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**Appendix C:  
Analytical Documentation,  
First Quarter 2019  
(on CD-ROM at end of document)**

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908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

Certification Number: CA1312  
NELAP Certification number: CA00046  
DoD-ELAP Certificate number: 4064.01

## Data Validatable Report

January 9, 2019

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, Hawaii 96813

Attn: Margie Pascua

Title: Report of Data: Case 87650

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126  
Subcontract: 18S-22209-HI27

Dear Ms. Pascua:

Six water samples were received December 14, 2018. Written results for the requested analyses are being provided on this January 9, 2019.

The total organic carbon analysis was subcontracted to Analytical Resources, Inc. Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

A handwritten signature in black ink that reads 'Paula McCartney'.

Paula McCartney, Laboratory Director  
APPL, Inc.

PM/rp  
Enclosure  
cc: File

Number of pages in this report: \_\_\_\_\_

Data Validation Package  
for  
60481245 CIV 0053 Red Hill Fuel Storage

APPL SDG 87650-Revised

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# CASE NARRATIVE

# Case Narrative

ARF: 87650

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

## Sample Receipt Information:

Six water samples were received December 14, 2018, at 1.0°C, 1.5°C, 2.0°C, 2.0°C, 2.5°C, 3.0°C, 3.0°C, 3.0°C, and 3.5°C. The sample group was assigned Analytical Request Form (ARF) number 87650.

## Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D SIM analysis, the samples were extracted according to EPA method 3520C.

For the EPA 8270D analysis, the samples were extracted according to EPA method 3520C. The samples were screened for Tentatively Identified Compounds (TICs).

For the APPL SOP ANA2MEE analysis, the samples were extracted according to EPA method 3535.

For the EPA 8260B analyses, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the samples were allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 300.0, 353.2, SM 2320B, and SM 3500FeB analyses, the samples were prepared according to the methods.

The total organic carbon analysis was subcontracted to Analytical Resources, Inc.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

## Analytical Exceptions, Deviations and Abnormalities.

**EPA 8015B:** In the MS/MSD performed on sample ERH719, one compound recovered outside their control limits. Corrective action: the client was notified.

**Revision 01-28-19:** Due to inconsistent field duplicate hydrocarbon patterns in the early-elution range for samples ERH719 and ERH723, the client requested the following samples to be re-extracted past hold time: ERH719, ERH720, ERH722, and ERH723. The re-extracted results had no hydrocarbon pattern detections above the DL/LOD.

The Form 1 results for the original extractions of ERH719 and ERH723 were revised from positive detections to "not detected" for Diesel, since the early-eluting pattern did not match the Diesel fuel pattern. Both sets of data were included with this revised report.

**REVISED PAGE**

**Revision 01-28-19:** The O-Terphenyl surrogate recovered below the 56% lower control limit in sample ERH719 for both the non-silica gel cleaned sample and the silica gel cleaned sample. Corrective Action: The samples were re-injected with similar results. The client was notified, and the samples were re-extracted past hold time with acceptable surrogate results.

**EPA 8270D SIM;** The surrogate Fluroranthene recovered above the 120% upper control limit in one sample. Corrective action: None, No target compound was detected in the sample.

**EPA 8270D Phenol:** One RPD exceeded the 20% limit in the MS/MSD.

**APPL SOP ANA2MEE:** In the (181218A) LCS, 2-(2-METHOXYETHOXY) recovered above the 130% upper control limit Corrective action: None, 2-(2-METHOXYETHOXY) was not detected in the associated samples. The client was notified.

**EPA 8260B:** In the MS/MSD performed on sample ERH719, one compound recovered outside the control limits. One RPD exceeded the 20% limit. Corrective action: the client was notified.

**Inorganic Analyses:** One sample was received more than 24 hours after collection. All of the samples were analyzed for ferrous iron and nitrate as soon as possible on the day received.

In the method blank, total alkalinity and bicarbonate were detected above the LOQ. Corrective action: The concentration of total alkalinity and bicarbonate in the samples exceeds the blank concentration by ten-fold or more.

**REVISED PAGE**

**APPL Inc.**  
**Abbreviations and Flags**

<b>FLAG</b>	<b>DESCRIPTION</b>
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%




SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	SM3500FeB	Ferrous Iron
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH WATER L-L SGC
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	RSK 175	METHANE BY RSK 175
87650	12/14/18	ERH719	AZ84057	12/12/18 9:25:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87650	12/14/18	ERH718	AZ84058	12/12/18 8:40:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87650	12/14/18	ERH718	AZ84058	12/12/18 8:40:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87650	12/14/18	ERH718	AZ84058	12/12/18 8:40:00 AM	WATER	RSK 175	METHANE BY RSK 175
87650	12/14/18	ERH720	AZ84059	12/12/18 9:25:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87650	12/14/18	ERH720	AZ84059	12/12/18 9:25:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87650	12/14/18	ERH720	AZ84059	12/12/18 9:25:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87650	12/14/18	ERH720	AZ84059	12/12/18 9:25:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87650	12/14/18	ERH720	AZ84059	12/12/18 9:25:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87650	12/14/18	ERH720	AZ84059	12/12/18 9:25:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87650	12/14/18	ERH721	AZ84060	12/13/18 8:05:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87650	12/14/18	ERH721	AZ84060	12/13/18 8:05:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87650	12/14/18	ERH721	AZ84060	12/13/18 8:05:00 AM	WATER	RSK 175	METHANE BY RSK 175
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	SM3500FeB	Ferrous Iron
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	RSK 175	METHANE BY RSK 175
87650	12/14/18	ERH722	AZ84061	12/13/18 9:05:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH WATER L-L SGC
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87650	12/14/18	ERH723	AZ84062	12/13/18 9:05:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ

**SAMPLE RECORDS MANAGEMENT  
CHAIN OF CUSTODY,  
ARF, CRF, AND  
CLIENT COMMUNICATION**

# APPL - Analysis Request Form

**87650**

Client: AECOM  
 Address: 1001 Bishop Street, Suite 1600  
Honolulu, HI 96813  
 Attn: Margie Pascua  
 Phone: 808-356-5373 Fax: 808-523-8950  
 Job: 60571032 CV18F0126 Red Hill Fuel Storage  
 PO #: 18S-22209-HI27 PO# 102604  
 Chain of Custody (Y/N): Y # RH121318- 1-9  
 RAD Screen (Y/N): Y pH (Y/N): Y  
 Turn Around Type: 1 WEEK

Received by: AAR   
 Date Received: 12/14/18 Time: 10:00  
 Delivered by: FEDEX  
 Shuttle Custody Seals (Y/N): Y Time Zone: -10  
 Chest Temp(s): SEE CRF  
 Color: VOA/I-PurpRed/SUB  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Libby Cheesebor  
 QC Report Type: DVP4DOD/EQUIS/HI  
 Due Date: 12/21/18

**Comments:**

*PM: login and F1s to Margie.Pascua@aecom.com*  
*AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms (LOQ/LOD database/DL)*  
*8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.*  
*TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections*  
*RSK: Methane only; \$87DC53W5: report phenol + TICs; \$87DMEEW5: 2-MEE (LCS Spk 80ppb).*  
*MS/MSD for 8015, 8260, 8270, 8270SIM ONLY* *Change in ARF: added sgc to extraction code*  
*FR: HC to LDC, 2 labeled CDs to Margie Pascua.* *ur 12/20/18*  
*EDD: AECOM EQUIS EDD 2.5.3 Red Hill 87DMEE->3535A to Margie.Pascua@aecom.com & jecklund@lab-data.com*  
*SUB: TOC to ARI*



**Sample Distribution:**

**GC:** 4-\$87DC53W5, 4-\$87DMEEW5, 4-\$DOC53W5LIQ, 4-\$SIM53LIQ51  
**Extractions:** 4- LIQ003, 4- LIQ005SGC, 4- MWE2MEE  
**VOA:** 6-\$86BTOTXDOD5W, 6-\$GASBL, 6-\$GRO86BW, 4-\$RSKMETH  
**Wetlab:** 2-\$232W(HCO3,CO3,ALK), 2-\$300W(NO3,CL,SO4), 2-\$300WD(CL,SO4), 2-\$35FE, 2-\$35OF  
**Other:** 2-SUB

**Charges:**

**Invoice To:**

**ACCOUNTS PAYABLE**  
 1001 Bishop Street, Ste 1600  
 USAPImaging@aecom.com  
 mary.basano@aecom.com

Client ID	APPL ID	Sampled	Analyses Requested
1. ERH719 MS/MSD, No MS/MSD for WL o	AZ84057W 	12/12/18 09:25	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$300WD(CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, SUB -- D&O-SGC analysis if detections
2. ERH718	LCSD AZ84058W 	12/12/18 08:40	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

# APPL - Analysis Request Form

87650

- 
3. ERH720      LCSD      AZ84059W      12/12/18 09:25      \$86BTOTXDOD5W, \$87DC53W5,  
\$87DMEEW5, \$DOC53W5LIQ, \$GASBL,  
\$GRO86BW, \$SIM53LIQ51 -- D&O-SGC  
analysis if detections
- 
4. ERH721      LCSD      AZ84060W      12/13/18 08:05      \$86BTOTXDOD5W, \$GASBL, \$GRO86BW,  
\$RSKMETH
- 
5. ERH722      MS/MSD, No MS/MSD for WL o      AZ84061W      12/13/18 09:05      \$232W(HCO3,CO3,ALK),  
\$300W(NO3,CL,SO4), \$300WD(CL,SO4),  
\$35FE, \$35OF, \$86BTOTXDOD5W,  
\$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ,  
\$GASBL, \$GRO86BW, \$RSKMETH,  
\$SIM53LIQ51, SUB -- D&O-SGC analysis if  
detections
- 
6. ERH723      LCSD      AZ84062W      12/13/18 09:05      \$86BTOTXDOD5W, \$87DC53W5,  
\$87DMEEW5, \$DOC53W5LIQ, \$GASBL,  
\$GRO86BW, \$SIM53LIQ51 -- D&O-SGC  
analysis if detections

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

# APPL Sample Receipt Form

ARF# 87650

Sample	Container Type	Count	pH
AZ84057	3 PL 250mL	1	NA
	10 PL 250mL - H2SO4	1	1.7
	13 VOAs - HCL	12	NA
	17 Amber Liter	15	NA
	32 Clear VOA - H2SO4	4	NA
	38 250mL brn poly, HCl prsvd	1	1.7
	41 250mL Amber, unprsvd	2	NA
AZ84058	13 VOAs - HCL	4	NA
AZ84059	13 VOAs - HCL	4	NA
	17 Amber Liter	5	NA
	41 250mL Amber, unprsvd	2	NA
AZ84060	13 VOAs - HCL	4	NA
AZ84061	3 PL 250mL	1	NA
	10 PL 250mL - H2SO4	1	1.7
	13 VOAs - HCL	12	NA
	17 Amber Liter	15	NA
	32 Clear VOA - H2SO4	4	NA
	38 250mL brn poly, HCl prsvd	1	1.7
	41 250mL Amber, unprsvd	2	NA
AZ84062	13 VOAs - HCL	4	NA
	17 Amber Liter	5	NA
	41 250mL Amber, unprsvd	2	NA

Sample    Container Type    Count    pH



APPL, Inc.  
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Clovis, CA 93611  
www.applinc.com

CHAIN OF CUSTODY RECORD  
Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com

C.O.C. PH12318 - 1

Report to: <b>PLEASE PRINT</b>  Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>  Attn: <u>Margie Pascua</u>  Email: <u>margie.pascua@aecom.com</u>	Invoice to: <b>PLEASE PRINT</b>  Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>  Attn: <u>Mary Basano</u>  Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
--	--

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number											Date Shipped:											
		No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	8630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs		8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate Sulfate, Chloride	300.0 Bromide/Fluoride	300.0 Total Ca, Mg, Mn, K, Na	300.0 Total & Dissolved Silica	Carrier:	Waybill No.:
Purchase Order Number	Sampler (Signature)		Aq	Sed.	Soil																			
<del>CIV 53 / 60481245</del> <del>CV18FO126 / 60571032</del>	<del>ALL for MH, PE, MD</del> me																							
77265 102604	<i>[Signature]</i> for MH, PE, MD																							
Sample Identification	Location	Date Collected	Time Collected	Time Zone																				
ERH719	RHMW2254-01	12/12/18	0925	HST	8	X					X	X*	X	X	X									
<div style="position: relative; height: 100px;"> <span style="font-size: 2em; opacity: 0.5; transform: rotate(-45deg); display: inline-block;">me</span> <span style="font-size: 1.5em; opacity: 0.5; transform: rotate(-45deg); display: inline-block;">CS</span> <span style="font-size: 1.2em; opacity: 0.5; transform: rotate(-45deg); display: inline-block;">12/19/18</span> </div>																								
																			*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.					

see other workes  
MS/MSD: 3015, 3260, 3270, 3270SM

Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____					Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)		
Relinquished by sampler: AECOM	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:		
<i>[Signature]</i>	12/13/18	1030							
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:		
					12-14-18	1000	<i>[Signature]</i>		



APPL, Inc.  
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Clovis, CA 93611  
www.applinc.com

CHAIN OF CUSTODY RECORD

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C.O.C. PH121318-2

Report to: <u>PLEASE PRINT</u>  Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>  Attn: <u>Margie Pascua</u>  Email: <u>margie.pascua@aecom.com</u>	Invoice to: <u>PLEASE PRINT</u>  Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>  Attn: <u>Mary Basano</u>  Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
--	--

Project Name/Number <u>GIY 53 / 60401245</u> <u>CV18FO126 / 60571032</u>	Sampler (Print) <u>MD for</u>	Analysis Requested/Method Number											Date Shipped: <u>12/13/18</u>														
		Purchase Order Number <u>77265 102604</u>	Sampler (Signature) <u>Margie Pascua</u>	No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT		8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fa Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate Sulfate, Chloride	800.0 Bromide/Fluoride	9010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	Carrier: <u>FedEx</u>	Waybill No.:	Comments:
Aq	Sed.				Soil																						
<u>EPH719</u>	<u>RHMW2294-oi</u>	<u>12/12/18</u>	<u>0925</u>	<u>HST</u>	<u>8</u>	<u>X</u>				<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>													<u>See other orders</u> <u>MG/MSO: 8015, 8260, 8070, 8270DSIM</u>
<p style="font-size: 2em; opacity: 0.5;">MCO 12/10/18</p>																											
<p>*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o &amp; PAHs need liquid-liquid extraction.</p>																											

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____										Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: <u>AECOM</u> <u>Margie Pascua</u>	Date <u>12/13/18</u>	Time <u>1030</u>	Received by:			Relinquished by:	Date	Time	Received by:						
Relinquished by:	Date	Time	Received by:			Relinquished by:	Date <u>12-14-18</u>	Time <u>7000</u>	Received at lab by: <u>[Signature]</u>						



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**CHAIN OF CUSTODY RECORD**

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C.O.C. RH21318-3

Report to: <u>PLEASE PRINT</u>	Invoice to: <u>PLEASE PRINT</u>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number <u>CIV 53 / 60481245</u> <u>CN18F0126 / 60571032</u>	Sampler (Print)	Purchase Order Number <u>77265 102604</u>	Sampler (Signature)	Date Collected	Time Collected	Time Zone	No. of Containers	Analysis Requested/Method Number														Date Shipped: <u>12/13/18</u>					
								Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N		SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silicon
Sample Identification	Location							Aq	Sed.	Soil																	
<u>ERH 718</u>	<u>Trip Blank</u>			<u>12/12/18</u>	<u>0840</u>	<u>HST</u>	<u>4</u>	X				X															
<u>ERH 719</u>	<u>RHMW 2294-01</u>			<u>12/12/18</u>	<u>0925</u>	<u>HST</u>	<u>10</u>	X				X	X <sup>4</sup>	X	X	X	X	X	X	X	X	X				<u>See other codes MS/MSD: 8015, 3260, 8270, 8270sim</u>	
<u>ERH 720</u>	<u>RHMW 2294-01</u>			<u>12/12/18</u>	<u>0925</u>	<u>HST</u>	<u>4</u>	X				X															
<u>IN C 12/13/18</u>																											
<u>[Signature]</u>																											

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>AECOM</u> <u>[Signature]</u>	Date: <u>12/13/18</u> Time: <u>1030</u>	Received by: _____
Relinquished by: _____	Date: _____ Time: _____	Received by: _____
	Date: <u>12-14-18</u> Time: <u>1000</u>	Received at lab by: <u>[Signature]</u>





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**CHAIN OF CUSTODY RECORD**

C.O.C. DH121318-4

Report to: <u>PLEASE PRINT</u>	Invoice to: <u>PLEASE PRINT</u>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number <u>CIV 53 / 60481245</u> <u>GH18FO126 / 60571032</u>	Sampler (Print) <u>MH, MD, KC</u>	Analysis Requested/Method Number											Date Shipped <u>2/13/18</u>									
		Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol		RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	8010 Nitrate, Sulfate, Chloride	8000 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Ni	SM4500 Total & Dissolved Silica	
Purchase Order Number <u>77265 102604</u>	Sampler (Signature) <u>Margie Pascua for MH, MD, KC</u>	No. of Containers	Aq	Sed.	Soil																	Carrier: FedEx
Sample Identification <u>ERT1720</u>	Location <u>RHMW2254-01</u>	Date Collected <u>12/12/18</u>	Time Collected <u>0928</u>	Time Zone <u>HST</u>	7	X				X	X	X	X	X								Comments: <u>see other coolers</u>
<div style="font-size: 2em; opacity: 0.3; transform: rotate(-15deg); display: inline-block;"> <u>Margie Pascua</u> <u>12/13/18</u> </div>																						
												*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.										

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____											Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: <u>AECOM</u> <u>Margie Pascua</u>	Date <u>12/12/18</u>	Time <u>1030</u>	Received by:					Relinquished by:					Date	Time	Received by:	
Relinquished by:	Date	Time	Received by:					Relinquished by:					Date <u>12.14.18</u>	Time <u>1000</u>	Received at lab by: <u>[Signature]</u>	



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**CHAIN OF CUSTODY RECORD**

C.O.C. RH121318-5

Report to: <b>PLEASE PRINT</b> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <b>PLEASE PRINT</b> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number <u>CIV 53 / 60481245</u> <u>CY18FD126 / 60571032</u>		Sampler (Print) <u>M.H., MD, KE</u>			Analysis Requested/Method Number												Date Shipped: <u>12/14/18</u>									
Purchase Order Number <u>77265 102604</u>		Sampler (Signature) <u>[Signature]</u>			No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM4230B Alkalinity	300.0 Nitrate, Sulfate, Chloride	800.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Al	SM4500 Total & Dissolved Silica	Carrier: <u>FedEx</u>	
Sample Identification		Location		Aq		Sed.	Soil	Comments:																		
<u>ERH723</u>		<u>RHMW2254-01</u>		<u>12/13/18</u>	<u>0905</u>	<u>HST</u>	<u>7</u>	<u>X</u>				<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>										<u>see other coolers</u>	
<p><i>[Large handwritten signature/initials across the table]</i></p>																										
<p>*Analyze TPH w/SGT only if TPH-d/o detected.</p> <p>TPH-d/o &amp; PAHs need liquid-liquid extraction.</p>																										

Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____										Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)			
Relinquished by sampler: <u>AECOM</u>		Date	Time	Received by:			Relinquished by:			Date	Time	Received by:			
<u>[Signature]</u>		<u>12/13/18</u>	<u>1300</u>									<u>[Signature]</u>			
Relinquished by:		Date	Time	Received by:			Relinquished by:			Date	Time	Received at lab by:			
										<u>12-14-18</u>	<u>1000</u>	<u>[Signature]</u>			

67659



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C.O.C. PH12318-6

Report to: <u>PLEASE PRINT</u>	Invoice to: <u>PLEASE PRINT</u>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number <u>CIV 53 / 60481245</u> <u>CW18FD126/60571032</u>	Sampler (Print) <u>MH, MD, KE</u>	Analysis Requested/Method Number											Date Shipped: <u>12/13/18</u>									
		No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs		8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	500.0 Nitrate Sulfate, Chloride	806.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Al	SM4500 Total & Dissolved Silica
Purchase Order Number <u>77265 102604</u>	Sampler (Signature) <u>MCS for MH, MD, KE</u>	Aq	Sed.	Soil																		Carrier: <u>FedEx</u>
Sample Identification	Location	Date Collected	Time Collected	Time Zone																		Waybill No.:
<u>ERH 722</u>	<u>RHMW2204-01</u>	<u>12/13/18</u>	<u>0905</u>	<u>HST</u>	<u>8</u>	<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>									<u>Comments:</u>
<u>CO 12/13/18</u>																						
<u>MCS</u>																						
*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.																						

see other coolers  
MS/MED: 805, 3200, 3270, 3270GSM

Shuttle Temperature: <u>20.0, 20.1, 20.1, 20.5</u>	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>AECOM</u> <u>MCS</u>	Date: <u>12/13/18</u> Time: <u>1300</u>	Received by: _____
Relinquished by: _____	Date: _____ Time: _____	Received at lab by: _____
	Date: <u>12-14-18</u> Time: <u>1000</u>	



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CHAIN OF CUSTODY RECORD

C.O.C. PH121318-7

Report to: <b>PLEASE PRINT</b> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <b>PLEASE PRINT</b> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
--	--

Project Name/Number <u>CIV 53 / 60481245</u> <u>Cv18FO126 / 60571032</u>	Sampler (Print) <u>Mt MD, KE</u>	Analysis Requested/Method Number										Date Shipped: <u>12/13/18</u>												
		Matrix					8260C BTEX,TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT		8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	500.0 Nitrate, Sulfate, Chloride	800.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Na	814500 Total & Dissolved Silica	
Purchase Order Number <u>72265 102604</u>	Sampler (Signature) <u>[Signature]</u> for <u>Mt MD, KE</u>	No. of Containers	Aq	Sed.	Soil																		Carrier: FedEx	
Sample Identification	Location	Date Collected	Time Collected	Time Zone																			Waybill No.:	
<u>EPH 722</u>	<u>RHMW225T-01</u>	<u>12/13/18</u>	<u>0905</u>	<u>HST</u>	<u>8</u>	<u>X</u>					<u>X</u>	<u>X*</u>	<u>X</u>	<u>X</u>	<u>X</u>									<u>See other worksheets</u> <u>MS (MSD): 8015, 8240, 8270, 8270SIM</u>
<u>[Large Signature]</u> <u>12/13/18</u>																								
*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.																								

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: <u>AECOM</u> <u>[Signature]</u>	Date: <u>12/13/18</u> Time: <u>1300</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:	Relinquished by:	Date: <u>12-14-18</u> Time: <u>1000</u>	Received at lab by: <u>[Signature]</u>



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CHAIN OF CUSTODY RECORD

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C.O.C. PH121318-8

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number <u>CIV 53 / 60481245</u> <u>CV18F0126 / 60571032</u>	Sampler (Print) <u>MH, MD, KE</u>	Analysis Requested/Method Number													Date Shipped: <u>12/13/18</u>														
		Purchase Order Number <u>77265 102604</u>					No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	900.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	Carrier: FedEx	Waybill No.:	Comments:
Sample Identification	Sampler (Signature) <u>M S for MH, MD, KE</u>	Location	Date Collected	Time Collected	Time Zone	Aq		Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	900.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica				
<u>EPH 721</u>		<u>Trip Blank</u>	<u>12/10/18</u>	<u>0805</u>	<u>HST</u>	<u>4</u>	<u>X</u>		<u>X</u>								<u>X</u>												
<u>EPH 722</u>		<u>RHMW2254-01</u>	<u>12/13/18</u>	<u>0905</u>	<u>HST</u>	<u>16</u>	<u>X</u>		<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>See other labels</u>	<u>MS/MSO: 5215, 5260, 5270, 5270SM</u>	
<u>EPH 723</u>		<u>RHMW2254-01</u>	<u>12/13/18</u>	<u>0905</u>	<u>HST</u>	<u>4</u>	<u>X</u>		<u>X</u>																				
		<u>M S 12/13/18</u>																											
		*Analyze TPH w/SGT only if TPH-d/o detected.																											
		TPH-d/o & PAHs need liquid-liquid extraction.																											

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____						Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)					
Relinquished by sampler: <u>AECOM</u> <u>M S</u>	Date <u>12/13/18</u>	Time <u>1300</u>	Received by:			Relinquished by:	Date	Time	Received by:			
Relinquished by:	Date	Time	Received by:			Relinquished by:	Date <u>12-14-18</u>	Time <u>1000</u>	Received at lab by: <u>M S</u>			



APPL, Inc.  
908 N Temperance Ave  
Clovis, CA 93611  
www.applinc.com

CHAIN OF CUSTODY RECORD

Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com

C.O.C. 2H121318-9

Report to: PLEASE PRINT Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: PLEASE PRINT Company Name: <u>AECOM / APPL</u> Phone: <u>594-275-2175</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-529-7249</u> Attn: <del>Mary Basano</del> <u>Libby Cheeseborough</u> Email: <del>mary.basano@aecom.com; usapimaging@aecom.com</del>
---	---

Project Name/Number		Sampler (Print)					Analysis Requested/Method Number		Date Shipped:
<del>CIV 53 / 60401245</del> <u>CV18FOI24 / 60571032</u>		<u>MH, MD, KE</u>							<u>12/13/18</u>
Purchase Order Number		Sampler (Signature)					Matrix		Carrier:
<del>77265</del> <u>102604</u>		<u>[Signature] for MH, MD, KE</u>					Aq Sed Soil 8260C BTEX, TPH-g 8260C DCA 8011 EDB 8015C TPH-d/o 3630/8015C TPH-d/g w/SGT 8270SIM PAHs short list 8270D Phenol, TICs 8270D 2-(2-methoxy- ethoxy)-ethanol RSK175M Methane SM3500-Fe Ferrrous Iron 353.2 Nitrate-Nitrite-N SM2320B Alkalinity 300.0 Nitrate-Sulfate-Chloride 300.0 Bromide/Fluoride 8010 Total Ca, Mg, Mn, Ni 804500 Total & Dissolved Silica		<u>FedEx</u>
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed	Soil	Comments:
<u>ERH719</u>	<u>RHMW 2254-01</u>	<u>12/12/18</u>	<u>0925</u>	<u>HST</u>	<u>4</u>	<u>X</u>			<u>X</u> <u>Sub through APPL</u>
<u>ERH722</u>	<u>RHMW 2254-01</u>	<u>12/13/18</u>	<u>0905</u>	<u>HST</u>	<u>4</u>	<u>X</u>			<u>X</u> <u>Sub through APPL</u>
*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.									

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>AECOM</u>	Date: <u>12/13/18</u> Time: <u>1310</u>	Received by:
Relinquished by:	Date: _____ Time: _____	Received at lab by: <u>[Signature]</u>

COOLER RECEIPT FORM

ARF: 87650

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 12/14/18

2) Coolers: Number of Coolers: 9

3) YES Were custody seals present and intact? How many? 18 Name/Date on seal? see below

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap popcorn foam X plastic bags other X wet ice dry ice no ice gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of certified NIST thermometer use R1

8) Cooler temp(s): In °C 1: 2.0°C 2: 1.0°C 3: 2.0°C 4: 1.5°C 5: 3.0°C 6: 3.5°C 7: 3.0°C 8: 3.0°C 9: 2.5°C 10: 11: 12:

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken)

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples? If yes, the following were received with air bubbles:

Larger than a pea:

Smaller than a pea: AZ84058W01-4, AZ84060W01-4

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide > 12?

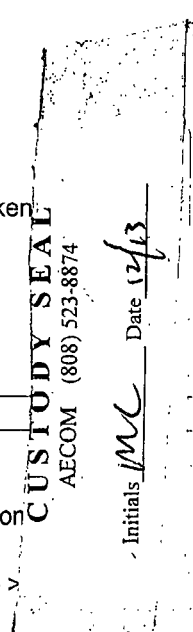
22) NO Were unpreserved VOA Vials received?

23) NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?

pH strip lot number: 90B2031

Lab notified if pH was not adequate:

Notes/Deficiencies:



Personnel receiving samples: ZG Second reviewer: LAL

Personnel labeling samples: ZG

Project manager notified: AA Date/Time of notification 12/14/18

Name of client notified: Date/Time of notification

## **SAMPLE RESULTS**



# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**  
Sample Collection Date: 12/12/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650  
**APPL ID: AZ84057**  
QCG: #DOC53-181214A-236181

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	12/20/18
EPA 8015B-e	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	12/20/18
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	76.8	60-142			%	12/14/18	12/20/18
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	53.6 #	56-125			%	12/14/18	12/20/18

# = Recovery (or RPD) is outside QC limits.

Amended Results.

Quant Method: DOC0905.M  
Run #: 1218084  
Instrument: Apollo  
Sequence: 181218  
Dilution Factor: 1  
Initials: DPO

Printed: 01/28/19 3:47:41 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH WATER L-L SGC

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH719**

**APPL ID: AZ84057**

Sample Collection Date: 12/12/18

QCG: #DOC53-181214A1-236372

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	01/02/19
EPA 8015B-e	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	01/02/19
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	12/14/18	01/02/19
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	70.8	60-142			%	12/14/18	01/02/19
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	49.4 #	56-125			%	12/14/18	01/02/19

# = Recovery (or RPD) is outside QC limits.

Amended Results.

Quant Method: DOC0905.M
Run #: 102010
Instrument: Apollo
Sequence: 190102
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 3:47:41 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ RE-EXTRACT

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH719**

**APPL ID: AZ84057**

Sample Collection Date: 12/12/18

QCG: #DOC53-190124A1-236937

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	113	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	109	56-125			%	01/24/19	01/25/19

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Quant Method: DOC0117.M  
Run #: 124027  
Instrument: Apollo  
Sequence: 190124  
Dilution Factor: 1  
Initials: DPO

Printed: 01/28/19 4:12:31 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84059**  
QCG: #DOC53-181214A-236181

**Sample ID: ERH720**

Sample Collection Date: 12/12/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	12/19/18
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	12/19/18
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	103	60-142			%	12/14/18	12/19/18
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	109	56-125			%	12/14/18	12/19/18

Quant Method: DOC0905.M
Run #: 1218059
Instrument: Apollo
Sequence: 181218
Dilution Factor: 1
Initials: DPO

Printed: 12/21/18 11:47:07 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8015B TPH LIQ-LIQ RE-EXTRACT

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH720**

Sample Collection Date: 12/12/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650

**APPL ID: AZ84059**

QCG: #DOC53-190124A1-236937

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	114	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	111	56-125			%	01/24/19	01/25/19

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Quant Method: DOC0117.M
Run #: 124028
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

*Printed: 01/28/19 4:12:31 PM*  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH722**

**APPL ID: AZ84061**

Sample Collection Date: 12/13/18

QCG: #DOC53-181214A-236181

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	12/19/18
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	12/19/18
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	124	60-142			%	12/14/18	12/19/18
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	104	56-125			%	12/14/18	12/19/18

Quant Method: DOC0905.M
Run #: 1218060
Instrument: Apollo
Sequence: 181218
Dilution Factor: 1
Initials: DPO

Printed: 12/21/18 11:47:07 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ RE-EXTRACT

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH722**

**APPL ID: AZ84061**

Sample Collection Date: 12/13/18

QCG: #DOC53-190124A1-236937

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	113	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	106	56-125			%	01/24/19	01/25/19

Quant Method: DOC0117.M
Run #: 124029
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

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*Printed: 01/28/19 4:12:31 PM*  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH723**  
Sample Collection Date: 12/13/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650  
**APPL ID: AZ84062**  
QCG: #DOC53-181214A-236181

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	12/20/18
EPA 8015B-e	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	12/20/18
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	134	60-142			%	12/14/18	12/20/18
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	118	56-125			%	12/14/18	12/20/18

Amended Results.

Quant Method: DOC0905.M
Run #: 1218085
Instrument: Apollo
Sequence: 181218
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 3:47:41 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



**EPA 8015B TPH WATER L-L SGC**

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84062**  
QCG: #DOC53-181214A1-236372

**Sample ID: ERH723**  
Sample Collection Date: 12/13/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	01/02/19
EPA 8015B-e	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	01/02/19
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	12/14/18	01/02/19
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	132	60-142			%	12/14/18	01/02/19
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	119	56-125			%	12/14/18	01/02/19

Amended Results.

Quant Method: DOC0905.M
Run #: 102011
Instrument: Apollo
Sequence: 190102
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 3:47:41 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ RE-EXTRACT

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH723**

**APPL ID: AZ84062**

Sample Collection Date: 12/13/18

QCG: #DOC53-190124A1-236937

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	107	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	103	56-125			%	01/24/19	01/25/19

Quant Method: DOC0117.M
Run #: 124030
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

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# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**

Sample Collection Date: 12/12/18

ARF: 87650

**APPL ID: AZ84057**

QCG: #SIM53-181217A-236170

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALE	87.4	39-114			%	12/17/18	12/19/18
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (	106	58-120			%	12/17/18	12/19/18

Quant Method: L1026.M  
Run #: 1120L155  
Instrument: Linus  
Sequence: L181120  
Dilution Factor: 1  
Initials: AAB

Printed: 12/20/18 8:47:50 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH720**

**APPL ID: AZ84059**

Sample Collection Date: 12/12/18

QCG: #SIM53-181217A-236170

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALE	108	39-114			%	12/17/18	12/19/18
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (	127 #	58-120			%	12/17/18	12/19/18

# = Recovery (or RPD) is outside QC limits.

Quant Method: L1026.M
Run #: 1120L156
Instrument: Linus
Sequence: L181120
Dilution Factor: 1
Initials: AAB

Printed: 12/20/18 8:47:50 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH722**

Sample Collection Date: 12/13/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650

**APPL ID: AZ84061**

QCG: #SIM53-181217A-236170

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALE	91.0	39-114			%	12/17/18	12/19/18
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (	107	58-120			%	12/17/18	12/19/18

Quant Method: L1026.M  
Run #: 1120L159  
Instrument: Linus  
Sequence: L181120  
Dilution Factor: 1  
Initials: AAB

Printed: 12/20/18 8:47:50 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH723**

**APPL ID: AZ84062**

Sample Collection Date: 12/13/18

QCG: #SIM53-181217A-236170

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALE	87.6	39-114			%	12/17/18	12/19/18
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (	104	58-120			%	12/17/18	12/19/18

Quant Method: L1026.M
Run #: 1120L160
Instrument: Linus
Sequence: L181120
Dilution Factor: 1
Initials: AAB

Printed: 12/20/18 8:47:50 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**

Sample Collection Date: 12/12/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650

**APPL ID: AZ84057**

QCG: #87DC5-181217A-236184

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	81.8	43-140			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	70.1	44-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	105	19-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	78.4	44-120			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: PHENOL-D6 (S)	103	10-115			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	74.6	50-134			%	12/17/18	12/20/18

Quant Method: Y1201NC.M
Run #: 1201Y205
Instrument: Yoda
Sequence: Y181201
Dilution Factor: 1
Initials: AAB

Printed: 12/21/18 10:09:39 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84059**  
QCG: #87DC5-181217A-236184

**Sample ID: ERH720**

Sample Collection Date: 12/12/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	73.6	43-140			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUOROBIPHENYL (S)	65.4	44-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	90.0	19-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	71.3	44-120			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: PHENOL-D6 (S)	86.6	10-115			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	66.3	50-134			%	12/17/18	12/20/18

Quant Method: Y1201NC.M
Run #: 1201Y206
Instrument: Yoda
Sequence: Y181201
Dilution Factor: 1
Initials: AAB

Printed: 12/21/18 10:09:39 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

Sample ID: ERH722

APPL ID: AZ84061

Sample Collection Date: 12/13/18

QCG: #87DC5-181217A-236184

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	BENZENE, METHYL-	87 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	CYCLOHEXANE, 1-METHYL-3-PROPY	7.5 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	ETHENE, TETRACHLORO-	77 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	PENTANEDIOIC ACID, DIMETHYL EST	15 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	84.0	43-140			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	73.3	44-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	84.0	19-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	77.4	44-120			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: PHENOL-D6 (S)	83.6	10-115			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	75.5	50-134			%	12/17/18	12/20/18

T = Tentatively identified compound.

Quant Method: Y1201NC.M
Run #: 1201Y207
Instrument: Yoda
Sequence: Y181201
Dilution Factor: 1
Initials: AAB

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APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH723**

**APPL ID: AZ84062**

Sample Collection Date: 12/13/18

QCG: #87DC5-181217A-236184

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	BENZENE, METHYL-	14 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	ETHENE, TETRACHLORO-	78 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	HEXANEDIOIC ACID, DIOCTYL ESTER	11 T	TIC			ug/L	12/17/18	12/20/18
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	81.6	43-140			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	72.0	44-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	90.2	19-119			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	81.0	44-120			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: PHENOL-D6 (S)	89.0	10-115			%	12/17/18	12/20/18
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	73.9	50-134			%	12/17/18	12/20/18

T = Tentatively identified compound.

Quant Method: Y1201NC.M
Run #: 1201Y208
Instrument: Yoda
Sequence: Y181201
Dilution Factor: 1
Initials: AAB

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APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
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Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84057**  
QCG: #87DME-181217A-236171

**Sample ID: ERH719**

Sample Collection Date: 12/12/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	12/18/18	12/19/18

Quant Method: YMEE1128.M
Run #: 1128Y039
Instrument: Yoda
Sequence: Y181128M
Dilution Factor: 1
Initials: AAB

Printed: 12/20/18 10:02:51 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

**EPA 8270D MODIFIED WATER**

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84059**  
QCG: #87DME-181217A-236171

**Sample ID: ERH720**

Sample Collection Date: 12/12/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	12/18/18	12/19/18

Quant Method: YMEE1128.M  
Run #: 1128Y040  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

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APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
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Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84061**  
QCG: #87DME-181217A-236171

**Sample ID: ERH722**

Sample Collection Date: 12/13/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	12/18/18	12/19/18

Quant Method: YMEE1128.M  
Run #: 1128Y043  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

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APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
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Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH723**

**APPL ID: AZ84062**

Sample Collection Date: 12/13/18

QCG: #87DME-181217A-236171

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	12/18/18	12/19/18

Quant Method: YMEE1128.M  
Run #: 1128Y044  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

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APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**

Sample Collection Date: 12/12/18

ARF: 87650

**APPL ID: AZ84057**

QCG: #86BTO-181219BL-236217

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/20/18	12/20/18
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	112	81-118			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	87.8	85-114			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	118	80-119			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	98.2	89-112			%	12/20/18	12/20/18

Quant Method: L1218W.M
Run #: 1219L35
Instrument: Loki
Sequence: 181218
Dilution Factor: 1
Initials: DG

Printed: 12/21/18 2:35:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH718**

Sample Collection Date: 12/12/18

ARF: 87650

**APPL ID: AZ84058**

QCG: #86BTO-181219BL-236217

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/20/18	12/20/18
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	114	81-118			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	89.5	85-114			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	116	80-119			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	96.4	89-112			%	12/20/18	12/20/18

Quant Method: L1218W.M
Run #: 1219L36
Instrument: Loki
Sequence: 181218
Dilution Factor: 1
Initials: DG

Printed: 12/21/18 2:35:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH720**

Sample Collection Date: 12/12/18

ARF: 87650

**APPL ID: AZ84059**

QCG: #86BTO-181217AL-236219

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/17/18	12/17/18
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	102	81-118			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	85.7	85-114			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	103	80-119			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.9	89-112			%	12/17/18	12/17/18

Quant Method: L1213W.M
Run #: 1217L16
Instrument: Loki
Sequence: 181213
Dilution Factor: 1
Initials: DG

Printed: 12/21/18 2:35:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH721

Sample Collection Date: 12/13/18

ARF: 87650

APPL ID: AZ84060

QCG: #86BTO-181217AL-236219

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/17/18	12/17/18
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	105	81-118			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	88.5	85-114			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	106	80-119			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	96.6	89-112			%	12/17/18	12/17/18

Quant Method: L1213W.M
Run #: 1217L17
Instrument: Loki
Sequence: 181213
Dilution Factor: 1
Initials: DG

Printed: 12/21/18 2:35:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH722

Sample Collection Date: 12/13/18

ARF: 87650

APPL ID: AZ84061

QCG: #86BTO-181217AL-236219

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/17/18	12/17/18
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/17/18	12/17/18
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	109	81-118			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	85.1	85-114			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	112	80-119			%	12/17/18	12/17/18
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	96.2	89-112			%	12/17/18	12/17/18

Quant Method: L1213W.M
Run #: 1217L18
Instrument: Loki
Sequence: 181213
Dilution Factor: 1
Initials: DG

Printed: 12/21/18 2:35:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

Sample ID: ERH723

APPL ID: AZ84062

Sample Collection Date: 12/13/18

QCG: #86BTO-181220AL-236218

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/20/18	12/20/18
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/20/18	12/20/18
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	105	81-118			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	92.3	85-114			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	110	80-119			%	12/20/18	12/20/18
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	97.1	89-112			%	12/20/18	12/20/18

Quant Method: L1220W.M
Run #: 1220L22
Instrument: Loki
Sequence: 181220
Dilution Factor: 1
Initials: DG

Printed: 12/21/18 2:35:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**

Sample Collection Date: 12/12/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650

**APPL ID: AZ84057**

QCG: #GRO86-181216AL-236076

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/16/18	12/16/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	91.4	85-114			%	12/16/18	12/16/18

Quant Method: LSUR1213.M  
Run #: 1216L13  
Instrument: Loki  
Sequence: 181213  
Dilution Factor: 1  
Initials: DG

Printed: 12/18/18 10:47:03 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH718**

**APPL ID: AZ84058**

Sample Collection Date: 12/12/18

QCG: #GRO86-181216AL-236076

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/16/18	12/16/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	92.7	85-114			%	12/16/18	12/16/18

Quant Method: LSUR1213.M  
Run #: 1216L14  
Instrument: Loki  
Sequence: 181213  
Dilution Factor: 1  
Initials: DG

Printed: 12/18/18 10:47:03 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH720

Sample Collection Date: 12/12/18

ARF: 87650

APPL ID: **AZ84059**

QCG: #GRO86-181217AL-236066

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/17/18	12/17/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	85.7	85-114			%	12/17/18	12/17/18

Quant Method: LSUR1213.M
Run #: 1217L16
Instrument: Loki
Sequence: 181213
Dilution Factor: 1
Initials: DG

Printed: 12/18/18 10:47:03 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84060**  
QCG: #GRO86-181217AL-236066

**Sample ID: ERH721**  
Sample Collection Date: 12/13/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/17/18	12/17/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	88.5	85-114			%	12/17/18	12/17/18

Quant Method: LSUR1213.M
Run #: 1217L17
Instrument: Loki
Sequence: 181213
Dilution Factor: 1
Initials: DG

Printed: 12/18/18 10:47:03 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650

**Sample ID: ERH722**

**APPL ID: AZ84061**

Sample Collection Date: 12/13/18

QCG: #GRO86-181217AL-236066

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/17/18	12/17/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	85.1	85-114			%	12/17/18	12/17/18

Quant Method: LSUR1213.M  
Run #: 1217L18  
Instrument: Loki  
Sequence: 181213  
Dilution Factor: 1  
Initials: DG

Printed: 12/18/18 10:47:03 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87650  
APPL ID: **AZ84062**  
QCG: #GRO86-181216AL-236076

**Sample ID: ERH723**

Sample Collection Date: 12/13/18

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/16/18	12/16/18
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	87.4	85-114			%	12/16/18	12/16/18

Quant Method: LSUR1213.M  
Run #: 1216L18  
Instrument: Loki  
Sequence: 181213  
Dilution Factor: 1  
Initials: DG

Printed: 12/18/18 10:47:03 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**  
Sample Collection Date: 12/12/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650  
**APPL ID: AZ84057**  
QCG: #RSKME-181221A-236207

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	12/21/18	12/21/18

Quant Method: RSK1118.M  
Run #: 18122104  
Instrument: Rocky  
Sequence: 181118  
Dilution Factor: 1  
Initials: CMO

Printed: 12/21/18 11:17:24 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH718**

Sample Collection Date: 12/12/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650

**APPL ID: AZ84058**

QCG: #RSKME-181220A-236194

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	12/20/18	12/20/18

Quant Method: RSK1118.M  
Run #: 18122005  
Instrument: Rocky  
Sequence: 181118  
Dilution Factor: 1  
Initials: CMO

Printed: 12/21/18 11:17:24 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH721**

Sample Collection Date: 12/13/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650

**APPL ID: AZ84060**

QCG: #RSKME-181220A-236194

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	12/20/18	12/20/18

Quant Method: RSK1118.M  
Run #: 18122006  
Instrument: Rocky  
Sequence: 181118  
Dilution Factor: 1  
Initials: CMO

Printed: 12/21/18 11:17:24 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH722**  
Sample Collection Date: 12/13/18

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87650  
**APPL ID: AZ84061**  
QCG: #RSKME-181220A-236194

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	12/20/18	12/20/18

Quant Method: RSK1118.M  
Run #: 18122007  
Instrument: Rocky  
Sequence: 181118  
Dilution Factor: 1  
Initials: CMO

Printed: 12/21/18 11:17:24 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH719**

Sample Collection Date: 12/12/18

**APPL ID: AZ84057**

ARF: 87650

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	107	5.0	1.00	0.40	mg/L	5	12/19/18	12/19/18
EPA 300.0	NITRATE	2.3	0.5	0.18	0.04	mg/L	1	12/14/18	12/14/18
EPA 300.0	SULFATE	17.0	1.0	0.20	0.09	mg/L	1	12/14/18	12/14/18
EPA 353.2	NITRATE-NITRITE-N	0.61	0.10	0.100	0.028	mg/L	1	12/19/18	12/19/18
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	71.4	2.0	1.70	0.85	mg/L	1	12/18/18	12/18/18
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	12/18/18	12/18/18
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	71.4	2.0	1.70	0.85	mg/L	1	12/18/18	12/18/18
SM3500FeB	FERROUS IRON	0.30 J	1.0	0.32	0.16	mg/L	1	12/14/18	12/14/18

J = Estimated value.

Printed: 12/20/18 8:08:23 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH722**

Sample Collection Date: 12/13/18

**APPL ID: AZ84061**

ARF: 87650

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	105	5.0	1.00	0.40	mg/L	5	12/19/18	12/19/18
EPA 300.0	NITRATE	2.2	0.5	0.18	0.04	mg/L	1	12/14/18	12/14/18
EPA 300.0	SULFATE	14.4	1.0	0.20	0.09	mg/L	1	12/14/18	12/14/18
EPA 353.2	NITRATE-NITRITE-N	0.61	0.10	0.100	0.028	mg/L	1	12/19/18	12/19/18
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	62.7	2.0	1.70	0.85	mg/L	1	12/18/18	12/18/18
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	12/18/18	12/18/18
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	62.7	2.0	1.70	0.85	mg/L	1	12/18/18	12/18/18
SM3500FeB	FERROUS IRON	0.35 J	1.0	0.32	0.16	mg/L	1	12/14/18	12/14/18

J = Estimated value.

Printed: 12/20/18 8:08:23 AM

APPL-F1-SC-NoMC-REG MDLs



# QC FORMS

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181214A-BLK	Blank	60-142	117		56-125	105	
181214A-LCS	Lab Control Spike	60-142	116		56-125	93.2	
181214A-LCSD	Lab Control SpikeD	60-142	119		56-125	101	
AZ84057-MSD	Matrix SpikeD	60-142	135		56-125	92.1	
AZ84057-MS	Matrix Spike	60-142	136		56-125	94.8	
AZ84059	ERH720	60-142	103		56-125	109	
AZ84061	ERH722	60-142	124		56-125	104	
AZ84061-MS	Matrix Spike	60-142	123		56-125	99.9	
AZ84061-MSD	Matrix SpikeD	60-142	125		56-125	98.7	
AZ84057	ERH719	60-142	76.8		56-125	56.3	
AZ84062	ERH723	60-142	134		56-125	118	

Comments: Batch: #DOC53-181214A

Printed: 12/21/18 11:46:44 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 01/02/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181214A1-BLK	Blank	0-1	0.0		60-142	116	
181214A1-LCS	Lab Control Spike	0-1	0.0		60-142	119	
181214A1-LCSD	Lab Control SpikeD	0-1	0.0		60-142	128	
AZ84057	ERH719	0-1	0.0		60-142	70.8	
AZ84062	ERH723	0-1	0.0		60-142	132	

Comments: Batch: #DOC53-181214A1

Printed: 01/02/19 4:34:02 PM  
Form 2 & 8, Surrogate Recovery Summary

**EPA 8015B-eLL**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 01/02/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
181214A1-BLK	Blank	56-125	104				
181214A1-LCS	Lab Control Spike	56-125	101				
181214A1-LCSD	Lab Control SpikeD	56-125	111				
AZ84057	ERH719	56-125	56.3				
AZ84062	ERH723	56-125	119				

Comments: Batch: #DOC53-181214A1

**EPA 8015B-eLL**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87650  
Matrix: WATER

SDG No: 87650  
Date Analyzed: 01/25/19  
Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190124A1-BLK	Blank	60-142	112		56-125	103	
190124A1-LCS	Lab Control Spike	60-142	114		56-125	99.6	
190124A1-LCSD	Lab Control Spiked	60-142	111		56-125	98.0	
AZ84057	ERH719	60-142	113		56-125	109	
AZ84059	ERH720	60-142	114		56-125	111	
AZ84061	ERH722	60-142	113		56-125	106	
AZ84062	ERH723	60-142	107		56-125	103	

Comments: Batch: #DOC53-190124A1

Printed: 01/28/19 4:12:44 PM  
Form 2 & 8, Surrogate Recovery Summary

**ADDED PAGE**  
Page 67 of 178

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Apollo

Blank ID: 181214A-BLK

Time Analyzed: 1403

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181214A-BLK	Blank	1218043	12/19/18 1403
181214A-LCS	Lab Control Spike	1218048	12/19/18 1623
181214A-LCSD	Lab Control Spiked	1218049	12/19/18 1643
181214A-MSD	Matrix SpikeD	1218054	12/19/18 1823
181214A-MS	Matrix Spike	1218055	12/19/18 1843
AZ84059	ERH720	1218059	12/19/18 2003
AZ84061	ERH722	1218060	12/19/18 2023
181214A-MS	Matrix Spike	1218061	12/19/18 2043
181214A-MSD	Matrix SpikeD	1218062	12/19/18 2102
AZ84057	ERH719	1218084	12/20/18 1708
AZ84062	ERH723	1218085	12/20/18 1728

Comments: Batch: #DOC53-181214A

Printed: 12/21/18 11:47:05 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **181214W-84057 - 236181**  
Batch ID: #DOC53-181214A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	12/19/18
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	12/19/18
BLANK	SURROGATE: OCTACOSANE (S)	117	60-142			%	12/14/18	12/19/18
BLANK	SURROGATE: ORTHO-TERPHEN	105	56-125			%	12/14/18	12/19/18

Quant Method: DOC0905.M  
Run #: 1218043  
Instrument: Apollo  
Sequence: 181218  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 11:46:43 AM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 01/02/19

Matrix: WATER

Instrument: Apollo

Blank ID: 181214A1-BLK

Time Analyzed: 1410

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181214A1-BLK	Blank	102005	01/02/19 1410
181214A1-LCS	Lab Control Spike	102006	01/02/19 1430
181214A1-LCSD	Lab Control SpikeD	102007	01/02/19 1450
AZ84057	ERH719	102010	01/02/19 1550
AZ84062	ERH723	102011	01/02/19 1610

Comments: Batch: #DOC53-181214A1

Printed: 01/02/19 4:33:59 PM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8015B TPH WATER L-L SGC**

Blank Name/QCG: **181214W-84057 - 236372**  
Batch ID: #DOC53-181214A1

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	12/14/18	01/02/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	12/14/18	01/02/19
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	12/14/18	01/02/19
BLANK	SURROGATE: OCTACOSANE (S)	116	60-142			%	12/14/18	01/02/19
BLANK	SURROGATE: ORTHO-TERPHEN	104	56-125			%	12/14/18	01/02/19

Quant Method: DOC0905.M  
Run #: 102005  
Instrument: Apollo  
Sequence: 190102  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/02/19 4:34:04 PM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190124A1-BLK

Time Analyzed: 1625

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190124A1-BLK	Blank	124024	01/25/19 1625
190124A1-LCS	Lab Control Spike	124025	01/25/19 1644
190124A1-LCSD	Lab Control Spiked	124026	01/25/19 1704
AZ84057	ERH719	124027	01/25/19 1724
AZ84059	ERH720	124028	01/25/19 1744
AZ84061	ERH722	124029	01/25/19 1804
AZ84062	ERH723	124030	01/25/19 1824

Comments: Batch: #DOC53-190124A1

**ADDED PAGE**  
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Printed: 01/28/19 4:12:38 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ RE-EXTRACT**

Blank Name/QCG: **190124W-84057 - 236937**  
Batch ID: #DOC53-190124A1

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
BLANK	SURROGATE: OCTACOSANE (S)	112	60-142			%	01/24/19	01/25/19
BLANK	SURROGATE: ORTHO-TERPHEN	103	56-125			%	01/24/19	01/25/19

Quant Method:DOC0117.M  
Run #: 124024  
Instrument:Apollo  
Sequence: 190124  
Initials:DPO

**ADDED PAGE**  
Page 73 of 1287

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 4:12:47 PM

**EPA 8015B-eL**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Apollo

LCS ID: 181214A-LCS

Time Analyzed: 1623

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181214A-BLK	Blank	1218043	12/19/18 1403
181214A-LCS	Lab Control Spike	1218048	12/19/18 1623
181214A-LCSD	Lab Control SpikeD	1218049	12/19/18 1643
181214A-MSD	Matrix SpikeD	1218054	12/19/18 1823
181214A-MS	Matrix Spike	1218055	12/19/18 1843
AZ84059	ERH720	1218059	12/19/18 2003
AZ84061	ERH722	1218060	12/19/18 2023
181214A-MS	Matrix Spike	1218061	12/19/18 2043
181214A-MSD	Matrix SpikeD	1218062	12/19/18 2102
AZ84057	ERH719	1218084	12/20/18 1708
AZ84062	ERH723	1218085	12/20/18 1728

Comments: Batch: #DOC53-181214A

**Laboratory Control Spike Recoveries**  
**EPA 8015B TPH LIQ-LIQ**

APPL ID: **181214W-84057 LCS - 236181**  
 Batch ID: #DOC53-181214A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1180	1220	94.4	97.6	36-132	3.3	30
OIL (C24-C40)	1250	1120	1130	89.6	90.4	41-113	0.89	30
SURROGATE: OCTACOSANE (S)	75.0	87.1	89.3	116	119	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	69.9	75.9	93.2	101	56-125		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	12/14/18	12/14/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Apollo	Apollo
Run :	1218048	1218049
Initials :	DPO	

**EPA 8015B-eL**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 01/02/19

Matrix: WATER

Instrument: Apollo

LCS ID: 181214A1-LCS

Time Analyzed: 1430

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181214A1-BLK	Blank	102005	01/02/19 1410
181214A1-LCS	Lab Control Spike	102006	01/02/19 1430
181214A1-LCSD	Lab Control SpikeD	102007	01/02/19 1450
AZ84057	ERH719	102010	01/02/19 1550
AZ84062	ERH723	102011	01/02/19 1610

Comments: Batch: #DOC53-181214A1

Printed: 01/02/19 4:33:58 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8015B TPH WATER L-L SGC**

APPL ID: 181214W-84057 LCS - 236372  
 Batch ID: #DOC53-181214A1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1110	1220	88.8	97.6	36-132	9.4	30
OIL (C24-C40)	1250	1140	1190	91.2	95.2	41-113	4.3	30
-----								
SURROGATE: (R) DECANOIC ACID (S)	10.00	0	0	0.0	0.0	0-1		
SURROGATE: OCTACOSANE (S)	75.0	89.3	96.3	119	128	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	75.8	83.1	101	111	56-125		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	12/14/18	12/14/18
Analysis Date :	01/02/19	01/02/19
Instrument :	Apollo	Apollo
Run :	102006	102007
Initials :	DPO	

# Matrix Spike Recoveries

## EPA 8015B TPH LIQ-LIQ

APPL ID: 181214W-84057 MS - 236181  
 Batch ID: #DOC53-181214A  
 Sample ID: AZ84057  
 Client ID: ERH719

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	350	1350	1250	80.0	72.0	36-132	7.7	30
OIL (C24-C40)	1250	ND	1460	1220	117 #	97.6	41-113	17.9	30
SURROGATE: OCTACOSANE (S)	75.0	NA	102	101	136	135	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	NA	71.1	69.1	94.8	92.1	56-125		

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	12/14/18	12/14/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Apollo	Apollo
Run :	1218055	1218054
Initials :	DPO	

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 APPL MSD SCII



# Matrix Spike Recoveries

## EPA 8015B TPH LIQ-LIQ

APPL ID: 181214W-84061 MS - 236181  
 Batch ID: #DOC53-181214A  
 Sample ID: AZ84061  
 Client ID: ERH722

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	ND	1280	1520	102	122	36-132	17.1	30
OIL (C24-C40)	1250	ND	1320	1260	106	101	41-113	4.7	30
SURROGATE: OCTACOSANE (S)	75.0	NA	91.9	93.8	123	125	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	NA	74.9	74.0	99.9	98.7	56-125		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Primary		
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	12/14/18	12/14/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Apollo	Apollo
Run :	1218061	1218062
Initials :	DPO	

Printed: 12/21/18 11:46:59 AM  
 APPL MSD SCII

# 8270D-SIM

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181217A-BLK	Blank	39-114	98.5		58-120	110	
181217A-LCS	Lab Control Spike	39-114	94.1		58-120	106	
181217A-LCSD	Lab Control Spiked	39-114	88.5		58-120	99.0	
AZ84057-MS	Matrix Spike	39-114	92.8		58-120	107	
AZ84057-MSD	Matrix SpikeD	39-114	102		58-120	114	
AZ84057	ERH719	39-114	87.4		58-120	106	
AZ84059	ERH720	39-114	108		58-120	127	#
AZ84061-MS	Matrix Spike	39-114	96.6		58-120	118	
AZ84061-MSD	Matrix SpikeD	39-114	102		58-120	110	
AZ84061	ERH722	39-114	91.0		58-120	107	
AZ84062	ERH723	39-114	87.6		58-120	104	

Comments: Batch: #SIM53-181217A

# = Recovery outside of Control Limits on Sample.

Printed: 12/20/18 8:48:04 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190124A1-LCS

Time Analyzed: 1644

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190124A1-BLK	Blank	124024	01/25/19 1625
190124A1-LCS	Lab Control Spike	124025	01/25/19 1644
190124A1-LCSD	Lab Control SpikeD	124026	01/25/19 1704
AZ84057	ERH719	124027	01/25/19 1724
AZ84059	ERH720	124028	01/25/19 1744
AZ84061	ERH722	124029	01/25/19 1804
AZ84062	ERH723	124030	01/25/19 1824

Comments: Batch: #DOC53-190124A1

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Printed: 01/28/19 4:12:34 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8015B TPH LIQ-LIQ RE-EXTRACT**

APPL ID: 190124W-84057 LCS - 236937  
 Batch ID: #DOC53-190124A1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1330	1310	106	105	36-132	1.5	30
OIL (C24-C40)	1250	1230	1220	98.4	97.6	41-113	0.82	30
SURROGATE: OCTACOSANE (S)	75.0	85.5	83.6	114	111	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	74.7	73.5	99.6	98.0	56-125		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/24/19	01/24/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Apollo	Apollo
Run :	124025	124026
Initials :	DPO	

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# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Linus

Blank ID: 181217A-BLK

Time Analyzed: 1352

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181217A-BLK	Blank	1120L150	12/19/18 1352
181217A-LCS	Lab Control Spike	1120L151	12/19/18 1421
181217A-LCSD	Lab Control SpikeD	1120L152	12/19/18 1450
181217A-MS	Matrix Spike	1120L153	12/19/18 1519
181217A-MSD	Matrix SpikeD	1120L154	12/19/18 1548
AZ84057	ERH719	1120L155	12/19/18 1617
AZ84059	ERH720	1120L156	12/19/18 1647
181217A-MS	Matrix Spike	1120L157	12/19/18 1716
181217A-MSD	Matrix SpikeD	1120L158	12/19/18 1745
AZ84061	ERH722	1120L159	12/19/18 1814
AZ84062	ERH723	1120L160	12/19/18 1843

Comments: Batch: #SIM53-181217A

Printed: 12/20/18 8:48:15 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D SIM LIQ-LIQ**

Blank Name/QCG: **181217W-84057 - 236170**  
Batch ID: #SIM53-181217A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	12/17/18	12/19/18
BLANK	SURROGATE: 2-METHYLNAPHT	98.5	39-114			%	12/17/18	12/19/18
BLANK	SURROGATE: FLUORANTHENE-	110	58-120			%	12/17/18	12/19/18

Quant Method:L1026.M  
Run #:1120L150  
Instrument:Linus  
Sequence:L181120  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 12/20/18 8:48:24 AM

# 8270D-SIM

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Linus

LCS ID: 181217A-LCS

Time Analyzed: 1421

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181217A-BLK	Blank	1120L150	12/19/18 1352
181217A-LCS	Lab Control Spike	1120L151	12/19/18 1421
181217A-LCSD	Lab Control SpikeD	1120L152	12/19/18 1450
181217A-MS	Matrix Spike	1120L153	12/19/18 1519
181217A-MSD	Matrix SpikeD	1120L154	12/19/18 1548
AZ84057	ERH719	1120L155	12/19/18 1617
AZ84059	ERH720	1120L156	12/19/18 1647
181217A-MS	Matrix Spike	1120L157	12/19/18 1716
181217A-MSD	Matrix SpikeD	1120L158	12/19/18 1745
AZ84061	ERH722	1120L159	12/19/18 1814
AZ84062	ERH723	1120L160	12/19/18 1843

Comments: Batch: #SIM53-181217A

Printed: 12/20/18 8:48:34 AM  
Form 4, LCS Summary

**Matrix Spike Recoveries**  
**EPA 8270D SIM LIQ-LIQ**

APPL ID: 181217W-84057 MS - 236170  
 Batch ID: #SIM53-181217A  
 Sample ID: AZ84057  
 Client ID: ERH719

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	ND	5.62	5.91	89.9	94.6	41-115	5.0	20
2-METHYLNAPHTHALENE	6.25	ND	5.72	6.04	91.5	96.6	39-114	5.4	20
NAPHTHALENE	6.25	ND	5.45	5.77	87.2	92.3	43-114	5.7	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	NA	5.80	6.37	92.8	102	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	NA	6.69	7.13	107	114	58-120		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1026.M	L1026.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Linus	Linus
Run :	1120L153	1120L154
Initials :	AAB	

Printed: 12/20/18 8:48:40 AM  
 APPL MSD SCII



# Matrix Spike Recoveries

## EPA 8270D SIM LIQ-LIQ

APPL ID: 181217W-84061 MS - 236170  
 Batch ID: #SIM53-181217A  
 Sample ID: AZ84061  
 Client ID: ERH722

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	ND	5.87	6.08	93.9	97.3	41-115	3.5	20
2-METHYLNAPHTHALENE	6.25	ND	5.94	6.12	95.0	97.9	39-114	3.0	20
NAPHTHALENE	6.25	ND	5.74	5.96	91.8	95.4	43-114	3.8	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	NA	6.04	6.35	96.6	102	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	NA	7.40	6.90	118	110	58-120		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1026.M	L1026.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Linus	Linus
Run :	1120L157	1120L158
Initials :	AAB	

Printed: 12/20/18 8:48:40 AM  
 APPL MSD SCII

**Laboratory Control Spike Recoveries**  
**EPA 8270D SIM LIQ-LIQ**

APPL ID: 181217W-84057 LCS - 236170  
 Batch ID: #SIM53-181217A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	5.57	5.31	89.1	85.0	41-115	4.8	20
2-METHYLNAPHTHALENE	6.25	5.66	5.39	90.6	86.2	39-114	4.9	20
NAPHTHALENE	6.25	5.38	5.16	86.1	82.6	43-114	4.2	20
-----								
SURROGATE: 2-METHYLNAPHTHALEN	6.25	5.88	5.53	94.1	88.5	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	6.60	6.19	106	99.0	58-120		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1026.M	L1026.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Linus	Linus
Run :	1120L151	1120L152
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1026L002.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 10/26/18  
 Instrument: Linus  
 Time Analyzed: 12:05

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	5 SIM 10/26/18	1026L003.D	10/26/18 12:21
2	0.1 SIM 10/26/18	1026L004.D	10/26/18 12:50
3	0.2 SIM 10/26/18	1026L005.D	10/26/18 13:20
4	0.5 SIM 10/26/18	1026L006.D	10/26/18 13:49
5	1 SIM 10/26/18	1026L007.D	10/26/18 14:18
6	10 SIM 10/26/18	1026L008.D	10/26/18 14:47
7	50 SIM 10/26/18	1026L009.D	10/26/18 15:16
8	100 SIM 10/26/18	1026L010.D	10/26/18 15:46
9	SS SIM 10/26/18	1026L011.D	10/26/18 16:46
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80% of mass 198	<u>44.4</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>55.0</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.5</u>
275 10 - 60% of mass 198	<u>21.8</u>
365 1 - 100% of mass 198	<u>2.6</u>
441 0.01 - 24% of mass 442	<u>18.1</u>
442 50 - 150% of mass 198	<u>59.1</u>
443 15 - 24% of mass 442	<u>20.7</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87650  
Matrix: Water  
ID: 1120L145.D

SDG No: 87650  
Date Analyzed: 12/19/18  
Instrument: Linus  
Time Analyzed: 8:21

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	5 ug/ml SIM 10/26/18	1120L146.D	12/19/18 8:37
2	Blank	181217A Blk 1/800	1120L150.D
3	Lab Control Spike	181217A LCS-2 1/800	1120L151.D
4	Lab Control SpikeD	181217A LCSD-2 1/800	1120L152.D
5		AZ84057W24 MS-2 1/80	1120L153.D
6		AZ84057W31 MSD-2 1/8	1120L154.D
7	ERH719	AZ84057W22 1/800	1120L155.D
8	ERH720	AZ84059W08 1/800	1120L156.D
9		AZ84061W23 MS-2 1/80	1120L157.D
10		AZ84061W28 MSD-2 1/8	1120L158.D
11	ERH722	AZ84061W24 1/800	1120L159.D
12	ERH723	AZ84062W07 1/800	1120L160.D
13		5 ug/ml SIM 10/26/18	1120L161.D
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80% of mass 198	51.9
68 0 - 2.05% of mass 69	0.0
70 0 - 2% of mass 69	0.4
127 10 - 80% of mass 198	56.4
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.4
275 10 - 60% of mass 198	20.7
365 1 - 100% of mass 198	2.5
441 0.01 - 24% of mass 442	17.1
442 50 - 150% of mass 198	58.5
443 15 - 24% of mass 442	18.9

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1120L146.D Date Analyzed: 12/19/18  
 Instrument ID: Linus Time Analyzed: 8:37  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD		28262		4.17		12397		6.19	
UPPER LIMIT		56524		4.34		24794		6.36	
LOWER LIMIT		14131		4.00		6199		6.02	
SAMPLE									
NO.									
01	181217A Bik 1/800	18904		4.18		8865		6.19	
02	181217A LCS-2 1/800	20300		4.18		9621		6.19	
03	181217A LCSD-2 1/800	21810		4.18		10227		6.19	
04	AZ84057W24 MS-2 1/800	20007		4.18		9364		6.19	
05	AZ84057W31 MSD-2 1/800	19108		4.18		9018		6.19	
06	AZ84057W22 1/800	21814		4.18		9599		6.19	
07	AZ84059W08 1/800	18298		4.18		8166		6.19	
08	AZ84061W23 MS-2 1/800	20344		4.18		9093		6.19	
09	AZ84061W28 MSD-2 1/800	19685		4.18		8969		6.19	
10	AZ84061W24 1/800	22507		4.18		10154		6.19	
11	AZ84062W07 1/800	21807		4.18		9660		6.20	
12	5 ug/ml SIM 10/26/18	29922		4.18		13189		6.19	
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1120L146.D Date Analyzed: 12/19/18  
 Instrument ID: Linus Time Analyzed: 8:37  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Chrysene-D12(IS)		Perylene-D12(IS)		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12 HOUR STD	37810	14.39	36424	18.18		
UPPER LIMIT	75620	14.56	72848	18.35		
LOWER LIMIT	18905	14.22	18212	18.01		
SAMPLE NO.						
01 181217A Bik 1/800	25751	14.41	25864	18.23		
02 181217A LCS-2 1/800	28249	14.38	28150	18.18		
03 181217A LCSD-2 1/800	30423	14.38	30375	18.18		
04 AZ84057W24 MS-2 1/800	27827	14.38	27478	18.18		
05 AZ84057W31 MSD-2 1/800	27405	14.38	26943	18.20		
06 AZ84057W22 1/800	28425	14.40	28116	18.22		
07 AZ84059W08 1/800	23889	14.40	24360	18.22		
08 AZ84061W23 MS-2 1/800	26606	14.38	25888	18.20		
09 AZ84061W28 MSD-2 1/800	28210	14.38	27323	18.20		
10 AZ84061W24 1/800	28648	14.40	28799	18.22		
11 AZ84062W07 1/800	28026	14.41	27778	18.23		
12 5 ug/ml SIM 10/26/18	39556	14.38	37461	18.18		
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181217A-BLK	Blank	43-140	86.5		44-119	76.8	
181217A-LCSD	Lab Control SpikeD	43-140	94.0		44-119	80.8	
AZ84061-MS	Matrix Spike	43-140	114		44-119	98.4	
181217A-LCS	Lab Control Spike	43-140	99.2		44-119	85.6	
AZ84057-MS	Matrix Spike	43-140	76.8		44-119	68.1	
AZ84057-MSD	Matrix SpikeD	43-140	74.8		44-119	64.4	
AZ84057	ERH719	43-140	81.8		44-119	70.1	
AZ84059	ERH720	43-140	73.6		44-119	65.4	
AZ84061	ERH722	43-140	84.0		44-119	73.3	
AZ84062	ERH723	43-140	81.6		44-119	72.0	
AZ84061-MSD	Matrix SpikeD	43-140	84.4		44-119	72.9	

Comments: Batch: #87DC5-181217A

Printed: 12/21/18 10:10:02 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181217A-BLK	Blank	19-119	114		44-120	80.8	
181217A-LCSD	Lab Control SpikeD	19-119	114		44-120	88.8	
AZ84061-MS	Matrix Spike	19-119	104		44-120	102	
181217A-LCS	Lab Control Spike	19-119	112		44-120	90.4	
AZ84057-MS	Matrix Spike	19-119	81.6		44-120	73.0	
AZ84057-MSD	Matrix SpikeD	19-119	101		44-120	72.8	
AZ84057	ERH719	19-119	105		44-120	78.4	
AZ84059	ERH720	19-119	90.0		44-120	71.3	
AZ84061	ERH722	19-119	84.0		44-120	77.4	
AZ84062	ERH723	19-119	90.2		44-120	81.0	
AZ84061-MSD	Matrix SpikeD	19-119	85.2		44-120	78.8	

Comments: Batch: #87DC5-181217A

Printed: 12/21/18 10:10:02 AM  
Form 2 & 8, Surrogate Recovery Summary



# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181217A-BLK	Blank	10-115	110		50-134	76.0	
181217A-LCSD	Lab Control SpikeD	10-115	109		50-134	84.0	
AZ84061-MS	Matrix Spike	10-115	104		50-134	105	
181217A-LCS	Lab Control Spike	10-115	106		50-134	91.2	
AZ84057-MS	Matrix Spike	10-115	77.2		50-134	70.2	
AZ84057-MSD	Matrix SpikeD	10-115	98.0		50-134	66.4	
AZ84057	ERH719	10-115	103		50-134	74.6	
AZ84059	ERH720	10-115	86.6		50-134	66.3	
AZ84061	ERH722	10-115	83.6		50-134	75.5	
AZ84062	ERH723	10-115	89.0		50-134	73.9	
AZ84061-MSD	Matrix SpikeD	10-115	83.2		50-134	76.6	

Comments: Batch: #87DC5-181217A

Printed: 12/21/18 10:10:02 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Yoda

Blank ID: 181217A-BLK

Time Analyzed: 0821

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181217A-BLK	Blank	1201Y194	12/20/18 0821
181217A-LCSD	Lab Control SpikeD	1201Y196	12/20/18 0917
181217A-MS	Matrix Spike	1201Y201	12/20/18 1135
181217A-LCS	Lab Control Spike	1201Y202	12/20/18 1206
181217A-MS	Matrix Spike	1201Y203	12/20/18 1234
181217A-MSD	Matrix Spiked	1201Y204	12/20/18 1301
AZ84057	ERH719	1201Y205	12/20/18 1329
AZ84059	ERH720	1201Y206	12/20/18 1357
AZ84061	ERH722	1201Y207	12/20/18 1424
AZ84062	ERH723	1201Y208	12/20/18 1452
181217A-MSD	Matrix Spiked	1201Y209	12/20/18 1520

Comments: Batch: #87DC5-181217A

Printed: 12/21/18 10:10:03 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D WATER**

Blank Name/QCG: **181217W-84057 - 236184**  
Batch ID: #87DC5-181217A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	12/17/18	12/20/18
BLANK	SURROGATE: 2,4,6-TRIBROMOP	86.5	43-140			%	12/17/18	12/20/18
BLANK	SURROGATE: 2-FLUORBIPHENY	76.8	44-119			%	12/17/18	12/20/18
BLANK	SURROGATE: 2-FLUOROPHENO	114	19-119			%	12/17/18	12/20/18
BLANK	SURROGATE: NITROBENZENE-	80.8	44-120			%	12/17/18	12/20/18
BLANK	SURROGATE: PHENOL-D6 (S)	110	10-115			%	12/17/18	12/20/18
BLANK	SURROGATE: TERPHENYL-D14 (	76.0	50-134			%	12/17/18	12/20/18

Quant Method: Y1201NC.M  
Run #: 1201Y194  
Instrument: Yoda  
Sequence: Y181201  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 10:09:37 AM

# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Yoda

LCS ID: 181217A-LCS

Time Analyzed: 1206

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181217A-BLK	Blank	1201Y194	12/20/18 0821
181217A-LCSD	Lab Control SpikeD	1201Y196	12/20/18 0917
181217A-MS	Matrix Spike	1201Y201	12/20/18 1135
181217A-LCS	Lab Control Spike	1201Y202	12/20/18 1206
181217A-MS	Matrix Spike	1201Y203	12/20/18 1234
181217A-MSD	Matrix SpikeD	1201Y204	12/20/18 1301
AZ84057	ERH719	1201Y205	12/20/18 1329
AZ84059	ERH720	1201Y206	12/20/18 1357
AZ84061	ERH722	1201Y207	12/20/18 1424
AZ84062	ERH723	1201Y208	12/20/18 1452
181217A-MSD	Matrix SpikeD	1201Y209	12/20/18 1520

Comments: Batch: #87DC5-181217A

Printed: 12/21/18 10:10:04 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: 181217W-84057 LCS - 236184  
 Batch ID: #87DC5-181217A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	68.3	70.6	109	113	10-115	3.3	20
-----								
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	248	235	99.2	94.0	43-140		
SURROGATE: 2-FLUOROBIPHENYL (S)	125	107	101	85.6	80.8	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	280	286	112	114	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	113	111	90.4	88.8	44-120		
SURROGATE: PHENOL-D6 (S)	250	264	273	106	109	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	114	105	91.2	84.0	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y1201NC.M	Y1201NC.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/20/18	12/20/18
Instrument :	Yoda	Yoda
Run :	1201Y202	1201Y196
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D WATER

APPL ID: 181217W-84057 MS - 236184  
 Batch ID: #87DC5-181217A  
 Sample ID: AZ84057  
 Client ID: ERH719

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	ND	56.9	69.6	91.0	111	10-115	20.1	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	NA	192	187	76.8	74.8	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	NA	85.1	80.5	68.1	64.4	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	NA	204	253	81.6	101	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	NA	91.3	91.0	73.0	72.8	44-120		
SURROGATE: PHENOL-D6 (S)	250	NA	193	245	77.2	98.0	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	NA	87.7	83.0	70.2	66.4	50-134		

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	Y1201NC.M	Y1201NC.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/20/18	12/20/18
Instrument :	Yoda	Yoda
Run :	1201Y203	1201Y204
Initials :	AAB	

Printed: 12/21/18 10:16:38 AM  
 APPL MSD SCII

# Matrix Spike Recoveries

## EPA 8270D WATER

APPL ID: 181217W-84061 MS - 236184  
 Batch ID: #87DC5-181217A  
 Sample ID: AZ84061  
 Client ID: ERH722

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	ND	69.4	54.6	111	87.4	10-115	23.9 #	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	NA	285	211	114	84.4	43-140		
SURROGATE: 2-FLUOROBIPHENYL (S)	125	NA	123	91.1	98.4	72.9	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	NA	261	213	104	85.2	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	NA	128	98.5	102	78.8	44-120		
SURROGATE: PHENOL-D6 (S)	250	NA	261	208	104	83.2	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	NA	131	95.8	105	76.6	50-134		

# = Recovery is outside QC limits.

Comments:

---

Primary	SPK	DUP
Quant Method :	Y1201NC.M	Y1201NC.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/20/18	12/20/18
Instrument :	Yoda	Yoda
Run :	1201Y201	1201Y209
Initials :	AAB	

Printed: 12/21/18 10:16:39 AM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1201Y002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 12/01/18  
Instrument: Yoda  
Time Analyzed: 15:37

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		4ug/mL 8270 11/15/18	1201Y003.D	12/01/18 15:52
2		5ug/mL 8270 11/15/18	1201Y004.D	12/01/18 16:20
3		10ug/mL 8270 11/15/1	1201Y005.D	12/01/18 16:48
4		20ug/mL 8270 11/15/1	1201Y006.D	12/01/18 17:16
5		40ug/mL 8270 11/15/1	1201Y007.D	12/01/18 17:43
6		50ug/mL 8270 11/15/1	1201Y008.D	12/01/18 18:11
7		60ug/mL 8270 11/15/1	1201Y009.D	12/01/18 18:39
8		80ug/mL 8270 11/15/1	1201Y010.D	12/01/18 19:06
9		100ug/mL 8270 11/15/1	1201Y011.D	12/01/18 19:34
10		SS- 8270 11/15/18	1201Y012.D	12/01/18 20:02
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>36.5</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.6</u>
127 10 - 80% of mass 198	<u>49.5</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.8</u>
275 10 - 60% of mass 198	<u>30.3</u>
365 1 - 100% of mass 198	<u>4.0</u>
441 0.01 - 24% of mass 442	<u>16.1</u>
442 50 - 150% of mass 198	<u>129.0</u>
443 15 - 24% of mass 442	<u>19.5</u>



Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87650  
Matrix: Water  
ID: 1201Y192.D

SDG No: 87650  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Time Analyzed: 7:38

Client Sample No.	APPL ID.	File ID.	Date Analyzed	
1	Blank	181217A BLK 1/800	1201Y194.D	12/20/18 8:21
2	Lab Control Spiked	181217A LCSD-1 1/800	1201Y196.D	12/20/18 9:17
3		AZ84061W20 MS-1 1/80	1201Y201.D	12/20/18 11:35
4	Lab Control Spike	181217A LCS-1 1/800	1201Y202.D	12/20/18 12:06
5		AZ84057W32 MS-1 1/80	1201Y203.D	12/20/18 12:34
6		AZ84057W23 MSD-1 1/8	1201Y204.D	12/20/18 13:01
7	ERH719	AZ84057W22 1/800	1201Y205.D	12/20/18 13:29
8	ERH720	AZ84059W08 1/800	1201Y206.D	12/20/18 13:57
9	ERH722	AZ84061W24 1/800	1201Y207.D	12/20/18 14:24
10	ERH723	AZ84062W07 1/800	1201Y208.D	12/20/18 14:52
11		AZ84061W19 MSD-1 1/8	1201Y209.D	12/20/18 15:20
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51	9.95 - 80.04% of mass 198	37.7
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.4
127	10 - 80% of mass 198	52.1
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.9
275	10 - 60% of mass 198	26.2
365	1 - 100% of mass 198	3.2
441	0.01 - 24% of mass 442	16.5
442	50 - 150% of mass 198	97.1
443	15 - 24% of mass 442	19.3

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1201Y193.D Date Analyzed: 12/20/18  
 Instrument ID: Yoda Time Analyzed: 7:53  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		870005	5.47	3728630	6.91	1829230	8.93
UPPER LIMIT		1740010	5.64	7457260	7.08	3658460	9.10
LOWER LIMIT		435003	5.30	1864315	6.74	914615	8.76
SAMPLE NO.							
01	181217A BLK 1/800	459695	5.48	2608240	6.91	1378160	8.93
02	181217A LCSD-1 1/800	441349	5.48	2471800	6.91	1304320	8.93
03	AZ84061W20 MS-1 1/800	482696	5.47	2111630	6.91	1066090	8.93
04	181217A LCS-1 1/800	446755	5.48	2340440	6.90	1203330	8.93
05	AZ84057W32 MS-1 1/800	553088	5.48	2894350	6.91	1497290	8.93
06	AZ84057W23 MSD-1 1/800	463916	5.48	2757970	6.91	1477790	8.93
07	AZ84057W22 1/800	472686	5.48	2662800	6.91	1495570	8.93
08	AZ84059W08 1/800	560823	5.48	3030610	6.90	1592560	8.93
09	AZ84061W24 1/800	583476	5.47	2660350	6.90	1396920	8.93
10	AZ84062W07 1/800	526602	5.47	2446740	6.91	1361520	8.93
11	AZ84061W19 MSD-1 1/800	595587	5.47	2740430	6.91	1443150	8.93
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1201Y193.D Date Analyzed: 12/20/18  
 Instrument ID: Yoda Time Analyzed: 7:53  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12 HOUR STD	3414600	10.68	3129650	13.79	3068640	15.70	
UPPER LIMIT	6829200	10.85	6259300	13.96	6137280	15.87	
LOWER LIMIT	1707300	10.51	1564825	13.62	1534320	15.53	
SAMPLE NO.							
01	181217A BLK 1/800	2551520	10.68	2364660	13.78	2411710	15.69
02	181217A LCSD-1 1/800	2417390	10.68	2105750	13.79	2275580	15.69
03	AZ84061W20 MS-1 1/800	1966550	10.68	1708590	13.79	1826830	15.69
04	181217A LCS-1 1/800	2227720	10.67	1909810	13.78	2096060	15.69
05	AZ84057W32 MS-1 1/800	2745850	10.68	2439330	13.79	2591560	15.69
06	AZ84057W23 MSD-1 1/800	2766060	10.68	2426390	13.79	2526110	15.69
07	AZ84057W22 1/800	2802930	10.68	2380950	13.78	2578180	15.68
08	AZ84059W08 1/800	2951670	10.67	2622500	13.78	2716990	15.69
09	AZ84061W24 1/800	2619420	10.67	2298510	13.78	2418560	15.68
10	AZ84062W07 1/800	2563810	10.67	2304930	13.78	2365380	15.69
11	AZ84061W19 MSD-1 1/800	2662040	10.67	2334510	13.78	2547000	15.70
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Yoda

Blank ID: 181217A-BLK

Time Analyzed: 0942

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181217A-BLK	Blank	1128Y034	12/19/18 0942
181217A-LCS	Lab Control Spike	1128Y035	12/19/18 1005
181217A-LCSD	Lab Control SpikeD	1128Y036	12/19/18 1028
181217A-MS	Matrix Spike	1128Y037	12/19/18 1052
181217A-MSD	Matrix SpikeD	1128Y038	12/19/18 1115
AZ84057	ERH719	1128Y039	12/19/18 1139
AZ84059	ERH720	1128Y040	12/19/18 1308
181217A-MS	Matrix Spike	1128Y041	12/19/18 1332
181217A-MSD	Matrix SpikeD	1128Y042	12/19/18 1355
AZ84061	ERH722	1128Y043	12/19/18 1419
AZ84062	ERH723	1128Y044	12/19/18 1442

Comments: Batch: #87DME-181217A

Printed: 12/20/18 10:03:06 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D MODIFIED WATER**

Blank Name/QCG: **181217W-84057 - 236171**  
Batch ID: #87DME-181217A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	12/18/18	12/19/18

Quant Method: YMEE1128.M  
Run #: 1128Y034  
Instrument: Yoda  
Sequence: Y181128M  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 12/20/18 10:03:20 AM

# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Yoda

LCS ID: 181217A-LCS

Time Analyzed: 1005

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181217A-BLK	Blank	1128Y034	12/19/18 0942
181217A-LCS	Lab Control Spike	1128Y035	12/19/18 1005
181217A-LCSD	Lab Control SpikeD	1128Y036	12/19/18 1028
181217A-MS	Matrix Spike	1128Y037	12/19/18 1052
181217A-MSD	Matrix SpikeD	1128Y038	12/19/18 1115
AZ84057	ERH719	1128Y039	12/19/18 1139
AZ84059	ERH720	1128Y040	12/19/18 1308
181217A-MS	Matrix Spike	1128Y041	12/19/18 1332
181217A-MSD	Matrix SpikeD	1128Y042	12/19/18 1355
AZ84061	ERH722	1128Y043	12/19/18 1419
AZ84062	ERH723	1128Y044	12/19/18 1442

Comments: Batch: #87DME-181217A

Printed: 12/20/18 10:03:29 AM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8270D MODIFIED WATER**

APPL ID: 181218W-84057 LCS - 236171  
 Batch ID: #87DME-181217A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	92.3	111	115	139 #	30-130	18.4	20

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	12/18/18	12/18/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Yoda	Yoda
Run :	1128Y035	1128Y036
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D MODIFIED WATER

APPL ID: 181218W-84057 MS - 236171  
 Batch ID: #87DME-181217A  
 Sample ID: AZ84057  
 Client ID: ERH719

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	ND	96.5	100	121	125	30-130	3.6	20

Comments: \_\_\_\_\_  
 \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	12/18/18	12/17/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Yoda	Yoda
Run :	1128Y037	1128Y038
Initials :	AAB	

Printed: 12/20/18 10:03:48 AM  
 APPL MSD SCII



**Matrix Spike Recoveries**  
**EPA 8270D MODIFIED WATER**

APPL ID: 181218W-84061 MS - 236171  
 Batch ID: #87DME-181217A  
 Sample ID: AZ84061  
 Client ID: ERH722

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	ND	104	104	130	130	30-130	0.0	20

Comments: \_\_\_\_\_  
 \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	12/18/18	12/18/18
Analysis Date :	12/19/18	12/19/18
Instrument :	Yoda	Yoda
Run :	1128Y041	1128Y042
Initials :	AAB	

Printed: 12/20/18 10:03:48 AM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1128Y002.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 11/28/18  
 Instrument: Yoda  
 Time Analyzed: 7:30

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/ml MEE 08/01/18	1128Y004.D	11/28/18 8:08
2	100ug/ml MEE 08/01/1	1128Y005.D	11/28/18 8:32
3	200ug/ml MEE 08/01/1	1128Y006.D	11/28/18 8:55
4	400ug/ml MEE 08/01/1	1128Y007.D	11/28/18 9:19
5	600ug/ml MEE 08/01/1	1128Y008.D	11/28/18 9:43
6	800ug/ml MEE 08/01/1	1128Y009.D	11/28/18 10:06
7	1000ug/ml MEE 08/01/	1128Y010.D	11/28/18 10:30
8	500ug/ml MEE 08/01/1	1128Y012.D	11/28/18 11:17
9	SS ug/ml MEE 08/01/1	1128Y014.D	11/28/18 12:26
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>37.6</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.4</u>
127 10 - 80% of mass 198	<u>49.3</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.6</u>
275 10 - 60% of mass 198	<u>27.6</u>
365 1 - 100% of mass 198	<u>3.7</u>
441 0.01 - 24% of mass 442	<u>15.6</u>
442 50 - 150% of mass 198	<u>104.9</u>
443 15 - 24% of mass 442	<u>19.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87650  
 Matrix: Water  
 ID: 1128Y032.D

SDG No: 87650  
 Date Analyzed: 12/19/18  
 Instrument: Yoda  
 Time Analyzed: 8:15

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	500ug/ml MEE 12/19/1	1128Y033.D	12/19/18 8:31
2	Blank	181217A Blk 2/500	12/19/18 9:42
3	Lab Control Spike	181217A LCS-1 2/500	12/19/18 10:05
4	Lab Control SpikeD	181217A LCSD-1 2/500	12/19/18 10:28
5	AZ84057W16 MS-1 2/50	1128Y037.D	12/19/18 10:52
6	AZ84057W09 MSD-1 2/5	1128Y038.D	12/19/18 11:15
7	ERH719	AZ84057W17 2/500	12/19/18 11:39
8	ERH720	AZ84059W05 2/500	12/19/18 13:08
9	AZ84061W09 MS-1 2/50	1128Y041.D	12/19/18 13:32
10	AZ84061W17 MSD-1 2/5	1128Y042.D	12/19/18 13:55
11	ERH722	AZ84061W11 2/500	12/19/18 14:19
12	ERH723	AZ84062W06 2/500	12/19/18 14:42
13	500ug/ml MEE 12/20/1	1128Y048.D	12/19/18 16:16
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	38.1
68 0 - 2.04% of mass 69	0.0
70 0 - 2.04% of mass 69	0.7
127 10 - 80% of mass 198	50.4
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.8
275 10 - 60% of mass 198	25.6
365 1 - 100% of mass 198	3.1
441 0.01 - 24% of mass 442	15.6
442 50 - 150% of mass 198	94.1
443 15 - 24% of mass 442	19.2

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1128Y033.D Date Analyzed: 12/19/18  
 Instrument ID: Yoda Time Analyzed: 8:31  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12 HOUR STD	595254	5.25	2491540	6.66	1256490	8.68	
UPPER LIMIT	1190508	5.42	4983080	6.83	2512980	8.85	
LOWER LIMIT	297627	5.08	1245770	6.49	628245	8.51	
SAMPLE NO.							
01	181217A Blk 2/500	574426	5.23	2427800	6.65	1219730	8.68
02	181217A LCS-1 2/500	460642	5.23	1992740	6.65	995154	8.68
03	181217A LCSD-1 2/500	411444	5.23	1667480	6.65	813065	8.68
04	AZ84057W16 MS-1 2/500	494617	5.24	2129340	6.65	1117770	8.68
05	AZ84057W09 MSD-1 2/500	480452	5.25	2190870	6.66	1128650	8.68
06	AZ84057W17 2/500	515166	5.24	2165770	6.66	1077970	8.68
07	AZ84059W05 2/500	521303	5.24	2269560	6.66	1225500	8.69
08	AZ84061W09 MS-1 2/500	504726	5.24	2255060	6.65	1282290	8.68
09	AZ84061W17 MSD-1 2/500	483749	5.24	2232330	6.65	1267910	8.68
10	AZ84061W11 2/500	548110	5.23	2401770	6.66	1330800	8.68
11	AZ84062W06 2/500	506339	5.24	2208130	6.65	1162880	8.68
12	500ug/ml MEE 12/20/18	553827	5.24	2363850	6.65	1167160	8.68
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1128Y033.D Date Analyzed: 12/19/18  
 Instrument ID: Yoda Time Analyzed: 8:31  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	2312700	10.42	1974590	13.52	1954780	15.30
UPPER LIMIT	4625400	10.59	3949180	13.69	3909560	15.47
LOWER LIMIT	1156350	10.25	987295	13.35	977390	15.13
SAMPLE NO.						
01 181217A Bik 2/500	2303590	10.42	1904940	13.52	1872090	15.31
02 181217A LCS-1 2/500	1832850	10.41	1559130	13.52	1485570	15.30
03 181217A LCSD-1 2/500	1517320	10.41	1309900	13.52	1281290	15.30
04 AZ84057W16 MS-1 2/500	2059310	10.41	1567500	13.52	1491960	15.31
05 AZ84057W09 MSD-1 2/500	2098500	10.42	1666040	13.52	1523460	15.31
06 AZ84057W17 2/500	1928970	10.42	1534780	13.52	1482440	15.30
07 AZ84059W05 2/500	2285320	10.42	1871540	13.52	1718320	15.32
08 AZ84061W09 MS-1 2/500	2469800	10.41	2056400	13.51	1830070	15.31
09 AZ84061W17 MSD-1 2/500	2388790	10.42	1899340	13.51	1806630	15.31
10 AZ84061W11 2/500	2557320	10.42	2147900	13.52	2048010	15.31
11 AZ84062W06 2/500	2158390	10.41	1865170	13.51	1835510	15.30
12 500ug/ml MEE 12/20/18	2172810	10.41	1831350	13.51	1770880	15.31
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/16/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AZ84061-MS	Matrix Spike	81-118	95.6		85-114	99.6	
AZ84061-MSD	Matrix SpikeD	81-118	96.0		85-114	99.2	
181217AL-LCS	Lab Control Spike	81-118	97.2		85-114	98.4	
181217AL-LCSD	Lab Control SpikeD	81-118	98.4		85-114	98.0	
181217AL-BLK	Blank	81-118	107		85-114	90.0	
AZ84059	ERH720	81-118	102		85-114	85.7	
AZ84060	ERH721	81-118	105		85-114	88.5	
AZ84061	ERH722	81-118	109		85-114	85.1	

Comments: Batch: #86BTO-181217AL

Printed: 12/21/18 2:35:15 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/16/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AZ84061-MS	Matrix Spike	80-119	96.0		89-112	97.6	
AZ84061-MSD	Matrix SpikeD	80-119	96.0		89-112	98.8	
181217AL-LCS	Lab Control Spike	80-119	98.4		89-112	98.4	
181217AL-LCSD	Lab Control SpikeD	80-119	98.4		89-112	95.6	
181217AL-BLK	Blank	80-119	108		89-112	97.0	
AZ84059	ERH720	80-119	103		89-112	94.9	
AZ84060	ERH721	80-119	106		89-112	96.6	
AZ84061	ERH722	80-119	112		89-112	96.2	

Comments: Batch: #86BTO-181217AL

Printed: 12/21/18 2:35:15 PM  
Form 2 & 8, Surrogate Recovery Summary

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/17/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AZ84057-MS	Matrix Spike	81-118	100		85-114	99.6	
AZ84057-MSD	Matrix Spiked	81-118	101		85-114	103	
181219BL-LCS	Lab Control Spike	81-118	106		85-114	104	
181219BL-LCSD	Lab Control Spiked	81-118	102		85-114	107	
181219BL-BLK	Blank	81-118	107		85-114	93.3	
AZ84057	ERH719	81-118	112		85-114	87.8	
AZ84058	ERH718	81-118	114		85-114	89.5	

Comments: Batch: #86BTO-181219BL

Printed: 12/21/18 2:35:15 PM  
Form 2 & 8, Surrogate Recovery Summary



**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/17/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AZ84057-MS	Matrix Spike	80-119	103		89-112	102	
AZ84057-MSD	Matrix Spiked	80-119	99.6		89-112	103	
181219BL-LCS	Lab Control Spike	80-119	106		89-112	103	
181219BL-LCSD	Lab Control Spiked	80-119	104		89-112	105	
181219BL-BLK	Blank	80-119	109		89-112	98.6	
AZ84057	ERH719	80-119	118		89-112	98.2	
AZ84058	ERH718	80-119	116		89-112	96.4	

Comments: Batch: #86BTO-181219BL

Printed: 12/21/18 2:35:15 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181220AL-LCS	Lab Control Spike	81-118	97.2		85-114	106	
181220AL-LCSD	Lab Control SpikeD	81-118	94.8		85-114	105	
181220AL-BLK	Blank	81-118	102		85-114	91.8	
AZ84062	ERH723	81-118	105		85-114	92.3	

Comments: Batch: #86BTO-181220AL

Printed: 12/21/18 2:35:15 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
181220AL-LCS	Lab Control Spike	80-119	98.0		89-112	110	
181220AL-LCSD	Lab Control SpikeD	80-119	98.0		89-112	109	
181220AL-BLK	Blank	80-119	107		89-112	99.3	
AZ84062	ERH723	80-119	110		89-112	97.1	

Comments: Batch: #86BTO-181220AL

Printed: 12/21/18 2:35:15 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Loki

Blank ID: 181219BL-BLK

Time Analyzed: 0140

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181219BL-MS	Matrix Spike	1216L38	12/17/18 0230
181219BL-MSD	Matrix SpikeD	1216L39	12/17/18 0259
181219BL-LCS	Lab Control Spike	1219L32	12/20/18 0043
181219BL-LCSD	Lab Control SpikeD	1219L33	12/20/18 0112
181219BL-BLK	Blank	1219L34	12/20/18 0140
AZ84057	ERH719	1219L35	12/20/18 0209
AZ84058	ERH718	1219L36	12/20/18 0237

Comments: Batch: #86BTO-181219BL

Printed: 12/21/18 2:35:13 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **181219W-84057 - 236217**  
Batch ID: #86BTO-181219BL

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/20/18	12/20/18
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/20/18	12/20/18
BLANK	SURROGATE: 1,2-DICHLOROET	107	81-118			%	12/20/18	12/20/18
BLANK	SURROGATE: 4-BROMOFLUORO	93.3	85-114			%	12/20/18	12/20/18
BLANK	SURROGATE: DIBROMOFLUOR	109	80-119			%	12/20/18	12/20/18
BLANK	SURROGATE: TOLUENE-D8 (S)	98.6	89-112			%	12/20/18	12/20/18

Quant Method: L1218W.M  
Run #: 1219L34  
Instrument: Loki  
Sequence: 181218  
Initials: DG

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 2:35:24 PM

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Loki

Blank ID: 181220AL-BLK

Time Analyzed: 1913

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181220AL-LCS	Lab Control Spike	1220L15	12/20/18 1748
181220AL-LCSD	Lab Control SpikeD	1220L16	12/20/18 1816
181220AL-BLK	Blank	1220L18	12/20/18 1913
AZ84062	ERH723	1220L22	12/20/18 2107

Comments: Batch: #86BTO-181220AL

Printed: 12/21/18 2:35:13 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **181220W-84062 - 236218**  
Batch ID: #86BTO-181220AL

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/20/18	12/20/18
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/20/18	12/20/18
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/20/18	12/20/18
BLANK	SURROGATE: 1,2-DICHLOROET	102	81-118			%	12/20/18	12/20/18
BLANK	SURROGATE: 4-BROMOFLUORO	91.8	85-114			%	12/20/18	12/20/18
BLANK	SURROGATE: DIBROMOFLUOR	107	80-119			%	12/20/18	12/20/18
BLANK	SURROGATE: TOLUENE-D8 (S)	99.3	89-112			%	12/20/18	12/20/18

Quant Method: L1220W.M  
Run #: 1220L18  
Instrument: Loki  
Sequence: 181220  
Initials: DG

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 2:35:24 PM

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/17/18

Matrix: WATER

Instrument: Loki

Blank ID: 181217AL-BLK

Time Analyzed: 1420

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181217AL-MS	Matrix Spike	1216L23	12/16/18 1922
181217AL-MSD	Matrix SpikeD	1216L24	12/16/18 1950
181217AL-LCS	Lab Control Spike	1217L05	12/17/18 1129
181217AL-LCSD	Lab Control Spiked	1217L06	12/17/18 1157
181217AL-BLK	Blank	1217L11	12/17/18 1420
AZ84059	ERH720	1217L16	12/17/18 1643
AZ84060	ERH721	1217L17	12/17/18 1712
AZ84061	ERH722	1217L18	12/17/18 1740

Comments: Batch: #86BTO-181217AL

Printed: 12/21/18 2:35:13 PM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **181217W-84061 - 236219**  
Batch ID: #86BTO-181217AL

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	12/17/18	12/17/18
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	12/17/18	12/17/18
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	12/17/18	12/17/18
BLANK	SURROGATE: 1,2-DICHLOROET	107	81-118			%	12/17/18	12/17/18
BLANK	SURROGATE: 4-BROMOFLUORO	90.0	85-114			%	12/17/18	12/17/18
BLANK	SURROGATE: DIBROMOFLUOR	108	80-119			%	12/17/18	12/17/18
BLANK	SURROGATE: TOLUENE-D8 (S)	97.0	89-112			%	12/17/18	12/17/18

Quant Method: L1213W.M  
Run #: 1217L11  
Instrument: Loki  
Sequence: 181213  
Initials: DG

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 2:35:24 PM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Loki

LCS ID: 181219BL-LCS

Time Analyzed: 0043

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181219BL-MS	Matrix Spike	1216L38	12/17/18 0230
181219BL-MSD	Matrix SpikeD	1216L39	12/17/18 0259
181219BL-LCS	Lab Control Spike	1219L32	12/20/18 0043
181219BL-LCSD	Lab Control SpikeD	1219L33	12/20/18 0112
181219BL-BLK	Blank	1219L34	12/20/18 0140
AZ84057	ERH719	1219L35	12/20/18 0209
AZ84058	ERH718	1219L36	12/20/18 0237

Comments: Batch: #86BTO-181219BL

Printed: 12/21/18 2:35:12 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: 181220W-84057 LCS - 236217  
 Batch ID: #86BTO-181219BL

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.2	9.95	102	99.5	79-120	2.5	20
ETHYLBENZENE	10.00	9.18	9.76	91.8	97.6	79-121	6.1	20
TOLUENE	10.00	9.68	9.67	96.8	96.7	80-121	0.10	20
XYLENES (TOTAL)	30.0	28.0	27.9	93.3	93.0	79-121	0.36	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	26.5	25.6	106	102	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	25.9	26.7	104	107	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	26.4	26.1	106	104	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	25.8	26.2	103	105	89-112		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1218W.M	L1218W.M
Extraction Date :	12/20/18	12/20/18
Analysis Date :	12/20/18	12/20/18
Instrument :	Loki	Loki
Run :	1219L32	1219L33
Initials :	DG	

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/17/18

Matrix: WATER

Instrument: Loki

LCS ID: 181217AL-LCS

Time Analyzed: 1129

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181217AL-MS	Matrix Spike	1216L23	12/16/18 1922
181217AL-MSD	Matrix SpikeD	1216L24	12/16/18 1950
181217AL-LCS	Lab Control Spike	1217L05	12/17/18 1129
181217AL-LCSD	Lab Control SpikeD	1217L06	12/17/18 1157
181217AL-BLK	Blank	1217L11	12/17/18 1420
AZ84059	ERH720	1217L16	12/17/18 1643
AZ84060	ERH721	1217L17	12/17/18 1712
AZ84061	ERH722	1217L18	12/17/18 1740

Comments: Batch: #86BTO-181217AL

Printed: 12/21/18 2:35:12 PM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8260B BTEX WATER

APPL ID: 181217W-84061 LCS - 236219  
 Batch ID: #86BTO-181217AL

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	8.93	9.18	89.3	91.8	79-120	2.8	20
ETHYLBENZENE	10.00	8.58	8.82	85.8	88.2	79-121	2.8	20
TOLUENE	10.00	9.42	9.53	94.2	95.3	80-121	1.2	20
XYLENES (TOTAL)	30.0	26.2	26.4	87.3	88.0	79-121	0.76	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	24.3	24.6	97.2	98.4	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.6	24.5	98.4	98.0	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	24.6	24.6	98.4	98.4	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	24.6	23.9	98.4	95.6	89-112		
-----								

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1213W.M	L1213W.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/17/18	12/17/18
Instrument :	Loki	Loki
Run :	1217L05	1217L06
Initials :	DG	

**EPA 8260B**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87650  
Matrix: WATER  
LCS ID: 181220AL-LCS

SDG No: 87650  
Date Analyzed: 12/20/18  
Instrument: Loki  
Time Analyzed: 1748

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181220AL-LCS	Lab Control Spike	1220L15	12/20/18 1748
181220AL-LCSD	Lab Control SpikeD	1220L16	12/20/18 1816
181220AL-BLK	Blank	1220L18	12/20/18 1913
AZ84062	ERH723	1220L22	12/20/18 2107

Comments: Batch: #86BTO-181220AL

**Laboratory Control Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: 181220W-84062 LCS - 236218  
 Batch ID: #86BTO-181220AL

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.1	10.7	101	107	79-120	5.8	20
ETHYLBENZENE	10.00	9.67	9.71	96.7	97.1	79-121	0.41	20
TOLUENE	10.00	10.4	10.4	104	104	80-121	0.0	20
XYLENES (TOTAL)	30.0	28.1	28.9	93.7	96.3	79-121	2.8	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	24.3	23.7	97.2	94.8	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	26.5	26.2	106	105	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	24.5	24.5	98.0	98.0	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	27.4	27.3	110	109	89-112		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1220W.M	L1220W.M
Extraction Date :	12/20/18	12/20/18
Analysis Date :	12/20/18	12/20/18
Instrument :	Loki	Loki
Run :	1220L15	1220L16
Initials :	DG	

**Matrix Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: 181217W-84057 MS - 236217  
Batch ID: #86BTO-181219BL  
Sample ID: AZ84057  
Client ID: ERH719

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	ND	8.50	8.84	85.0	88.4	79-120	3.9	20
ETHYLBENZENE	10.00	ND	7.90	8.56	79.0	85.6	79-121	8.0	20
TOLUENE	10.00	ND	8.85	9.33	88.5	93.3	80-121	5.3	20
XYLENES (TOTAL)	30.0	ND	24.2	24.9	80.7	83.0	79-121	2.9	20
-----									
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	NA	25.1	25.2	100	101	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	24.9	25.7	99.6	103	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	NA	25.8	24.9	103	99.6	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	NA	25.4	25.7	102	103	89-112		
-----									

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L1213W.M	L1213W.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/17/18	12/17/18
Instrument :	Loki	Loki
Run :	1216L38	1216L39
Initials :	DG	

Printed: 12/21/18 2:35:18 PM  
APPL MSD SCII



# Matrix Spike Recoveries

## EPA 8260B BTEX WATER

APPL ID: 181216W-84061 MS - 236219  
 Batch ID: #86BTO-181217AL  
 Sample ID: AZ84061  
 Client ID: ERH722

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	ND	9.98	8.88	99.8	88.8	79-120	11.7	20
ETHYLBENZENE	10.00	ND	8.64	8.46	86.4	84.6	79-121	2.1	20
TOLUENE	10.00	ND	13.6	10.9	136 #	109	80-121	22.0 #	20
XYLENES (TOTAL)	30.0	ND	27.8	26.6	92.7	88.7	79-121	4.4	20
-----									
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	NA	23.9	24.0	95.6	96.0	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	24.9	24.8	99.6	99.2	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	NA	24.0	24.0	96.0	96.0	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	NA	24.4	24.7	97.6	98.8	89-112		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	L1213W.M	L1213W.M
Extraction Date :	12/16/18	12/16/18
Analysis Date :	12/16/18	12/16/18
Instrument :	Loki	Loki
Run :	1216L23	1216L24
Initials :	DG	

Printed: 12/21/18 2:35:18 PM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1213L01.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 12/13/18  
 Instrument: Loki  
 Time Analyzed: 13:50

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 12/1	1213L03.D	12/13/18 14:34
2	0.5ug/L VOC STD 12/1	1213L04.D	12/13/18 15:03
3	1.0ug/L VOC STD 12/1	1213L05.D	12/13/18 15:31
4	2.0ug/L VOC STD 12/1	1213L06.D	12/13/18 16:00
5	5.0ug/L VOC STD 12/1	1213L07.D	12/13/18 16:29
6	10ug/L VOC STD 12/13	1213L08.D	12/13/18 16:57
7	20ug/L VOC STD 12/13	1213L09.D	12/13/18 17:26
8	40ug/L VOC STD 12/13	1213L10.D	12/13/18 17:54
9	100ug/L VOC STD 12/1	1213L11.D	12/13/18 18:23
10	(SS)10ug/L VOC STD 1	1213L13.D	12/13/18 19:20
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>16.8</u>
75 30 - 60% of mass 95	<u>46.4</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.3</u>
173 0 - 2% of mass 174	<u>1.4</u>
174 50 - 100% of mass 95	<u>96.5</u>
175 5 - 9% of mass 174	<u>7.5</u>
176 94.95 - 101% of mass 174	<u>96.1</u>
177 5 - 9% of mass 176	<u>6.7</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1216L01.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 12/16/18  
 Instrument: Loki  
 Time Analyzed: 9:04

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		181216A CCV 10ug/L	1216L03.D	12/16/18 9:49
2		AZ84061W03 MS10ug/L	1216L23.D	12/16/18 19:22
3		AZ84061W04 MSD10ug/L	1216L24.D	12/16/18 19:50
4		Ending CCV 10ug/L 12	1216L29.D	12/16/18 22:13
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

50 15 - 40% of mass 95	<u>17.7</u>
75 30 - 60% of mass 95	<u>46.9</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.9</u>
173 0 - 2% of mass 174	<u>0.0</u>
174 50 - 100% of mass 95	<u>80.9</u>
175 5 - 9% of mass 174	<u>8.3</u>
176 94.95 - 101% of mass 174	<u>96.4</u>
177 5 - 9% of mass 176	<u>7.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1216L31.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 12/16/18  
 Instrument: Loki  
 Time Analyzed: 23:10

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		181216B CCV 10ug/L	1216L33.D	12/17/18 0:08
2		AZ84057W02 MS10ug/L	1216L38.D	12/17/18 2:30
3		AZ84057W03 MSD 10ug/	1216L39.D	12/17/18 2:59
4		Ending CCV 10ug/L 12	1216L40.D	12/17/18 3:27
5				
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13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

50 15 - 40% of mass 95	<u>17.0</u>
75 30 - 60% of mass 95	<u>45.7</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>7.0</u>
173 0 - 2% of mass 174	<u>1.7</u>
174 50 - 100% of mass 95	<u>94.6</u>
175 5 - 9% of mass 174	<u>8.0</u>
176 94.95 - 101% of mass 174	<u>99.4</u>
177 5 - 9% of mass 176	<u>5.7</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87650  
Matrix: Water  
ID: 1217L03.D

SDG No: 87650  
Date Analyzed: 12/17/18  
Instrument: Loki  
Time Analyzed: 10:32

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	181217A CCV 10ug/L	1217L04.D	12/17/18 11:00
2	Lab Control Spike	181217A LCS 10ug/L	12/17/18 11:29
3	Lab Control SpikeD	181217A LCSD 10ug/L	12/17/18 11:57
4	Blank	181217A blk	12/17/18 14:20
5	ERH720	AZ84059W02	12/17/18 16:43
6	ERH721	AZ84060W02	12/17/18 17:12
7	ERH722	AZ84061W07	12/17/18 17:40
8	Ending CCV 10ug/L 12	1217L28.D	12/17/18 22:26
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>16.7</u>
75 30 - 60% of mass 95	<u>47.0</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.8</u>
173 0 - 2% of mass 174	<u>1.5</u>
174 50 - 100% of mass 95	<u>95.1</u>
175 5 - 9% of mass 174	<u>7.3</u>
176 94.95 - 101% of mass 174	<u>95.2</u>
177 5 - 9% of mass 176	<u>6.3</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1218L02.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 12/18/18  
 Instrument: Loki  
 Time Analyzed: 15:06

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 12/1	1218L04.D	12/18/18 15:56
2	0.5ug/L VOC STD 12/1	1218L05.D	12/18/18 16:25
3	1ug/L VOC STD 12/18/	1218L06.D	12/18/18 16:53
4	2ug/L VOC STD 12/18/	1218L07.D	12/18/18 17:22
5	5ug/L VOC STD 12/18/	1218L08.D	12/18/18 17:50
6	10ug/L VOC STD 12/18	1218L09.D	12/18/18 18:19
7	20ug/L VOC STD 12/18	1218L10.D	12/18/18 18:48
8	40ug/L VOC STD 12/18	1218L11.D	12/18/18 19:16
9	100ug/L VOC STD 12/1	1218L12.D	12/18/18 19:45
10	(SS) 10ug/L VOC STD	1218L15.D	12/18/18 21:10
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>16.8</u>
75 30 - 60% of mass 95	<u>45.4</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.7</u>
173 0 - 2% of mass 174	<u>1.5</u>
174 50 - 100% of mass 95	<u>95.5</u>
175 5 - 9% of mass 174	<u>7.7</u>
176 94.95 - 101% of mass 174	<u>95.3</u>
177 5 - 9% of mass 176	<u>6.6</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87650  
Matrix: Water  
ID: 1219L29.D

SDG No: 87650  
Date Analyzed: 12/19/18  
Instrument: Loki  
Time Analyzed: 23:18

Client Sample No.	APPL ID.	File ID.	Date Analyzed	
1		181219B CCV 10ug/L	1219L31.D	12/20/18 0:15
2	Lab Control Spike	181219B LCS 10ug/L	1219L32.D	12/20/18 0:43
3	Lab Control SpikeD	181219B LCSD 10ug/L	1219L33.D	12/20/18 1:12
4	Blank	181219B Blk	1219L34.D	12/20/18 1:40
5	ERH719	AZ84057W08	1219L35.D	12/20/18 2:09
6	ERH718	AZ84058W03	1219L36.D	12/20/18 2:37
7		Ending CCV 10ug/L	1219L51.D	12/20/18 9:45
8				
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18				
19				
20				
21				
22				

m/e

50 15 - 40% of mass 95	<u>17.8</u>
75 30 - 60% of mass 95	<u>47.5</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.4</u>
173 0 - 2% of mass 174	<u>0.6</u>
174 50 - 100% of mass 95	<u>96.2</u>
175 5 - 9% of mass 174	<u>7.9</u>
176 94.95 - 101% of mass 174	<u>95.1</u>
177 5 - 9% of mass 176	<u>6.6</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 1213L08.D Date Analyzed: 12/13/18  
 Instrument ID: Loki Time Analyzed: 16:57  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		305088	4.67	318016	8.37	191936	10.91
UPPER LIMIT		610176	4.84	636032	8.54	383872	11.08
LOWER LIMIT		152544	4.50	159008	8.20	95968	10.74
SAMPLE NO.							
01	(SS)10ug/L VOC STD 1	303424	4.67	328192	8.37	193408	10.91
02							
03							
04							
05							
06							
07							
08							
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22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1216L03.D Date Analyzed: 12/16/18  
 Instrument ID: Loki Time Analyzed: 9:49  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	339968	4.66	365440	8.37	216512	10.91
UPPER LIMIT	679936	4.83	730880	8.54	433024	11.08
LOWER LIMIT	169984	4.49	182720	8.20	108256	10.74
SAMPLE NO.						
01 AZ84061W03 MS10ug/L	327040	4.66	361280	8.37	197440	10.91
02 AZ84061W04 MSD10ug	326976	4.67	351936	8.37	192576	10.91
03 Ending CCV 10ug/L 12/1	301760	4.67	333440	8.37	186496	10.91
04 181216B CCV 10ug/L	297728	4.67	310464	8.37	187648	10.91
05 AZ84057W02 MS10ug/L	277824	4.67	290496	8.37	172224	10.91
06 AZ84057W03 MSD 10ug	279040	4.67	288704	8.37	170496	10.91
07 Ending CCV 10ug/L 12/1	277632	4.67	298688	8.37	172224	10.91
08						
09						
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1217L04.D Date Analyzed: 12/17/18  
 Instrument ID: Loki Time Analyzed: 11:00  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	299648	4.66	321792	8.37	184640	10.91
UPPER LIMIT	599296	4.83	643584	8.54	369280	11.08
LOWER LIMIT	149824	4.49	160896	8.20	92320	10.74
SAMPLE NO.						
01 181217A LCS 10ug/L	297344	4.67	313600	8.37	180992	10.91
02 181217A LCSD 10ug/L	293632	4.67	320704	8.37	185344	10.91
03 181217A blk	269888	4.67	291904	8.37	147328	10.91
04 AZ84059W02	274688	4.67	289984	8.37	154176	10.91
05 AZ84060W02	264384	4.67	282304	8.37	140096	10.91
06 AZ84061W07	240128	4.67	264704	8.37	127480	10.91
07 Ending CCV 10ug/L 12/17	291200	4.66	321024	8.37	181504	10.91
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 1218L09.D Date Analyzed: 12/18/18  
 Instrument ID: Loki Time Analyzed: 18:19  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		283072	4.61	310464	8.34	172096	10.89
UPPER LIMIT		566144	4.78	620928	8.51	344192	11.06
LOWER LIMIT		141536	4.44	155232	8.17	86048	10.72
SAMPLE NO.							
01	(SS) 10ug/L VOC STD 1	275456	4.61	297408	8.34	171840	10.89
02							
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1219L31.D Date Analyzed: 12/20/18  
 Instrument ID: Loki Time Analyzed: 0:15  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	254784	4.60	260032	8.34	153536	10.89
UPPER LIMIT	509568	4.77	520064	8.51	307072	11.06
LOWER LIMIT	127392	4.43	130016	8.17	76768	10.72
SAMPLE NO.						
01 181219B LCS 10ug/L	258432	4.60	281408	8.34	156416	10.89
02 181219B LCSD 10ug/L	260608	4.60	272128	8.34	161600	10.89
03 181219B Blk	244160	4.61	264000	8.34	120680	10.89
04 AZ84057W08	239360	4.61	260736	8.34	117128	10.89
05 AZ84058W03	223808	4.61	252544	8.34	117864	10.89
06 Ending CCV 10ug/L	251584	4.60	265280	8.34	156608	10.89
07						
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1220L00.D

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Time Analyzed: 10:45

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 12/2	1220L02.D	12/20/18 11:36
2	0.5ug/L VOC STD 12/2	1220L03.D	12/20/18 12:04
3	1.0ug/L VOC STD 12/2	1220L04.D	12/20/18 12:33
4	2.0ug/L VOC STD 12/2	1220L05.D	12/20/18 13:02
5	5.0ug/L VOC STD 12/2	1220L06.D	12/20/18 13:30
6	10ug/L VOC STD 12/20	1220L07.D	12/20/18 13:59
7	20ug/L VOC STD 12/20	1220L08.D	12/20/18 14:27
8	40ug/L VOC STD 12/20	1220L09.D	12/20/18 14:56
9	100ug/L VOC STD 12/2	1220L10.D	12/20/18 15:25
10			
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17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>17.8</u>
75 30 - 60% of mass 95	<u>47.5</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.6</u>
173 0 - 2% of mass 174	<u>1.5</u>
174 50 - 100% of mass 95	<u>93.3</u>
175 5 - 9% of mass 174	<u>7.0</u>
176 94.95 - 101% of mass 174	<u>97.0</u>
177 5 - 9% of mass 176	<u>6.4</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87650  
 Matrix: Water  
 ID: 1220L12.D

SDG No: 87650  
 Date Analyzed: 12/20/18  
 Instrument: Loki  
 Time Analyzed: 16:22

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	SS 10ug/L VOC STD 12	1220L13.D	12/20/18 16:50
2	Lab Control Spike	181220A LCS 10ug/L x	12/20/18 17:48
3	Lab Control SpikeD	181220A LCSD 10ug/L	12/20/18 18:16
4	Blank	181220A Blk	12/20/18 19:13
5	ERH723	AZ84062W03	12/20/18 21:07
6	Ending CCV 10ug/L 12	1220L37.D	12/21/18 4:15
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20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>16.3</u>
75 30 - 60% of mass 95	<u>47.2</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>5.9</u>
173 0 - 2% of mass 174	<u>1.6</u>
174 50 - 100% of mass 95	<u>96.6</u>
175 5 - 9% of mass 174	<u>7.3</u>
176 94.95 - 101% of mass 174	<u>95.9</u>
177 5 - 9% of mass 176	<u>6.5</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87650  
 Lab File ID (Standard): 1220L07.D Date Analyzed: 12/20/18  
 Instrument ID: Loki Time Analyzed: 13:59  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	249600	4.61	263232	8.34	159936	10.89
UPPER LIMIT	499200	4.78	526464	8.51	319872	11.06
LOWER LIMIT	124800	4.44	131616	8.17	79968	10.72
SAMPLE NO.						
01 SS 10ug/L VOC STD 12	256384	4.60	278464	8.34	165824	10.89
02 181220A LCS 10ug/L x4	258624	4.61	279936	8.34	162560	10.89
03 181220A LCSD 10ug/L x	258496	4.61	275840	8.34	162560	10.89
04 181220A Blk	236480	4.61	251456	8.34	118112	10.89
05 AZ84062W03	225024	4.61	243776	8.34	111872	10.89
06 Ending CCV 10ug/L 12/2	248256	4.60	263168	8.34	156736	10.89
07						
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/16/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)			Limits	Result	Qualifier
		Limits	Result	Qualifier			
181216AL-LCS	Lab Control Spike	85-114	87.6				
181216AL-LCSD	Lab Control Spiked	85-114	85.6				
181216AL-BLK	Blank	85-114	89.0				
AZ84057	ERH719	85-114	91.4				
AZ84058	ERH718	85-114	92.7				
AZ84062	ERH723	85-114	87.4				
AZ84057-MS	Matrix Spike	85-114	92.8				
AZ84057-MSD	Matrix Spiked	85-114	94.0				

Comments: Batch: #GRO86-181216AL

Printed: 12/18/18 10:46:55 AM  
Form 2 & 8, Surrogate Recovery Summary



# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/16/18

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)			Limits	Result	Qualifier
		Limits	Result	Qualifier			
AZ84061-MS	Matrix Spike	85-114	96.8				
AZ84061-MSD	Matrix SpikeD	85-114	92.0				
181217AL-LCS	Lab Control Spike	85-114	89.2				
181217AL-LCSD	Lab Control SpikeD	85-114	90.0				
181217AL-BLK	Blank	85-114	90.0				
AZ84059	ERH720	85-114	85.7				
AZ84060	ERH721	85-114	88.5				
AZ84061	ERH722	85-114	85.1				

Comments: Batch: #GRO86-181217AL

Printed: 12/18/18 10:46:55 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/16/18

Matrix: WATER

Instrument: Loki

Blank ID: 181216AL-BLK

Time Analyzed: 1309

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181216AL-LCS	Lab Control Spike	1216L07	12/16/18 1144
181216AL-LCSD	Lab Control SpikeD	1216L08	12/16/18 1212
181216AL-BLK	Blank	1216L10	12/16/18 1309
AZ84057	ERH719	1216L13	12/16/18 1435
AZ84058	ERH718	1216L14	12/16/18 1504
AZ84062	ERH723	1216L18	12/16/18 1659
181216AL-MS	Matrix Spike	1216L25	12/16/18 2019
181216AL-MSD	Matrix SpikeD	1216L26	12/16/18 2047

Comments: Batch: #GRO86-181216AL

Printed: 12/18/18 10:46:52 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **181216W-84057 - 236076**

Batch ID: #GRO86-181216AL

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/16/18	12/16/18
BLANK	SURROGATE: 4-BROMOFLUORO	89.0	85-114			%	12/16/18	12/16/18

Quant Method: LSUR1213.M  
Run #: 1216L10  
Instrument: Loki  
Sequence: 181213  
Initials: DG

GC SC-Blank-REG MDLs-DOD  
Printed: 12/18/18 10:47:05 AM

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/17/18

Matrix: WATER

Instrument: Loki

Blank ID: 181217AL-BLK

Time Analyzed: 1420

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181217AL-MS	Matrix Spike	1216L27	12/16/18 2116
181217AL-MSD	Matrix SpikeD	1216L28	12/16/18 2145
181217AL-LCS	Lab Control Spike	1217L08	12/17/18 1254
181217AL-LCSD	Lab Control SpikeD	1217L09	12/17/18 1323
181217AL-BLK	Blank	1217L11	12/17/18 1420
AZ84059	ERH720	1217L16	12/17/18 1643
AZ84060	ERH721	1217L17	12/17/18 1712
AZ84061	ERH722	1217L18	12/17/18 1740

Comments: Batch: #GRO86-181217AL

Printed: 12/18/18 10:46:52 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **181217W-84061 - 236066**  
Batch ID: #GRO86-181217AL

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	12/17/18	12/17/18
BLANK	SURROGATE: 4-BROMOFLUORO	90.0	85-114			%	12/17/18	12/17/18

Quant Method:LSUR1213.M  
Run #: 1217L11  
Instrument:Loki  
Sequence: 181213  
Initials:DG

GC SC-Blank-REG MDLs-DOD  
Printed: 12/18/18 10:47:05 AM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/16/18

Matrix: WATER

Instrument: Loki

LCS ID: 181216AL-LCS

Time Analyzed: 1144

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
181216AL-LCS	Lab Control Spike	1216L07	12/16/18 1144
181216AL-LCSD	Lab Control SpikeD	1216L08	12/16/18 1212
181216AL-BLK	Blank	1216L10	12/16/18 1309
AZ84057	ERH719	1216L13	12/16/18 1435
AZ84058	ERH718	1216L14	12/16/18 1504
AZ84062	ERH723	1216L18	12/16/18 1659
181216AL-MS	Matrix Spike	1216L25	12/16/18 2019
181216AL-MSD	Matrix SpikeD	1216L26	12/16/18 2047

Comments: Batch: #GRO86-181216AL

Printed: 12/18/18 10:46:50 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## EPA 8260B GRO WATER

APPL ID: 181216W-84057 LCS - 236076  
 Batch ID: #GRO86-181216AL

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	274	260	91.3	86.7	78-122	5.2	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	21.9	21.4	87.6	85.6	85-114		

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	LSUR1213.M	LSUR1213.M
Extraction Date :	12/16/18	12/16/18
Analysis Date :	12/16/18	12/16/18
Instrument :	Loki	Loki
Run :	1216L07	1216L08
Initials :	DG	

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/17/18

Matrix: WATER

Instrument: Loki

LCS ID: 181217AL-LCS

Time Analyzed: 1254

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181217AL-MS	Matrix Spike	1216L27	12/16/18 2116
181217AL-MSD	Matrix SpikeD	1216L28	12/16/18 2145
181217AL-LCS	Lab Control Spike	1217L08	12/17/18 1254
181217AL-LCSD	Lab Control SpikeD	1217L09	12/17/18 1323
181217AL-BLK	Blank	1217L11	12/17/18 1420
AZ84059	ERH720	1217L16	12/17/18 1643
AZ84060	ERH721	1217L17	12/17/18 1712
AZ84061	ERH722	1217L18	12/17/18 1740

Comments: Batch: #GRO86-181217AL

Printed: 12/18/18 10:46:50 AM  
Form 4, LCS Summary



**Laboratory Control Spike Recoveries**  
**EPA 8260B GRO WATER**

APPL ID: 181217W-84061 LCS - 236066  
 Batch ID: #GRO86-181217AL

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	310	315	103	105	78-122	1.6	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	22.3	22.5	89.2	90.0	85-114		

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	LSUR1213.M	LSUR1213.M
Extraction Date :	12/17/18	12/17/18
Analysis Date :	12/17/18	12/17/18
Instrument :	Loki	Loki
Run :	1217L08	1217L09
Initials :	DG	

# Matrix Spike Recoveries

## EPA 8260B GRO WATER

APPL ID: 181216W-84057 MS - 236076

Batch ID: #GRO86-181216AL

Sample ID: AZ84057

Client ID: ERH719

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	ND	274	272	91.3	90.7	78-122	0.73	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	23.2	23.5	92.8	94.0	85-114		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	LSUR1213.M	LSUR1213.M
Extraction Date :	12/16/18	12/16/18
Analysis Date :	12/16/18	12/16/18
Instrument :	Loki	Loki
Run :	1216L25	1216L26
Initials :	DG	

Printed: 12/18/18 10:46:58 AM  
APPL MSD SCII

# Matrix Spike Recoveries

## EPA 8260B GRO WATER

APPL ID: 181216W-84061 MS - 236066  
 Batch ID: #GRO86-181217AL  
 Sample ID: AZ84061  
 Client ID: ERH722

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	ND	297	255	99.0	85.0	78-122	15.2	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	24.2	23.0	96.8	92.0	85-114		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	LSUR1213.M	LSUR1213.M
Extraction Date :	12/16/18	12/16/18
Analysis Date :	12/16/18	12/16/18
Instrument :	Loki	Loki
Run :	1216L27	1216L28
Initials :	DG	

Printed: 12/18/18 10:46:58 AM  
 APPL MSD SCII

# RSK 175

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Rocky

Blank ID: 181220A-BLK

Time Analyzed: 1850

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181220A-LCS	Lab Control Spike	18122000	12/20/18 1834
181220A-LCSD	Lab Control SpikeD	18122003	12/20/18 1847
181220A-BLK	Blank	18122004	12/20/18 1850
AZ84058	ERH718	18122005	12/20/18 1854
AZ84060	ERH721	18122006	12/20/18 1857
AZ84061	ERH722	18122007	12/20/18 1900

Comments: Batch: #RSKME-181220A

Printed: 12/21/18 11:17:16 AM  
Form 4, Blank Summary

**Method Blank**  
**METHANE**

Blank Name/QCG: **181220W-84058 - 236194**

Batch ID: #RSKME-181220A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	12/20/18	12/20/18

Quant Method:RSK1118.M  
Run #:18122004  
Instrument:Rocky  
Sequence:181118  
Initials:CMO

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 11:17:27 AM

# RSK 175

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/21/18

Matrix: WATER

Instrument: Rocky

Blank ID: 181221A-BLK

Time Analyzed: 1057

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181221A-LCS	Lab Control Spike	18122100	12/21/18 1042
181221A-LCSD	Lab Control SpikeD	18122102	12/21/18 1054
181221A-BLK	Blank	18122103	12/21/18 1057
AZ84057	ERH719	18122104	12/21/18 1059

Comments: Batch: #RSKME-181221A

Printed: 12/21/18 11:17:16 AM  
Form 4, Blank Summary

Method Blank  
METHANE

Blank Name/QCG: 181221W-84057 - 236207  
Batch ID: #RSKME-181221A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	12/21/18	12/21/18

Quant Method:RSK1118.M  
Run #:18122103  
Instrument:Rocky  
Sequence:181118  
Initials:CMO

GC SC-Blank-REG MDLs-DOD  
Printed: 12/21/18 11:17:27 AM

# RSK 175

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/20/18

Matrix: WATER

Instrument: Rocky

LCS ID: 181220A-LCS

Time Analyzed: 1834

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181220A-LCS	Lab Control Spike	18122000	12/20/18 1834
181220A-LCSD	Lab Control Spiked	18122003	12/20/18 1847
181220A-BLK	Blank	18122004	12/20/18 1850
AZ84058	ERH718	18122005	12/20/18 1854
AZ84060	ERH721	18122006	12/20/18 1857
AZ84061	ERH722	18122007	12/20/18 1900

Comments: Batch: #RSKME-181220A

Printed: 12/21/18 11:17:13 AM  
Form 4, LCS Summary



# Laboratory Control Spike Recoveries

## METHANE

APPL ID: 181220W-84058 LCS - 236194

Batch ID: #RSKME-181220A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	74.7	81.4	89.6	97.6	72-125	8.6	30

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	RSK1118.M	RSK1118.M
Extraction Date :	12/20/18	12/20/18
Analysis Date :	12/20/18	12/20/18
Instrument :	Rocky	Rocky
Run :	18122000	18122003
Initials :	CMO	

# RSK 175

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/21/18

Matrix: WATER

Instrument: Rocky

LCS ID: 181221A-LCS

Time Analyzed: 1042

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181221A-LCS	Lab Control Spike	18122100	12/21/18 1042
181221A-LCSD	Lab Control Spiked	18122102	12/21/18 1054
181221A-BLK	Blank	18122103	12/21/18 1057
AZ84057	ERH719	18122104	12/21/18 1059

Comments: Batch: #RSKME-181221A

Printed: 12/21/18 11:17:13 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## METHANE

APPL ID: 181221W-84057 LCS - 236207

Batch ID: #RSKME-181221A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	75.4	80.6	90.4	96.6	72-125	6.7	30

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	RSK1118.M	RSK1118.M
Extraction Date :	12/21/18	12/21/18
Analysis Date :	12/21/18	12/21/18
Instrument :	Rocky	Rocky
Run :	18122100	18122102
Initials :	CMO	

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/14/18

Matrix: WATER

Instrument: Charlie

Blank ID: 181213A3-BLK

Time Analyzed: 0936

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ84061	ERH722	11	12/14/18 1141
AZ84057	ERH719	12	12/14/18 1151
181213A3-BLK	Blank	2	12/14/18 0936
181213A3-LCS	Lab Control Spike	3	12/14/18 0945
181213A3-LCSD	Lab Control SpikeD	4	12/14/18 0955

Comments: Batch: #300W-181213A3

Printed: 12/20/18 8:08:26 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	12/14/18	12/14/18	#300W-181213A3-AZ84057
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	12/14/18	12/14/18	#300W-181213A3-AZ84057

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: Charlie

Blank ID: 181219A-BLK

Time Analyzed: 0926

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
181219A-BLK	Blank	5	12/19/18 0926
181219A-LCS	Lab Control Spike	6	12/19/18 0936
181219A-LCSD	Lab Control SpikeD	7	12/19/18 0946
AZ84057	ERH719	8	12/19/18 0956
AZ84061	ERH722	9	12/19/18 1006

Comments: Batch: #300WD-181219A

Printed: 12/20/18 8:08:26 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.14 J	1.0	0.20	0.08	mg/L	12/19/18	12/19/18	#300WD-181219A-AZ84057

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 12/20/18 8:08:29 AM

# EPA 353.2

Form 4

## Blank Summary

Lab Name: APPL, Inc. SDG No: 87650  
Case No: 87650 Date Analyzed: 12/19/18  
Matrix: WATER Instrument: EVE  
Blank ID: 181219A-BLK Time Analyzed: 1646

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181219A-BLK	Blank	12	12/19/18 1646
181219A-LCS	Lab Control Spike	13	12/19/18 1649
181219A-LCSD	Lab Control SpikeD	14	12/19/18 1651
AZ84057	ERH719	20	12/19/18 1704
AZ84061	ERH722	25	12/19/18 1715

Comments: Batch: #35OF-181219A



# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	12/19/18	12/19/18	#35OF-181219A-AZ84057

Wetlab SC-Blank-REG MDLs  
Printed: 12/20/18 8:08:29 AM

**SM 2320B**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/18/18

Matrix: WATER

Instrument: Tiamo

Blank ID: 181218A-BLK

Time Analyzed: 1502

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181218A-BLK	Blank	1	12/18/18 1502
AZ84057	ERH719	17	12/18/18 1825
AZ84061	ERH722	18	12/18/18 1831
181218A-LCS	Lab Control Spike	2	12/18/18 1506
181218A-LCSD	Lab Control Spiked	3	12/18/18 1516

Comments: Batch: #232W-181218A

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS CA	2.7	2.0	1.70	0.85	mg/L	12/18/18	12/18/18	#232W-181218A-AZ84057
SM 2320B	CARBONATE AS CACO	1.70 U	2.0	1.70	0.85	mg/L	12/18/18	12/18/18	#232W-181218A-AZ84057
SM 2320B	TOTAL ALKALINITY AS	2.7	2.0	1.70	0.85	mg/L	12/18/18	12/18/18	#232W-181218A-AZ84057

Wetlab SC-Blank-REG MDLs  
Printed: 12/20/18 8:08:29 AM

# SM3500FeB

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/14/18

Matrix: WATER

Instrument: Manual Spec

Blank ID: 181214A-BLK

Time Analyzed: 1050

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181214A-BLK	Blank	10	12/14/18 1050
181214A-LCSD	Lab Control SpikeD	11	12/14/18 1051
181214A-LCS	Lab Control Spike	12	12/14/18 1051
AZ84057	ERH719	18	12/14/18 1133
AZ84061	ERH722	19	12/14/18 1134

Comments: Batch: #35FE-181214A

Printed: 12/20/18 8:08:26 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	12/14/18	12/14/18	#35FE-181214A-AZ84057

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/14/18

Matrix: WATER

Instrument: Charlie

LCS ID: 181213A3-LCS

Time Analyzed: 0945

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ84061	ERH722	11	12/14/18 1141
AZ84057	ERH719	12	12/14/18 1151
181213A3-BLK	Blank	2	12/14/18 0936
181213A3-LCS	Lab Control Spike	3	12/14/18 0945
181213A3-LCSD	Lab Control Spiked	4	12/14/18 0955

Comments: Batch: #300W-181213A3

Printed: 12/20/18 8:08:32 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	NITRATE	22.1	21.6	21.7	97.7	98.2	0.46	20	90-110	12/14/18	12/14/18	12/14/18	12/14/18	#300W-181213A3-AZ8405
EPA 300.0	SULFATE	20.0	20.5	20.5	103	103	0.0	20	90-110	12/14/18	12/14/18	12/14/18	12/14/18	#300W-181213A3-AZ8405

Comments: \_\_\_\_\_

**EPA 300.0**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87650  
Matrix: WATER  
LCS ID: 181219A-LCS

SDG No: 87650  
Date Analyzed: 12/19/18  
Instrument: Charlie  
Time Analyzed: 0936

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
181219A-BLK	Blank	5	12/19/18 0926
181219A-LCS	Lab Control Spike	6	12/19/18 0936
181219A-LCSD	Lab Control Spiked	7	12/19/18 0946
AZ84057	ERH719	8	12/19/18 0956
AZ84061	ERH722	9	12/19/18 1006

Comments: Batch: #300WD-181219A



# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25	22.9	23.1	91.6	92.4	0.87	20	90-110	12/19/18	12/19/18	12/19/18	12/19/18	#300WD-181219A-AZ8405

Comments: \_\_\_\_\_

**EPA 353.2**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/19/18

Matrix: WATER

Instrument: EVE

LCS ID: 181219A-LCS

Time Analyzed: 1649

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181219A-BLK	Blank	12	12/19/18 1646
181219A-LCS	Lab Control Spike	13	12/19/18 1649
181219A-LCSD	Lab Control SpikeD	14	12/19/18 1651
AZ84057	ERH719	20	12/19/18 1704
AZ84061	ERH722	25	12/19/18 1715

Comments: Batch: #35OF-181219A

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE-N	3.00	2.96	2.98	98.7	99.3	0.67	20	90-110	12/19/18	12/19/18	12/19/18	12/19/18	#35OF-181219A-AZ84057

Comments: \_\_\_\_\_

# SM 2320B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/18/18

Matrix: WATER

Instrument: Tiamo

LCS ID: 181218A-LCS

Time Analyzed: 1506

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181218A-BLK	Blank	1	12/18/18 1502
AZ84057	ERH719	17	12/18/18 1825
AZ84061	ERH722	18	12/18/18 1831
181218A-LCS	Lab Control Spike	2	12/18/18 1506
181218A-LCSD	Lab Control SpikeD	3	12/18/18 1516

Comments: Batch: #232W-181218A

Printed: 12/20/18 8:08:32 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM 2320B	BICARBONATE AS CaCO3	250	249	250	99.6	100	0.40	20	90-110	12/18/18	12/18/18	12/18/18	12/18/18	#232W-181218A-AZ84057
SM 2320B	TOTAL ALKALINITY AS CA	250	249	250	99.6	100	0.40	20	90-110	12/18/18	12/18/18	12/18/18	12/18/18	#232W-181218A-AZ84057

Comments: \_\_\_\_\_

# SM3500FeB

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87650

Case No: 87650

Date Analyzed: 12/14/18

Matrix: WATER

Instrument: Manual Spec

LCS ID: 181214A-LCS

Time Analyzed: 1051

APPL ID.	Client Sample No.	File ID.	Date Analyzed
181214A-BLK	Blank	10	12/14/18 1050
181214A-LCSD	Lab Control SpikeD	11	12/14/18 1051
181214A-LCS	Lab Control Spike	12	12/14/18 1051
AZ84057	ERH719	18	12/14/18 1133
AZ84061	ERH722	19	12/14/18 1134

Comments: Batch: #35FE-181214A

Printed: 12/20/18 8:08:32 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP. Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.15	3.13	105	104	0.64	20	80-120	12/14/18	12/14/18	12/14/18	12/14/18	#35FE-181214A-AZ84057

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**ORGANICS  
Calibration Data**



TPH Extractables  
DOC0905

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 09/05/18

Matrix: \_\_\_\_\_

Instrument: Apollo

Initials: \_\_\_\_\_

Diesel: 905003.D 905004.D 905005.D 905006.D 905007.D 905008.D

Motor Oil: 905010.D 905011.D 905012.D 905013.D 905014.D 905015.D

Decanoic Acid: 814017.D 814018.D 814019.D 814020.D 814021.D 814022.D

	Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATM Diesel (C10-C24)	1977954	1585759	1547772	1602850	1558536	1558715					1638598	10	HATM		
2	HBTM Motor Oil (C24-C40)	1632679	1442329	1281707	1335557	1305155	1329878					1387884	9.5	HBTM		
3	SC Decanoic Acid(S)	648675	1095549	1090928	1053315	1004335	1065935					993123	17	SC		
4	SA Ortho-Terphenyl(S)	2367841	1987512	1916740	1891892	1734307	1719637					1936322	12	SA		
5	SA Octacosane(S)	1652614	1674318	1605080	1646548	1560961	1550101					1614937	3.2	SA		
6																
7																
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10																
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1.497611

Data File : G:\APOLLO\DATA\180905\905003.D Vial: 3  
 Acq On : 9-5-18 13:32:12 Operator: DP  
 Sample : Diesel - 1 9/5/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

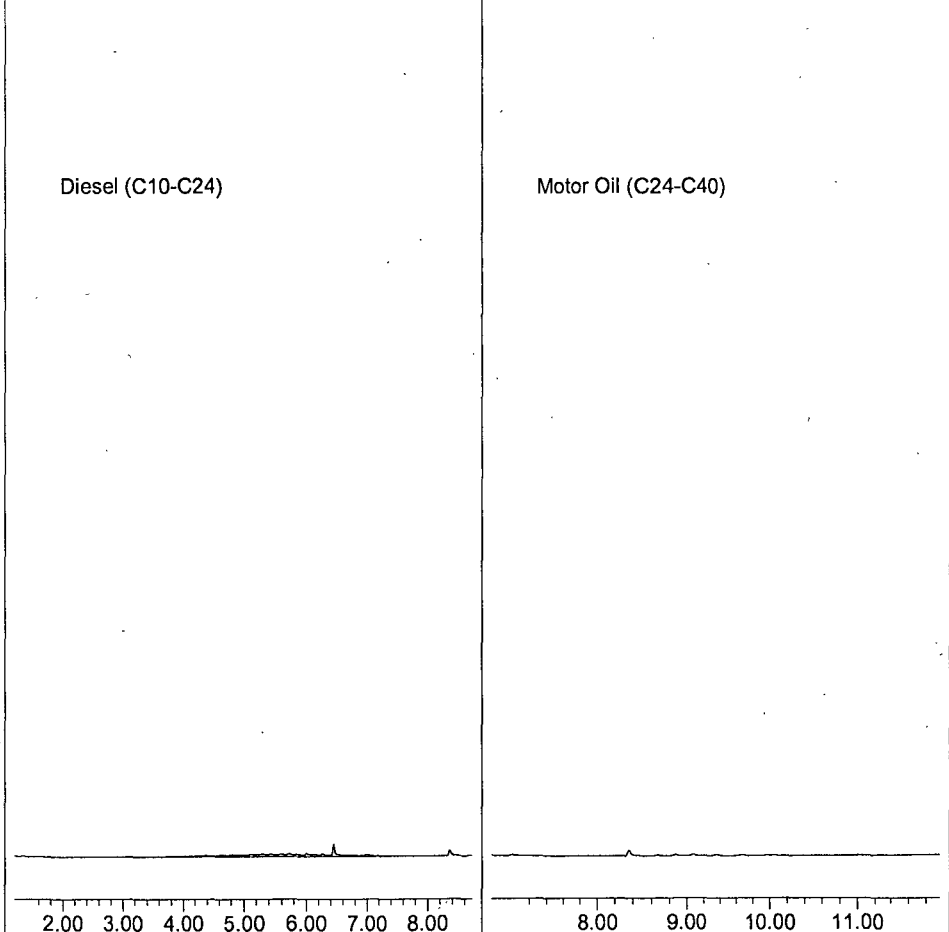
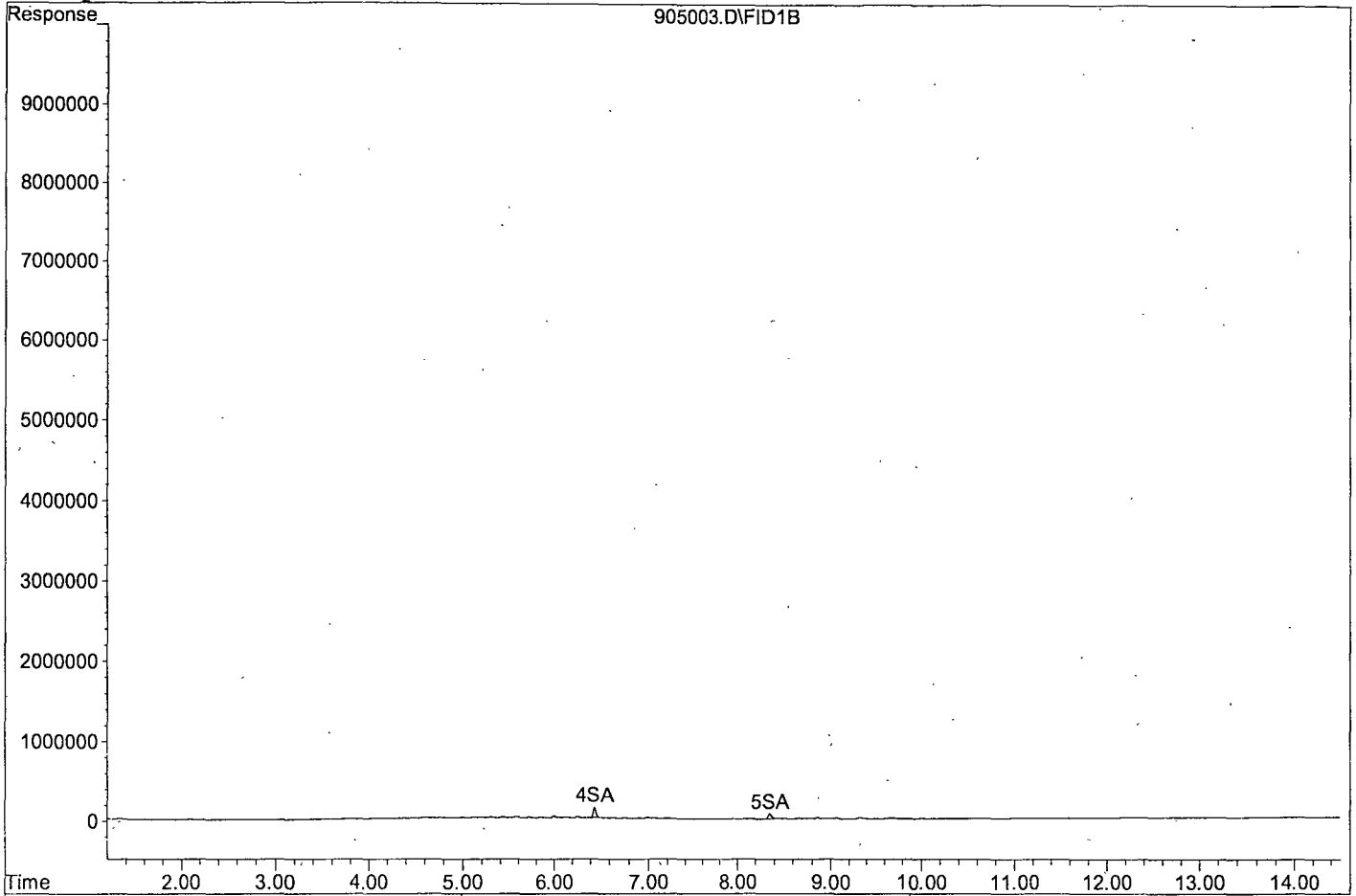
Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.44	2367841	0.611 ppb
Surrogate Spike 30.000		Recovery =	2.04%
5) SA Octacosane(S)	8.35	1652614	0.512 ppb
Surrogate Spike 30.000		Recovery =	1.71%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	39559086	12.071 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905003.D  
Sample : Diesel - 1 9/5/18



Data File : G:\APOLLO\DATA\180905\905004.D Vial: 4  
 Acq On : 9-5-18 13:51:56 Operator: DP  
 Sample : Diesel - 2 9/5/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

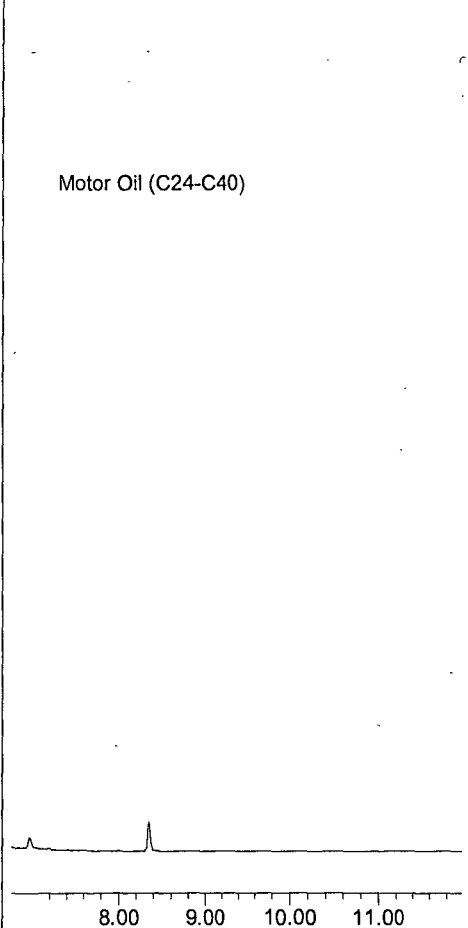
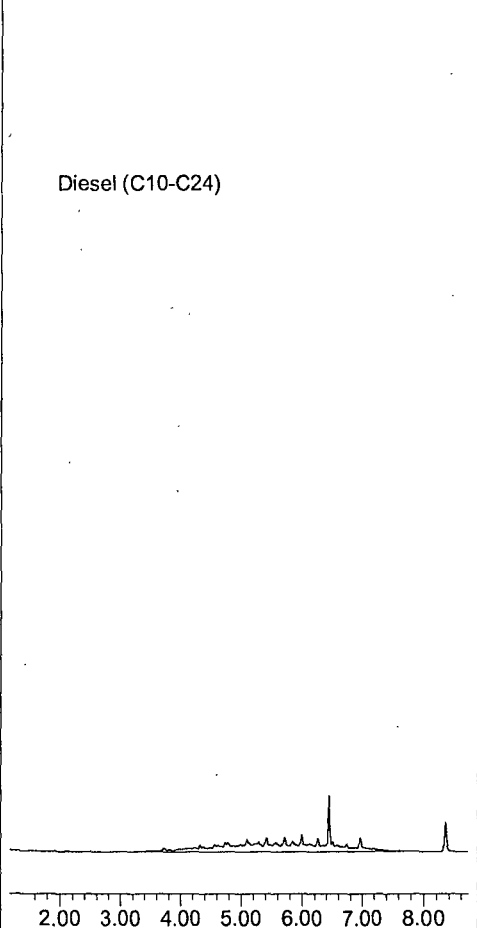
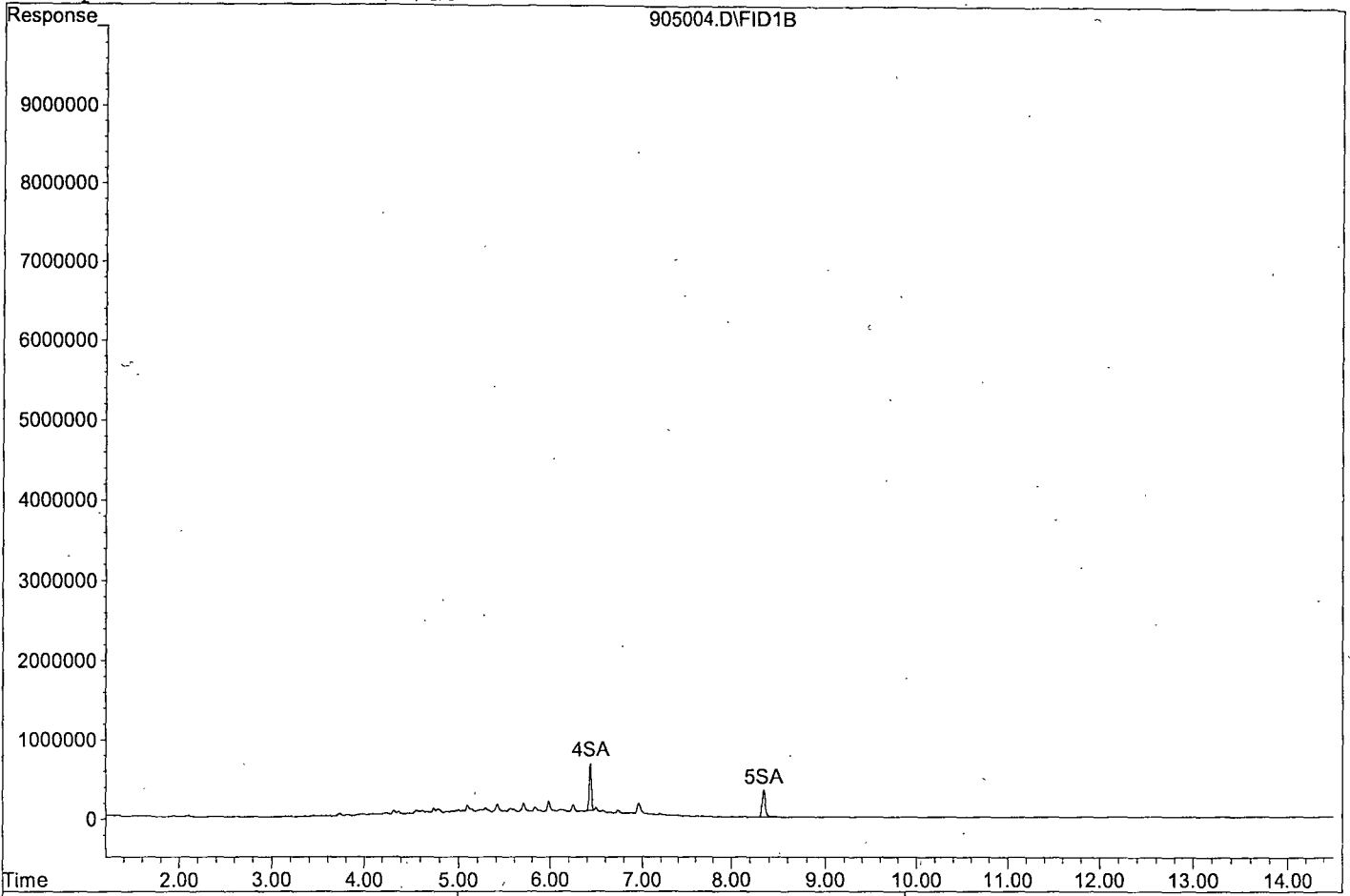
Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.44	9937558	2.566 ppb
Surrogate Spike 30.000		Recovery =	8.55%
5) SA Octacosane(S)	8.35	8371591	2.592 ppb
Surrogate Spike 30.000		Recovery =	8.64%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	158575904	48.388 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905004.D  
Sample : Diesel - 2 9/5/18



Data File : G:\APOLLO\DATA\180905\905005.D Vial: 5  
 Acq On : 9-5-18 14:11:55 Operator: DP  
 Sample : Diesel - 3 9/5/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

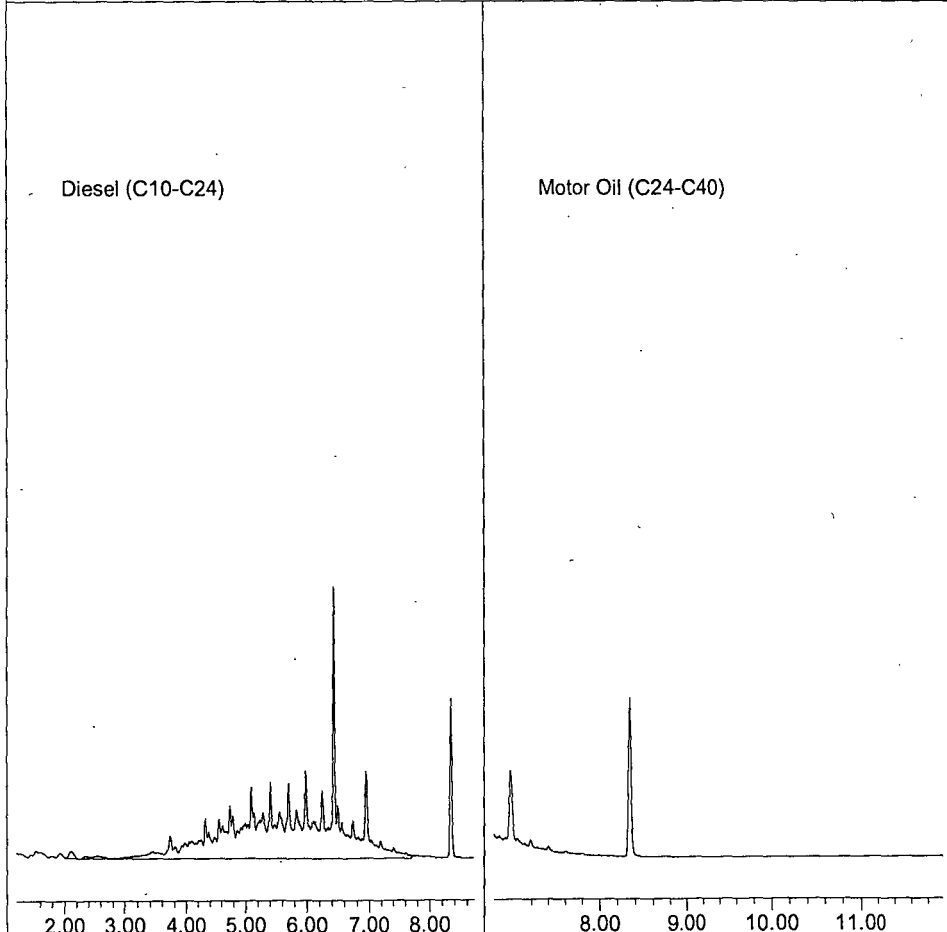
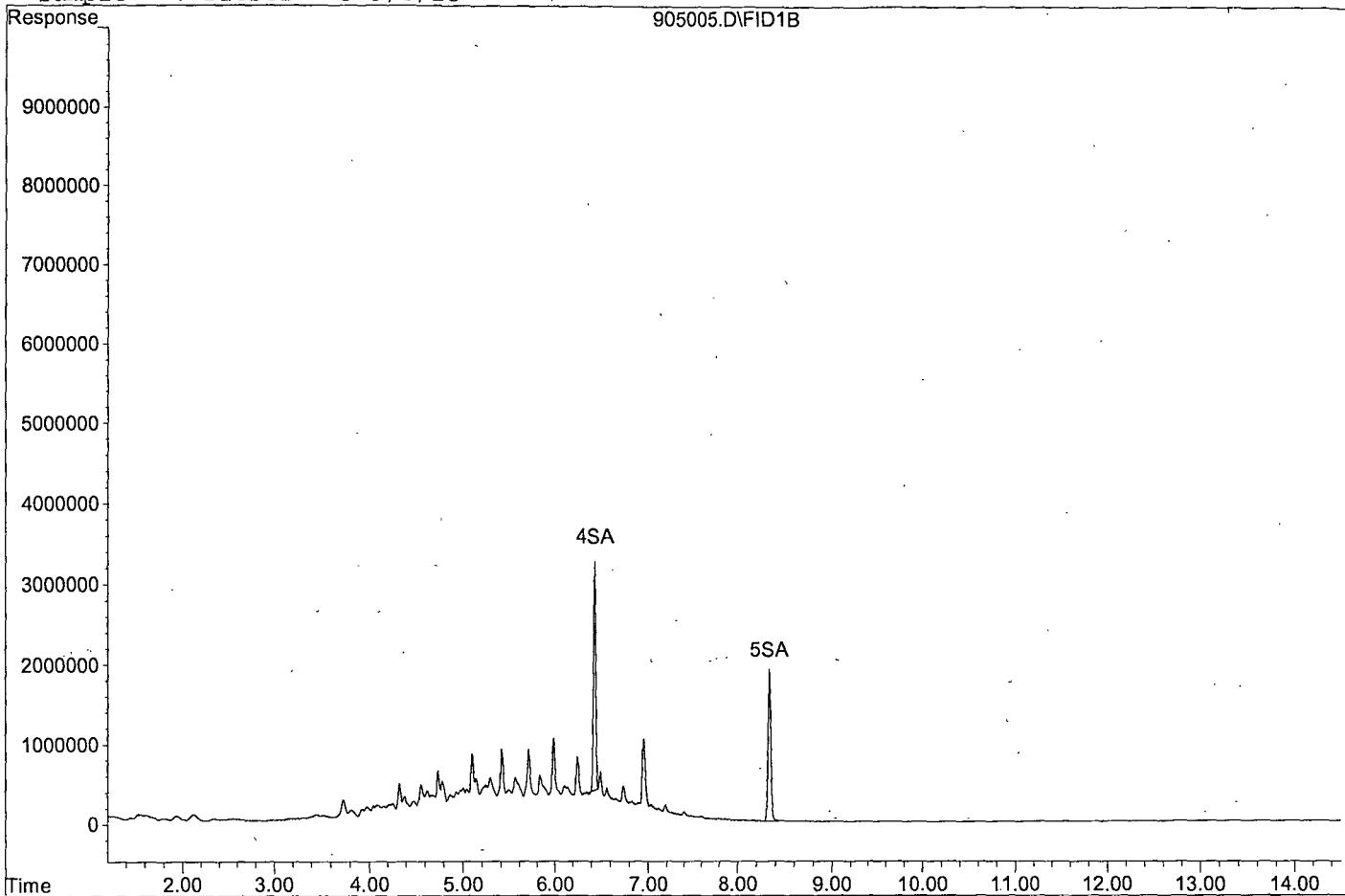
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.44	47918495	12.374 ppb
Surrogate Spike 30.000		Recovery =	41.25%
5) SA Octacosane(S)	8.34	40127010	12.424 ppb
Surrogate Spike 30.000		Recovery =	41.41%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	773886098	236.143 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905005.D

Sample : Diesel - 3 9/5/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180905\905006.D Vial: 6  
 Acq On : 9-5-18 14:31:55 Operator: DP  
 Sample : Diesel - 4 9/5/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

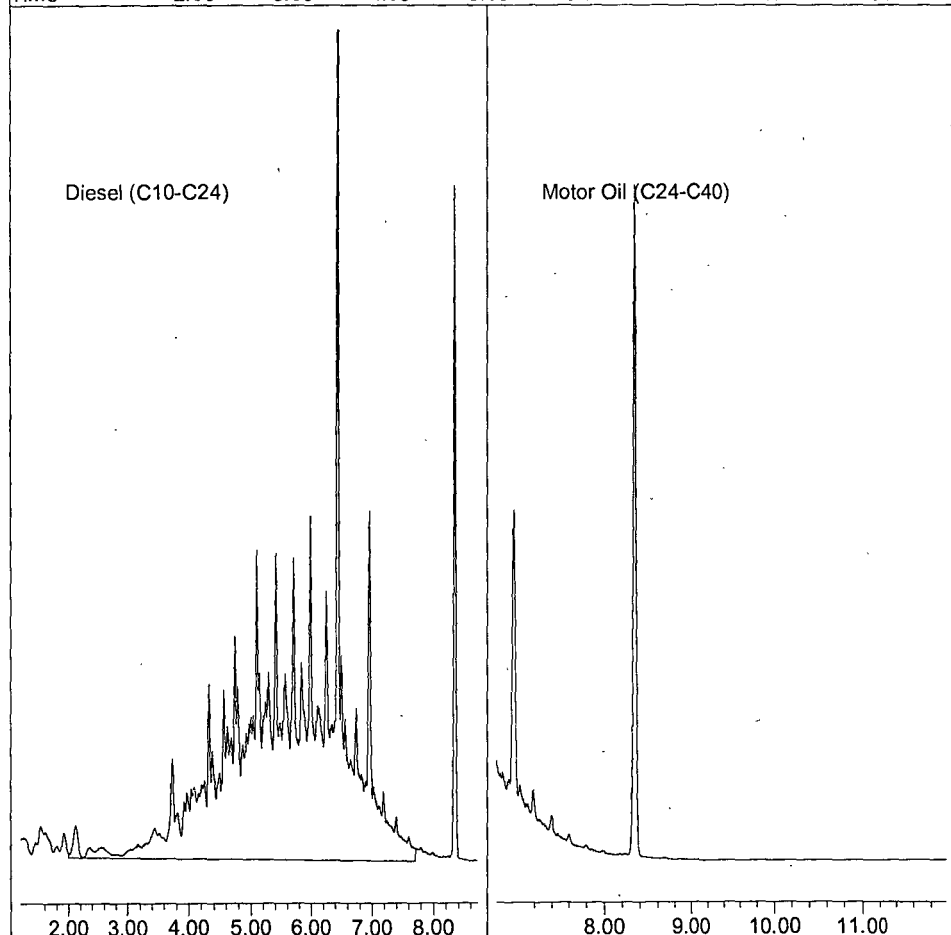
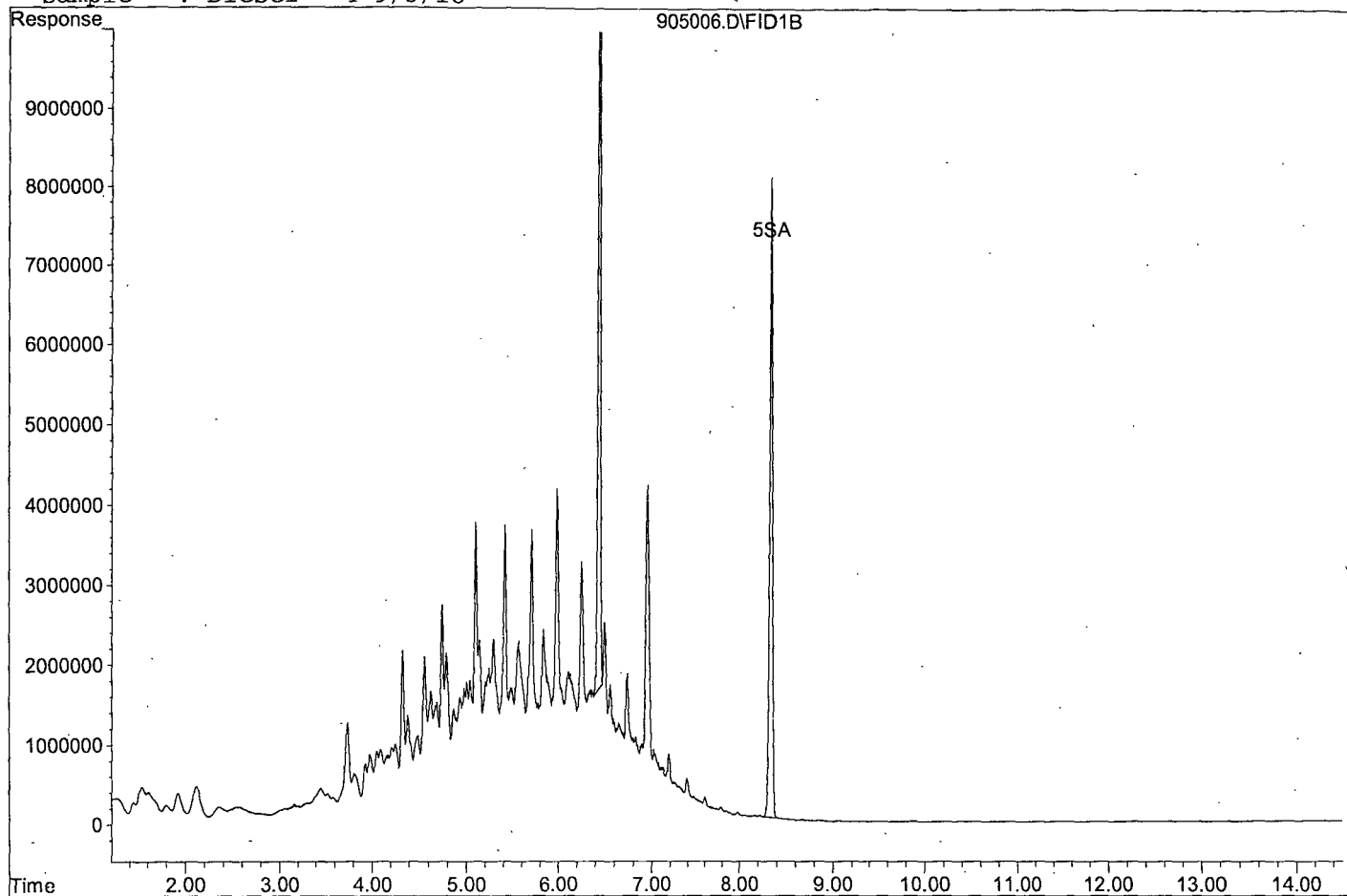
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.44	189189247	48.853 ppb
Surrogate Spike 30.000		Recovery =	162.84%
5) SA Octacosane(S)	8.34	164654773	50.979 ppb
Surrogate Spike 30.000		Recovery =	169.93%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	3205699857	978.184 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\180905\905006.D

Sample : Diesel - 4 9/5/18



Data File : G:\APOLLO\DATA\180905\905007.D Vial: 7  
 Acq On : 9-5-18 14:51:56 Operator: DP  
 Sample : Diesel - 5 9/5/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

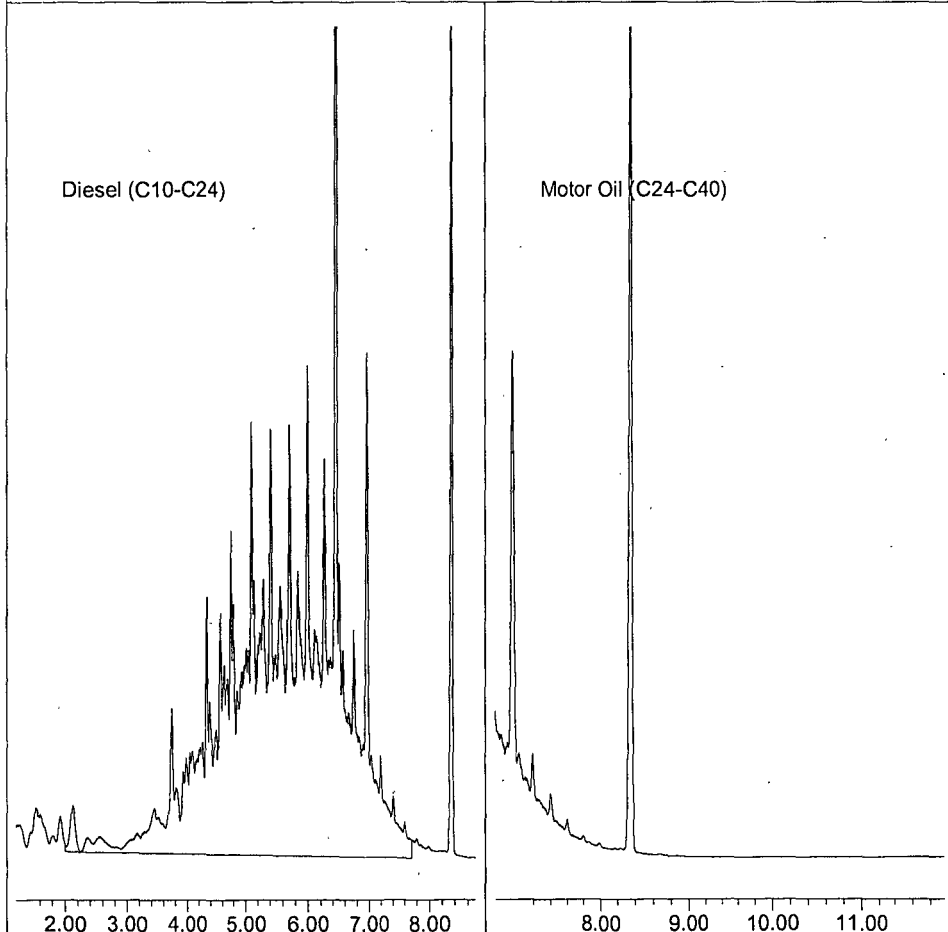
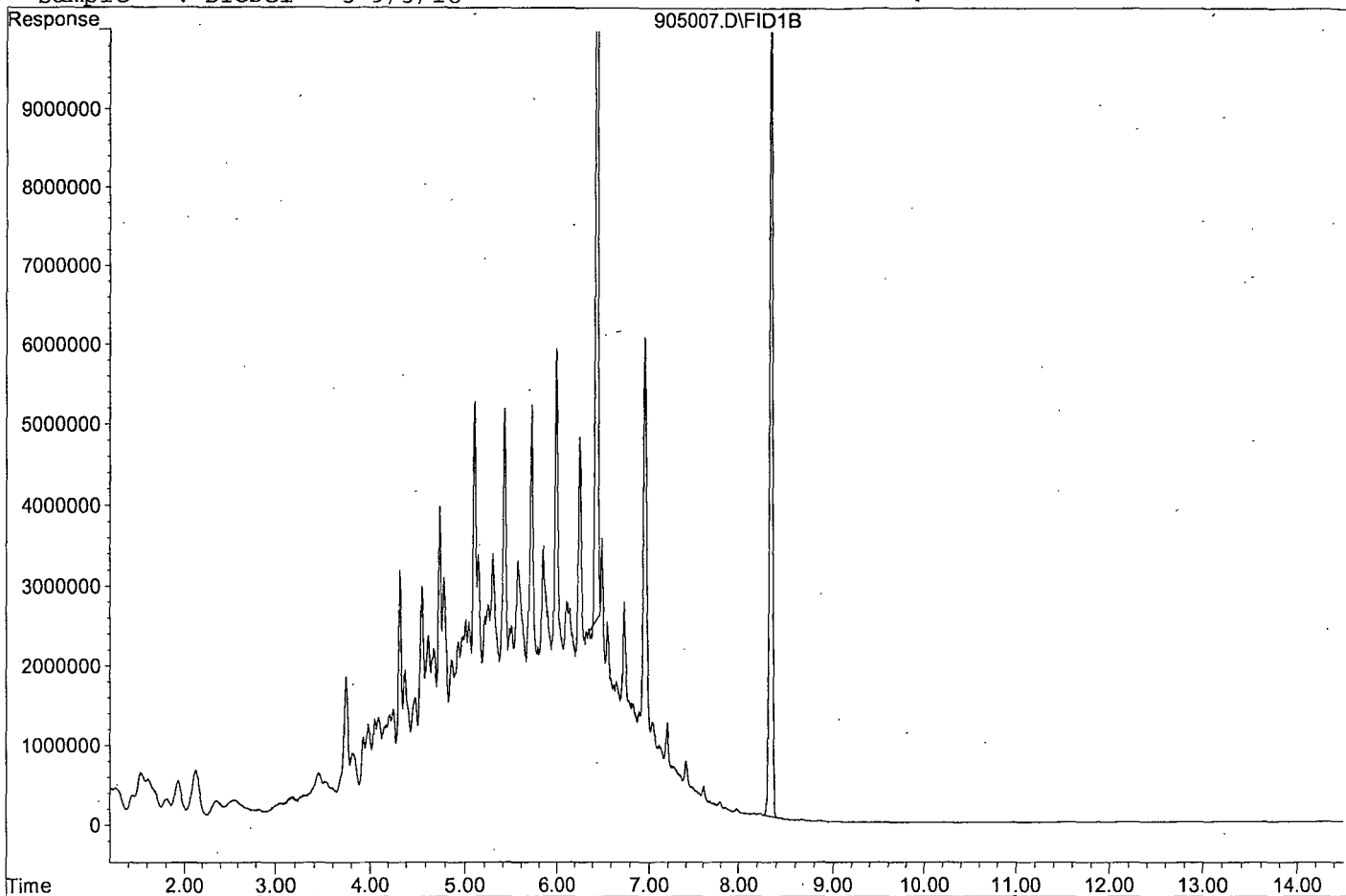
Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.45	260146116	67.175 ppb
Surrogate Spike 30.000		Recovery =	223.92%
5) SA Octacosane(S)	8.35	234144102	72.493 ppb
Surrogate Spike 30.000		Recovery =	241.64%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	4675608367	1426.710 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905007.D  
Sample : Diesel - 5 9/5/18



Data File : G:\APOLLO\DATA\180905\905008.D Vial: 8  
 Acq On : 9-5-18 15:11:58 Operator: DP  
 Sample : Diesel - 6 9/5/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

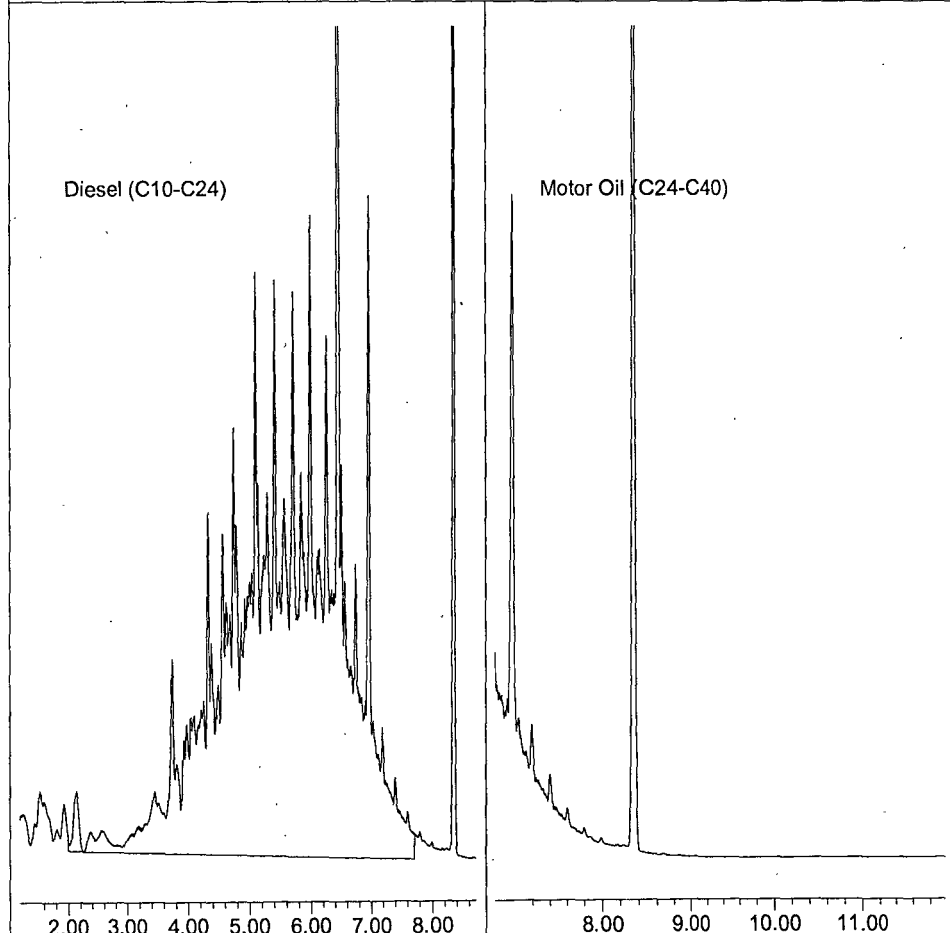
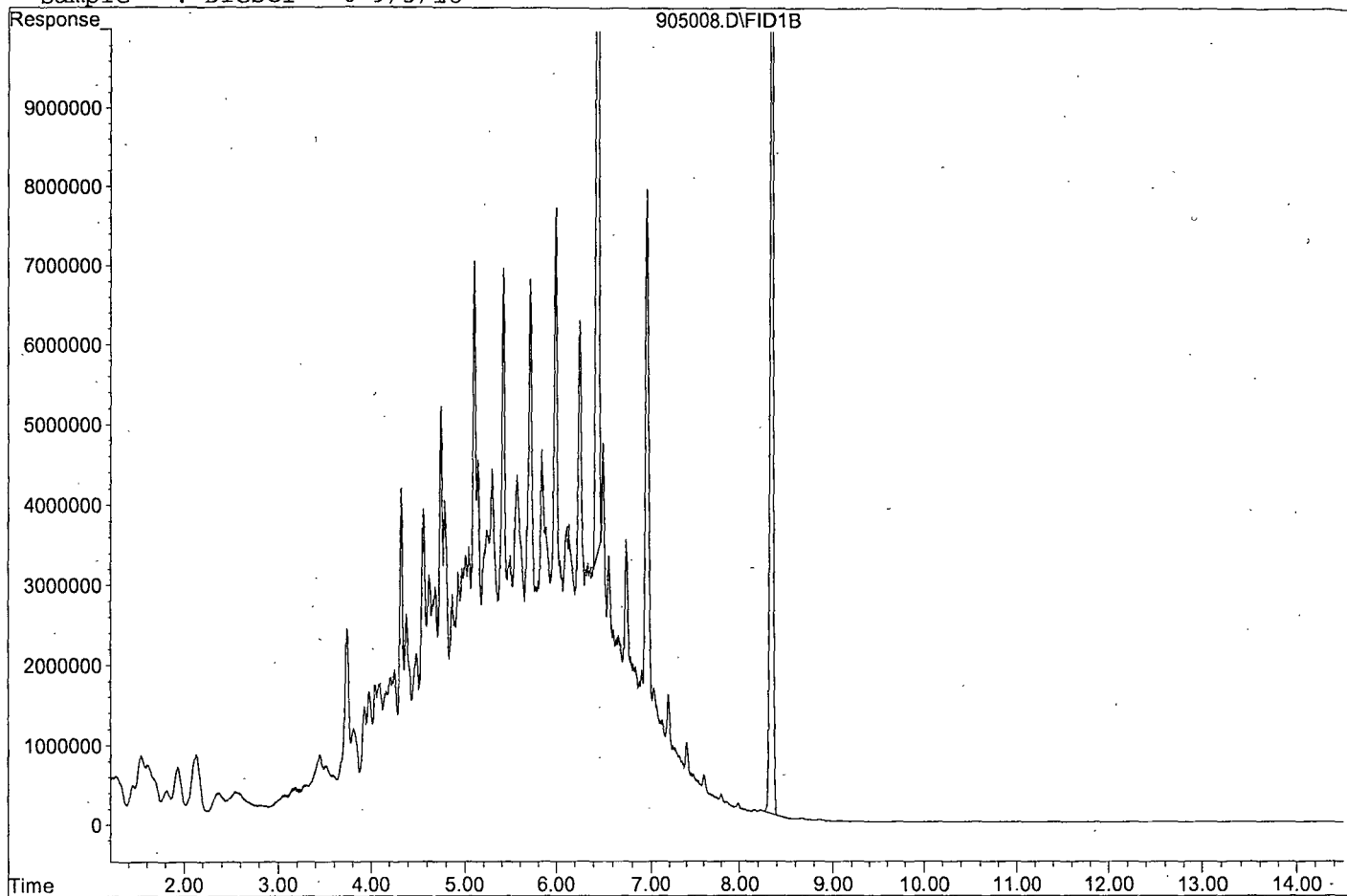
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.45	343927438	88.809 ppb
Surrogate Spike 30.000		Recovery =	296.03%
5) SA Octacosane(S)	8.35	310020200	95.985 ppb
Surrogate Spike 30.000		Recovery =	319.95%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	6234861442	1902.499 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905008.D

Sample : Diesel - 6 9/5/18



Data File : G:\APOLLO\DATA\180905\905010.D Vial: 10  
 Acq On : 9-5-18 15:52:08 Operator: DP  
 Sample : Motor Oil - 1 9/5/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:49 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

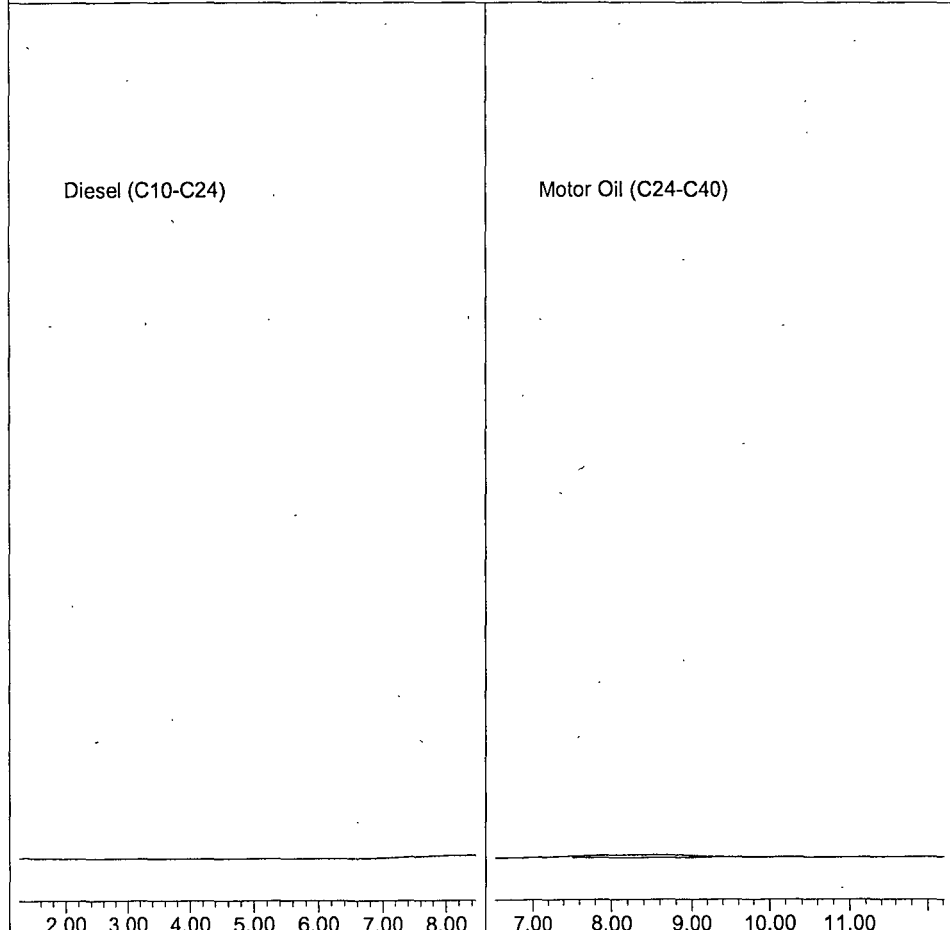
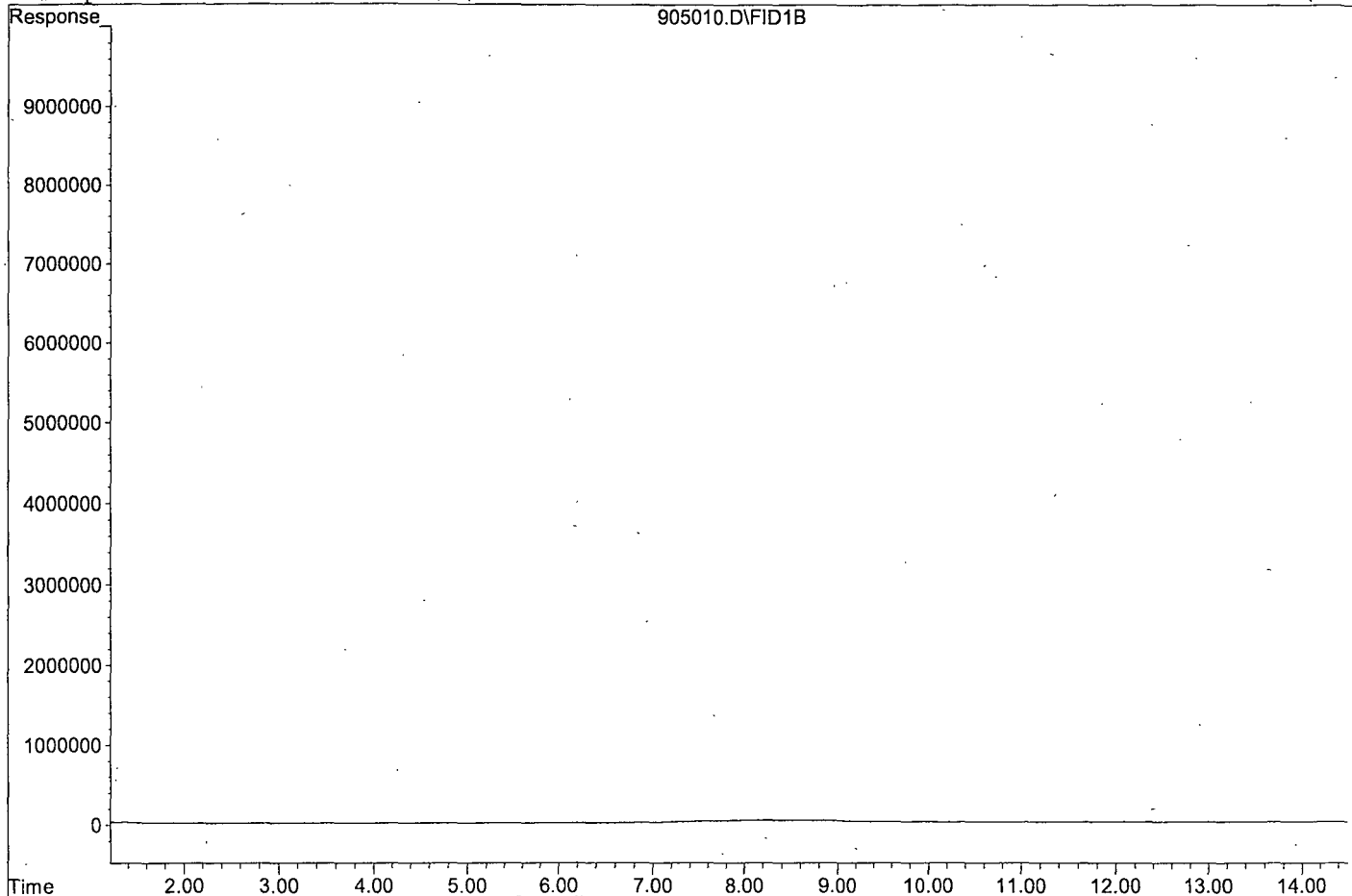
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	32653584	11.764 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905010.D

Sample : Motor Oil - 1 9/5/18



Data File : G:\APOLLO\DATA\180905\905011.D Vial: 11  
 Acq On : 9-5-18 16:12:11 Operator: DP  
 Sample : Motor Oil - 2 9/5/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:49 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

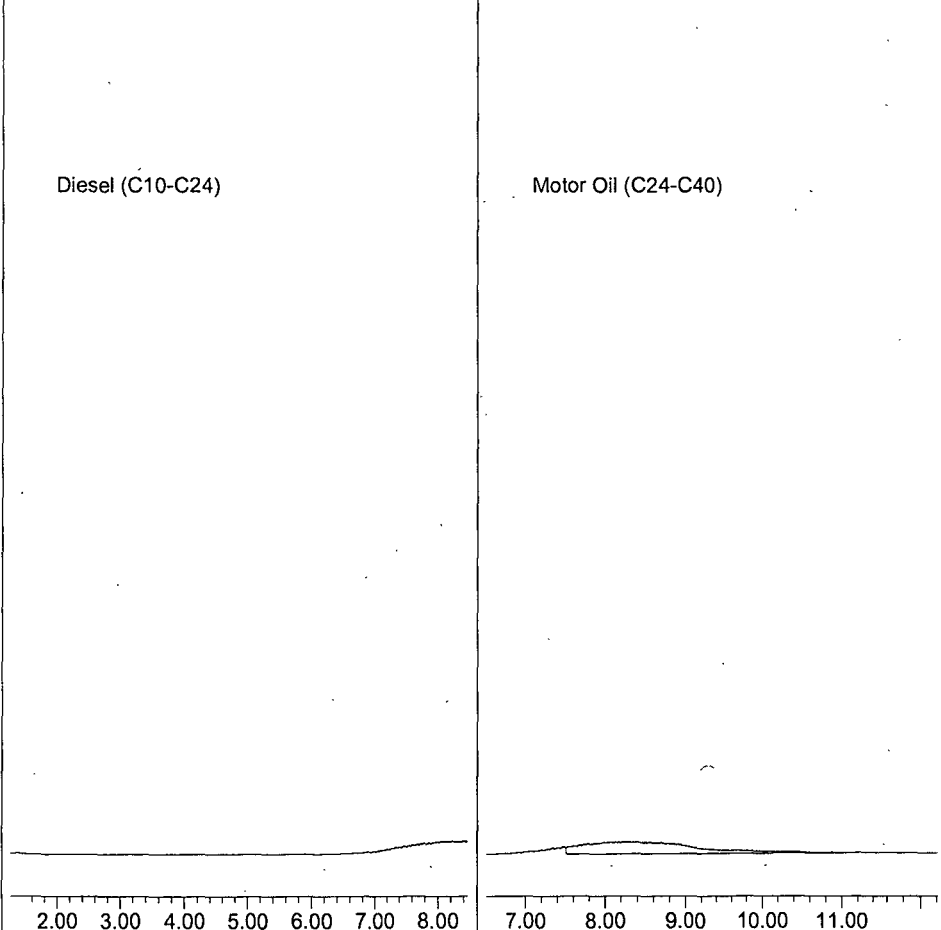
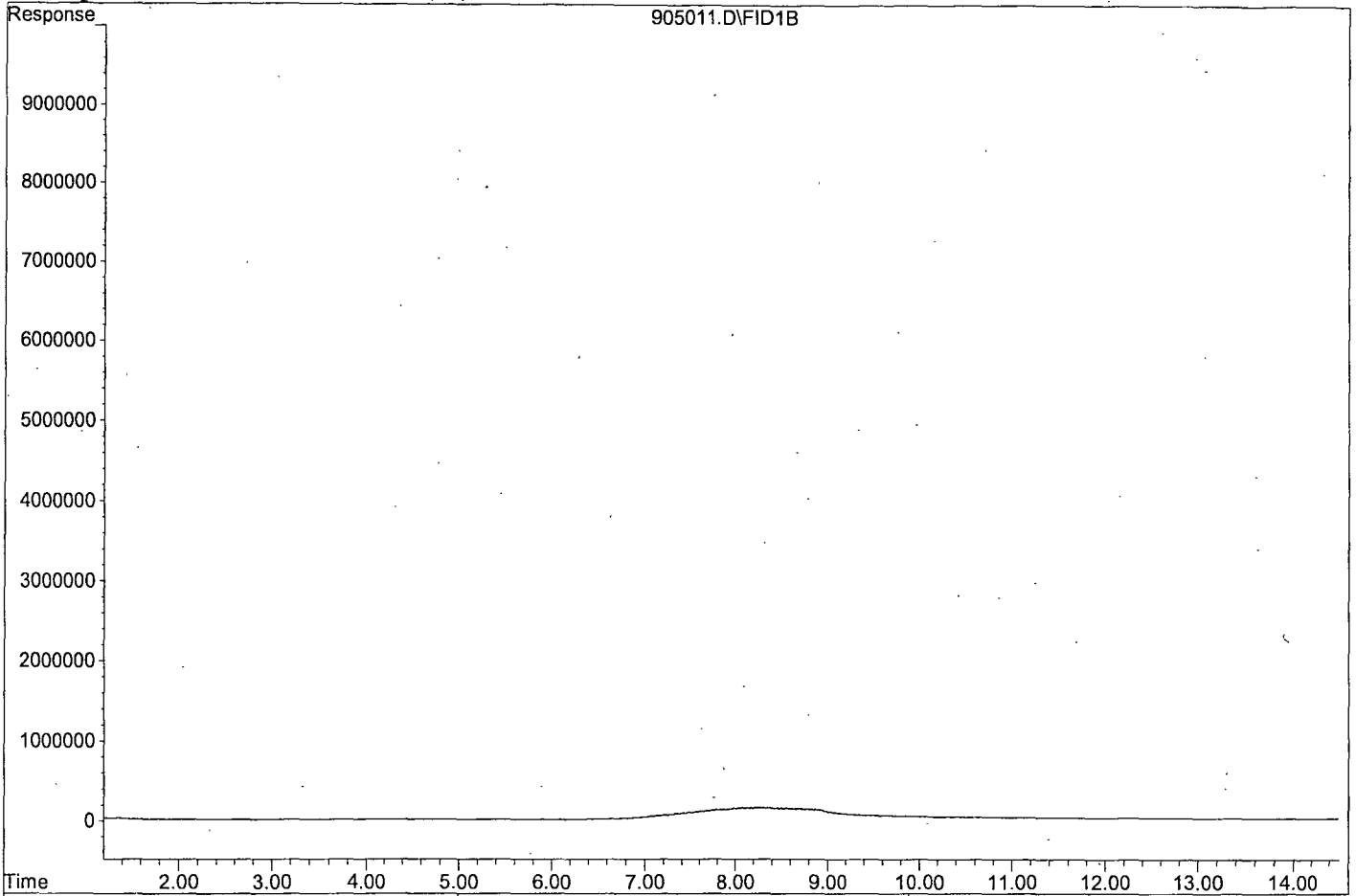
2) HBTM Motor Oil (C24-C40)	9.36	144232897	51.961 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\180905\905011.D

Sample : Motor Oil - 2 9/5/18



Data File : G:\APOLLO\DATA\180905\905012.D Vial: 12  
 Acq On : 9-5-18 16:32:11 Operator: DP  
 Sample : Motor Oil - 3 9/5/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:49 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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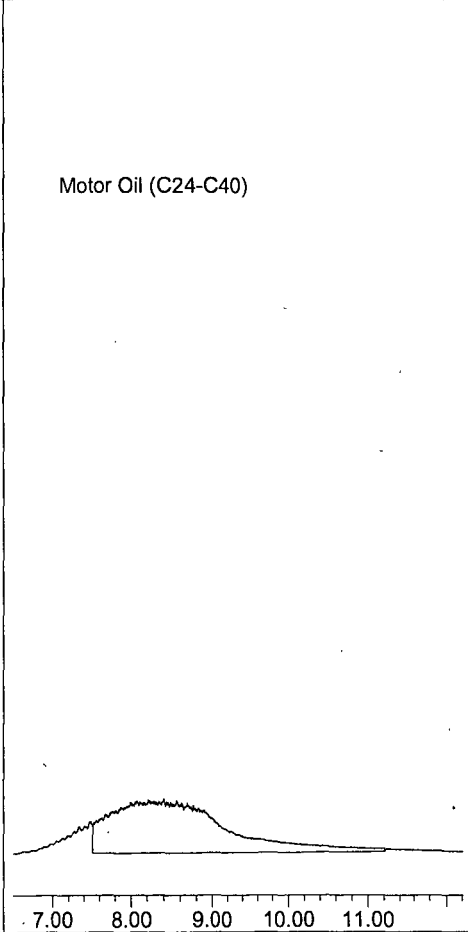
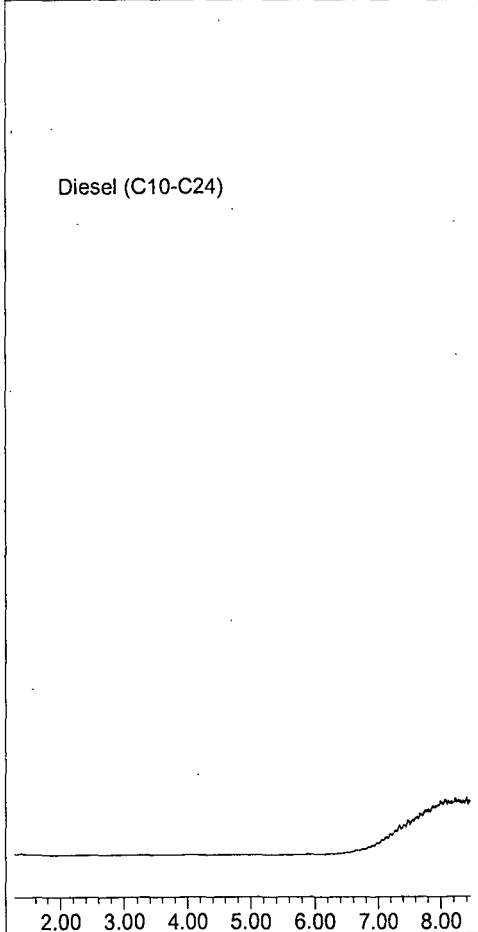
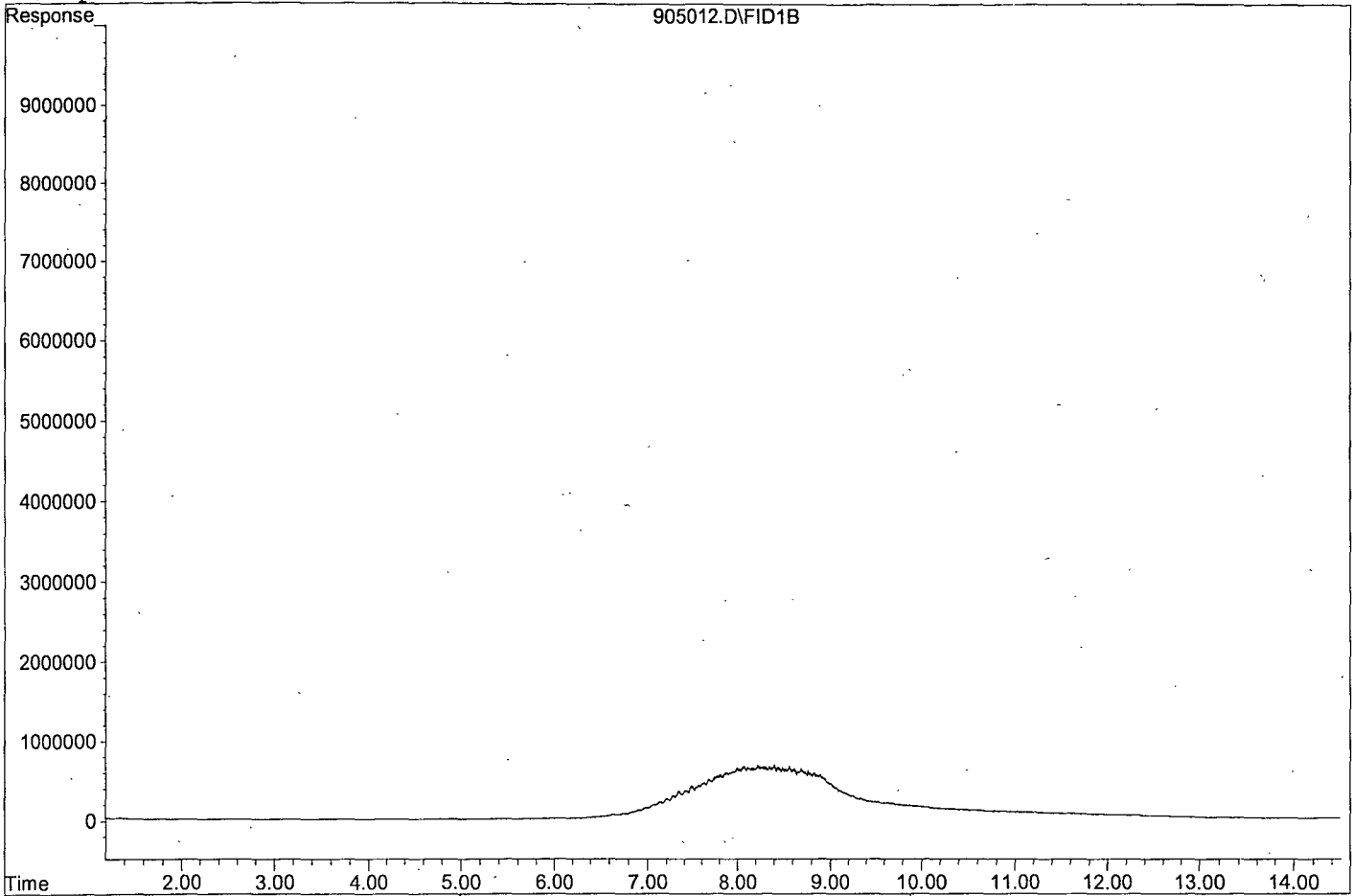
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	640853647	230.874 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\180905\905012.D  
Sample : Motor Oil - 3 9/5/18



Data File : G:\APOLLO\DATA\180905\905013.D Vial: 13  
 Acq On : 9-5-18 16:52:14 Operator: DP  
 Sample : Motor Oil - 4 9/5/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:49 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

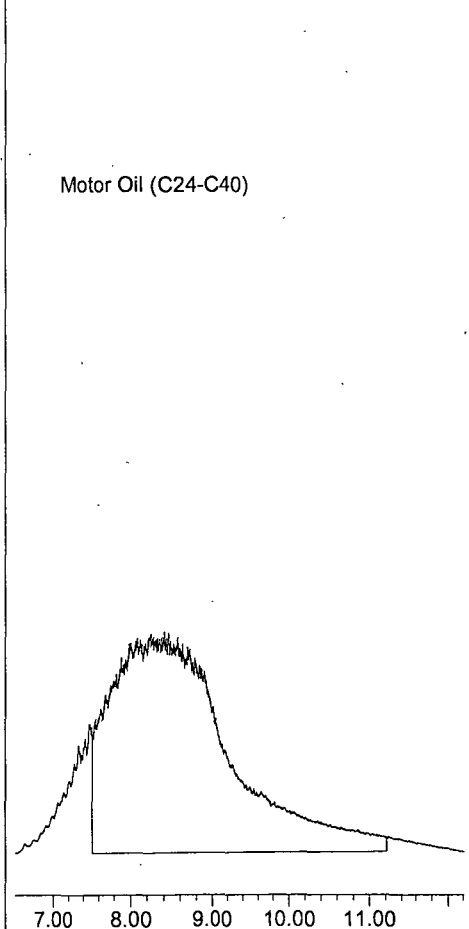
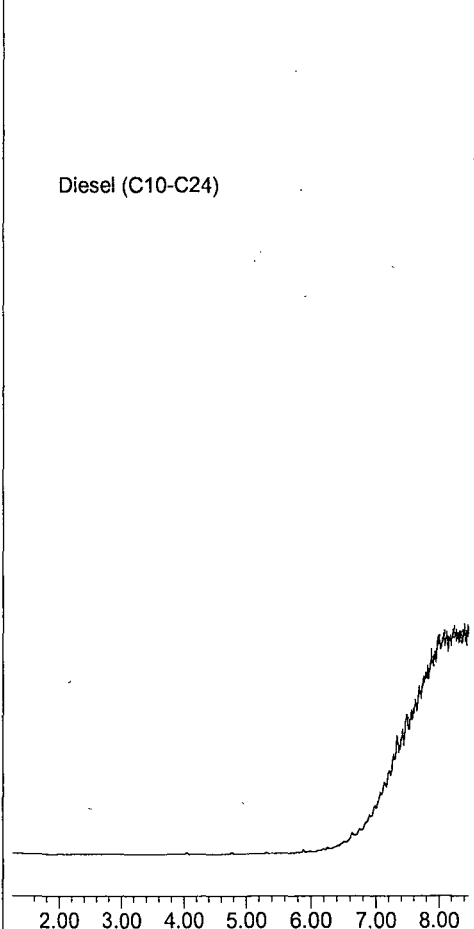
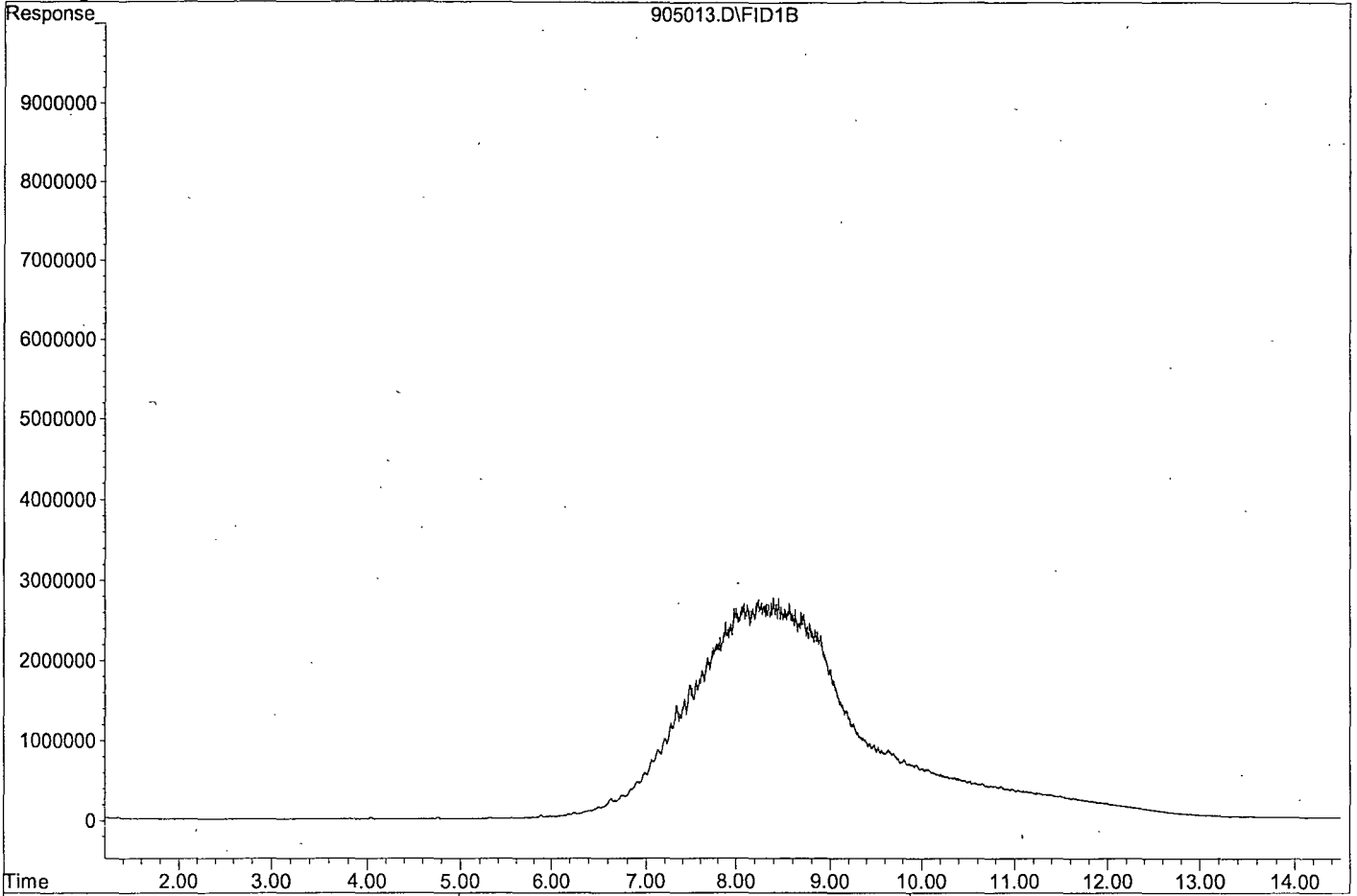
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	2671114888	962.297 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905013.D

Sample : Motor Oil - 4 9/5/18.



Data File : G:\APOLLO\DATA\180905\905014.D Vial: 14  
 Acq On : 9-5-18 17:12:14 Operator: DP  
 Sample : Motor Oil - 5 9/5/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:49 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

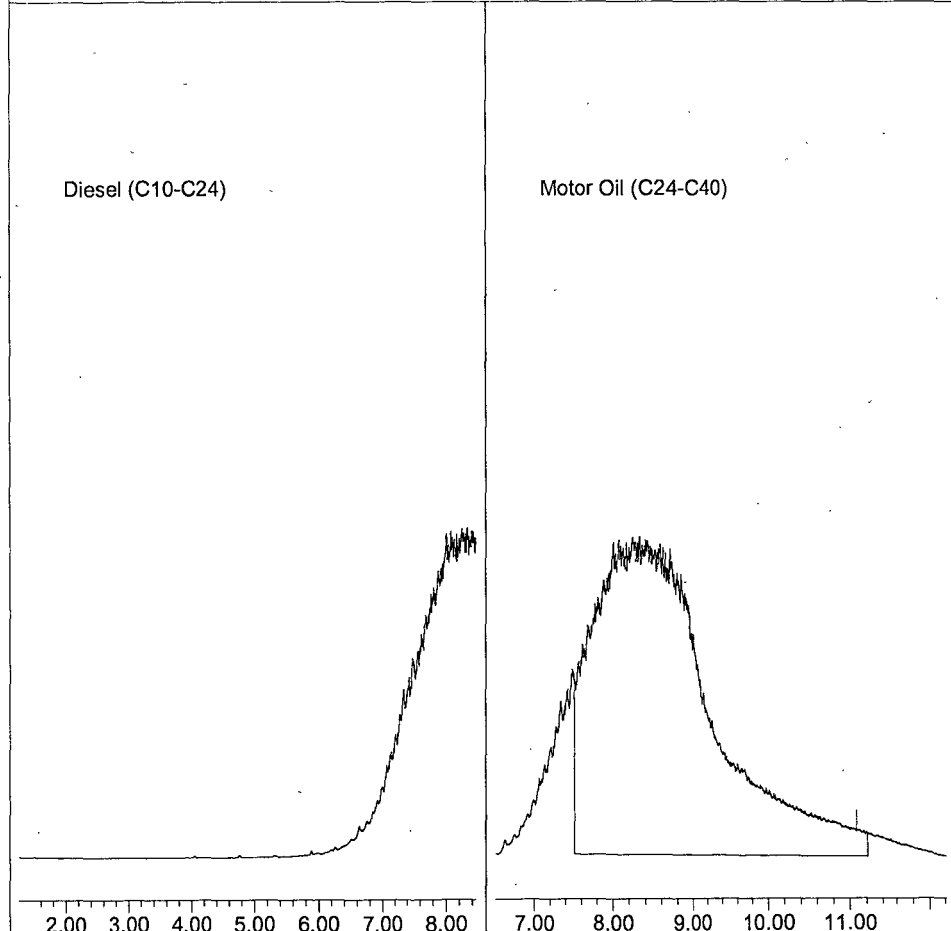
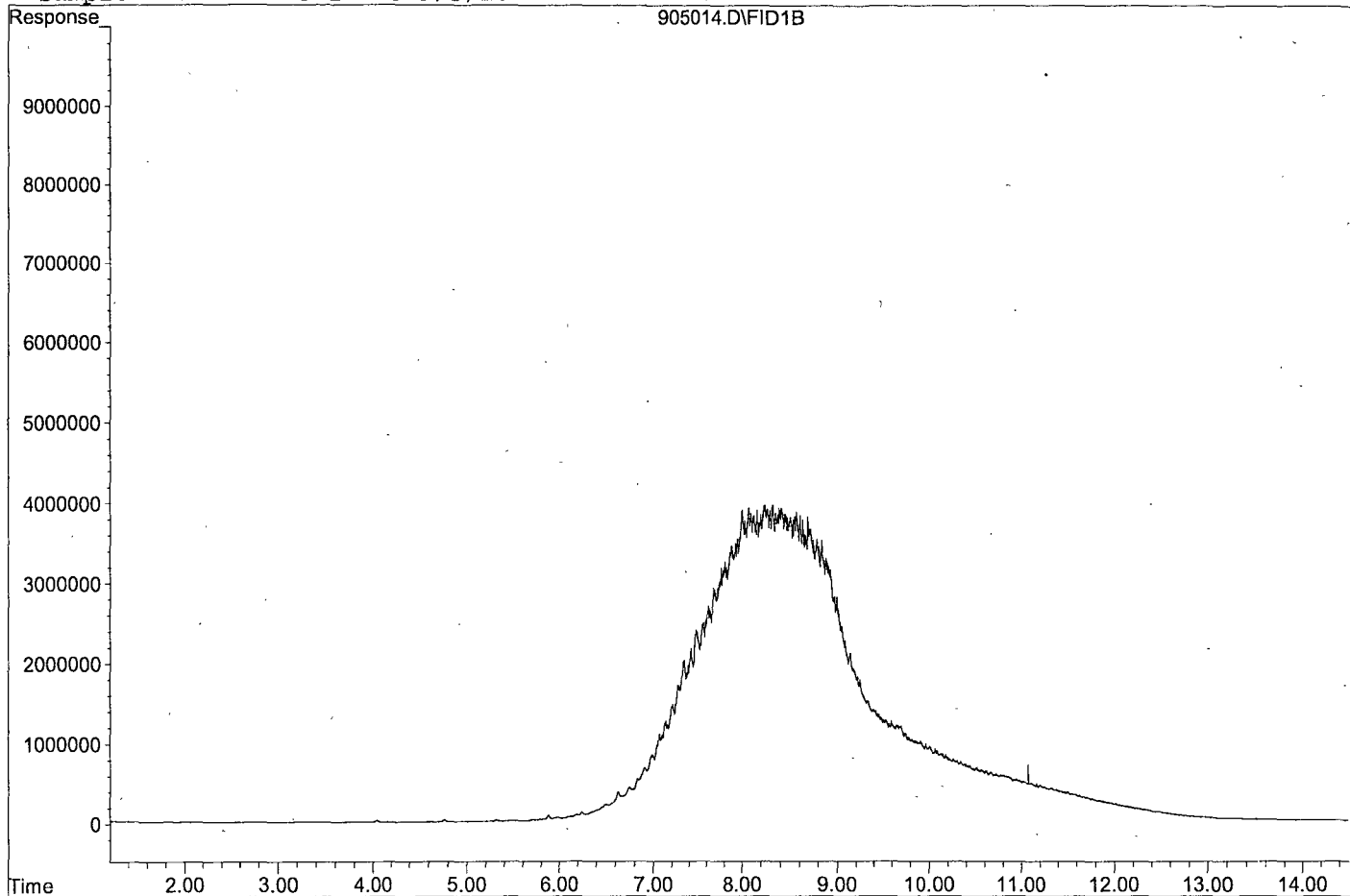
Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	3915465455	1410.588 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\180905\905014.D

Sample : Motor Oil - 5 9/5/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180905\905015.D Vial: 15  
 Acq On : 9-5-18 17:31:25 Operator: DP  
 Sample : Motor Oil - 6 9/5/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:49 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

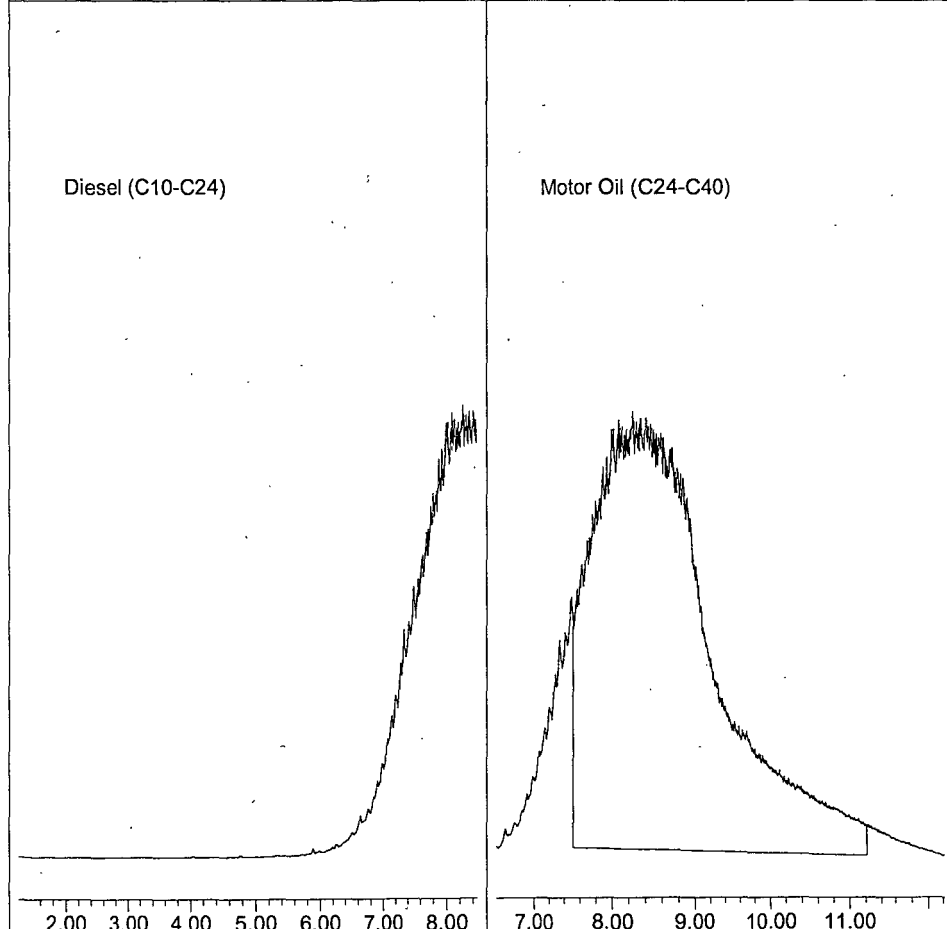
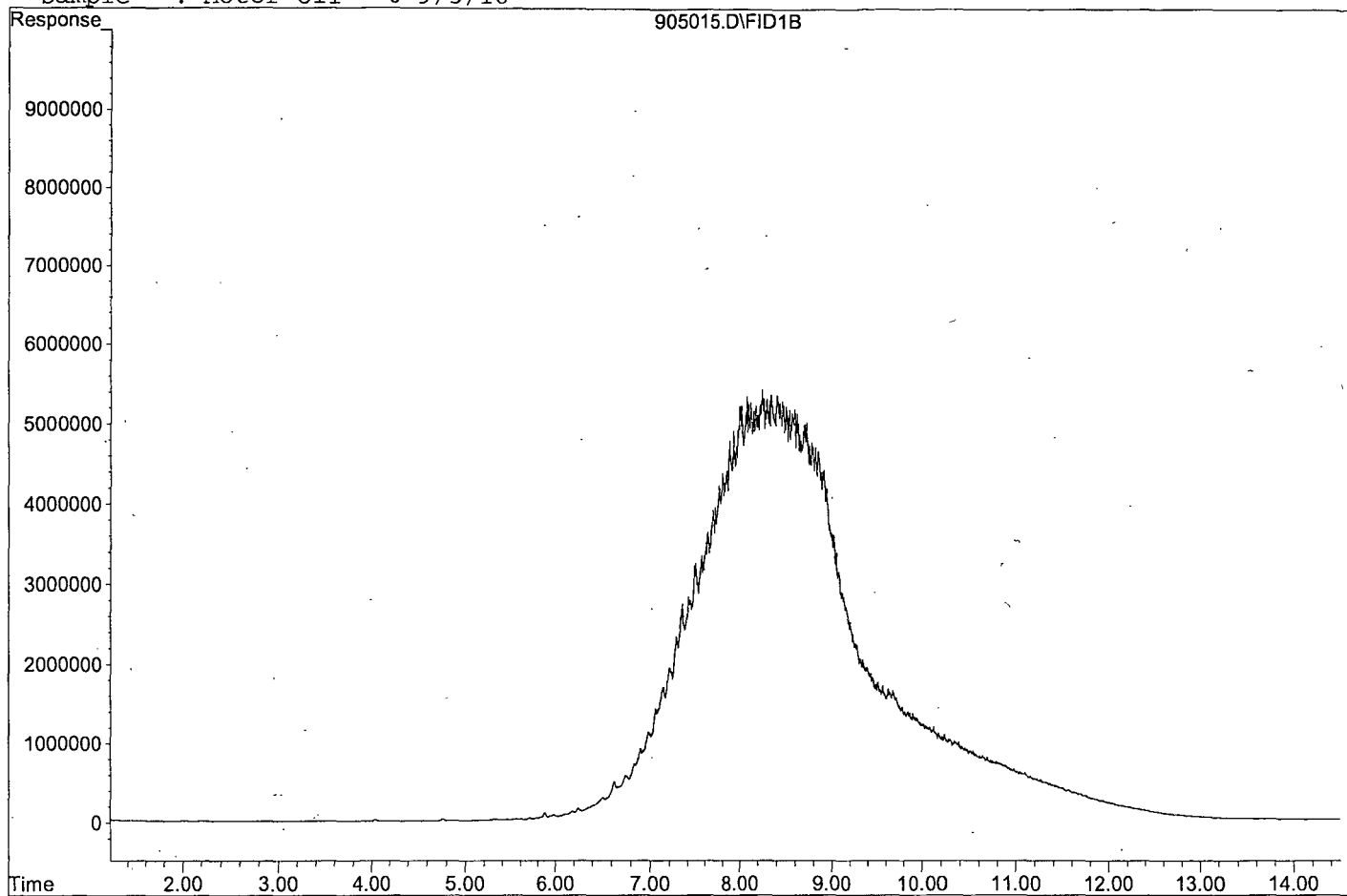
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	5319513396	1916.411 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\180905\905015.D

Sample : Motor Oil - 6 9/5/18



Data File : G:\APOLLO\DATA\180814\814017.D Vial: 17  
 Acq On : 8-14-18 16:56:27 Operator: DP  
 Sample : Decanoic Acid - 1 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 9 11:33 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

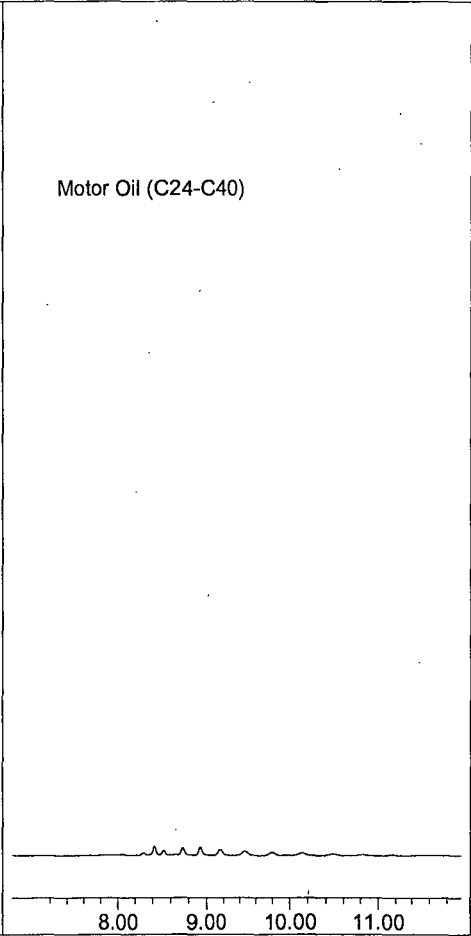
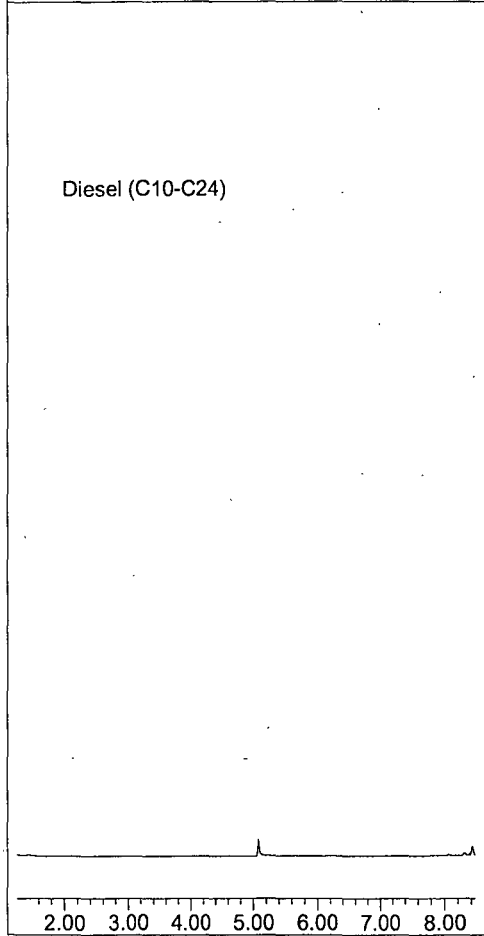
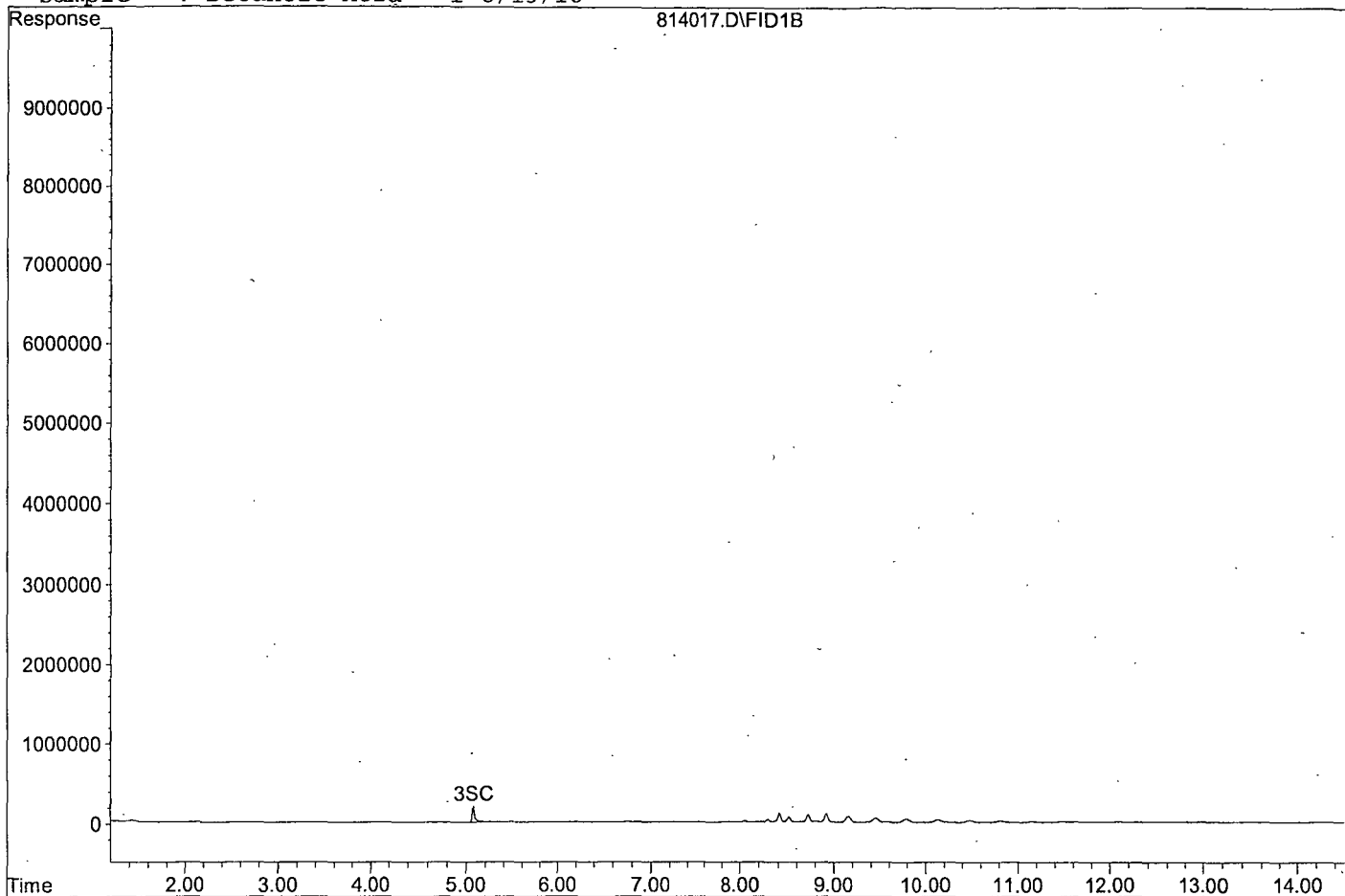
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.08f	3892047	1.959 ppb
Surrogate Spike 24.000	Recovery	=	8.16%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814017.D

Sample : Decanoic Acid - 1 8/13/18



Data File : G:\APOLLO\DATA\180814\814018.D Vial: 18  
 Acq On : 8-14-18 17:15:48 Operator: DP  
 Sample : Decanoic Acid - 2 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 9 11:33 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

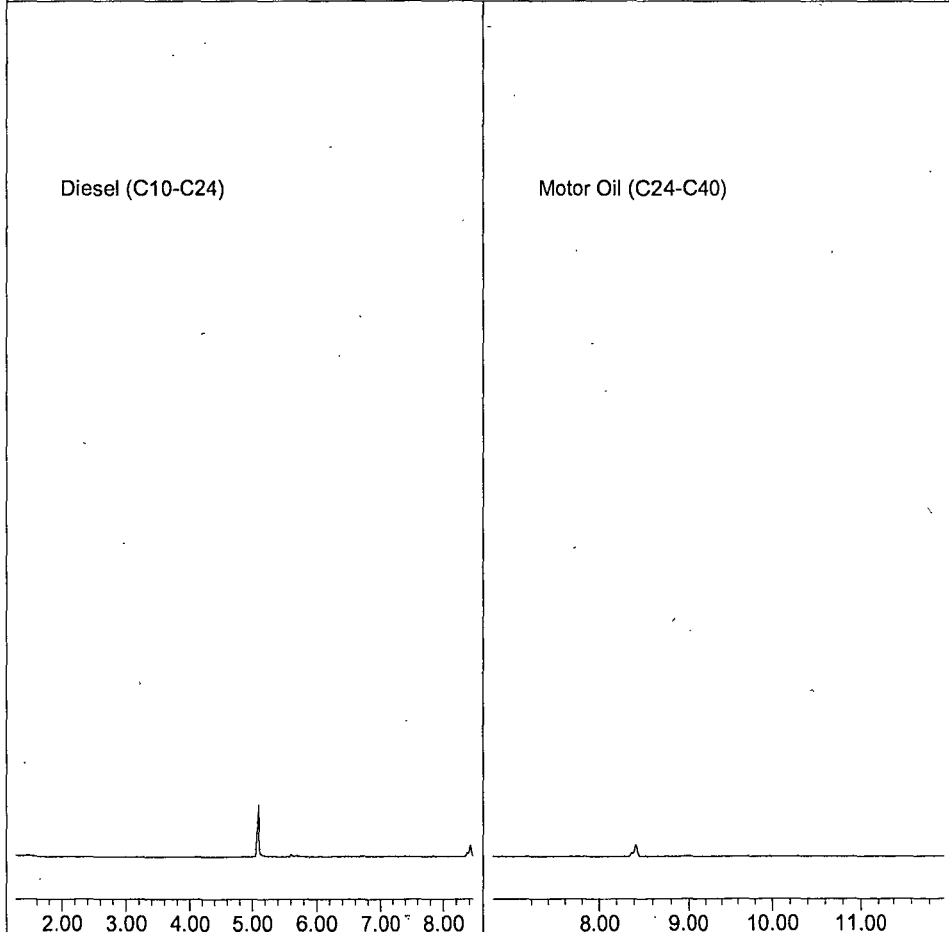
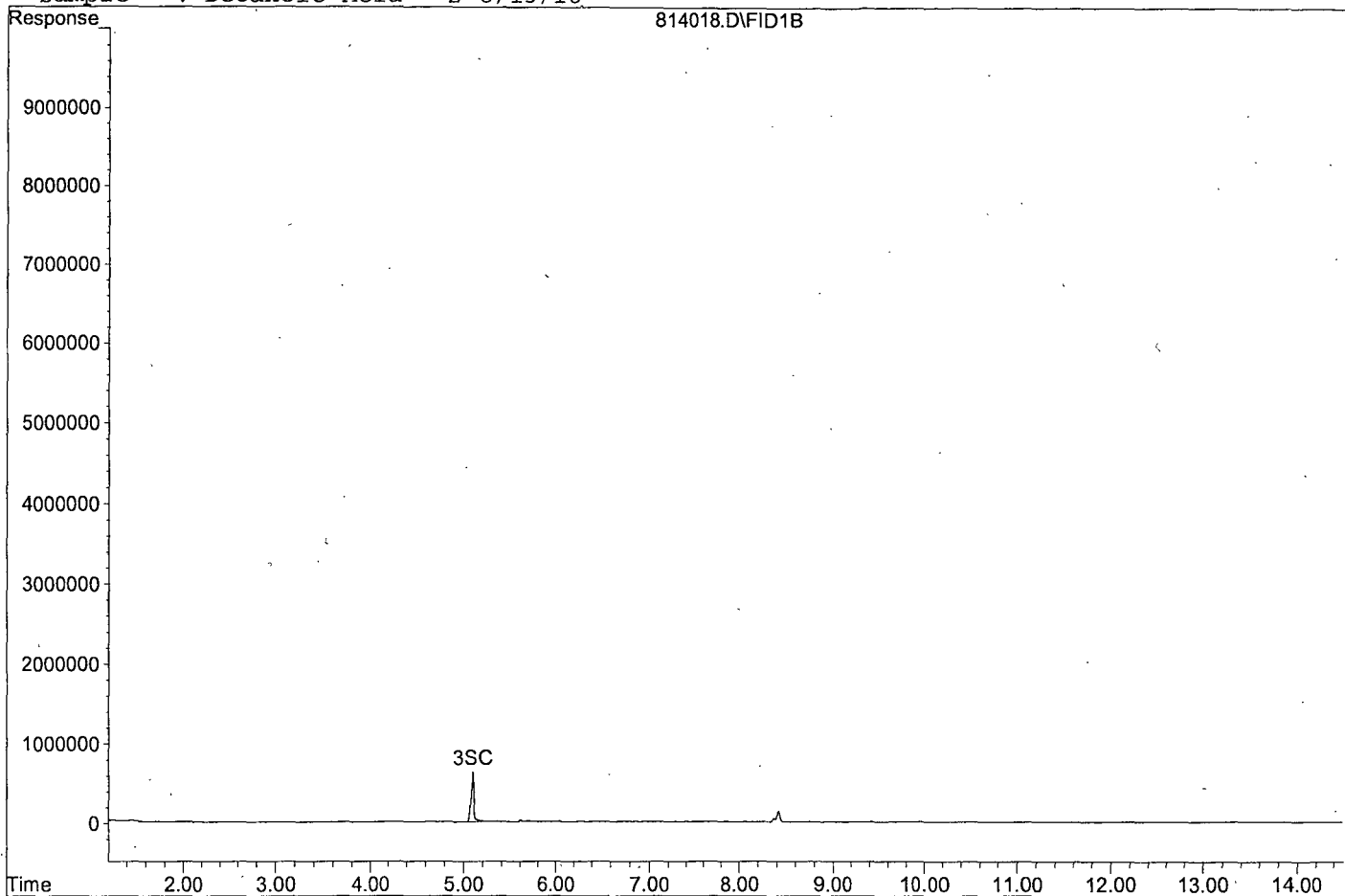
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.10	13146585	6.619 ppb
Surrogate Spike 24.000		Recovery =	27.58%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814018.D

Sample : Decanoic Acid - 2 8/13/18



Data File : G:\APOLLO\DATA\180814\814019.D Vial: 19  
 Acq On : 8-14-18 17:35:59 Operator: DP  
 Sample : Decanoic Acid - 3 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 9 11:33 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

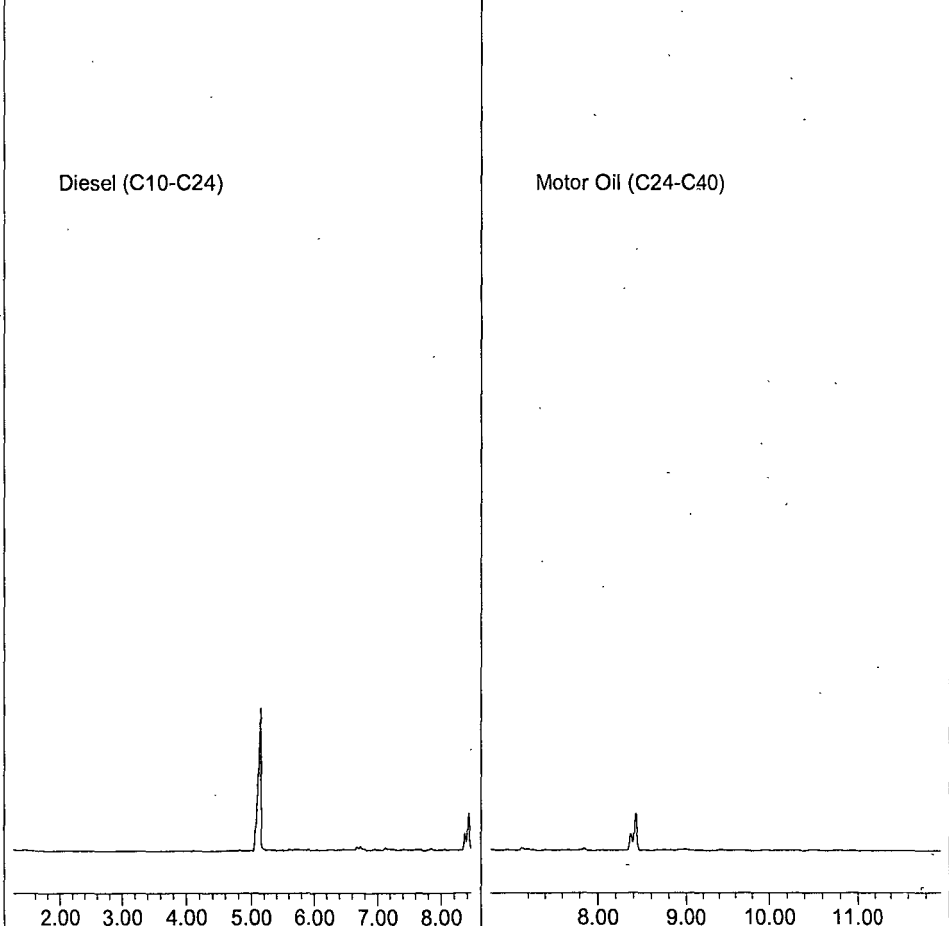
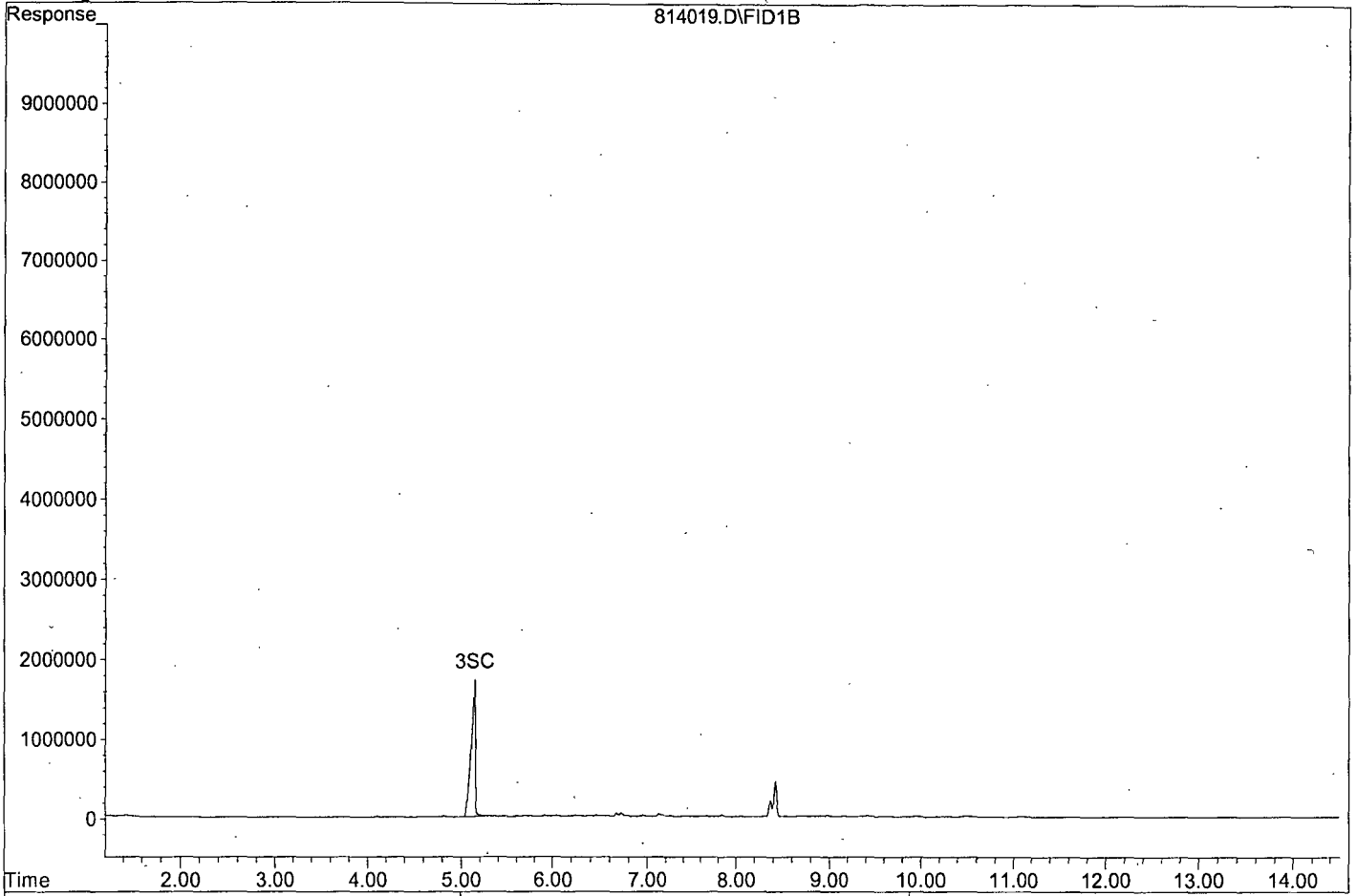
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.14	52364534	26.364 ppb
Surrogate Spike 24.000		Recovery =	109.85%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814019.D  
Sample : Decanoic Acid - 3 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814020.D - Vial: 20  
 Acq On : 8-14-18 17:56:16 Operator: DP  
 Sample : Decanoic Acid - 4 8/13/18. Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 9 11:33 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30.2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.15	75838654	38.182 ppb
Surrogate Spike 24.000		Recovery =	159.09%

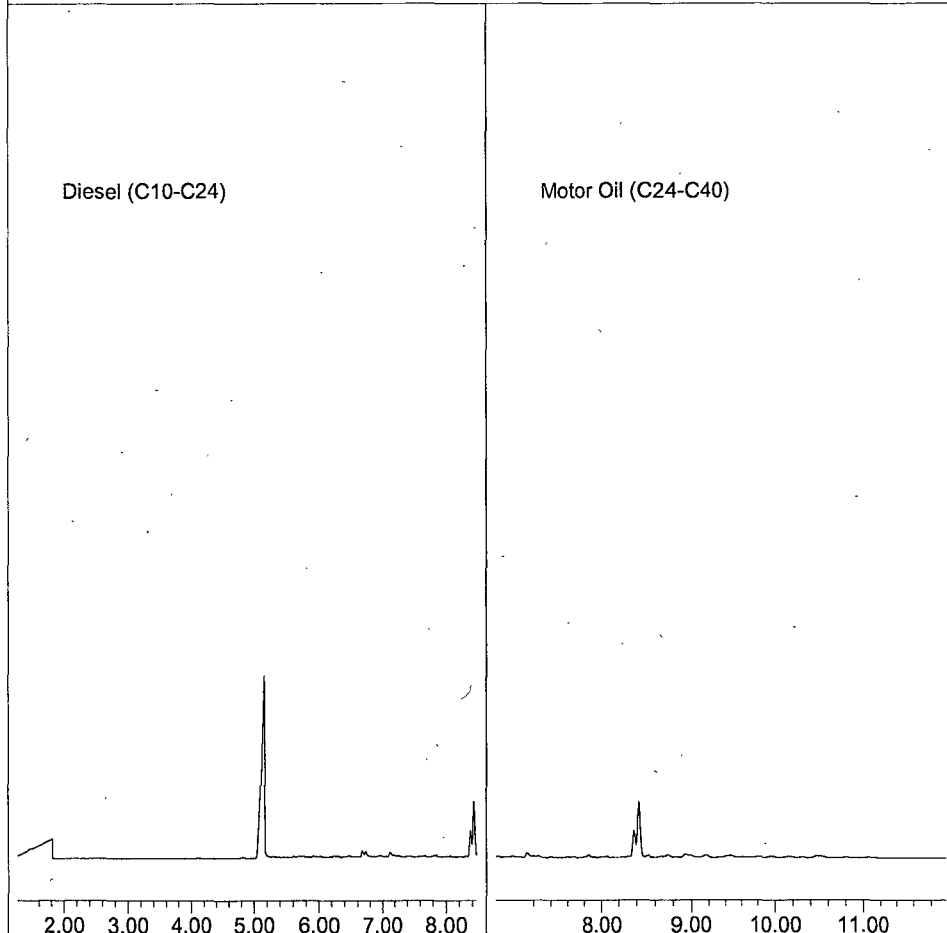
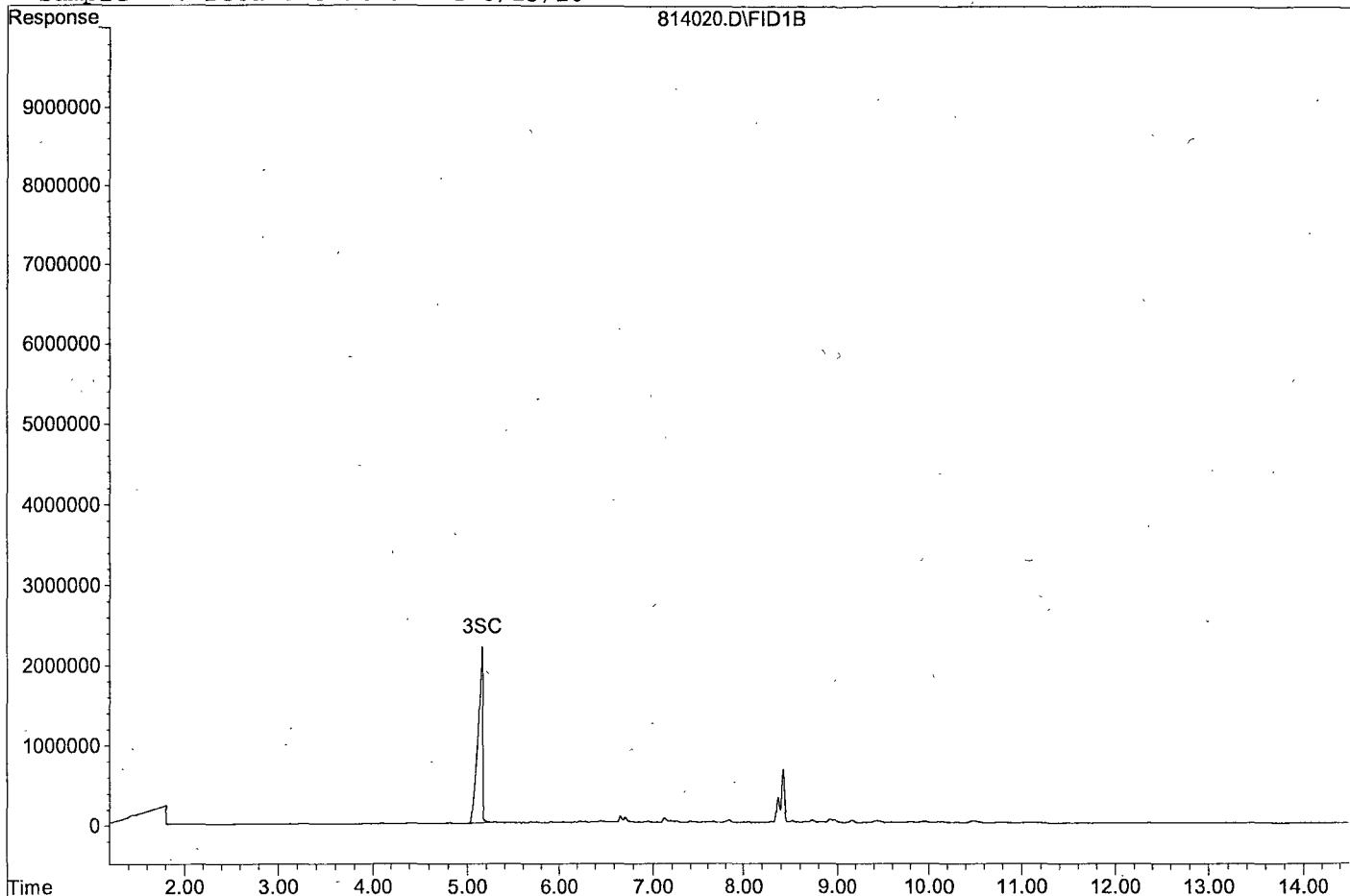
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\180814\814020.D

Sample : Decanoic Acid - 4 8/13/18



Data File : G:\APOLLO\DATA\180814\814021.D Vial: 21  
 Acq On : 8-14-18 18:16:22 Operator: DP  
 Sample : Decanoic Acid - 5 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 9 11:33 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

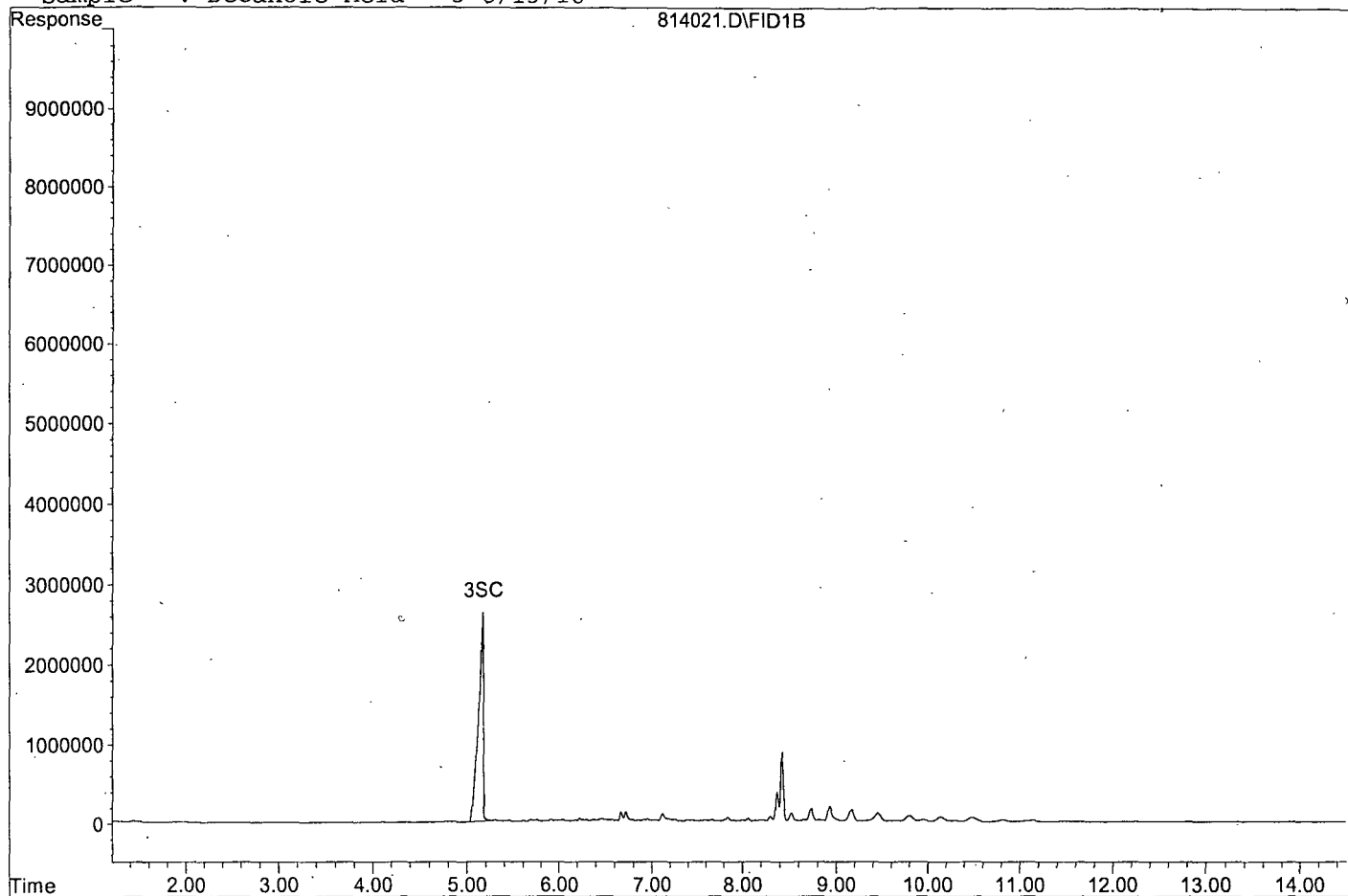
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.17	96416189	48.542 ppb
Surrogate Spike 24.000		Recovery =	202.26%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814021.D

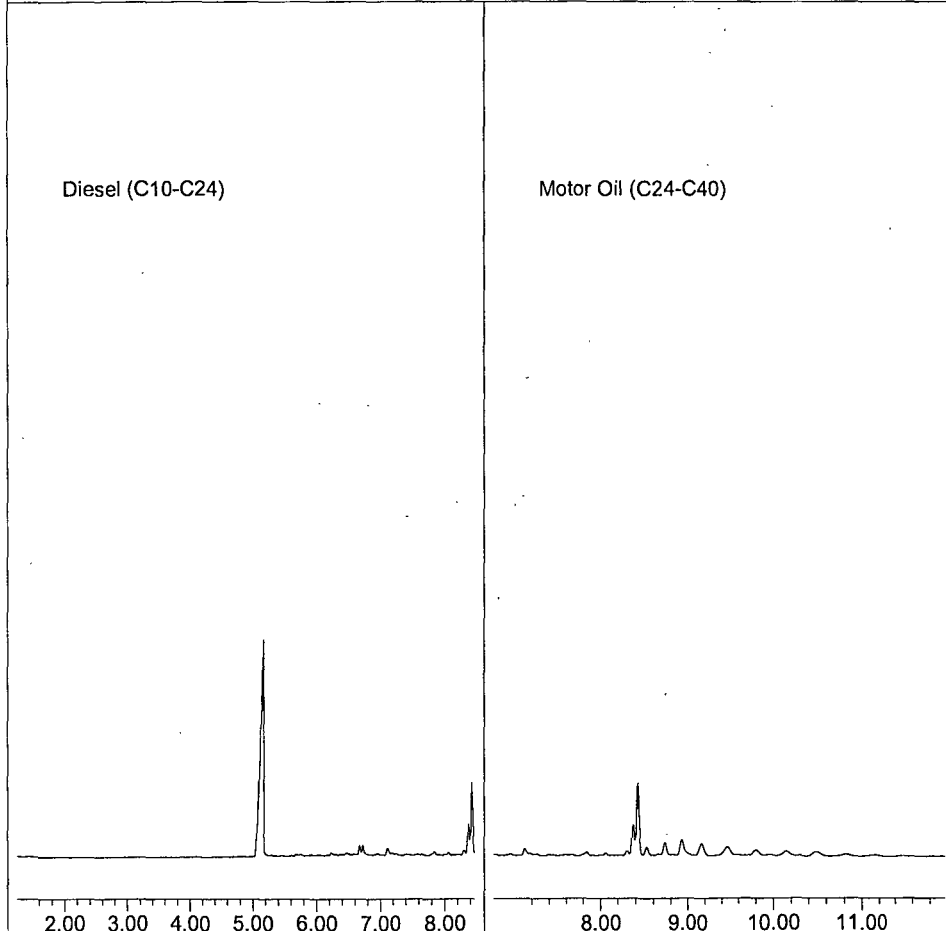
Sample : Decanoic Acid - 5 8/13/18

814021.D\FID1B



Diesel (C10-C24)

Motor Oil (C24-C40)



Data File : G:\APOLLO\DATA\180814\814022.D Vial: 22  
 Acq On : 8-14-18 18:36:30 Operator: DP  
 Sample : Decanoic Acid - 6 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 9 11:33 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

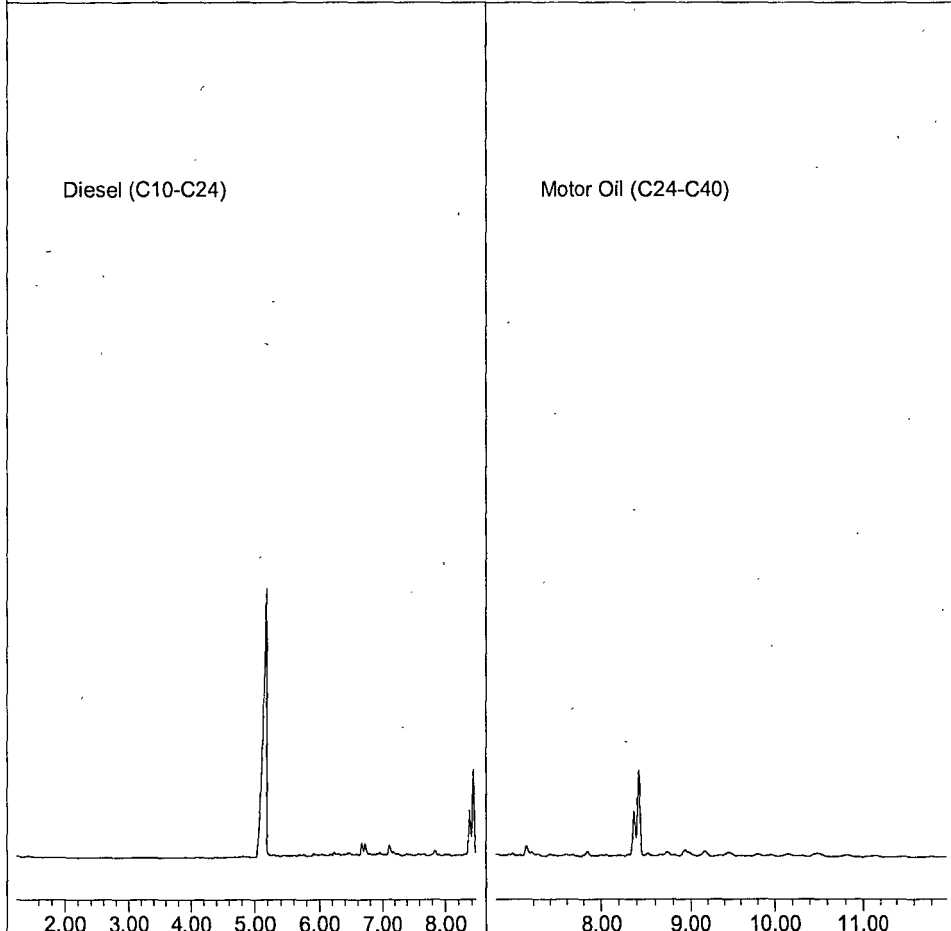
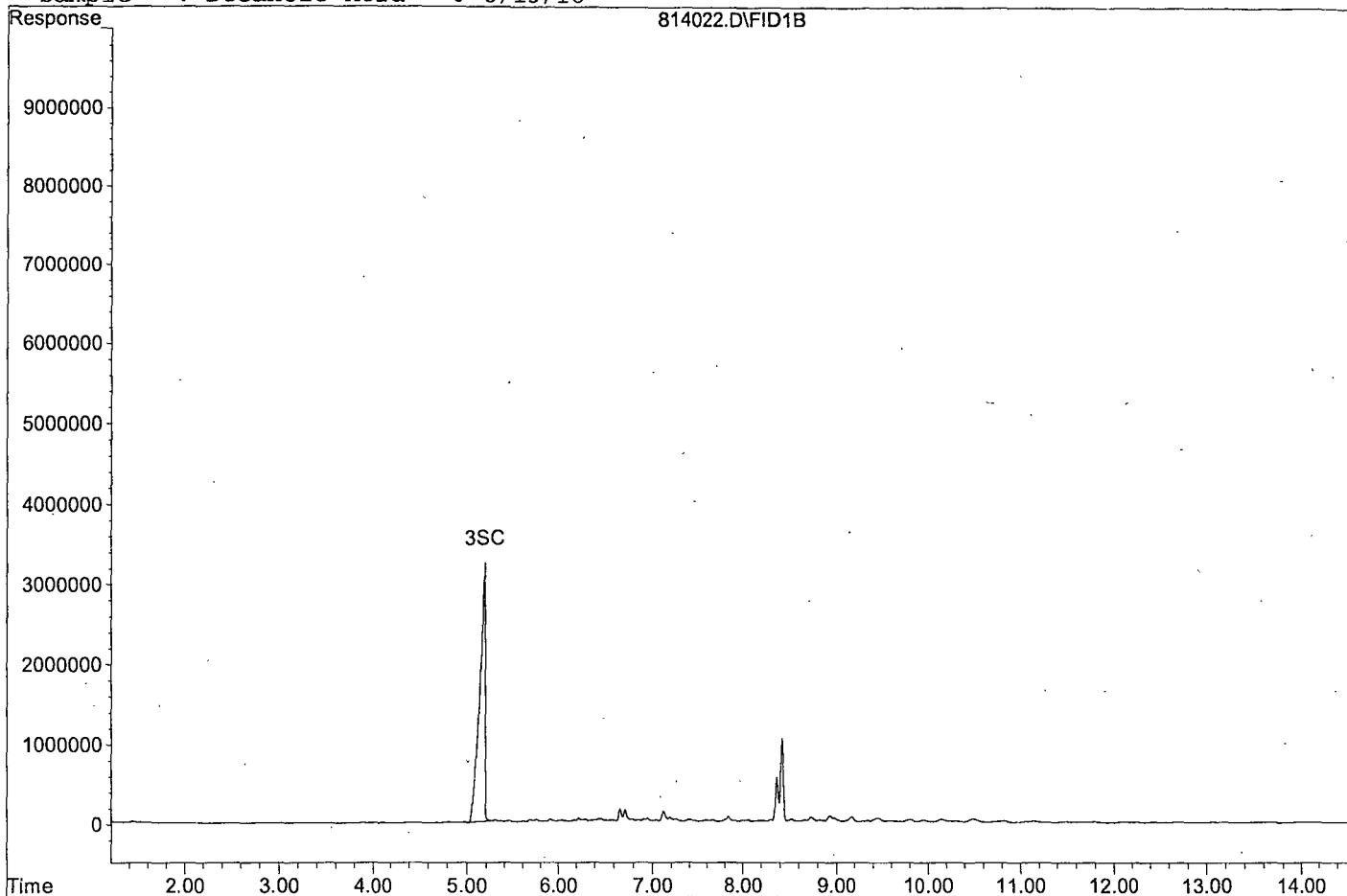
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.18	127912154	64.399 ppb
Surrogate Spike 24.000		Recovery =	268.33%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814022.D

Sample : Decanoic Acid - 6 8/13/18



TPH Extractables  
DOC0905

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 09/05/18  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 905009.D 905016.D  
                  Diesel                   Motor Oil

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1644000	0.33	HATM
2	HBTM Motor Oil (C24-C40)	1387880	1237490	11	HBTM
3					
4					
5					
6					
7					
8					
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35					
36					
37					
38					
39					
40	Average			5.7	

Data File : G:\APOLLO\DATA\180905\905009.D Vial: 9  
 Acq On : 9-5-18 15:32:03 Operator: DP  
 Sample : Diesel - SS 8/2/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

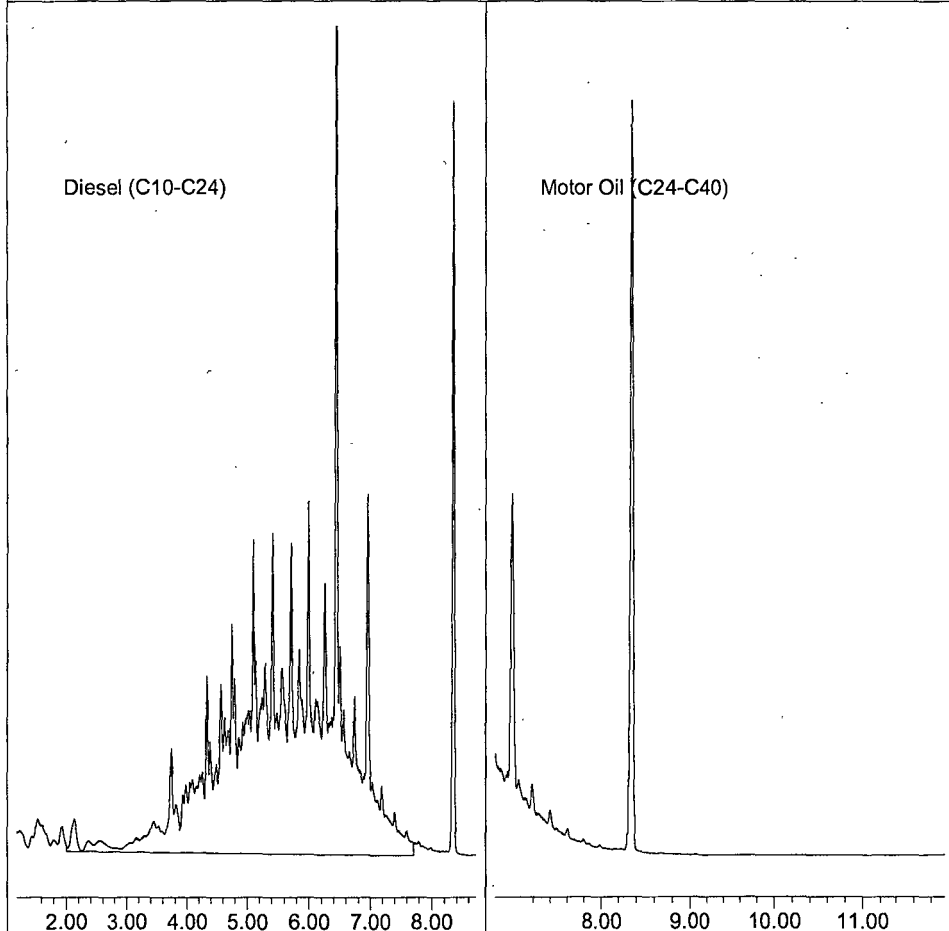
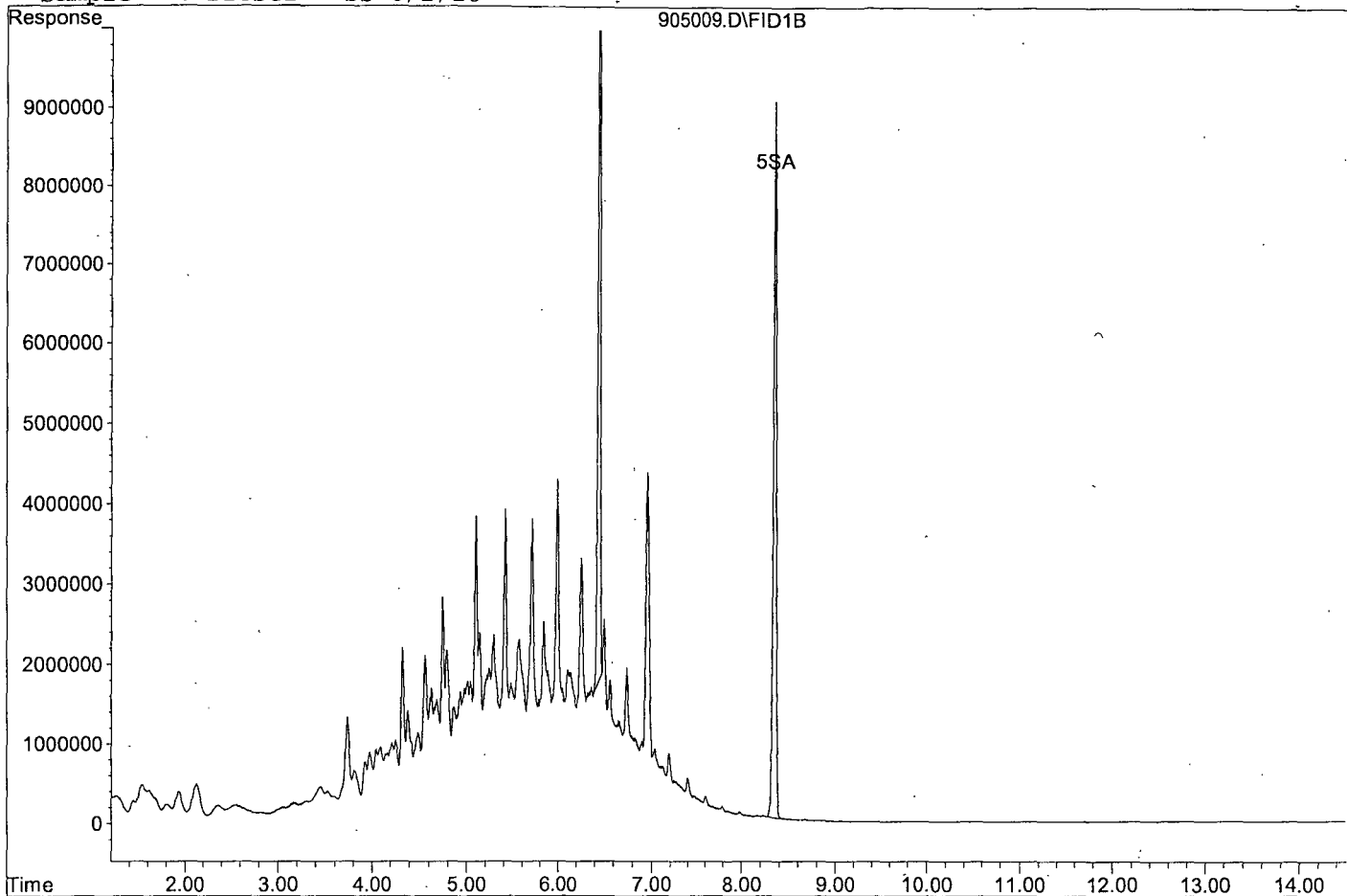
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.44	189576923	48.953 ppb
Surrogate Spike 30.000		Recovery =	163.18%
5) SA Octacosane(S)	8.35	191937049	59.426 ppb
Surrogate Spike 30.000		Recovery =	198.09%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	3287993103	1003.295 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\180905\905009.D

Sample : Diesel - SS 8/2/18





Data File : G:\APOLLO\DATA\180905\905016.D Vial: 16  
 Acq On : 9-5-18 17:51:24 Operator: DP  
 Sample : Motor Oil - SS 7/13/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Sep 25 12:48 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\180905\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Tue Sep 25 13:45:30 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

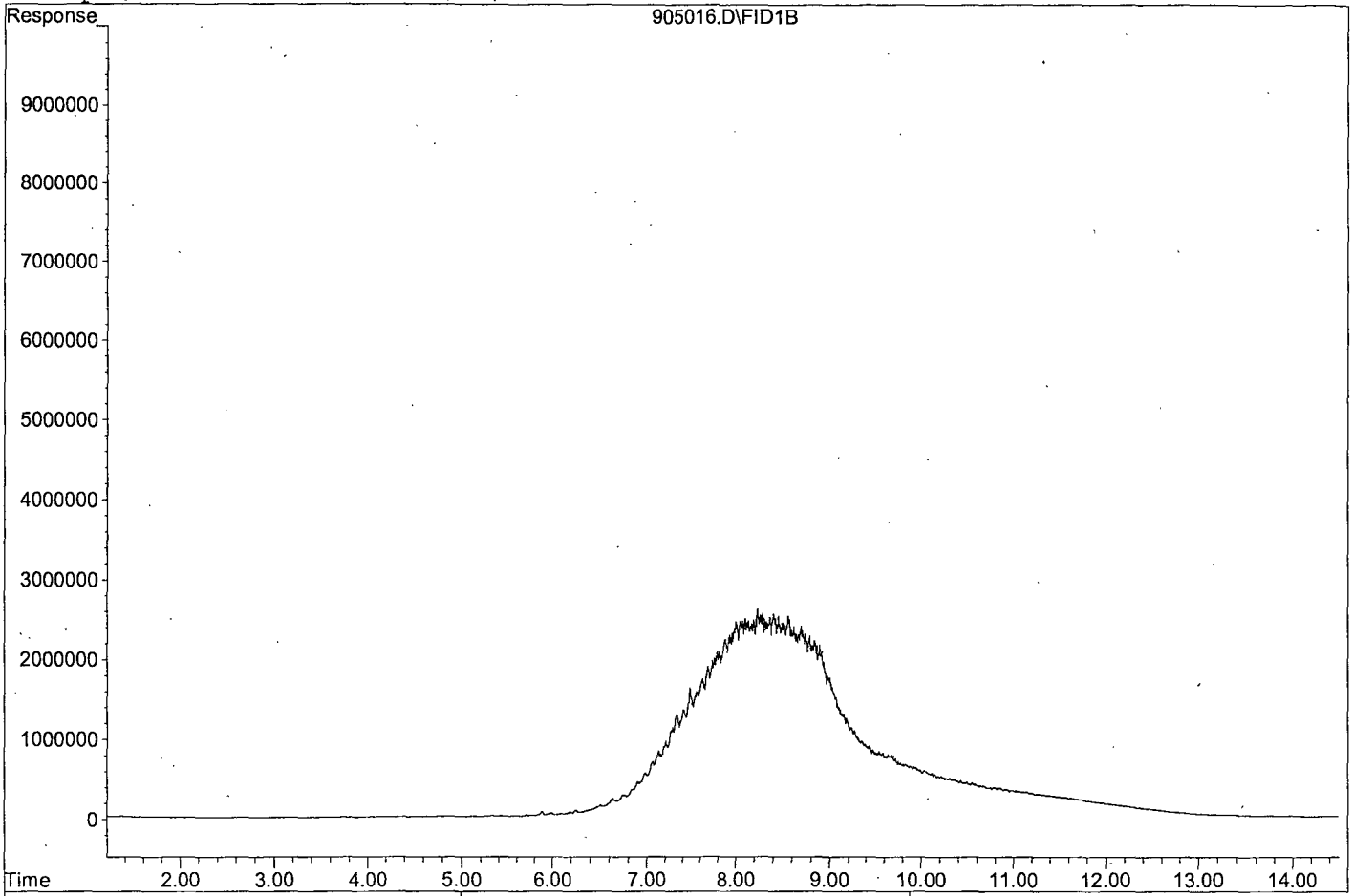
2) HBTM Motor Oil (C24-C40)	9.36	2474981428	891.638 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\180905\905016.D

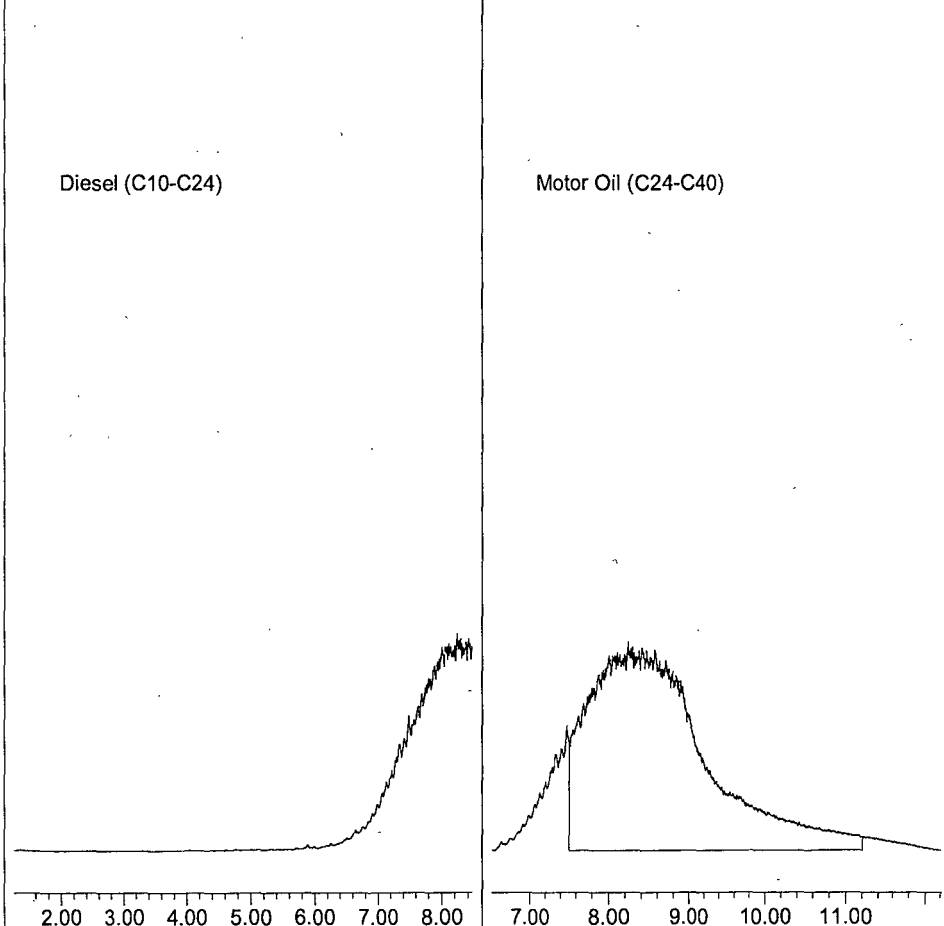
Sample : Motor Oil - SS 7/13/18

905016.D\FID1B



Diesel (C10-C24)

Motor Oil (C24-C40)



TPH Extractables  
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/19/18  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 1218036-37.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1581040	3.5	HATM
2	SA Ortho-Terphenyl(S)	1936320	1895070	2.1	SA
3	SA Octacosane(S)	1614940	1594670	1.3	SA
4	HBTM Motor Oil (C24-C40)	1387880	1151020	17	HBTM
5					
6					
7					
8					
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37					
38					
39					
40	Average			6.0	

Data File : G:\APOLLO\DATA\181218\1218036.D Vial: 36  
 Acq On : 12-19-18 11:43:13 Operator: DP  
 Sample : Diesel - 3 12/11/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 20 12:11 2018 Quant Results File: DOC0905.RES

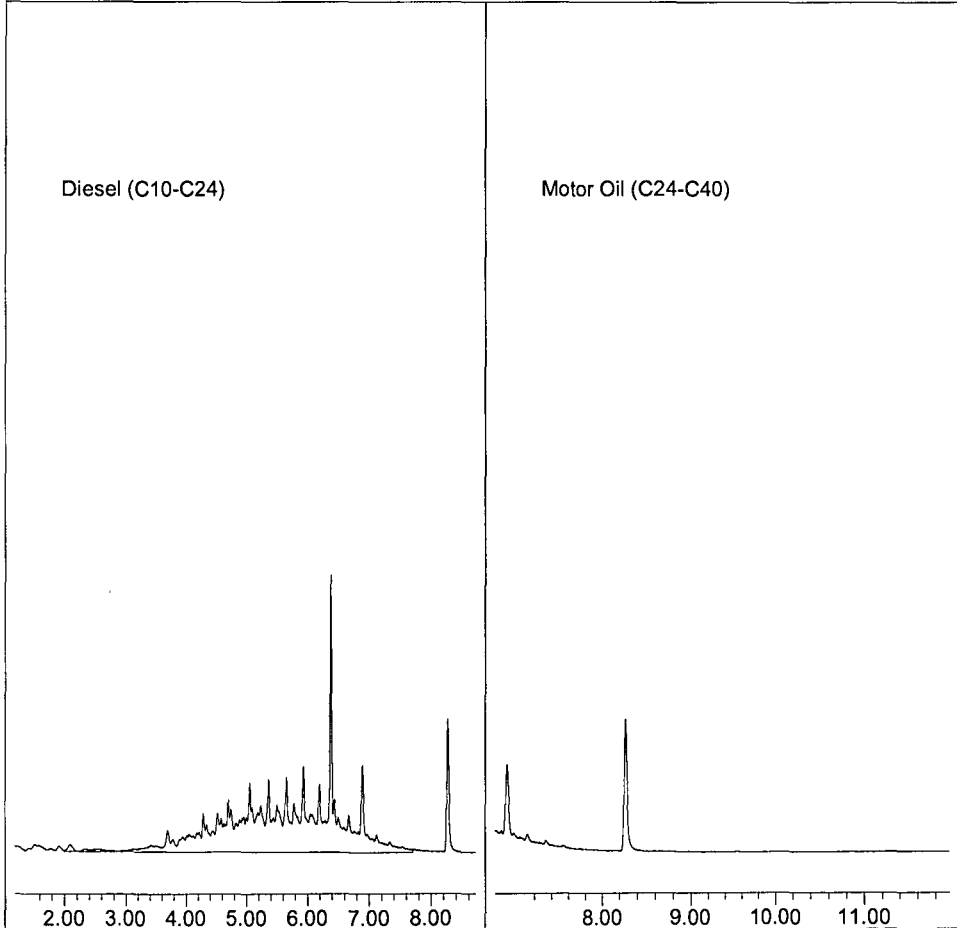
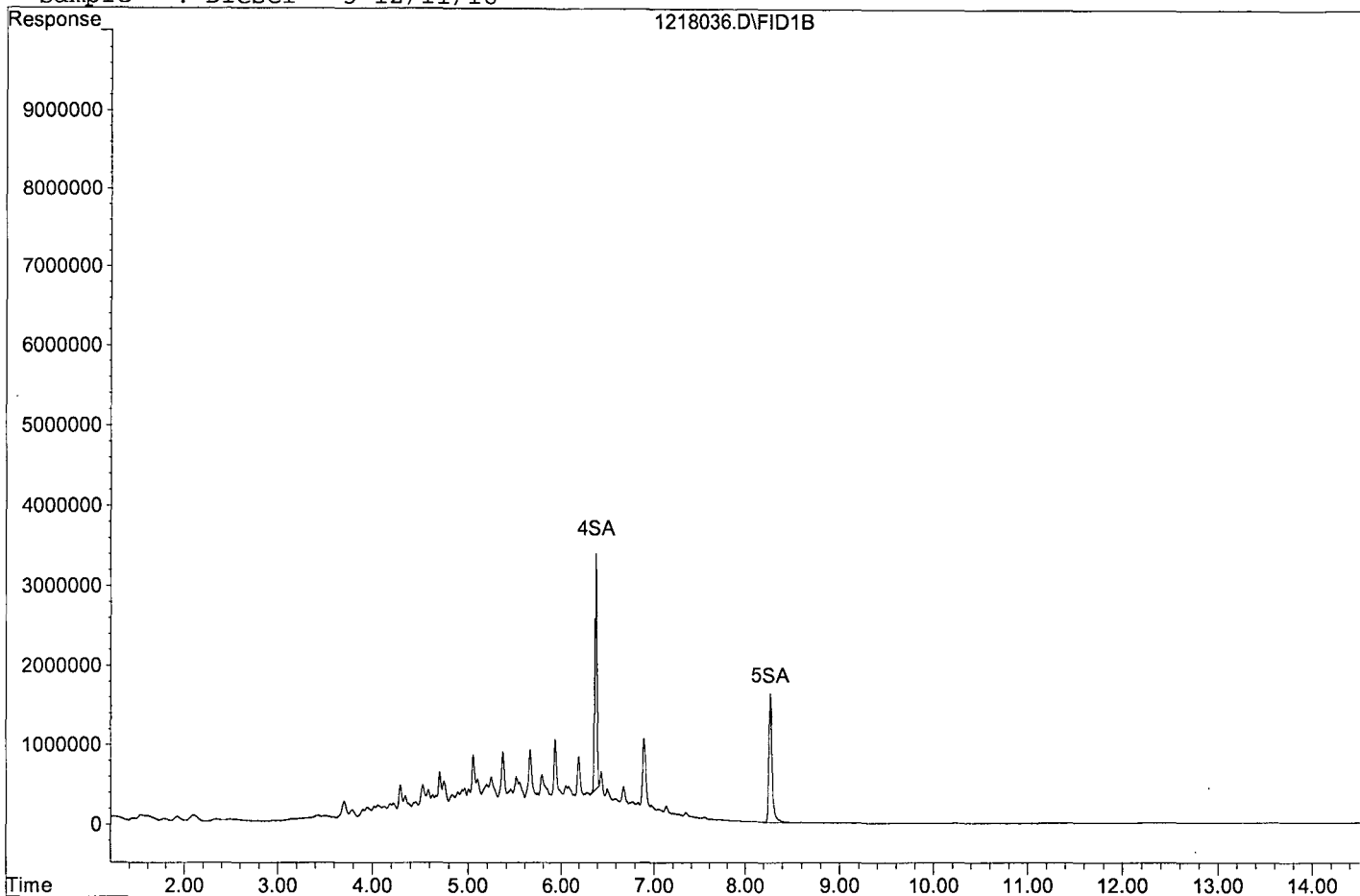
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	47376662	12.234 ppb
Surrogate Spike 30.000		Recovery =	40.78%
5) SA Octacosane(S)	8.27	39866743	12.343 ppb
Surrogate Spike 30.000		Recovery =	41.14%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	790520195	241.218 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218036.D  
Sample : Diesel - 3 12/11/18



Data File : G:\APOLLO\DATA\181218\1218037.D Vial: 37  
 Acq On : 12-19-18 12:03:14 Operator: DP  
 Sample : Motor Oil - 3 12/11/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 20 12:11 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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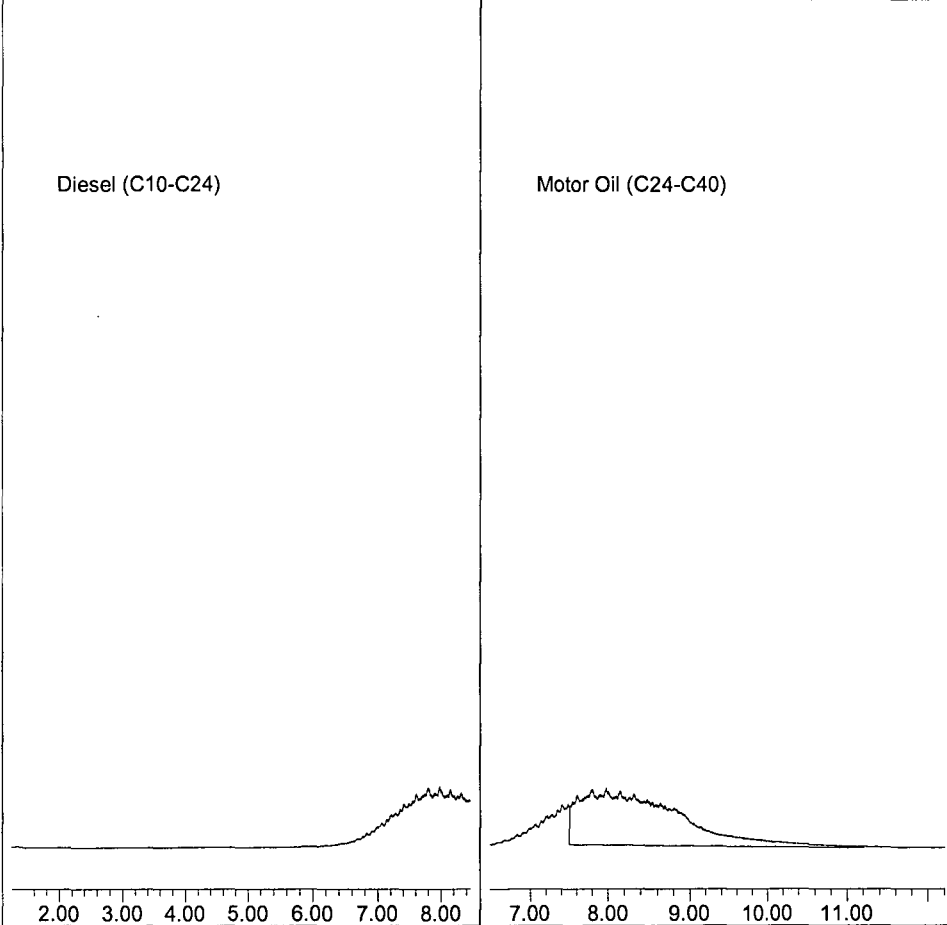
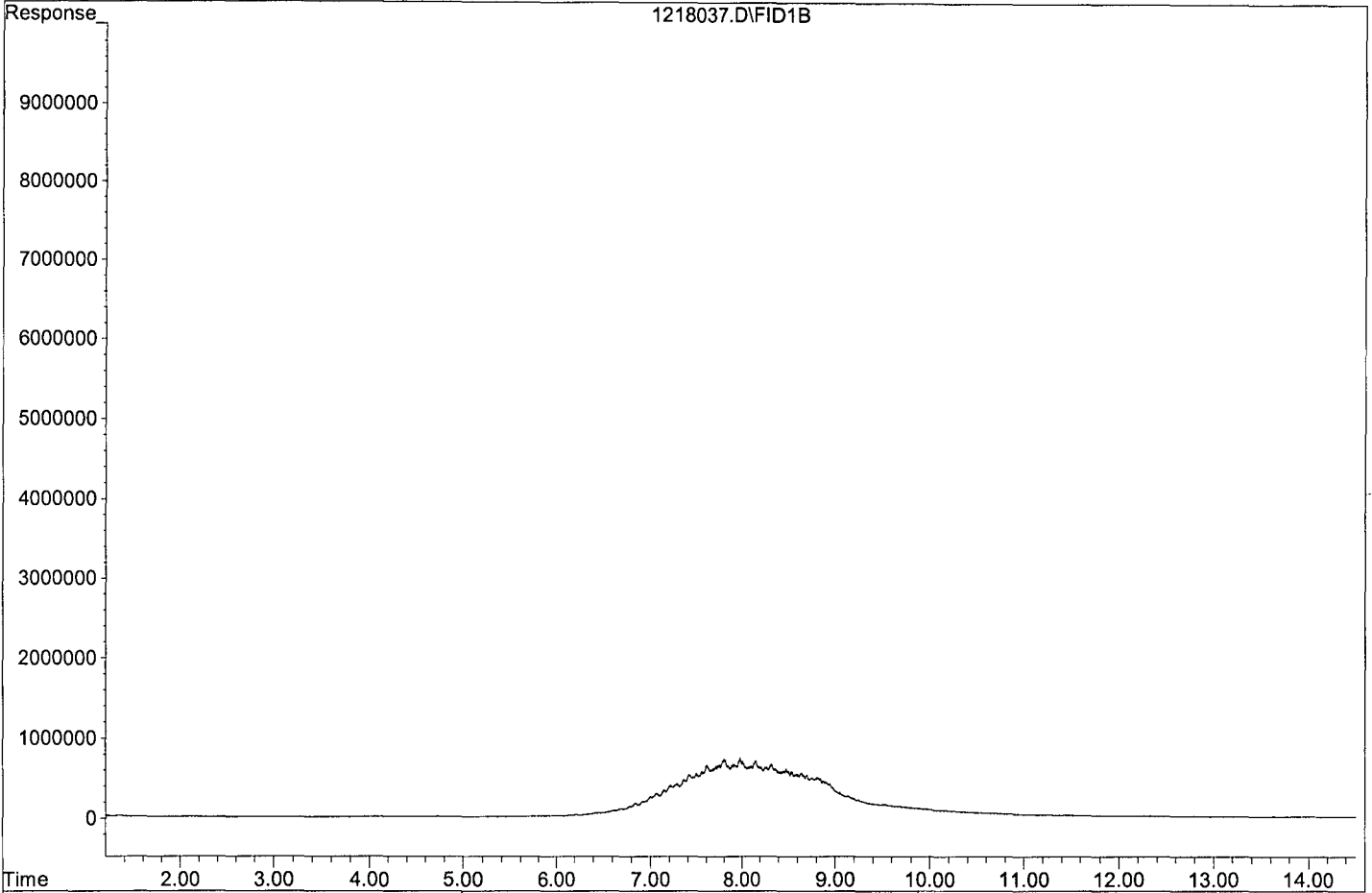
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	575511721	207.334 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218037.D  
Sample : Motor Oil - 3 12/11/18



TPH Extractables  
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/19/18  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 1218057-58.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1631970	0.40	HATM
2	SA Ortho-Terphenyl(S)	1936320	1921230	0.78	SA
3	SA Octacosane(S)	1614940	1682350	4.2	SA
4	HBTM Motor Oil (C24-C40)	1387880	1152150	17	HBTM
5					
6					
7					
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38					
39					
40	Average			5.6	



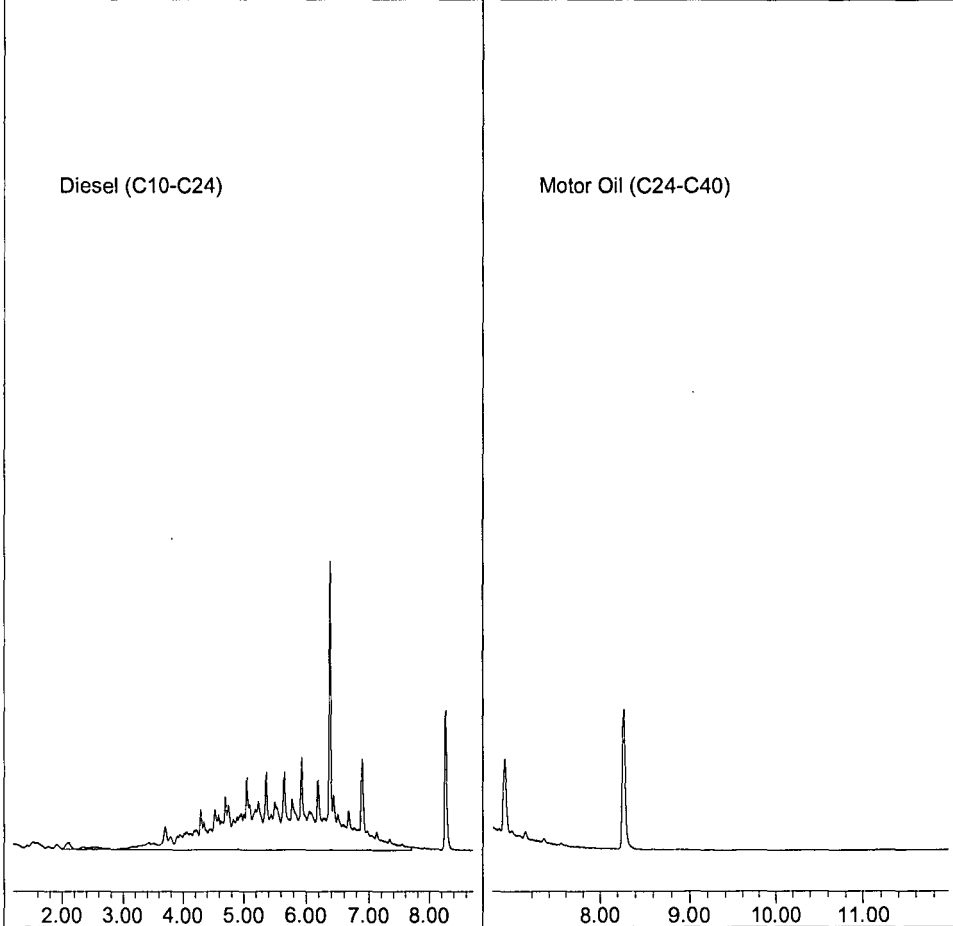
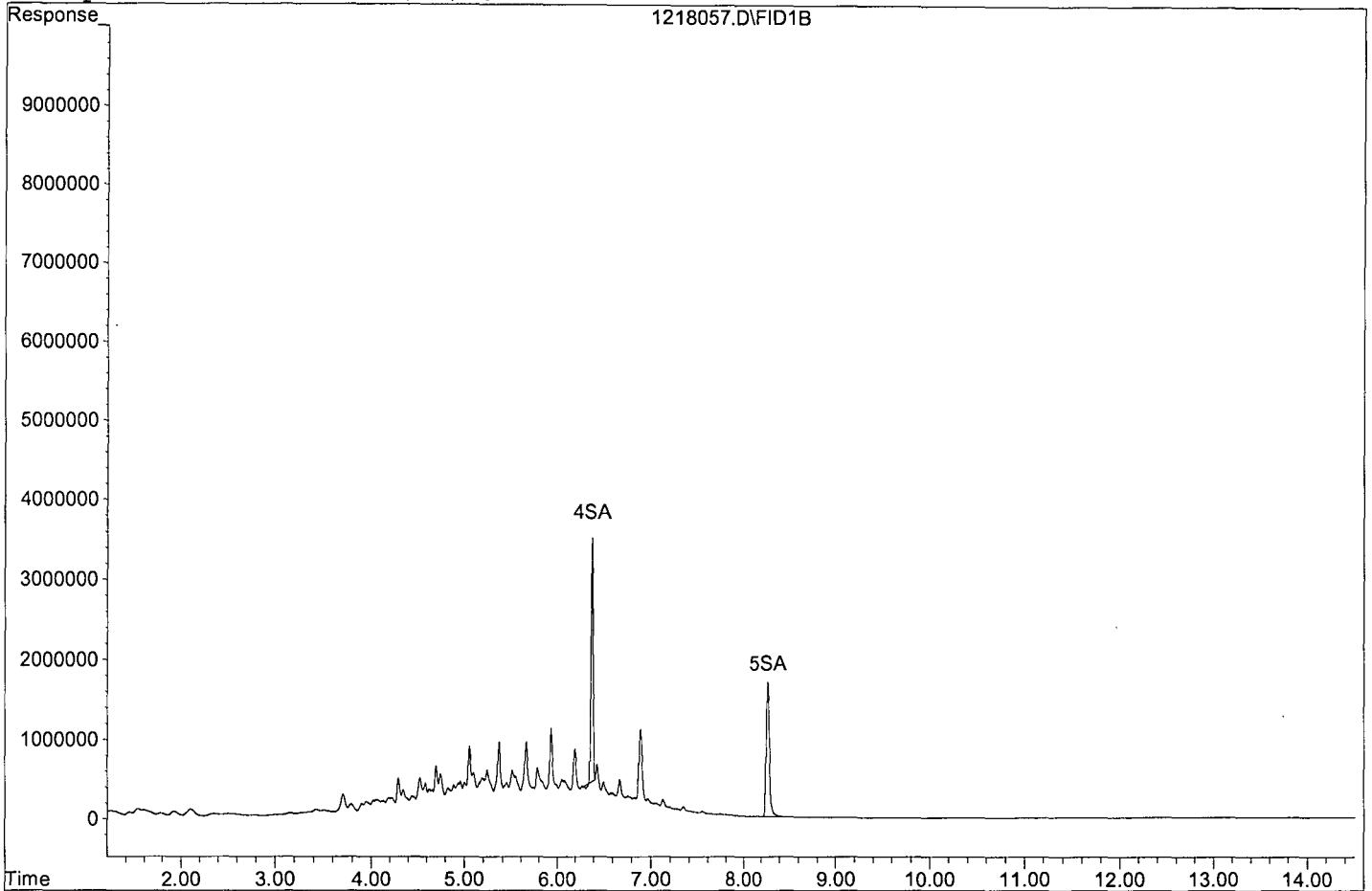
Data File : G:\APOLLO\DATA\181218\1218057.D Vial: 57  
 Acq On : 12-19-18 19:23:12 Operator: DP  
 Sample : Diesel - 3 12/11/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 20 12:10 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	48030802	12.403 ppb
Surrogate Spike 30.000		Recovery =	41.34%
5) SA Octacosane(S)	8.27	42058686	13.022 ppb
Surrogate Spike 30.000		Recovery =	43.41%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	815983270	248.988 ppb

Data File: G:\APOLLO\DATA\181218\1218057.D  
Sample : Diesel - 3 12/11/18



Data File : G:\APOLLO\DATA\181218\1218058.D Vial: 58  
 Acq On : 12-19-18 19:43:14 Operator: DP  
 Sample : Motor Oil - 3 12/11/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 20 12:10 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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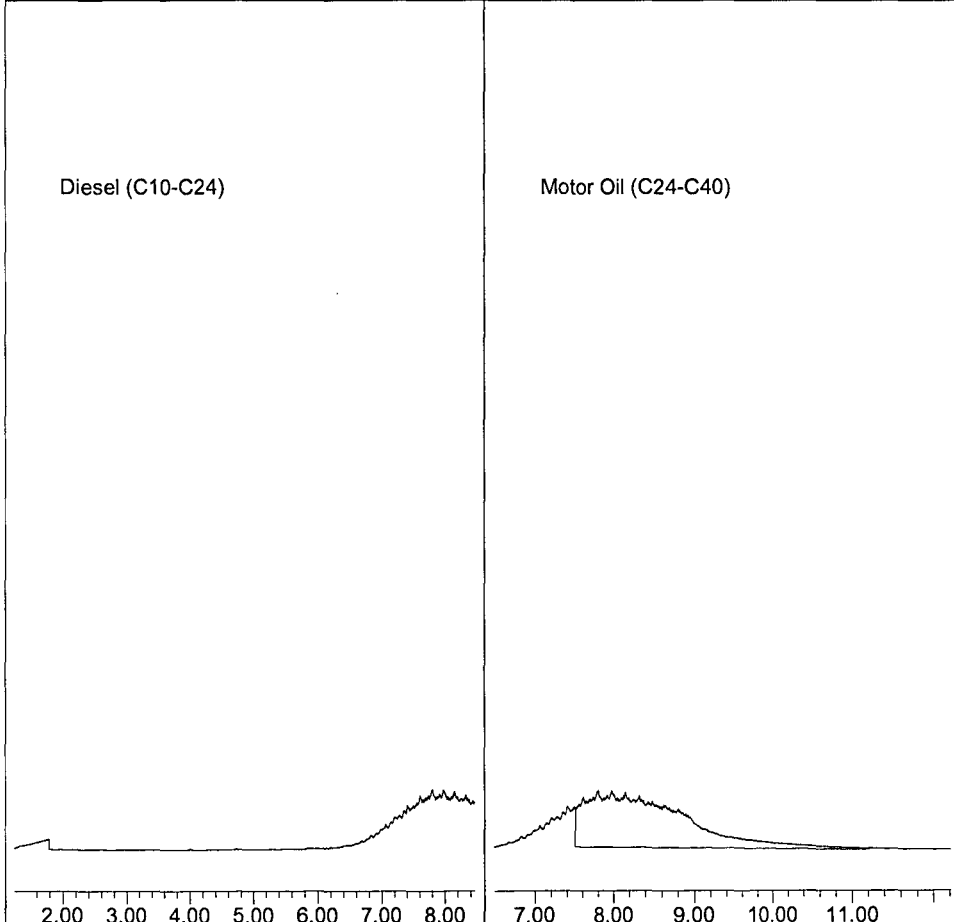
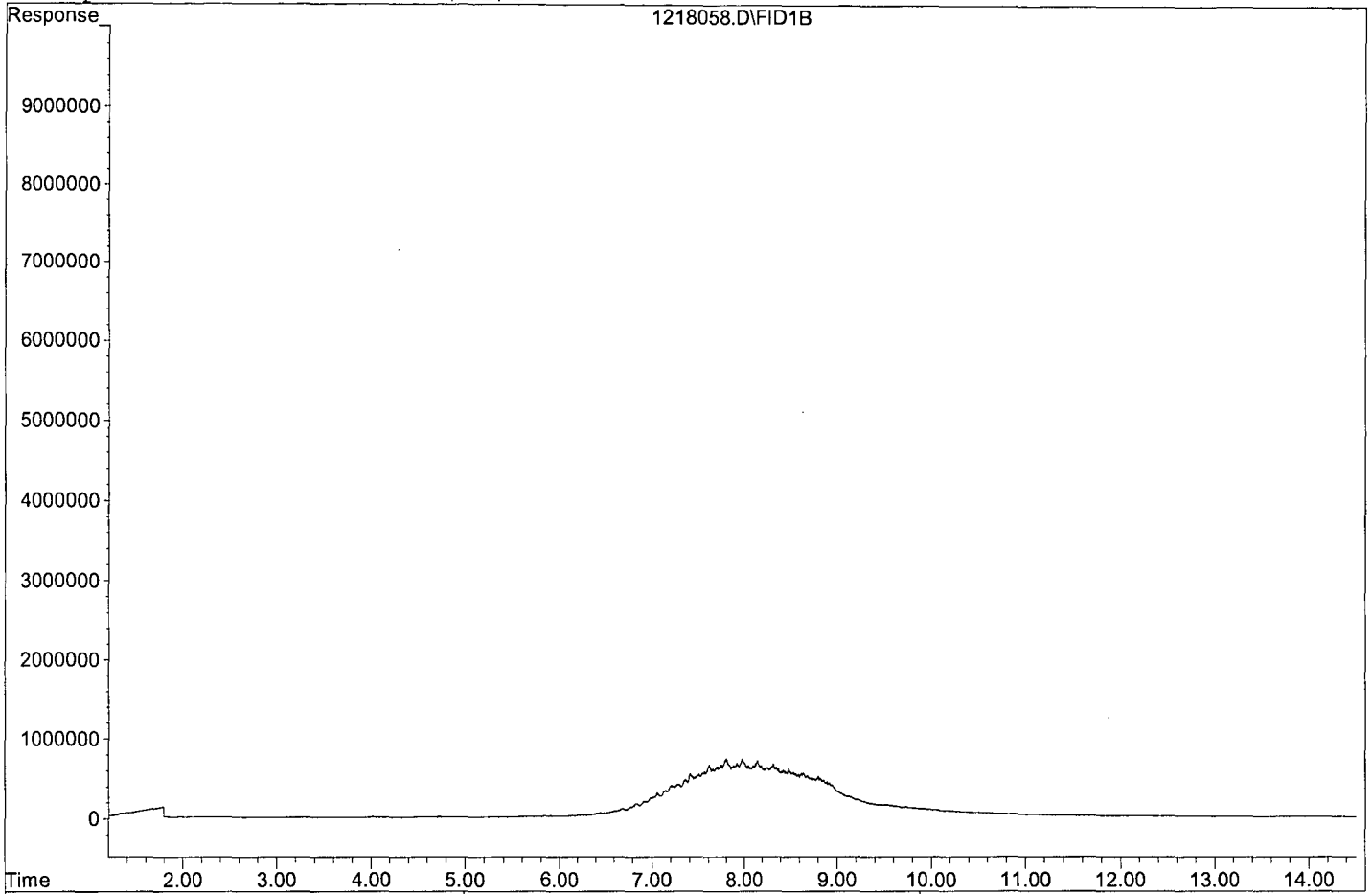
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	576075190	207.537 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218058.D  
Sample : Motor Oil - 3 12/11/18



TPH Extractables  
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 1218066-67.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1581150	3.5	HATM
2	SA Ortho-Terphenyl(S)	1936320	1944610	0.43	SA
3	SA Octacosane(S)	1614940	1720610	6.5	SA
4	HBTM Motor Oil (C24-C40)	1387880	1224740	12	HBTM
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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28					
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30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			5.6	

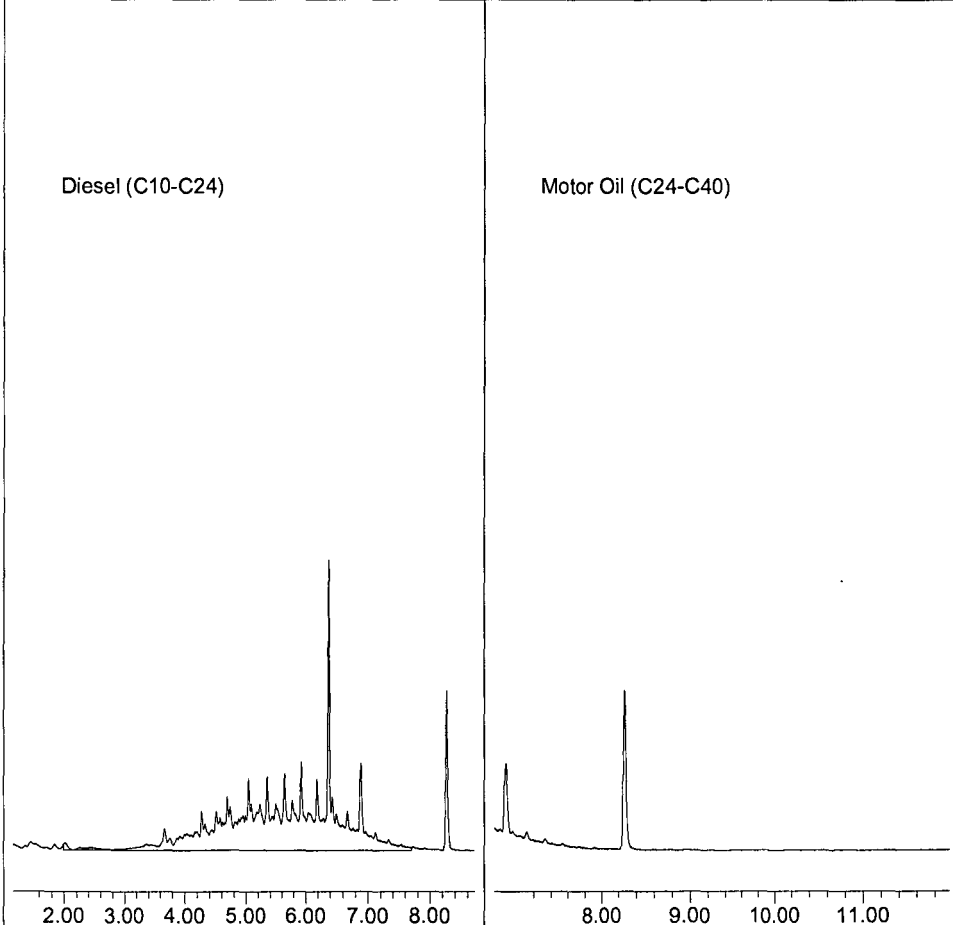
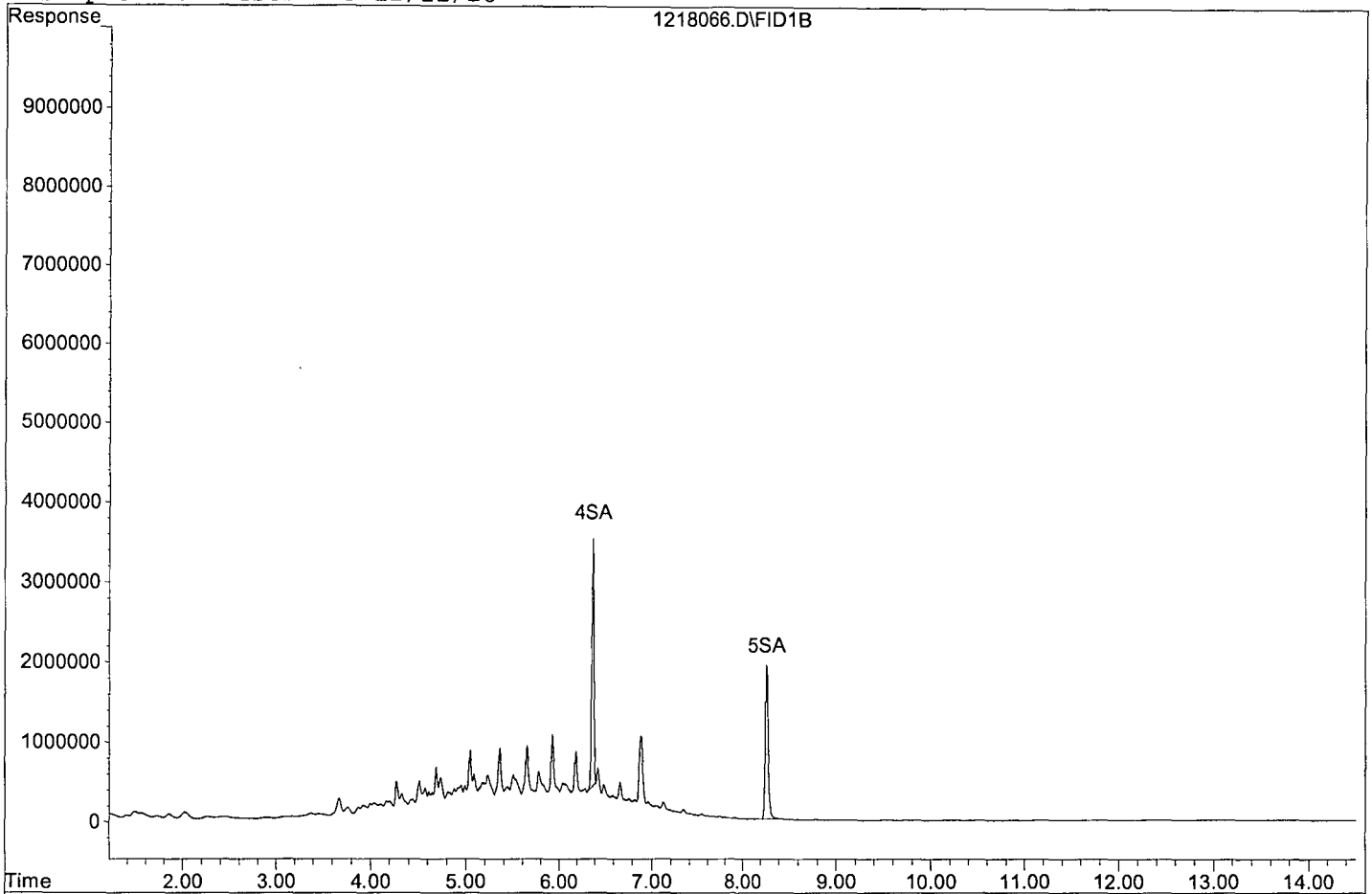
Data File : G:\APOLLO\DATA\181218\1218066.D Vial: 66  
 Acq On : 12-20-18 11:08:41 Operator: DP  
 Sample : Diesel - 3 12/11/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 20 12:10 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	48615297	12.554 ppb
Surrogate Spike 30.000		Recovery =	41.85%
5) SA Octacosane(S)	8.27	43015308	13.318 ppb
Surrogate Spike 30.000		Recovery =	44.39%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	790577152	241.236 ppb

Data File: G:\APOLLO\DATA\181218\1218066.D  
Sample : Diesel - 3 12/11/18



Data File : G:\APOLLO\DATA\181218\1218067.D Vial: 67  
 Acq On : 12-20-18 11:28:29 Operator: DP  
 Sample : Motor Oil - 3 12/11/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 20 12:10 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

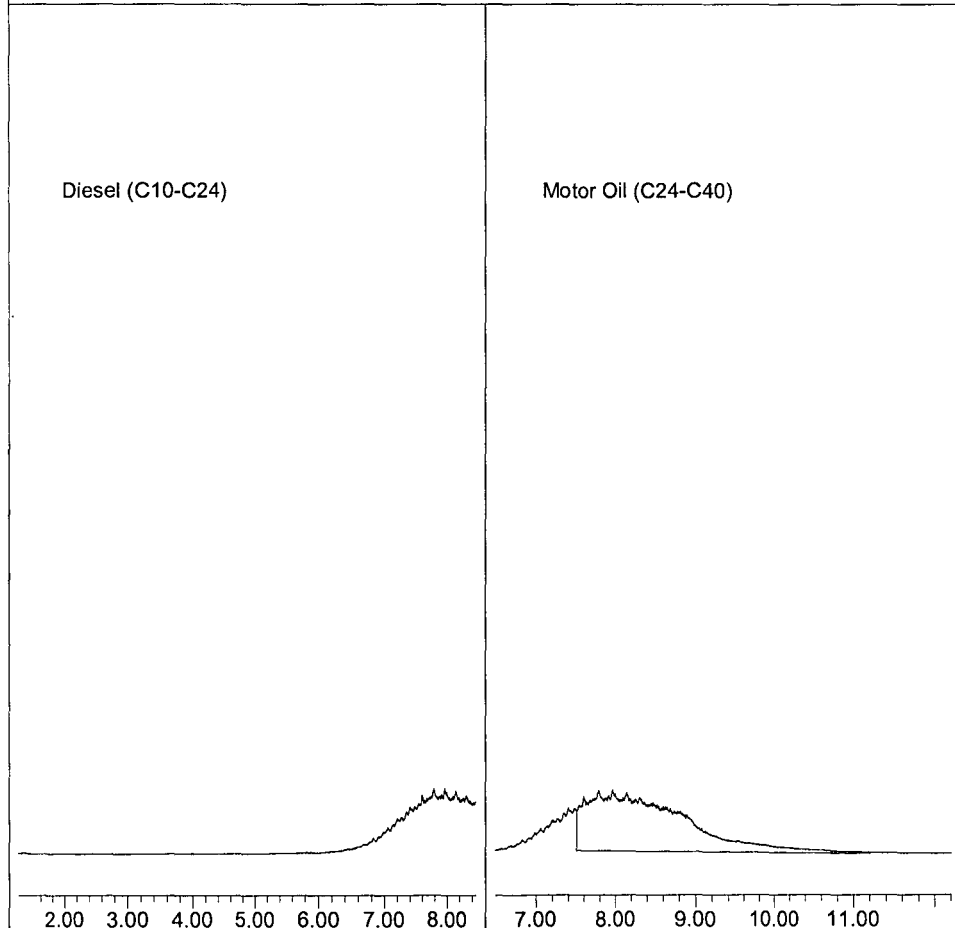
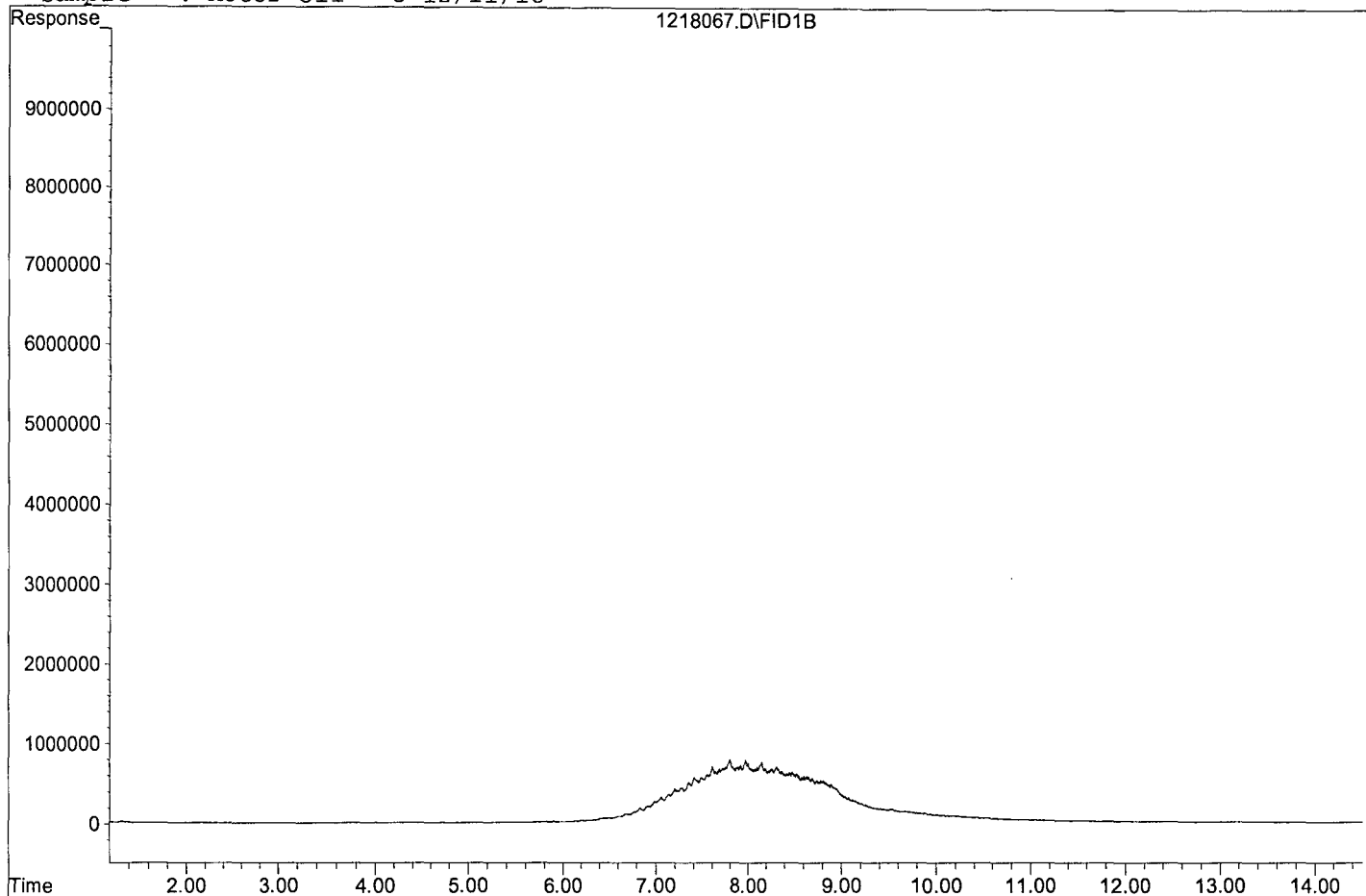
Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	612371320	220.613 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218067.D  
Sample : Motor Oil - 3 12/11/18



TPH Extractables  
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 1218086-87.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1620730	1.1	HATM
2	SA Ortho-Terphenyl(S)	1936320	1947720	0.59	SA
3	SA Octacosane(S)	1614940	1647650	2.0	SA
4	HBTM Motor Oil (C24-C40)	1387880	1207770	13	HBTM
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39					
40	Average			4.2	

Data File : G:\APOLLO\DATA\181218\1218086.D Vial: 86  
 Acq On : 12-20-18 17:48:15 Operator: DP  
 Sample : Diesel - 3 12/11/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 21 11:40 2018 Quant Results File: DOC0905.RES

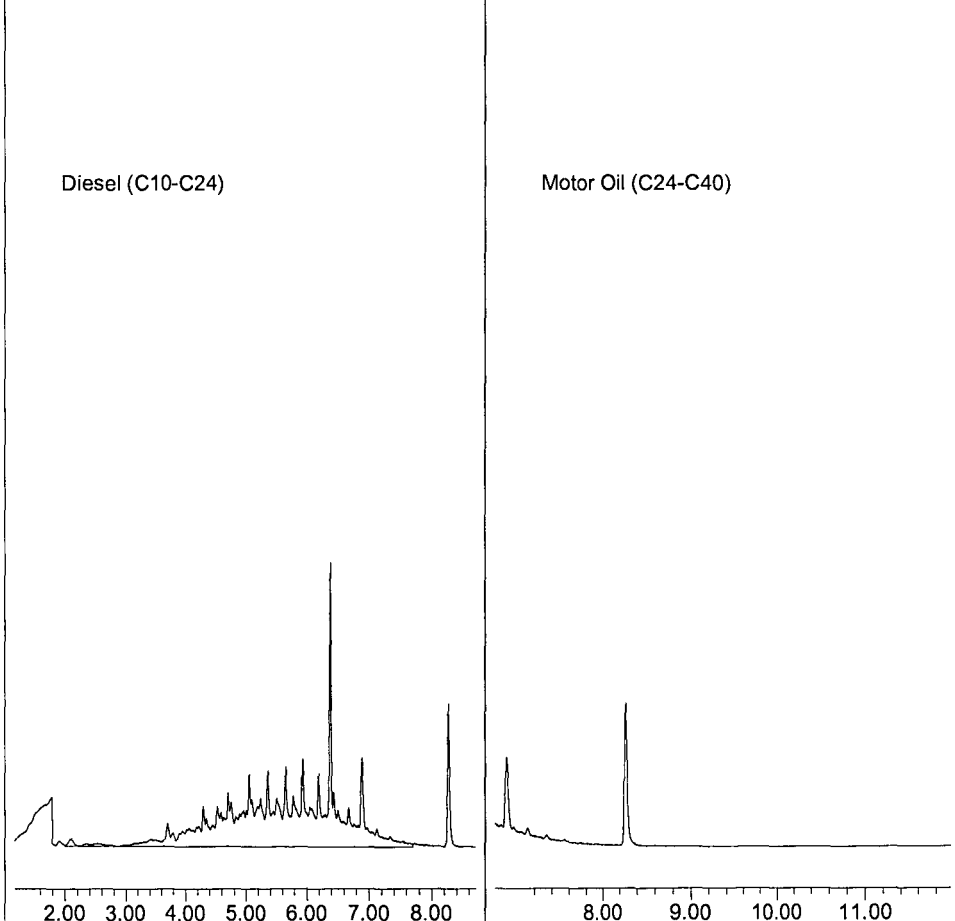
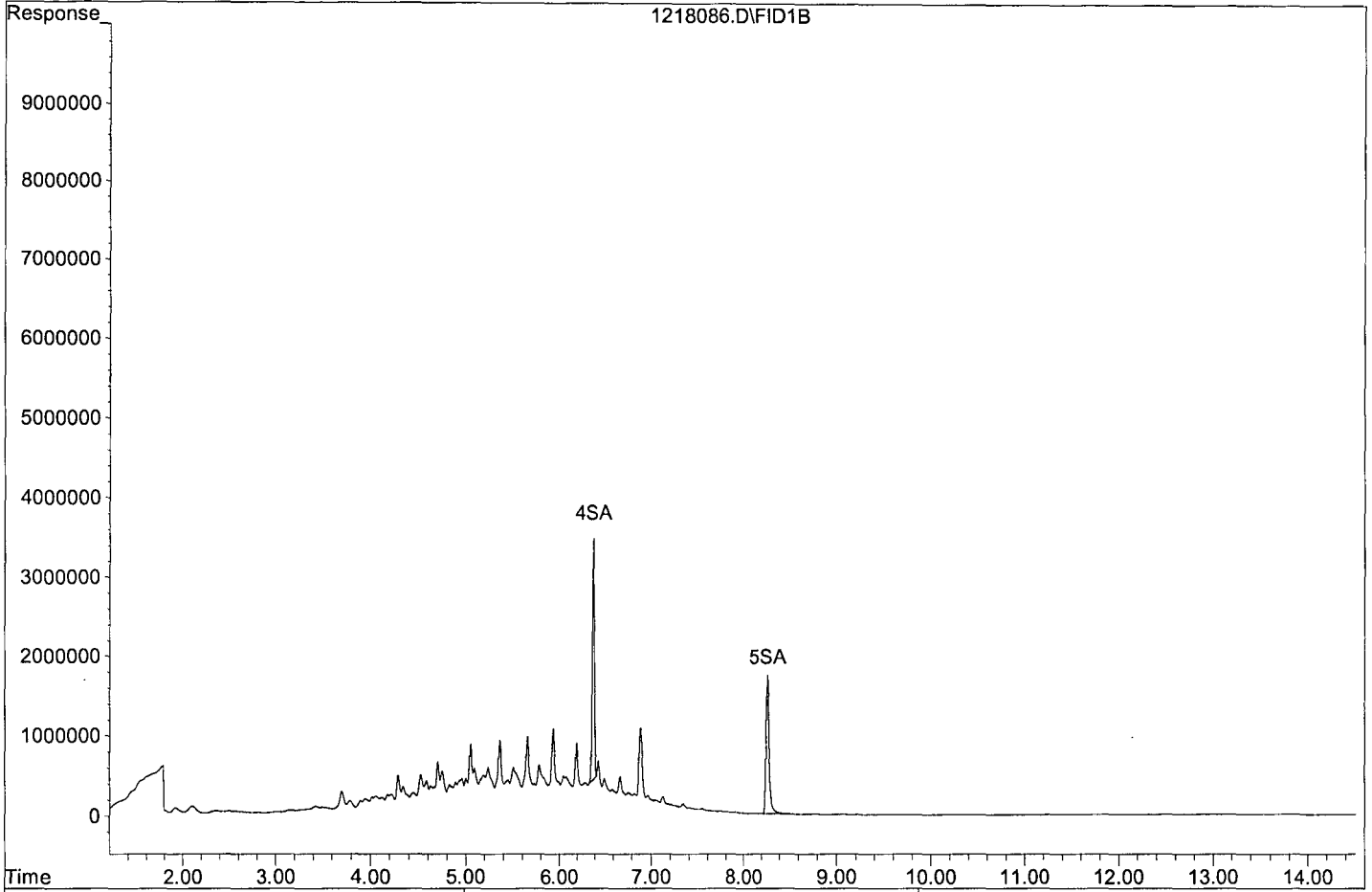
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	48693100	12.574 ppb
Surrogate Spike 30.000		Recovery =	41.91%
5) SA Octacosane(S)	8.27	41191355	12.753 ppb
Surrogate Spike 30.000		Recovery =	42.51%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	810364589	247.274 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218086.D  
Sample : Diesel - 3 12/11/18



Data File : G:\APOLLO\DATA\181218\1218087.D Vial: 87  
 Acq On : 12-20-18 18:08:20 Operator: DP  
 Sample : Motor Oil - 3 12/11/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Dec 21 11:40 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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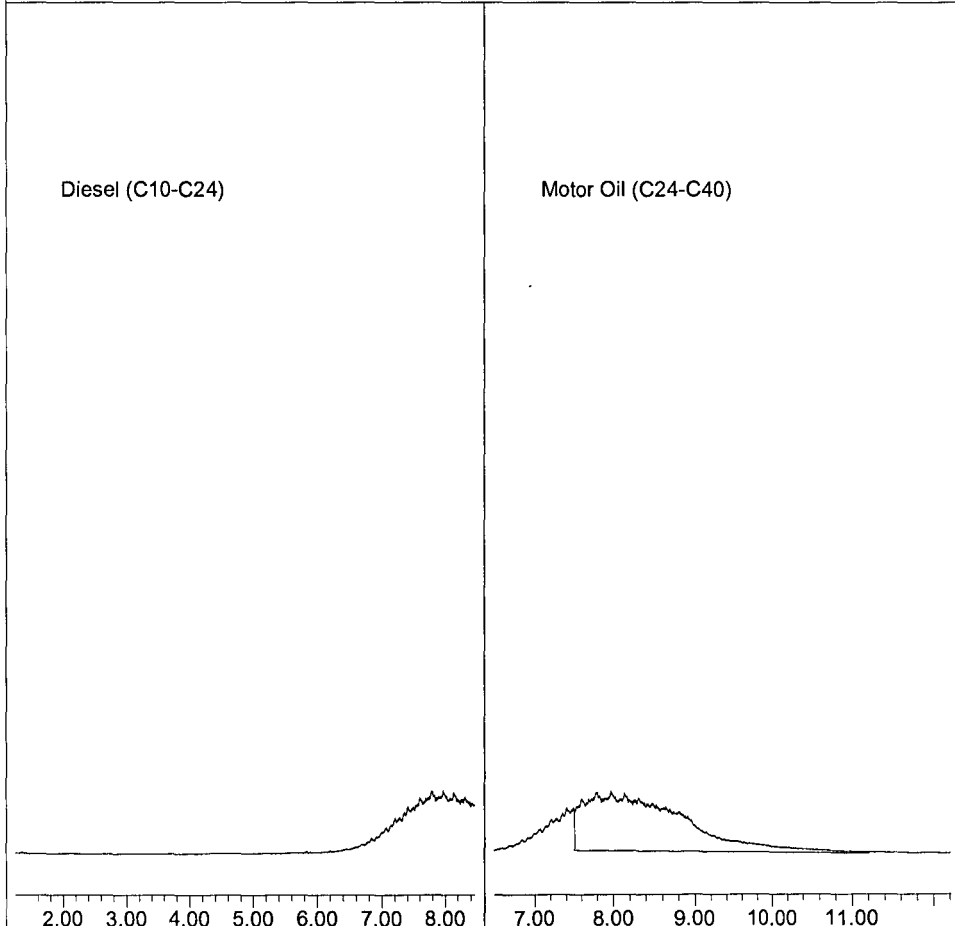
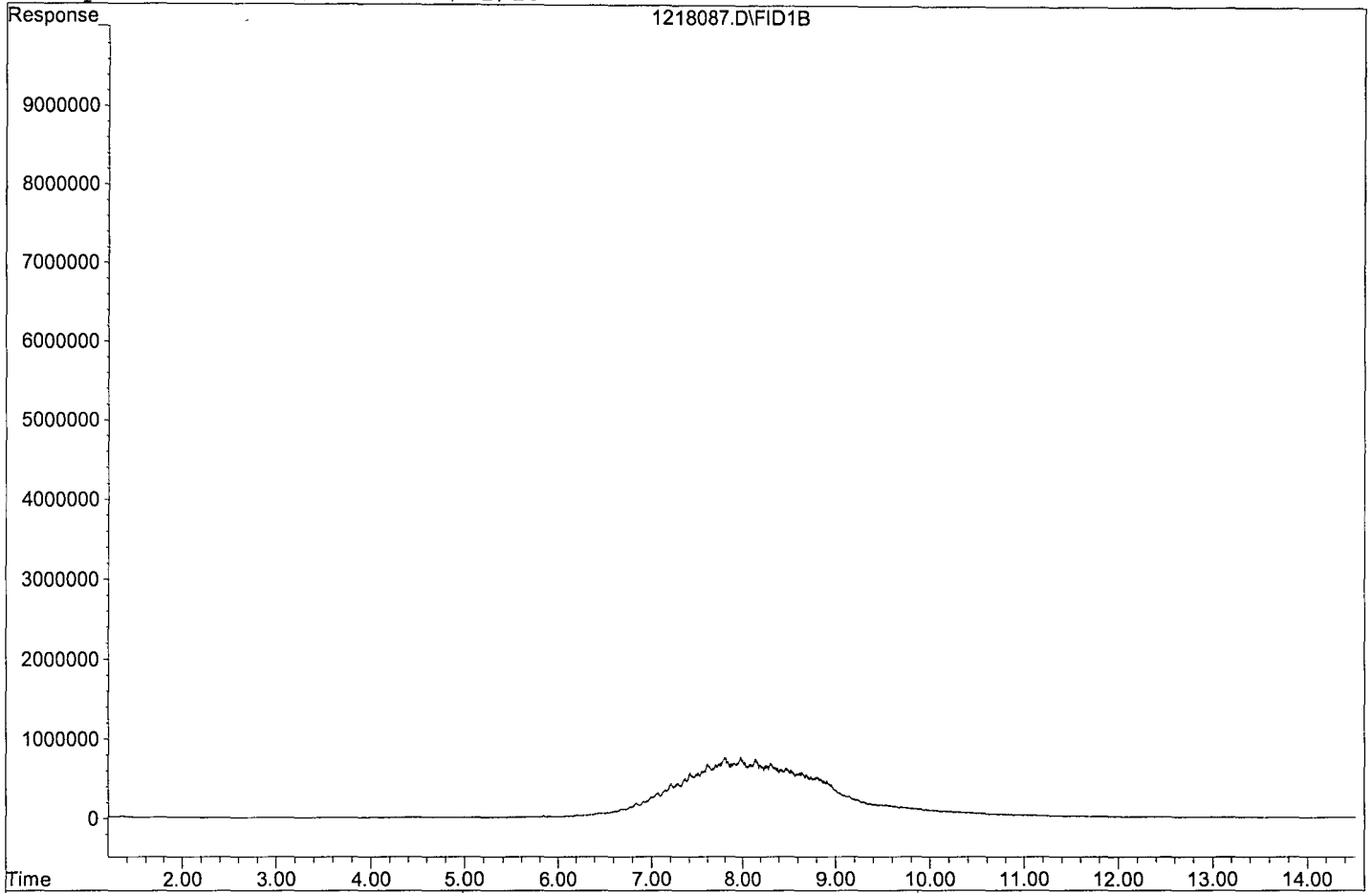
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	603885054	217.556 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218087.D  
Sample : Motor Oil - 3 12/11/18



TPH Extractables  
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/02/19  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 102002-4.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1570280	4.2	HATM
2	SA Ortho-Terphenyl(S)	1936320	1922830	0.70	SA
3	SA Octacosane(S)	1614940	1582150	2.0	SA
4	HBTM Motor Oil (C24-C40)	1387880	1204930	13	HBTM
5	SC Decanoic Acid(S)	993123	957963	3.5	SC
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Average

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Data File : G:\APOLLO\DATA\190102\102002.D Vial: 2  
 Acq On : 1-2-19 13:11:08 Operator: DP  
 Sample : Diesel - 3 12/11/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 2 16:05 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

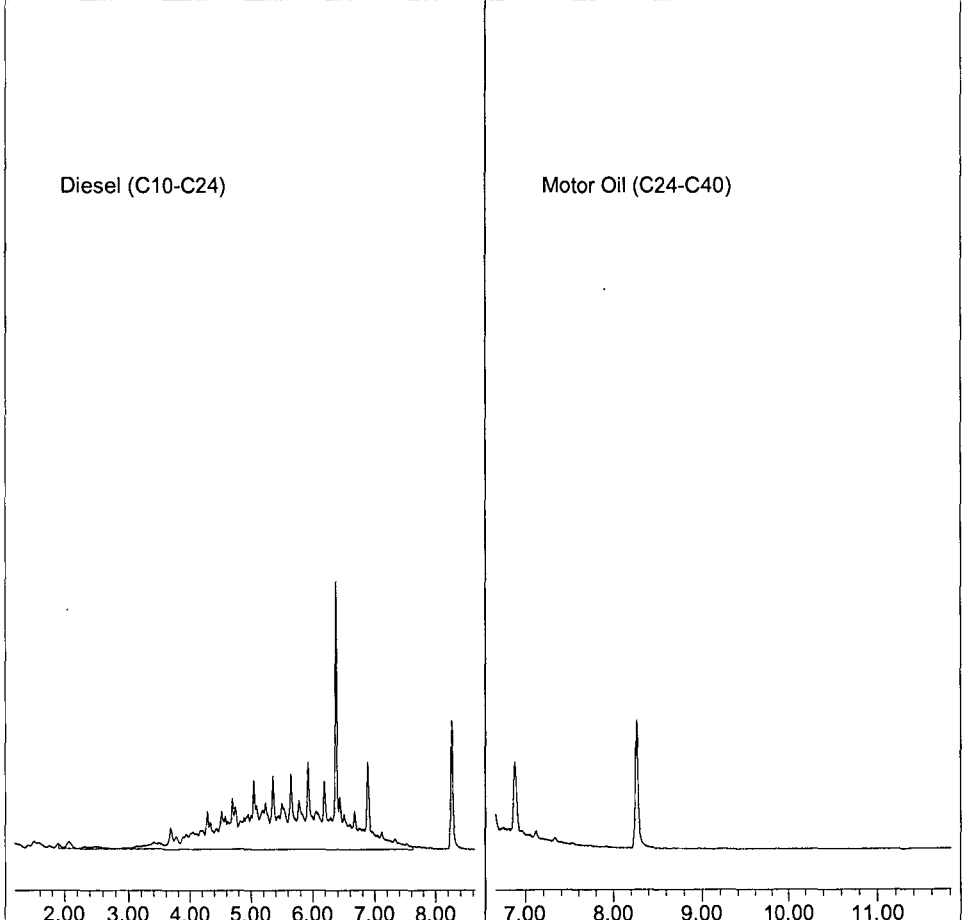
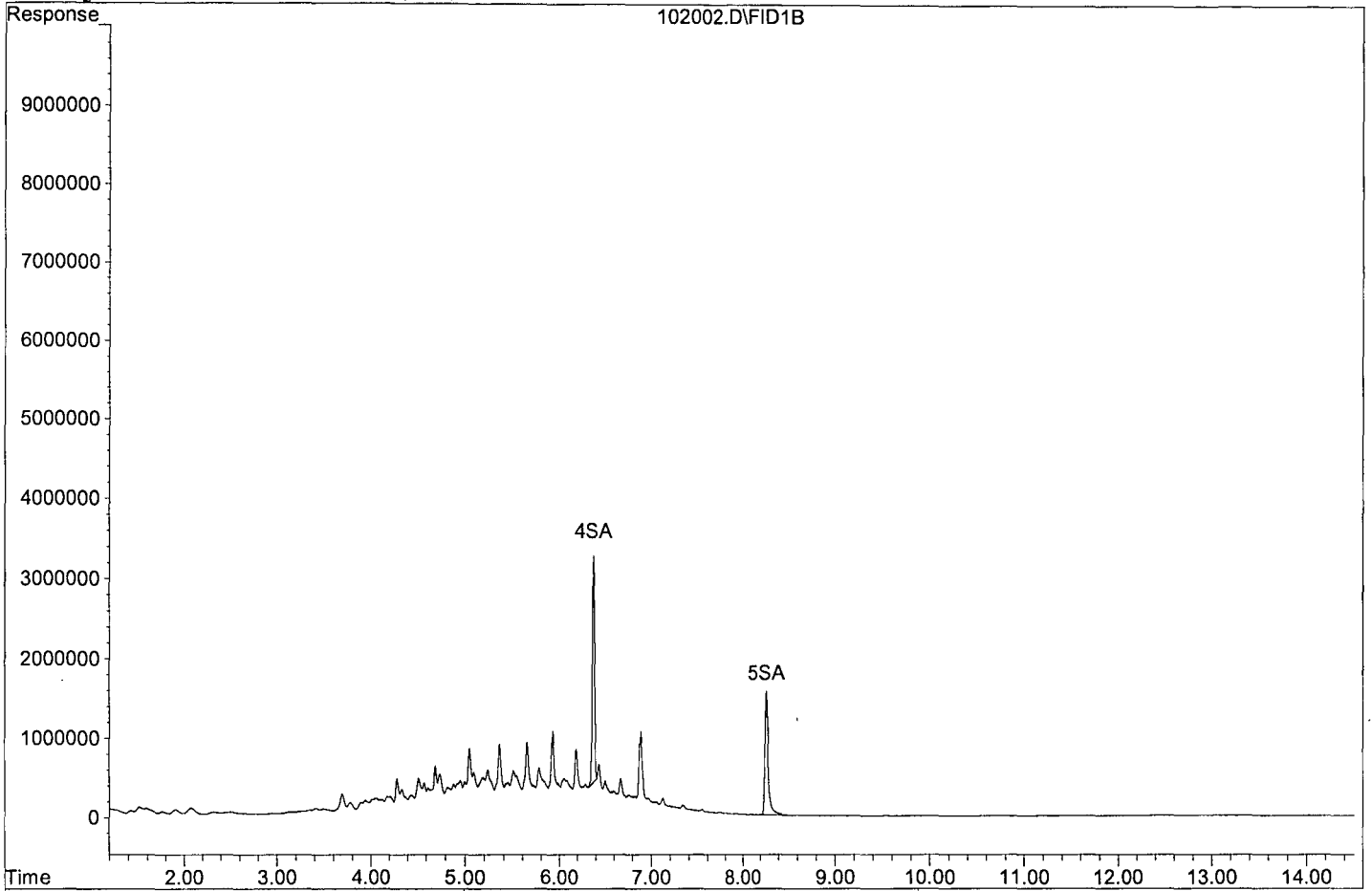
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	48070678	12.413 ppb
Surrogate Spike 30.000		Recovery =	41.38%
5) SA Octacosane(S)	8.27	39553733	12.246 ppb
Surrogate Spike 30.000		Recovery =	40.82%
Target Compounds			
1) HATM Diesel (C10-C24)	4.77	785142307	239.577 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190102\102002.D  
Sample : Diesel - 3 12/11/18



Data File : G:\APOLLO\DATA\190102\102003.D Vial: 3  
 Acq On : 1-2-19 13:31:01 Operator: DP  
 Sample : Motor Oil - 3 12/11/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 2 16:05 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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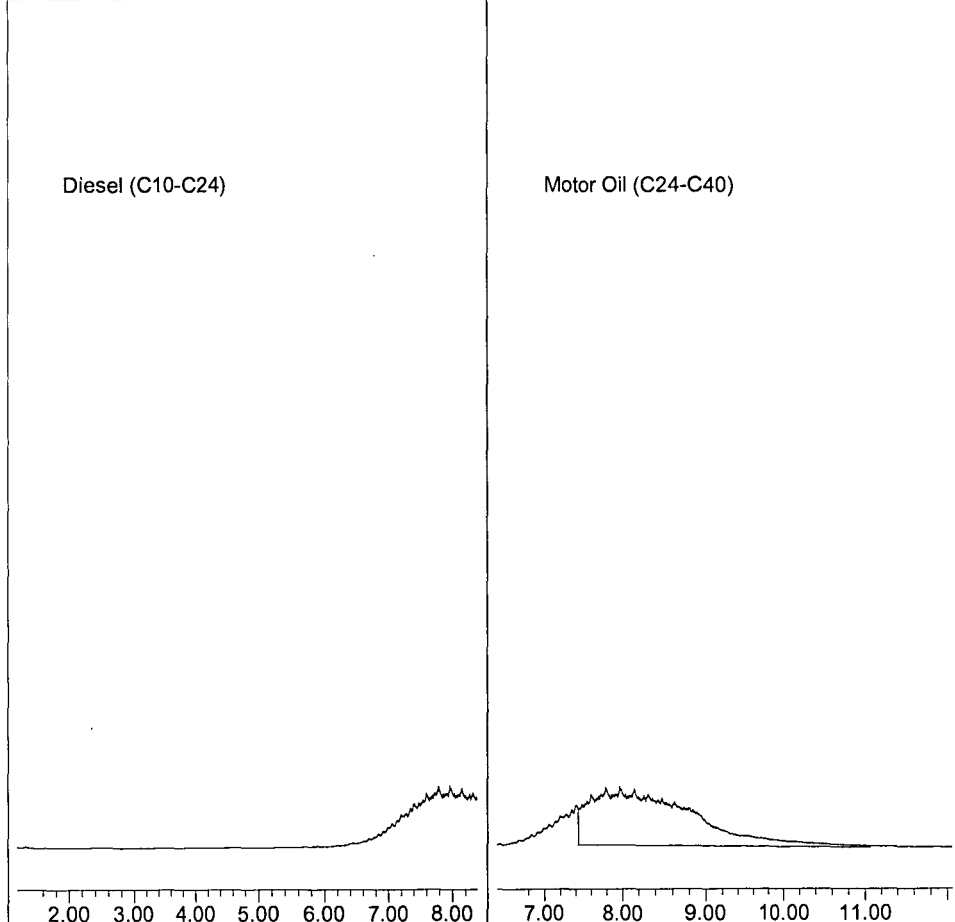
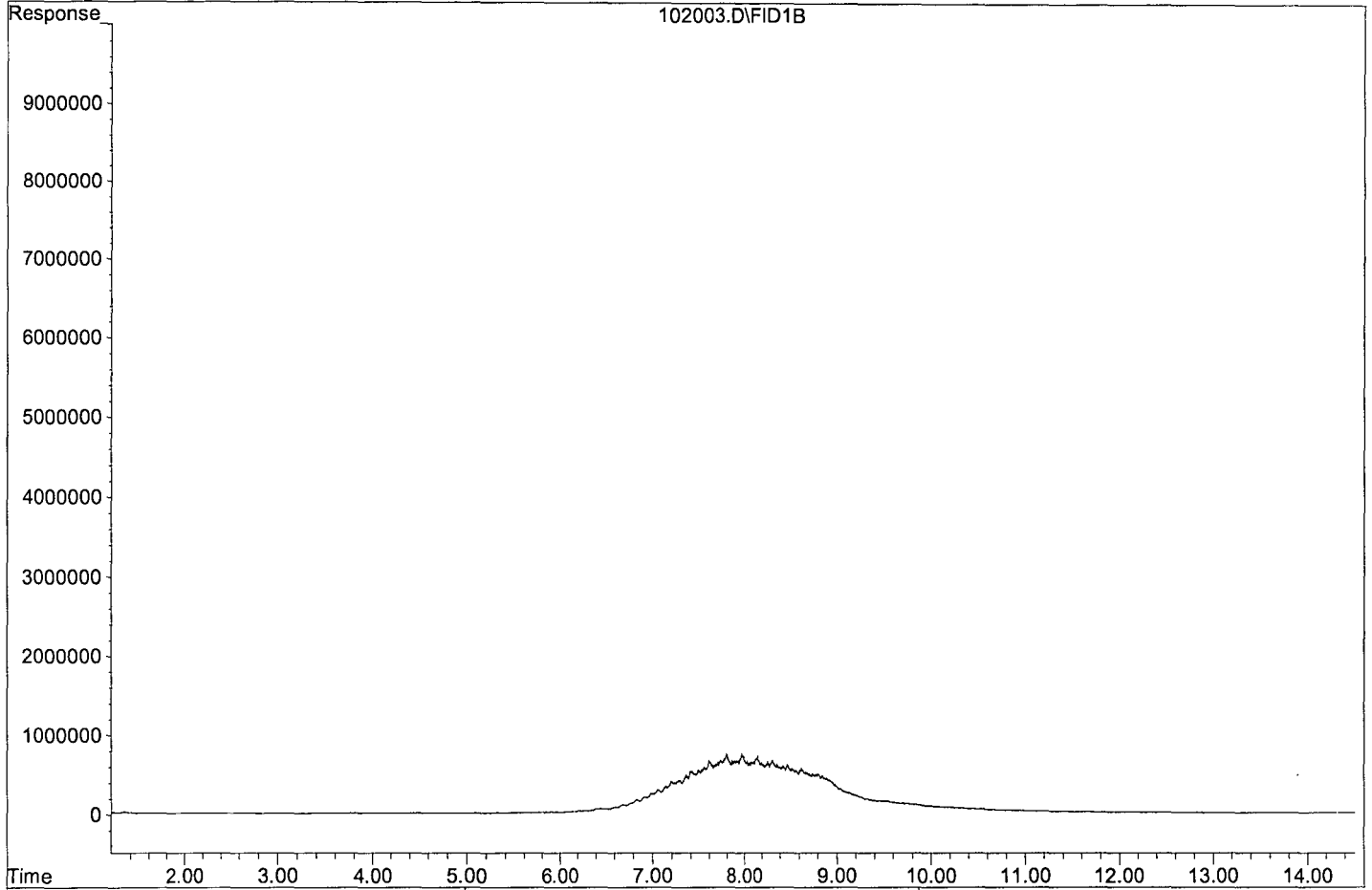
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C24-C40)	9.24	602466869	217.045 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\190102\102003.D  
Sample : Motor Oil - 3 12/11/18



Data File : G:\APOLLO\DATA\190102\102004.D Vial: 4  
 Acq On : 1-2-19 13:50:56 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 2 16:06 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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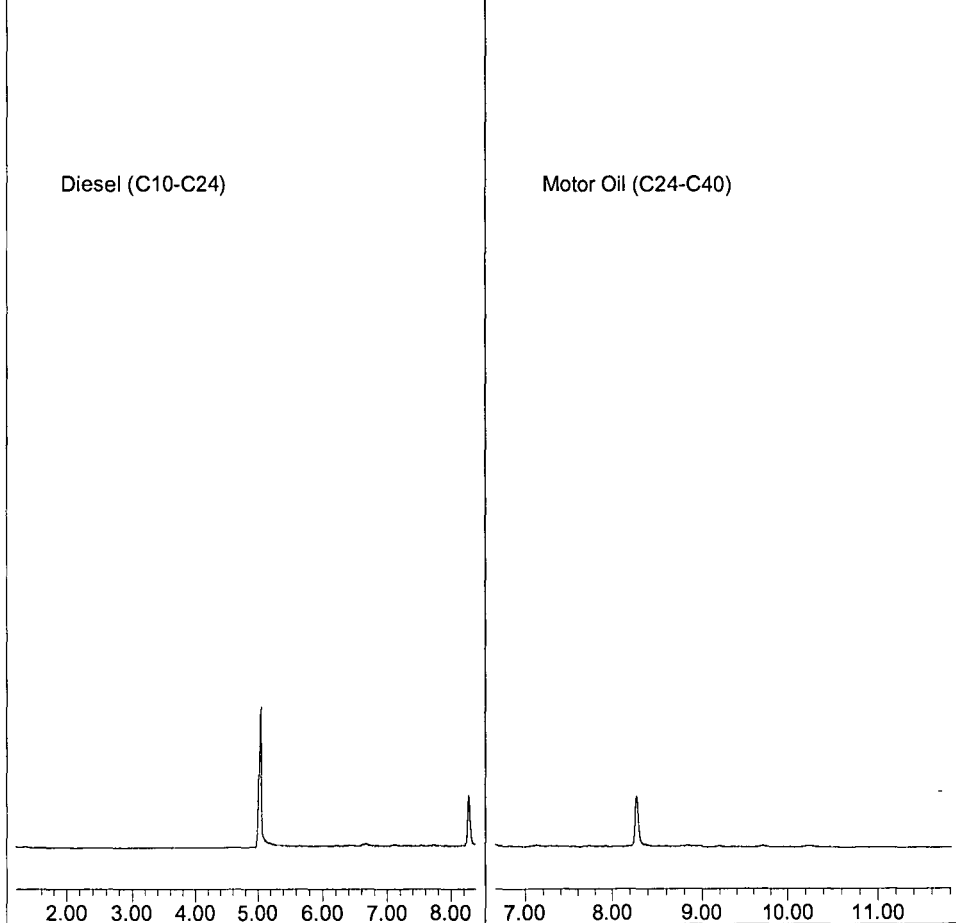
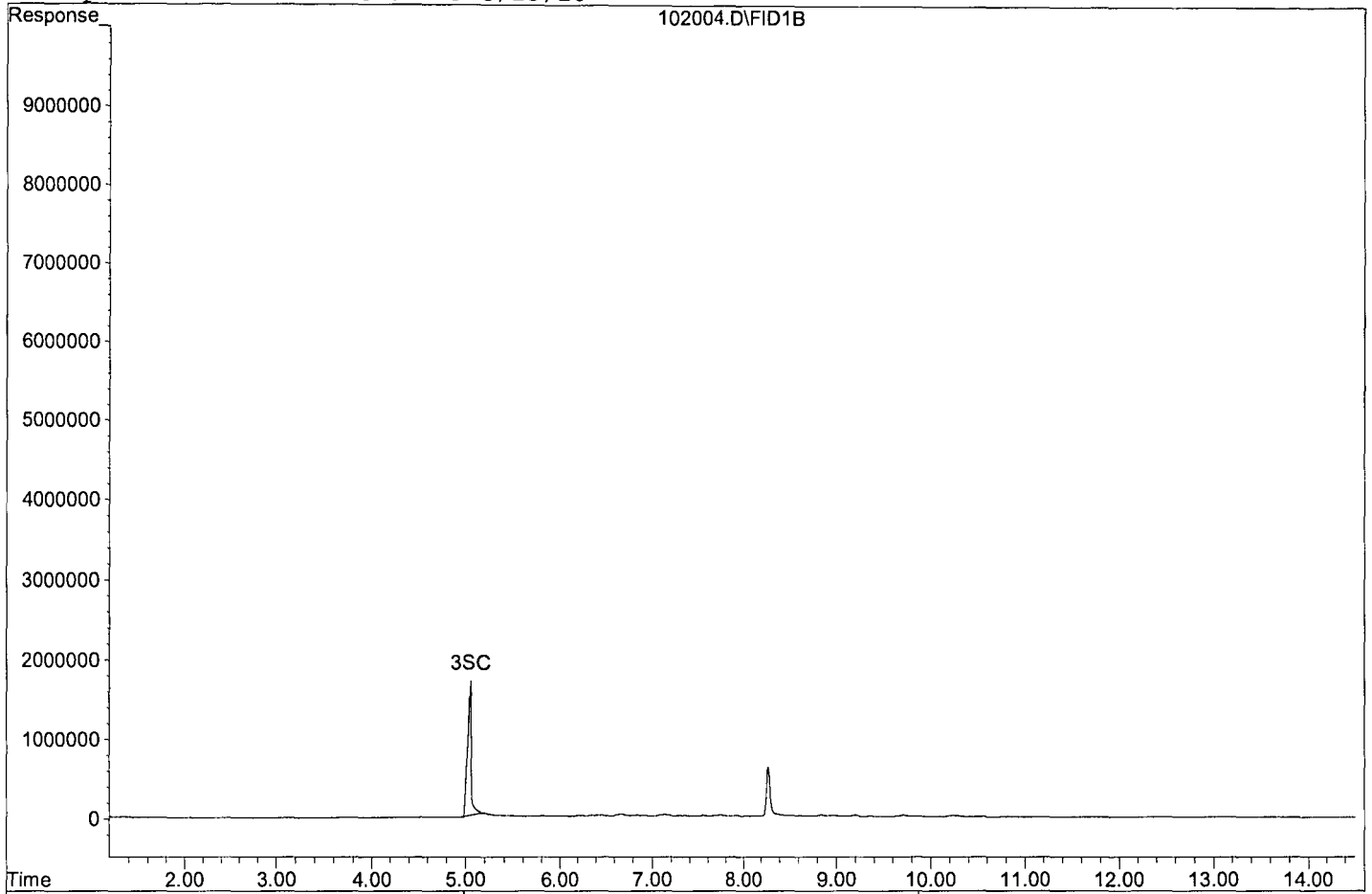
System Monitoring Compounds

3) SC Decanoic Acid(S)	5.05	45982240	23.150 ppb
Surrogate Spike 24.000	Recovery	=	96.46%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102004.D  
Sample : Decanoic Acid - 3 8/23/18



TPH Extractables  
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/02/19  
Instrument: Apollo  
Initial Cal. Date: 09/05/18  
Data File: 102012-14.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1638600	1665550	1.6	HATM
2	SA Ortho-Terphenyl(S)	1936320	2023850	4.5	SA
3	SA Octacosane(S)	1614940	1669010	3.3	SA
4	HBTM Motor Oil (C24-C40)	1387880	1256580	9.5	HBTM
5	SC Decanoic Acid(S)	993123	1083380	9.1	SC
6					
7					
8					
9					
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36					
37					
38					
39					
40	Average			5.6	

Data File : G:\APOLLO\DATA\190102\102012.D Vial: 12  
 Acq On : 1-2-19 16:30:08 Operator: DP  
 Sample : Diesel - 3 12/11/18 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 2 16:42 2019 Quant Results File: DOC0905.RES

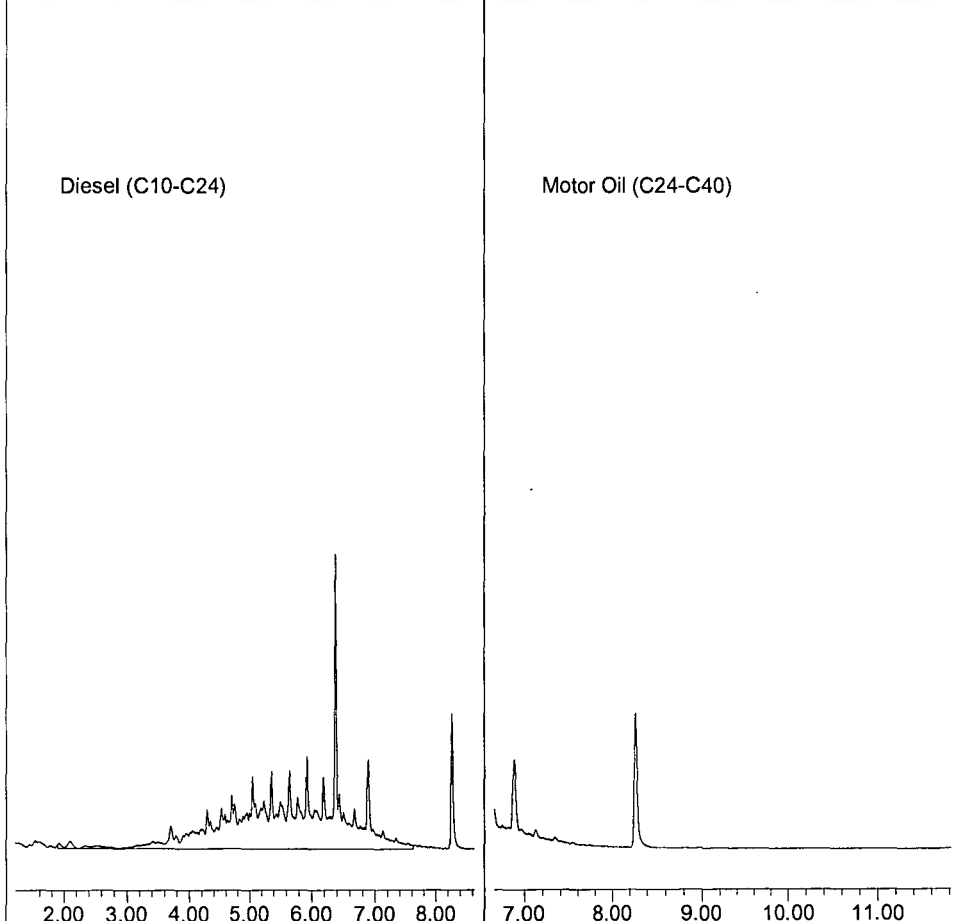
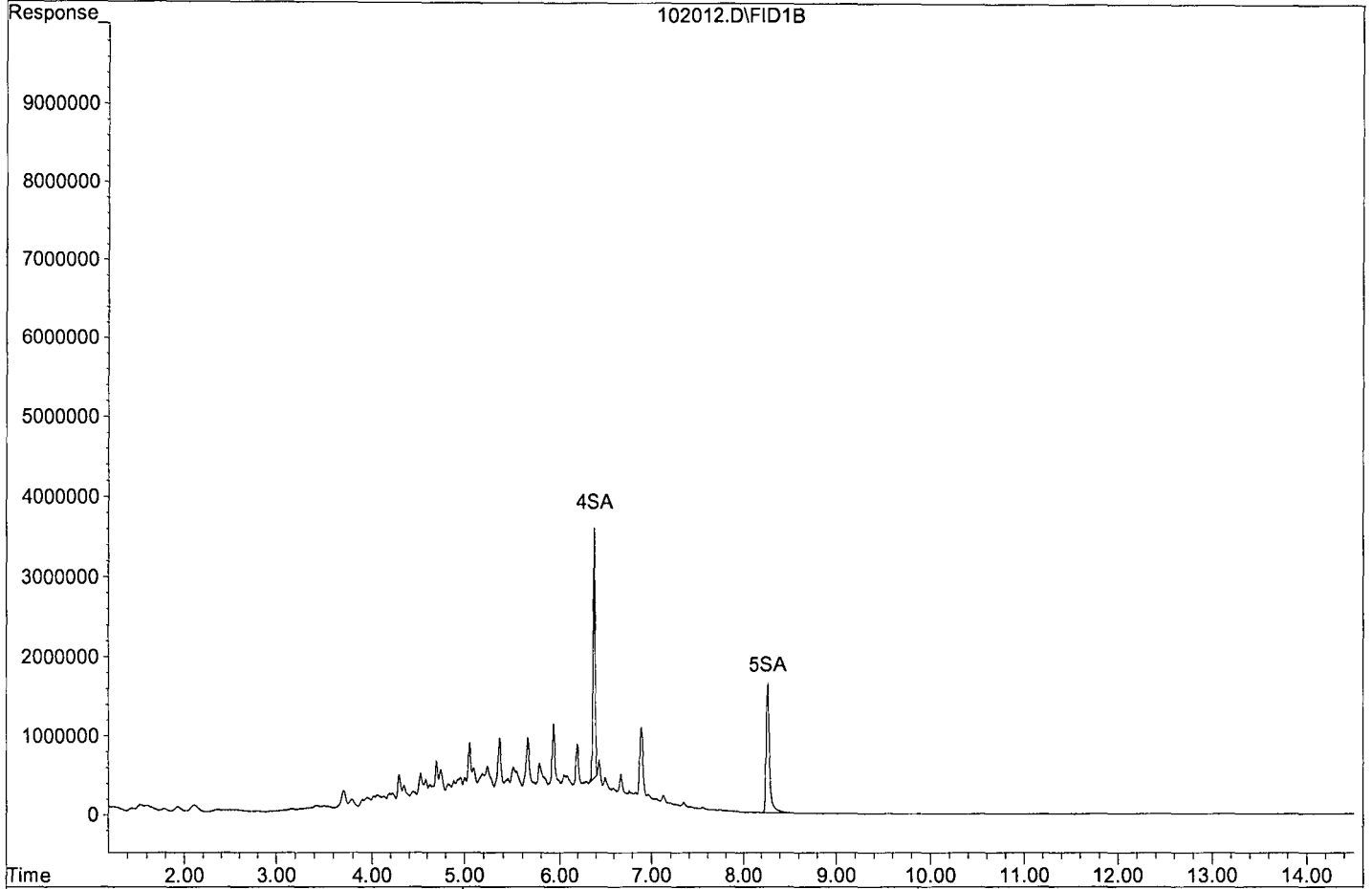
Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	50596162	13.065 ppb
Surrogate Spike 30.000		Recovery =	43.55%
5) SA Octacosane(S)	8.27	41725258	12.919 ppb
Surrogate Spike 30.000		Recovery =	43.06%
Target Compounds			
1) HATM Diesel (C10-C24)	4.77	832773518	254.112 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102012.D  
Sample : Diesel - 3 12/11/18





Data File : G:\APOLLO\DATA\190102\102013.D Vial: 13  
 Acq On : 1-2-19 16:50:09 Operator: DP  
 Sample : Motor Oil - 3 12/11/18 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 2 17:26 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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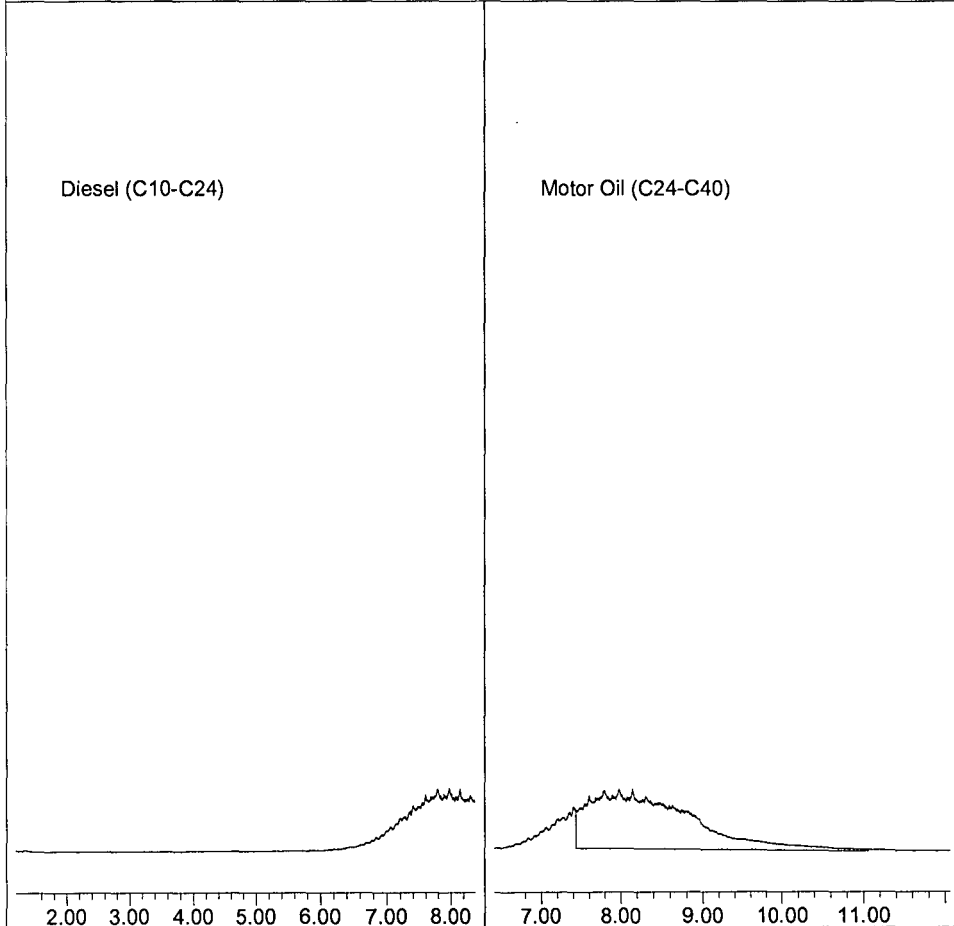
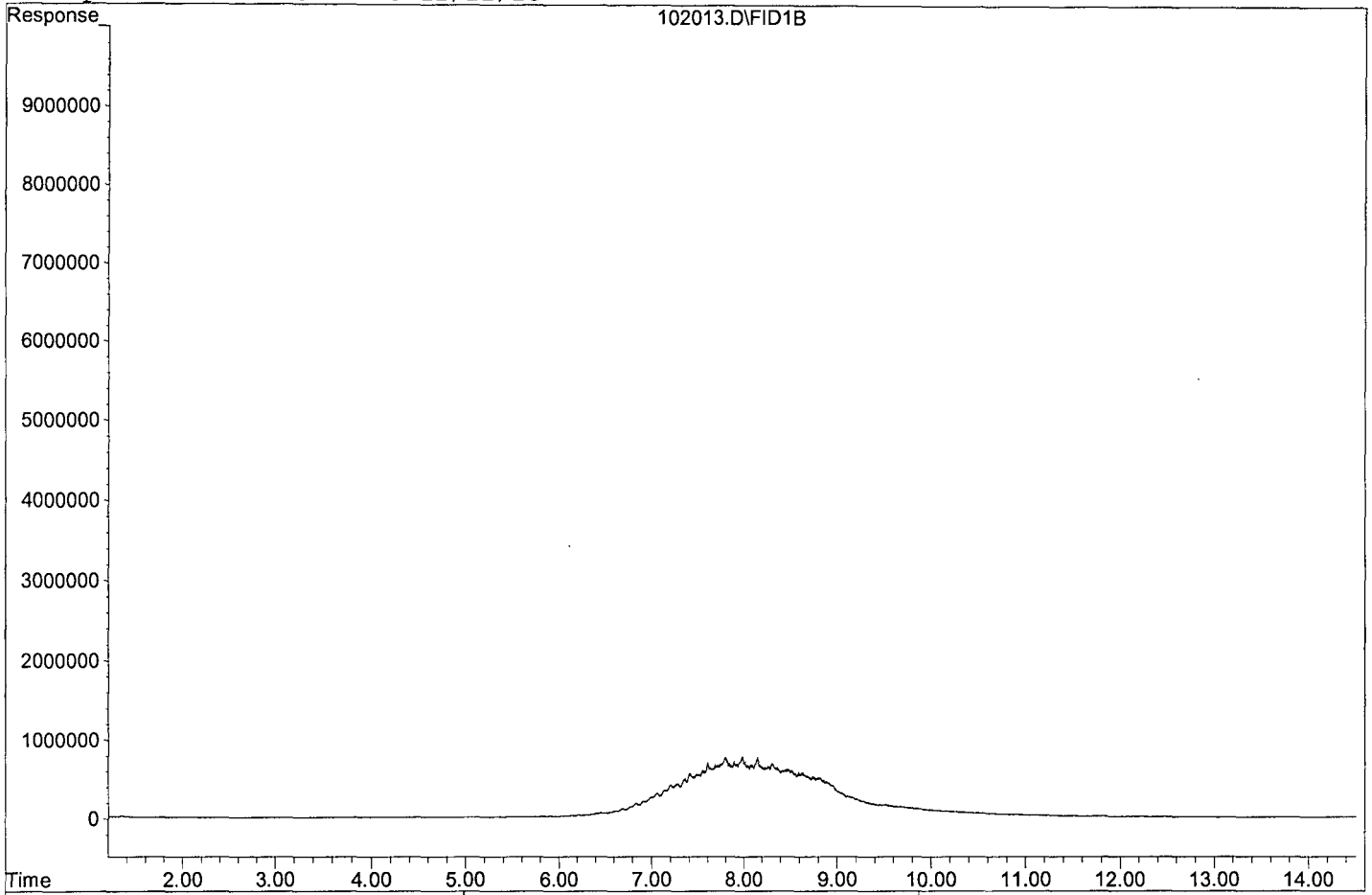
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C24-C40)	9.24	628292051	226.349 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\190102\102013.D  
Sample : Motor Oil - 3 12/11/18



Data File : G:\APOLLO\DATA\190102\102014.D Vial: 14  
 Acq On : 1-2-19 17:10:11 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 2 17:26 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

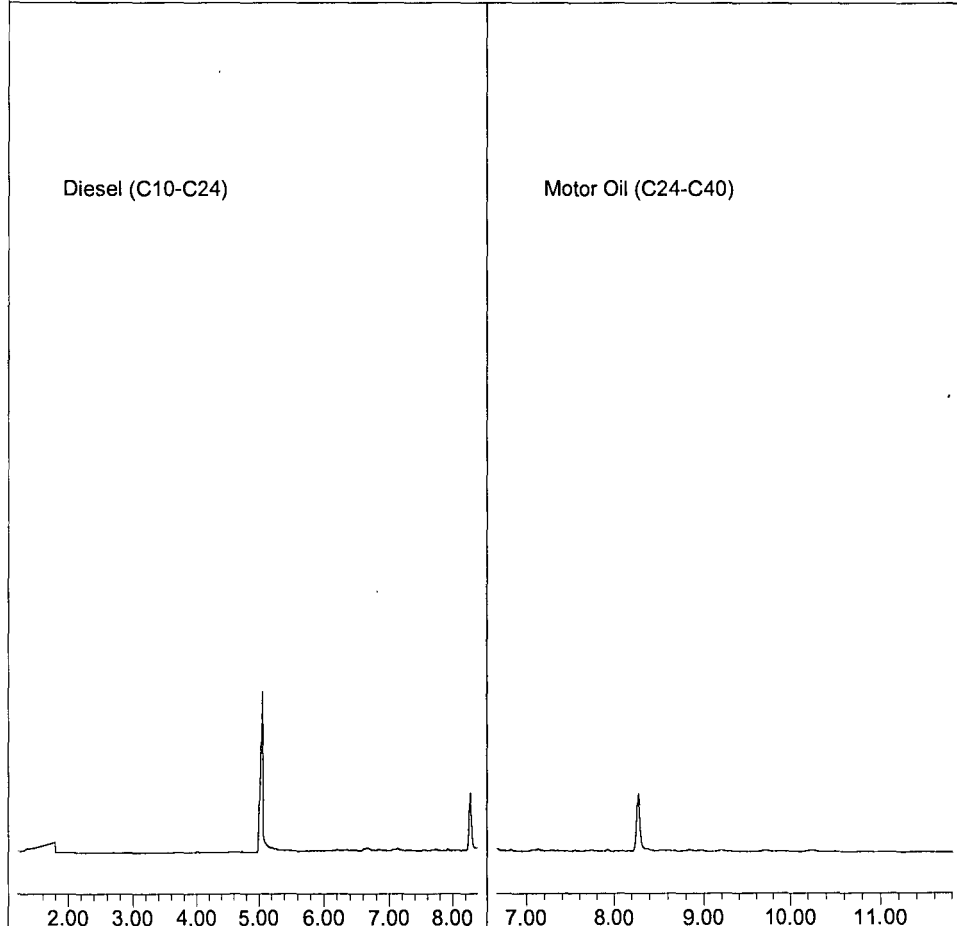
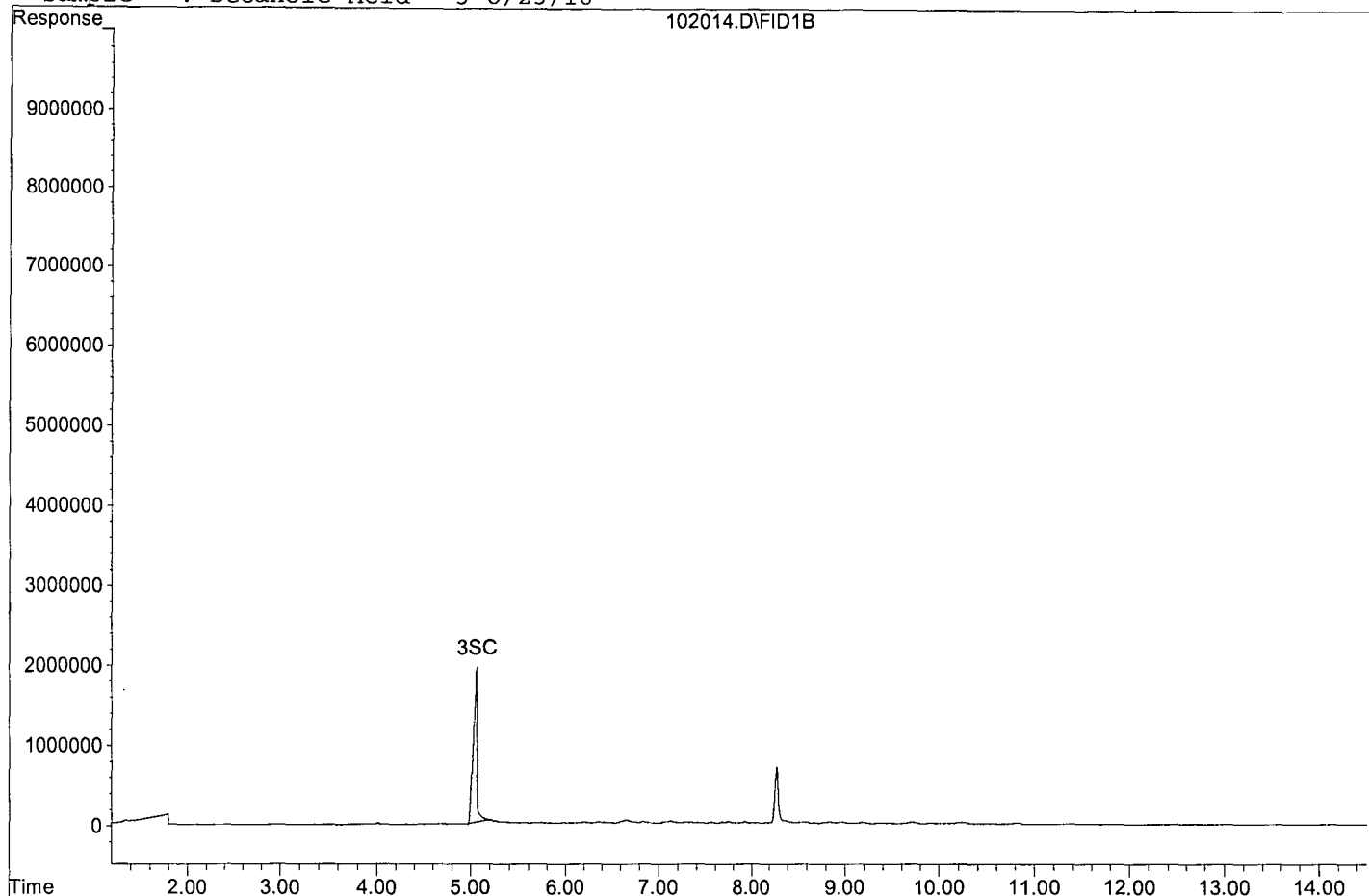
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.06	52002175	26.181 ppb
Surrogate Spike 24.000	Recovery	=	109.09%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102014.D

Sample : Decanoic Acid - 3 8/23/18



TPH Extractables  
DOC0117

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/17/19

Matrix: Water

Instrument: Apollo

Initials: \_\_\_\_\_

117002.D    117003.D    117004.D    117005.D    117006.D    117007.D

	Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATM Diesel (C10-C24)	1247225	1163187	1209913	1221573	1152277	1133164					1187890	3.8	HATM		
2	HBTM Motor Oil (C24-C40)	1046830	917795	948443	920306	882639	861594					929601	7.0	HBTM		
3	SC Decanoic Acid(S)	648675	1095549	1090928	1053315	1004335	1065935					993123	17	SC		
4	SA Ortho-Terphenyl(S)	2315091	2079412	2039254	2009486	1862079	1811493					2019469	8.8	SA		
5	SA Octacosane(S)	2056338	1855545	1881468	1912913	1840710	1711226					1876367	6.0	SA		
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Data File : G:\APOLLO\DATA\190117\117002.D Vial: 2  
 Acq On : 1-17-19 16:38:28 Operator: DP  
 Sample : Diesel / Motor Oil - 1 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

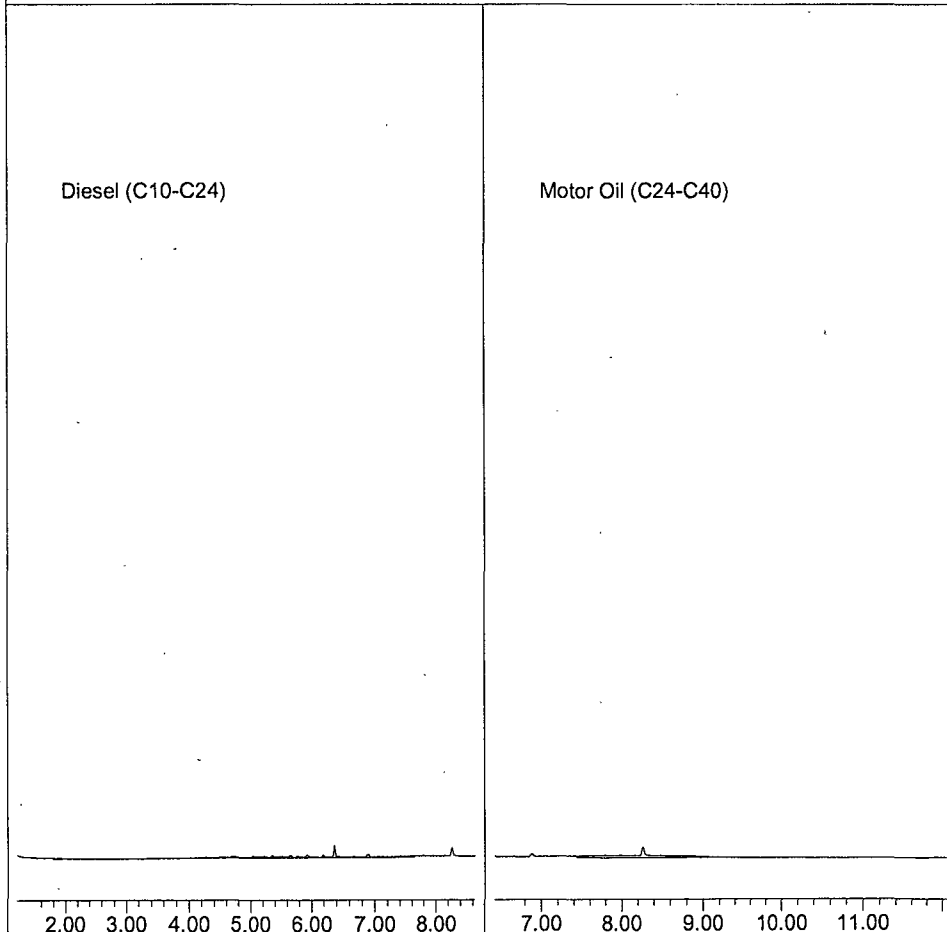
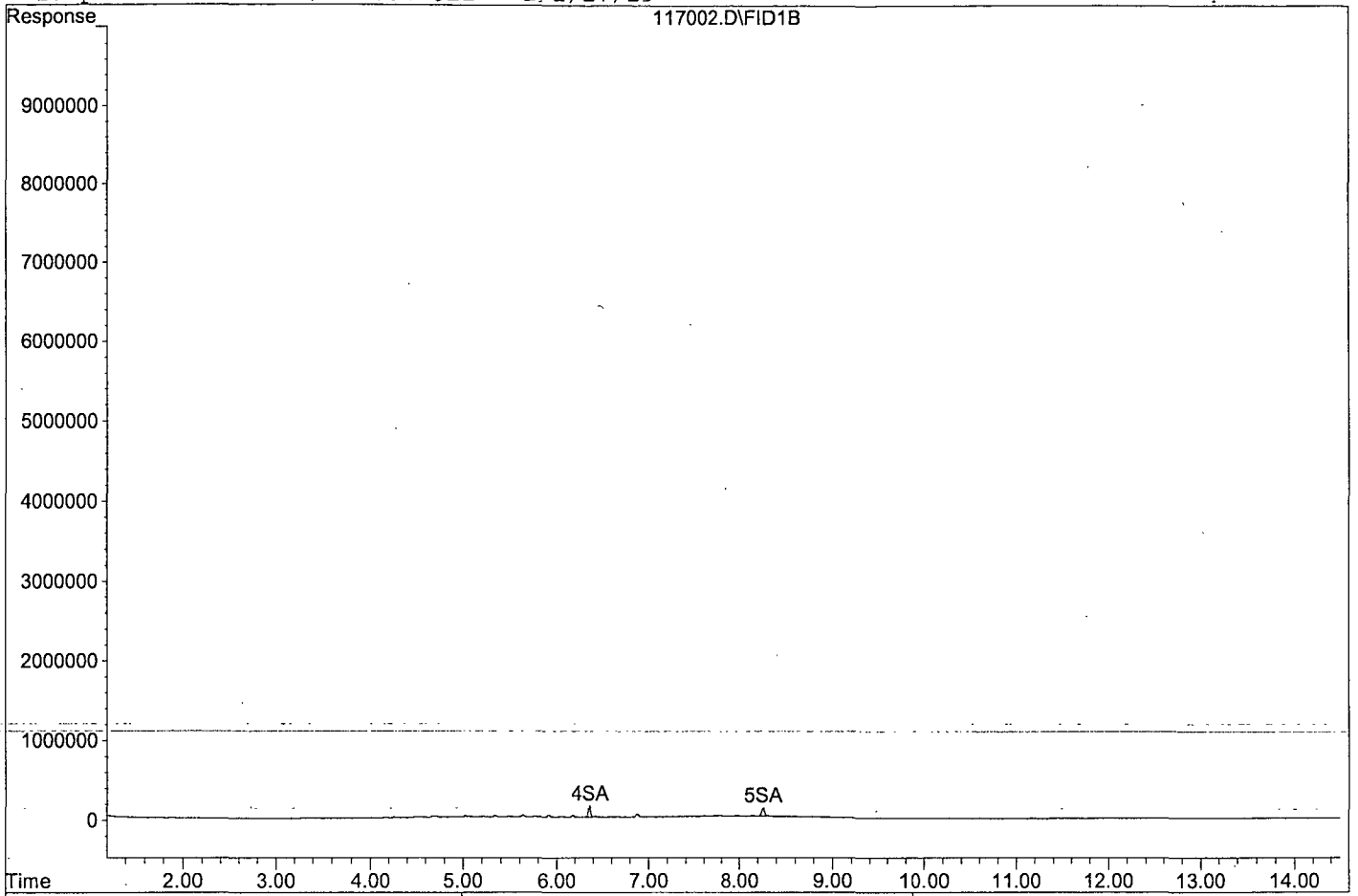
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	2315091	0.573 ppb
Surrogate Spike 30.000		Recovery =	1.91%
5) SA Octacosane(S)	8.26	2056338	0.548 ppb
Surrogate Spike 30.000		Recovery =	1.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	24944497	10.500 ppb
2) HBTM Motor Oil (C24-C40)	9.23	20936598	11.261 ppb

**ADDED PAGE**

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117002.D

Sample : Diesel / Motor Oil - 1.1/17/19



**ADDED PAGE**

Data File : G:\APOLLO\DATA\190117\117003.D Vial: 3  
 Acq On : 1-17-19 16:58:29 Operator: DP  
 Sample : Diesel / Motor Oil - 2 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	10397059	2.574 ppb
Surrogate Spike 30.000		Recovery =	8.58%
5) SA Octacosane(S)	8.26	9277725	2.472 ppb
Surrogate Spike 30.000		Recovery =	8.24%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	116318686	48.960 ppb
2) HBTM Motor Oil (C24-C40)	9.23	91779450	49.365 ppb

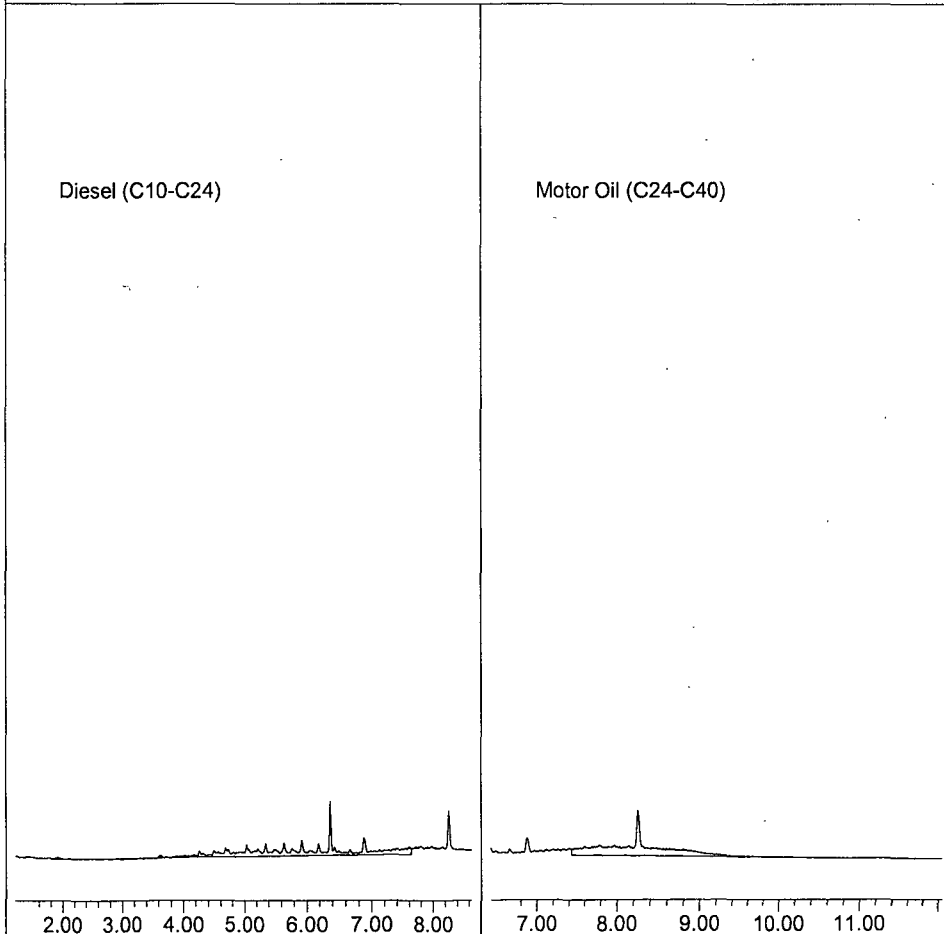
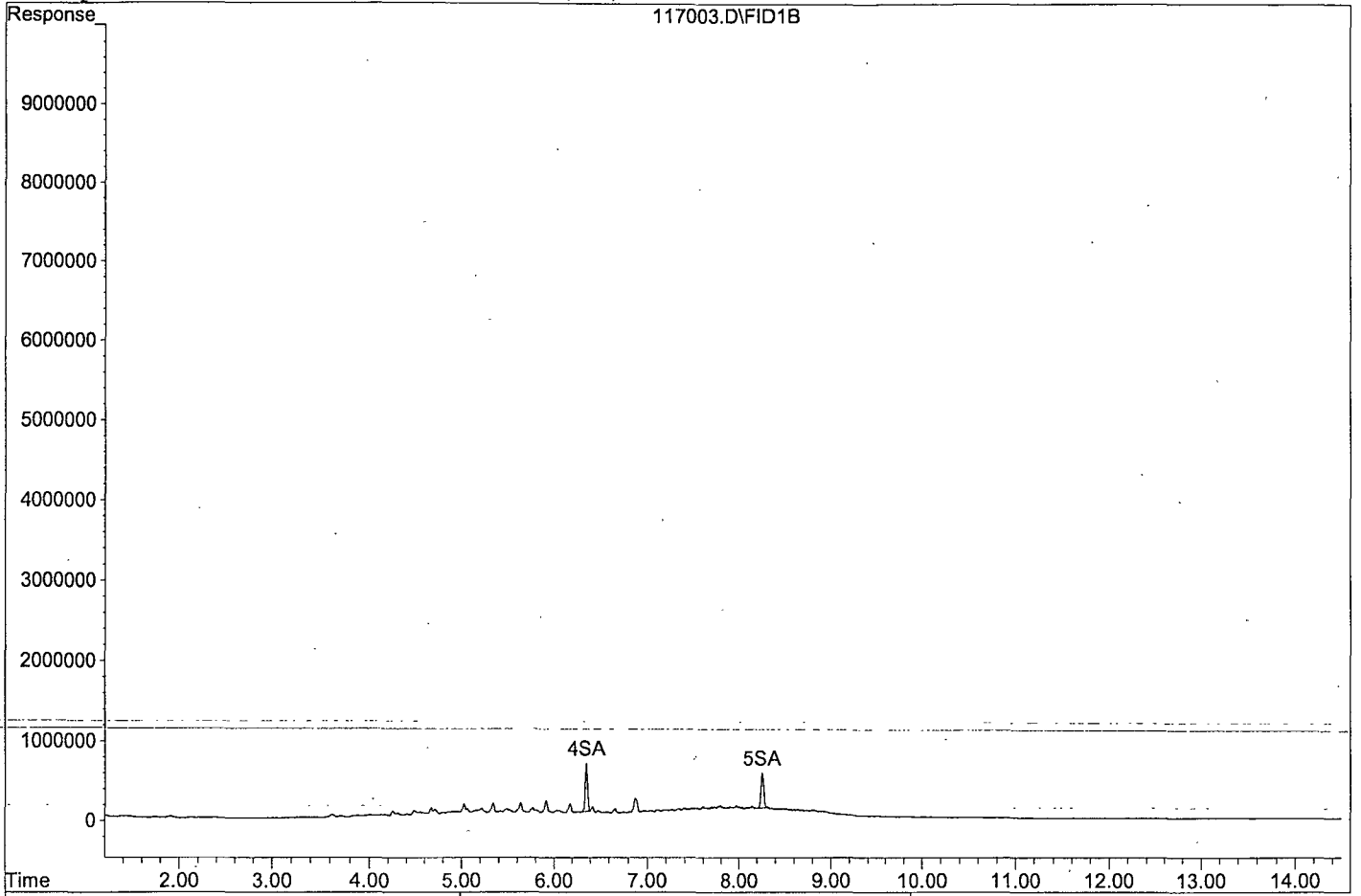
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Quantitation Report

Data File: G:\APOLLO\DATA\190117\117003.D

Sample : Diesel / Motor Oil - 2 1/17/19



**ADDED PAGE**

Data File : G:\APOLLO\DATA\190117\117004.D Vial: 4  
 Acq On : 1-17-19 17:17:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

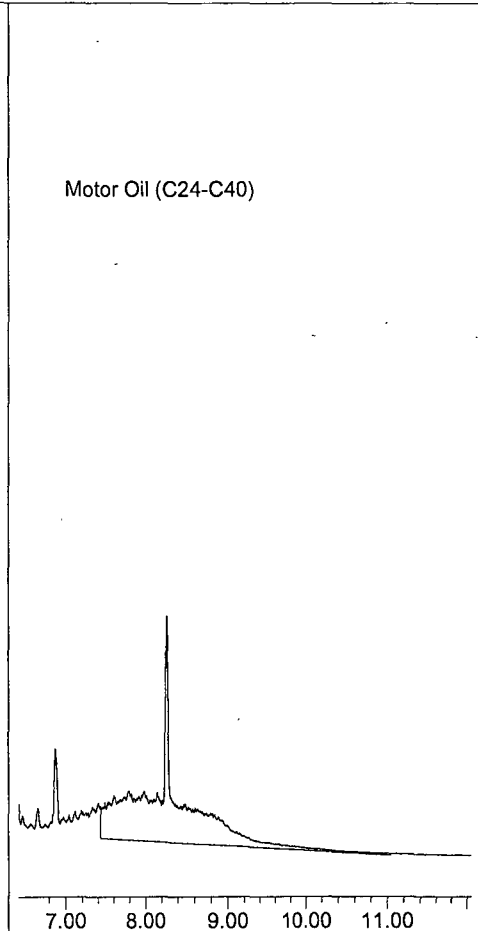
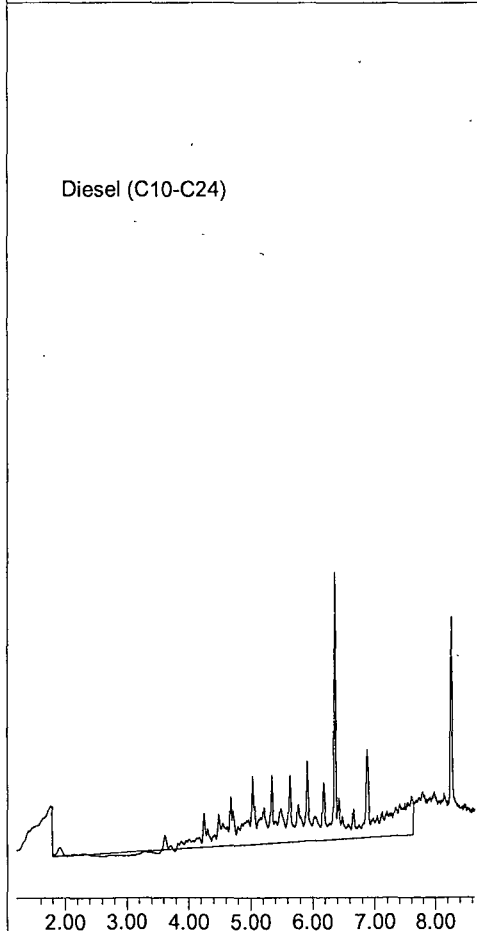
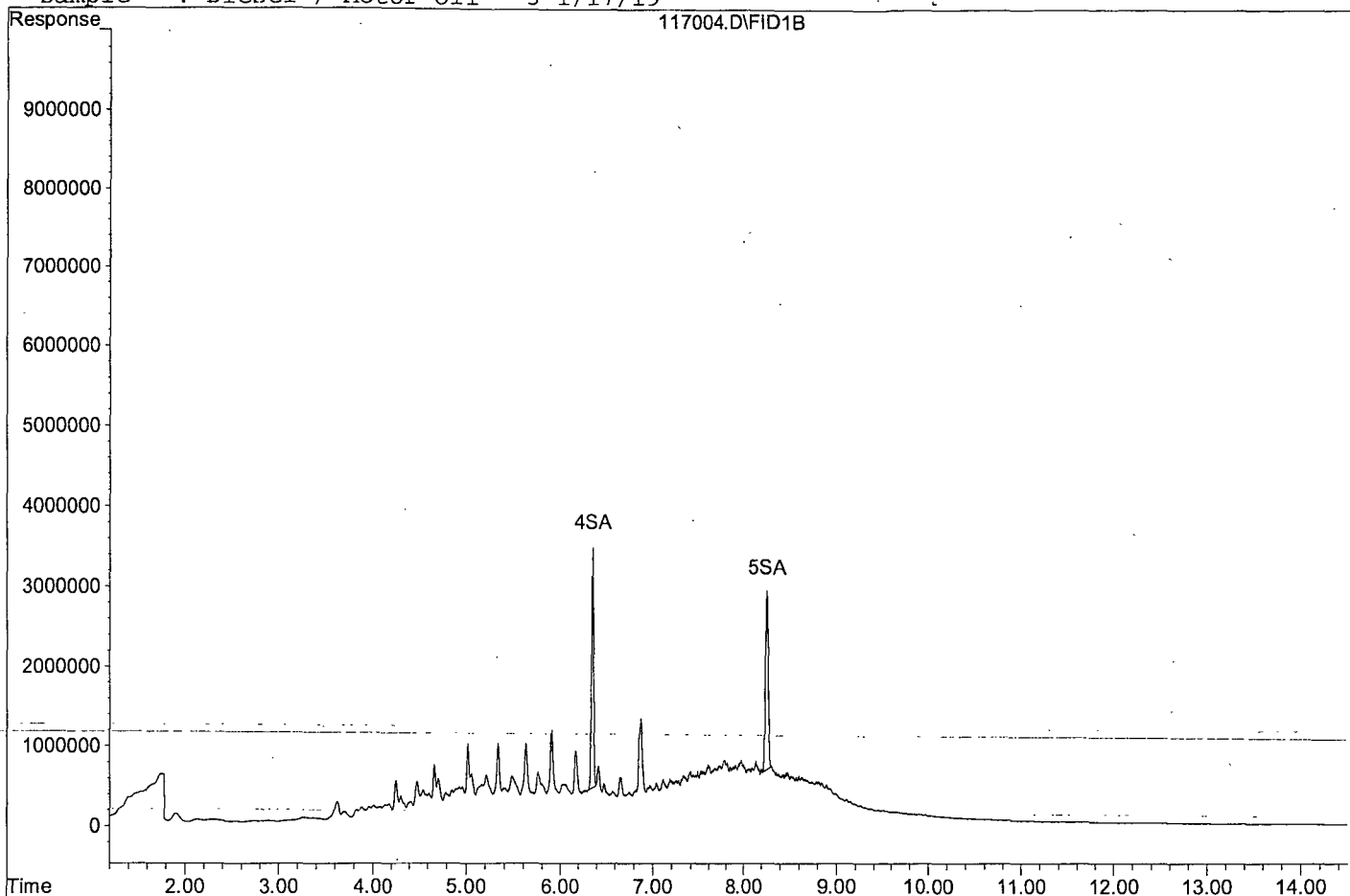
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50981338	12.622 ppb
Surrogate Spike 30.000		Recovery =	42.07%
5) SA Octacosane(S)	8.26	47036708	12.534 ppb
Surrogate Spike 30.000		Recovery =	41.78%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	604956690	254.635 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474221646	255.067 ppb

**ADDED PAGE**

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117004.D  
Sample : Diesel / Motor Oil - 3 1/17/19



**ADDED PAGE**

Data File : G:\APOLLO\DATA\190117\117005.D Vial: 5  
 Acq On : 1-17-19 17:37:44 Operator: DP  
 Sample : Diesel / Motor Oil - 4 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

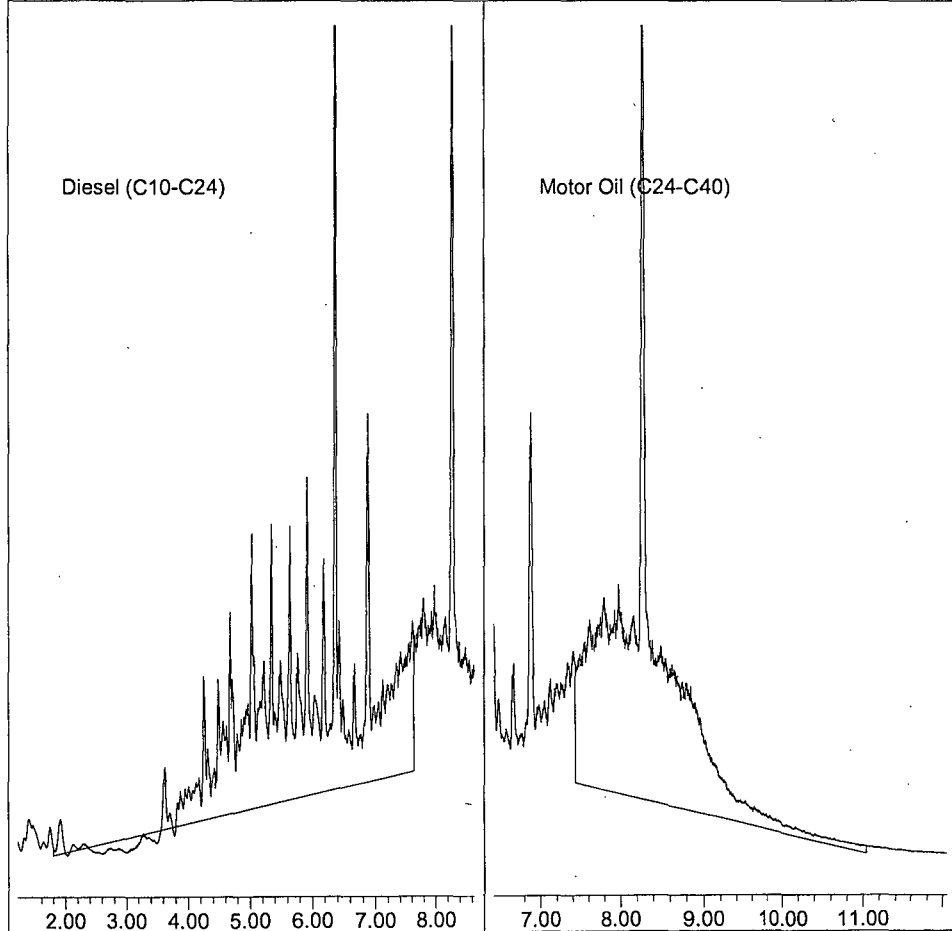
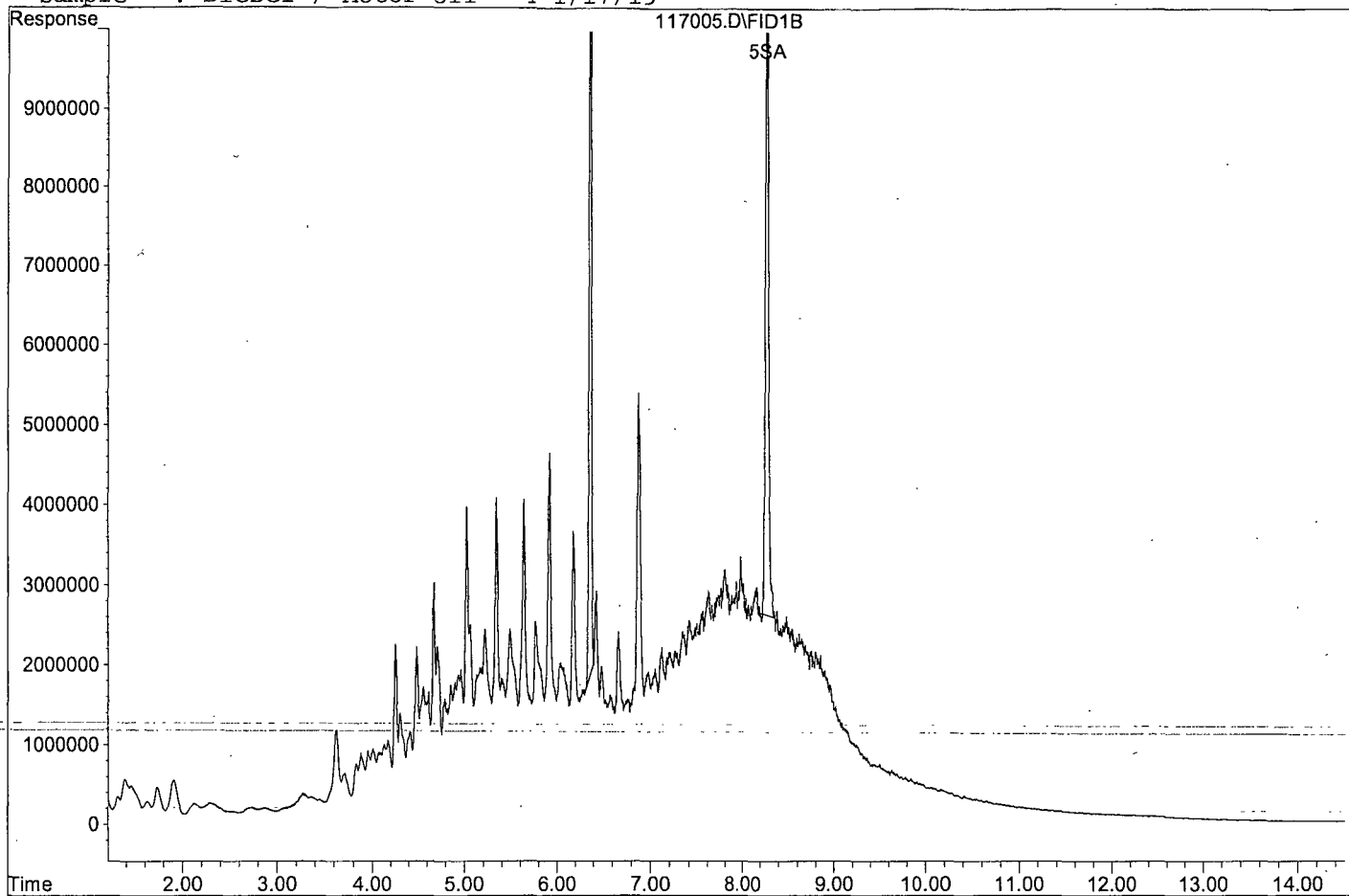
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	200948587	49.753 ppb
Surrogate Spike 30.000		Recovery =	165.84%
5) SA Octacosane(S)	8.27	191291289	50.974 ppb
Surrogate Spike 30.000		Recovery =	169.91%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	2443146618	1028.356 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1840612778	990.001 ppb

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Quantitation Report

Data File: G:\APOLLO\DATA\190117\117005.D  
Sample : Diesel / Motor Oil - 4 1/17/19



**ADDED PAGE**

Data File : G:\APOLLO\DATA\190117\117006.D Vial: 6  
 Acq On : 1-17-19 17:57:32 Operator: DP  
 Sample : Diesel / Motor Oil - 5 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

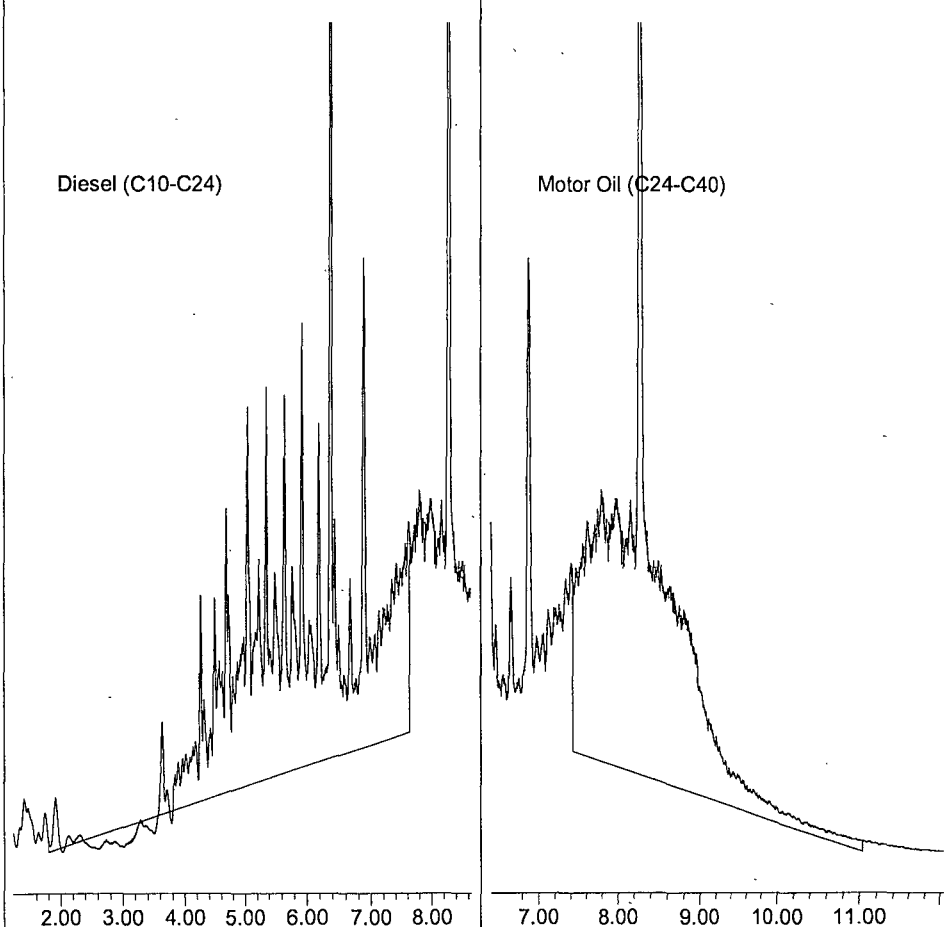
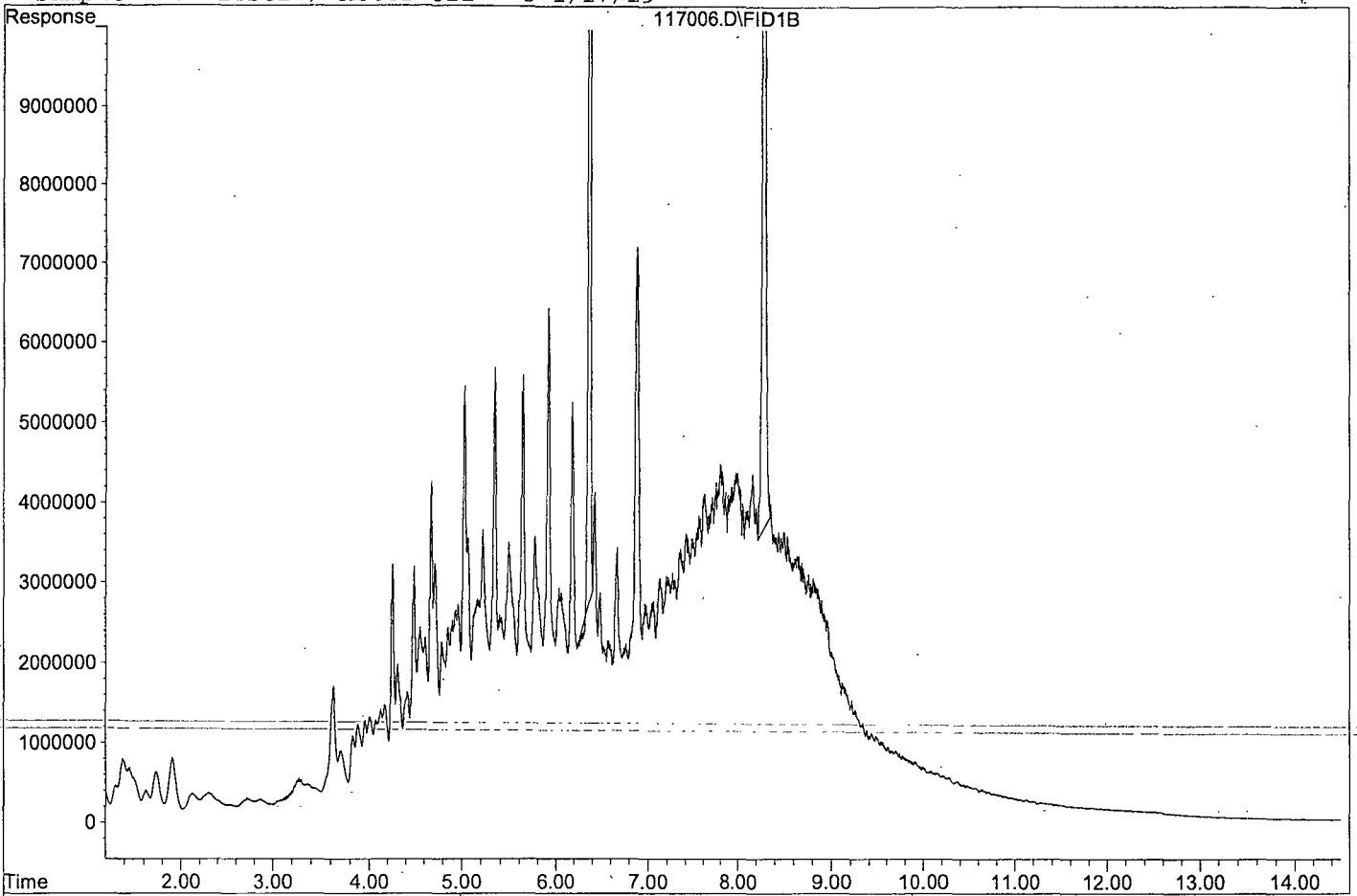
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	279311894	69.155 ppb
Surrogate Spike 30.000		Recovery =	230.52%
5) SA Octacosane(S)	8.28	276106552	73.575 ppb
Surrogate Spike 30.000		Recovery =	245.25%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	3456829820	1455.030 ppb
2) HBTM Motor Oil (C24-C40)	9.23	2647918269	1424.223 ppb

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Quantitation Report

Data File: G:\APOLLO\DATA\190117\117006.D  
Sample : Diesel / Motor Oil - 5 1/17/19



**ADDED PAGE**

Data File : G:\APOLLO\DATA\190117\117007.D Vial: 7  
 Acq On : 1-17-19 18:17:22 Operator: DP  
 Sample : Diesel / Motor Oil - 6 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	362298697	89.701 ppb
Surrogate Spike 30.000		Recovery =	299.00%
5) SA Octacosane(S)	8.29	342245296	91.199 ppb
Surrogate Spike 30.000		Recovery =	304.00%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	4532654243	1907.860 ppb
2) HBTM Motor Oil (C24-C40)	9.23	3446375794	1853.685 ppb

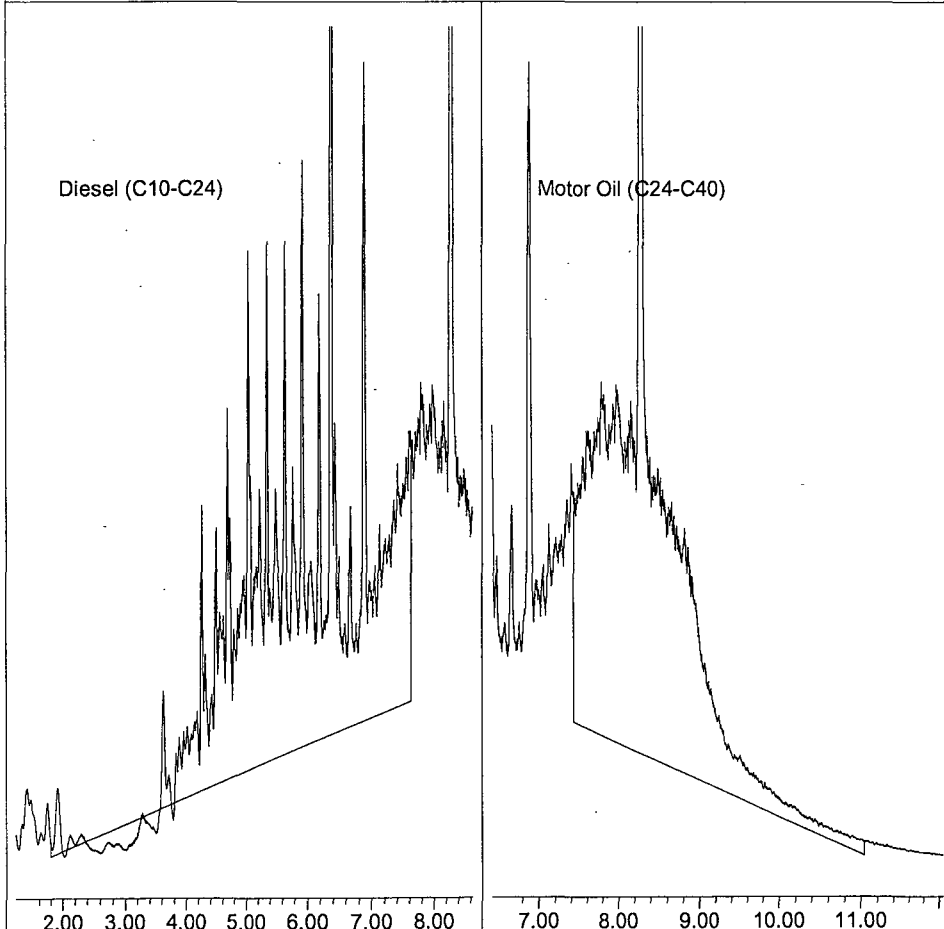
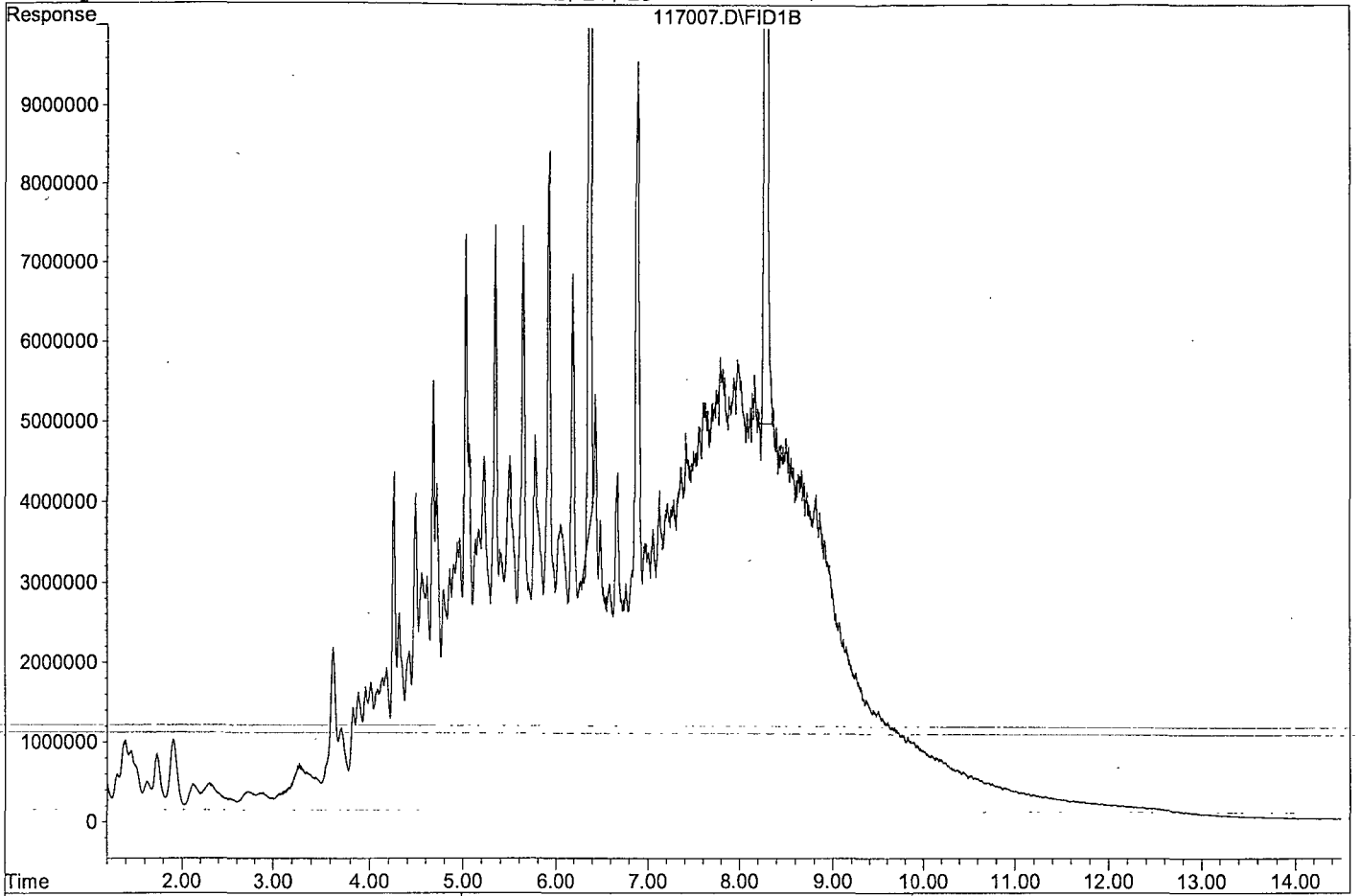
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Quantitation Report

Data File: G:\APOLLO\DATA\190117\117007.D

Sample : Diesel / Motor Oil - 6 1/17/19



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TPH Extractables  
DOC0117

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/17/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 117008.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1199930	1.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	923236	0.68	HBTM
3					
4					
5					
6					
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39					
40	Average			0.8	

**ADDED PAGE**

Data File : G:\APOLLO\DATA\190117\117008.D Vial: 8  
 Acq On : 1-17-19 18:37:21 Operator: DP  
 Sample : Diesel / Motor Oil - SS 1/15/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

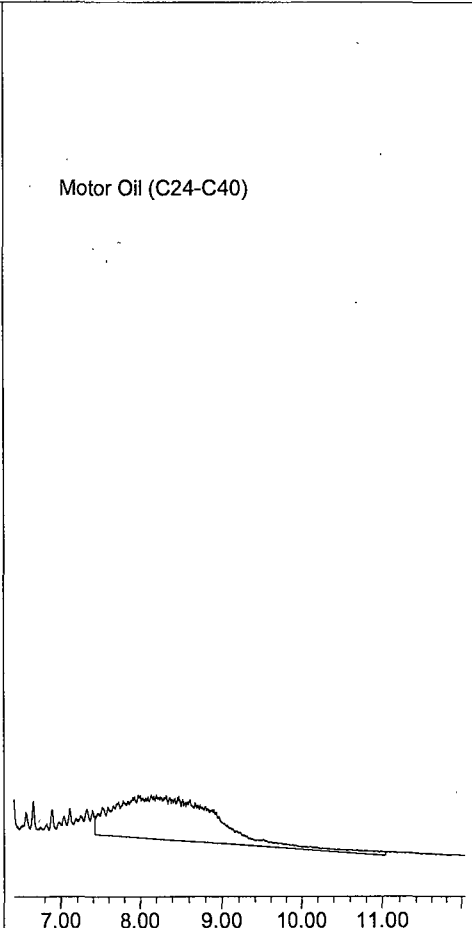
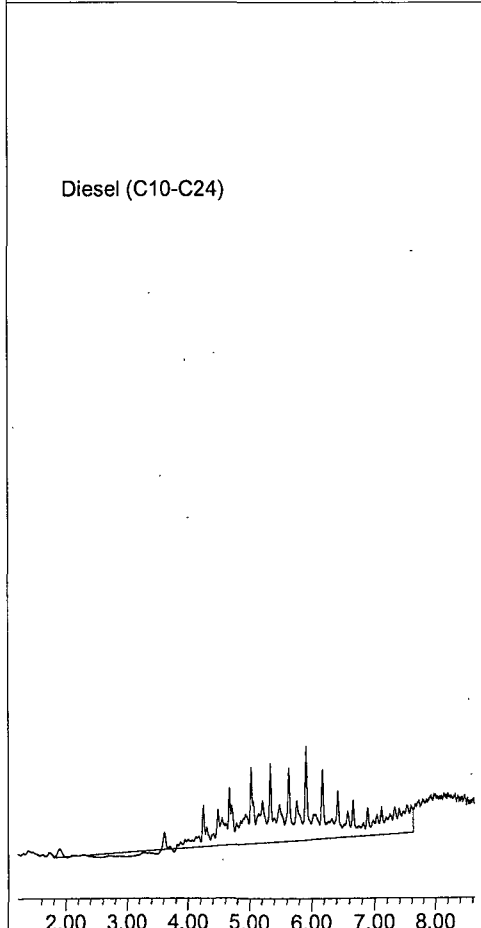
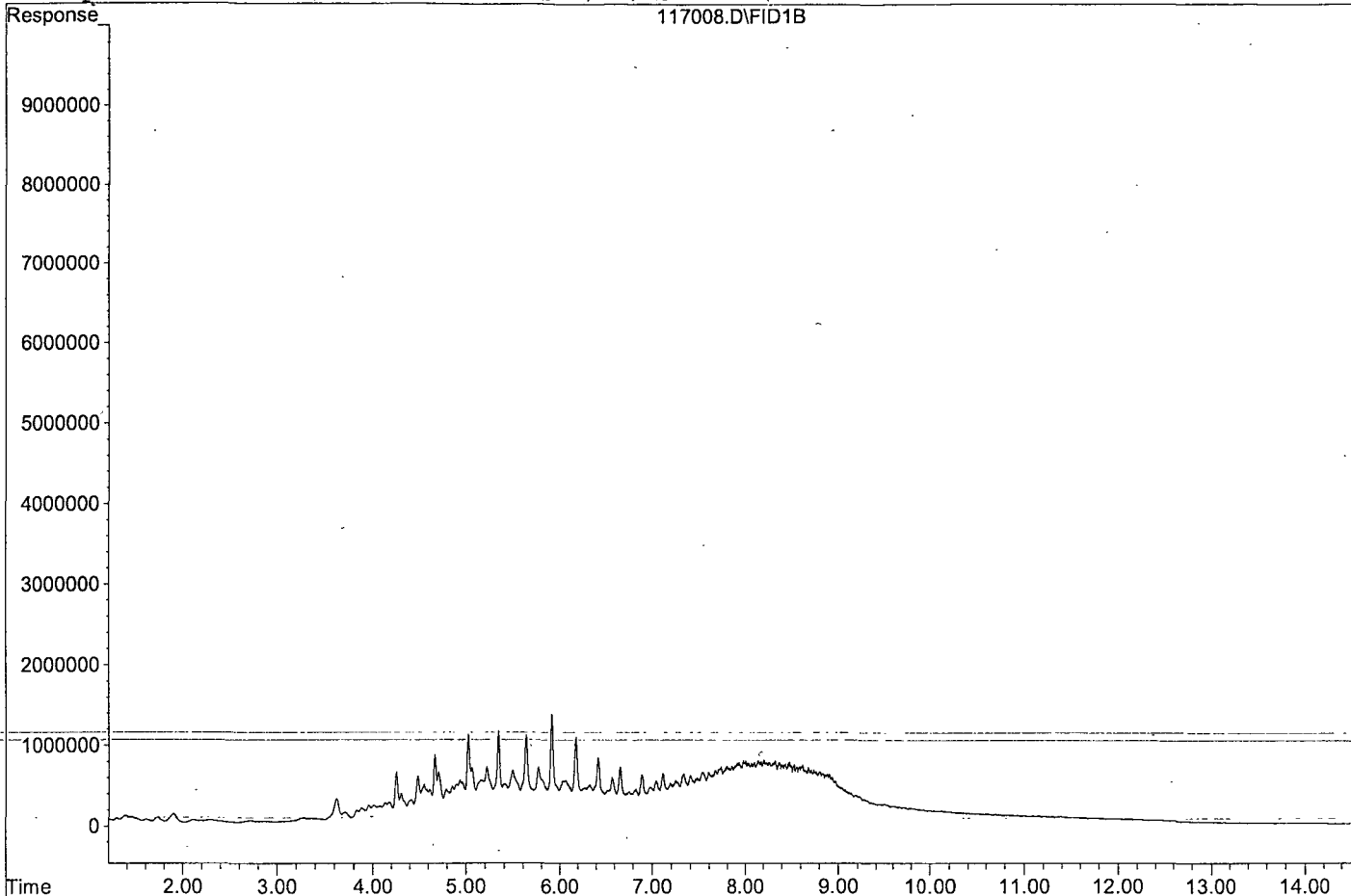
1) HATM Diesel (C10-C24)	4.71	599966004	252.534 ppb
2) HBTM Motor Oil (C24-C40)	9.23	461617841	248.288 ppb

**ADDED PAGE**

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117008.D

Sample : Diesel / Motor Oil - SS 1/15/19



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TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124022.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1105330	7.0	HATM
2	HBTM	Motor Oil (C24-C40)	929601	876430	5.7	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	1855650	8.1	SA
4	SA	Octacosane(S)	1876370	1795160	4.3	SA
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40		Average			6.3	

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Data File : G:\APOLLO\DATA\190124\124022.D Vial: 22  
 Acq On : 1-25-19 15:45:29 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 29 9:50 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

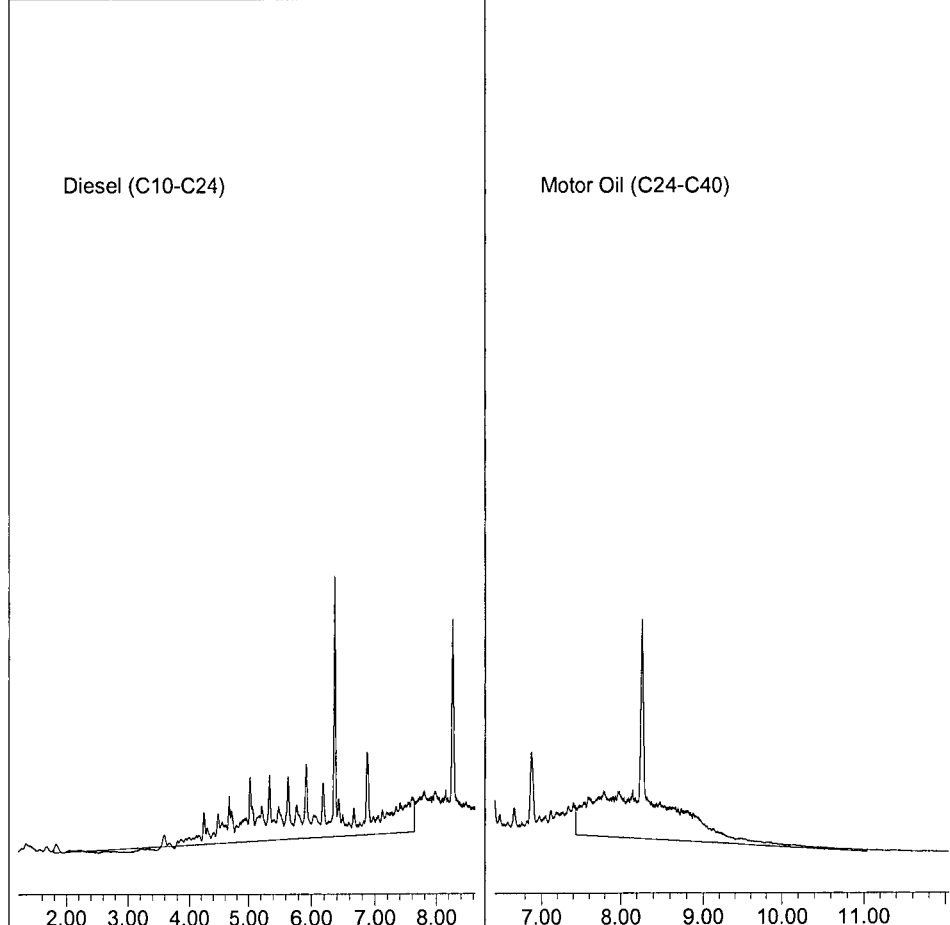
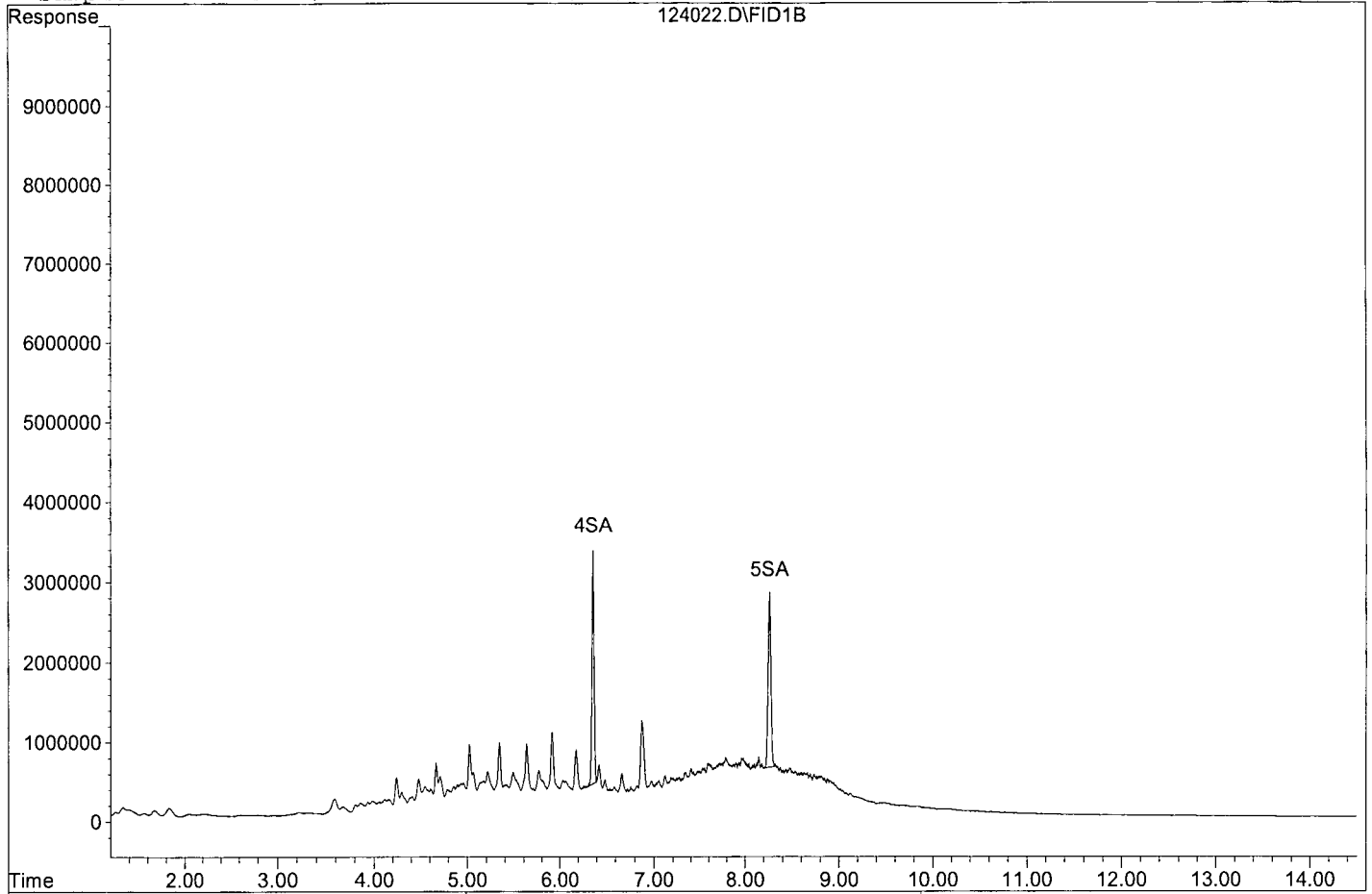
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl (S)	6.36	46391220	11.486 ppb
Surrogate Spike 30.000		Recovery =	38.29%
5) SA Octacosane (S)	8.26	44879116	11.959 ppb
Surrogate Spike 30.000		Recovery =	39.86%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	552664050	232.624 ppb
2) HBTM Motor Oil (C24-C40)	9.23	438214825	235.700 ppb

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Quantitation Report

Data File: G:\APOLLO\DATA\190124\124022.D  
Sample : Diesel / Motor Oil - 3 1/21/19



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TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124044.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1217020	2.5	HATM
2	HBTM	Motor Oil (C24-C40)	929601	953163	2.5	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	2083160	3.2	SA
4	SA	Octacosane(S)	1876370	1871340	0.27	SA
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40		Average			2.1	

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Data File : G:\APOLLO\DATA\190124\124044.D Vial: 44  
 Acq On : 1-25-19 22:58:02 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 29 9:50 2019 Quant Results File: DOC0117.RES

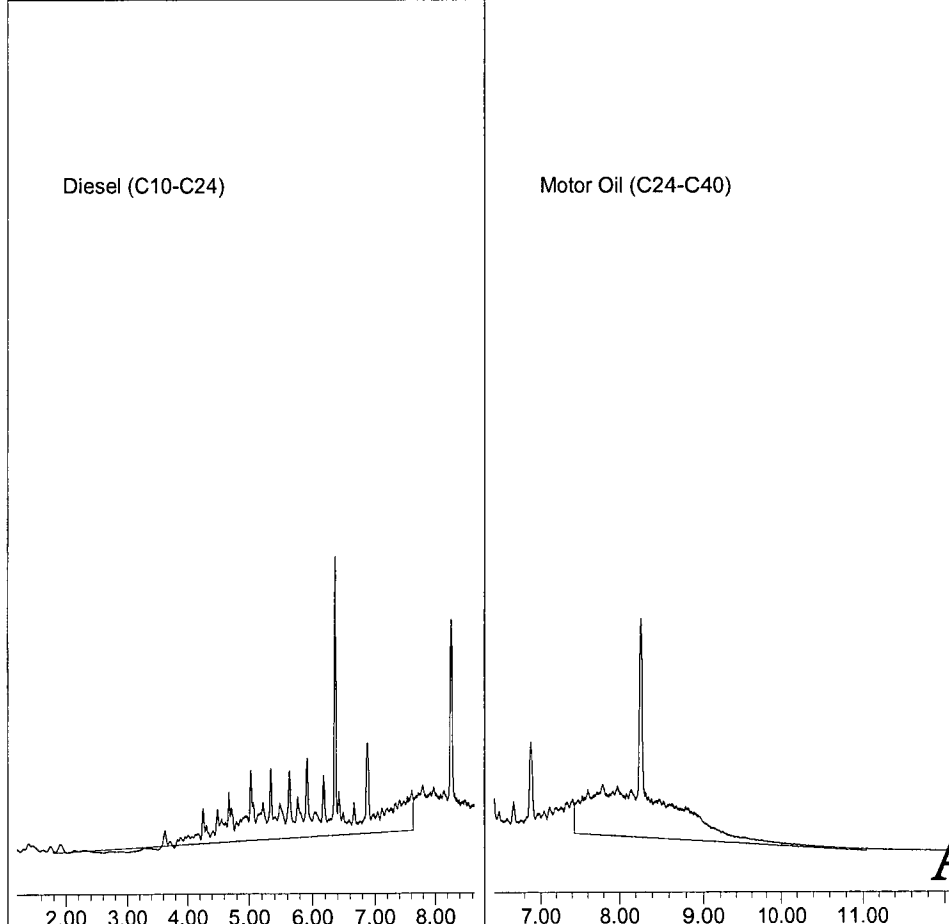
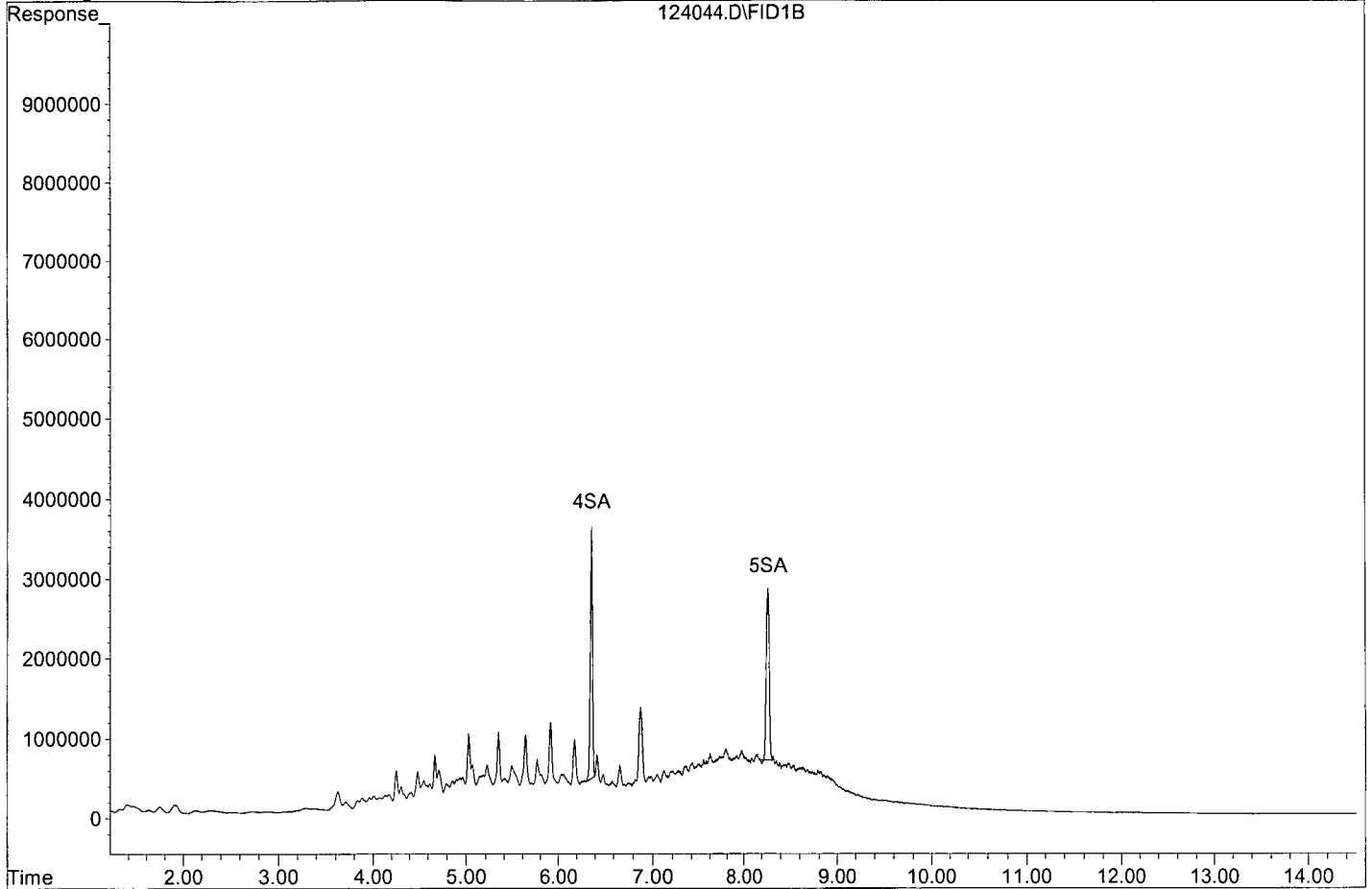
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	52078887	12.894 ppb
Surrogate Spike 30.000		Recovery =	42.98%
5) SA Octacosane(S)	8.26	46783566	12.467 ppb
Surrogate Spike 30.000		Recovery =	41.56%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	608507761	256.130 ppb
2) HBTM Motor Oil (C24-C40)	9.23	476581378	256.336 ppb

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Data File: G:\APOLLO\DATA\190124\124044.D  
Sample : Diesel / Motor Oil - 3 1/21/19



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**ORGANICS**  
**Raw Data**

**APPL, INC.**

Data File : G:\APOLLO\DATA\181218\1218084.D Vial: 84  
 Acq On : 12-20-18 17:08:16 Operator: DP  
 Sample : AZ84057W21 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 21 11:44 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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 System Monitoring Compounds

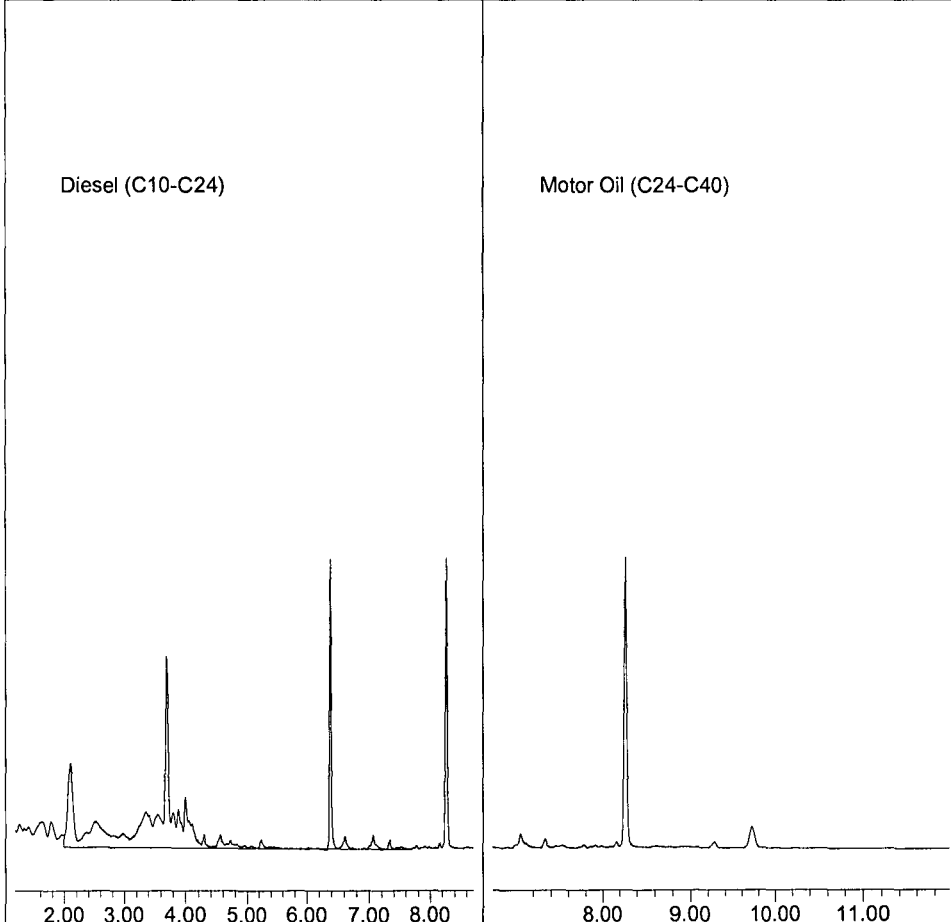
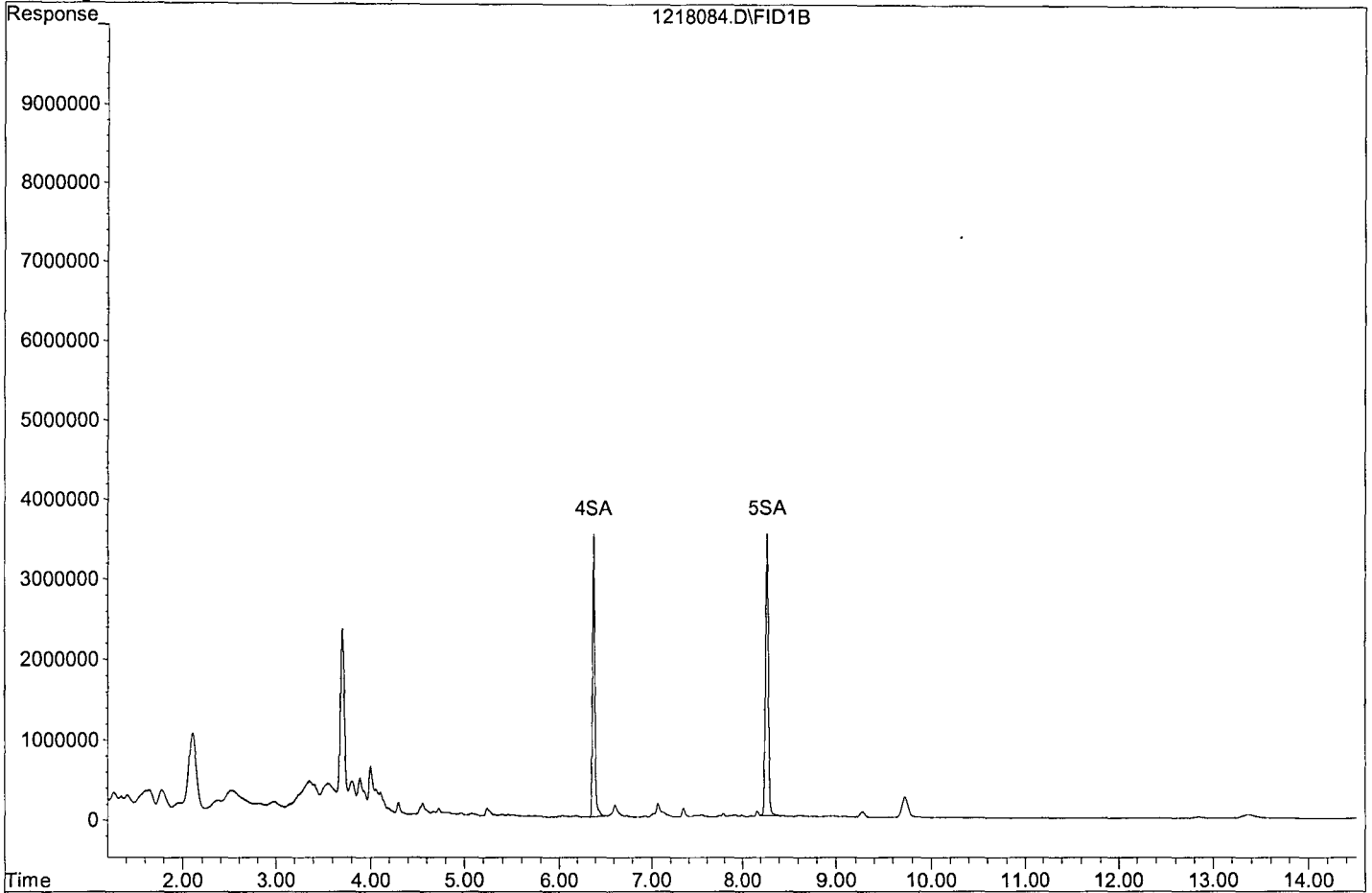
4) SA Ortho-Terphenyl(S)	6.38	62340858	40.244 ppb
Surrogate Spike 75.000		Recovery =	53.66%
5) SA Octacosane(S)	8.27	74448480	57.625 ppb
Surrogate Spike 75.000		Recovery =	76.83%

Target Compounds

1) HATM Diesel (C10-C24)	4.86	455763989	347.678 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218084.D  
Sample : AZ84057W21 2/800



Data File : G:\APOLLO\DATA\190124\124027.D Vial: 27  
 Acq On : 1-25-19 17:24:26 Operator: DP  
 Sample : AZ84057W25 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:40 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

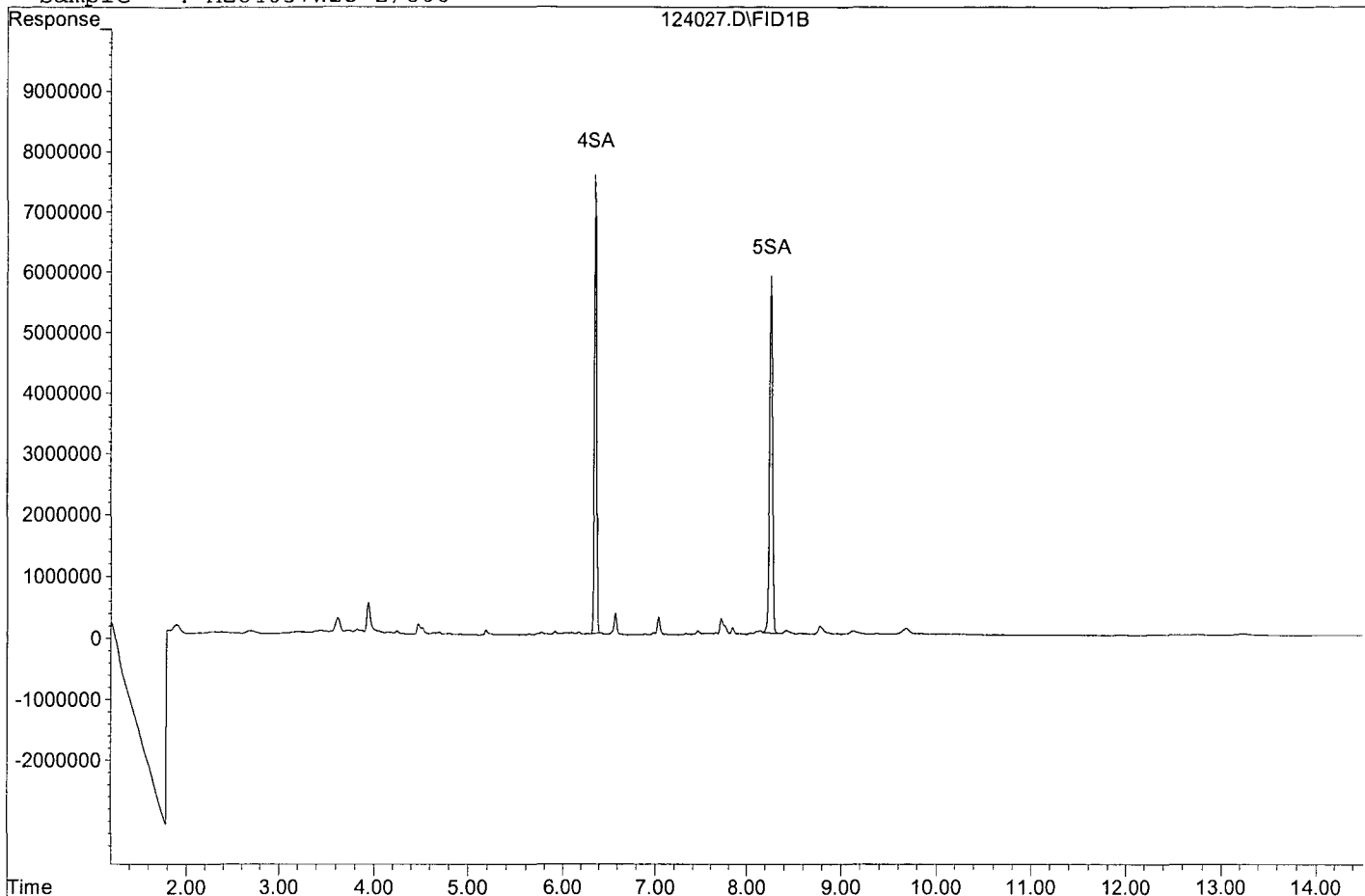
4) SA Ortho-Terphenyl(S)	6.36	131524197	81.410 ppb
Surrogate Spike 75.000		Recovery =	108.55%
5) SA Octacosane(S)	8.26	127632333	85.026 ppb
Surrogate Spike 75.000		Recovery =	113.37%

Target Compounds

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Data File: G:\APOLLO\DATA\190124\124027.D

Sample : AZ84057W25 2/800



**ADDED PAGE**

Data File : G:\APOLLO\DATA\190102\102010.D Vial: 10  
 Acq On : 1-2-19 15:50:03 Operator: DP  
 Sample : AZ84057W21 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:34 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	57356034	37.026 ppb
Surrogate Spike 75.000		Recovery =	49.37%
5) SA Octacosane(S)	8.27	68578126	53.081 ppb
Surrogate Spike 75.000		Recovery =	70.77%

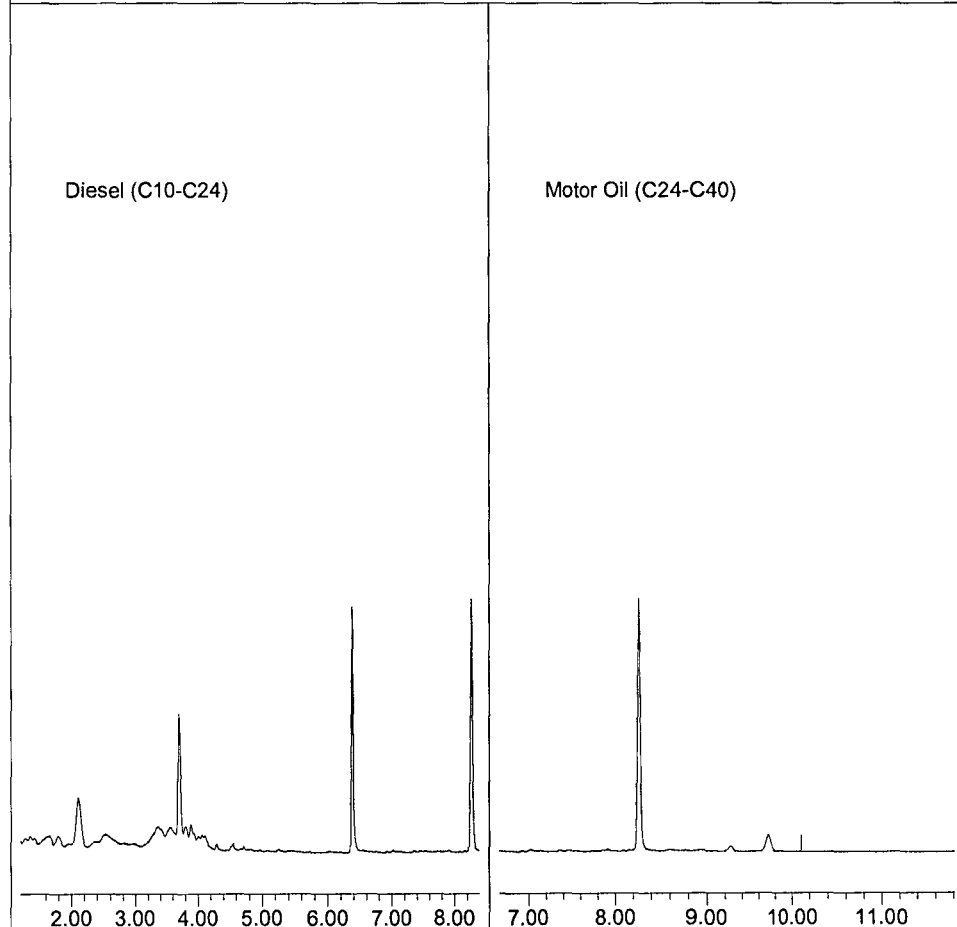
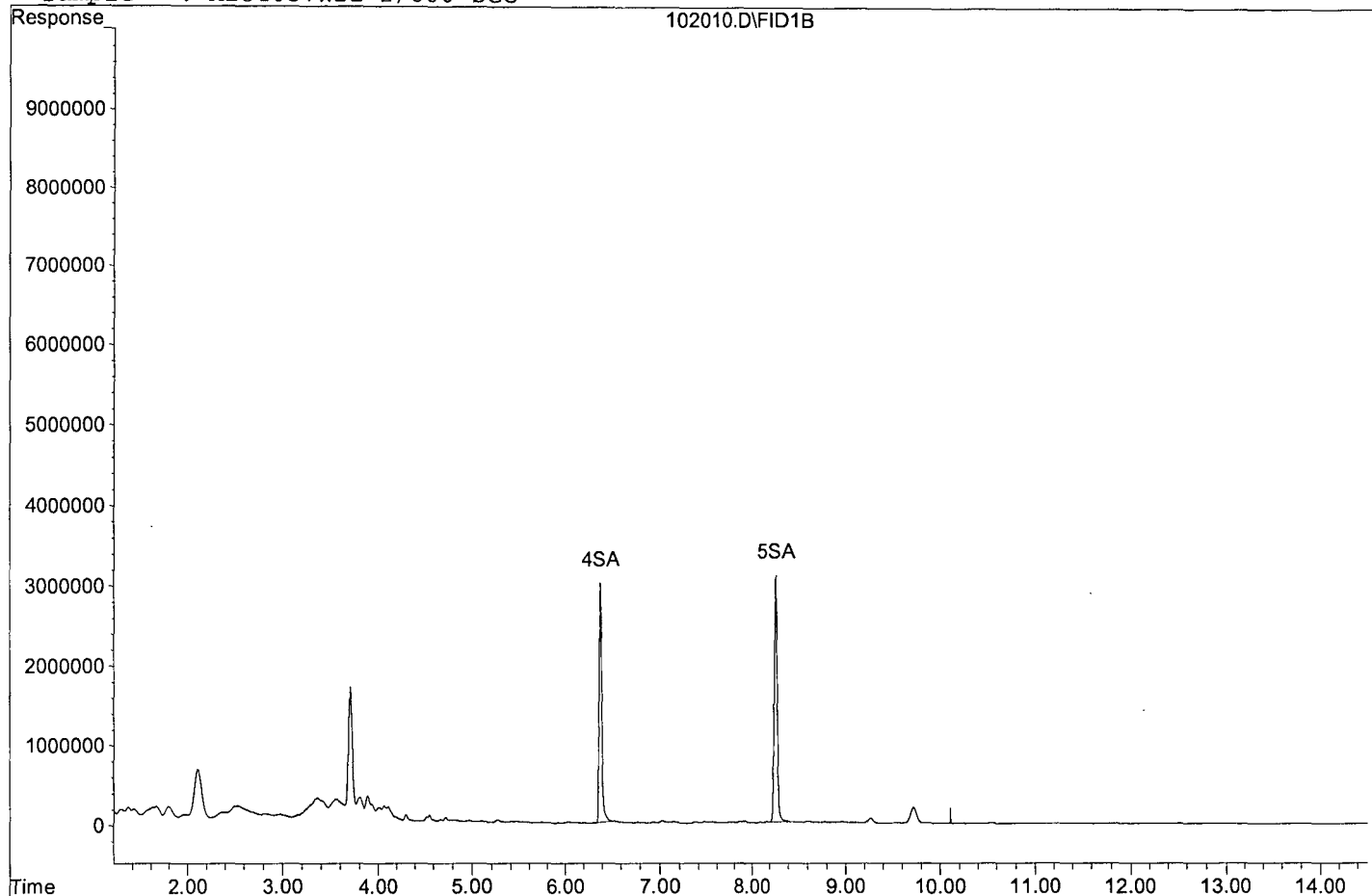
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\190102\102010.D

Sample : AZ84057W21 2/800 SGC



Data File : G:\APOLLO\DATA\181218\1218059.D Vial: 59  
 Acq On : 12-19-18 20:03:10 Operator: DP  
 Sample : AZ84059W09 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:12 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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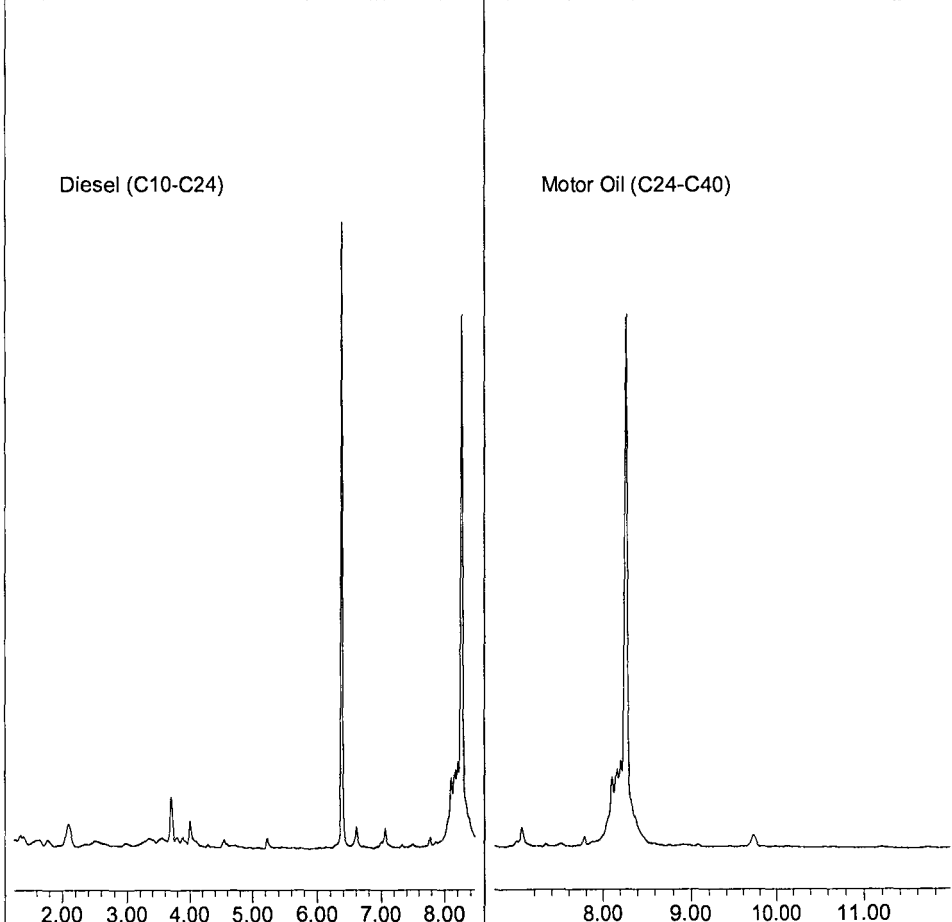
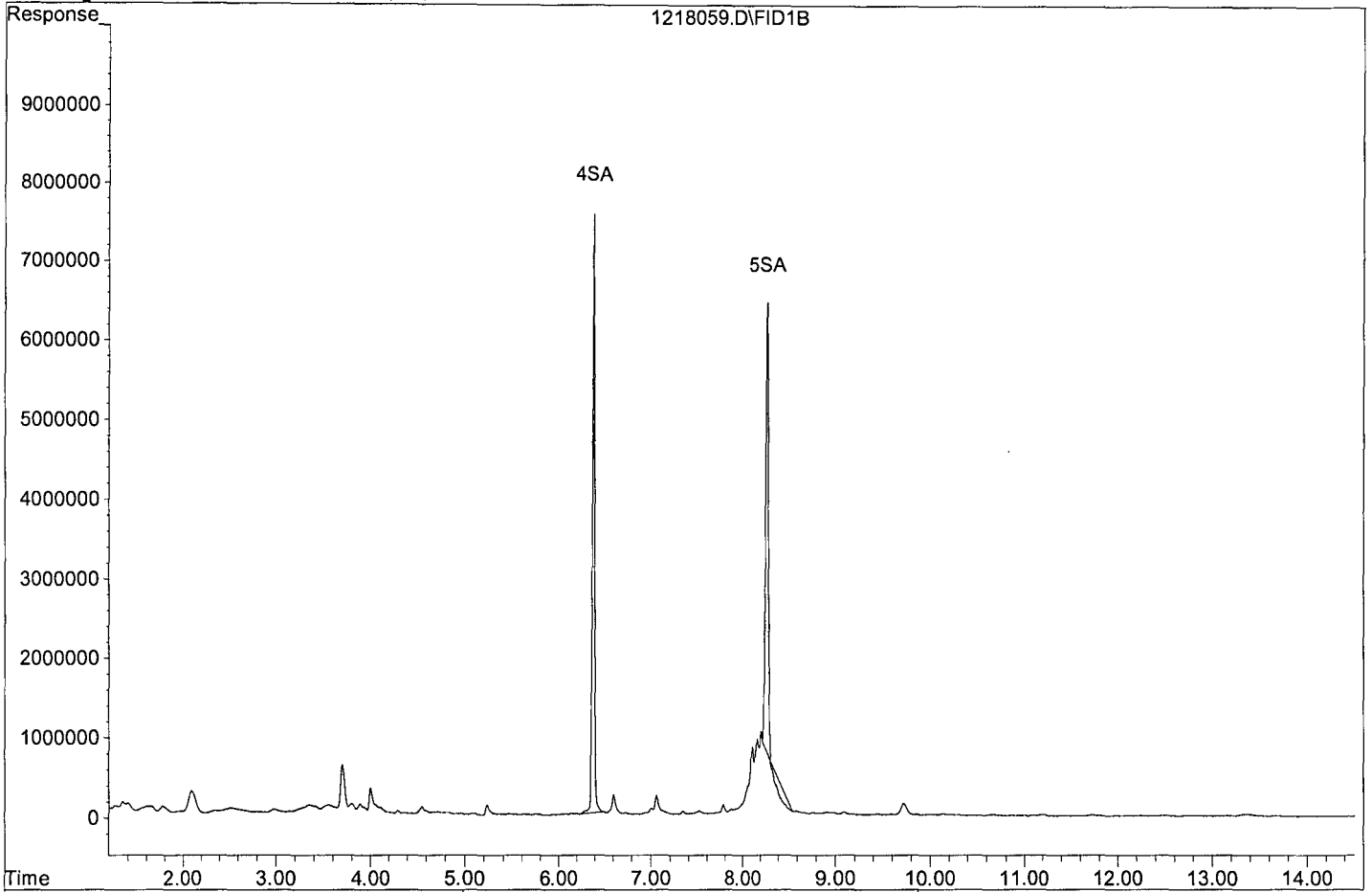
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	126368317	81.578 ppb
Surrogate Spike 75.000		Recovery =	108.77%
5) SA Octacosane(S)	8.27	99503754	77.018 ppb
Surrogate Spike 75.000		Recovery =	102.69%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218059.D

Sample : AZ84059W09 2/800



Data File : G:\APOLLO\DATA\190124\124028.D Vial: 28  
 Acq On : 1-25-19 17:44:24 Operator: DP  
 Sample : AZ84059W07 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:40 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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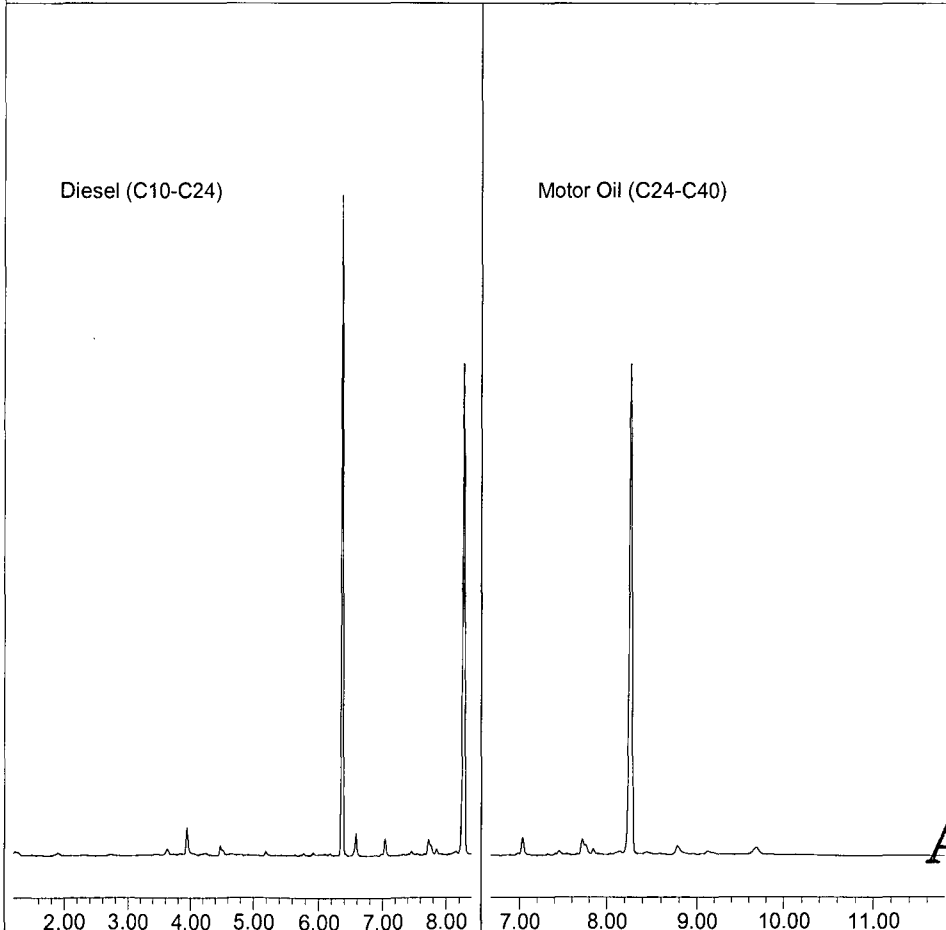
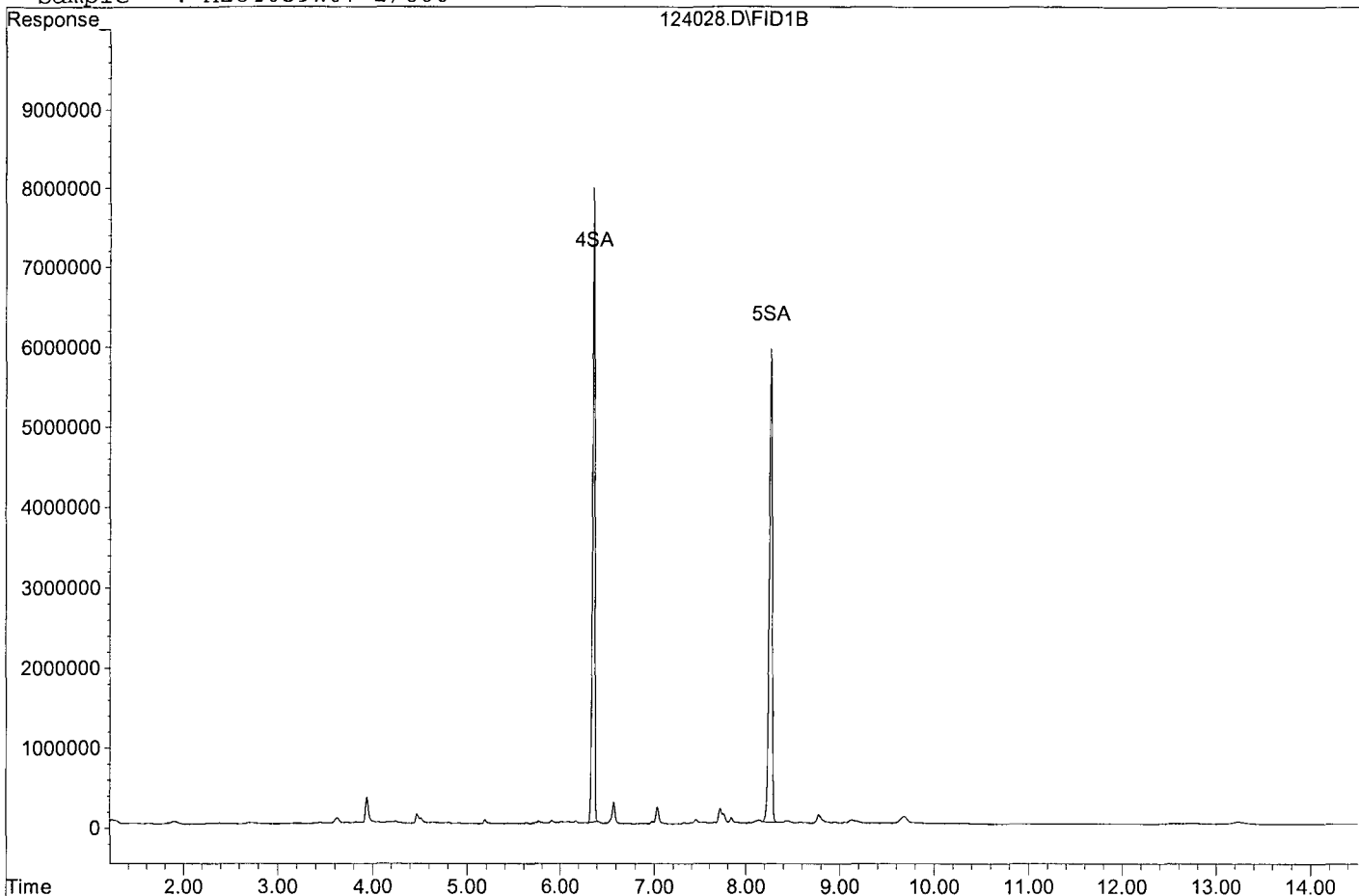
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	134111548	83.012 ppb
Surrogate Spike 75.000		Recovery =	110.68%
5) SA Octacosane(S)	8.26	127850567	85.172 ppb
Surrogate Spike 75.000		Recovery =	113.56%

Target Compounds

**ADDED PAGE**

Data File: G:\APOLLO\DATA\190124\124028.D

Sample : AZ84059W07 2/800



ADDED PAGE

Data File : G:\APOLLO\DATA\181218\1218060.D Vial: 60  
 Acq On : 12-19-18 20:23:03 Operator: DP  
 Sample : AZ84061W18 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:12 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

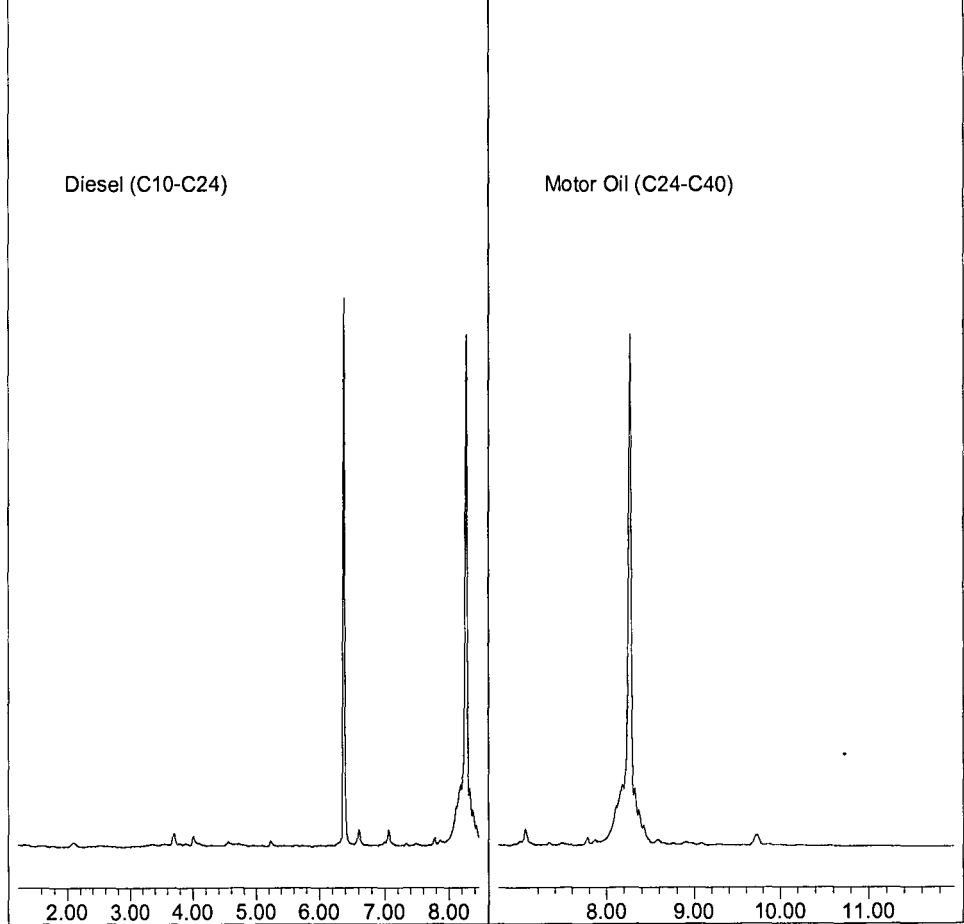
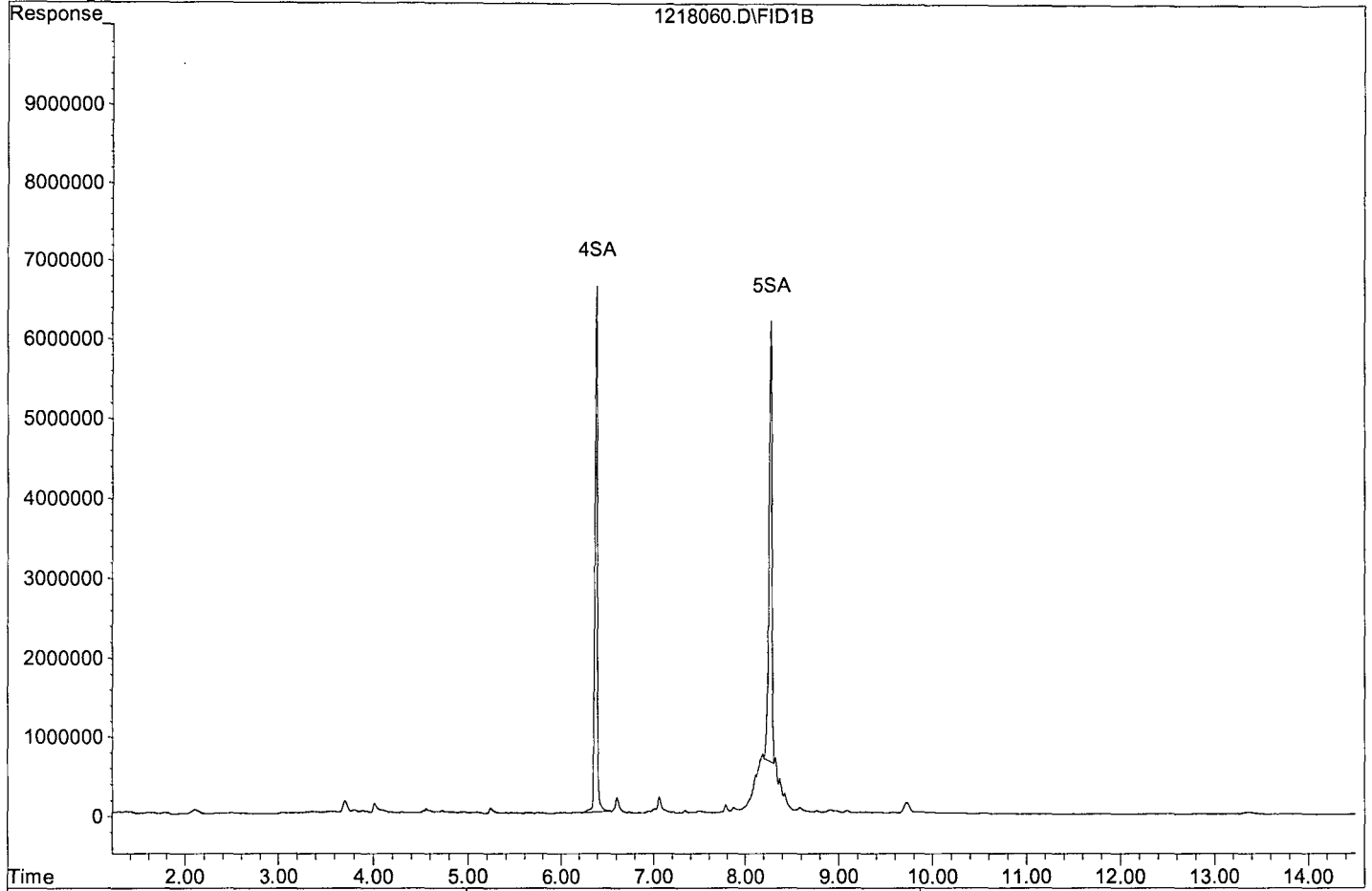
4) SA Ortho-Terphenyl(S)	6.38	120382666	77.714 ppb
Surrogate Spike 75.000		Recovery =	103.62%
5) SA Octacosane(S)	8.27	120037812	92.912 ppb
Surrogate Spike 75.000		Recovery =	123.88%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218060.D

Sample : AZ84061W18 2/800



Data File : G:\APOLLO\DATA\190124\124029.D Vial: 29  
 Acq On : 1-25-19 18:04:15 Operator: DP  
 Sample : AZ84061W27 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:40 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	128205662	79.356 ppb
Surrogate Spike 75.000		Recovery =	105.81%
5) SA Octacosane(S)	8.26	127407886	84.877 ppb
Surrogate Spike 75.000		Recovery =	113.17%

Target Compounds

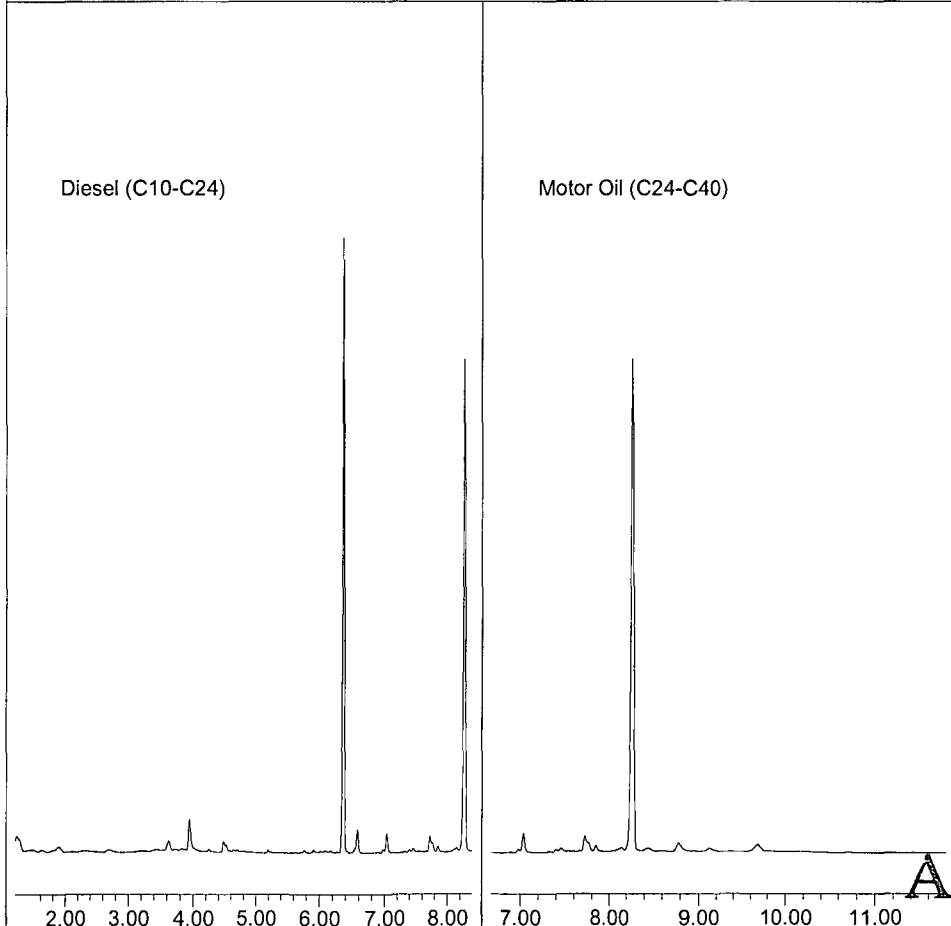
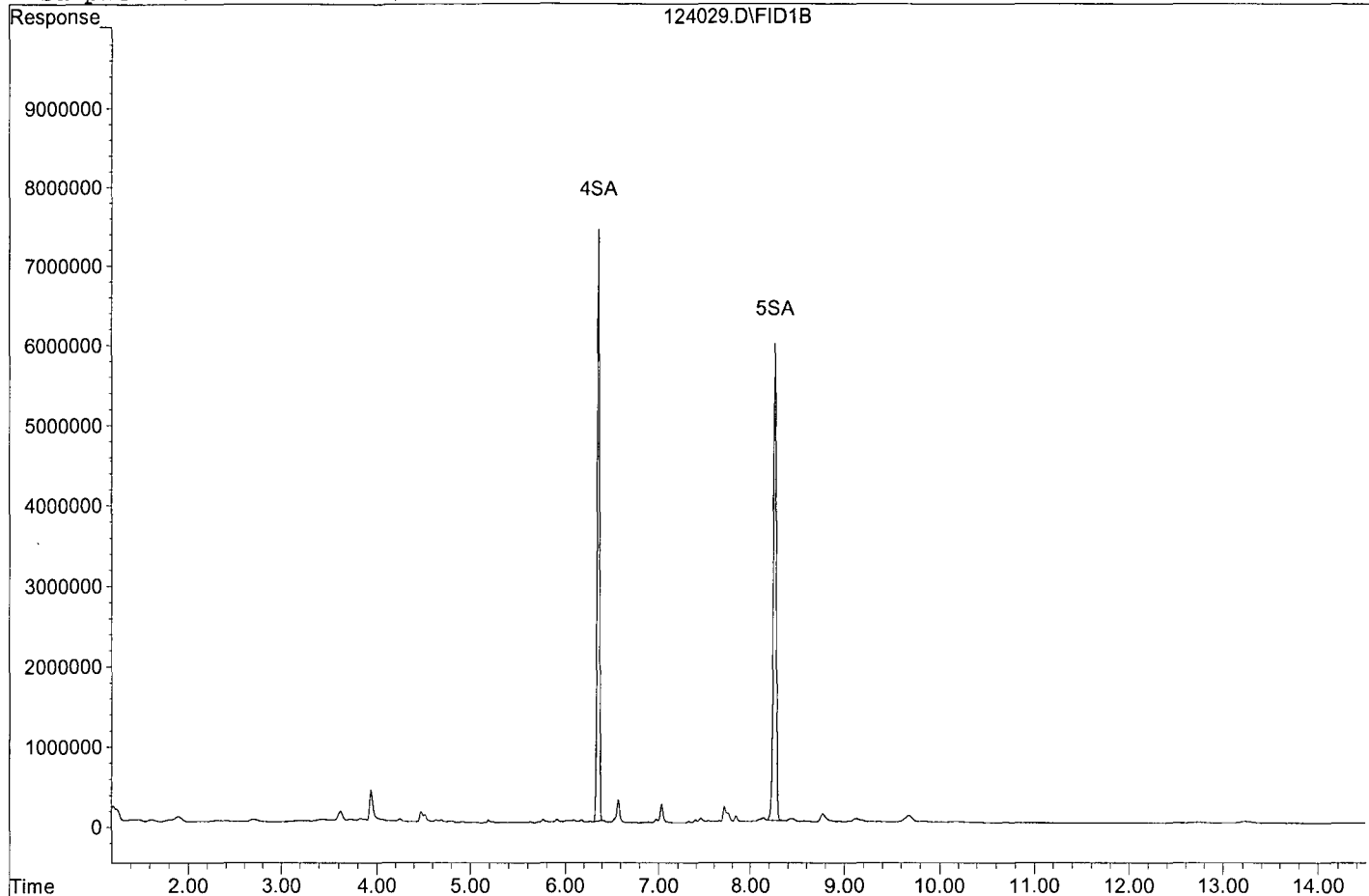
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Quantitation Report

Data File: G:\APOLLO\DATA\190124\124029.D

Sample : AZ84061W27 2/800



ADDED PAGE

Data File : G:\APOLLO\DATA\181218\1218085.D Vial: 85  
 Acq On : 12-20-18 17:28:14 Operator: DP  
 Sample : AZ84062W11 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 21 11:38 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

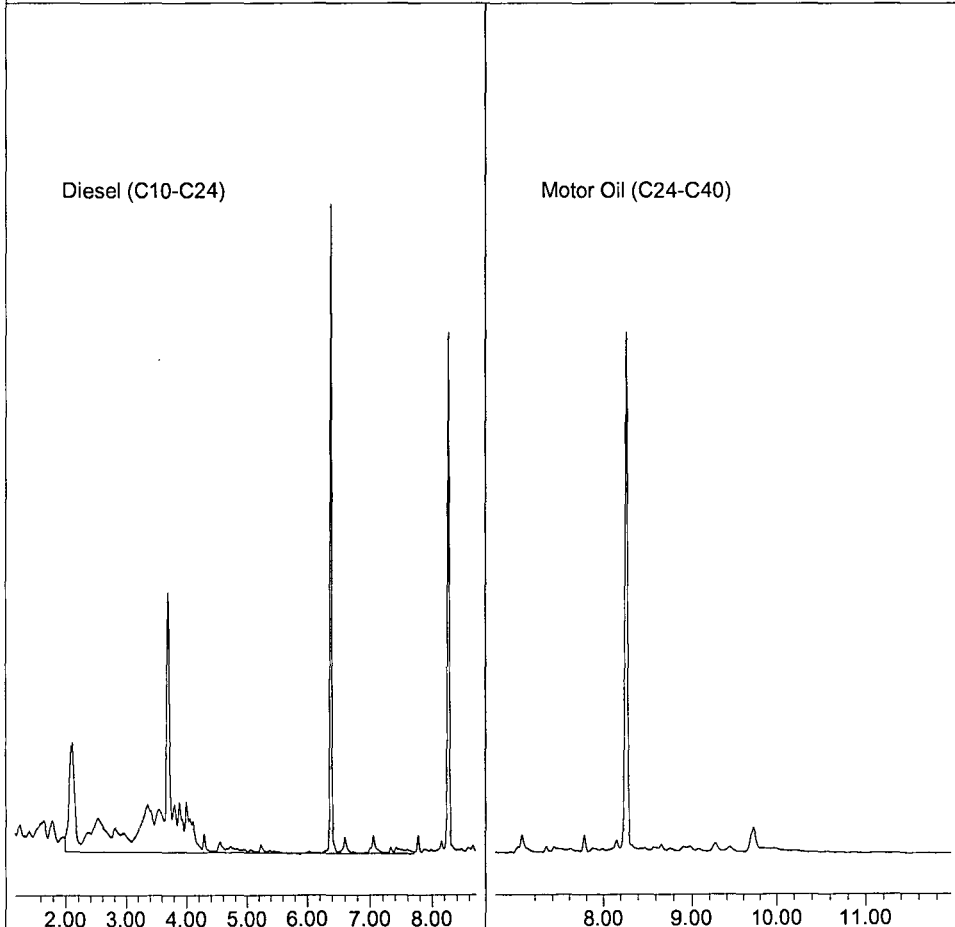
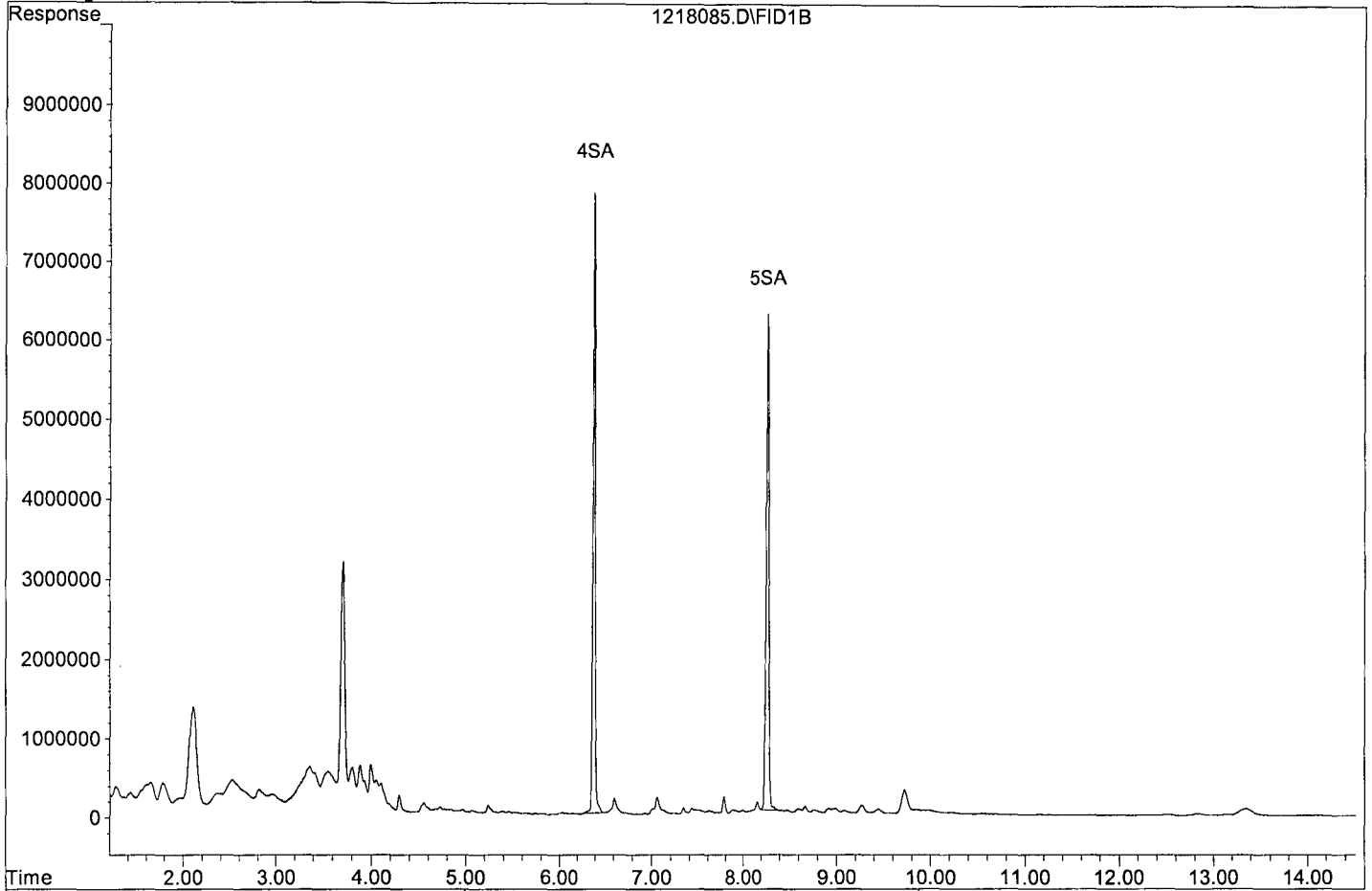
4) SA Ortho-Terphenyl(S)	6.38	137143368	88.533 ppb
Surrogate Spike 75.000		Recovery =	118.04%
5) SA Octacosane(S)	8.27	129717711	100.405 ppb
Surrogate Spike 75.000		Recovery =	133.87%

Target Compounds

1) HATM Diesel (C10-C24)	4.86	608218707	463.978 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218085.D  
Sample : AZ84062W11 2/800



Data File : G:\APOLLO\DATA\190124\124030.D Vial: 30  
 Acq On : 1-25-19 18:24:06 Operator: DP  
 Sample : AZ84062W08 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:40 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

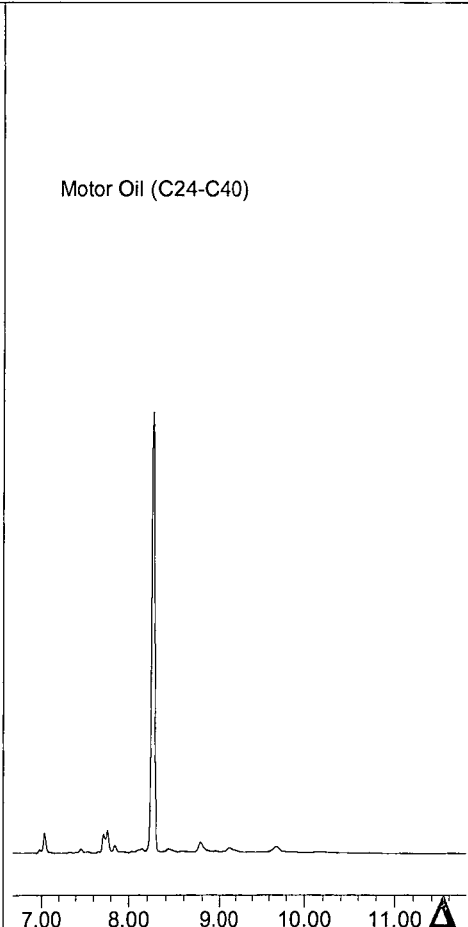
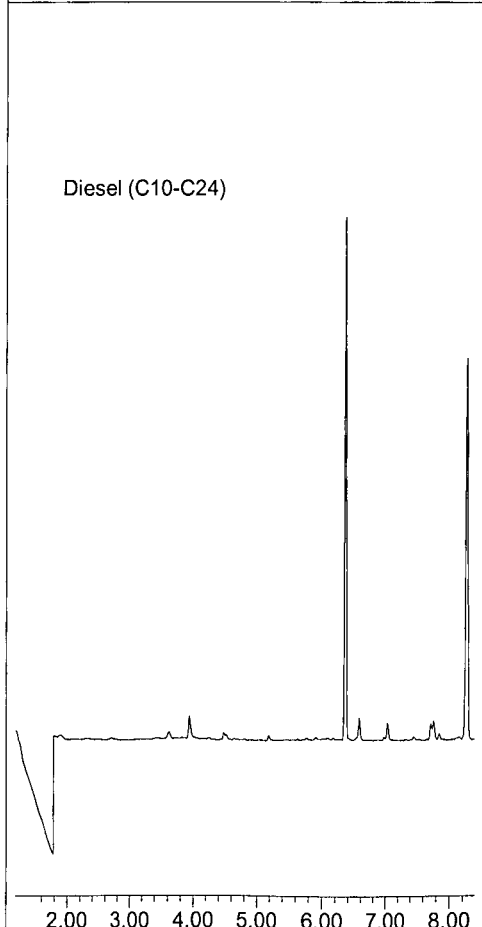
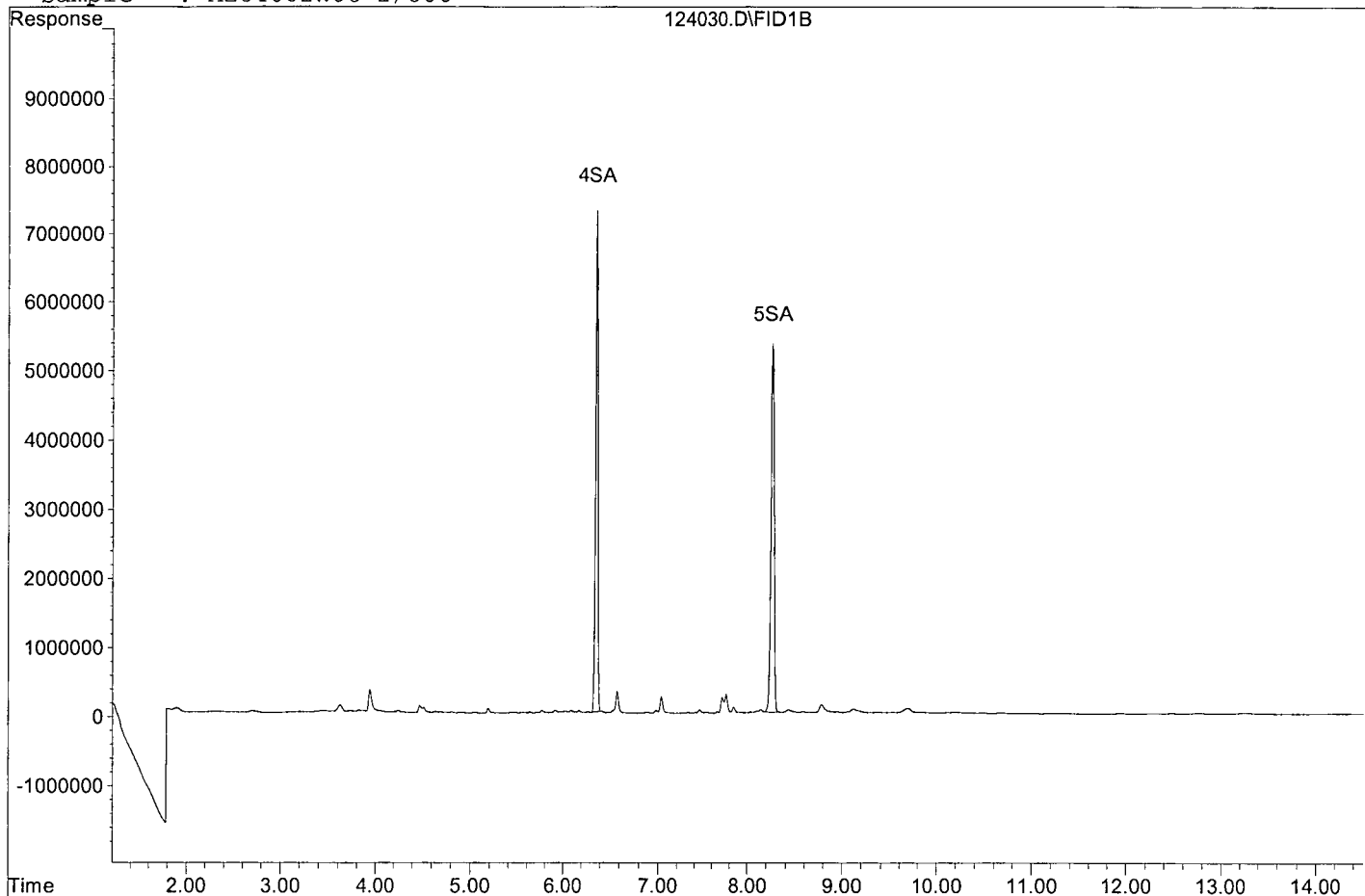
4) SA Ortho-Terphenyl(S)	6.36	124535425	77.084 ppb
Surrogate Spike 75.000		Recovery =	102.78%
5) SA Octacosane(S)	8.26	120764874	80.451 ppb
Surrogate Spike 75.000		Recovery =	107.27%

Target Compounds

**ADDED PAGE**

Data File: G:\APOLLO\DATA\190124\124030.D

Sample : AZ84062W08 2/800



Data File : G:\APOLLO\DATA\190102\102011.D Vial: 11  
 Acq On : 1-2-19 16:10:05 Operator: DP  
 Sample : AZ84062W11 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:26 2019 Quant Results File: DOC0905.RES

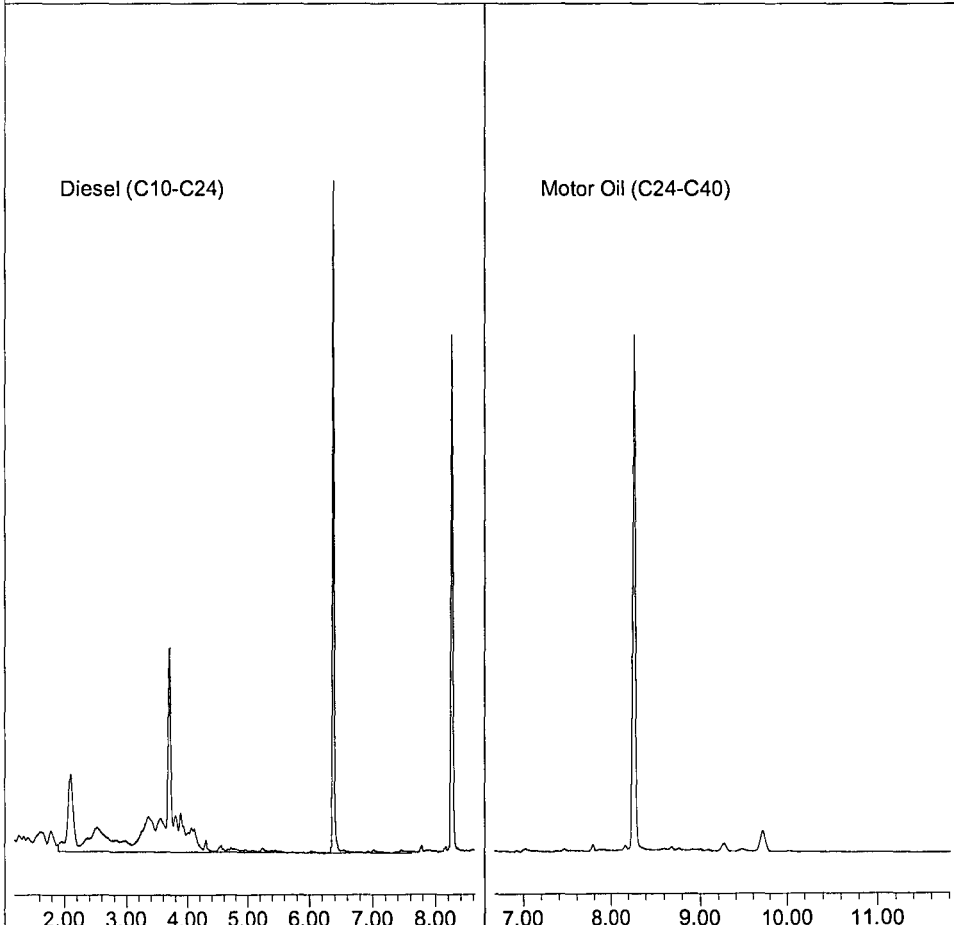
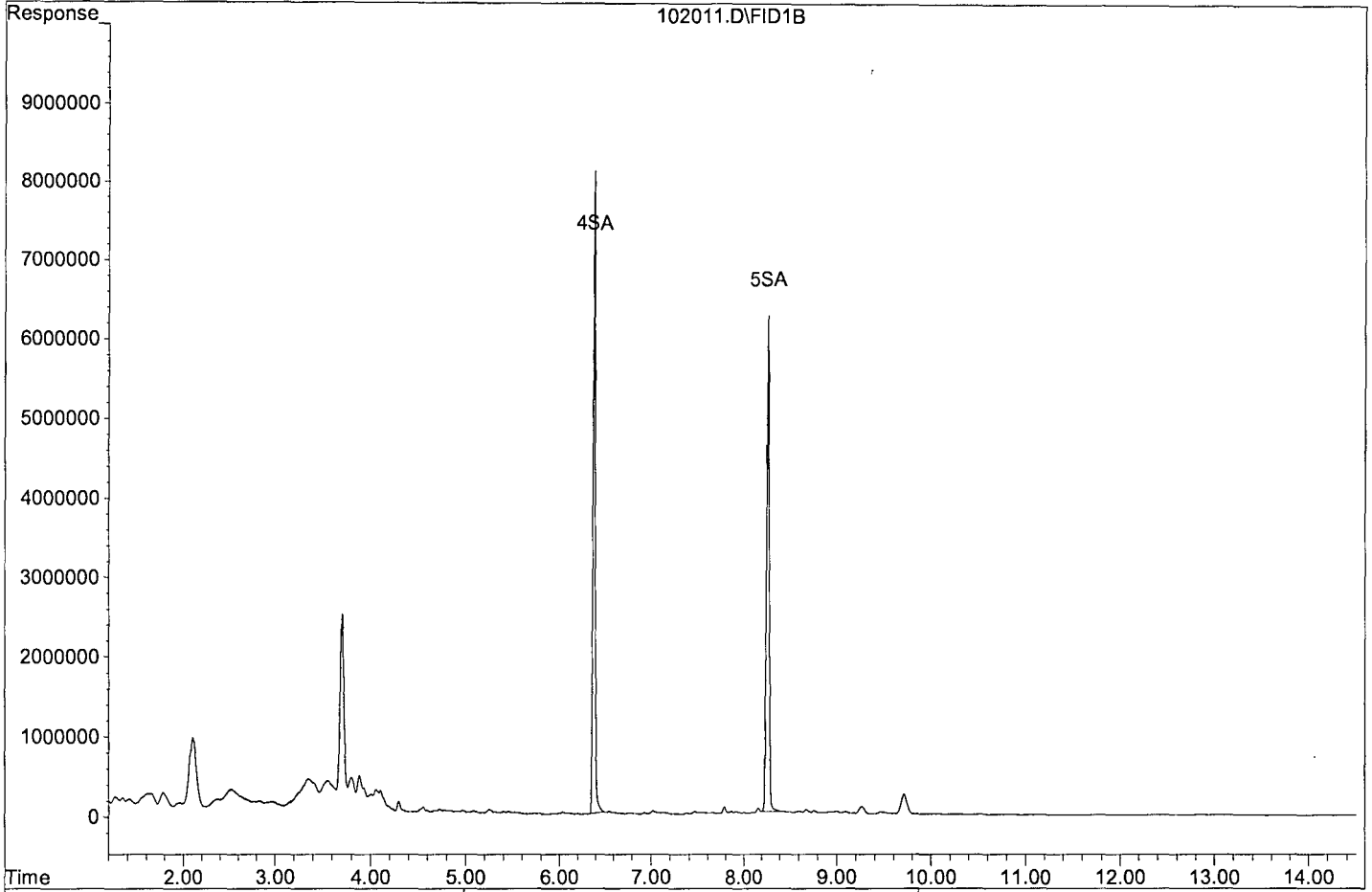
Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	138200095	89.216 ppb
Surrogate Spike 75.000		Recovery =	118.95%
5) SA Octacosane(S)	8.27	128360302	99.354 ppb
Surrogate Spike 75.000		Recovery =	132.47%
Target Compounds			
1) HATM Diesel (C10-C24)	4.77	426426251	325.298 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102011.D  
Sample : AZ84062W11 2/800 SGC



Data File : G:\APOLLO\DATA\181218\1218043.D Vial: 43  
 Acq On : 12-19-18 14:03:49 Operator: DP  
 Sample : 181214A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:14 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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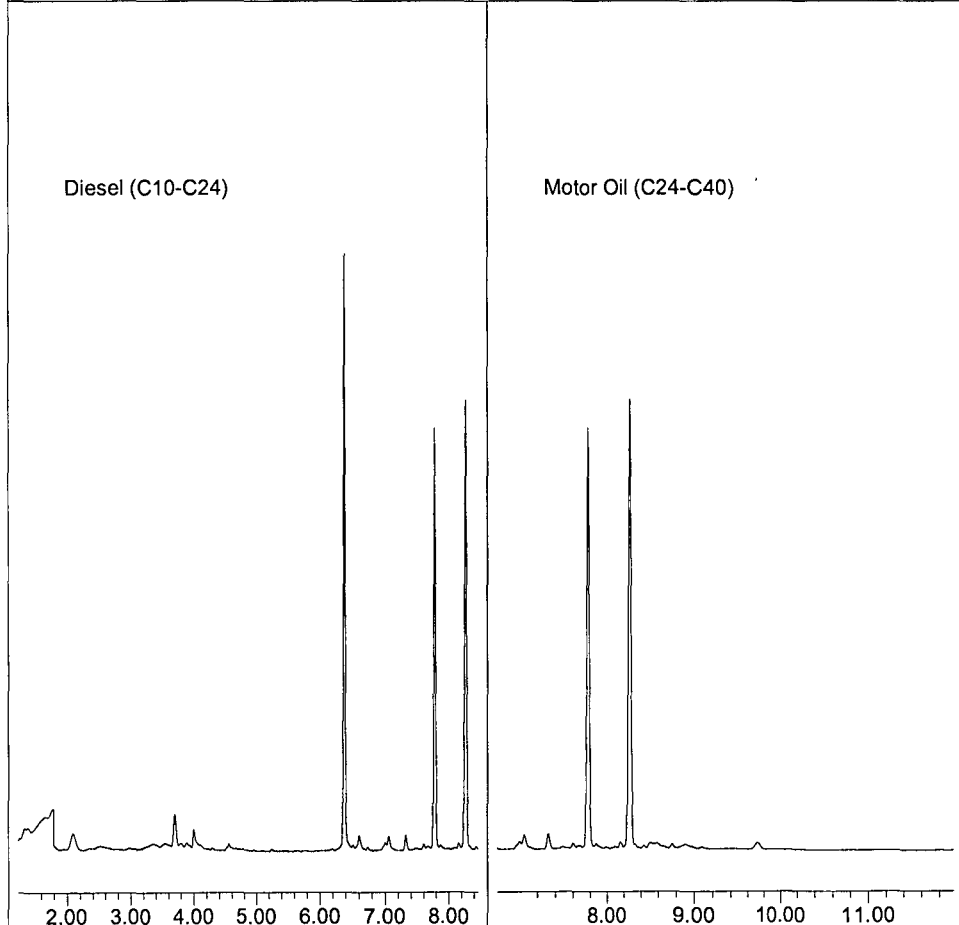
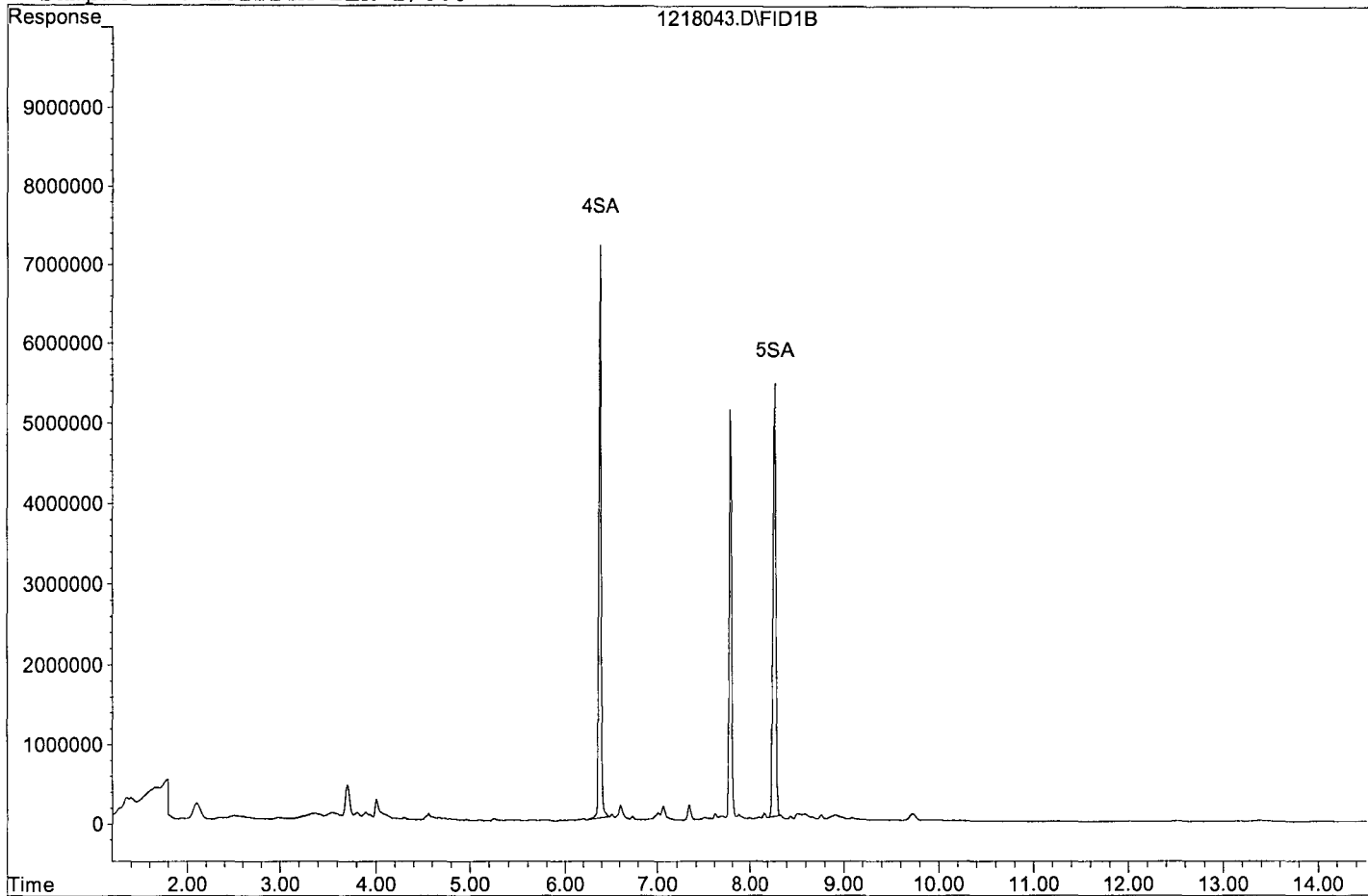
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	122023830	78.773 ppb
Surrogate Spike 75.000		Recovery =	105.03%
5) SA Octacosane(S)	8.27	113830651	88.108 ppb
Surrogate Spike 75.000		Recovery =	117.48%

Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218043.D  
Sample : 181214A BLK 2/800



Data File : G:\APOLLO\DATA\190102\102005.D Vial: 5  
 Acq On : 1-2-19 14:10:56 Operator: DP  
 Sample : 181214A BLK 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:06 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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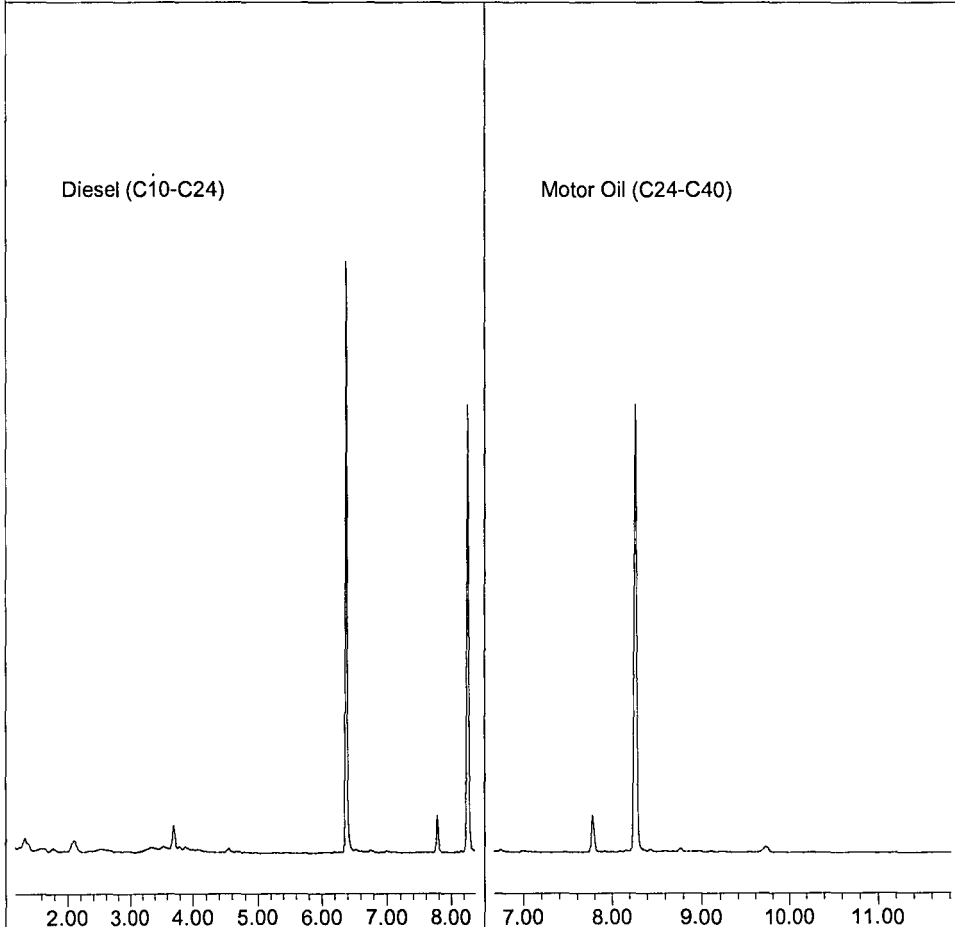
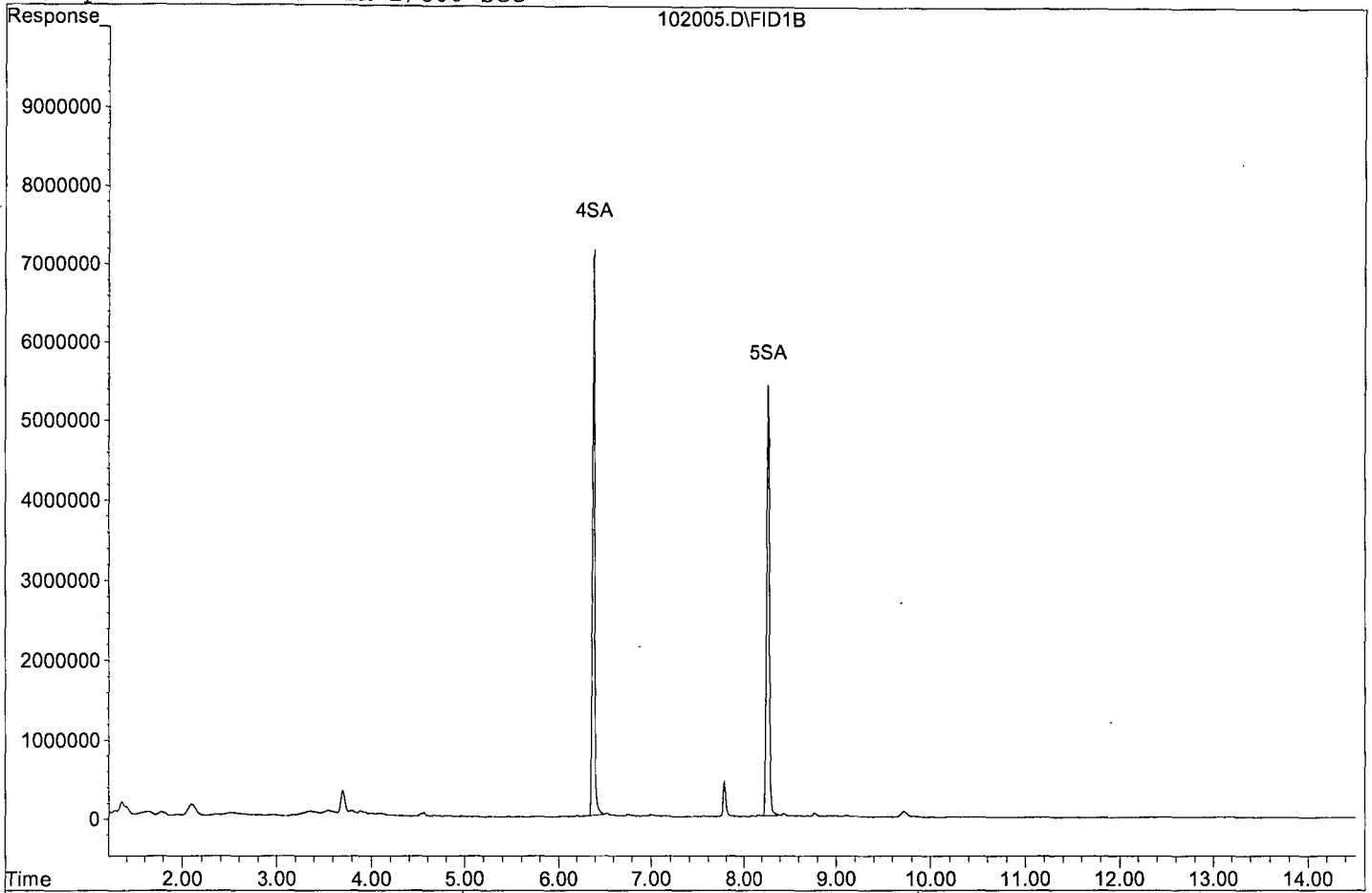
System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.38	121349073	78.337 ppb
Surrogate Spike 75.000		Recovery =	104.45%
5) SA Octacosane(S)	8.27	112849355	87.348 ppb
Surrogate Spike 75.000		Recovery =	116.46%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102005.D  
Sample : 181214A BLK 2/800 SGC



Data File : G:\APOLLO\DATA\190124\124024.D Vial: 24  
 Acq On : 1-25-19 16:25:09 Operator: DP  
 Sample : 190124A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:41 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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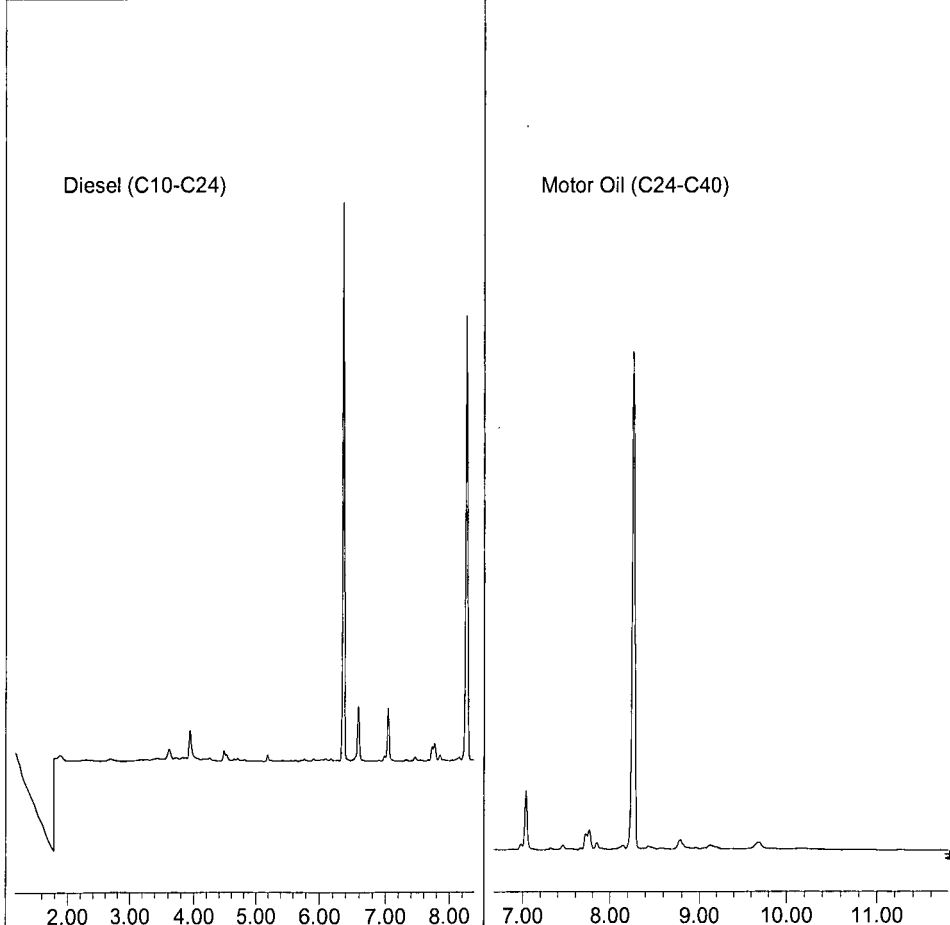
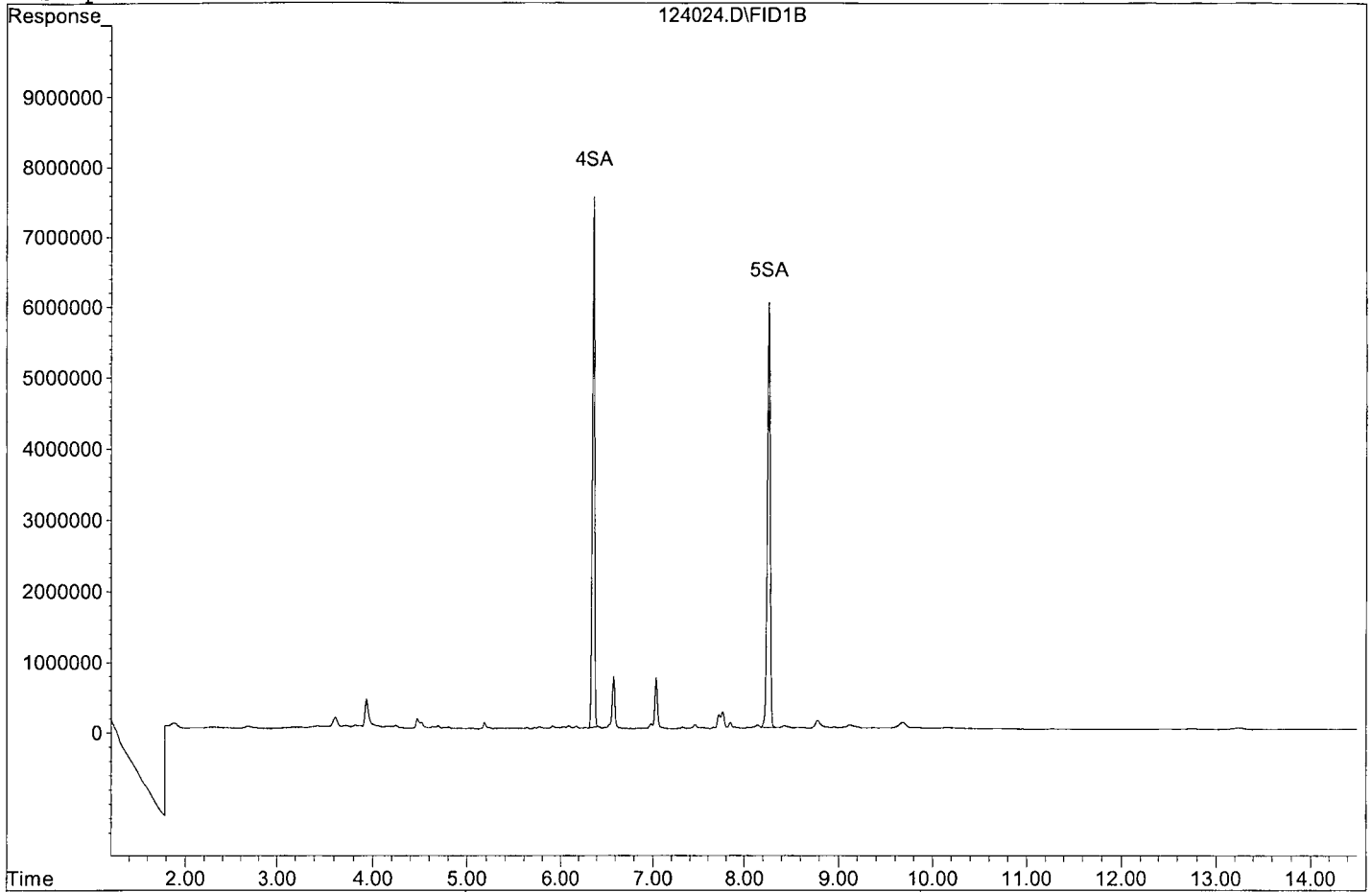
System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.36	125037138	77.395 ppb
Surrogate Spike 75.000		Recovery =	103.19%
5) SA Octacosane(S)	8.26	125782181	83.794 ppb
Surrogate Spike 75.000		Recovery =	111.73%

Target Compounds

**ADDED PAGE**

Data File: G:\APOLLO\DATA\190124\124024.D  
Sample : 190124A BLK 2/800



**ADDED PAGE**

Data File : G:\APOLLO\DATA\181218\1218048.D Vial: 48  
 Acq On : 12-19-18 16:23:39 Operator: DP  
 Sample : 181214A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:14 2018 Quant Results File: DOC0905.RES

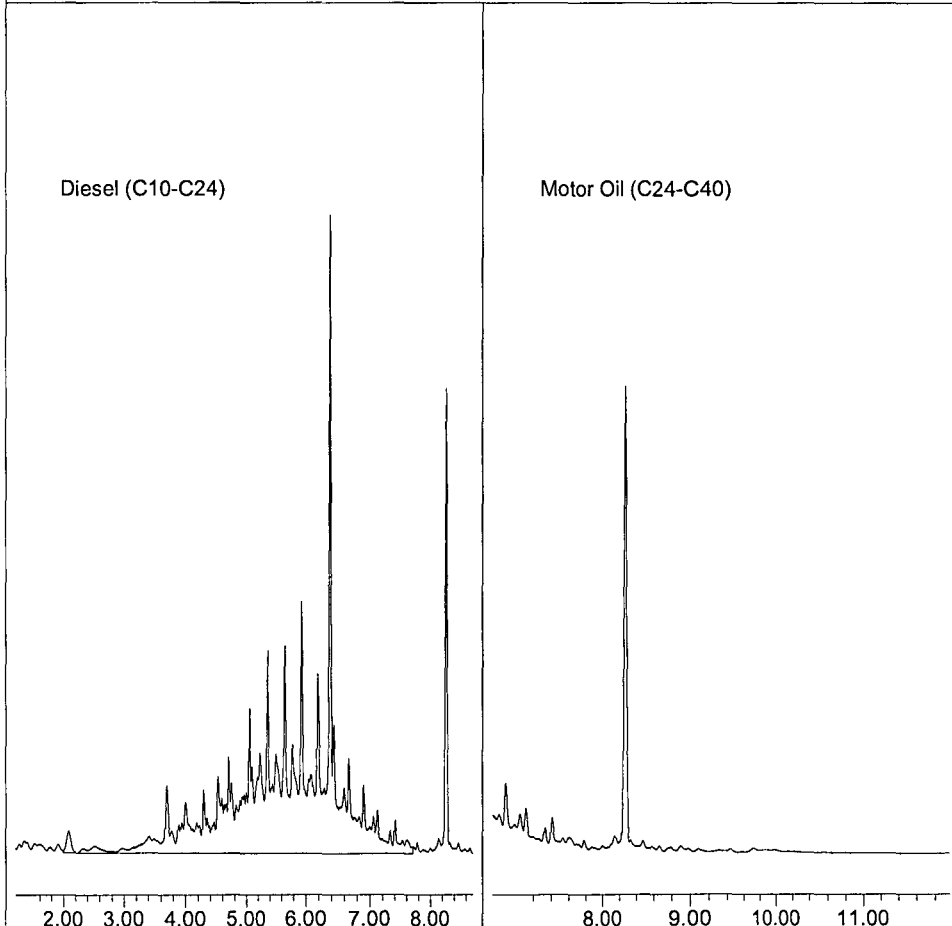
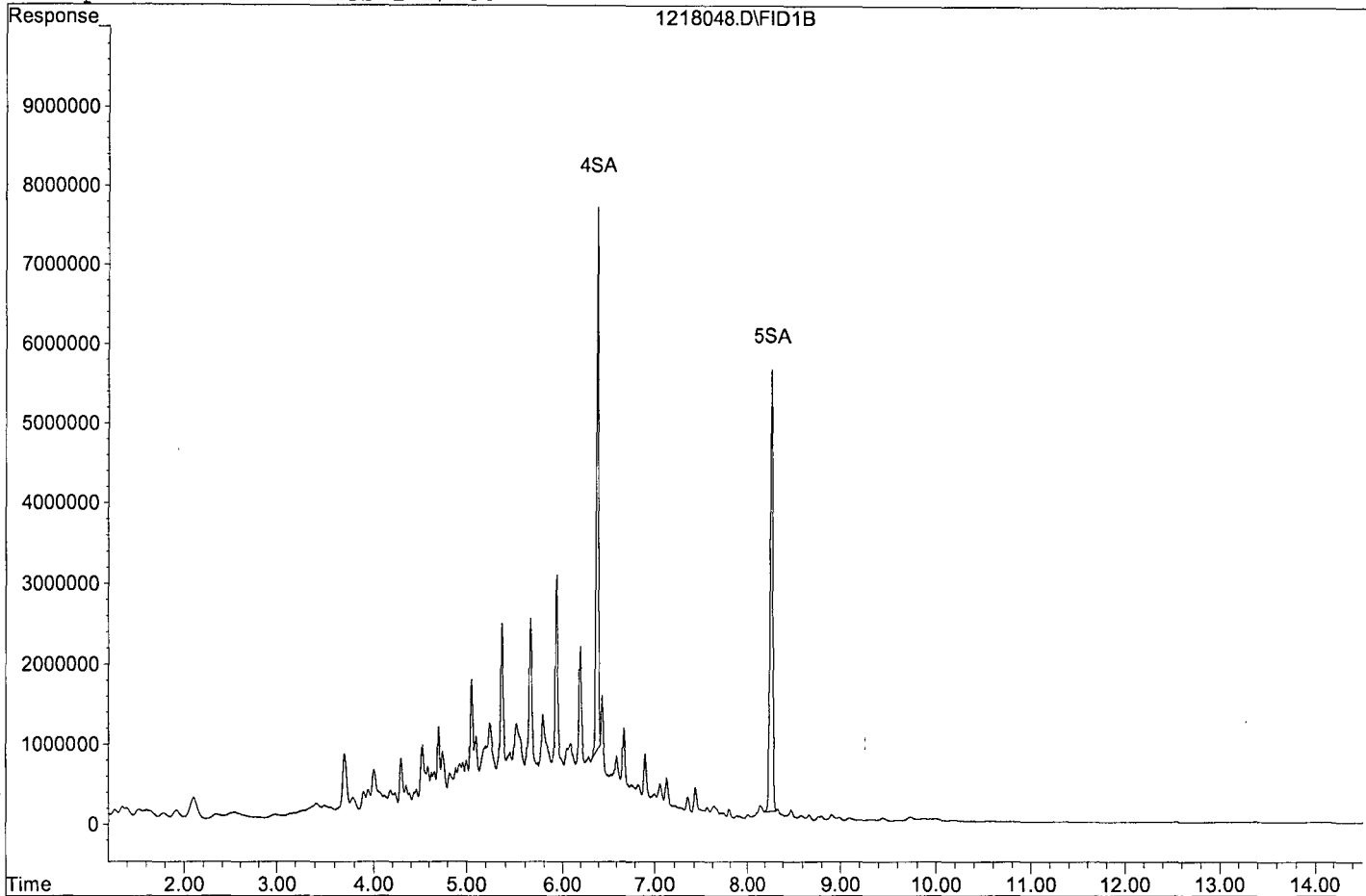
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	108317860	69.925 ppb
Surrogate Spike 75.000		Recovery =	93.23%
5) SA Octacosane(S)	8.27	112527231	87.099 ppb
Surrogate Spike 75.000		Recovery =	116.13%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	1545182414	1178.738 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218048.D  
Sample : 181214A LCS-1 2/800



Data File : G:\APOLLO\DATA\190102\102006.D Vial: 6  
 Acq On : 1-2-19 14:30:59 Operator: DP  
 Sample : 181214A LCS-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:06 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

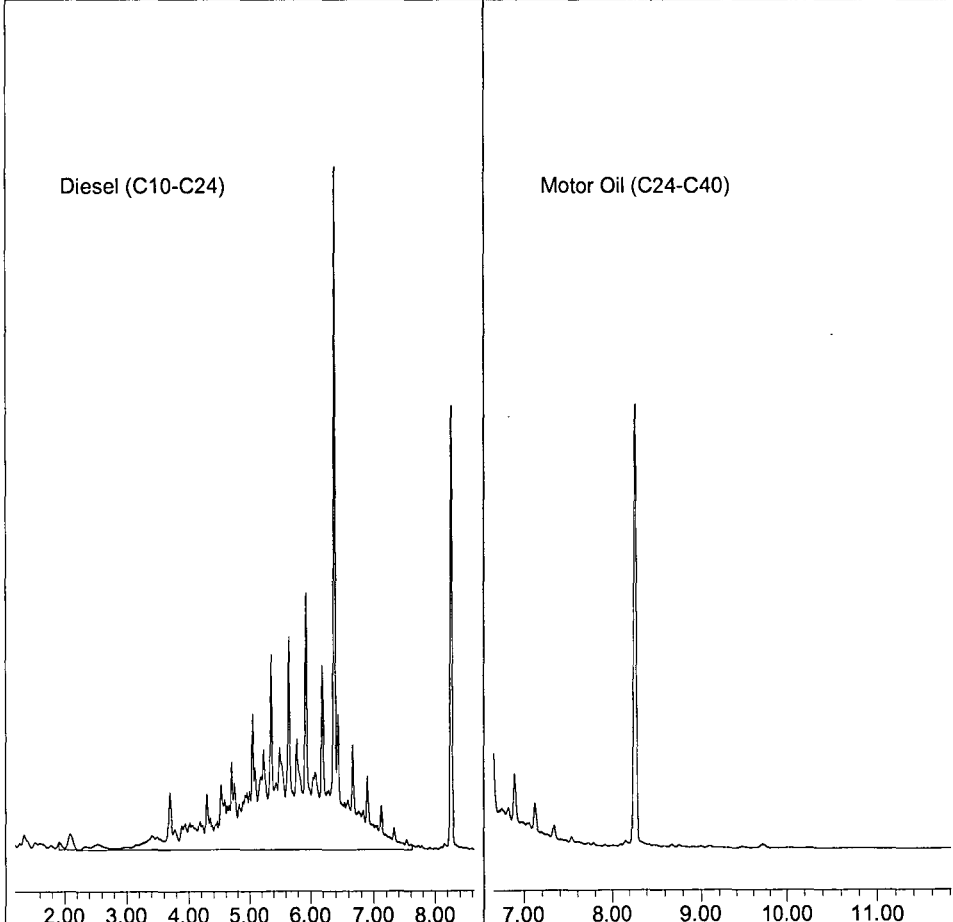
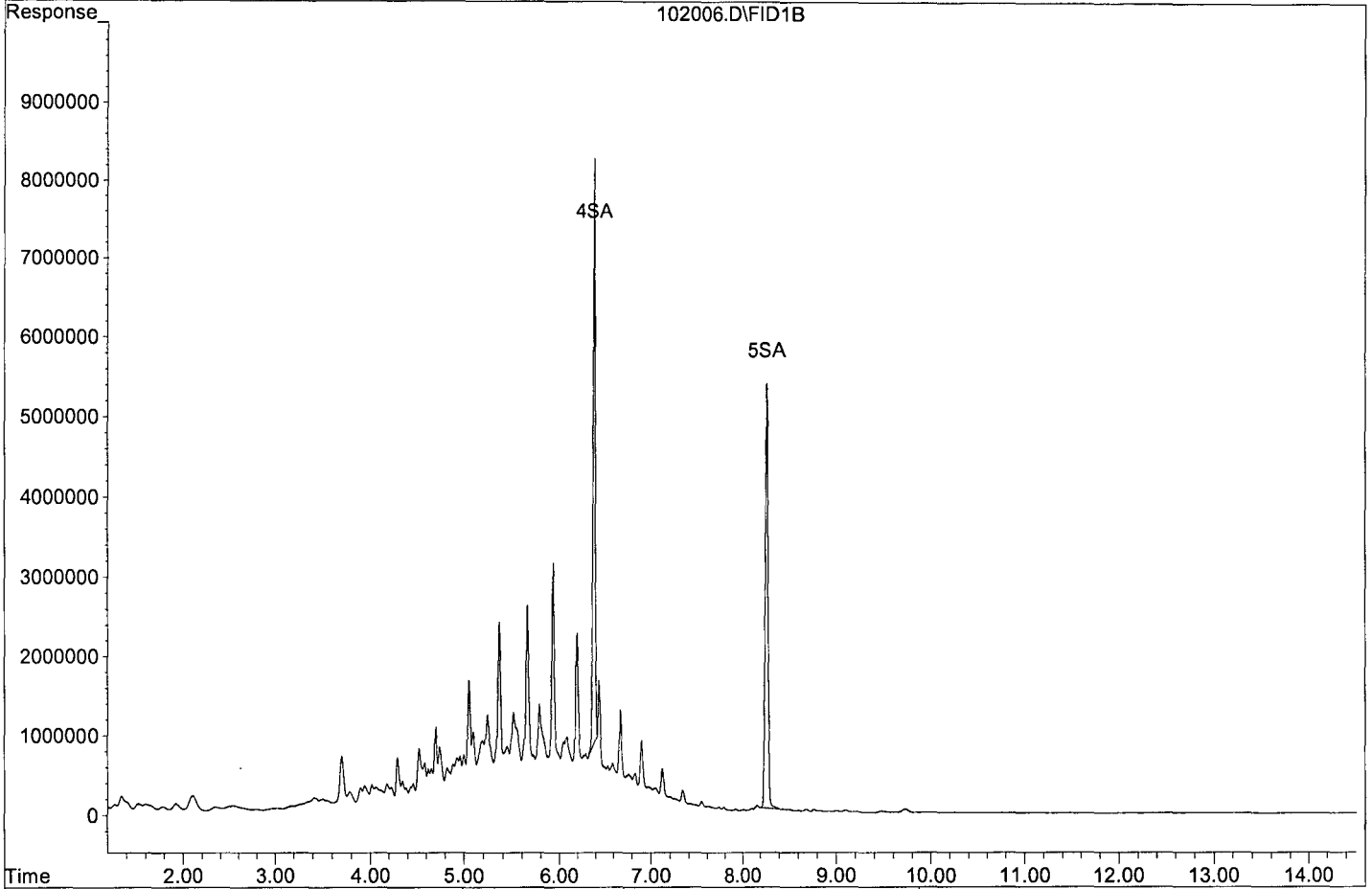
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	117428152	75.806 ppb
Surrogate Spike 75.000		Recovery =	101.07%
5) SA Octacosane(S)	8.27	115391602	89.316 ppb
Surrogate Spike 75.000		Recovery =	119.09%
Target Compounds			
1) HATM Diesel (C10-C24)	4.77	1448691555	1105.131 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190102\102006.D  
Sample : 181214A LCS-1 2/800 SGC



Data File : G:\APOLLO\DATA\181218\1218050.D Vial: 50  
 Acq On : 12-19-18 17:03:50 Operator: DP  
 Sample : 181214A LCS-2 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:13 2018 Quant Results File: DOC0905.RES

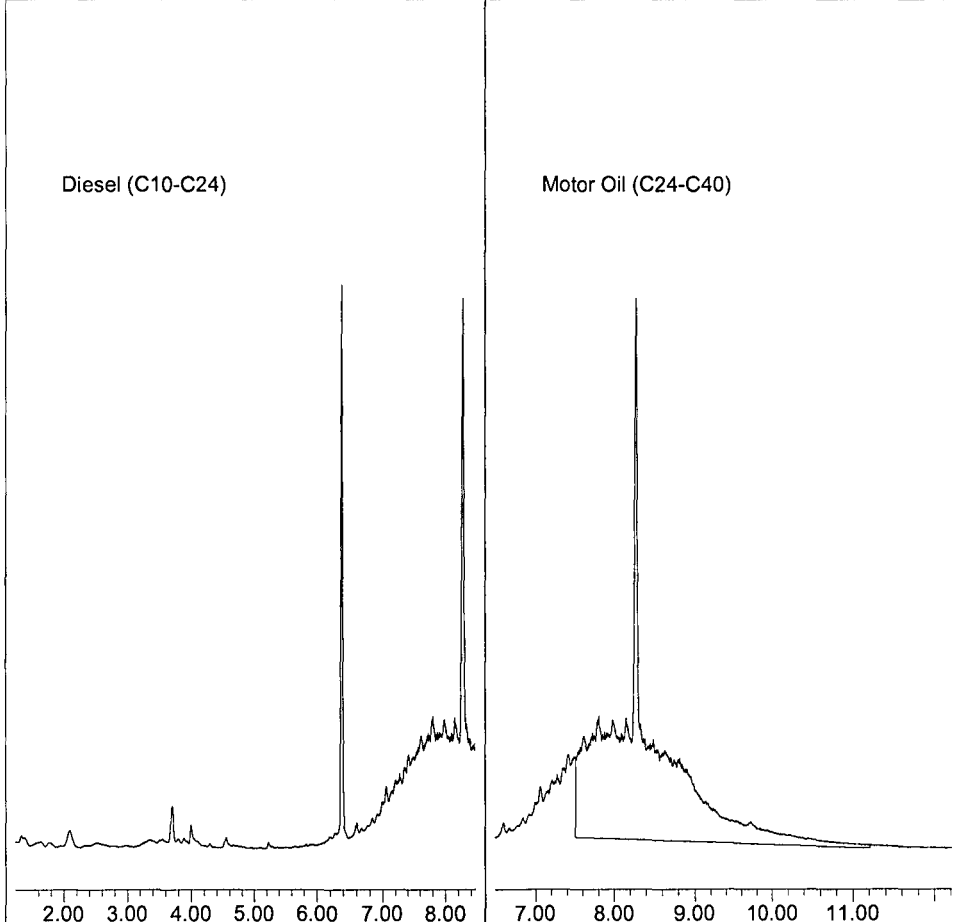
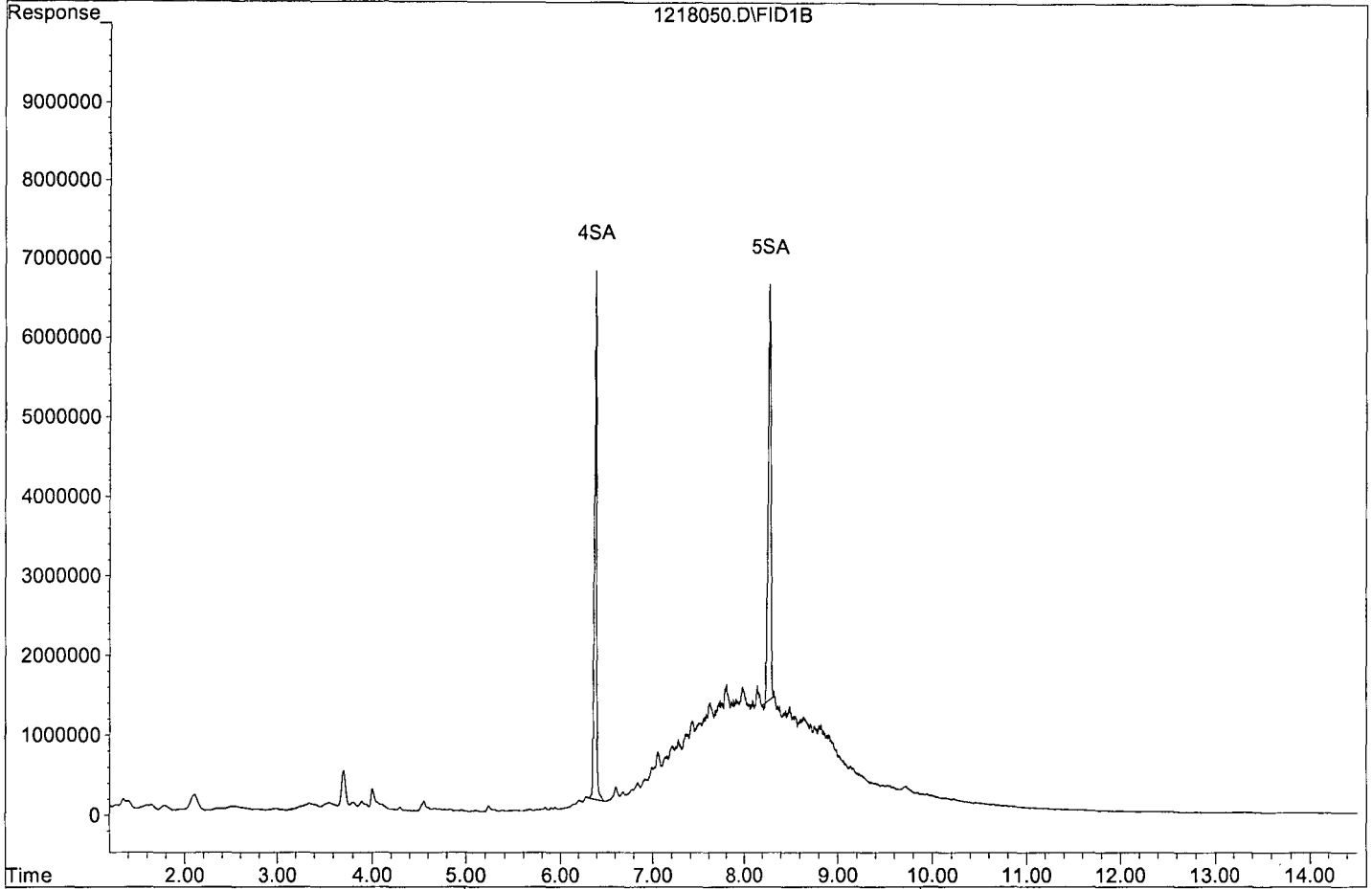
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	111443369	71.943 ppb
Surrogate Spike 75.000		Recovery =	95.92%
5) SA Octacosane(S)	8.27	106795295	82.662 ppb
Surrogate Spike 75.000		Recovery =	110.22%
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	1241815000	1118.442 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218050.D  
Sample : 181214A LCS-2 2/800



Data File : G:\APOLLO\DATA\190102\102008.D Vial: 8  
 Acq On : 1-2-19 15:10:29 Operator: DP  
 Sample : 181214A LCS-2 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:07 2019 Quant Results File: DOC0905.RES

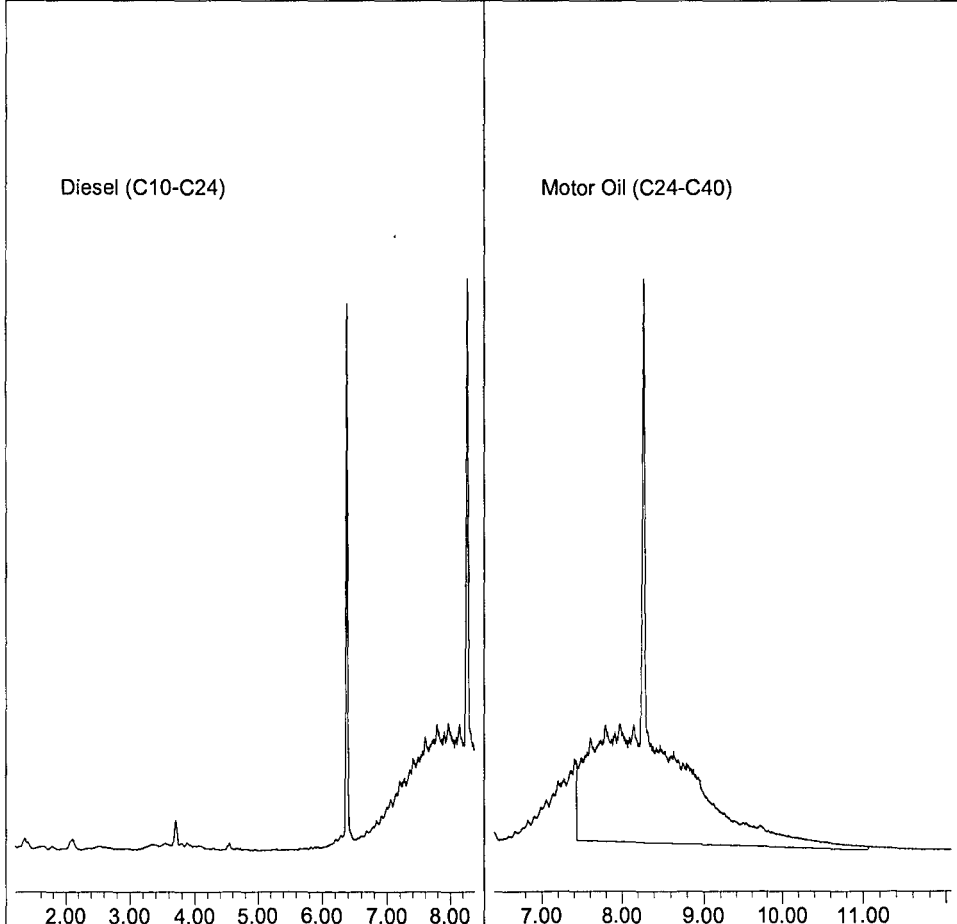
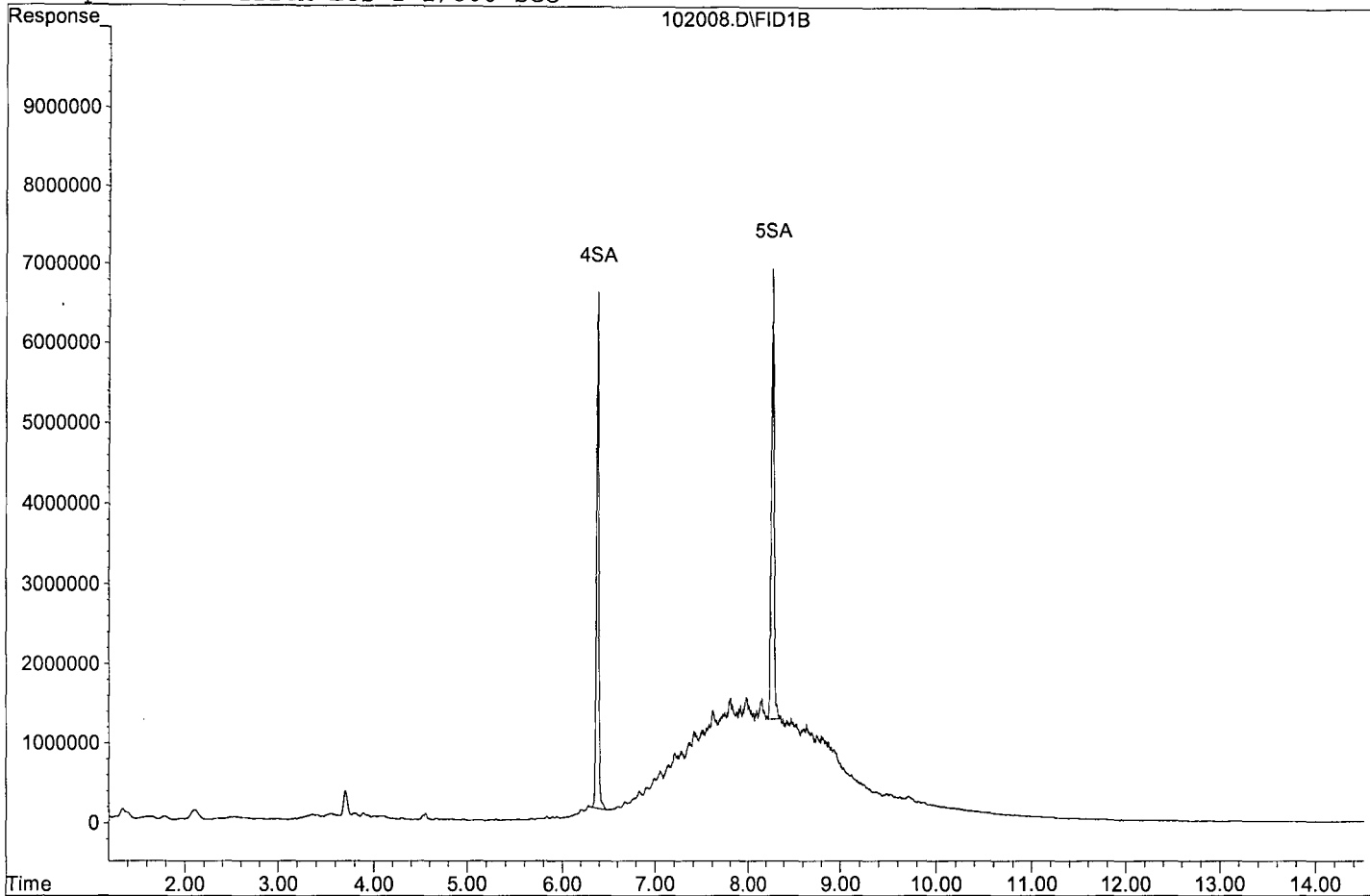
Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	110800458	71.528 ppb
Surrogate Spike 75.000		Recovery =	95.37%
5) SA Octacosane(S)	8.27	114032532	88.264 ppb
Surrogate Spike 75.000		Recovery =	117.69%
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.24	1268358829	1142.349 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102008.D  
Sample : 181214A LCS-2 2/800 SGC



Data File : G:\APOLLO\DATA\181218\1218049.D Vial: 49  
 Acq On : 12-19-18 16:43:47 Operator: DP  
 Sample : 181214A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:13 2018 Quant Results File: DOC0905.RES

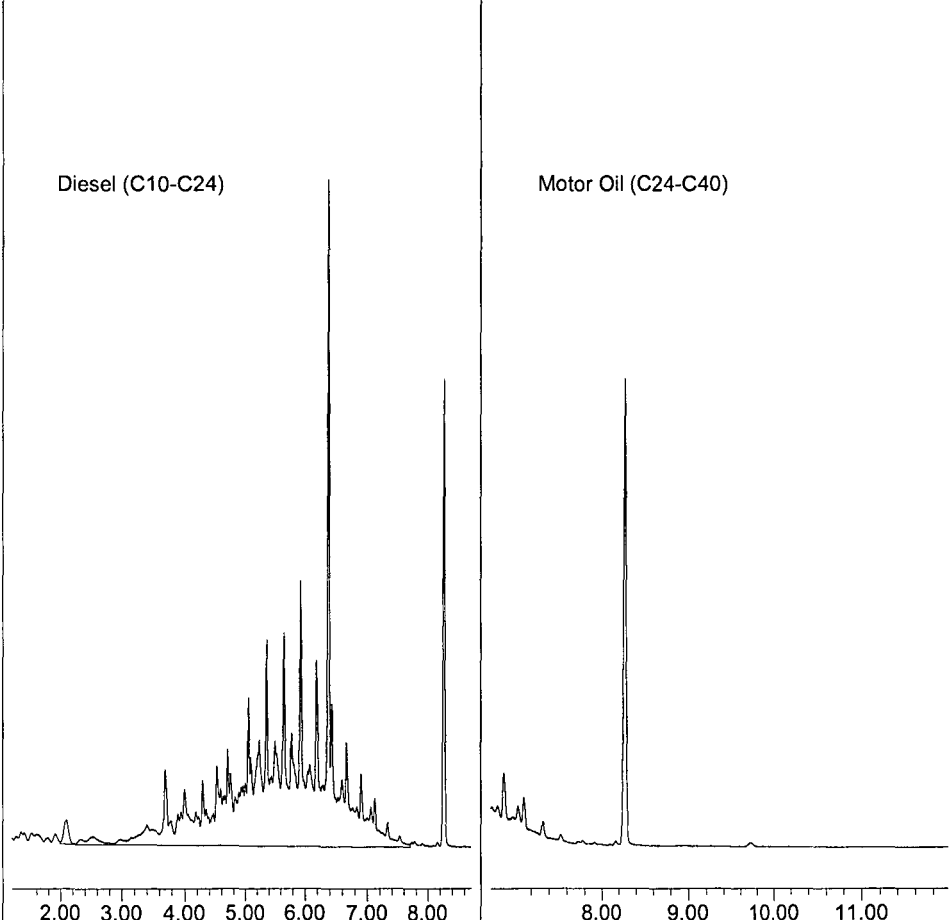
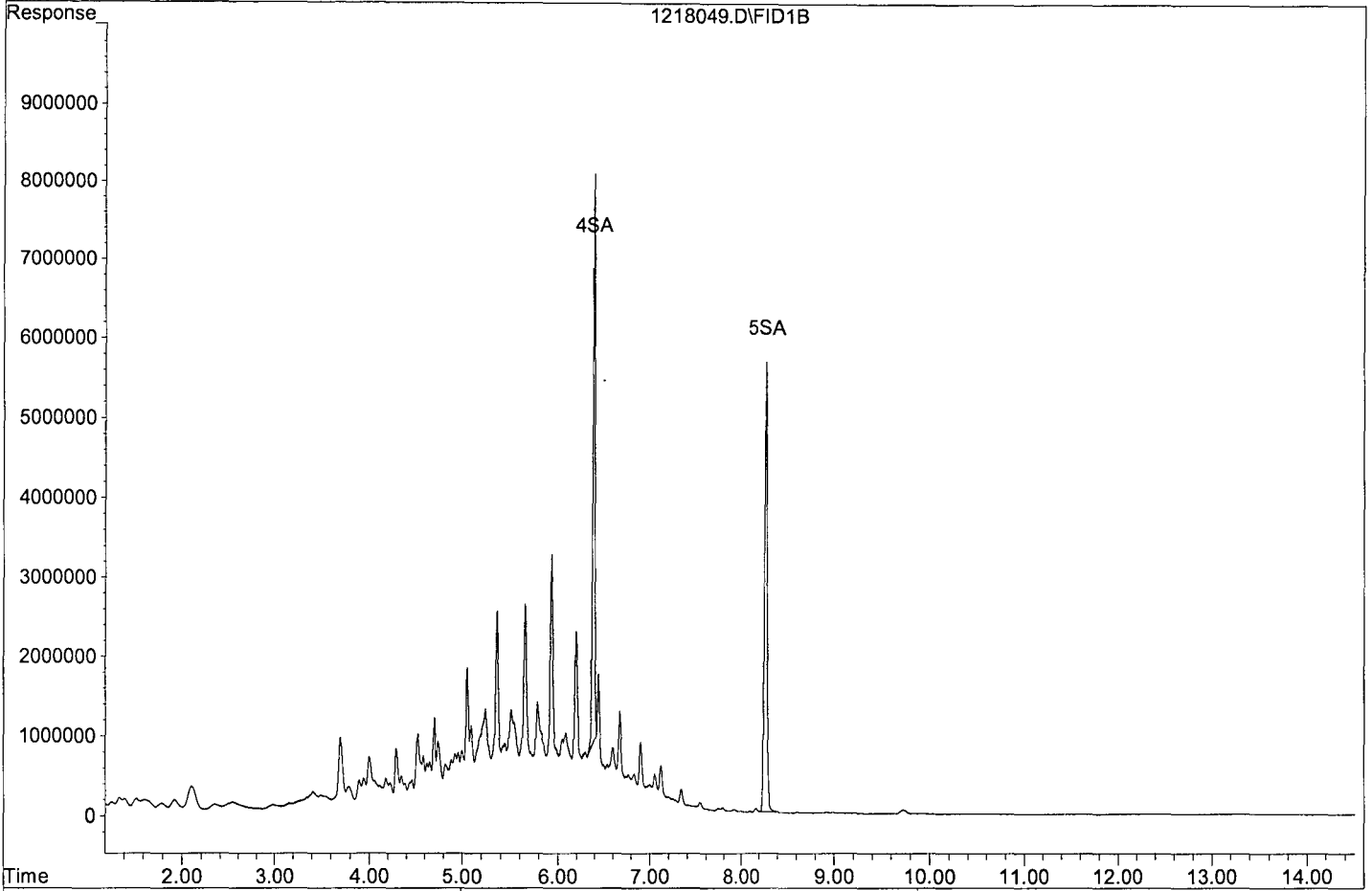
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.39	117516623	75.863 ppb
Surrogate Spike 75.000		Recovery =	101.15%
5) SA Octacosane(S)	8.27	115314243	89.256 ppb
Surrogate Spike 75.000		Recovery =	119.01%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	1597545036	1218.683 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218049.D  
Sample : 181214A LCSD-1 2/800



Data File : G:\APOLLO\DATA\190102\102007.D Vial: 7  
 Acq On : 1-2-19 14:50:25 Operator: DP  
 Sample : 181214A LCSD-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:06 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

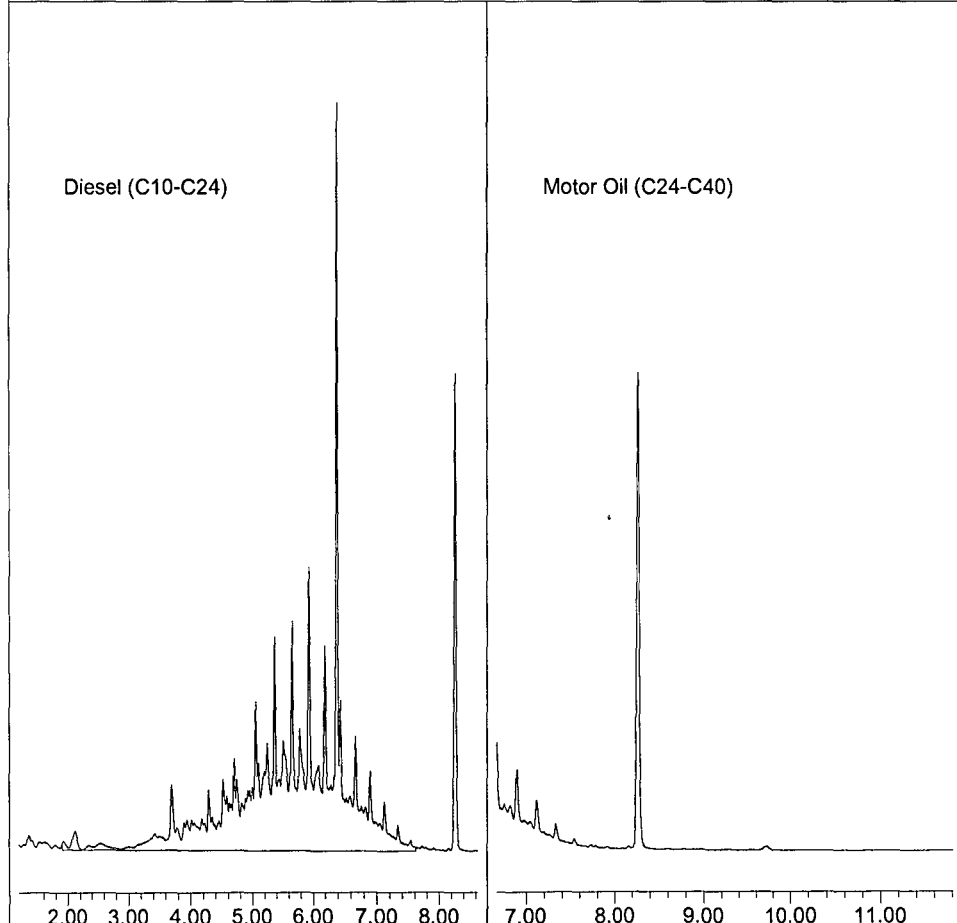
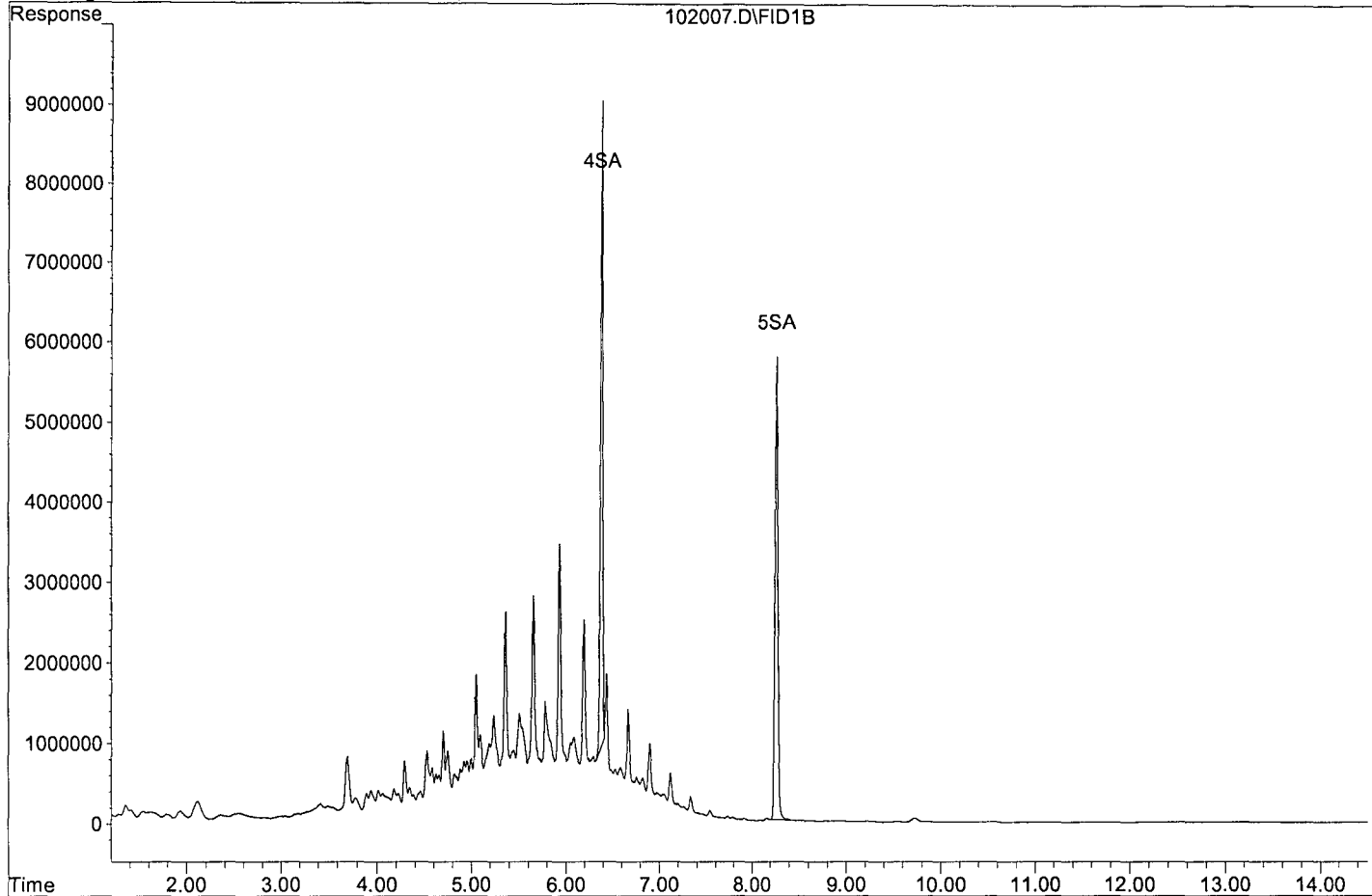
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	128794716	83.144 ppb
Surrogate Spike 75.000		Recovery =	110.86%
5) SA Octacosane(S)	8.27	124469426	96.342 ppb
Surrogate Spike 75.000		Recovery =	128.46%
Target Compounds			
1) HATM Diesel (C10-C24)	4.77	1601867005	1221.980 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190102\102007.D

Sample : 181214A LCSD-1 2/800 SGC



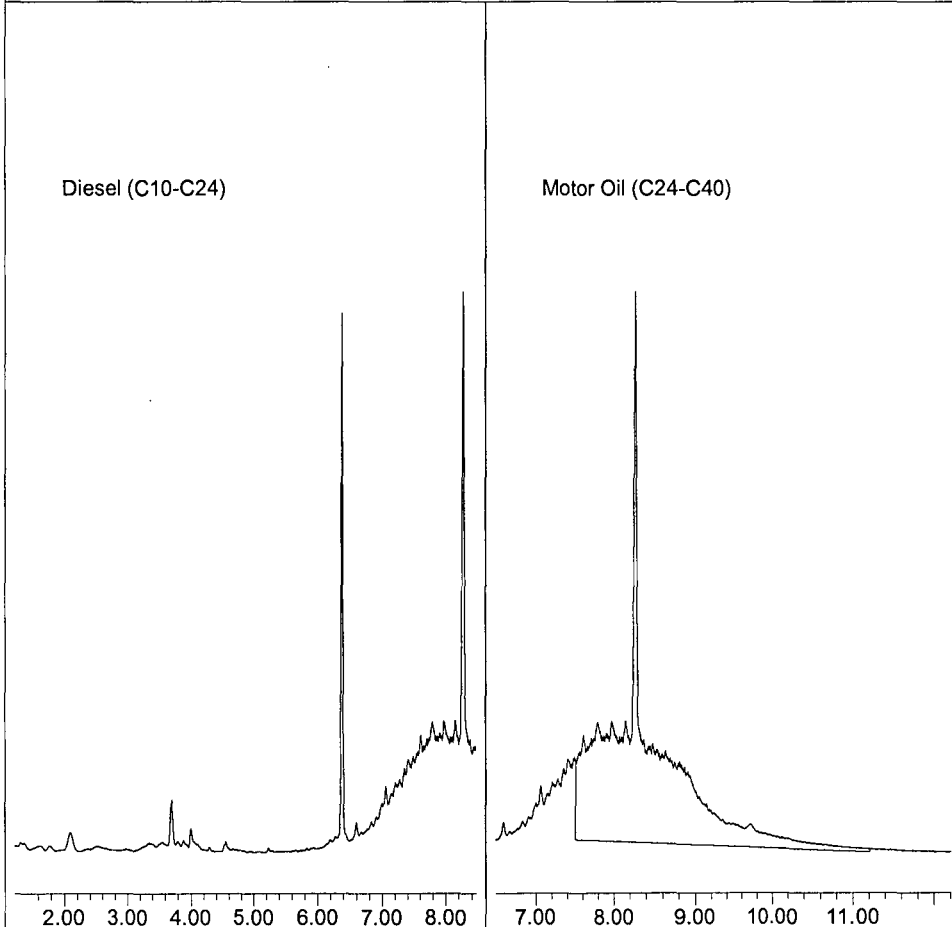
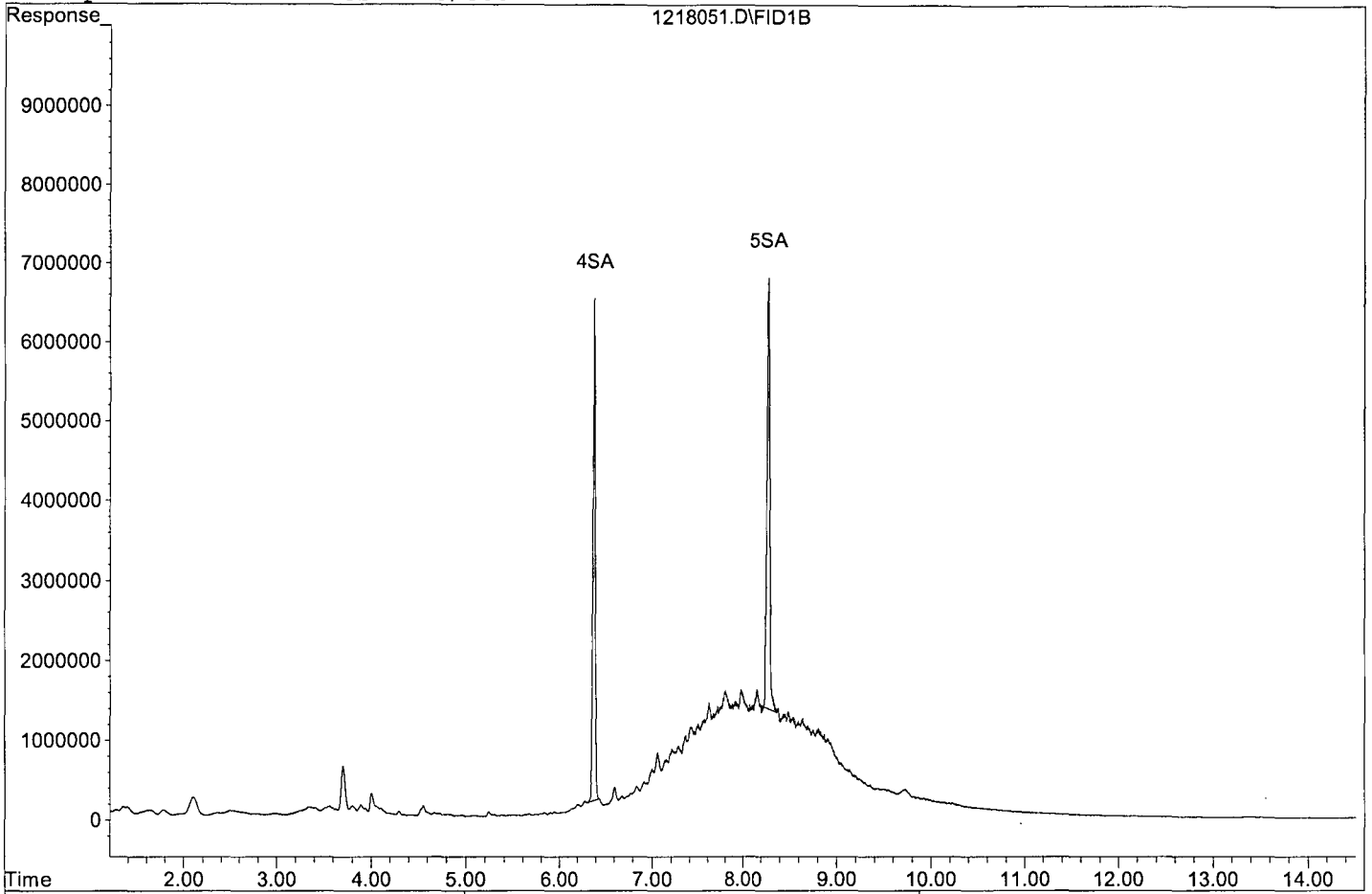
Data File : G:\APOLLO\DATA\181218\1218051.D Vial: 51  
 Acq On : 12-19-18 17:23:53 Operator: DP  
 Sample : 181214A LCSD-2 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:13 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	107928726	69.674 ppb
Surrogate Spike 75.000		Recovery =	92.90%
5) SA Octacosane(S)	8.27	112999501	87.464 ppb
Surrogate Spike 75.000		Recovery =	116.62%
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	1249831969	1125.663 ppb

Data File: G:\APOLLO\DATA\181218\1218051.D  
Sample : 181214A LCSD-2 2/800



Data File : G:\APOLLO\DATA\190102\102009.D Vial: 9  
 Acq On : 1-2-19 15:30:37 Operator: DP  
 Sample : 181214A LCSD-2 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 2 16:07 2019 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\190102\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Dec 20 12:07:28 2018  
 Response via : Multiple Level Calibration

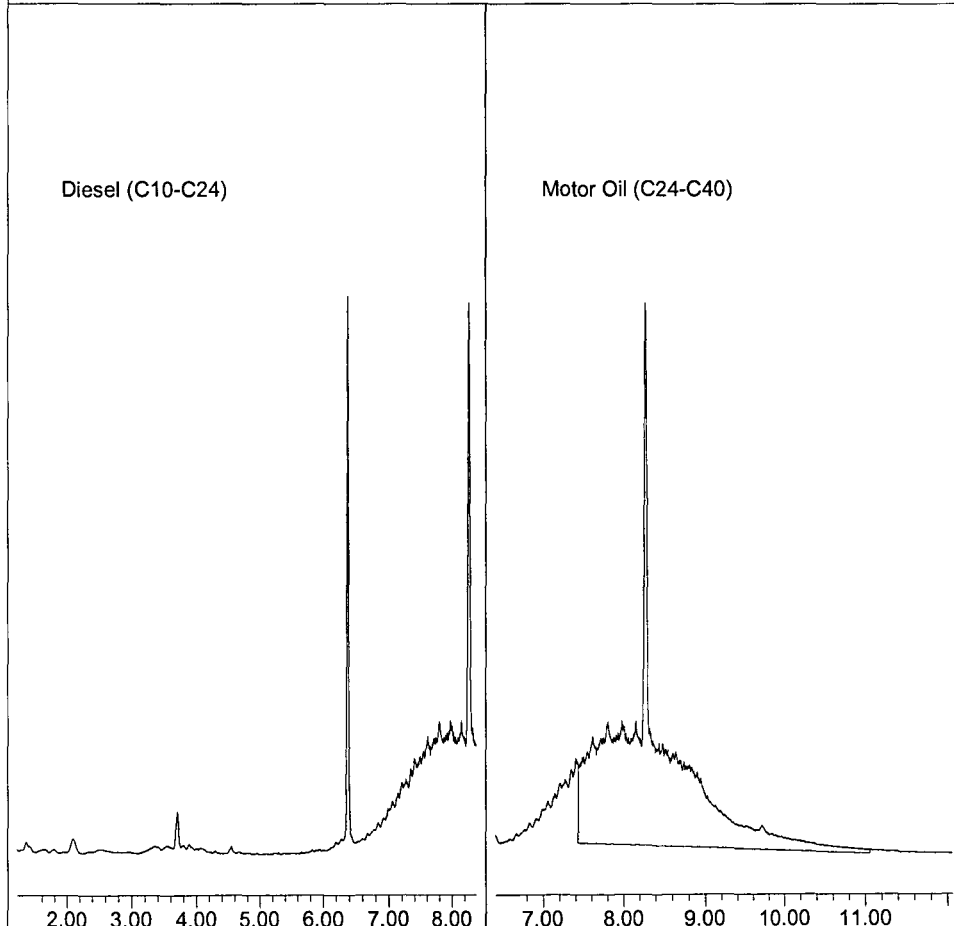
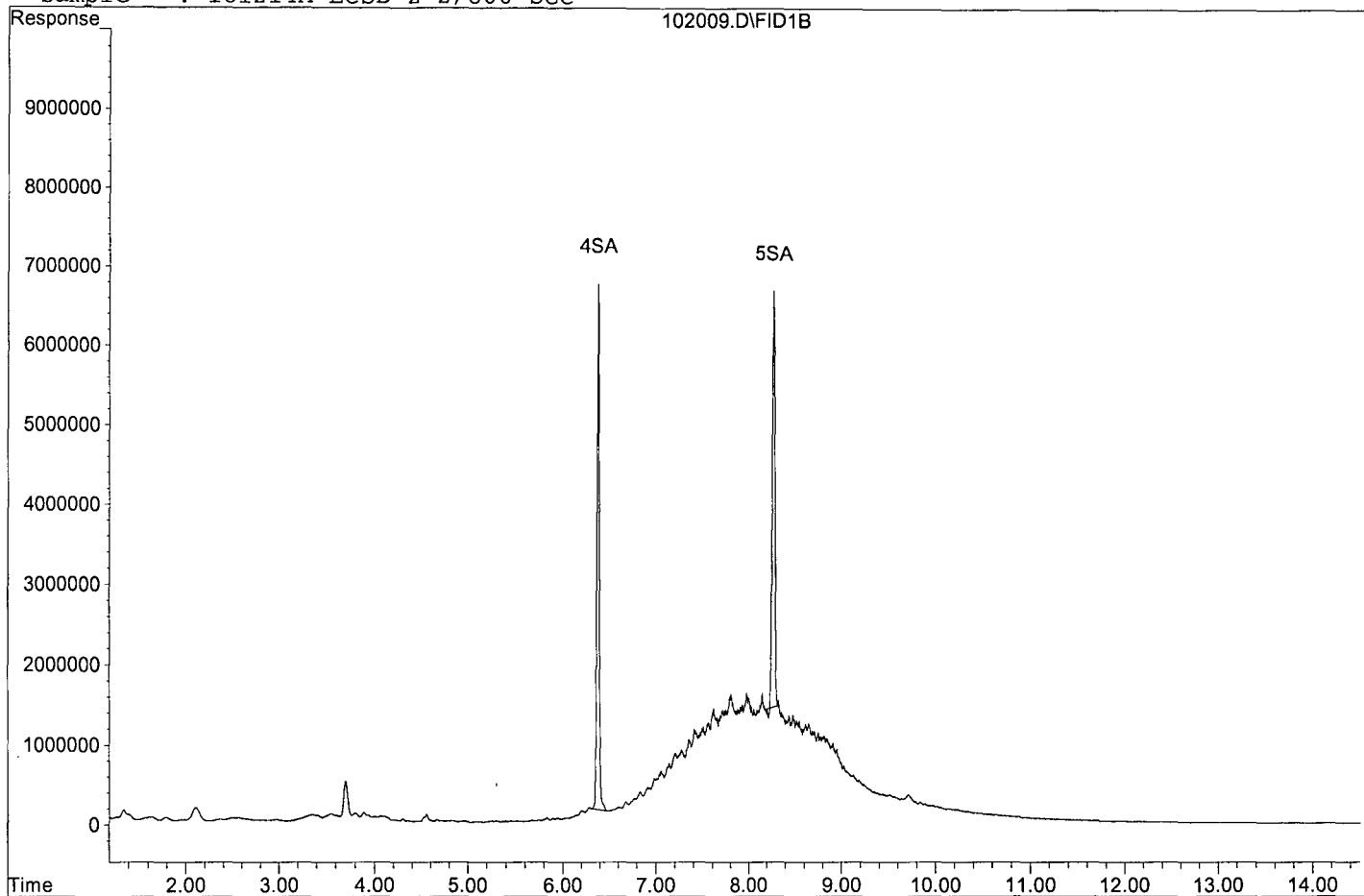
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	113249968	73.109 ppb
Surrogate Spike 75.000		Recovery =	97.48%
5) SA Octacosane(S)	8.27	106966895	82.795 ppb
Surrogate Spike 75.000		Recovery =	110.39%
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.24	1317002631	1186.160 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190102\102009.D

Sample : 181214A LCSD-2 2/800 SGC



Data File : G:\APOLLO\DATA\190124\124025.D Vial: 25  
 Acq On : 1-25-19 16:44:30 Operator: DP  
 Sample : 190124A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:41 2019 Quant Results File: DOC0117.RES

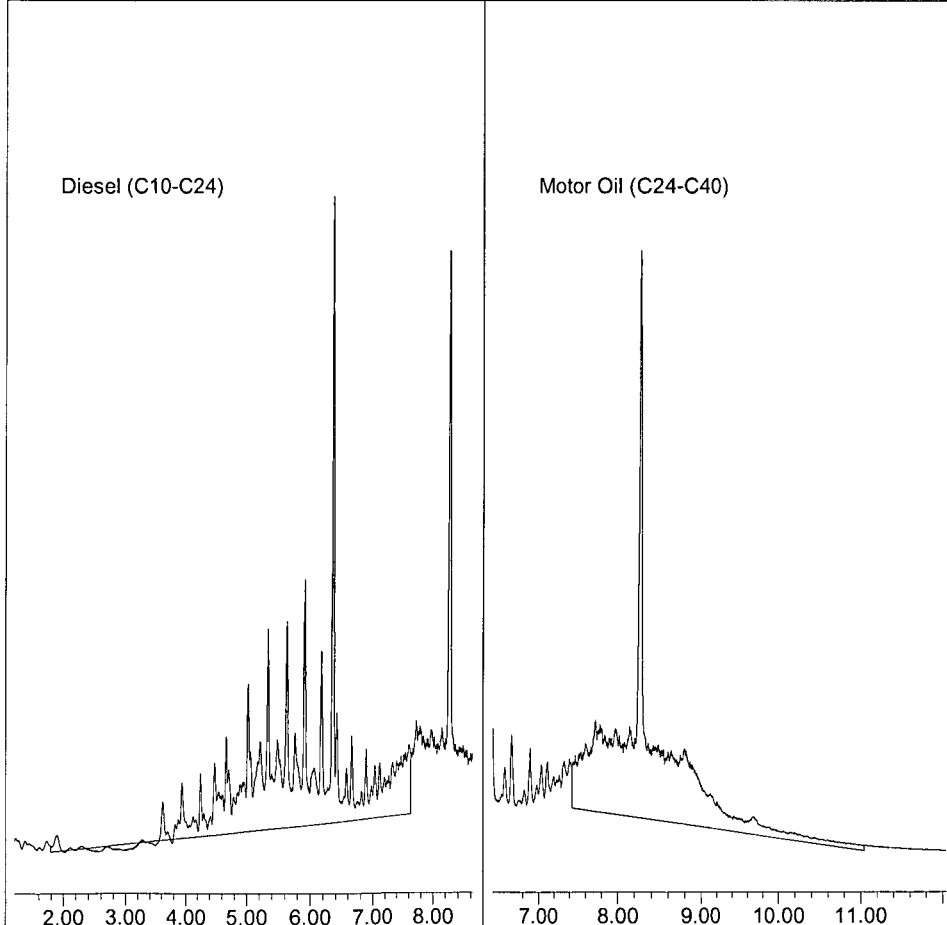
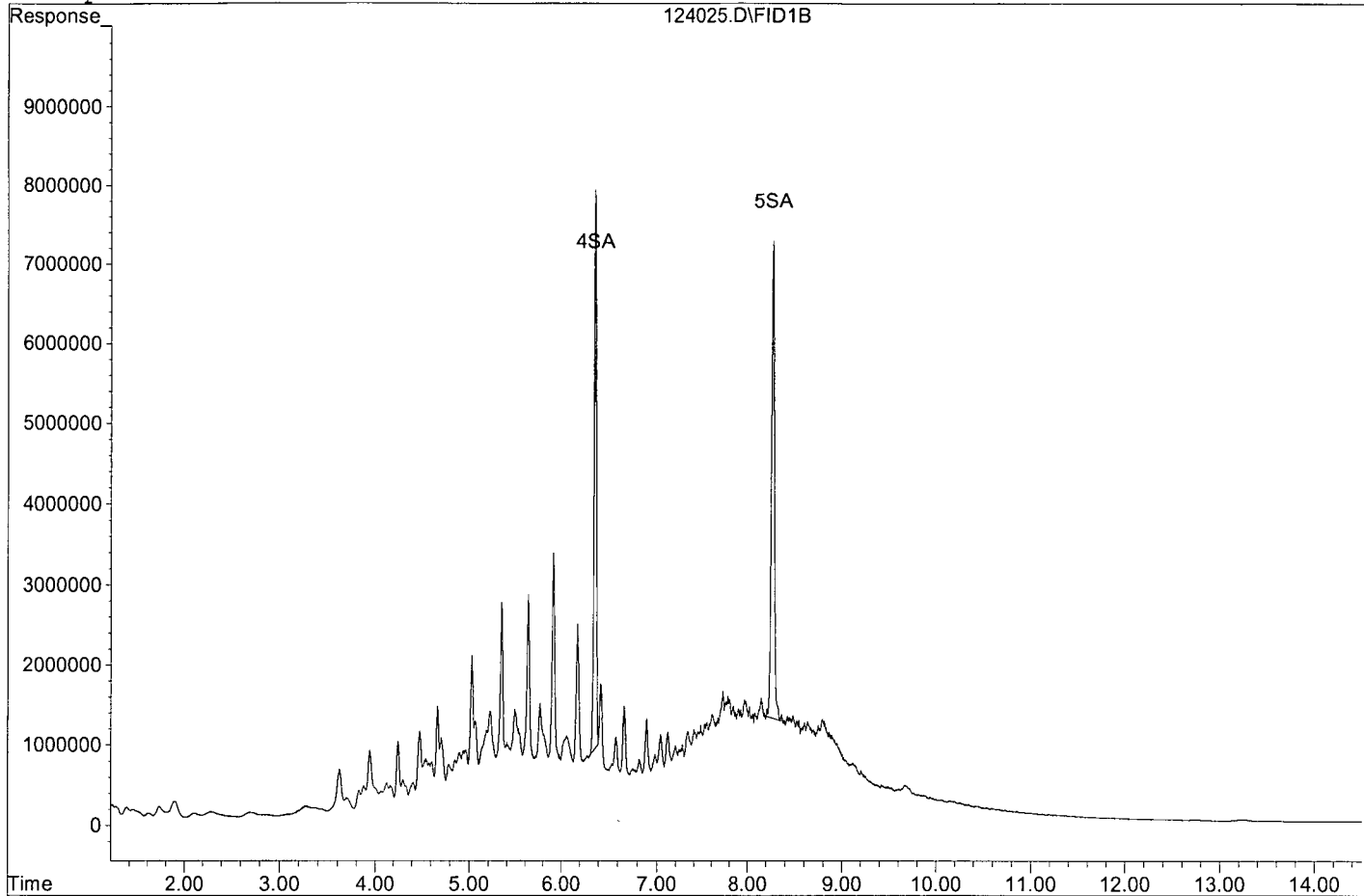
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	120731645	74.730 ppb
Surrogate Spike 75.000		Recovery =	99.64%
5) SA Octacosane(S)	8.27	128377864	85.523 ppb
Surrogate Spike 75.000		Recovery =	114.03%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1259945928	1325.824 ppb
2) HBTM Motor Oil (C24-C40)	9.23	917867016	1234.221 ppb

**ADDED PAGE**

Data File: G:\APOLLO\DATA\190124\124025.D  
Sample : 190124A LCS-1 2/800



ADDED PAGE

Data File : G:\APOLLO\DATA\190124\124026.D Vial: 26  
 Acq On : 1-25-19 17:04:28 Operator: DP  
 Sample : 190124A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:41 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	118719780	73.485 ppb
Surrogate Spike 75.000		Recovery =	97.98%
5) SA Octacosane(S)	8.27	125545605	83.636 ppb
Surrogate Spike 75.000		Recovery =	111.51%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1245400594	1310.518 ppb
2) HBTM Motor Oil (C24-C40)	9.23	904643924	1216.441 ppb

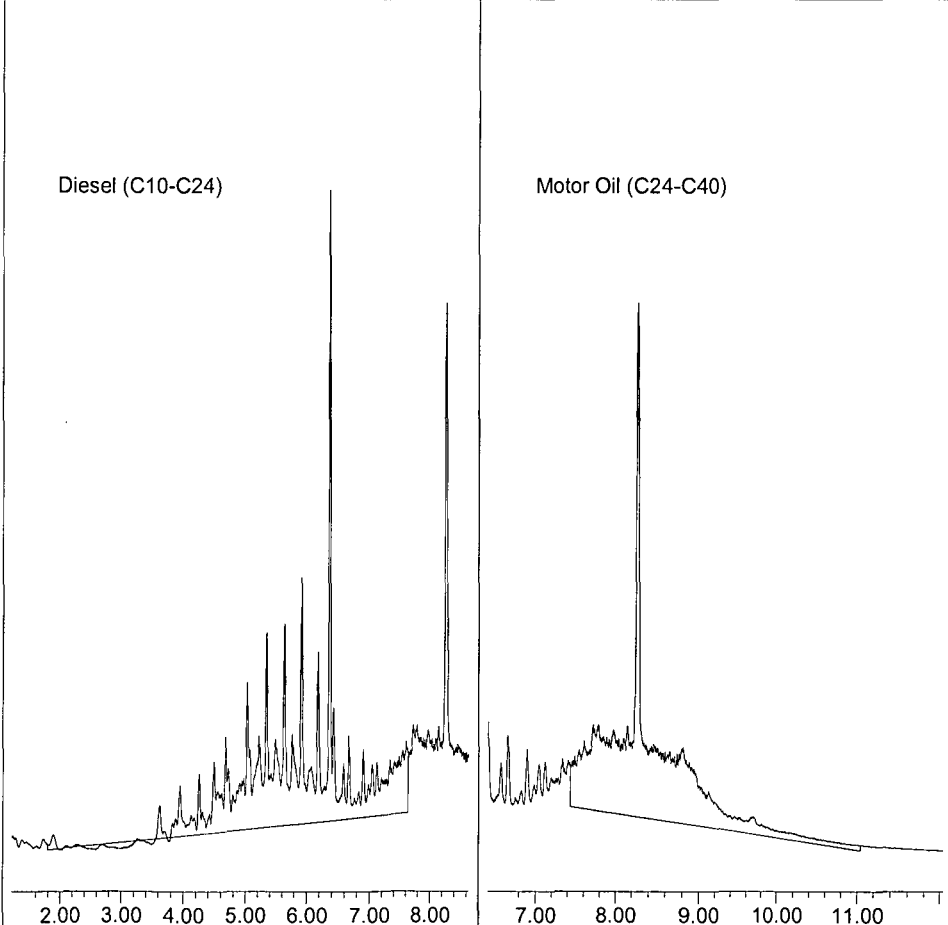
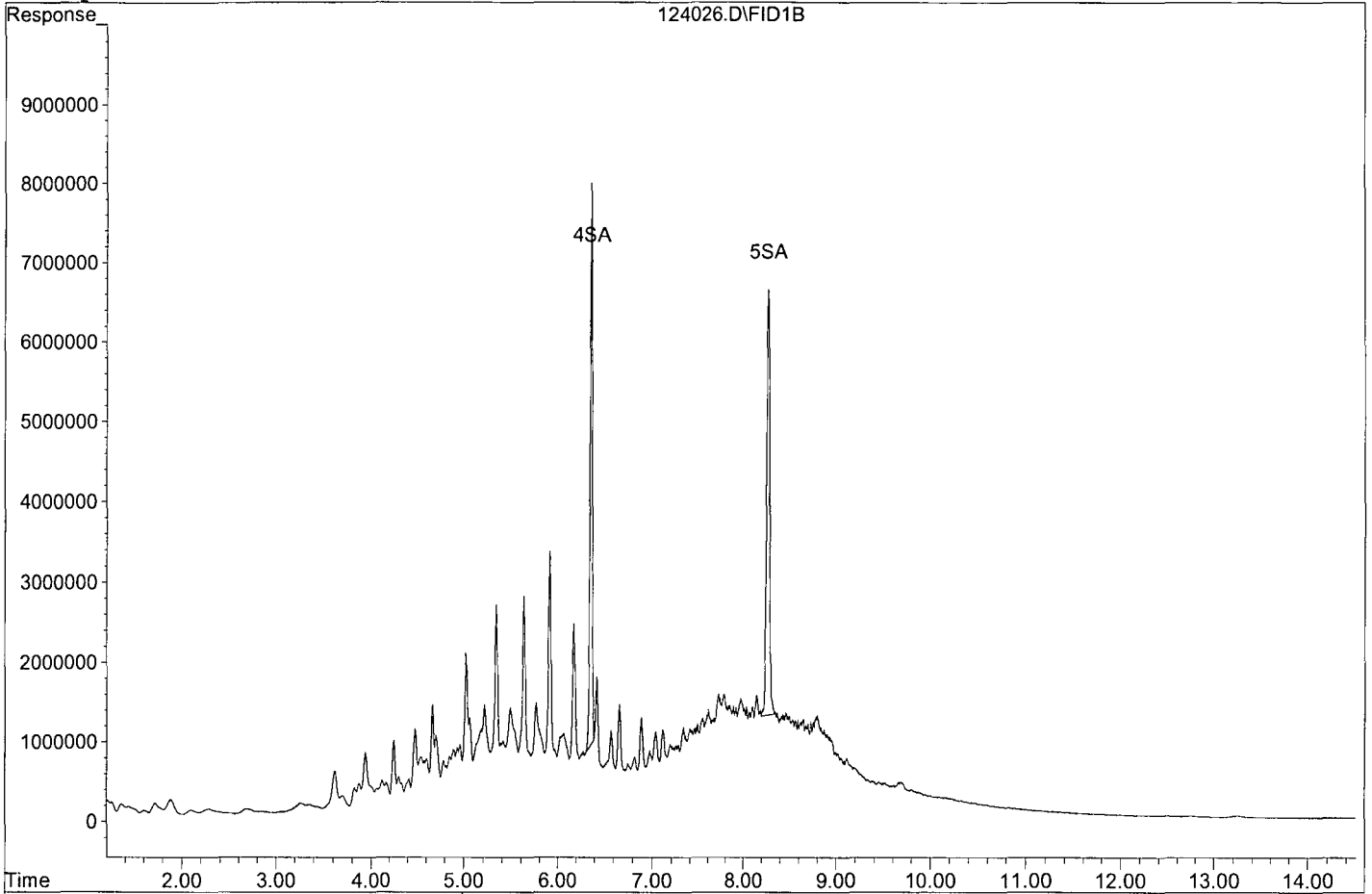
**ADDED PAGE**



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124026.D

Sample : 190124A LCSD-1 2/800



**ADDED PAGE**

Data File : G:\APOLLO\DATA\181218\1218053.D Vial: 53  
 Acq On : 12-19-18 18:03:52 Operator: DP  
 Sample : AZ84057W20 MS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:13 2018 Quant Results File: DOC0905.RES

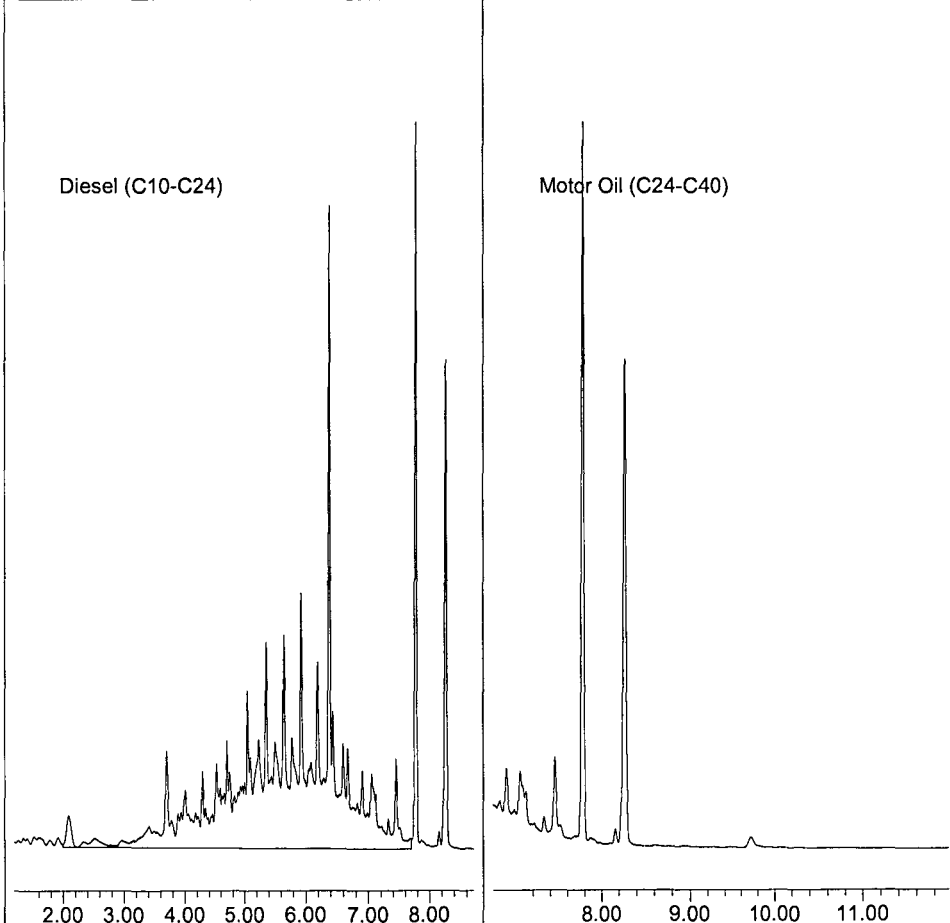
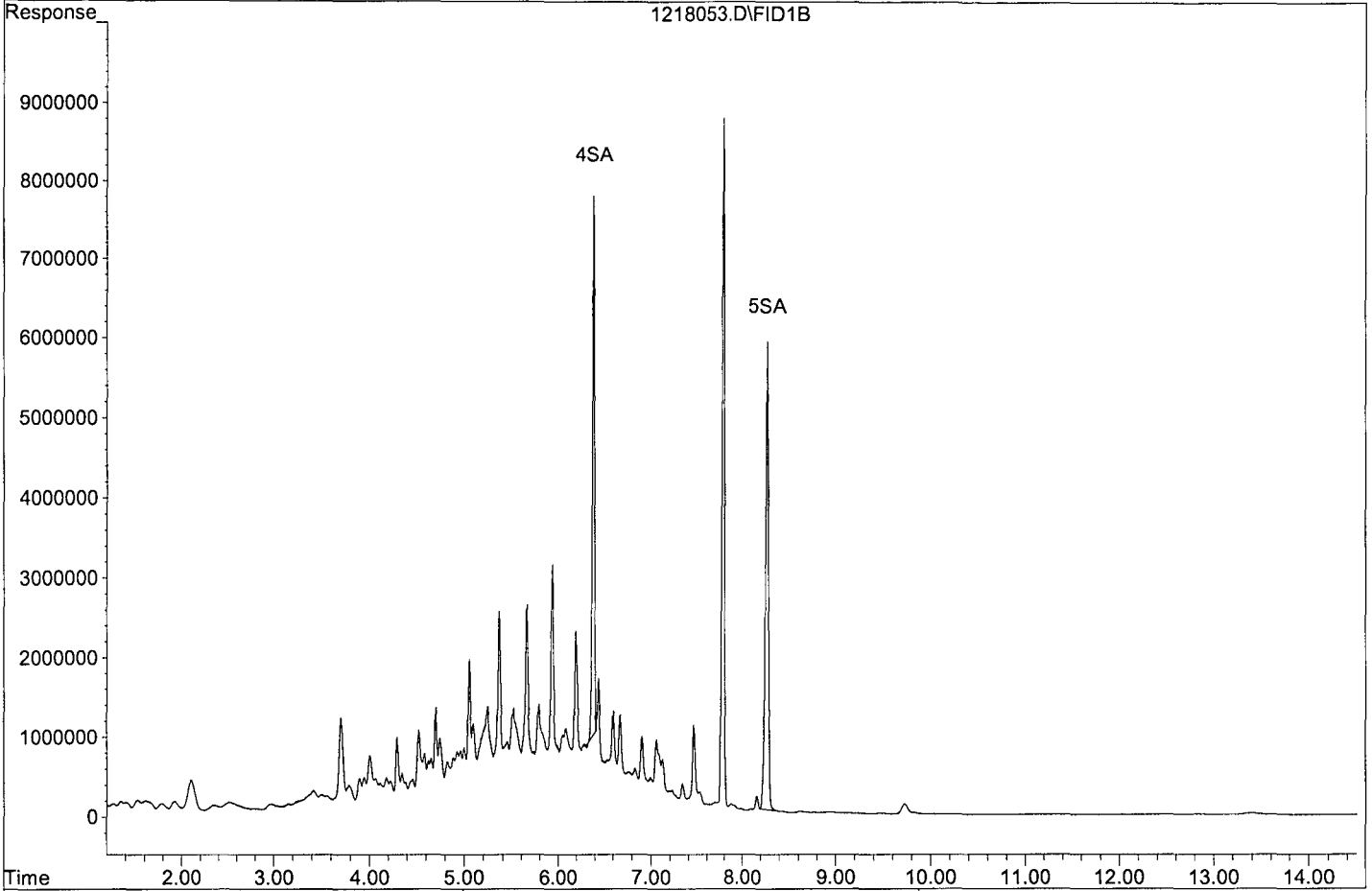
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.39	110213791	71.149 ppb
Surrogate Spike 75.000		Recovery =	94.87%
5) SA Octacosane(S)	8.27	131231296	101.576 ppb
Surrogate Spike 75.000		Recovery =	135.43%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	1766588018	1347.637 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218053.D  
Sample : AZ84057W20 MS-1 2/800



Data File : G:\APOLLO\DATA\181218\1218055.D Vial: 55  
 Acq On : 12-19-18 18:43:49 Operator: DP  
 Sample : AZ84057W18 MS-2 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:13 2018 Quant Results File: DOC0905.RES

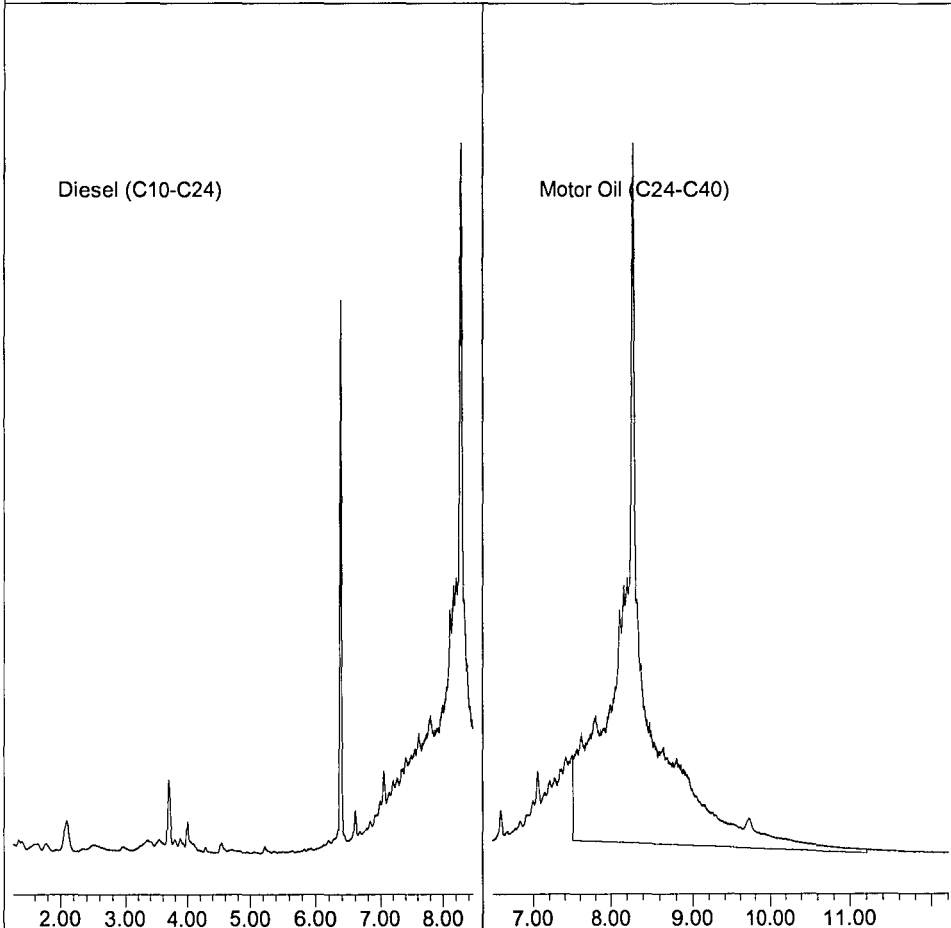
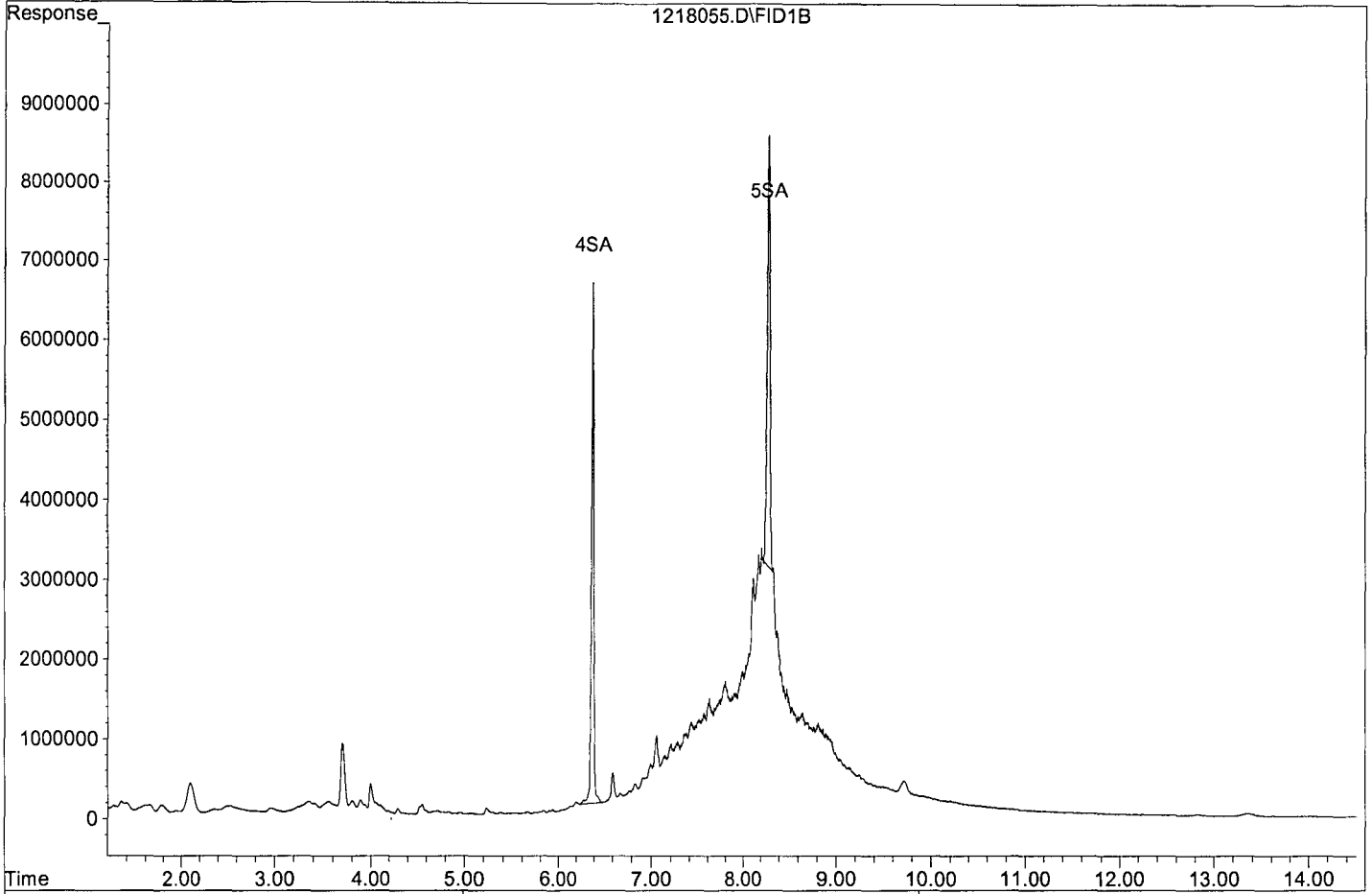
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	116750171	75.369 ppb
Surrogate Spike 75.000		Recovery =	100.49%
5) SA Octacosane(S)	8.28	116281373	90.005 ppb
Surrogate Spike 75.000		Recovery =	120.01%
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	1621036732	1459.989 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218055.D  
Sample : AZ84057W18 MS-2 2/800



Data File : G:\APOLLO\DATA\181218\1218054.D Vial: 54  
 Acq On : 12-19-18 18:23:49 Operator: DP  
 Sample : AZ84057W19 MSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:13 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

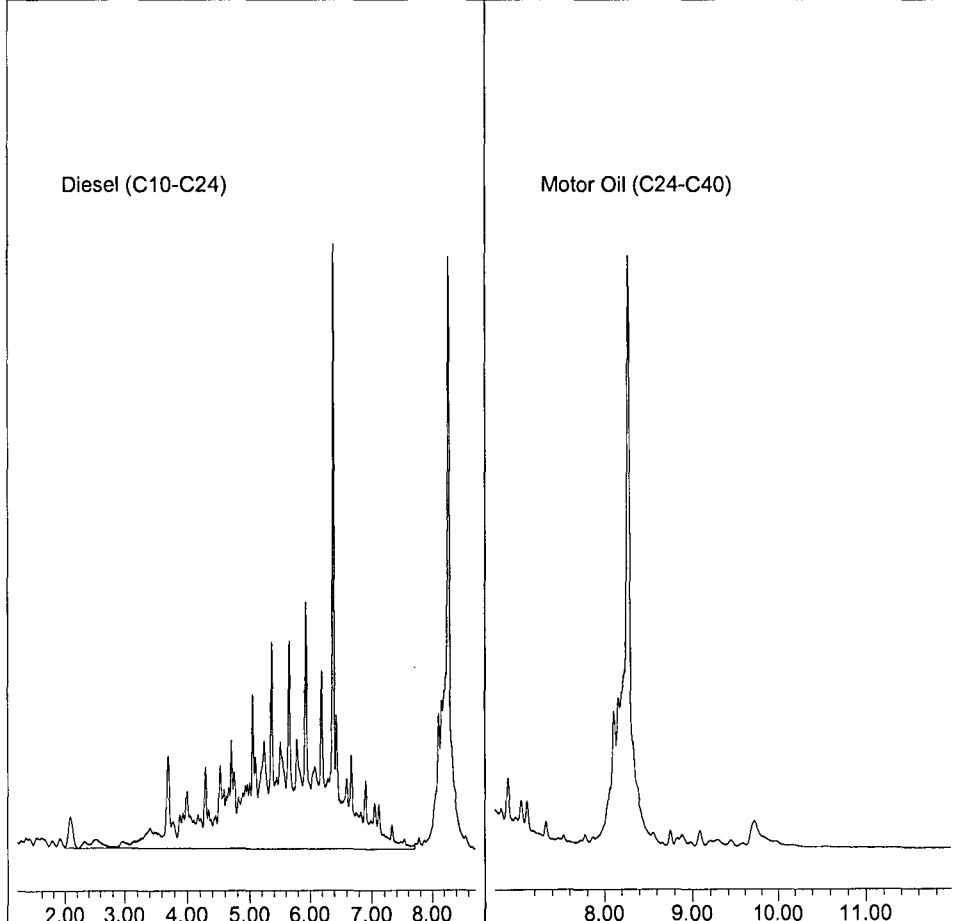
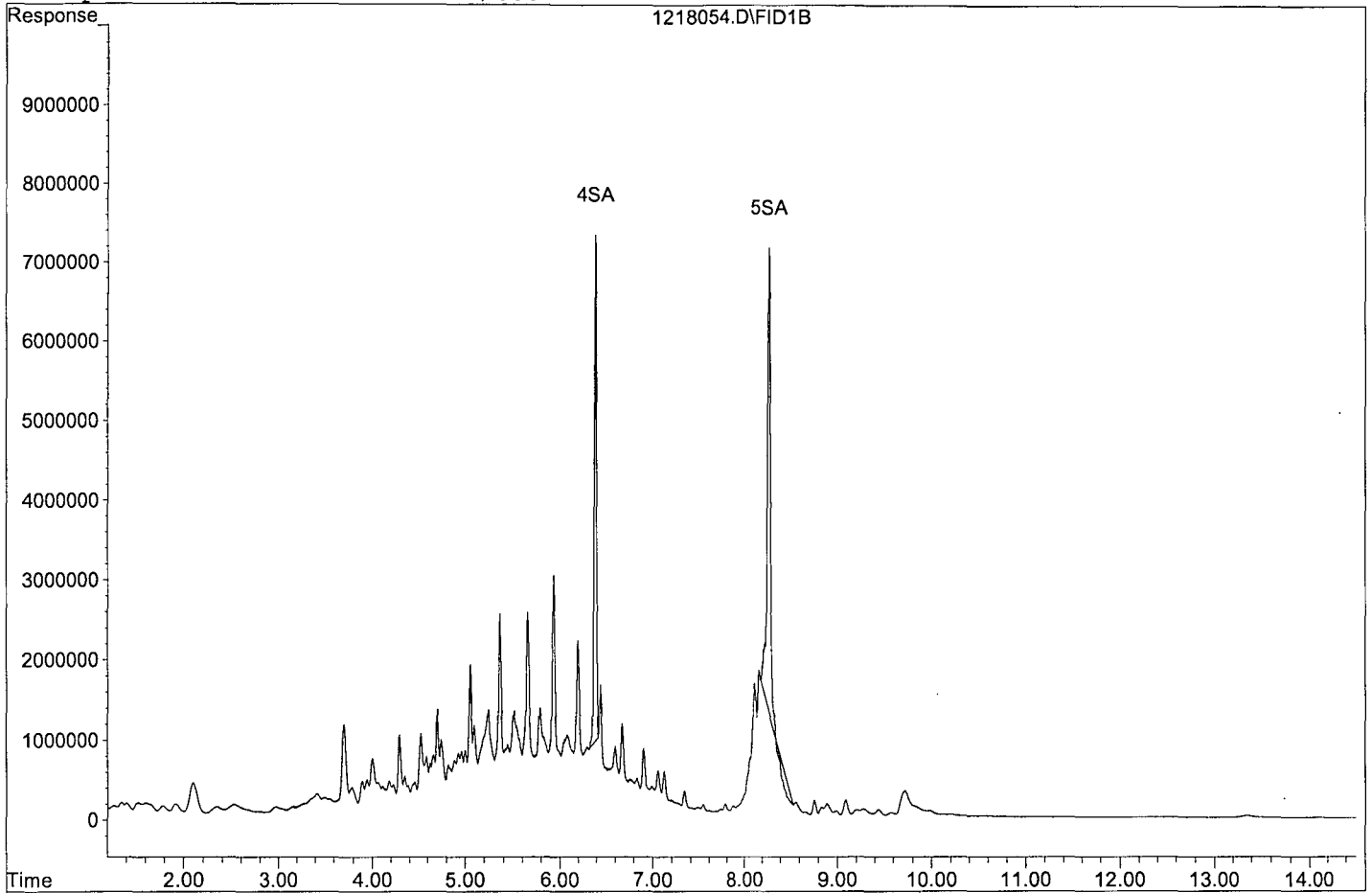
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	107091882	69.134 ppb
Surrogate Spike 75.000		Recovery =	92.18%
5) SA Octacosane(S)	8.27	130254785	100.820 ppb
Surrogate Spike 75.000		Recovery =	134.43%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	1643734537	1253.919 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218054.D

Sample : AZ84057W19 MSD-1 2/800



Data File : G:\APOLLO\DATA\181218\1218056.D Vial: 56  
 Acq On : 12-19-18 19:03:08 Operator: DP  
 Sample : AZ84057W27 MSD-2 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:12 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.38	115691694	74.685 ppb
Surrogate Spike 75.000		Recovery =	99.58%
5) SA Octacosane(S)	8.28	110007965	85.149 ppb
Surrogate Spike 75.000		Recovery =	113.53%

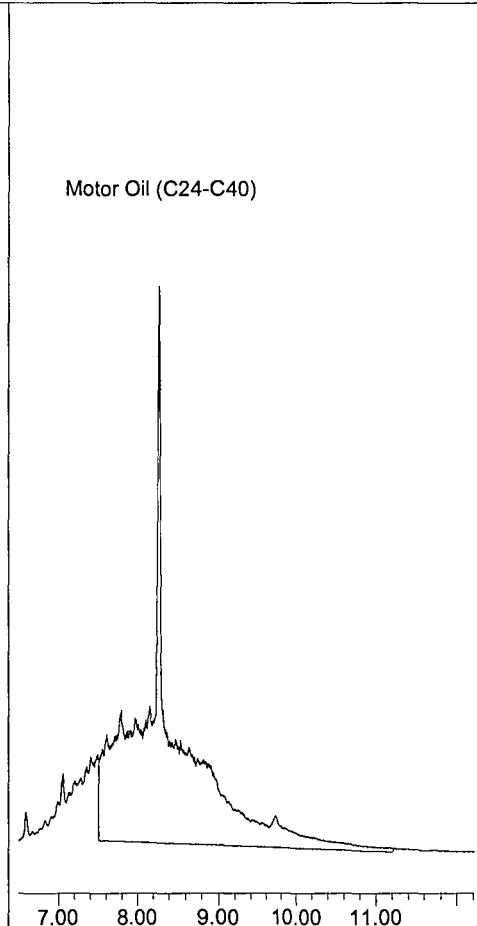
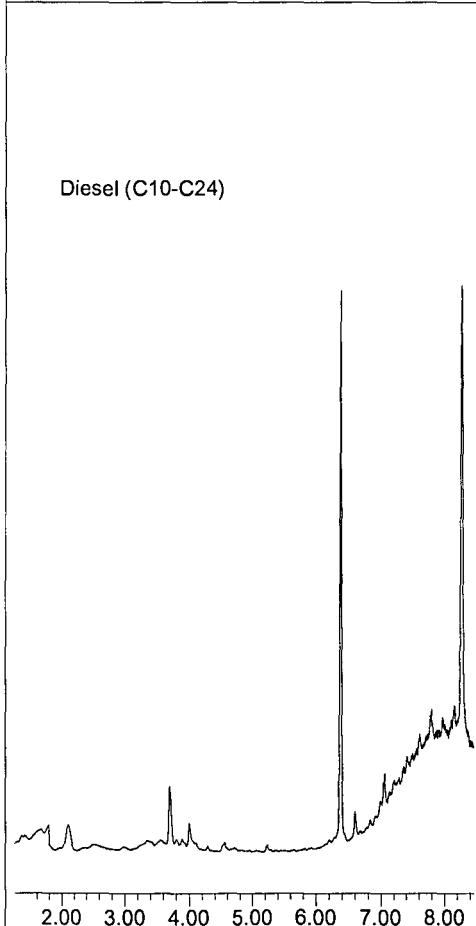
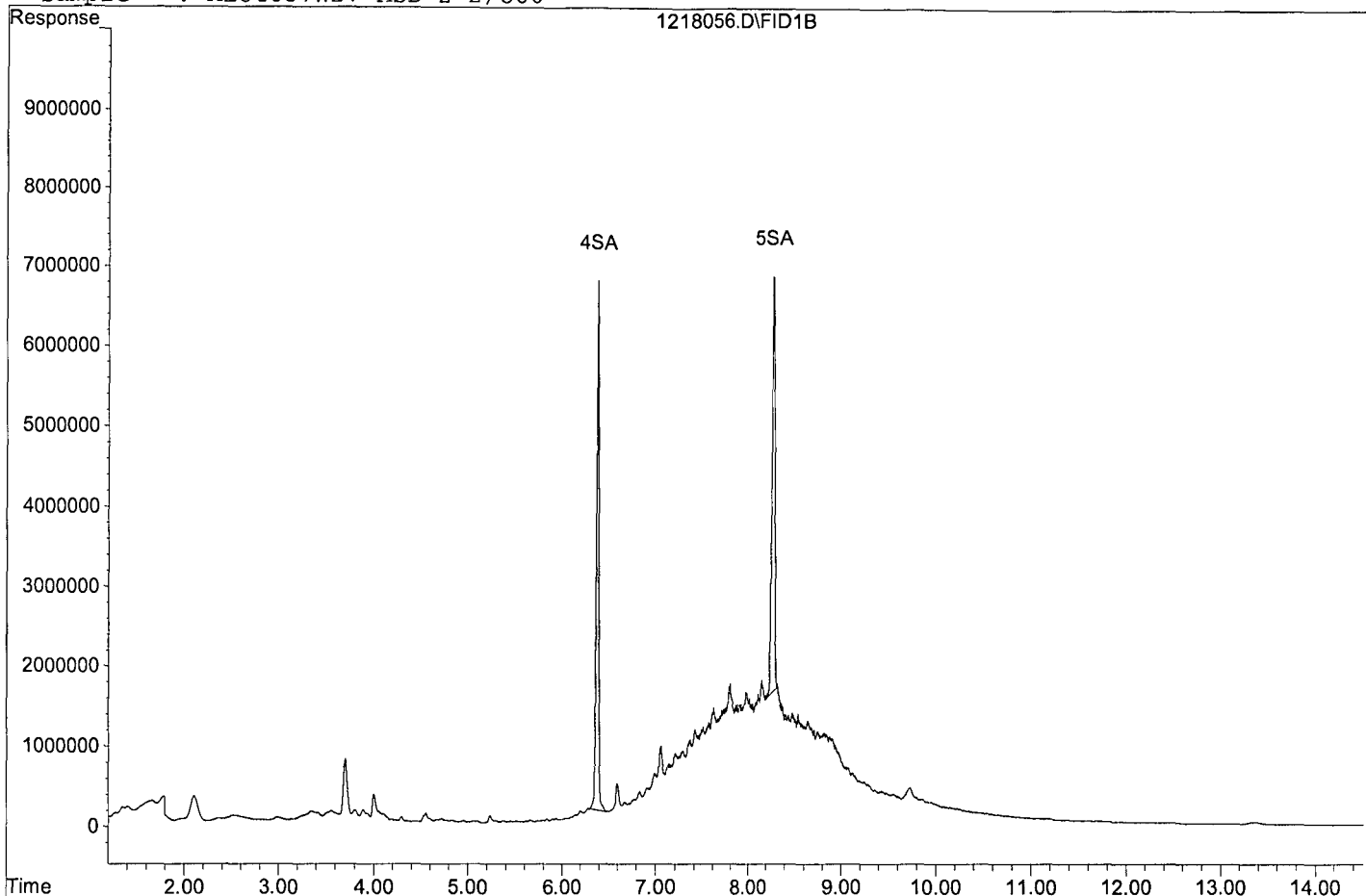
Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	1352251823	1217.907 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218056.D  
Sample : AZ84057W27 MSD-2 2/800



Data File : G:\APOLLO\DATA\181218\1218061.D Vial: 61  
 Acq On : 12-19-18 20:43:00 Operator: DP  
 Sample : AZ84061W25 MS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:12 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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 System Monitoring Compounds

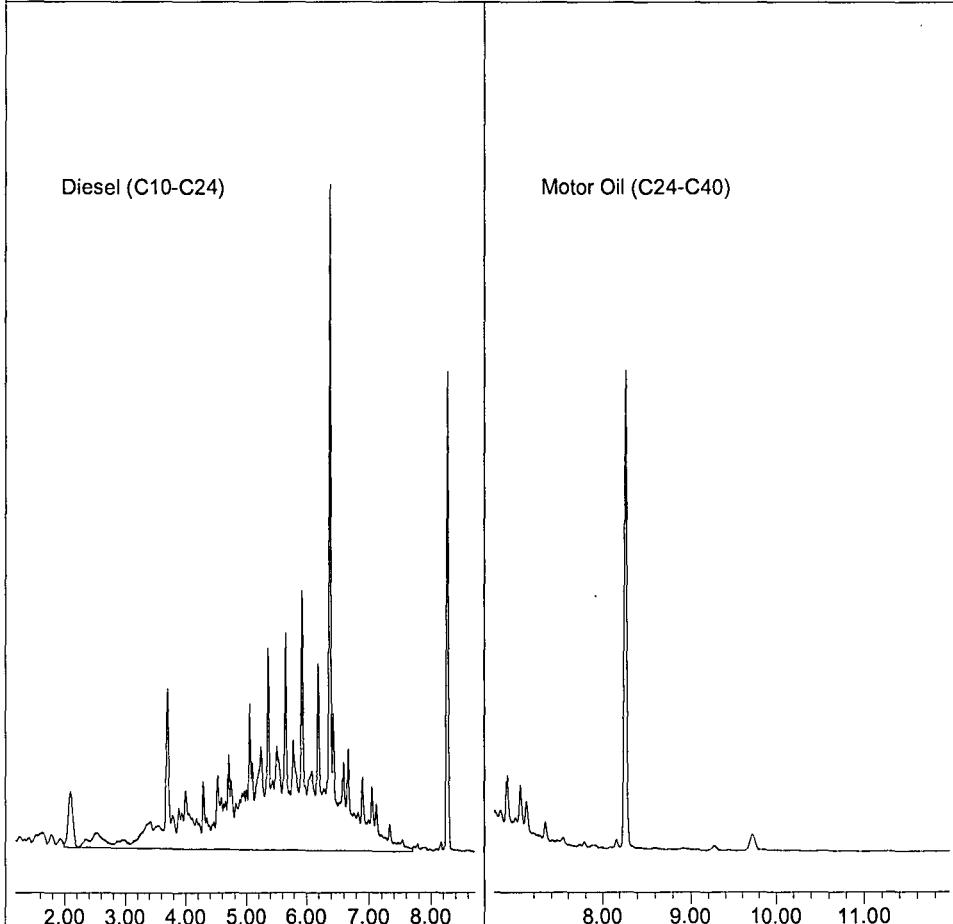
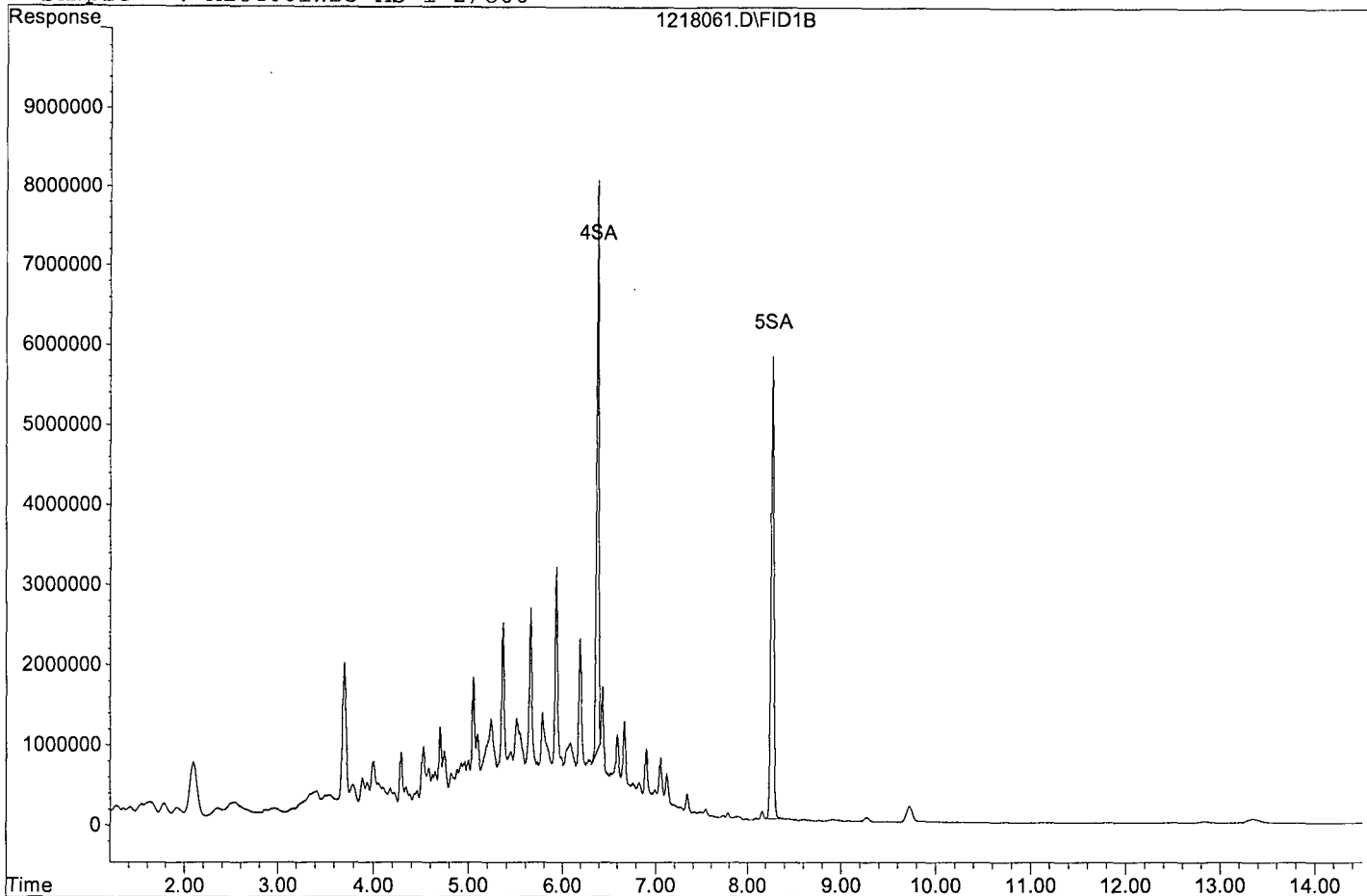
4) SA Ortho-Terphenyl(S)	6.39	116091289	74.943 ppb
Surrogate Spike 75.000		Recovery =	99.92%
5) SA Octacosane(S)	8.27	118787063	91.944 ppb
Surrogate Spike 75.000		Recovery =	122.59%

Target Compounds

1) HATM Diesel (C10-C24)	4.86	1680742768	1282.150 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218061.D  
Sample : AZ84061W25 MS-1 2/800



Data File : G:\APOLLO\DATA\181218\1218063.D Vial: 63  
 Acq On : 12-19-18 21:22:41 Operator: DP  
 Sample : AZ84061W31 MS-2 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:09 2018 Quant Results File: DOC0905.RES

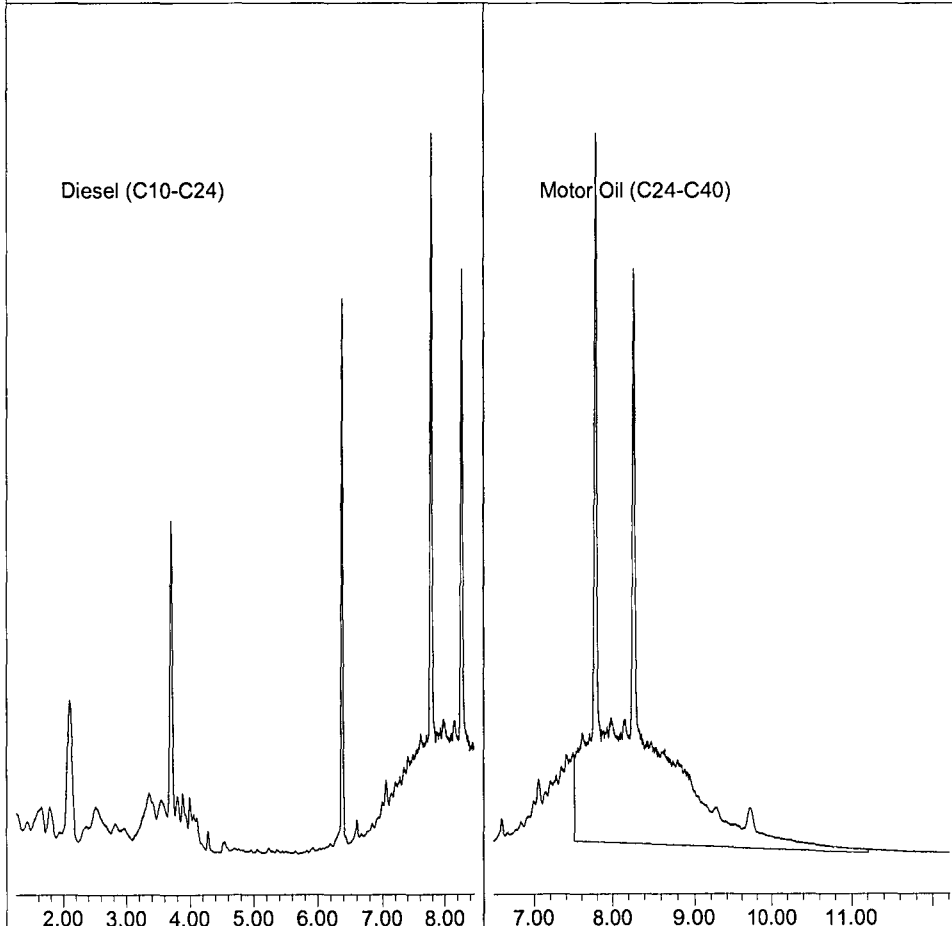
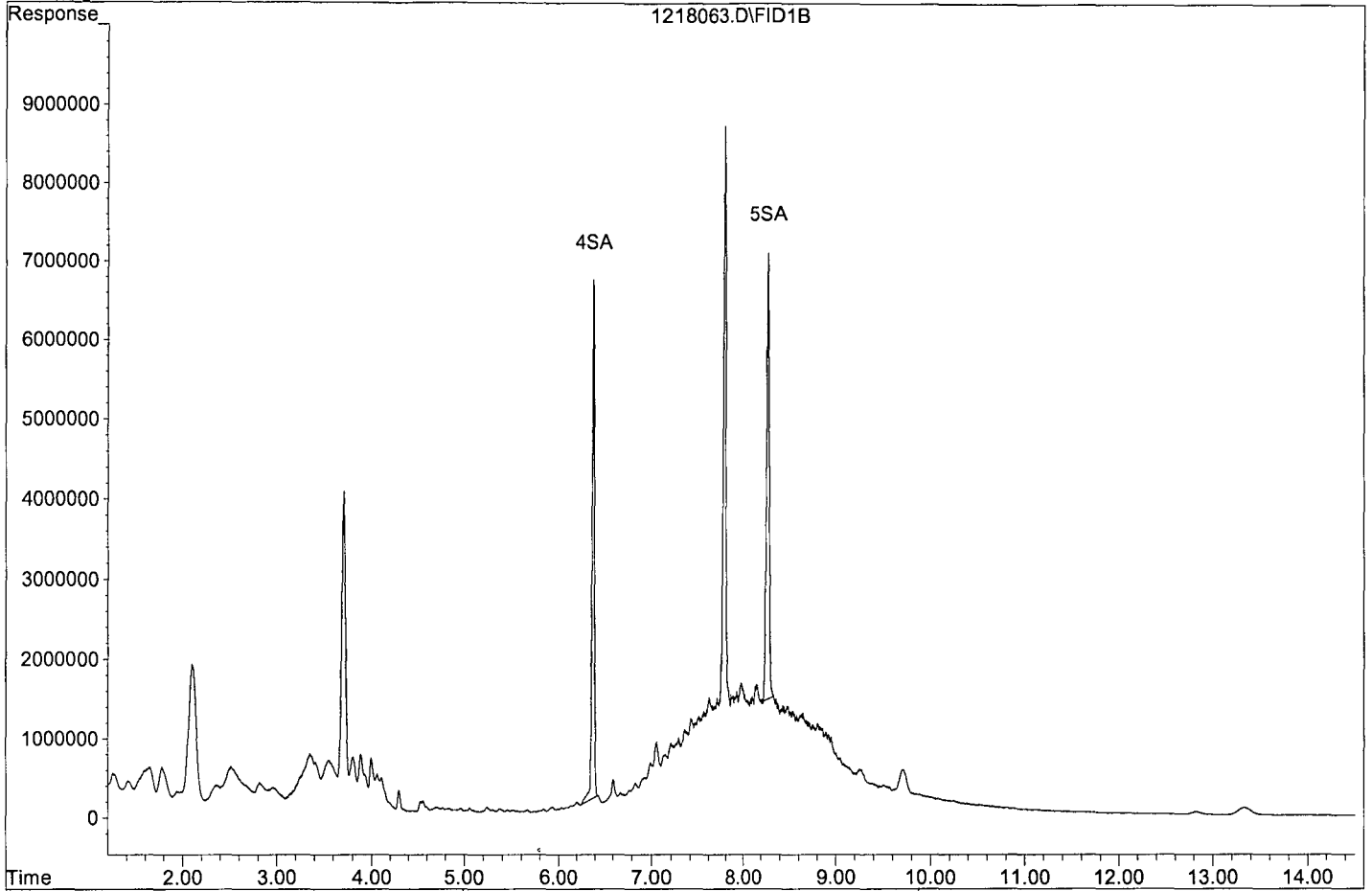
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	115357730	74.470 ppb
Surrogate Spike 75.000		Recovery =	99.29%
5) SA Octacosane(S)	8.27	116310147	90.027 ppb
Surrogate Spike 75.000		Recovery =	120.04%
Target Compounds			
2) HBTM Motor Oil (C24-C40)	9.36	1465725420	1320.108 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218063.D  
Sample : AZ84061W31 MS-2 2/800



Data File : G:\APOLLO\DATA\181218\1218062.D Vial: 62  
 Acq On : 12-19-18 21:02:49 Operator: DP  
 Sample : AZ84061W30 MSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:09 2018 Quant Results File: DOC0905.RES

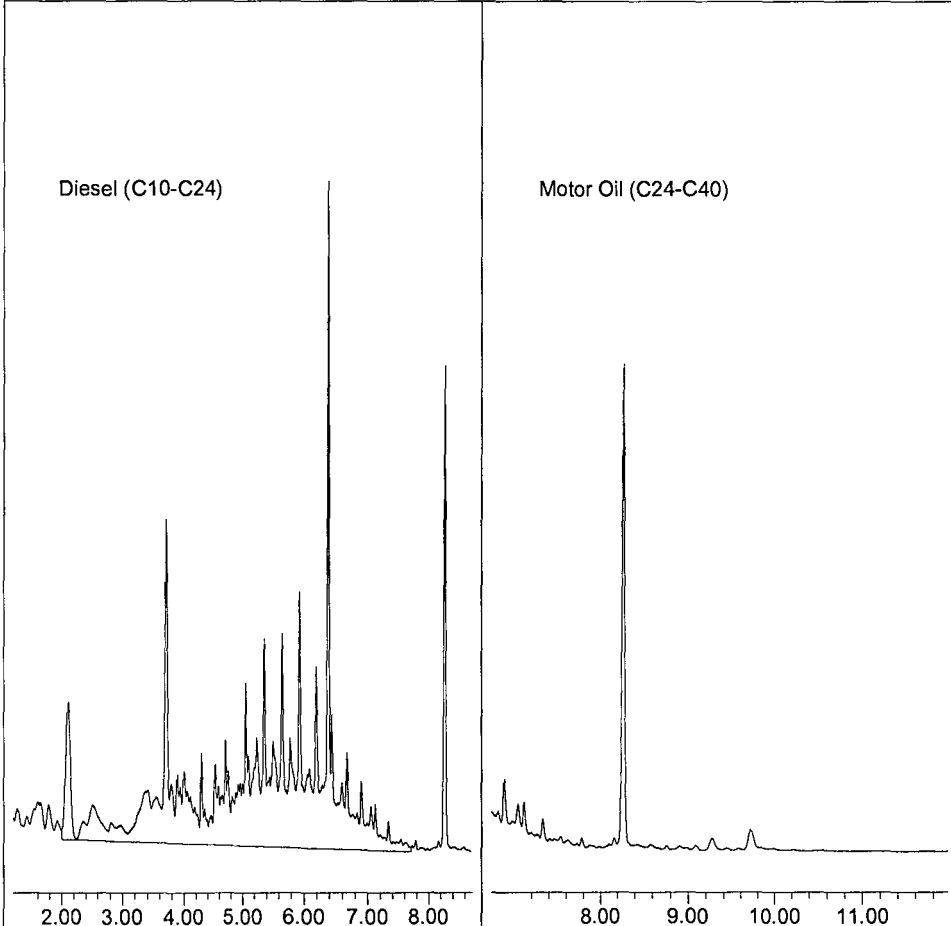
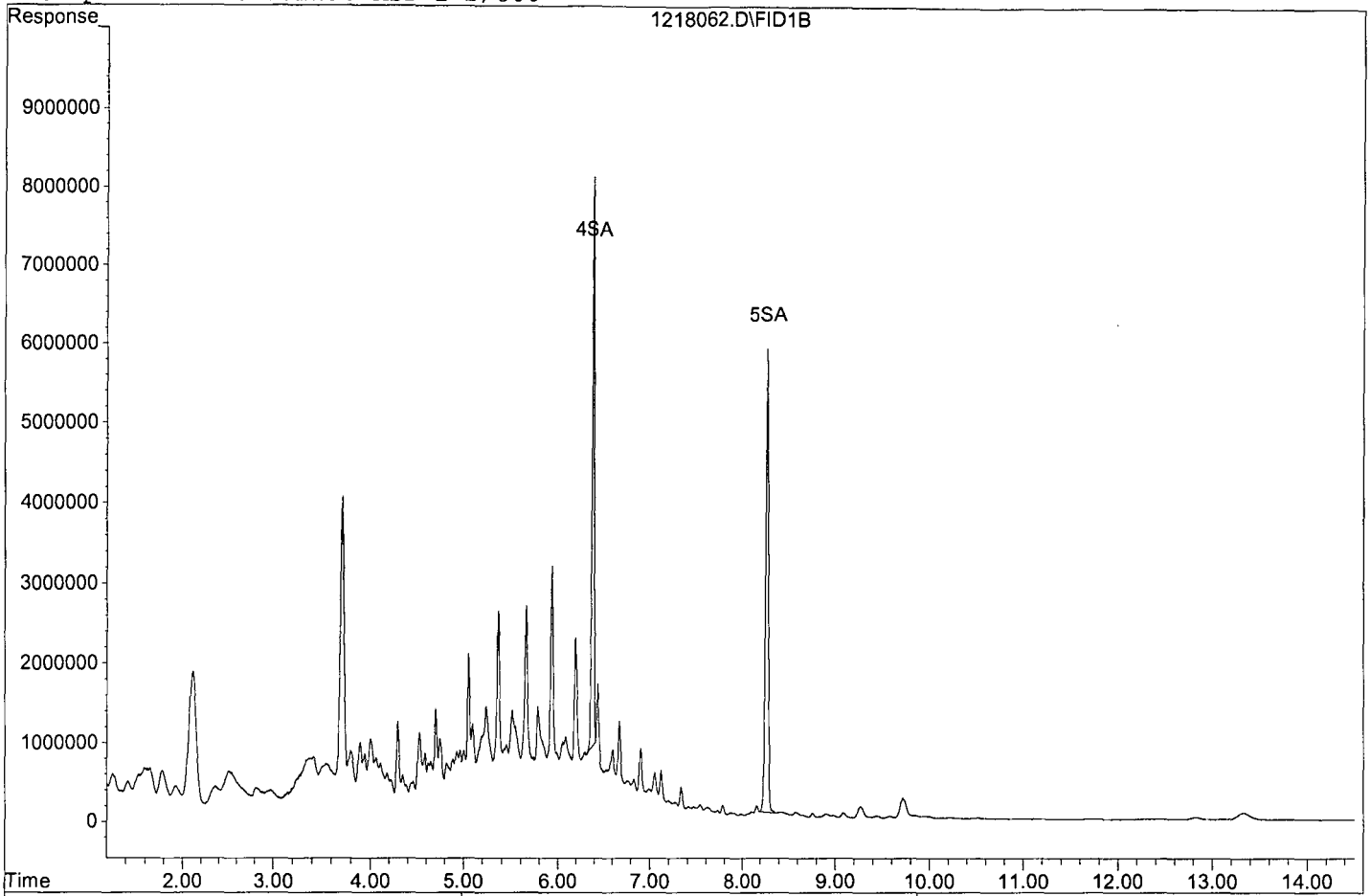
Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.39	114689462	74.038 ppb
Surrogate Spike 75.000		Recovery =	98.72%
5) SA Octacosane(S)	8.27	121232505	93.837 ppb
Surrogate Spike 75.000		Recovery =	125.12%
Target Compounds			
1) HATM Diesel (C10-C24)	4.86	1995318135	1522.123 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218062.D  
Sample : AZ84061W30 MSD-1 2/800



Data File : G:\APOLLO\DATA\181218\1218064.D Vial: 64  
 Acq On : 12-19-18 21:42:43 Operator: DP  
 Sample : AZ84061W32 MSD-2 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Dec 20 12:09 2018 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\181218\DOC0905.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Wed Jan 02 16:05:34 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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 System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.38	119434405	77.101 ppb
Surrogate Spike 75.000		Recovery =	102.80%
5) SA Octacosane(S)	8.28	122409172	94.748 ppb
Surrogate Spike 75.000		Recovery =	126.33%

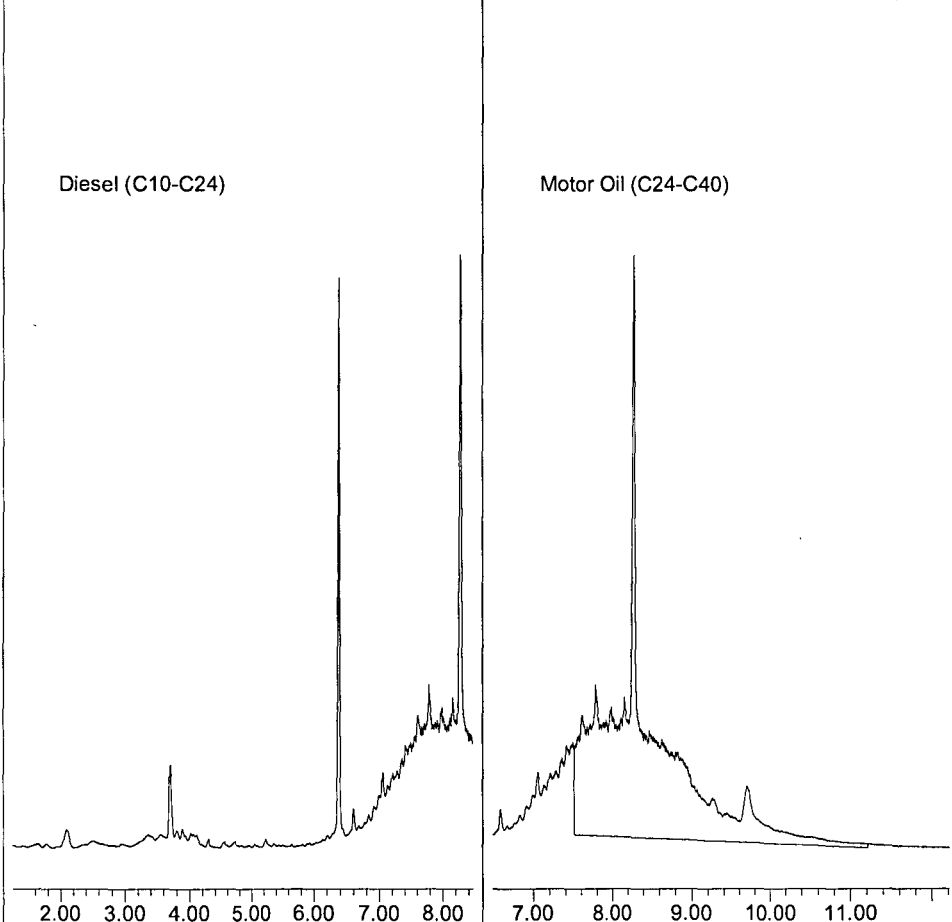
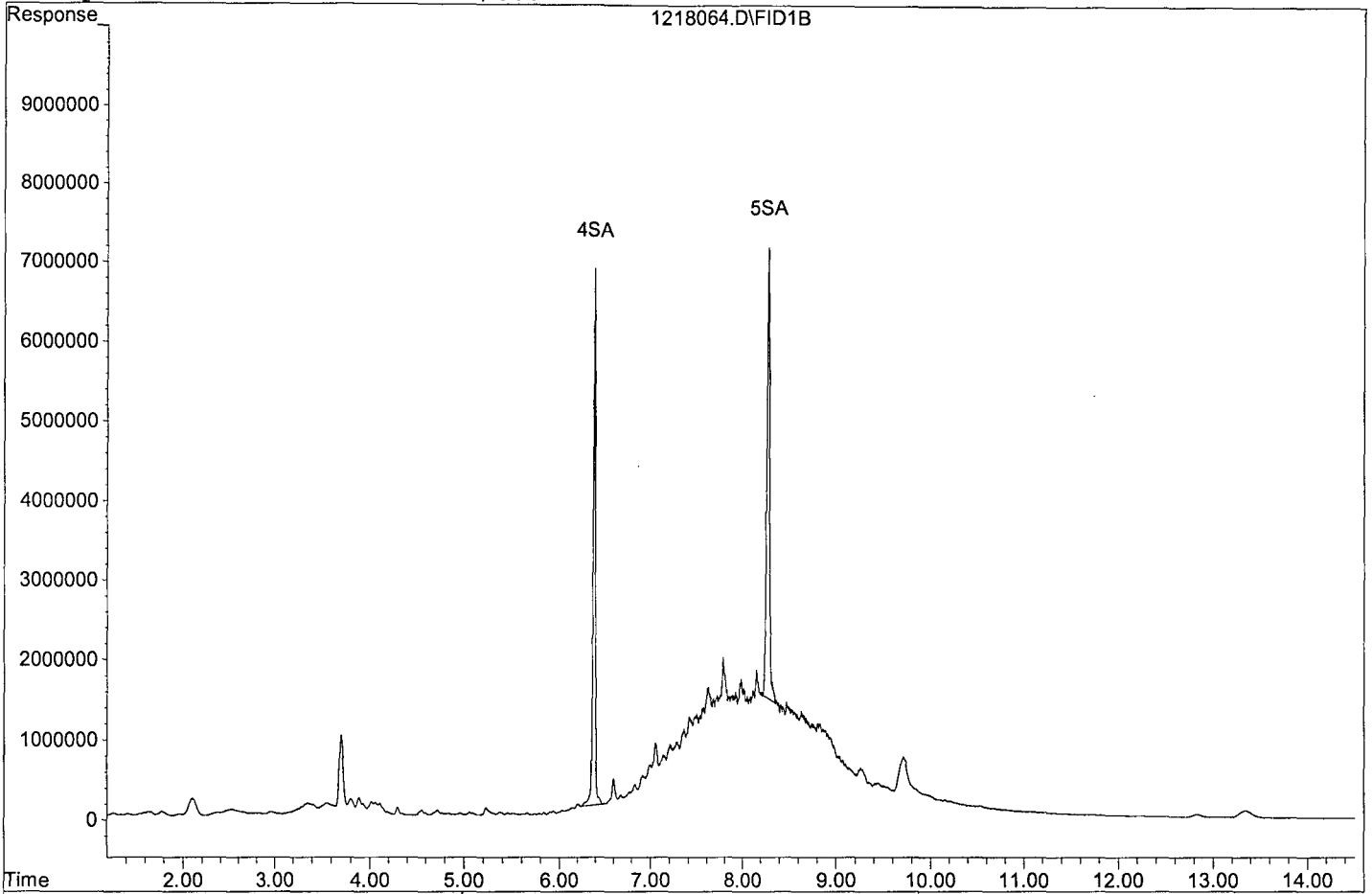
Target Compounds

2) HBTM Motor Oil (C24-C40)	9.36	1399900397	1260.822 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\181218\1218064.D  
Sample : AZ84061W32 MSD-2 2/800



### 8015 Standard Prep

THC Surrogate										
Prepared: 11/02/18					Prepared By (Initials): DP					
Expires: 10/18/19										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	CL12572-39692	10/18/19	06/30/23	N/A	N/A	N/A	600
Diesel Calibration Standard										
Prepared: 08/13/18					Prepared By (Initials): DP					
Expires: 08/13/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Diesel Fuel #2	Restek	31258	50,000	A0121108	08/13/19		1000uL	25mL	MC	2000
THC Surrogate	Phenova	ALO-130161	600	CL12238-39244	08/13/19		4165			100
Diesel Calibration Curve										
Prepared: 09/05/18					Prepared By (Initials): DP					
Expires: 03/06/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Diesel Calibration STD	Restek	Diesel STD (Level 1)	2,000	Prepared 08/13/18	08/13/19	N/A	5uL	1000uL	MC	10
Diesel Calibration STD	Restek	Diesel STD (Level 2)	2,000	Prepared 08/13/18	08/13/19	N/A	25uL	1000uL	MC	50
Diesel Calibration STD	Restek	Diesel STD (Level 3)	2,000	Prepared 08/13/18	08/13/19	N/A	125uL	1000uL	MC	250
Diesel Calibration STD	Restek	Diesel STD (Level 4)	2,000	Prepared 08/13/18	08/13/19	N/A	50uL	100uL	MC	1000
Diesel Calibration STD	Restek	Diesel STD (Level 5)	2,000	Prepared 08/13/18	08/13/19	N/A	75uL	100uL	MC	1500
Diesel Calibration STD	Restek	Diesel STD (Level 6)	2,000	Prepared 08/13/18	08/13/19	N/A	100uL	100uL	N/A	2,000
Diesel Second Source (SS)										
Prepared: 08/02/18					Prepared By (Initials): DP					
Expires: 08/02/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Diesel Fuel #2	O2SI	G34-011598-03	50,000	G34-319187-38958	08/02/19		100uL	5mL	MC	1,000
Diesel CCV										
Prepared: 10/15/18					Prepared By (Initials): DP					
Expires: 04/15/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Diesel Calibration STD	Restek	Diesel CCV	2,000	Prepared 08/13/18	08/13/19	N/A	1250uL	10mL	MC	250
Diesel Spike										
Prepared: 10/24/18					Prepared By (Initials): DP					
Expires: 10/24/19										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Diesel Fuel #2	Absolute	51046	50,000	111715-39358	10/24/19	11/17/20	N/A	N/A	N/A	50,000

Motor Oil Standard										
Prepared: 03/02/18						Prepared By (Initials): DP				
Expires: 03/02/19										
Methylene Chloride Lot No. 56258										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Motor Oil	O2SI	116390-01	50,000	334223-38795	03/02/19		1mL	25mL	MC	2,000

Motor Oil Calibration Curve										
Prepared: 09/05/18						Prepared By (Initials): DP				
Expires: 03/02/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Motor Oil STD	O2SI	Motor Oil (Level 1)	2,000	Prepared 03/02/18	03/02/19	N/A	5uL	1000uL	MC	10
Motor Oil STD	O2SI	Motor Oil (Level 2)	2,000	Prepared 03/02/18	03/02/19	N/A	25uL	1000uL	MC	50
Motor Oil STD	O2SI	Motor Oil (Level 3)	2,000	Prepared 03/02/18	03/02/19	N/A	125uL	1000uL	MC	250
Motor Oil STD	O2SI	Motor Oil (Level 4)	2,000	Prepared 03/02/18	03/02/19	N/A	50uL	100uL	MC	1,000
Motor Oil STD	O2SI	Motor Oil (Level 5)	2,000	Prepared 03/02/18	03/02/19	N/A	75uL	100uL	MC	1,500
Motor Oil STD	O2SI	Motor Oil (Level 6)	2,000	Prepared 03/02/18	03/02/19	N/A	100uL	100uL	N/A	2,000

Motor Oil Second Source (SS)										
Prepared: 07/13/18						Prepared By (Initials): DP				
Expires: 03/02/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Motor Oil Second Source	O2SI	116390-02-SS	50,000	301142-37652	03/02/19		100uL	5mL	MC	1,000

Motor Oil CCV										
Prepared: 10/15/18						Prepared By (Initials): DP				
Expires: 03/02/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Motor Oil STD	O2SI	Motor Oil CCV	2,000	Prepared 03/02/18	03/02/19	N/A	1250uL	10mL	MC	250

Motor Oil Spike										
Prepared: 10/31/18						Prepared By (Initials): DP				
Expires: 10/31/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Standard Conc.
Motor Oil Composite	O2SI	116390-02	50,000	343132-39108	10/31/19	03/02/22	N/A	N/A	N/A	50,000

**Diesel / Motor Oil Calibration Standard**

Prepared: 01/15/19

Prepared By (Initials): DP

Expires: 01/15/20

Methylene Chloride Lot No. 56278

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0135614-39409	01/15/20	03/31/25	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	A0135245-39351	01/15/20	03/31/25	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	CL12572-39691	08/13/19	06/30/23	1666uL			100

**Diesel / Motor Oil Second Source (SS)**

Prepared: 01/15/19

Prepared By (Initials): DP

Expires: 01/15/20

Methylene Chloride Lot No. 56278

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2 Second Source	O2SI	G34-011598-03	50,000	G34-319187-38958	08/02/19	09/29/21	50uL	10mL	MC	250
Motor Oil Second Source	O2SI	116390-02-SS	50,000	301142-37652	07/13/19	03/05/22	50uL			

**Diesel / Motor Oil Calibration Curve**

Prepared: 01/17/19

Prepared By (Initials): DP

Expires: 07/17/19

Methylene Chloride Lot No. 56278

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 1	2,000	Prepared 01/17/19	01/15/20	N/A	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 2	2,000	Prepared 01/17/19	01/15/20	N/A	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 3	2,000	Prepared 01/17/19	01/15/20	N/A	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 4	2,000	Prepared 01/17/19	01/15/20	N/A	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 5	2,000	Prepared 01/17/19	01/15/20	N/A	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 6	2,000	Prepared 01/17/19	01/15/20	N/A	100uL	100uL	N/A	2,000

**Diesel / Motor Oil CCV**

Prepared: 01/21/19

Prepared By (Initials): DP

Expires: 07/22/19

Methylene Chloride Lot No. 56278

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil STD	APPL	Diesel / Motor Oil CCV	2,000	Prepared 01/15/19	01/15/20	N/A	1250uL	10mL	MC	250

**ADDED PAGE**

**Motor Oil Spike**

Prepared: 11/15/18

Prepared By (Initials): DP

Expires: 11/15/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Motor Oil Composite	Restek	31464	50,000	A0135245-39352	11/15/19	03/31/25	N/A	N/A	N/A	50,000

**ADDED PAGE**

**Diesel Spike**

Prepared: 12/11/18

Prepared By (Initials): DP

Expires: 12/11/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Absolute	51046	50,000	111715-39355	12/11/19	11/17/20	N/A	N/A	N/A	50,000

**ADDED PAGE**

THC Surrogate										
Prepared: 11/21/18					Prepared By (Initials): DP					
Expires: 10/18/19										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	CL12572-39687	10/18/19	06/30/23	N/A	N/A	N/A	600

**ADDED PAGE**

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	181214A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 11-21-18 EXP 11-21-19				
Spiked ID 2	Motor Oil Spike 11-15-18 EXP 11-15-19	Surrogate ID 2					
Spiked ID 3	Diesel Cal Std 8-13-18 EXP 8-13-19	Surrogate ID 3					
Spiked ID 4	Motor Oil Cal Std 12-11-18 EXP 12-11-19	Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		YES			
Spiked ID 7		Ext. Start Time:	12/14/18 16:30				
Spiked ID 8		Ext. End Time:	12/15/18 11:00, 12/18/18 16:10				
		GC Requires Extract By:	12/21/18 0:00				
		pH1	2	12/14/18 7:45:00 AM	Water Bath Temp Criteria	35,35,35 °	
		pH2	2	12/14/18 1:55:00 PM			
		pH3	2	12/14/18 3:10:00 PM			

Spiked By: DL

Date 12/14/18

Witnessed By: CFM

Date 12/14/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 181214A Bik				0.100	1	800	2	2	12/14/18 8:00	
					equip	E-HP51 E-WB1				
2 181214A LCS-1		0.020	1	0.100	1	800	2	2	12/14/18 14:00	
					equip	E-HP50 E-WB2				
3 181214A LCS-2		0.020	2	0.100	1	800	2	2	12/14/18 14:00	
					equip	E-HP48 E-WB1				
4 181214A LCSD-1		0.020	1	0.100	1	800	2	2	12/14/18 14:00	
					equip	E-HP49 E-WB3				
5 181214A LCSD-2		0.020	2	0.100	1	800	2	2	12/14/18 14:00	
					equip	E-HP47 E-WB2				
6 AZ78569	AZ78569W01	0.020	3	NA	NA	800	2	2	12/14/18 8:00	DIESEL LOD
					equip	E-HP11 E-WB3				
7 AZ81888	AZ81888W01	0.080	4	NA	NA	800	2	2	12/14/18 8:00	MO LOD
					equip	E-HP9 E-WB2				
8 AZ84057 MS-1	AZ84057W20	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP29 E-WB1				
9 AZ84057 MSD-1	AZ84057W19	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP28 E-WB2				
10 AZ84057 MS-2	AZ84057W18	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP27 E-WB3				
11 AZ84057 MSD-2	AZ84057W27	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP26 E-WB1				
12 AZ84057	AZ84057W21			0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP30 E-WB3				
13 AZ84059	AZ84059W09			0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP25 E-WB2				
14 AZ84061 MS-1	AZ84061W25	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP16 E-WB1				
15 AZ84061 MSD-1	AZ84061W30	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP15 E-WB2				
16 AZ84061 MS-2	AZ84061W31	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP14 E-WB3				

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
Filter Paper	400138
B. Sodium Sulfate	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	DP
Date	12/18/18
Time	5:09
Refrigerator	Hubarstl

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/20/18 12:56:15 PM

Reviewed By: *[Signature]* Date: 12/20/18  
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Ext\_ID: 61272



# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	181214A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 11-21-18 EXP 11-21-19				
Spiked ID 2	Motor Oil Spike 11-15-18 EXP 11-15-19	Surrogate ID 2					
Spiked ID 3	Diesel Cal Std 8-13-18 EXP 8-13-19	Surrogate ID 3					
Spiked ID 4	Motor Oil Cal Std 12-11-18 EXP 12-11-19	Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		YES			
Spiked ID 7		Ext. Start Time:		12/14/18 16:30			
Spiked ID 8		Ext. End Time:		12/15/18 11:00 , 12/18/18 16:00			
		GC Requires Extract By:		12/21/18 0:00			
pH1	2	12/14/18 7:45:00 AM	Water Bath Temp Criteria		35,35,35 °		
pH2	2	12/14/18 1:55:00 PM					
pH3	2	12/14/18 3:10:00 PM					

Spiked By: DL

Date 12/14/18

Witnessed By: CFM

Date 12/14/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ84061 MSD-2 AZ84061W32	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
						equip	E-HP13 E-WB1			
18	AZ84061 AZ84061W18			0.100	1	800	2	2	12/14/18 15:20	87650
						equip	E-HP17 E-WB3			
19	AZ84062 AZ84062W11			0.100	1	800	2	2	12/14/18 15:20	87650
						equip	E-HP12 E-WB2			
20	Diesel LOQ	0.080	3	NA	NA	800	2	2	12/14/18 8:00	DIESEL LOQ
						equip	E-HP10 E-WB1			
21	MO LOQ	0.200	4	NA	NA	800	2	2	12/14/18 8:00	MO LOQ
						equip	E-HP7 E-WB3			

*kg 12/20/18*

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400138
B. Sodium Sulfate	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/20/18 12:56:15 PM

Reviewed By: *ky* Date *12/20/18*  
 Page 359 of 1287  
 Ext\_ID 61272

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH- 3520C w/SGC	<b>Extraction Set</b>	181214A	<b>Extraction Method</b>	LIQ005SGC	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 11-21-18 EXP 11-21-19				
Spiked ID 2	Motor Oil Spike 11-15-18 EXP 11-15-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		YES			
Spiked ID 7		Ext. Start Time:		12/14/18 16:10			
Spiked ID 8		Ext. End Time:		12/15/18 11:00			
GC Requires Extract By:				12/21/18 0:00			
pH1	2	12/14/18 7:45:00 AM	Water Bath Temp Criteria	35,35,35 °			
pH2	2	12/14/18 1:55:00 PM					
pH3	2	12/14/18 3:10:00 PM					

Spiked By: DL

Date 12/14/18

Witnessed By: CFM

Date 12/14/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 181214A Blk				0.100	1	800	2	2	12/14/18 8:00	*
					equip	E-HP51 E-WB1				
2 181214A LCS-1		0.020	1	0.100	1	800	2	2	12/14/18 14:00	*
					equip	E-HP50 E-WB2				
3 181214A LCS-2		0.020	2	0.100	1	800	2	2	12/14/18 14:00	*
					equip	E-HP48 E-WB1				
4 181214A LCSD-1		0.020	1	0.100	1	800	2	2	12/14/18 14:00	*
					equip	E-HP49 E-WB3				
5 181214A LCSD-2		0.020	2	0.100	1	800	2	2	12/14/18 14:00	*
					equip	E-HP47 E-WB2				
6 AZ84057 MS-1	AZ84057W20	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP29 E-WB1				
7 AZ84057 MSD-1	AZ84057W19	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP28 E-WB2				
8 AZ84057 MS-2	AZ84057W18	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP27 E-WB3				
9 AZ84057 MSD-2	AZ84057W27	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP26 E-WB1				
10 AZ84057	AZ84057W21			0.100	1	800	2	2	12/14/18 15:20	87650 *
					equip	E-HP30 E-WB3				
11 AZ84059	AZ84059W09			0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP25 E-WB2				
12 AZ84061 MS-1	AZ84061W25	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP16 E-WB1				
13 AZ84061 MSD-1	AZ84061W30	0.020	1	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP15 E-WB2				
14 AZ84061 MS-2	AZ84061W31	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP14 E-WB3				
15 AZ84061 MSD-2	AZ84061W32	0.020	2	0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP13 E-WB1				
16 AZ84061	AZ84061W18			0.100	1	800	2	2	12/14/18 15:20	87650
					equip	E-HP17 E-WB3				

Solvent and Lot#	
I+1 HCL (5mLs)	11-19-18
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
Filter Paper	400138
B. Sodium Sulfate	17H095210
SILICA GEL (*)	021111Q

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	DP
Date	12/19
Time	12:50
Refrigerator	Hobart 1

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/02/19 11:19:43 AM

Reviewed By: *KY* Date: *12/19*

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH- 3520C w/SGC	<b>Extraction Set</b>	181214A	<b>Extraction Method</b>	LIQ005SGC	<b>Units</b>	mL	
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 11-21-18 EXP 11-21-19					
Spiked ID 2	Motor Oil Spike 11-15-18 EXP 11-15-19	Surrogate ID 2						
Spiked ID 3		Surrogate ID 3						
Spiked ID 4		Surrogate ID 4						
Spiked ID 5		Surrogate ID 5						
Spiked ID 6		Sufficient Vol for Matrix QC:		YES				
Spiked ID 7		Ext. Start Time:		12/14/18 16:10				
Spiked ID 8		Ext. End Time:		12/15/18 11:00				
		GC Requires Extract By:		12/21/18 0:00				
		pH1	2	12/14/18 7:45:00 AM	Water Bath Temp Criteria			35,35,35 °
		pH2	2	12/14/18 1:55:00 PM				
		pH3	2	12/14/18 3:10:00 PM				

Spiked By: DL

Date 12/14/18

Witnessed By: CFM

Date 12/14/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ84062	AZ84062W11		0.100	1	800	2	2	12/14/18 15:20	87650 *
						equip	E-HP12 E-WB2			

Ks 1/2/19

Solvent and Lot#	
1+1 HCL (5mLs)	11-19-18
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
Filter Paper	400138
B. Sodium Sulfate	17H095210
SILICA GEL (*)	021111Q

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/02/19 11:19:43 AM

Reviewed By: *Ks*

Date 1/2/19

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190124A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 12-17-18 EXP 12-17-19	Spiked ID 2	Motor Oil Spike 12-0-18 EXP 12-20-19	Surrogate ID 2	
Spiked ID 3		Surrogate ID 3		Spiked ID 4		Surrogate ID 4	
Spiked ID 5		Surrogate ID 5		Spiked ID 6		Surrogate ID 5	
Spiked ID 7		Sufficient Vol for Matrix QC: NO		Spiked ID 8		Ext. Start Time: 01/24/19 15:00 , 01/25/19 09:00	
		Ext. End Time: 01/25/19 15:30				GC Requires Extract By: 01/30/19 0:00	
		pH1	2	01/24/19 1:35:00 PM	Water Bath Temp Criteria 35,35,35 °		
		pH2					
		pH3					

Spiked By: KY

Date 01/24/19

Witnessed By: DL

Date 01/24/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190124A Blk			0.100	1	800	2	2	01/24/19 13:40	
					equip	E-HP3 E-WB1				
2	190124A LCS-1	0.020	1,2	0.100	1	800	2	2	01/24/19 13:40	
					equip	E-HP4 E-WB2				
3	190124A LCSD-1	0.020	1,2	0.100	1	800	2	2	01/24/19 13:40	
					equip	E-HP9 E-WB2				
4	AZ84057 AZ84057W25			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP10 E-WB3				
5	AZ84059 AZ84059W07			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP11 E-WB1				
6	AZ84061 AZ84061W27			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP12 E-WB2				
7	AZ84062 AZ84062W08			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP13 E-WB3				
8	AZ85520 AZ85520W10			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP14 E-WB1				
9	AZ85523 AZ85523W13			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP15 E-WB2				
10	AZ85525 AZ85525W10			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP16 E-WB3				
11	AZ85527 AZ85527W11			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP17 E-WB1				

Key 1/28/19

Solvent and Lot#	
I+1 HCL	11-19-18
PH Strips	HC849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	DP
Date	1/26/19
Time	9:50
Refrigerator	H66wrt1

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/28/19 1:47:36 PM

Reviewed By: *Key* Date: *1/28/19*

ADDED PAGE

## Injection Log

Directory: G:\APOLLO\DATA\181218\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
3	905003.D	1	Diesel - 1 9/5/18	Mix(A)	9-5-18 13:32:12
4	905004.D	1	Diesel - 2 9/5/18	Mix(A)	9-5-18 13:51:56
5	905005.D	1	Diesel - 3 9/5/18	Mix(A)	9-5-18 14:11:55
6	905006.D	1	Diesel - 4 9/5/18	Mix(A)	9-5-18 14:31:55
7	905007.D	1	Diesel - 5 9/5/18	Mix(A)	9-5-18 14:51:56
8	905008.D	1	Diesel - 6 9/5/18	Mix(A)	9-5-18 15:11:58
9	905009.D	1	Diesel - SS 8/2/18	Mix(A)	9-5-18 15:32:03
10	905010.D	1	Motor Oil - 1 9/5/18	Mix(B)	9-5-18 15:52:08
11	905011.D	1	Motor Oil - 2 9/5/18	Mix(B)	9-5-18 16:12:11
12	905012.D	1	Motor Oil - 3 9/5/18	Mix(B)	9-5-18 16:32:11
13	905013.D	1	Motor Oil - 4 9/5/18	Mix(B)	9-5-18 16:52:14
14	905014.D	1	Motor Oil - 5 9/5/18	Mix(B)	9-5-18 17:12:14
15	905015.D	1	Motor Oil - 6 9/5/18	Mix(B)	9-5-18 17:31:25
16	905016.D	1	Motor Oil - SS 7/13/18	Mix(B)	9-5-18 17:51:24
17	814017.D	1	Decanoic Acid - 1 8/13/18	Mix(C)	8-14-18 16:56:27
18	814018.D	1	Decanoic Acid - 2 8/13/18	Mix(C)	8-14-18 17:15:48
19	814019.D	1	Decanoic Acid - 3 8/13/18	Mix(C)	8-14-18 17:35:59
20	814020.D	1	Decanoic Acid - 4 8/13/18	Mix(C)	8-14-18 17:56:16
21	814021.D	1	Decanoic Acid - 5 8/13/18	Mix(C)	8-14-18 18:16:22
22	814022.D	1	Decanoic Acid - 6 8/13/18	Mix(C)	8-14-18 18:36:30
36	1218036.D	1	Diesel - 3 12/11/18	Mix(A)	12-19-18 11:43:13
37	1218037.D	1	Motor Oil - 3 12/11/18	Mix(B)	12-19-18 12:03:14
43	1218043.D	2.5	181214A BLK 2/800	water	12-19-18 14:03:49
48	1218048.D	2.5	181214A LCS-1 2/800	water	12-19-18 16:23:39
49	1218049.D	2.5	181214A LCSD-1 2/800	water	12-19-18 16:43:47
50	1218050.D	2.5	181214A LCS-2 2/800	water	12-19-18 17:03:50
51	1218051.D	2.5	181214A LCSD-2 2/800	water	12-19-18 17:23:53
53	1218053.D	2.5	AZ84057W20 MS-1 2/800	water	12-19-18 18:03:52
54	1218054.D	2.5	AZ84057W19 MSD-1 2/800	water	12-19-18 18:23:49
55	1218055.D	2.5	AZ84057W18 MS-2 2/800	water	12-19-18 18:43:49
56	1218056.D	2.5	AZ84057W27 MSD-2 2/800	water	12-19-18 19:03:08
57	1218057.D	1	Diesel - 3 12/11/18	Mix(A)	12-19-18 19:23:12
58	1218058.D	1	Motor Oil - 3 12/11/18	Mix(B)	12-19-18 19:43:14
59	1218059.D	2.5	AZ84059W09 2/800	water	12-19-18 20:03:10
60	1218060.D	2.5	AZ84061W18 2/800	water	12-19-18 20:23:03
61	1218061.D	2.5	AZ84061W25 MS-1 2/800	water	12-19-18 20:43:00
62	1218062.D	2.5	AZ84061W30 MSD-1 2/800	water	12-19-18 21:02:49
63	1218063.D	2.5	AZ84061W31 MS-2 2/800	water	12-19-18 21:22:41
64	1218064.D	2.5	AZ84061W32 MSD-2 2/800	water	12-19-18 21:42:43
66	1218066.D	1	Diesel - 3 12/11/18	Mix(A)	12-20-18 11:08:41
67	1218067.D	1	Motor Oil - 3 12/11/18	Mix(B)	12-20-18 11:28:29
84	1218084.D	2.5	AZ84057W21 2/800	water	12-20-18 17:08:16
85	1218085.D	2.5	AZ84062W11 2/800	water	12-20-18 17:28:14
86	1218086.D	1	Diesel - 3 12/11/18	Mix(A)	12-20-18 17:48:15
87	1218087.D	1	Motor Oil - 3 12/11/18	Mix(B)	12-20-18 18:08:20
2	102002.D	1	Diesel - 3 12/11/18	Mix(A)	1-2-19 13:11:08
3	102003.D	1	Motor Oil - 3 12/11/18	Mix(B)	1-2-19 13:31:01
4	102004.D	1	Decanoic Acid - 3 8/23/18	Mix(C)	1-2-19 13:50:56
5	102005.D	2.5	181214A BLK 2/800 SGC	water	1-2-19 14:10:56
6	102006.D	2.5	181214A LCS-1 2/800 SGC	water	1-2-19 14:30:59
7	102007.D	2.5	181214A LCSD-1 2/800 SGC	water	1-2-19 14:50:25

8	102008.D	2.5	181214A LCS-2 2/800 SGC	water	1-2-19 15:10:29
9	102009.D	2.5	181214A LCSD-2 2/800 SGC	water	1-2-19 15:30:37
10	102010.D	2.5	AZ84057W21 2/800 SGC	water	1-2-19 15:50:03
11	102011.D	2.5	AZ84062W11 2/800 SGC	water	1-2-19 16:10:05
12	102012.D	1	Diesel - 3 12/11/18	Mix(A)	1-2-19 16:30:08
13	102013.D	1	Motor Oil - 3 12/11/18	Mix(B)	1-2-19 16:50:09
14	102014.D	1	Decanoic Acid - 3 8/23/18	Mix(C)	1-2-19 17:10:11

## Injection Log

Directory: G:\APOLLO\DATA\190117\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	117002.D	1	Diesel / Motor Oil - 1 1/17/19	water	1-17-19 16:38:28
3	117003.D	1	Diesel / Motor Oil - 2 1/17/19	water	1-17-19 16:58:29
4	117004.D	1	Diesel / Motor Oil - 3 1/17/19	water	1-17-19 17:17:50
5	117005.D	1	Diesel / Motor Oil - 4 1/17/19	water	1-17-19 17:37:44
6	117006.D	1	Diesel / Motor Oil - 5 1/17/19	water	1-17-19 17:57:32
7	117007.D	1	Diesel / Motor Oil - 6 1/17/19	water	1-17-19 18:17:22
8	117008.D	1	Diesel / Motor Oil - SS 1/15/19	water	1-17-19 18:37:21
22	124022.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-25-19 15:45:29
24	124024.D	2.5	190124A BLK 2/800	water	1-25-19 16:25:09
25	124025.D	2.5	190124A LCS-1 2/800	water	1-25-19 16:44:30
26	124026.D	2.5	190124A LCSD-1 2/800	water	1-25-19 17:04:28
27	124027.D	2.5	AZ84057W25 2/800	water	1-25-19 17:24:26
28	124028.D	2.5	AZ84059W07 2/800	water	1-25-19 17:44:24
29	124029.D	2.5	AZ84061W27 2/800	water	1-25-19 18:04:15
30	124030.D	2.5	AZ84062W08 2/800	water	1-25-19 18:24:06
44	124044.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-25-19 22:58:02

**ADDED PAGE**

**ORGANICS**  
**Calibration Data**



PAH by GCMS SIM  
EPA 8270 SIM

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 10/26/18  
Instrument: Linus

Initials: \_\_\_\_\_

1026L004.D 1026L005.D 1026L006.D 1026L007.D 1026L003.D 1026L008.D 1026L009.D 1026L010.D

		Compound	0.1	0.2	0.5	1	5	10	50	100		Avg	%RSD	Type	r^2	Q	MRF
1	I	Napthalene-D8(IS)															
2	S	Surrogate Recovery (NBZ)		0.4490	0.3905	0.3381	0.3544	0.3895	0.3629	0.3647		0.38	9.6	S			
3	TM	Naphthalene	1.071	1.109	1.094	1.040	0.9826	1.064	0.9678	0.9409		1.0	6.0	TM			0.700
4	S	2-Methylnaphthalene-D10 (2M)	1.204	1.170	1.283	1.182	1.115	1.207	1.054	1.014		1.2	7.6	S			
5	TM	2-Methylnaphthalene	0.6342	0.6457	0.6760	0.6427	0.6407	0.6856	0.6079	0.5737		0.64	5.6	TM			0.400
6	TM	1-Methylnaphthalene	0.6941	0.6784	0.7038	0.6570	0.6224	0.6581	0.5807	0.5502		0.64	8.5	TM			
7	I	Acenaphthene-D10(IS)															
8	S	Surrogate Recovery (FBP)	1.668	1.668	1.756	1.634	1.614	1.756	1.472	1.448		1.6	7.1	S			
9	TM	Acenaphthylene	4.411	4.374	4.576	4.233	4.273	4.605	4.004	3.832		4.3	6.2	TM			0.900
10	*TM	Acenaphthene	1.471	1.421	1.404	1.292	1.236	1.347	1.147	1.130		1.3	9.7	*TM			0.900
11	TM	Fluorene	1.527	1.526	1.612	1.554	1.494	1.607	1.380	1.349		1.5	6.4	TM			0.900
12	I	Phenanthrene-D10(IS)															
13	TM	Phenanthrene	1.224	1.258	1.233	1.198	1.099	1.227	1.071	0.9849		1.2	8.4	TM			0.700
14	TM	Anthracene	1.101	1.107	1.146	1.108	1.076	1.204	1.040	0.9417		1.1	7.1	TM			0.700
15	S	Fluoranthene-D10 (FRT)	1.512	1.533	1.628	1.543	1.527	1.738	1.504	1.474		1.6	5.5	S			
16	*TM	Fluoranthene	1.639	1.693	1.766	1.728	1.661	1.857	1.631	1.559		1.7	5.4	*TM			0.600
17	I	Chrysene-D12(IS)															
18	TM	Pyrene	1.239	1.278	1.319	1.266	1.226	1.359	1.271	1.238		1.3	3.5	TM			0.600
19	S	Surrogate Recovery (TPH)	0.9654	0.8333	0.8383	0.7662	0.7250	0.8033	0.7421	0.7345		0.80	9.9	S			
20	TM	Benz (a) anthracene	1.135	1.030	1.075	0.9966	1.038	1.151	1.122	1.044		1.1	5.2	TM			0.800
21	TM	Chrysene	1.267	1.224	1.220	1.123	1.071	1.175	1.069	1.061		1.2	7.0	TM			0.700
22	TML	Indeno (1,2,3-cd) pyrene	0.5269	0.5639	0.6808	0.6912	0.7735	0.8537	0.9032	0.9238		0.74	20	TML	1.000		0.500
23	I	Perylene-D12(IS)															
24	TM	Benzo (b) fluoranthene	1.025	1.065	1.071	1.012	1.056	1.169	1.109	1.091		1.1	4.6	TM			0.700
25	TM	Benzo (k) fluoranthene	1.385	1.237	1.205	1.145	1.158	1.283	1.115	1.070		1.2	8.4	TM			0.700
26	*TM	Benzo (a) pyrene	0.8478	0.8472	0.9054	0.8976	0.9593	1.090	1.004	0.9603		0.94	8.8	*TM			0.700
27	TM	Dibenz (a,h) anthracene	0.9632	0.8830	0.9203	0.8970	0.8805	0.9763	0.9194	0.8807		0.92	4.1	TM			0.400
28	TM	Benzo (g,h,i) perylene	0.9218	0.9218	0.9490	0.8944	0.9068	1.008	0.9146	0.8895		0.93	4.1	TM			0.500
29																	
30																	
31																	
32																	
33																	
34																	
35																	

Data File : M:\LINUS\DATA\L181026\1026L003.D  
 Acq On : 26 Oct 18 12:21  
 Sample : 5 SIM 10/26/18  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Oct 26 15:34 2018

Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	34683	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.20	164	15809	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.94	188	31498	2.50000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	43804	2.50000	ppb	0.00
23) Perylene-D12 (IS)	18.17	264	42589	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.36	82	12292	1.97005	ppb	0.00
Spiked Amount	5.000		Recovery	=	39.400%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	38674	2.07165	ppb	0.00
Spiked Amount	5.000		Recovery	=	41.440%	
8) Surrogate Recovery (FBP)	5.43	172	25518	2.08947	ppb	0.00
Spiked Amount	5.000		Recovery	=	41.780%	
15) Fluoranthene-D10 (FRT)	10.10	212	48093	2.01683	ppb	0.00
Spiked Amount	5.000		Recovery	=	40.340%	
19) Surrogate Recovery (TPH)	11.37	244	31756	1.90290	ppb	0.00
Spiked Amount	5.000		Recovery	=	38.060%	
Target Compounds						
3) Naphthalene	4.20	128	68158	4.39564	ppb	100
5) 2-Methylnaphthalene	5.00	142	44443	4.68460	ppb	100
6) 1-Methylnaphthalene	5.11	142	43171	4.63382	ppb	100
9) Acenaphthylene	6.04	152	135113	4.62142	ppb	100
10) Acenaphthene	6.24	154	39083	4.31457	ppb	100
11) Fluorene	6.84	166	47222	4.67548	ppb	100
13) Phenanthrene	7.98	178	69245	4.31309	ppb	100
14) Anthracene	8.05	178	67774	4.69700	ppb	100
16) Fluoranthene	10.14	202	104660	4.52909	ppb	100
18) Pyrene	10.76	202	107443	4.23342	ppb	100
20) Benz (a) anthracene	14.36	228	90932	4.13406	ppb	100
21) Chrysene	14.46	228	93849	4.26898	ppb	100
22) Indeno (1,2,3-cd) pyrene	20.47	276	67761	3.61003	ppb	100
24) Benzo (b) fluoranthene	17.27	252	89977	4.21504	ppb	100
25) Benzo (k) fluoranthene	17.34	252	98605	4.42343	ppb	100
26) Benzo (a) pyrene	18.03	252	81715	4.30156	ppb	100
27) Dibenz (a,h) anthracene	20.54	278	74995	3.92549	ppb	100
28) Benzo (g,h,i) perylene	20.96	276	77243	3.90791	ppb	100

Quantitation Report

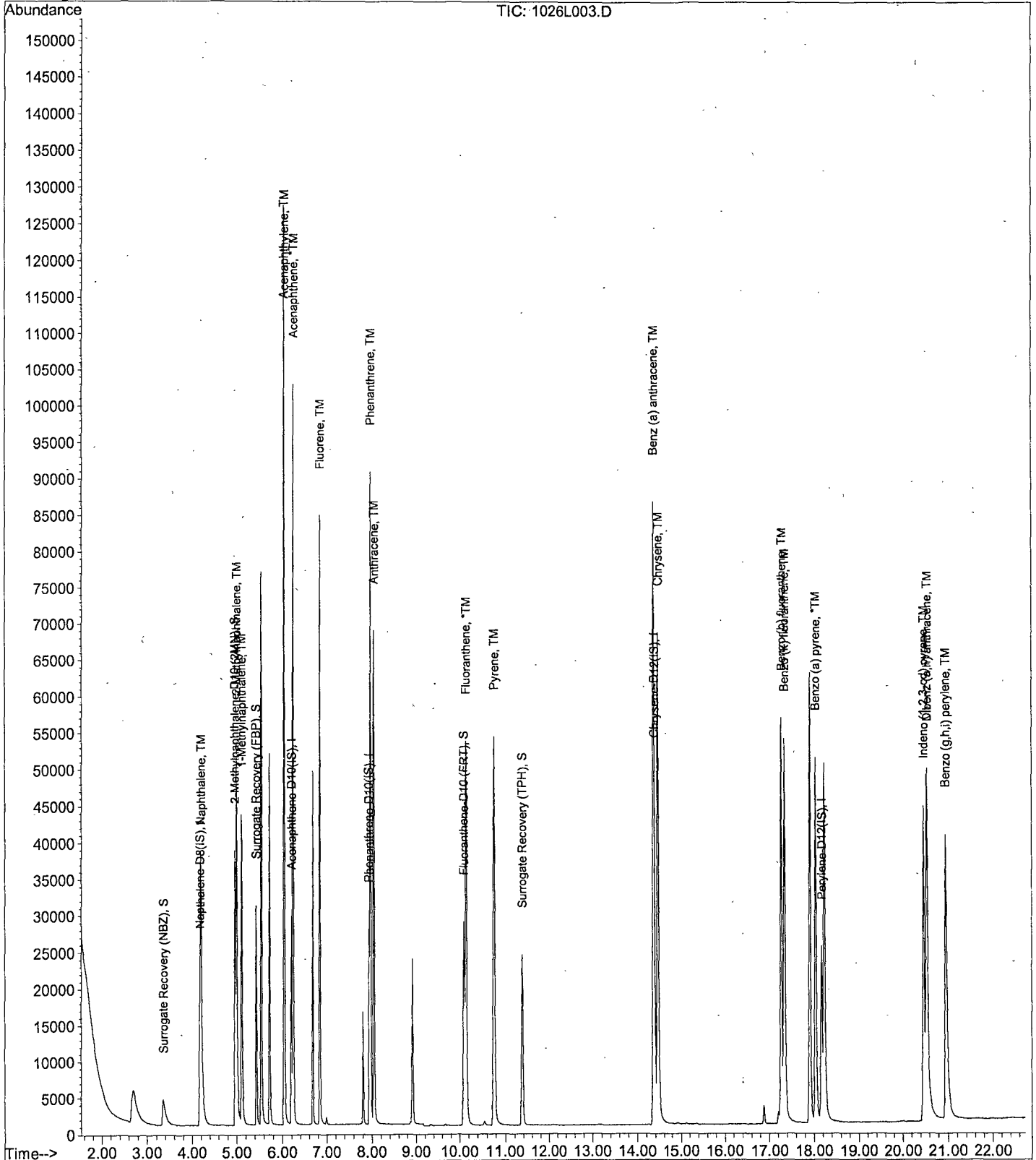
Data File : M:\LINUS\DATA\L181026\1026L003.D  
Acq On : 26 Oct 18 12:21  
Sample : 5 SIM 10/26/18  
Misc :

Vial: 3  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 15:34 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L181026\1026L004.D Vial: 4  
 Acq On : 26 Oct 18 12:50 Operator: MA  
 Sample : 0.1 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 16:19 2018

Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	33859	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.20	164	15943	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	30089	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.39	240	40761	2.50000	ppb	0.01
23) Perylene-D12 (IS)	18.17	264	40517	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.38	82	331	0.05434	ppb	0.02
Spiked Amount	5.000		Recovery	=	1.080%	
4) 2-Methylnaphthalene-D10 (2)	4.99	152	815	0.04472	ppb	0.02
Spiked Amount	5.000		Recovery	=	0.900%	
8) Surrogate Recovery (FBP)	5.44	172	532	0.04320	ppb	0.01
Spiked Amount	5.000		Recovery	=	0.860%	
15) Fluoranthene-D10 (FRT)	10.13	212	910	0.03995	ppb	0.03
Spiked Amount	5.000		Recovery	=	0.800%	
19) Surrogate Recovery (TPH)	11.39	244	787	0.05068	ppb	0.02
Spiked Amount	5.000		Recovery	=	1.020%	
Target Compounds						
3) Naphthalene	4.20	128	1450	0.09579	ppb	98
5) 2-Methylnaphthalene	5.01	142	859	0.09275	ppb	97
6) 1-Methylnaphthalene	5.12	142	940	0.10335	ppb	94
9) Acenaphthylene	6.05	152	2813	0.09541	ppb	99
10) Acenaphthene	6.24	154	938	0.10268	ppb	96
11) Fluorene	6.86	166	974	0.09563	ppb	95
13) Phenanthrene	7.98	178	1473	0.09605	ppb	99
14) Anthracene	8.06	178	1325	0.09613	ppb	97
16) Fluoranthene	10.18	202	1973	0.08938	ppb	97
18) Pyrene	10.79	202	2020	0.08553	ppb	97
20) Benz (a) anthracene	14.37	228	1851	0.09043	ppb	99
21) Chrysene	14.47	228	2065	0.10094	ppb	98
22) Indeno (1,2,3-cd) pyrene	20.55	276	859m	0.04918	ppb	100
24) Benzo (b) fluoranthene	17.31	252	1661	0.08179	ppb	99
25) Benzo (k) fluoranthene	17.38	252	2245m	0.10586	ppb	97
26) Benzo (a) pyrene	18.06	252	1374	0.07603	ppb	98
27) Dibenz (a,h) anthracene	20.61	278	1561	0.08589	ppb	# 93
28) Benzo (g,h,i) perylene	21.03	276	1494	0.07945	ppb	95

Quantitation Report

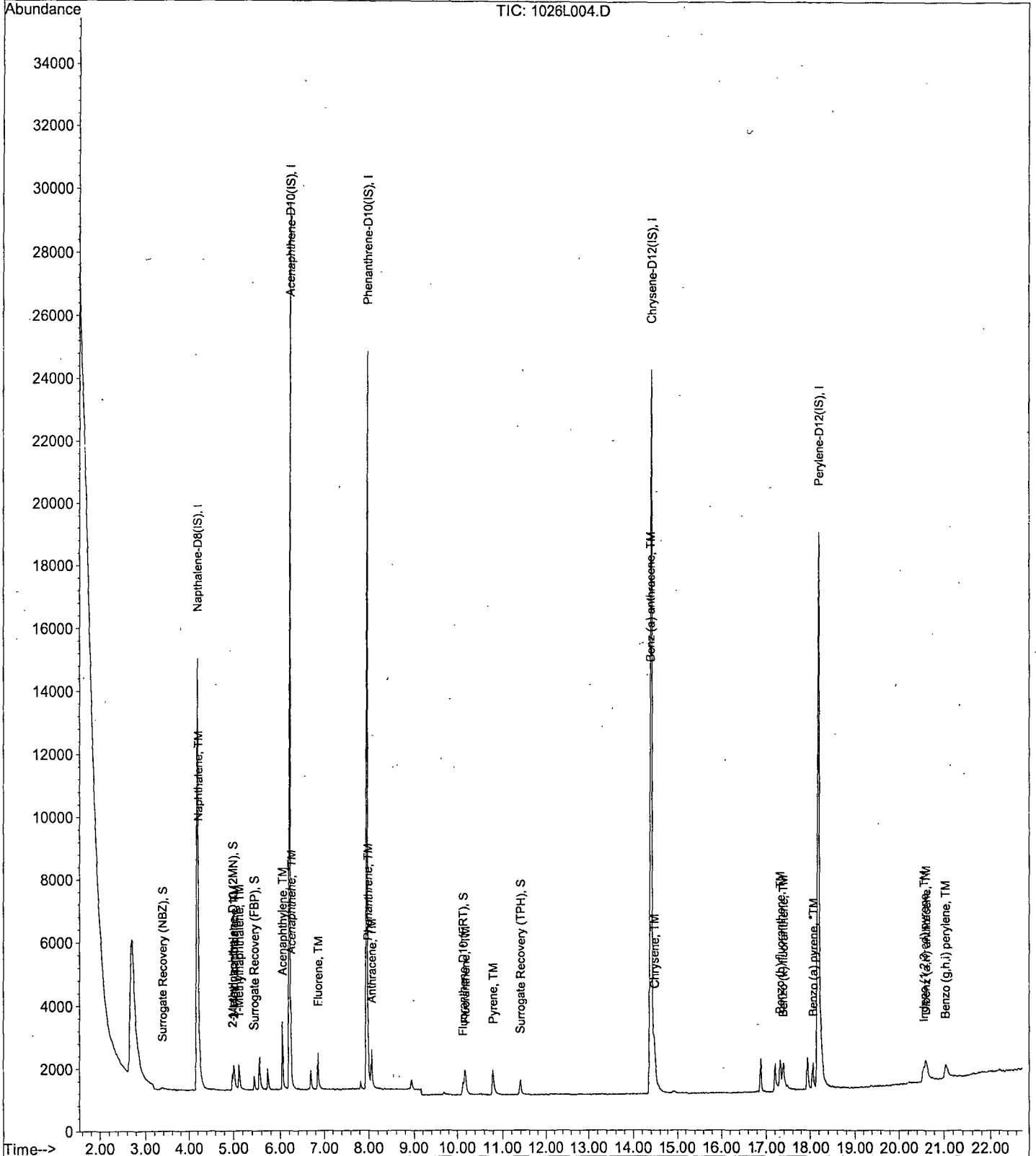
Data File : M:\LINUS\DATA\L181026\1026L004.D  
Acq On : 26 Oct 18 12:50  
Sample : 0.1 SIM 10/26/18  
Misc :

Vial: 4  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 16:19 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L181026\1026L005.D Vial: 5  
 Acq On : 26 Oct 18 13:20 Operator: MA  
 Sample : 0.2 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 16:15 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	32908	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.21	164	15199	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	28536	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.38	240	38282	2.50000	ppb	0.00
23) Perylene-D12 (IS)	18.17	264	37740	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.38	82	591	0.09983	ppb	0.02
Spiked Amount	5.000		Recovery	= 2.000%		
4) 2-Methylnaphthalene-D10 (2)	4.97	152	1540	0.08694	ppb	0.01
Spiked Amount	5.000		Recovery	= 1.740%		
8) Surrogate Recovery (FBP)	5.44	172	1014	0.08636	ppb	0.01
Spiked Amount	5.000		Recovery	= 1.720%		
15) Fluoranthene-D10 (FRT)	10.13	212	1750	0.08101	ppb	0.03
Spiked Amount	5.000		Recovery	= 1.620%		
19) Surrogate Recovery (TPH)	11.39	244	1276	0.08749	ppb	0.02
Spiked Amount	5.000		Recovery	= 1.740%		
Target Compounds						Qvalue
3) Naphthalene	4.20	128	2920	0.19847	ppb	98
5) 2-Methylnaphthalene	5.01	142	1700	0.18886	ppb	93
6) 1-Methylnaphthalene	5.12	142	1786	0.20204	ppb	97
9) Acenaphthylene	6.05	152	5319	0.18923	ppb	100
10) Acenaphthene	6.24	154	1728	0.19842	ppb	93
11) Fluorene	6.86	166	1855	0.19104	ppb	96
13) Phenanthrene	7.98	178	2873	0.19753	ppb	99
14) Anthracene	8.06	178	2528	0.19339	ppb	99
16) Fluoranthene	10.17	202	3865	0.18462	ppb	98
18) Pyrene	10.79	202	3914	0.17646	ppb	97
20) Benz (a) anthracene	14.37	228	3153	0.16402	ppb	98
21) Chrysene	14.47	228	3749	0.19513	ppb	98
22) Indeno (1,2,3-cd) pyrene	20.53	276	1727m	0.10528	ppb	97
24) Benzo (b) fluoranthene	17.30	252	3214	0.16991	ppb	98
25) Benzo (k) fluoranthene	17.38	252	3734m	0.18903	ppb	98
26) Benzo (a) pyrene	18.06	252	2558	0.15196	ppb	100
27) Dibenz (a,h) anthracene	20.60	278	2666	0.15748	ppb	94
28) Benzo (g,h,i) perylene	21.02	276	2783	0.15889	ppb	97

Quantitation Report

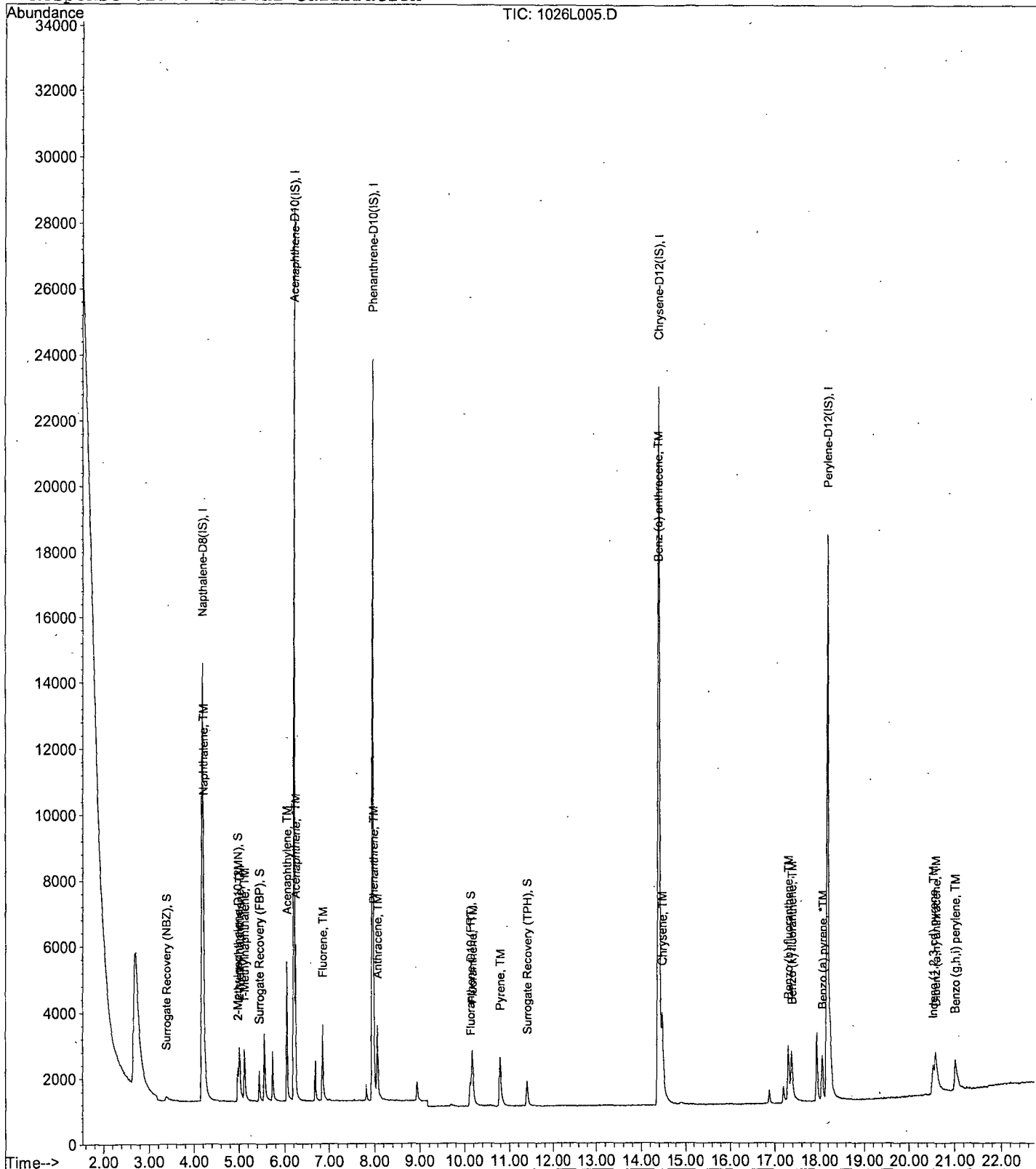
Data File : M:\LINUS\DATA\L181026\1026L005.D  
Acq On : 26 Oct 18 13:20  
Sample : 0.2 SIM 10/26/18  
Misc :

Vial: 5  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 16:15 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181026\1026L006.D Vial: 6  
 Acq On : 26 Oct 18 13:49 Operator: MA  
 Sample : 0.5 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 16:11 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	32750	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.20	164	14930	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	28628	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.39	240	38484	2.50000	ppb	0.01
23) Perylene-D12 (IS)	18.17	264	37609	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.38	82	1279	0.21709	ppb	0.02
Spiked Amount	5.000		Recovery	=	4.340%	
4) 2-Methylnaphthalene-D10 (2)	4.97	152	4203	0.23843	ppb	0.01
Spiked Amount	5.000		Recovery	=	4.760%	
8) Surrogate Recovery (FBP)	5.44	172	2622	0.22734	ppb	0.01
Spiked Amount	5.000		Recovery	=	4.540%	
15) Fluoranthene-D10 (FRT)	10.12	212	4660	0.21501	ppb	0.02
Spiked Amount	5.000		Recovery	=	4.300%	
19) Surrogate Recovery (TPH)	11.39	244	3226	0.22003	ppb	0.02
Spiked Amount	5.000		Recovery	=	4.400%	
Target Compounds						
3) Naphthalene	4.20	128	7168	0.48956	ppb	98
5) 2-Methylnaphthalene	5.01	142	4428	0.49429	ppb	99
6) 1-Methylnaphthalene	5.12	142	4610	0.52403	ppb	100
9) Acenaphthylene	6.05	152	13663	0.49485	ppb	98
10) Acenaphthene	6.24	154	4192	0.49002	ppb	93
11) Fluorene	6.86	166	4814	0.50470	ppb	99
13) Phenanthrene	7.98	178	7057	0.48363	ppb	98
14) Anthracene	8.06	178	6562	0.50036	ppb	99
16) Fluoranthene	10.16	202	10110	0.48136	ppb	99
18) Pyrene	10.78	202	10151	0.45526	ppb	99
20) Benzo (a) anthracene	14.37	228	8271	0.42801	ppb	99
21) Chrysene	14.47	228	9389	0.48612	ppb	97
22) Indeno (1,2,3-cd) pyrene	20.51	276	5240m	0.31776	ppb	99
24) Benzo (b) fluoranthene	17.29	252	8054	0.42726	ppb	97
25) Benzo (k) fluoranthene	17.37	252	9064	0.46045	ppb	100
26) Benzo (a) pyrene	18.05	252	6810	0.40595	ppb	99
27) Dibenz (a,h) anthracene	20.58	278	6922	0.41030	ppb	96
28) Benzo (g,h,i) perylene	21.00	276	7138	0.40895	ppb	96



Quantitation Report

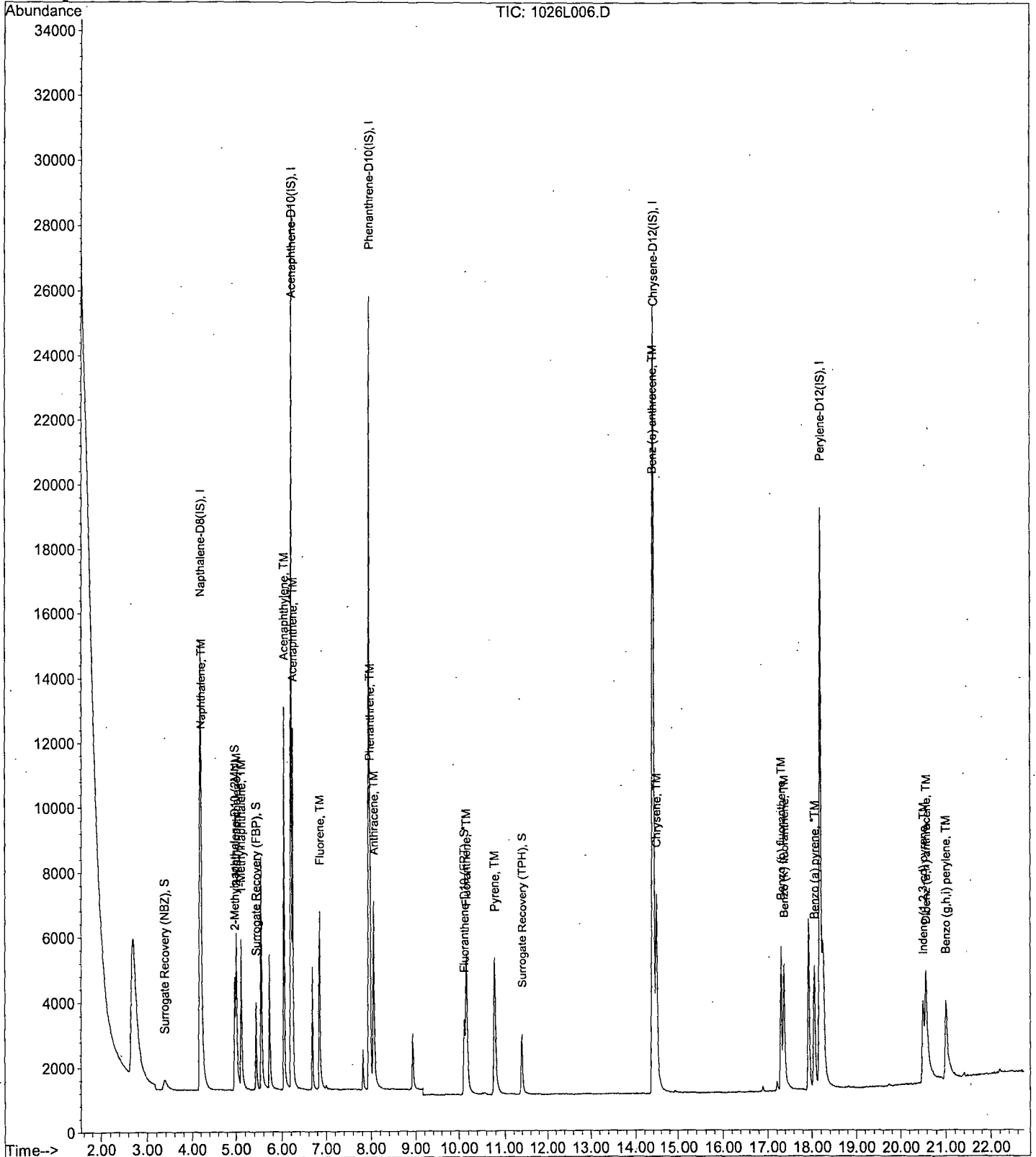
Data File : M:\LINUS\DATA\L181026\1026L006.D  
Acq On : 26 Oct 18 13:49  
Sample : 0.5 SIM 10/26/18  
Misc :

Vial: 6  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 16:11 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L181026\1026L007.D Vial: 7  
 Acq On : 26 Oct 18 14:18 Operator: MA  
 Sample : 1 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 16:11 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	33971	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.21	164	15608	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	29272	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.38	240	39857	2.50000	ppb	0.00
23) Perylene-D12 (IS)	18.17	264	39069	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.37	82	2297	0.37586	ppb	0.01
Spiked Amount	5.000		Recovery	=	7.520%	
4) 2-Methylnaphthalene-D10 (2)	4.97	152	8029	0.43910	ppb	0.01
Spiked Amount	5.000		Recovery	=	8.780%	
8) Surrogate Recovery (FBP)	5.44	172	5100	0.42298	ppb	0.01
Spiked Amount	5.000		Recovery	=	8.460%	
15) Fluoranthene-D10 (FRT)	10.11	212	9033	0.40761	ppb	0.01
Spiked Amount	5.000		Recovery	=	8.160%	
19) Surrogate Recovery (TPH)	11.38	244	6108	0.40225	ppb	0.01
Spiked Amount	5.000		Recovery	=	8.040%	
Target Compounds						
3) Naphthalene	4.20	128	14128	0.93024	ppb	100
5) 2-Methylnaphthalene	5.01	142	8733	0.93981	ppb	98
6) 1-Methylnaphthalene	5.12	142	8928	0.97838	ppb	98
9) Acenaphthylene	6.05	152	26429	0.91562	ppb	99
10) Acenaphthene	6.24	154	8065	0.90180	ppb	92
11) Fluorene	6.84	166	9703	0.97307	ppb	97
13) Phenanthrene	7.98	178	14031	0.94041	ppb	99
14) Anthracene	8.06	178	12971	0.96730	ppb	99
16) Fluoranthene	10.16	202	20236	0.94229	ppb	98
18) Pyrene	10.77	202	20187	0.87417	ppb	97
20) Benz (a) anthracene	14.36	228	15888	0.79385	ppb	99
21) Chrysene	14.47	228	17899	0.89481	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.50	276	11020 <sup>m</sup>	0.64524	ppb	95
24) Benzo (b) fluoranthene	17.28	252	15809	0.80731	ppb	98
25) Benzo (k) fluoranthene	17.36	252	17901	0.87539	ppb	99
26) Benzo (a) pyrene	18.04	252	14027	0.80492	ppb	97
27) Dibenz (a,h) anthracene	20.56	278	14018	0.79986	ppb	95
28) Benzo (g,h,i) perylene	20.99	276	13977	0.77084	ppb	98

Quantitation Report

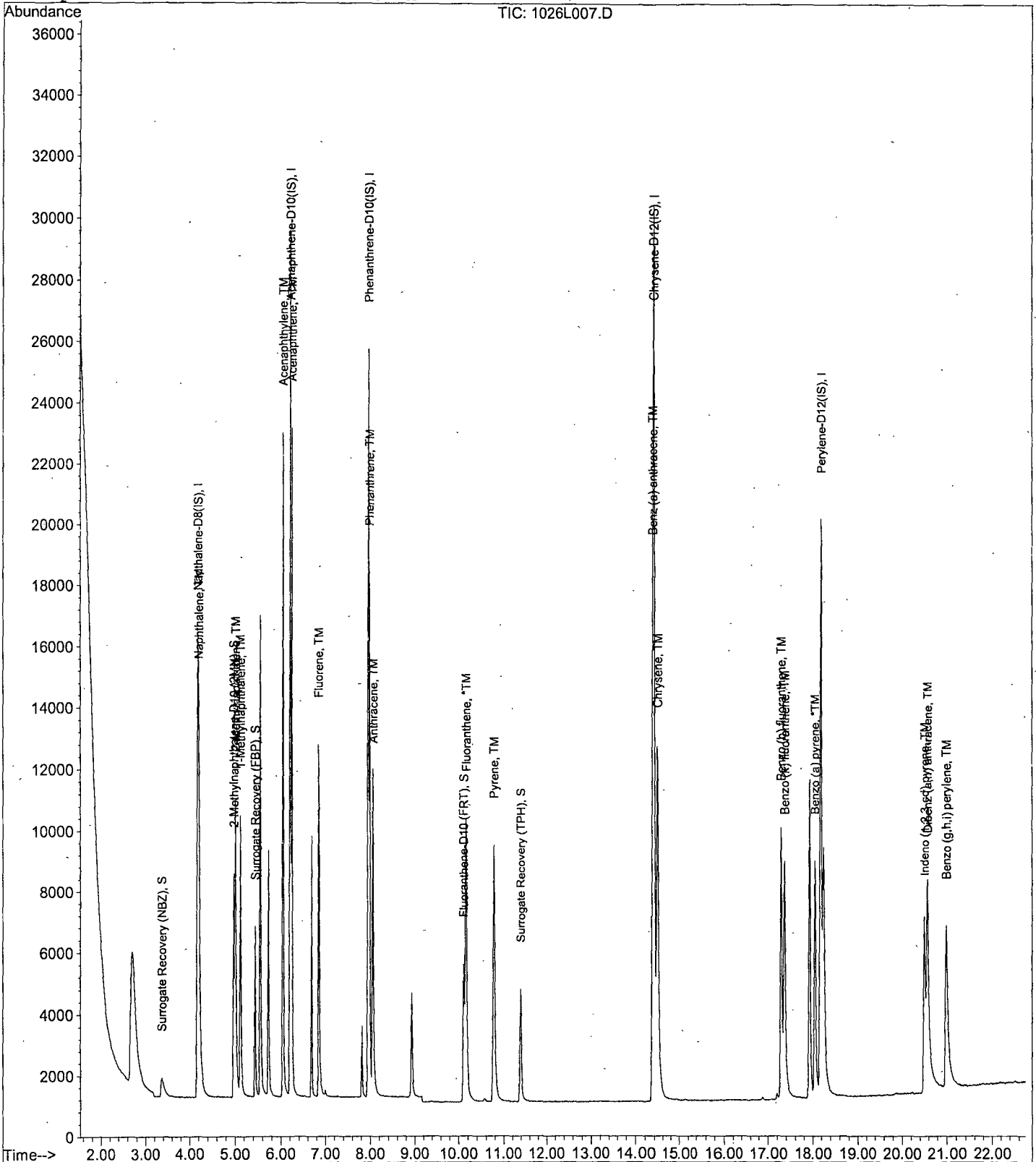
Data File : M:\LINUS\DATA\L181026\1026L007.D  
Acq On : 26 Oct 18 14:18  
Sample : 1 SIM 10/26/18  
Misc :

Vial: 7  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 16:11 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L181026\1026L008.D Vial: 8  
 Acq On : 26 Oct 18 14:47 Operator: MA  
 Sample : 10 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 15:34 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	32570	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.21	164	14513	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	27797	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.38	240	38774	2.50000	ppb	0.00
23) Perylene-D12 (IS)	18.17	264	36501	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.36	82	25371	4.33004	ppb	0.00
Spiked Amount	5.000		Recovery	=	86.600%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	78619	4.48459	ppb	0.00
Spiked Amount	5.000		Recovery	=	89.700%	
8) Surrogate Recovery (FBP)	5.43	172	50972	4.54640	ppb	0.00
Spiked Amount	5.000		Recovery	=	90.920%	
15) Fluoranthene-D10 (FRT)	10.10	212	96613	4.59101	ppb	0.00
Spiked Amount	5.000		Recovery	=	91.820%	
19) Surrogate Recovery (TPH)	11.37	244	62297	4.21726	ppb	0.00
Spiked Amount	5.000		Recovery	=	84.340%	
Target Compounds						
3) Naphthalene	4.20	128	138573	9.51662	ppb	100
5) 2-Methylnaphthalene	5.00	142	89316	10.02530	ppb	99
6) 1-Methylnaphthalene	5.12	142	85742	9.80030	ppb	97
9) Acenaphthylene	6.04	152	267328	9.96025	ppb	100
10) Acenaphthene	6.24	154	78196	9.40333	ppb	98
11) Fluorene	6.84	166	93296	10.06218	ppb	100
13) Phenanthrene	7.98	178	136446	9.63044	ppb	99
14) Anthracene	8.05	178	133826	10.50953	ppb	100
16) Fluoranthene	10.15	202	206441	10.12305	ppb	96
18) Pyrene	10.76	202	210764	9.38172	ppb	98
20) Benz (a) anthracene	14.36	228	178514	9.16865	ppb	100
21) Chrysene	14.46	228	182173	9.36164	ppb	100
22) Indeno (1,2,3-cd) pyrene	20.47	276	132404	7.96902	ppb	98
24) Benzo (b) fluoranthene	17.27	252	170669	9.32862	ppb	99
25) Benzo (k) fluoranthene	17.34	252	187357	9.80670	ppb	99
26) Benzo (a) pyrene	18.03	252	159123	9.77348	ppb	99
27) Dibenz (a,h) anthracene	20.54	278	142540	8.70545	ppb	99
28) Benzo (g,h,i) perylene	20.96	276	147120	8.68460	ppb	99

Quantitation Report

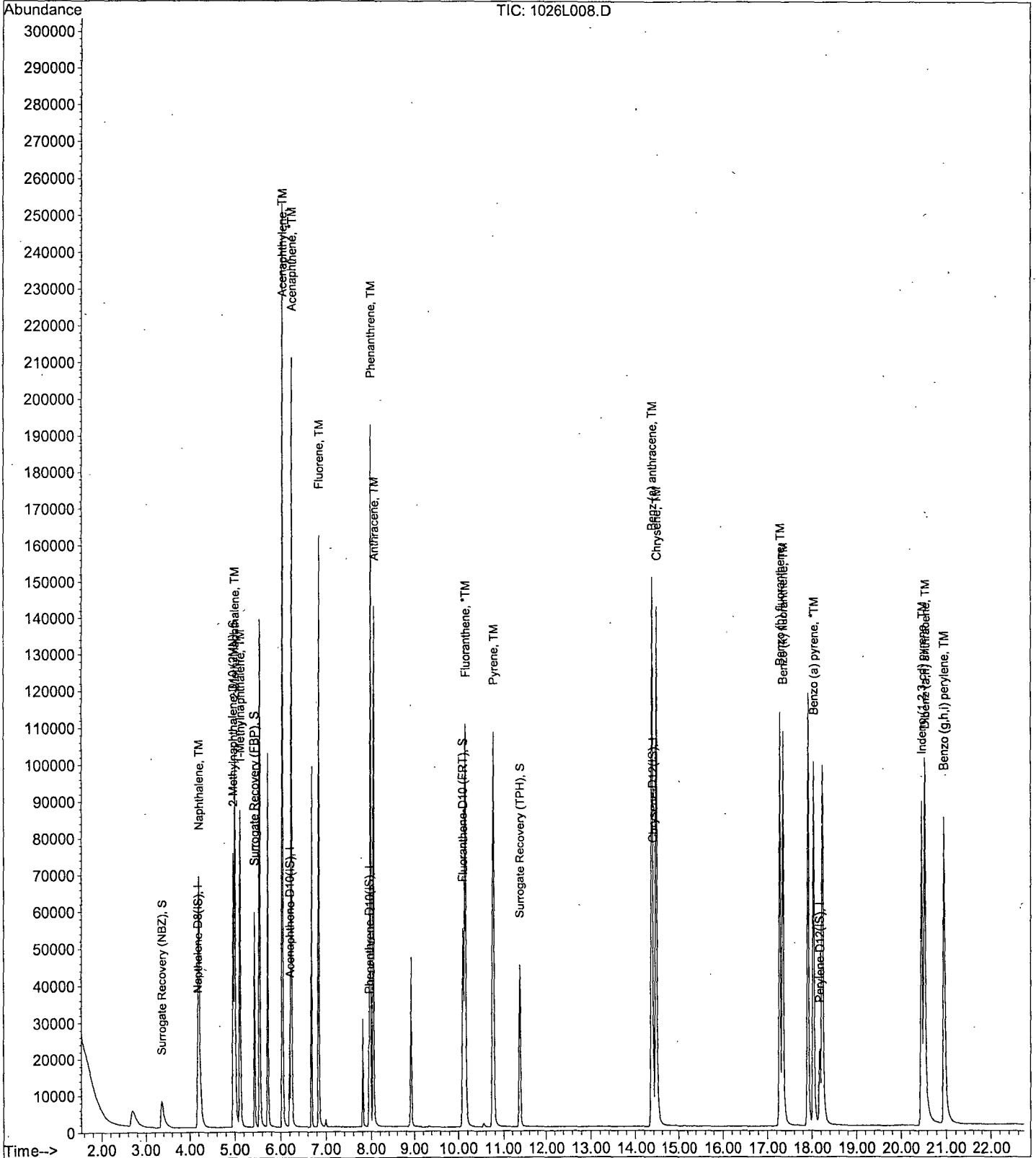
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Acq On : 26 Oct 18 14:47  
Sample : 10 SIM 10/26/18  
Misc :

Vial: 8  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 15:34 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L181026\1026L009.D Vial: 9  
 Acq On : 26 Oct 18 15:16 Operator: MA  
 Sample : 50 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 15:56 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.17	136	33697	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.20	164	14973	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	28689	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.40	240	38392	2.50000	ppb	0.02
23) Perylene-D12 (IS)	18.18	264	37588	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.35	82	122273	21.73245	ppb	-0.01
Spiked Amount	5.000		Recovery	=	434.640%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	355045	22.10239	ppb	0.00
Spiked Amount	5.000		Recovery	=	442.040%	
8) Surrogate Recovery (FBP)	5.43	172	220430	21.82249	ppb	0.00
Spiked Amount	5.000		Recovery	=	436.440%	
15) Fluoranthene-D10 (FRT)	10.11	212	431396	22.92845	ppb	0.01
Spiked Amount	5.000		Recovery	=	458.560%	
19) Surrogate Recovery (TPH)	11.38	244	284921	21.83788	ppb	0.01
Spiked Amount	5.000		Recovery	=	436.760%	
Target Compounds						
3) Naphthalene	4.20	128	652242	46.00597	ppb	Qvalue 100
5) 2-Methylnaphthalene	5.00	142	409700	47.62530	ppb	99
6) 1-Methylnaphthalene	5.12	142	391332	45.14684	ppb	96
9) Acenaphthylene	6.04	152	1199003	46.39626	ppb	100
10) Acenaphthene	6.24	154	343423	43.41979	ppb	94
11) Fluorene	6.84	166	413269	45.87248	ppb	98
13) Phenanthrene	7.98	178	614637	45.60337	ppb	99
14) Anthracene	8.05	178	596928	47.86908	ppb	99
16) Fluoranthene	10.17	202	935853	47.50242	ppb	97
18) Pyrene	10.78	202	976032	48.05263	ppb	98
20) Benz (a) anthracene	14.38	228	861770	50.73337	ppb	99
21) Chrysene	14.49	228	821012	45.08714	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.50	276	693522	42.54313	ppb	95
24) Benzo (b) fluoranthene	17.29	252	833397	49.82667	ppb	# 98
25) Benzo (k) fluoranthene	17.38	252	837921	48.85260	ppb	97
26) Benzo (a) pyrene	18.08	252	754977	52.03384	ppb	97
27) Dibenz (a,h) anthracene	20.58	278	691170	48.13785	ppb	97
28) Benzo (g,h,i) perylene	21.00	276	687548	47.00469	ppb	96

Quantitation Report

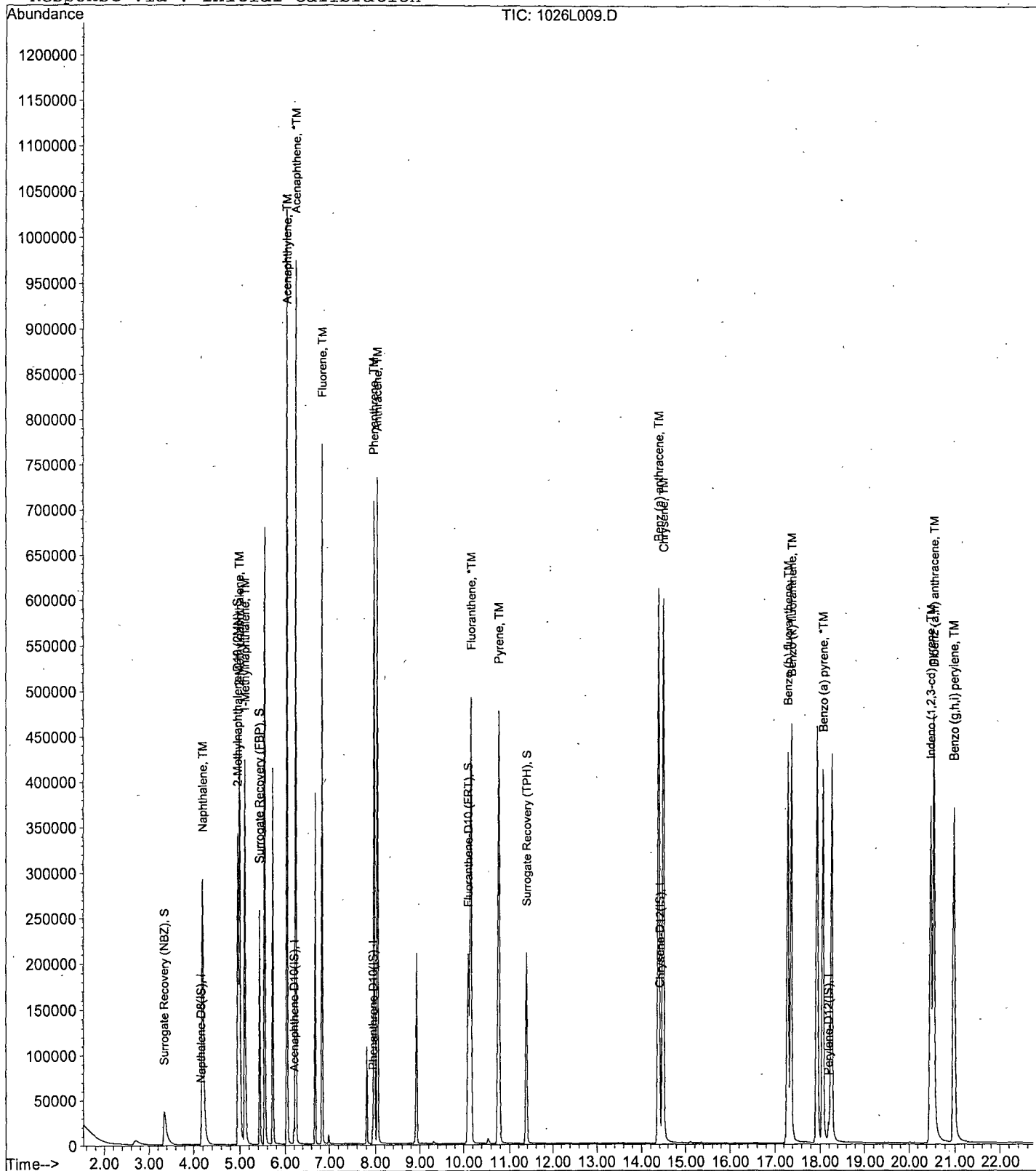
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Acq On : 26 Oct 18 15:16  
Sample : 50 SIM 10/26/18  
Misc :

Vial: 9  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 15:56 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L181026\1026L010.D Vial: 10  
 Acq On : 26 Oct 18 15:46 Operator: MA  
 Sample : 100 SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 26 16:12 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 15:34:20 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.17	136	31633	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.20	164	14067	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	26871	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.42	240	35782	2.50000	ppb	0.04
23) Perylene-D12 (IS)	18.20	264	35404	2.50000	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.35	82	230737	45.09256	ppb	-0.01
Spiked Amount	5.000		Recovery	=	901.860%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	641392	43.26523	ppb	0.00
Spiked Amount	5.000		Recovery	=	865.300%	
8) Surrogate Recovery (FBP)	5.43	172	407321	43.93229	ppb	0.00
Spiked Amount	5.000		Recovery	=	878.640%	
15) Fluoranthene-D10 (FRT)	10.12	212	792092	46.17898	ppb	0.02
Spiked Amount	5.000		Recovery	=	923.580%	
19) Surrogate Recovery (TPH)	11.39	244	525605	44.69973	ppb	0.02
Spiked Amount	5.000		Recovery	=	894.000%	
Target Compounds						
3) Naphthalene	4.19	128	1190602	90.34580	ppb	100
5) 2-Methylnaphthalene	5.01	142	725937	89.84741	ppb	96
6) 1-Methylnaphthalene	5.12	142	696199	85.61444	ppb	97
9) Acenaphthylene	6.05	152	2156100	89.29356	ppb	99
10) Acenaphthene	6.25	154	635563	86.08448	ppb	95
11) Fluorene	6.86	166	758985	89.77625	ppb	99
13) Phenanthrene	7.99	178	1058586	83.98357	ppb	98
14) Anthracene	8.06	178	1012170	86.44068	ppb	98
16) Fluoranthene	10.19	202	1675844	91.44665	ppb	98
18) Pyrene	10.80	202	1771989	95.58281	ppb	96
20) Benz (a) anthracene	14.40	228	1494777	96.18039	ppb	99
21) Chrysene	14.51	228	1518028	91.13060	ppb	98
22) Indeno (1,2,3-cd) pyrene	20.53	276	1322256	89.75981	ppb	95
24) Benzo (b) fluoranthene	17.31	252	1544889	98.73724	ppb	# 97
25) Benzo (k) fluoranthene	17.41	252	1515838	94.40721	ppb	98
26) Benzo (a) pyrene	18.11	252	1359978	100.87684	ppb	98
27) Dibenz (a,h) anthracene	20.61	278	1247200	94.24990	ppb	98
28) Benzo (g,h,i) perylene	21.03	276	1259732	93.82010	ppb	98



Quantitation Report

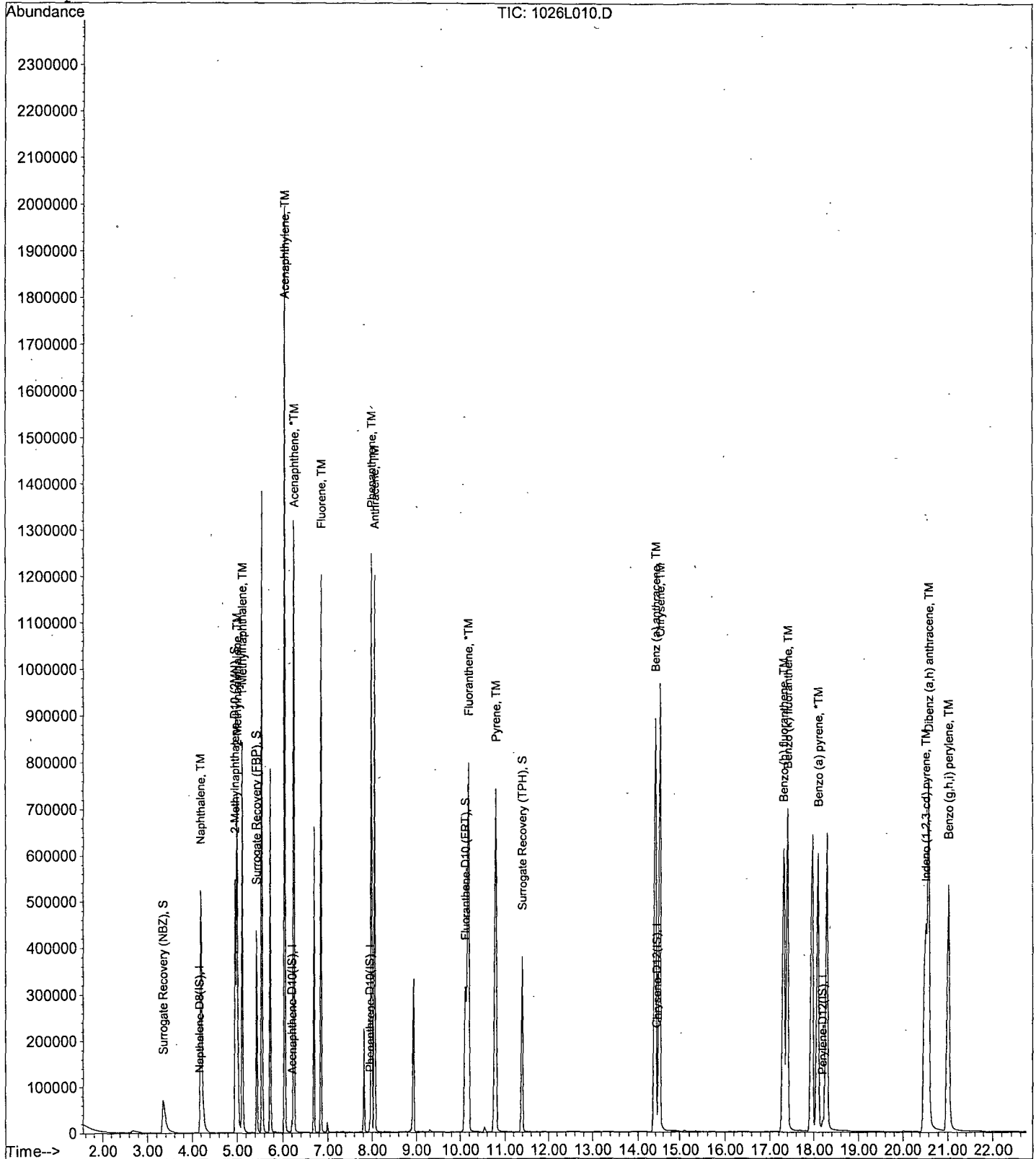
Data File : M:\LINUS\DATA\L181026\1026L010.D  
Acq On : 26 Oct 18 15:46  
Sample : 100 SIM 10/26/18  
Misc :

Vial: 10  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 26 16:12 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 10/26/18  
Instrument: Linus  
Initial Cal. Date: 10/26/18  
Data File: 1026L011.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	Naphthalene	1.034	0.9993	3.3	TM	
2	TM	2-Methylnaphthalene	0.6383	0.6413	0.46	TM	
3	TM	1-Methylnaphthalene	0.6431	0.6161	4.2	TM	
4	TM	Acenaphthylene	4.289	4.407	2.8	TM	
5	*TM	Acenaphthene	1.306	1.332	2.0	*TM	
6	TM	Fluorene	1.506	1.561	3.6	TM	
7	TM	Phenanthrene	1.162	1.168	0.56	TM	
8	TM	Anthracene	1.090	1.139	4.5	TM	
9	*TM	Fluoranthene	1.692	1.720	1.7	*TM	
10	TM	Pyrene	1.275	1.256	1.4	TM	
11	TM	Benz (a) anthracene	1.074	1.063	1.0	TM	
12	TM	Chrysene	1.151	1.121	2.6	TM	
13	TML	Indeno (1,2,3-cd) pyrene	0.7396	0.7805	5.5	TML	7.6
14	TM	Benzo (b) fluoranthene	1.075	1.067	0.71	TM	
15	TM	Benzo (k) fluoranthene	1.200	1.235	3.0	TM	
16	*TM	Benzo (a) pyrene	0.9390	1.033	10.0	*TM	
17	TM	Dibenz (a,h) anthracene	0.9150	0.9194	0.47	TM	
18	TM	Benzo (g,h,i) perylene	0.9257	0.9786	5.7	TM	
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							

Average

3.0

PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Second Source Calibration

Data File : M:\LINUS\DATA\L181026\1026L011.D Vial: 11  
 Acq On : 26 Oct 18 16:46 Operator: MA  
 Sample : SS SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 29 8:35 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Fri Oct 26 16:20:40 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.18	136	35068	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.21	164	15606	2.50000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	29941	2.50000	ppb	0.01
17) Chrysene-D12 (IS)	14.38	240	41767	2.50000	ppb	0.00
23) Perylene-D12 (IS)	18.17	264	39215	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.37	82	17	0.00320	ppb	0.01
Spiked Amount	5.000		Recovery	=	0.060%	
4) 2-Methylnaphthalene-D10 (2)	4.97	152	29	0.00179	ppb	0.01
Spiked Amount	5.000		Recovery	=	0.040%	
8) Surrogate Recovery (FBP)	5.46	172	33	0.00325	ppb	0.02
Spiked Amount	5.000		Recovery	=	0.060%	
15) Fluoranthene-D10 (FRT)	10.11	212	117	0.00627	ppb	0.01
Spiked Amount	5.000		Recovery	=	0.120%	
19) Surrogate Recovery (TPH)	11.42	244	200	0.01495	ppb	0.05
Spiked Amount	5.000		Recovery	=	0.300%	
Target Compounds						
3) Naphthalene	4.20	128	70085	4.83393	ppb	99
5) 1-Methylnaphthalene	5.01	142	44975	5.02294	ppb	97
6) 1-Methylnaphthalene	5.12	142	43210	4.79009	ppb	96
9) Acenaphthylene	6.04	152	137556	5.13827	ppb	99
10) Acenaphthene	6.24	154	41566	5.09893	ppb	97
11) Fluorene	6.84	166	48722	5.18226	ppb	98
13) Phenanthrene	7.98	178	69971	5.02806	ppb	99
14) Anthracene	8.05	178	68217	5.22347	ppb	99
16) Fluoranthene	10.15	202	103017	5.08425	ppb	99
18) Pyrene	10.76	202	104952	4.92873	ppb	96
20) Benz (a) anthracene	14.36	228	88798	4.94910	ppb	99
21) Chrysene	14.46	228	93681	4.87125	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.47	276	65202	4.62149	ppb	96
24) Benzo (b) fluoranthene	17.27	252	83679	4.96445	ppb	98
25) Benzo (k) fluoranthene	17.34	252	96884	5.14794	ppb	98
26) Benzo (a) pyrene	18.03	252	80997	5.49925	ppb	99
27) Dibenz (a,h) anthracene	20.54	278	72107	5.02375	ppb	97
28) Benzo (g,h,i) perylene	20.96	276	76750	5.28564	ppb	97

Quantitation Report

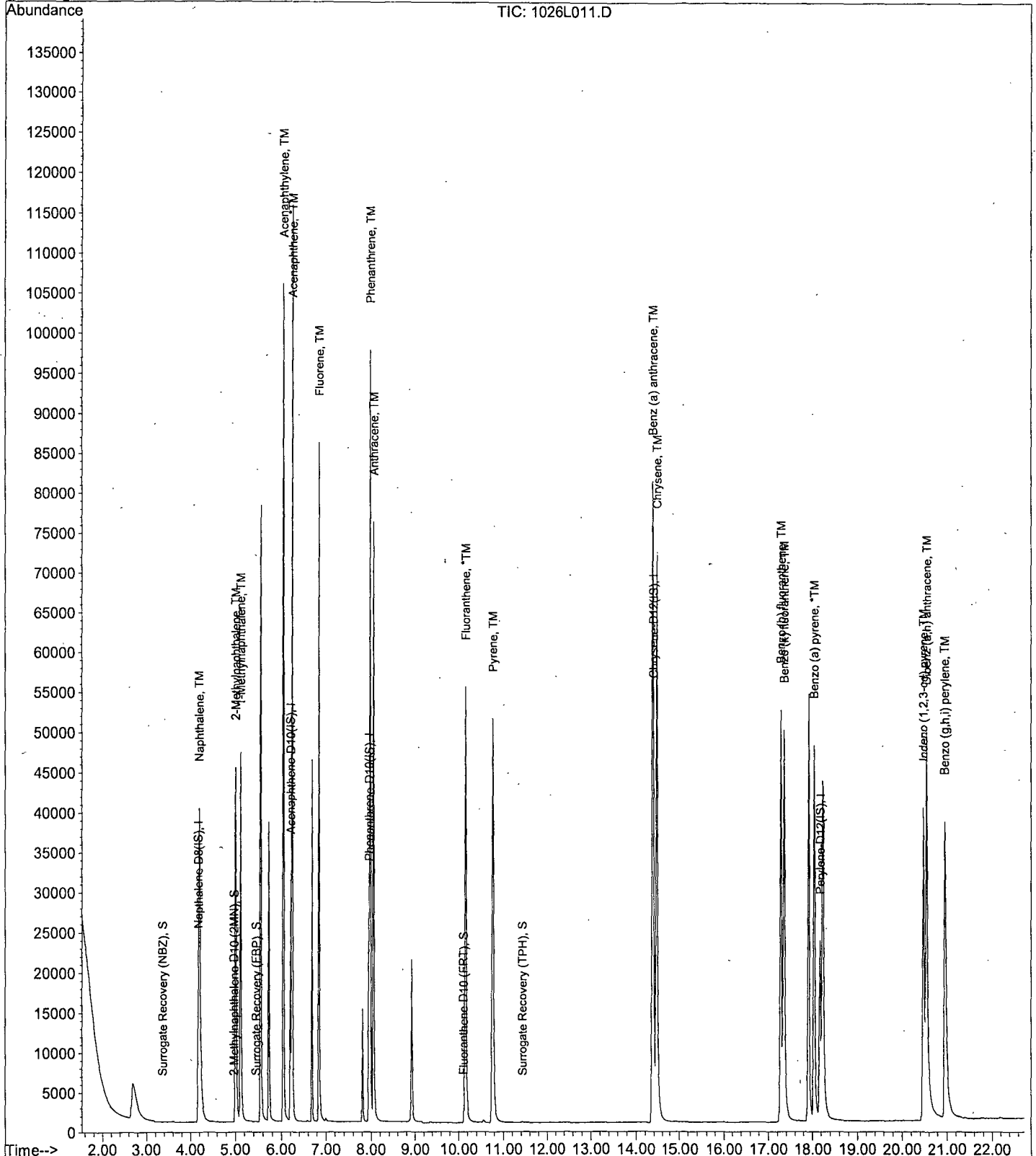
Data File : M:\LINUS\DATA\L181026\1026L011.D  
Acq On : 26 Oct 18 16:46  
Sample : SS SIM 10/26/18  
Misc :

Vial: 11  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Oct 29 8:35 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Fri Oct 26 16:20:40 2018  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/19/18

Matrix: \_\_\_\_\_

Instrument: Linus

Initial Cal. Date: 10/26/18

Data File: 1120L146.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.3784	0.4362	15	S
3	TM	Naphthalene	1.034	1.087	5.2	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.154	1.184	2.7	S
5	TM	2-Methylnaphthalene	0.6383	0.6852	7.3	TM
6	TM	1-Methylnaphthalene	0.6431	0.6745	4.9	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.627	1.786	9.8	S
9	TM	Acenaphthylene	4.289	4.888	14	TM
10	*TM	Acenaphthene	1.306	1.396	6.9	*TM
11	TM	Fluorene	1.506	1.672	11	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.162	1.186	2.1	TM
14	TM	Anthracene	1.090	1.183	8.5	TM
15	S	Fluoranthene-D10 (FRT)	1.557	1.776	14	S
16	*TM	Fluoranthene	1.692	1.919	13	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.275	1.300	2.0	TM
19	S	Surrogate Recovery (TPH)	0.8010	0.7896	1.4	S
20	TM	Benz (a) anthracene	1.074	1.105	2.9	TM
21	TM	Chrysene	1.151	1.136	1.3	TM
22	TML	Indeno (1,2,3-cd) pyrene	0.7396	0.7928	7.2	TML 6.2
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.075	1.095	1.9	TM
25	TM	Benzo (k) fluoranthene	1.200	1.247	4.0	TM
26	*TM	Benzo (a) pyrene	0.9390	1.017	8.3	*TM
27	TM	Dibenz (a,h) anthracene	0.9150	0.9855	7.7	TM
28	TM	Benzo (g,h,i) perylene	0.9257	0.9499	2.6	TM
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

6.7

Data File : M:\LINUS\DATA\L181120\1120L146.D Vial: 46  
 Acq On : 19 Dec 18 8:37 Operator: MA  
 Sample : 5 ug/ml SIM 10/26/18 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Dec 19 9:03 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.17	136	28262	2.50000	ppb	-0.01
7) Acenaphthene-D10(IS)	6.19	164	12397	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.94	188	24992	2.50000	ppb	0.00
17) Chrysene-D12(IS)	14.39	240	37810	2.50000	ppb	0.01
23) Perylene-D12(IS)	18.18	264	36424	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.36	82	12329	2.88185	ppb	0.00
Spiked Amount 5.000			Recovery =	57.640%		
4) 2-Methylnaphthalene-D10 (2)	4.96	152	33472	2.56686	ppb	0.00
Spiked Amount 5.000			Recovery =	51.340%		
8) Surrogate Recovery (FBP)	5.43	172	22139	2.74396	ppb	0.00
Spiked Amount 5.000			Recovery =	54.880%		
15) Fluoranthene-D10 (FRT)	10.10	212	44374	2.85035	ppb	0.00
Spiked Amount 5.000			Recovery =	57.000%		
19) Surrogate Recovery (TPH)	11.37	244	29856	2.46450	ppb	0.00
Spiked Amount 5.000			Recovery =	49.280%		
Target Compounds						
3) Naphthalene	4.19	128	61465	5.26031	ppb	99
5) 2-Methylnaphthalene	5.00	142	38730	5.36713	ppb	99
6) 1-Methylnaphthalene	5.11	142	38126	5.24432	ppb	99
9) Acenaphthylene	6.04	152	121190	5.69875	ppb	99
10) Acenaphthene	6.23	154	34614	5.34525	ppb	87
11) Fluorene	6.84	166	41454	5.55054	ppb	100
13) Phenanthrene	7.98	178	59295	5.10465	ppb	99
14) Anthracene	8.05	178	59134	5.42461	ppb	99
16) Fluoranthene	10.15	202	95914	5.67107	ppb	100
18) Pyrene	10.76	202	98305	5.09972	ppb	98
20) Benz (a) anthracene	14.37	228	83588	5.14628	ppb	100
21) Chrysene	14.47	228	85895	4.93382	ppb	100
22) Indeno (1,2,3-cd) pyrene	20.51	276	59950	4.68772	ppb	99
24) Benzo (b) fluoranthene	17.28	252	79791	5.09651	ppb	98
25) Benzo (k) fluoranthene	17.36	252	90862	5.19791	ppb	99
26) Benzo (a) pyrene	18.05	252	74062	5.41370	ppb	99
27) Dibenz (a,h) anthracene	20.58	278	71790	5.38492	ppb	99
28) Benzo (g,h,i) perylene	21.00	276	69196	5.13056	ppb	97

PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/19/18  
Instrument: Linus  
Initial Cal. Date: 10/26/18  
Data File: 1120L161.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.3784	0.4291	13	S
3	TM	Naphthalene	1.034	1.085	4.9	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.154	1.200	4.1	S
5	TM	2-Methylnaphthalene	0.6383	0.6812	6.7	TM
6	TM	1-Methylnaphthalene	0.6431	0.6779	5.4	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.627	1.785	9.7	S
9	TM	Acenaphthylene	4.289	4.841	13	TM
10	*TM	Acenaphthene	1.306	1.388	6.3	*TM
11	TM	Fluorene	1.506	1.690	12	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.162	1.179	1.5	TM
14	TM	Anthracene	1.090	1.183	8.5	TM
15	S	Fluoranthene-D10 (FRT)	1.557	1.773	14	S
16	*TM	Fluoranthene	1.692	1.904	13	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.275	1.288	1.1	TM
19	S	Surrogate Recovery (TPH)	0.8010	0.7901	1.4	S
20	TM	Benz (a) anthracene	1.074	1.061	1.2	TM
21	TM	Chrysene	1.151	1.153	0.16	TM
22	TML	Indeno (1,2,3-cd) pyrene	0.7396	1.098	49	TML 27
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.075	1.116	3.9	TM
25	TM	Benzo (k) fluoranthene	1.200	1.252	4.4	TM
26	*TM	Benzo (a) pyrene	0.9390	1.002	6.7	*TM
27	TM	Dibenz (a,h) anthracene	0.9150	0.9473	3.5	TM
28	TM	Benzo (g,h,i) perylene	0.9257	0.9217	0.43	TM
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

8.0

Data File : M:\LINUS\DATA\L181120\1120L161.D  
 Acq On : 19 Dec 18 19:12  
 Sample : 5 ug/ml SIM 10/26/18  
 Misc :

Vial: 61  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Dec 20 6:52 2018

Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	29922	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	13189	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	26338	2.50000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	39556	2.50000	ppb	0.00
23) Perylene-D12 (IS)	18.18	264	37461	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.37	82	12841	2.83501	ppb	0.01
Spiked Amount	5.000		Recovery	=	56.700%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	35919	2.60170	ppb	0.00
Spiked Amount	5.000		Recovery	=	52.040%	
8) Surrogate Recovery (FBP)	5.43	172	23543	2.74275	ppb	0.00
Spiked Amount	5.000		Recovery	=	54.860%	
15) Fluoranthene-D10 (FRT)	10.10	212	46699	2.84640	ppb	0.00
Spiked Amount	5.000		Recovery	=	56.920%	
19) Surrogate Recovery (TPH)	11.37	244	31255	2.46610	ppb	0.00
Spiked Amount	5.000		Recovery	=	49.320%	
Target Compounds						
3) Naphthalene	4.20	128	64904	5.24647	ppb	100
5) 2-Methylnaphthalene	5.00	142	40767	5.33600	ppb	99
6) 1-Methylnaphthalene	5.11	142	40569	5.27078	ppb	99
9) Acenaphthylene	6.04	152	127701	5.64432	ppb	99
10) Acenaphthene	6.23	154	36611	5.31413	ppb	86
11) Fluorene	6.84	166	44568	5.60915	ppb	100
13) Phenanthrene	7.98	178	62127	5.07512	ppb	99
14) Anthracene	8.05	178	62307	5.42358	ppb	100
16) Fluoranthene	10.15	202	100290	5.62677	ppb	99
18) Pyrene	10.76	202	101926	5.05417	ppb	97
20) Benz (a) anthracene	14.36	228	83917	4.93848	ppb	99
21) Chrysene	14.46	228	91217	5.00824	ppb	98
22) Indeno (1,2,3-cd) pyrene	20.51	276	86902	6.34241	ppb	# 98
24) Benzo (b) fluoranthene	17.28	252	83639	5.19441	ppb	99
25) Benzo (k) fluoranthene	17.35	252	93803	5.21760	ppb	98
26) Benzo (a) pyrene	18.05	252	75087	5.33669	ppb	99
27) Dibenz (a,h) anthracene	20.58	278	70973	5.17627	ppb	98
28) Benzo (g,h,i) perylene	21.01	276	69055	4.97837	ppb	98



Quantitation Report

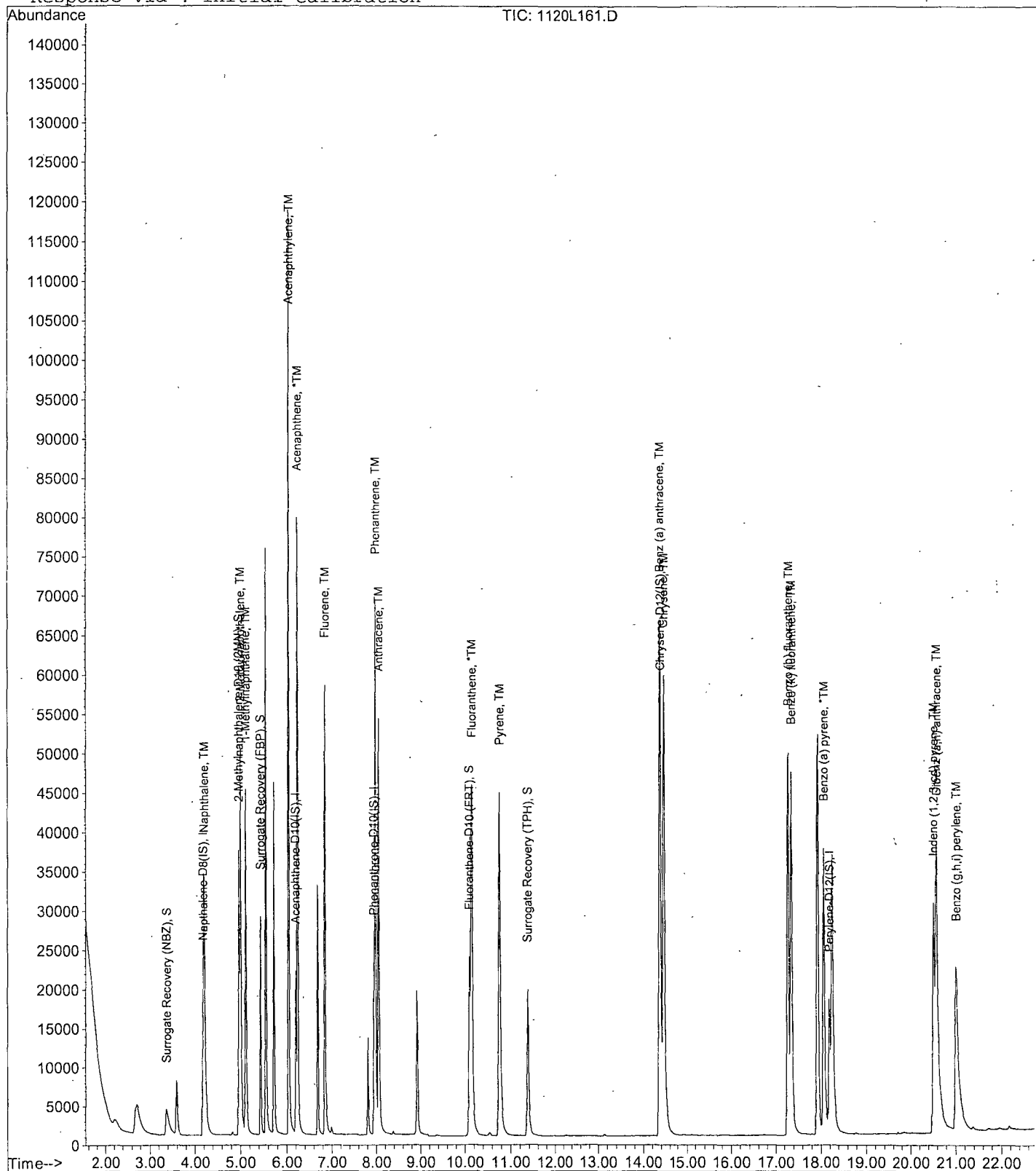
Data File : M:\LINUS\DATA\L181120\L120L161.D  
Acq On : 19 Dec 18 19:12  
Sample : 5 ug/ml SIM 10/26/18  
Misc :

Vial: 61  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Dec 20 6:52 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

**APPL, INC.**

Data File : M:\LINUS\DATA\L181120\1120L155.D Vial: 55  
 Acq On : 19 Dec 18 16:17 Operator: MA  
 Sample : AZ84057W22 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:34 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	21814	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	9599	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.95	188	18849	2.5000	ppb	0.01
17) Chrysene-D12 (IS)	14.40	240	28425	2.5000	ppb	0.02
23) Perylene-D12 (IS)	18.22	264	28116	2.5000	ppb	0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.37	82	375320	142.0767	ppb	0.01
Spiked Amount	6.250					
					Recovery = 2273.232%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	44004	5.4650	ppb	0.00
Spiked Amount	6.250					
					Recovery = 87.440%	
8) Surrogate Recovery (FBP)	5.43	172	467369	93.5148	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1496.240%	
15) Fluoranthene-D10 (FRT)	10.10	212	62208	6.6228	ppb	0.00
Spiked Amount	6.250					
					Recovery = 105.968%	
19) Surrogate Recovery (TPH)	11.39	244	656893	90.1586	ppb	0.02
Spiked Amount	6.250					
					Recovery = 1442.544%	

Target Compounds Qvalue

Quantitation Report

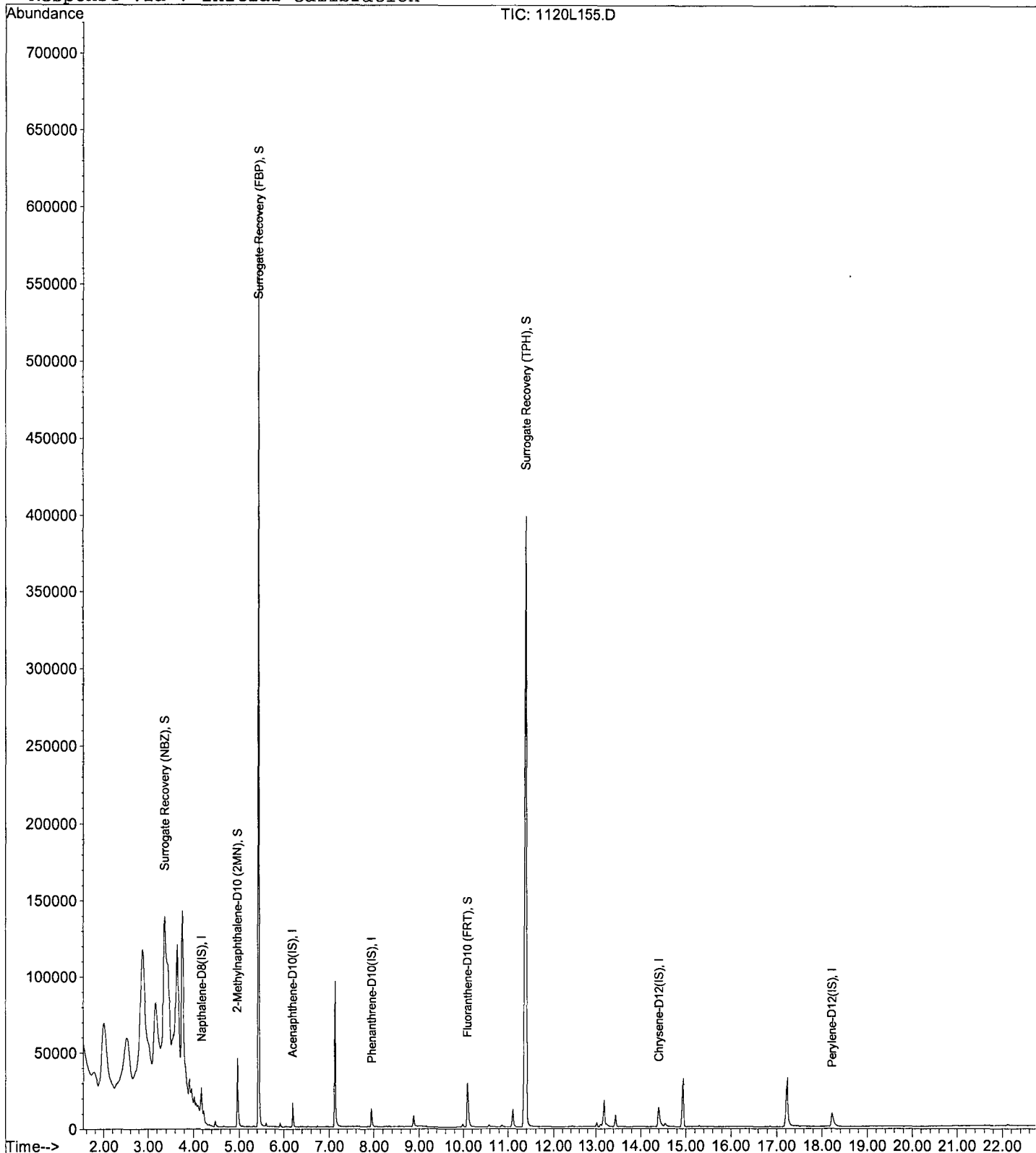
Data File : M:\LINUS\DATA\L181120\1120L155.D  
Acq On : 19 Dec 18 16:17  
Sample : AZ84057W22 1/800  
Misc :

Vial: 55  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:34 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L156.D Vial: 56  
 Acq On : 19 Dec 18 16:47 Operator: MA  
 Sample : AZ84059W08 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:33 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	18298	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	8166	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.95	188	16116	2.5000	ppb	0.01
17) Chrysene-D12 (IS)	14.40	240	23889	2.5000	ppb	0.02
23) Perylene-D12 (IS)	18.22	264	24360	2.5000	ppb	0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.37	82	384357	173.4553	ppb	0.01
Spiked Amount	6.250		Recovery	=	2775.280%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	45502	6.7369	ppb	0.00
Spiked Amount	6.250		Recovery	=	107.792%	
8) Surrogate Recovery (FBP)	5.43	172	476405	112.0503	ppb	0.00
Spiked Amount	6.250		Recovery	=	1792.800%	
15) Fluoranthene-D10 (FRT)	10.10	212	63751	7.9380	ppb	0.00
Spiked Amount	6.250		Recovery	=	127.008%	
19) Surrogate Recovery (TPH)	11.39	244	665691	108.7146	ppb	0.02
Spiked Amount	6.250		Recovery	=	1739.440%	

Target Compounds Qvalue

Quantitation Report

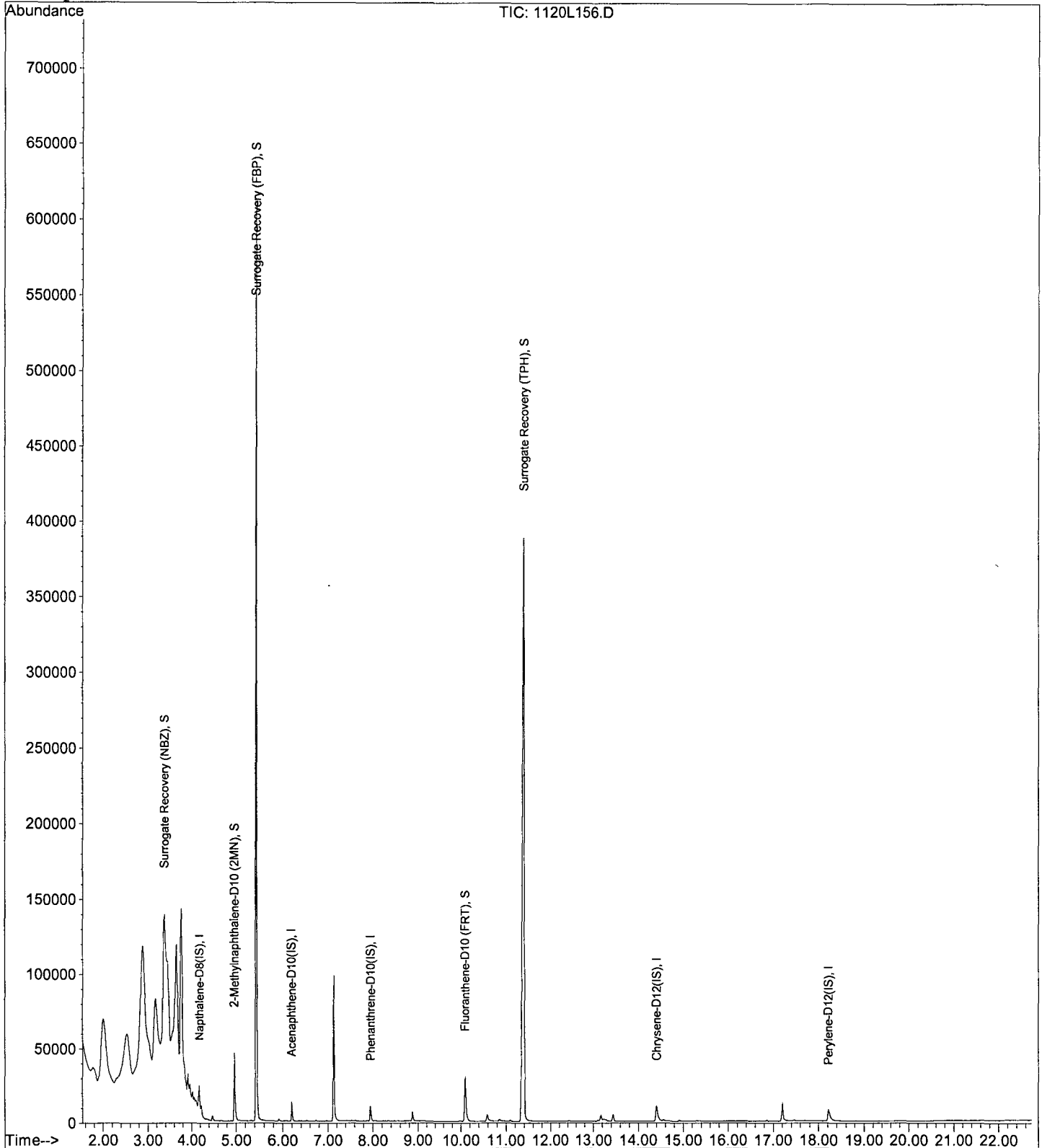
Data File : M:\LINUS\DATA\L181120\1120L156.D  
Acq On : 19 Dec 18 16:47  
Sample : AZ84059W08 1/800  
Misc :

Vial: 56  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:33 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L159.D Vial: 59  
 Acq On : 19 Dec 18 18:14 Operator: MA  
 Sample : AZ84061W24 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:32 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	22507	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	10154	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	19333	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.40	240	28648	2.5000	ppb	0.02
23) Perylene-D12 (IS)	18.22	264	28799	2.5000	ppb	0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.36	82	308388	113.1452	ppb	0.00
Spiked Amount	6.250					
			Recovery	=	1810.320%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	47274	5.6903	ppb	0.00
Spiked Amount	6.250					
			Recovery	=	91.040%	
8) Surrogate Recovery (FBP)	5.43	172	493238	93.2966	ppb	0.00
Spiked Amount	6.250					
			Recovery	=	1492.752%	
15) Fluoranthene-D10 (FRT)	10.10	212	64386	6.6830	ppb	0.00
Spiked Amount	6.250					
			Recovery	=	106.928%	
19) Surrogate Recovery (TPH)	11.39	244	671040	91.3834	ppb	0.02
Spiked Amount	6.250					
			Recovery	=	1462.128%	

Target Compounds Qvalue

Quantitation Report

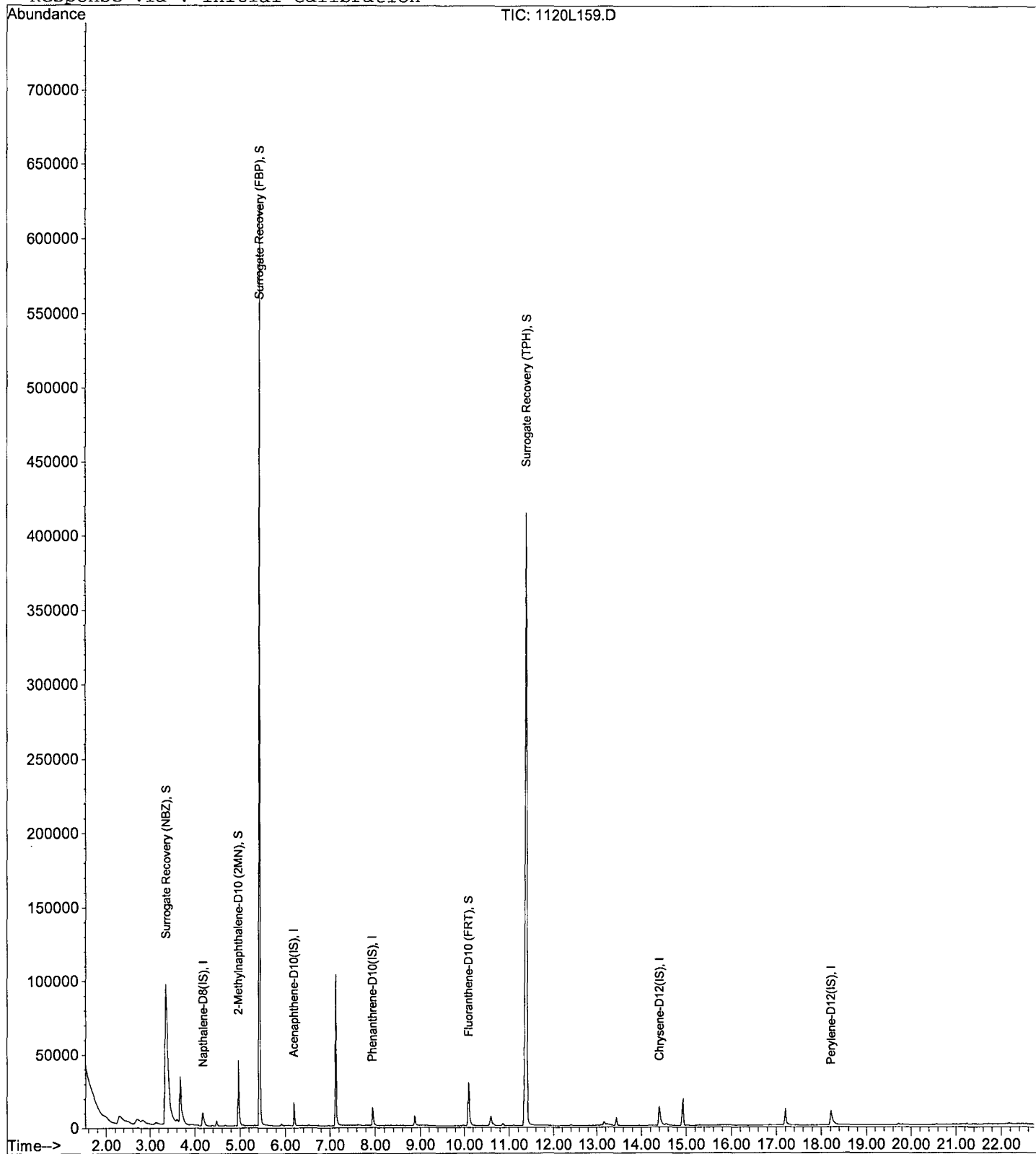
Data File : M:\LINUS\DATA\L181120\1120L159.D  
Acq On : 19 Dec 18 18:14  
Sample : AZ84061W24 1/800  
Misc :

Vial: 59  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:32 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration





Data File : M:\LINUS\DATA\L181120\1120L160.D Vial: 60  
 Acq On : 19 Dec 18 18:43 Operator: MA  
 Sample : AZ84062W07 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:38 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	21807	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.20	164	9660	2.5000	ppb	0.00
12) Phenanthrene-D10 (IS)	7.95	188	18999	2.5000	ppb	0.01
17) Chrysene-D12 (IS)	14.41	240	28026	2.5000	ppb	0.03
23) Perylene-D12 (IS)	18.23	264	27778	2.5000	ppb	0.05
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.36	82	288790	109.3560	ppb	0.00
Spiked Amount	6.250		Recovery	= 1749.696%		
4) 2-Methylnaphthalene-D10 (2)	4.96	152	44059	5.4736	ppb	0.00
Spiked Amount	6.250		Recovery	= 87.584%		
8) Surrogate Recovery (FBP)	5.43	172	470835	93.6134	ppb	0.00
Spiked Amount	6.250		Recovery	= 1497.808%		
15) Fluoranthene-D10 (FRT)	10.11	212	61683	6.5150	ppb	0.01
Spiked Amount	6.250		Recovery	= 104.240%		
19) Surrogate Recovery (TPH)	11.39	244	645414	89.8443	ppb	0.02
Spiked Amount	6.250		Recovery	= 1437.504%		

Target Compounds Qvalue

Quantitation Report

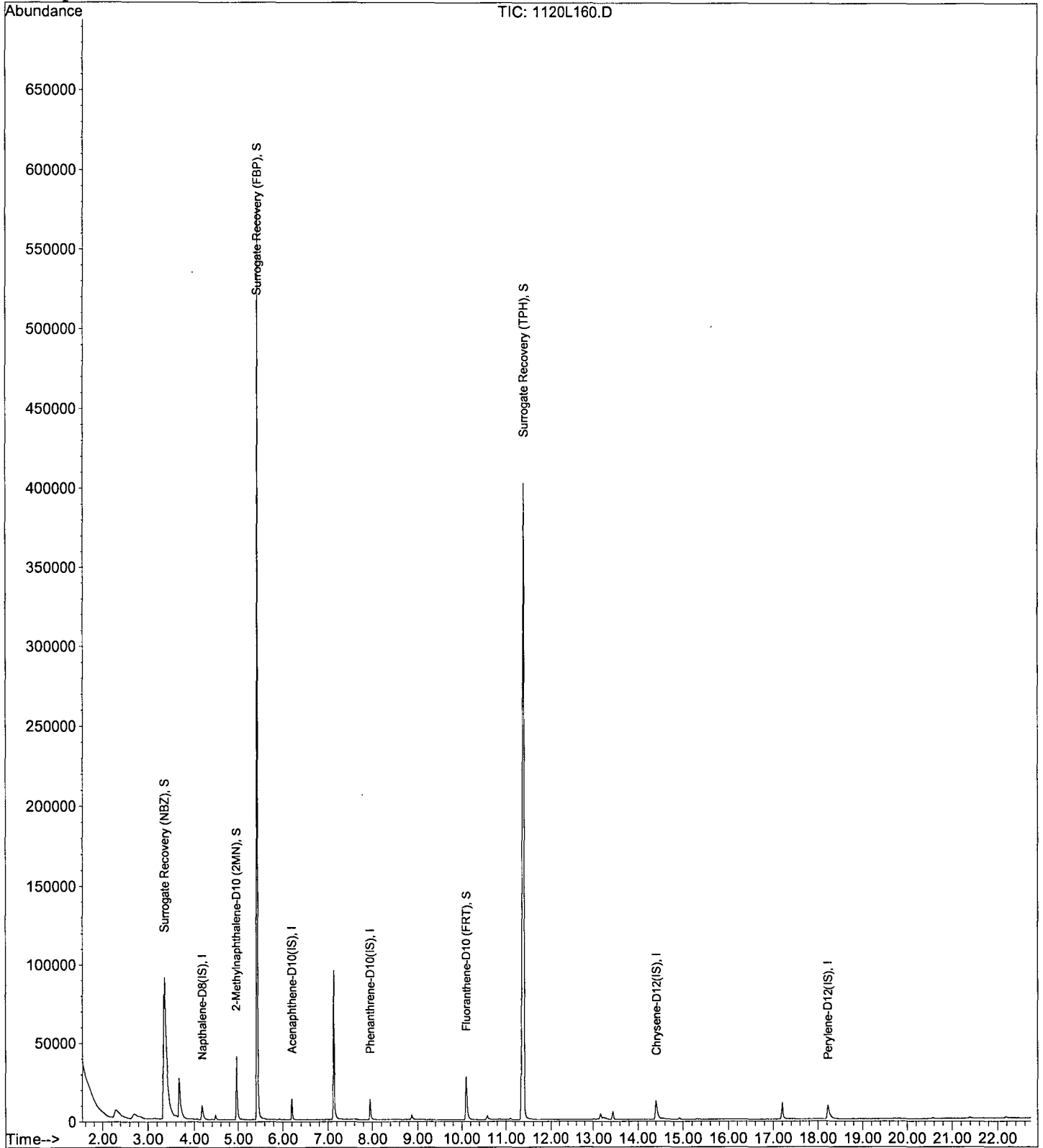
Data File : M:\LINUS\DATA\L181120\L1120L160.D  
Acq On : 19 Dec 18 18:43  
Sample : AZ84062W07 1/800  
Misc :

Vial: 60  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:38 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L150.D Vial: 50  
 Acq On : 19 Dec 18 13:52 Operator: MA  
 Sample : 181217A Blk 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:36 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	18904	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	8865	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.95	188	17417	2.5000	ppb	0.01
17) Chrysene-D12 (IS)	14.41	240	25751	2.5000	ppb	0.03
23) Perylene-D12 (IS)	18.23	264	25864	2.5000	ppb	0.05

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.36	82	356761	155.8404	ppb	0.00
Spiked Amount	6.250					
					Recovery = 2493.440%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	42969	6.1579	ppb	0.00
Spiked Amount	6.250					
					Recovery = 98.528%	
8) Surrogate Recovery (FBP)	5.43	172	457302	99.0765	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1585.216%	
15) Fluoranthene-D10 (FRT)	10.11	212	59406	6.8444	ppb	0.01
Spiked Amount	6.250					
					Recovery = 109.504%	
19) Surrogate Recovery (TPH)	11.40	244	644980	97.7159	ppb	0.03
Spiked Amount	6.250					
					Recovery = 1563.456%	

Target Compounds Qvalue

Quantitation Report

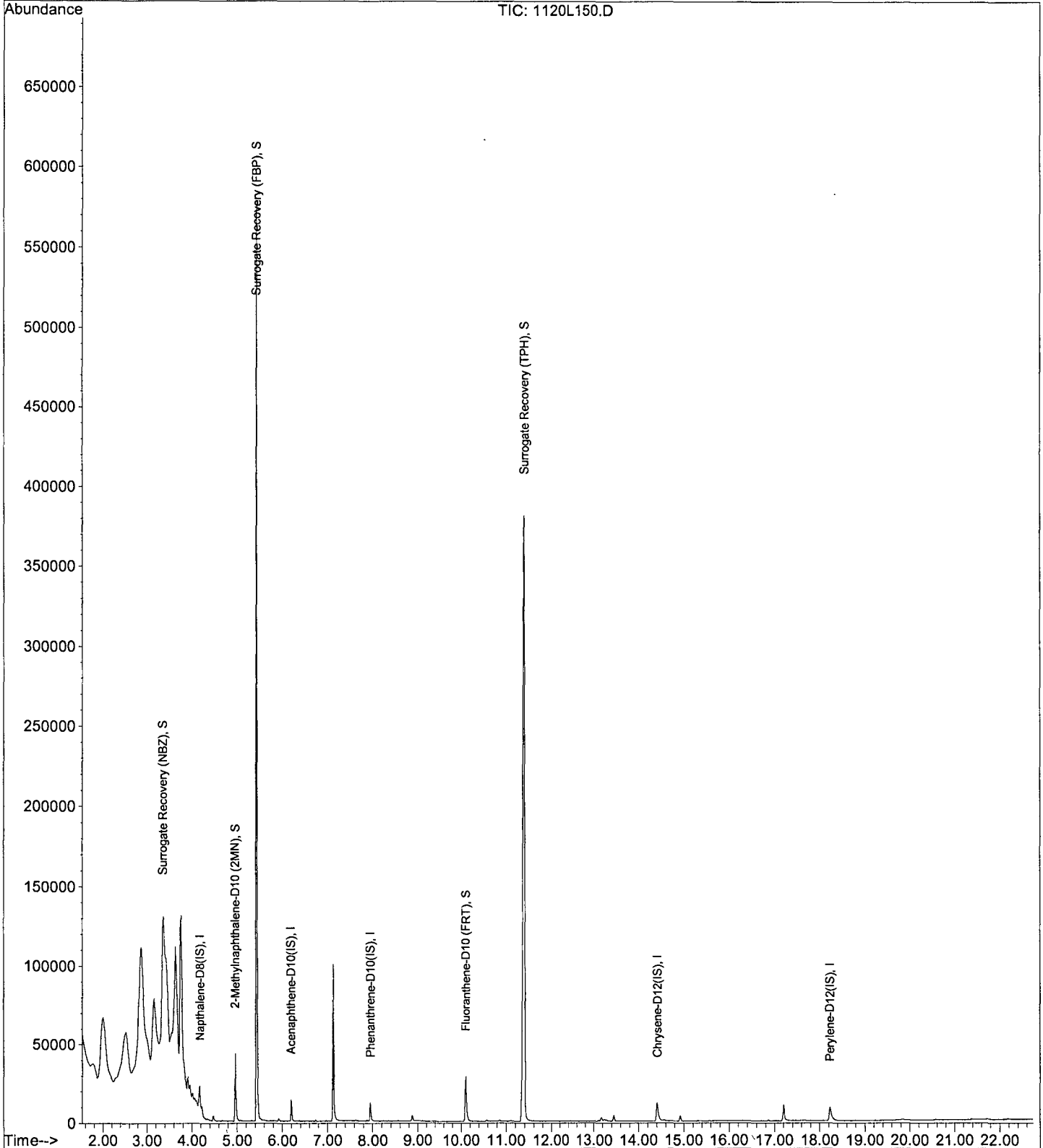
Data File : M:\LINUS\DATA\L181120\L120L150.D  
Acq On : 19 Dec 18 13:52  
Sample : 181217A Blk 1/800  
Misc :

Vial: 50  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:36 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L151.D Vial: 51  
 Acq On : 19 Dec 18 14:21 Operator: MA  
 Sample : 181217A LCS-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:36 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	20300	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	9621	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	18966	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	28249	2.5000	ppb	0.00
23) Perylene-D12 (IS)	18.18	264	28150	2.5000	ppb	0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.33	82	46864	19.0634	ppb	-0.02
Spiked Amount 6.250			Recovery	=	305.008%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	44084	5.8833	ppb	0.00
Spiked Amount 6.250			Recovery	=	94.128%	
8) Surrogate Recovery (FBP)	5.43	172	72	0.0144	ppb	0.00
Spiked Amount 6.250			Recovery	=	0.224%	
15) Fluoranthene-D10 (FRT)	10.10	212	62399	6.6021	ppb	0.00
Spiked Amount 6.250			Recovery	=	105.632%	
19) Surrogate Recovery (TPH)	11.38	244	113	0.0156	ppb	0.01
Spiked Amount 6.250			Recovery	=	0.256%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.20	128	36151	5.3842	ppb	96
5) 2-Methylnaphthalene	5.00	142	23478	5.6620	ppb	100
6) 1-Methylnaphthalene	5.11	142	23251	5.5658	ppb	100
9) Acenaphthylene	6.04	152	77199	5.8470	ppb	99
10) Acenaphthene	6.23	154	22338	5.5561	ppb	90
11) Fluorene	6.83	166	27264	5.8798	ppb	94
13) Phenanthrene	7.98	178	39443	5.5931	ppb	99
14) Anthracene	8.04	178	37973	5.7377	ppb	98
16) Fluoranthene	10.14	202	61338	5.9738	ppb	98
18) Pyrene	10.75	202	63200	5.4853	ppb	96
20) Benz (a) anthracene	14.36	228	52743	5.4329	ppb	99
21) Chrysene	14.46	228	54783	5.2647	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.51	276	54541	7.0274	ppb	# 98
24) Benzo (b) fluoranthene	17.28	252	51402	5.3103	ppb	99
25) Benzo (k) fluoranthene	17.35	252	58211	5.3861	ppb	98
26) Benzo (a) pyrene	18.05	252	46392	5.4848	ppb	100
27) Dibenz (a,h) anthracene	20.58	278	44929	5.4508	ppb	98
28) Benzo (g,h,i) perylene	21.01	276	42958	5.1517	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

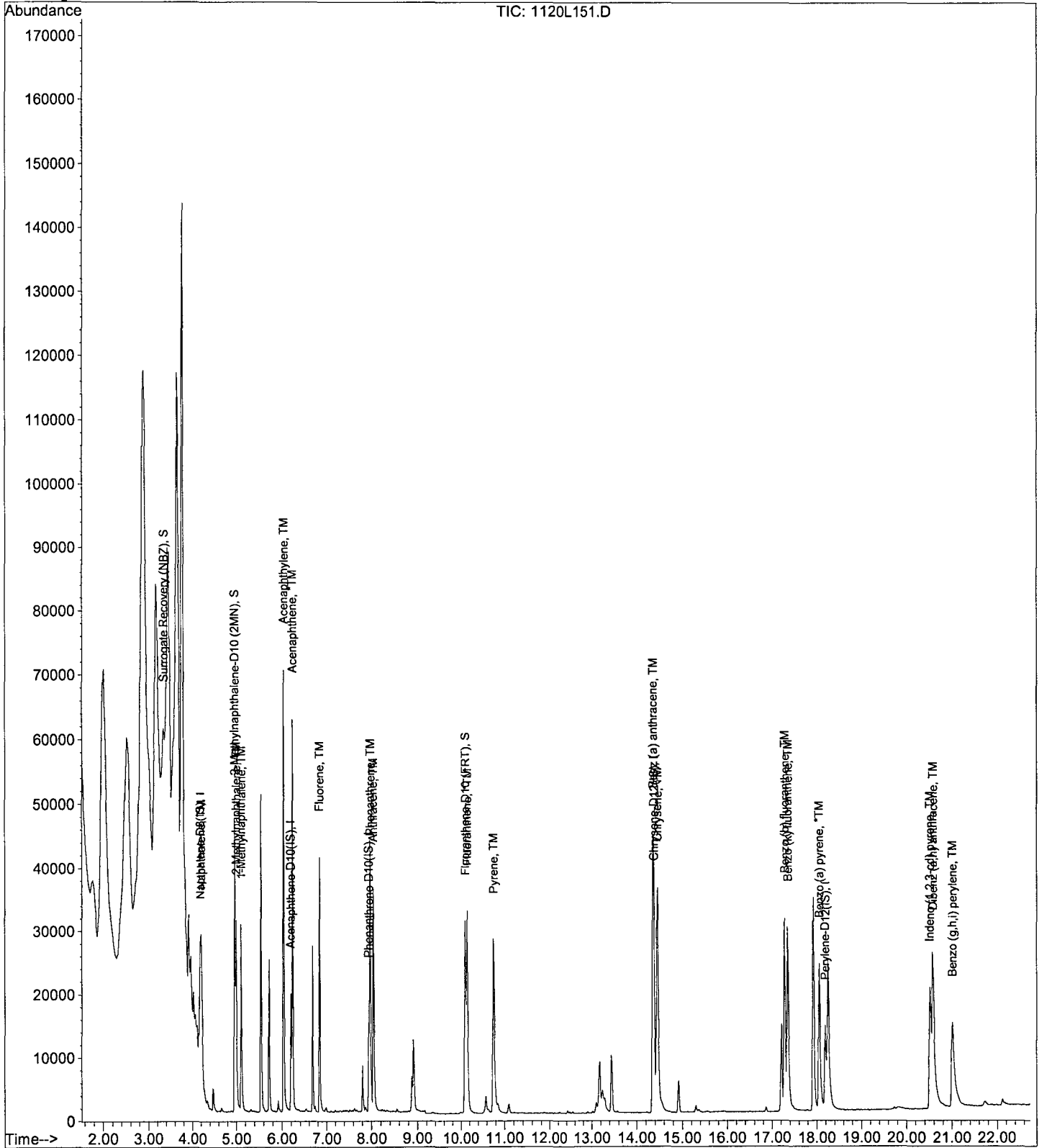
Data File : M:\LINUS\DATA\L181120\1120L151.D  
Acq On : 19 Dec 18 14:21  
Sample : 181217A LCS-2 1/800  
Misc :

Vial: 51  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:36 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L152.D Vial: 52  
 Acq On : 19 Dec 18 14:50 Operator: MA  
 Sample : 181217A LCSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:35 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	4.18	136	21810	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	10227	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	20470	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	30423	2.5000	ppb	0.00
23) Perylene-D12 (IS)	18.18	264	30375	2.5000	ppb	0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
2) Surrogate Recovery (NBZ)	3.33	82	45203	17.1146	ppb	-0.02
Spiked Amount	6.250		Recovery	=	273.840%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	44559	5.5349	ppb	0.00
Spiked Amount	6.250		Recovery	=	88.560%	
8) Surrogate Recovery (FBP)	5.43	172	43	0.0081	ppb	0.00
Spiked Amount	6.250		Recovery	=	0.128%	
15) Fluoranthene-D10 (FRT)	10.10	212	63109	6.1866	ppb	0.00
Spiked Amount	6.250		Recovery	=	98.992%	
19) Surrogate Recovery (TPH)	11.39	244	72	0.0092	ppb	0.02
Spiked Amount	6.250		Recovery	=	0.144%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.20	128	37189	5.1553	ppb	96
5) 2-Methylnaphthalene	5.00	142	24016	5.3908	ppb	99
6) 1-Methylnaphthalene	5.11	142	23831	5.3097	ppb	100
9) Acenaphthylene	6.04	152	79065	5.6335	ppb	99
10) Acenaphthene	6.23	154	22843	5.3450	ppb	89
11) Fluorene	6.83	166	28181	5.7175	ppb	94
13) Phenanthrene	7.98	178	39852	5.2359	ppb	100
14) Anthracene	8.04	178	39269	5.4976	ppb	98
16) Fluoranthene	10.14	202	62932	5.6787	ppb	99
18) Pyrene	10.76	202	64429	5.1924	ppb	99
20) Benz (a) anthracene	14.36	228	53426	5.1100	ppb	99
21) Chrysene	14.46	228	56932	5.0803	ppb	100
22) Indeno (1,2,3-cd) pyrene	20.51	276	55908	6.7126	ppb	# 97
24) Benzo (b) fluoranthene	17.28	252	51529	4.9335	ppb	99
25) Benzo (k) fluoranthene	17.35	252	59528	5.1044	ppb	98
26) Benzo (a) pyrene	18.05	252	47910	5.2494	ppb	99
27) Dibenzo (a,h) anthracene	20.58	278	46102	5.1834	ppb	97
28) Benzo (g,h,i) perylene	21.01	276	43831	4.8713	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

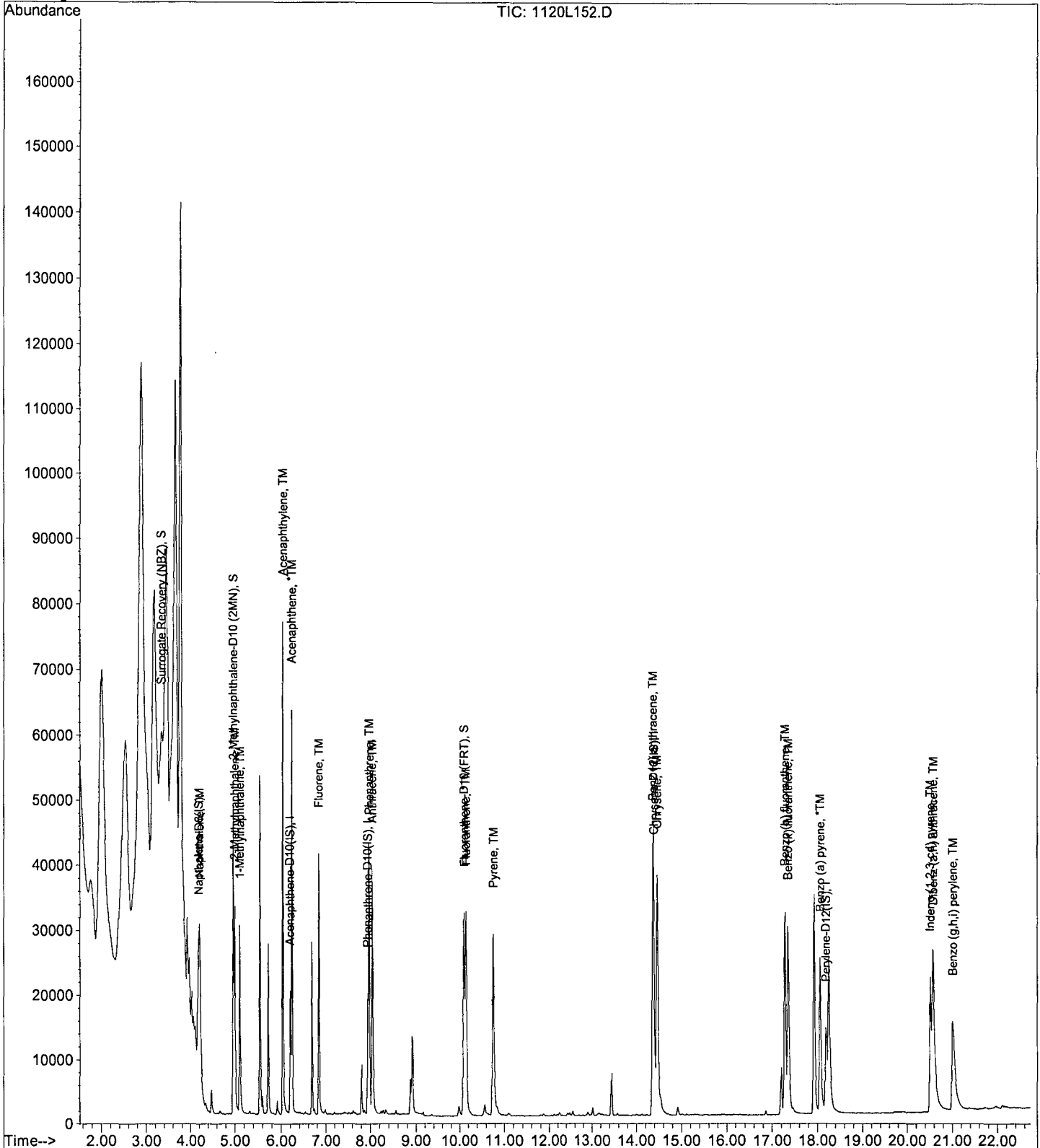
Data File : M:\LINUS\DATA\L181120\1120L152.D  
Acq On : 19 Dec 18 14:50  
Sample : 181217A LCSD-2 1/800  
Misc :

Vial: 52  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:35 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration





Data File : M:\LINUS\DATA\L181120\1120L153.D  
 Acq On : 19 Dec 18 15:19  
 Sample : AZ84057W24 MS-2 1/800  
 Misc :

Vial: 53  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.25

Quant Time: Dec 20 8:35 2018

Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	20007	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	9364	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	18332	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	27827	2.5000	ppb	0.00
23) Perylene-D12 (IS)	18.18	264	27478	2.5000	ppb	0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.33	82	47373	19.5526	ppb	-0.02
Spiked Amount 6.250			Recovery =	312.848%		
4) 2-Methylnaphthalene-D10 (2)	4.96	152	42803	5.7960	ppb	0.00
Spiked Amount 6.250			Recovery =	92.736%		
8) Surrogate Recovery (FBP)	5.43	172	35	0.0072	ppb	0.00
Spiked Amount 6.250			Recovery =	0.112%		
15) Fluoranthene-D10 (FRT)	10.10	212	61105	6.6888	ppb	0.00
Spiked Amount 6.250			Recovery =	107.024%		
19) Surrogate Recovery (TPH)	11.38	244	69	0.0097	ppb	0.01
Spiked Amount 6.250			Recovery =	0.160%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.20	128	36096	5.4547	ppb	96
5) 2-Methylnaphthalene	5.00	142	23367	5.7178	ppb	100
6) 1-Methylnaphthalene	5.11	142	23147	5.6220	ppb	99
9) Acenaphthylene	6.04	152	77005	5.9923	ppb	99
10) Acenaphthene	6.23	154	21946	5.6084	ppb	89
11) Fluorene	6.84	166	27170	6.0204	ppb	100
13) Phenanthrene	7.98	178	38706	5.6784	ppb	100
14) Anthracene	8.05	178	38197	5.9712	ppb	100
16) Fluoranthene	10.14	202	61176	6.1640	ppb	98
18) Pyrene	10.76	202	62312	5.4903	ppb	98
20) Benz (a) anthracene	14.36	228	52156	5.4539	ppb	100
21) Chrysene	14.46	228	55303	5.3953	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.51	276	56576	7.3738	ppb	# 97
24) Benzo (b) fluoranthene	17.28	252	50644	5.3599	ppb	99
25) Benzo (k) fluoranthene	17.35	252	57900	5.4883	ppb	98
26) Benzo (a) pyrene	18.05	252	47375	5.7380	ppb	99
27) Dibenz (a,h) anthracene	20.58	278	47282	5.8766	ppb	97
28) Benzo (g,h,i) perylene	21.01	276	44023	5.4085	ppb	98

Quantitation Report

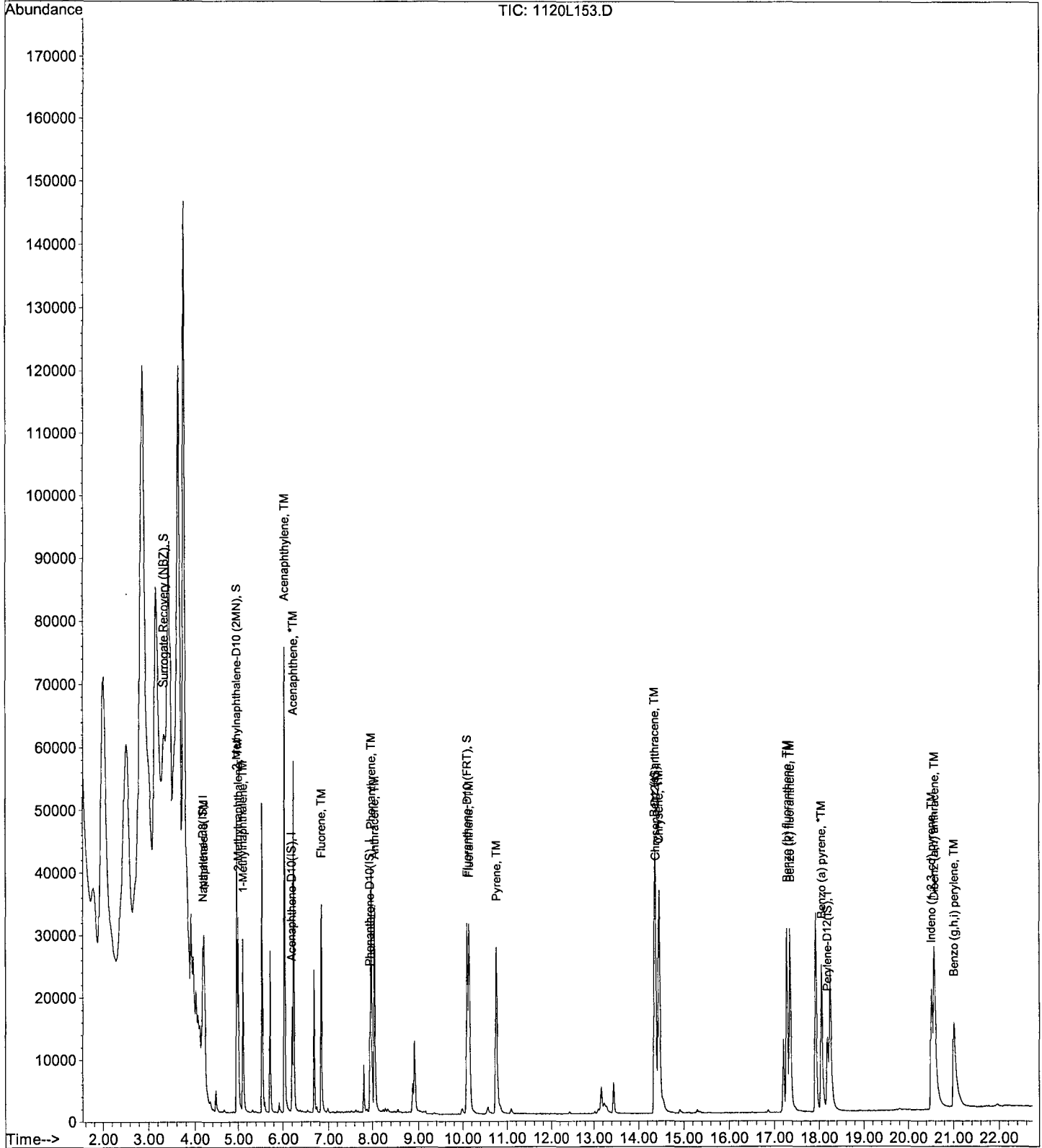
Data File : M:\LINUS\DATA\L181120\1120L153.D  
Acq On : 19 Dec 18 15:19  
Sample : AZ84057W24 MS-2 1/800  
Misc :

Vial: 53  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:35 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L154.D Vial: 54  
 Acq On : 19 Dec 18 15:48 Operator: MA  
 Sample : AZ84057W31 MSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:35 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	19108	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	9018	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	17903	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	27405	2.5000	ppb	0.00
23) Perylene-D12 (IS)	18.20	264	26943	2.5000	ppb	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.33	82	49332	21.3191	ppb	-0.02
Spiked Amount 6.250			Recovery =	341.104%		
4) 2-Methylnaphthalene-D10 (2)	4.96	152	44925	6.3695	ppb	0.00
Spiked Amount 6.250			Recovery =	101.920%		
8) Surrogate Recovery (FBP)	5.43	172	101	0.0215	ppb	0.00
Spiked Amount 6.250			Recovery =	0.352%		
15) Fluoranthene-D10 (FRT)	10.10	212	63651	7.1344	ppb	0.00
Spiked Amount 6.250			Recovery =	114.144%		
19) Surrogate Recovery (TPH)	11.39	244	338	0.0481	ppb	0.02
Spiked Amount 6.250			Recovery =	0.768%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.20	128	36454	5.7680	ppb	95
5) 2-Methylnaphthalene	5.00	142	23584	6.0424	ppb	100
6) 1-Methylnaphthalene	5.11	142	23234	5.9087	ppb	98
9) Acenaphthylene	6.04	152	78876	6.3734	ppb	99
10) Acenaphthene	6.23	154	22434	5.9530	ppb	88
11) Fluorene	6.83	166	27896	6.4184	ppb	94
13) Phenanthrene	7.98	178	39625	5.9525	ppb	100
14) Anthracene	8.05	178	38552	6.1711	ppb	100
16) Fluoranthene	10.14	202	62557	6.4542	ppb	98
18) Pyrene	10.76	202	64234	5.7468	ppb	98
20) Benz (a) anthracene	14.36	228	53019	5.6295	ppb	99
21) Chrysene	14.46	228	57002	5.6467	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.51	276	55670	7.3679	ppb	# 99
24) Benzo (b) fluoranthene	17.28	252	51358	5.5434	ppb	97
25) Benzo (k) fluoranthene	17.35	252	59311	5.7337	ppb	# 98
26) Benzo (a) pyrene	18.05	252	47610	5.8810	ppb	100
27) Dibenz (a,h) anthracene	20.58	278	46064	5.8389	ppb	97
28) Benzo (g,h,i) perylene	21.01	276	44871	5.6221	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1120L154.D L1026.M Thu Dec 20 10:04:19 2018

Quantitation Report

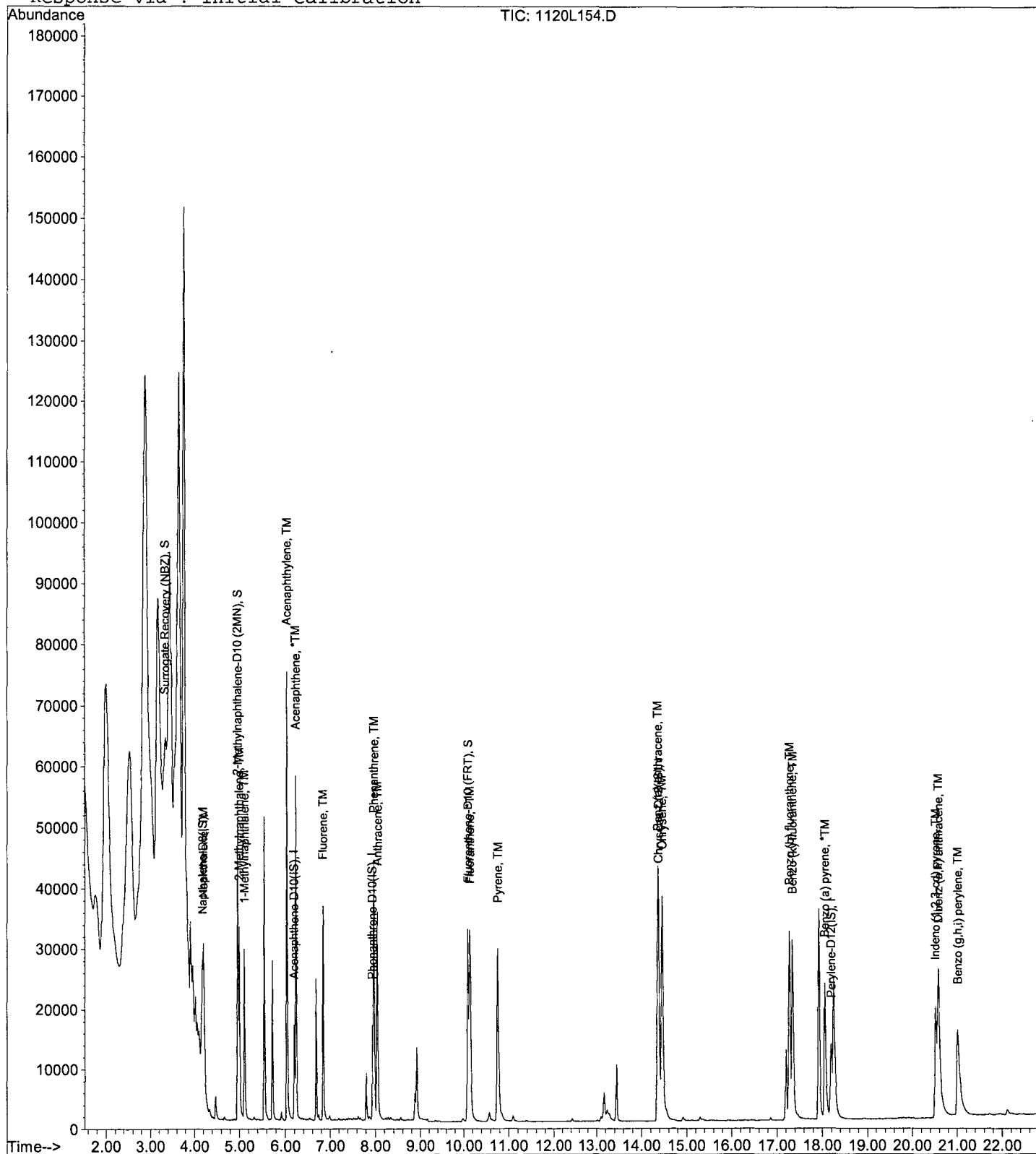
Data File : M:\LINUS\DATA\L181120\1120L154.D  
Acq On : 19 Dec 18 15:48  
Sample : AZ84057W31 MSD-2 1/800  
Misc :

Vial: 54  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:35 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L157.D Vial: 57  
 Acq On : 19 Dec 18 17:16 Operator: MA  
 Sample : AZ84061W23 MS-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:32 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.18	136	20344	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	9093	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	17403	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	26606	2.5000	ppb	0.00
23) Perylene-D12 (IS)	18.20	264	25888	2.5000	ppb	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.31	82	376	0.1526	ppb	-0.05
Spiked Amount	6.250		Recovery	=	2.448%	
4) 2-Methylnaphthalene-D10 (2)	4.96	152	45362	6.0407	ppb	0.00
Spiked Amount	6.250		Recovery	=	96.656%	
8) Surrogate Recovery (FBP)	5.43	172	61	0.0129	ppb	0.00
Spiked Amount	6.250		Recovery	=	0.208%	
15) Fluoranthene-D10 (FRT)	10.10	212	64199	7.4026	ppb	0.00
Spiked Amount	6.250		Recovery	=	118.448%	
19) Surrogate Recovery (TPH)	11.39	244	203	0.0298	ppb	0.02
Spiked Amount	6.250		Recovery	=	0.480%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.20	128	38651	5.7441	ppb	99
5) 2-Methylnaphthalene	5.00	142	24671	5.9369	ppb	100
6) 1-Methylnaphthalene	5.11	142	24586	5.8726	ppb	99
9) Acenaphthylene	6.04	152	79148	6.3427	ppb	99
10) Acenaphthene	6.23	154	22954	6.0408	ppb	88
11) Fluorene	6.84	166	28251	6.4465	ppb	99
13) Phenanthrene	7.98	178	39388	6.0869	ppb	99
14) Anthracene	8.05	178	38751	6.3812	ppb	100
16) Fluoranthene	10.14	202	63901	6.7823	ppb	97
18) Pyrene	10.76	202	65411	6.0278	ppb	99
20) Benz (a) anthracene	14.36	228	53990	5.9047	ppb	100
21) Chrysene	14.46	228	57120	5.8283	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.52	276	54975	7.4859	ppb	# 93
24) Benzo (b) fluoranthene	17.28	252	51791	5.8180	ppb	98
25) Benzo (k) fluoranthene	17.36	252	59812	6.0177	ppb	99
26) Benzo (a) pyrene	18.05	252	46458	5.9725	ppb	98
27) Dibenz (a,h) anthracene	20.58	278	45301	5.9762	ppb	97
28) Benzo (g,h,i) perylene	21.01	276	44105	5.7514	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

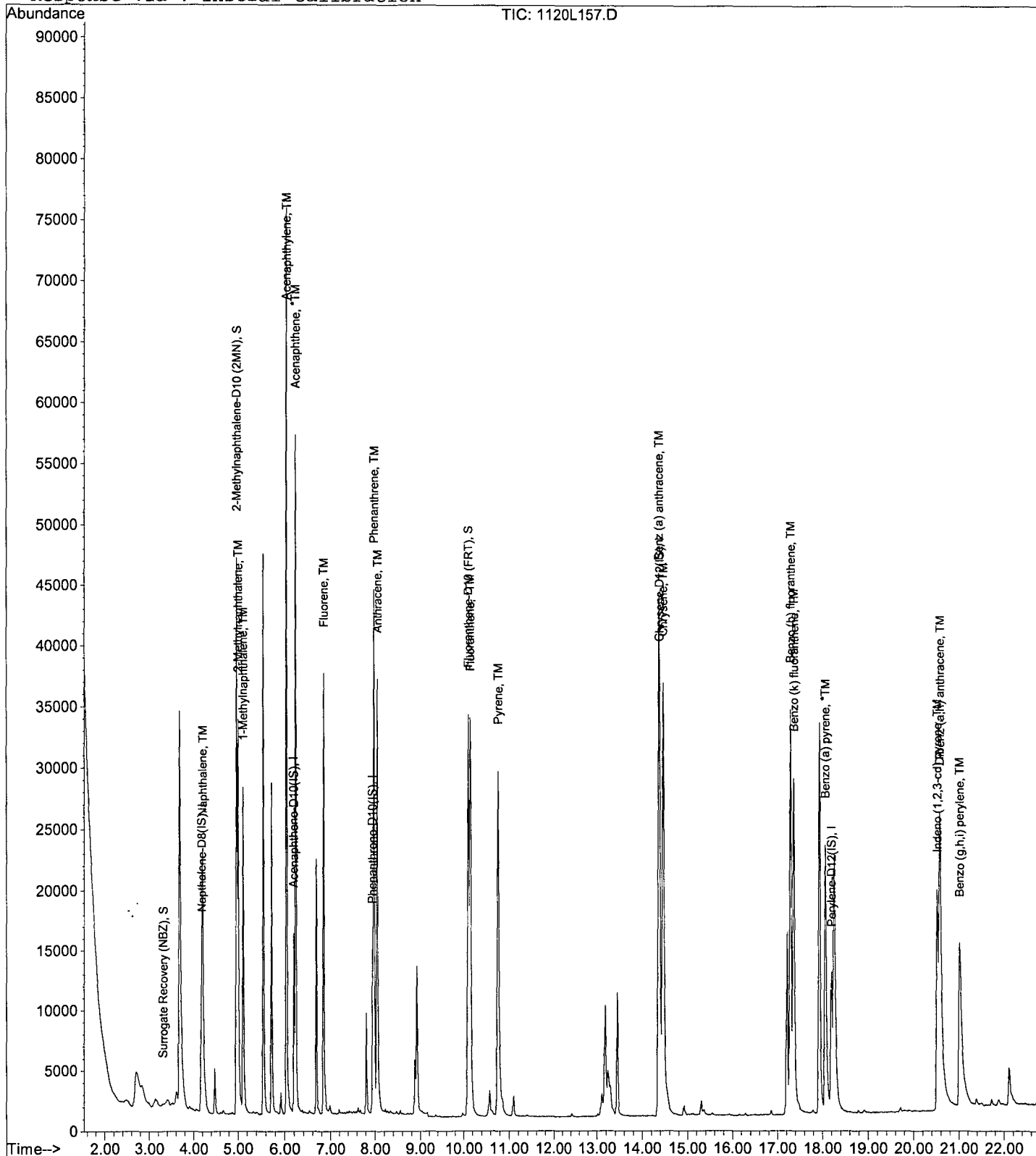
Data File : M:\LINUS\DATA\L181120\1120L157.D  
Acq On : 19 Dec 18 17:16  
Sample : AZ84061W23 MS-2 1/800  
Misc :

Vial: 57  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:32 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L181120\1120L158.D Vial: 58  
 Acq On : 19 Dec 18 17:45 Operator: MA  
 Sample : AZ84061W28 MSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 8:32 2018 Quant Results File: L1026.RES

Quant Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Wed Nov 14 15:04:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2SA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.18	136	19685	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.19	164	8969	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.94	188	18516	2.5000	ppb	0.00
17) Chrysene-D12 (IS)	14.38	240	28210	2.5000	ppb	0.00
23) Perylene-D12 (IS)	18.20	264	27323	2.5000	ppb	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.31	82	353	0.1481	ppb	-0.05
Spiked Amount 6.250			Recovery =	2.368%		
4) 2-Methylnaphthalene-D10 (2)	4.96	152	46136	6.3495	ppb	0.00
Spiked Amount 6.250			Recovery =	101.584%		
8) Surrogate Recovery (FBP)	5.43	172	40	0.0086	ppb	0.00
Spiked Amount 6.250			Recovery =	0.144%		
15) Fluoranthene-D10 (FRT)	10.10	212	63703	6.9039	ppb	0.00
Spiked Amount 6.250			Recovery =	110.464%		
19) Surrogate Recovery (TPH)	11.39	244	110	0.0152	ppb	0.02
Spiked Amount 6.250			Recovery =	0.240%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.20	128	38794	5.9583	ppb	99
5) 2-Methylnaphthalene	5.00	142	24619	6.1227	ppb	100
6) 1-Methylnaphthalene	5.11	142	24629	6.0798	ppb	99
9) Acenaphthylene	6.04	152	78672	6.3917	ppb	99
10) Acenaphthene	6.23	154	22563	6.0200	ppb	87
11) Fluorene	6.84	166	27787	6.4283	ppb	99
13) Phenanthrene	7.98	178	39205	5.6945	ppb	99
14) Anthracene	8.05	178	38118	5.8996	ppb	100
16) Fluoranthene	10.14	202	62528	6.2377	ppb	96
18) Pyrene	10.76	202	63813	5.5462	ppb	97
20) Benz (a) anthracene	14.36	228	52267	5.3913	ppb	99
21) Chrysene	14.46	228	56540	5.4411	ppb	99
22) Indeno (1,2,3-cd) pyrene	20.52	276	54096	6.9830	ppb	# 97
24) Benzo (b) fluoranthene	17.28	252	52825	5.6225	ppb	97
25) Benzo (k) fluoranthene	17.36	252	56708	5.4058	ppb	99
26) Benzo (a) pyrene	18.05	252	45692	5.5656	ppb	99
27) Dibenz (a,h) anthracene	20.59	278	44776	5.5967	ppb	96
28) Benzo (g,h,i) perylene	21.02	276	42997	5.3124	ppb	98

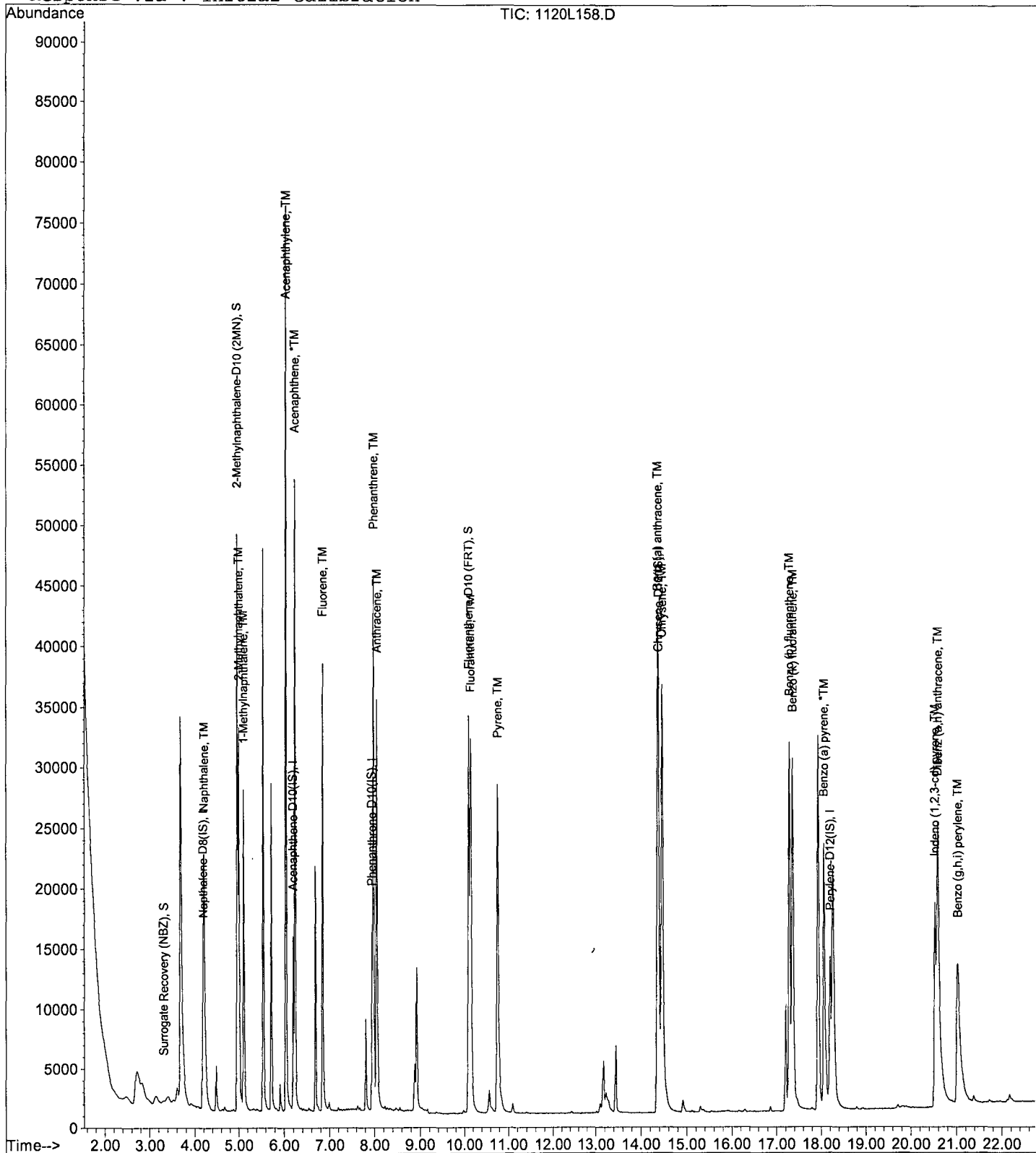
Data File : M:\LINUS\DATA\L181120\1120L158.D  
Acq On : 19 Dec 18 17:45  
Sample : AZ84061W28 MSD-2 1/800  
Misc :

Vial: 58  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Dec 20 8:32 2018

Quant Results File: L1026.RES

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Wed Nov 14 15:04:19 2018  
Response via : Initial Calibration

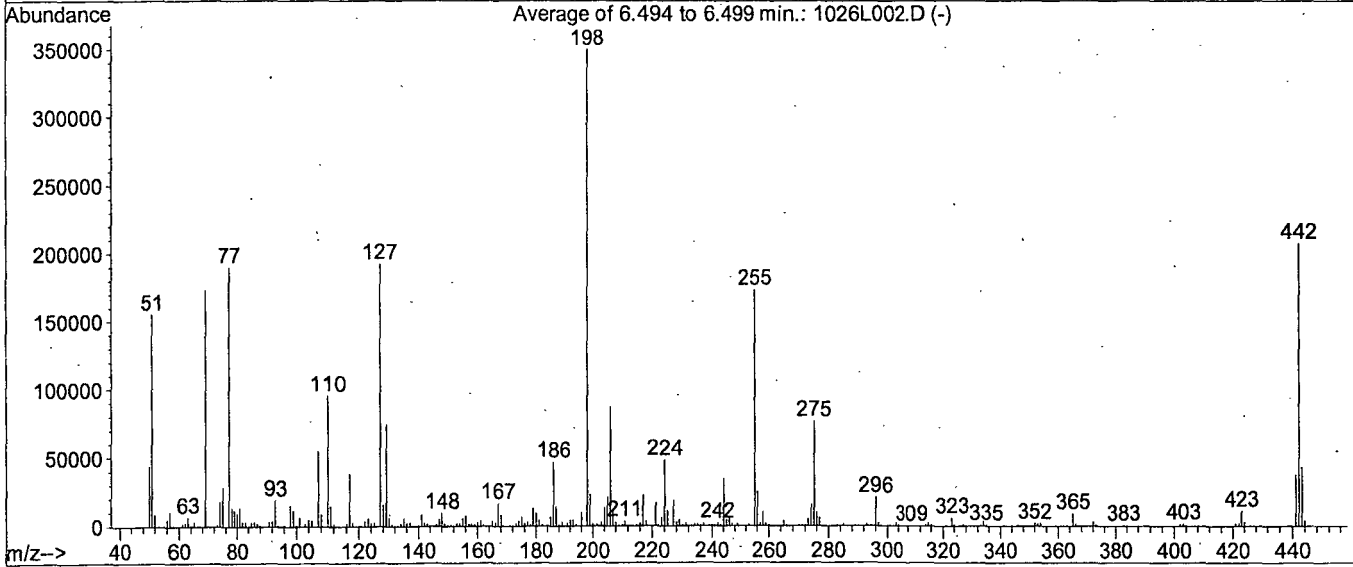
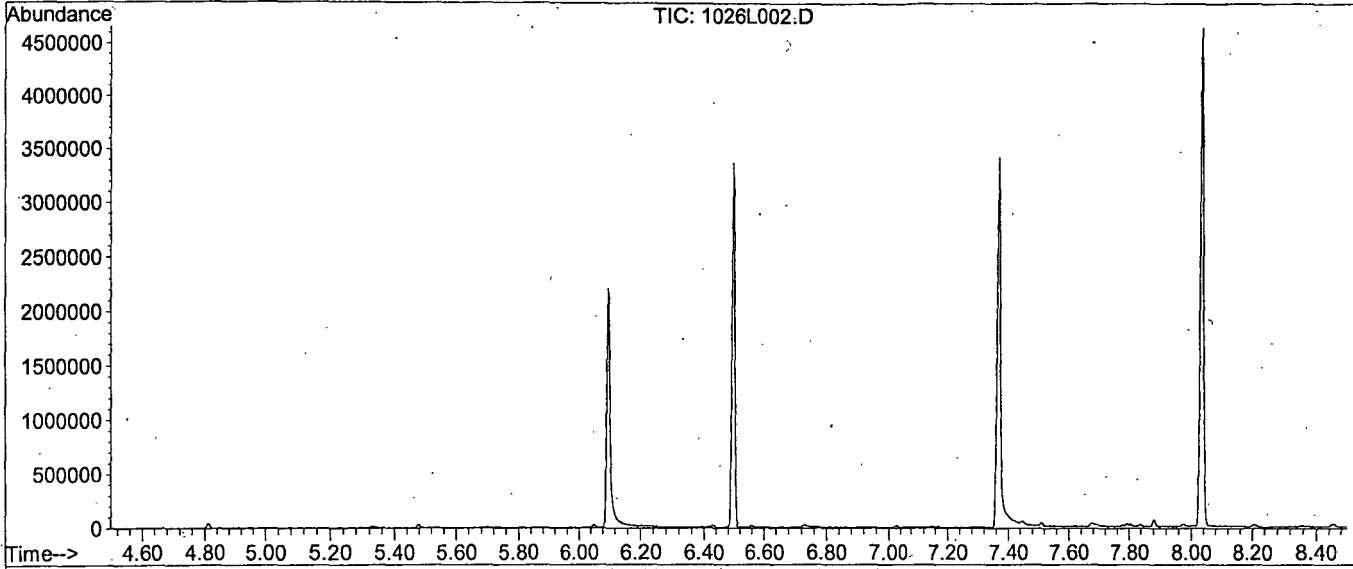




Data File : M:\LINUS\DATA\L181026\1026L002.D  
 Acq On : 26 Oct 18 12:05  
 Sample : SV Tune 03/07/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L181026\L1026.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1570, 1571, 1572; Background Corrected with Scan 1561

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.4	155594	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	527	PASS
127	198	10	80	55.0	192576	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	350165	PASS
199	198	5	9	6.5	22893	PASS
275	198	10	60	21.8	76453	PASS
365	198	1	100	2.6	9171	PASS
441	442	0.01	24	18.1	37424	PASS
442	198	50	150	59.1	206955	PASS
443	442	15	24	20.7	42821	PASS

Data File Name: 1026L002.D  
Data File Path: M:\LINUS\DATA\181026\  
Operator: MA  
Date Acquired: 26 Oct 2018 12:05  
Method File: DFTPP2.M  
Sample Name: SV Tune 03/07/18  
Vial Number: 2  
Instrument Name: Linus

#	Name	Ret Time	Target Response
1)	DDT	8.04	32874800
2)	DDD	7.79	219957
3)	DDE	7.91	378113

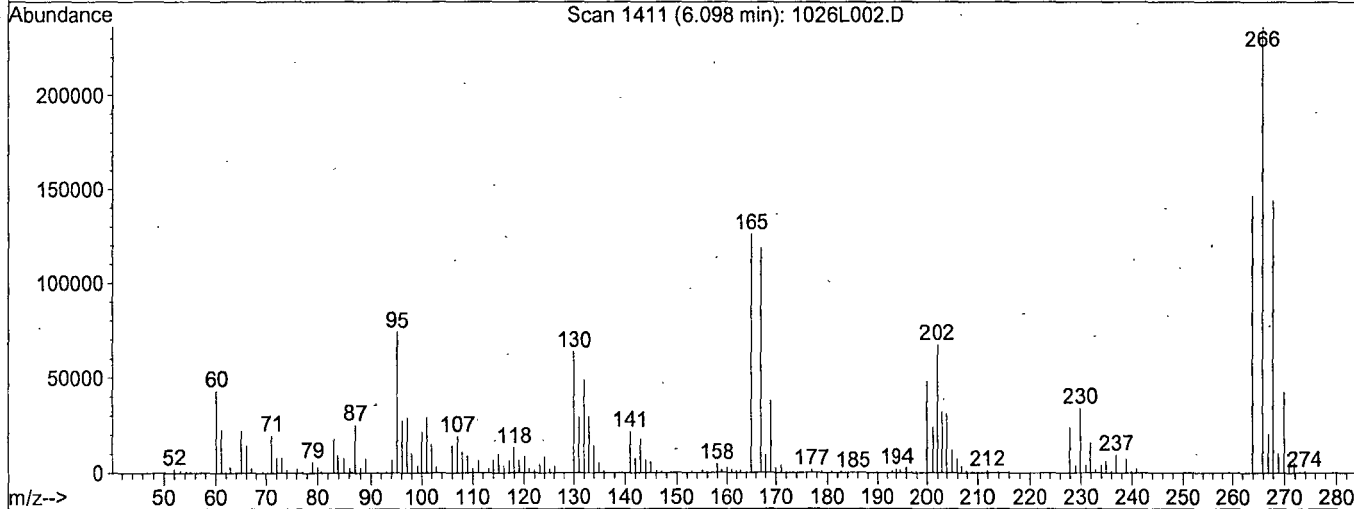
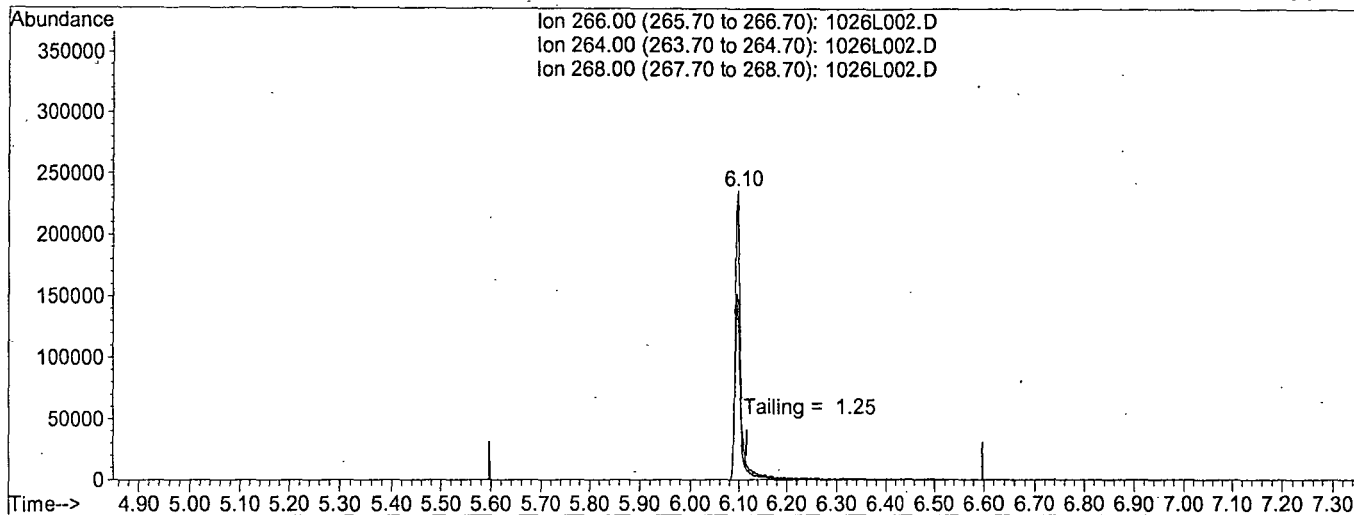
Breakdown 1.79

Quantitation Report

Data File : M:\LINUS\DATA\L181026\1026L002.D  
 Acq On : 26 Oct 18 12:05  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Oct 26 12:19 2018

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L181026\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Fri Oct 26 12:19:07 2018  
 Response via : Single Level Calibration



TIC: 1026L002.D

(5) Pentachlorophenol

6.10min 0.0000

response 1816051

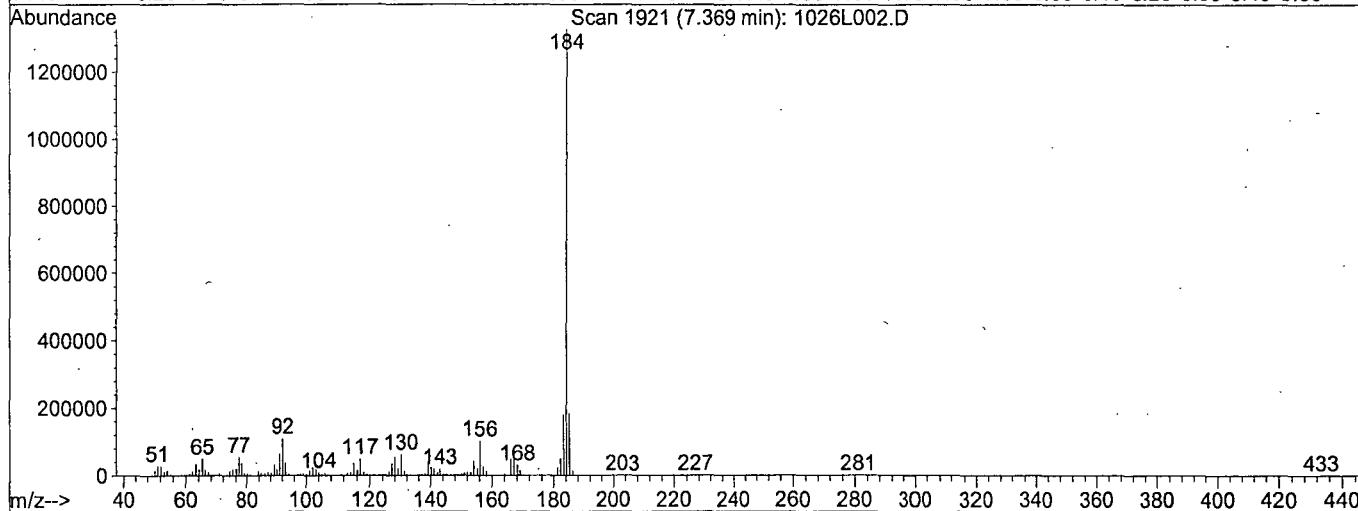
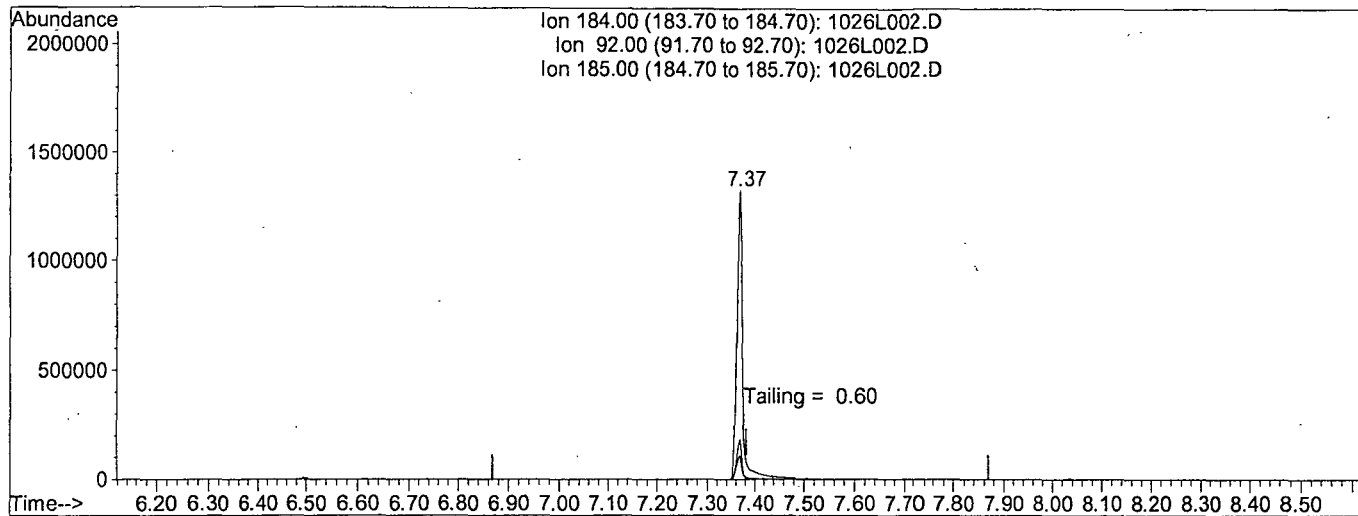
Ion	Exp%	Act%
266.00	100	100
264.00	61.90	64.53
268.00	60.80	61.02
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L181026\1026L002.D  
 Acq On : 26 Oct 18 12:05  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Oct 26 12:19 2018

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L181026\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Fri Oct 26 12:19:07 2018  
 Response via : Single Level Calibration



TIC: 1026L002.D

(6) Benzidine

7.37min 0.0000

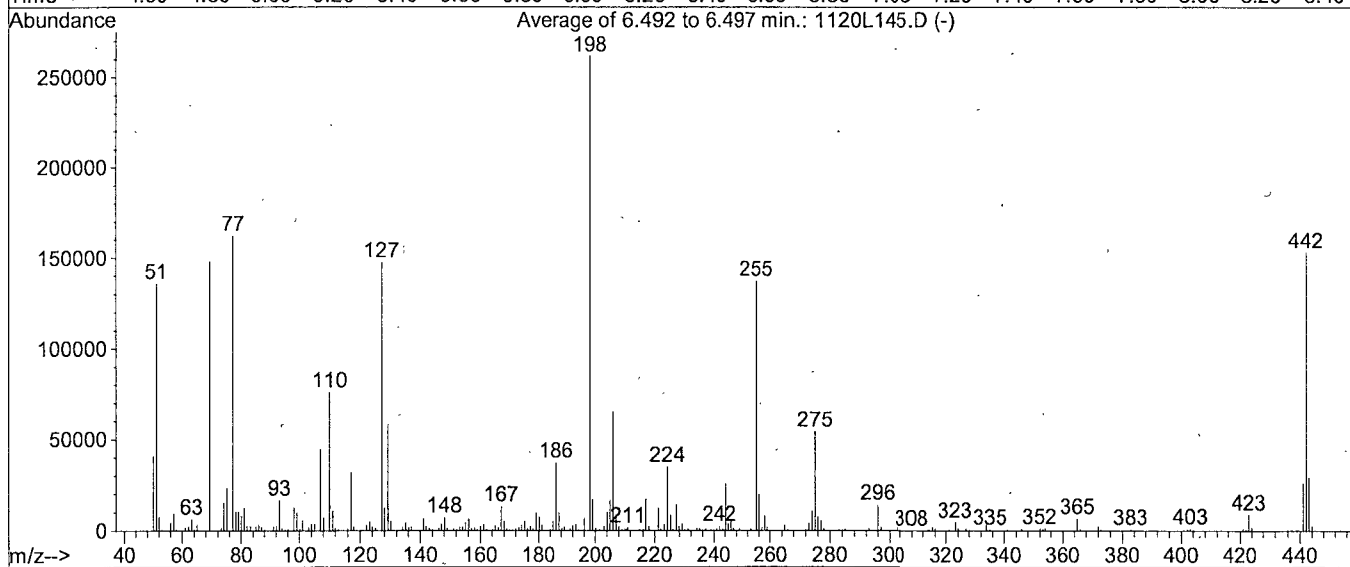
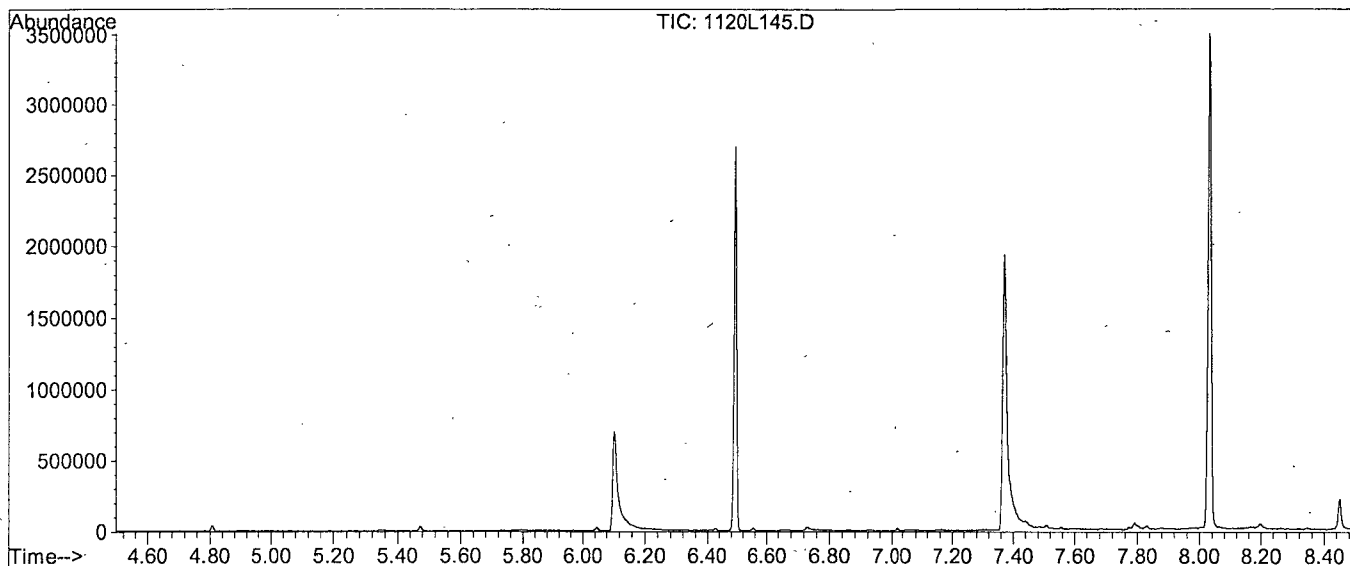
response 11036508

Ion	Exp%	Act%
184.00	100	100
92.00	8.20	7.85
185.00	13.80	12.80
0.00	0.00	0.00

Data File : M:\LINUS\DATA\L181120\1120L145.D  
 Acq On : 19 Dec 18 8:21  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 45  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L181120\L1026.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1569, 1570, 1571; Background Corrected with Scan 1561

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	51.9	135828	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	612	PASS
127	198	10	80	56.4	147547	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	261803	PASS
199	198	5	9	6.4	16845	PASS
275	198	10	60	20.7	54160	PASS
365	198	1	100	2.5	6624	PASS
441	442	0.01	24	17.1	26125	PASS
442	198	50	150	58.5	153219	PASS
443	442	15	24	18.9	29032	PASS

Data File Name: 1120L145.D  
Data File Path: M:\LINUS\DATA\181120\  
Operator: MA  
Date Acquired: 19 Dec 2018 08:21  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 45  
Instrument Name: Linus

#	Name	Ret Time	Target Response
1)	DDT	8.03	24356100
2)	DDD	7.79	588248
3)	DDE	7.97	0

Breakdown 2.36

Name of Final Standard Semivolatle (SV) Tuning Solution  
 Prep Date 03/07/18  
 Exp Date 03/07/19

Prep'd By (Initials)

GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatle GC/MS Tuning Standard	Ultra Scientific	GCM-150-1	1,000 ug/mL	CR3789-38878	03/07/19	1,250 uL	25 mL	MC #56258	50 ug/mL

Name of  
Final  
Standard

SIM Curve

Prep'd By (Initials)

GA

Prep Date 10/26/18

Exp Date 06/01/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1.0 ug/mL SIM	APPL	SIM 1.0	1.0 ug/mL	10/26/18	06/01/19	10 uL	100uL	MC 56258 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*
1.0 ug/mL SIM	APPL	SIM 1.0	1.0 ug/mL	10/26/18	06/01/19	20 uL	100uL	MC 56258 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*
5.0 ug/mL SIM	APPL	SIM 5.0	5.0 ug/mL	10/26/18	06/01/19	10 uL	100uL	MC 56258 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*
5.0 ug/mL SIM	APPL	SIM 5.0	5.0 ug/mL	10/26/18	06/01/19	20 uL	100uL	MC 56258 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*
SIM STOCK	APPL	SIM STOCK	200 ug/mL	10/26/18	10/26/19	5 uL	200uL	MC 56258 190 uL	5.0 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	4 uL	*	*	*
SIM STOCK	APPL	SIM STOCK	200 ug/mL	10/26/18	10/26/19	5 uL	100 uL	MC 56258 90 uL	10 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*



SIM STOCK	APPL	SIM STOCK	200	10/26/18	10/26/19	25 uL	100uL	MC 56258 50 uL	50 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	25 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*
SIM STOCK	APPL	SIM STOCK	200 ug/mL	10/26/18	10/26/19	50 uL	100uL	na	100 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	50 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/25/18	06/25/19	2 uL	*	*	*

Name of  
 Final  
 Standard PAH SIM Stock (Ampule)

Prep'd By (Initials) GA

Prep Date 10/26/18  
Exp Date 10/26/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01	200 ug/mL	353450- 39732	08/12/20	1000 uL	1mL	NA	200ug/mL

Name of  
Final  
Standard

**SIM 2S Surrogate**

Prep'd By (Initials)

**GA**

Prep Date **06/07/18**

Exp Date **06/01/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SIM Surrogate Mix	Restek	33913	2000 ug/mL	<del>A0131716</del> 38553 & 38554	06/01/19 06/07/19	250 uL	5 mL	Acetone #030817A	100 ug/mL
8270 B/N surrog mix	Restek	31086	5000 ug/mL	<del>A0135243</del> 39162	06/04/19	100 uL	*	*	*

Name of Final Standard 8270 PAH SIM Second Source

Prep'd By (Initials) GA

Prep Date 10/26/18  
Exp Date 03/24/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
PAH SIMPCP	o2si	110780-01 SS	200 ug/mL	06/25/18	03/24/19	5 uL	200uL	MC 56258 195uL	5 ug/mL
SV Internal Standard	Restek		2000 ug/mL	06/25/18	06/25/19	4 uL	*	*	*

Name of Final Standard PAH SIM Spike (Ampules)

Prep'd By (Initials) OA

Prep Date 10/26/18  
Exp Date 10/26/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01	200 ug/mL	353450-39731	08/12/20	1 mL	1 mL	NA	200ug/mL

Name of Final Standard SIM 2nd Source Ampule Prep'd By (Initials) GA

Prep Date 06/25/18  
Exp Date 03/24/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-02 SS	200 ug/mL	G34-327639-38583	03/24/19	1 mL	na	na	200 ug/mL

Name of Final Standard 8270 SIM PAH Internal Standard Prep'd By (Initials) GA

Prep Date 06/25/18  
Exp Date 06/25/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	A0130603-38561	06/25/19	350 uL	5,600 uL	MC:56258 5,250 uL	125 ug/mL

Name of  
Final  
Standard

**SIM Surrogate**

Prep'd By (Initials)

**MA**

Prep Date **09/27/18**

Exp Date **09/27/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	<b>A0131718-39321</b>	<b>09/27/19</b>	1250 uL	25 mL	<b>Acetone #030817A</b>	100 ug/mL

Name of  
Final  
Standard

**PAH SIM Spike (Ampules)**

Prep'd By (Initials)

**MA**

Prep Date **09/27/19**

Exp Date **03/24/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01 SS	200 ug/mL	<b>G34-327639-38585</b>	<b>03/24/19</b>	2 mL	2 mL	<b>NA</b>	200ug/mL

Name of  
Final

Standard PAH SIM Spike (Ampules)

Prep'd By (Initials)

MA

Prep Date 09/27/19

Exp Date 03/24/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with	Exp Date	Aliquot from Stock	Final Volume	Final Solvent +	Final Standard Conc (range)
				QA #				Lot# (or APPL Prep Date)	
8270D PAH SIM	O2SI	110780-01 SS	200 ug/mL	G34-327639-38585	03/24/19	2 mL	2 mL	NA	200ug/mL

## Injection Log

Directory: M:\LINUS\DATA\181026\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1026L002.D	1	SV Tune 03/07/18		26 Oct 18 12:05
3	1026L003.D	1	5 SIM 10/26/18		26 Oct 18 12:21
4	1026L004.D	1	0.1 SIM 10/26/18		26 Oct 18 12:50
5	1026L005.D	1	0.2 SIM 10/26/18		26 Oct 18 13:20
6	1026L006.D	1	0.5 SIM 10/26/18		26 Oct 18 13:49
7	1026L007.D	1	1 SIM 10/26/18		26 Oct 18 14:18
8	1026L008.D	1	10 SIM 10/26/18		26 Oct 18 14:47
9	1026L009.D	1	50 SIM 10/26/18		26 Oct 18 15:16
10	1026L010.D	1	100 SIM 10/26/18		26 Oct 18 15:46
11	1026L011.D	1	SS SIM 10/26/18		26 Oct 18 16:46
45	1120L145.D	1	SV TUNE 11/10/18		19 Dec 18 8:21
46	1120L146.D	1	5 ug/ml SIM 10/26/18		19 Dec 18 8:37
50	1120L150.D	1.25	181217A Blk 1/800		19 Dec 18 13:52
51	1120L151.D	1.25	181217A LCS-2 1/800		19 Dec 18 14:21
52	1120L152.D	1.25	181217A LCSD-2 1/800		19 Dec 18 14:50
53	1120L153.D	1.25	AZ84057W24 MS-2 1/800		19 Dec 18 15:19
54	1120L154.D	1.25	AZ84057W31 MSD-2 1/800		19 Dec 18 15:48
55	1120L155.D	1.25	AZ84057W22 1/800		19 Dec 18 16:17
56	1120L156.D	1.25	AZ84059W08 1/800		19 Dec 18 16:47
57	1120L157.D	1.25	AZ84061W23 MS-2 1/800		19 Dec 18 17:16
58	1120L158.D	1.25	AZ84061W28 MSD-2 1/800		19 Dec 18 17:45
59	1120L159.D	1.25	AZ84061W24 1/800		19 Dec 18 18:14
60	1120L160.D	1.25	AZ84062W07 1/800		19 Dec 18 18:43
61	1120L161.D	1	5 ug/ml SIM 10/26/18		19 Dec 18 19:12



# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	181217A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL	
Spiked ID 1	8270T STD 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 11-6-18 EXP 9-27-19					
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 9-27-18 EXP 9-27-19					
Spiked ID 3		Surrogate ID 3						
Spiked ID 4		Surrogate ID 4						
Spiked ID 5		Surrogate ID 5						
Spiked ID 6		Sufficient Vol for Matrix QC:		yes				
Spiked ID 7		Ext. Start Time:		12/17/18 15:45, <del>12/18/18 13:00</del>				
Spiked ID 8		Ext. End Time:		12/18/18 10:30, <del>12/19/18 07:30, 12/19/18 12:45</del>				
		GC Requires Extract By:		12/21/18 0:00				
		pH1	2	12/17/18 2:20:00 PM	Water Bath Temp Criteria			75,77 °C
		pH2	14	2/18/18 12:30:00 PM				
		pH3						

Spiked By: DL

Date 12/17/18

Witnessed By: CFM

Date 12/17/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
1	181217A Blk			1,0.050	1,2	800	1	2/1	12/17/18 14:00		
						equip					
						E-HP51 E-WB5					
2	181217A LCS-1	0.250	1	1	1	800	1	2/1	12/17/18 14:00		
						equip					
						E-HP50 E-WB5					
3	181217A LCS-2	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00		
						equip					
						E-HP48 E-WB5					
4	181217A LCSD-1	0.250	1	1	1	800	1	2/1	12/17/18 14:00		
						equip					
						E-HP49 E-WB5					
5	181217A LCSD-2	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00		
						equip					
						E-HP47 E-WB5					
6	AZ84057 MS-1	AZ84057W32	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP29 E-WB5					
7	AZ84057 MSD-1	AZ84057W23	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP28 E-WB5					
8	AZ84057 MS-2	AZ84057W24	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP27 E-WB5					
9	AZ84057 MSD-2	AZ84057W31	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP26 E-WB5					
10	AZ84057	AZ84057W22		1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650	
						equip					
						E-HP30 E-WB5					
11	AZ84059	AZ84059W08		1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650	
						equip					
						E-HP25 E-WB5					
12	AZ84061 MS-1	AZ84061W20	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP16 E-WB5					
13	AZ84061 MSD-1	AZ84061W19	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP15 E-WB6					
14	AZ84061 MS-2	AZ84061W23	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP14 E-WB6					
15	AZ84061 MSD-2	AZ84061W28	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
						equip					
						E-HP13 E-WB6					
16	AZ84061	AZ84061W24		1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650	
						equip					
						E-HP17 E-WB6					

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	10-17-18
Filter Paper	400138
Acidified Na2SO4	10-2-18
B. Na2SO4	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	12/19/18
Time	14:00
Refrigerator	BLC

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/20/18 1:00:40 PM

Reviewed By: *KY* Date: *12/20/18*  
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 Ext\_ID: 61290

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C		Extraction Set	181217A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T STD 11-20-18 EXP 10-20-19		Surrogate ID 1	8270 Surrogate 11-6-18 EXP 9-27-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19		Surrogate ID 2	SIM Surrogate 9-27-18 EXP 9-27-19				
Spiked ID 3			Surrogate ID 3					
Spiked ID 4			Surrogate ID 4					
Spiked ID 5			Surrogate ID 5					
Spiked ID 6			Sufficient Vol for Matrix QC:		yes			
Spiked ID 7			Ext. Start Time:		12/17/18 15:45, 12/18/18 13:00			
Spiked ID 8			Ext. End Time:		12/18/18 10:30, 12/19/18 07:30, 12/19/18 12:45			
			GC Requires Extract By:		12/21/18 0:00			
			pH1	2	12/17/18 2:20:00 PM	Water Bath Temp Criteria		75.77 °C
			pH2	14	2/18/18 12:30:00 PM			
			pH3					

Spiked By: DL

Date 12/17/18

Witnessed By: CFM

Date 12/17/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17 AZ84062	AZ84062W07			1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650
						equip				
						E-HP12 E-WB6				

KCS 12/20/18

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	10-17-18
Filter Paper	400138
Acidified Na2SO4	10-2-18
B. Na2SO4	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/20/18 1:00:40 PM

Reviewed By: *KCS* Date 12/20/18  
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 Ext\_ID 61290

**ORGANICS  
Calibration Data**

**APPL, INC.**

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/01/18  
Instrument: Yoda

Initials: \_\_\_\_\_

1201Y003.D 1201Y004.D 1201Y005.D 1201Y006.D 1201Y007.D 1201Y008.D 1201Y009.D 1201Y010.D 1201Y011.D

	Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type	r^2	Q	MRF
1	I 1,4-dichlorobenzene-D4(1S)	ISTD														
2	1,4-Dioxane		0.2074	0.1832	0.1601	0.1405	0.1401	0.1439	0.1562	0.1524	0.16	15				
3	TM n-Nitrosodimethylamine		0.3223	0.2783	0.3041	0.2690	0.2703	0.2572	0.2736	0.2825	0.28	7.5	TM			
4	TM Pyridine		0.7588	0.7697	0.7202	0.6386	0.6214	0.6085	0.6883	0.6797	0.69	8.9	TM			
5	S 2-Fluorophenol (S)		1.480	1.690	1.600	1.520	1.570	1.560	1.641	1.643	1.6	4.4	S			
6	S Phenol-D6 (S)		2.024	2.308	2.139	1.987	2.043	2.023	2.126	2.105	2.1	4.9	S			
7	*TM Phenol		2.745	2.730	2.542	2.322	2.307	2.277	2.400	2.346	2.5	7.7	*TM			0.800
8	TML Aniline		1.059	0.8539	1.048	1.871	1.839	1.843	1.908	1.867	1.5	30	TML	0.995		
9	TM Bis (2-chloroethyl) ether		1.353	1.363	1.274	1.169	1.148	1.150	1.223	1.207	1.2	7.0	TM			0.700
10	TM 2-Chlorophenol		1.843	1.878	1.724	1.592	1.591	1.587	1.691	1.688	1.7	6.6	TM			0.800
11	TM 1,3-DCB		1.971	1.932	1.801	1.630	1.633	1.609	1.725	1.730	1.8	7.9	TM			
12	*TM 1,4-DCB		2.030	1.959	1.823	1.643	1.645	1.623	1.749	1.744	1.8	8.5	*TM			
13	TM Benzyl alcohol		1.103	1.166	1.097	1.022	1.024	1.031	1.088	1.082	1.1	4.6	TM			
14	TM 1,2-DCB		1.877	1.844	1.700	1.543	1.553	1.531	1.639	1.634	1.7	8.0	TM			
15	TM 2-Methylphenol		1.486	1.491	1.411	1.281	1.292	1.282	1.358	1.371	1.4	6.3	TM			0.700
16	TM Bis (2-chloroisopropyl) ether		2.388	2.387	2.166	1.932	1.917	1.904	2.006	1.970	2.1	9.8	TM			0.010
17	TM Acetophenone		2.560	2.607	2.299	2.026	2.020	1.977	2.076	2.024	2.2	12	TM			0.010
18	TM 3&4-Methylphenol		1.939	2.020	1.795	1.595	1.601	1.568	1.641	1.597	1.7	10	TM			0.600
19	**TM n-Nitrosodi-n-propylamine		1.493	1.537	1.368	1.203	1.204	1.188	1.257	1.259	1.3	10	**TM			0.500
20	TM Hexachloroethane		0.7480	0.7418	0.6998	0.6457	0.6454	0.6359	0.6865	0.6931	0.69	6.3	TM			0.300
21	I Napthalene-D8(1S)	ISTD														
22	S Nitrobenzene-D5(S)		0.4066	0.4227	0.4636	0.4356	0.4512	0.4394	0.4497	0.4513	0.44	4.2	S			
23	TM Nitrobenzene		0.4832	0.4337	0.4580	0.4188	0.4204	0.4055	0.4175	0.4120	0.43	6.1	TM			0.200
24	TM Isophorone		0.8577	0.8105	0.8177	0.7449	0.7398	0.7200	0.7406	0.7299	0.77	6.6	TM			0.400
25	*TM 2-Nitrophenol		0.1774	0.1692	0.2001	0.1907	0.1923	0.1898	0.1957	0.1962	0.19	5.5	*TM			0.100
26	TM 2,4-Dimethylphenol		0.3758	0.3700	0.3689	0.3408	0.3434	0.3340	0.3421	0.3374	0.35	4.8	TM			0.200
27	TM Benzoic acid			0.1467	0.1769	0.1942	0.2005	0.2113	0.2260	0.2320	0.20	15	TM			
28	TM Bis (2-chloroethoxy) methane		0.5630	0.5133	0.5119	0.4630	0.4605	0.4501	0.4576	0.4506	0.48	8.5	TM			0.300
29	*TM 2,4-Dichlorophenol		0.3268	0.3002	0.3131	0.2887	0.2906	0.2781	0.2854	0.2824	0.30	5.7	*TM			0.200
30	TM 1,2,4-Trichlorobenzene		0.3719	0.3341	0.3411	0.3092	0.3054	0.3011	0.3047	0.3000	0.32	8.0	TM			
31	TM 3,4-Dimethylphenol		0.5194	0.4860	0.4930	0.4561	0.4543	0.4425	0.4485	0.4387	0.47	6.2	TM			
32	TM Napthalene		1.339	1.186	1.206	1.093	1.078	1.045	1.054	1.034	1.1	9.4	TM			0.700
33	TM 4-Chloroaniline		0.5090	0.3737	0.4951	0.4548	0.4374	0.4308	0.4065	0.3812	0.44	11	TM			0.010
34	TM 2,6-Dichlorophenol		0.3250	0.3076	0.3091	0.2790	0.2767	0.2706	0.2765	0.2728	0.29	7.2	TM			
35	TM Hexachloropropene		0.1829	0.1725	0.1953	0.1868	0.1861	0.1845	0.1896	0.1900	0.19	3.6	TM			

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/01/18  
Instrument: Yoda

Initials: \_\_\_\_\_

	Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q
36	*TM Hexachlorobutadiene		0.1974	0.1718	0.1798	0.1641	0.1630	0.1574	0.1603	0.1603		0.17	8.0	*TM		0.010
37	TM Caprolactam		0.1821	0.1674	0.1745	0.1601	0.1600	0.1581	0.1614	0.1600		0.17	5.2	TM		0.010
38	*TM 4-Chloro-3-methylphenol		0.3557	0.3444	0.3520	0.3282	0.3213	0.3119	0.3210	0.3172		0.33	5.1	*TM		0.200
39	TM 2-Methylnaphthalene		0.8223	0.7582	0.7537	0.6957	0.6910	0.6652	0.6752	0.6697		0.72	7.8	TM		0.400
40	TM 1-Methylnaphthalene		0.8233	0.7567	0.7553	0.6953	0.6824	0.6702	0.6848	0.6690		0.72	7.7	TM		
41	I Acenaphthene-D10(IS)	ISTD														
42	**TML Hexachlorocyclopentadiene		0.1179	0.1371	0.2441	0.2760	0.2763	0.2782	0.2927	0.3179		0.24	31	**TML	0.996	0.050
43	TM 1,2,4,5-Tetrachlorobenzene		0.7333	0.6091	0.6449	0.5984	0.5979	0.5711	0.5655	0.5844		0.61	8.9	TM		0.010
44	*TM 2,4,6-Trichlorophenol		0.4183	0.3741	0.4308	0.4020	0.4013	0.3849	0.3915	0.4071		0.40	4.5	*TM		0.200
45	TM 2,4,5-Trichlorophenol		0.4682	0.4065	0.4502	0.4352	0.4331	0.4191	0.4119	0.4354		0.43	4.7	TM		0.200
46	S 2-Fluorobiphenyl(S)		1.714	1.579	1.706	1.617	1.655	1.592	1.570	1.623		1.6	3.4	S		
47	TM 1,1'-Biphenyl		2.114	1.785	1.905	1.761	1.731	1.645	1.634	1.688		1.8	8.9	TM		0.010
48	TM 2-Chloronaphthalene		1.620	1.339	1.440	1.334	1.317	1.256	1.259	1.293		1.4	8.9	TM		0.800
49	TM 2-Nitroaniline		0.4547	0.4253	0.4932	0.4643	0.4615	0.4524	0.4437	0.4521		0.46	4.2	TM		0.010
50	TM Dimethyl phthalate		1.785	1.519	1.630	1.527	1.499	1.461	1.466	1.475		1.5	7.2	TM		0.010
51	TM 2,6-DNT		0.2834	0.2765	0.3334	0.3353	0.3334	0.3247	0.3336	0.3360		0.32	7.7	TM		0.200
52	TM Acenaphthylene		2.395	2.069	2.284	2.089	2.059	1.960	1.975	1.979		2.1	7.5	TM		0.900
53	TM 3-Nitroaniline		0.3938	0.3406	0.4309	0.4034	0.3937	0.3891	0.3749	0.3794		0.39	6.6	TM		0.010
54	*TM Acenaphthene		1.673	1.387	1.475	1.361	1.342	1.298	1.287	1.287		1.4	9.4	*TM		0.900
55	**TML 2,4-Dinitrophenol				0.0819	0.1214	0.1271	0.1390	0.1526	0.1706		0.13	23	**TML	0.992	0.010
56	**TM 4-Nitrophenol			0.2097	0.2825	0.2892	0.2909	0.2914	0.2982	0.3071		0.28	12	**TM		0.010
57	TM Dibenzofuran		2.298	1.957	2.059	1.869	1.834	1.750	1.749	1.717		1.9	10	TM		0.800
58	TM 2,4-DNT		0.3784	0.3606	0.4612	0.4458	0.4346	0.4292	0.4305	0.4344		0.42	8.1	TM		0.200
59	TM 2,3,4,6-Tetrachlorophenol		0.3015	0.2921	0.3408	0.3322	0.3271	0.3211	0.3194	0.3242		0.32	5.0	TM		0.010
60	TM Diethyl phthalate		1.736	1.488	1.611	1.460	1.458	1.398	1.380	1.400		1.5	8.2	TM		0.010
61	TM 4-Chlorophenyl phenyl ether		0.8814	0.7632	0.8094	0.7323	0.7205	0.6855	0.6679	0.6740		0.74	10.0	TM		0.400
62	TM Fluorene		1.832	1.578	1.669	1.532	1.495	1.435	1.384	1.393		1.5	9.9	TM		0.900
63	TM 4-Nitroaniline		0.4286	0.3508	0.4100	0.4029	0.3929	0.3870	0.3483	0.3537		0.38	7.9	TM		0.010
64	S 2,4,6-Tribromophenol(S)		0.1557	0.1621	0.1794	0.1721	0.1753	0.1715	0.1672	0.1688		0.17	4.4	S		
65	I Phenanthrene-D10(IS)	ISTD														
66	TM 4,6-Dinitro-2-methylphenol				0.1171	0.1311	0.1355	0.1397	0.1507	0.1527		0.14	9.6	TM		0.010
67	TM Diphenyl amine		0.7788	0.6750	0.7119	0.6474	0.6393	0.6105	0.6181	0.5874		0.66	9.4	TM		
68	*TM n-Nitrosodiphenylamine		0.7788	0.6750	0.7119	0.6474	0.6393	0.6105	0.6181	0.5874		0.66	9.4	*TM		0.010
69	TM 1,2-Diphenylhydrazine		1.137	0.9643	1.039	0.9367	0.9248	0.8894	1.066	1.015		1.00	8.3	TM		
70	TM 4-Bromophenyl phenyl ether		0.2631	0.2277	0.2439	0.2284	0.2270	0.2144	0.2233	0.2159		0.23	6.9	TM		0.100

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/01/18 \_\_\_\_\_  
Instrument: Yoda \_\_\_\_\_

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type	Q	
71	TM	Hexachlorobenzene		0.2563	0.2226	0.2359	0.2155	0.2153	0.2064	0.2103	0.2022		0.22	8.1	TM		0.100
72	TM	Atrazine		0.2337	0.2098	0.2348	0.2270	0.2209	0.2146	0.2234	0.2232		0.22	3.8	TM		0.010
73	*TM	Pentachlorophenol				0.1274	0.1324	0.1311	0.1315	0.1386	0.1386		0.13	3.4	*TM		0.050
74	TM	Phenanthrene		1.436	1.254	1.304	1.201	1.193	1.138	1.140	1.135		1.2	8.5	TM		0.700
75	TM	Anthracene		1.433	1.271	1.359	1.236	1.231	1.180	1.184	1.179		1.3	7.4	TM		0.700
76	TM	Carbazol		1.295	1.135	1.222	1.135	1.131	1.076	1.085	1.070		1.1	6.8	TM		0.010
77	TM	Di-n-butylphthalate		1.448	1.286	1.460	1.351	1.313	1.274	1.278	1.246		1.3	6.1	TM		0.010
78	*TM	Fluoranthene		1.485	1.279	1.416	1.303	1.270	1.235	1.237	1.252		1.3	7.0	*TM		0.600
79	I	Chrysene-D12(IS)	ISTD														
80	TML	Benzidine		0.3634	0.2374	0.4356	0.4135	0.3951	0.3862				0.37	19	TML	0.991	
81	TM	Pyrene		1.669	1.526	1.574	1.455	1.451	1.379	1.410	1.393		1.5	6.8	TM		0.600
82	S	Terphenyl-D14(S)		1.032	1.108	1.097	1.023	1.067	1.020	1.033	1.026		1.1	3.4	S		
83	TM	Butyl benzylphthalate		0.6254	0.5850	0.6810	0.6336	0.6415	0.6109	0.6332	0.6245		0.63	4.3	TM		0.010
84	TM	3,3'-Dichlorobenzidine		0.4529	0.3212	0.4852	0.4440	0.4315	0.4140	0.4031	0.3854		0.42	12	TM		0.010
85	TM	Benz (a) anthracene		1.477	1.295	1.368	1.265	1.271	1.194	1.210	1.194		1.3	7.6	TM		0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.9001	0.8188	0.9267	0.8448	0.8494	0.7983	0.8081	0.7838		0.84	6.0	TM		0.010
87	TM	Chrysene		1.471	1.316	1.409	1.258	1.230	1.192	1.243	1.224		1.3	7.6	TM		0.700
88	*TM	Di-n-octylphthalate		1.359	1.279	1.515	1.490	1.504	1.436	1.506	1.481		1.4	5.9	*TM		0.010
89	I	Perylene-D12(IS)	ISTD														
90	TM	Benzo (b) fluoranthene		1.630	1.240	1.409	1.343	1.322	1.211	1.295	1.226		1.3	10	TM		0.700
91	TM	Benzo (k) fluoranthene		1.551	1.217	1.541	1.381	1.287	1.258	1.081	1.169		1.3	13	TM		0.700
92	*TM	Benzo (a) pyrene	1.299	1.377	1.089	1.378	1.275	1.226	1.162	1.127	1.131		1.2	8.9	*TM		0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.380	1.090	1.368	1.289	1.239	1.166	1.143	1.128		1.2	9.1	TM		0.500
94	TM	Dibenz (a,h) anthracene	1.222	1.251	1.002	1.254	1.182	1.142	1.066	1.051	1.037		1.1	8.6	TM		0.400
95	TM	Benzo (g,h,i) perylene		1.225	0.9837	1.223	1.161	1.104	1.045	1.032	1.017		1.1	8.6	TM		0.500
96																	
97																	
98																	
99																	
100																	
101																	
102																	
103																	
104																	
105																	

Data File : M:\YODA\DATA\Y181201\1201Y003.D  
 Acq On : 1 Dec 18 15:52  
 Sample : 4ug/mL 8270 11/15/18  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:22 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	784710	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	3340352	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1651685	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	3046512	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2766303	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.67	264	2422170	40.00000	ppb	-0.02
<b>System Monitoring Compounds</b>						
5) 2-Fluorophenol (S)	0.00	112	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
6) Phenol-D6 (S)	0.00	99	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5 (S)	0.00	82	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
46) 2-Fluorobiphenyl (S)	0.00	172	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
64) 2,4,6-Tribromophenol (S)	0.00	330	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
82) Terphenyl-D14 (S)	0.00	244	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
<b>Target Compounds</b>						
92) Benzo (a) pyrene	15.58	252	314601	3.99144	ppb	98
94) Dibenz (a,h) anthracene	17.66	278	295968	3.96553	ppb	98

Quantitation Report

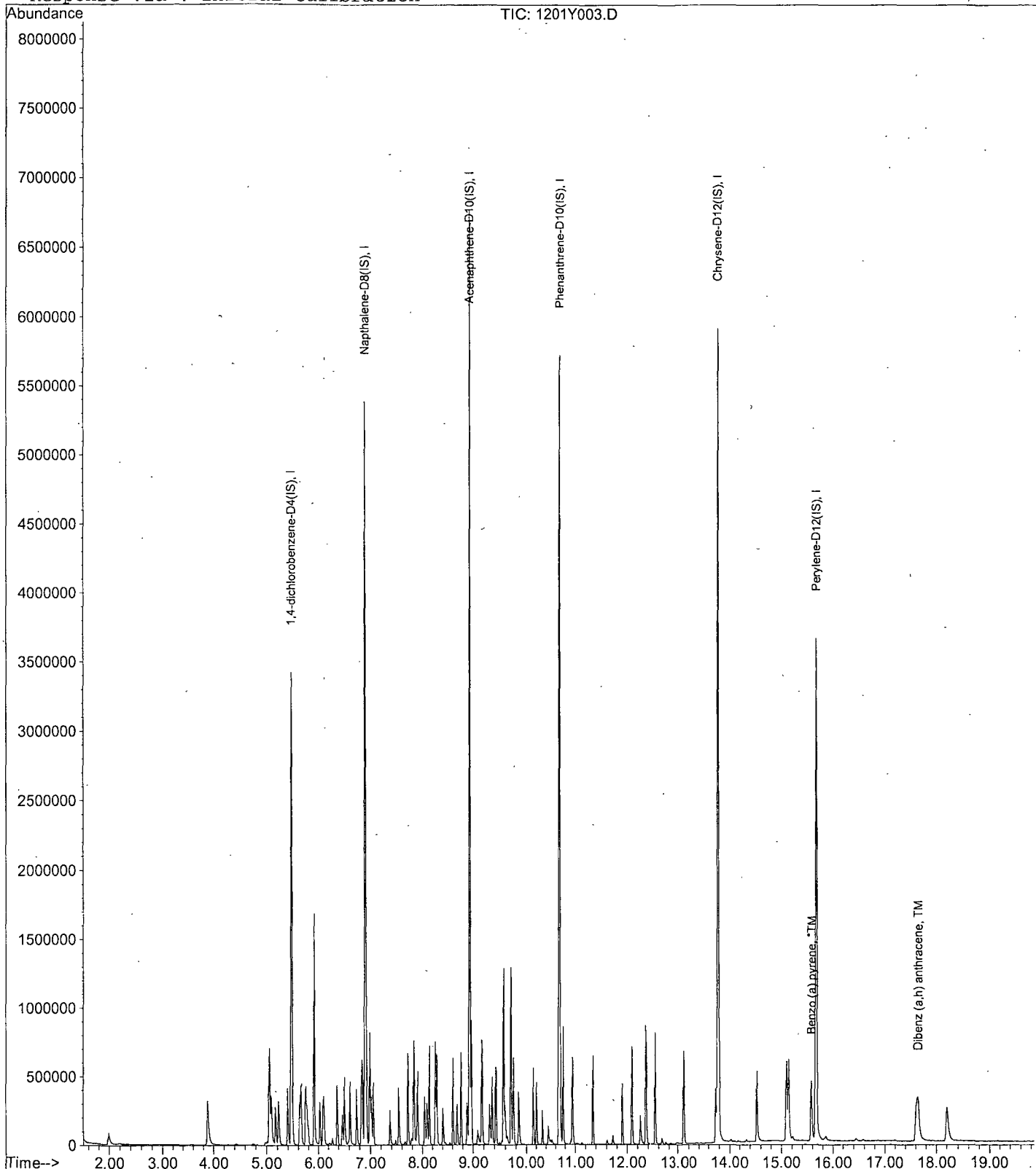
Data File : M:\YODA\DATA\Y181201\1201Y003.D  
Acq On : 1 Dec 18 15:52  
Sample : 4ug/mL 8270 11/15/18  
Misc :

Vial: 3  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:22 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181201\1201Y004.D  
 Acq On : 1 Dec 18 16:20  
 Sample : 5ug/mL 8270 11/15/18  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:20 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth. : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	723955	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	3081864	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1499147	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2781135	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2663133	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.68	264	2341782	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	267851	9.44286	ppb	0.00
Spiked Amount 200.000			Recovery =	4.722%		
6) Phenol-D6 (S)	5.05	99	366355	10.35461	ppb	0.00
Spiked Amount 200.000			Recovery =	5.178%		
22) Nitrobenzene-D5 (S)	6.09	82	156627	4.60333	ppb	0.00
Spiked Amount 100.000			Recovery =	4.603%		
46) 2-Fluorobiphenyl (S)	8.14	172	321276	5.31459	ppb	0.00
Spiked Amount 100.000			Recovery =	5.315%		
64) 2,4,6-Tribromophenol (S)	9.86	330	58366	8.66854	ppb	0.00
Spiked Amount 200.000			Recovery =	4.335%		
82) Terphenyl-D14 (S)	12.54	244	343603	4.93888	ppb	0.00
Spiked Amount 100.000			Recovery =	4.939%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	1877	0.75736		77
3) n-Nitrosodimethylamine	1.97	42	29168	5.25035	ppb	90
4) Pyridine	1.99	79	68664	6.47309	ppb	87
7) Phenol	5.07	94	248364	5.64917	ppb	98
8) Aniline	5.10	66	95868	3.13917	ppb	88
9) Bis (2-chloroethyl) ether	5.17	63	122480	5.31897	ppb	98
10) 2-Chlorophenol	5.23	128	166741	5.08544	ppb	97
11) 1,3-DCB	5.40	146	178322	5.29233	ppb	99
12) 1,4-DCB	5.49	146	183748	5.42491	ppb	99
13) Benzyl alcohol	5.62	108	99811	4.73712	ppb	93
14) 1,2-DCB	5.65	146	169858	5.28981	ppb	99
15) 2-Methylphenol	5.75	107	134443	5.12612	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	216058	5.24869	ppb	96
17) Acetophenone	5.92	105	231656	2.36294	ppb	91
18) 3&4-Methylphenol	5.91	107	350999	2.45989	ppb	98
19) n-Nitrosodi-n-propylamine	5.91	70	135153	5.73545	ppb	98
20) Hexachloroethane	6.03	117	67694	5.21744	ppb	96
23) Nitrobenzene	6.12	77	186131	5.26758	ppb	95
24) Isophorone	6.38	82	330410	5.24115	ppb	99
25) 2-Nitrophenol	6.47	139	68357	4.09942	ppb	89
26) 2,4-Dimethylphenol	6.51	122	144764	4.89832	ppb	98
27) Benzoic acid	6.62	105	50844	12.62622	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	216887	5.81938	ppb	98
29) 2,4-Dichlorophenol	6.74	162	125901	4.97270	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	143272	5.34911	ppb	98
31) 3,4-Dimethylphenol	6.85	107	200099	5.05627	ppb	97
32) Naphthalene	6.92	128	515728	5.59079	ppb	100
33) 4-Chloroaniline	6.99	127	196092	5.72133	ppb	96
34) 2,6-Dichlorophenol	7.00	162	125185	5.30591	ppb	96
35) Hexachloropropene	7.02	213	70464	4.19650	ppb	98
36) Hexachlorobutadiene	7.05	225	76039	5.23870	ppb	99
37) Caprolactum	7.38	55	70163	4.70216	ppb	98

Data File : M:\YODA\DATA\Y181201\1201Y004.D  
 Acq On : 1 Dec 18 16:20  
 Sample : 5ug/mL 8270 11/15/18  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:20 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	137015	4.88584	ppb	88
39) 2-Methylnaphthalene	7.72	142	316760	5.43514	ppb	98
40) 1-Methylnaphthalene	7.83	142	317174	5.48102	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	22100	10.47257	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	137415	5.55094	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	78382	4.58740	ppb	98
45) 2,4,5-Trichlorophenol	8.09	196	87739	4.78460	ppb	96
47) 1,1'-Biphenyl	8.26	154	396083	5.77402	ppb	98
48) 2-Chloronaphthalene	8.29	162	303608	5.68999	ppb	97
49) 2-Nitroaniline	8.41	65	85202	4.59480	ppb	95
50) Dimethyl phthalate	8.61	163	334450	5.40724	ppb	98
51) 2,6-DNT	8.69	165	53112	3.91846	ppb	82
52) Acenaphthylene	8.77	152	448723	5.27912	ppb	99
53) 3-Nitroaniline	8.89	138	73800	4.69032	ppb	# 93
54) Acenaphthene	8.97	154	313482	5.87349	ppb	98
55) 2,4-Dinitrophenol	9.08	184	1064	14.16856	ppb	85
56) 4-Nitrophenol	9.09	65	37020	3.12500	ppb	94
57) Dibenzofuran	9.17	168	430686	5.90684	ppb	96
58) 2,4-DNT	9.16	165	70903	4.11204	ppb	90
59) 2,3,4,6-Tetrachlorophenol	9.32	232	56506	3.94304	ppb	96
60) Diethyl phthalate	9.43	149	325298	5.46413	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	165164	0.12672	ppb	98
62) Fluorene	9.57	166	343215	1.92662	ppb	99
63) 4-Nitroaniline	9.60	138	80312	4.96834	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	18048	10.12946	ppb	# 80
67) Diphenyl amine	9.71	169	541475	12.19279	ppb	98
68) n-Nitrosodiphenylamine	9.71	169	541475	12.19279	ppb	98
69) 1,2-Diphenylhydrazine	9.76	77	395172	5.52389	ppb	93
70) 4-Bromophenyl phenyl ether	10.15	248	91473	5.31909	ppb	94
71) Hexachlorobenzene	10.21	284	89090	5.15894	ppb	90
72) Atrazine	10.33	200	40624	2.47289	ppb	99
73) Pentachlorophenol	10.45	266	29950	2.93585	ppb	98
74) Phenanthrene	10.70	178	499110	5.57216	ppb	99
75) Anthracene	10.76	178	498119	5.41858	ppb	99
76) Carbazol	10.95	167	450216	5.28497	ppb	100
77) Di-n-butylphthalate	11.34	149	503483	5.09477	ppb	99
78) Fluoranthene	12.10	202	516184	5.37905	ppb	96
80) Benzidine	12.26	184	120958	3.91690	ppb	98
81) Pyrene	12.36	202	555432	5.35944	ppb	99
83) Butyl benzylphthalate	13.11	149	208182	4.59610	ppb	97
84) 3,3'-Dichlorobenzidine	13.73	252	150774	4.89906	ppb	99
85) Benz (a) anthracene	13.77	228	491771	5.59123	ppb	100
86) Bis (2-ethylhexyl) phthala	13.76	149	299640	5.18976	ppb	# 95
87) Chrysene	13.80	228	489555	5.36073	ppb	100
88) Di-n-octylphthalate	14.54	149	452265	4.32224	ppb	99
90) Benzo (b) fluoranthene	15.10	252	477256	5.84330	ppb	99
91) Benzo (k) fluoranthene	15.14	252	453949	5.63703	ppb	98
92) Benzo (a) pyrene	15.59	252	403150	5.31786	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.63	276	403840	4.90003	ppb	98
94) Dibenz (a,h) anthracene	17.66	278	366244	5.05926	ppb	99
95) Benzo (g,h,i) perylene	18.21	276	358662	5.13433	ppb	99

Quantitation Report

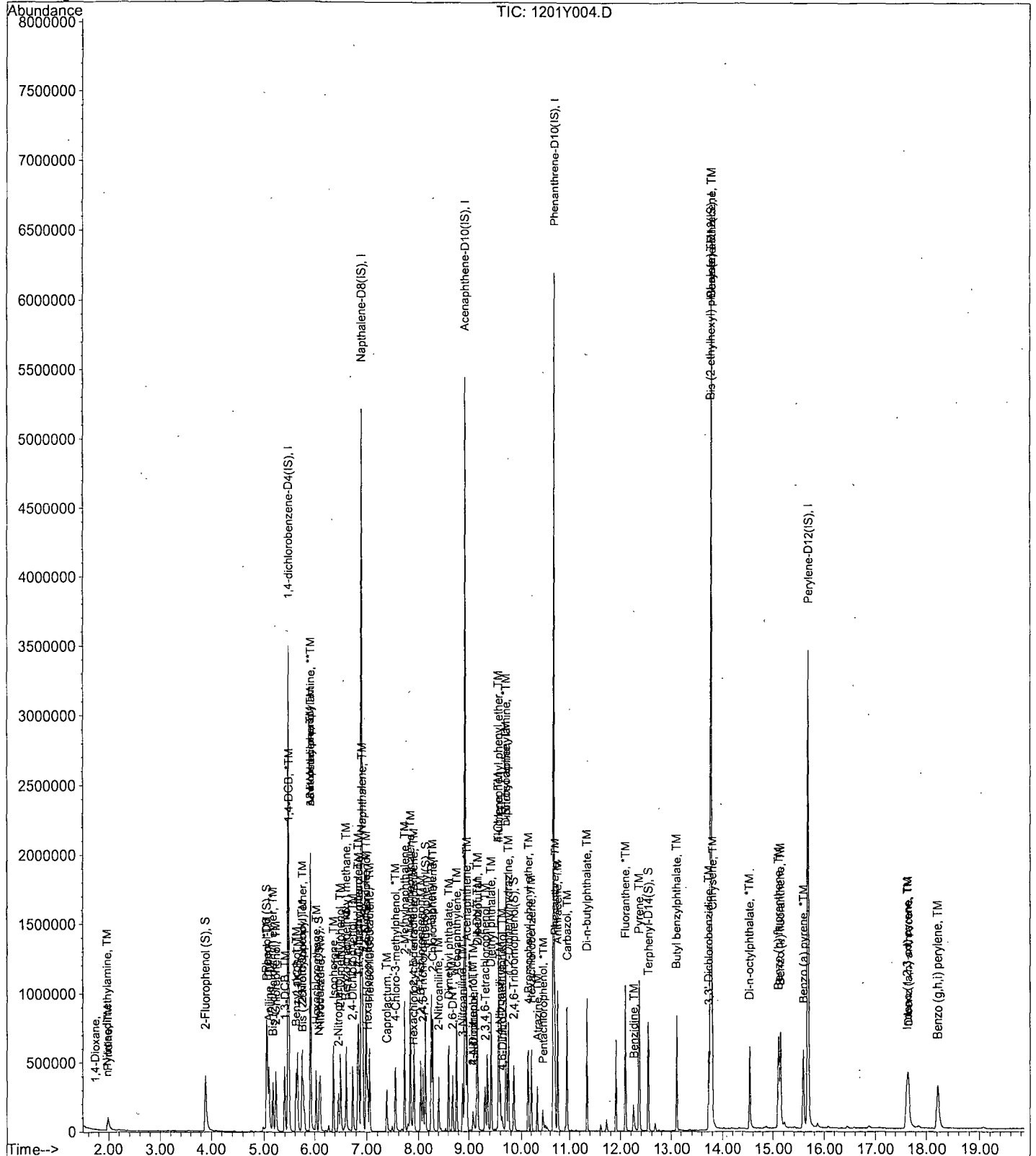
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Acq On : 1 Dec 18 16:20  
Sample : 5ug/mL 8270 11/15/18  
Misc :

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:20 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y005.D  
 Acq On : 1 Dec 18 16:48  
 Sample : 10ug/mL 8270 11/15/18  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:20 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	546577	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2610428	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1388671	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2550057	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2323300	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.68	264	2336564	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	461776	21.94069	ppb	0.00
Spiked Amount 200.000			Recovery =	10.971%		
6) Phenol-D6 (S)	5.05	99	630629	24.23894	ppb	0.00
Spiked Amount 200.000			Recovery =	12.120%		
22) Nitrobenzene-D5 (S)	6.09	82	275872	9.54492	ppb	0.00
Spiked Amount 100.000			Recovery =	9.545%		
46) 2-Fluorobiphenyl (S)	8.14	172	548152	9.64602	ppb	0.00
Spiked Amount 100.000			Recovery =	9.646%		
64) 2,4,6-Tribromophenol (S)	9.86	330	112556	17.43416	ppb	0.00
Spiked Amount 200.000			Recovery =	8.717%		
82) Terphenyl-D14 (S)	12.54	244	643635	10.62767	ppb	0.00
Spiked Amount 100.000			Recovery =	10.628%		

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	2503	1.41440		# 45
3) n-Nitrosodimethylamine	1.97	42	38024	9.02528	ppb	91
4) Pyridine	1.99	79	105176	13.90657	ppb	96
7) Phenol	5.07	94	373092	11.22500	ppb	97
8) Aniline	5.10	66	116684	4.66440	ppb	88
9) Bis (2-chloroethyl) ether	5.17	63	186223	10.72734	ppb	98
10) 2-Chlorophenol	5.23	128	256621	10.25977	ppb	96
11) 1,3-DCB	5.40	146	264021	10.22518	ppb	99
12) 1,4-DCB	5.49	146	267671	10.33140	ppb	99
13) Benzyl alcohol	5.62	108	159270	9.87822	ppb	95
14) 1,2-DCB	5.65	146	252001	10.24336	ppb	99
15) 2-Methylphenol	5.75	107	203713	10.18864	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	326178	10.38312	ppb	96
17) Acetophenone	5.92	105	356293	9.65866	ppb	92
18) 3&4-Methylphenol	5.91	107	551959	17.71321	ppb	99
19) n-Nitrosodi-n-propylamine	5.91	70	210074	11.87642	ppb	100
20) Hexachloroethane	6.03	117	101360	10.25233	ppb	95
23) Nitrobenzene	6.12	77	283032	9.24393	ppb	93
24) Isophorone	6.38	82	528944	9.74739	ppb	99
25) 2-Nitrophenol	6.47	139	110409	7.43120	ppb	# 83
26) 2,4-Dimethylphenol	6.51	122	241490	9.41331	ppb	98
27) Benzoic acid	6.62	105	95748	13.71382	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	334999	10.54997	ppb	99
29) 2,4-Dichlorophenol	6.74	162	195884	8.80636	ppb	95
30) 1,2,4-Trichlorobenzene	6.83	180	218025	9.29793	ppb	99
31) 3,4-Dimethylphenol	6.85	107	317180	9.19223	ppb	99
32) Napthalene	6.92	128	774239	9.66757	ppb	100
33) 4-Chloroaniline	6.99	127	243850	7.95326	ppb	96
34) 2,6-Dichlorophenol	7.00	162	200730	9.72546	ppb	97
35) Hexachloropropene	7.02	213	112607	7.53766	ppb	100
36) Hexachlorobutadiene	7.05	225	112100	8.78060	ppb	97
37) Caprolactum	7.38	55	109278	8.31546	ppb	96

Data File : M:\YODA\DATA\Y181201\1201Y005.D  
 Acq On : 1 Dec 18 16:48  
 Sample : 10ug/mL 8270 11/15/18  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:20 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	224759	9.25489	ppb	93
39) 2-Methylnaphthalene	7.72	142	494786	9.79403	ppb	98
40) 1-Methylnaphthalene	7.83	142	493845	9.81655	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	47582	11.02116	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	211461	8.83891	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	129860	7.81719	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	141137	7.96389	ppb	93
47) 1,1'-Biphenyl	8.26	154	619815	9.46463	ppb	98
48) 2-Chloronaphthalene	8.29	162	465013	9.09338	ppb	98
49) 2-Nitroaniline	8.41	65	147650	8.33305	ppb	95
50) Dimethyl phthalate	8.61	163	527435	8.90599	ppb	99
51) 2,6-DNT	8.69	165	95992	7.25540	ppb	88
52) Acenaphthylene	8.77	152	718410	8.80609	ppb	99
53) 3-Nitroaniline	8.89	138	118241	7.76493	ppb	91
54) Acenaphthene	8.97	154	481571	9.43620	ppb	99
55) 2,4-Dinitrophenol	9.02	184	8561	14.03336	ppb	# 78
56) 4-Nitrophenol	9.09	65	72816	6.34471	ppb	90
57) Dibenzofuran	9.17	168	679373	9.72184	ppb	95
58) 2,4-DNT	9.16	165	125201	7.38204	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.32	232	101391	7.20536	ppb	96
60) Diethyl phthalate	9.43	149	516552	9.05642	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.57	204	264948	4.24587	ppb	97
62) Fluorene	9.57	166	547719	5.53238	ppb	98
63) 4-Nitroaniline	9.60	138	121782	7.75292	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	41730	10.72329	ppb	96
67) Diphenyl amine	9.71	169	860627	20.40281	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	860627	20.40281	ppb	100
69) 1,2-Diphenylhydrazine	9.76	77	614771	9.21409	ppb	94
70) 4-Bromophenyl phenyl ether	10.15	248	145163	8.91576	ppb	92
71) Hexachlorobenzene	10.21	284	141919	8.55915	ppb	92
72) Atrazine	10.33	200	66883	4.35631	ppb	97
73) Pentachlorophenol	10.45	266	55297	5.56671	ppb	98
74) Phenanthrene	10.70	178	799157	9.45324	ppb	100
75) Anthracene	10.76	178	810056	9.29471	ppb	100
76) Carbazol	10.95	167	723676	8.95525	ppb	100
77) Di-n-butylphthalate	11.34	149	819759	8.74048	ppb	99
78) Fluoranthene	12.10	202	815278	8.96404	ppb	97
80) Benzidine	12.26	184	137896	4.69415	ppb	98
81) Pyrene	12.36	202	886225	9.62992	ppb	98
83) Butyl benzylphthalate	13.11	149	339788	8.36364	ppb	95
84) 3,3'-Dichlorobenzidine	13.73	252	186589	6.49850	ppb	99
85) Benz (a) anthracene	13.77	228	752262	9.52829	ppb	100
86) Bis (2-ethylhexyl) phthala	13.76	149	475557	9.12391	ppb	# 96
87) Chrysene	13.80	228	764368	9.35953	ppb	99
88) Di-n-octylphthalate	14.53	149	742721	7.87456	ppb	94
90) Benzo (b) fluoranthene	15.10	252	724303	8.67911	ppb	98
91) Benzo (k) fluoranthene	15.14	252	710725	8.59992	ppb	97
92) Benzo (a) pyrene	15.59	252	636059	8.19392	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.63	276	636678	7.44176	ppb	98
94) Dibenz (a,h) anthracene	17.67	278	585477	7.86008	ppb	99
95) Benzo (g,h,i) perylene	18.22	276	574624	7.99812	ppb	99

Quantitation Report

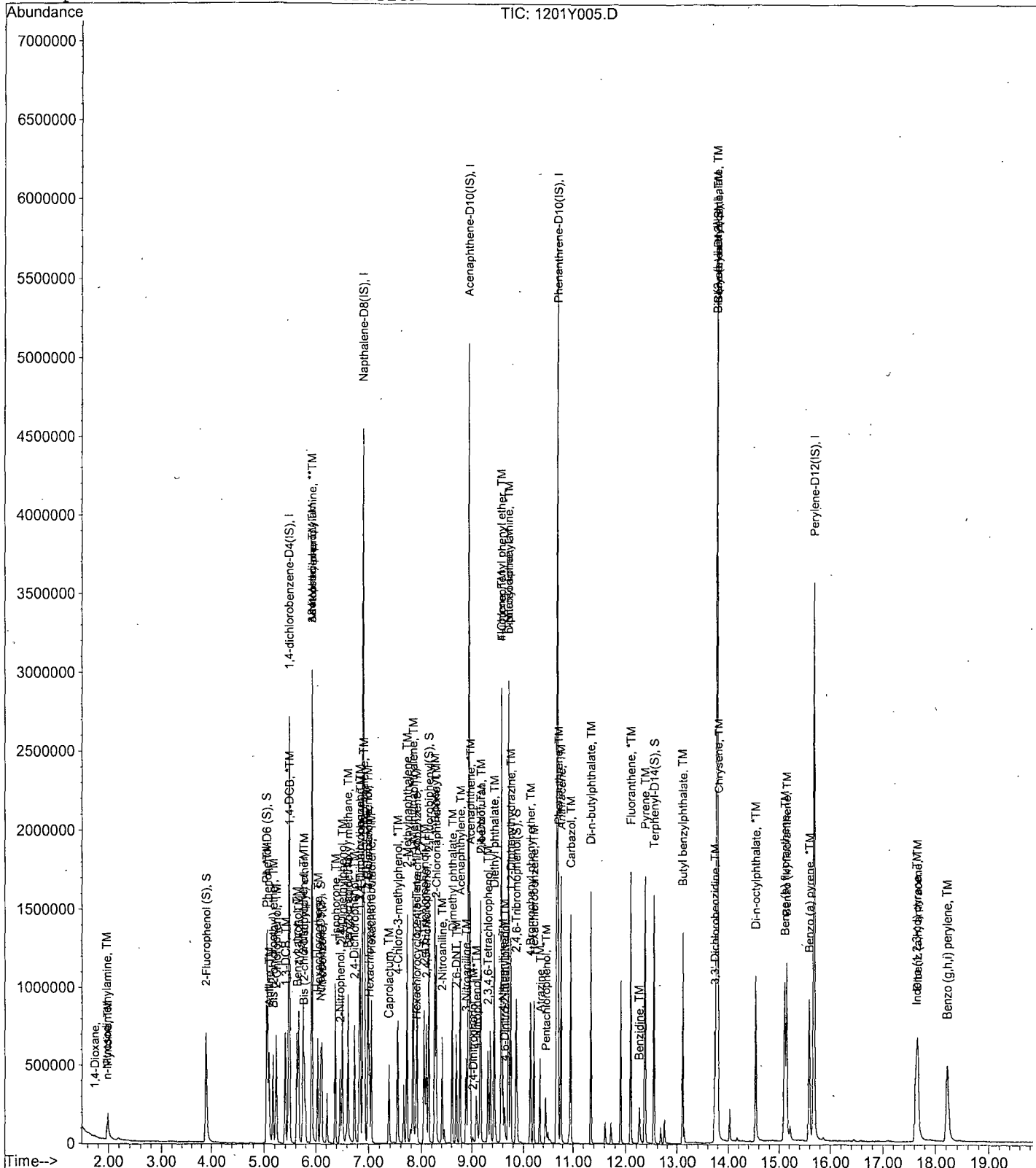
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Acq On : 1 Dec 18 16:48  
Sample : 10ug/mL 8270 11/15/18  
Misc :

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:20 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y006.D  
 Acq On : 1 Dec 18 17:16  
 Sample : 20ug/mL 8270 11/15/18  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:19 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	850175	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	3657129	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1825421	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	3358006	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	3149570	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.68	264	2834415	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	1360552	41.26756	ppb	0.00
Spiked Amount 200.000			Recovery =	20.634%		
6) Phenol-D6 (S)	5.05	99	1818377	45.06838	ppb	0.00
Spiked Amount 200.000			Recovery =	22.534%		
22) Nitrobenzene-D5 (S)	6.10	82	847782	20.90974	ppb	0.00
Spiked Amount 100.000			Recovery =	20.910%		
46) 2-Fluorobiphenyl (S)	8.14	172	1556828	20.65884	ppb	0.00
Spiked Amount 100.000			Recovery =	20.659%		
64) 2,4,6-Tribromophenol (S)	9.86	330	327429	37.37941	ppb	0.00
Spiked Amount 200.000			Recovery =	18.690%		
82) Terphenyl-D14 (S)	12.54	244	1727419	20.92189	ppb	0.00
Spiked Amount 100.000			Recovery =	20.922%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	6805	2.52323		99
3) n-Nitrosodimethylamine	1.96	42	129276	19.84511	ppb	94
4) Pyridine	1.98	79	306167	27.80429	ppb	97
7) Phenol	5.07	94	1080773	20.61130	ppb	99
8) Aniline	5.10	66	445387	10.66935	ppb	94
9) Bis (2-chloroethyl) ether	5.17	63	541646	19.87304	ppb	94
10) 2-Chlorophenol	5.23	128	732891	18.41950	ppb	99
11) 1,3-DCB	5.40	146	765639	18.58675	ppb	99
12) 1,4-DCB	5.49	146	775066	18.78808	ppb	99
13) Benzyl alcohol	5.63	108	466493	18.15590	ppb	97
14) 1,2-DCB	5.65	146	722691	18.41664	ppb	99
15) 2-Methylphenol	5.75	107	599745	18.92613	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	920659	18.39176	ppb	95
17) Acetophenone	5.92	105	977151	20.24518	ppb	96
18) 3&4-Methylphenol	5.92	107	1526322	40.26737	ppb	95
19) n-Nitrosodi-n-propylamine	5.92	70	581667	21.04724	ppb	95
20) Hexachloroethane	6.03	117	297464	18.99810	ppb	97
23) Nitrobenzene	6.12	77	837469	19.23727	ppb	98
24) Isophorone	6.38	82	1495151	19.38256	ppb	99
25) 2-Nitrophenol	6.47	139	365986	16.98540	ppb	88
26) 2,4-Dimethylphenol	6.52	122	674632	18.33806	ppb	98
27) Benzoic acid	6.63	105	323452	17.02792	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	936101	21.01377	ppb	99
29) 2,4-Dichlorophenol	6.74	162	572607	17.86437	ppb	96
30) 1,2,4-Trichlorobenzene	6.84	180	623715	18.53607	ppb	98
31) 3,4-Dimethylphenol	6.85	107	901410	18.16511	ppb	97
32) Naphthalene	6.93	128	2204822	19.30347	ppb	100
33) 4-Chloroaniline	6.99	127	905346	20.74051	ppb	96
34) 2,6-Dichlorophenol	7.00	162	565292	18.99094	ppb	97
35) Hexachloropropene	7.03	213	357098	16.37530	ppb	99
36) Hexachlorobutadiene	7.05	225	328769	17.87152	ppb	100
37) Caprolactum	7.41	55	319144	16.67319	ppb	99

Data File : M:\YODA\DATA\Y181201\1201Y006.D  
 Acq On : 1 Dec 18 17:16  
 Sample : 20ug/mL 8270 11/15/18  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:19 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	643700	18.50107	ppb	98
39) 2-Methylnaphthalene	7.72	142	1378098	19.09237	ppb	98
40) 1-Methylnaphthalene	7.83	142	1381071	19.16372	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	222790	17.41673	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	588582	18.10325	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	393153	17.41487	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	410858	17.03138	ppb	94
47) 1,1'-Biphenyl	8.26	154	1739088	19.85467	ppb	99
48) 2-Chloronaphthalene	8.29	162	1314311	19.09028	ppb	98
49) 2-Nitroaniline	8.41	65	450186	19.03266	ppb	95
50) Dimethyl phthalate	8.61	163	1487675	18.71336	ppb	99
51) 2,6-DNT	8.70	165	304261	16.89412	ppb	93
52) Acenaphthylene	8.77	152	2084389	18.95723	ppb	100
53) 3-Nitroaniline	8.89	138	393321	19.21336	ppb	93
54) Acenaphthene	8.98	154	1346680	19.74825	ppb	99
55) 2,4-Dinitrophenol	9.02	184	74750	16.70786	ppb	97
56) 4-Nitrophenol	9.09	65	257815	16.60985	ppb	93
57) Dibenzofuran	9.17	168	1879012	20.05259	ppb	94
58) 2,4-DNT	9.16	165	420956	18.20871	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.32	232	311077	16.06646	ppb	98
60) Diethyl phthalate	9.44	149	1470472	19.20201	ppb	97
61) 4-Chlorophenyl phenyl ethe	9.57	204	738704	18.23139	ppb	99
62) Fluorene	9.57	166	1522883	18.10529	ppb	99
63) 4-Nitroaniline	9.61	138	374209	17.58434	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.64	198	196675	17.16800	ppb	# 79
67) Diphenyl amine	9.72	169	2390581	42.28924	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	2390581	42.28924	ppb	99
69) 1,2-Diphenylhydrazine	9.76	77	1745225	19.77024	ppb	99
70) 4-Bromophenyl phenyl ether	10.15	248	409430	18.68262	ppb	98
71) Hexachlorobenzene	10.21	284	396092	17.52005	ppb	95
72) Atrazine	10.33	200	197093	9.69859	ppb	98
73) Pentachlorophenol	10.45	266	213964	15.69108	ppb	99
74) Phenanthrene	10.70	178	2189599	19.27702	ppb	100
75) Anthracene	10.77	178	2282581	19.51888	ppb	100
76) Carbazol	10.95	167	2052460	18.93326	ppb	99
77) Di-n-butylphthalate	11.34	149	2451737	19.49437	ppb	99
78) Fluoranthene	12.10	202	2378159	19.51131	ppb	98
80) Benzidine	12.26	184	686025	16.55879	ppb	99
81) Pyrene	12.36	202	2478754	19.58674	ppb	99
83) Butyl benzylphthalate	13.11	149	1072388	19.15986	ppb	95
84) 3,3'-Dichlorobenzidine	13.74	252	764053	19.02565	ppb	98
85) Benz (a) anthracene	13.77	228	2153803	19.69086	ppb	99
86) Bis (2-ethylhexyl) phthala	13.76	149	1459378	20.28349	ppb	# 95
87) Chrysene	13.81	228	2219472	19.78454	ppb	100
88) Di-n-octylphthalate	14.54	149	2386327	18.31033	ppb	98
90) Benzo (b) fluoranthene	15.10	252	1996379	19.36277	ppb	99
91) Benzo (k) fluoranthene	15.14	252	2183446	21.93802	ppb	99
92) Benzo (a) pyrene	15.59	252	1952905	20.66049	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.64	276	1938341	18.27661	ppb	100
94) Dibenz (a,h) anthracene	17.68	278	1777621	19.38247	ppb	97
95) Benzo (g,h,i) perylene	18.23	276	1733571	19.69792	ppb	98

(#) = qualifier out of range (m) = manual integration



Quantitation Report

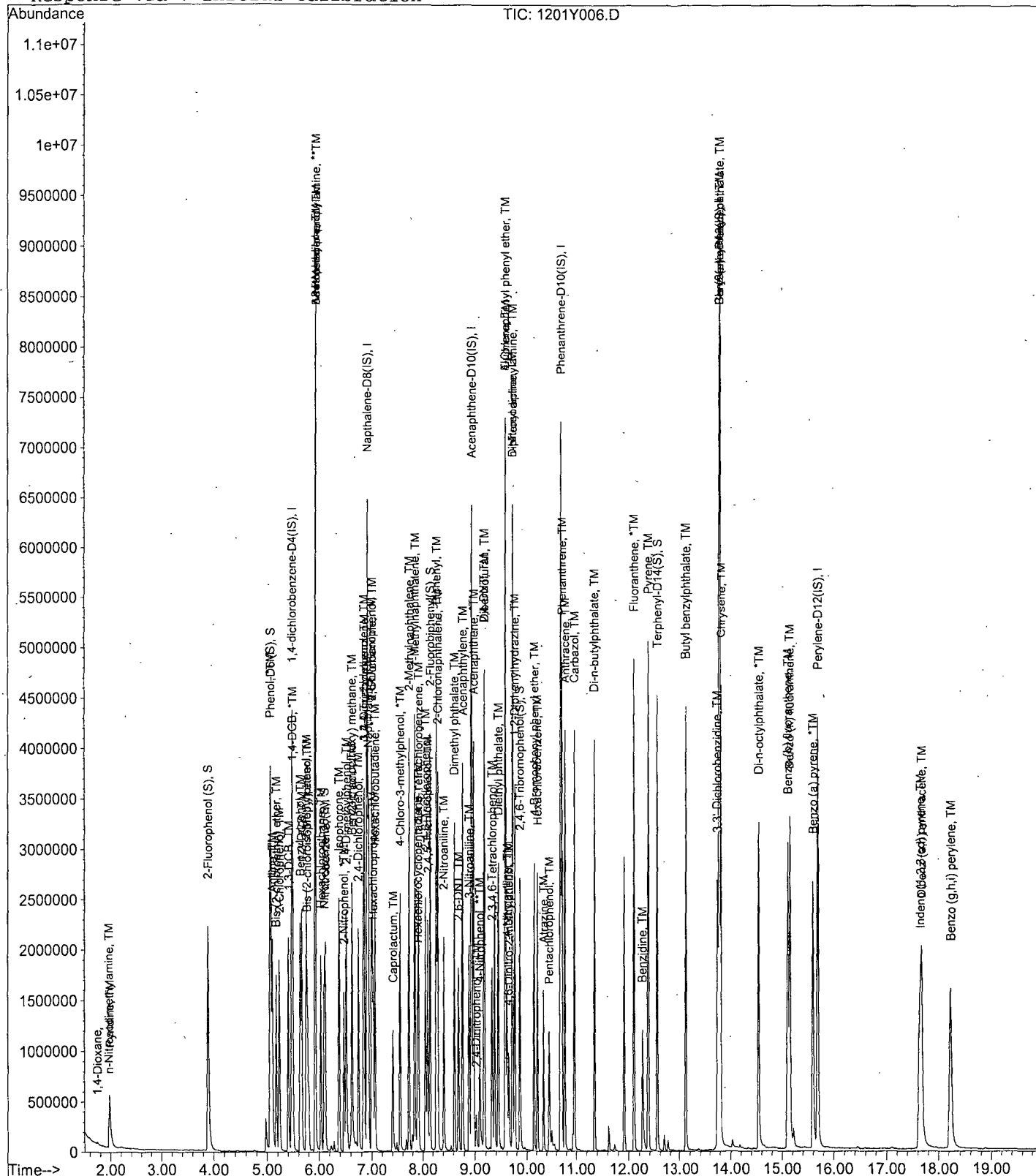
Data File : M:\YODA\DATA\Y181201\1201Y006.D  
Acq On : 1 Dec 18 17:16  
Sample : 20ug/mL 8270 11/15/18  
Misc :

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:19 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y007.D  
 Acq On : 1 Dec 18 17:43  
 Sample : 40ug/mL 8270 11/15/18  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:19 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	831344	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	3605044	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1800337	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	3309164	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	3101081	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2911406	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	2527664	77.97502	ppb	0.00
Spiked Amount	200.000		Recovery	=	38.988%	
6) Phenol-D6 (S)	5.06	99	3303745	84.50179	ppb	0.00
Spiked Amount	200.000		Recovery	=	42.251%	
22) Nitrobenzene-D5 (S)	6.10	82	1570282	39.12492	ppb	0.00
Spiked Amount	100.000		Recovery	=	39.125%	
46) 2-Fluorobiphenyl (S)	8.15	172	2910918	39.05554	ppb	0.00
Spiked Amount	100.000		Recovery	=	39.056%	
64) 2,4,6-Tribromophenol (S)	9.87	330	619801	69.99440	ppb	0.00
Spiked Amount	200.000		Recovery	=	34.997%	
82) Terphenyl-D14 (S)	12.54	244	3172228	38.83683	ppb	0.00
Spiked Amount	100.000		Recovery	=	38.837%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	11677	4.53885		80
3) n-Nitrosodimethylamine	1.97	42	223601	34.42833	ppb	84
4) Pyridine	1.98	79	530895	51.57663	ppb	99
7) Phenol	5.08	94	1930084	37.33132	ppb	100
8) Aniline	5.09	66	1555853	37.86016	ppb	96
9) Bis (2-chloroethyl) ether	5.18	63	971597	36.18639	ppb	99
10) 2-Chlorophenol	5.22	128	1323418	33.37999	ppb	99
11) 1,3-DCB	5.40	146	1355183	32.96497	ppb	99
12) 1,4-DCB	5.48	146	1366029	33.08740	ppb	99
13) Benzyl alcohol	5.63	108	849898	33.17970	ppb	92
14) 1,2-DCB	5.65	146	1282478	32.76026	ppb	99
15) 2-Methylphenol	5.75	107	1064609	33.60919	ppb	98
16) Bis (2-chloroisopropyl) et	5.77	45	1605744	32.00496	ppb	99
17) Acetophenone	5.93	105	1684428	40.53272	ppb	98
18) 3&4-Methylphenol	5.92	107	2651534	83.67893	ppb	100
19) n-Nitrosodi-n-propylamine	5.93	70	1000282	37.22924	ppb	96
20) Hexachloroethane	6.03	117	536819	34.55914	ppb	98
23) Nitrobenzene	6.12	77	1509745	34.52768	ppb	98
24) Isophorone	6.38	82	2685367	34.74786	ppb	100
25) 2-Nitrophenol	6.48	139	687347	31.34551	ppb	99
26) 2,4-Dimethylphenol	6.51	122	1228726	33.09205	ppb	99
27) Benzoic acid	6.65	105	700078	25.07309	ppb	96
28) Bis (2-chloroethoxy) metha	6.63	93	1669100	37.85072	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1040844	32.02953	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1114525	32.81703	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1644332	32.83422	ppb	99
32) Naphthalene	6.93	128	3938996	34.31222	ppb	100
33) 4-Chloroaniline	7.00	127	1639634	37.81276	ppb	99
34) 2,6-Dichlorophenol	7.00	162	1005983	33.51300	ppb	99
35) Hexachloropropene	7.03	213	673576	30.20961	ppb	100
36) Hexachlorobutadiene	7.06	225	591485	31.65193	ppb	99
37) Caprolactum	7.42	55	577085	29.41710	ppb	100

Data File : M:\YODA\DATA\Y181201\1201Y007.D  
 Acq On : 1 Dec 18 17:43  
 Sample : 40ug/mL 8270 11/15/18  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:19 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1182994	33.83634	ppb	100
39) 2-Methylnaphthalene	7.72	142	2507856	34.63676	ppb	98
40) 1-Methylnaphthalene	7.84	142	2506605	34.70605	ppb	100
42) Hexachlorocyclopentadiene	7.90	237	496846	29.53169	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	1077278	32.71092	ppb	100
44) 2,4,6-Trichlorophenol	8.05	196	723649	31.53047	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	783583	32.08281	ppb	99
47) 1,1'-Biphenyl	8.26	154	3169771	36.19808	ppb	99
48) 2-Chloronaphthalene	8.29	162	2401871	34.74420	ppb	100
49) 2-Nitroaniline	8.42	65	835884	35.16436	ppb	82
50) Dimethyl phthalate	8.61	163	2749296	34.38846	ppb	99
51) 2,6-DNT	8.70	165	603598	33.04090	ppb	96
52) Acenaphthylene	8.77	152	3761132	33.83268	ppb	100
53) 3-Nitroaniline	8.90	138	726172	35.28787	ppb	86
54) Acenaphthene	8.97	154	2450948	36.02685	ppb	99
55) 2,4-Dinitrophenol	9.02	184	218484	25.02618	ppb	99
56) 4-Nitrophenol	9.10	65	520641	33.08503	ppb	91
57) Dibenzofuran	9.18	168	3364083	35.80964	ppb	99
58) 2,4-DNT	9.17	165	802669	34.26688	ppb	99
59) 2,3,4,6-Tetrachlorophenol	9.32	232	598129	30.07836	ppb	99
60) Diethyl phthalate	9.44	149	2629090	34.09574	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.57	204	1318298	41.22704	ppb	99
62) Fluorene	9.58	166	2758642	39.96881	ppb	99
63) 4-Nitroaniline	9.62	138	725344	33.86075	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.65	198	433691	29.46290	ppb	# 74
67) Diphenyl amine	9.72	169	4284500	76.30241	ppb	100
68) n-Nitrosodiphenylamine	9.72	169	4284500	76.30241	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	3099796	35.27582	ppb	98
70) 4-Bromophenyl phenyl ether	10.14	248	755895	34.25768	ppb	95
71) Hexachlorobenzene	10.21	284	713154	31.01099	ppb	97
72) Atrazine	10.34	200	375541	18.53815	ppb	99
73) Pentachlorophenol	10.45	266	438249	31.33126	ppb	100
74) Phenanthrene	10.70	178	3973697	34.84308	ppb	100
75) Anthracene	10.77	178	4090709	34.88494	ppb	100
76) Carbazol	10.96	167	3756748	34.46521	ppb	98
77) Di-n-butylphthalate	11.35	149	4469556	35.44120	ppb	98
78) Fluoranthene	12.10	202	4310650	35.34116	ppb	# 93
80) Benzidine	12.26	184	1282154	30.31294	ppb	99
81) Pyrene	12.36	202	4510923	35.65436	ppb	100
83) Butyl benzylphthalate	13.11	149	1964760	34.93270	ppb	95
84) 3,3'-Dichlorobenzidine	13.74	252	1376758	33.88420	ppb	98
85) Benz (a) anthracene	13.77	228	3921971	36.07928	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	2619916	36.54592	ppb	99
87) Chrysene	13.81	228	3902145	34.62939	ppb	100
88) Di-n-octylphthalate	14.54	149	4619174	35.25521	ppb	98
90) Benzo (b) fluoranthene	15.11	252	3909562	36.67777	ppb	99
91) Benzo (k) fluoranthene	15.15	252	4019579	38.98413	ppb	99
92) Benzo (a) pyrene	15.60	252	3712769	37.92904	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.65	276	3753894	33.68002	ppb	99
94) Dibenz (a,h) anthracene	17.69	278	3442330	35.98094	ppb	98
95) Benzo (g,h,i) perylene	18.26	276	3378699	36.85267	ppb	99

Quantitation Report

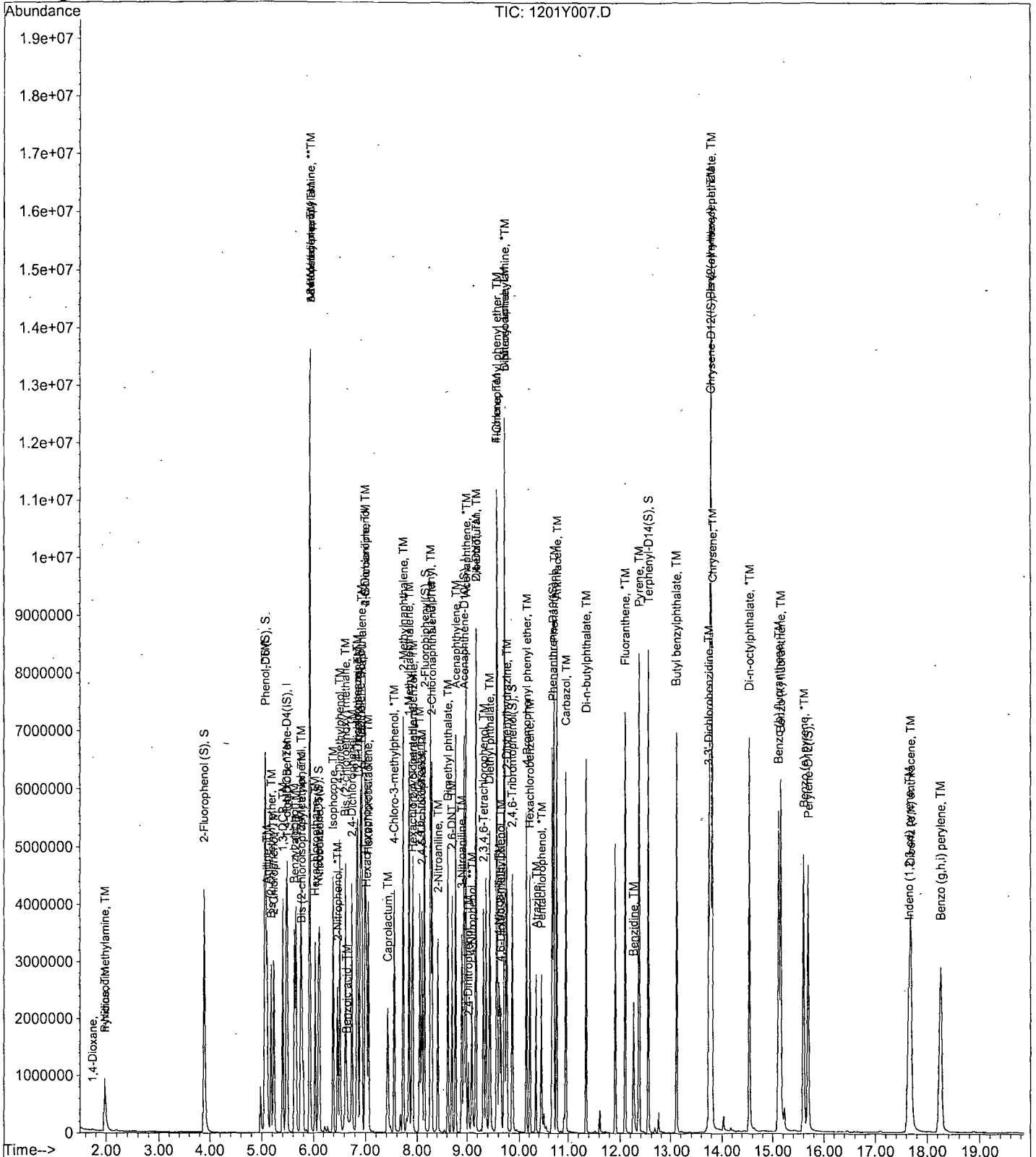
Data File : M:\YODA\DATA\Y181201\1201Y007.D  
Acq On : 1 Dec 18 17:43  
Sample : 40ug/mL 8270 11/15/18  
Misc :

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:19 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181201\1201Y008.D  
 Acq On : 1 Dec 18 18:11  
 Sample : 50ug/mL 8270 11/15/18  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:17 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:17:37 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	685286	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2965966	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1471747	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2682603	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2475092	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2421393	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	2689865	99.89699	ppb	0.00
Spiked Amount 200.000			Recovery =	49.949%		
6) Phenol-D6 (S)	5.06	99	3500804	109.36947	ppb	0.00
Spiked Amount 200.000			Recovery =	54.685%		
22) Nitrobenzene-D5 (S)	6.10	82	1672841	49.97527	ppb	0.00
Spiked Amount 100.000			Recovery =	49.975%		
46) 2-Fluorobiphenyl (S)	8.15	172	3045385	49.64133	ppb	0.00
Spiked Amount 100.000			Recovery =	49.641%		
64) 2,4,6-Tribromophenol (S)	9.87	330	644975	86.83578	ppb	0.00
Spiked Amount 200.000			Recovery =	43.418%		
82) Terphenyl-D14 (S)	12.54	244	3301559	50.38964	ppb	0.00
Spiked Amount 100.000			Recovery =	50.390%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	12002	5.75132		69
3) n-Nitrosodimethylamine	1.96	42	231519	42.02658	ppb	# 60
4) Pyridine	1.98	79	532260	64.59653	ppb	80
7) Phenol	5.08	94	1976057	46.14613	ppb	93
8) Aniline	5.10	66	1575175	46.01552	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	983179	43.90074	ppb	91
10) 2-Chlorophenol	5.23	128	1362561	40.87054	ppb	95
11) 1,3-DCB	5.40	146	1398731	40.50799	ppb	97
12) 1,4-DCB	5.49	146	1408923	40.73008	ppb	98
13) Benzyl alcohol	5.62	108	877177	40.65895	ppb	92
14) 1,2-DCB	5.65	146	1330713	40.48225	ppb	97
15) 2-Methylphenol	5.75	107	1106425	41.68223	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1641837	38.73027	ppb	94
17) Acetophenone	5.93	105	1730432	52.56952	ppb	# 85
18) 3&4-Methylphenol	5.92	107	2743430	110.44242	ppb	96
19) n-Nitrosodi-n-propylamine	5.92	70	1031237	46.73140	ppb	80
20) Hexachloroethane	6.03	117	552841	42.51855	ppb	97
23) Nitrobenzene	6.12	77	1558484	42.48302	ppb	91
24) Isophorone	6.39	82	2742946	42.30120	ppb	96
25) 2-Nitrophenol	6.48	139	713023	38.28258	ppb	97
26) 2,4-Dimethylphenol	6.52	122	1273123	40.82542	ppb	94
27) Benzoic acid	6.65	105	743426	27.92951	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	1707377	46.76597	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1077470	39.19962	ppb	100
30) 1,2,4-Trichlorobenzene	6.84	180	1132355	39.66691	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1684347	39.88440	ppb	94
32) Naphthalene	6.93	128	3998433	41.62467	ppb	100
33) 4-Chloroaniline	7.00	127	1621744	45.07973	ppb	95
34) 2,6-Dichlorophenol	7.00	162	1025679	40.77797	ppb	97
35) Hexachloropropene	7.03	213	690124	36.18140	ppb	99
36) Hexachlorobutadiene	7.05	225	604441	38.27260	ppb	99
37) Caprolactum	7.43	55	593344	35.25731	ppb	93

Data File : M:\YODA\DATA\Y181201\1201Y008.D  
 Acq On : 1 Dec 18 18:11  
 Sample : 50ug/mL 8270 11/15/18  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:17 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:17:37 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1191381	40.36732	ppb	95
39) 2-Methylnaphthalene	7.72	142	2561695	42.29761	ppb	98
40) 1-Methylnaphthalene	7.83	142	2529859	41.90350	ppb	99
42) Hexachlorocyclopentadiene	7.90	237	508366	33.70925	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	1099996	39.94689	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	738268	38.13172	ppb	96
45) 2,4,5-Trichlorophenol	8.10	196	796752	38.86970	ppb	93
47) 1,1'-Biphenyl	8.26	154	3184050	44.06848	ppb	95
48) 2-Chloronaphthalene	8.29	162	2423468	42.11654	ppb	98
49) 2-Nitroaniline	8.41	65	849105	42.74401	ppb	94
50) Dimethyl phthalate	8.61	163	2756864	41.31550	ppb	99
51) 2,6-DNT	8.70	165	613350	39.81991	ppb	84
52) Acenaphthylene	8.77	152	3788169	40.81119	ppb	99
53) 3-Nitroaniline	8.89	138	724297	42.05283	ppb	88
54) Acenaphthene	8.98	154	2468535	43.90166	ppb	93
55) 2,4-Dinitrophenol	9.02	184	233808	27.41702	ppb	96
56) 4-Nitrophenol	9.09	65	535216	40.20472	ppb	91
57) Dibenzofuran	9.18	168	3374037	43.47849	ppb	91
58) 2,4-DNT	9.17	165	799546	40.75952	ppb	99
59) 2,3,4,6-Tetrachlorophenol	9.32	232	601753	35.56974	ppb	96
60) Diethyl phthalate	9.44	149	2681481	41.75145	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.57	204	1325509	53.45482	ppb	93
62) Fluorene	9.58	166	2749985	50.61467	ppb	99
63) 4-Nitroaniline	9.62	138	722860	40.18278	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.64	198	454414	34.98039	ppb	96
67) Diphenyl amine	9.72	169	4287483	94.01403	ppb	98
68) n-Nitrosodiphenylamine	9.72	169	4287483	94.01403	ppb	98
69) 1,2-Diphenylhydrazine	9.76	77	3101053	43.02775	ppb	93
70) 4-Bromophenyl phenyl ether	10.15	248	761269	41.69316	ppb	96
71) Hexachlorobenzene	10.21	284	721943	37.59360	ppb	96
72) Atrazine	10.34	200	370350	22.18475	ppb	96
73) Pentachlorophenol	10.45	266	439642	36.99883	ppb	100
74) Phenanthrene	10.70	178	4000604	42.69784	ppb	99
75) Anthracene	10.77	178	4127354	42.82408	ppb	98
76) Carbazol	10.95	167	3791731	42.10155	ppb	98
77) Di-n-butylphthalate	11.34	149	4404231	42.23475	ppb	100
78) Fluoranthene	12.09	202	4257214	42.33919	ppb #	95
80) Benzidine	12.26	184	1222358	34.74782	ppb	99
81) Pyrene	12.36	202	4487814	43.86919	ppb	99
83) Butyl benzylphthalate	13.11	149	1984802	43.44327	ppb	92
84) 3,3'-Dichlorobenzidine	13.74	252	1334983	40.04086	ppb	99
85) Benz (a) anthracene	13.77	228	3930900	45.23410	ppb	99
86) Bis (2-ethylhexyl) phthala	13.77	149	2628076	45.77861	ppb	95
87) Chrysene	13.81	228	3806915	41.64135	ppb	99
88) Di-n-octylphthalate	14.54	149	4653186	43.59084	ppb	99
90) Benzo (b) fluoranthene	15.11	252	3999948	44.08638	ppb	98
91) Benzo (k) fluoranthene	15.15	252	3895778	45.06214	ppb	98
92) Benzo (a) pyrene	15.59	252	3709799	44.94494	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.65	276	3749639	39.21034	ppb	93
94) Dibenz (a,h) anthracene	17.68	278	3456100	42.54919	ppb #	95
95) Benzo (g,h,i) perylene	18.25	276	3343006	43.14529	ppb	93

Quantitation Report

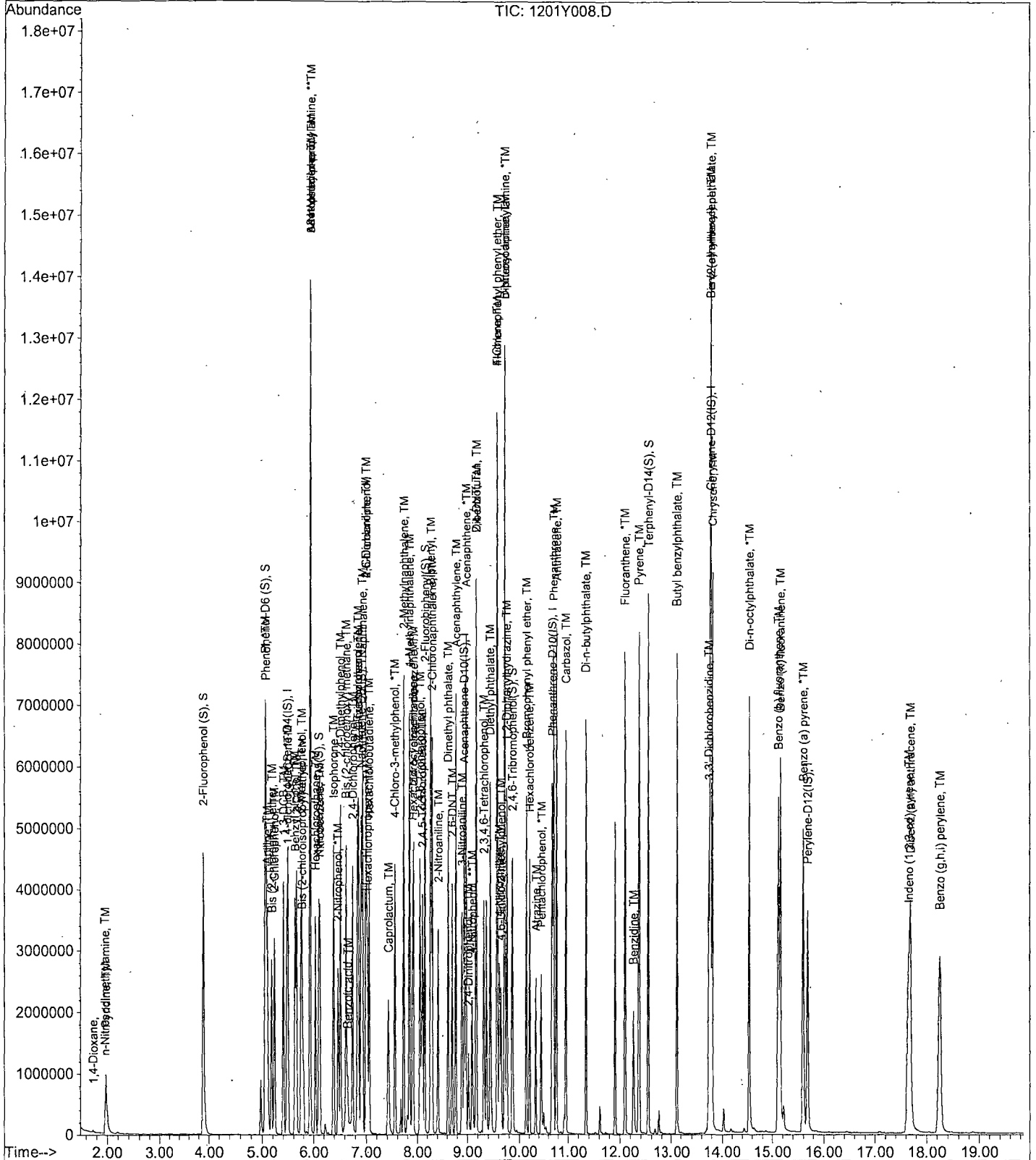
Data File : M:\YODA\DATA\Y181201\1201Y008.D  
Acq On : 1 Dec 18 18:11  
Sample : 50ug/mL 8270 11/15/18  
Misc :

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:17 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y009.D  
 Acq On : 1 Dec 18 18:39  
 Sample : 60ug/mL 8270 11/15/18  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:23 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	719361	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	3185335	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1606771	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2964212	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2796477	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2711424	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	3367305	119.15266	ppb	0.00
Spiked Amount 200.000			Recovery =	59.577%		
6) Phenol-D6 (S)	5.06	99	4365096	122.77780	ppb	0.00
Spiked Amount 200.000			Recovery =	61.389%		
22) Nitrobenzene-D5 (S)	6.10	82	2099471	59.72980	ppb	0.00
Spiked Amount 100.000			Recovery =	59.730%		
46) 2-Fluorobiphenyl (S)	8.15	172	3836126	59.27880	ppb	0.00
Spiked Amount 100.000			Recovery =	59.279%		
64) 2,4,6-Tribromophenol (S)	9.87	330	826847	117.46229	ppb	0.00
Spiked Amount 200.000			Recovery =	58.731%		
82) Terphenyl-D14 (S)	12.54	244	4277234	58.65769	ppb	0.00
Spiked Amount 100.000			Recovery =	58.658%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	15527	5.65852		81
3) n-Nitrosodimethylamine	1.96	42	277580	50.23386	ppb	98
4) Pyridine	1.98	79	656592	57.63456	ppb	99
7) Phenol	5.08	94	2457081	55.97045	ppb	98
8) Aniline	5.08	66	1988931	69.73851	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	1240830	54.12551	ppb	99
10) 2-Chlorophenol	5.23	128	1712659	53.12731	ppb	95
11) 1,3-DCB	5.40	146	1736240	52.18442	ppb	100
12) 1,4-DCB	5.49	146	1751585	52.38149	ppb	100
13) Benzyl alcohol	5.63	108	1112882	53.97555	ppb	92
14) 1,2-DCB	5.65	146	1652302	52.47526	ppb	99
15) 2-Methylphenol	5.75	107	1383076	53.39282	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	2054102	50.65016	ppb	99
17) Acetophenone	5.93	105	2133505	62.62442	ppb	97
18) 3&4-Methylphenol	5.93	107	3383434	130.56580	ppb	95
19) n-Nitrosodi-n-propylamine	5.93	70	1281812	54.25379	ppb	97
20) Hexachloroethane	6.03	117	686129	53.30742	ppb	99
23) Nitrobenzene	6.13	77	1937586	53.29875	ppb	92
24) Isophorone	6.40	82	3439993	52.85530	ppb	96
25) 2-Nitrophenol	6.48	139	906823	54.48963	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1596014	53.31926	ppb	100
27) Benzoic acid	6.66	105	1009823	40.77300	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2150602	55.26354	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1328934	51.81357	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1438804	52.87862	ppb	99
31) 3,4-Dimethylphenol	6.86	107	2114187	52.45328	ppb	99
32) Napthalene	6.93	128	4991319	52.86588	ppb	100
33) 4-Chloroaniline	7.00	127	2058498	58.92355	ppb	98
34) 2,6-Dichlorophenol	7.01	162	1293133	54.32742	ppb	96
35) Hexachloropropene	7.03	213	881456	52.50175	ppb	99
36) Hexachlorobutadiene	7.06	225	752036	50.87321	ppb	99
37) Caprolactum	7.44	55	755260	50.13952	ppb	99



Data File : M:\YODA\DATA\Y181201\1201Y009.D  
 Acq On : 1 Dec 18 18:39  
 Sample : 60ug/mL 8270 11/15/18  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:23 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1490089	51.91945	ppb	91
39) 2-Methylnaphthalene	7.72	142	3178124	53.22209	ppb	99
40) 1-Methylnaphthalene	7.84	142	3202326	54.05363	ppb	100
42) Hexachlorocyclopentadiene	7.90	237	670504	45.35047	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	1376464	52.64676	ppb	99
44) 2,4,6-Trichlorophenol	8.06	196	927715	51.83852	ppb	97
45) 2,4,5-Trichlorophenol	8.10	196	1010012	52.76388	ppb	98
47) 1,1'-Biphenyl	8.26	154	3964798	54.11180	ppb	100
48) 2-Chloronaphthalene	8.29	162	3026248	53.03178	ppb	100
49) 2-Nitroaniline	8.42	65	1090403	55.30549	ppb	87
50) Dimethyl phthalate	8.62	163	3520399	53.30297	ppb	99
51) 2,6-DNT	8.70	165	782488	55.23883	ppb	93
52) Acenaphthylene	8.77	152	4723101	52.51954	ppb	100
53) 3-Nitroaniline	8.90	138	937694	56.16759	ppb	87
54) Acenaphthene	8.98	154	3127703	54.67092	ppb	99
55) 2,4-Dinitrophenol	9.02	184	335071	39.86113	ppb	94
56) 4-Nitrophenol	9.10	65	702408	57.00177	ppb	96
57) Dibenzofuran	9.18	168	4216767	54.54051	ppb	99
58) 2,4-DNT	9.17	165	1034553	58.26883	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.32	232	773912	52.83502	ppb	99
60) Diethyl phthalate	9.45	149	3368729	53.26575	ppb	97
61) 4-Chlorophenyl phenyl ethe	9.57	204	1652163	63.26697	ppb	97
62) Fluorene	9.58	166	3458069	61.13564	ppb	99
63) 4-Nitroaniline	9.63	138	932690	54.50124	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.65	198	621354	47.62765	ppb	88
67) Diphenyl amine	9.73	169	5429137	111.64119	ppb	99
68) n-Nitrosodiphenylamine	9.73	169	5429137	111.64119	ppb	99
69) 1,2-Diphenylhydrazine	9.77	77	3954384	51.51781	ppb	# 91
70) 4-Bromophenyl phenyl ether	10.15	248	953217	52.46586	ppb	94
71) Hexachlorobenzene	10.22	284	917647	50.94878	ppb	# 84
72) Atrazine	10.34	200	477170	27.16133	ppb	98
73) Pentachlorophenol	10.45	266	584630	55.33655	ppb	99
74) Phenanthrene	10.70	178	5060666	53.52408	ppb	100
75) Anthracene	10.77	178	5246351	54.06191	ppb	100
76) Carbazol	10.96	167	4784329	53.28626	ppb	98
77) Di-n-butylphthalate	11.35	149	5665969	54.19197	ppb	99
78) Fluoranthene	12.10	202	5490690	54.24343	ppb	95
80) Benzidine	12.26	184	1620203	51.90800	ppb	99
81) Pyrene	12.37	202	5783869	53.21145	ppb	99
83) Butyl benzylphthalate	13.11	149	2562393	54.49506	ppb	97
84) 3,3'-Dichlorobenzidine	13.74	252	1736461	54.65324	ppb	99
85) Benz (a) anthracene	13.77	228	5009031	54.70045	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	3348591	55.80764	ppb	99
87) Chrysene	13.81	228	5002187	52.56944	ppb	100
88) Di-n-octylphthalate	14.54	149	6022211	55.49121	ppb	100
90) Benzo (b) fluoranthene	15.11	252	4925843	51.14747	ppb	99
91) Benzo (k) fluoranthene	15.16	252	5115207	54.49309	ppb	98
92) Benzo (a) pyrene	15.60	252	4724828	53.18298	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.66	276	4743479	50.26401	ppb	99
94) Dibenz (a,h) anthracene	17.69	278	4335855	51.69999	ppb	99
95) Benzo (g,h,i) perylene	18.26	276	4251397	52.35422	ppb	99

Quantitation Report

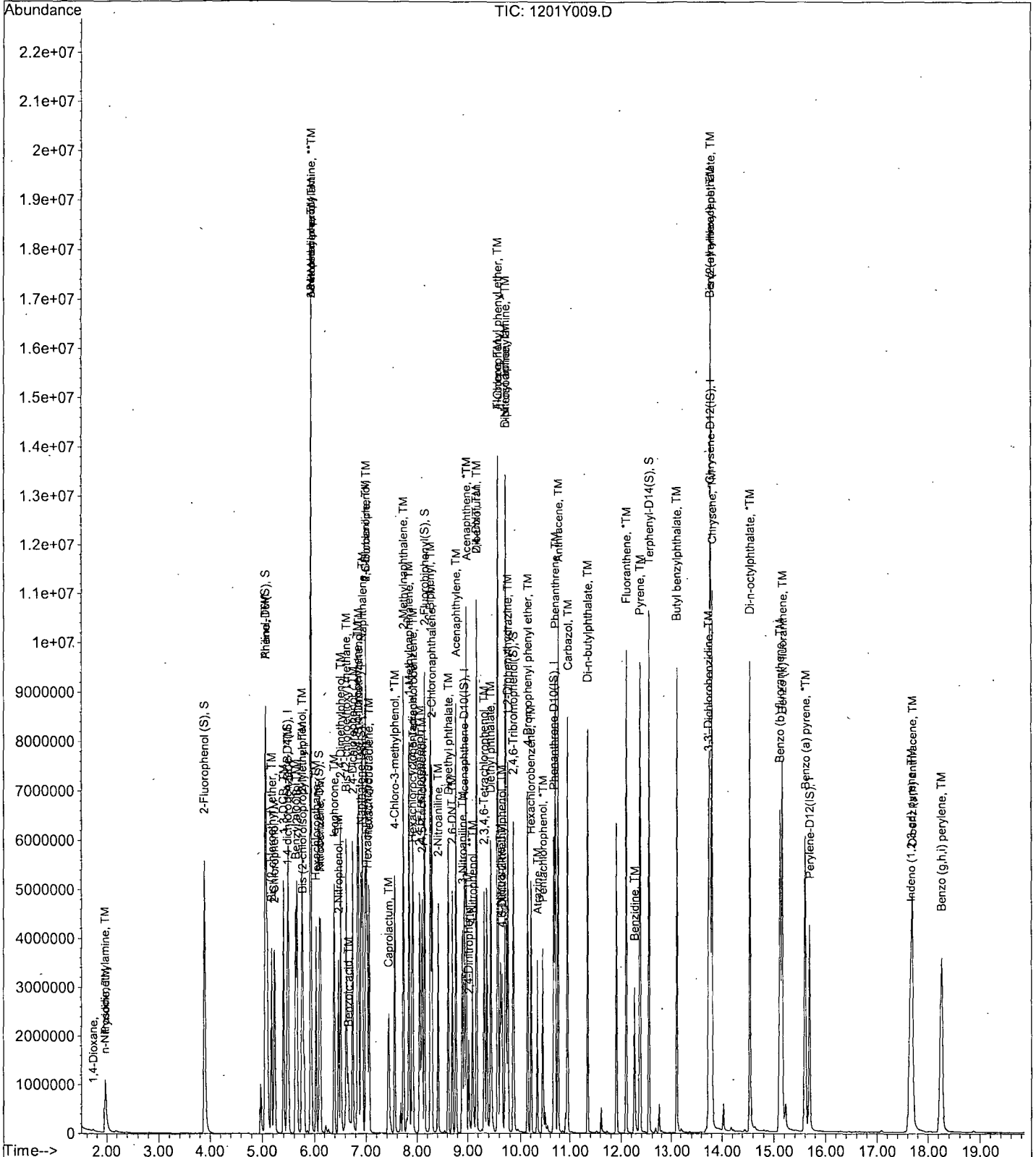
Data File : M:\YODA\DATA\Y181201\1201Y009.D  
Acq On : 1 Dec 18 18:39  
Sample : 60ug/mL 8270 11/15/18  
Misc :

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:23 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y010.D  
 Acq On : 1 Dec 18 19:06  
 Sample : 80ug/mL 8270 11/15/18  
 Misc :

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:24 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	629582	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2893102	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1489439	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2640058	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.79	240	2464926	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2636473	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	4133262	167.43538	ppb	0.00
Spiked Amount 200.000				Recovery = 83.718%		
6) Phenol-D6 (S)	5.07	99	5354013	169.77804	ppb	0.00
Spiked Amount 200.000				Recovery = 84.889%		
22) Nitrobenzene-D5 (S)	6.10	82	2602228	81.54110	ppb	0.00
Spiked Amount 100.000				Recovery = 81.541%		
46) 2-Fluorobiphenyl (S)	8.15	172	4677568	78.13120	ppb	0.00
Spiked Amount 100.000				Recovery = 78.131%		
64) 2,4,6-Tribromophenol (S)	9.87	330	996084	154.69942	ppb	0.00
Spiked Amount 200.000				Recovery = 77.350%		
82) Terphenyl-D14 (S)	12.54	244	5091135	79.27349	ppb	0.00
Spiked Amount 100.000				Recovery = 79.273%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	19673	8.10911		83
3) n-Nitrosodimethylamine	1.96	42	344490	73.67005	ppb	99
4) Pyridine	1.98	79	866703	85.46625	ppb	98
7) Phenol	5.08	94	3021755	79.29346	ppb	94
8) Aniline	5.09	66	2402989	97.65718	ppb	# 21
9) Bis (2-chloroethyl) ether	5.18	63	1540130	77.71215	ppb	97
10) 2-Chlorophenol	5.24	128	2129692	77.20492	ppb	95
11) 1,3-DCB	5.40	146	2172037	76.39403	ppb	99
12) 1,4-DCB	5.49	146	2202599	77.06447	ppb	100
13) Benzyl alcohol	5.63	108	1370499	77.88451	ppb	94
14) 1,2-DCB	5.65	146	2064151	76.79296	ppb	99
15) 2-Methylphenol	5.76	107	1709806	77.01195	ppb	98
16) Bis (2-chloroisopropyl) et	5.77	45	2526118	73.35768	ppb	98
17) Acetophenone	5.93	105	2614278	89.14850	ppb	98
18) 3&4-Methylphenol	5.93	107	4131900	184.68212	ppb	98
19) n-Nitrosodi-n-propylamine	5.93	70	1583239	76.55559	ppb	98
20) Hexachloroethane	6.03	117	864409	78.40563	ppb	99
23) Nitrobenzene	6.13	77	2415794	74.64511	ppb	95
24) Isophorone	6.40	82	4285261	73.95360	ppb	98
25) 2-Nitrophenol	6.48	139	1132322	77.51672	ppb	98
26) 2,4-Dimethylphenol	6.52	122	1979215	74.61659	ppb	98
27) Benzoic acid	6.68	105	1307674	56.75643	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2647671	75.30151	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1651399	73.23503	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1762859	73.04149	ppb	99
31) 3,4-Dimethylphenol	6.86	107	2595125	72.94852	ppb	98
32) Naphthalene	6.93	128	6096066	72.63538	ppb	100
33) 4-Chloroaniline	7.00	127	2352211	74.82244	ppb	99
34) 2,6-Dichlorophenol	7.01	162	1600093	75.73384	ppb	97
35) Hexachloropropene	7.03	213	1097094	75.65280	ppb	98
36) Hexachlorobutadiene	7.06	225	927360	71.74194	ppb	99
37) Caprolactum	7.44	55	933603	71.48606	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y181201\1201Y010.D Vial: 10  
 Acq On : 1 Dec 18 19:06 Operator: MA  
 Sample : 80ug/mL 8270 11/15/18 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Dec 1 20:24 2018 Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1857450	73.51521	ppb	96
39) 2-Methylnaphthalene	7.72	142	3906773	73.66673	ppb	100
40) 1-Methylnaphthalene	7.84	142	3962662	74.83336	ppb	100
42) Hexachlorocyclopentadiene	7.90	237	871931	62.62394	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	1684479	71.31504	ppb	99
44) 2,4,6-Trichlorophenol	8.06	196	1166168	73.26065	ppb	96
45) 2,4,5-Trichlorophenol	8.10	196	1226930	71.57031	ppb	93
47) 1,1'-Biphenyl	8.27	154	4867930	72.72133	ppb	98
48) 2-Chloronaphthalene	8.30	162	3749535	72.32250	ppb	97
49) 2-Nitroaniline	8.42	65	1321640	74.18980	ppb	89
50) Dimethyl phthalate	8.62	163	4367840	73.19652	ppb	99
51) 2,6-DNT	8.71	165	993722	78.66458	ppb	86
52) Acenaphthylene	8.77	152	5882270	72.77964	ppb	100
53) 3-Nitroaniline	8.90	138	1116806	73.99744	ppb	92
54) Acenaphthene	8.98	154	3834203	73.47952	ppb	99
55) 2,4-Dinitrophenol	9.02	184	454555	55.00595	ppb	90
56) 4-Nitrophenol	9.10	65	888330	81.30753	ppb	100
57) Dibenzofuran	9.18	168	5210428	73.60412	ppb	99
58) 2,4-DNT	9.17	165	1282354	79.89865	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.32	232	951335	73.28676	ppb	97
60) Diethyl phthalate	9.45	149	4112195	71.66027	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	1989588	83.58825	ppb	97
62) Fluorene	9.58	166	4121642	79.86435	ppb	100
63) 4-Nitroaniline	9.64	138	1037678	67.09663	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.65	198	795662	67.05644	ppb	98
67) Diphenyl amine	9.73	169	6527113	152.08289	ppb	99
68) n-Nitrosodiphenylamine	9.73	169	6527113	152.08289	ppb	99
69) 1,2-Diphenylhydrazine	9.77	77	5626719	83.70234	ppb	# 92
70) 4-Bromophenyl phenyl ether	10.15	248	1179291	75.09797	ppb	95
71) Hexachlorobenzene	10.22	284	1110236	72.09883	ppb	# 84
72) Atrazine	10.34	200	589808	38.64883	ppb	96
73) Pentachlorophenol	10.45	266	731998	82.53219	ppb	99
74) Phenanthrene	10.71	178	6021621	73.05099	ppb	100
75) Anthracene	10.77	178	6252593	73.87509	ppb	99
76) Carbazol	10.96	167	5730030	73.67525	ppb	99
77) Di-n-butylphthalate	11.35	149	6746835	74.51836	ppb	99
78) Fluoranthene	12.10	202	6531564	74.16987	ppb	95
80) Benzidine	12.26	184	1767000	67.91783	ppb	99
81) Pyrene	12.37	202	6950330	74.07299	ppb	99
83) Butyl benzylphthalate	13.11	149	3121757	77.58349	ppb	96
84) 3,3'-Dichlorobenzidine	13.74	252	1987029	73.76077	ppb	99
85) Benz (a) anthracene	13.77	228	5965391	74.90222	ppb	99
86) Bis (2-ethylhexyl) phthala	13.77	149	3983751	76.37976	ppb	100
87) Chrysene	13.82	228	6127652	74.71489	ppb	100
88) Di-n-octylphthalate	14.54	149	7424495	79.92048	ppb	99
90) Benzo (b) fluoranthene	15.11	252	6829402	75.49236	ppb	99
91) Benzo (k) fluoranthene	15.16	252	5701920	63.11937	ppb	99
92) Benzo (a) pyrene	15.60	252	5940676	70.29130	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.66	276	6028948	68.54415	ppb	100
94) Dibenz (a,h) anthracene	17.70	278	5541427	70.15753	ppb	99
95) Benzo (g,h,i) perylene	18.28	276	5442164	70.99068	ppb	98

Quantitation Report

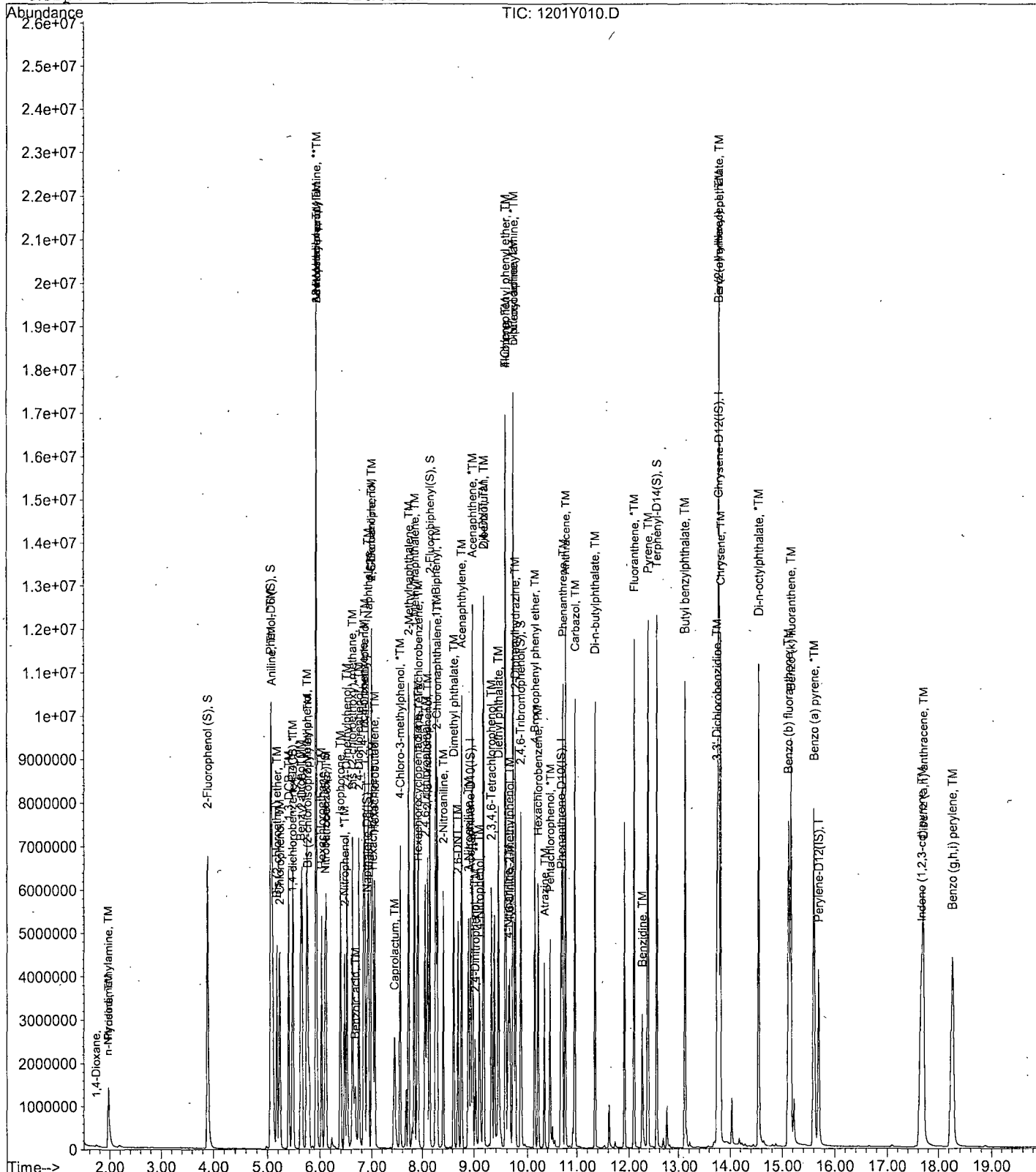
Data File : M:\YODA\DATA\Y181201\1201Y010.D  
Acq On : 1 Dec 18 19:06  
Sample : 80ug/mL 8270 11/15/18  
Misc :

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:24 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y011.D  
 Acq On : 1 Dec 18 19:34  
 Sample : 100ug/mL 8270 11/15/18  
 Misc :

Vial: 11  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:24 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	612084	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2837555	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1390981	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2562549	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2412539	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2535418	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	5029276	208.12667	ppb	0.00
Spiked Amount 200.000			Recovery =	104.064%		
6) Phenol-D6 (S)	5.07	99	6442308	205.37110	ppb	0.00
Spiked Amount 200.000			Recovery =	102.686%		
22) Nitrobenzene-D5 (S)	6.11	82	3201810	102.15797	ppb	0.00
Spiked Amount 100.000			Recovery =	102.158%		
46) 2-Fluorobiphenyl (S)	8.15	172	5642568	100.30826	ppb	0.00
Spiked Amount 100.000			Recovery =	100.308%		
64) 2,4,6-Tribromophenol (S)	9.88	330	1174052	197.48048	ppb	0.00
Spiked Amount 200.000			Recovery =	98.740%		
82) Terphenyl-D14 (S)	12.55	244	6189503	97.80703	ppb	0.00
Spiked Amount 100.000			Recovery =	97.807%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	23320	9.64494		86
3) n-Nitrosodimethylamine	1.97	42	432334	96.81390	ppb	82
4) Pyridine	1.98	79	1040102	102.01879	ppb	99
7) Phenol	5.09	94	3590392	96.23861	ppb	88
8) Aniline	5.09	66	2856512	120.04503	ppb	# 7
9) Bis (2-chloroethyl) ether	5.18	63	1846915	96.01870	ppb	93
10) 2-Chlorophenol	5.23	128	2582719	97.56851	ppb	96
11) 1,3-DCB	5.40	146	2647716	97.18472	ppb	100
12) 1,4-DCB	5.48	146	2668161	96.79452	ppb	99
13) Benzyl alcohol	5.63	108	1655442	98.11920	ppb	97
14) 1,2-DCB	5.66	146	2500512	96.58941	ppb	98
15) 2-Methylphenol	5.75	107	2097917	98.28144	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	3014846	92.07281	ppb	96
17) Acetophenone	5.93	105	3096987	104.60348	ppb	97
18) 3&4-Methylphenol	5.94	107	4887278	213.99907	ppb	96
19) n-Nitrosodi-n-propylamine	5.96	70	1926896	95.21033	ppb	97
20) Hexachloroethane	6.03	117	1060532	99.83769	ppb	96
23) Nitrobenzene	6.13	77	2922804	93.48442	ppb	96
24) Isophorone	6.40	82	5177727	92.54037	ppb	97
25) 2-Nitrophenol	6.48	139	1391900	100.15987	ppb	95
26) 2,4-Dimethylphenol	6.52	122	2393217	93.67367	ppb	100
27) Benzoic acid	6.69	105	1645934	77.74298	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	3196788	92.78705	ppb	99
29) 2,4-Dichlorophenol	6.76	162	2003063	92.90878	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	2127867	91.55275	ppb	99
31) 3,4-Dimethylphenol	6.87	107	3112432	91.33084	ppb	98
32) Naphthalene	6.93	128	7337022	90.24491	ppb	99
33) 4-Chloroaniline	7.00	127	2704305	87.61680	ppb	96
34) 2,6-Dichlorophenol	7.01	162	1935220	94.07320	ppb	98
35) Hexachloropropene	7.03	213	1348024	98.64099	ppb	99
36) Hexachlorobutadiene	7.06	225	1137020	92.20835	ppb	100
37) Caprolactum	7.46	55	1135118	92.77347	ppb	99

Data File : M:\YODA\DATA\Y181201\1201Y011.D  
 Acq On : 1 Dec 18 19:34  
 Sample : 100ug/mL 8270 11/15/18  
 Misc :

Vial: 11  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:24 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:19:00 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	2250454	92.97509	ppb	99
39) 2-Methylnaphthalene	7.73	142	4750648	92.56899	ppb	99
40) 1-Methylnaphthalene	7.84	142	4745706	92.36339	ppb	100
42) Hexachlorocyclopentadiene	7.90	237	1105639	88.15640	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	2032305	94.00023	ppb	98
44) 2,4,6-Trichlorophenol	8.06	196	1415818	98.29956	ppb	98
45) 2,4,5-Trichlorophenol	8.11	196	1514156	97.69710	ppb	97
47) 1,1'-Biphenyl	8.27	154	5870915	94.51364	ppb	99
48) 2-Chloronaphthalene	8.30	162	4494952	94.10384	ppb	97
49) 2-Nitroaniline	8.42	65	1572291	96.36013	ppb	93
50) Dimethyl phthalate	8.62	163	5129827	93.43810	ppb	99
51) 2,6-DNT	8.71	165	1168436	101.50509	ppb	95
52) Acenaphthylene	8.78	152	6882738	92.55016	ppb	100
53) 3-Nitroaniline	8.90	138	1319410	95.59272	ppb	96
54) Acenaphthene	8.98	154	4475175	92.24375	ppb	99
55) 2,4-Dinitrophenol	9.03	184	593295	79.05314	ppb	96
56) 4-Nitrophenol	9.11	65	1067898	108.04257	ppb	95
57) Dibenzofuran	9.18	168	5971076	90.21867	ppb	95
58) 2,4-DNT	9.18	165	1510628	101.88535	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.33	232	1127240	96.64235	ppb	96
60) Diethyl phthalate	9.45	149	4869485	92.16442	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.58	204	2343887	103.75838	ppb	94
62) Fluorene	9.58	166	4845651	100.31935	ppb	99
63) 4-Nitroaniline	9.64	138	1230041	88.08520	ppb	92
66) 4,6-Dinitro-2-methylphenol	9.66	198	977932	86.91095	ppb	90
67) Diphenyl amine	9.73	169	7526309	178.80813	ppb	99
68) n-Nitrosodiphenylamine	9.73	169	7526309	178.80813	ppb	99
69) 1,2-Diphenylhydrazine	9.76	77	6504016	100.13022	ppb	95
70) 4-Bromophenyl phenyl ether	10.15	248	1383120	92.15043	ppb	92
71) Hexachlorobenzene	10.22	284	1295066	88.83667	ppb	92
72) Atrazine	10.35	200	715084	48.81260	ppb	99
73) Pentachlorophenol	10.45	266	887899	107.71444	ppb	100
74) Phenanthrene	10.71	178	7268708	91.56788	ppb	100
75) Anthracene	10.78	178	7555343	92.49317	ppb	99
76) Carbazol	10.96	167	6852779	91.89881	ppb	99
77) Di-n-butylphthalate	11.35	149	7981279	92.03994	ppb	99
78) Fluoranthene	12.10	202	8021415	94.49979	ppb	97
80) Benzidine	12.26	184	2131329	88.89702	ppb	98
81) Pyrene	12.37	202	8403932	92.35851	ppb	100
83) Butyl benzylphthalate	13.12	149	3766479	97.03751	ppb	87
84) 3,3'-Dichlorobenzidine	13.75	252	2324236	90.22073	ppb	99
85) Benz (a) anthracene	13.77	228	7201631	92.30844	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	4727237	92.33905	ppb	99
87) Chrysene	13.82	228	7383358	93.02912	ppb	100
88) Di-n-octylphthalate	14.55	149	8932271	100.20668	ppb	95
90) Benzo (b) fluoranthene	15.12	252	7770261	90.02651	ppb	99
91) Benzo (k) fluoranthene	15.17	252	7411695	87.57936	ppb	98
92) Benzo (a) pyrene	15.61	252	7171613	89.94608	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.66	276	7151637	87.82800	ppb	98
94) Dibenz (a,h) anthracene	17.71	278	6575010	88.75495	ppb	99
95) Benzo (g,h,i) perylene	18.29	276	6445568	89.31240	ppb	99

Quantitation Report

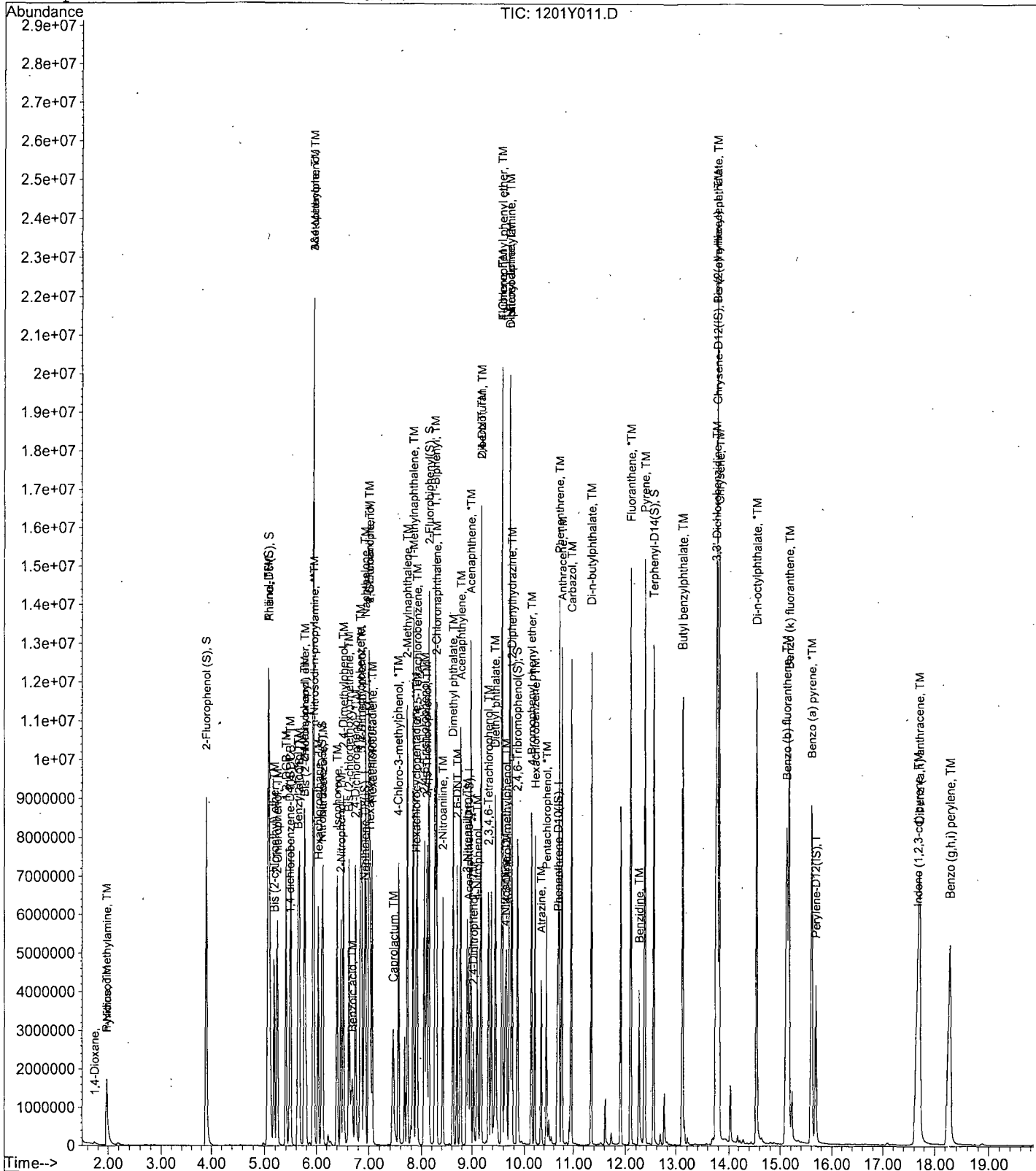
Data File : M:\YODA\DATA\Y181201\1201Y011.D  
Acq On : 1 Dec 18 19:34  
Sample : 100ug/mL 8270 11/15/18  
Misc :

Vial: 11  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:24 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration





Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Dec 18 20:02  
Instrument: Yoda  
Initial Cal. Date: 12/01/18  
Data File: 1201Y012.D

		Compound	MEAN	CCRF	%D	%Drift
1		1,4-Dioxane	0.1605	0.1579	1.6	
2	TM	n-Nitrosodimethylamine	0.2822	0.2702	4.3	TM
3	TM	Pyridine	0.6856	0.6365	7.2	TM
4	*TM	Phenol	2.459	2.468	0.37	*TM
5	TML	Aniline	1.536	1.710	11	TML 4.7
6	TM	Bis (2-chloroethyl) ether	1.236	1.181	4.4	TM
7	TM	2-Chlorophenol	1.699	1.708	0.55	TM
8	TM	1,3-DCB	1.754	1.704	2.9	TM
9	*TM	1,4-DCB	1.777	1.722	3.1	*TM
10	TM	Benzyl alcohol	1.077	1.041	3.3	TM
11	TM	1,2-DCB	1.665	1.639	1.6	TM
12	TM	2-Methylphenol	1.371	1.345	1.9	TM
13	TM	Bis (2-chloroisopropyl) ether	2.084	1.956	6.1	TM
14	TM	Acetophenone	2.199	2.069	5.9	TM
15	TM	3&4-Methylphenol	1.719	1.663	3.3	TM
16	**TM	n-Nitrosodi-n-propylamine	1.314	1.243	5.4	**TM
17	TM	Hexachloroethane	0.6870	0.6860	0.15	TM
18	TM	Nitrobenzene	0.4311	0.4440	3.0	TM
19	TM	Isophorone	0.7701	0.7929	3.0	TM
20	*TM	2-Nitrophenol	0.1889	0.2084	10	*TM
21	TM	2,4-Dimethylphenol	0.3516	0.3647	3.7	TM
22	TM	Benzoic acid	0.1982	0.2362	19	TM
23	TM	Bis (2-chloroethoxy) methane	0.4838	0.4793	0.92	TM
24	*TM	2,4-Dichlorophenol	0.2957	0.3029	2.4	*TM
25	TM	1,2,4-Trichlorobenzene	0.3209	0.3268	1.8	TM
26	TM	3,4-Dimethylphenol	0.4673	0.4755	1.7	TM
27	TM	Naphthalene	1.129	1.108	1.9	TM
28	TM	4-Chloroaniline	0.4361	0.4390	0.67	TM
29	TM	2,6-Dichlorophenol	0.2897	0.2981	2.9	TM
30	TM	Hexachloropropene	0.1860	0.1986	6.8	TM
31	*TM	Hexachlorobutadiene	0.1693	0.1724	1.9	*TM
32	TM	Caprolactum	0.1655	0.1707	3.2	TM
33	*TM	4-Chloro-3-methylphenol	0.3315	0.3448	4.0	*TM
34	TM	2-Methylnaphthalene	0.7163	0.7022	2.0	TM
35	TM	1-Methylnaphthalene	0.7171	0.7184	0.17	TM
36	**TML	Hexachlorocyclopentadiene	0.2425	0.3087	27	**TML 6.7
37	TM	1,2,4,5-Tetrachlorobenzene	0.6131	0.6140	0.15	TM
38	*TM	2,4,6-Trichlorophenol	0.4012	0.4235	5.5	*TM
39	TM	2,4,5-Trichlorophenol	0.4324	0.4458	3.1	TM
40	TM	1,1'-Biphenyl	1.783	1.790	0.41	TM

Average

4.2

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Dec 18 20:02  
Instrument: Yoda  
Cal. Date: 12/01/18  
Data File: 1201Y012.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2-Chloronaphthalene	1.357	1.393	2.7	TM
42	TM	2-Nitroaniline	0.4559	0.4709	3.3	TM
43	TM	Dimethyl phthalate	1.545	1.548	0.21	TM
44	TM	2,6-DNT	0.3195	0.3663	15	TM
45	TM	Acenaphthylene	2.101	2.123	1.0	TM
46	TM	3-Nitroaniline	0.3882	0.3983	2.6	TM
47	*TM	Acenaphthene	1.389	1.385	0.29	*TM
48	**TML	2,4-Dinitrophenol	0.1321	0.1646	25	**TML 15
49	**TM	4-Nitrophenol	0.2813	0.3168	13	**TM
50	TM	Dibenzofuran	1.904	1.818	4.5	TM
51	TM	2,4-DNT	0.4219	0.4775	13	TM
52	TM	2,3,4,6-Tetrachlorophenol	0.3198	0.3641	14	TM
53	TM	Diethyl phthalate	1.491	1.478	0.88	TM
54	TM	4-Chlorophenyl phenyl ether	0.7418	0.7350	0.91	TM
55	TM	Fluorene	1.540	1.543	0.23	TM
56	TM	4-Nitroaniline	0.3843	0.4106	6.8	TM
57	TM	4,6-Dinitro-2-methylphenol	0.1378	0.1574	14	TM
58	TM	Diphenyl amine	0.6585	0.6670	1.3	TM
59	*TM	n-Nitrosodiphenylamine	0.6585	0.6670	1.3	*TM
60	TM	1,2-Diphenylhydrazine	0.9965	0.9733	2.3	TM
61	TM	4-Bromophenyl phenyl ether	0.2305	0.2359	2.3	TM
62	TM	Hexachlorobenzene	0.2206	0.2296	4.1	TM
63	TM	Atrazine	0.2234	0.2225	0.40	TM
64	*TM	Pentachlorophenol	0.1333	0.1477	11	*TM
65	TM	Phenanthrene	1.225	1.220	0.39	TM
66	TM	Anthracene	1.259	1.277	1.4	TM
67	TM	Carbazol	1.144	1.202	5.1	TM
68	TM	Di-n-butylphthalate	1.332	1.377	3.4	TM
69	*TM	Fluoranthene	1.310	1.327	1.3	*TM
70	TML	Benzidine	0.3719	0.4659	25	TML 17
71	TM	Pyrene	1.482	1.510	1.9	TM
72	TM	Butyl benzylphthalate	0.6294	0.6562	4.3	TM
73	TM	3,3'-Dichlorobenzidine	0.4171	0.4853	16	TM
74	TM	Benz (a) anthracene	1.284	1.308	1.9	TM
75	TM	Bis (2-ethylhexyl) phthalate	0.8413	0.8674	3.1	TM
76	TM	Chrysene	1.293	1.291	0.19	TM
77	*TM	Di-n-octylphthalate	1.446	1.575	8.9	*TM
78	TM	Benzo (b) fluoranthene	1.334	1.283	3.9	TM
79	TM	Benzo (k) fluoranthene	1.311	1.302	0.65	TM
80	*TM	Benzo (a) pyrene	1.229	1.230	0.04	*TM

Average

5.4

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Dec 18 20:02  
Instrument: Yoda  
Cal. Date: 12/01/18  
Data File: 1201Y012.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Indeno (1,2,3-cd) pyrene	1.225	1.249	1.9	TM
82	TM	Dibenz (a,h) anthracene	1.134	1.093	3.7	TM
83	TM	Benzo (g,h,i) perylene	1.099	1.014	7.7	TM
84						
85						
86						
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118						
119						
120		Average			4.4	

Average

4.4

Data File : M:\YODA\DATA\Y181201\1201Y012.D  
 Acq On : 1 Dec 18 20:02  
 Sample : SS- 8270 11/15/18  
 Misc :

Vial: 12  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:38 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.47	152	846257	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.90	136	3685445	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.94	164	1851793	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.67	188	3362658	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.78	240	3125378	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.69	264	3204578	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.97	112	150	0.00446	ppb	0.08
Spiked Amount 200.000			Recovery =	0.002%		
6) Phenol-D6 (S)	0.00	99	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5(S)	6.03	82	181326	4.47252	ppb	-0.07
Spiked Amount 100.000			Recovery =	4.473%		
46) 2-Fluorobiphenyl(S)	8.15	172	1726	0.02285	ppb	0.00
Spiked Amount 100.000			Recovery =	0.023%		
64) 2,4,6-Tribromophenol(S)	9.87	330	805	0.10288	ppb	0.00
Spiked Amount 200.000			Recovery =	0.052%		
82) Terphenyl-D14(S)	12.54	244	4713	0.05741	ppb	0.00
Spiked Amount 100.000			Recovery =	0.057%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	16699	4.91867		89
3) n-Nitrosodimethylamine	1.97	42	285774	47.87179	ppb	82
4) Pyridine	1.98	79	673346	46.41878	ppb	99
7) Phenol	5.07	94	2610341	50.18341	ppb	98
8) Aniline	5.09	66	1808904	47.65871	ppb	99
9) Bis (2-chloroethyl) ether	5.17	63	1249497	47.78799	ppb	93
10) 2-Chlorophenol	5.22	128	1807292	50.27378	ppb	99
11) 1,3-DCB	5.40	146	1802199	48.56874	ppb	99
12) 1,4-DCB	5.48	146	1821859	48.45743	ppb	99
13) Benzyl alcohol	5.63	108	1101146	48.33851	ppb	92
14) 1,2-DCB	5.65	146	1733801	49.21235	ppb	100
15) 2-Methylphenol	5.75	107	1422825	49.04373	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	2069072	46.93791	ppb	99
17) Acetophenone	5.93	105	2188437	47.04628	ppb	98
18) 3&4-Methylphenol	5.93	107	3519187	96.73917	ppb	95
19) n-Nitrosodi-n-propylamine	5.92	70	1314982	47.30760	ppb	98
20) Hexachloroethane	6.03	117	725661	49.92571	ppb	100
23) Nitrobenzene	6.12	77	2045301	51.48937	ppb	100
24) Isophorone	6.39	82	3652892	51.48044	ppb	96
25) 2-Nitrophenol	6.48	139	960056	55.15206	ppb	99
26) 2,4-Dimethylphenol	6.51	122	1680202	51.87249	ppb	98
27) Benzoic acid	6.66	105	1088246	59.58035	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2208200	49.54229	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1395289	51.21842	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1505568	50.91695	ppb	99
31) 3,4-Dimethylphenol	6.86	107	2190479	50.87372	ppb	99
32) Naphthalene	6.93	128	5104408	49.05716	ppb	100
33) 4-Chloroaniline	7.00	127	2022309	50.33343	ppb	99
34) 2,6-Dichlorophenol	7.01	162	1373210	51.45197	ppb	97
35) Hexachloropropene	7.03	213	914828	53.38753	ppb	99
36) Hexachlorobutadiene	7.06	225	794416	50.94332	ppb	99
37) Caprolactum	7.43	55	786594	51.59802	ppb	99

Data File : M:\YODA\DATA\Y181201\1201Y012.D  
 Acq On : 1 Dec 18 20:02  
 Sample : SS- 8270 11/15/18  
 Misc :

Vial: 12  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:38 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1588303	52.00771	ppb	91
39) 2-Methylnaphthalene	7.72	142	3235020	49.01495	ppb	99
40) 1-Methylnaphthalene	7.84	142	3309355	50.08571	ppb	100
42) Hexachlorocyclopentadiene	7.90	237	714664	53.32735	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	1421188	50.07339	ppb	99
44) 2,4,6-Trichlorophenol	8.06	196	980279	52.77385	ppb	97
45) 2,4,5-Trichlorophenol	8.10	196	1031890	51.54254	ppb	92
47) 1,1'-Biphenyl	8.26	154	4144101	50.20747	ppb	99
48) 2-Chloronaphthalene	8.29	162	3225116	51.32784	ppb	99
49) 2-Nitroaniline	8.42	65	1089948	51.64094	ppb	86
50) Dimethyl phthalate	8.62	163	3584123	50.10284	ppb	99
51) 2,6-DNT	8.70	165	847798	57.31303	ppb	95
52) Acenaphthylene	8.77	152	4913726	50.51431	ppb	100
53) 3-Nitroaniline	8.90	138	922020	51.30090	ppb	88
54) Acenaphthene	8.98	154	3205551	49.85733	ppb	99
55) 2,4-Dinitrophenol	9.02	184	381090	57.40854	ppb	99
56) 4-Nitrophenol	9.10	65	733272	56.30786	ppb	94
57) Dibenzofuran	9.18	168	4207419	47.73173	ppb	99
58) 2,4-DNT	9.17	165	1105354	56.59919	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.32	232	842910	56.93459	ppb	99
60) Diethyl phthalate	9.44	149	3422018	49.56236	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.57	204	1701421	49.54683	ppb	99
62) Fluorene	9.58	166	3571982	50.11556	ppb	99
63) 4-Nitroaniline	9.62	138	950412	53.42366	ppb	92
66) 4,6-Dinitro-2-methylphenol	9.65	198	661784	57.12768	ppb	82
67) Diphenyl amine	9.72	169	5607629	101.29110	ppb	100
68) n-Nitrosodiphenylamine	9.72	169	5607629	101.29110	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	4090991	48.83314	ppb	100
70) 4-Bromophenyl phenyl ether	10.14	248	991390	51.16922	ppb	98
71) Hexachlorobenzene	10.21	284	965280	52.06231	ppb	100
72) Atrazine	10.34	200	467696	24.89980	ppb	99
73) Pentachlorophenol	10.45	266	620859	55.41117	ppb	99
74) Phenanthrene	10.70	178	5129013	49.80302	ppb	100
75) Anthracene	10.77	178	5366263	50.69443	ppb	99
76) Carbazol	10.96	167	5050279	52.52695	ppb	97
77) Di-n-butylphthalate	11.34	149	5789364	51.69973	ppb	100
78) Fluoranthene	12.10	202	5576013	50.65053	ppb #	93
80) Benzidine	12.26	184	1820199	58.72304	ppb	99
81) Pyrene	12.36	202	5897761	50.93444	ppb	100
83) Butyl benzylphthalate	13.11	149	2563457	52.12793	ppb	99
84) 3,3'-Dichlorobenzidine	13.74	252	1896025	58.17158	ppb	99
85) Benz (a) anthracene	13.77	228	5111517	50.94190	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	3388537	51.55166	ppb	99
87) Chrysene	13.81	228	5041869	49.90372	ppb	100
88) Di-n-octylphthalate	14.54	149	6154130	54.46569	ppb	99
90) Benzo (b) fluoranthene	15.11	252	5137603	48.05605	ppb	99
91) Benzo (k) fluoranthene	15.16	252	5215294	49.67300	ppb	98
92) Benzo (a) pyrene	15.60	252	4926172	50.01990	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.66	276	5003069	50.96104	ppb	99
94) Dibenz (a,h) anthracene	17.69	278	4376348	48.16095	ppb	99
95) Benzo (g,h,i) perylene	18.26	276	4062259	46.14079	ppb	99

Quantitation Report

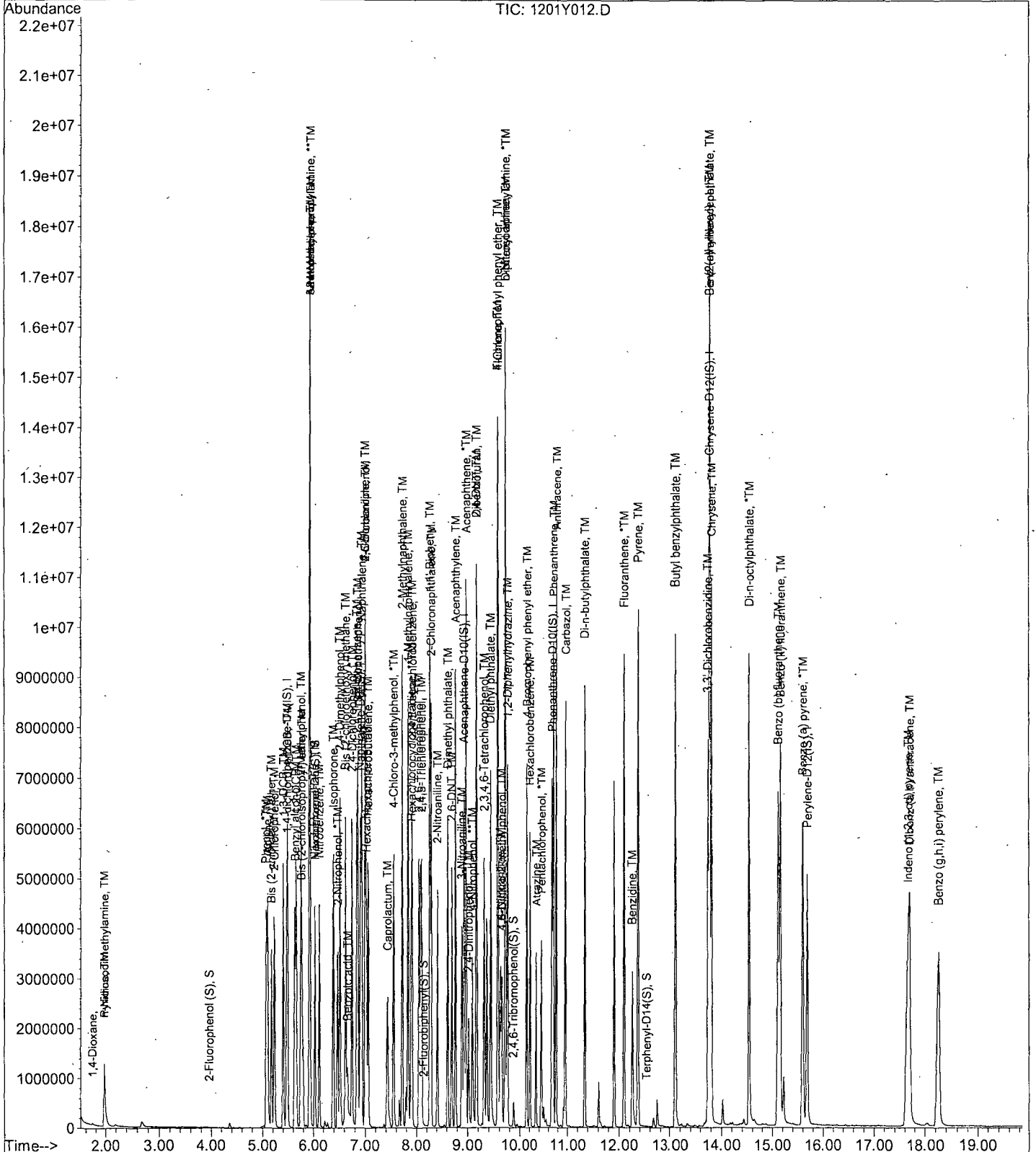
Data File : M:\YODA\DATA\Y181201\1201Y012.D  
Acq On : 1 Dec 18 20:02  
Sample : SS- 8270 11/15/18  
Misc :

Vial: 12  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 1 20:38 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Initial Cal. Date: 12/01/18  
Data File: 1201Y193.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.1605	0.1702	6.0	
3	TM	n-Nitrosodimethylamine	0.2822	0.2592	8.1	TM
4	TM	Pyridine	0.6856	0.6500	5.2	TM
5	S	2-Fluorophenol (S)	1.588	1.597	0.54	S
6	S	Phenol-D6 (S)	2.094	1.996	4.7	S
7	*TM	Phenol	2.459	2.263	7.9	*TM
8	TML	Aniline	1.536	1.752	14	TML 2.6
9	TM	Bis (2-chloroethyl) ether	1.236	1.120	9.4	TM
10	TM	2-Chlorophenol	1.699	1.616	4.9	TM
11	TM	1,3-DCB	1.754	1.645	6.2	TM
12	*TM	1,4-DCB	1.777	1.644	7.5	*TM
13	TM	Benzyl alcohol	1.077	1.023	5.0	TM
14	TM	1,2-DCB	1.665	1.552	6.8	TM
15	TM	2-Methylphenol	1.371	1.282	6.5	TM
16	TM	Bis (2-chloroisopropyl) ether	2.084	1.804	13	TM
17	TM	Acetophenone	2.199	1.945	12	TM
18	TM	3&4-Methylphenol	1.719	1.516	12	TM
19	**TM	n-Nitrosodi-n-propylamine	1.314	1.119	15	**TM
20	TM	Hexachloroethane	0.6870	0.6343	7.7	TM
21	I	Napthalene-D8(IS)	ISTD			I
22	S	Nitrobenzene-D5(S)	0.4400	0.4475	1.7	S
23	TM	Nitrobenzene	0.4311	0.4166	3.4	TM
24	TM	Isophorone	0.7701	0.7271	5.6	TM
25	*TM	2-Nitrophenol	0.1889	0.1957	3.6	*TM
26	TM	2,4-Dimethylphenol	0.3516	0.3187	9.3	TM
27	TM	Benzoic acid	0.1982	0.1684	15	TM
28	TM	Bis (2-chloroethoxy) methane	0.4838	0.4487	7.2	TM
29	*TM	2,4-Dichlorophenol	0.2957	0.2850	3.6	*TM
30	TM	1,2,4-Trichlorobenzene	0.3209	0.3114	3.0	TM
31	TM	3,4-Dimethylphenol	0.4673	0.4423	5.4	TM
32	TM	Napthalene	1.129	1.060	6.2	TM
33	TM	4-Chloroaniline	0.4361	0.4296	1.5	TM
34	TM	2,6-Dichlorophenol	0.2897	0.2710	6.4	TM
35	TM	Hexachloropropene	0.1860	0.1833	1.4	TM
36	*TM	Hexachlorobutadiene	0.1693	0.1600	5.5	*TM
37	TM	Caprolactum	0.1655	0.1581	4.5	TM
38	*TM	4-Chloro-3-methylphenol	0.3315	0.3157	4.8	*TM
39	TM	2-Methylnapthalene	0.7163	0.6732	6.0	TM
40	TM	1-Methylnapthalene	0.7171	0.6694	6.7	TM

Average

6.7

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Cal. Date: 12/01/18  
Data File: 1201Y193.D

		Compound	MEAN	CCRF	%D		%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TML	Hexachlorocyclopentadiene	0.2425	0.2482	2.3	**TML	12
43	TM	1,2,4,5-Tetrachlorobenzene	0.6131	0.5847	4.6	TM	
44	*TM	2,4,6-Trichlorophenol	0.4012	0.3982	0.75	*TM	
45	TM	2,4,5-Trichlorophenol	0.4324	0.4292	0.76	TM	
46	S	2-Fluorobiphenyl(S)	1.632	1.619	0.82	S	
47	TM	1,1'-Biphenyl	1.783	1.688	5.4	TM	
48	TM	2-Chloronaphthalene	1.357	1.299	4.3	TM	
49	TM	2-Nitroaniline	0.4559	0.4576	0.38	TM	
50	TM	Dimethyl phthalate	1.545	1.512	2.1	TM	
51	TM	2,6-DNT	0.3195	0.3441	7.7	TM	
52	TM	Acenaphthylene	2.101	2.039	3.0	TM	
53	TM	3-Nitroaniline	0.3882	0.4127	6.3	TM	
54	*TM	Acenaphthene	1.389	1.315	5.3	*TM	
55	**TML	2,4-Dinitrophenol	0.1321	0.0724	45	**TML	33 *NT
56	**TM	4-Nitrophenol	0.2813	0.2547	9.5	**TM	
57	TM	Dibenzofuran	1.904	1.804	5.3	TM	
58	TM	2,4-DNT	0.4219	0.4427	4.9	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.3198	0.3251	1.7	TM	
60	TM	Diethyl phthalate	1.491	1.432	4.0	TM	
61	TM	4-Chlorophenyl phenyl ether	0.7418	0.6965	6.1	TM	
62	TM	Fluorene	1.540	1.444	6.2	TM	
63	TM	4-Nitroaniline	0.3843	0.3959	3.0	TM	
64	S	2,4,6-Tribromophenol(S)	0.1690	0.1753	3.7	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1378	0.1154	16	TM	
67	TM	Diphenyl amine	0.6585	0.6036	8.3	TM	
68	*TM	n-Nitrosodiphenylamine	0.6585	0.6036	8.3	*TM	
69	TM	1,2-Diphenylhydrazine	0.9965	1.003	0.68	TM	
70	TM	4-Bromophenyl phenyl ether	0.2305	0.2177	5.5	TM	
71	TM	Hexachlorobenzene	0.2206	0.2045	7.3	TM	
72	TM	Atrazine	0.2234	0.2185	2.2	TM	
73	*TM	Pentachlorophenol	0.1333	0.1392	4.4	*TM	
74	TM	Phenanthrene	1.225	1.159	5.4	TM	
75	TM	Anthracene	1.259	1.192	5.3	TM	
76	TM	Carbazol	1.144	1.096	4.1	TM	
77	TM	Di-n-butylphthalate	1.332	1.312	1.5	TM	
78	*TM	Fluoranthene	1.310	1.250	4.5	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TML	Benidine	0.3719	0.3903	5.0	TML	1.3

Average

5.7



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Cal. Date: 12/01/18  
Data File: 1201Y193.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.482	1.436	3.1	TM
82	S	Terphenyl-D14(S)	1.051	1.061	0.95	S
83	TM	Butyl benzylphthalate	0.6294	0.6437	2.3	TM
84	TM	3,3'-Dichlorobenzidine	0.4171	0.4523	8.4	TM
85	TM	Benz (a) anthracene	1.284	1.213	5.5	TM
86	TM	Bis (2-ethylhexyl) phthalate	0.8413	0.8386	0.32	TM
87	TM	Chrysene	1.293	1.232	4.7	TM
88	*TM	Di-n-octylphthalate	1.446	1.557	7.7	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.334	1.394	4.5	TM
91	TM	Benzo (k) fluoranthene	1.311	1.195	8.8	TM
92	*TM	Benzo (a) pyrene	1.229	1.234	0.38	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.225	1.276	4.1	TM
94	TM	Dibenz (a,h) anthracene	1.134	1.158	2.1	TM
95	TM	Benzo (g,h,i) perylene	1.099	1.146	4.3	TM
96						
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118						
119						
120						

Average

4.1

Data File : M:\YODA\DATA\Y181201\1201Y008.D  
 Acq On : 1 Dec 18 18:11  
 Sample : 50ug/mL 8270 11/15/18  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 1 20:17 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:17:37 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	685286	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2965966	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.94	164	1471747	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2682603	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2475092	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2421393	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	2689865	99.89699	ppb	0.00
Spiked Amount	200.000		Recovery	=	49.949%	
6) Phenol-D6 (S)	5.06	99	3500804	109.36947	ppb	0.00
Spiked Amount	200.000		Recovery	=	54.685%	
22) Nitrobenzene-D5 (S)	6.10	82	1672841	49.97527	ppb	0.00
Spiked Amount	100.000		Recovery	=	49.975%	
46) 2-Fluorobiphenyl (S)	8.15	172	3045385	49.64133	ppb	0.00
Spiked Amount	100.000		Recovery	=	49.641%	
64) 2,4,6-Tribromophenol (S)	9.87	330	644975	86.83578	ppb	0.00
Spiked Amount	200.000		Recovery	=	43.418%	
82) Terphenyl-D14 (S)	12.54	244	3301559	50.38964	ppb	0.00
Spiked Amount	100.000		Recovery	=	50.390%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	12002	5.75132		69
3) n-Nitrosodimethylamine	1.96	42	231519	42.02658	ppb	# 60
4) Pyridine	1.98	79	532260	64.59653	ppb	80
7) Phenol	5.08	94	1976057	46.14613	ppb	93
8) Aniline	5.10	66	1575175	46.01552	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	983179	43.90074	ppb	91
10) 2-Chlorophenol	5.23	128	1362561	40.87054	ppb	95
11) 1,3-DCB	5.40	146	1398731	40.50799	ppb	97
12) 1,4-DCB	5.49	146	1408923	40.73008	ppb	98
13) Benzyl alcohol	5.62	108	877177	40.65895	ppb	92
14) 1,2-DCB	5.65	146	1330713	40.48225	ppb	97
15) 2-Methylphenol	5.75	107	1106425	41.68223	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1641837	38.73027	ppb	94
17) Acetophenone	5.93	105	1730432	52.56952	ppb	# 85
18) 3&4-Methylphenol	5.92	107	2743430	110.44242	ppb	96
19) n-Nitrosodi-n-propylamine	5.92	70	1031237	46.73140	ppb	80
20) Hexachloroethane	6.03	117	552841	42.51855	ppb	97
23) Nitrobenzene	6.12	77	1558484	42.48302	ppb	91
24) Isophorone	6.39	82	2742946	42.30120	ppb	96
25) 2-Nitrophenol	6.48	139	713023	38.28258	ppb	97
26) 2,4-Dimethylphenol	6.52	122	1273123	40.82542	ppb	94
27) Benzoic acid	6.65	105	743426	27.92951	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	1707377	46.76597	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1077470	39.19962	ppb	100
30) 1,2,4-Trichlorobenzene	6.84	180	1132355	39.66691	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1684347	39.88440	ppb	94
32) Naphthalene	6.93	128	3998433	41.62467	ppb	100
33) 4-Chloroaniline	7.00	127	1621744	45.07973	ppb	95
34) 2,6-Dichlorophenol	7.00	162	1025679	40.77797	ppb	97
35) Hexachloropropene	7.03	213	690124	36.18140	ppb	99
36) Hexachlorobutadiene	7.05	225	604441	38.27260	ppb	99
37) Caprolactum	7.43	55	593344	35.25731	ppb	93

Data File : M:\YODA\DATA\Y181201\1201Y193.D  
 Acq On : 20 Dec 18 7:53  
 Sample : 50ug/mL 8270 11/15/18  
 Misc :

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 20 8:01 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq-Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	870005	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	3728628	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1829234	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	3414603	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.79	240	3129647	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.70	264	3068643	40.00000	ppb	0.01

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	3472873	100.53946	ppb	0.00
Spiked Amount 200.000			Recovery =	50.270%		
6) Phenol-D6 (S)	5.06	99	4342192	95.32360	ppb	0.00
Spiked Amount 200.000			Recovery =	47.662%		
22) Nitrobenzene-D5 (S)	6.10	82	2085807	50.85192	ppb	0.00
Spiked Amount 100.000			Recovery =	50.852%		
46) 2-Fluorobiphenyl (S)	8.14	172	3701156	49.59211	ppb	0.00
Spiked Amount 100.000			Recovery =	49.592%		
64) 2,4,6-Tribromophenol (S)	9.87	330	801489	103.69218	ppb	0.00
Spiked Amount 200.000			Recovery =	51.846%		
82) Terphenyl-D14 (S)	12.54	244	4149801	50.47734	ppb	0.00
Spiked Amount 100.000			Recovery =	50.477%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.73	58	18504	5.30156		71
3) n-Nitrosodimethylamine	1.96	42	281914	45.93610	ppb	91
4) Pyridine	1.98	79	706825	47.39668	ppb	98
7) Phenol	5.08	94	2461303	46.02656	ppb	95
8) Aniline	5.08	66	1905255	48.70874	ppb	# 1
9) Bis (2-chloroethyl) ether	5.17	63	1218140	45.31701	ppb	95
10) 2-Chlorophenol	5.23	128	1757759	47.56122	ppb	97
11) 1,3-DCB	5.39	146	1789189	46.90194	ppb	99
12) 1,4-DCB	5.49	146	1787893	46.25595	ppb	98
13) Benzyl alcohol	5.63	108	1112668	47.51103	ppb	95
14) 1,2-DCB	5.65	146	1688121	46.60784	ppb	98
15) 2-Methylphenol	5.75	107	1394164	46.74406	ppb	100
16) Bis (2-chloroisopropyl) et	5.77	45	1962203	43.29847	ppb	# 93
17) Acetophenone	5.92	105	2114727	44.22075	ppb	97
18) 3&4-Methylphenol	5.93	107	3297972	88.18354	ppb	95
19) n-Nitrosodi-n-propylamine	5.92	70	1217367	42.60035	ppb	96
20) Hexachloroethane	6.02	117	689817	46.16416	ppb	94
23) Nitrobenzene	6.12	77	1941492	48.30997	ppb	97
24) Isophorone	6.39	82	3389051	47.20895	ppb	99
25) 2-Nitrophenol	6.47	139	912062	51.78815	ppb	92
26) 2,4-Dimethylphenol	6.52	122	1485354	45.32590	ppb	98
27) Benzoic acid	6.67	105	785100	42.48561	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	2091275	46.37561	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1328376	48.19744	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	1451313	48.51365	ppb	97
31) 3,4-Dimethylphenol	6.86	107	2061259	47.31816	ppb	99
32) Naphthalene	6.93	128	4939759	46.92493	ppb	100
33) 4-Chloroaniline	7.00	127	2002461	49.26221	ppb	98
34) 2,6-Dichlorophenol	7.00	162	1263036	46.77585	ppb	99
35) Hexachloropropene	7.02	213	854313	49.27859	ppb	100
36) Hexachlorobutadiene	7.06	225	745572	47.25739	ppb	99
37) Caprolactum	7.45	55	736752	47.76883	ppb	98

Data File : M:\YODA\DATA\Y181201\1201Y193.D  
 Acq On : 20 Dec 18 7:53  
 Sample : 50ug/mL 8270 .11/15/18  
 Misc :

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 20 8:01 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1471259	47.61726	ppb	91
39) 2-Methylnaphthalene	7.72	142	3137570	46.98788	ppb	98
40) 1-Methylnaphthalene	7.84	142	3119862	46.67096	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	567446	43.94745	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1336971	47.68707	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	910573	49.62574	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	981312	49.62068	ppb	96
47) 1,1'-Biphenyl	8.26	154	3858586	47.32487	ppb	99
48) 2-Chloronaphthalene	8.29	162	2970713	47.86208	ppb	98
49) 2-Nitroaniline	8.42	65	1046374	50.18784	ppb	# 79
50) Dimethyl phthalate	8.62	163	3457800	48.93308	ppb	99
51) 2,6-DNT	8.70	165	786745	53.84163	ppb	100
52) Acenaphthylene	8.77	152	4661795	48.51542	ppb	99
53) 3-Nitroaniline	8.90	138	943650	53.15190	ppb	87
54) Acenaphthene	8.98	154	3007610	47.35556	ppb	99
55) 2,4-Dinitrophenol	9.02	184	165623	33.41407	ppb	94
56) 4-Nitrophenol	9.10	65	582387	45.27295	ppb	98
57) Dibenzofuran	9.17	168	4124287	47.36565	ppb	96
58) 2,4-DNT	9.17	165	1012166	52.46670	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.32	232	743363	50.82988	ppb	99
60) Diethyl phthalate	9.44	149	3274749	48.01433	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	1592563	46.94874	ppb	97
62) Fluorene	9.58	166	3301157	46.88703	ppb	99
63) 4-Nitroaniline	9.63	138	905247	51.51242	ppb	96
66) 4,6-Dinitro-2-methylphenol	9.65	198	492704	41.88503	ppb	88
67) Diphenyl amine	9.72	169	5152278	91.65028	ppb	100
68) n-Nitrosodiphenylamine	9.72	169	5152278	91.65028	ppb	100
69) 1,2-Diphenylhydrazine	9.76	77	4282347	50.33968	ppb	96
70) 4-Bromophenyl phenyl ether	10.15	248	929114	47.22541	ppb	96
71) Hexachlorobenzene	10.21	284	872747	46.35547	ppb	97
72) Atrazine	10.34	200	466247	24.44504	ppb	98
73) Pentachlorophenol	10.45	266	594147	52.22046	ppb	99
74) Phenanthrene	10.70	178	4946597	47.30106	ppb	100
75) Anthracene	10.77	178	5089770	47.35097	ppb	99
76) Carbazol	10.96	167	4679647	47.93165	ppb	98
77) Di-n-butylphthalate	11.34	149	5600002	49.24794	ppb	99
78) Fluoranthene	12.10	202	5335188	47.72572	ppb	99
80) Benzidine	12.26	184	1526875	49.33679	ppb	98
81) Pyrene	12.37	202	5616374	48.43815	ppb	100
83) Butyl benzylphthalate	13.11	149	2518382	51.14148	ppb	99
84) 3,3'-Dichlorobenzidine	13.74	252	1769498	54.21557	ppb	98
85) Benz (a) anthracene	13.77	228	4745637	47.23099	ppb	99
86) Bis (2-ethylhexyl) phthala	13.77	149	3280511	49.84012	ppb	99
87) Chrysene	13.82	228	4819443	47.63711	ppb	99
88) Di-n-octylphthalate	14.54	149	6092189	53.84395	ppb	100
90) Benzo (b) fluoranthene	15.12	252	5346891	52.22919	ppb	100
91) Benzo (k) fluoranthene	15.16	252	4582106	45.57548	ppb	100
92) Benzo (a) pyrene	15.61	252	4733407	50.19166	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.67	276	4893878	52.05703	ppb	99
94) Dibenz (a,h) anthracene	17.71	278	4441732	51.04580	ppb	99
95) Benzo (g,h,i) perylene	18.29	276	4397475	52.16092	ppb	99

Quantitation Report

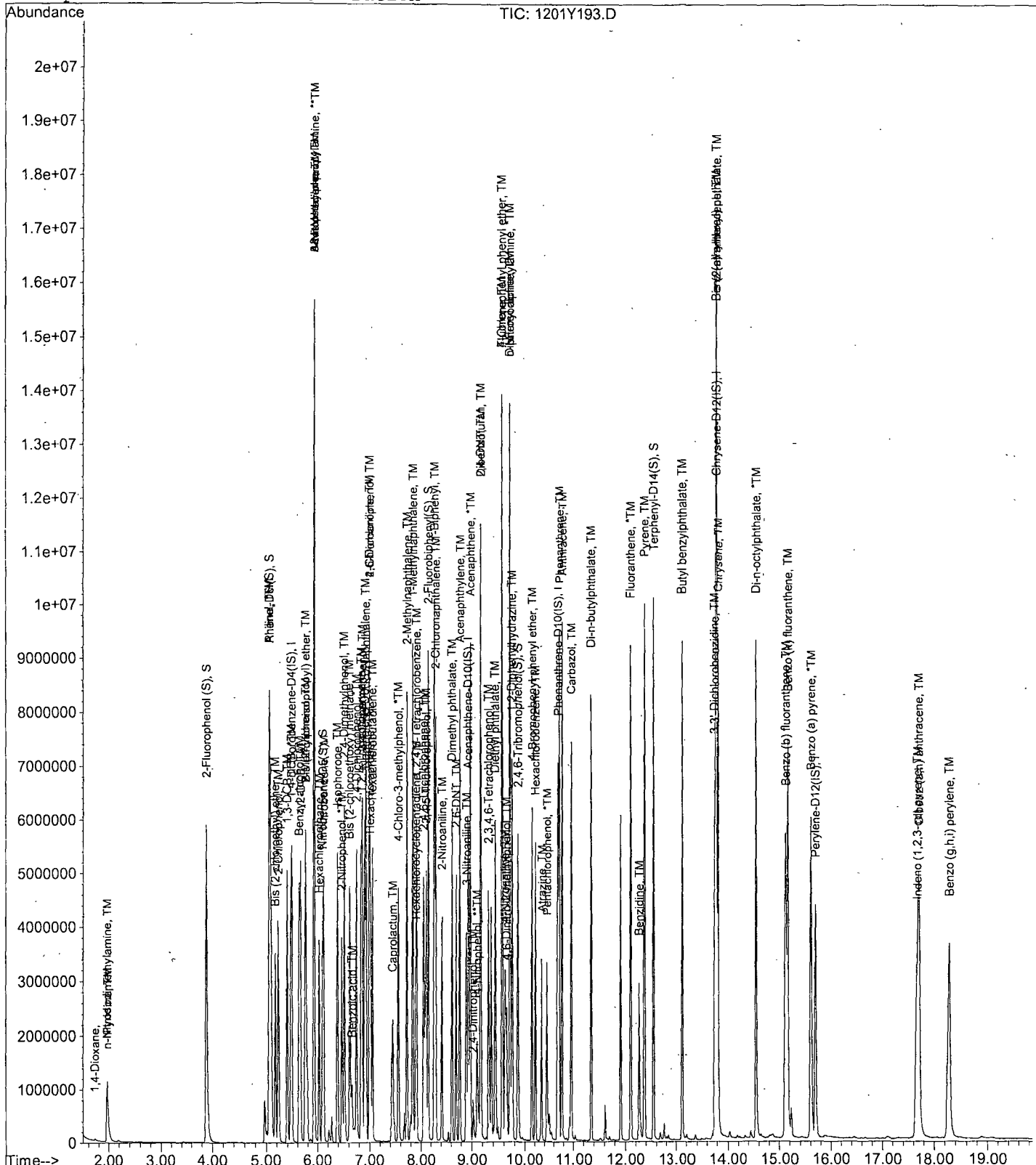
Data File : M:\YODA\DATA\Y181201\1201Y193.D  
Acq On : 20 Dec 18 7:53  
Sample : 50ug/mL 8270\_11/15/18  
Misc :

Vial: 93  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 8:01 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Initial Cal. Date: 12/01/18  
Data File: 1201Y209.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.1605	0.1395	13	
3	TM	n-Nitrosodimethylamine	0.2822	0.2548	9.7	TM
4	TM	Pyridine	0.6856	0.3444	50	TM
5	S	2-Fluorophenol (S)	1.588	1.352	15	S
6	S	Phenol-D6 (S)	2.094	1.746	17	S
7	*TM	Phenol	2.459	2.147	13	*TM
8	TML	Aniline	1.536	1.733	13	TML 3.5
9	TM	Bis (2-chloroethyl) ether	1.236	1.050	15	TM
10	TM	2-Chlorophenol	1.699	1.520	11	TM
11	TM	1,3-DCB	1.754	1.430	18	TM
12	*TM	1,4-DCB	1.777	1.480	17	*TM
13	TM	Benzyl alcohol	1.077	0.9976	7.4	TM
14	TM	1,2-DCB	1.665	1.416	15	TM
15	TM	2-Methylphenol	1.371	1.240	9.6	TM
16	TM	Bis (2-chloroisopropyl) ether	2.084	1.692	19	TM
17	TM	Acetophenone	2.199	1.956	11	TM
18	TM	3&4-Methylphenol	1.719	1.530	11	TM
19	**TM	n-Nitrosodi-n-propylamine	1.314	1.134	14	**TM
20	TM	Hexachloroethane	0.6870	0.5131	25	TM
21	I	Napthalene-D8(IS)	ISTD			I
22	S	Nitrobenzene-D5(S)	0.4400	0.3469	21	S
23	TM	Nitrobenzene	0.4311	0.3781	12	TM
24	TM	Isophorone	0.7701	0.6775	12	TM
25	*TM	2-Nitrophenol	0.1889	0.1827	3.3	*TM
26	TM	2,4-Dimethylphenol	0.3516	0.2608	26	TM
27	TM	Benzoic acid	0.1982	0.2018	1.8	TM
28	TM	Bis (2-chloroethoxy) methane	0.4838	0.4175	14	TM
29	*TM	2,4-Dichlorophenol	0.2957	0.2668	9.8	*TM
30	TM	1,2,4-Trichlorobenzene	0.3209	0.2646	18	TM
31	TM	3,4-Dimethylphenol	0.4673	0.4096	12	TM
32	TM	Napthalene	1.129	0.9526	16	TM
33	TM	4-Chloroaniline	0.4361	0.3178	27	TM
34	TM	2,6-Dichlorophenol	0.2897	0.2557	12	TM
35	TM	Hexachloropropene	0.1860	0.1149	38	TM
36	*TM	Hexachlorobutadiene	0.1693	0.1232	27	*TM
37	TM	Caprolactum	0.1655	0.1487	10	TM
38	*TM	4-Chloro-3-methylphenol	0.3315	0.3044	8.2	*TM
39	TM	2-Methylnapthalene	0.7163	0.6126	14	TM
40	TM	1-Methylnapthalene	0.7171	0.6136	14	TM

Average

15.8

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Cal. Date: 12/01/18  
Data File: 1201Y209.D

		Compound	MEAN	CCRF	%D	%Drift	
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TML	Hexachlorocyclopentadiene	0.2425	0.0607	75	**TML	70 *NT
43	TM	1,2,4,5-Tetrachlorobenzene	0.6131	0.4884	20	TM	
44	*TM	2,4,6-Trichlorophenol	0.4012	0.3512	12	*TM	
45	TM	2,4,5-Trichlorophenol	0.4324	0.3789	12	TM	
46	S	2-Fluorobiphenyl(S)	1.632	1.190	27	S	
47	TM	1,1'-Biphenyl	1.783	1.472	17	TM	
48	TM	2-Chloronaphthalene	1.357	1.151	15	TM	
49	TM	2-Nitroaniline	0.4559	0.3969	13	TM	
50	TM	Dimethyl phthalate	1.545	1.395	9.7	TM	
51	TM	2,6-DNT	0.3195	0.3092	3.2	TM	
52	TM	Acenaphthylene	2.101	1.772	16	TM	
53	TM	3-Nitroaniline	0.3882	0.3636	6.3	TM	
54	*TM	Acenaphthene	1.389	1.158	17	*TM	
55	**TML	2,4-Dinitrophenol	0.1321	0.1313	0.58	**TML	2.5
56	**TM	4-Nitrophenol	0.2813	0.2238	20	**TM	
57	TM	Dibenzofuran	1.904	1.618	15	TM	
58	TM	2,4-DNT	0.4219	0.4080	3.3	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.3198	0.2891	9.6	TM	
60	TM	Diethyl phthalate	1.491	1.300	13	TM	
61	TM	4-Chlorophenyl phenyl ether	0.7418	0.6247	16	TM	
62	TM	Fluorene	1.540	1.290	16	TM	
63	TM	4-Nitroaniline	0.3843	0.3476	9.5	TM	
64	S	2,4,6-Tribromophenol(S)	0.1690	0.1426	16	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1378	0.1257	8.8	TM	
67	TM	Diphenyl amine	0.6585	0.4956	25	TM	
68	*TM	n-Nitrosodiphenylamine	0.6585	0.4956	25	*TM	
69	TM	1,2-Diphenylhydrazine	0.9965	0.9168	8.0	TM	
70	TM	4-Bromophenyl phenyl ether	0.2305	0.1958	15	TM	
71	TM	Hexachlorobenzene	0.2206	0.1870	15	TM	
72	TM	Atrazine	0.2234	0.1893	15	TM	
73	*TM	Pentachlorophenol	0.1333	0.1205	9.6	*TM	
74	TM	Phenanthrene	1.225	1.039	15	TM	
75	TM	Anthracene	1.259	1.061	16	TM	
76	TM	Carbazol	1.144	0.9775	15	TM	
77	TM	Di-n-butylphthalate	1.332	1.239	7.0	TM	
78	*TM	Fluoranthene	1.310	1.122	14	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TML	Benzidine	0.3719	0.0041	99	TML	97 *

Average

17.6

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Yoda  
Cal. Date: 12/01/18  
Data File: 1201Y209.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.482	1.321	11	TM
82	S	Terphenyl-D14(S)	1.051	0.8054	23	S
83	TM	Butyl benzylphthalate	0.6294	0.6136	2.5	TM
84	TM	3,3'-Dichlorobenzidine	0.4171	0.2733	34	TM
85	TM	Benz (a) anthracene	1.284	1.102	14	TM
86	TM	Bis (2-ethylhexyl) phthalate	0.8413	0.8764	4.2	TM
87	TM	Chrysene	1.293	1.131	12	TM
88	*TM	Di-n-octylphthalate	1.446	1.495	3.4	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.334	1.151	14	TM
91	TM	Benzo (k) fluoranthene	1.311	0.9344	29	TM
92	*TM	Benzo (a) pyrene	1.229	0.9749	21	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.225	1.024	16	TM
94	TM	Dibenz (a,h) anthracene	1.134	0.9310	18	TM
95	TM	Benzo (g,h,i) perylene	1.099	0.9144	17	TM
96						
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118						
119						
120						

Average

15.7



Data File : M:\YODA\DATA\Y181201\1201Y209.D  
 Acq On : 20 Dec 18 15:20  
 Sample : AZ84061W19 MSD-1 1/800 (CCV)  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 15:27 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	595587	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2740429	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1443152	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2662043	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2334512	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.70	264	2547001	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	4025939	212.81459	ppb	0.00
Spiked Amount 250.000			Recovery =	85.126%		
6) Phenol-D6 (S)	5.06	99	5199338	208.41359	ppb	0.00
Spiked Amount 250.000			Recovery =	83.366%		
22) Nitrobenzene-D5 (S)	6.10	82	2376689	98.54761	ppb	0.00
Spiked Amount 125.000			Recovery =	78.838%		
46) 2-Fluorobiphenyl (S)	8.15	172	4292229	91.12243	ppb	0.00
Spiked Amount 125.000			Recovery =	72.898%		
64) 2,4,6-Tribromophenol (S)	9.87	330	1029218	210.97112	ppb	0.00
Spiked Amount 250.000			Recovery =	84.388%		
82) Terphenyl-D14 (S)	12.54	244	4700607	95.81476	ppb	0.00
Spiked Amount 125.000			Recovery =	76.652%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.73	58	10387	5.43393		90
3) n-Nitrosodimethylamine	1.97	42	189677	56.43372	ppb	82
4) Pyridine	1.99	79	256436	31.39797	ppb	99
7) Phenol	5.08	94	1598263	54.57305	ppb	98
8) Aniline	5.08	66	1290499	60.30563	ppb	# 1
9) Bis (2-chloroethyl) ether	5.17	63	781354	53.07603	ppb	93
10) 2-Chlorophenol	5.23	128	1131636	55.90968	ppb	98
11) 1,3-DCB	5.40	146	1064352	50.94557	ppb	99
12) 1,4-DCB	5.49	146	1101992	52.05844	ppb	99
13) Benzyl alcohol	5.62	108	742684	57.90546	ppb	96
14) 1,2-DCB	5.65	146	1053975	53.13396	ppb	98
15) 2-Methylphenol	5.75	107	922985	56.50589	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1259493	50.74707	ppb	# 91
17) Acetophenone	5.92	105	1455846	55.58707	ppb	96
18) 3&4-Methylphenol	5.92	107	2278852	111.26107	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	844015	53.92974	ppb	95
20) Hexachloroethane	6.03	117	381971	46.67539	ppb	89
23) Nitrobenzene	6.12	77	1295098	54.80805	ppb	99
24) Isophorone	6.39	82	2320777	54.98196	ppb	96
25) 2-Nitrophenol	6.47	139	625932	60.44686	ppb	91
26) 2,4-Dimethylphenol	6.52	122	893510	46.37206	ppb	99
27) Benzoic acid	6.65	105	691145	63.61017	ppb	100
28) Bis (2-chloroethoxy) metha	6.62	93	1430099	53.93680	ppb	98
29) 2,4-Dichlorophenol	6.75	162	914078	56.40618	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	906353	51.52770	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1403266	54.78679	ppb	99
32) Napthalene	6.93	128	3263254	52.72168	ppb	100
33) 4-Chloroaniline	6.99	127	1088784	45.55459	ppb	# 95
34) 2,6-Dichlorophenol	7.00	162	876017	55.17712	ppb	98
35) Hexachloropropene	7.02	213	393495	38.60300	ppb	99
36) Hexachlorobutadiene	7.05	225	422021	45.49406	ppb	100
37) Caprolactum	7.43	55	509535	56.18726	ppb	98

Data File : M:\YODA\DATA\Y181201\1201Y209.D  
 Acq On : 20 Dec 18 15:20  
 Sample : AZ84061W19 MSD-1 1/800 (CCV)  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 15:27 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1042785	57.39982	ppb	99
39) 2-Methylnaphthalene	7.72	142	2098588	53.45153	ppb	98
40) 1-Methylnaphthalene	7.83	142	2101964	53.47824	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	109572	18.65709	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	881073	49.79179	ppb	97
44) 2,4,6-Trichlorophenol	8.05	196	633593	54.71039	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	683506	54.76021	ppb	95
47) 1,1'-Biphenyl	8.26	154	2655471	51.60241	ppb	99
48) 2-Chloronaphthalene	8.29	162	2076251	53.00025	ppb	99
49) 2-Nitroaniline	8.41	65	716026	54.41361	ppb	96
50) Dimethyl phthalate	8.61	163	2517007	56.43575	ppb	99
51) 2,6-DNT	8.70	165	557827	60.48545	ppb	93
52) Acenaphthylene	8.77	152	3196509	52.70718	ppb	99
53) 3-Nitroaniline	8.89	138	655948	58.53888	ppb	96
54) Acenaphthene	8.98	154	2088771	52.10837	ppb	98
55) 2,4-Dinitrophenol	9.02	184	236907	60.92551	ppb	98
56) 4-Nitrophenol	9.10	65	403661	49.71771	ppb	98
57) Dibenzofuran	9.17	168	2919375	53.12166	ppb	95
58) 2,4-DNT	9.17	165	736016	60.44862	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.32	232	521485	56.49723	ppb	98
60) Diethyl phthalate	9.44	149	2345147	54.47913	ppb	97
61) 4-Chlorophenyl phenyl ethe	9.57	204	1126848	52.63321	ppb	98
62) Fluorene	9.57	166	2327093	52.36818	ppb	99
63) 4-Nitroaniline	9.63	138	627062	56.53568	ppb	85
66) 4,6-Dinitro-2-methylphenol	9.65	198	418125	56.99202	ppb	# 77
67) Diphenyl amine	9.72	169	3297951	94.06192	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	3297951	94.06192	ppb	99
69) 1,2-Diphenylhydrazine	9.76	77	3050721	57.49979	ppb	97
70) 4-Bromophenyl phenyl ether	10.15	248	651468	53.09272	ppb	97
71) Hexachlorobenzene	10.21	284	622170	52.98548	ppb	97
72) Atrazine	10.34	200	315026	26.48233	ppb	99
73) Pentachlorophenol	10.45	266	400883	56.49365	ppb	100
74) Phenanthrene	10.70	178	3458209	53.02134	ppb	100
75) Anthracene	10.77	178	3531237	52.67357	ppb	100
76) Carbazol	10.95	167	3252626	53.41688	ppb	99
77) Di-n-butylphthalate	11.34	149	4121292	58.11235	ppb	99
78) Fluoranthene	12.10	202	3734856	53.56878	ppb	# 93
80) Benzidine	12.28	184	11919	1.74379	ppb	# 90
81) Pyrene	12.36	202	3854122	55.70142	ppb	99
83) Butyl benzylphthalate	13.11	149	1790585	60.93346	ppb	98
84) 3,3'-Dichlorobenzidine	13.74	252	797510	40.94674	ppb	99
85) Benz (a) anthracene	13.78	228	3215006	53.61960	ppb	99
86) Bis (2-ethylhexyl) phthala	13.77	149	2557323	65.10772	ppb	99
87) Chrysene	13.81	228	3301815	54.69033	ppb	100
88) Di-n-octylphthalate	14.54	149	4363043	64.61930	ppb	99
90) Benzo (b) fluoranthene	15.11	252	3663216	53.88920	ppb	98
91) Benzo (k) fluoranthene	15.16	252	2974942	44.56274	ppb	99
92) Benzo (a) pyrene	15.60	252	3103924	49.56739	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.67	276	3259719	52.21962	ppb	98
94) Dibenz (a,h) anthracene	17.70	278	2963938	51.29842	ppb	99
95) Benzo (g,h,i) perylene	18.27	276	2911373	52.00762	ppb	99

Quantitation Report

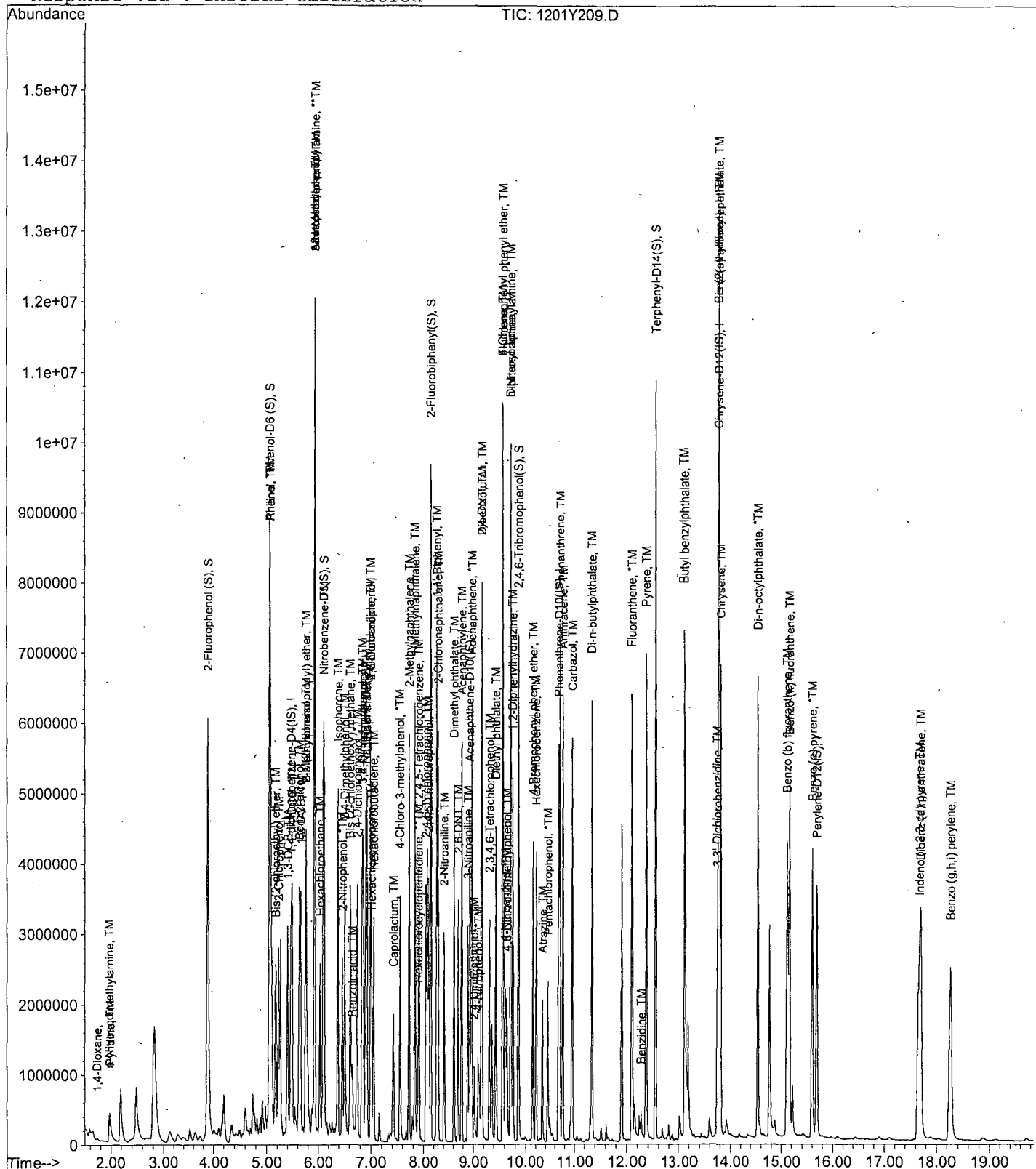
Data File : M:\YODA\DATA\Y181201\1201Y209.D  
Acq On : 20 Dec 18 15:20  
Sample : AZ84061W19 MSD-1 1/800 (CCV)  
Misc :

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 15:27 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Sat Dec 01 20:36:54 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**



Data File : M:\YODA\DATA\Y181201\1201Y205.D  
 Acq On : 20 Dec 18 13:29  
 Sample : AZ84057W22 1/800  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 13:38 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	472686	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.91	136	2662800	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1495566	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2802930	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2380954	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.68	264	2578182	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	3926384	261.5167	ppb	0.00
Spiked Amount 250.000						
					Recovery = 104.607%	
6) Phenol-D6 (S)	5.06	99	5086858	256.9213	ppb	0.00
Spiked Amount 250.000						
					Recovery = 102.768%	
22) Nitrobenzene-D5 (S)	6.10	82	2296284	97.9895	ppb	0.00
Spiked Amount 125.000						
					Recovery = 78.391%	
46) 2-Fluorobiphenyl (S)	8.14	172	4278587	87.6495	ppb	0.00
Spiked Amount 125.000						
					Recovery = 70.119%	
64) 2,4,6-Tribromophenol (S)	9.86	330	1033483	204.4210	ppb	0.00
Spiked Amount 250.000						
					Recovery = 81.768%	
82) Terphenyl-D14 (S)	12.54	244	4667235	93.2789	ppb	0.00
Spiked Amount 125.000						
					Recovery = 74.623%	

Target Compounds Qvalue

Quantitation Report

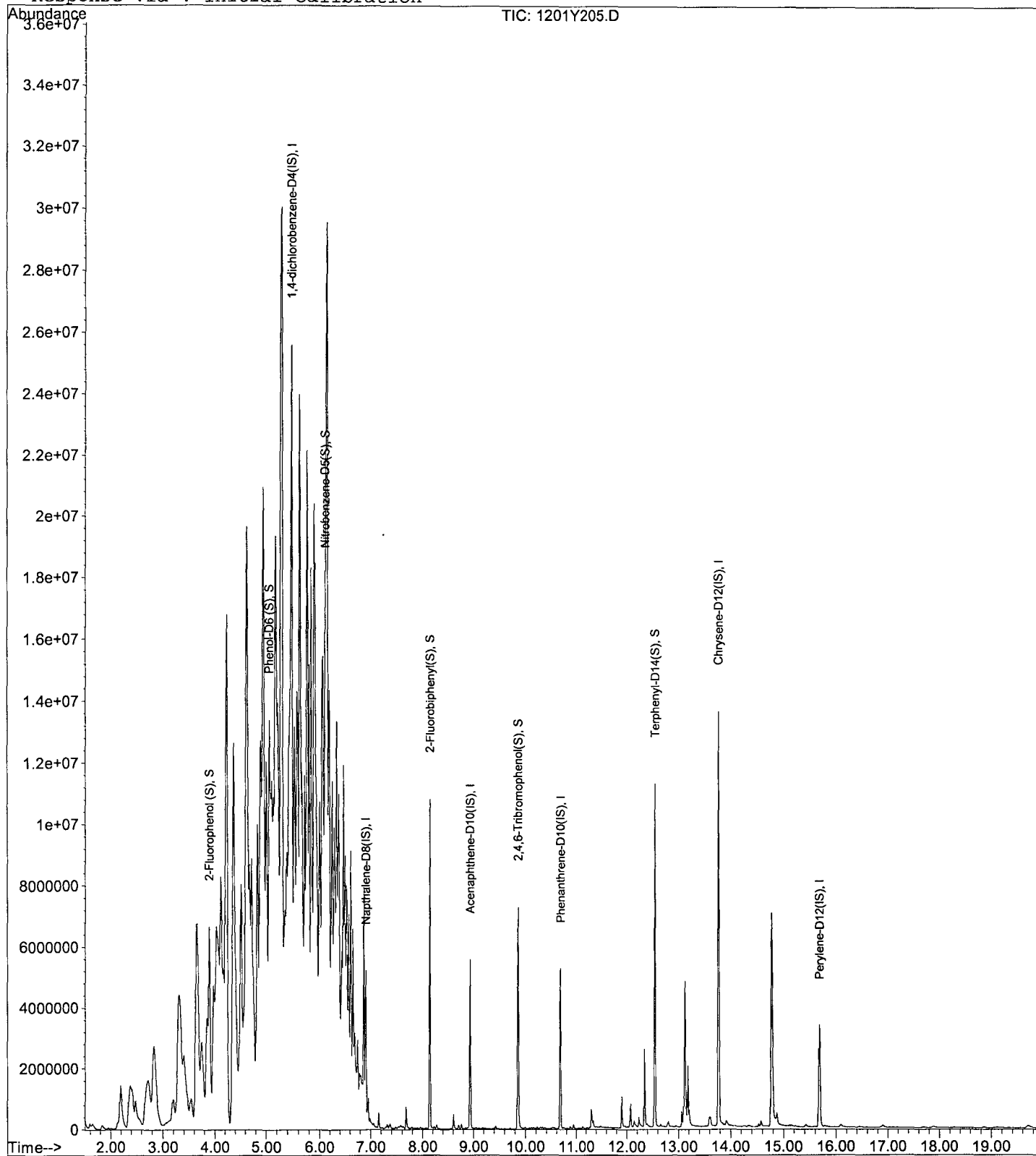
Data File : M:\YODA\DATA\Y181201\1201Y205.D  
Acq On : 20 Dec 18 13:29  
Sample : AZ84057W22 1/800  
Misc :

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 13:38 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 20 Dec 18 13:29  
Data File: M:\YODA\DATA\Y181201\1201Y205.D  
Name: AZ84057W22 1/800  
Misc:  
Method: M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
1201Y205.D Y1201NC.M		Wed Jan 09	10:37:50	2019				

Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y205.D                   Vial: 5  
Acq On    : 20 Dec 18  13:29                   Operator: MA  
Sample    : AZ84057W22 1/800                  Inst     : Yoda  
Misc      :                                    Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title        : EPA 8270C  
Library      : M:\DATABASE\WILEY138.L

No Library Search Compounds Detected

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LSC Area Percent Report

Data File : M:\YODA\DATA\Y181201\1201Y205.D  
 Acq On : 20 Dec 18 13:29  
 Sample : AZ84057W22 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

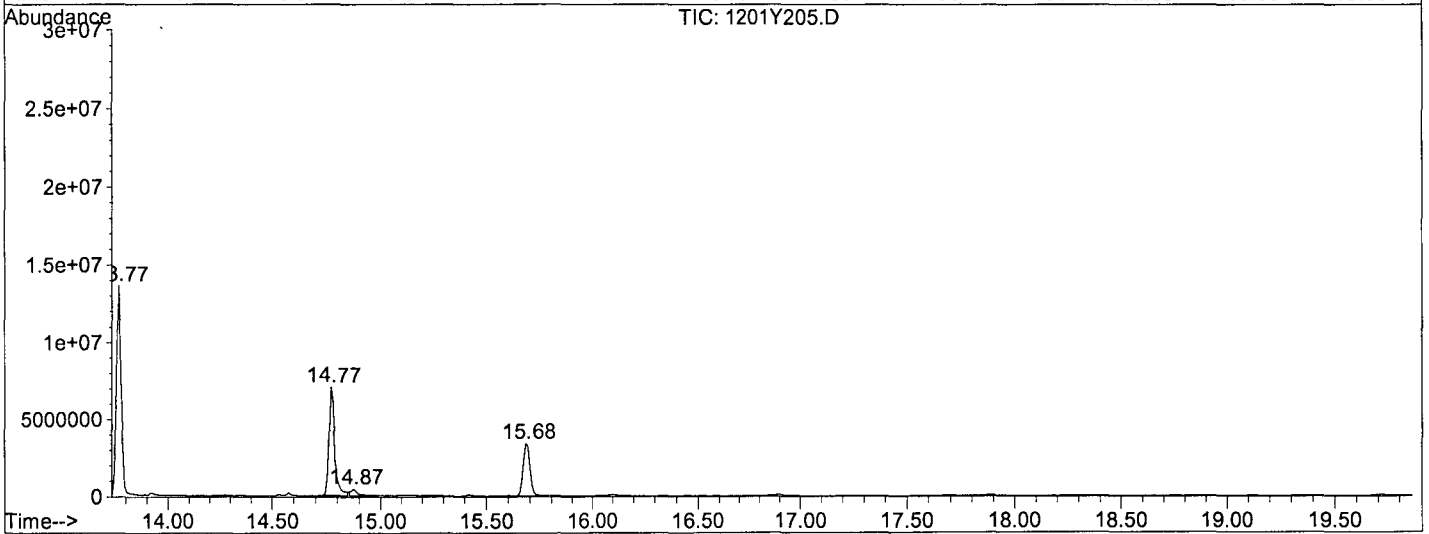
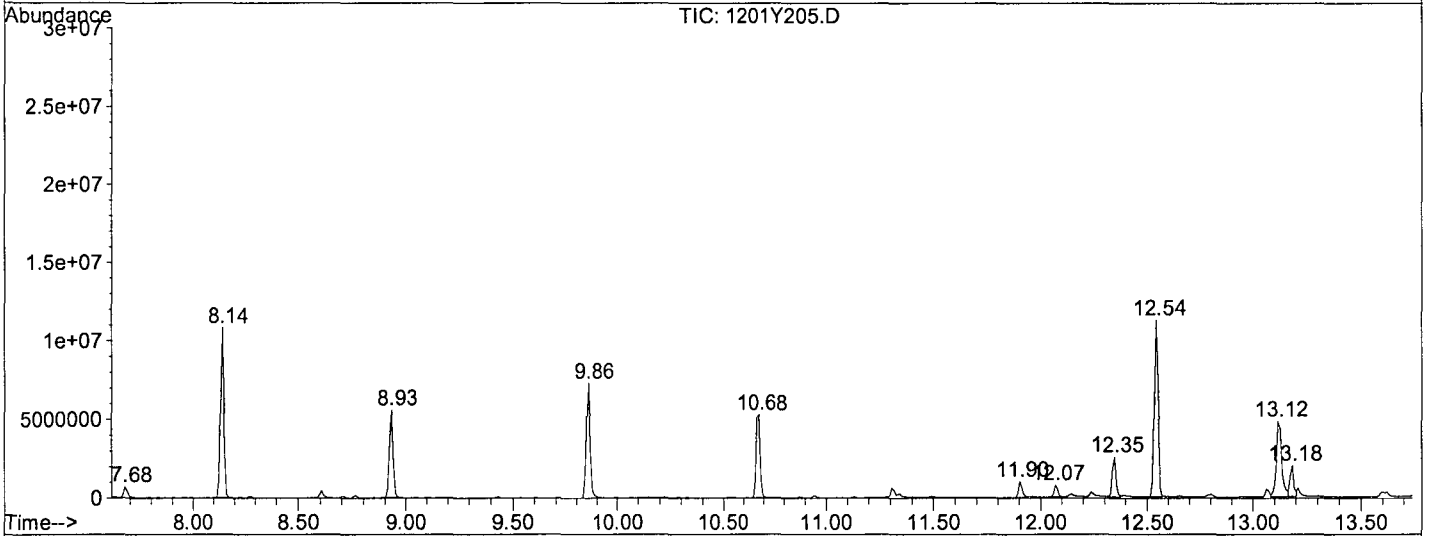
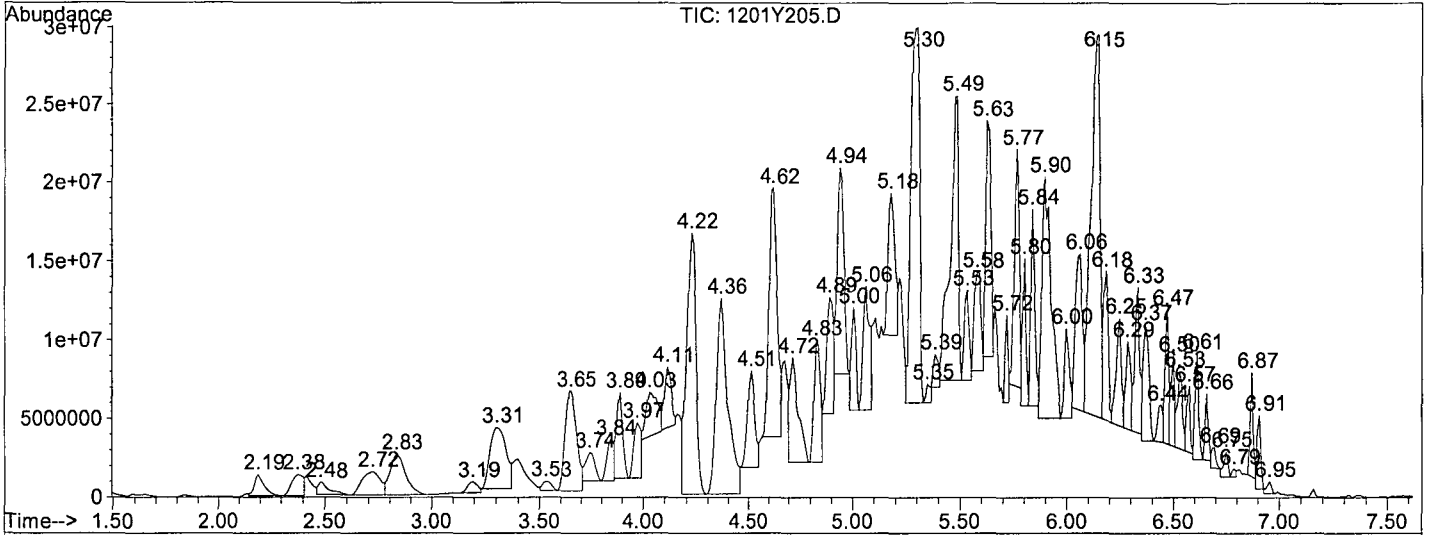
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.192	71	76	88	rVB	1357550	7208965	4435746	6.11%	0.429%
2	2.378	88	96	99	rBV3	1360460	6570036	5246579	7.23%	0.507%
3	2.480	105	107	122	rVB	784245	7846221	2676024	3.69%	0.259%
4	2.721	122	133	139	rVV4	1470900	11566640	9039454	12.45%	0.874%
5	2.832	139	145	164	rVB2	2597384	22998158	13262095	18.27%	1.282%
6	3.194	178	184	188	rBV	684647	4225025	2333255	3.21%	0.226%
7	3.306	188	196	203	rBV6	3890536	24381062	20342167	28.02%	1.966%
8	3.529	217	220	226	rVB2	600949	4409745	1730916	2.38%	0.167%
9	3.649	226	233	239	rBV2	6337152	28680857	25247772	34.78%	2.441%
10	3.742	239	243	249	rVB3	1795256	12266277	5748177	7.92%	0.556%
11	3.844	249	254	256	rBV	2602373	9637766	6687880	9.21%	0.647%
12	3.891	256	259	264	rVB	5442219	21359268	11094543	15.28%	1.073%
13	3.974	264	268	270	rBV	3521967	12459717	8639940	11.90%	0.835%
14	4.030	270	274	280	rVV3	2845399	23570862	10744233	14.80%	1.039%
15	4.114	280	283	287	rVV	3857612	21223635	8589664	11.83%	0.830%
16	4.225	290	295	302	rVB	16569096	68545434	49206610	67.79%	4.757%
17	4.364	302	310	320	rBV2	12421628	52252714	49425738	68.09%	4.778%
18	4.513	320	326	330	rBV2	6123931	22022880	15557806	21.43%	1.504%
19	4.624	332	338	342	rBV3	15787523	57811594	45405525	62.55%	4.389%
20	4.717	346	348	356	rVB3	6623171	40281494	17405535	23.98%	1.683%
21	4.828	356	360	363	rBV2	7739159	21910347	16799130	23.14%	1.624%
22	4.893	363	367	369	rBV3	7378254	28398462	17122392	23.59%	1.655%
23	4.940	369	372	377	rVB3	13085549	55072244	27877568	38.40%	2.695%
24	5.005	377	379	382	rVB	6486787	23685807	9251801	12.75%	0.894%
25	5.060	382	385	388	rBV2	7836311	31550732	17982685	24.77%	1.738%
26	5.181	394	398	401	rBV2	9029960	41986271	20282789	27.94%	1.961%
27	5.302	405	411	414	rVB3	24017022	89911274	68111856	93.83%	6.584%
28	5.348	414	416	418	rBV2	1203029	9526404	2038771	2.81%	0.197%
29	5.385	418	420	422	rBV3	2067724	13188965	3554362	4.90%	0.344%
30	5.488	422	431	433	rVB2	18131339	76049610	46769143	64.43%	4.521%
31	5.534	433	436	438	rBV3	5714305	22521111	8953652	12.33%	0.866%
32	5.580	438	441	444	rBV3	6265913	31902907	13831040	19.05%	1.337%
33	5.627	444	446	449	rBV3	15037774	46575692	25083769	34.56%	2.425%
34	5.720	454	456	457	rBV	5558650	14107252	5984460	8.24%	0.579%
35	5.766	457	461	463	rVV3	14972826	38389799	24356602	33.55%	2.355%
36	5.803	463	465	467	rVB	9334706	23444958	10090329	13.90%	0.975%
37	5.840	467	469	472	rBV	12462301	33997803	16479092	22.70%	1.593%
38	5.896	472	475	483	rVB3	15350368	77348189	46183516	63.62%	4.465%
39	5.998	483	486	489	rBV3	5695365	19847280	10088822	13.90%	0.975%
40	6.063	489	493	495	rVV2	9888057	40574612	23621497	32.54%	2.283%
41	6.147	495	502	504	rVV3	24376200	100554323	72589633	100.00%	7.017%
42	6.184	504	506	509	rVV2	9494392	32924671	14336894	19.75%	1.386%
43	6.249	509	513	515	rVV2	6819148	23848370	12177280	16.78%	1.177%
44	6.286	515	517	519	rVV3	5552324	25431347	14786971	12.44%	0.873%
45	6.332	519	522	524	rVV3	9222892	25431347	14786971	20.37%	1.429%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y181201\1201Y205.D  
Operator : MA  
Acquired : 20 Dec 18 13:29 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ84057W22 1/800  
Misc Info :  
Vial Number: 5  
Quant File :Y1201NC.RES (RTE Integrator)



Data File : M:\YODA\DATA\Y181201\1201Y206.D  
 Acq On : 20 Dec 18 13:57  
 Sample : AZ84059W08 1/800  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 14:05 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	560823	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	3030610	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1592558	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2951672	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2622496	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2716986	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	4007458	224.9690	ppb	0.00
Spiked Amount 250.000			Recovery =	89.988%		
6) Phenol-D6 (S)	5.06	99	5086028	216.5091	ppb	0.00
Spiked Amount 250.000			Recovery =	86.604%		
22) Nitrobenzene-D5 (S)	6.10	82	2375587	89.0704	ppb	0.00
Spiked Amount 125.000			Recovery =	71.256%		
46) 2-Fluorobiphenyl (S)	8.14	172	4252392	81.8074	ppb	0.00
Spiked Amount 125.000			Recovery =	65.446%		
64) 2,4,6-Tribromophenol (S)	9.86	330	990974	184.0750	ppb	0.00
Spiked Amount 250.000			Recovery =	73.630%		
82) Terphenyl-D14 (S)	12.55	244	4565140	82.8350	ppb	0.00
Spiked Amount 125.000			Recovery =	66.268%		

Target Compounds

Qvalue

Quantitation Report

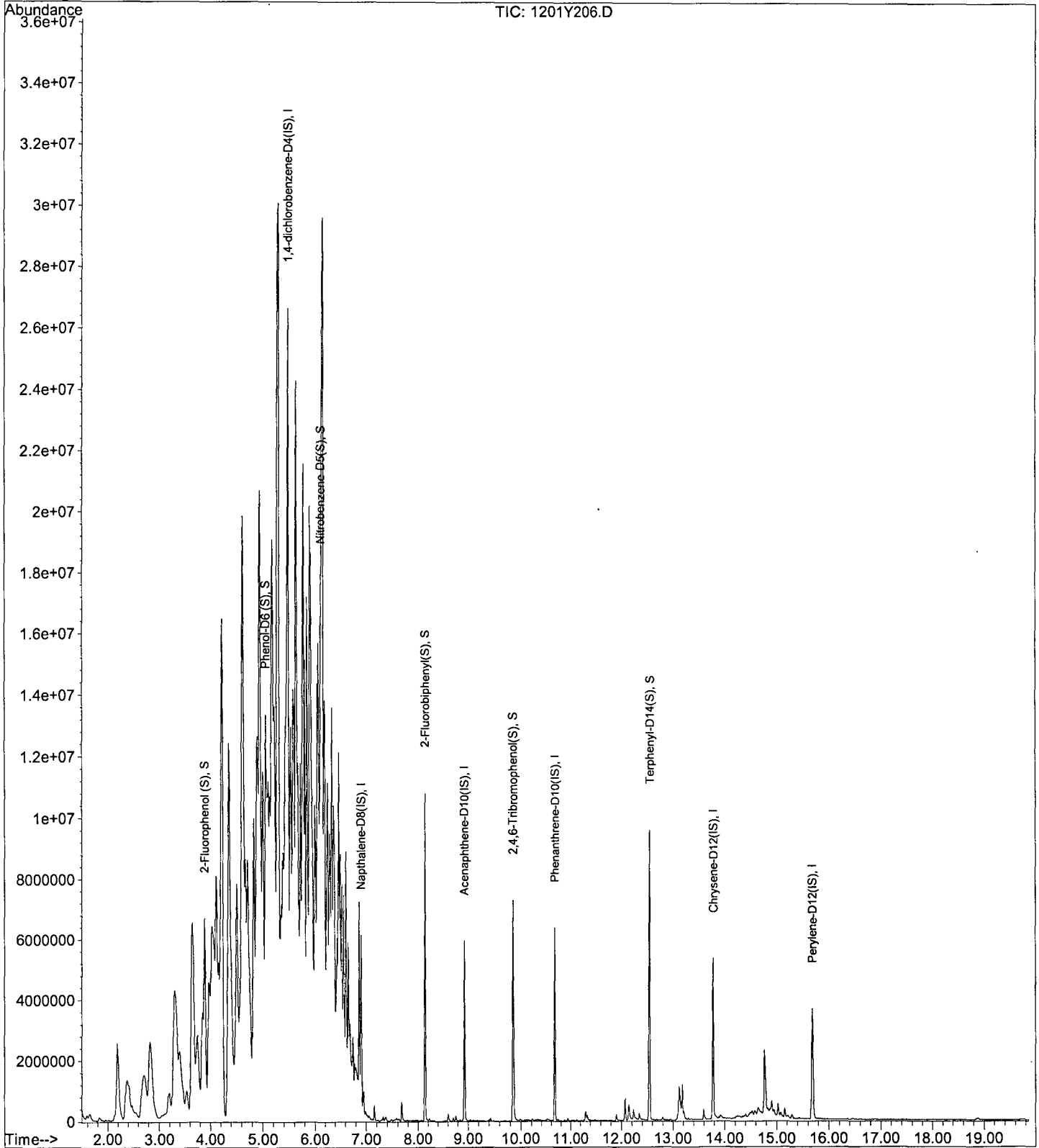
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Acq On : 20 Dec 18 13:57  
Sample : AZ84059W08 1/800  
Misc :

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 14:05 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y206.D                   Vial: 6  
Acq On    : 20 Dec 18  13:57                   Operator: MA  
Sample    : AZ84059W08 1/800                   Inst     : Yoda  
Misc      :                                    Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title        : EPA 8270C  
Library      : M:\DATABASE\WILEY138.L

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 20 Dec 18 13:57  
Data File: M:\YODA\DATA\Y181201\1201Y206.D  
Name: AZ84059W08 1/800  
Misc:  
Method: M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC	Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
1201Y206.D	Y1201NC.M		Wed Jan 09 10:40:37 2019						

LSC Area Percent Report

Data File : M:\YODA\DATA\Y181201\1201Y206.D  
 Acq On : 20 Dec 18 13:57  
 Sample : AZ84059W08 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 6  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

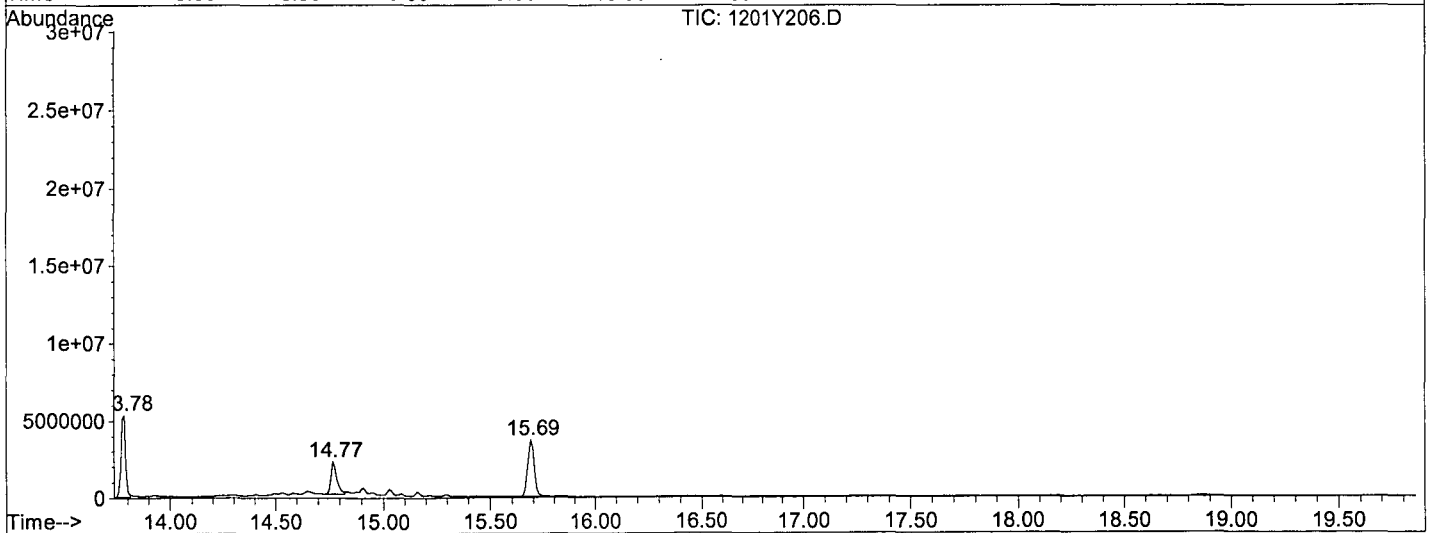
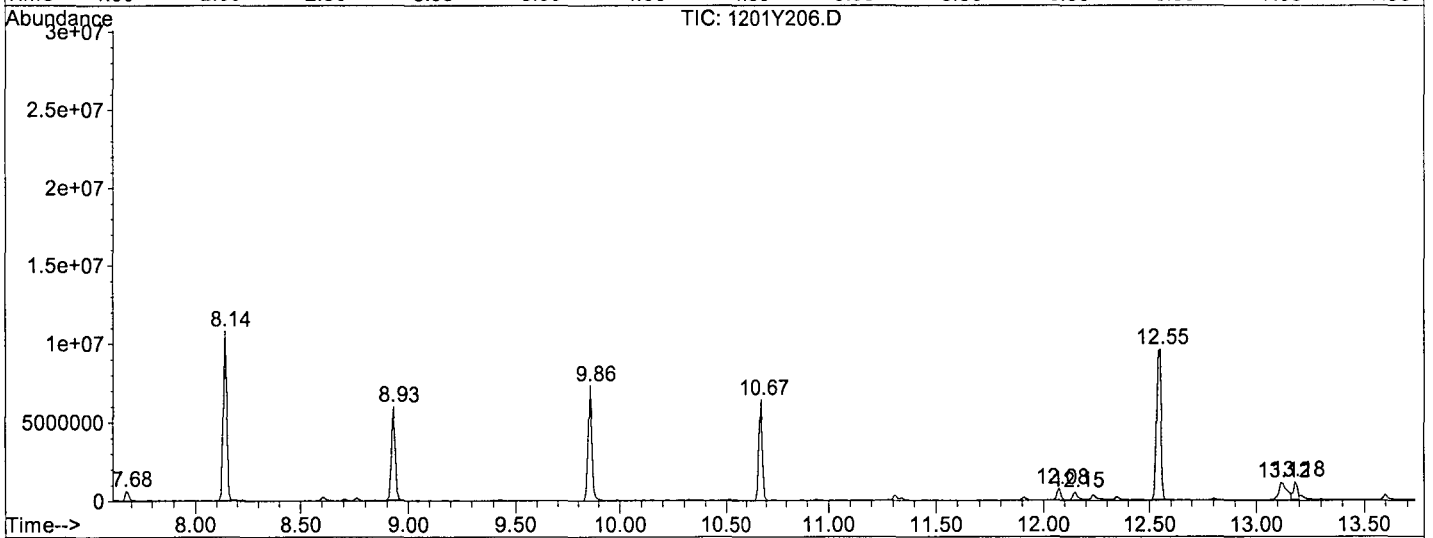
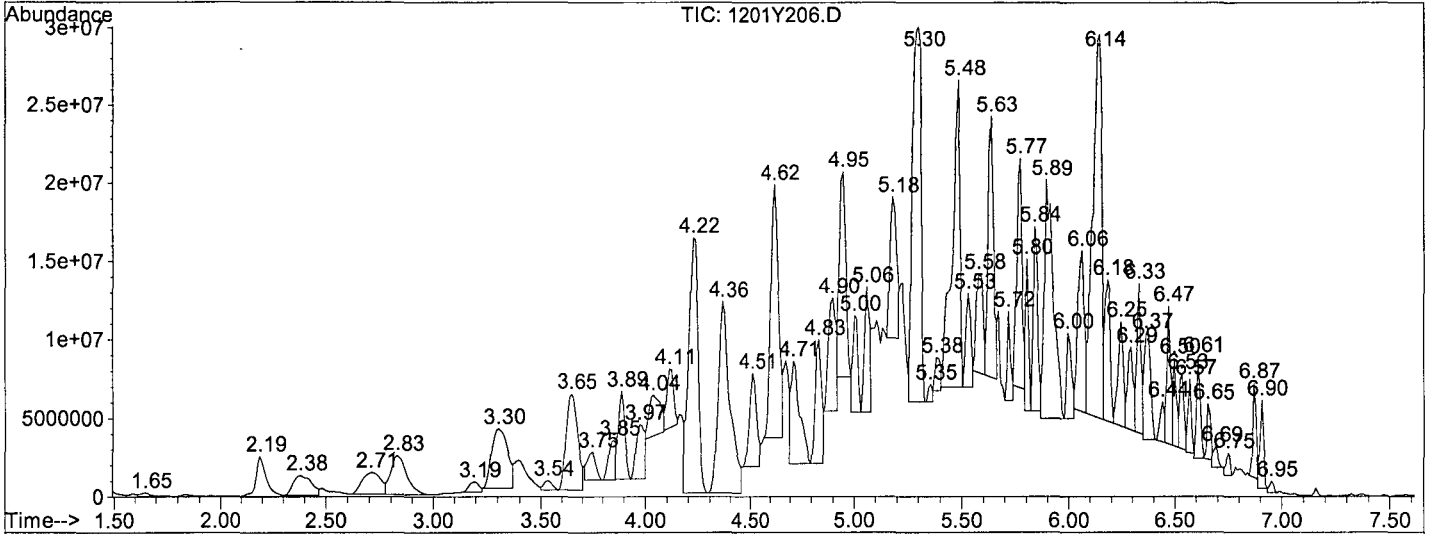
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.650	14	18	33	rVB2	218882	3847396	742661	1.01%	0.074%
2	2.189	62	76	88	rBV	2539415	11939666	8687943	11.79%	0.863%
3	2.384	88	97	106	rBV2	1263492	10180336	7558141	10.26%	0.751%
4	2.709	122	132	139	rBV5	1387987	11433135	8575878	11.64%	0.852%
5	2.829	139	145	163	rVB2	2493135	22240223	12866902	17.46%	1.279%
6	3.192	178	184	188	rBV	659248	4329918	2259039	3.07%	0.225%
7	3.303	188	196	203	rBV6	3791249	23726354	19501966	26.47%	1.938%
8	3.535	217	221	226	rVB2	606972	4473583	1717052	2.33%	0.171%
9	3.646	226	233	239	rBV2	6157007	27864253	24439354	33.17%	2.429%
10	3.749	240	244	249	rVB2	1783157	11636201	5078357	6.89%	0.505%
11	3.851	249	255	256	rBV	2534824	9153933	6177456	8.38%	0.614%
12	3.888	256	259	264	rVB	5585835	21957812	11864593	16.10%	1.179%
13	3.971	264	268	271	rBV	3467720	14215042	10089329	13.69%	1.003%
14	4.036	271	275	280	rVV2	2630356	22820186	9845319	13.36%	0.978%
15	4.111	280	283	287	rVV	3743099	20305411	8237409	11.18%	0.819%
16	4.222	290	295	303	rVB	16272541	68717966	49345464	66.97%	4.904%
17	4.361	303	310	320	rBV2	12217114	52347695	48458029	65.77%	4.816%
18	4.510	321	326	330	rBV2	5933524	21530812	14961103	20.31%	1.487%
19	4.621	332	338	342	rBV3	16121420	56745158	44514950	60.42%	4.424%
20	4.714	346	348	357	rVB3	6540670	42337678	18551068	25.18%	1.844%
21	4.835	357	361	363	rBV2	7890846	22752001	16508774	22.41%	1.641%
22	4.900	363	368	370	rBV3	7206980	30566298	18548094	25.17%	1.843%
23	4.946	370	373	377	rVB3	13087173	57136096	26781512	36.35%	2.662%
24	5.002	377	379	382	rVB	6141342	23006839	9844268	13.36%	0.978%
25	5.057	382	385	387	rBV	7976062	24738907	14579862	19.79%	1.449%
26	5.178	395	398	401	rBV2	9007793	42746451	19982956	27.12%	1.986%
27	5.299	406	411	415	rVB3	24024347	98881037	65924549	89.47%	6.552%
28	5.355	415	417	418	rBV2	1123331	7699299	1534664	2.08%	0.153%
29	5.382	418	420	422	rBV2	2126095	13036673	3823039	5.19%	0.380%
30	5.485	422	431	433	rVB2	19646894	76269451	49036759	66.55%	4.873%
31	5.531	433	436	438	rBV2	5968159	22503522	9806926	13.31%	0.975%
32	5.577	438	441	444	rVV4	6214311	29478914	13636415	18.51%	1.355%
33	5.633	444	447	450	rVV3	16589922	50810308	30104885	40.86%	2.992%
34	5.717	454	456	458	rBV	5649676	15128951	6108078	8.29%	0.607%
35	5.772	458	462	464	rVV2	14571699	43933638	25509357	34.62%	2.535%
36	5.800	464	465	467	rVB	9692229	21567626	8574420	11.64%	0.852%
37	5.837	467	469	472	rBV	11757827	30804115	17029256	23.11%	1.692%
38	5.893	472	475	484	rVB3	15193468	75723570	45942206	62.35%	4.566%
39	5.995	484	486	489	rBV2	5430325	20161746	9438200	12.81%	0.938%
40	6.060	489	493	495	rVV2	10202575	37189361	22863895	31.03%	2.272%
41	6.144	495	502	504	rVV3	24510713	99466775	73680928	100.00%	7.323%
42	6.181	504	506	509	rVV2	9053113	32682428	15198279	20.63%	1.510%
43	6.246	509	513	515	rVV2	6663912	22751085	11929091	16.19%	1.186%
44	6.292	515	518	520	rVV4	5280682	22751085	11929091	14.02%	1.027%
45	6.329	520	522	524	rVV2	9550894	23756081	12890722	17.50%	1.281%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y181201\1201Y206.D  
 Operator : MA  
 Acquired : 20 Dec 18 13:57 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ84059W08 1/800  
 Misc Info :  
 Vial Number: 6  
 Quant File : Y1201NC.RES (RTE Integrator)





Data File : M:\YODA\DATA\Y181201\1201Y207.D  
 Acq On : 20 Dec 18 14:24  
 Sample : AZ84061W24 1/800  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 14:32 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	583476	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2660349	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1396920	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2619417	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2298512	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.68	264	2418557	40.0000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.89	112	3890773	209.9386	ppb	0.00
Spiked Amount	250.000					
					Recovery =	83.976%
6) Phenol-D6 (S)	5.06	99	5110628	209.1098	ppb	0.00
Spiked Amount	250.000					
					Recovery =	83.644%
22) Nitrobenzene-D5 (S)	6.10	82	2266558	96.8101	ppb	0.00
Spiked Amount	125.000					
					Recovery =	77.448%
46) 2-Fluorobiphenyl (S)	8.14	172	4178901	91.6526	ppb	0.00
Spiked Amount	125.000					
					Recovery =	73.322%
64) 2,4,6-Tribromophenol (S)	9.86	330	991946	210.0604	ppb	0.00
Spiked Amount	250.000					
					Recovery =	84.024%
82) Terphenyl-D14 (S)	12.54	244	4559369	94.3914	ppb	0.00
Spiked Amount	125.000					
					Recovery =	75.513%
Target Compounds					Qvalue	

Quantitation Report

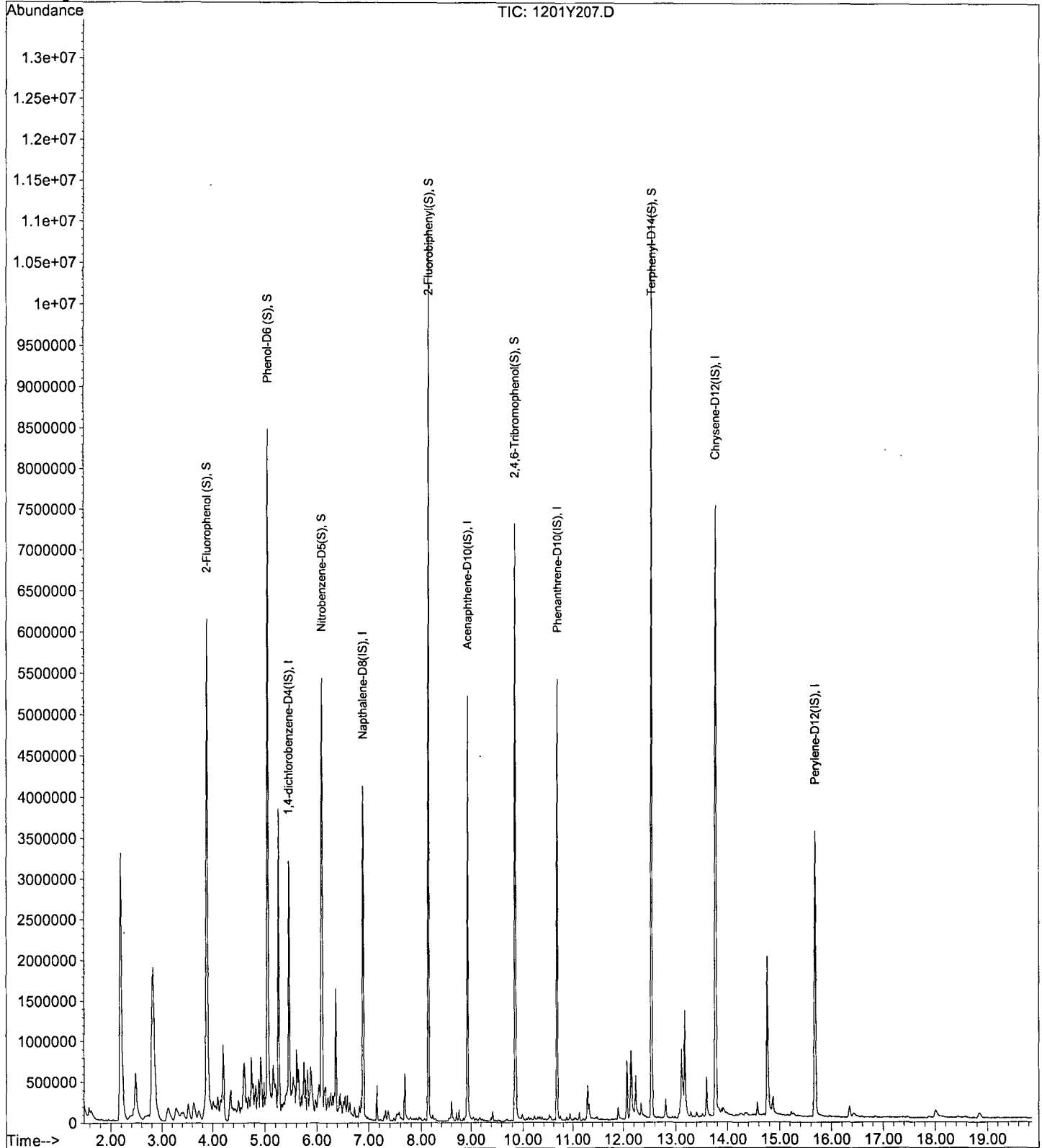
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Acq On : 20 Dec 18 14:24  
Sample : AZ84061W24 1/800  
Misc :

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 14:32 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 20 Dec 18 14:24  
 Data File: M:\YODA\DATA\Y181201\1201Y207.D  
 Name: AZ84061W24 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.19	86.7	ppb	8876130	ISTD01	5.47	5117480	40.0
Ethene, tetrachloro-	2.82	77.0	ppb	7876170	ISTD01	5.47	5117480	40.0
Cyclohexane, 1-methy	5.16	7.5	ppb	766363	ISTD01	5.47	5117480	40.0
Pentanedioic acid, d	6.38	15.5	ppb	1623270	ISTD02	6.90	5249710	40.0

1201Y207.D Y1201NC.M Wed Jan 09 10:43:55 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y181201\1201Y207.D  
 Acq On : 20 Dec 18 14:24  
 Sample : AZ84061W24 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

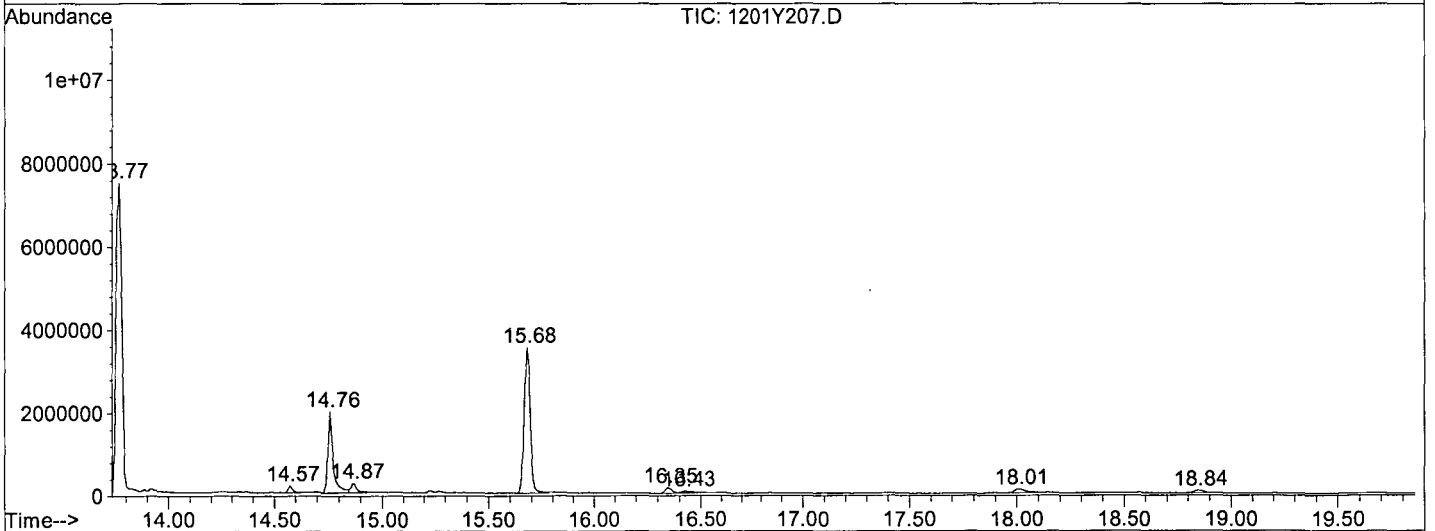
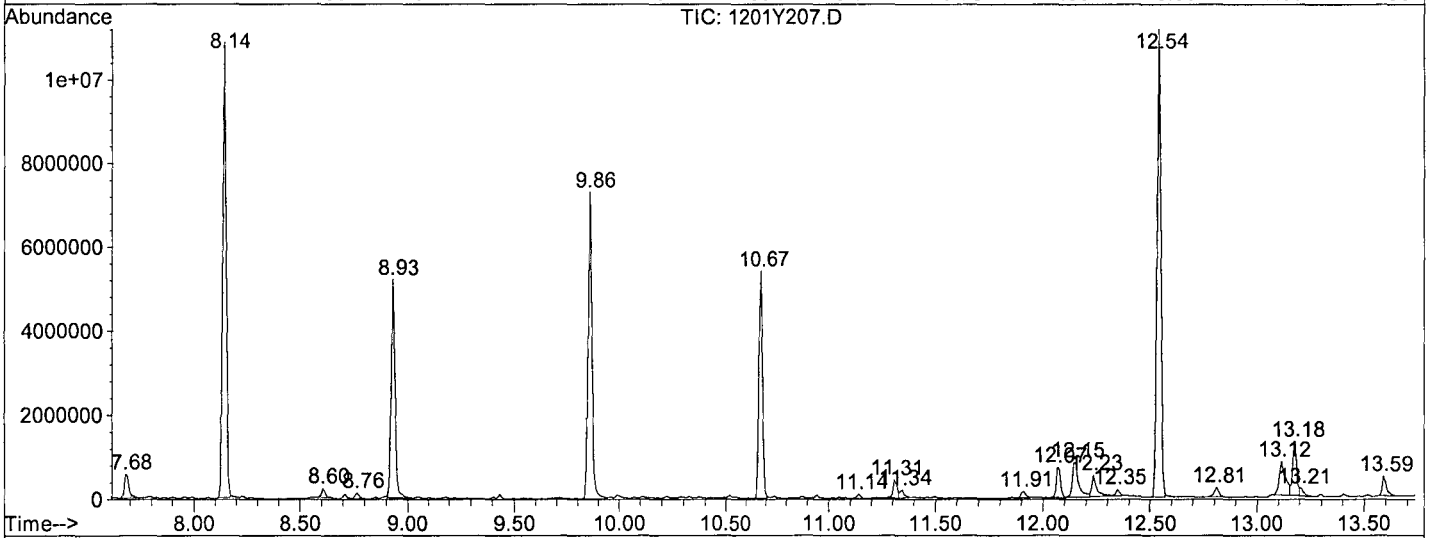
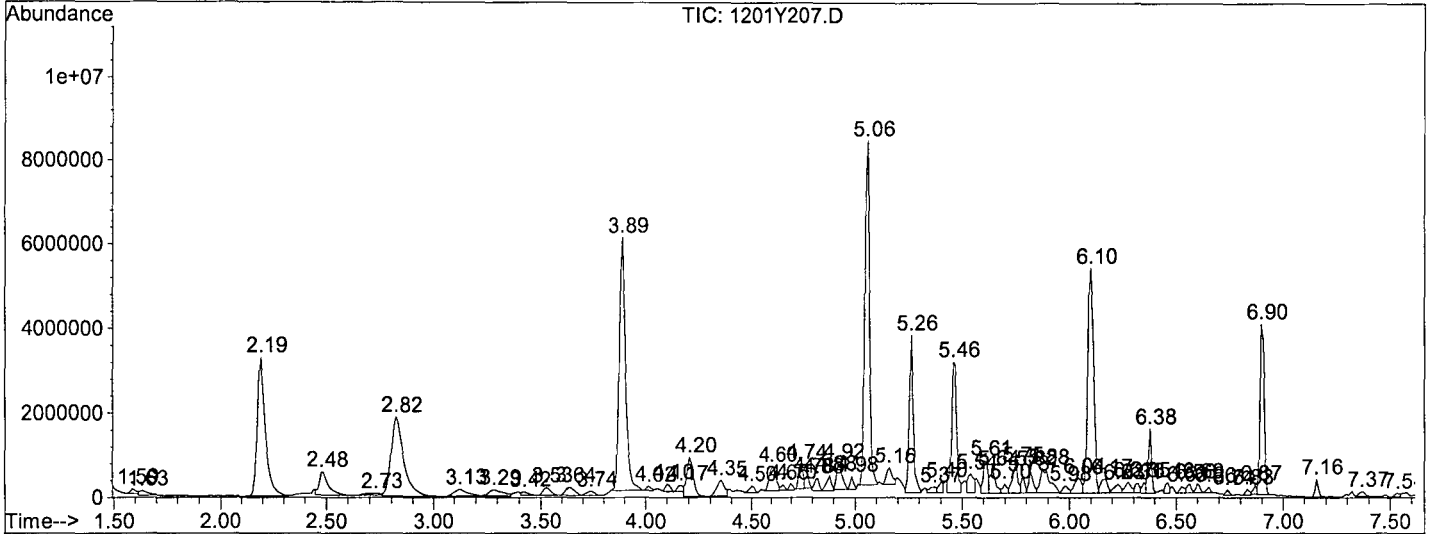
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.586	8	11	14	rBV	105387	841610	193043	1.37%	0.105%
2	1.633	14	16	27	rVB2	110822	1865535	313311	2.23%	0.170%
3	2.190	70	76	90	rBV	3285965	10707489	8876129	63.20%	4.808%
4	2.478	104	107	123	rVB	559487	4132942	1670680	11.90%	0.905%
5	2.728	123	134	137	rBV5	50664	1594936	262281	1.87%	0.142%
6	2.821	137	144	167	rVB	1887079	11256919	7876169	56.08%	4.267%
7	3.127	169	177	188	rBV3	160436	2410547	720102	5.13%	0.390%
8	3.285	188	194	202	rBV3	144235	1989901	665867	4.74%	0.361%
9	3.424	207	209	215	rVV	84455	1113272	179731	1.28%	0.097%
10	3.527	215	220	226	rVB	185356	1511143	462360	3.29%	0.250%
11	3.638	226	232	238	rBV2	196918	1767207	623775	4.44%	0.338%
12	3.740	238	243	249	rVB3	96275	1413960	285431	2.03%	0.155%
13	3.889	254	259	270	rVB	5990868	14830292	12566430	89.48%	6.807%
14	4.019	270	273	275	rBV2	99859	850622	174645	1.24%	0.095%
15	4.102	280	282	285	rVB	181378	1035778	285672	2.03%	0.155%
16	4.167	285	289	290	rBV2	148550	916477	286898	2.04%	0.155%
17	4.204	290	293	302	rVB	926084	3931343	1885107	13.42%	1.021%
18	4.353	302	309	312	rBV	376508	1908335	1023134	7.29%	0.554%
19	4.501	321	325	328	rVB2	154760	1133637	290135	2.07%	0.157%
20	4.603	332	336	340	rVV3	570597	2467132	1350461	9.62%	0.732%
21	4.659	340	342	344	rVB	133109	769693	162330	1.16%	0.088%
22	4.696	344	346	348	rBV	154186	790609	205442	1.46%	0.111%
23	4.743	348	351	353	rBV	597499	1534029	851974	6.07%	0.462%
24	4.780	353	355	357	rVB2	255412	1139909	317503	2.26%	0.172%
25	4.826	357	360	362	rVB2	287329	1289184	454694	3.24%	0.246%
26	4.882	362	366	368	rBV2	360050	1487054	585879	4.17%	0.317%
27	4.919	368	370	375	rBV3	615696	2574881	1138033	8.10%	0.616%
28	4.984	375	377	379	rBV	302037	1007067	326156	2.32%	0.177%
29	5.058	381	385	390	rBV	8180347	15094222	12760783	90.86%	6.913%
30	5.160	393	396	399	rBV2	400397	1974954	766363	5.46%	0.415%
31	5.263	404	407	412	rVV	3738071	6823180	5068757	36.09%	2.746%
32	5.374	415	419	420	rVV3	139529	1024100	334778	2.38%	0.181%
33	5.402	420	422	423	rVV2	251623	852089	365224	2.60%	0.198%
34	5.458	425	428	432	rVV2	3105669	6592551	5117483	36.44%	2.772%
35	5.541	435	437	439	rVV	448260	1727318	838215	5.97%	0.454%
36	5.606	442	444	446	rVV	778363	2006737	1208821	8.61%	0.655%
37	5.643	446	448	452	rVV	544596	2329052	927526	6.60%	0.502%
38	5.699	452	454	456	rVV	218617	897996	318143	2.27%	0.172%
39	5.755	456	460	462	rVV2	628517	2244518	1219587	8.68%	0.661%
40	5.782	462	463	465	rVV	409339	1062291	383129	2.73%	0.208%
41	5.820	465	467	470	rVV	532346	1555667	712093	5.07%	0.386%
42	5.875	470	473	482	rVV3	573056	3592628	1766659	12.58%	0.957%
43	5.977	482	484	487	rVV2	170928	997826	322237	2.29%	0.175%
44	6.042	487	491	493	rVV2	354559	128814	57814	5.78%	0.440%
45	6.098	493	497	501	rVV2	5325233	11691545	10271959	73.14%	5.564%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y181201\1201Y207.D  
 Operator : MA  
 Acquired : 20 Dec 18 14:24 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ84061W24 1/800  
 Misc Info :  
 Vial Number: 7  
 Quant File : Y1201NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y207.D  
 Acq On : 20 Dec 18 14:24  
 Sample : AZ84061W24 1/800  
 Misc :

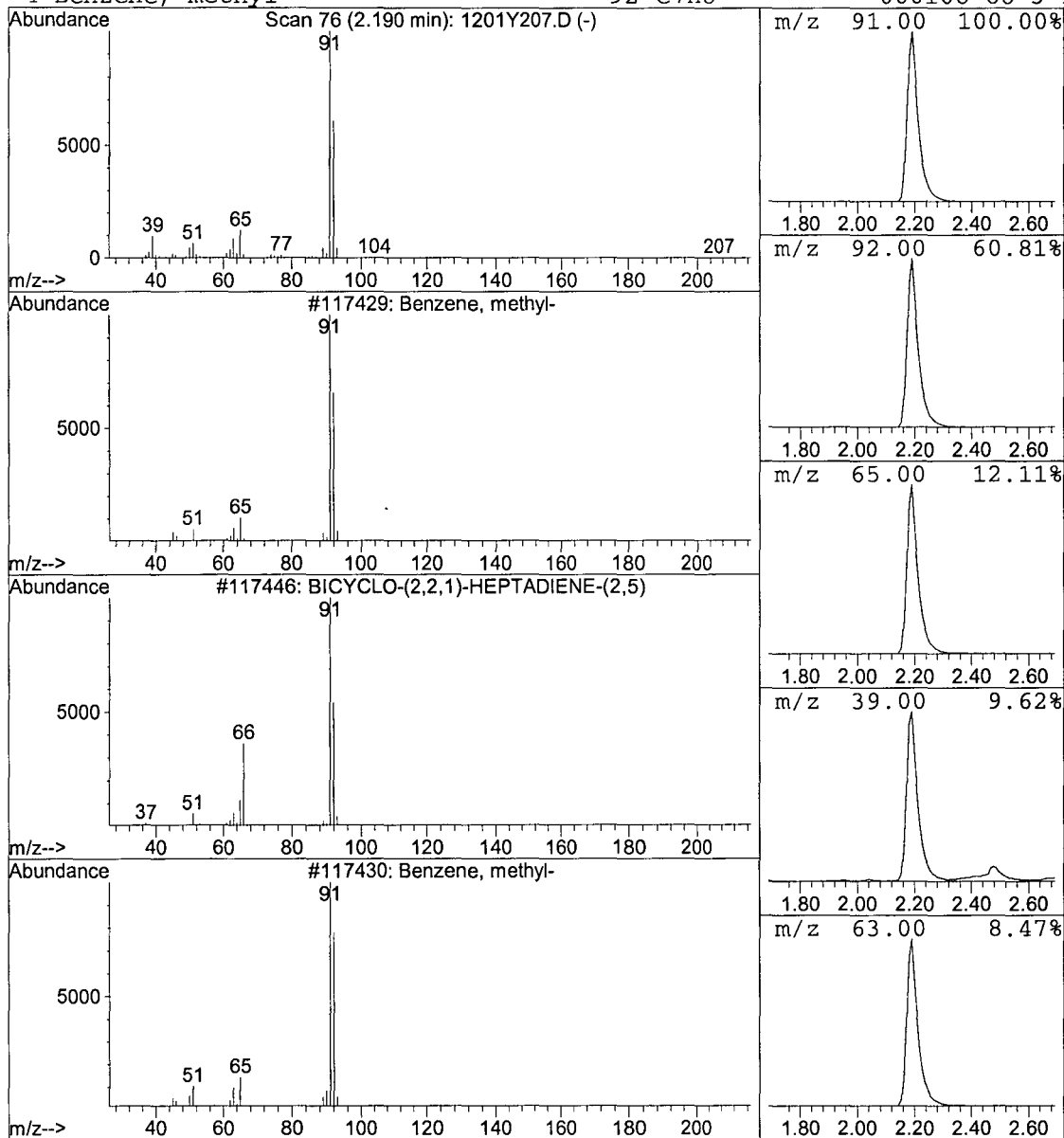
Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.19	86.72 ppb	8876130	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzene, methyl-	92	C7H8	000108-88-3	94
2		BICYCLO-(2,2,1)-HEPTADIENE-(2,5)	92	C7H8	000121-46-0	91
3		Benzene, methyl-	92	C7H8	000108-88-3	91
4		Benzene, methyl-	92	C7H8	000108-88-3	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y207.D  
 Acq On : 20 Dec 18 14:24  
 Sample : AZ84061W24 1/800  
 Misc :

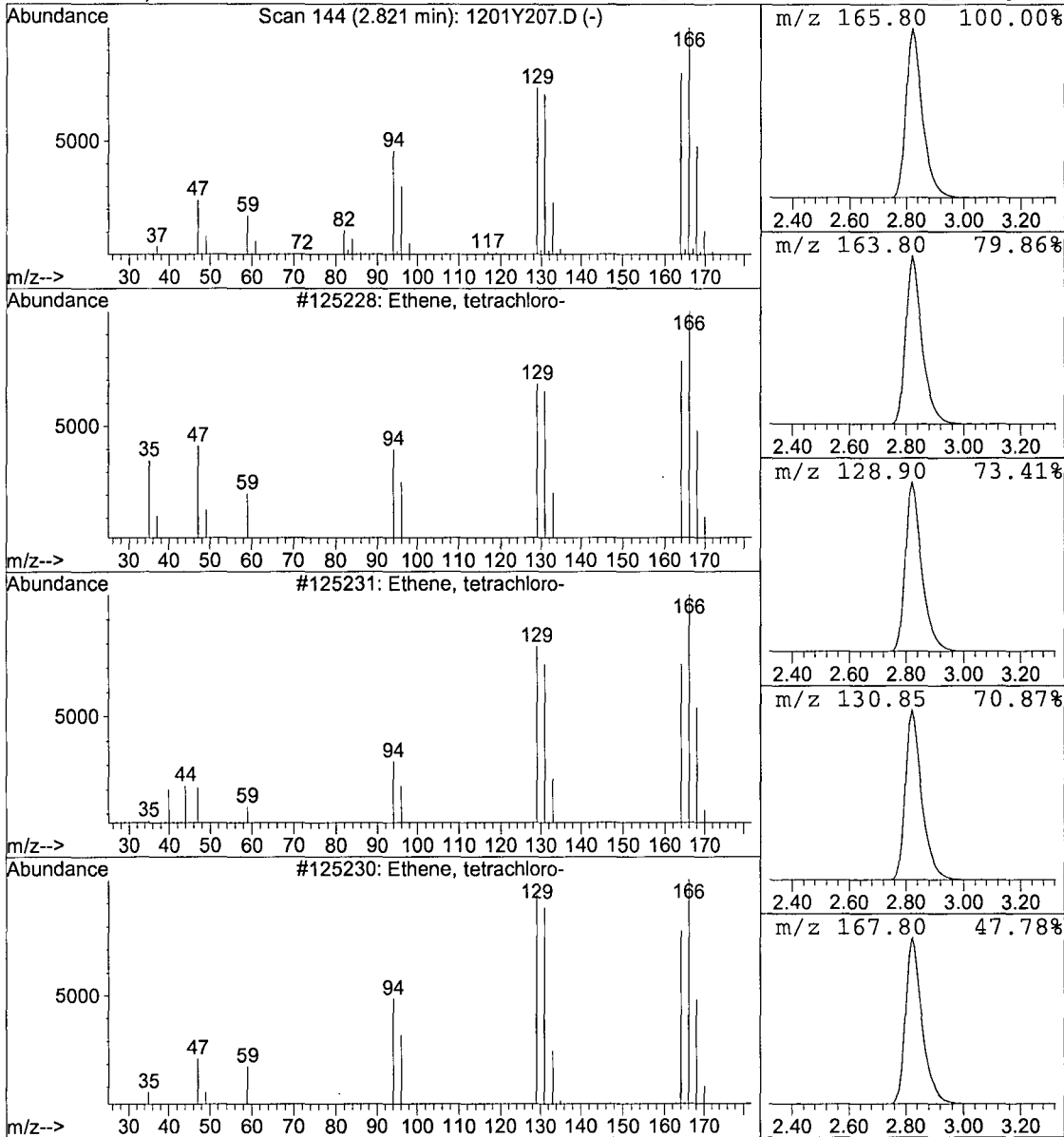
Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Ethene, tetrachloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	76.95 ppb	7876170	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
3			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96
4			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y207.D  
 Acq On : 20 Dec 18 14:24  
 Sample : AZ84061W24 1/800  
 Misc :

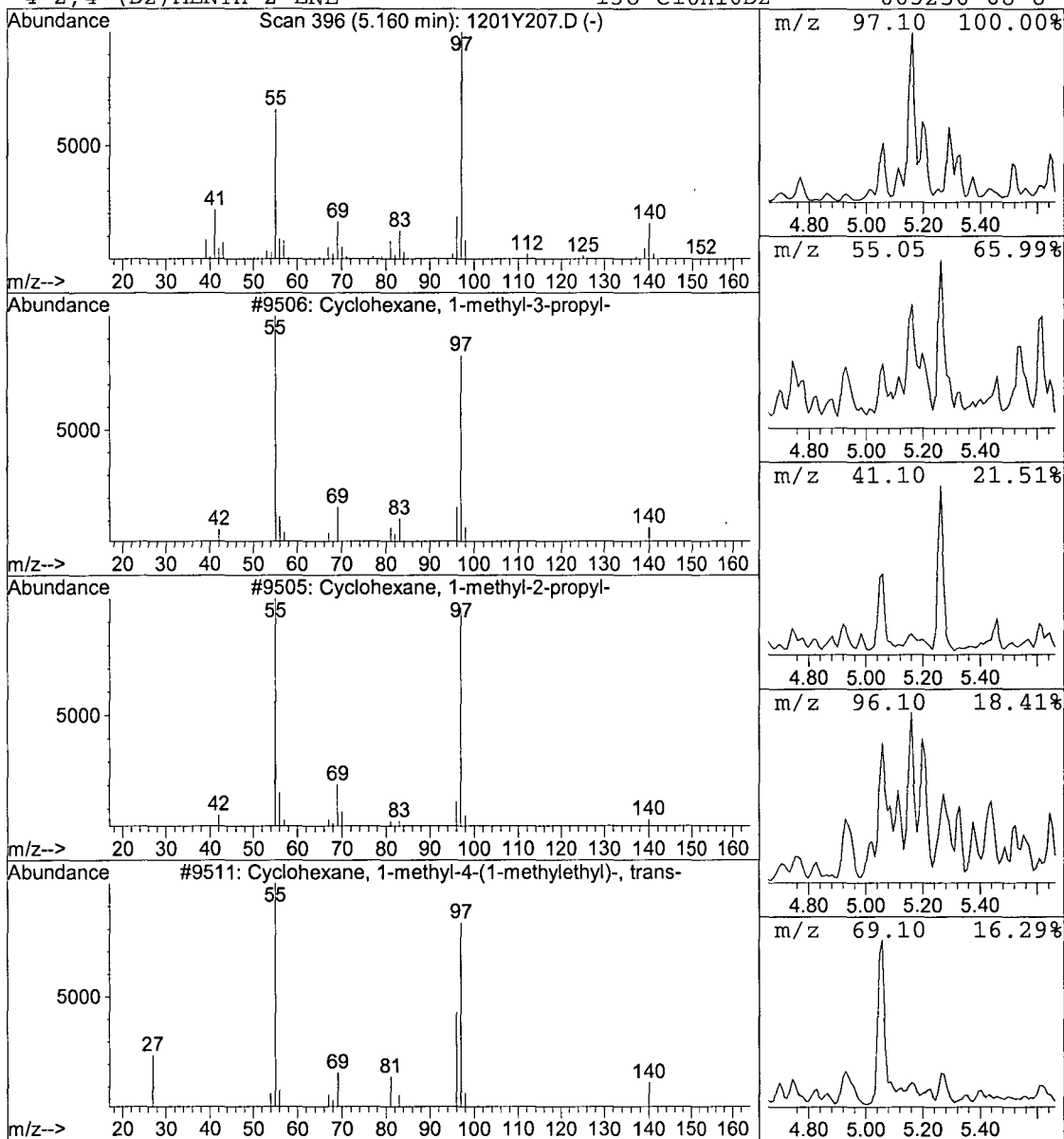
Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Cyclohexane, 1-methyl-3-propyl Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.16	7.49 ppb	766363	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	90
2		Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	80
3		Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	72
4		2,4-(D2)MENTH-2-ENE	138	C10H16D2	005256-68-8	72





Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y207.D  
 Acq On : 20 Dec 18 14:24  
 Sample : AZ84061W24 1/800  
 Misc :

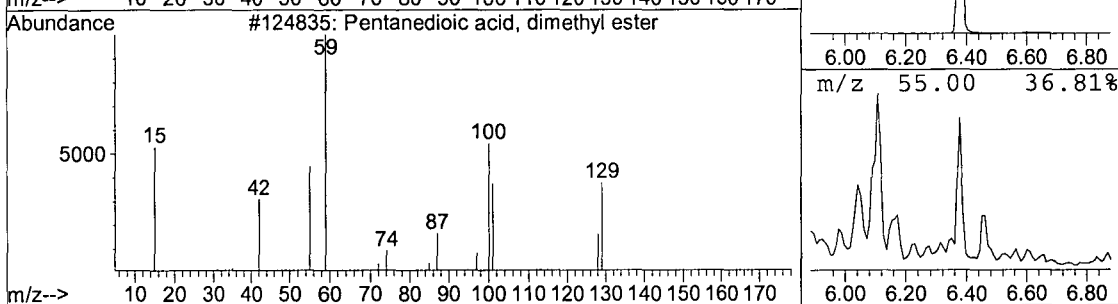
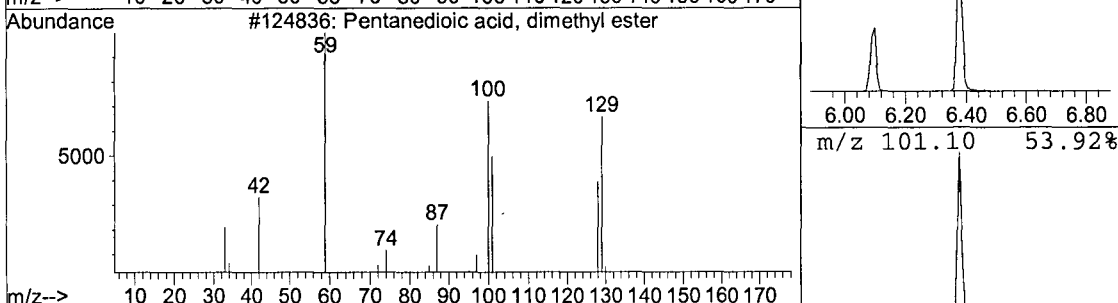
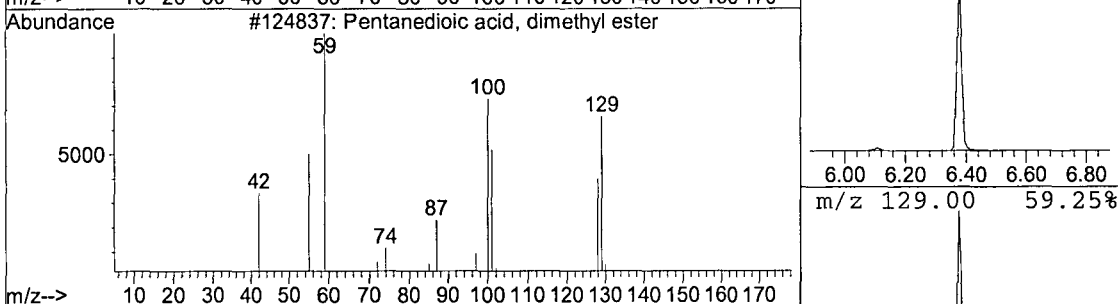
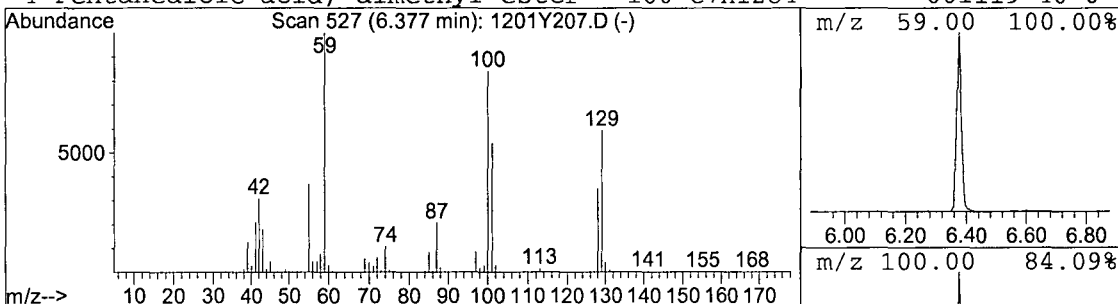
Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Pentanedioic acid, dimethyl es Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.38	15.46 ppb	1623270	Napthalene-D8 (IS)	6.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
3	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
4	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	64



Data File : M:\YODA\DATA\Y181201\1201Y208.D Vial: 8  
 Acq On : 20 Dec 18 14:52 Operator: MA  
 Sample : AZ84062W07 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Dec 20 15:03 2018 Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	526602	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2446739	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1361522	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2563809	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2304927	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2365375	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
5) 2-Fluorophenol (S)	3.89	112	3773282	225.5881	ppb	0.00
Spiked Amount 250.000			Recovery =	90.235%		
6) Phenol-D6 (S)	5.06	99	4909943	222.5959	ppb	0.00
Spiked Amount 250.000			Recovery =	89.038%		
22) Nitrobenzene-D5 (S)	6.10	82	2179940	101.2393	ppb	0.00
Spiked Amount 125.000			Recovery =	80.991%		
46) 2-Fluorobiphenyl (S)	8.14	172	3998217	89.9697	ppb	0.00
Spiked Amount 125.000			Recovery =	71.976%		
64) 2,4,6-Tribromophenol (S)	9.86	330	939453	204.1165	ppb	0.00
Spiked Amount 250.000			Recovery =	81.646%		
82) Terphenyl-D14 (S)	12.54	244	4475533	92.3979	ppb	0.00
Spiked Amount 125.000			Recovery =	73.918%		

Target Compounds Qvalue

Quantitation Report

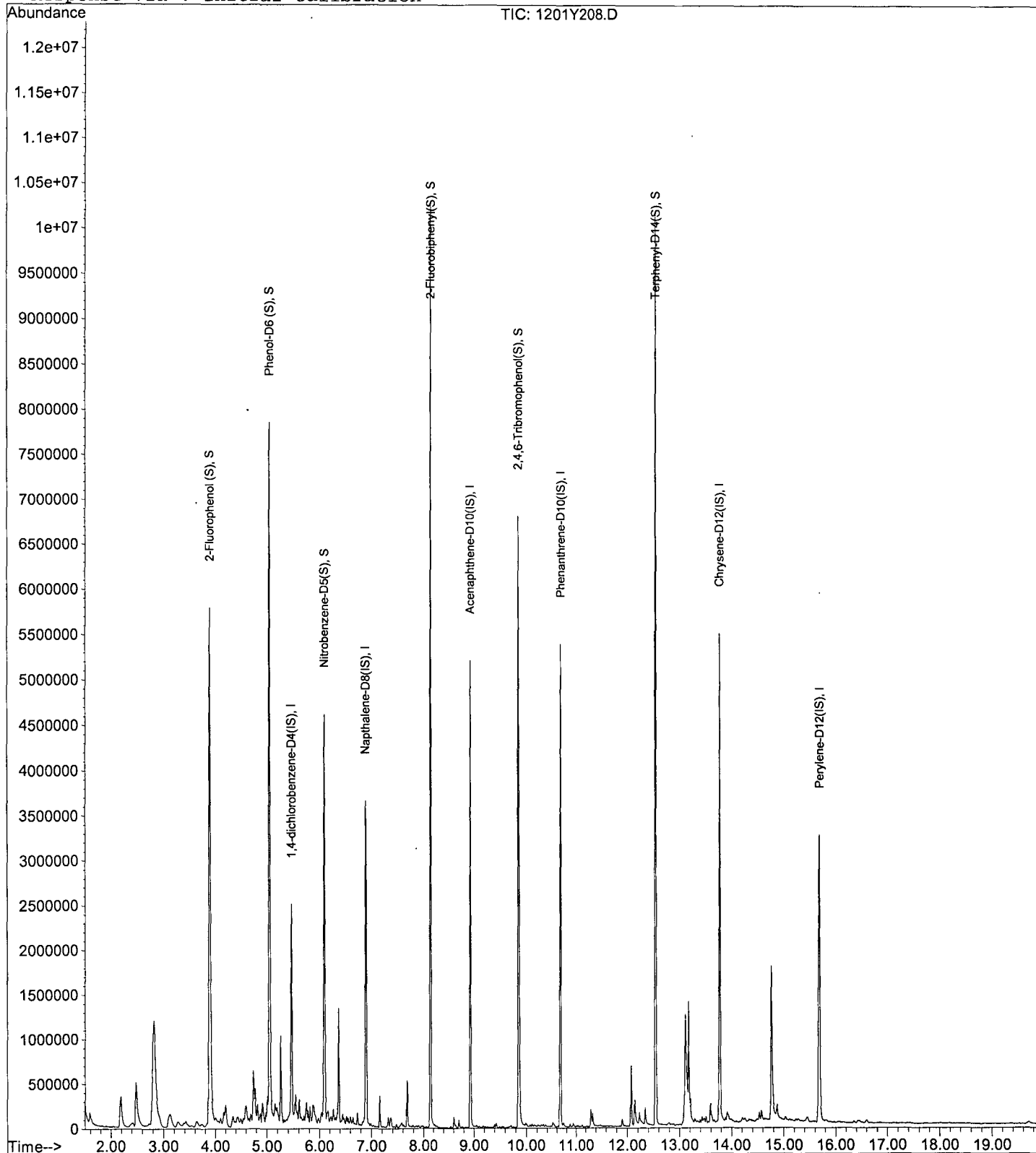
Data File : M:\YODA\DATA\Y181201\1201Y208.D  
Acq On : 20 Dec 18 14:52  
Sample : AZ84062W07 1/800  
Misc :

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 15:03 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 20 Dec 18 14:52  
Data File: M:\YODA\DATA\Y181201\1201Y208.D  
Name: AZ84062W07 1/800  
Misc:  
Method: M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.19	14.5	ppb	961781	ISTD01	5.47	3324440	40.0
Ethene, tetrachloro-	2.82	78.2	ppb	5200550	ISTD01	5.47	3324440	40.0
Hexanedioic acid, di	13.18	11.0	ppb	1608380	ISTD05	13.78	7288350	40.0

1201Y208.D Y1201NC.M Wed Jan 09 12:55:35 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y181201\1201Y208.D  
 Acq On : 20 Dec 18 14:52  
 Sample : AZ84062W07 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs : 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

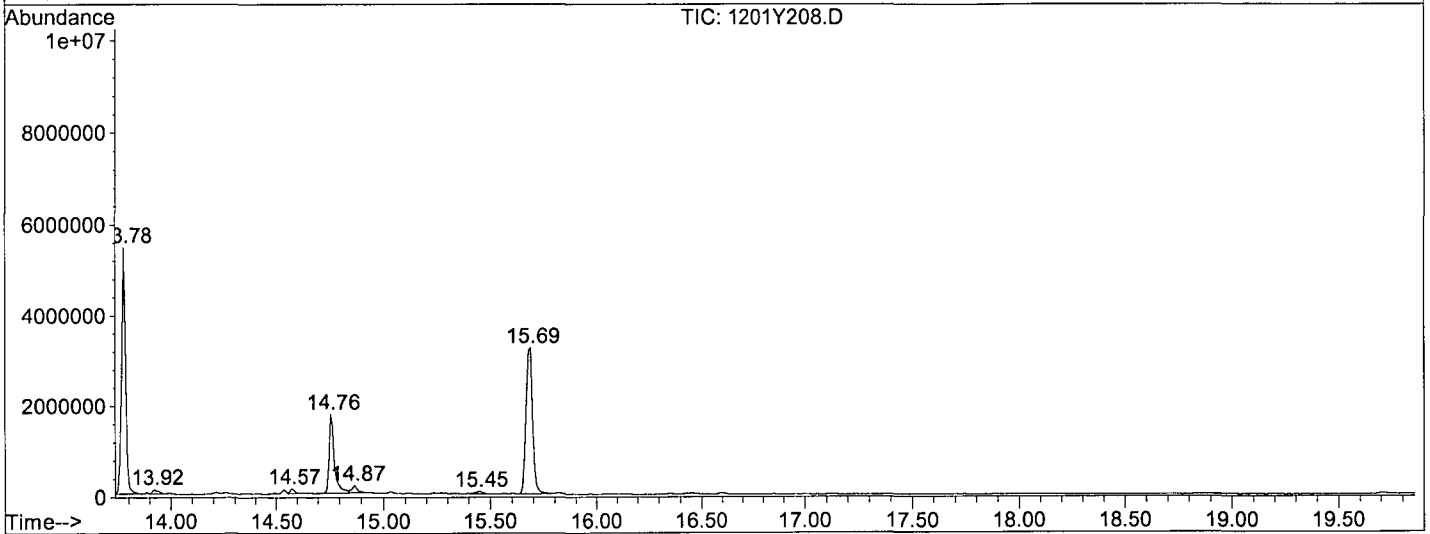
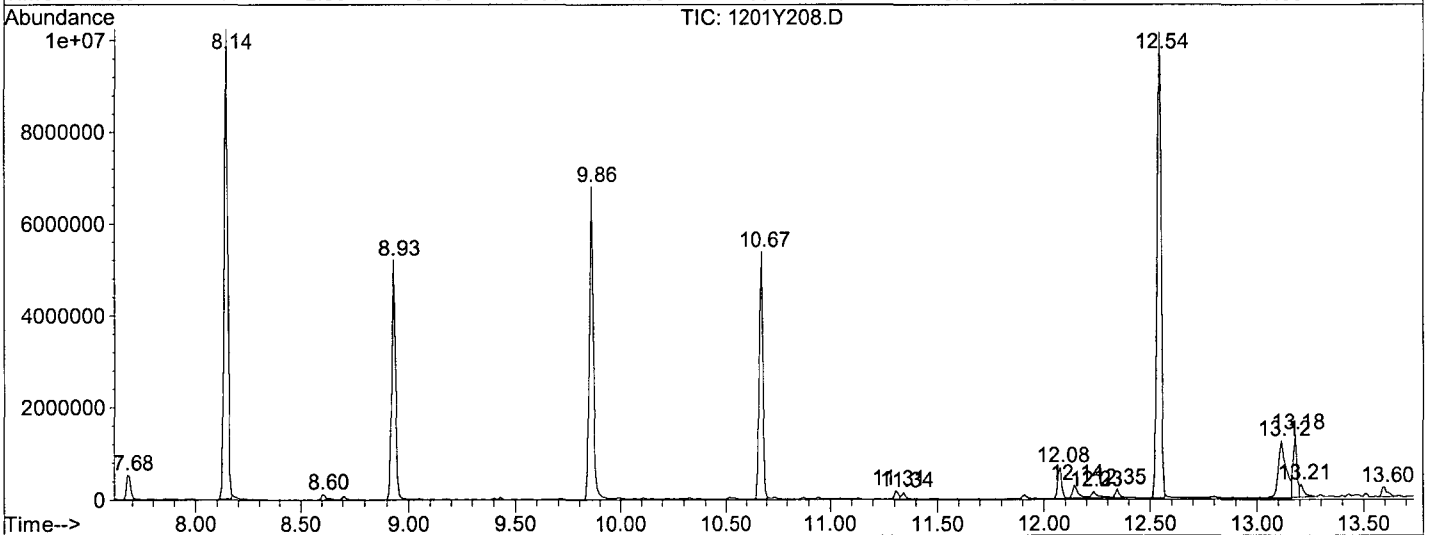
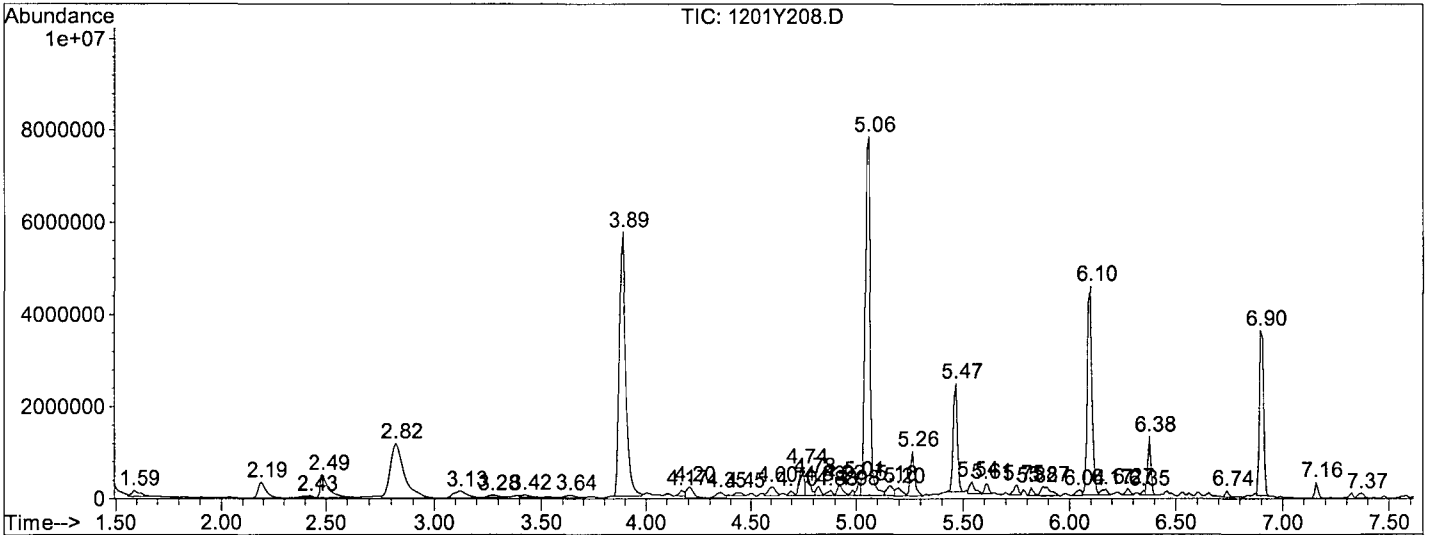
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.586	8	11	23	rVB3	137900	2158051	385212	2.89%	0.286%
2	2.189	70	76	89	rBV	344674	2831273	961781	7.22%	0.713%
3	2.431	91	102	104	rBV3	44705	1473753	175338	1.32%	0.130%
4	2.486	104	108	125	rVV	485058	3488816	1347370	10.12%	0.999%
5	2.821	137	144	167	rVB	1191344	8631813	5200548	39.06%	3.857%
6	3.127	169	177	187	rBV3	145963	2427151	654359	4.91%	0.485%
7	3.275	187	193	200	rBV4	56702	1517682	221938	1.67%	0.165%
8	3.424	206	209	217	rVB	57342	1358971	153036	1.15%	0.113%
9	3.637	226	232	237	rBV3	61134	1298091	203055	1.53%	0.151%
10	3.888	254	259	269	rBV	5730717	14142139	12392736	93.08%	9.190%
11	4.167	285	289	291	rBV3	125723	896074	229322	1.72%	0.170%
12	4.204	291	293	303	rVB	242476	2293979	490646	3.69%	0.364%
13	4.352	303	309	312	rBV	117422	1235362	329215	2.47%	0.244%
14	4.445	315	319	322	rVV3	70463	1036264	187830	1.41%	0.139%
15	4.603	332	336	340	rVV2	193125	1476277	495607	3.72%	0.368%
16	4.696	344	346	348	rVV	101347	655805	147486	1.11%	0.109%
17	4.742	348	351	353	rVV	582153	1543000	923511	6.94%	0.685%
18	4.779	353	355	358	rVV2	381228	1591111	600850	4.51%	0.446%
19	4.826	358	360	362	rVV2	206593	917265	286192	2.15%	0.212%
20	4.881	362	366	368	rVV2	110723	924660	200630	1.51%	0.149%
21	4.919	368	370	375	rVV2	225858	1412476	432749	3.25%	0.321%
22	4.984	375	377	378	rVV	119436	517339	138347	1.04%	0.103%
23	5.011	378	380	381	rVV	302647	776751	347514	2.61%	0.258%
24	5.058	381	385	393	rVV	7789785	15585355	12681889	95.25%	9.405%
25	5.160	393	396	398	rVV	217019	1178046	456802	3.43%	0.339%
26	5.197	398	400	404	rVV4	171479	1270863	348556	2.62%	0.258%
27	5.262	404	407	412	rVB	970071	2445467	1351664	10.15%	1.002%
28	5.466	425	429	433	rVV	2356968	4496636	3324443	24.97%	2.465%
29	5.541	435	437	442	rVB2	269838	1664773	442366	3.32%	0.328%
30	5.606	442	444	447	rBV	218391	1007429	313571	2.36%	0.233%
31	5.754	456	460	462	rBV2	205852	1139036	356839	2.68%	0.265%
32	5.819	465	467	470	rBV	175086	814453	202828	1.52%	0.150%
33	5.875	470	473	482	rVB3	204834	2114467	642156	4.82%	0.476%
34	6.042	487	491	493	rBV2	115956	921653	240273	1.80%	0.178%
35	6.098	493	497	501	rVV	4538239	8211605	7071898	53.11%	5.244%
36	6.172	501	505	507	rVV2	125392	1070602	256770	1.93%	0.190%
37	6.274	513	516	519	rVV2	141869	940389	212054	1.59%	0.157%
38	6.348	522	524	525	rVV	102066	515027	133638	1.00%	0.099%
39	6.376	525	527	530	rVB	1275219	2527896	1294571	9.72%	0.960%
40	6.738	564	566	569	rVB	138584	770044	160538	1.21%	0.119%
41	6.896	581	583	587	rVB	3589048	6877471	4808863	36.12%	3.566%
42	7.156	609	611	617	rBV	347829	1344790	381980	2.87%	0.283%
43	7.369	631	634	639	rVB	103503	1123472	199832	1.50%	0.148%
44	7.676	665	667	676	rVB	516731	1273303	546303	5.46%	0.539%
45	8.140	714	717	720	rBV	10210412	12452858	11383916	85.50%	8.442%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y181201\1201Y208.D  
 Operator : MA  
 Acquired : 20 Dec 18 14:52 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ84062W07 1/800  
 Misc Info :  
 Vial Number: 8  
 Quant File :Y1201NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y208.D  
 Acq On : 20 Dec 18 14:52  
 Sample : AZ84062W07 1/800  
 Misc :

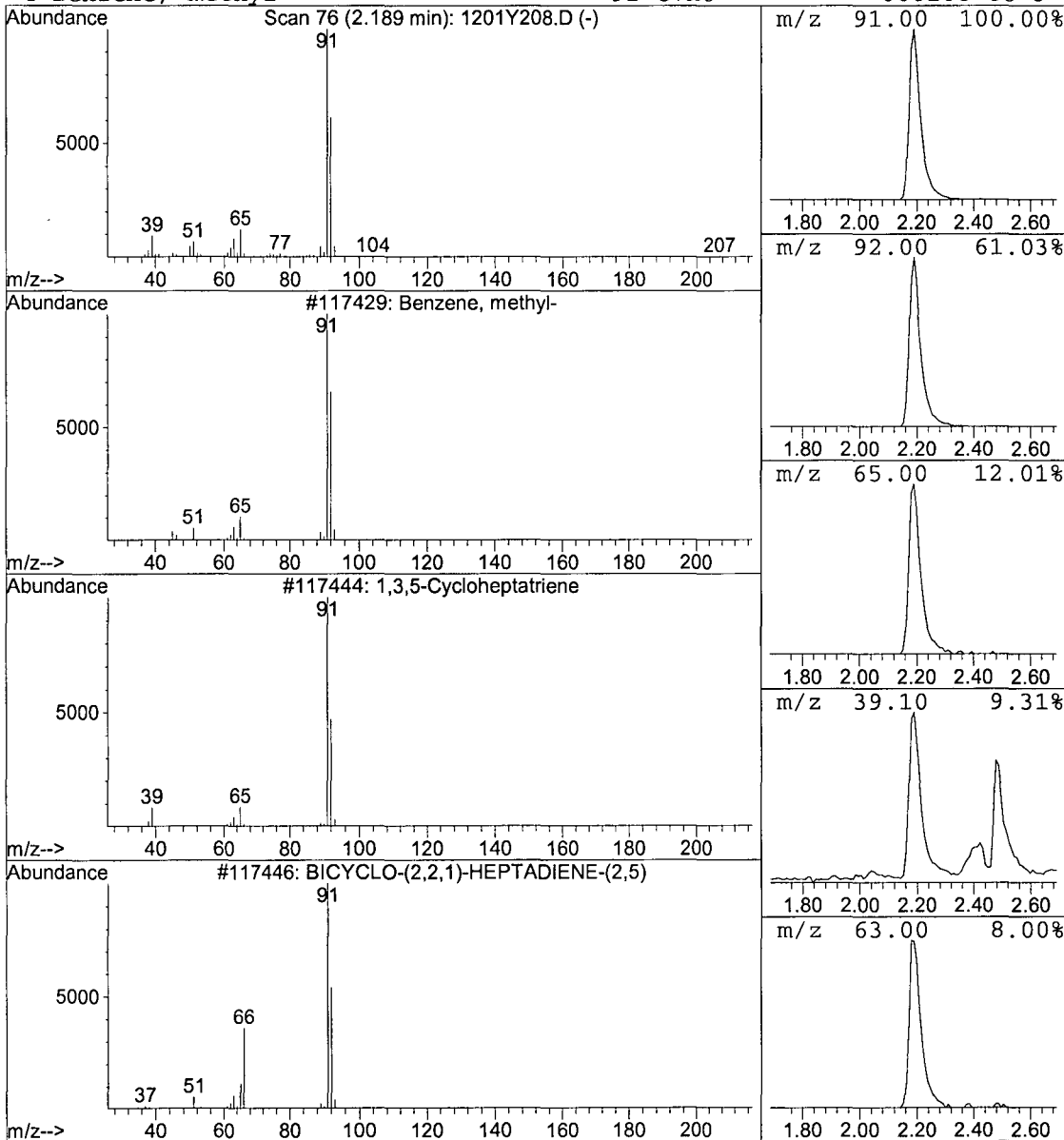
Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzene, methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.19	14.47 ppb	961781	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzene, methyl-	92	C7H8	000108-88-3	94
2		1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91
3		BICYCLO-(2,2,1)-HEPTADIENE-(2,5)	92	C7H8	000121-46-0	91
4		Benzene, methyl-	92	C7H8	000108-88-3	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y208.D  
 Acq On : 20 Dec 18 14:52  
 Sample : AZ84062W07 1/800  
 Misc :

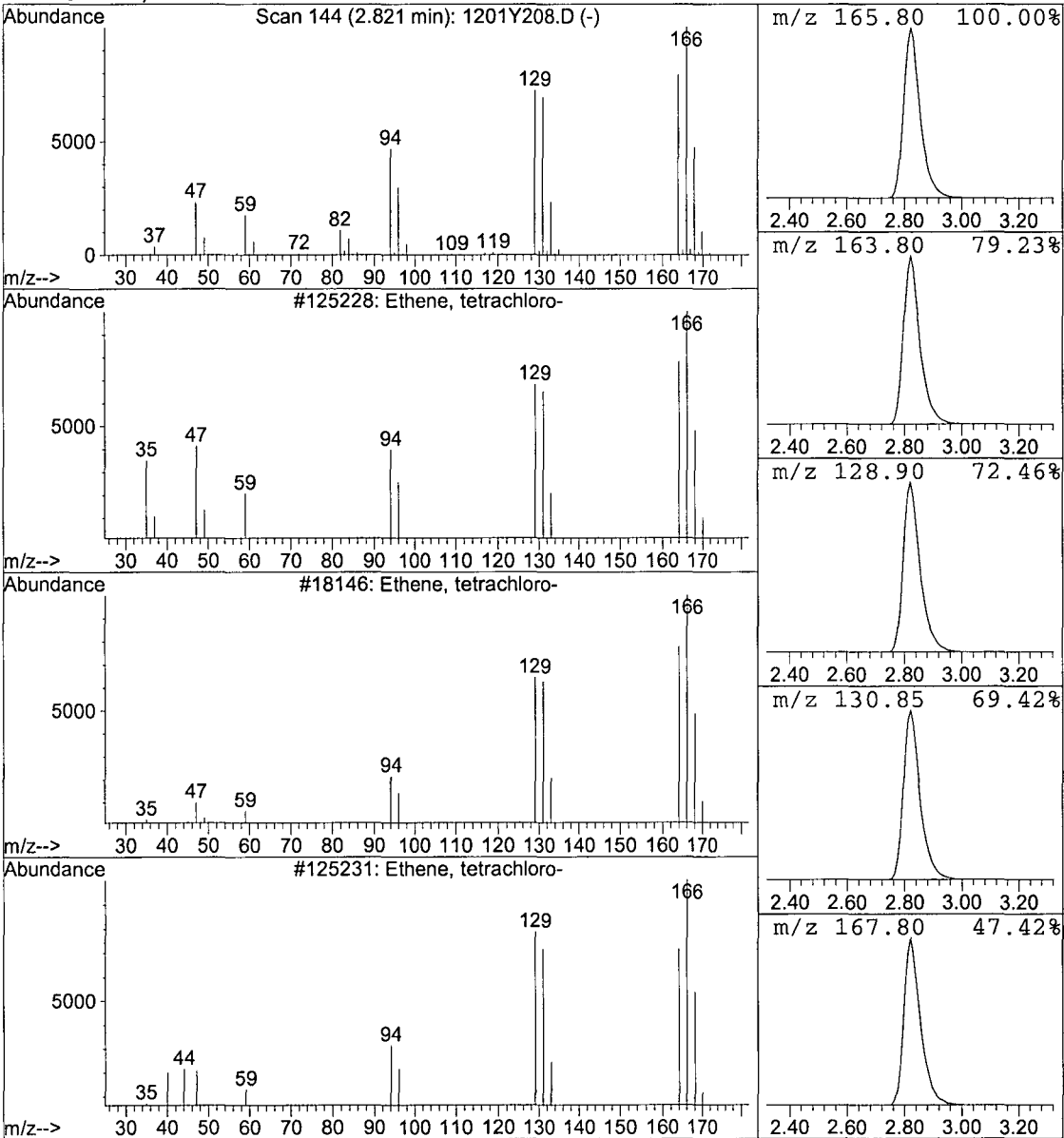
Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Ethene, tetrachloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	78.22 ppb	5200550	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96
3		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94
4		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94





Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y208.D  
 Acq On : 20 Dec 18 14:52  
 Sample : AZ84062W07 1/800  
 Misc :

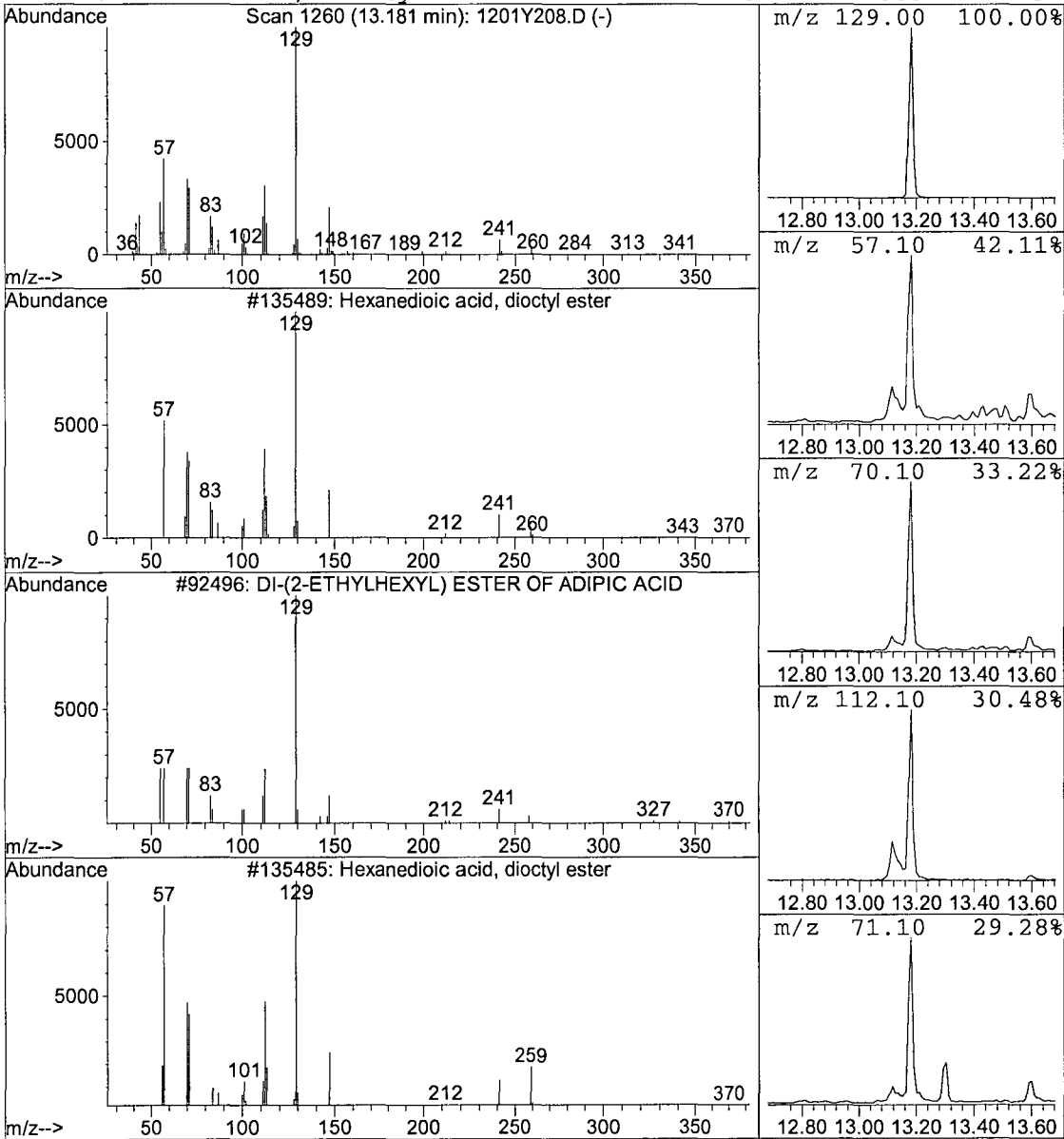
Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Hexanedioic acid, dioctyl este Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.18	11.03 ppb	1608380	Chrysene-D12 (IS)	13.78

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	78
2		DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	72
3		Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	50
4		Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	50



Data File : M:\YODA\DATA\Y181201\1201Y194.D  
 Acq On : 20 Dec 18 8:21  
 Sample : 181217A BLK 1/800  
 Misc :

Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 10:39 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	459695	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2608240	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1378161	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2551518	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2364657	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2411705	40.0000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.89	112	4173963	285.8632	ppb	0.00
Spiked Amount	250.000					
					Recovery = 114.345%	
6) Phenol-D6 (S)	5.06	99	5277876	274.1022	ppb	0.00
Spiked Amount	250.000					
					Recovery = 109.641%	
22) Nitrobenzene-D5 (S)	6.10	82	2318914	101.0251	ppb	0.00
Spiked Amount	125.000					
					Recovery = 80.820%	
46) 2-Fluorobiphenyl (S)	8.14	172	4320219	96.0418	ppb	0.00
Spiked Amount	125.000					
					Recovery = 76.834%	
64) 2,4,6-Tribromophenol (S)	9.86	330	1007106	216.1737	ppb	0.00
Spiked Amount	250.000					
					Recovery = 86.470%	
82) Terphenyl-D14 (S)	12.54	244	4720110	94.9858	ppb	0.00
Spiked Amount	125.000					
					Recovery = 75.989%	

Target Compounds Qvalue

Quantitation Report

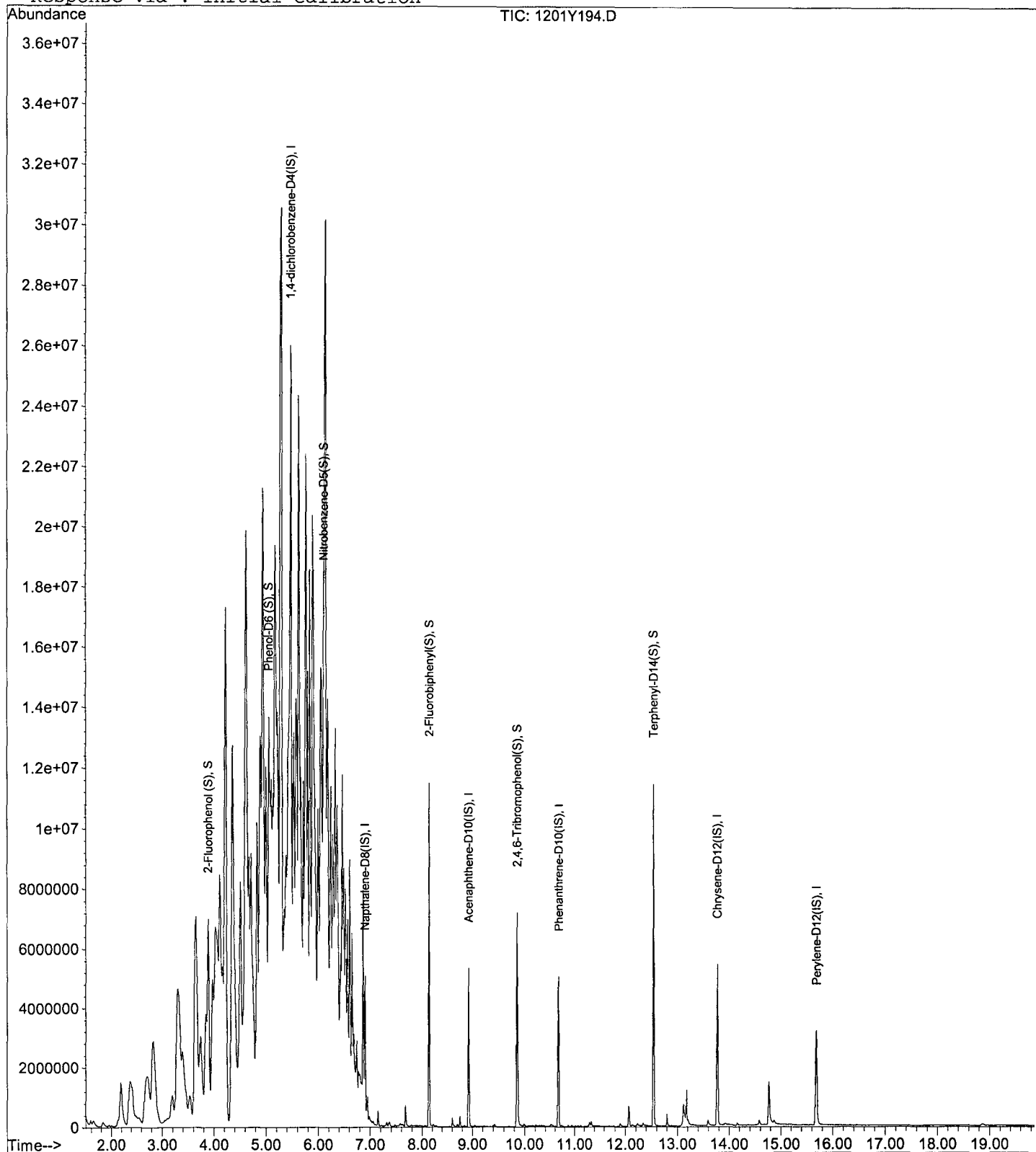
Data File : M:\YODA\DATA\Y181201\1201Y194.D  
Acq On : 20 Dec 18 8:21  
Sample : 181217A BLK 1/800  
Misc :

Vial: 94  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 10:39 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 20 Dec 18 8:21  
 Data File: M:\YODA\DATA\Y181201\1201Y194.D  
 Name: 181217A BLK 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Cyclohexane, 1,2,4-t	3.65	28.3	ppb	26170200	ISTD01	5.48	46260300	40.0
Nonane	4.22	53.9	ppb	49882900	ISTD01	5.48	46260300	40.0
Decane	5.30	71.7	ppb	66376600	ISTD01	5.48	46260300	40.0
Decane, 3-methyl-	5.89	50.4	ppb	46606400	ISTD01	5.48	46260300	40.0

1201Y194.D Y1201NC.M Wed Jan 09 09:35:11 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y181201\1201Y194.D  
 Acq On : 20 Dec 18 8:21  
 Sample : 181217A BLK 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

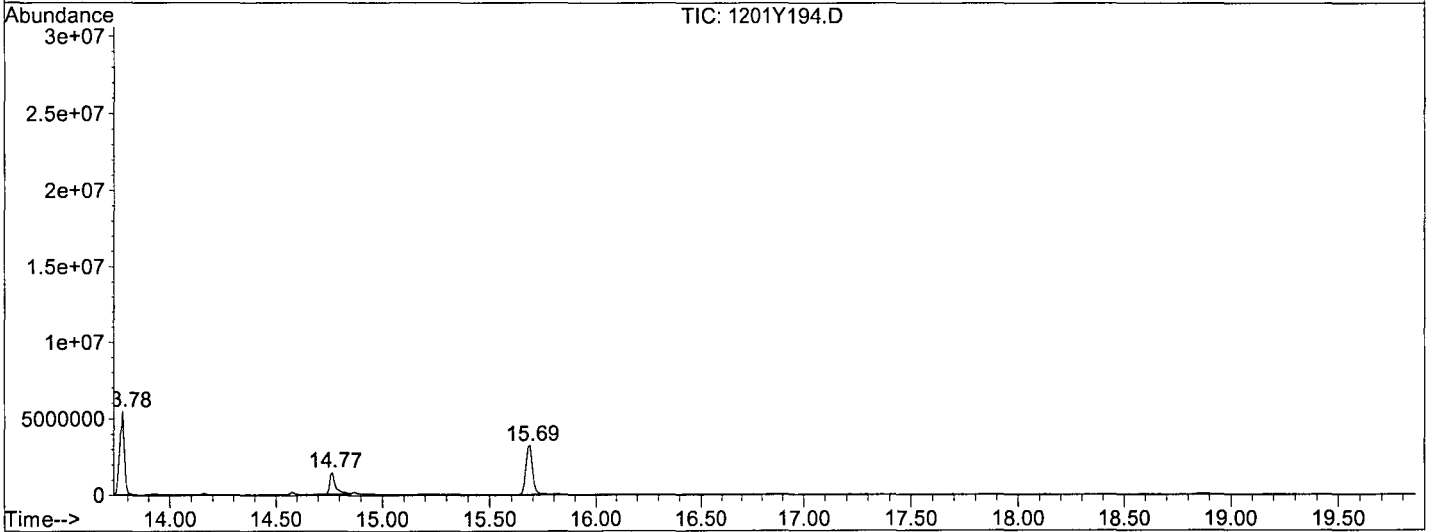
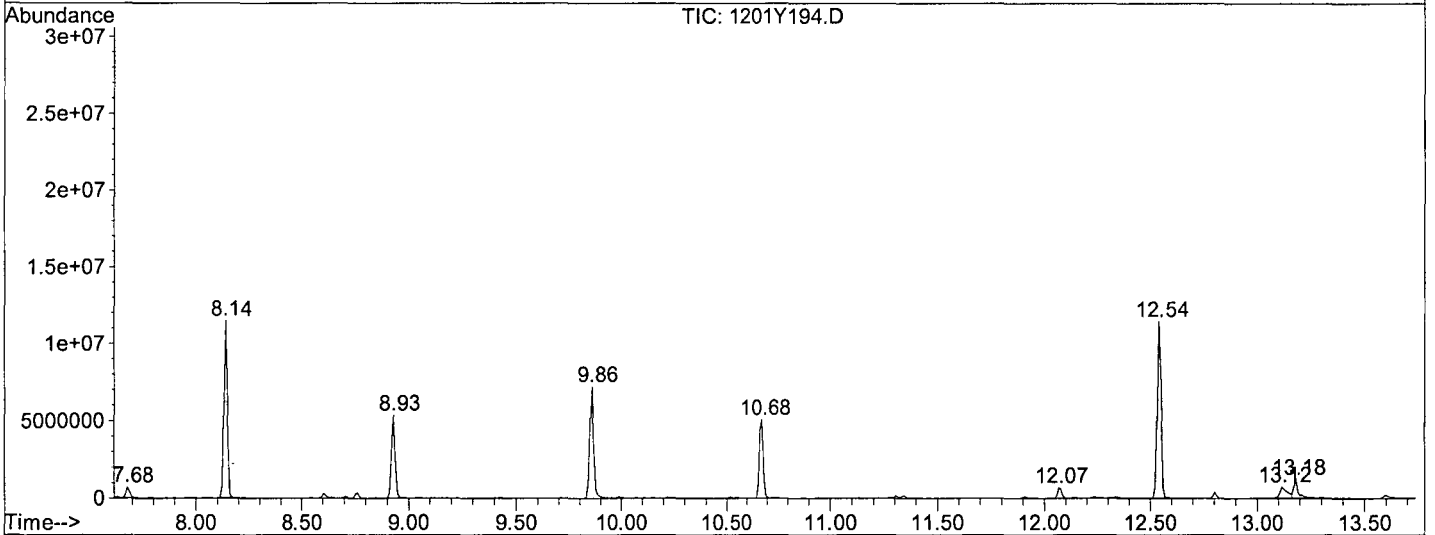
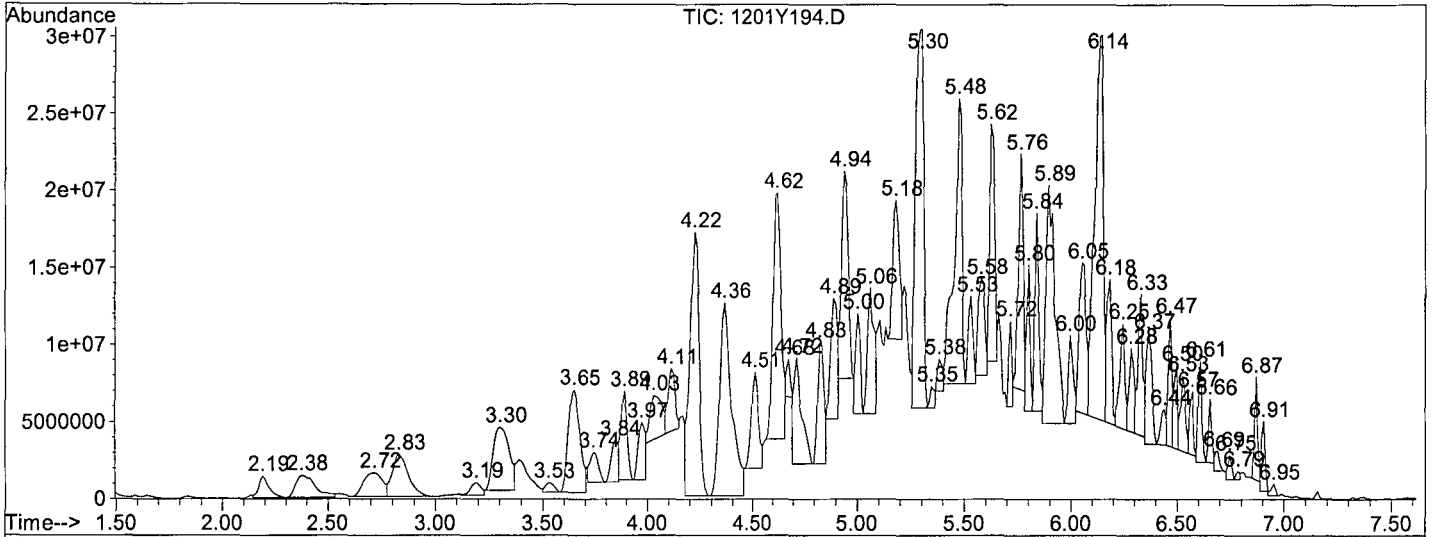
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.190	71	76	88	rVB	1402321	8095444	4673920	6.48%	0.464%
2	2.376	88	96	113	rBV4	1447598	13465885	9563841	13.26%	0.949%
3	2.719	121	133	139	rBV6	1534278	12730708	9642113	13.37%	0.957%
4	2.831	139	145	163	rVB2	2720031	24415581	14059632	19.50%	1.395%
5	3.193	171	184	188	rBV2	834843	6474697	3128300	4.34%	0.310%
6	3.304	188	196	203	rBV5	4074924	25884720	21236842	29.45%	2.107%
7	3.527	217	220	226	rVB2	635050	4853507	1829851	2.54%	0.182%
8	3.647	226	233	239	rBV2	6658767	30066631	26170171	36.29%	2.597%
9	3.740	240	243	249	rVB2	1926152	12432290	5374517	7.45%	0.533%
10	3.842	249	254	256	rBV	2695516	10138587	6880684	9.54%	0.683%
11	3.889	256	259	264	rVB	5754435	22852207	11840048	16.42%	1.175%
12	3.972	264	268	270	rBV	3724095	13097231	9004496	12.49%	0.894%
13	4.028	270	274	280	rVV4	2919352	25096362	11617068	16.11%	1.153%
14	4.112	280	283	287	rVV	4090002	22396932	9368995	12.99%	0.930%
15	4.223	290	295	302	rVB	17083811	69444333	49882862	69.18%	4.950%
16	4.362	302	310	320	rBV2	12511098	53744638	50326790	69.79%	4.994%
17	4.511	320	326	330	rBV2	6249020	22529018	15637251	21.68%	1.552%
18	4.622	332	338	342	rBV3	15975567	58621676	45737177	63.43%	4.538%
19	4.678	342	344	346	rVB	2403977	13049646	2984384	4.14%	0.296%
20	4.715	346	348	356	rVB3	6876726	41336811	17671813	24.51%	1.754%
21	4.826	356	360	363	rBV2	7897291	22268425	16870607	23.40%	1.674%
22	4.891	363	367	369	rBV3	7821854	29417330	17826622	24.72%	1.769%
23	4.938	369	372	377	rVB3	13424860	55464028	28247379	39.17%	2.803%
24	5.003	377	379	382	rVB	6455009	24085064	9343471	12.96%	0.927%
25	5.059	382	385	388	rBV2	8100760	31571270	18121228	25.13%	1.798%
26	5.179	394	398	401	rBV2	8973526	41899764	19891085	27.58%	1.974%
27	5.300	406	411	414	rVB3	24621966	102069717	66376569	92.05%	6.587%
28	5.346	414	416	418	rBV2	1400717	9966820	2325076	3.22%	0.231%
29	5.383	418	420	422	rBV3	2070496	13498486	3627088	5.03%	0.360%
30	5.476	422	430	433	rVB2	18506894	75969588	46260347	64.15%	4.590%
31	5.532	433	436	438	rBV3	5651826	22766864	8786217	12.18%	0.872%
32	5.578	438	441	444	rBV4	6234687	32200864	13754820	19.07%	1.365%
33	5.625	444	446	449	rBV3	15403414	46663783	25034298	34.72%	2.484%
34	5.718	454	456	457	rBV	5514413	14402312	5982553	8.30%	0.594%
35	5.764	457	461	463	rVV3	15174779	38478572	24077832	33.39%	2.389%
36	5.801	463	465	467	rVB	9418475	23549023	10085168	13.99%	1.001%
37	5.838	467	469	472	rBV	12794072	34643912	16541682	22.94%	1.641%
38	5.894	472	475	483	rVB3	15438441	78491272	46606364	64.63%	4.625%
39	5.996	483	486	489	rBV3	5714247	20365469	10336284	14.33%	1.026%
40	6.052	489	492	495	rVV2	9704201	40315402	23112871	32.05%	2.293%
41	6.145	495	502	504	rVV3	24947048	100229593	72111034	100.00%	7.156%
42	6.182	504	506	509	rVV2	9370600	32572119	13888747	19.26%	1.378%
43	6.247	509	513	515	rVV2	6783820	23609087	11797746	16.36%	1.171%
44	6.284	515	517	519	rVV3	5437408	25323173	12870223	12.23%	0.875%
45	6.330	519	522	524	rVV3	9153329	25323173	14604361	20.25%	1.449%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y181201\1201Y194.D  
 Operator : MA  
 Acquired : 20 Dec 18 8:21 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: 181217A BLK 1/800  
 Misc Info :  
 Vial Number: 94  
 Quant File : Y1201NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y194.D  
 Acq On : 20 Dec 18 8:21  
 Sample : 181217A BLK 1/800  
 Misc :

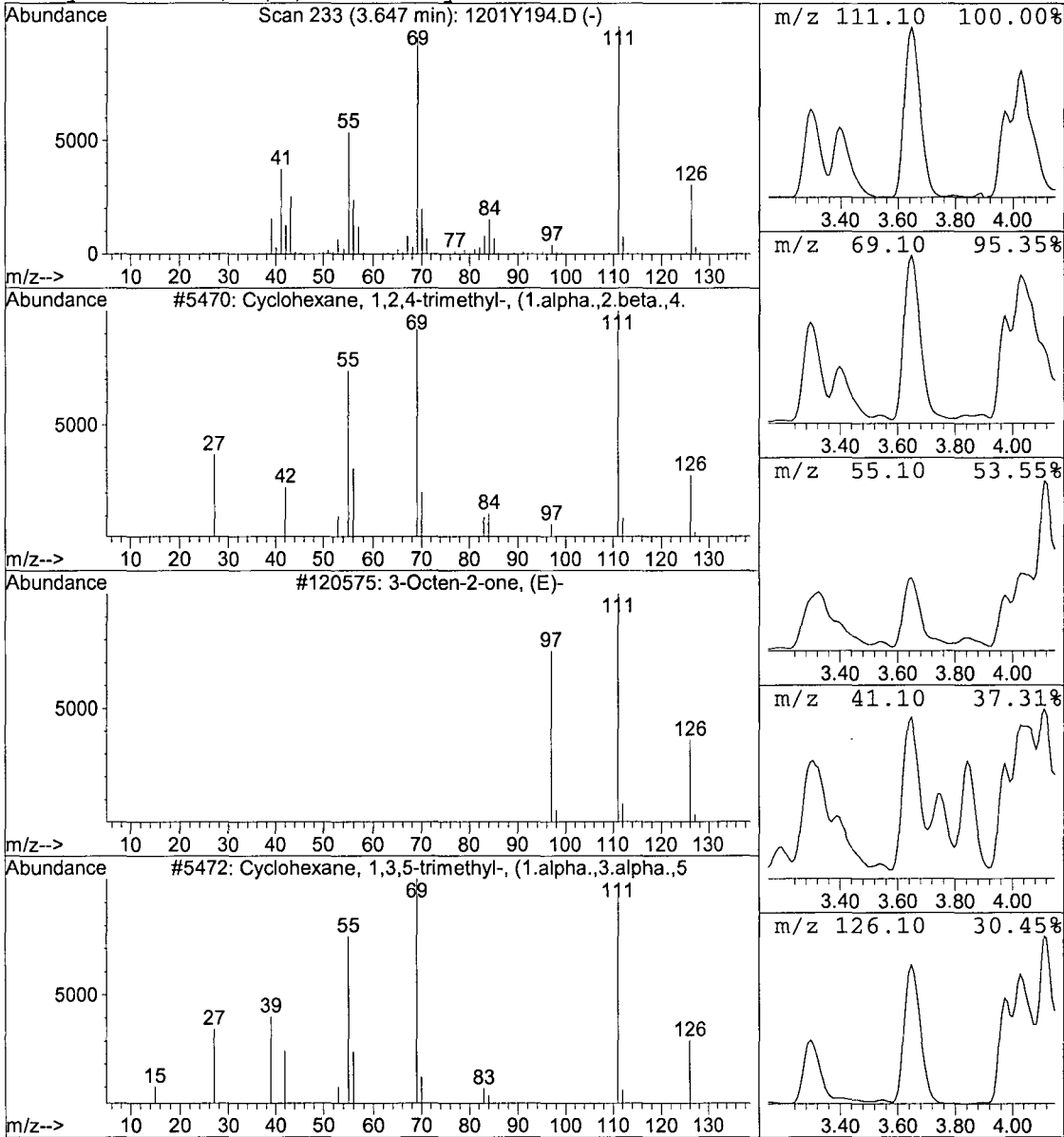
Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Cyclohexane, 1,2,4-trimethyl-, Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.65	28.29 ppb	26170200	1,4-dichlorobenzene-D4 (IS)	5.48

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, 1,2,4-trimethyl-, (1.a	126	C9H18	007667-60-9	86
2			3-Octen-2-one, (E)-	126	C8H14O	018402-82-9	83
3			Cyclohexane, 1,3,5-trimethyl-, (1.a	126	C9H18	001795-26-2	74
4			Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	72



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y194.D  
 Acq On : 20 Dec 18 8:21  
 Sample : 181217A BLK 1/800  
 Misc :

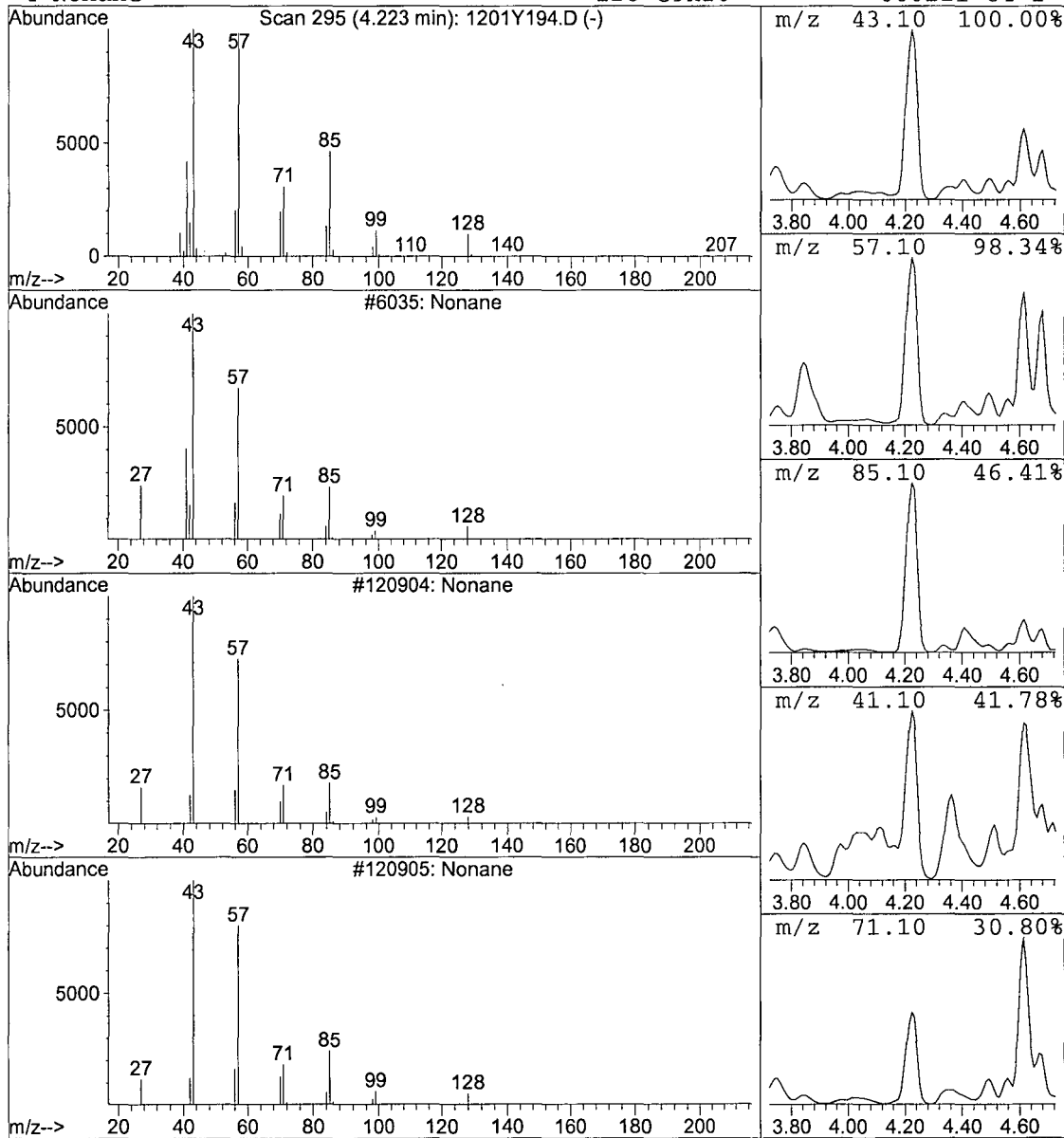
Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Nonane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.22	53.92 ppb	49882900	1,4-dichlorobenzene-D4 (IS)	5.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Nonane	128	C9H20	000111-84-2	95
2		Nonane	128	C9H20	000111-84-2	94
3		Nonane	128	C9H20	000111-84-2	91
4		Nonane	128	C9H20	000111-84-2	64





Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y194.D  
 Acq On : 20 Dec 18 8:21  
 Sample : 181217A BLK 1/800  
 Misc :

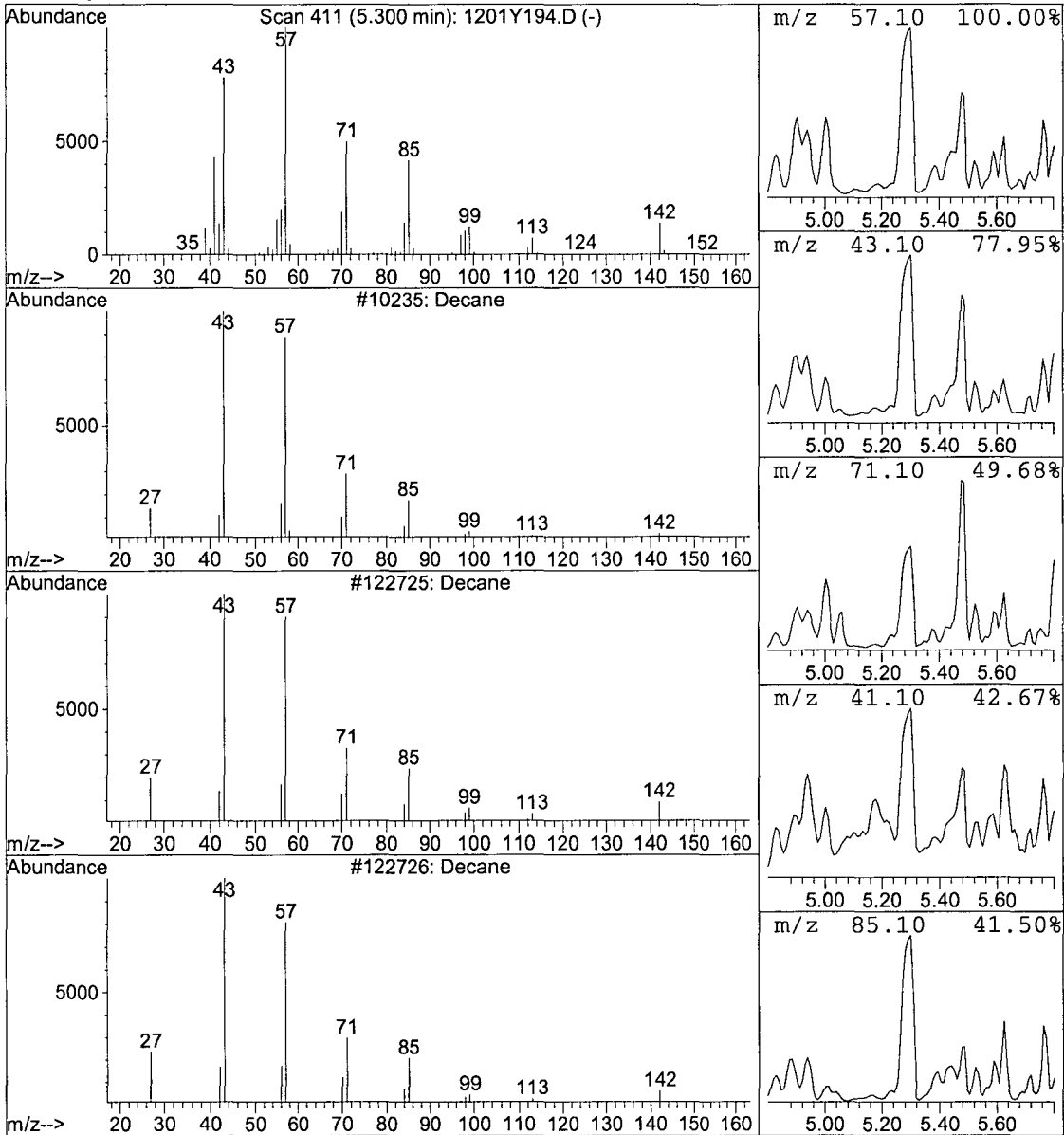
Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Decane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.30	71.74 ppb	66376600	1,4-dichlorobenzene-D4 (IS)	5.48

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane			142	C10H22	000124-18-5	95
2	Decane			142	C10H22	000124-18-5	95
3	Decane			142	C10H22	000124-18-5	94
4	Decane			142	C10H22	000124-18-5	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y181201\1201Y194.D  
 Acq On : 20 Dec 18 8:21  
 Sample : 181217A BLK 1/800  
 Misc :

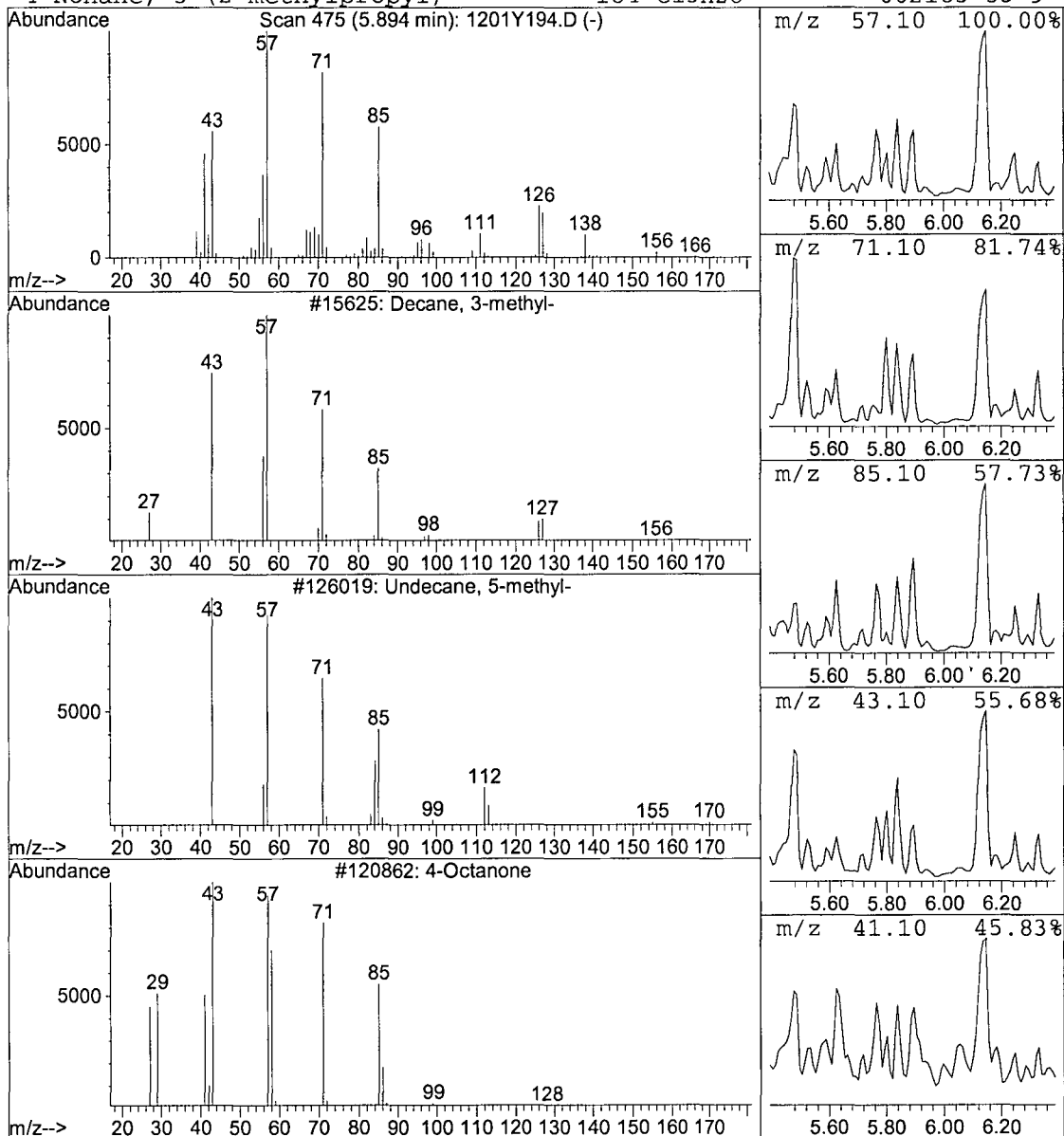
Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Decane, 3-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.89	50.37 ppb	46606400	1,4-dichlorobenzene-D4 (IS)	5.48

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Decane, 3-methyl-	156	C11H24	013151-34-3	93
2			Undecane, 5-methyl-	170	C12H26	001632-70-8	50
3			4-Octanone	128	C8H16O	000589-63-9	49
4			Nonane, 5-(2-methylpropyl)-	184	C13H28	062185-53-9	47



Data File : M:\YODA\DATA\Y181201\1201Y202.D  
 Acq On : 20 Dec 18 12:06  
 Sample : 181217A LCS-1 1/800  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 12:13 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	446755	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2340444	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1203330	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2227722	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	1909807	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2096062	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	3973897	280.0442	ppb	0.00
Spiked Amount	250.000					
						Recovery = 112.018%
6) Phenol-D6 (S)	5.07	99	4931872	263.5515	ppb	0.00
Spiked Amount	250.000					
						Recovery = 105.421%
22) Nitrobenzene-D5 (S)	6.11	82	2322289	112.7484	ppb	0.00
Spiked Amount	125.000					
						Recovery = 90.198%
46) 2-Fluorobiphenyl (S)	8.15	172	4216229	107.3480	ppb	0.00
Spiked Amount	125.000					
						Recovery = 85.878%
64) 2,4,6-Tribromophenol (S)	9.87	330	1006985	247.5517	ppb	0.00
Spiked Amount	250.000					
						Recovery = 99.021%
82) Terphenyl-D14 (S)	12.55	244	4594552	114.4796	ppb	0.00
Spiked Amount	125.000					
						Recovery = 91.584%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	10269	7.1619		87
3) n-Nitrosodimethylamine	1.97	42	185632	73.6296	ppb	79
4) Pyridine	1.98	79	280150	45.7287	ppb	96
7) Phenol	5.08	94	1500359	68.2969	ppb	98
8) Aniline	5.08	66	1230210	75.0061	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	613167	55.5271	ppb	90
10) 2-Chlorophenol	5.23	128	1022674	67.3586	ppb	96
11) 1,3-DCB	5.41	146	955690	60.9837	ppb	# 79
12) 1,4-DCB	5.50	146	936697	58.9912	ppb	97
13) Benzyl alcohol	5.63	108	650668	67.6318	ppb	94
14) 1,2-DCB	5.67	146	920703	61.8781	ppb	96
15) 2-Methylphenol	5.75	107	784301	64.0114	ppb	96
16) Bis (2-chloroisopropyl) et	5.78	45	900218	48.3547	ppb	88
17) Acetophenone	5.93	105	1328600	67.6283	ppb	99
18) 3&4-Methylphenol	5.93	107	2073732	134.9757	ppb	99
19) n-Nitrosodi-n-propylamine	5.93	70	1001170	85.2829	ppb	88
20) Hexachloroethane	6.04	117	336945	54.8899	ppb	91
23) Nitrobenzene	6.13	77	862610	42.7441	ppb	88
24) Isophorone	6.39	82	2627220	72.8792	ppb	# 93
25) 2-Nitrophenol	6.48	139	667801	75.5116	ppb	94
26) 2,4-Dimethylphenol	6.52	122	1057086	64.2373	ppb	97
27) Benzoic acid	6.65	105	635579	68.4932	ppb	98
28) Bis (2-chloroethoxy) metha	6.63	93	1318149	58.2108	ppb	98
29) 2,4-Dichlorophenol	6.75	162	880648	63.6306	ppb	96
30) 1,2,4-Trichlorobenzene	6.84	180	876727	58.3617	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1398295	63.9227	ppb	97
32) Napthalene	6.93	128	3180127	60.1594	ppb	100
33) 4-Chloroaniline	7.00	127	1119868	54.8627	ppb	100
34) 2,6-Dichlorophenol	7.00	162	878998	64.8268	ppb	100
35) Hexachloropropene	7.03	213	433329	49.7760	ppb	98
36) Hexachlorobutadiene	7.05	225	427350	53.9417	ppb	99
37) Caprolactum	7.42	55	495998	64.0419	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y181201\1201Y202.D  
 Acq On : 20 Dec 18 12:06  
 Sample : 181217A LCS-1 1/800  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 12:13 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1023679	65.9781	ppb	92
39) 2-Methylnaphthalene	7.72	142	2062065	61.4972	ppb	99
40) 1-Methylnaphthalene	7.83	142	2058300	61.3170	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	135340	24.3159	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.92	216	883350	59.8695	ppb	100
44) 2,4,6-Trichlorophenol	8.06	196	640158	66.2940	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	676710	65.0209	ppb	93
47) 1,1'-Biphenyl	8.26	154	2624954	61.1755	ppb	99
48) 2-Chloronaphthalene	8.29	162	2024213	61.9700	ppb	99
49) 2-Nitroaniline	8.41	65	697697	63.5877	ppb	98
50) Dimethyl phthalate	8.61	163	2548060	68.5183	ppb	99
51) 2,6-DNT	8.70	165	547342	71.1766	ppb	97
52) Acenaphthylene	8.77	152	3112120	61.5428	ppb	100
53) 3-Nitroaniline	8.89	138	641291	68.6369	ppb	97
54) Acenaphthene	8.98	154	2041822	61.0888	ppb	99
55) 2,4-Dinitrophenol	9.02	184	222677	66.3622	ppb	95
56) 4-Nitrophenol	9.11	65	410738	60.6718	ppb	94
57) Dibenzofuran	9.17	168	2844094	62.0659	ppb	94
58) 2,4-DNT	9.17	165	719635	70.8825	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.32	232	515510	66.9807	ppb	99
60) Diethyl phthalate	9.44	149	2323965	64.7466	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	1103037	61.7891	ppb	99
62) Fluorene	9.58	166	2264816	61.1243	ppb	100
63) 4-Nitroaniline	9.62	138	616650	66.6773	ppb	87
66) 4,6-Dinitro-2-methylphenol	9.65	198	414316	67.4829	ppb	81
67) Diphenyl amine	9.72	169	3420561	116.5792	ppb	100
68) n-Nitrosodiphenylamine	9.72	169	3420561	116.5792	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2530071	56.9837	ppb	98
70) 4-Bromophenyl phenyl ether	10.14	248	637163	62.0507	ppb	97
71) Hexachlorobenzene	10.21	284	605447	61.6138	ppb	98
72) Atrazine	10.34	200	320557	32.2010	ppb	98
73) Pentachlorophenol	10.45	266	399142	67.2146	ppb	99
74) Phenanthrene	10.70	178	3379722	61.9205	ppb	100
75) Anthracene	10.77	178	3429094	61.1223	ppb	99
76) Carbazol	10.96	167	3147527	61.7686	ppb	98
77) Di-n-butylphthalate	11.35	149	3974594	66.9702	ppb	98
78) Fluoranthene	12.10	202	3651962	62.5919	ppb	# 94
80) Benzidine	12.27	184	101230	7.6897	ppb	95
81) Pyrene	12.37	202	3764510	66.5052	ppb	99
83) Butyl benzylphthalate	13.11	149	1720538	71.5701	ppb	97
84) 3,3'-Dichlorobenzidine	13.74	252	823585	51.6890	ppb	98
85) Benz (a) anthracene	13.77	228	3135227	63.9171	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	2541930	79.1074	ppb	98
87) Chrysene	13.82	228	3212854	65.0512	ppb	99
88) Di-n-octylphthalate	14.54	149	4172637	75.5423	ppb	99
90) Benzo (b) fluoranthene	15.12	252	3470756	62.0424	ppb	99
91) Benzo (k) fluoranthene	15.16	252	2966716	54.0001	ppb	99
92) Benzo (a) pyrene	15.60	252	3023319	58.6670	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.66	276	3153400	61.3843	ppb	98
94) Dibenz (a,h) anthracene	17.70	278	2883568	60.6443	ppb	100
95) Benzo (g,h,i) perylene	18.27	276	2812121	61.0419	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1201Y202.D Y1201NC.M Fri Dec 28 14:44:21 2018

Quantitation Report

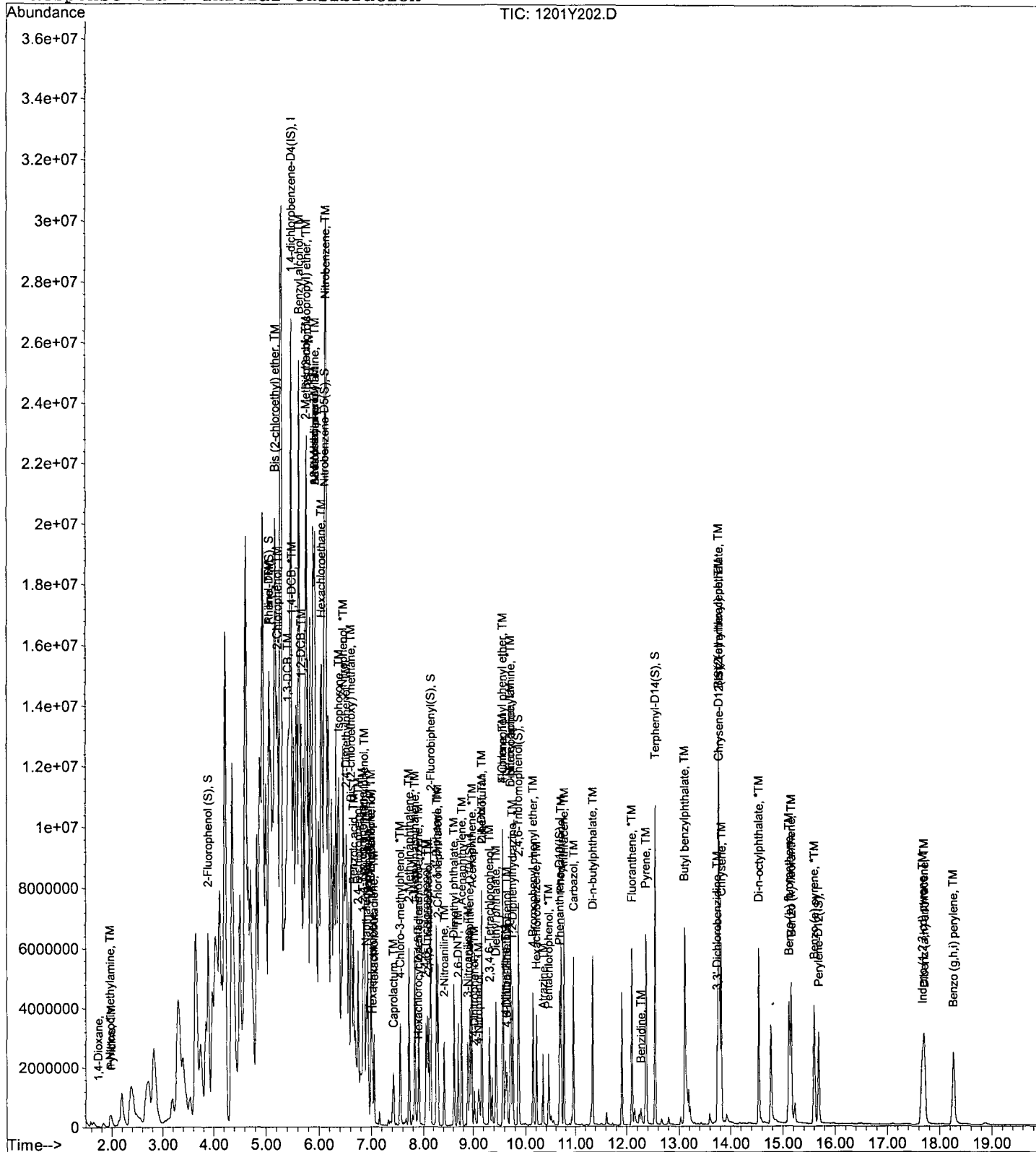
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Acq On : 20 Dec 18 12:06  
Sample : 181217A LCS-1 1/800  
Misc :

Vial: 2  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 12:13 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y196.D  
 Acq On : 20 Dec 18 9:17  
 Sample : 181217A LCSD-1 1/800  
 Misc :

Vial: 96  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 10:41 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	441349	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.91	136	2471804	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1304320	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2417389	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.79	240	2105748	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2275578	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	4004874	285.6841	ppb	0.00
Spiked Amount	250.000		Recovery	=	114.274%	
6) Phenol-D6 (S)	5.06	99	5052633	273.3121	ppb	0.00
Spiked Amount	250.000		Recovery	=	109.325%	
22) Nitrobenzene-D5 (S)	6.10	82	2421248	111.3057	ppb	0.00
Spiked Amount	125.000		Recovery	=	89.045%	
46) 2-Fluorobiphenyl (S)	8.14	172	4295275	100.8931	ppb	0.00
Spiked Amount	125.000		Recovery	=	80.714%	
64) 2,4,6-Tribromophenol (S)	9.87	330	1033969	234.5044	ppb	0.00
Spiked Amount	250.000		Recovery	=	93.802%	
82) Terphenyl-D14 (S)	12.54	244	4649070	105.0592	ppb	0.00
Spiked Amount	125.000		Recovery	=	84.047%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	9486	6.6968		95
3) n-Nitrosodimethylamine	1.96	42	183536	73.6900	ppb	94
4) Pyridine	1.98	79	284861	47.0672	ppb	99
7) Phenol	5.08	94	1532196	70.6004	ppb	99
8) Aniline	5.08	66	1228059	75.7289	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	629407	57.6959	ppb	# 86
10) 2-Chlorophenol	5.24	128	1035961	69.0696	ppb	94
11) 1,3-DCB	5.41	146	977538	63.1419	ppb	# 70
12) 1,4-DCB	5.50	146	947770	60.4197	ppb	92
13) Benzyl alcohol	5.64	108	662456	69.7004	ppb	95
14) 1,2-DCB	5.66	146	939300	63.9012	ppb	# 88
15) 2-Methylphenol	5.76	107	796938	65.8395	ppb	97
16) Bis (2-chloroisopropyl) et	5.78	45	915180	49.7605	ppb	# 80
17) Acetophenone	5.93	105	1339019	68.9935	ppb	98
18) 3&4-Methylphenol	5.93	107	2142243	141.1429	ppb	98
19) n-Nitrosodi-n-propylamine	5.93	70	1105400	95.3149	ppb	84
20) Hexachloroethane	6.04	117	341338	56.2866	ppb	95
23) Nitrobenzene	6.12	77	893828	41.9373	ppb	98
24) Isophorone	6.39	82	2670214	70.1354	ppb	# 96
25) 2-Nitrophenol	6.48	139	678858	72.6825	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1086730	62.5292	ppb	98
27) Benzoic acid	6.66	105	588651	60.0648	ppb	95
28) Bis (2-chloroethoxy) metha	6.62	93	1365975	57.1171	ppb	96
29) 2,4-Dichlorophenol	6.75	162	900751	61.6244	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	891404	56.1853	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1451559	62.8312	ppb	94
32) Napthalene	6.94	128	3257206	58.3429	ppb	99
33) 4-Chloroaniline	6.99	127	1107534	51.3750	ppb	97
34) 2,6-Dichlorophenol	7.00	162	894459	62.4614	ppb	98
35) Hexachloropropene	7.02	213	436330	47.4571	ppb	98
36) Hexachlorobutadiene	7.06	225	435584	52.0592	ppb	99
37) Caprolactum	7.42	55	503550	61.5617	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y181201\1201Y196.D  
 Acq On : 20 Dec 18 9:17  
 Sample : 181217A LCSD-1 1/800  
 Misc :

Vial: 96  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 10:41 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1044840	63.7632	ppb	96
39) 2-Methylnaphthalene	7.72	142	2129837	60.1428	ppb	99
40) 1-Methylnaphthalene	7.84	142	2106870	59.4284	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	131029	22.4557	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	895884	56.0177	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	646069	61.7257	ppb	97
45) 2,4,5-Trichlorophenol	8.11	196	694240	61.5404	ppb	98
47) 1,1'-Biphenyl	8.26	154	2664433	57.2877	ppb	97
48) 2-Chloronaphthalene	8.29	162	2074183	58.5832	ppb	96
49) 2-Nitroaniline	8.41	65	702225	59.0450	ppb	88
50) Dimethyl phthalate	8.62	163	2601127	64.5297	ppb	99
51) 2,6-DNT	8.70	165	554617	66.5384	ppb	83
52) Acenaphthylene	8.77	152	3184360	58.0957	ppb	100
53) 3-Nitroaniline	8.89	138	641807	63.3735	ppb	90
54) Acenaphthene	8.97	154	2056959	56.7767	ppb	99
55) 2,4-Dinitrophenol	9.02	184	218824	61.8648	ppb	95
56) 4-Nitrophenol	9.10	65	389577	53.0903	ppb	99
57) Dibenzofuran	9.17	168	2897303	58.3316	ppb	97
58) 2,4-DNT	9.16	165	723697	65.7633	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.32	232	529677	63.4928	ppb	94
60) Diethyl phthalate	9.44	149	2381872	61.2218	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	1121586	57.9636	ppb	93
62) Fluorene	9.57	166	2297930	57.2161	ppb	100
63) 4-Nitroaniline	9.62	138	667758	66.6130	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.65	198	402512	60.4165	ppb	92
67) Diphenyl amine	9.72	169	3502733	110.0133	ppb	100
68) n-Nitrosodiphenylamine	9.72	169	3502733	110.0133	ppb	100
69) 1,2-Diphenylhydrazine	9.76	77	2611082	54.1942	ppb	93
70) 4-Bromophenyl phenyl ether	10.15	248	642612	57.6712	ppb	89
71) Hexachlorobenzene	10.21	284	626926	58.7939	ppb	91
72) Atrazine	10.34	200	330558	30.6003	ppb	99
73) Pentachlorophenol	10.45	266	393762	61.1061	ppb	99
74) Phenanthrene	10.71	178	3423900	57.8082	ppb	99
75) Anthracene	10.76	178	3489479	57.3185	ppb	99
76) Carbazol	10.96	167	3231436	58.4398	ppb	99
77) Di-n-butylphthalate	11.35	149	4055252	62.9682	ppb	99
78) Fluoranthene	12.10	202	3693660	58.3396	ppb	97
80) Benzidine	12.27	184	12699	1.8586	ppb #	86
81) Pyrene	12.37	202	3830883	61.3804	ppb	99
83) Butyl benzylphthalate	13.11	149	1772938	66.8874	ppb	92
84) 3,3'-Dichlorobenzidine	13.74	252	861873	49.0587	ppb	100
85) Benz (a) anthracene	13.77	228	3346184	61.8702	ppb	100
86) Bis (2-ethylhexyl) phthala	13.76	149	2684530	75.7713	ppb #	95
87) Chrysene	13.82	228	3204418	58.8433	ppb	99
88) Di-n-octylphthalate	14.54	149	4278869	70.2573	ppb	96
90) Benzo (b) fluoranthene	15.11	252	3405836	56.0790	ppb	99
91) Benzo (k) fluoranthene	15.15	252	3329839	55.8282	ppb	100
92) Benzo (a) pyrene	15.60	252	3142527	56.1696	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.66	276	3296823	59.1135	ppb	99
94) Dibenz (a,h) anthracene	17.70	278	3008965	58.2894	ppb	99
95) Benzo (g,h,i) perylene	18.26	276	2940244	58.7882	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1201Y196.D Y1201NC.M Fri Dec 28 14:44:13 2018

Quantitation Report

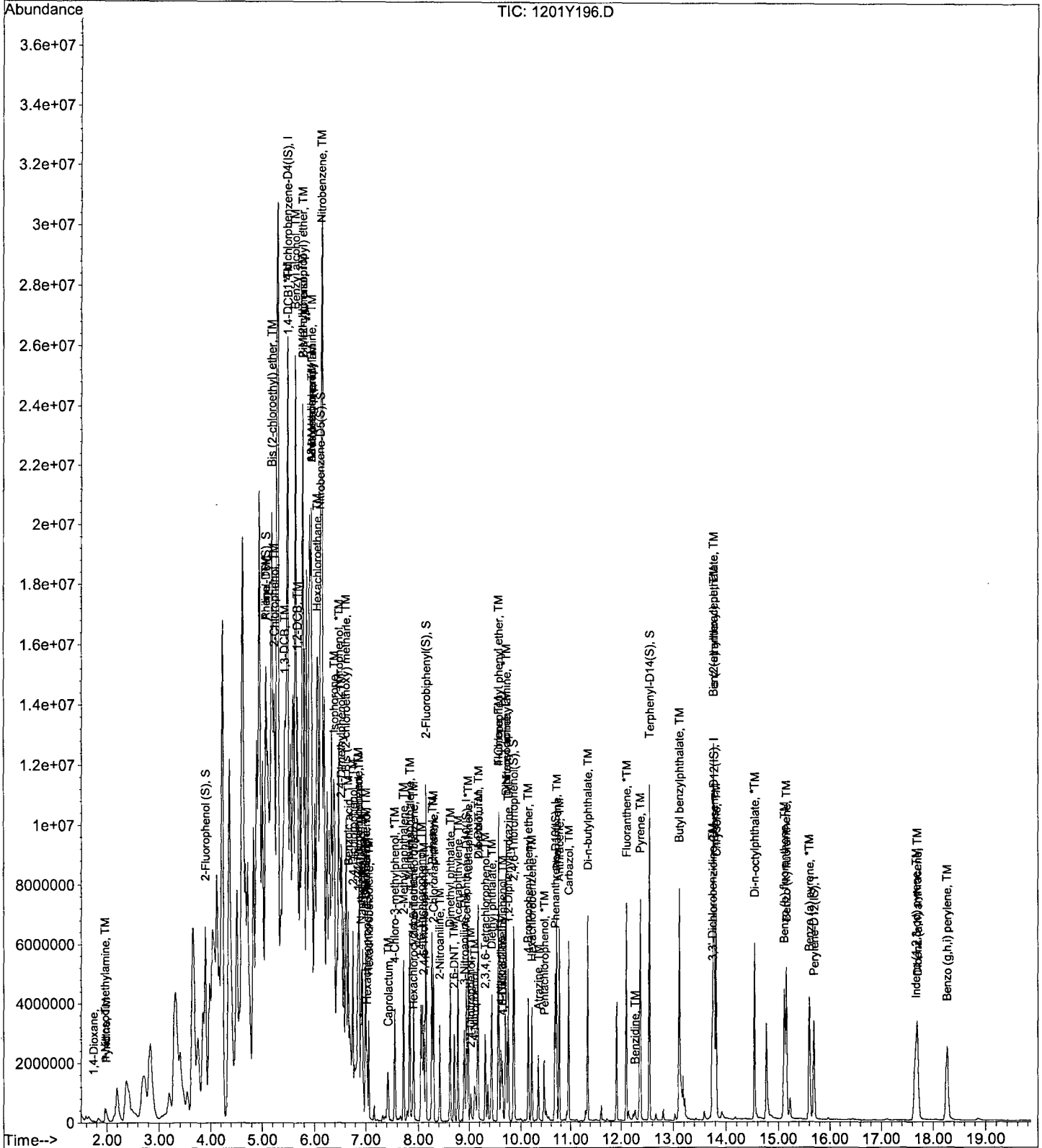
Data File : M:\YODA\DATA\Y181201\1201Y196.D  
Acq On : 20 Dec 18 9:17  
Sample : 181217A LCSD-1 1/800  
Misc :

Vial: 96  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 10:41 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181201\1201Y203.D  
 Acq On : 20 Dec 18 12:34  
 Sample : AZ84057W32 MS-1 1/800  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 12:42 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	553088	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.91	136	2894353	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1497288	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2745846	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.79	240	2439327	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2591564	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	3588303	204.2558	ppb	0.00
Spiked Amount				250.000		
				Recovery =	81.702%	
6) Phenol-D6 (S)	5.06	99	4461036	192.5594	ppb	0.00
Spiked Amount				250.000		
				Recovery =	77.024%	
22) Nitrobenzene-D5 (S)	6.10	82	2324615	91.2624	ppb	0.00
Spiked Amount				125.000		
				Recovery =	73.010%	
46) 2-Fluorobiphenyl (S)	8.14	172	4157131	85.0634	ppb	0.00
Spiked Amount				125.000		
				Recovery =	68.050%	
64) 2,4,6-Tribromophenol (S)	9.87	330	972739	192.1846	ppb	0.00
Spiked Amount				250.000		
				Recovery =	76.874%	
82) Terphenyl-D14 (S)	12.54	244	4494797	87.6828	ppb	0.00
Spiked Amount				125.000		
				Recovery =	70.146%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	9721	5.4763		88
3) n-Nitrosodimethylamine	1.96	42	180676	57.8863	ppb	96
4) Pyridine	1.98	79	362368	47.7775	ppb	96
7) Phenol	5.08	94	1546487	56.8627	ppb	99
8) Aniline	5.08	66	1273822	63.7207	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	602996	44.1079	ppb	# 86
10) 2-Chlorophenol	5.24	128	959918	51.0699	ppb	95
11) 1,3-DCB	5.41	146	945568	48.7377	ppb	# 73
12) 1,4-DCB	5.50	146	920292	46.8155	ppb	93
13) Benzyl alcohol	5.63	108	629111	52.8194	ppb	93
14) 1,2-DCB	5.66	146	915926	49.7225	ppb	92
15) 2-Methylphenol	5.76	107	747066	49.2503	ppb	97
16) Bis (2-chloroisopropyl) et	5.77	45	883173	38.3188	ppb	# 77
17) Acetophenone	5.93	105	1296731	53.3162	ppb	99
18) 3&4-Methylphenol	5.93	107	1986163	104.4222	ppb	98
19) n-Nitrosodi-n-propylamine	5.93	70	1078985	74.2411	ppb	84
20) Hexachloroethane	6.03	117	326072	42.9064	ppb	94
23) Nitrobenzene	6.12	77	814141	32.6218	ppb	98
24) Isophorone	6.39	82	2561487	57.4574	ppb	# 96
25) 2-Nitrophenol	6.48	139	646896	59.1491	ppb	98
26) 2,4-Dimethylphenol	6.52	122	971138	47.7205	ppb	100
27) Benzoic acid	6.65	105	502417	43.7813	ppb	97
28) Bis (2-chloroethoxy) metha	6.62	93	1289737	46.0561	ppb	95
29) 2,4-Dichlorophenol	6.75	162	844971	49.3688	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	854968	46.0215	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1319256	48.7677	ppb	95
32) Naphthalene	6.93	128	3081529	47.1381	ppb	100
33) 4-Chloroaniline	6.99	127	1178084	46.6696	ppb	97
34) 2,6-Dichlorophenol	7.00	162	829846	49.4893	ppb	98
35) Hexachloropropene	7.02	213	419236	38.9410	ppb	99
36) Hexachlorobutadiene	7.06	225	409180	41.7640	ppb	100
37) Caprolactum	7.42	55	477685	49.8738	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1201Y203.D Y1201NC.M Fri Dec 28 14:44:25 2018

Data File : M:\YODA\DATA\Y181201\1201Y203.D  
 Acq On : 20 Dec 18 12:34  
 Sample : AZ84057W32 MS-1 1/800  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 12:42 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	999063	52.0686	ppb	99
39) 2-Methylnaphthalene	7.72	142	2013852	48.5655	ppb	99
40) 1-Methylnaphthalene	7.83	142	2012967	48.4904	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	170954	24.5799	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	855306	46.5880	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	599402	49.8867	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	649880	50.1837	ppb	98
47) 1,1'-Biphenyl	8.26	154	2531615	47.4169	ppb	98
48) 2-Chloronaphthalene	8.29	162	1994613	49.0754	ppb	97
49) 2-Nitroaniline	8.41	65	672205	49.2365	ppb	92
50) Dimethyl phthalate	8.61	163	2495047	53.9207	ppb	99
51) 2,6-DNT	8.70	165	532615	55.6636	ppb	86
52) Acenaphthylene	8.77	152	3049557	48.4660	ppb	99
53) 3-Nitroaniline	8.89	138	601933	51.7762	ppb	90
54) Acenaphthene	8.97	154	1972180	47.4209	ppb	99
55) 2,4-Dinitrophenol	9.02	184	203262	53.5332	ppb	94
56) 4-Nitrophenol	9.10	65	364056	43.2185	ppb	98
57) Dibenzofuran	9.17	168	2783098	48.8109	ppb	97
58) 2,4-DNT	9.16	165	714186	56.5350	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.32	232	497212	51.9199	ppb	97
60) Diethyl phthalate	9.44	149	2275669	50.9537	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	1079307	48.5899	ppb	94
62) Fluorene	9.57	166	2205872	47.8455	ppb	99
63) 4-Nitroaniline	9.62	138	623435	54.1764	ppb	92
66) 4,6-Dinitro-2-methylphenol	9.65	198	402649	53.2076	ppb	93
67) Diphenyl amine	9.72	169	3222214	89.0970	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	3222214	89.0970	ppb	99
69) 1,2-Diphenylhydrazine	9.76	77	2488108	45.4644	ppb	93
70) 4-Bromophenyl phenyl ether	10.15	248	621073	49.0708	ppb	93
71) Hexachlorobenzene	10.21	284	589765	48.6929	ppb	92
72) Atrazine	10.33	200	208828	17.0191	ppb	95
73) Pentachlorophenol	10.45	266	406412	55.5249	ppb	99
74) Phenanthrene	10.70	178	3290657	48.9126	ppb	100
75) Anthracene	10.76	178	3391038	49.0385	ppb	99
76) Carbazol	10.95	167	3077088	48.9918	ppb	100
77) Di-n-butylphthalate	11.34	149	3873570	52.9524	ppb	99
78) Fluoranthene	12.10	202	3537252	49.1861	ppb	98
80) Benzidine	12.26	184	235826	13.1107	ppb	98
81) Pyrene	12.37	202	3697589	51.1429	ppb	99
83) Butyl benzylphthalate	13.11	149	1722959	56.1128	ppb	94
84) 3,3'-Dichlorobenzidine	13.74	252	875346	43.0119	ppb	99
85) Benz (a) anthracene	13.77	228	3206457	51.1792	ppb	99
86) Bis (2-ethylhexyl) phthala	13.77	149	2357615	57.4442	ppb	99
87) Chrysene	13.81	228	3112105	49.3331	ppb	100
88) Di-n-octylphthalate	14.54	149	4192453	59.4247	ppb	98
90) Benzo (b) fluoranthene	15.11	252	3171347	45.8511	ppb	99
91) Benzo (k) fluoranthene	15.16	252	3255397	47.9253	ppb	97
92) Benzo (a) pyrene	15.61	252	3012809	47.2850	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.66	276	3126223	49.2199	ppb	100
94) Dibenz (a,h) anthracene	17.70	278	2847641	48.4381	ppb	98
95) Benzo (g,h,i) perylene	18.26	276	2799673	49.1523	ppb	98

Quantitation Report

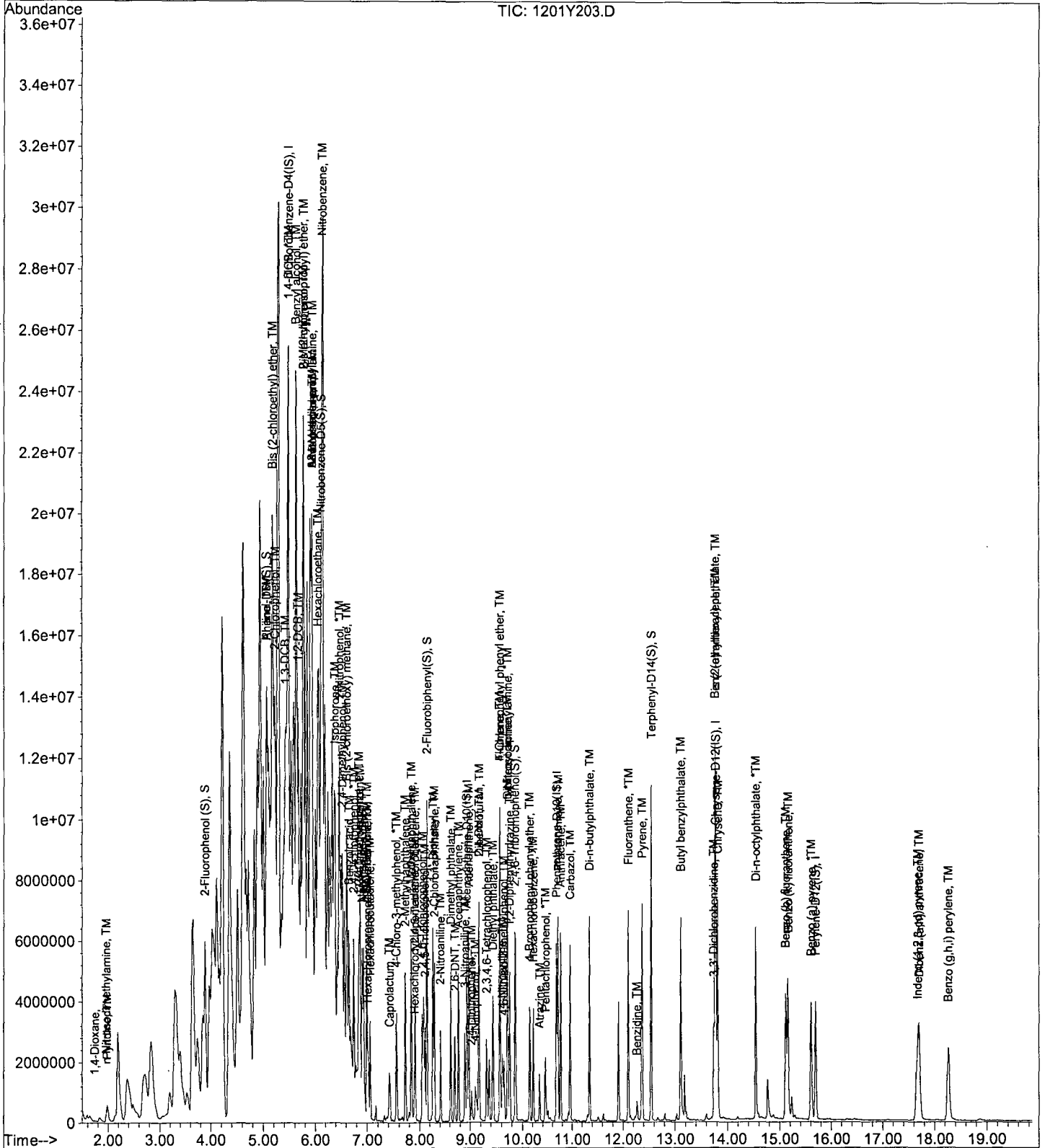
Data File : M:\YODA\DATA\Y181201\1201Y203.D  
 Acq On : 20 Dec 18 12:34  
 Sample : AZ84057W32 MS-1 1/800  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 12:42 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Dec 26 11:15:05 2018  
 Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y204.D  
 Acq On : 20 Dec 18 13:01  
 Sample : AZ84057W23 MSD-1 1/800  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 13:35 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.48	152	463916	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2757968	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1477786	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	2766056	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.79	240	2426388	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	2526110	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	3732727	253.3181	ppb	0.00
Spiked Amount						
						Recovery = 101.327%
6) Phenol-D6 (S)	5.06	99	4752141	244.5531	ppb	0.00
Spiked Amount						Recovery = 97.821%
22) Nitrobenzene-D5 (S)	6.10	82	2207498	90.9501	ppb	0.00
Spiked Amount						Recovery = 72.760%
46) 2-Fluorobiphenyl (S)	8.14	172	3884609	80.5360	ppb	0.00
Spiked Amount						Recovery = 64.429%
64) 2,4,6-Tribromophenol (S)	9.87	330	932777	186.7214	ppb	0.00
Spiked Amount						Recovery = 74.688%
82) Terphenyl-D14 (S)	12.54	244	4233087	83.0179	ppb	0.00
Spiked Amount						Recovery = 66.414%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	9663	6.4900		85
3) n-Nitrosodimethylamine	1.96	42	187623	71.6665	ppb	98
4) Pyridine	1.99	79	283681	44.5922	ppb	98
7) Phenol	5.08	94	1586601	69.5510	ppb	100
8) Aniline	5.08	66	1265796	74.3760	ppb	# 1
9) Bis (2-chloroethyl) ether	5.18	63	592989	51.7134	ppb	87
10) 2-Chlorophenol	5.24	128	964637	61.1857	ppb	96
11) 1,3-DCB	5.41	146	916109	56.2956	ppb	# 74
12) 1,4-DCB	5.50	146	890144	53.9857	ppb	95
13) Benzyl alcohol	5.63	108	640251	64.0872	ppb	91
14) 1,2-DCB	5.66	146	881087	57.0252	ppb	91
15) 2-Methylphenol	5.75	107	763214	59.9862	ppb	96
16) Bis (2-chloroisopropyl) et	5.78	45	847561	43.8422	ppb	88
17) Acetophenone	5.93	105	1265238	62.0207	ppb	98
18) 3&4-Methylphenol	5.93	107	2007247	125.8154	ppb	99
19) n-Nitrosodi-n-propylamine	5.93	70	960108	78.7597	ppb	87
20) Hexachloroethane	6.04	117	310143	48.6548	ppb	87
23) Nitrobenzene	6.12	77	813844	34.2225	ppb	98
24) Isophorone	6.39	82	2542041	59.8410	ppb	# 93
25) 2-Nitrophenol	6.48	139	645885	61.9771	ppb	96
26) 2,4-Dimethylphenol	6.52	122	971303	50.0888	ppb	98
27) Benzoic acid	6.65	105	583646	53.3748	ppb	97
28) Bis (2-chloroethoxy) metha	6.62	93	1246113	46.6988	ppb	95
29) 2,4-Dichlorophenol	6.75	162	836498	51.2906	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	821182	46.3887	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1324582	51.3859	ppb	99
32) Napthalene	6.93	128	3043226	48.8542	ppb	100
33) 4-Chloroaniline	6.99	127	1100075	45.7343	ppb	96
34) 2,6-Dichlorophenol	7.00	162	831351	52.0308	ppb	99
35) Hexachloropropene	7.03	213	404830	39.4624	ppb	99
36) Hexachlorobutadiene	7.05	225	399218	42.7622	ppb	99
37) Caprolactum	7.42	55	495064	54.2443	ppb	100

(#) = qualifier out of range (m) = manual integration  
 1201Y204.D Y1201NC.M Fri Dec 28 14:44:29 2018

Data File : M:\YODA\DATA\Y181201\1201Y204.D  
 Acq On : 20 Dec 18 13:01  
 Sample : AZ84057W23 MSD-1 1/800  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 13:35 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	985412	53.8968	ppb	98
39) 2-Methylnaphthalene	7.72	142	1952076	49.4036	ppb	99
40) 1-Methylnaphthalene	7.83	142	1950106	49.2991	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	155616	23.2061	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	827718	45.6803	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	595981	50.2565	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	645219	50.4813	ppb	97
47) 1,1'-Biphenyl	8.26	154	2496979	47.3853	ppb	98
48) 2-Chloronaphthalene	8.29	162	1950464	48.6224	ppb	97
49) 2-Nitroaniline	8.41	65	660026	48.9824	ppb	90
50) Dimethyl phthalate	8.61	163	2463211	53.9352	ppb	99
51) 2,6-DNT	8.70	165	530101	56.1320	ppb	84
52) Acenaphthylene	8.77	152	2954717	47.5784	ppb	99
53) 3-Nitroaniline	8.89	138	640073	55.7834	ppb	92
54) Acenaphthene	8.97	154	1926998	46.9460	ppb	99
55) 2,4-Dinitrophenol	9.02	184	248916	62.0391	ppb	95
56) 4-Nitrophenol	9.10	65	390874	47.0145	ppb	100
57) Dibenzofuran	9.17	168	2718664	48.3101	ppb	96
58) 2,4-DNT	9.16	165	682514	54.7408	ppb	95
59) 2,3,4,6-Tetrachlorophenol	9.32	232	476991	50.4657	ppb	97
60) Diethyl phthalate	9.44	149	2228334	50.5523	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.57	204	1056905	48.2093	ppb	96
62) Fluorene	9.57	166	2162949	47.5336	ppb	100
63) 4-Nitroaniline	9.62	138	584685	51.4795	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	403561	52.9385	ppb	94
67) Diphenyl amine	9.72	169	3303627	90.6807	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	3303627	90.6807	ppb	99
69) 1,2-Diphenylhydrazine	9.76	77	2406480	43.6516	ppb	94
70) 4-Bromophenyl phenyl ether	10.15	248	604970	47.4493	ppb	93
71) Hexachlorobenzene	10.21	284	579070	47.4606	ppb	93
72) Atrazine	10.34	200	256709	20.7685	ppb	97
73) Pentachlorophenol	10.45	266	373379	50.6391	ppb	99
74) Phenanthrene	10.70	178	3201232	47.2357	ppb	100
75) Anthracene	10.76	178	3280670	47.0958	ppb	100
76) Carbazol	10.95	167	2967892	46.9080	ppb	100
77) Di-n-butylphthalate	11.34	149	3782864	51.3346	ppb	99
78) Fluoranthene	12.10	202	3471161	47.9145	ppb	98
80) Benzidine	12.27	184	16523	1.9553	ppb #	91
81) Pyrene	12.36	202	3595819	50.0005	ppb	99
83) Butyl benzylphthalate	13.11	149	1663810	54.4754	ppb	97
84) 3,3'-Dichlorobenzidine	13.74	252	810076	40.0170	ppb	100
85) Benz (a) anthracene	13.77	228	3058297	49.0747	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	2244865	54.9886	ppb	99
87) Chrysene	13.81	228	3033128	48.3375	ppb	100
88) Di-n-octylphthalate	14.54	149	4052080	57.7413	ppb	99
90) Benzo (b) fluoranthene	15.11	252	3012335	44.6806	ppb	98
91) Benzo (k) fluoranthene	15.16	252	3168209	47.8502	ppb	98
92) Benzo (a) pyrene	15.60	252	2862100	46.0836	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.67	276	3014175	48.6854	ppb	98
94) Dibenz (a,h) anthracene	17.70	278	2756024	48.0944	ppb	99
95) Benzo (g,h,i) perylene	18.27	276	2692470	48.4950	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1201Y204.D Y1201NC.M Fri Dec 28 14:44:29 2018

Quantitation Report

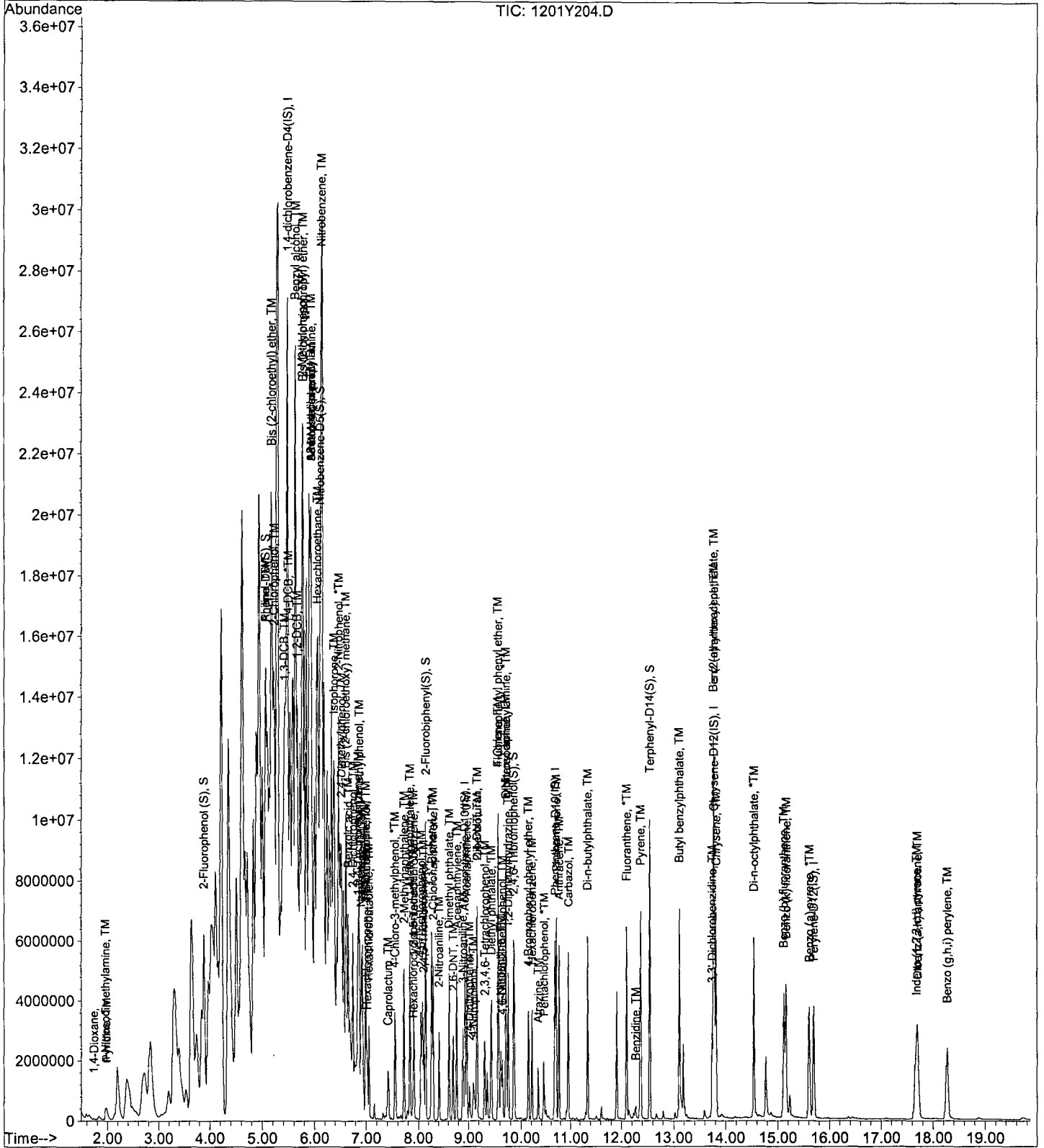
Data File : M:\YODA\DATA\Y181201\1201Y204.D  
Acq On : 20 Dec 18 13:01  
Sample : AZ84057W23 MSD-1 1/800  
Misc :

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 13:35 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y201.D  
 Acq On : 20 Dec 18 11:35  
 Sample : AZ84061W20 MS-1 1/800  
 Misc :

Vial: 1  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 11:51 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	482696	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2111633	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1066086	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.68	188	1966545	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.79	240	1708585	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.69	264	1826832	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	3995822	260.6225	ppb	0.00
Spiked Amount 250.000						
					Recovery = 104.249%	
6) Phenol-D6 (S)	5.06	99	5273868	260.8427	ppb	0.00
Spiked Amount 250.000						
					Recovery = 104.337%	
22) Nitrobenzene-D5 (S)	6.10	82	2377867	127.9562	ppb	0.00
Spiked Amount 125.000						
					Recovery = 102.365%	
46) 2-Fluorobiphenyl (S)	8.14	172	4277398	122.9255	ppb	0.00
Spiked Amount 125.000						
					Recovery = 98.340%	
64) 2,4,6-Tribromophenol (S)	9.87	330	1026349	284.7938	ppb	0.00
Spiked Amount 250.000						
					Recovery = 113.918%	
82) Terphenyl-D14 (S)	12.54	244	4697436	130.8274	ppb	0.00
Spiked Amount 125.000						
					Recovery = 104.662%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	11268	7.2735		69
3) n-Nitrosodimethylamine	1.96	42	191786	70.4064	ppb	95
4) Pyridine	1.99	79	359682	54.3391	ppb	98
7) Phenol	5.08	94	1647795	69.4232	ppb	96
8) Aniline	5.08	66	1321874	74.6270	ppb	# 1
9) Bis (2-chloroethyl) ether	5.17	63	792155	66.3945	ppb	95
10) 2-Chlorophenol	5.23	128	1146693	69.9035	ppb	96
11) 1,3-DCB	5.39	146	1077138	63.6157	ppb	98
12) 1,4-DCB	5.49	146	1098688	64.0411	ppb	98
13) Benzyl alcohol	5.63	108	752109	72.3549	ppb	93
14) 1,2-DCB	5.65	146	1049963	65.3112	ppb	98
15) 2-Methylphenol	5.75	107	924280	69.8191	ppb	100
16) Bis (2-chloroisopropyl) et	5.77	45	1257551	62.5190	ppb	# 93
17) Acetophenone	5.92	105	1455295	68.5616	ppb	97
18) 3&4-Methylphenol	5.92	107	2292977	138.1333	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	847659	66.8299	ppb	95
20) Hexachloroethane	6.03	117	377388	56.9006	ppb	92
23) Nitrobenzene	6.12	77	1306784	71.7704	ppb	96
24) Isophorone	6.38	82	2292427	70.4827	ppb	100
25) 2-Nitrophenol	6.47	139	621195	77.8529	ppb	95
26) 2,4-Dimethylphenol	6.52	122	977961	65.8686	ppb	99
27) Benzoic acid	6.67	105	697644	83.3281	ppb	97
28) Bis (2-chloroethoxy) metha	6.62	93	1426167	69.8055	ppb	99
29) 2,4-Dichlorophenol	6.75	162	909454	72.8323	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	897159	66.1931	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1403844	71.1303	ppb	96
32) Napthalene	6.93	128	3265930	68.4771	ppb	100
33) 4-Chloroaniline	6.99	127	1081649	58.7323	ppb	97
34) 2,6-Dichlorophenol	7.00	162	880603	71.9825	ppb	97
35) Hexachloropropene	7.02	213	383579	48.8356	ppb	99
36) Hexachlorobutadiene	7.06	225	402963	56.3749	ppb	99
37) Caprolactum	7.43	55	504714	72.2286	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1201Y201.D Y1201NC.M Fri Dec 28 14:44:17 2018

Data File : M:\YODA\DATA\Y181201\1201Y201.D  
 Acq On : 20 Dec 18 11:35  
 Sample : AZ84061W20 MS-1 1/800  
 Misc :

Vial: 1  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 11:51 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1035438	73.9673	ppb	99
39) 2-Methylnaphthalene	7.72	142	2100643	69.4361	ppb	98
40) 1-Methylnaphthalene	7.84	142	2085966	68.8746	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	100679	21.5236	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	876419	67.0467	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	638380	74.6206	ppb	98
45) 2,4,5-Trichlorophenol	8.11	196	681058	73.8630	ppb	97
47) 1,1'-Biphenyl	8.26	154	2665872	70.1274	ppb	97
48) 2-Chloronaphthalene	8.29	162	2071037	71.5658	ppb	97
49) 2-Nitroaniline	8.41	65	701005	72.1140	ppb	92
50) Dimethyl phthalate	8.62	163	2523916	76.6063	ppb	99
51) 2,6-DNT	8.70	165	550285	80.7716	ppb	86
52) Acenaphthylene	8.77	152	3158025	70.4903	ppb	99
53) 3-Nitroaniline	8.89	138	656447	79.3039	ppb	93
54) Acenaphthene	8.97	154	2060297	69.5771	ppb	99
55) 2,4-Dinitrophenol	9.02	184	204720	68.1784	ppb	93
56) 4-Nitrophenol	9.10	65	405013	67.5279	ppb	97
57) Dibenzofuran	9.17	168	2886589	71.1028	ppb	97
58) 2,4-DNT	9.16	165	726146	80.7315	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.32	232	527440	77.3532	ppb	96
60) Diethyl phthalate	9.44	149	2346969	73.8053	ppb	97
61) 4-Chlorophenyl phenyl ethe	9.57	204	1127297	71.2775	ppb	93
62) Fluorene	9.57	166	2295570	69.9301	ppb	99
63) 4-Nitroaniline	9.62	138	673879	82.2458	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.65	198	408585	75.3879	ppb	94
67) Diphenyl amine	9.72	169	3572568	137.9308	ppb	100
68) n-Nitrosodiphenylamine	9.72	169	3572568	137.9308	ppb	100
69) 1,2-Diphenylhydrazine	9.76	77	2647740	67.5539	ppb	93
70) 4-Bromophenyl phenyl ether	10.15	248	650843	71.8008	ppb	92
71) Hexachlorobenzene	10.21	284	616802	71.1058	ppb	92
72) Atrazine	10.33	200	325796	37.0738	ppb	95
73) Pentachlorophenol	10.45	266	398386	75.9971	ppb	99
74) Phenanthrene	10.70	178	3453795	71.6815	ppb	100
75) Anthracene	10.76	178	3509051	70.8544	ppb	99
76) Carbazol	10.96	167	3237678	71.9763	ppb	100
77) Di-n-butylphthalate	11.35	149	4046014	77.2278	ppb	99
78) Fluoranthene	12.10	202	3709476	72.0214	ppb	97
80) Benzidine	12.26	184	389639	29.4181	ppb	99
81) Pyrene	12.37	202	3862185	76.2664	ppb	99
83) Butyl benzylphthalate	13.11	149	1823260	84.7752	ppb	91
84) 3,3'-Dichlorobenzidine	13.74	252	943244	66.1709	ppb	99
85) Benz (a) anthracene	13.77	228	3308731	75.3985	ppb	100
86) Bis (2-ethylhexyl) phthala	13.77	149	2949551	102.6035	ppb	99
87) Chrysene	13.81	228	3202923	72.4876	ppb	100
88) Di-n-octylphthalate	14.54	149	4384197	88.7202	ppb	98
90) Benzo (b) fluoranthene	15.11	252	3390035	69.5303	ppb	99
91) Benzo (k) fluoranthene	15.15	252	3326804	69.4786	ppb	99
92) Benzo (a) pyrene	15.61	252	3139557	69.9011	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.66	276	3281882	73.3005	ppb	100
94) Dibenz (a,h) anthracene	17.69	278	2991026	72.1748	ppb	99
95) Benzo (g,h,i) perylene	18.26	276	2934749	73.0921	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1201Y201.D Y1201NC.M Fri Dec 28 14:44:17 2018



Quantitation Report

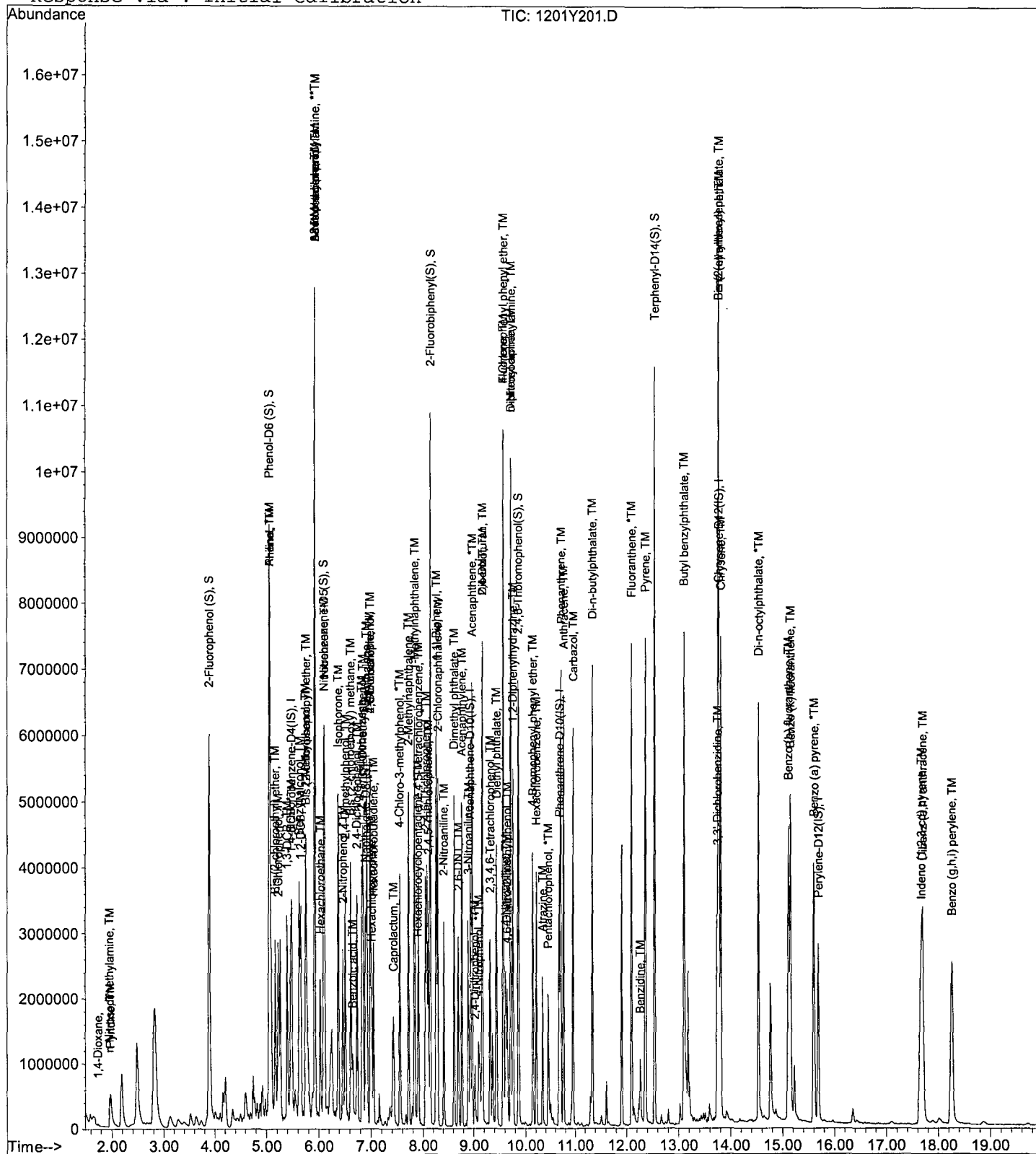
Data File : M:\YODA\DATA\Y181201\1201Y201.D  
Acq On : 20 Dec 18 11:35  
Sample : AZ84061W20 MS-1 1/800  
Misc :

Vial: 1  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 11:51 2018

Quant Results File: Y1201NC.RES

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y209.D  
 Acq On : 20 Dec 18 15:20  
 Sample : AZ84061W19 MSD-1 1/800 (CCV)  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 15:27 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	595587	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2740429	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	1443152	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2662043	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.78	240	2334512	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.70	264	2547001	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	4025939	212.8146	ppb	0.00
Spiked Amount 250.000			Recovery =	85.126%		
6) Phenol-D6 (S)	5.06	99	5199338	208.4136	ppb	0.00
Spiked Amount 250.000			Recovery =	83.366%		
22) Nitrobenzene-D5 (S)	6.10	82	2376689	98.5476	ppb	0.00
Spiked Amount 125.000			Recovery =	78.838%		
46) 2-Fluorobiphenyl (S)	8.15	172	4292229	91.1224	ppb	0.00
Spiked Amount 125.000			Recovery =	72.898%		
64) 2,4,6-Tribromophenol (S)	9.87	330	1029218	210.9711	ppb	0.00
Spiked Amount 250.000			Recovery =	84.388%		
82) Terphenyl-D14 (S)	12.54	244	4700607	95.8148	ppb	0.00
Spiked Amount 125.000			Recovery =	76.652%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	10387	5.4339		90
3) n-Nitrosodimethylamine	1.97	42	189677	56.4337	ppb	82
4) Pyridine	1.99	79	256436	31.3980	ppb	99
7) Phenol	5.08	94	1598263	54.5730	ppb	98
8) Aniline	5.08	66	1290499	60.3056	ppb	# 1
9) Bis (2-chloroethyl) ether	5.17	63	781354	53.0760	ppb	93
10) 2-Chlorophenol	5.23	128	1131636	55.9097	ppb	98
11) 1,3-DCB	5.40	146	1064352	50.9456	ppb	99
12) 1,4-DCB	5.49	146	1101992	52.0584	ppb	99
13) Benzyl alcohol	5.62	108	742684	57.9055	ppb	96
14) 1,2-DCB	5.65	146	1053975	53.1340	ppb	98
15) 2-Methylphenol	5.75	107	922985	56.5059	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1259493	50.7471	ppb	# 91
17) Acetophenone	5.92	105	1455846	55.5871	ppb	96
18) 3&4-Methylphenol	5.92	107	2278852	111.2611	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	844015	53.9297	ppb	95
20) Hexachloroethane	6.03	117	381971	46.6754	ppb	89
23) Nitrobenzene	6.12	77	1295098	54.8080	ppb	99
24) Isophorone	6.39	82	2320777	54.9820	ppb	96
25) 2-Nitrophenol	6.47	139	625932	60.4469	ppb	91
26) 2,4-Dimethylphenol	6.52	122	893510	46.3721	ppb	99
27) Benzoic acid	6.65	105	691145	63.6102	ppb	100
28) Bis (2-chloroethoxy) metha	6.62	93	1430099	53.9368	ppb	98
29) 2,4-Dichlorophenol	6.75	162	914078	56.4062	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	906353	51.5277	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1403266	54.7868	ppb	99
32) Napthalene	6.93	128	3263254	52.7217	ppb	100
33) 4-Chloroaniline	6.99	127	1088784	45.5546	ppb	# 95
34) 2,6-Dichlorophenol	7.00	162	876017	55.1771	ppb	98
35) Hexachloropropene	7.02	213	393495	38.6030	ppb	99
36) Hexachlorobutadiene	7.05	225	422021	45.4941	ppb	100
37) Caprolactum	7.43	55	509535	56.1873	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1201Y209.D Y1201NC.M Fri Dec 28 14:45:30 2018

Data File : M:\YODA\DATA\Y181201\1201Y209.D  
 Acq On : 20 Dec 18 15:20  
 Sample : AZ84061W19 MSD-1 1/800 (CCV)  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Dec 20 15:27 2018

Quant Results File: Y1201NC.RES

Quant Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sat Dec 01 20:36:54 2018  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1042785	57.3998	ppb	99
39) 2-Methylnaphthalene	7.72	142	2098588	53.4515	ppb	98
40) 1-Methylnaphthalene	7.83	142	2101964	53.4782	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	109572	18.6571	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	881073	49.7918	ppb	97
44) 2,4,6-Trichlorophenol	8.05	196	633593	54.7104	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	683506	54.7602	ppb	95
47) 1,1'-Biphenyl	8.26	154	2655471	51.6024	ppb	99
48) 2-Chloronaphthalene	8.29	162	2076251	53.0002	ppb	99
49) 2-Nitroaniline	8.41	65	716026	54.4136	ppb	96
50) Dimethyl phthalate	8.61	163	2517007	56.4357	ppb	99
51) 2,6-DNT	8.70	165	557827	60.4855	ppb	93
52) Acenaphthylene	8.77	152	3196509	52.7072	ppb	99
53) 3-Nitroaniline	8.89	138	655948	58.5389	ppb	96
54) Acenaphthene	8.98	154	2088771	52.1084	ppb	98
55) 2,4-Dinitrophenol	9.02	184	236907	60.9255	ppb	98
56) 4-Nitrophenol	9.10	65	403661	49.7177	ppb	98
57) Dibenzofuran	9.17	168	2919375	53.1217	ppb	95
58) 2,4-DNT	9.17	165	736016	60.4486	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.32	232	521485	56.4972	ppb	98
60) Diethyl phthalate	9.44	149	2345147	54.4791	ppb	97
61) 4-Chlorophenyl phenyl ethe	9.57	204	1126848	52.6332	ppb	98
62) Fluorene	9.57	166	2327093	52.3682	ppb	99
63) 4-Nitroaniline	9.63	138	627062	56.5357	ppb	85
66) 4,6-Dinitro-2-methylphenol	9.65	198	418125	56.9920	ppb	# 77
67) Diphenyl amine	9.72	169	3297951	94.0619	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	3297951	94.0619	ppb	99
69) 1,2-Diphenylhydrazine	9.76	77	3050721	57.4998	ppb	97
70) 4-Bromophenyl phenyl ether	10.15	248	651468	53.0927	ppb	97
71) Hexachlorobenzene	10.21	284	622170	52.9855	ppb	97
72) Atrazine	10.34	200	315026	26.4823	ppb	99
73) Pentachlorophenol	10.45	266	400883	56.4936	ppb	100
74) Phenanthrene	10.70	178	3458209	53.0213	ppb	100
75) Anthracene	10.77	178	3531237	52.6736	ppb	100
76) Carbazol	10.95	167	3252626	53.4169	ppb	99
77) Di-n-butylphthalate	11.34	149	4121292	58.1123	ppb	99
78) Fluoranthene	12.10	202	3734856	53.5688	ppb	# 93
80) Benzidine	12.28	184	11919	1.7438	ppb	# 90
81) Pyrene	12.36	202	3854122	55.7014	ppb	99
83) Butyl benzylphthalate	13.11	149	1790585	60.9335	ppb	98
84) 3,3'-Dichlorobenzidine	13.74	252	797510	40.9467	ppb	99
85) Benz (a) anthracene	13.78	228	3215006	53.6196	ppb	99
86) Bis (2-ethylhexyl) phthala	13.77	149	2557323	65.1077	ppb	99
87) Chrysene	13.81	228	3301815	54.6903	ppb	100
88) Di-n-octylphthalate	14.54	149	4363043	64.6193	ppb	99
90) Benzo (b) fluoranthene	15.11	252	3663216	53.8892	ppb	98
91) Benzo (k) fluoranthene	15.16	252	2974942	44.5627	ppb	99
92) Benzo (a) pyrene	15.60	252	3103924	49.5674	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.67	276	3259719	52.2196	ppb	98
94) Dibenz (a,h) anthracene	17.70	278	2963938	51.2984	ppb	99
95) Benzo (g,h,i) perylene	18.27	276	2911373	52.0076	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1201Y209.D Y1201NC.M Fri Dec 28 14:45:31 2018

Quantitation Report

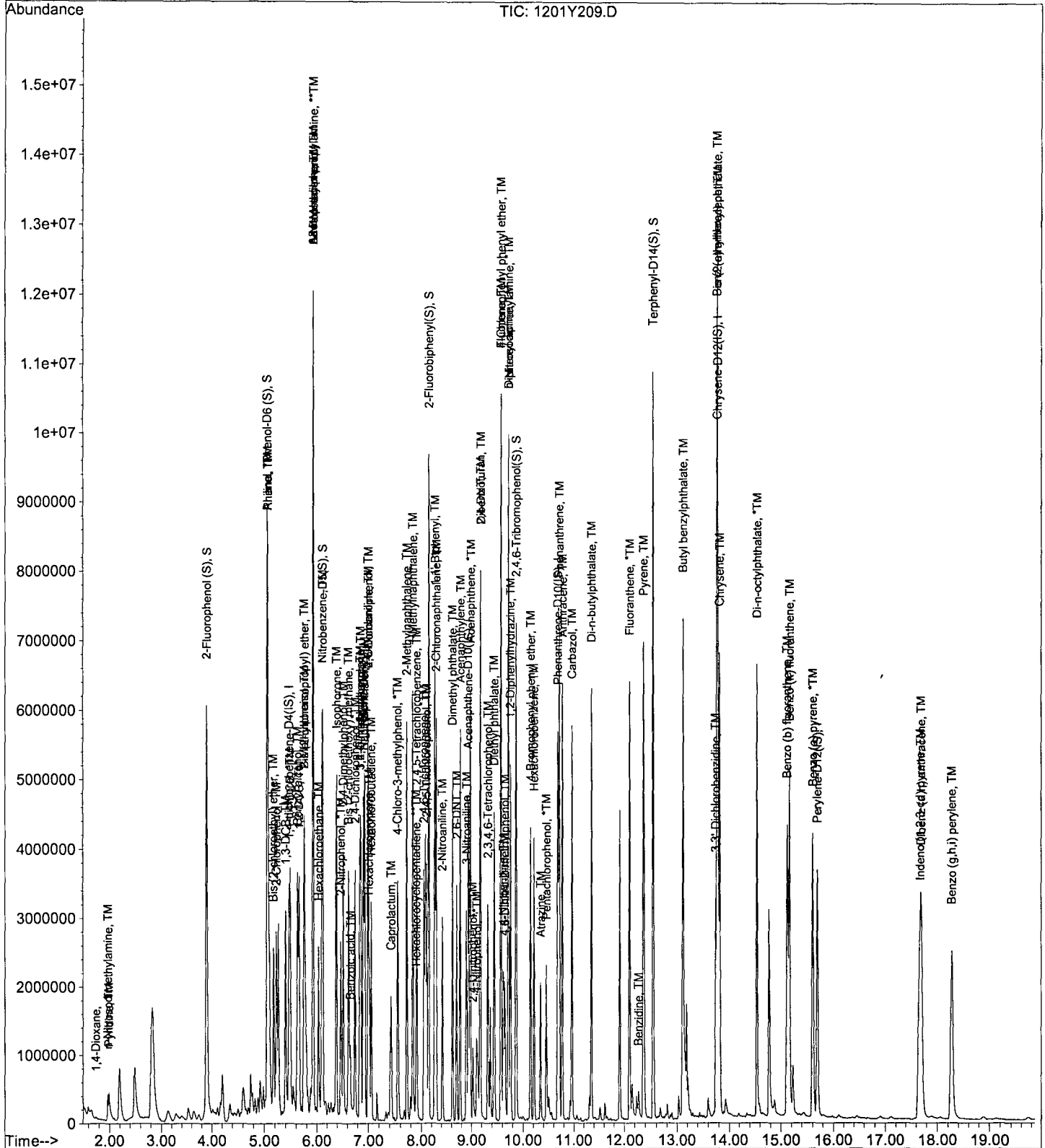
Data File : M:\YODA\DATA\Y181201\1201Y209.D  
Acq On : 20 Dec 18 15:20  
Sample : AZ84061W19 MSD-1 1/800 (CCV)  
Misc :

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Dec 20 15:27 2018

Quant Results File: Y1201NC.RES

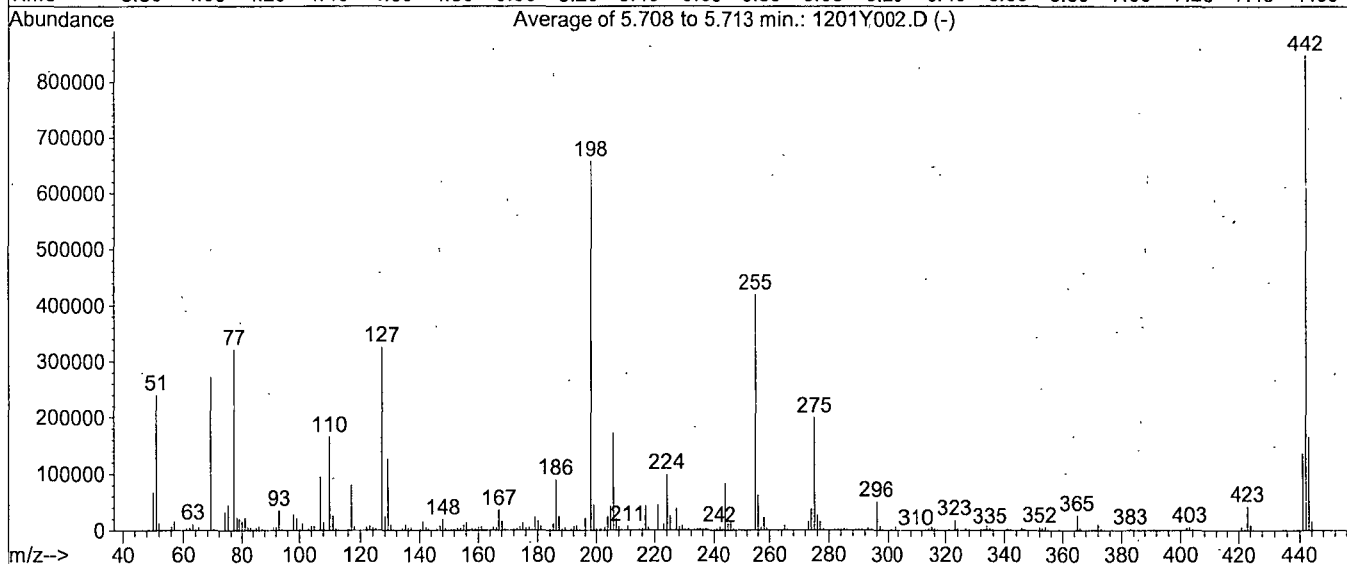
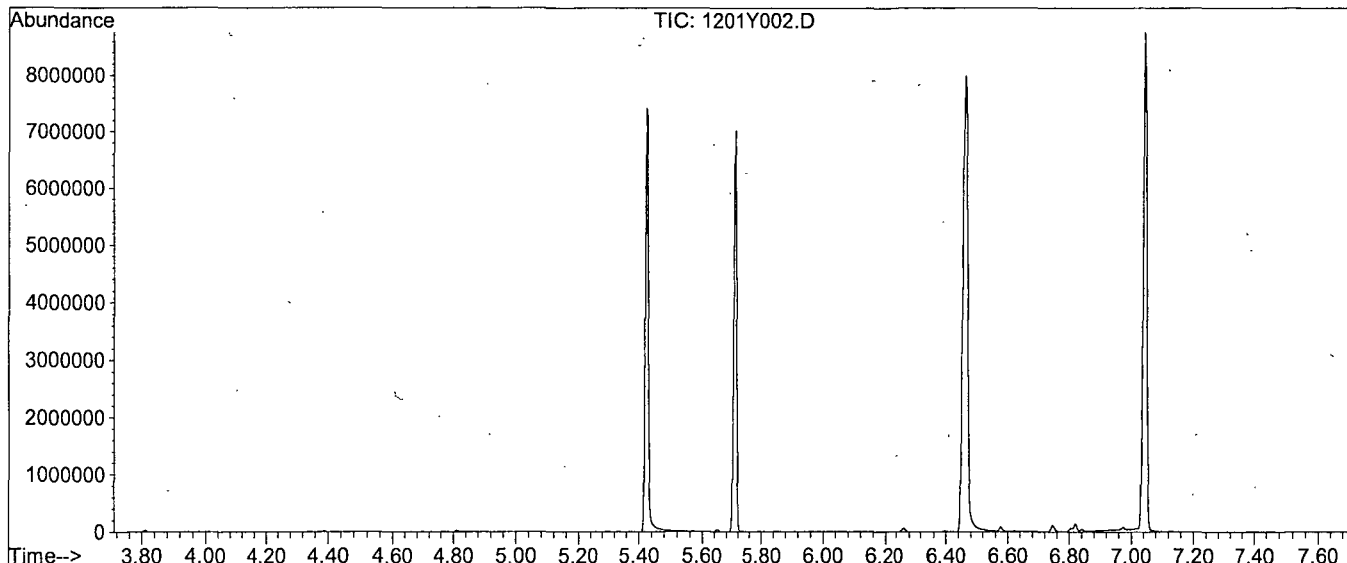
Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Dec 26 11:15:05 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181201\1201Y002.D  
 Acq On : 1 Dec 18 15:37  
 Sample : SV Tune 03/07/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 849, 850, 851; Background Corrected with Scan 840

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.5	239765	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1558	PASS
127	198	10	80	49.5	325867	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	657728	PASS
199	198	5	9	6.8	44547	PASS
275	198	10	60	30.3	199488	PASS
365	198	1	100	4.0	26232	PASS
441	442	0.01	24	16.1	136280	PASS
442	198	50	150	129.0	848320	PASS
443	442	15	24	19.5	165568	PASS

M:\YODA\DATA\Y181201\1201Y002.D

Data File Name: 1201Y002.D  
Data File Path: M:\YODA\DATA\Y181201\  
Operator: MA  
Date Acquired: 1 Dec 18 15:37  
Method File: DFTPP2.M  
Sample Name: SV Tune 03/07/18  
Vial Number: 2  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.04	71395500
2)	DDD	6.82	1055100
3)	DDE	6.97	305625

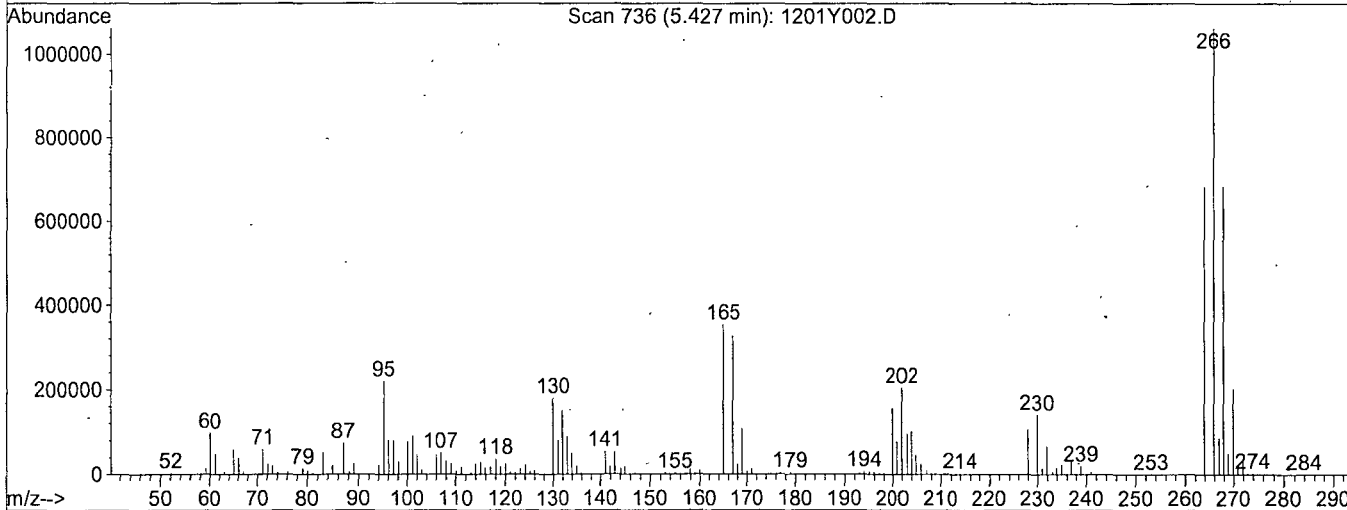
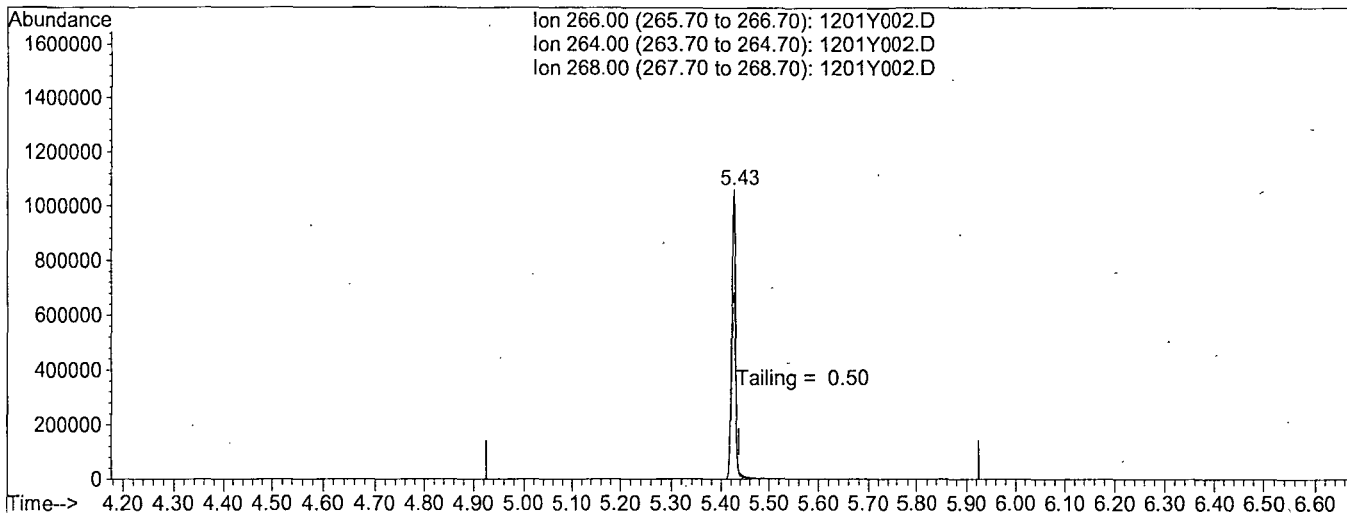
Breakdown 1.87

Quantitation Report

Data File : M:\YODA\DATA\Y181201\1201Y002.D  
 Acq On : 1 Dec 18 15:37  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Dec 1 15:34 2018

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181201\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Sat Dec 01 15:34:48 2018  
 Response via : Single Level Calibration



TIC: 1201Y002.D

(5) Pentachlorophenol

5.43min 0.0000

response 6593158

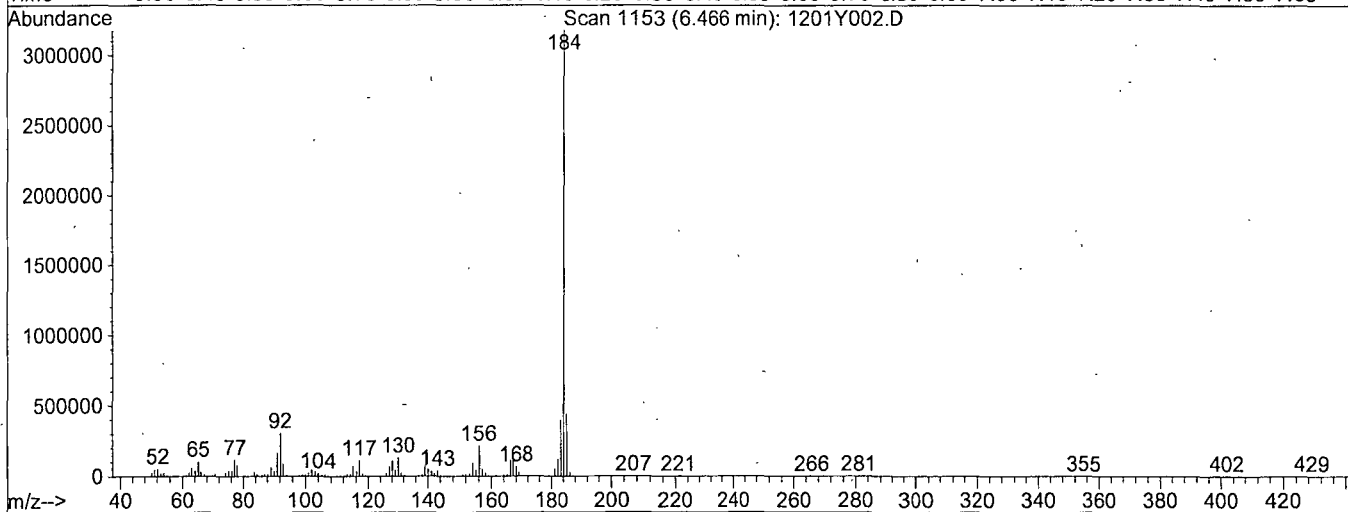
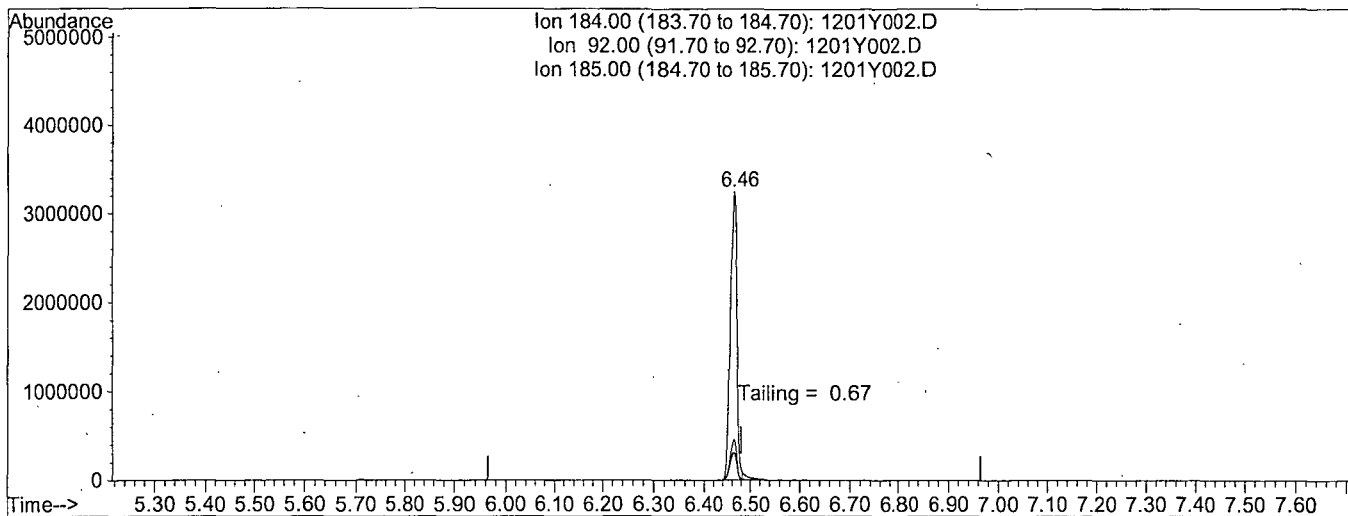
Ion	Exp%	Act%
266.00	100	100
264.00	64.40	62.83
268.00	64.40	63.52
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181201\1201Y002.D  
 Acq On : 1 Dec 18 15:37  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Dec 1 15:34 2018

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181201\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Sat Dec 01 15:34:48 2018  
 Response via : Single Level Calibration



TIC: 1201Y002.D

(6) Benzidine

6.46min 0.0000

response 34003416

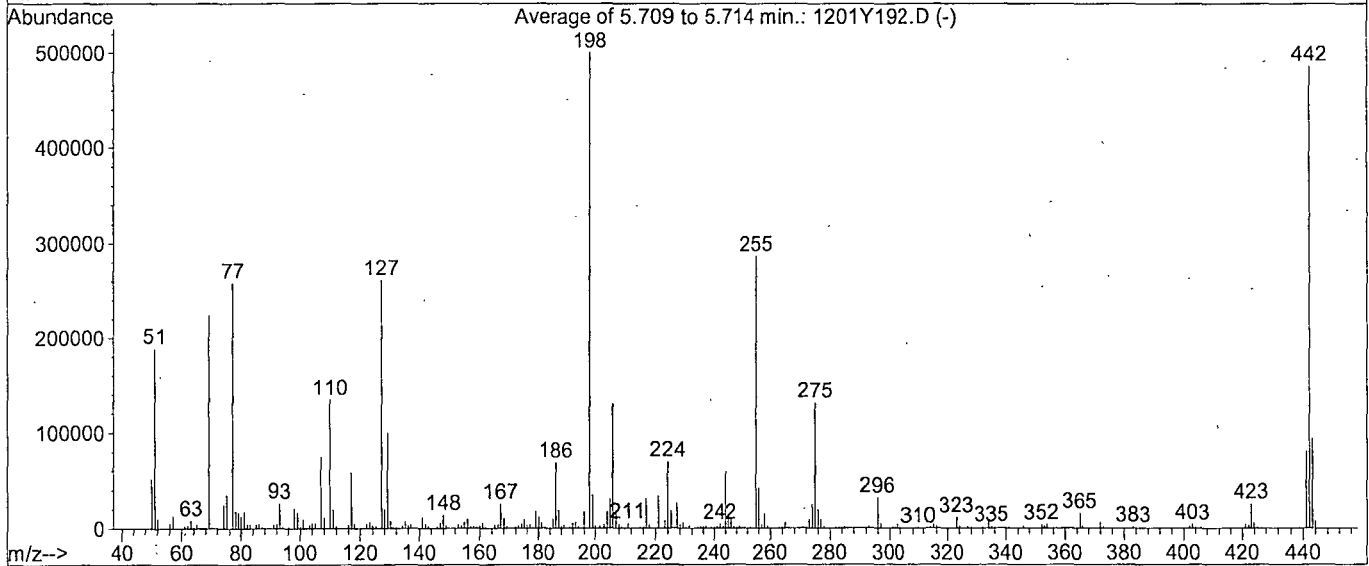
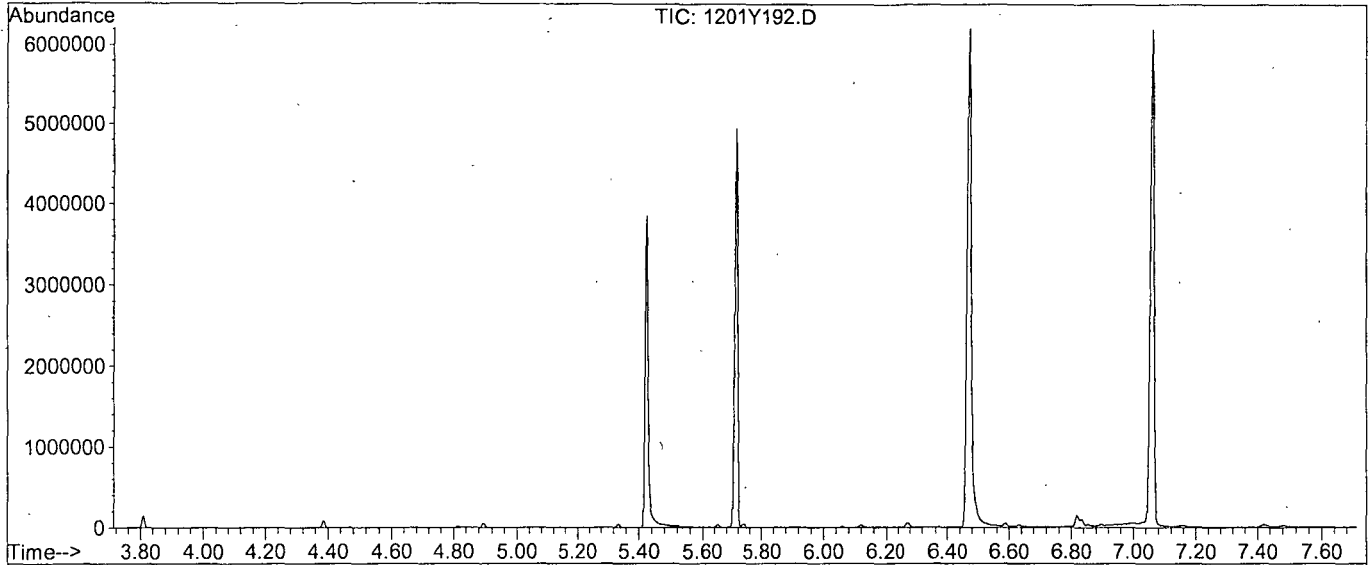
Ion	Exp%	Act%
184.00	100	100
92.00	9.60	9.94
185.00	14.40	13.90
0.00	0.00	0.00



Data File : M:\YODA\DATA\Y181201\1201Y192.D  
 Acq On : 20 Dec 18 7:38  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 92  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 849, 850, 851; Background Corrected with Scan 841

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	37.7	188864	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	895	PASS
127	198	10	80	52.1	261035	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	500629	PASS
199	198	5	9	6.9	34432	PASS
275	198	10	60	26.2	131147	PASS
365	198	1	100	3.2	15887	PASS
441	442	0.01	24	16.5	80099	PASS
442	198	50	150	97.1	486059	PASS
443	442	15	24	19.3	93835	PASS

M:\YODA\DATA\Y181201\1201Y192.D

Data File Name: 1201Y192.D  
Data File Path: M:\YODA\DATA\Y181201\  
Operator: MA  
Date Acquired: 20 Dec 2018 07:38  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 92  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	50475600
2)	DDD	6.82	1297930
3)	DDE	6.98	57333

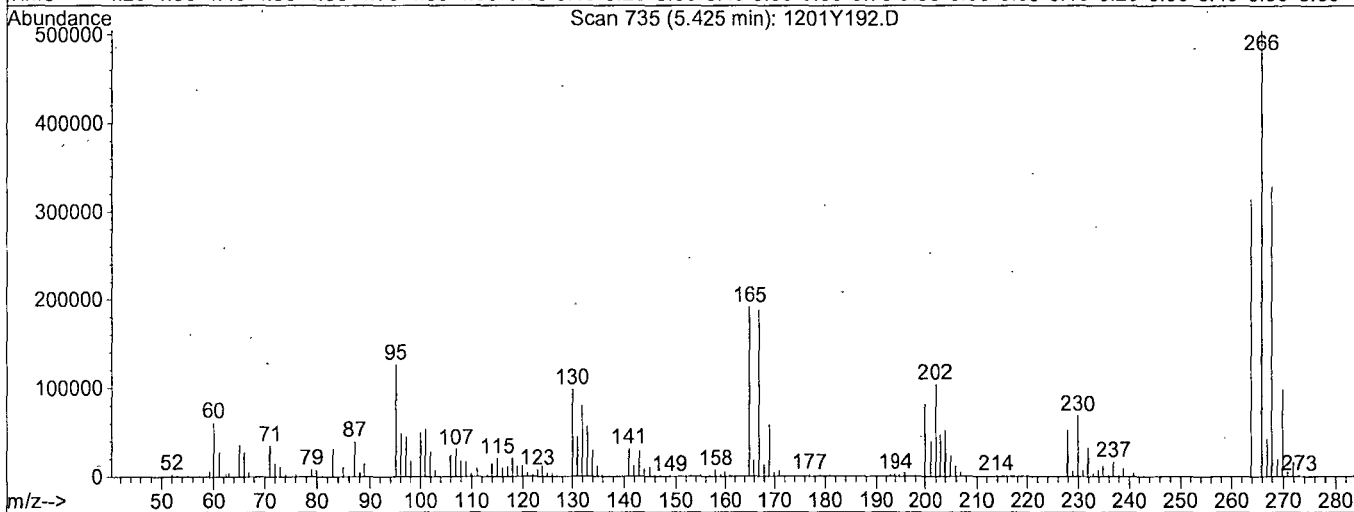
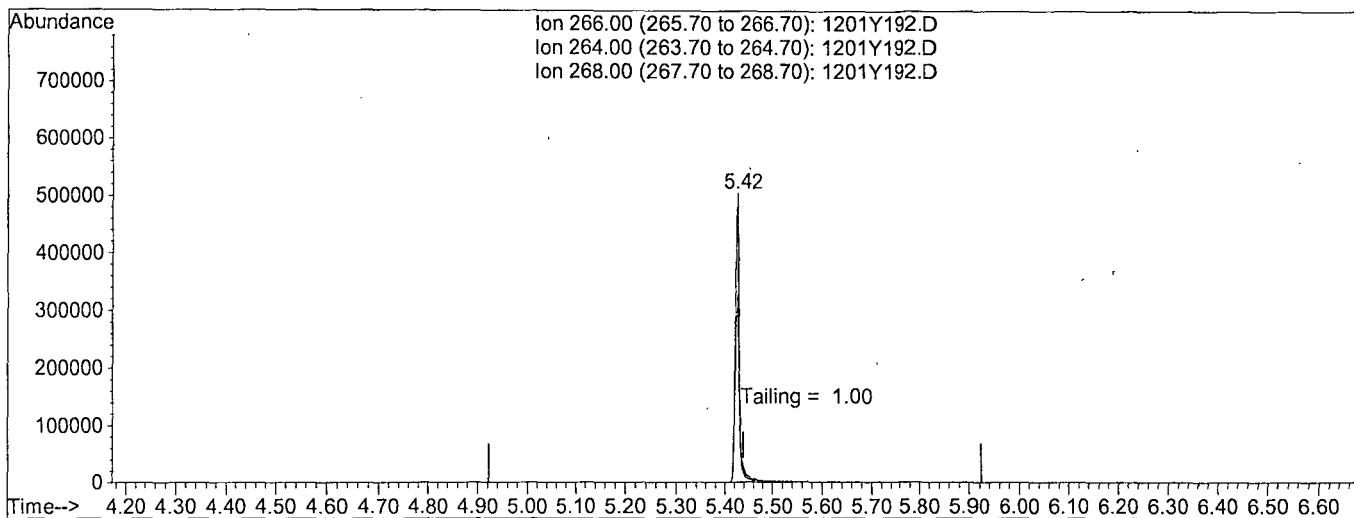
Breakdown 2.61

Quantitation Report

Data File : M:\YODA\DATA\Y181201\1201Y192.D  
 Acq On : 20 Dec 18 7:38  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Dec 20 8:00 2018

Vial: 92  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181201\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Thu Dec 13 12:30:44 2018  
 Response via : Single Level Calibration



TIC: 1201Y192.D

(5) Pentachlorophenol

5.43min 0.0000

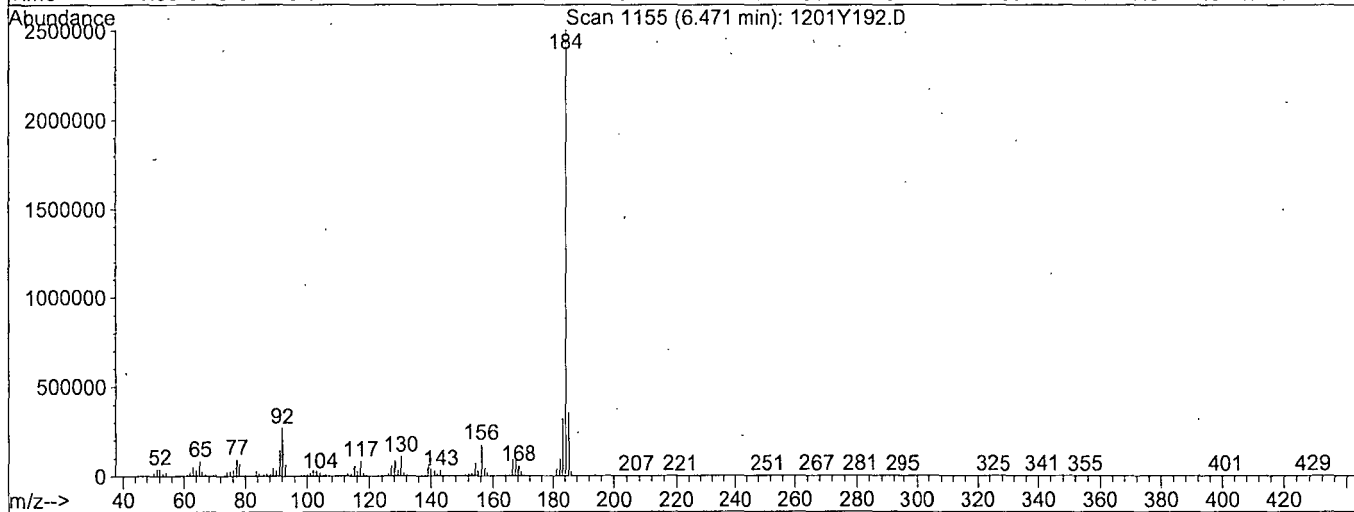
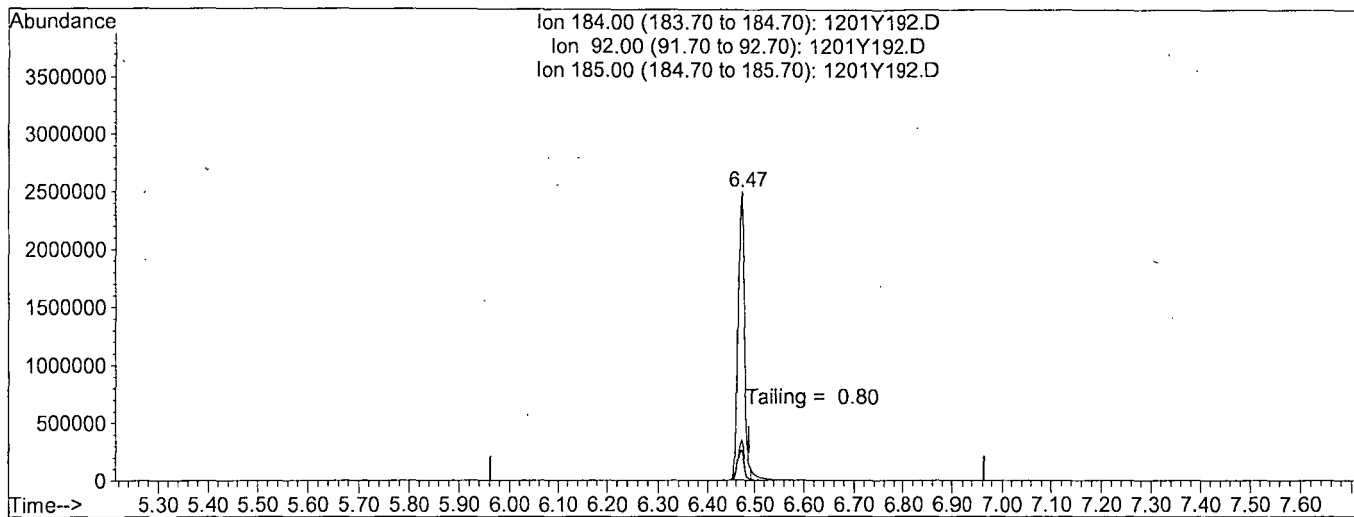
response 3225113

Ion	Exp%	Act%
266.00	100	100
264.00	64.70	61.80
268.00	64.70	65.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181201\1201Y192.D Vial: 92  
 Acq On : 20 Dec 18 7:38 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Dec 20 8:00 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181201\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Thu Dec 13 12:30:44 2018  
 Response via : Single Level Calibration



TIC: 1201Y192.D

(6) Benzidine

6.47min 0.0000

response 23985902

Ion	Exp%	Act%
184.00	100	100
92.00	10.00	10.64
185.00	14.20	14.02
0.00	0.00	0.00

Name of Final Standard 8270 Full Scan Standard Curve  
 Prep Date 11/15/18  
 Exp Date 05/29/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc. (range)
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	4 uL	200uL	MC 56258 192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	4 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	4 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	5 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	4 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	5 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	10 uL	100uL	MC 56258 80 uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	10 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	20 uL	100uL	MC 56258 60 uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	20 uL	*	*	*

SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	200 uL	MC 56258 100 uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	50 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	4 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	30 uL	100uL	MC 56258 40 uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	30 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	40 uL	100uL	MC 56258 20 uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	40 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	06/13/18	05/29/19	50 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	2 uL	*	*	*

Name of  
Final

Standard 8270 Full Scan Second Source

Prep'd By (Initials)

GA

Prep Date 11/15/18

Exp Date 04/19/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	04/19/18	04/19/19	50 uL	200uL	MC 56258 150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	10/11/18	10/11/19	4 uL	*	*	*

Name of Final Standard 8270 Full Scan Spike  
 Prep Date 11/09/18  
 Exp Date 10/20/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	051018-39433	11/09/19	1.0 mL	20 mL	NA	2000 ug/mL
10002	Absolute	10002	2000	051018-39437	11/09/19	1.0 mL	*	*	2000 ug/mL
10004	Absolute	10004	2000	071618-39441	11/09/19	1.0 mL	*	*	2000 ug/mL
10005	Absolute	10005	2000	032018-39609	11/09/19	1.0 mL	*	*	2000 ug/mL
10006	Absolute	10006	2000	071318-39447	11/09/19	1.0 mL	*	*	2000 ug/mL
10007	Absolute	10007	2000	080116-39614	11/09/19	1.0 mL	*	*	2000 ug/mL
10018	Absolute	10018	2000	062718-39452	11/09/19	1.0 mL	*	*	2000 ug/mL
70023	Absolute	70023	1000	020818-39457	11/09/19	1.0 mL	*	*	1000 ug/mL
82705	Absolute	82705	2000	081418-39618	11/09/19	1.0 mL	*	*	2000 ug/mL
94552	Absolute	94552	various	102017-39621	10/20/19	1.0 mL	*	*	various



**Name of Final Standard** 8270 Surrogate 200/400 ppm      **Prep'd. By (Initials)** GA  
**Prep Date** 06/13/18  
**Exp Date** 05/29/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0130078-38378	05/29/19	200 uL	5 mL	MC 56258	400 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0130555-38549	06/04/19	200 uL	*	*	200 ug/mL

Name of Final Standard 8270 Internal Standard (Ampule)  
 Prep Date 10/11/18  
 Exp Date 10/11/19

Prep'd By (Initials)

GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2mg/mL	A0138585 - 39541 39542	10/11/19	2 mL	2 mL	NA	2mg/mL

Name of  
Final

Standard **8270 SS STOCK**

Prep'd By (Initials)

OA

Prep Date 04/19/18

Exp Date 04/19/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
	Absolute	10001	2000	G34-081717-38180	04/19/19	1.0 mL	10 mL	NA	2000 ug/mL
	Absolute	10002	2000	G34-020217-38183	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10004	2000	010815-38624	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10005	2000	041317-37803	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10006	2000	011718-38826	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10007	2000	020515-38628	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10018	2000	G34-030216-38198	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	70023	1000	013118-38829	04/19/19	1.0 mL	*	*	1000 ug/mL
	Absolute	82705	2000	090617-38831	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	94552	various	013118-38824	04/19/19	1.0 mL	*	*	various

Name of  
 Final **8270 Surrogate 100/200**  
 Standard **ppm**

Prep'd By (Initials) **GA**

Prep Date **11/06/18**

Exp Date **09/27/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent+ Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352 - 39395	10/17/19	5.0 mL	250 mL	Acetone #030817A	200 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243 - 39166 & A0140132 - 39545	09/27/19 11/06/19	5.0 mL	250 mL	*	100 ug/mL

Name of Final Standard 8270 Full Scan Spike  
 Prep Date 10/09/18  
 Exp Date 10/09/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Allquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc. (range)
10001	Absolute	10001	2000	051018 - 39430 39431	10/09/19	2.0 mL	20 mL	NA	2000 ug/mL
10002	Absolute	10002	2000	051018 - 39435 39436	10/09/19	2.0 mL	*	*	2000 ug/mL
10004	Absolute	10004	2000	071618 - 39439 39440	10/09/19	2.0 mL	*	*	2000 ug/mL
10005	Absolute	10005	2000	032018 - 39607 39608	10/09/19	2.0 mL	*	*	2000 ug/mL
10006	Absolute	10006	2000	071318 - 39445 39446	10/09/19	2.0 mL	*	*	2000 ug/mL
10007	Absolute	10007	2000	080116 - 39445 39446	10/09/19	2.0 mL	*	*	2000 ug/mL
10018	Absolute	10018	2000	062718 - 39450 39451	10/09/19	2.0 mL	*	*	2000 ug/mL
70023	Absolute	70023	1000	020818 - 39455 39456	10/09/19	2.0 mL	*	*	1000 ug/mL
82705	Absolute	82705	2000	090617 - 39228 081418 - 39617	10/09/19	2.0 mL	*	*	2000 ug/mL
94552	Absolute	94552	various	102017 - 39622 39623	10/09/19	2.0 mL	*	*	various

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	181217A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T STD 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 11-6-18 EXP 9-27-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 9-27-18 EXP 9-27-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		yes			
Spiked ID 7		Ext. Start Time:		12/17/18 15:45, 12/18/18 13:00			
Spiked ID 8		Ext. End Time:		12/18/18 10:30, 12/19/18 07:30, 12/19/18 12:45			
GC Requires Extract By:				12/21/18 0:00			
pH1	2	12/17/18 2:20:00 PM	Water Bath Temp Criteria		75,77 °C		
pH2	14	2/18/18 12:30:00 PM					
pH3							

Spiked By: DL

Date 12/17/18

Witnessed By: CFM

Date 12/17/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 181217A Blk				1,0.050	1,2	800	1	2/1	12/17/18 14:00	
					equip	E-HP51 E-WB5				
2 181217A LCS-1		0.250	1	1	1	800	1	2/1	12/17/18 14:00	
					equip	E-HP50 E-WB5				
3 181217A LCS-2		0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	
					equip	E-HP48 E-WB5				
4 181217A LCSD-1		0.250	1	1	1	800	1	2/1	12/17/18 14:00	
					equip	E-HP49 E-WB5				
5 181217A LCSD-2		0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	
					equip	E-HP47 E-WB5				
6 AZ84057 MS-1	AZ84057W32	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP29 E-WB5				
7 AZ84057 MSD-1	AZ84057W23	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP28 E-WB5				
8 AZ84057 MS-2	AZ84057W24	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP27 E-WB5				
9 AZ84057 MSD-2	AZ84057W31	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP26 E-WB5				
10 AZ84057	AZ84057W22			1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP30 E-WB5				
11 AZ84059	AZ84059W08			1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP25 E-WB5				
12 AZ84061 MS-1	AZ84061W20	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP16 E-WB5				
13 AZ84061 MSD-1	AZ84061W19	0.250	1	1	1	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP15 E-WB6				
14 AZ84061 MS-2	AZ84061W23	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP14 E-WB6				
15 AZ84061 MSD-2	AZ84061W28	0.0250	2	0.050	2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP13 E-WB6				
16 AZ84061	AZ84061W24			1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650
					equip	E-HP17 E-WB6				

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
i+1 H2SO4	11-28-18
10N NaOH	10-17-18
Filter Paper	400138
Acidified Na2SO4	10-2-18
B. Na2SO4	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	12/19/18
Time	14:00
Refrigerator	66.0

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/20/18 1:00:40 PM

Reviewed By: *KY* Date 12/20/18

# Organic Extraction Worksheet


<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	181217A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T STD 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 11-6-18 EXP 9-27-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 9-27-18 EXP 9-27-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		yes			
Spiked ID 7		Ext. Start Time:		12/17/18 15:45, 12/18/18 13:00			
Spiked ID 8		Ext. End Time:		12/18/18 10:30, 12/19/18 07:30, 12/19/18 12:45			
<b>GC Requires Extract By:</b>				12/21/18 0:00			
pH1	2	12/17/18 2:20:00 PM	Water Bath Temp Criteria		75.77 °C		
pH2	14	2/18/18 12:30:00 PM					
pH3							

Spiked By: DL

Date 12/17/18

Witnessed By: CFM

Date 12/17/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ84062 	AZ84062W07		1,0.050	1,2	800	1	2/1	12/17/18 14:00	87650
						equip	E-HP12 E-WB6			

No 12/20/18

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	10-17-18
Filter Paper	400138
Acidified Na2SO4	10-2-18
B. Na2SO4	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/20/18 1:00:40 PM

Reviewed By: *KY* Date 12/20/18

## Injection Log

Directory: M:\YODA\DATA\Y181201\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1201Y002.D	1	SV Tune 03/07/18		1 Dec 18 15:37
3	1201Y003.D	1	4ug/mL 8270 11/15/18		1 Dec 18 15:52
4	1201Y004.D	1	5ug/mL 8270 11/15/18		1 Dec 18 16:20
5	1201Y005.D	1	10ug/mL 8270 11/15/18		1 Dec 18 16:48
6	1201Y006.D	1	20ug/mL 8270 11/15/18		1 Dec 18 17:16
7	1201Y007.D	1	40ug/mL 8270 11/15/18		1 Dec 18 17:43
8	1201Y008.D	1	50ug/mL 8270 11/15/18		1 Dec 18 18:11
9	1201Y009.D	1	60ug/mL 8270 11/15/18		1 Dec 18 18:39
10	1201Y010.D	1	80ug/mL 8270 11/15/18		1 Dec 18 19:06
11	1201Y011.D	1	100ug/mL 8270 11/15/18		1 Dec 18 19:34
12	1201Y012.D	1	SS- 8270 11/15/18		1 Dec 18 20:02
92	1201Y192.D	1	SV TUNE 11/10/18		20 Dec 18 7:38
93	1201Y193.D	1	50ug/mL 8270 11/15/18		20 Dec 18 7:53
94	1201Y194.D	1.25	181217A BLK 1/800		20 Dec 18 8:21
96	1201Y196.D	1.25	181217A LCSD-1 1/800		20 Dec 18 9:17
1	1201Y201.D	1.25	AZ84061W20 MS-1 1/800		20 Dec 18 11:35
2	1201Y202.D	1.25	181217A LCS-1 1/800		20 Dec 18 12:06
3	1201Y203.D	1.25	AZ84057W32 MS-1 1/800		20 Dec 18 12:34
4	1201Y204.D	1.25	AZ84057W23 MSD-1 1/800		20 Dec 18 13:01
5	1201Y205.D	1.25	AZ84057W22 1/800		20 Dec 18 13:29
6	1201Y206.D	1.25	AZ84059W08 1/800		20 Dec 18 13:57
7	1201Y207.D	1.25	AZ84061W24 1/800		20 Dec 18 14:24
8	1201Y208.D	1.25	AZ84062W07 1/800		20 Dec 18 14:52
9	1201Y209.D	1.25	AZ84061W19 MSD-1 1/800 (CCV)		20 Dec 18 15:20



**ORGANICS  
Calibration Data**



**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 11/28/18  
Instrument: Yoda

Initials: \_\_\_\_\_

1128Y004.D    1128Y005.D    1128Y006.D    1128Y007.D    1128Y012.D    1128Y008.D    1128Y009.D    1128Y010.D

	Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r^2	Q	MRF
1	I 1,4-dichlorobenzene-D4(IS)																
2	TM 2-(2-Methoxyethoxy)ethanol	0.2305	0.2453	0.2498	0.2070	0.2284	0.2415	0.2719	0.2475			0.24	7.9	TM			
3	I Napthalene-D8(IS)																
4	I Acenaphthene-D10(IS)																
5	I Phenanthrene-D10(IS)																
6	I Chrysene-D12(IS)																
7	I Perylene-D12(IS)																
8																	
9																	
10																	
11																	
12																	
13																	
14																	
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33																	
34																	
35																	

Data File : M:\YODA\DATA\Y181128M\1128Y004.D Vial: 4  
 Acq On : 28 Nov 18 8:08 Operator: MA  
 Sample : 50ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev.(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	846679	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3808187	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1917814	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3593004	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3055748	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3109829	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	243946	76.98478	ppb	99

Quantitation Report

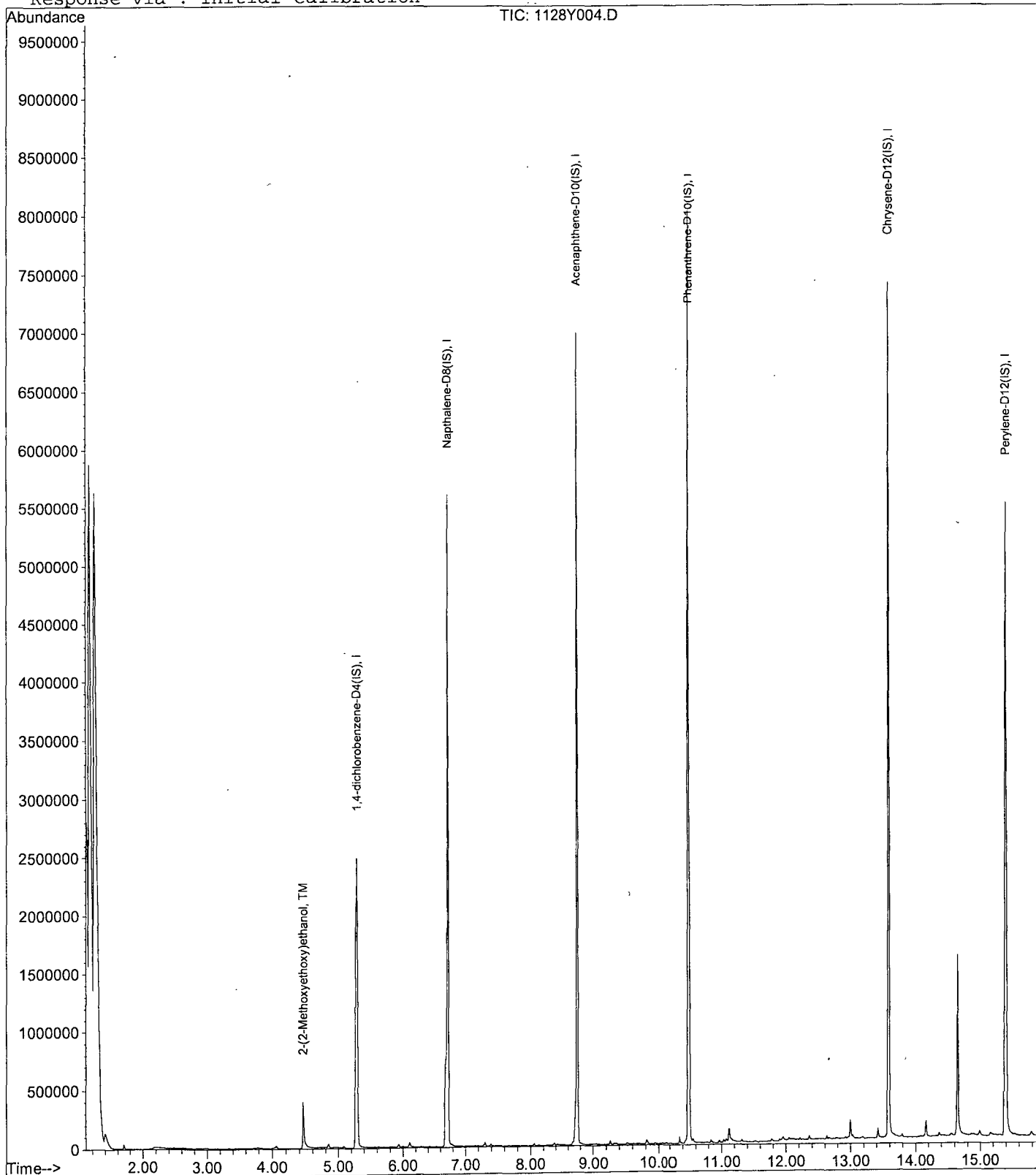
Data File : M:\YODA\DATA\Y181128M\1128Y004.D  
Acq On : 28 Nov 18 8:08  
Sample : 50ug/ml MEE 08/01/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y005.D Vial: 5  
 Acq On : 28 Nov 18 8:32 Operator: MA  
 Sample : 100ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	833525	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3655933	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1870603	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3472767	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	2784977	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2713194	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.47	45	511054	121.26713	ppb	99

Quantitation Report

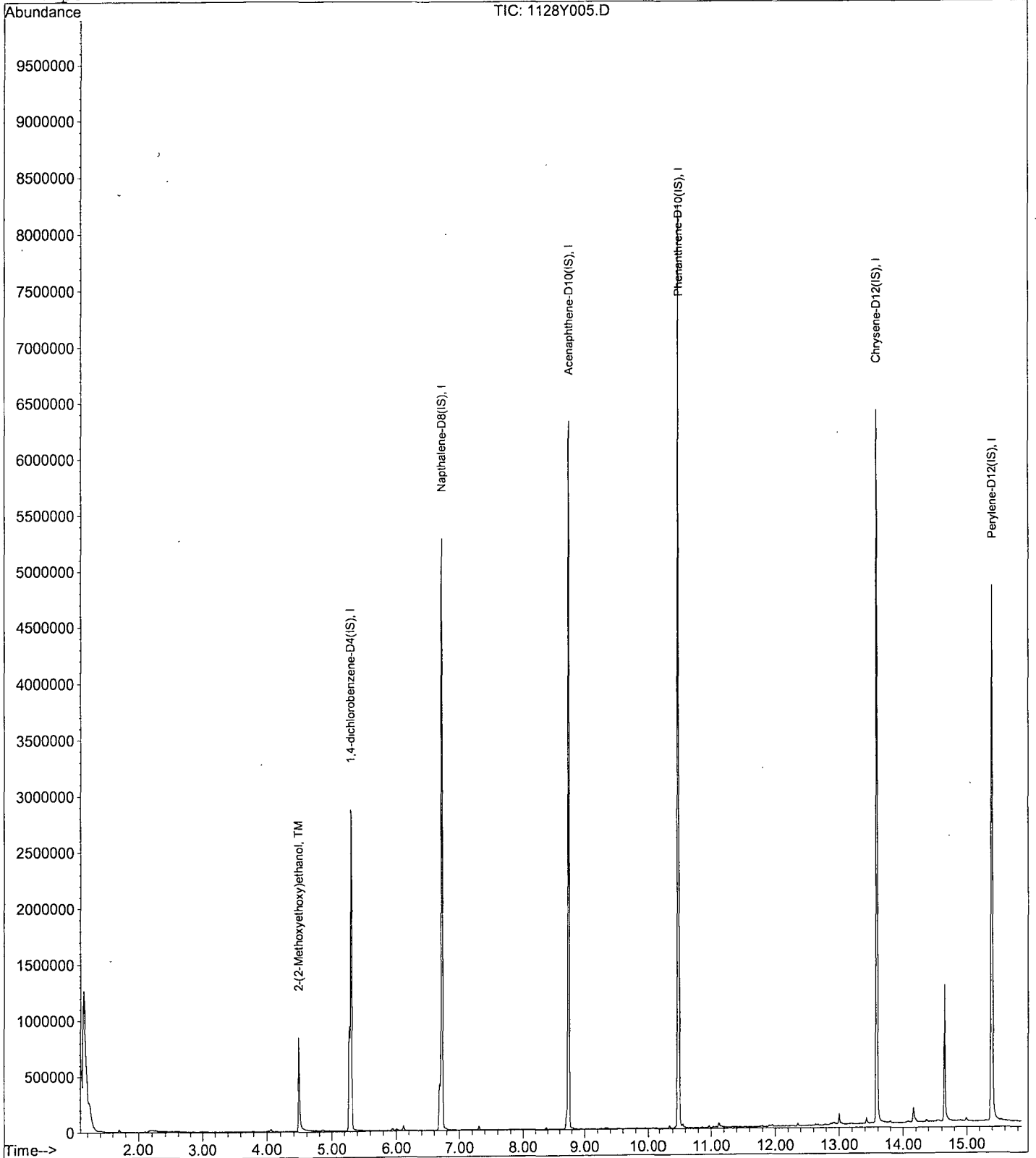
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Acq On : 28 Nov 18 8:32  
Sample : 100ug/ml MEE 08/01/18  
Misc : soil

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y006.D Vial: 6  
 Acq On : 28 Nov 18 8:55 Operator: MA  
 Sample : 200ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	906220	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4175598	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2128971	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3974569	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3488549	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3293123	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1131710	207.88279	ppb	99

Quantitation Report

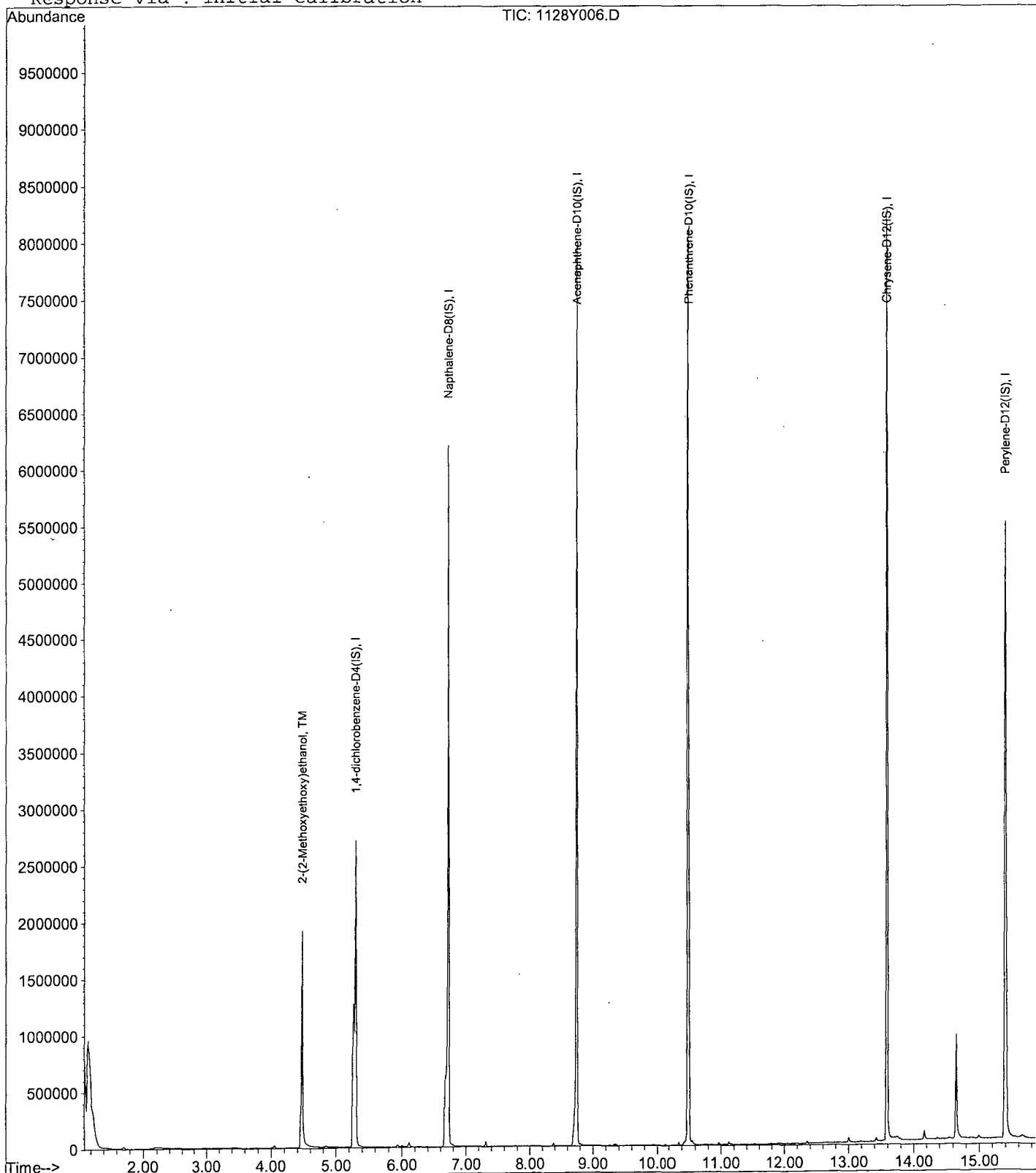
Data File : M:\YODA\DATA\Y181128M\1128Y006.D  
Acq On : 28 Nov 18 8:55  
Sample : 200ug/ml MEE 08/01/18  
Misc : soil

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y007.D Vial: 7  
 Acq On : 28 Nov 18 9:19 Operator: MA  
 Sample : 400ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:31 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	948008	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4475913	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2298421	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	4282330	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3776629	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3748965	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1962520	319.79035	ppb	100

Quantitation Report

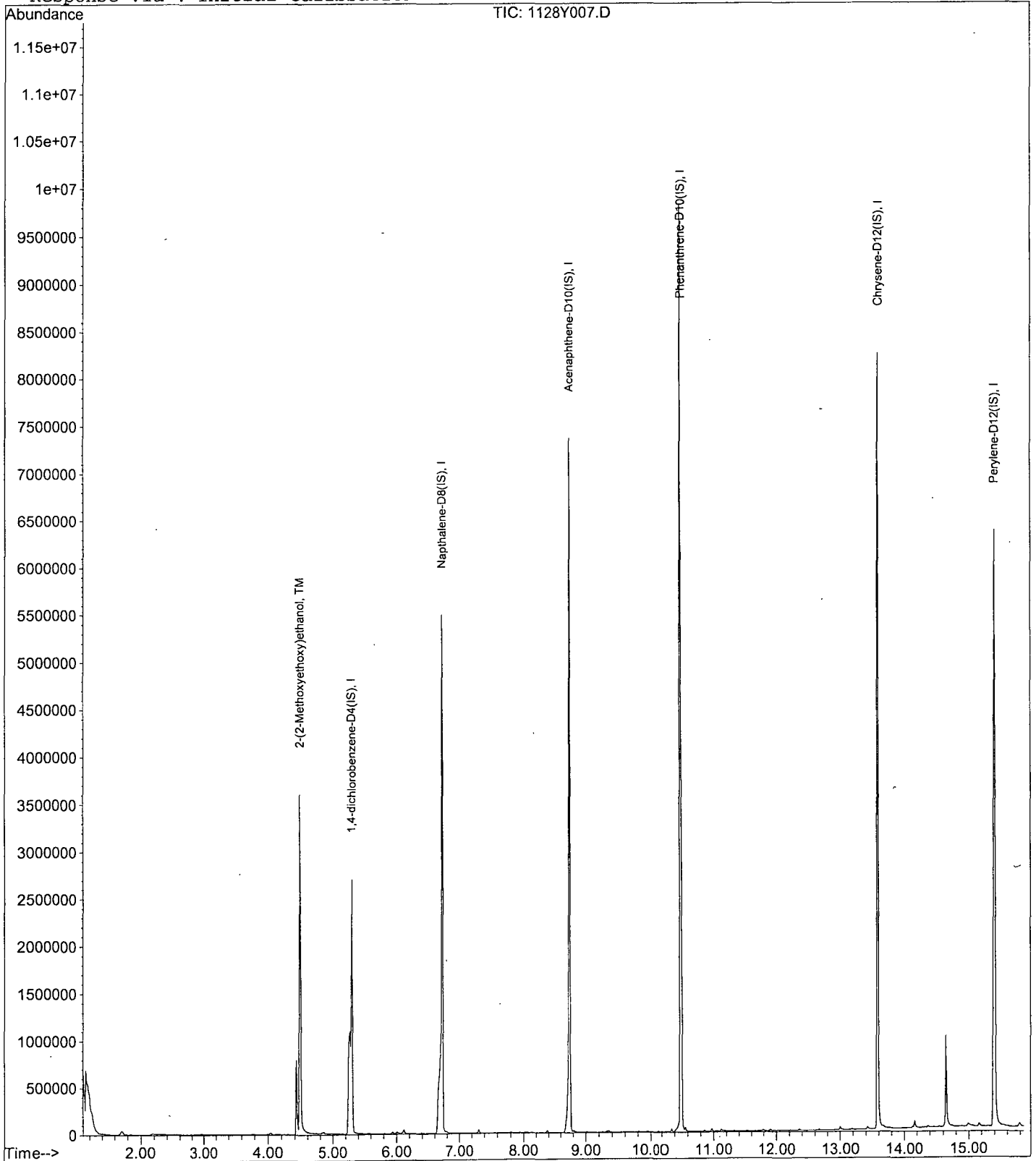
Data File : M:\YODA\DATA\Y181128M\1128Y007.D  
Acq On : 28 Nov 18 9:19  
Sample : 400ug/ml MEE 08/01/18  
Misc : soil

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:31 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y008.D Vial: 8  
 Acq On : 28 Nov 18 9:43 Operator: MA  
 Sample : 600ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	856651m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3531920	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2073085	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3859845	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3489580	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3140389	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.50	45	3103564	483.70926	ppb	100

Quantitation Report

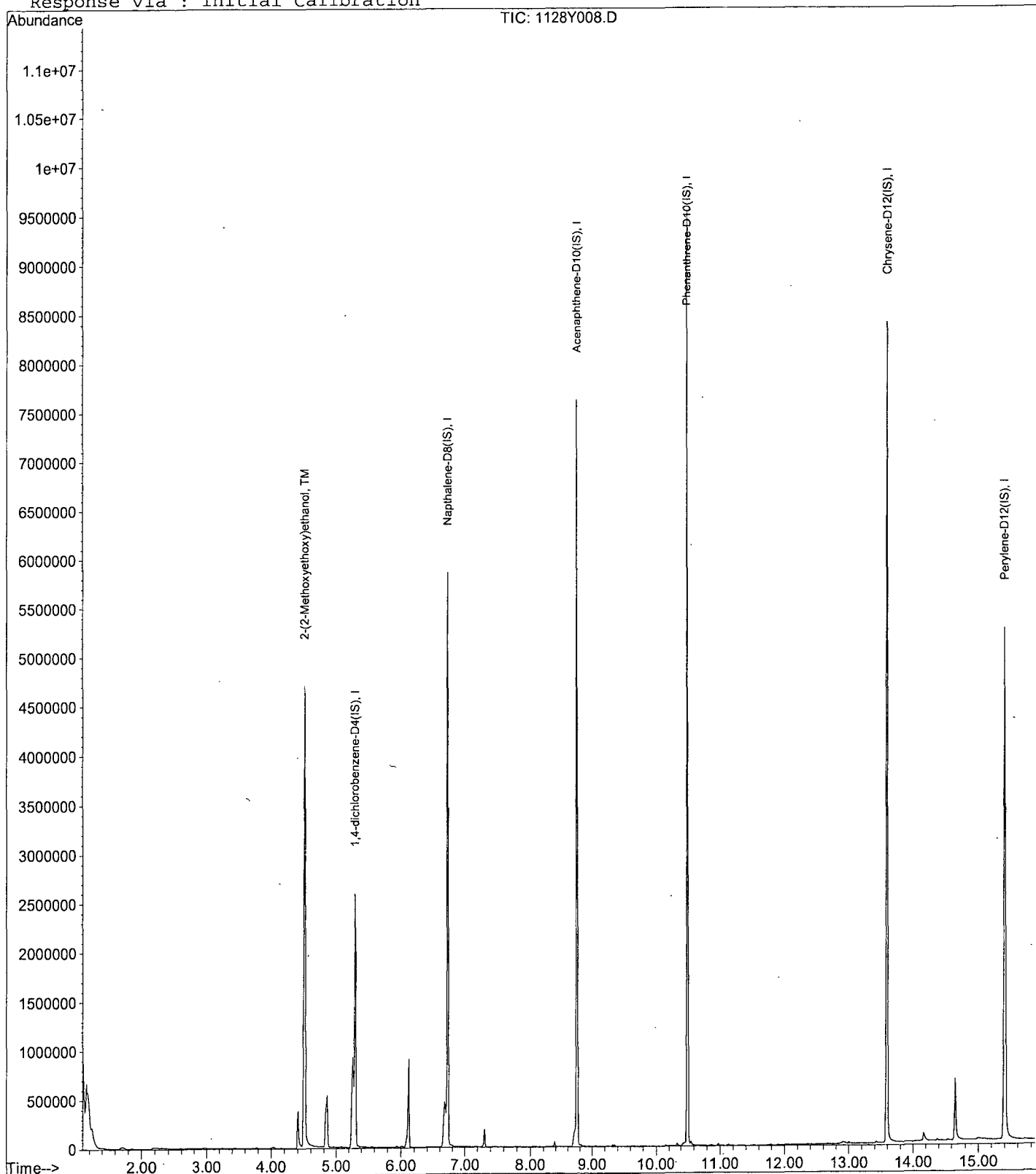
Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
Acq On : 28 Nov 18 9:43  
Sample : 600ug/ml MEE 08/01/18  
Misc : soil

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

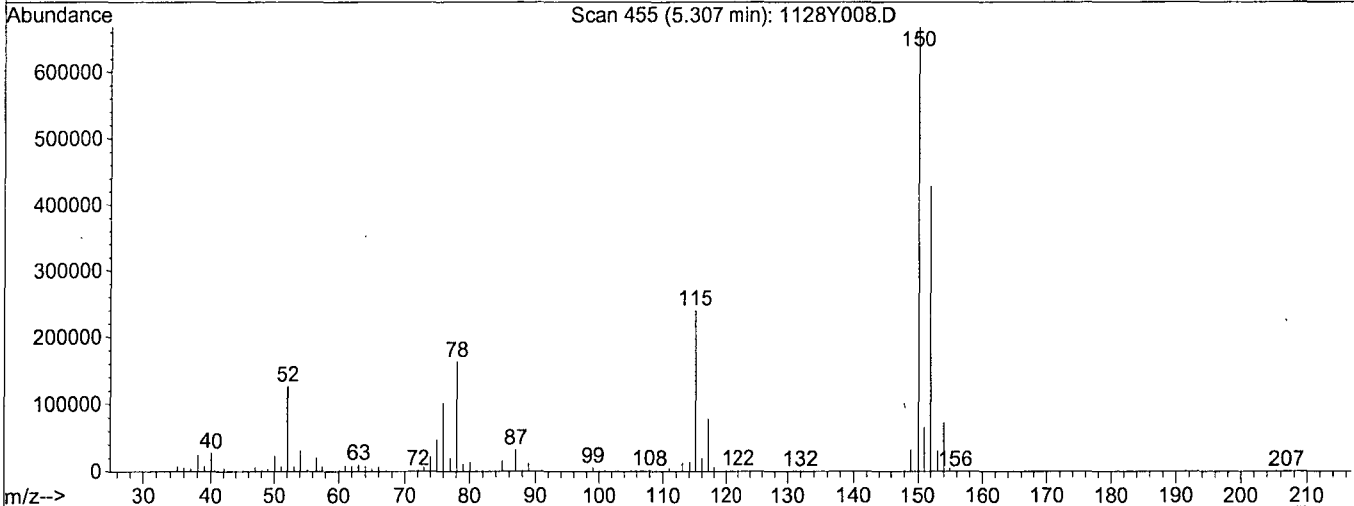
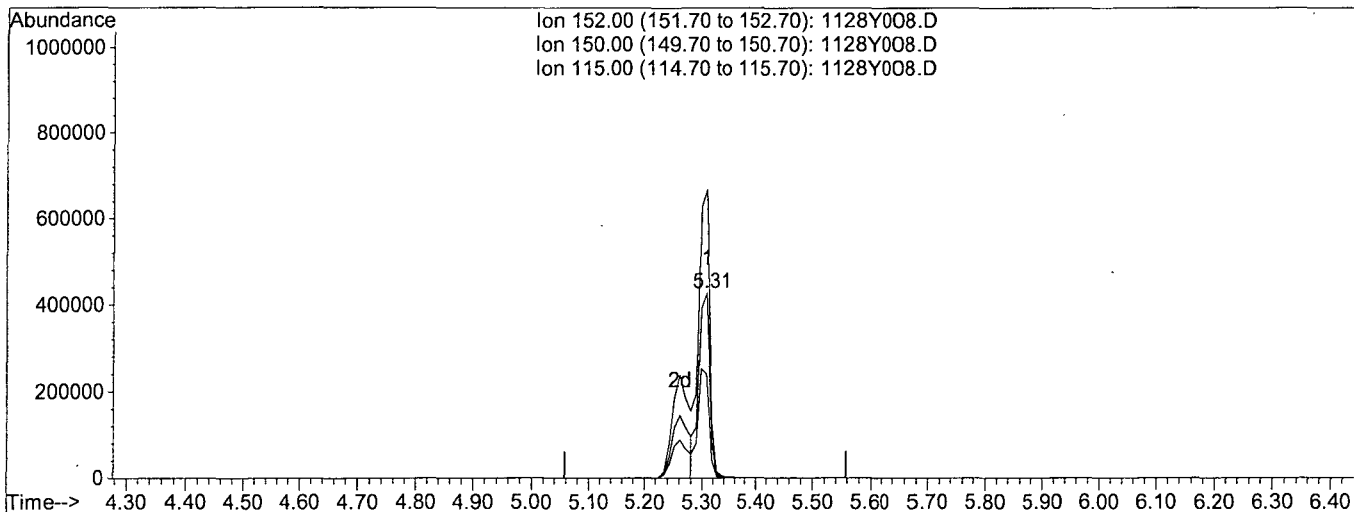
Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D Vial: 8  
 Acq On : 28 Nov 18 9:43 Operator: MA  
 Sample : 600ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Nov 28 11:40 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.31min 40.0000ppb

response 580797

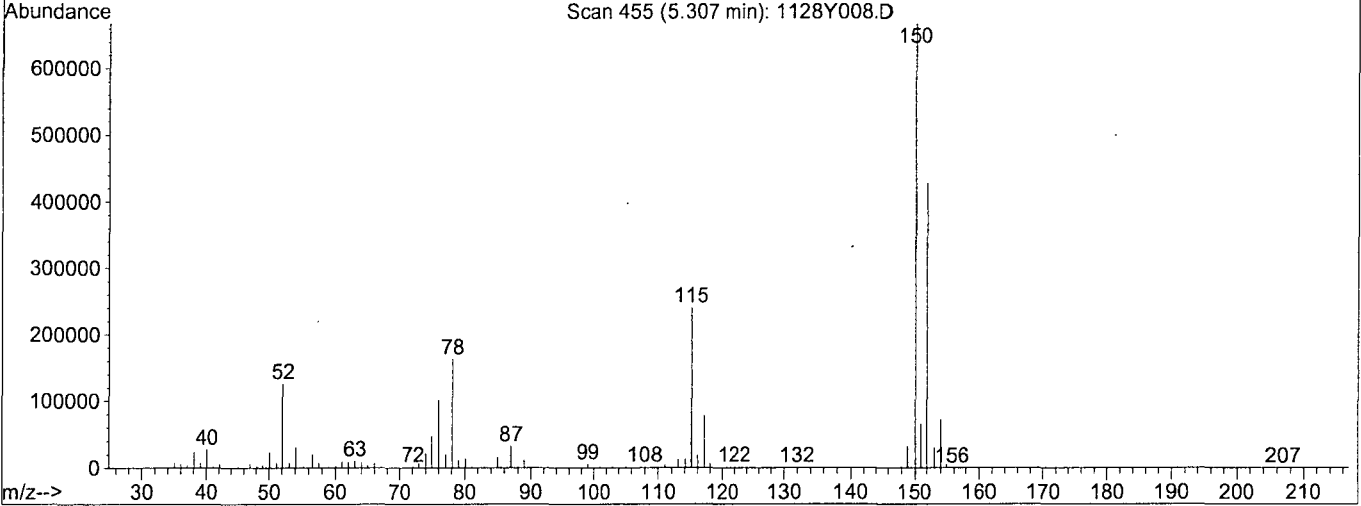
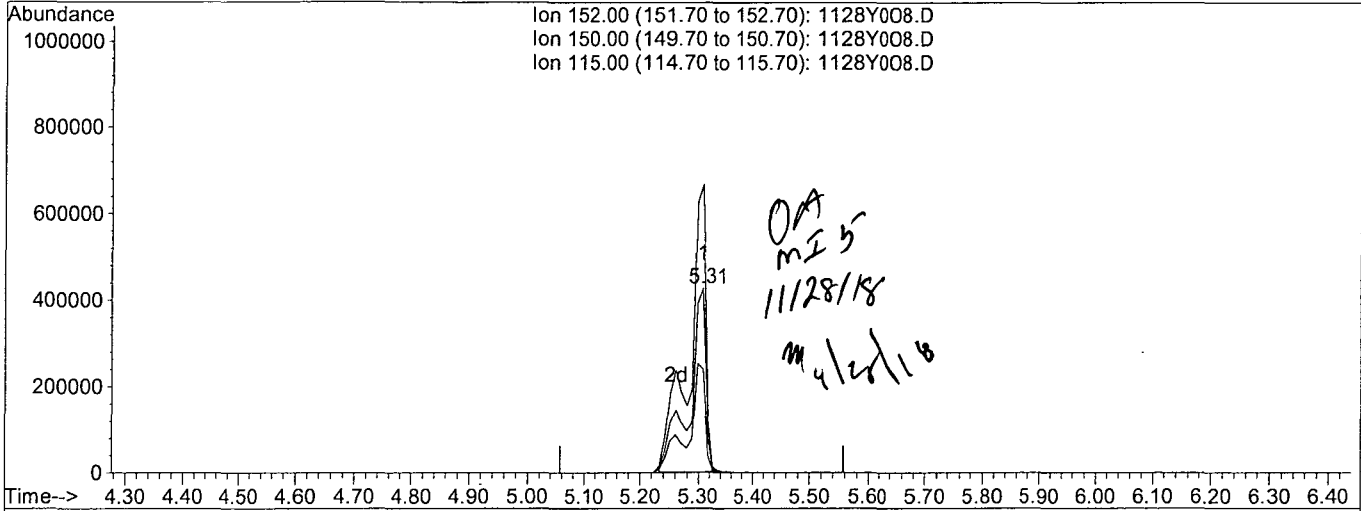
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.26
115.00	56.30	56.24
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.31min 40.0000ppb m

response 856651

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.25
115.00	56.30	56.26
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y009.D Vial: 9  
 Acq On : 28 Nov 18 10:06 Operator: MA  
 Sample : 800ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	785528m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3646286	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2099263	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3938984	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3411642	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2743638	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.52	45	4272210	778.75542	ppb	98

Quantitation Report

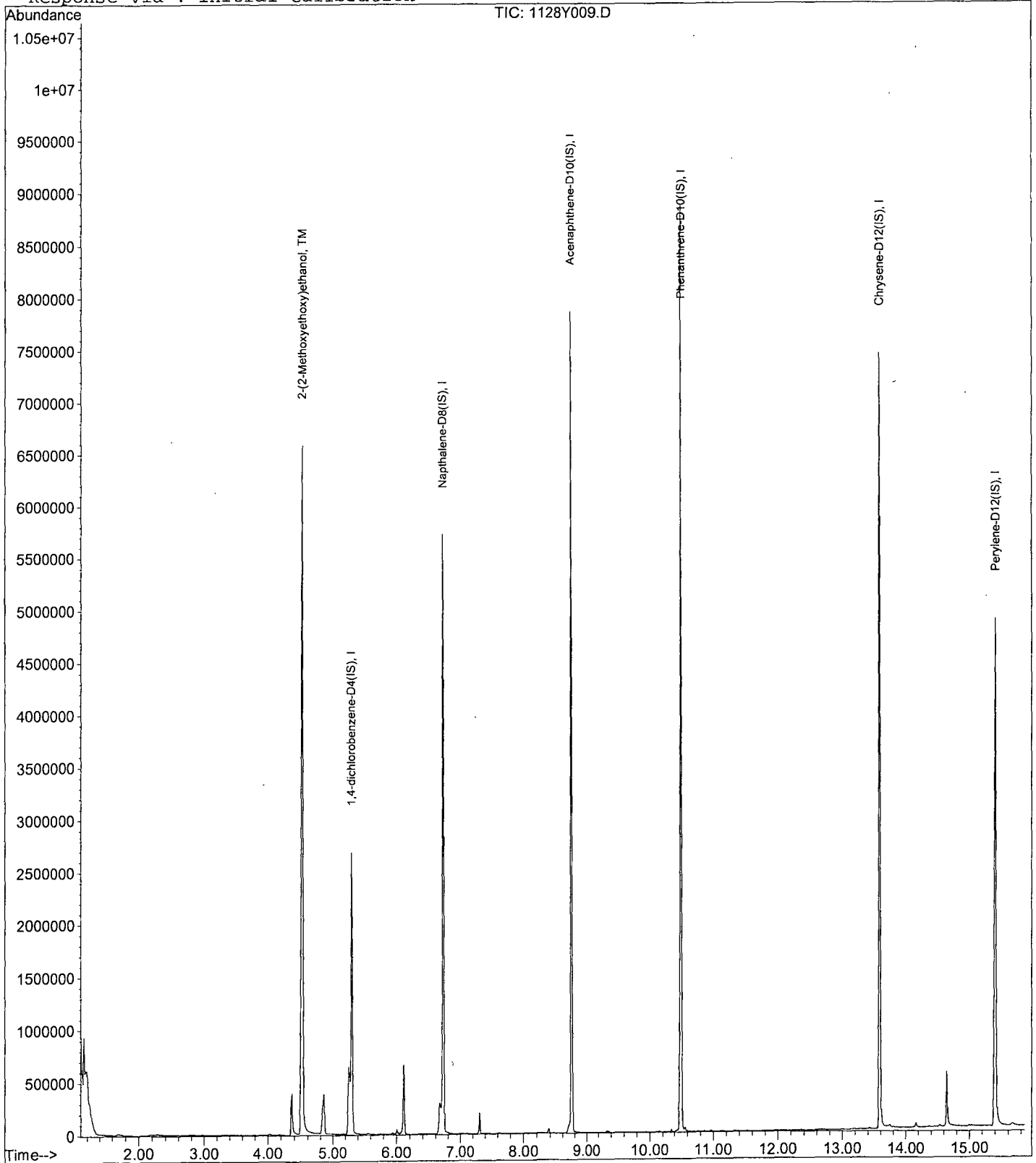
Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
Acq On : 28 Nov 18 10:06  
Sample : 800ug/ml MEE 08/01/18  
Misc : soil

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



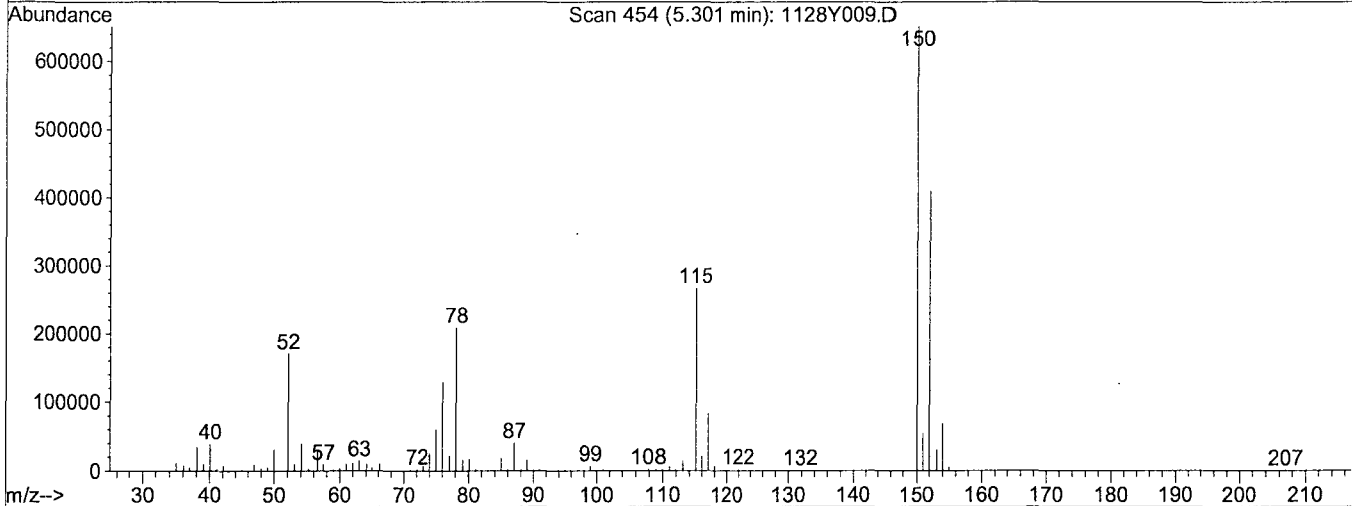
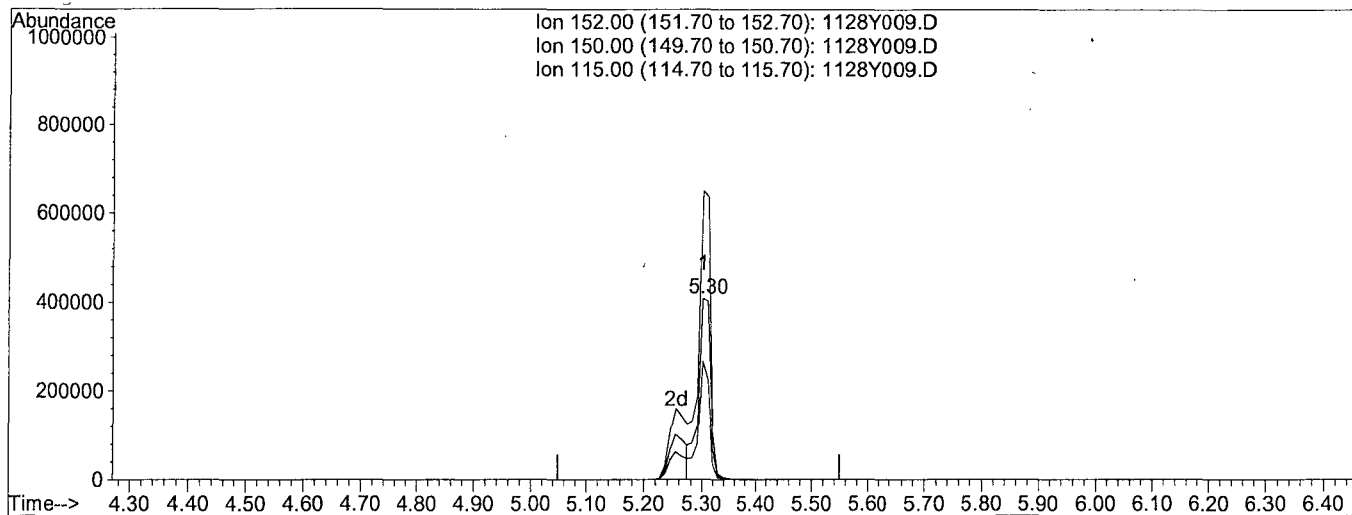


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:31 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(1S) (I)  
 5.30min 40.0000ppb  
 response 614492

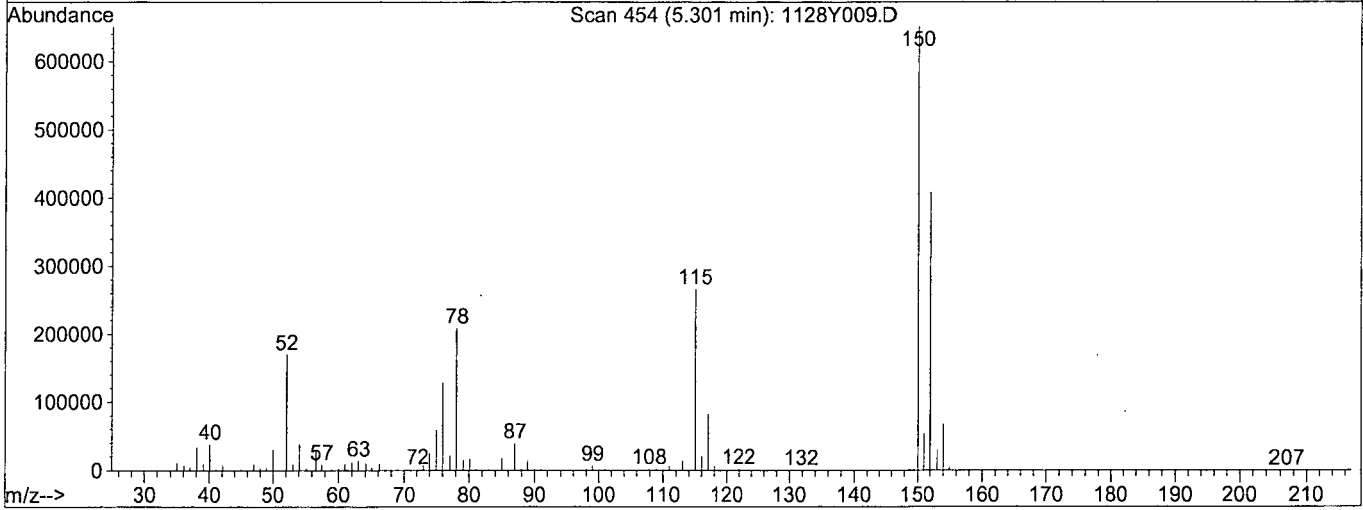
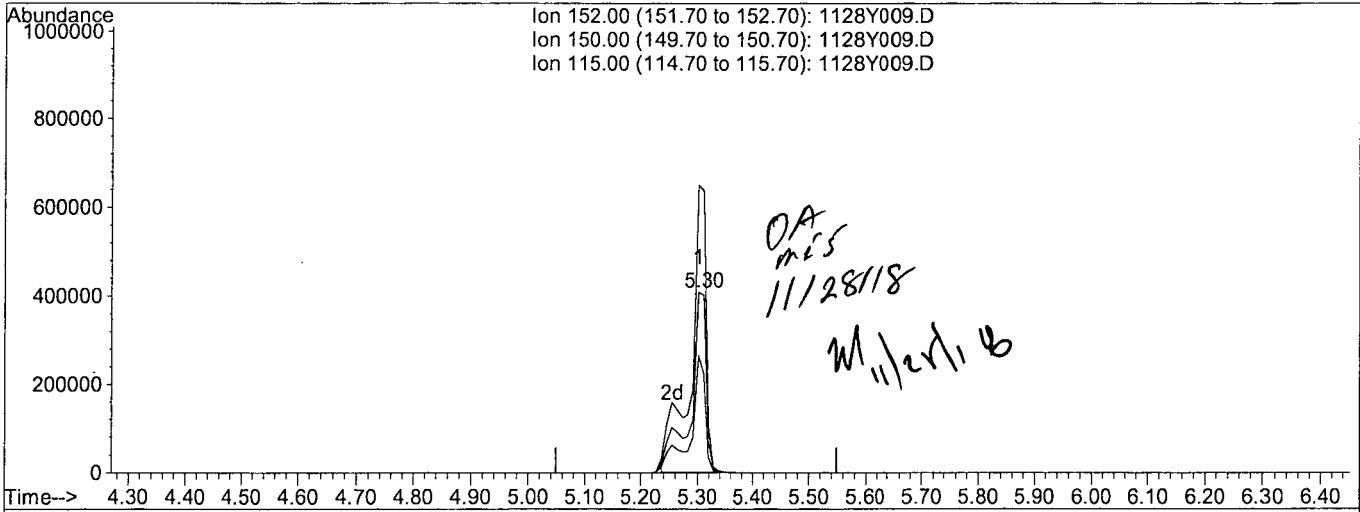
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.30
115.00	63.20	65.14
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
Acq On : 28 Nov 18 10:06  
Sample : 800ug/ml MEE 08/01/18  
Misc : soil  
Quant Time: Nov 28 11:40 2018

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:40:16 2018  
Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(1S) (1)

5.30min 40.0000ppb m

response 785528

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.35
115.00	63.20	65.18
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y010.D Vial: 10  
 Acq On : 28 Nov 18 10:30 Operator: MA  
 Sample : 1000ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:41 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	817975m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3554268	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2016499	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3774107	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3353765	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3559145	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.53	45	5060771	787.46043	ppb	98

Quantitation Report

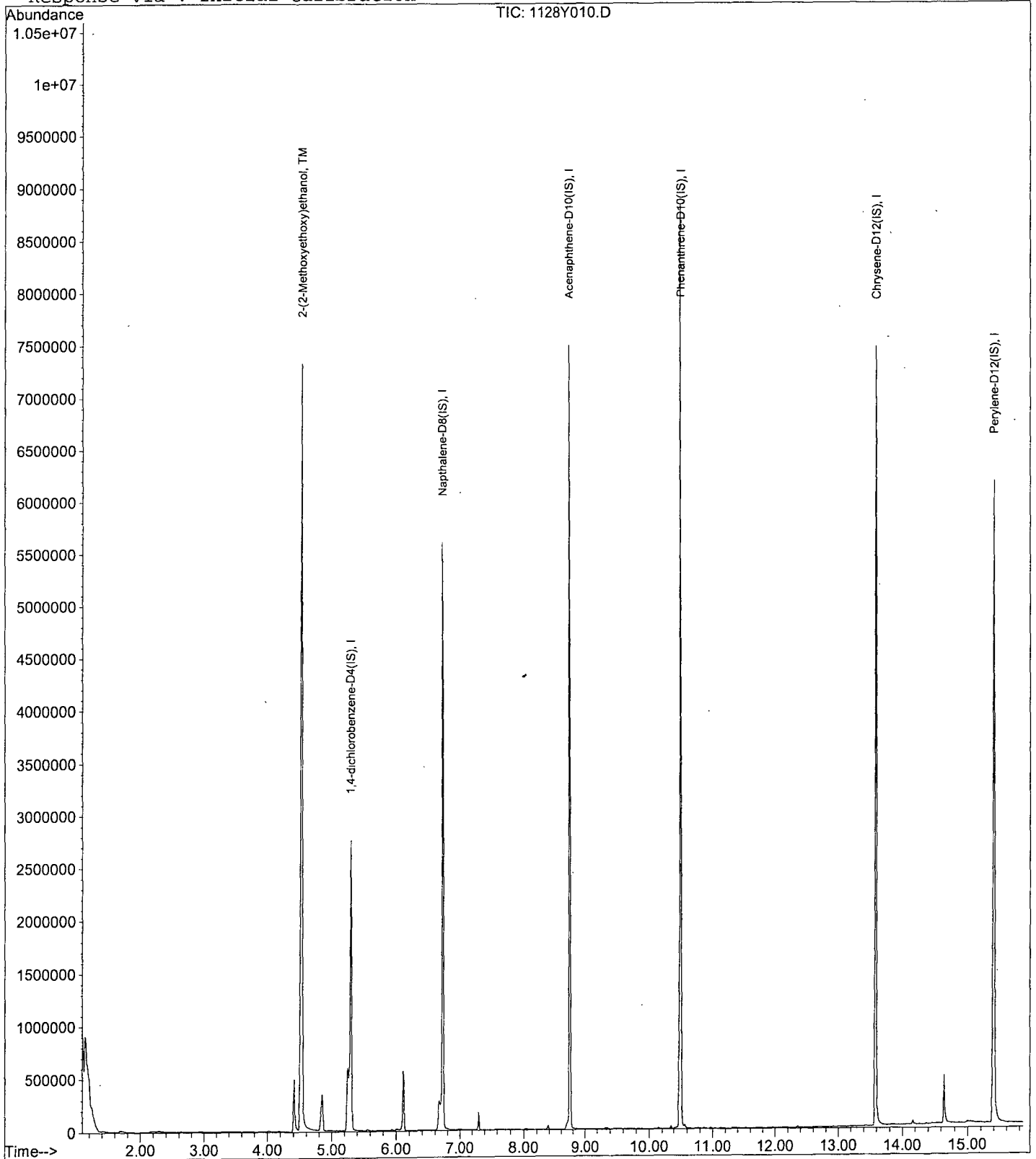
Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
Acq On : 28 Nov 18 10:30  
Sample : 1000ug/ml MEE 08/01/18  
Misc : soil

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:41 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

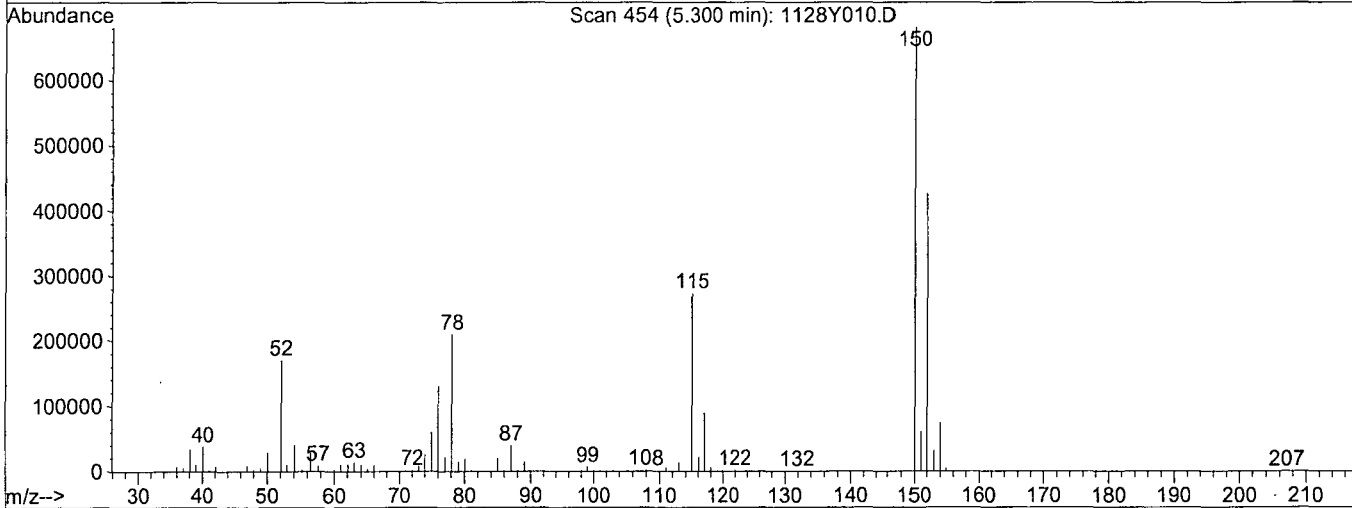
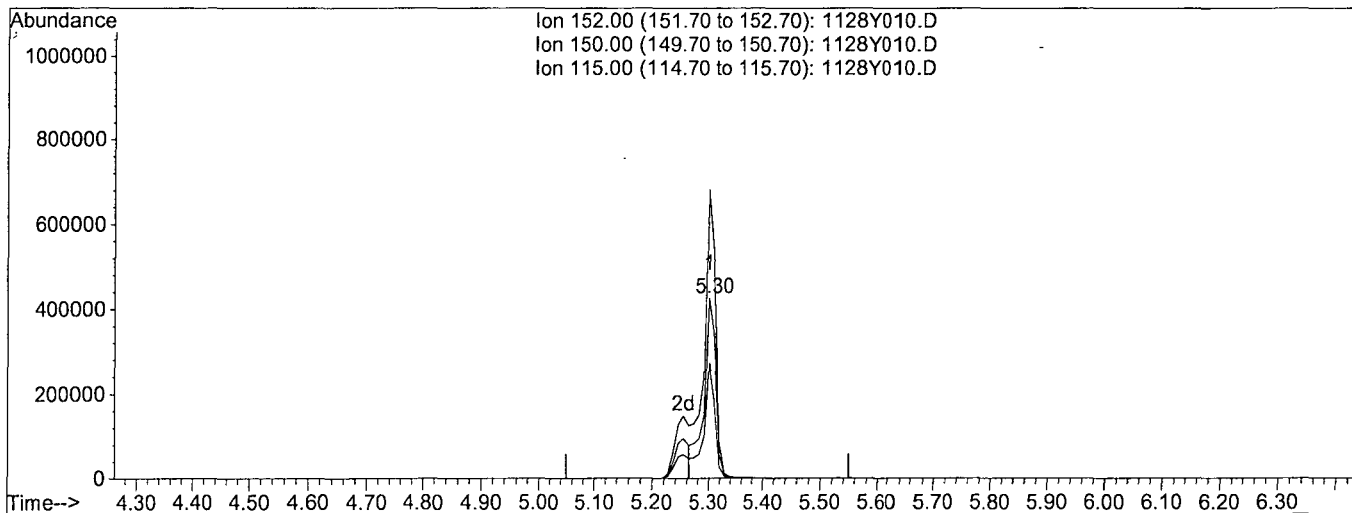


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:32 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.30min 40.0000ppb

response 652352

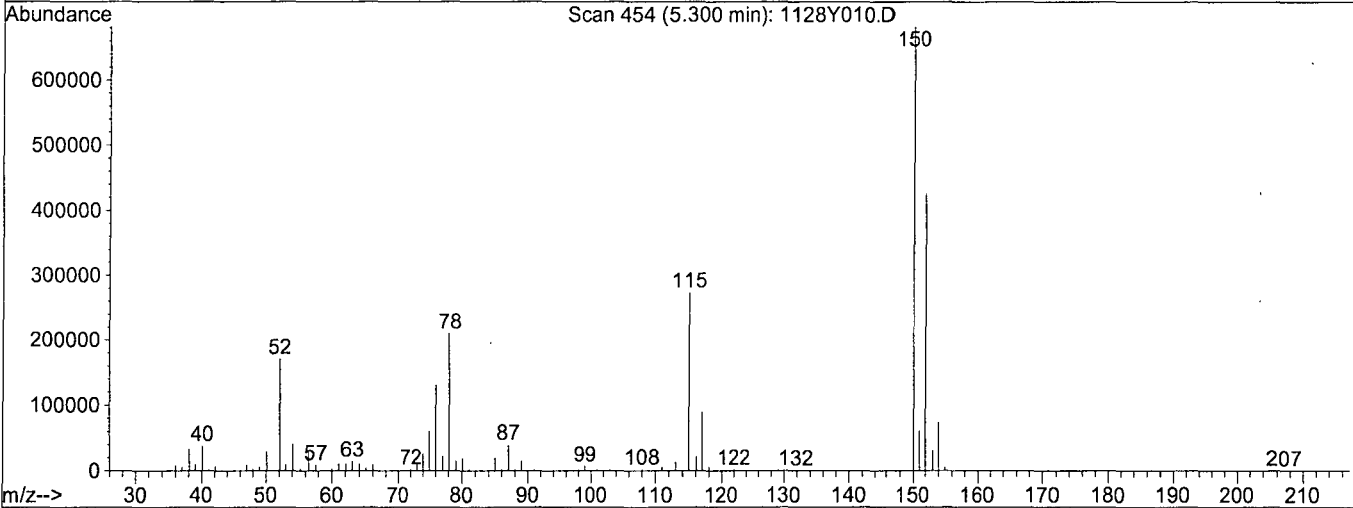
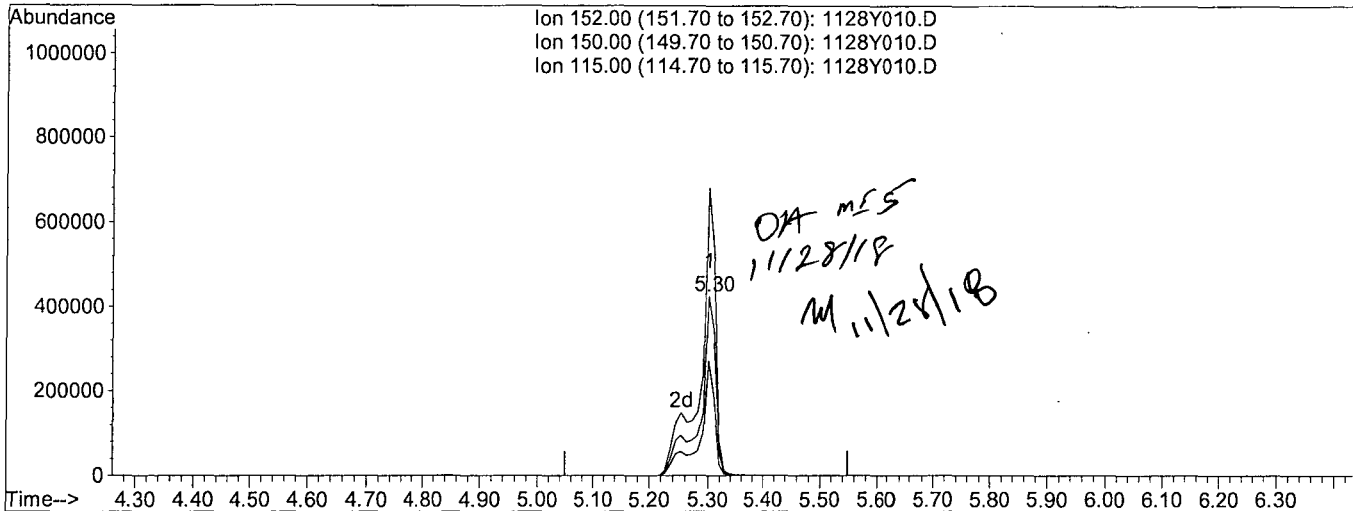
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.08
115.00	63.20	64.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:41 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 817975

Ion	Exp%	Act%
152.00	100.	100
150.00	160.10	160.10
115.00	63.20	64.11
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y012.D Vial: 12  
 Acq On : 28 Nov 18 11:17 Operator: MA  
 Sample : 500ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:25 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 09:56:17 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	830482	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3639618	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1806558	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3340149	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	2995047	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2844171	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.49	45	2370937	400.21340	ppb	100

Quantitation Report

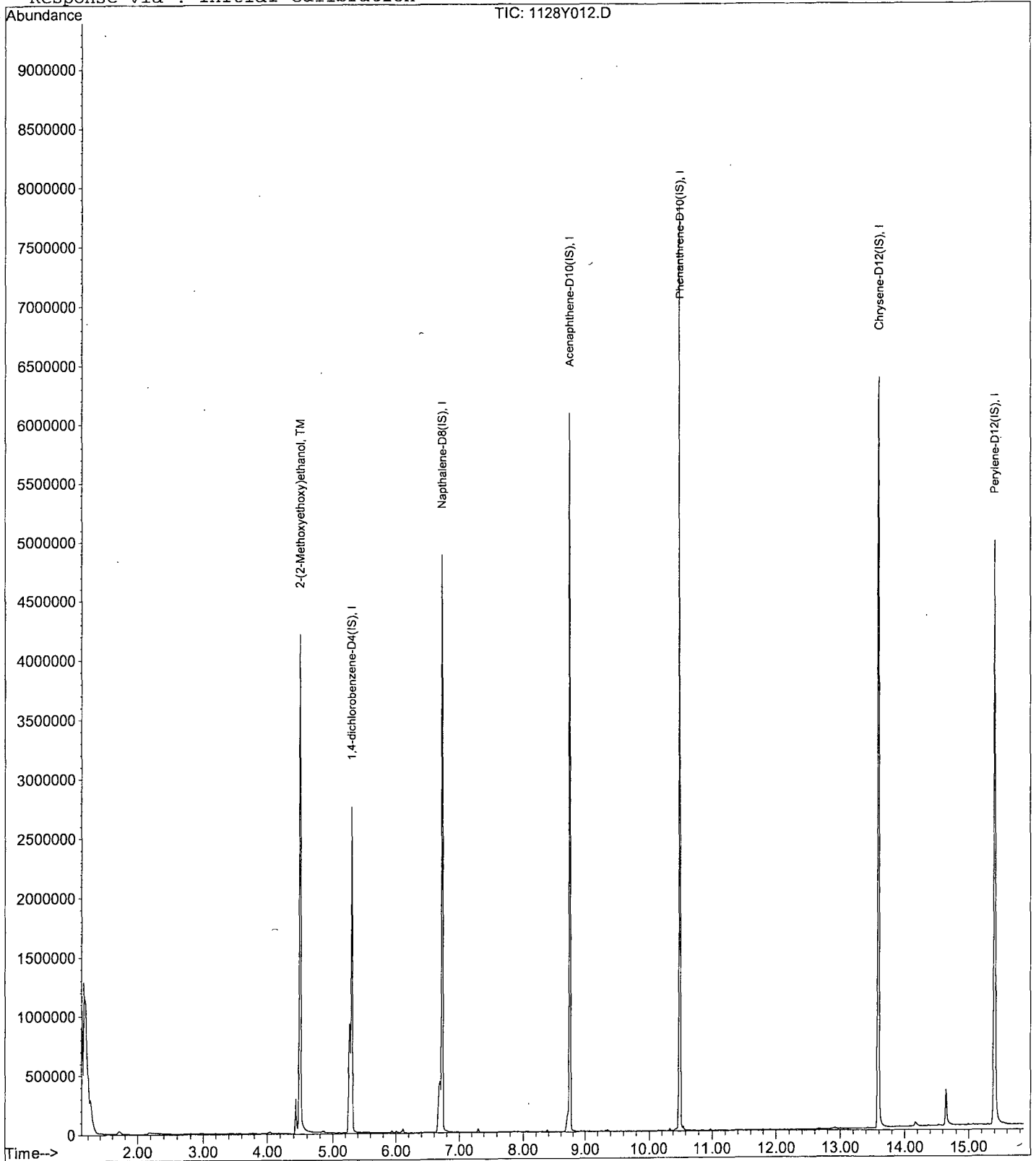
Data File : M:\YODA\DATA\Y181128M\1128Y012.D  
Acq On : 28 Nov 18 11:17  
Sample : 500ug/ml MEE 08/01/18  
Misc : soil

Vial: 12  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:25 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





2MEE  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 11/28/18

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y014.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2671	11	TM
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
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22						
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25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

11.0

Data File : M:\YODA\DATA\Y181128M\1128Y014.D Vial: 14  
 Acq On : 28 Nov 18 12:26 Operator: MA  
 Sample : SS ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 12:58 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	835108m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3156594	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1957153	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3684850	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3336185	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3221218	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2787828	555.84367	ppb	100

Quantitation Report

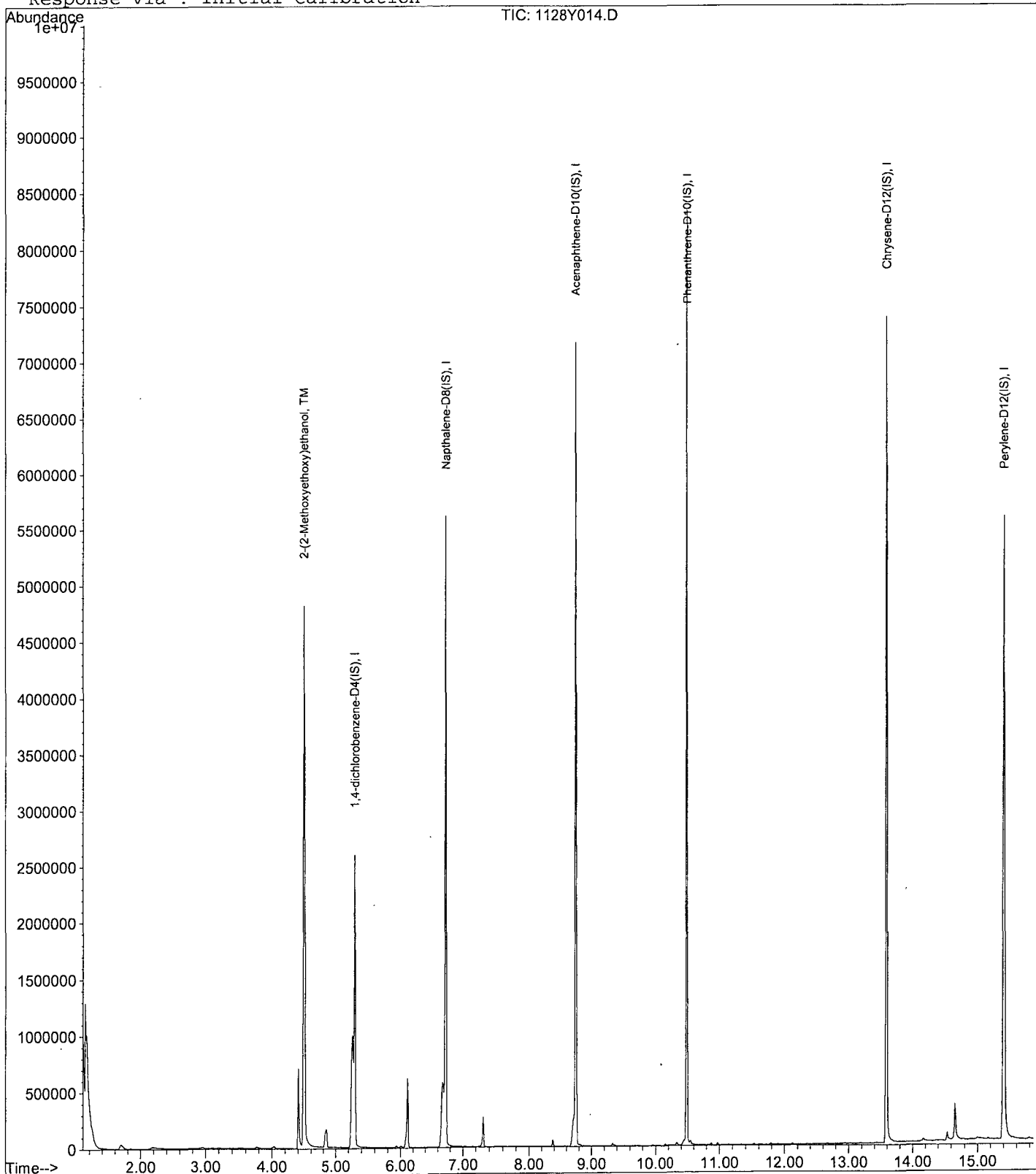
Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
Acq On : 28 Nov 18 12:26  
Sample : SS ug/ml MEE 08/01/18  
Misc : soil

Vial: 14  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 12:58 2018

Quant Results File: YMEE1128.RES

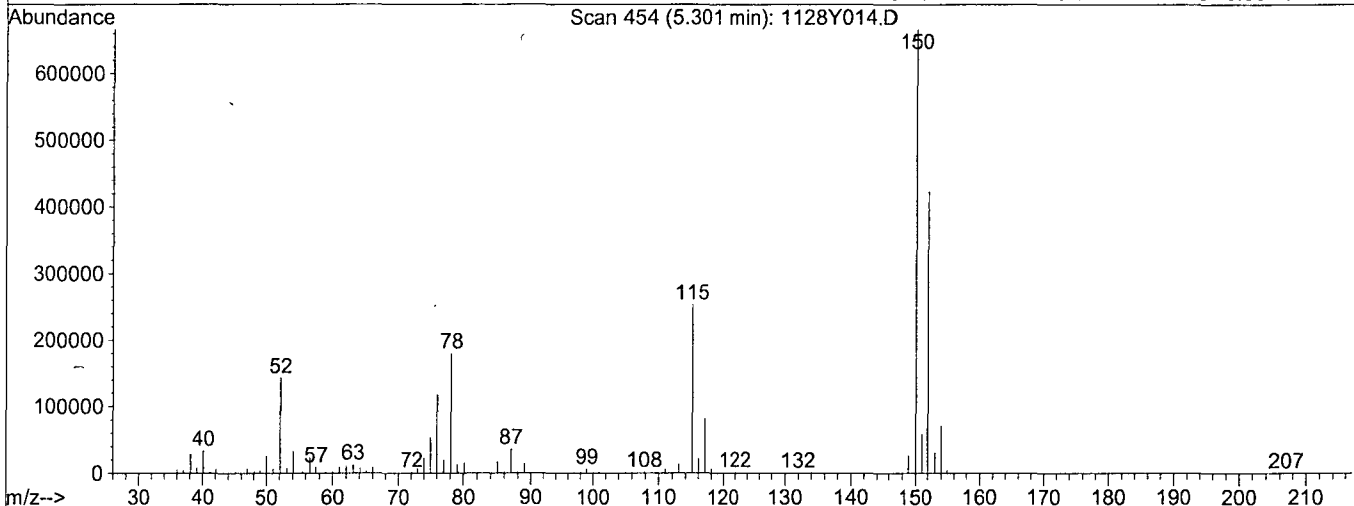
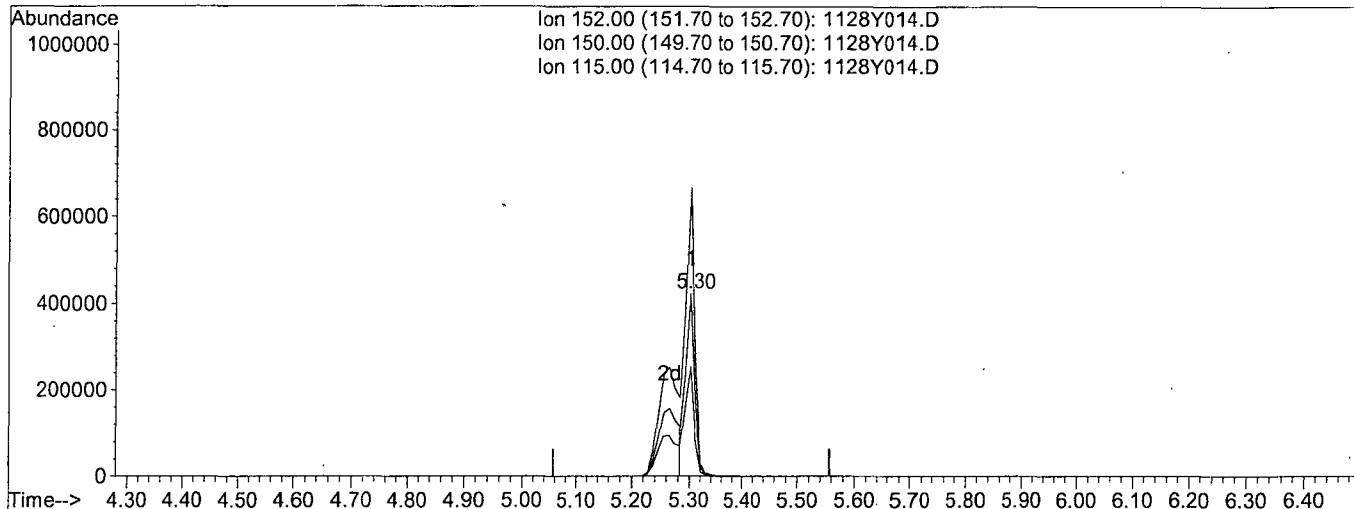
Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D Vial: 14  
 Acq On : 28 Nov 18 12:26 Operator: MA  
 Sample : SS ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Nov 28 12:58 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (l)

5.30min 40.0000ppb

response 473674

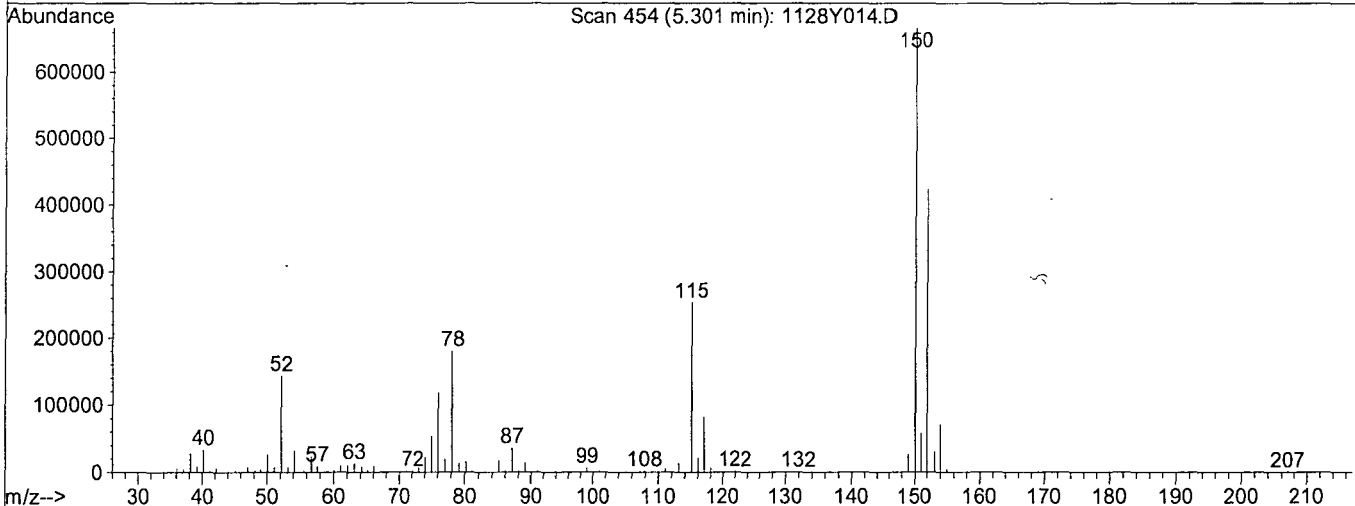
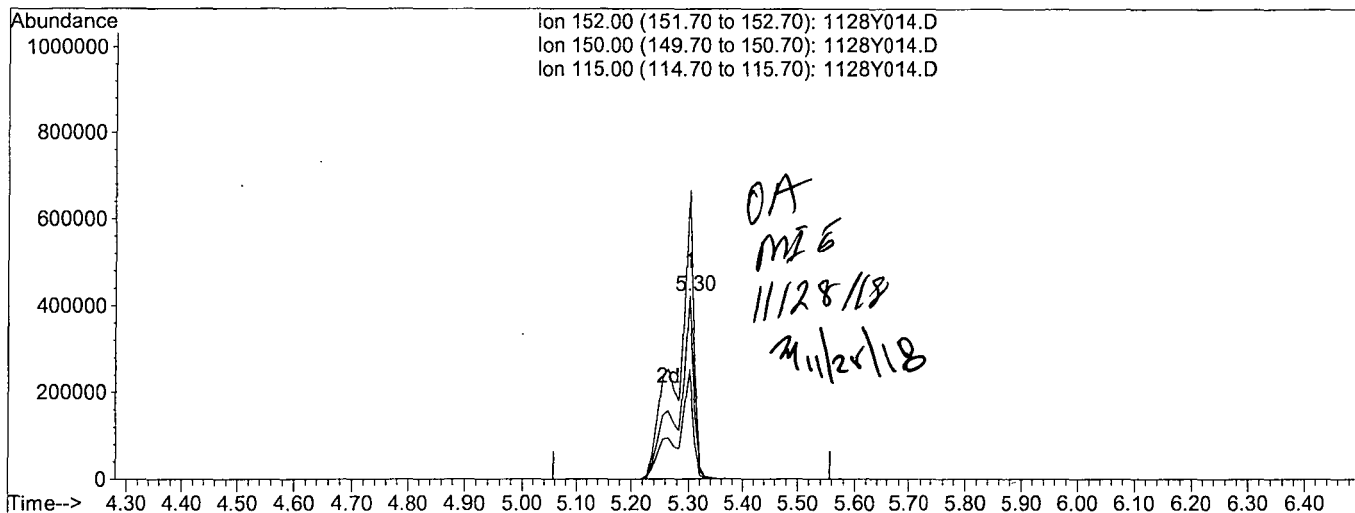
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.54
115.00	56.30	59.84
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 835108

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.52
115.00	56.30	59.85
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/19/18  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y033.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2463	2.5	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
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31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
		Average			2.5	

Data File : M:\YODA\DATA\Y181128M\1128Y033.D  
 Acq On : 19 Dec 18 8:31  
 Sample : 500ug/ml MEE 12/19/18  
 Misc : soil

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Dec 19 8:39 2018

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	595254	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	2491543	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1256492	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.42	188	2312697	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1974590	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.30	264	1954775	40.0000	ppb	-0.10

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.44	45	1832318	512.5401	ppb	98

Quantitation Report

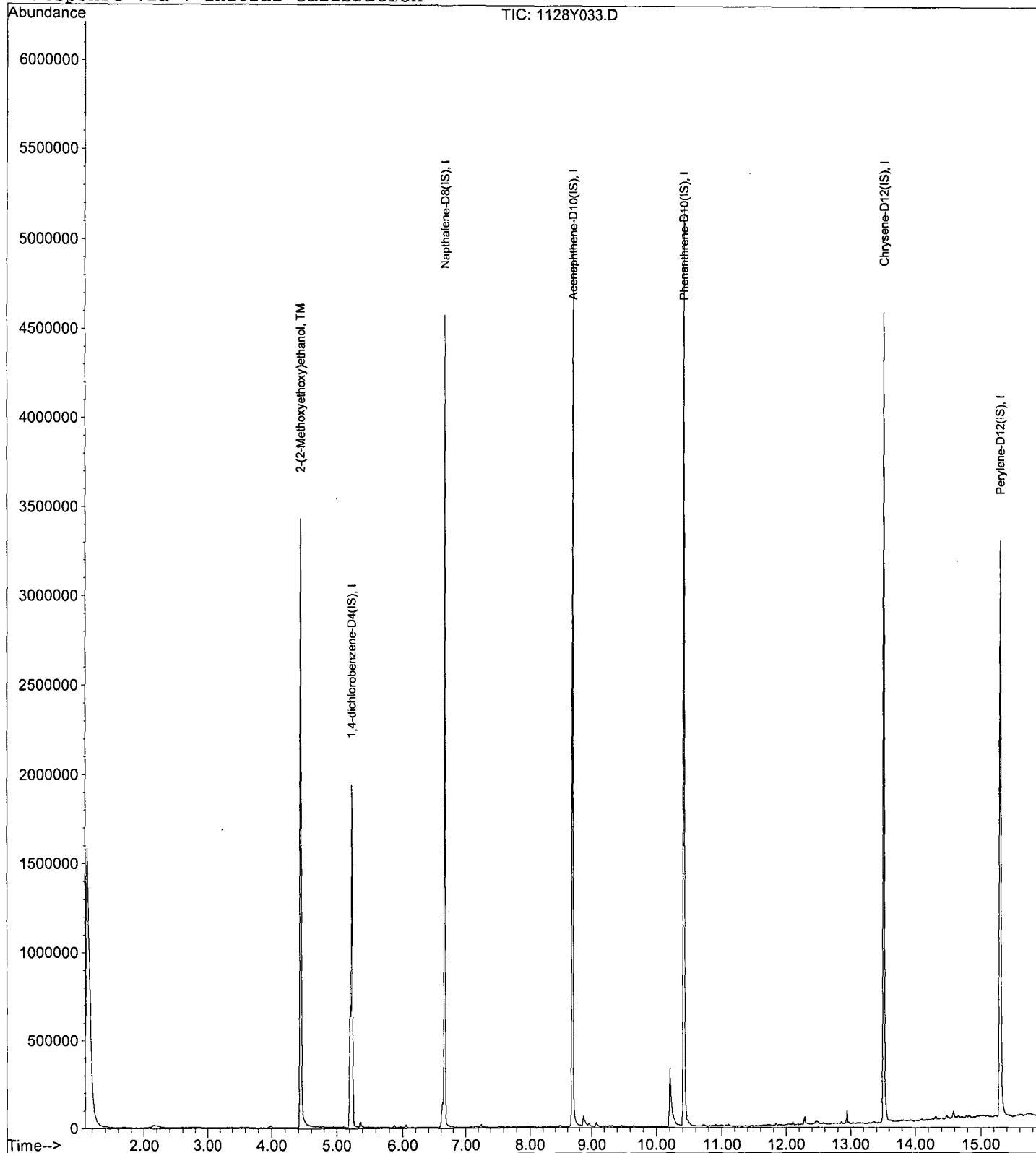
Data File : M:\YODA\DATA\Y181128M\1128Y033.D  
Acq On : 19 Dec 18 8:31  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 33  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 19 8:39 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





2MEE  
EPA 8270

Form 7  
Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/19/18  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y048.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2317	3.6	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
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28						
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30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40		Average			3.6	

Data File : M:\YODA\DATA\Y181128M\1128Y048.D Vial: 48  
 Acq On : 19 Dec 18 16:16 Operator: MA  
 Sample : 500ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:43 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	553827	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	2363851	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1167161	40.00000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.41	188	2172811	40.00000	ppb	-0.07
6) Chrysene-D12 (IS)	13.51	240	1831345	40.00000	ppb	-0.07
7) Perylene-D12 (IS)	15.31	264	1770883	40.00000	ppb	-0.09

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.44	45	1603753	482.16168	ppb	97

Quantitation Report

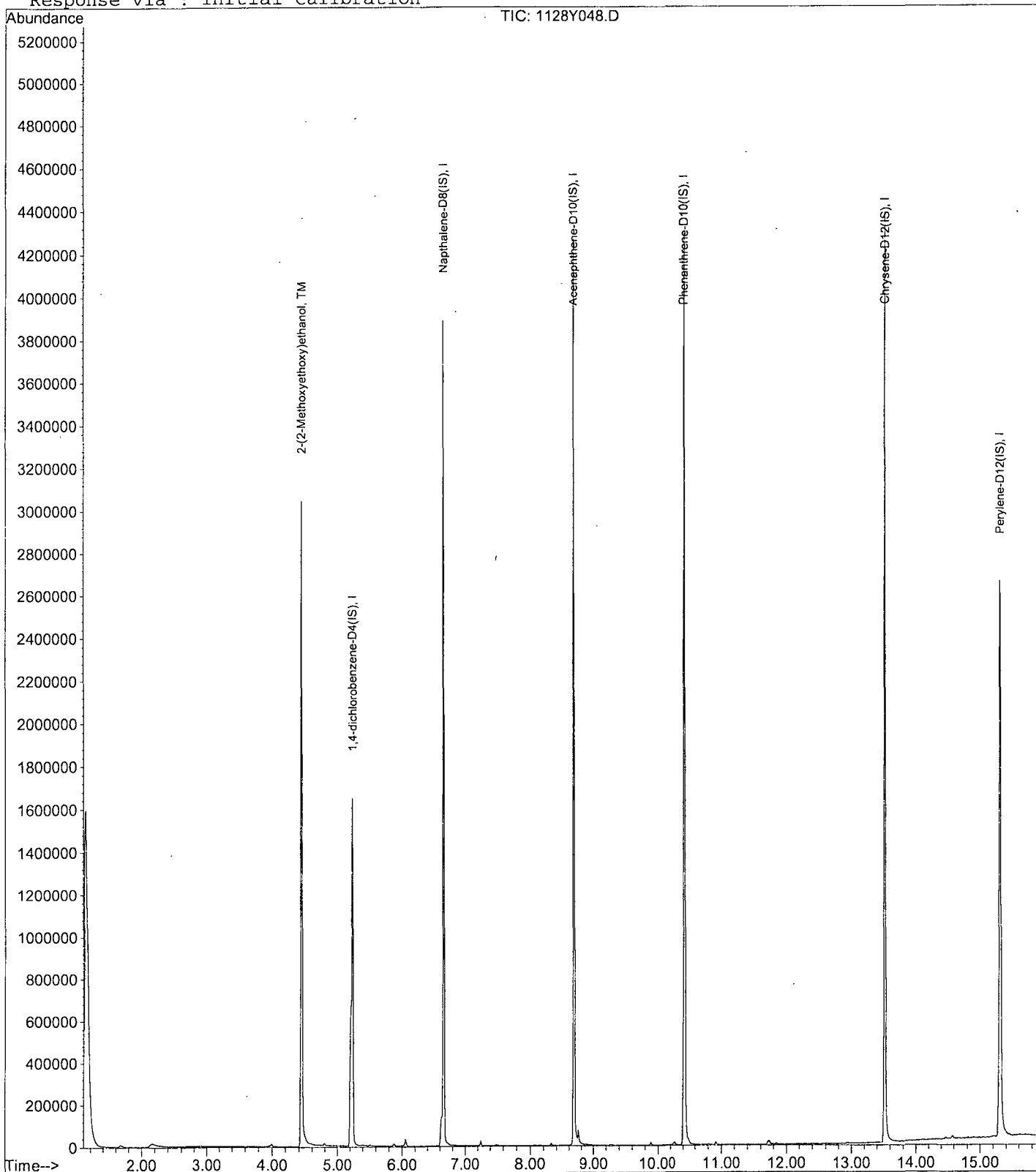
Data File : M:\YODA\DATA\Y181128M\1128Y048.D  
Acq On : 19 Dec 18 16:16  
Sample : 500ug/ml MEE 08/01/18.  
Misc : soil

Vial: 48  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:43 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**



Data File : M:\YODA\DATA\Y181128M\1128Y039.D Vial: 39  
 Acq On : 19 Dec 18 11:39 Operator: MA  
 Sample : AZ84057W17 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 8:58 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	515166	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	2165773	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1077965	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.42	188	1928970	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1534777	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.30	264	1482439	40.0000	ppb	-0.10

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

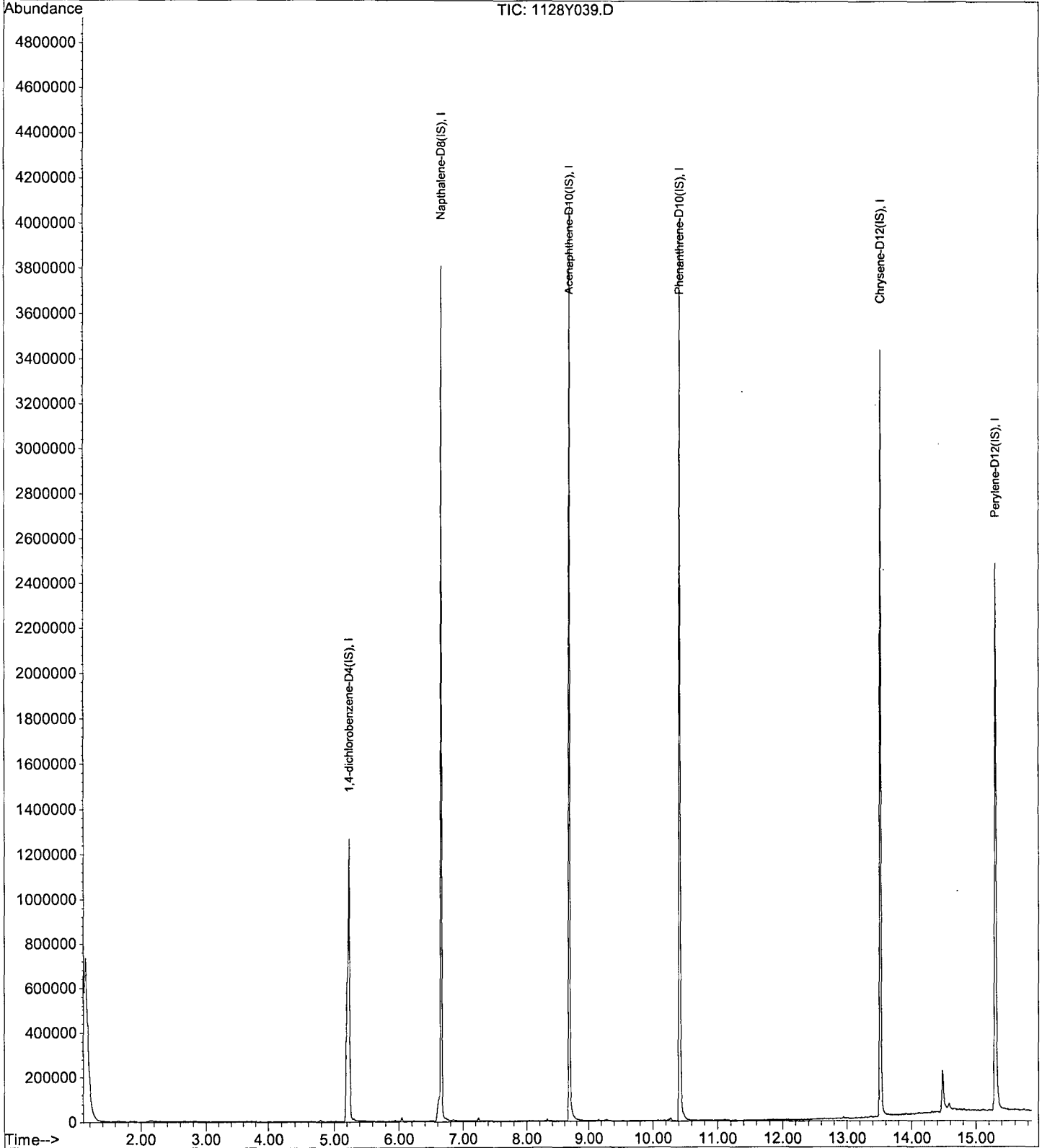
Data File : M:\YODA\DATA\Y181128M\1128Y039.D  
Acq On : 19 Dec 18 11:39  
Sample : AZ84057W17 2/500  
Misc : soil

Vial: 39  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 8:58 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y040.D Vial: 40  
 Acq On : 19 Dec 18 13:08 Operator: MA  
 Sample : AZ84059W05 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:46 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	521303	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	2269558	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.69	164	1225495	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.42	188	2285315	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1871536	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.32	264	1718321	40.0000	ppb	-0.08

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

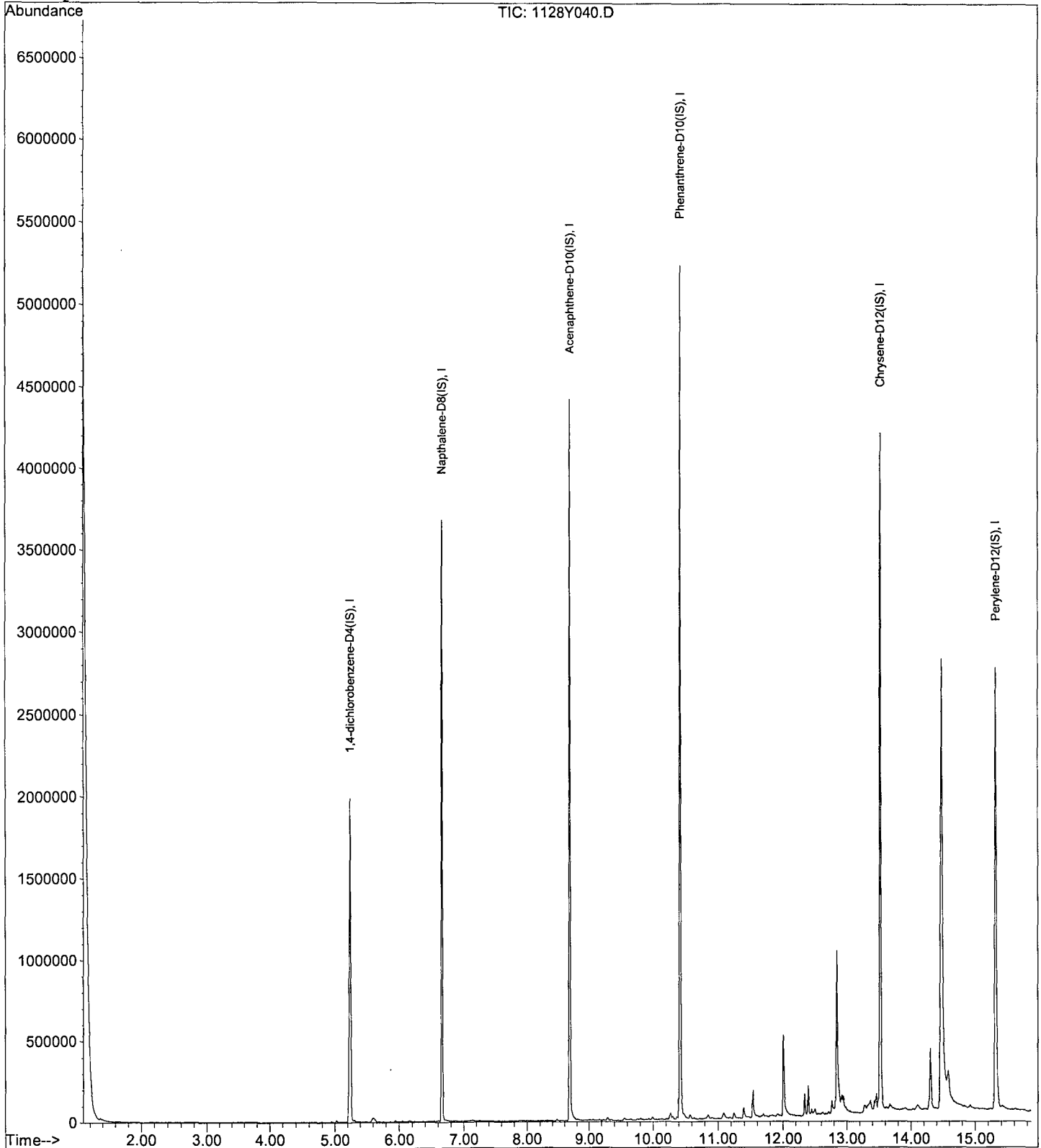
Data File : M:\YODA\DATA\Y181128M\1128Y040.D  
Acq On : 19 Dec 18 13:08  
Sample : AZ84059W05 2/500  
Misc : soil

Vial: 40  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:46 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y043.D Vial: 43  
 Acq On : 19 Dec 18 14:19 Operator: MA  
 Sample : AZ84061W11 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:46 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	548110	40.0000	ppb	-0.08
3) Napthalene-D8 (IS)	6.66	136	2401771	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1330800	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.42	188	2557316	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	2147897	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.31	264	2048007	40.0000	ppb	-0.09

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

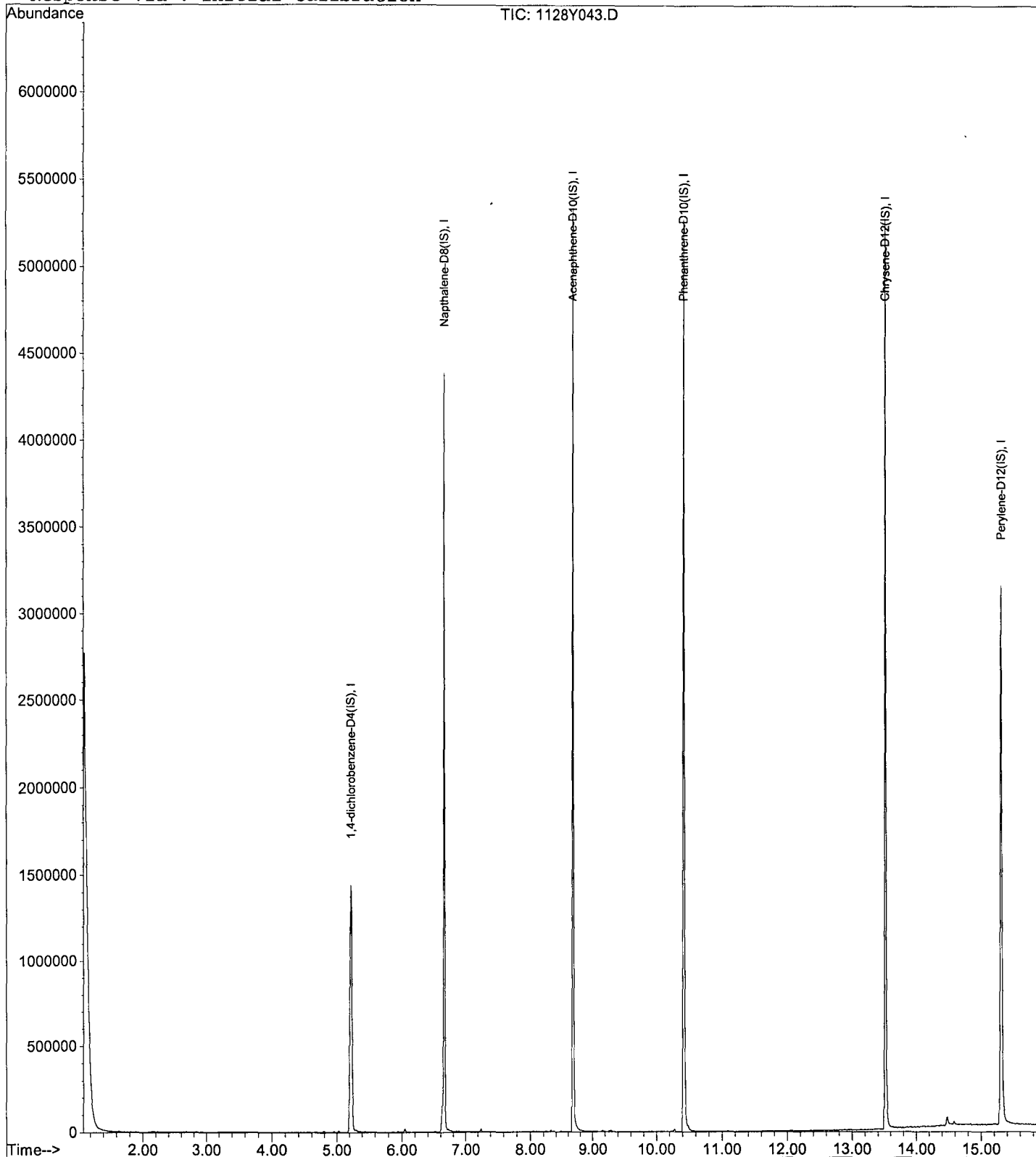
Data File : M:\YODA\DATA\Y181128M\1128Y043.D  
Acq On : 19 Dec 18 14:19  
Sample : AZ84061W11 2/500  
Misc : soil

Vial: 43  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:46 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y044.D Vial: 44  
 Acq On : 19 Dec 18 14:42 Operator: MA  
 Sample : AZ84062W06 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 8:57 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	506339	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	2208130	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.68	164	1162879	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2158389	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.51	240	1865170	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.30	264	1835509	40.0000	ppb	-0.10

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

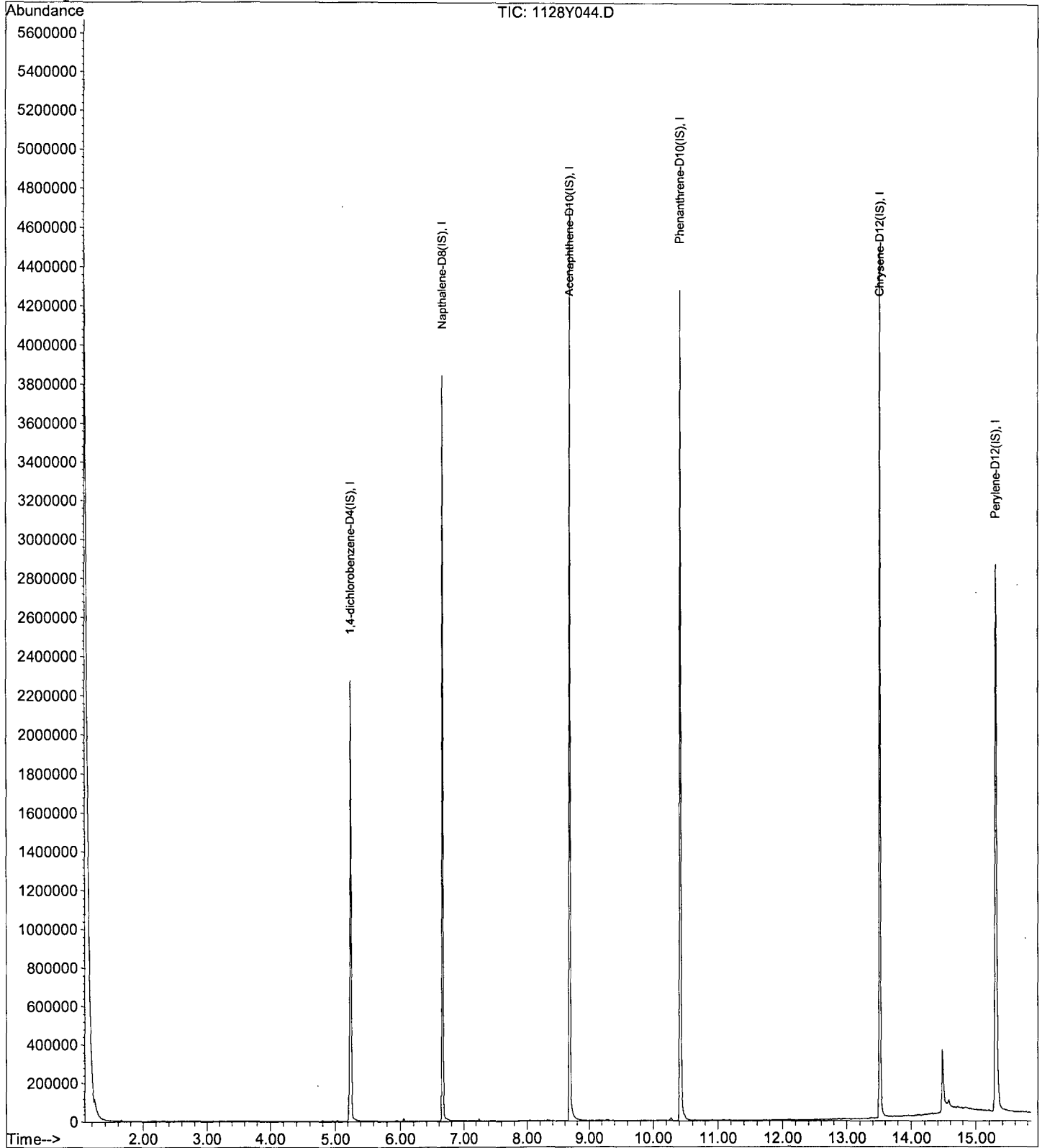
Data File : M:\YODA\DATA\Y181128M\1128Y044.D  
Acq On : 19 Dec 18 14:42  
Sample : AZ84062W06 2/500  
Misc : soil

Vial: 44  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 8:57 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y034.D Vial: 34  
 Acq On : 19 Dec 18 9:42 Operator: MA  
 Sample : 181217A Blk 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 19 11:08 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	574426	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.65	136	2427795	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1219725	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.42	188	2303594	40.0000	ppb	-0.06
6) Chrysene-D12 (IS)	13.52	240	1904944	40.0000	ppb	-0.06
7) Perylene-D12 (IS)	15.31	264	1872085	40.0000	ppb	-0.09

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

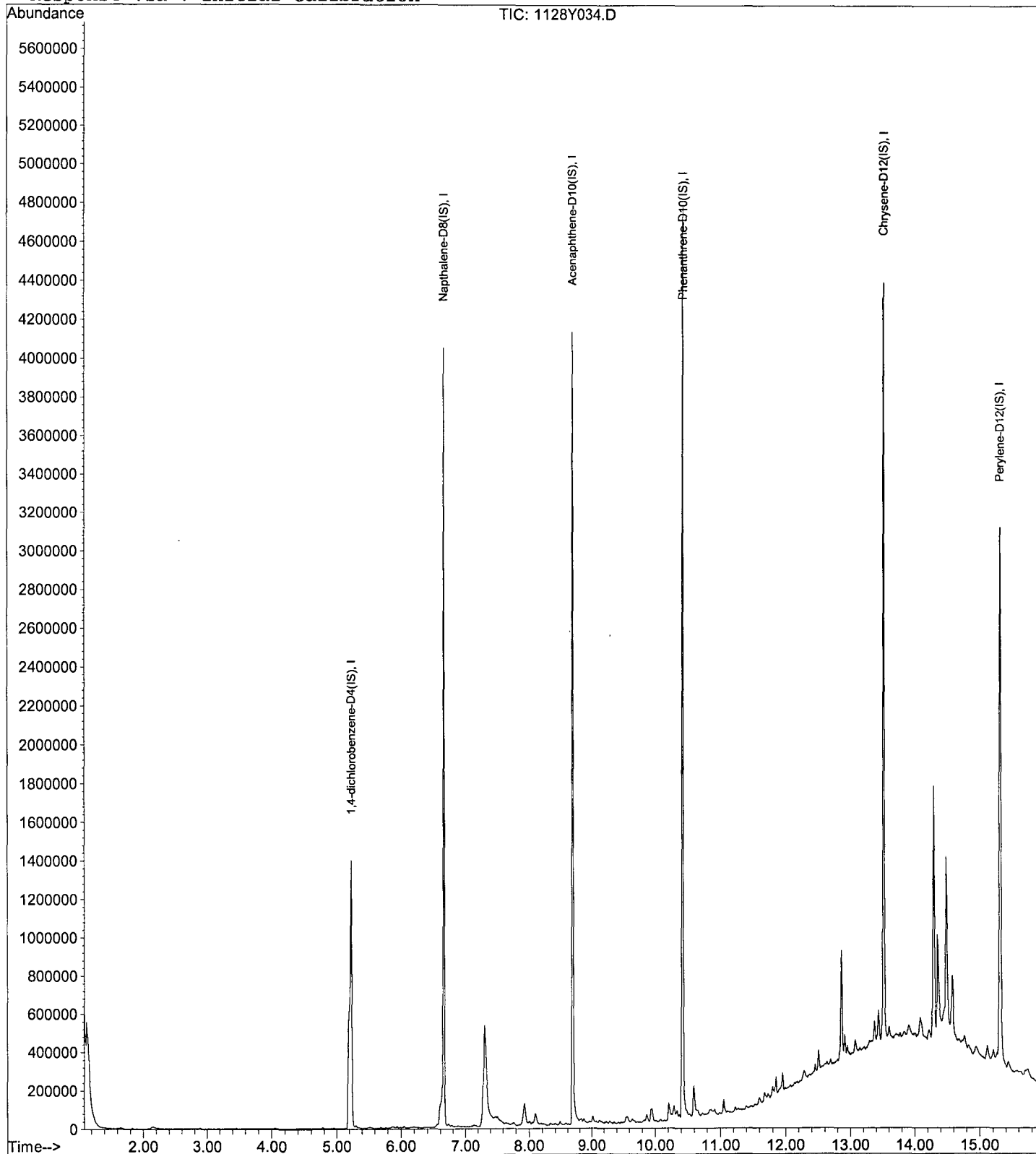
Data File : M:\YODA\DATA\Y181128M\1128Y034.D  
Acq On : 19 Dec 18 9:42  
Sample : 181217A Blk 2/500  
Misc : soil

Vial: 34  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 19 11:08 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y035.D Vial: 35  
 Acq On : 19 Dec 18 10:05 Operator: MA  
 Sample : 181217A LCS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 19 11:09 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	460642	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.65	136	1992742	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	995154	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.41	188	1832850	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1559134	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.30	264	1485569	40.0000	ppb	-0.10

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.45	45	255475	92.3452	ppb	96

Quantitation Report

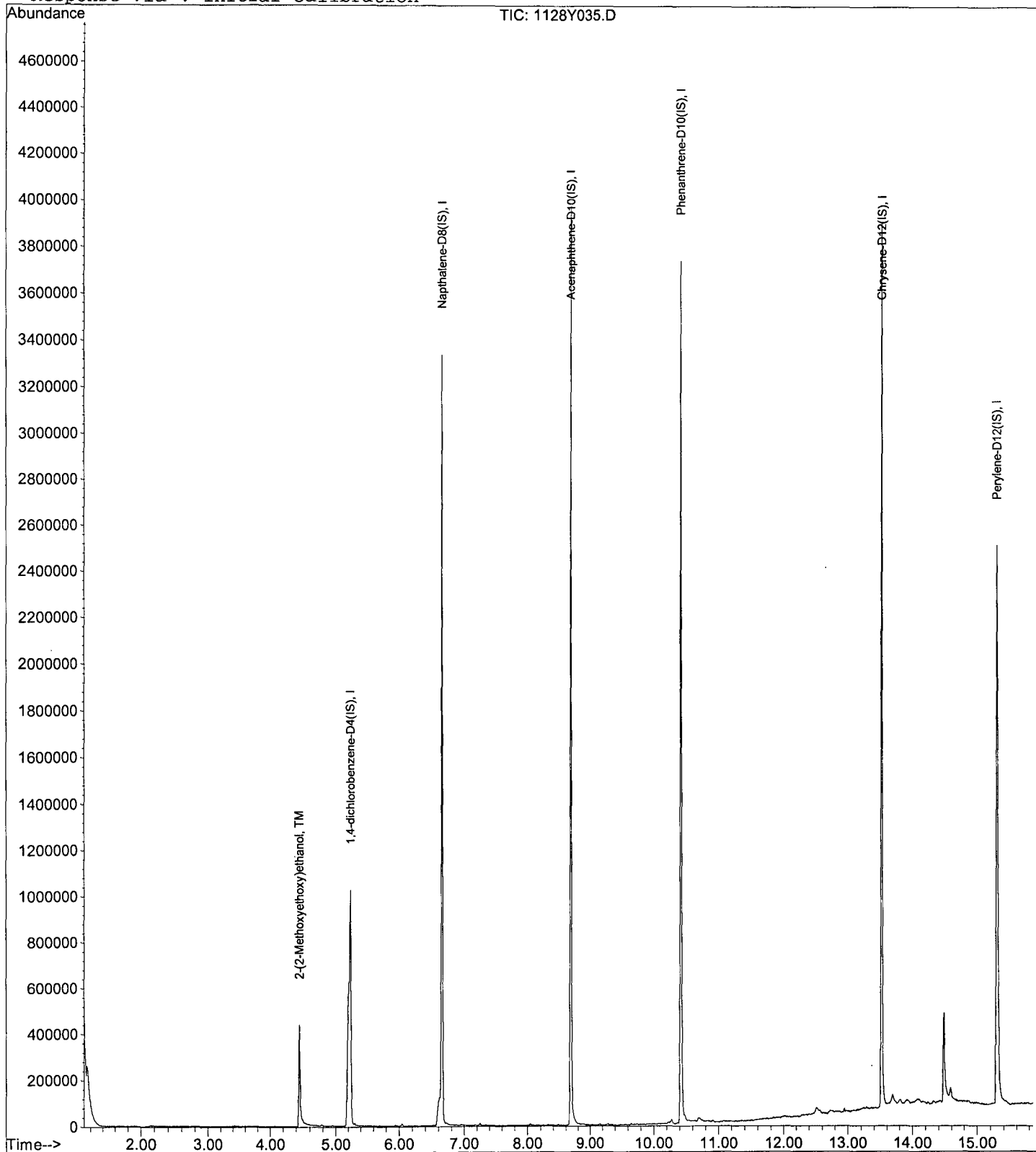
Data File : M:\YODA\DATA\Y181128M\1128Y035.D  
Acq On : 19 Dec 18 10:05  
Sample : 181217A LCS-1 2/500  
Misc : soil

Vial: 35  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 19 11:09 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y036.D Vial: 36  
 Acq On : 19 Dec 18 10:28 Operator: MA  
 Sample : 181217A LCSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 19 11:09 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	411444	40.0000	ppb	-0.08
3) Napthalene-D8 (IS)	6.65	136	1667483	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	813065	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.41	188	1517321	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1309899	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.30	264	1281294	40.0000	ppb	-0.10

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.45	45	274104	110.9262	ppb	97

Quantitation Report

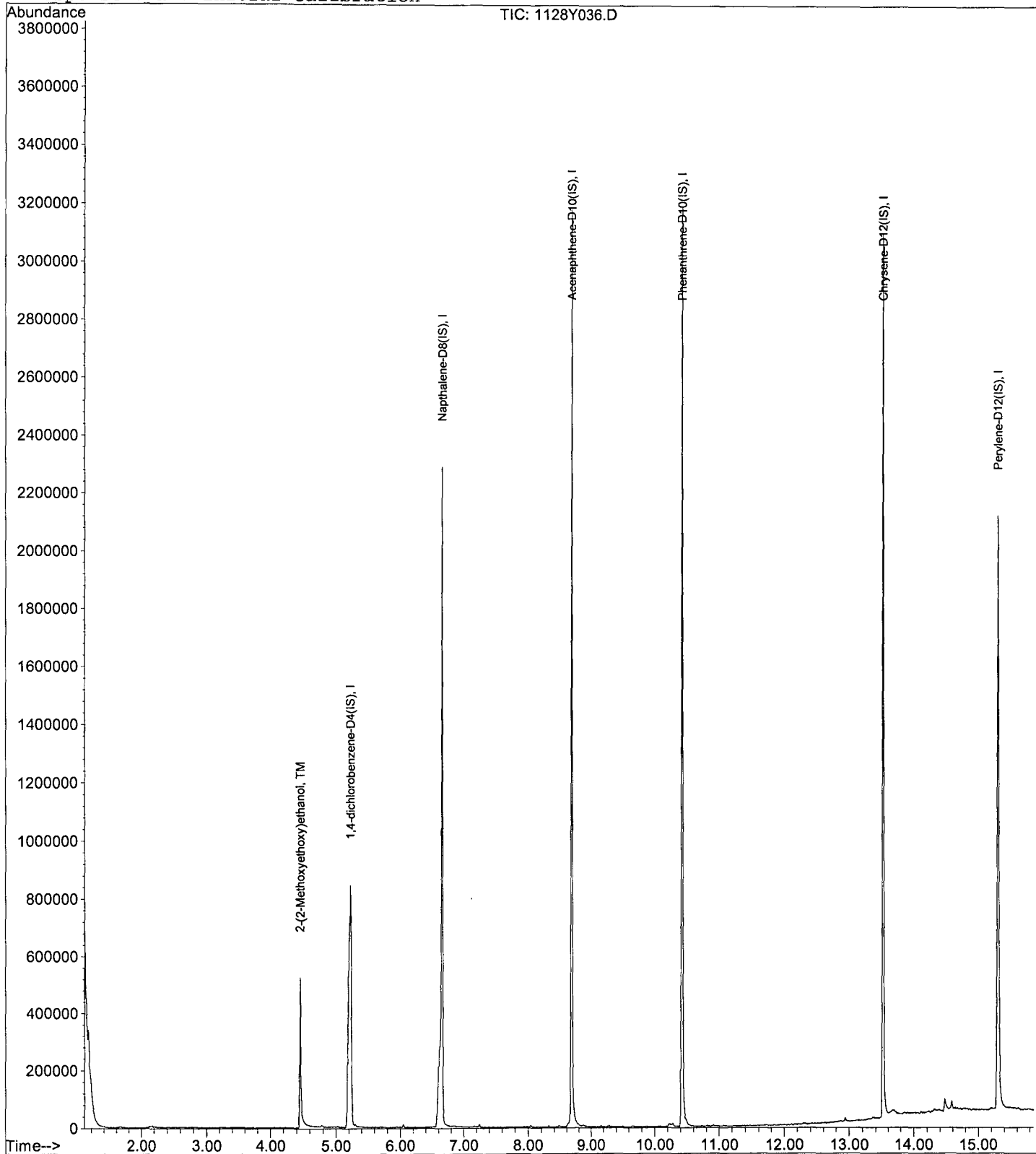
Data File : M:\YODA\DATA\Y181128M\1128Y036.D  
Acq On : 19 Dec 18 10:28  
Sample : 181217A LCSD-1 2/500  
Misc : soil

Vial: 36  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 19 11:09 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y037.D Vial: 37  
 Acq On : 19 Dec 18 10:52 Operator: MA  
 Sample : AZ84057W16 MS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:46 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	494617	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	2129336	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1117769	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.41	188	2059307	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1567499	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.31	264	1491960	40.0000	ppb	-0.09

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	286594	96.4778	ppb	99

Quantitation Report

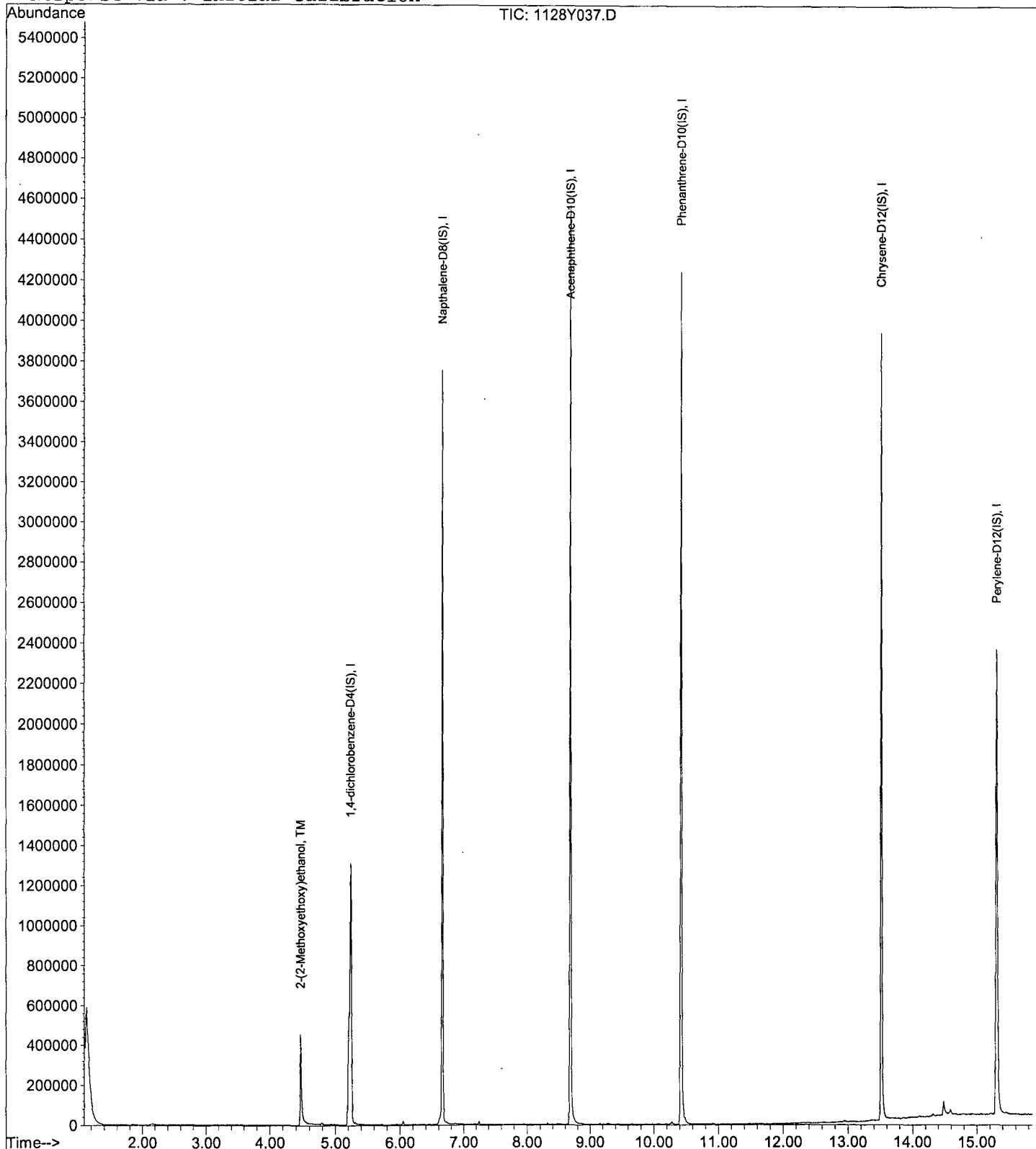
Data File : M:\YODA\DATA\Y181128M\1128Y037.D  
Acq On : 19 Dec 18 10:52  
Sample : AZ84057W16 MS-1 2/500  
Misc : soil

Vial: 37  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:46 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y038.D Vial: 38  
 Acq On : 19 Dec 18 11:15 Operator: MA  
 Sample : AZ84057W09 MSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:46 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	480452	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	2190867	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.68	164	1128645	40.0000	ppb	-0.06
5) Phenanthrene-D10 (IS)	10.42	188	2098504	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.52	240	1666036	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.31	264	1523464	40.0000	ppb	-0.09

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	289284	100.2545	ppb	97

Quantitation Report

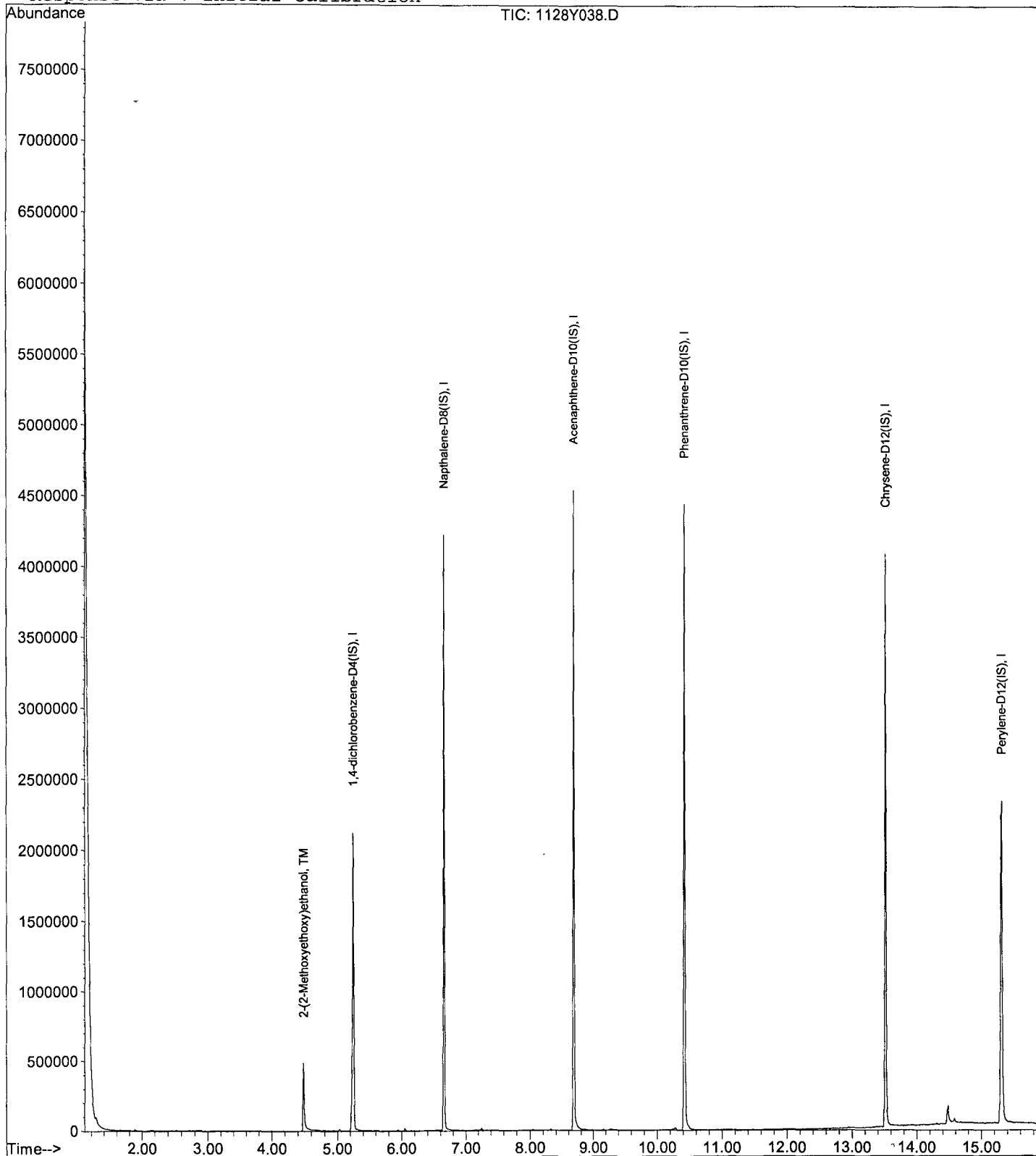
Data File : M:\YODA\DATA\Y181128M\1128Y038.D  
Acq On : 19 Dec 18 11:15  
Sample : AZ84057W09 MSD-1 2/500  
Misc : soil

Vial: 38  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:46 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y041.D Vial: 41  
 Acq On : 19 Dec 18 13:32 Operator: MA  
 Sample : AZ84061W09 MS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:46 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	504726	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	2255064	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.68	164	1282285	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2469801	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.51	240	2056401	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.31	264	1830070	40.0000	ppb	-0.09

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.51	45	316065	104.2678	ppb	99

Quantitation Report

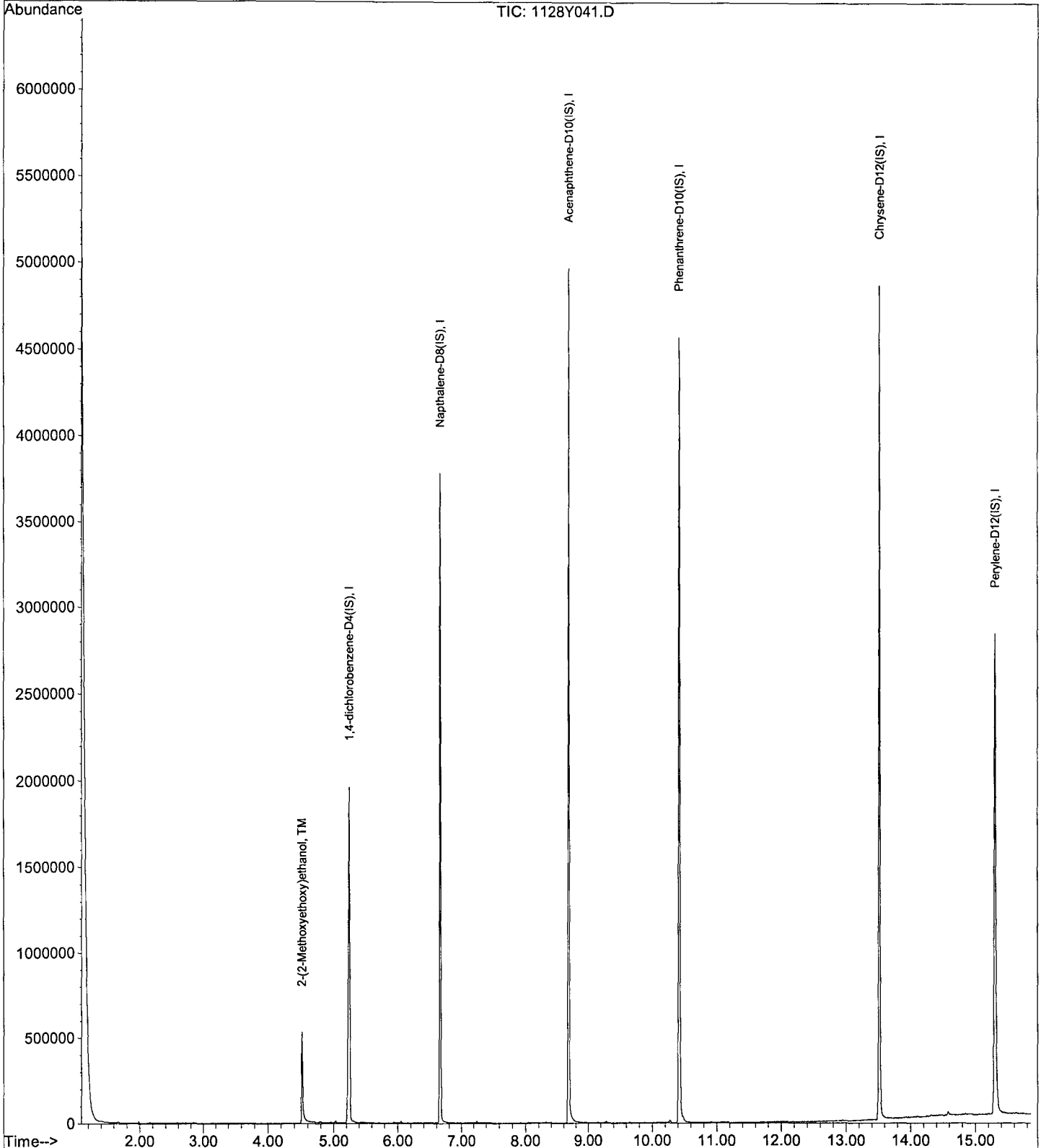
Data File : M:\YODA\DATA\Y181128M\1128Y041.D  
Acq On : 19 Dec 18 13:32  
Sample : AZ84061W09 MS-1 2/500  
Misc : soil

Vial: 41  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:46 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y042.D Vial: 42  
 Acq On : 19 Dec 18 13:55 Operator: MA  
 Sample : AZ84061W17 MSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Dec 20 6:46 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	483749	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	2232329	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.68	164	1267912	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.42	188	2388790	40.0000	ppb	-0.07
6) Chrysene-D12 (IS)	13.51	240	1899336	40.0000	ppb	-0.07
7) Perylene-D12 (IS)	15.31	264	1806626	40.0000	ppb	-0.09

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.50	45	302763	104.2106	ppb	98

Quantitation Report

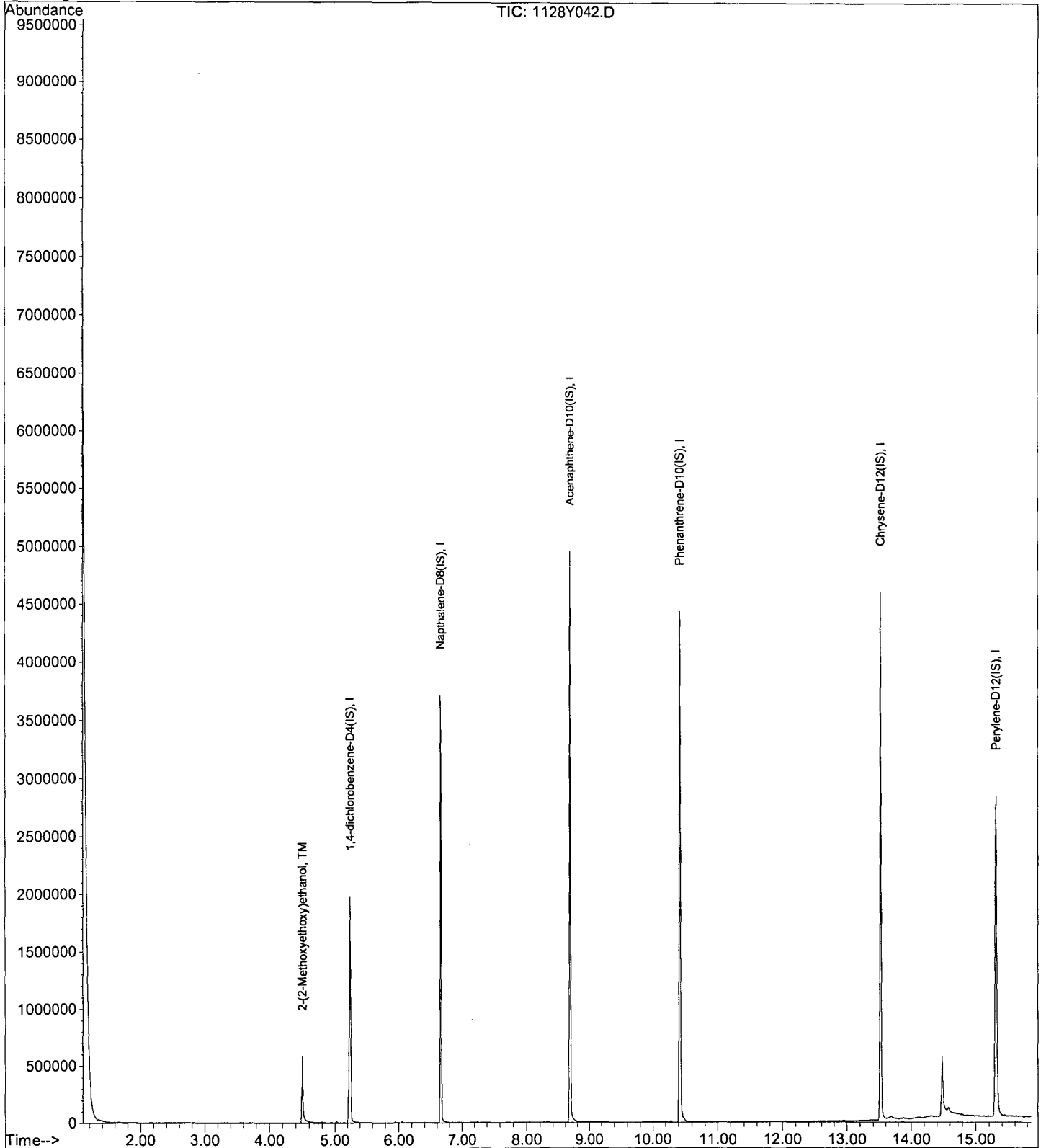
Data File : M:\YODA\DATA\Y181128M\1128Y042.D  
Acq On : 19 Dec 18 13:55  
Sample : AZ84061W17 MSD-1 2/500  
Misc : soil

Vial: 42  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Dec 20 6:46 2018

Quant Results File: YMEE1128.RES

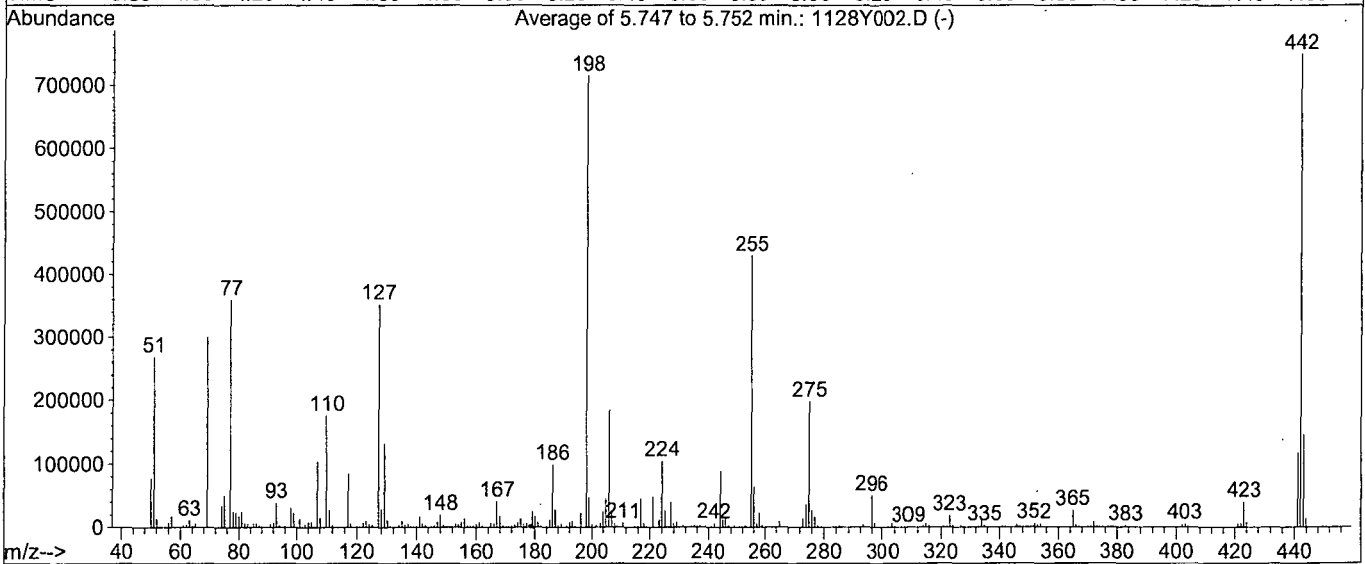
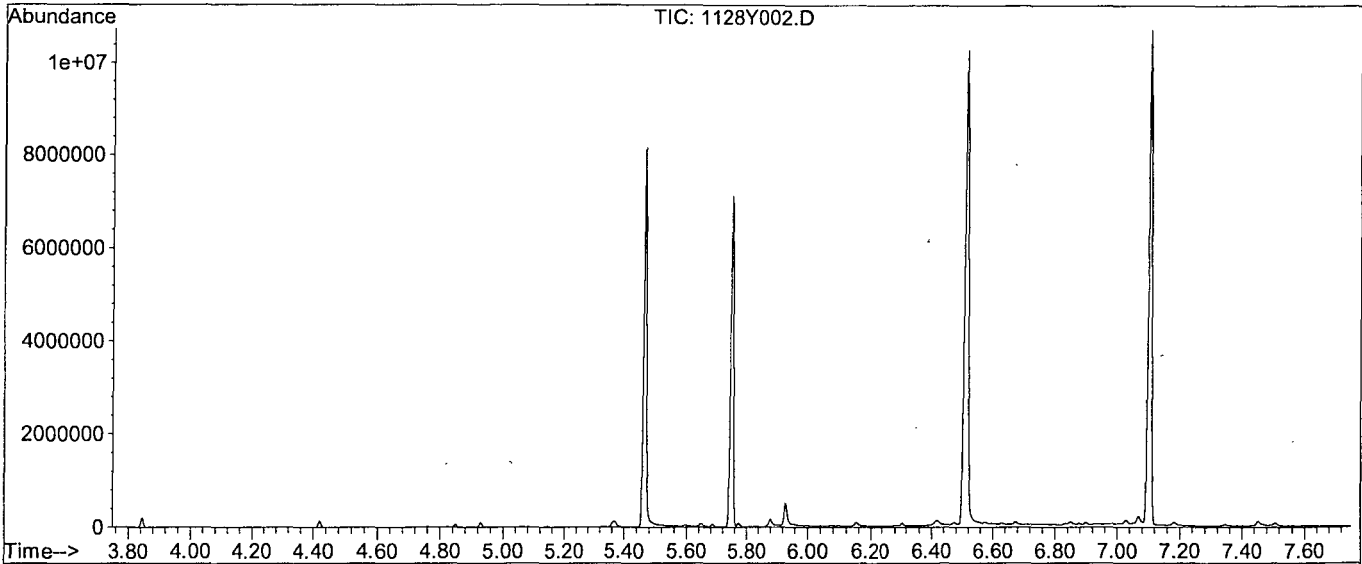
Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 865, 866, 867; Background Corrected with Scan 856

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	37.6	268391	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	1292	PASS
127	198	10	80	49.3	352384	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	714581	PASS
199	198	5	9	6.6	46827	PASS
275	198	10	60	27.6	197547	PASS
365	198	1	100	3.7	26576	PASS
441	442	0.01	24	15.6	116851	PASS
442	198	50	150	104.9	749675	PASS
443	442	15	24	19.5	145880	PASS

Data File Name: 1128Y002.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 28 Nov 2018 07:30  
Method File: DFTPP2.M  
Sample Name: SV Tune 03/07/18  
Vial Number: 2  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	75896800
2)	DDD	6.90	747340
3)	DDE	7.03	414795

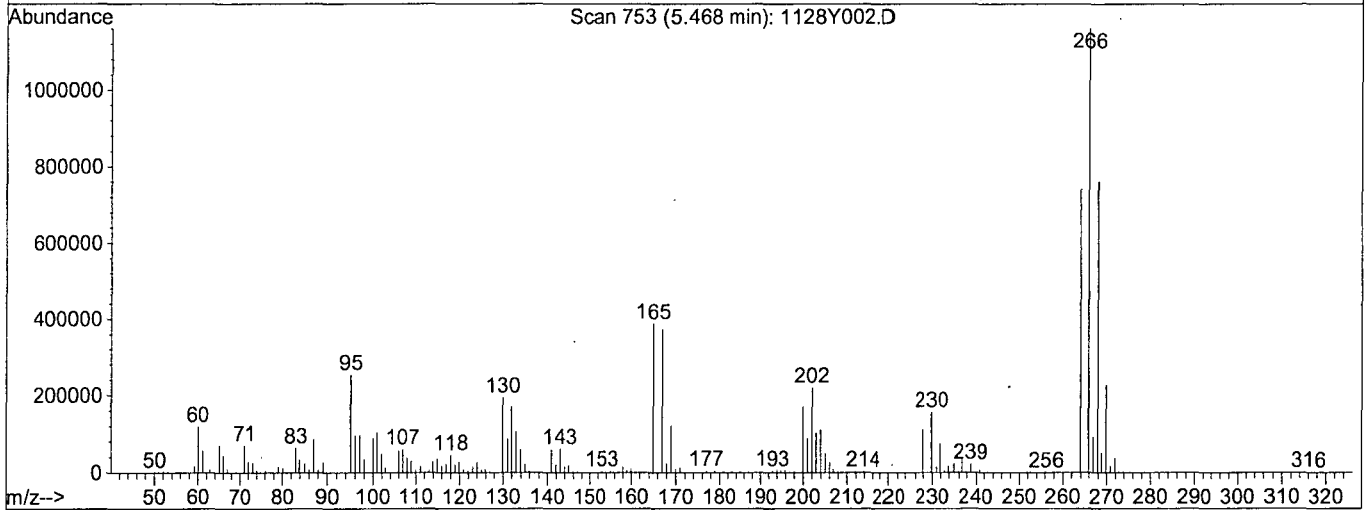
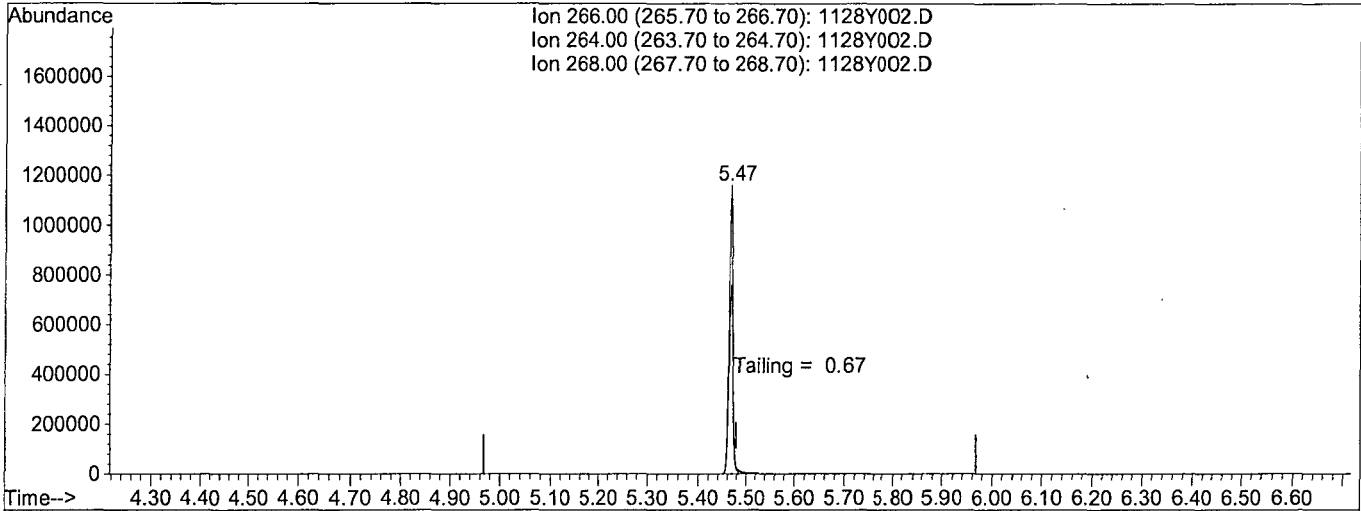
Breakdown 1.51

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Nov 28 10:24 2018

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

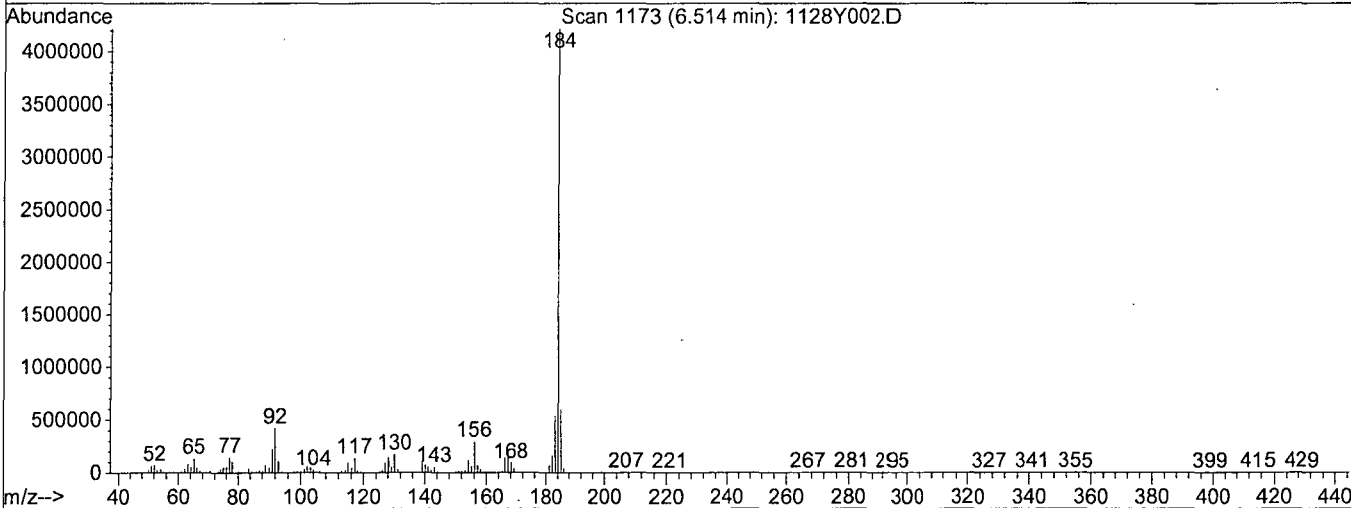
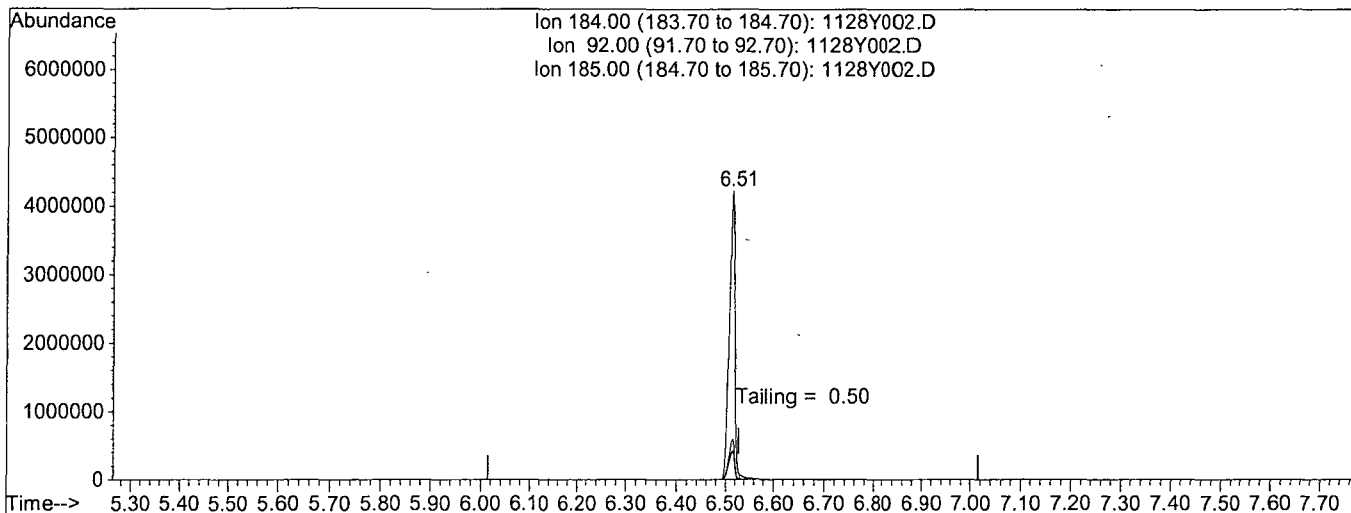
(5) Pentachlorophenol  
 5.47min 0.0000  
 response 7009891

Ion	Exp%	Act%
266.00	100	100
264.00	63.80	61.59
268.00	65.50	63.39
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D Vial: 2  
 Acq On : 28 Nov 18 7:30 Operator: MA  
 Sample : SV Tune 03/07/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Nov 28 10:24 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

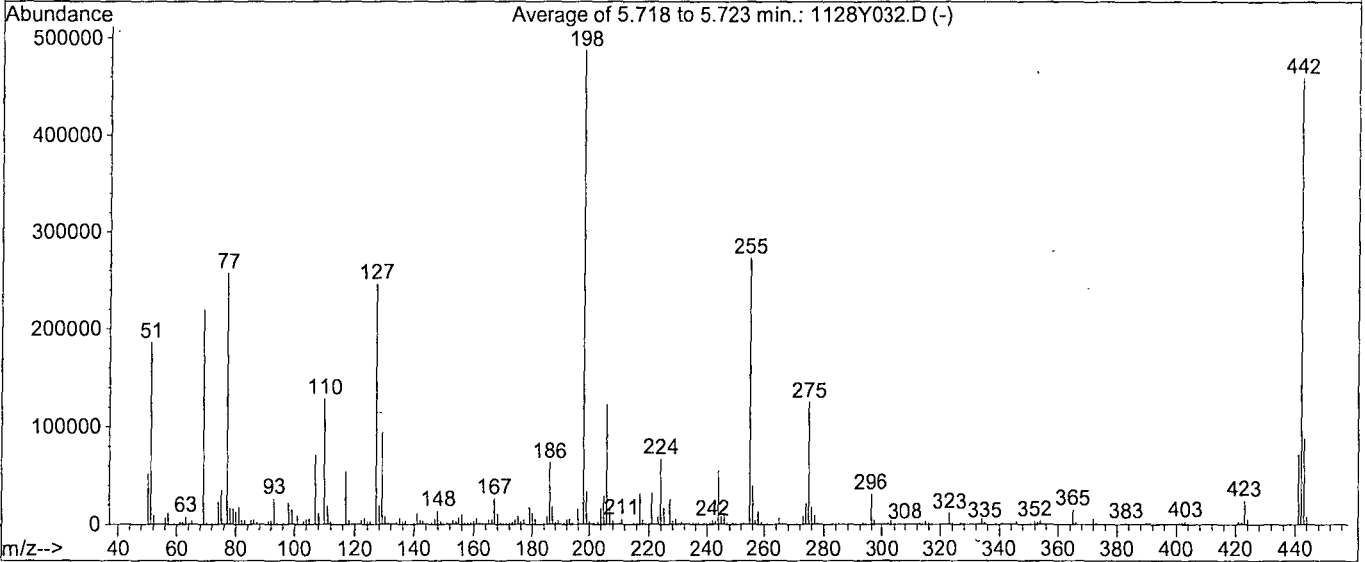
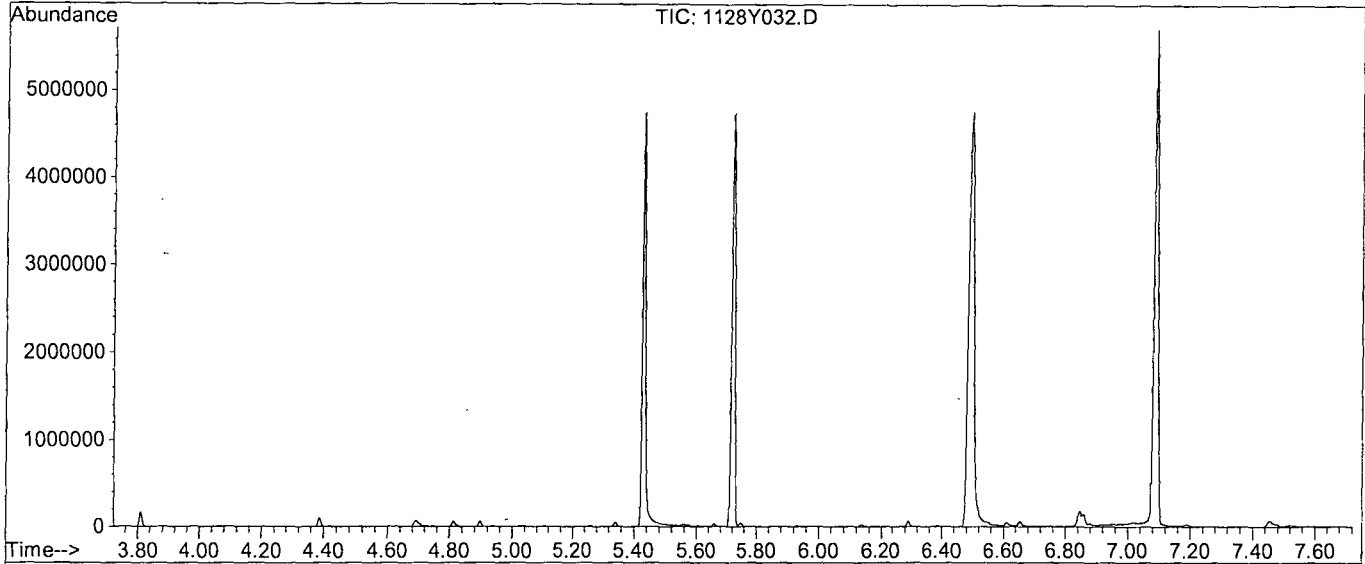
(6) Benzidine  
 6.52min 0.0000  
 response 35701269

Ion	Exp%	Act%
184.00	100	100
92.00	9.90	10.15
185.00	14.00	14.16
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y032.D  
 Acq On : 19 Dec 18 8:15  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 32  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 853, 854, 855; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.1	185720	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.7	1556	PASS
127	198	10	80	50.4	245781	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	487275	PASS
199	198	5	9	6.8	33224	PASS
275	198	10	60	25.6	124731	PASS
365	198	1	100	3.1	14976	PASS
441	442	0.01	24	15.6	71683	PASS
442	198	50	150	94.1	458688	PASS
443	442	15	24	19.2	87931	PASS

Data File Name: 1128Y032.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 19 Dec 2018 08:15  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 32  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.09	50792000
2)	DDD	6.86	1047960
3)	DDE	7.02	111700

Breakdown 2.23

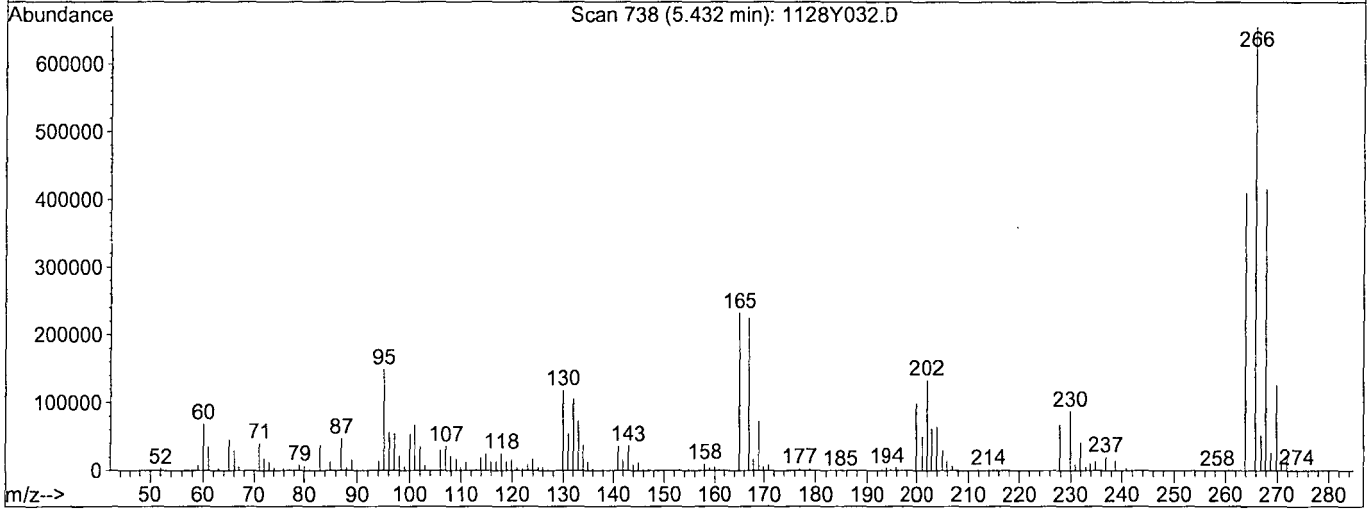
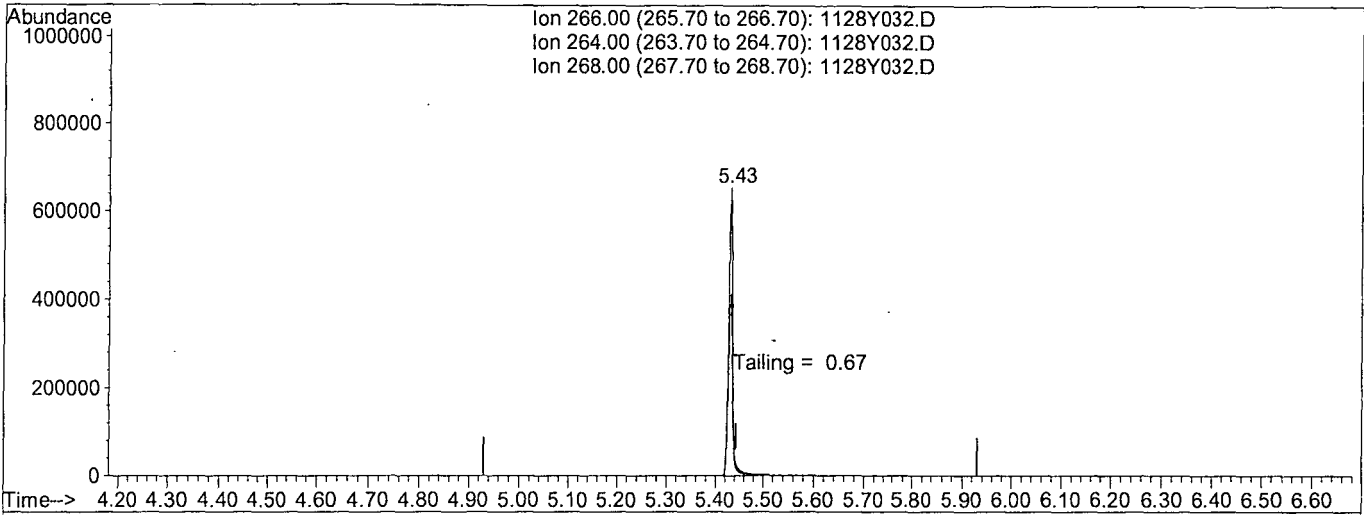


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y032.D  
 Acq On : 19 Dec 18 8:15  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Dec 19 8:26 2018

Vial: 32  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Dec 19 08:26:32 2018  
 Response via : Single Level Calibration



TIC: 1128Y032.D

(5) Pentachlorophenol

5.43min 0.0000

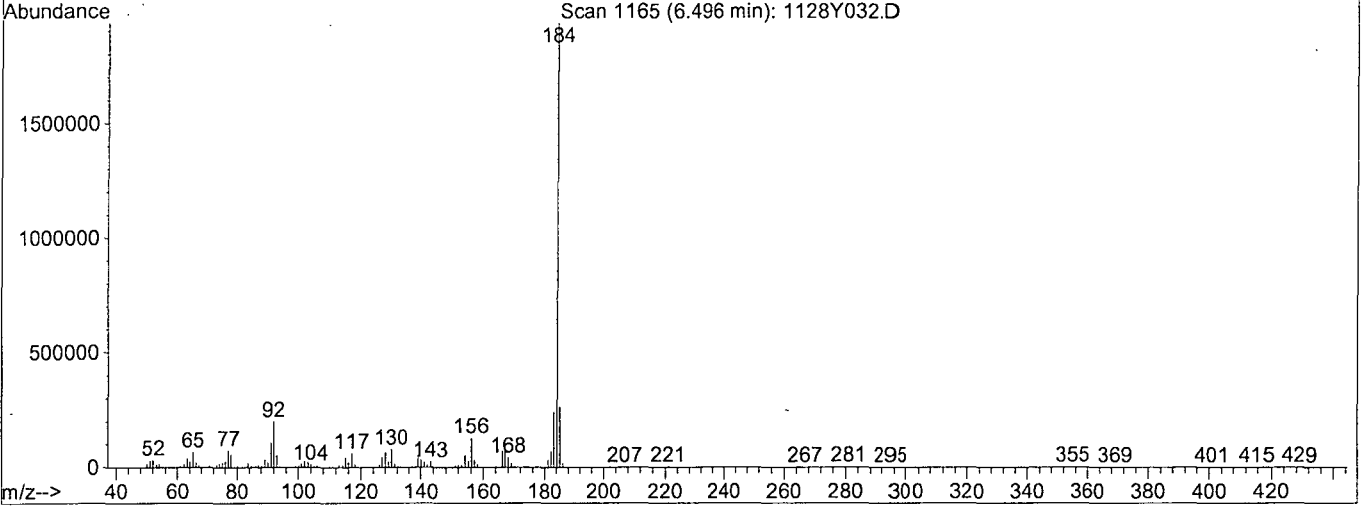
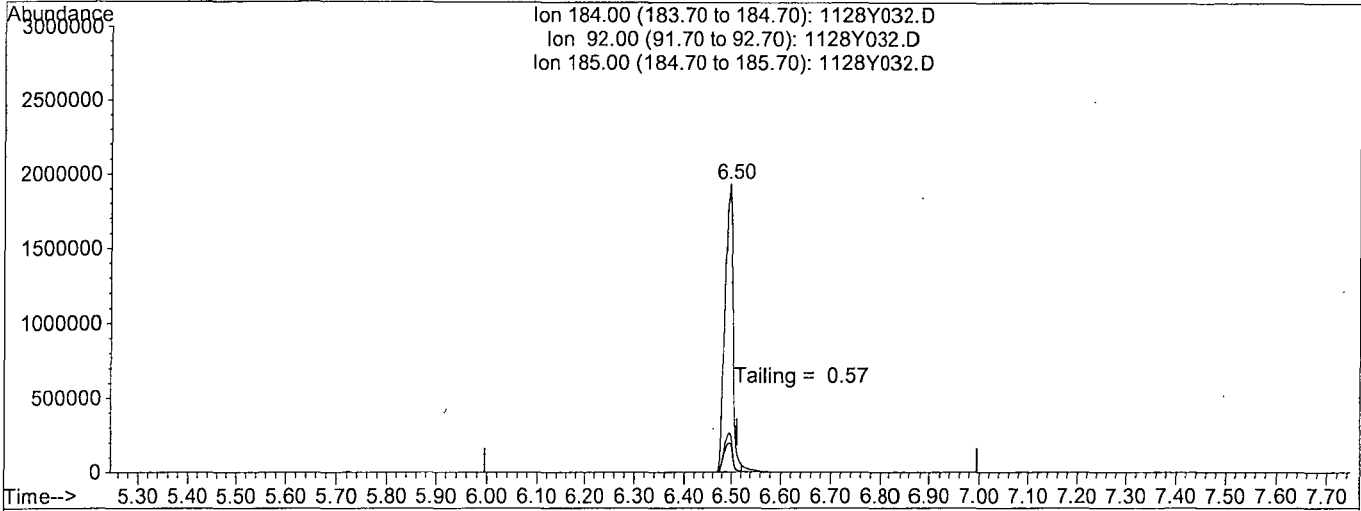
response 3960110

Ion	Exp%	Act%
266.00	100	100
264.00	62.60	63.28
268.00	63.30	63.30
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y032.D Vial: 32  
 Acq On : 19 Dec 18 8:15 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Dec 19 8:26 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Dec 19 08:26:32 2018  
 Response via : Single Level Calibration



TIC: 1128Y032.D

(6) Benzidine  
 6.50min 0.0000  
 response 24066803

Ion	Exp%	Act%
184.00	100	100
92.00	10.30	10.94
185.00	13.60	14.03
0.00	0.00	0.00

Name of

Final

Standard 2MEE Second Source Stock

Prep'd By (Initials) GA

Prep Date 08/03/18

Exp Date 08/03/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Methoxyethanol-Neat	Chem Service	N-12404-1G	Neat 99.5%	7079100 - 39417	08/03/19	0.1035g	10 mL	MC #56258	10320 ug/mL

Given to Extraction to do **MEE SS** (used for ICAL SS)

0.097ml were spiked in 500ml of water and extracted on 08/08/18. Final concentration is 2000ug/L

Name of Final Standard Diethylene Glycol

Prep'd By (Initials) GA

Prep Date 07/25/18  
 Exp Date 02/28/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	216101007-37330 and 37331	02/28/19	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do MEE M STD Stock (used for ICAL) Final concentration 2000ug/L on 7/27/18. APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 02/28/19 per verification with a second source from ChemService lot 7079100-39 Inj on Yoda 1128Y014

HA 12/11/18

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/19						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MEE	Neat 99.5%	HEM SERVIC	0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 7/31/22				

0.097ml were spiked in 500ml of water and extracted on 07/27/18. Final concentration is 2000ug/L  
 QC on 05/04/18

Name of  
 Final  
 Standard Diethylene Glycol

Prep'd By (Initials) GA

Prep Date 07/25/18  
 Exp Date 11/10/18

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	216101007-37330 and 37331	10/03/18	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 11/10/18 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 0801Y064

<b>Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex 08/04/18</b>						
<b>STANDARD</b>	<b>INITIAL CONC.</b>	<b>SOURCE DATE</b>	<b>ALIQUOT</b>	<b>FINAL VOL</b>	<b>FINAL CONC.</b>	<b>SOLVENT /LOT#</b>
MEE	Neat 99.5%	HEM SERVIC	0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 08/04/18				

0.097ml were spiked in 500ml of water and extracted on 06/07/17. Final concentration is 2000ug

APPL re-certified MEE SS stock Lot 5259000-37082 and extended the expiration date to 8/04/18 per verification with a different source Accu Standards Lot # 216101007-37334,5 injected on 05/04/18

Name of Final Standard **8270 Internal Standard (Ampule)**  
 Prep Date **06/22/18**  
 Exp Date **06/22/19**

Prep'd By (Initials) **OA**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
EPA 8270 Semivolatile Internal Standard	RESTEK	CRM48902	2000 ug/mL	A0130603-38562	06/22/19	1000 uL	1 mL	NA	100ug/mL



Name of Final Standard MEE CCV  
 Prep Date 12/19/18  
 Exp Date 11/06/19

Prep'd By (Initials) OA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD	APPL		2000 ug/mL	12/17/18	12/17/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	11/29/18	11/06/19	4 uL	*	*	*

Name of  
Final  
Standard Diethylene Glycol

Prep'd By (Initials) OA

Prep Date 12/17/18  
Exp Date 02/28/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	216101007-37332 and 37333	02/28/19	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 02/28/19 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 1128Y014

Name of  
Final  
Standard

MEE Curve

Prep'd By (Initials)

GA

Prep Date 08/01/18

Exp Date 02/28/19

Initial Standard Information						Final Standard Information			
MEE M STD Stock	APPL		200 ug/mL	07/27/18	02/28/19	5 uL	200uL	Methanol 195uL	50 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	5 uL	100uL	Methanol 95uL	100 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	10 uL	100uL	Methanol 90 uL	200 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	20 uL	100uL	Methanol 80 uL	400 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	200 uL	Methanol 150 uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	30 uL	100uL	Methanol 70 uL	600 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	40 uL	100uL	Methanol 60 uL	800 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	100uL	Methanol 50uL	1000 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*

Name of  
Final

Standard MEE Second Source

Prep'd By (Initials) GA

Prep Date 08/01/18

Exp Date 06/22/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	07/27/18	07/27/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*

# Organic Extraction Worksheet

<b>Method</b>	Solid Phase Extraction of 2MEE in Water	<b>Extraction Set</b>	181218A	<b>Extraction Method</b>	MWE2MEE	<b>Units</b>	mL
Spiked ID 1	Diethylene Glycol 12-17-18 EXP 2-28-19		Surrogate ID 1				
Spiked ID 2	2MEE SS 10320ug/ML 8-3-18 EXP 8-3-19		Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:		YES		
Spiked ID 7			Ext. Start Time:		12/18/18 8:30		
Spiked ID 8			Ext. End Time:		12/18/18 15:25		
			GC Requires Extract By:		12/21/18 0:00		
			pH1			Water Bath Temp Criteria	
			pH2				
			pH3				

Spiked By: DL

Date 12/18/18

Witnessed By: CFM

Date 12/18/18

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 181218A Blk				NA	NA	500	2	7	12/18/18 8:30	
					equip					
2 181218A LCS-1		0.040	1	NA	NA	500	2	7	12/18/18 8:30	
					equip					
3 181218A LCS-2		0.040	1	NA	NA	500	2	7	12/18/18 8:30	New SPE Tube
					equip					
4 181218A LCSD-1		0.040	1	NA	NA	500	2	7	12/18/18 8:30	
					equip					
5 AZ84057 MS-1	AZ84057W16	0.040	1	NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
6 AZ84057 MSD-1	AZ84057W09	0.040	1	NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
7 AZ84057	AZ84057W17			NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
8 AZ84059	AZ84059W05			NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
9 AZ84061 MS-1	AZ84061W09	0.040	1	NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
10 AZ84061 MSD-1	AZ84061W17	0.040	1	NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
11 AZ84061	AZ84061W11			NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
12 AZ84062	AZ84062W06			NA	NA	500	2	7	12/18/18 8:30	87650
					equip					
13 M STD		1	1	NA	NA	500	2	7	12/18/18 8:30	
					equip					
14 M STD (1)		1	1	NA	NA	500	2	7	12/18/18 8:30	New SPE Tube
					equip					
15 SS		0.097	2	NA	NA	500	2	7	12/18/18 8:30	
					equip					
16 SS (1)		0.097	2	NA	NA	500	2	7	12/18/18 8:30	New SPE Tube
					equip					

<b>Solvent and Lot#</b>	
ENVI-Carb Plus 400MG/1ML	10527404
Reverible Tube Lot:	10689901
PH Strip	HC 849161
Di Water	12-18-18
Dichloromethane	18G194011
Methanol	58179

<b>Extraction COC Transfer</b>	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	12/19/18
Time	06:35
Refrigerator	Hobart

<b>Technician's Initials</b>	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	12/18/18 1:38:19 PM

Reviewed By: *Ky* Date *12/20/18*  
 Page 635 of 1287  
 Ext\_ID 61291

## Injection Log

Directory: M:\YODA\DATA\Y181128M\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1128Y002.D	1	SV Tune	03/07/18	28 Nov 18 7:30
4	1128Y004.D	1	50ug/ml MEE	08/01/18	28 Nov 18 8:08
5	1128Y005.D	1	100ug/ml MEE	08/01/18	28 Nov 18 8:32
6	1128Y006.D	1	200ug/ml MEE	08/01/18	28 Nov 18 8:55
7	1128Y007.D	1	400ug/ml MEE	08/01/18	28 Nov 18 9:19
8	1128Y008.D	1	600ug/ml MEE	08/01/18	28 Nov 18 9:43
9	1128Y009.D	1	800ug/ml MEE	08/01/18	28 Nov 18 10:06
10	1128Y010.D	1	1000ug/ml MEE	08/01/18	28 Nov 18 10:30
12	1128Y012.D	1	500ug/ml MEE	08/01/18	28 Nov 18 11:17
14	1128Y014.D	1	SS ug/ml MEE	08/01/18	28 Nov 18 12:26
32	1128Y032.D	1	SV TUNE	11/10/18	19 Dec 18 8:15
33	1128Y033.D	1	500ug/ml MEE	12/19/18	19 Dec 18 8:31
34	1128Y034.D	1	181217A Blk	2/500	19 Dec 18 9:42
35	1128Y035.D	1	181217A LCS-1	2/500	19 Dec 18 10:05
36	1128Y036.D	1	181217A LCSD-1	2/500	19 Dec 18 10:28
37	1128Y037.D	1	AZ84057W16 MS-1	2/500	19 Dec 18 10:52
38	1128Y038.D	1	AZ84057W09 MSD-1	2/500	19 Dec 18 11:15
39	1128Y039.D	1	AZ84057W17	2/500	19 Dec 18 11:39
40	1128Y040.D	1	AZ84059W05	2/500	19 Dec 18 13:08
41	1128Y041.D	1	AZ84061W09 MS-1	2/500	19 Dec 18 13:32
42	1128Y042.D	1	AZ84061W17 MSD-1	2/500	19 Dec 18 13:55
43	1128Y043.D	1	AZ84061W11	2/500	19 Dec 18 14:19
44	1128Y044.D	1	AZ84062W06	2/500	19 Dec 18 14:42
48	1128Y048.D	1	500ug/ml MEE	12/20/18	19 Dec 18 16:16

**ORGANICS  
Calibration Data**

**APPL, INC.**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

Case No: \_\_\_\_\_

Matrix: water

SDG No: \_\_\_\_\_

Initial Cal. Date: 12/13/18

Instrument: Loki

Initials: DG

1213L03.D    1213L04.D    1213L05.D    1213L06.D    1213L07.D    1213L08.D    1213L09.D    1213L10.D    1213L11.D

	Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD	Type	r^2	Q	MRF
1	I Fluorobenzene (IS)															
2	TM Dichlorodifluoromethane		0.2173	0.2354	0.2215	0.1846	0.2054	0.2238	0.2143	0.1854	0.21	8.6	TM			
3	TM Freon 114		0.1853	0.1939	0.2269	0.1590	0.1781	0.1858	0.1856	0.1585	0.18	12	TM			
4	TM**L Chloromethane		0.7302	0.4668	0.5070	0.4401	0.4134	0.4213	0.3986		0.48	24	TM**L	0.999		
5	TM* Vinyl chloride		0.4024	0.4059	0.3965	0.3794	0.3762	0.3889	0.3637	0.3377	0.38	5.9	TM*			
6	TM Bromomethane		0.3929	0.2942	0.3429	0.3057	0.3197	0.2865	0.2621		0.31	14	TM			
7	TML Chloroethane		0.4424	0.2745	0.2315	0.2596	0.2718	0.2697	0.2418		0.28	25	TML	0.997		
8	TM Dichlorofluoromethane		0.7660	0.6968	0.6547	0.6435	0.6473	0.6353	0.5905	0.5838	0.65	8.9	TM			
9	TM Trichlorofluoromethane		0.5104	0.5667	0.5340	0.5039	0.5191	0.5246	0.4968	0.4719	0.52	5.4	TM			
10	TM Acrolein		0.0358	0.0398	0.0378	0.0367	0.0359	0.0360	0.0325	0.0300	0.04	8.6	TM			
11	TML Acetone				0.2431	0.1644	0.1450	0.1391	0.1185	0.1095	0.15	31	TML	0.999		
12	TM Freon-113		0.2561	0.2434	0.2488	0.2414	0.2612	0.2655	0.2507	0.2287	0.25	4.7	TM			
13	TM* 1,1-DCE		0.2062	0.1906	0.1635	0.1465	0.1532	0.1525	0.1444	0.1353	0.16	15	TM*			
14	TM t-Butanol	0.0425	0.0471	0.0462	0.0465	0.0439	0.0402	0.0377	0.0319		0.04	12	TM			
15	TM Acetonitrile		0.0726	0.0628	0.0638	0.0625	0.0629	0.0586	0.0528	0.0529	0.06	10	TM			
16	TM Methyl Acetate		0.4878	0.5964	0.5557	0.4095	0.4856	0.4798	0.4485	0.4864	0.49	12	TM			
17	TML Iodomethane			0.1715	0.1590	0.1683	0.1874	0.2023	0.2339	0.2487	0.20	18	TML	0.999		
18	TML Acrylonitrile		0.2466	0.1582	0.1823	0.1593	0.1558	0.1376	0.1280		0.17	23	TML	0.997		
19	TM Methylene chloride		0.5089	0.5265	0.4542	0.4144	0.4243	0.4061	0.3898	0.3732	0.44	13	TM			
20	TM Carbon disulfide		1.174	1.066	0.9502	0.9530	0.9697	0.9567	0.9083	0.8826	0.98	9.6	TM			
21	TM Methyl t-butyl ether (MtBE)		0.9608	1.007	0.9252	0.9678	0.9541	0.9394	0.8999	0.8979	0.94	3.9	TM			
22	TM Trans-1,2-DCE		0.4485	0.4108	0.4075	0.3481	0.3615	0.3537	0.3411	0.3358	0.38	11	TM			
23	TM Diisopropyl Ether		1.185	1.039	1.074	1.004	1.016	1.006	0.9800	0.9903	1.0	6.4	TM			
24	TM** 2,2-Dichloro-1,1,1-trifluoroethane		0.3179	0.4017	0.3266	0.3366	0.3254	0.3215	0.2945	0.3014	0.33	10.0	TM**			
25	TM** 1,1-DCA		0.9321	0.7641	0.7684	0.7133	0.6928	0.6963	0.6597	0.6364	0.73	13	TM**			
26	TM Vinyl Acetate		0.3830	0.4298	0.3920	0.3890	0.4102	0.3752	0.3324	0.3785	0.39	7.3	TM			
27	TM Ethyl tert Butyl Ether		0.8303	0.7956	0.7980	0.8081	0.8148	0.8275	0.8309	0.8754	0.82	3.1	TM			
28	TML MEK (2-Butanone)				0.2299	0.1727	0.1665	0.1636	0.1371	0.1440	0.17	19	TML	0.999		
29	TM Cis-1,2-DCE		0.2083	0.1875	0.1850	0.1555	0.1673	0.1785	0.1700	0.1684	0.18	9.1	TM			
30	TM 2,2-Dichloropropane		0.6871	0.5772	0.5335	0.4960	0.4929	0.4839	0.4675	0.4416	0.52	15	TM			
31	TML 2-Methylpentane		0.2537	0.2660	0.2252	0.1676	0.1877	0.1975	0.1907	0.2027	0.21	16	TML	0.999		
32	TM 3-Methylpentane		0.7733	0.7696	0.7220	0.5832	0.6430	0.6380	0.6197	0.6525	0.68	11	TM			
33	TM* Chloroform		0.6845	0.6790	0.7022	0.6422	0.6582	0.6600	0.6157	0.5961	0.65	5.4	TM*			
34	TM Bromochloromethane		0.2556	0.2133	0.2121	0.1930	0.2027	0.1968	0.1853	0.1773	0.20	12	TM			
35	S Dibromofluoromethane(S)	0.7289	0.7414	0.6173	0.6182	0.6430	0.6363	0.6222	0.6004	0.5637	0.64	9.0	S			



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/13/18  
Instrument: Loki

Initials: DG

	Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD	Type	Q	MRF
36	TM 1,1,1-TCA		0.6763	0.5508	0.5321	0.5223	0.5268	0.5246	0.5032	0.4831	0.54	11	TM		
37	TML Cyclohexane		0.3387	0.2471	0.2305	0.2073	0.2196	0.2201	0.2134		0.24	19	TML	1.000	
38	TM 1,1-Dichloropropene		0.4041	0.3736	0.3663	0.3490	0.3749	0.3812	0.3882	0.3848	0.38	4.3	TM		
39	TM 2,2,4-Trimethylpentane		0.4635	0.5140	0.5787	0.5145	0.5880	0.5983	0.6204	0.5946	0.56	9.8	TM		
40	S 1,2-DCA-D4(S)	0.8170	0.8761	0.7031	0.7176	0.7358	0.7177	0.7032	0.6922	0.6473	0.73	9.5	S		
41	TM Carbon Tetrachloride		0.5401	0.4910	0.5196	0.4605	0.4878	0.4744	0.4516	0.4299	0.48	7.5	TM		
42	TM Tert Amyl Methyl Ether		0.7624	0.7571	0.6940	0.6911	0.7507	0.7642	0.7689	0.8255	0.75	5.7	TM		
43	TM Methylcyclopentane		0.6083	0.6315	0.5951	0.5139	0.5536	0.5454	0.5325	0.5656	0.57	7.1	TM		
44	TM 1,2-DCA		0.4644	0.5252	0.5378	0.4773	0.5046	0.4870	0.4730	0.4578	0.49	5.9	TM		
45	TM Benzene		1.472	1.438	1.326	1.245	1.317	1.332	1.294	1.297	1.3	5.7	TM		
46	TM TCE		0.3408	0.3583	0.3522	0.3422	0.3441	0.3682	0.3565	0.3464	0.35	2.7	TM		
47	TM 2-Pentanone		0.2309	0.2482	0.2547	0.2545	0.2599	0.2559	0.2358	0.2312	0.25	4.8	TM		
48	TM* 1,2-Dichloropropane		0.3520	0.4178	0.3883	0.3683	0.3717	0.3608	0.3570	0.3569	0.37	5.9	TM*		
49	TM Bromodichloromethane		0.5002	0.5396	0.5433	0.5093	0.5347	0.5271	0.5017	0.4950	0.52	3.8	TM		
50	TM Methyl Cyclohexane		0.3496	0.2836	0.2792	0.2788	0.3172	0.3450	0.3544	0.3628	0.32	11	TM		
51	TM Dibromomethane		0.2580	0.2813	0.2737	0.2818	0.2740	0.2696	0.2519	0.2447	0.27	5.2	TM		
52	TM 2-Chloroethyl vinyl ether					0.0832	0.0822	0.0738	0.0676	0.0841	0.08	9.2	TM		
53	TML MIBK (methyl isobutyl ketone)		0.4213	0.5218	0.4093	0.3630	0.3011	0.3236	0.2815	0.2859	0.36	23	TML	0.999	
54	TM 1-Bromo-2-chloroethane		0.2564	0.2469	0.2326	0.2680	0.2685	0.2653	0.2598	0.2543	0.26	4.7	TM		
55	TM Cis-1,3-Dichloropropene		0.5562	0.5893	0.5208	0.5143	0.5353	0.5349	0.5602	0.5845	0.55	5.1	TM		
56	TM* Toluene		1.222	1.397	1.275	1.363	1.455	1.499	1.460	1.469	1.4	7.2	TM*		
57	TM Trans-1,3-Dichloropropene		0.4923	0.4814	0.4777	0.4846	0.5141	0.5189	0.5142	0.5318	0.50	4.0	TM		
58	TM 1,1,2-TCA		0.3811	0.3149	0.3174	0.3154	0.3260	0.3235	0.2974	0.2959	0.32	8.2	TM		
59	TM 2-Hexanone				0.2259	0.2008	0.1995	0.1815	0.1713	0.1973	0.20	9.5	TM		
60	I Chlorobenzene-D5 (IS)														
61	S Toluene-D8(S)	1.926	2.194	1.771	1.824	2.055	2.030	2.138	2.157	1.986	2.0	7.3	S		
62	TM 1,2-EDB		0.3891	0.3520	0.3797	0.3645	0.3665	0.3774	0.3628	0.3463	0.37	3.9	TM		
63	TM Tetrachloroethene		0.4490	0.4429	0.3744	0.3969	0.4106	0.4191	0.4102	0.3797	0.41	6.5	TM		
64	TM 1-Chlorohexane		0.2450	0.2388	0.2521	0.2840	0.2941	0.3128	0.3399	0.3564	0.29	15	TM		
65	TM 1,1,1,2-Tetrachloroethane		0.3433	0.4534	0.3809	0.3886	0.4029	0.3886	0.3868	0.3647	0.39	8.2	TM		
66	TM m&p-Xylene		0.9005	0.8938	0.9160	0.9391	1.043	1.137	1.213	1.197	1.0	13	TM		
67	TM o-Xylene		0.4116	0.4061	0.4458	0.4510	0.4935	0.5392	0.5684	0.5787	0.49	14	TM		
68	TML Styrene		0.3724	0.3724	0.3856	0.3992	0.4898	0.5474	0.6206	0.6324	0.48	23	TML	0.999	
69	S 4-Bromofluorobenzene(S)	0.6339	0.7901	0.6259	0.6288	0.7316	0.7462	0.8027	0.8160	0.7600	0.73	11	S		
70	TM 1,3-Dichloropropane		0.6240	0.5713	0.5576	0.5748	0.5897	0.5826	0.5832	0.5476	0.58	4.0	TM		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/13/18  
Instrument: Loki \_\_\_\_\_

Initials: DG \_\_\_\_\_

	Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	Q	MRF
71	TM Dibromochloromethane		0.4190	0.4126	0.4303	0.4212	0.4286	0.4258	0.4210	0.3934		0.42	2.8	TM		
72	TM** Chlorobenzene		1.043	0.9613	0.9561	0.9598	0.9519	0.9692	0.9581	0.9186		0.96	3.6	TM**		
73	TM* Ethylbenzene		1.308	1.229	1.224	1.256	1.361	1.458	1.552	1.536		1.4	9.8	TM*		
74	TM** Bromoform		0.3326	0.3027	0.3385	0.3173	0.3129	0.3159	0.3150	0.3060		0.32	3.9	TM**		
75	I 1,4-Dichlorobenzene-D (IS)															
76	TM Isopropylbenzene		1.890	1.929	1.999	1.859	1.945	2.117	2.257	2.179		2.0	7.2	TM		
77	TM** 1,1,2,2-Tetrachloroethane		0.9667	1.045	1.113	0.9942	0.9238	0.8700	0.7837	0.7687		0.93	13	TM**		
78	TM 1,2,3-Trichloropropane		0.1488	0.1556	0.1707	0.1750	0.1674	0.1554	0.1431	0.1333		0.16	9.2	TM		
79	TM t-1,4-Dichloro-2-Butene			0.1716	0.1831	0.1702	0.1709	0.1610	0.1659	0.1549		0.17	5.3	TM		
80	TM Bromobenzene		0.6905	0.7525	0.7543	0.7276	0.7300	0.7219	0.7149	0.6590		0.72	4.4	TM		
81	TM n-Propylbenzene		1.493	1.406	1.449	1.490	1.600	1.669	1.828	1.705		1.6	9.2	TM		
82	TM 4-Ethyltoluene		1.552	1.647	1.744	1.798	1.939	2.147	2.249	2.129		1.9	13	TM		
83	TM 2-Chlorotoluene		1.661	1.574	1.680	1.604	1.700	1.731	1.786	1.618		1.7	4.2	TM		
84	TML 1,3,5-Trimethylbenzene		0.9802	0.8575	0.9064	1.020	1.134	1.282	1.303	1.244		1.1	16	TML	0.999	
85	TM 4-Chlorotoluene		1.583	1.731	1.730	1.886	1.950	2.058	2.090	1.927		1.9	9.4	TM		
86	TM Tert-Butylbenzene		1.337	1.321	1.704	1.373	1.465	1.569	1.670	1.632		1.5	10	TM		
87	TM 1,2,4-Trimethylbenzene		1.487	1.507	1.588	1.618	1.770	1.985	2.123	2.044		1.8	14	TM		
88	TM Sec-Butylbenzene		1.891	2.018	1.984	1.995	2.240	2.409	2.539	2.458		2.2	11	TM		
89	TM p-Isopropyltoluene		1.810	1.892	1.918	1.888	2.084	2.188	2.276	2.186		2.0	8.6	TM		
90	TM Benzyl Chloride		1.083	1.003	1.166	1.040	0.9740	0.9406	0.8979	0.9833		1.0	8.4	TM		
91	TM 1,3-DCB		1.223	1.460	1.362	1.282	1.340	1.361	1.370	1.261		1.3	5.6	TM		
92	TM 1,4-DCB		1.580	1.321	1.468	1.405	1.408	1.391	1.392	1.309		1.4	6.1	TM		
93	TM n-Butylbenzene		1.336	1.592	1.583	1.565	1.644	1.804	1.950	1.951		1.7	13	TM		
94	TM 1,2-DCB		1.311	1.250	1.379	1.317	1.282	1.308	1.310	1.290		1.3	2.8	TM		
95	TM Hexachloroethane		0.4714	0.4597	0.4623	0.4588	0.4154	0.4107	0.4018	0.3760		0.43	8.2	TM		
96	TML 1,2-Dibromo-3-chloropropane			0.2084	0.2182	0.1874	0.1547	0.1558	0.1428	0.1395		0.17	19	TML	1.000	
97	TM 1,2,4-Trichlorobenzene		0.9132	0.8259	0.7839	0.7648	0.7680	0.8051	0.8636	0.9364		0.83	7.9	TM		
98	TM Hexachlorobutadiene			0.4839	0.5069	0.4522	0.4158	0.4397	0.4309	0.4371		0.45	7.1	TM		
99	TM Naphthalene		1.704	1.497	1.506	1.598	1.674	1.794	1.992	2.264		1.8	15	TM		
100	TM 1,2,3-Trichlorobenzene		0.4782	0.5798	0.4428	0.4494	0.4487	0.4931	0.5227	0.5253		0.49	9.7	TM		
101																
102																
103																
104																
105																

Data File : M:\LOKI\DATA\181213\1213L03.D  
 Acq On : 13 Dec 18 14:34  
 Sample : 0.3ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:52 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	305536	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	328128	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	172992	25.000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.65	111	44544	6.163	ppb	0.00
Spiked Amount				25.000		
			Recovery	=		24.652%
40) 1,2-DCA-D4(S)	4.14	65	49922	5.343	ppb	0.00
Spiked Amount				25.000		
			Recovery	=		21.372%
61) Toluene-D8(S)	6.74	98	126403	4.698	ppb	0.00
Spiked Amount				25.000		
			Recovery	=		18.792%
69) 4-Bromofluorobenzene(S)	9.68	95	41598	4.319	ppb	0.00
Spiked Amount				25.000		
			Recovery	=		17.276%
Target Compounds						
14) t-Butanol	1.94	59	5192	0.012	ppb	Qvalue 97

Quantitation Report

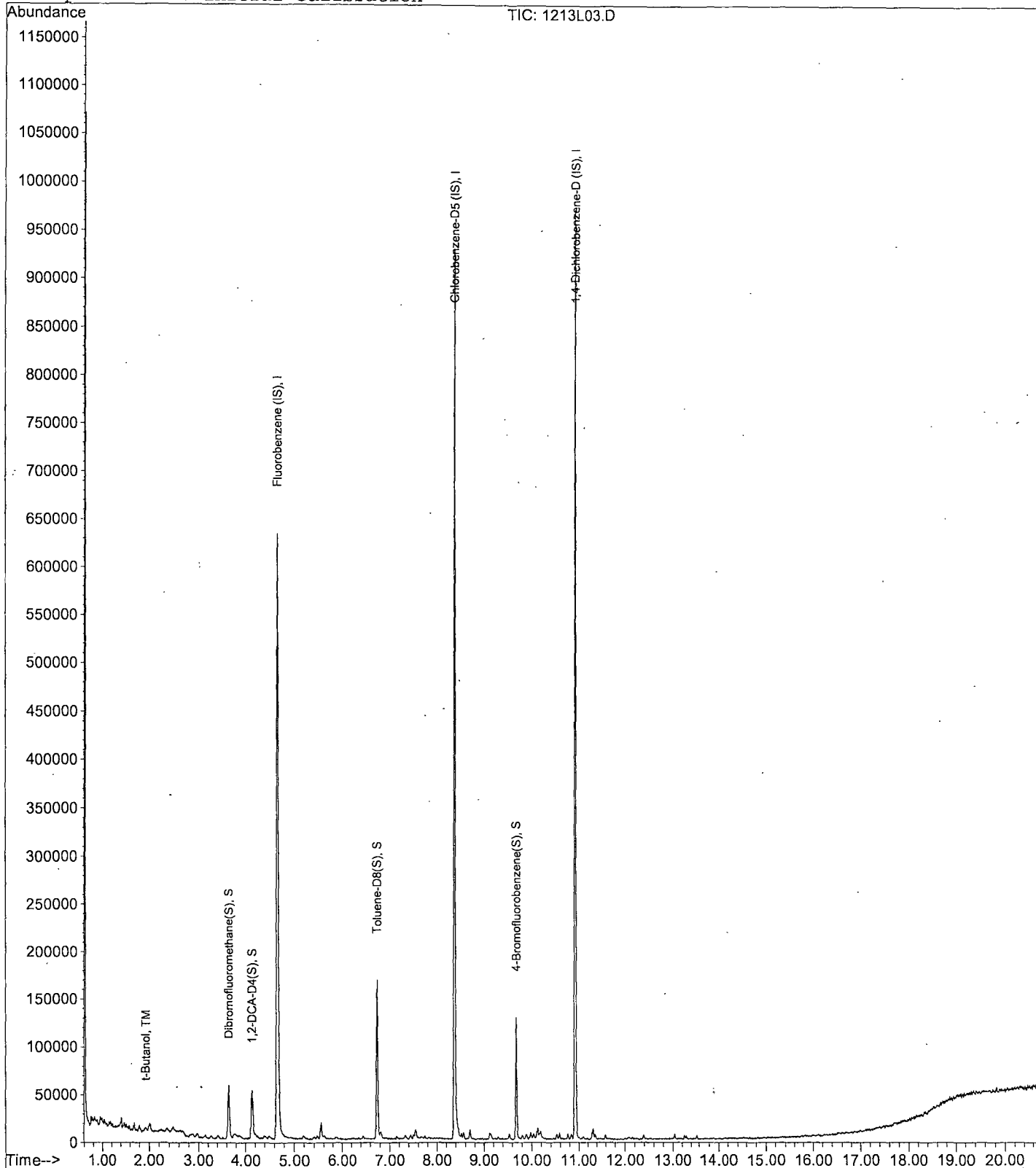
Data File : M:\LOKI\DATA\181213\1213L03.D  
Acq On : 13 Dec 18 14:34  
Sample : 0.3ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 8:52 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L04.D  
 Acq On : 13 Dec 18 15:03  
 Sample : 0.5ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	288768	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	299776	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	163648	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
35) Dibromofluoromethane(S)	3.64	111	42821	6.269	ppb	0.00
Spiked Amount				25.000		
Recovery						25.076%
40) 1,2-DCA-D4 (S)	4.14	65	50600	5.730	ppb	0.00
Spiked Amount				25.000		
Recovery						22.920%
61) Toluene-D8 (S)	6.74	98	131521	5.350	ppb	0.00
Spiked Amount				25.000		
Recovery						21.400%
69) 4-Bromofluorobenzene(S)	9.68	95	47370	5.383	ppb	0.00
Spiked Amount				25.000		
Recovery						21.532%
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.69	85	1255	0.297	ppb	93
3) Freon 114	0.75	85	1070	0.403	ppb	# 58
4) Chloromethane	0.77	50	4217	0.601	ppb	98
5) Vinyl chloride	0.82	62	2324	0.473	ppb	88
6) Bromomethane	0.98	94	2269	-0.078	ppb	82
7) Chloroethane	1.03	64	2555	0.884	ppb	# 78
8) Dichlorofluoromethane	1.14	67	4424	0.601	ppb	95
9) Trichlorofluoromethane	1.17	101	2948	0.514	ppb	88
10) Acrolein	1.41	56	10342	59.445	ppb	# 91
11) Acetone	1.51	43	2519	0.523	ppb	94
12) Freon-113	1.47	101	1479	0.522	ppb	89
13) 1,1-DCE	1.46	63	1191	0.123	ppb	80
14) t-Butanol	1.93	59	13614	19.603	ppb	97
15) Acetonitrile	1.69	41	20950	24.485	ppb	92
16) Methyl Acetate	1.81	43	2817	0.638	ppb	100
17) Iodomethane	1.55	142	1304	-0.380	ppb	86
18) Acrylonitrile	2.04	52	1424	-0.715	ppb	# 1
19) Methylene chloride	1.79	84	2939	-0.609	ppb	95
20) Carbon disulfide	1.59	76	6780	0.677	ppb	# 91
21) Methyl t-butyl ether (MtBE)	2.03	73	5549	0.522	ppb	# 88
22) Trans-1,2-DCE	2.00	96	2590	0.781	ppb	99
23) Diisopropyl Ether	2.49	45	6842	0.595	ppb	94
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	1836	0.327	ppb	# 71
25) 1,1-DCA	2.36	63	5383	0.876	ppb	# 93
26) Vinyl Acetate	2.47	43	2212	0.673	ppb	95
27) Ethyl tert Butyl Ether	2.89	59	4795	0.521	ppb	100
28) MEK (2-Butanone)	3.06	43	2193	0.969	ppb	# 51
29) Cis-1,2-DCE	2.99	96	1203	0.816	ppb	90
30) 2,2-Dichloropropane	2.96	77	3968	-0.157	ppb	# 87
31) 2-Methylpentane	1.82	71	1465	0.322	ppb	# 70
32) 3-Methylpentane	2.01	57	4466	0.859	ppb	# 61
33) Chloroform	3.43	83	3953	0.667	ppb	94
34) Bromochloromethane	3.27	128	1476	0.869	ppb	71
36) 1,1,1-TCA	3.63	97	3906	0.841	ppb	92
37) Cyclohexane	3.68	41	1956	0.561	ppb	# 58
38) 1,1-Dichloropropene	3.89	75	2334	0.666	ppb	# 88
39) 2,2,4-Trimethylpentane	4.40	57	2677	0.340	ppb	# 14
41) Carbon Tetrachloride	3.87	117	3119	0.860	ppb	89
42) Tert Amyl Methyl Ether	4.50	73	4403	0.522	ppb	# 78

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1213L04.D  
 Acq On : 13 Dec 18 15:03  
 Sample : 0.5ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.83	56	3513	0.431	ppb	92
44) 1,2-DCA	4.26	62	2682	0.540	ppb #	73
45) Benzene	4.21	78	8500	0.706	ppb #	93
46) TCE	5.19	130	1968	0.666	ppb #	84
47) 2-Pentanone	5.54	43	66673	20.408	ppb	100
48) 1,2-Dichloropropane	5.47	63	2033	0.575	ppb #	86
49) Bromodichloromethane	5.87	83	2889	0.602	ppb	98
50) Methyl Cyclohexane	5.40	83	2019	0.553	ppb	90
51) Dibromomethane	5.62	93	1490	0.601	ppb	94
52) 2-Chloroethyl vinyl ether	6.36	43	685	0.722	ppb #	30
53) MIBK (methyl isobutyl ket	6.70	43	2433	0.917	ppb #	73
54) 1-Bromo-2-chloroethane	6.21	63	1481	0.519	ppb	96
55) Cis-1,3-Dichloropropene	6.46	75	3212	0.649	ppb	92
56) Toluene	6.82	91	7055	0.579	ppb	93
57) Trans-1,3-Dichloropropene	7.14	75	2843	0.596	ppb #	82
58) 1,1,2-TCA	7.33	83	2201	0.738	ppb	83
59) 2-Hexanone	7.69	43	1326	1.412	ppb #	86
62) 1,2-EDB	7.83	107	2333	0.685	ppb	84
63) Tetrachloroethene	7.44	166	2692	0.779	ppb #	72
64) 1-Chlorohexane	8.45	91	1469	0.423	ppb	87
65) 1,1,1,2-Tetrachloroethane	8.52	131	2058	0.587	ppb	98
66) m&p-Xylene	8.71	91	10798	1.086	ppb	98
67) o-Xylene	9.13	106	2468	0.537	ppb	78
68) Styrene	9.15	104	2233	1.588	ppb #	68
70) 1,3-Dichloropropane	7.50	76	3741	0.652	ppb	95
71) Dibromochloromethane	7.74	129	2512	0.669	ppb	98
72) Chlorobenzene	8.41	112	6253	0.697	ppb	94
73) Ethylbenzene	8.56	91	7845	0.593	ppb	90
74) Bromoform	9.31	173	1994	0.312	ppb	85
76) Isopropylbenzene	9.54	105	6185	0.533	ppb #	84
77) 1,1,2,2-Tetrachloroethane	9.89	83	3164	0.572	ppb #	87
78) 1,2,3-Trichloropropane	9.90	110	487	0.512	ppb	88
79) t-1,4-Dichloro-2-Butene	9.95	53	726	0.761	ppb #	61
80) Bromobenzene	9.81	156	2260	0.607	ppb	90
81) n-Propylbenzene	9.99	91	4885	0.533	ppb #	84
82) 4-Ethyltoluene	10.12	105	5078	0.408	ppb	99
83) 2-Chlorotoluene	10.04	91	5436	0.547	ppb	94
84) 1,3,5-Trimethylbenzene	10.19	105	3208	0.903	ppb	90
85) 4-Chlorotoluene	10.17	91	5182	0.469	ppb	99
86) Tert-Butylbenzene	10.52	119	4375	1.205	ppb	86
87) 1,2,4-Trimethylbenzene	10.58	105	4867	1.326	ppb	90
88) Sec-Butylbenzene	10.76	105	6190	0.487	ppb	99
89) p-Isopropyltoluene	10.93	119	5923	0.528	ppb #	90
90) Benzyl Chloride	11.10	91	3543	0.498	ppb	91
91) 1,3-DCB	10.84	146	4003	0.582	ppb	85
92) 1,4-DCB	10.94	146	5170	0.687	ppb	91
93) n-Butylbenzene	11.37	91	4374	0.434	ppb	86
94) 1,2-DCB	11.33	146	4292	0.609	ppb	94
95) Hexachloroethane	11.60	117	1543	0.552	ppb #	76
96) 1,2-Dibromo-3-chloropropan	12.15	75	778	0.789	ppb #	57
97) 1,2,4-Trichlorobenzene	13.04	180	2989	1.713	ppb	89
98) Hexachlorobutadiene	13.26	225	627	0.315	ppb	94
99) Naphthalene	13.29	128	5578	2.088	ppb	92
100) 1,2,3-Trichlorobenzene	13.55	180	1565	0.646	ppb #	79

(#) = qualifier out of range (m) = manual integration

Quantitation Report

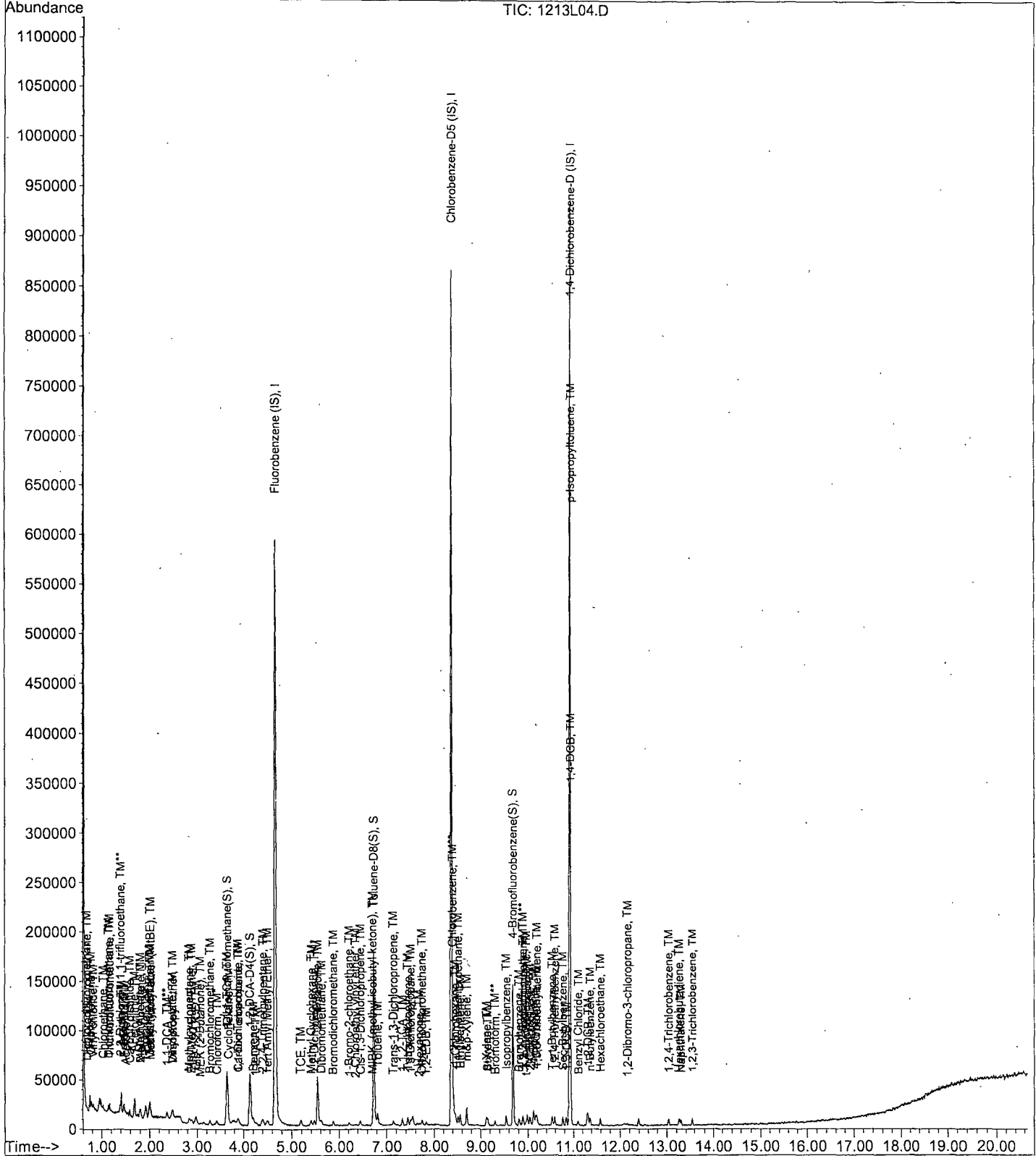
Data File : M:\LOKI\DATA\181213\1213L04.D  
 Acq On : 13 Dec 18 15:03  
 Sample : 0.5ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L05.D  
 Acq On : 13 Dec 18 15:31  
 Sample : 1.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	285568	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	306432	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	160000	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	70514	10.439	ppb	0.00
Spiked Amount				25.000		
Recovery					=	41.756%
40) 1,2-DCA-D4(S)	4.14	65	80308	9.196	ppb	0.00
Spiked Amount				25.000		
Recovery					=	36.784%
61) Toluene-D8(S)	6.74	98	217030	8.637	ppb	0.00
Spiked Amount				25.000		
Recovery					=	34.548%
69) 4-Bromofluorobenzene(S)	9.68	95	76718	8.529	ppb	0.00
Spiked Amount				25.000		
Recovery					=	34.116%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	2689	0.644	ppb	# 80
3) Freon 114	0.75	85	2215	0.843	ppb	94
4) Chloromethane	0.77	50	5332	0.849	ppb	94
5) Vinyl chloride	0.82	62	4637	0.955	ppb	95
6) Bromomethane	0.98	94	3360	0.261	ppb	# 70
7) Chloroethane	1.03	64	3135	1.097	ppb	92
8) Dichlorofluoromethane	1.14	67	7959	1.093	ppb	98
9) Trichlorofluoromethane	1.17	101	6473	1.141	ppb	85
10) Acrolein	1.41	56	22712	132.009	ppb	# 96
11) Acetone	1.51	43	4217	1.602	ppb	89
12) Freon-113	1.48	101	2780	0.993	ppb	# 87
13) 1,1-DCE	1.46	63	2177	0.827	ppb	92
14) t-Butanol	1.93	59	26399	49.035	ppb	96
15) Acetonitrile	1.69	41	35893	42.420	ppb	98
16) Methyl Acetate	1.82	43	6812	1.560	ppb	100
17) Iodomethane	1.55	142	1959	0.602	ppb	# 83
18) Acrylonitrile	1.99	52	1807	-0.443	ppb	96
19) Methylene chloride	1.79	84	6014	0.348	ppb	93
20) Carbon disulfide	1.59	76	12181	1.230	ppb	95
21) Methyl t-butyl ether (MtBE)	2.02	73	11503	1.094	ppb	95
22) Trans-1,2-DCE	2.00	96	4692	1.431	ppb	77
23) Diisopropyl Ether	2.49	45	11873	1.043	ppb	96
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	4588	0.827	ppb	92
25) 1,1-DCA	2.36	63	8728	1.437	ppb	97
26) Vinyl Acetate	2.46	43	4910	1.510	ppb	# 90
27) Ethyl tert Butyl Ether	2.88	59	9088	0.999	ppb	98
28) MEK (2-Butanone)	3.06	43	4300	1.956	ppb	99
29) Cis-1,2-DCE	2.98	96	2142	1.469	ppb	85
30) 2,2-Dichloropropane	2.96	77	6593	0.481	ppb	# 86
31) 2-Methylpentane	1.82	71	3039	0.676	ppb	88
32) 3-Methylpentane	2.00	57	8791	1.709	ppb	# 70
33) Chloroform	3.43	83	7756	1.323	ppb	96
34) Bromochloromethane	3.27	128	2436	1.450	ppb	95
36) 1,1,1-TCA	3.62	97	6292	1.369	ppb	99
37) Cyclohexane	3.69	41	2822	0.886	ppb	85
38) 1,1-Dichloropropene	3.90	75	4267	1.230	ppb	98
39) 2,2,4-Trimethylpentane	4.40	57	5871	0.755	ppb	# 35
41) Carbon Tetrachloride	3.87	117	5608	1.563	ppb	72
42) Tert Amyl Methyl Ether	4.51	73	8648	1.037	ppb	# 96

(#) = qualifier out of range (m) = manual integration



Data File : M:\LOKI\DATA\181213\1213L05.D  
 Acq On : 13 Dec 18 15:31  
 Sample : 1.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	7214	0.895	ppb	# 78
44) 1,2-DCA	4.26	62	5999	1.222	ppb	97
45) Benzene	4.20	78	16424	1.380	ppb	96
46) TCE	5.19	130	4093	1.400	ppb	88
47) 2-Pentanone	5.53	43	141735	43.869	ppb	98
48) 1,2-Dichloropropane	5.46	63	4772	1.365	ppb	# 93
49) Bromodichloromethane	5.88	83	6164	1.299	ppb	92
50) Methyl Cyclohexane	5.40	83	3240	0.897	ppb	77
51) Dibromomethane	5.62	93	3213	1.311	ppb	# 77
52) 2-Chloroethyl vinyl ether	6.34	43	1073	1.143	ppb	# 59
53) MIBK (methyl isobutyl ket	6.69	43	5960	1.712	ppb	# 80
54) 1-Bromo-2-chloroethane	6.21	63	2820	0.999	ppb	87
55) Cis-1,3-Dichloropropene	6.45	75	6731	1.376	ppb	97
56) Toluene	6.82	91	15963	1.326	ppb	100
57) Trans-1,3-Dichloropropene	7.15	75	5499	1.165	ppb	85
58) 1,1,2-TCA	7.33	83	3597	1.220	ppb	77
59) 2-Hexanone	7.68	43	2438	1.797	ppb	# 81
62) 1,2-EDB	7.82	107	4314	1.240	ppb	95
63) Tetrachloroethene	7.45	166	5429	1.536	ppb	85
64) 1-Chlorohexane	8.45	91	2927	0.825	ppb	85
65) 1,1,1,2-Tetrachloroethane	8.52	131	5557	1.550	ppb	93
66) m&p-Xylene	8.70	91	21910	2.156	ppb	99
67) o-Xylene	9.12	106	4978	1.059	ppb	99
68) Styrene	9.15	104	4564	1.959	ppb	96
70) 1,3-Dichloropropane	7.50	76	7003	1.194	ppb	96
71) Dibromochloromethane	7.74	129	5057	1.317	ppb	82
72) Chlorobenzene	8.40	112	11783	1.285	ppb	93
73) Ethylbenzene	8.56	91	15066	1.114	ppb	98
74) Bromoform	9.30	173	3710	0.928	ppb	92
76) Isopropylbenzene	9.54	105	12348	1.087	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.88	83	6688	1.236	ppb	85
78) 1,2,3-Trichloropropane	9.90	110	996	1.071	ppb	94
79) t-1,4-Dichloro-2-Butene	9.96	53	1098	1.057	ppb	96
80) Bromobenzene	9.81	156	4816	1.323	ppb	86
81) n-Propylbenzene	9.99	91	8998	1.005	ppb	97
82) 4-Ethyltoluene	10.12	105	10542	0.866	ppb	89
83) 2-Chlorotoluene	10.04	91	10071	1.036	ppb	96
84) 1,3,5-Trimethylbenzene	10.19	105	5488	1.234	ppb	93
85) 4-Chlorotoluene	10.17	91	11078	1.025	ppb	85
86) Tert-Butylbenzene	10.53	119	8453	1.651	ppb	93
87) 1,2,4-Trimethylbenzene	10.58	105	9645	1.745	ppb	99
88) Sec-Butylbenzene	10.76	105	12915	1.039	ppb	93
89) p-Isopropyltoluene	10.93	119	12110	1.105	ppb	98
90) Benzyl Chloride	11.10	91	6422	0.924	ppb	# 91
91) 1,3-DCB	10.84	146	9343	1.389	ppb	95
92) 1,4-DCB	10.94	146	8454	1.149	ppb	# 78
93) n-Butylbenzene	11.36	91	10191	1.035	ppb	89
94) 1,2-DCB	11.32	146	8001	1.162	ppb	91
95) Hexachloroethane	11.59	117	2942	1.077	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.16	75	1334	1.384	ppb	# 69
97) 1,2,4-Trichlorobenzene	13.04	180	5286	2.208	ppb	# 94
98) Hexachlorobutadiene	13.26	225	3097	1.589	ppb	91
99) Naphthalene	13.29	128	9582	2.430	ppb	# 84
100) 1,2,3-Trichlorobenzene	13.55	180	3711	1.568	ppb	82

(#) = qualifier out of range (m) = manual integration

Quantitation Report

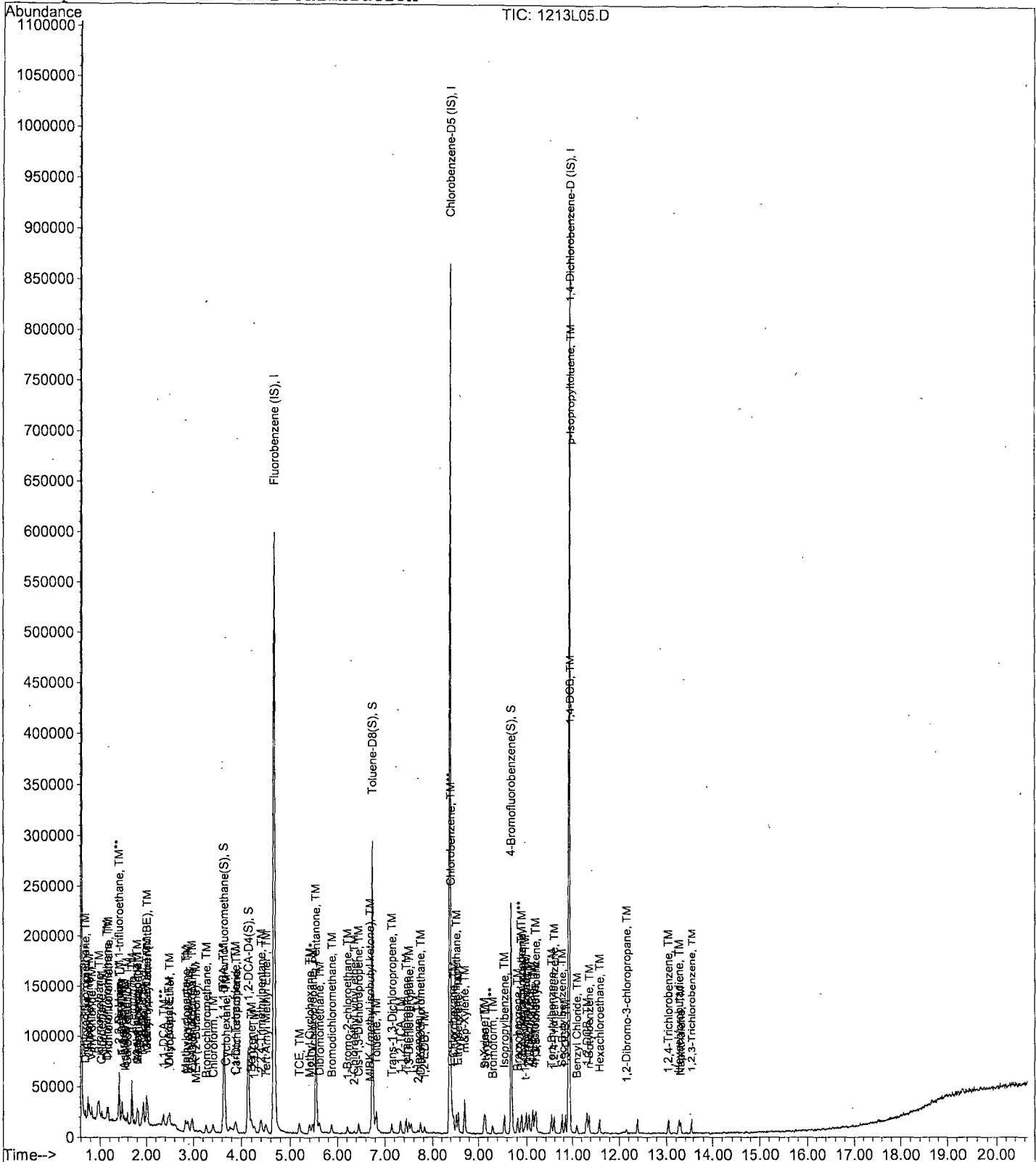
Data File : M:\LOKI\DATA\181213\1213L05.D  
Acq On : 13 Dec 18 15:31  
Sample : 1.0ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L06.D  
 Acq On : 13 Dec 18 16:00  
 Sample : 2.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV.  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	295872	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	304128	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	160768	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.65	111	73169	10.454	ppb	0.00
Spiked Amount	25.000		Recovery	=	41.816%	
40) 1,2-DCA-D4 (S)	4.14	65	84928	9.386	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.544%	
61) Toluene-D8 (S)	6.74	98	221952	8.900	ppb	0.00
Spiked Amount	25.000		Recovery	=	35.600%	
69) 4-Bromofluorobenzene(S)	9.68	95	76492	8.569	ppb	0.00
Spiked Amount	25.000		Recovery	=	34.276%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	5243	1.212	ppb	95
3) Freon 114	0.75	85	5371	1.974	ppb	96
4) Chloromethane	0.77	50	12000	2.181	ppb	92
5) Vinyl chloride	0.82	62	9384	1.865	ppb	96
6) Bromomethane	0.98	94	8117	1.619	ppb	94
7) Chloroethane	1.03	64	5479	1.851	ppb #	74
8) Dichlorofluoromethane	1.14	67	15497	2.054	ppb	95
9) Trichlorofluoromethane	1.17	101	12640	2.151	ppb	95
10) Acrolein	1.41	56	33584	188.402	ppb #	99
11) Acetone	1.51	43	5753	2.438	ppb	90
12) Freon-113	1.48	101	5888	2.030	ppb	95
13) 1,1-DCE	1.47	63	3869	1.925	ppb	91
14) t-Butanol	1.93	59	41244	79.543	ppb	96
15) Acetonitrile	1.69	41	56627	64.594	ppb	96
16) Methyl Acetate	1.82	43	13154	2.908	ppb	100
17) Iodomethane	1.55	142	3764	2.960	ppb #	91
18) Acrylonitrile	1.99	52	4315	1.168	ppb	91
19) Methylene chloride	1.79	84	10750	1.690	ppb	94
20) Carbon disulfide	1.59	76	22492	2.191	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	21900	2.010	ppb	96
22) Trans-1,2-DCE	2.00	96	9646	2.839	ppb	93
23) Diisopropyl Ether	2.49	45	25421	2.156	ppb	94
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	7731	1.344	ppb	93
25) 1,1-DCA	2.36	63	18188	2.889	ppb	97
26) Vinyl Acetate	2.46	43	9278	2.755	ppb	98
27) Ethyl tert Butyl Ether	2.88	59	18889	2.004	ppb	93
28) MEK (2-Butanone)	3.06	43	5441	2.397	ppb #	78
29) Cis-1,2-DCE	2.98	96	4378	2.897	ppb	89
30) 2,2-Dichloropropane	2.97	77	12627	1.820	ppb	97
31) 2-Methylpentane	1.82	71	5330	1.145	ppb #	69
32) 3-Methylpentane	2.01	57	17089	3.207	ppb	96
33) Chloroform	3.42	83	16621	2.736	ppb	84
34) Bromochloromethane	3.27	128	5021	2.885	ppb	100
36) 1,1,1-TCA	3.62	97	12595	2.646	ppb	100
37) Cyclohexane	3.68	41	5456	1.780	ppb	91
38) 1,1-Dichloropropene	3.89	75	8671	2.413	ppb	97
39) 2,2,4-Trimethylpentane	4.40	57	13698	1.700	ppb #	53
41) Carbon Tetrachloride	3.87	117	12299	3.309	ppb	79
42) Tert Amyl Methyl Ether	4.51	73	16426	1.901	ppb #	93

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1213L06.D  
 Acq On : 13 Dec 18 16:00  
 Sample : 2.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	14085	1.687	ppb	98
44) 1,2-DCA	4.27	62	12730	2.503	ppb	99
45) Benzene	4.20	78	31391	2.545	ppb	98
46) TCE	5.19	130	8336	2.752	ppb	88
47) 2-Pentanone	5.53	43	226090	67.542	ppb	96
48) 1,2-Dichloropropane	5.46	63	9192	2.537	ppb #	86
49) Bromodichloromethane	5.88	83	12860	2.616	ppb #	92
50) Methyl Cyclohexane	5.41	83	6609	1.766	ppb	98
51) Dibromomethane	5.61	93	6478	2.550	ppb	94
52) 2-Chloroethyl vinyl ether	6.35	43	2765	2.844	ppb #	70
53) MIBK (methyl isobutyl ket	6.70	43	9688	2.469	ppb #	94
54) 1-Bromo-2-chloroethane	6.21	63	5505	1.882	ppb #	82
55) Cis-1,3-Dichloropropene	6.45	75	12327	2.432	ppb	91
56) Toluene	6.82	91	30189	2.420	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	11308	2.312	ppb	91
58) 1,1,2-TCA	7.33	83	7512	2.459	ppb	90
59) 2-Hexanone	7.69	43	5346	2.727	ppb #	71
62) 1,2-EDB	7.83	107	9238	2.675	ppb	83
63) Tetrachloroethene	7.45	166	9109	2.597	ppb	94
64) 1-Chlorohexane	8.45	91	6133	1.742	ppb	92
65) 1,1,1,2-Tetrachloroethane	8.52	131	9267	2.605	ppb	81
66) m&p-Xylene	8.70	91	44571	4.420	ppb	98
67) o-Xylene	9.12	106	10847	2.326	ppb	95
68) Styrene	9.15	104	9381	2.754	ppb	98
70) 1,3-Dichloropropane	7.50	76	13567	2.331	ppb	100
71) Dibromochloromethane	7.74	129	10469	2.747	ppb	99
72) Chlorobenzene	8.40	112	23261	2.556	ppb	93
73) Ethylbenzene	8.56	91	29781	2.219	ppb	97
74) Bromoform	9.30	173	8235	2.617	ppb	83
76) Isopropylbenzene	9.54	105	25705	2.253	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.89	83	14314	2.632	ppb #	91
78) 1,2,3-Trichloropropane	9.90	110	2195	2.348	ppb	93
79) t-1,4-Dichloro-2-Butene	9.95	53	2355	2.009	ppb	97
80) Bromobenzene	9.81	156	9701	2.652	ppb	96
81) n-Propylbenzene	9.99	91	18640	2.072	ppb	100
82) 4-Ethyltoluene	10.12	105	22432	1.835	ppb	95
83) 2-Chlorotoluene	10.04	91	21604	2.211	ppb	98
84) 1,3,5-Trimethylbenzene	10.19	105	11658	2.094	ppb	94
85) 4-Chlorotoluene	10.17	91	22245	2.048	ppb	98
86) Tert-Butylbenzene	10.53	119	21917	3.076	ppb	84
87) 1,2,4-Trimethylbenzene	10.58	105	20420	2.663	ppb	100
88) Sec-Butylbenzene	10.76	105	25523	2.043	ppb	88
89) p-Isopropyltoluene	10.93	119	24674	2.240	ppb	97
90) Benzyl Chloride	11.10	91	14997	2.147	ppb	91
91) 1,3-DCB	10.84	146	17515	2.591	ppb	98
92) 1,4-DCB	10.94	146	18878	2.554	ppb	99
93) n-Butylbenzene	11.36	91	20361	2.059	ppb	97
94) 1,2-DCB	11.32	146	17736	2.564	ppb	94
95) Hexachloroethane	11.59	117	5946	2.167	ppb	94
96) 1,2-Dibromo-3-chloropropan	12.16	75	2806	2.897	ppb	85
97) 1,2,4-Trichlorobenzene	13.04	180	10082	3.200	ppb	94
98) Hexachlorobutadiene	13.26	225	6519	3.329	ppb	93
99) Naphthalene	13.29	128	19366	3.233	ppb	96
100) 1,2,3-Trichlorobenzene	13.55	180	5695	2.395	ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

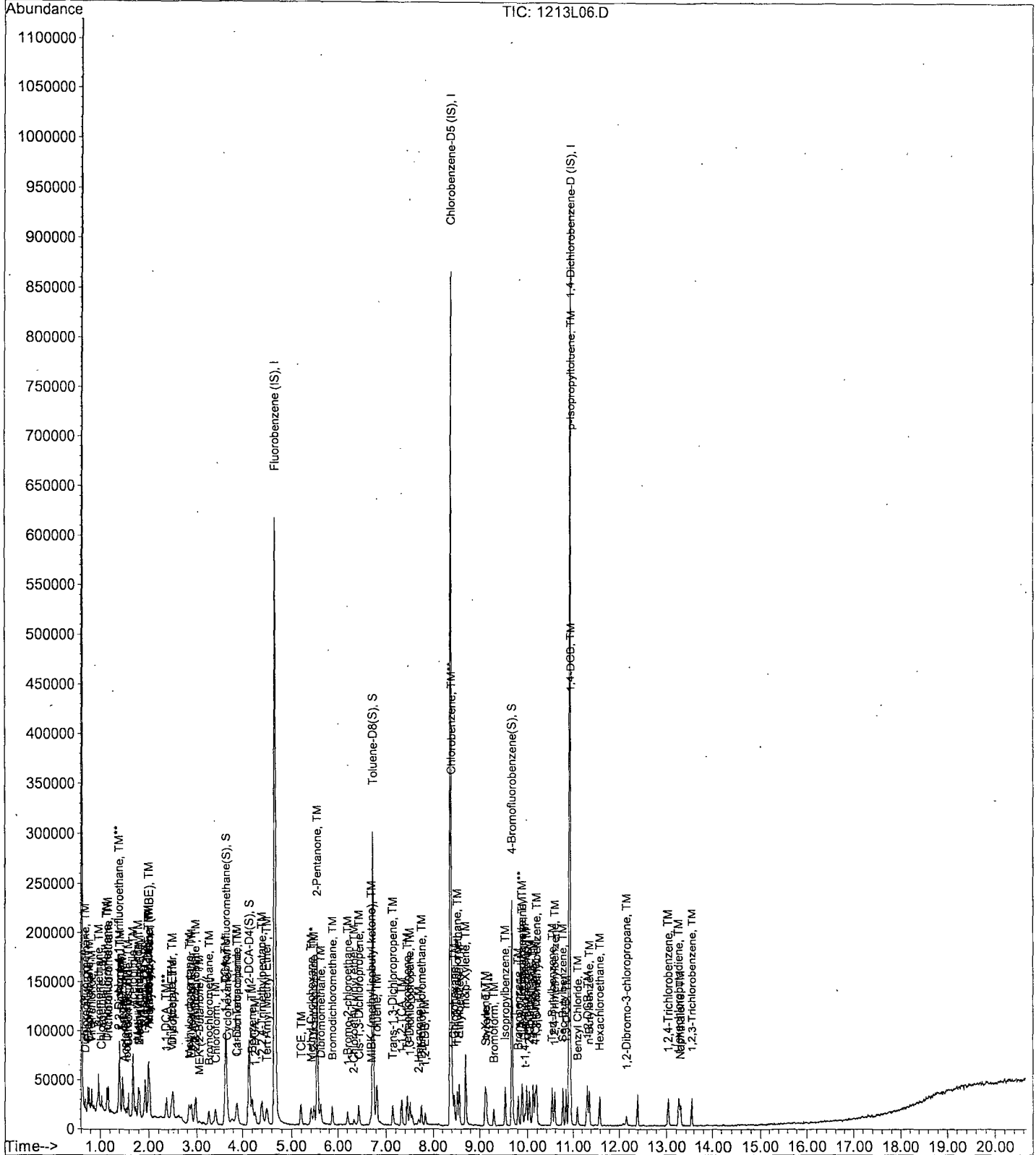
Data File : M:\LOKI\DATA\181213\1213L06.D  
Acq On : 13 Dec 18 16:00  
Sample : 2.0ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L07.D Vial: 6  
 Acq On : 13 Dec 18 16:29 Operator: PM, DG, SV, CMM, KV  
 Sample : 5.0ug/L VOC STD 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	301312	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	306304	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	176832	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
35) Dibromofluoromethane (S)	3.64	111	193757	27.184	ppb	0.00
Spiked Amount				25.000		
Recovery						108.736%
40) 1,2-DCA-D4 (S)	4.14	65	221691	24.058	ppb	0.00
Spiked Amount				25.000		
Recovery						96.232%
61) Toluene-D8 (S)	6.74	98	629569	25.066	ppb	0.00
Spiked Amount				25.000		
Recovery						100.264%
69) 4-Bromofluorobenzene (S)	9.68	95	224093	24.925	ppb	0.00
Spiked Amount				25.000		
Recovery						99.700%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	11123	2.525	ppb	90
3) Freon 114	0.75	85	9582	3.458	ppb	89
4) Chloromethane	0.77	50	26521	5.070	ppb	97
5) Vinyl chloride	0.82	62	22863	4.463	ppb	94
6) Bromomethane	0.98	94	18421	4.541	ppb	99
7) Chloroethane	1.03	64	15644	5.190	ppb	98
8) Dichlorofluoromethane	1.14	67	38781	5.048	ppb	96
9) Trichlorofluoromethane	1.17	101	30365	5.073	ppb	95
10) Acrolein	1.41	56	44192	243.436	ppb #	99
11) Acetone	1.51	43	9905	4.835	ppb	99
12) Freon-113	1.48	101	14548	4.925	ppb	98
13) 1,1-DCE	1.46	63	8831	5.192	ppb	92
14) t-Butanol	1.93	59	52934	103.116	ppb	98
15) Acetonitrile	1.69	41	75296	84.339	ppb	98
16) Methyl Acetate	1.82	43	24675	5.356	ppb	100
17) Iodomethane	1.55	142	10140	10.502	ppb	99
18) Acrylonitrile	1.98	52	9599	4.538	ppb	100
19) Methylene chloride	1.79	84	24973	5.781	ppb	96
20) Carbon disulfide	1.59	76	57428	5.494	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	58321	5.255	ppb	88
22) Trans-1,2-DCE	2.00	96	20980	6.063	ppb	96
23) Diisopropyl Ether	2.49	45	60502	5.039	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	20283	3.463	ppb	98
25) 1,1-DCA	2.36	63	42988	6.706	ppb	98
26) Vinyl Acetate	2.46	43	23442	6.835	ppb	100
27) Ethyl tert Butyl Ether	2.88	59	48696	5.072	ppb	98
28) MEK (2-Butanone)	3.05	43	10407	4.534	ppb	97
29) Cis-1,2-DCE	2.98	96	9372	6.090	ppb	92
30) 2,2-Dichloropropane	2.96	77	29888	5.681	ppb	98
31) 2-Methylpentane	1.82	71	10097	2.130	ppb	89
32) 3-Methylpentane	2.01	57	35144	6.475	ppb #	91
33) Chloroform	3.42	83	38700	6.255	ppb	93
34) Bromochloromethane	3.27	128	11629	6.561	ppb	84
36) 1,1,1-TCA	3.62	97	31476	6.493	ppb	97
37) Cyclohexane	3.68	41	12492	4.184	ppb	93
38) 1,1-Dichloropropene	3.89	75	21030	5.747	ppb	98
39) 2,2,4-Trimethylpentane	4.41	57	31004	3.778	ppb #	75
41) Carbon Tetrachloride	3.87	117	27751	7.331	ppb	81
42) Tert Amyl Methyl Ether	4.50	73	41648	4.733	ppb #	90

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1213L07.D  
 Acq On : 13 Dec 18 16:29  
 Sample : 5.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	30968	3.642	ppb	97
44) 1,2-DCA	4.26	62	28762	5.552	ppb	97
45) Benzene	4.20	78	75032	5.974	ppb	99
46) TCE	5.19	130	20624	6.685	ppb	95
47) 2-Pentanone	5.53	43	306766	89.988	ppb	98
48) 1,2-Dichloropropane	5.46	63	22195	6.016	ppb	100
49) Bromodichloromethane	5.87	83	30689	6.130	ppb	98
50) Methyl Cyclohexane	5.41	83	16800	4.408	ppb	91
51) Dibromomethane	5.62	93	16980	6.564	ppb	93
52) 2-Chloroethyl vinyl ether	6.35	43	5016	5.066	ppb	88
53) MIBK (methyl isobutyl ket	6.69	43	21875	5.013	ppb	92
54) 1-Bromo-2-chloroethane	6.21	63	16150	5.420	ppb	98
55) Cis-1,3-Dichloropropene	6.45	75	30992	6.004	ppb	97
56) Toluene	6.81	91	82109	6.463	ppb	99
57) Trans-1,3-Dichloropropene	7.14	75	29203	5.862	ppb	100
58) 1,1,2-TCA	7.33	83	19004	6.108	ppb	95
59) 2-Hexanone	7.68	43	12102	4.884	ppb	96
62) 1,2-EDB	7.82	107	22327	6.419	ppb	98
63) Tetrachloroethene	7.44	166	24317	6.884	ppb	94
64) 1-Chlorohexane	8.45	91	17397	4.907	ppb	98
65) 1,1,1,2-Tetrachloroethane	8.52	131	23804	6.644	ppb	88
66) m&p-Xylene	8.70	91	115061	11.329	ppb	95
67) o-Xylene	9.12	106	27629	5.882	ppb	96
68) Styrene	9.15	104	24456	5.194	ppb	93
70) 1,3-Dichloropropane	7.50	76	35212	6.008	ppb	98
71) Dibromochloromethane	7.74	129	25801	6.721	ppb	93
72) Chlorobenzene	8.40	112	58799	6.416	ppb	98
73) Ethylbenzene	8.56	91	76951	5.692	ppb	96
74) Bromoform	9.30	173	19436	6.723	ppb	98
76) Isopropylbenzene	9.54	105	65748	5.239	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.88	83	35161	5.879	ppb	95
78) 1,2,3-Trichloropropane	9.90	110	6190	6.020	ppb	96
79) t-1,4-Dichloro-2-Butene	9.95	53	6019	4.380	ppb	93
80) Bromobenzene	9.81	156	25732	6.396	ppb	98
81) n-Propylbenzene	9.99	91	52693	5.325	ppb	99
82) 4-Ethyltoluene	10.11	105	63606	4.729	ppb	99
83) 2-Chlorotoluene	10.04	91	56740	5.280	ppb	99
84) 1,3,5-Trimethylbenzene	10.19	105	36072	5.052	ppb	97
85) 4-Chlorotoluene	10.16	91	66717	5.585	ppb	100
86) Tert-Butylbenzene	10.53	119	48570	5.438	ppb	97
87) 1,2,4-Trimethylbenzene	10.58	105	57234	5.366	ppb	99
88) Sec-Butylbenzene	10.76	105	70544	5.135	ppb	98
89) p-Isopropyltoluene	10.93	119	66756	5.510	ppb	97
90) Benzyl Chloride	11.10	91	36777	4.788	ppb	97
91) 1,3-DCB	10.84	146	45350	6.100	ppb	98
92) 1,4-DCB	10.94	146	49682	6.112	ppb	98
93) n-Butylbenzene	11.36	91	55350	5.088	ppb	96
94) 1,2-DCB	11.32	146	46577	6.121	ppb	97
95) Hexachloroethane	11.59	117	16227	5.377	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.15	75	6627	6.221	ppb	# 85
97) 1,2,4-Trichlorobenzene	13.04	180	27048	6.220	ppb	95
98) Hexachlorobutadiene	13.26	225	15994	7.425	ppb	93
99) Naphthalene	13.28	128	56533	5.873	ppb	# 90
100) 1,2,3-Trichlorobenzene	13.55	180	15895	6.076	ppb	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

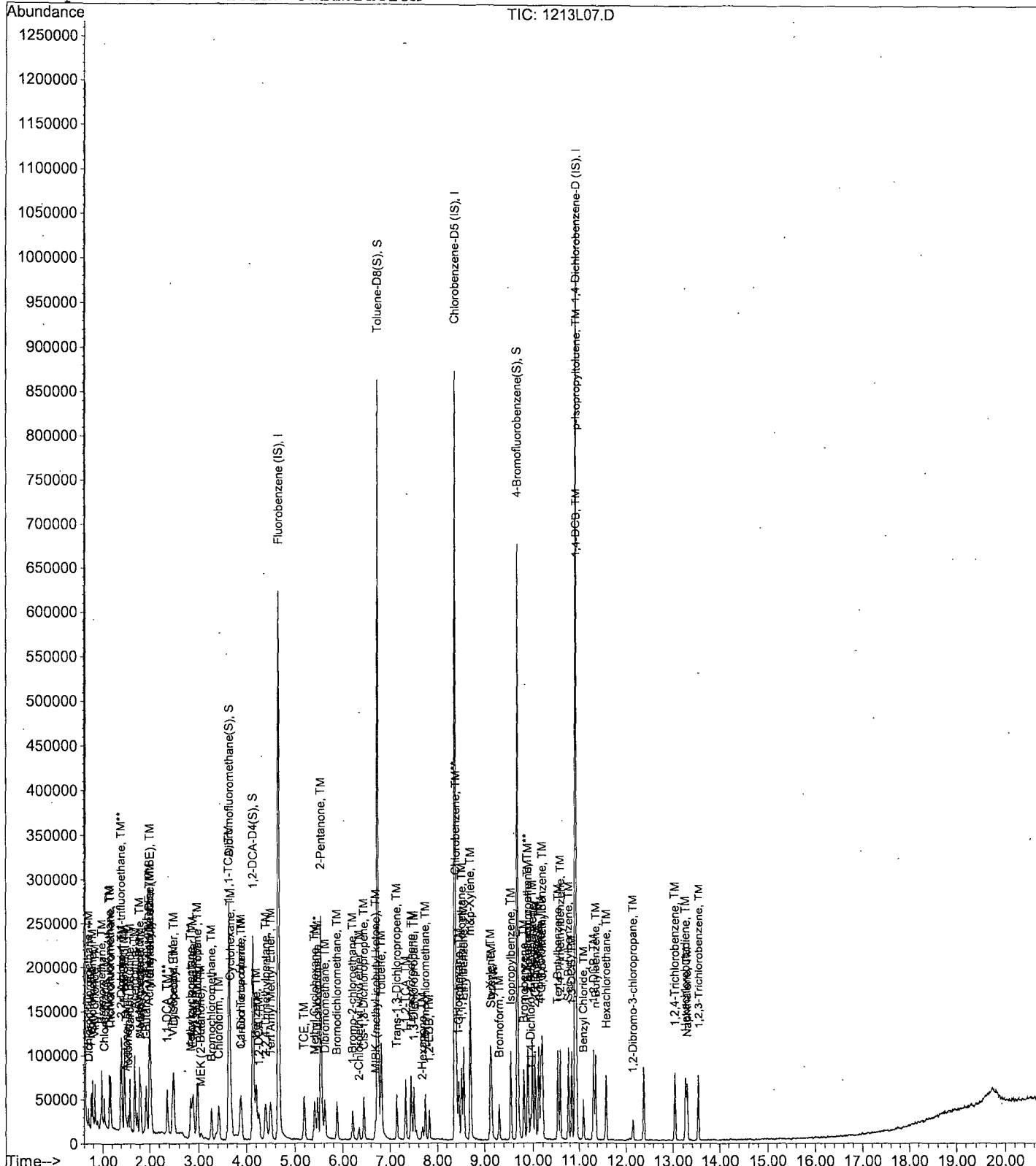
Data File : M:\LOKI\DATA\181213\1213L07.D  
Acq On : 13 Dec 18 16:29  
Sample : 5.0ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1213L08.D  
 Acq On : 13 Dec 18 16:57  
 Sample : 10ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	305088	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	318016	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	191936	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	194135	26.900	ppb	0.00
Spiked Amount				25.000		
Recovery						= 107.600%
40) 1,2-DCA-D4(S)	4.14	65	218968	23.469	ppb	0.00
Spiked Amount				25.000		
Recovery						= 93.876%
61) Toluene-D8(S)	6.74	98	645576	24.757	ppb	0.00
Spiked Amount				25.000		
Recovery						= 99.028%
69) 4-Bromofluorobenzene(S)	9.68	95	237313	25.423	ppb	0.00
Spiked Amount				25.000		
Recovery						= 101.692%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	25072	5.622	ppb	100
3) Freon 114	0.75	85	21736	7.747	ppb	100
4) Chloromethane	0.77	50	50450	9.777	ppb	100
5) Vinyl chloride	0.82	62	45905	8.850	ppb	100
6) Bromomethane	0.98	94	39010	10.326	ppb	100
7) Chloroethane	1.03	64	33175	10.869	ppb	100
8) Dichlorofluoromethane	1.14	67	78988	10.155	ppb	100
9) Trichlorofluoromethane	1.17	101	63350	10.454	ppb	100
10) Acrolein	1.41	56	54696	297.569	ppb	100
11) Acetone	1.51	43	17694	9.321	ppb	100
12) Freon-113	1.48	101	31876	10.658	ppb	100
13) 1,1-DCE	1.46	63	18698	11.628	ppb	100
14) t-Butanol	1.93	59	61307	119.535	ppb	100
15) Acetonitrile	1.69	41	95881	106.067	ppb	100
16) Methyl Acetate	1.82	43	59256	12.703	ppb	100
17) Iodomethane	1.55	142	22872	22.818	ppb	100
18) Acrylonitrile	1.98	52	19017	10.483	ppb	100
19) Methylene chloride	1.79	84	51776	13.412	ppb	100
20) Carbon disulfide	1.59	76	118337	11.181	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	116432	10.361	ppb	100
22) Trans-1,2-DCE	2.00	96	44118	12.592	ppb	100
23) Diisopropyl Ether	2.49	45	124005	10.201	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	39710	6.696	ppb	100
25) 1,1-DCA	2.36	63	84548	13.026	ppb	100
26) Vinyl Acetate	2.46	43	50053	14.412	ppb	100
27) Ethyl tert Butyl Ether	2.88	59	99440	10.229	ppb	100
28) MEK (2-Butanone)	3.05	43	20318	8.776	ppb	100
29) Cis-1,2-DCE	2.98	96	20416	13.103	ppb	100
30) 2,2-Dichloropropane	2.96	77	60148	12.374	ppb	100
31) 2-Methylpentane	1.82	71	22905	4.771	ppb	100
32) 3-Methylpentane	2.01	57	78474	14.280	ppb	100
33) Chloroform	3.42	83	80323	12.821	ppb	100
34) Bromochloromethane	3.27	128	24741	13.787	ppb	100
36) 1,1,1-TCA	3.62	97	64286	13.097	ppb	100
37) Cyclohexane	3.69	41	26800	9.030	ppb	100
38) 1,1-Dichloropropene	3.89	75	45756	12.349	ppb	100
39) 2,2,4-Trimethylpentane	4.40	57	71754	8.634	ppb	100
41) Carbon Tetrachloride	3.87	117	59528	15.531	ppb	100
42) Tert Amyl Methyl Ether	4.50	73	91608	10.282	ppb	100

(#) = qualifier out of range (m) = manual integration  
 1213L08.D L1213W.M Fri Dec 14 11:31:51 2018

Data File : M:\LOKI\DATA\181213\1213L08.D  
 Acq On : 13 Dec 18 16:57  
 Sample : 10ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	67557	7.847	ppb	100
44) 1,2-DCA	4.26	62	61577	11.740	ppb	100
45) Benzene	4.20	78	160773	12.642	ppb	100
46) TCE	5.18	130	41998	13.445	ppb	100
47) 2-Pentanone	5.53	43	396465	114.861	ppb	100
48) 1,2-Dichloropropane	5.46	63	45363	12.144	ppb	100
49) Bromodichloromethane	5.87	83	65251	12.873	ppb	100
50) Methyl Cyclohexane	5.41	83	38705	10.031	ppb	100
51) Dibromomethane	5.61	93	33435	12.765	ppb	100
52) 2-Chloroethyl vinyl ether	6.34	43	10026	10.000	ppb	100
53) MIBK (methyl isobutyl ket	6.69	43	36749	8.068	ppb	100
54) 1-Bromo-2-chloroethane	6.21	63	32768	10.861	ppb	100
55) Cis-1,3-Dichloropropene	6.45	75	65323	12.498	ppb	100
56) Toluene	6.81	91	177528	13.801	ppb	100
57) Trans-1,3-Dichloropropene	7.14	75	62740	12.439	ppb	100
58) 1,1,2-TCA	7.32	83	39780	12.626	ppb	100
59) 2-Hexanone	7.68	43	24351	8.754	ppb	100
62) 1,2-EDB	7.82	107	46622	12.910	ppb	100
63) Tetrachloroethene	7.44	166	52234	14.243	ppb	100
64) 1-Chlorohexane	8.45	91	37409	10.164	ppb	100
65) 1,1,1,2-Tetrachloroethane	8.52	131	51248	13.777	ppb	100
66) m&p-Xylene	8.70	91	265286	25.158	ppb	100
67) o-Xylene	9.12	106	62782	12.875	ppb	100
68) Styrene	9.14	104	62304	10.975	ppb	100
70) 1,3-Dichloropropane	7.50	76	75018	12.329	ppb	100
71) Dibromochloromethane	7.74	129	54519	13.680	ppb	100
72) Chlorobenzene	8.40	112	121092	12.726	ppb	100
73) Ethylbenzene	8.56	91	173178	12.339	ppb	100
74) Bromoform	9.30	173	39806	13.689	ppb	100
76) Isopropylbenzene	9.54	105	149294	10.960	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.88	83	70926	10.926	ppb	100
78) 1,2,3-Trichloropropane	9.90	110	12854	11.518	ppb	100
79) t-1,4-Dichloro-2-Butene	9.95	53	13123	8.577	ppb	100
80) Bromobenzene	9.81	156	56045	12.834	ppb	100
81) n-Propylbenzene	9.99	91	122848	11.438	ppb	100
82) 4-Ethyltoluene	10.12	105	148865	10.197	ppb	100
83) 2-Chlorotoluene	10.04	91	130541	11.191	ppb	100
84) 1,3,5-Trimethylbenzene	10.19	105	87064	10.670	ppb	100
85) 4-Chlorotoluene	10.16	91	149722	11.548	ppb	100
86) Tert-Butylbenzene	10.53	119	112512	10.757	ppb	100
87) 1,2,4-Trimethylbenzene	10.58	105	135906	10.650	ppb	100
88) Sec-Butylbenzene	10.76	105	171985	11.533	ppb	100
89) p-Isopropyltoluene	10.93	119	159995	12.166	ppb	100
90) Benzyl Chloride	11.10	91	74777	8.969	ppb	100
91) 1,3-DCB	10.84	146	102894	12.750	ppb	100
92) 1,4-DCB	10.94	146	108073	12.249	ppb	100
93) n-Butylbenzene	11.37	91	126199	10.687	ppb	100
94) 1,2-DCB	11.32	146	98450	11.919	ppb	100
95) Hexachloroethane	11.59	117	31892	9.736	ppb	100
96) 1,2-Dibromo-3-chloropropan	12.15	75	11880	10.274	ppb	100
97) 1,2,4-Trichlorobenzene	13.04	180	58966	11.381	ppb	100
98) Hexachlorobutadiene	13.26	225	31925	13.655	ppb	100
99) Naphthalene	13.29	128	128556	10.512	ppb	100
100) 1,2,3-Trichlorobenzene	13.55	180	34448	12.132	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

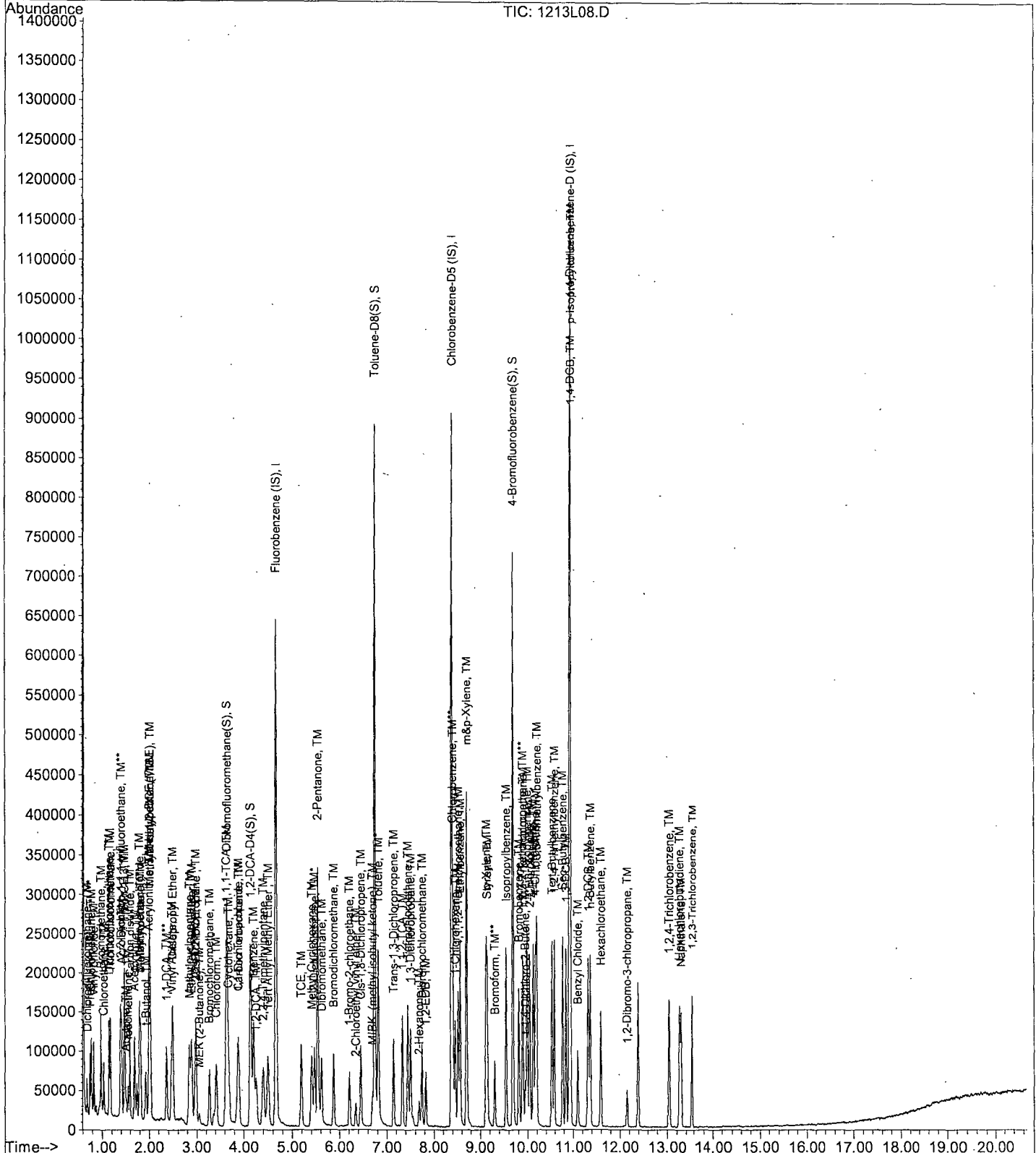
Data File : M:\LOKI\DATA\181213\1213L08.D
Acq On : 13 Dec 18 16:57
Sample : 10ug/L VOC STD 12/13/18
Misc : IS&S 11/8/18

Vial: 7
Operator: PM, DG, SV, CMM, KV
Inst : Loki
Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Dec 14 09:12:25 2018
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L09.D  
 Acq On : 13 Dec 18 17:26  
 Sample : 20ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	304768	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	316992	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	198336	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	379226	52.602	ppb	0.00
Spiked Amount	25.000		Recovery	=	210.408%	
40) 1,2-DCA-D4(S)	4.14	65	428606	45.986	ppb	0.00
Spiked Amount	25.000		Recovery	=	183.944%	
61) Toluene-D8(S)	6.74	98	1355723	52.157	ppb	0.00
Spiked Amount	25.000		Recovery	=	208.628%	
69) 4-Bromofluorobenzene(S)	9.68	95	508930	54.697	ppb	0.00
Spiked Amount	25.000		Recovery	=	218.788%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	54568	12.249	ppb	99
3) Freon 114	0.75	85	45303	16.163	ppb	93
4) Chloromethane	0.77	50	102727	20.228	ppb	95
5) Vinyl chloride	0.82	62	94811	18.298	ppb	97
6) Bromomethane	0.98	94	69846	19.108	ppb	96
7) Chloroethane	1.03	64	65748	21.563	ppb	98
8) Dichlorofluoromethane	1.14	67	154888	19.934	ppb	98
9) Trichlorofluoromethane	1.17	101	127900	21.127	ppb	99
10) Acrolein	1.41	56	65904	358.922	ppb	# 96
11) Acetone	1.51	43	33913	18.835	ppb	88
12) Freon-113	1.47	101	64737	21.668	ppb	99
13) 1,1-DCE	1.46	63	37183	23.848	ppb	91
14) t-Butanol	1.93	59	68897	135.853	ppb	98
15) Acetonitrile	1.69	41	107205	118.718	ppb	98
16) Methyl Acetate	1.81	43	116986	25.105	ppb	# 100
17) Iodomethane	1.55	142	49320	43.002	ppb	98
18) Acrylonitrile	1.99	52	33550	19.799	ppb	99
19) Methylene chloride	1.79	84	99008	27.049	ppb	100
20) Carbon disulfide	1.59	76	233264	22.062	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	229033	20.403	ppb	86
22) Trans-1,2-DCE	2.00	96	86232	24.638	ppb	99
23) Diisopropyl Ether	2.49	45	245305	20.201	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	78395	13.233	ppb	90
25) 1,1-DCA	2.36	63	169774	26.183	ppb	99
26) Vinyl Acetate	2.46	43	91479	26.369	ppb	99
27) Ethyl tert Butyl Ether	2.88	59	201758	20.777	ppb	96
28) MEK (2-Butanone)	3.05	43	39880	17.277	ppb	91
29) Cis-1,2-DCE	2.98	96	43528	27.966	ppb	98
30) 2,2-Dichloropropane	2.96	77	117978	25.353	ppb	98
31) 2-Methylpentane	1.81	71	48150	10.040	ppb	91
32) 3-Methylpentane	2.01	57	155552	28.335	ppb	95
33) Chloroform	3.42	83	160926	25.714	ppb	98
34) Bromochloromethane	3.27	128	47990	26.770	ppb	91
36) 1,1,1-TCA	3.62	97	127915	26.088	ppb	100
37) Cyclohexane	3.68	41	53672	18.250	ppb	83
38) 1,1-Dichloropropene	3.89	75	92932	25.108	ppb	97
39) 2,2,4-Trimethylpentane	4.40	57	145866	17.571	ppb	92
41) Carbon Tetrachloride	3.87	117	115672	30.210	ppb	93
42) Tert Amyl Methyl Ether	4.50	73	186318	20.934	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1213L09.D  
 Acq On : 13 Dec 18 17:26  
 Sample : 20ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration.  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	132970	15.462	ppb	98
44) 1,2-DCA	4.26	62	118727	22.660	ppb	99
45) Benzene	4.20	78	324691	25.558	ppb	98
46) TCE	5.19	130	89772	28.770	ppb	94
47) 2-Pentanone	5.53	43	467875	135.692	ppb	99
48) 1,2-Dichloropropane	5.46	63	87972	23.575	ppb	99
49) Bromodichloromethane	5.87	83	128525	25.383	ppb	# 96
50) Methyl Cyclohexane	5.41	83	84121	21.823	ppb	91
51) Dibromomethane	5.61	93	65723	25.119	ppb	97
52) 2-Chloroethyl vinyl ether	6.34	43	17982	17.954	ppb	89
53) MIBK (methyl isobutyl ket	6.69	43	78892	16.902	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	64688	21.464	ppb	95
55) Cis-1,3-Dichloropropene	6.45	75	130419	24.978	ppb	92
56) Toluene	6.81	91	365458	28.440	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	126504	25.107	ppb	98
58) 1,1,2-TCA	7.32	83	78867	25.059	ppb	93
59) 2-Hexanone	7.68	43	44256	15.137	ppb	98
62) 1,2-EDB	7.82	107	95713	26.590	ppb	100
63) Tetrachloroethene	7.44	166	106272	29.071	ppb	98
64) 1-Chlorohexane	8.45	91	79314	21.619	ppb	99
65) 1,1,1,2-Tetrachloroethane	8.52	131	98541	26.577	ppb	93
66) m&p-Xylene	8.70	91	576566	54.854	ppb	99
67) o-Xylene	9.12	106	136729	28.129	ppb	95
68) Styrene	9.14	104	138816	23.029	ppb	100
70) 1,3-Dichloropropane	7.50	76	147736	24.358	ppb	99
71) Dibromochloromethane	7.74	129	107987	27.183	ppb	100
72) Chlorobenzene	8.40	112	245775	25.912	ppb	97
73) Ethylbenzene	8.56	91	369663	26.424	ppb	99
74) Bromoform	9.30	173	80107	28.085	ppb	99
76) Isopropylbenzene	9.54	105	335934	23.867	ppb	97
77) 1,1,2,2-Tetrachloroethane	9.88	83	138041	20.578	ppb	99
78) 1,2,3-Trichloropropane	9.90	110	24664	21.387	ppb	99
79) t-1,4-Dichloro-2-Butene	9.95	53	25541	15.961	ppb	94
80) Bromobenzene	9.81	156	114541	25.382	ppb	99
81) n-Propylbenzene	9.99	91	264896	23.868	ppb	99
82) 4-Ethyltoluene	10.12	105	340639	22.581	ppb	98
83) 2-Chlorotoluene	10.04	91	274593	22.780	ppb	99
84) 1,3,5-Trimethylbenzene	10.19	105	203392	23.539	ppb	100
85) 4-Chlorotoluene	10.16	91	326576	24.376	ppb	95
86) Tert-Butylbenzene	10.53	119	248884	22.174	ppb	97
87) 1,2,4-Trimethylbenzene	10.58	105	315015	22.749	ppb	100
88) Sec-Butylbenzene	10.76	105	382235	24.805	ppb	99
89) p-Isopropyltoluene	10.93	119	347237	25.551	ppb	99
90) Benzyl Chloride	11.10	91	149241	17.322	ppb	97
91) 1,3-DCB	10.84	146	215969	25.898	ppb	99
92) 1,4-DCB	10.94	146	220753	24.212	ppb	99
93) n-Butylbenzene	11.37	91	286250	23.459	ppb	98
94) 1,2-DCB	11.32	146	207472	24.308	ppb	98
95) Hexachloroethane	11.59	117	65170	19.254	ppb	92
96) 1,2-Dibromo-3-chloropropan	12.16	75	24728	20.696	ppb	90
97) 1,2,4-Trichlorobenzene	13.04	180	127744	22.650	ppb	100
98) Hexachlorobutadiene	13.26	225	69763	28.876	ppb	95
99) Naphthalene	13.29	128	284718	20.658	ppb	96
100) 1,2,3-Trichlorobenzene	13.55	180	78232	26.663	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

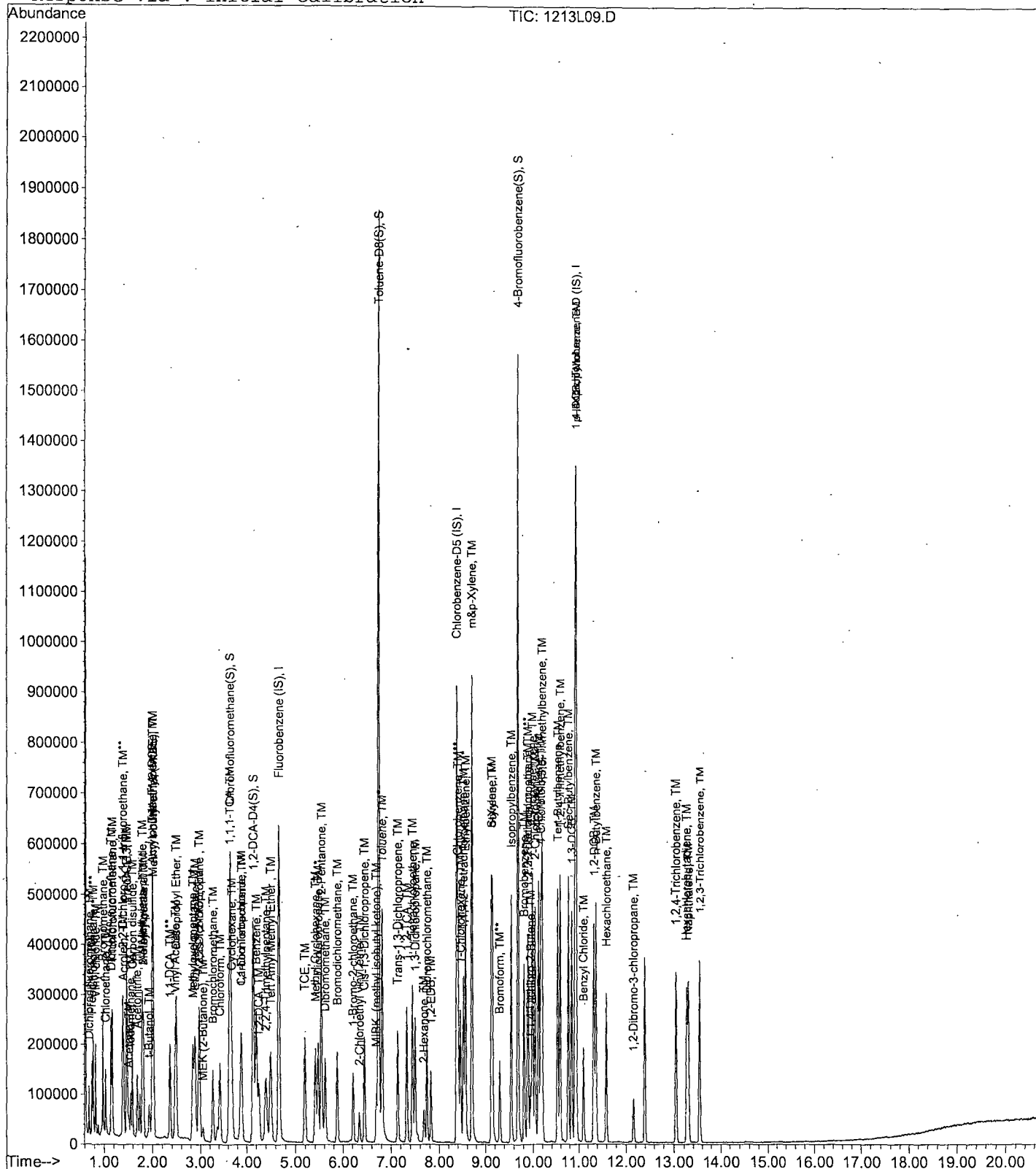
Data File : M:\LOKI\DATA\181213\1213L09.D  
 Acq On : 13 Dec 18 17:26  
 Sample : 20ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L10.D  
 Acq On : 13 Dec 18 17:54  
 Sample : 40ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	323904	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	328704	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	208000	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	388951	50.764	ppb	0.00
Spiked Amount	25.000		Recovery	=	203.056%	
40) 1,2-DCA-D4 (S)	4.14	65	448432	45.270	ppb	0.00
Spiked Amount	25.000		Recovery	=	181.080%	
61) Toluene-D8 (S)	6.74	98	1417814	52.602	ppb	0.00
Spiked Amount	25.000		Recovery	=	210.408%	
69) 4-Bromofluorobenzene(S)	9.68	95	536451	55.600	ppb	0.00
Spiked Amount	25.000		Recovery	=	222.400%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	111048	23.454	ppb	97
3) Freon 114	0.75	85	96202	32.294	ppb	97
4) Chloromethane	0.77	50	206565	38.529	ppb	94
5) Vinyl chloride	0.82	62	188481	34.226	ppb	96
6) Bromomethane	0.98	94	135825	35.593	ppb	95
7) Chloroethane	1.03	64	125321	38.673	ppb	93
8) Dichlorofluoromethane	1.14	67	306033	37.060	ppb	98
9) Trichlorofluoromethane	1.17	101	257449	40.015	ppb	100
10) Acrolein	1.41	56	73728	377.810	ppb	# 97
11) Acetone	1.51	43	61418	32.823	ppb	91
12) Freon-113	1.48	101	129936	40.922	ppb	99
13) 1,1-DCE	1.46	63	74840	45.796	ppb	92
14) t-Butanol	1.93	59	72289	133.979	ppb	98
15) Acetonitrile	1.69	41	119805	124.833	ppb	98
16) Methyl Acetate	1.82	43	232455	46.937	ppb	# 100
17) Iodomethane	1.55	142	121224	78.784	ppb	99
18) Acrylonitrile	1.99	52	66348	38.284	ppb	98
19) Methylene chloride	1.79	84	201994	53.307	ppb	98
20) Carbon disulfide	1.59	76	470741	41.893	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	466349	39.090	ppb	97
22) Trans-1,2-DCE	2.00	96	176794	47.530	ppb	98
23) Diisopropyl Ether	2.49	45	507885	39.353	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	152629	24.242	ppb	94
25) 1,1-DCA	2.36	63	341869	49.609	ppb	99
26) Vinyl Acetate	2.46	43	172264	46.721	ppb	99
27) Ethyl tert Butyl Ether	2.88	59	430604	41.723	ppb	95
28) MEK (2-Butanone)	3.05	43	71044	28.985	ppb	92
29) Cis-1,2-DCE	2.98	96	88104	53.262	ppb	95
30) 2,2-Dichloropropane	2.96	77	242283	50.012	ppb	97
31) 2-Methylpentane	1.82	71	98848	19.394	ppb	88
32) 3-Methylpentane	2.01	57	321157	55.045	ppb	93
33) Chloroform	3.42	83	319093	47.974	ppb	98
34) Bromochloromethane	3.27	128	96018	50.397	ppb	94
36) 1,1,1-TCA	3.62	97	260780	50.042	ppb	97
37) Cyclohexane	3.68	41	110607	35.525	ppb	89
38) 1,1-Dichloropropene	3.89	75	201187	51.144	ppb	97
39) 2,2,4-Trimethylpentane	4.40	57	321526	36.442	ppb	84
41) Carbon Tetrachloride	3.87	117	234057	57.517	ppb	92
42) Tert Amyl Methyl Ether	4.50	73	398482	42.127	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1213L10.D  
 Acq On : 13 Dec 18 17:54  
 Sample : 40ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	275967	30.194	ppb	99
44) 1,2-DCA	4.26	62	245143	44.024	ppb	99
45) Benzene	4.20	78	670817	49.683	ppb	100
46) TCE	5.19	130	184738	55.707	ppb	95
47) 2-Pentanone	5.53	43	534570	145.876	ppb	100
48) 1,2-Dichloropropane	5.46	63	185007	46.650	ppb	98
49) Bromodichloromethane	5.87	83	259988	48.313	ppb	100
50) Methyl Cyclohexane	5.41	83	183673	44.835	ppb	98
51) Dibromomethane	5.61	93	130544	46.946	ppb	98
52) 2-Chloroethyl vinyl ether	6.34	43	35028	32.908	ppb	97
53) MIBK (methyl isobutyl ket	6.69	43	145904	29.132	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	134656	42.040	ppb	93
55) Cis-1,3-Dichloropropene	6.45	75	290326	52.319	ppb	95
56) Toluene	6.81	91	756758	55.411	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	266506	49.768	ppb	99
58) 1,1,2-TCA	7.32	83	154103	46.071	ppb	97
59) 2-Hexanone	7.68	43	88752	27.707	ppb	97
62) 1,2-EDB	7.82	107	190785	51.114	ppb	99
63) Tetrachloroethene	7.44	166	215719	56.908	ppb	98
64) 1-Chlorohexane	8.45	91	178768	46.991	ppb	92
65) 1,1,1,2-Tetrachloroethane	8.52	131	203448	52.916	ppb	93
66) m&p-Xylene	8.70	91	1275969	117.070	ppb	99
67) o-Xylene	9.12	106	298942	59.310	ppb	98
68) Styrene	9.14	104	326400	50.676	ppb	100
70) 1,3-Dichloropropane	7.50	76	306742	48.772	ppb	99
71) Dibromochloromethane	7.74	129	221437	53.756	ppb	98
72) Chlorobenzene	8.40	112	503889	51.232	ppb	99
73) Ethylbenzene	8.56	91	816284	56.269	ppb	96
74) Bromoform	9.30	173	165675	56.451	ppb	97
76) Isopropylbenzene	9.54	105	751099	50.883	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.88	83	260817	37.075	ppb	97
78) 1,2,3-Trichloropropane	9.90	110	47616	39.370	ppb	96
79) t-1,4-Dichloro-2-Butene	9.94	53	55222	32.675	ppb	100
80) Bromobenzene	9.81	156	237924	50.274	ppb	99
81) n-Propylbenzene	9.99	91	608320	52.265	ppb	98
82) 4-Ethyltoluene	10.12	105	748631	47.321	ppb	97
83) 2-Chlorotoluene	10.04	91	594244	47.007	ppb	99
84) 1,3,5-Trimethylbenzene	10.19	105	433699	47.384	ppb	98
85) 4-Chlorotoluene	10.16	91	695590	49.508	ppb	98
86) Tert-Butylbenzene	10.53	119	555783	46.370	ppb	98
87) 1,2,4-Trimethylbenzene	10.58	105	706533	47.608	ppb	99
88) Sec-Butylbenzene	10.76	105	844938	52.285	ppb	99
89) p-Isopropyltoluene	10.93	119	757491	53.150	ppb	99
90) Benzyl Chloride	11.10	91	298819	33.072	ppb	96
91) 1,3-DCB	10.84	146	455945	52.135	ppb	99
92) 1,4-DCB	10.94	146	463337	48.457	ppb	97
93) n-Butylbenzene	11.36	91	648818	50.702	ppb	99
94) 1,2-DCB	11.32	146	435986	48.708	ppb	98
95) Hexachloroethane	11.59	117	133718	37.670	ppb	96
96) 1,2-Dibromo-3-chloropropan	12.15	75	47526	37.928	ppb	91
97) 1,2,4-Trichlorobenzene	13.04	180	287395	47.328	ppb	99
98) Hexachlorobutadiene	13.26	225	143405	56.599	ppb	94
99) Naphthalene	13.29	128	662839	43.863	ppb	96
100) 1,2,3-Trichlorobenzene	13.55	180	173952	56.532	ppb	99

(#) = qualifier out of range (m) = manual integration





Data File : M:\LOKI\DATA\181213\1213L11.D  
 Acq On : 13 Dec 18 1:8:23  
 Sample : 100ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	322368	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	346880	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	232384	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	726825	95.313	ppb	0.00
Spiked Amount	25.000		Recovery	=	381.252%	
40) 1,2-DCA-D4(S)	4.14	65	834674	84.664	ppb	0.00
Spiked Amount	25.000		Recovery	=	338.656%	
61) Toluene-D8(S)	6.74	98	2755305	96.868	ppb	0.00
Spiked Amount	25.000		Recovery	=	387.472%	
69) 4-Bromofluorobenzene(S)	9.68	95	1054503	103.567	ppb	0.00
Spiked Amount	25.000		Recovery	=	414.268%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	239104	50.741	ppb	99
3) Freon 114	0.75	85	204371	68.932	ppb	94
4) Chloromethane	0.77	50	481430	90.610	ppb	95
5) Vinyl chloride	0.82	62	435420	79.445	ppb	98
6) Bromomethane	0.97	94	297253	79.177	ppb	99
7) Chloroethane	1.02	64	179570	55.678	ppb	94
8) Dichlorofluoromethane	1.14	67	752846	91.602	ppb	99
9) Trichlorofluoromethane	1.16	101	608538	95.034	ppb	99
10) Acrolein	1.41	56	77270	397.847	ppb	99
11) Acetone	1.51	43	141216	77.185	ppb	93
12) Freon-113	1.47	101	294855	93.303	ppb	98
13) 1,1-DCE	1.46	63	174512	108.245	ppb	95
14) t-Butanol	1.99	59	107277	205.189	ppb	# 1
15) Acetonitrile	1.69	41	136509	142.916	ppb	95
16) Methyl Acetate	1.81	43	627201	127.247	ppb	# 100
17) Iodomethane	1.55	142	320704	147.776	ppb	99
18) Acrylonitrile	1.99	52	158276	94.106	ppb	95
19) Methylene chloride	1.79	84	481234	129.700	ppb	97
20) Carbon disulfide	1.58	76	1138054	101.762	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	1157867	97.516	ppb	# 82
22) Trans-1,2-DCE	2.00	96	432978	116.957	ppb	96
23) Diisopropyl Ether	2.49	45	1276943	99.415	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	388690	62.029	ppb	93
25) 1,1-DCA	2.36	63	820629	119.651	ppb	99
26) Vinyl Acetate	2.46	43	488098	133.011	ppb	100
27) Ethyl tert Butyl Ether	2.88	59	1128743	109.890	ppb	94
28) MEK (2-Butanone)	3.06	43	185691	76.178	ppb	98
29) Cis-1,2-DCE	2.98	96	217152	131.901	ppb	98
30) 2,2-Dichloropropane	2.96	77	569476	119.604	ppb	96
31) 2-Methylpentane	1.81	71	261360	51.522	ppb	90
32) 3-Methylpentane	2.00	57	841431	144.906	ppb	87
33) Chloroform	3.42	83	768598	116.105	ppb	93
34) Bromochloromethane	3.27	128	228583	120.549	ppb	94
36) 1,1,1-TCA	3.62	97	622885	120.098	ppb	99
37) Cyclohexane	3.68	41	265207	85.792	ppb	80
38) 1,1-Dichloropropene	3.89	75	496155	126.730	ppb	98
39) 2,2,4-Trimethylpentane	4.40	57	766673	87.310	ppb	# 79
41) Carbon Tetrachloride	3.87	117	554327	136.869	ppb	93
42) Tert Amyl Methyl Ether	4.50	73	1064472	113.072	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1213L11.D  
 Acq On : 13 Dec 18 18:23  
 Sample : 100ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 08:49:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.83	56	729382	80.183	ppb	98
44) 1,2-DCA	4.26	62	590263	106.506	ppb	99
45) Benzene	4.20	78	1671836	124.412	ppb	99
46) TCE	5.18	130	446659	135.329	ppb	95
47) 2-Pentanone	5.54	43	596215	163.473	ppb	99
48) 1,2-Dichloropropane	5.46	63	460150	116.581	ppb	99
49) Bromodichloromethane	5.87	83	638261	119.171	ppb	97
50) Methyl Cyclohexane	5.41	83	467824	114.741	ppb	96
51) Dibromomethane	5.61	93	315591	114.033	ppb	97
52) 2-Chloroethyl vinyl ether	6.34	43	108483	102.402	ppb	97
53) MIBK (methyl isobutyl ket	6.69	43	368700	73.383	ppb	94
54) 1-Bromo-2-chloroethane	6.21	63	327936	102.871	ppb	93
55) Cis-1,3-Dichloropropene	6.45	75	753638	136.460	ppb	95
56) Toluene	6.81	91	1893628	139.315	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	685756	128.671	ppb	97
58) 1,1,2-TCA	7.32	83	381607	114.631	ppb	98
59) 2-Hexanone	7.68	43	254380	77.981	ppb	94
62) 1,2-EDB	7.82	107	480434	121.970	ppb	99
63) Tetrachloroethene	7.44	166	526826	131.697	ppb	97
64) 1-Chlorohexane	8.45	91	494485	123.170	ppb	90
65) 1,1,1,2-Tetrachloroethane	8.52	131	505992	124.709	ppb	92
66) m&p-Xylene	8.70	91	3321658	288.792	ppb	99
67) o-Xylene	9.12	106	802960	150.959	ppb	99
68) Styrene	9.14	104	877504	127.216	ppb	99
70) 1,3-Dichloropropane	7.50	76	759781	114.475	ppb	98
71) Dibromochloromethane	7.74	129	545800	125.556	ppb	98
72) Chlorobenzene	8.40	112	1274511	122.795	ppb	99
73) Ethylbenzene	8.56	91	2131386	139.225	ppb	96
74) Bromoform	9.30	173	424648	137.737	ppb	93
76) Isopropylbenzene	9.54	105	2025261	122.805	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.89	83	714492	90.907	ppb	98
78) 1,2,3-Trichloropropane	9.90	110	123904	91.698	ppb	96
79) t-1,4-Dichloro-2-Butene	9.95	53	144009	75.978	ppb	95
80) Bromobenzene	9.81	156	612519	115.845	ppb	98
81) n-Propylbenzene	9.99	91	1585152	121.902	ppb	99
82) 4-Ethyltoluene	10.12	105	1979133	111.974	ppb	97
83) 2-Chlorotoluene	10.04	91	1503903	106.483	ppb	100
84) 1,3,5-Trimethylbenzene	10.19	105	1156441	112.449	ppb	99
85) 4-Chlorotoluene	10.16	91	1791631	114.137	ppb	98
86) Tert-Butylbenzene	10.53	119	1516855	112.193	ppb	96
87) 1,2,4-Trimethylbenzene	10.58	105	1900423	113.327	ppb	100
88) Sec-Butylbenzene	10.76	105	2285260	126.573	ppb	100
89) p-Isopropyltoluene	10.93	119	2031592	127.591	ppb	99
90) Benzyl Chloride	11.10	91	914002	90.544	ppb	96
91) 1,3-DCB	10.84	146	1171906	119.942	ppb	99
92) 1,4-DCB	10.94	146	1216653	113.890	ppb	97
93) n-Butylbenzene	11.37	91	1813732	126.863	ppb	99
94) 1,2-DCB	11.32	146	1198970	119.893	ppb	99
95) Hexachloroethane	11.59	117	349519	88.132	ppb	94
96) 1,2-Dibromo-3-chloropropan	12.15	75	129709	92.653	ppb	# 88
97) 1,2,4-Trichlorobenzene	13.04	180	870459	126.420	ppb	99
98) Hexachlorobutadiene	13.26	225	406330	143.543	ppb	94
99) Naphthalene	13.29	128	2104323	121.626	ppb	97
100) 1,2,3-Trichlorobenzene	13.55	180	488320	142.044	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

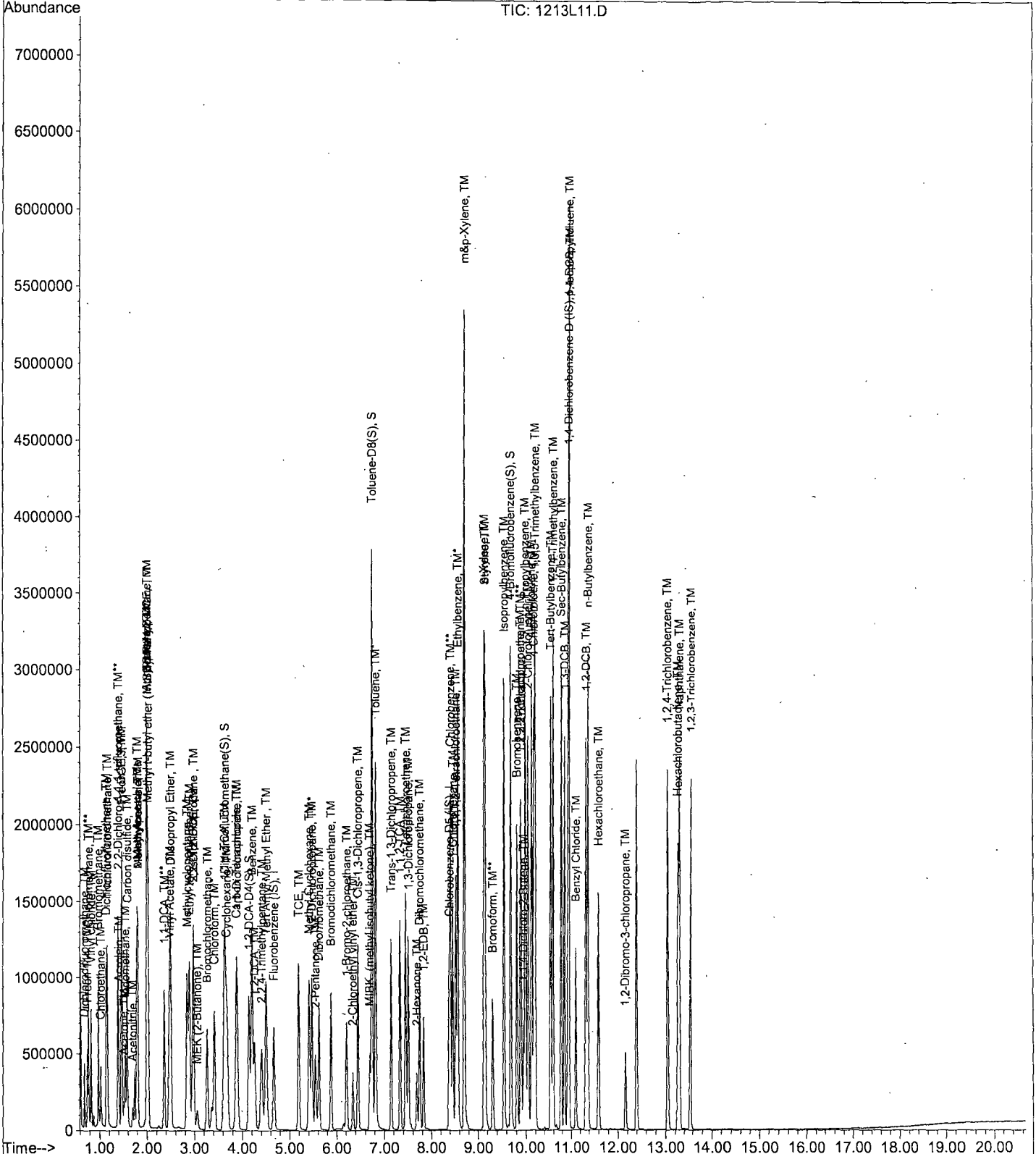
Data File : M:\LOKI\DATA\181213\1213L11.D  
Acq On : 13 Dec 18 18:23  
Sample : 100ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

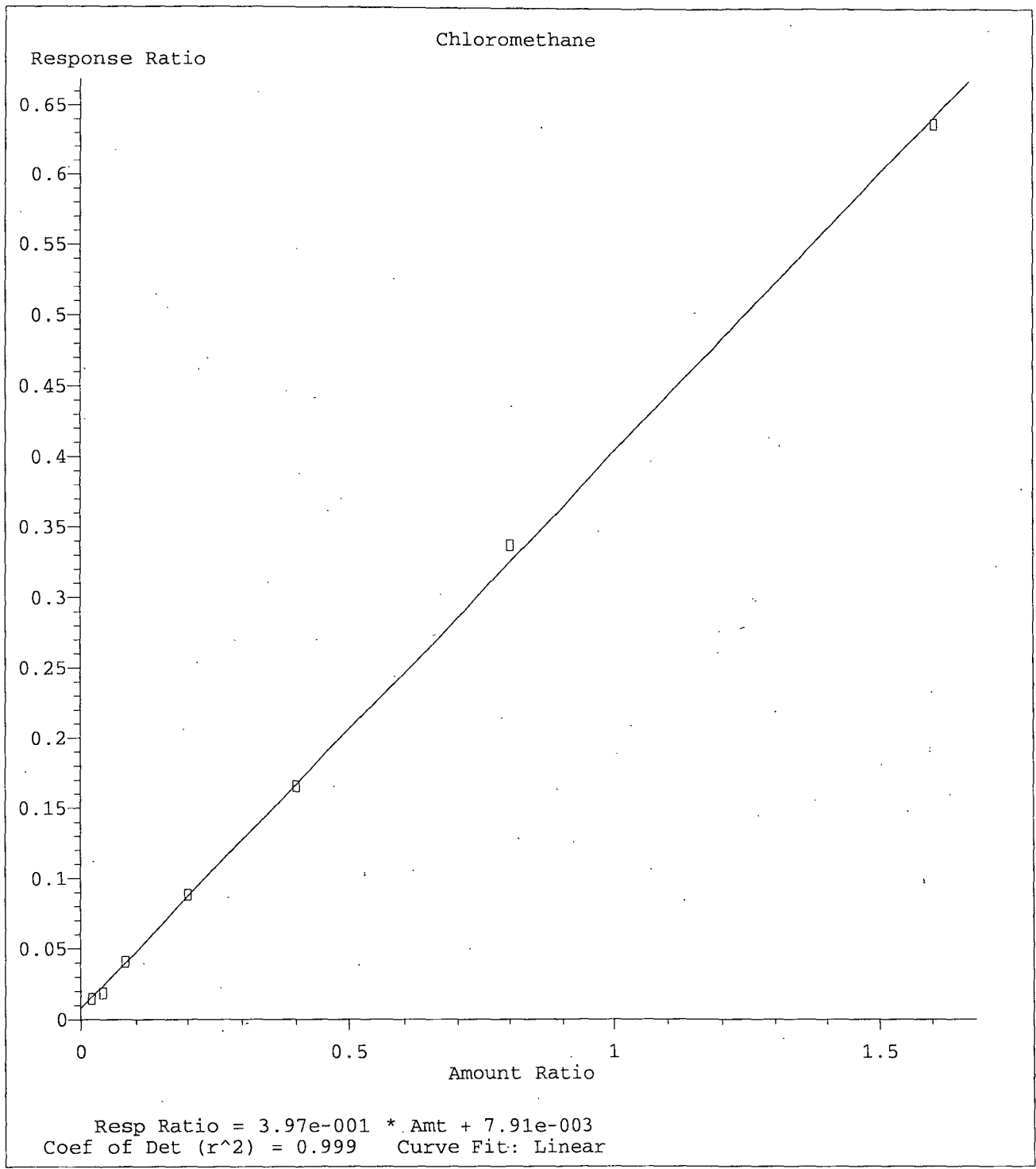
Vial: 10  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 8:50 2018

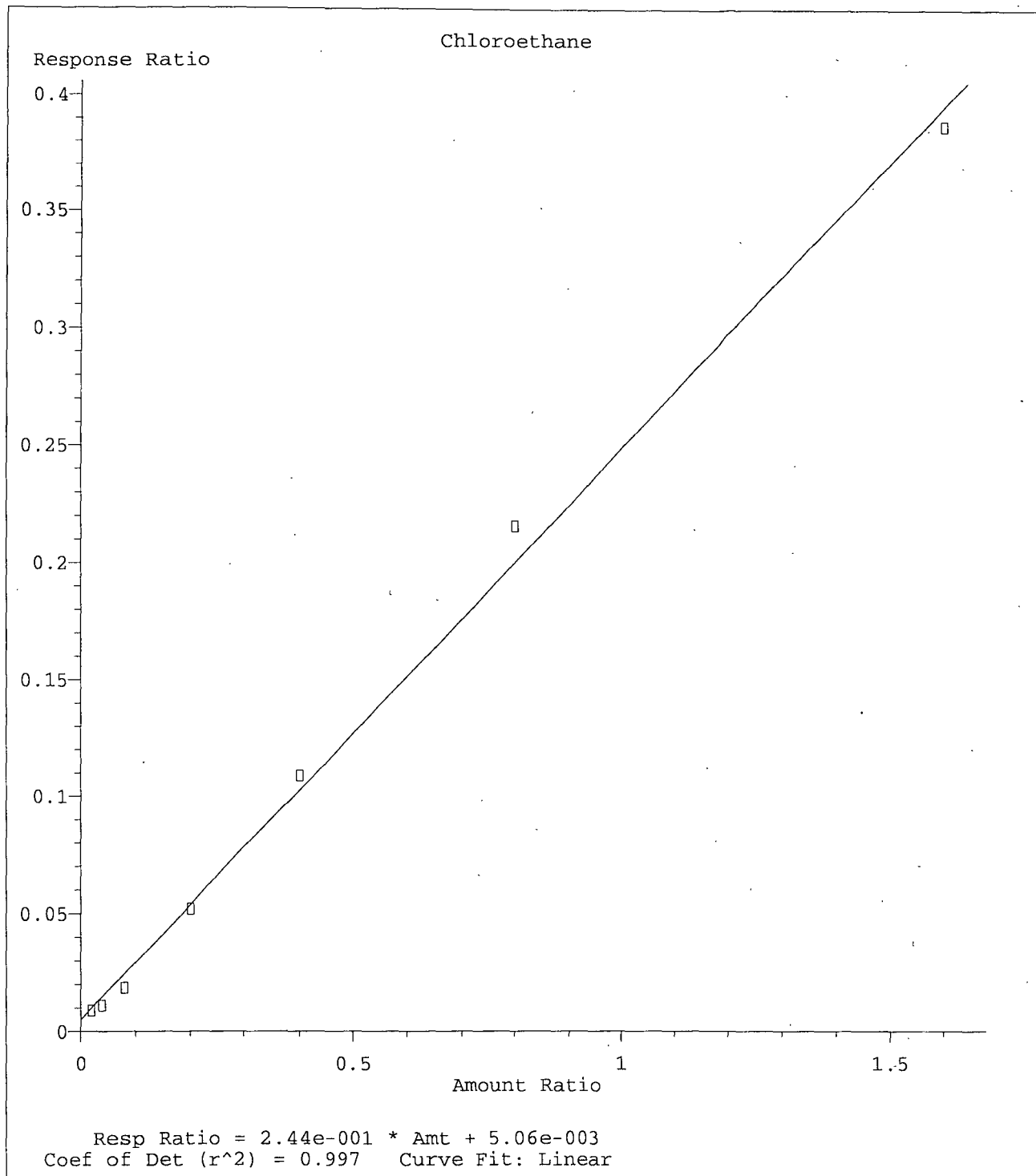
Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration

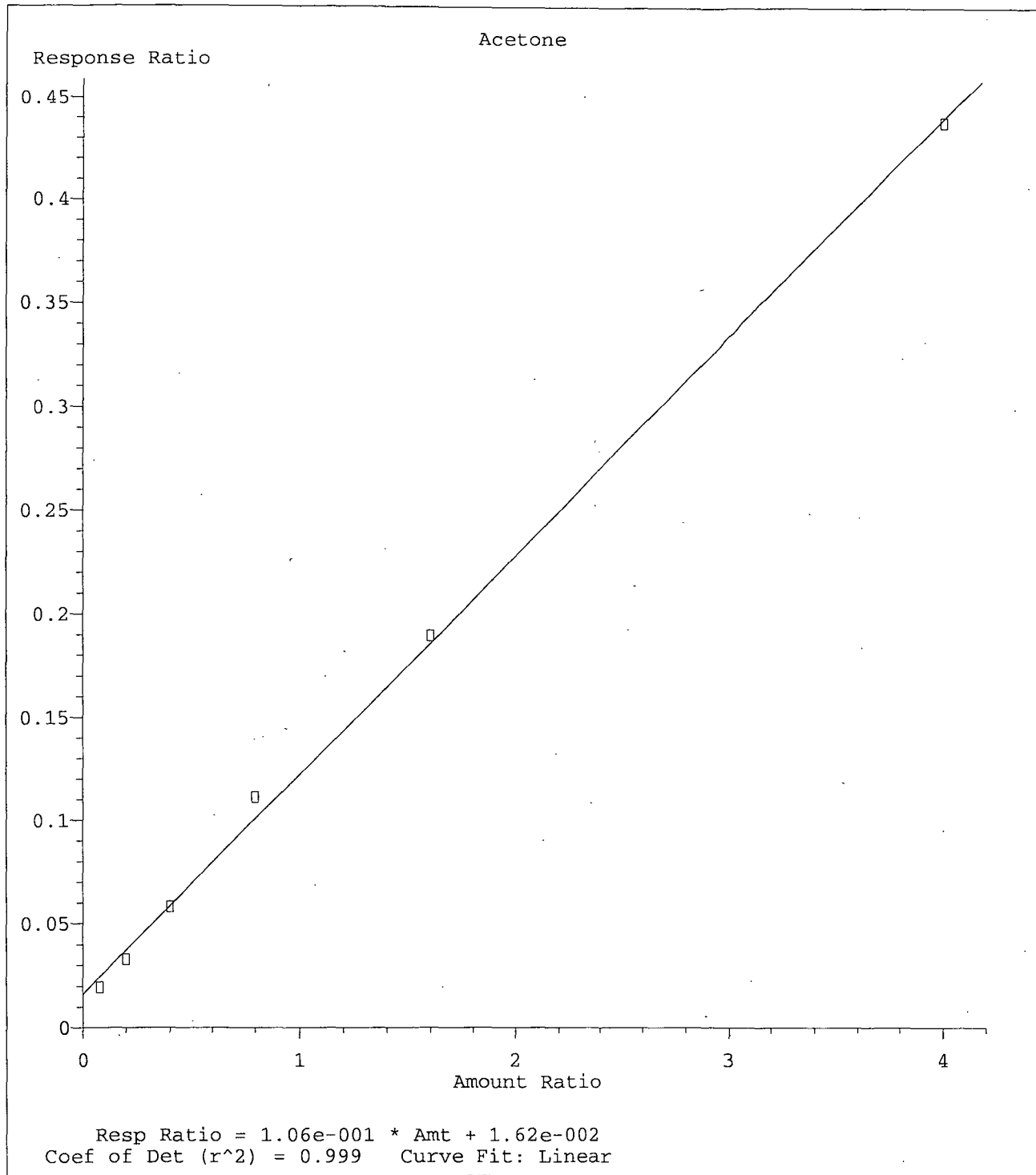




Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018



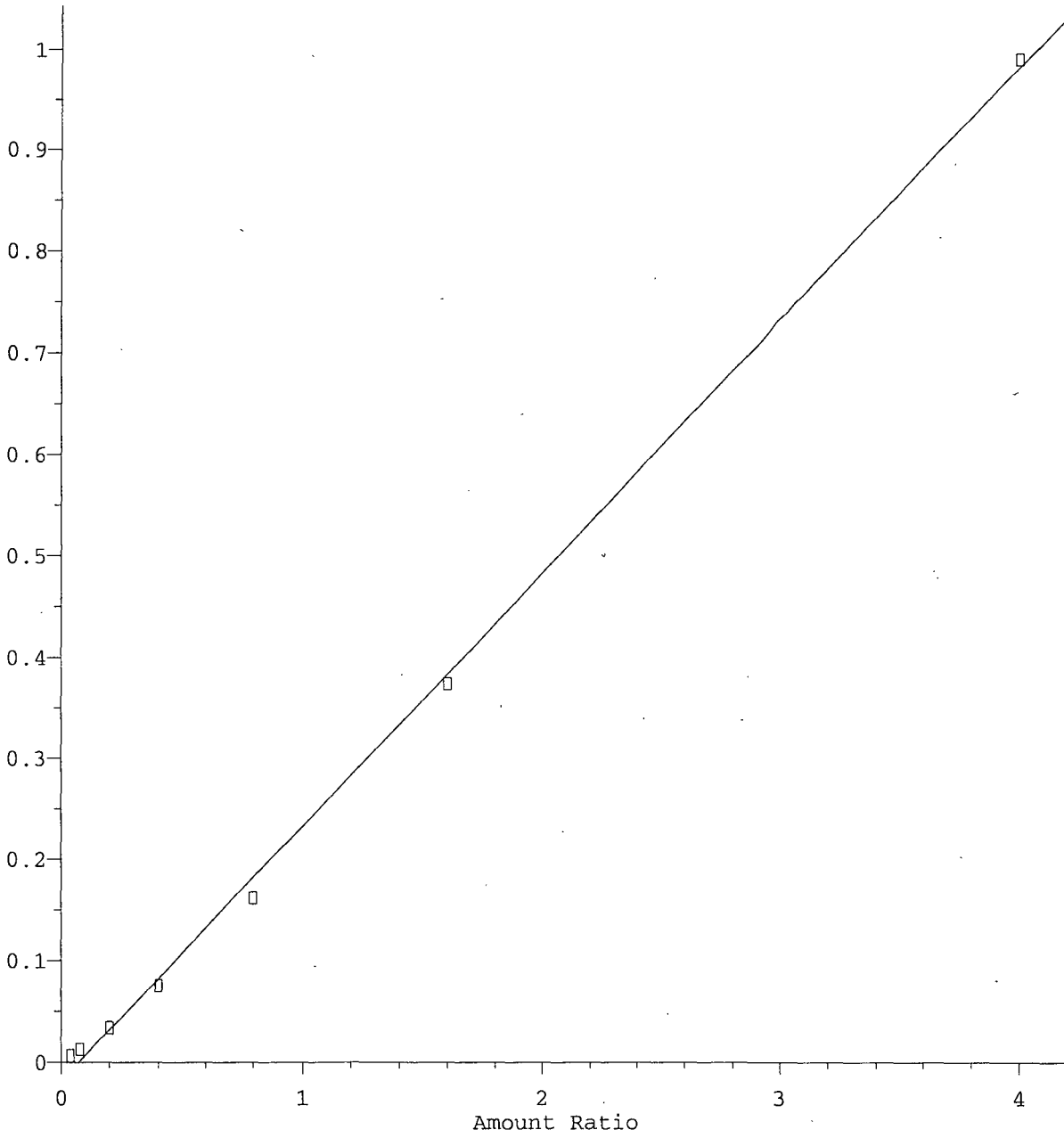
Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018



Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

Iodomethane

Response Ratio

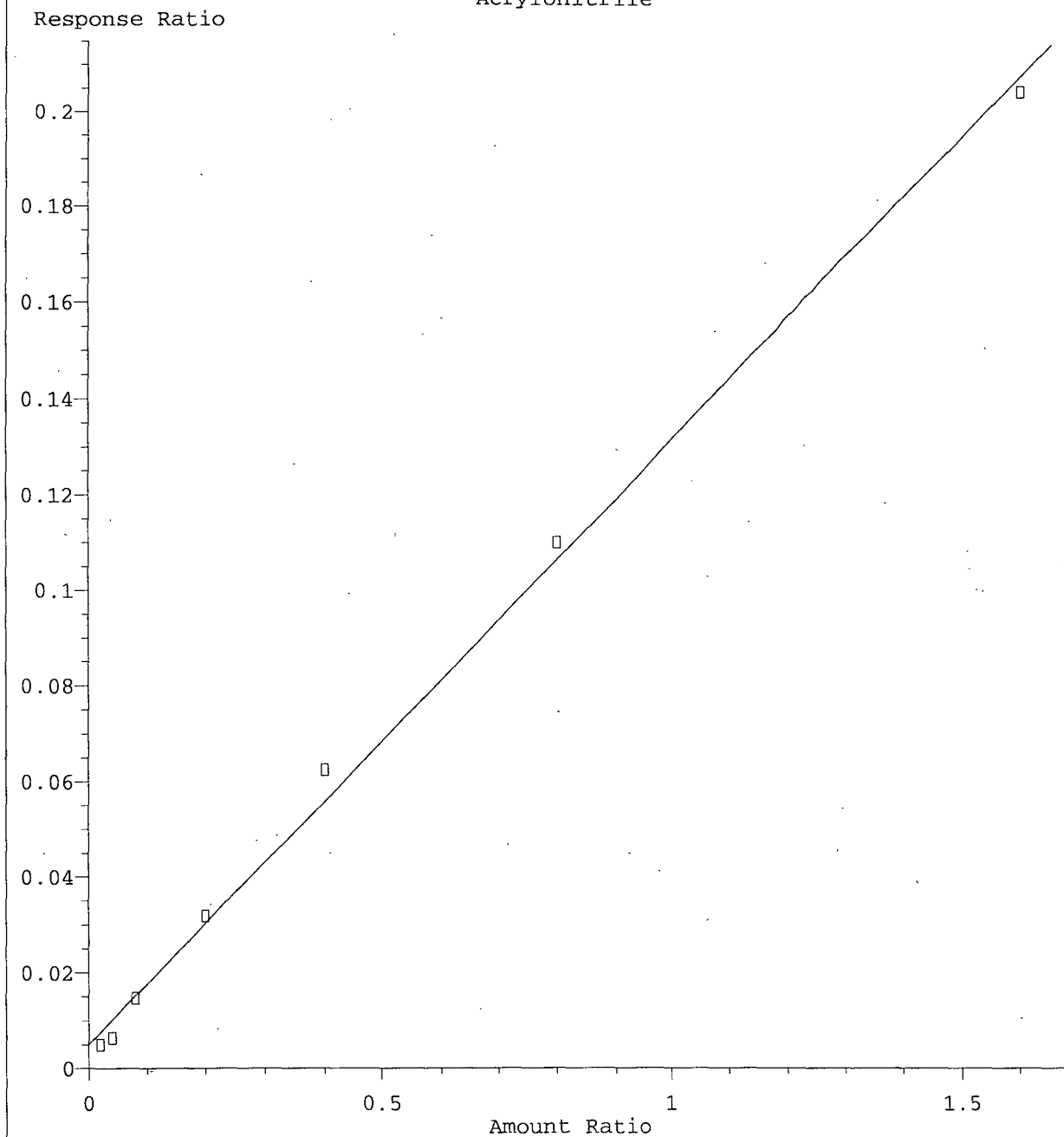


Resp Ratio = 2.51e-001 \* Amt - 1.87e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

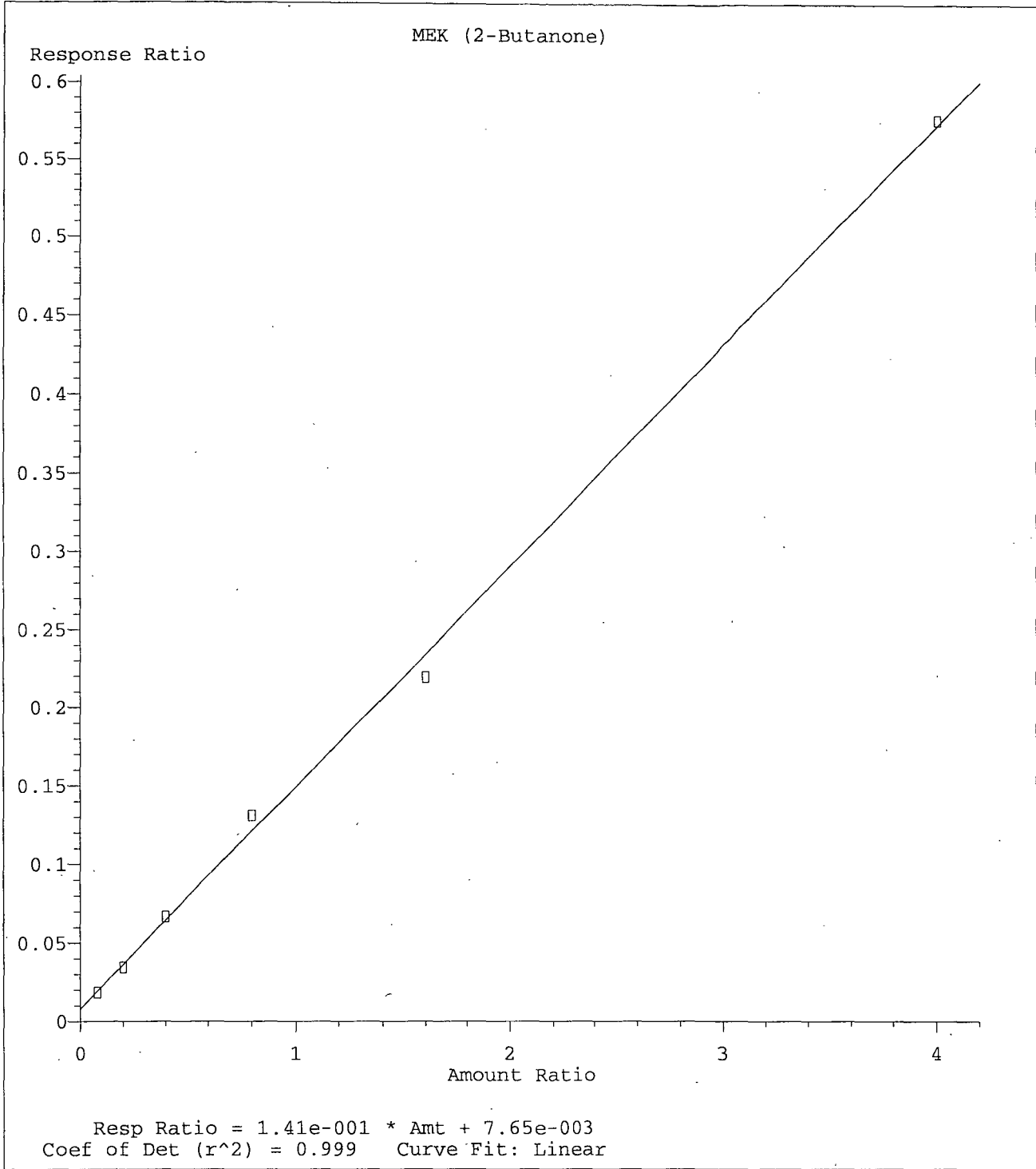


Acrylonitrile



Resp Ratio = 1.27e-001 \* Amt + 5.27e-003  
Coef of Det (r^2) = 0.997 Curve Fit: Linear

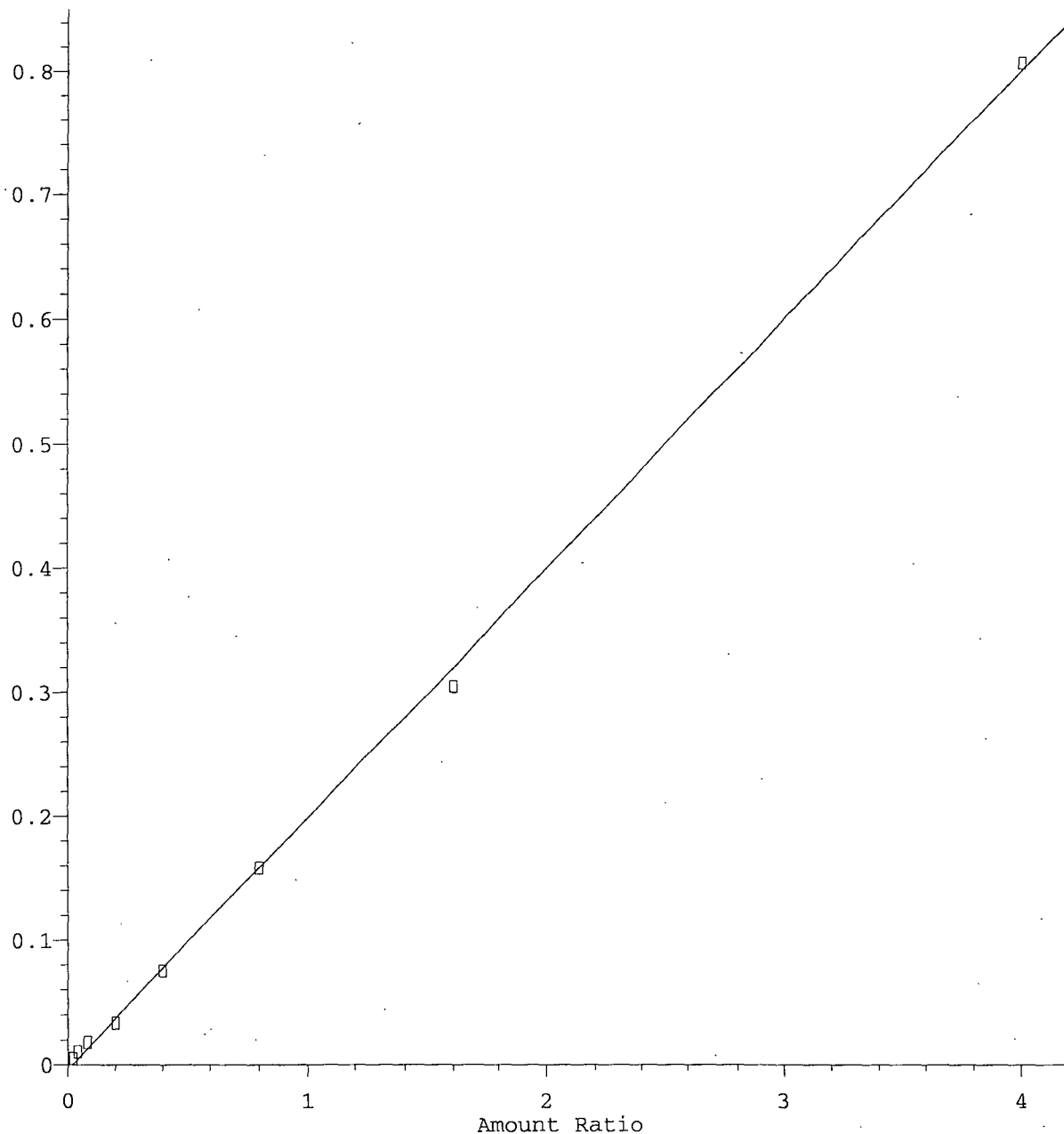
Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018



Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

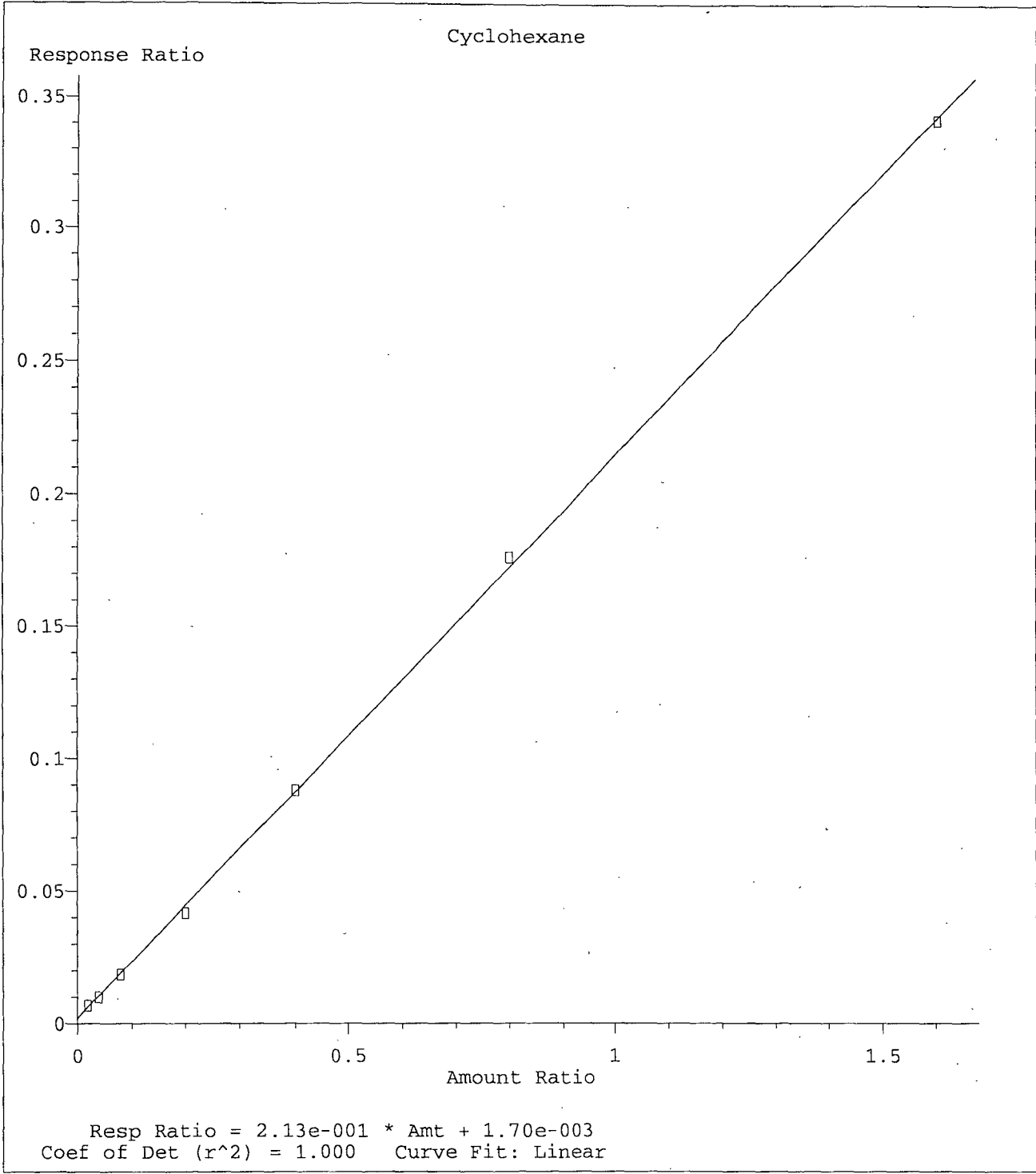
2-Methylpentane

Response Ratio



Resp Ratio = 2.02e-001 \* Amt - 3.20e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

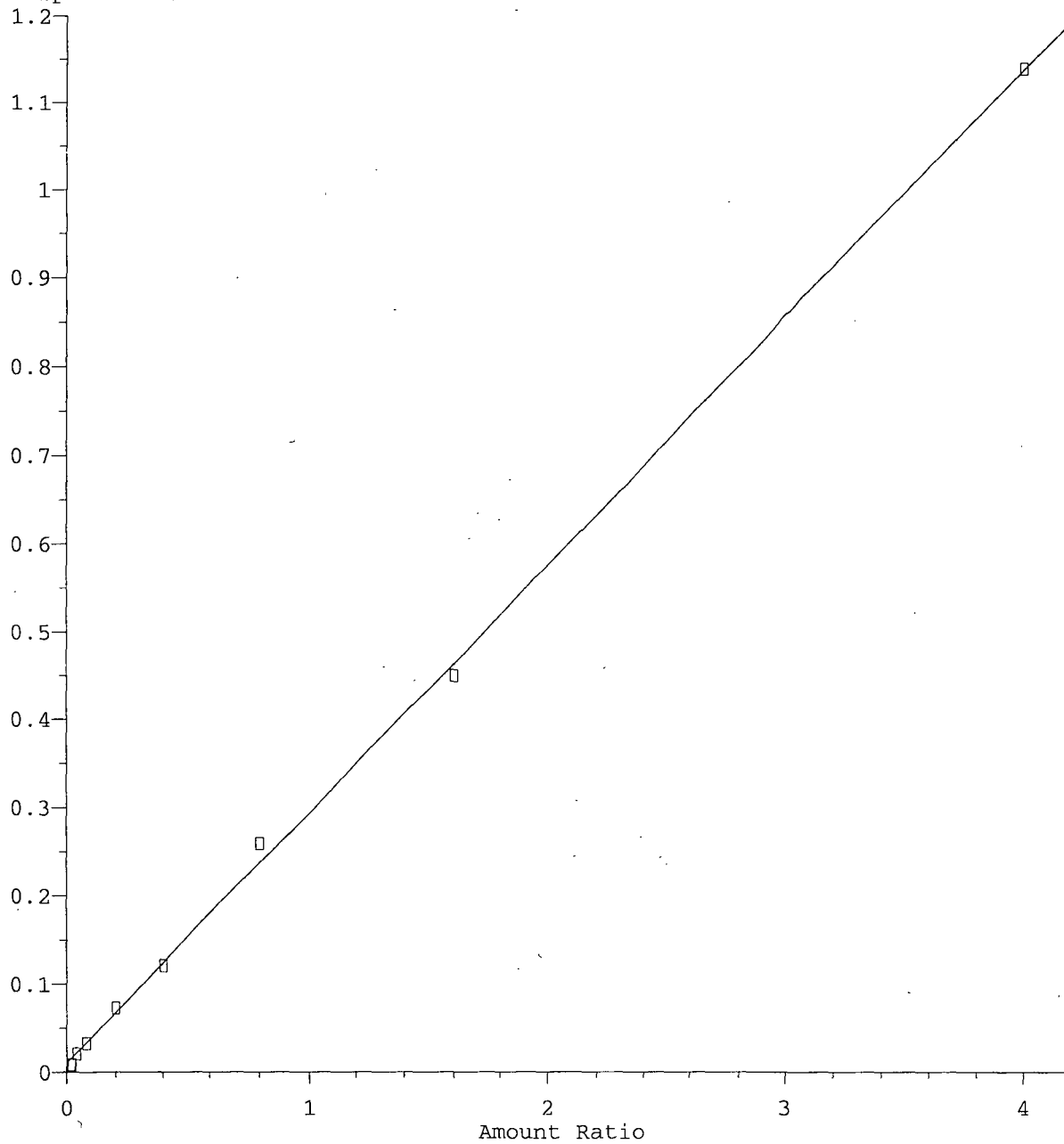
Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018



Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

MIBK (methyl isobutyl ketone)

Response Ratio

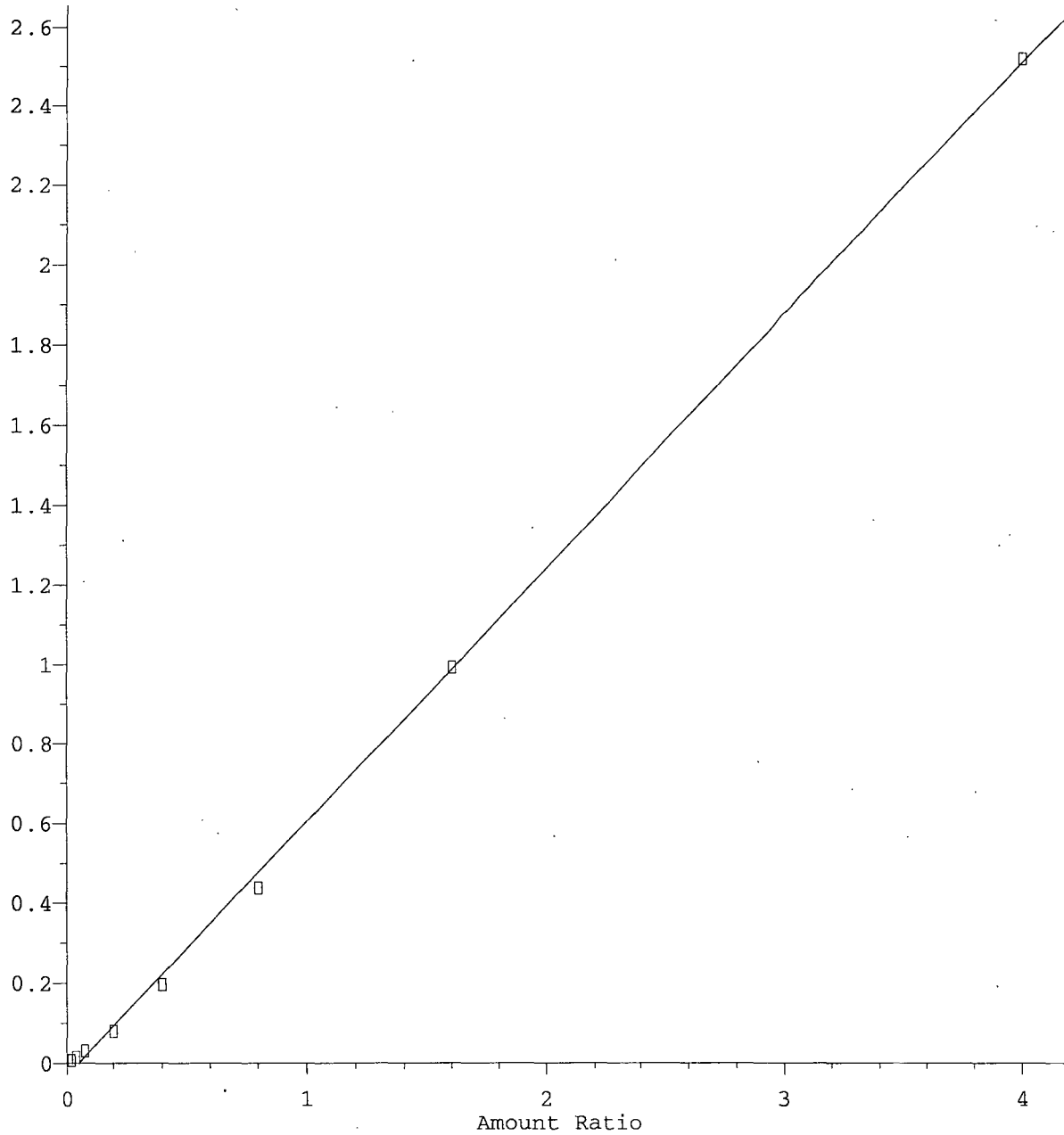


Resp Ratio =  $2.83e-001 * Amt + 1.11e-002$   
Coef of Det ( $r^2$ ) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

Styrene

Response Ratio

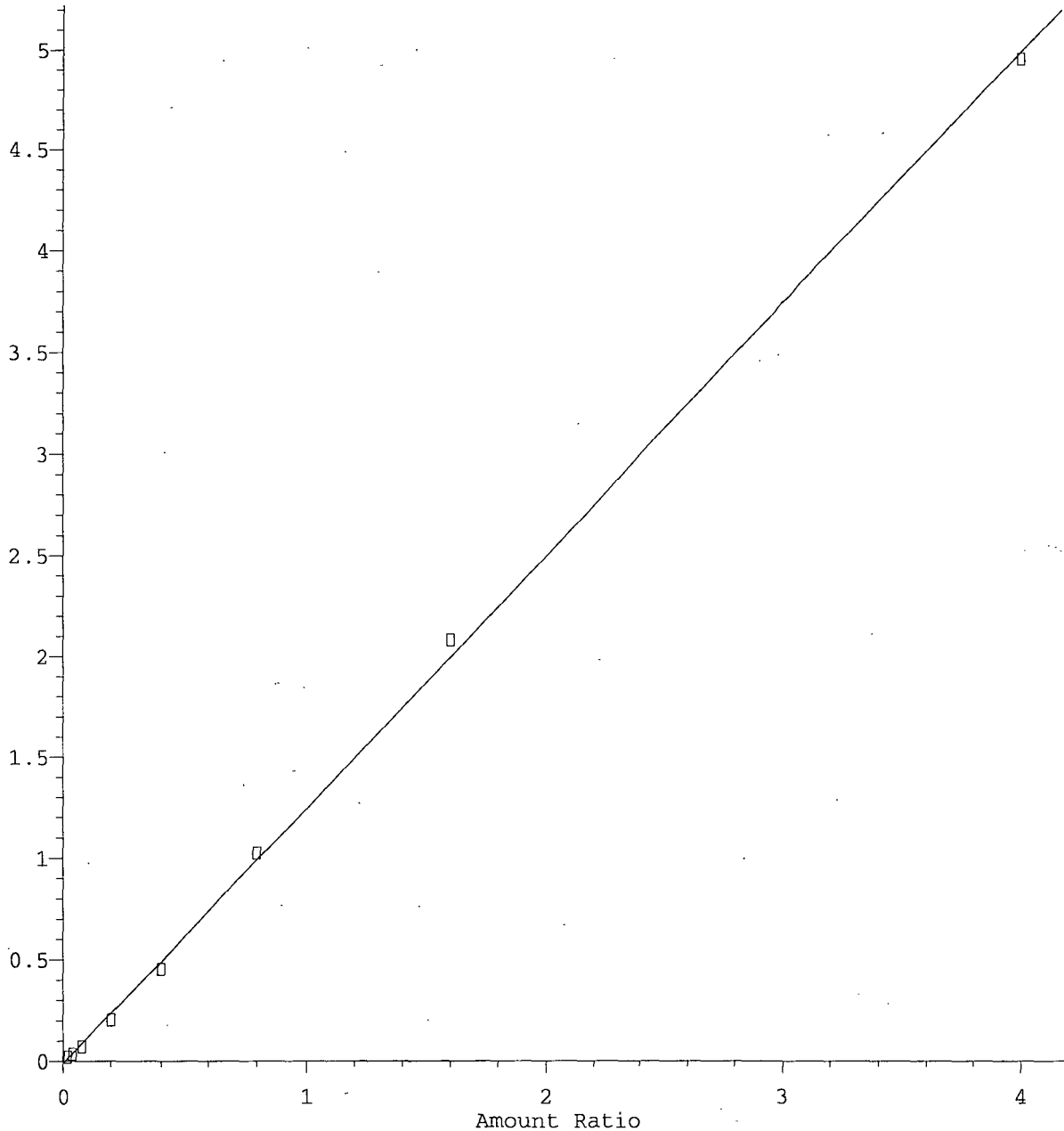


Resp Ratio = 6.39e-001 \* Amt - 3.39e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

1,3,5-Trimethylbenzene

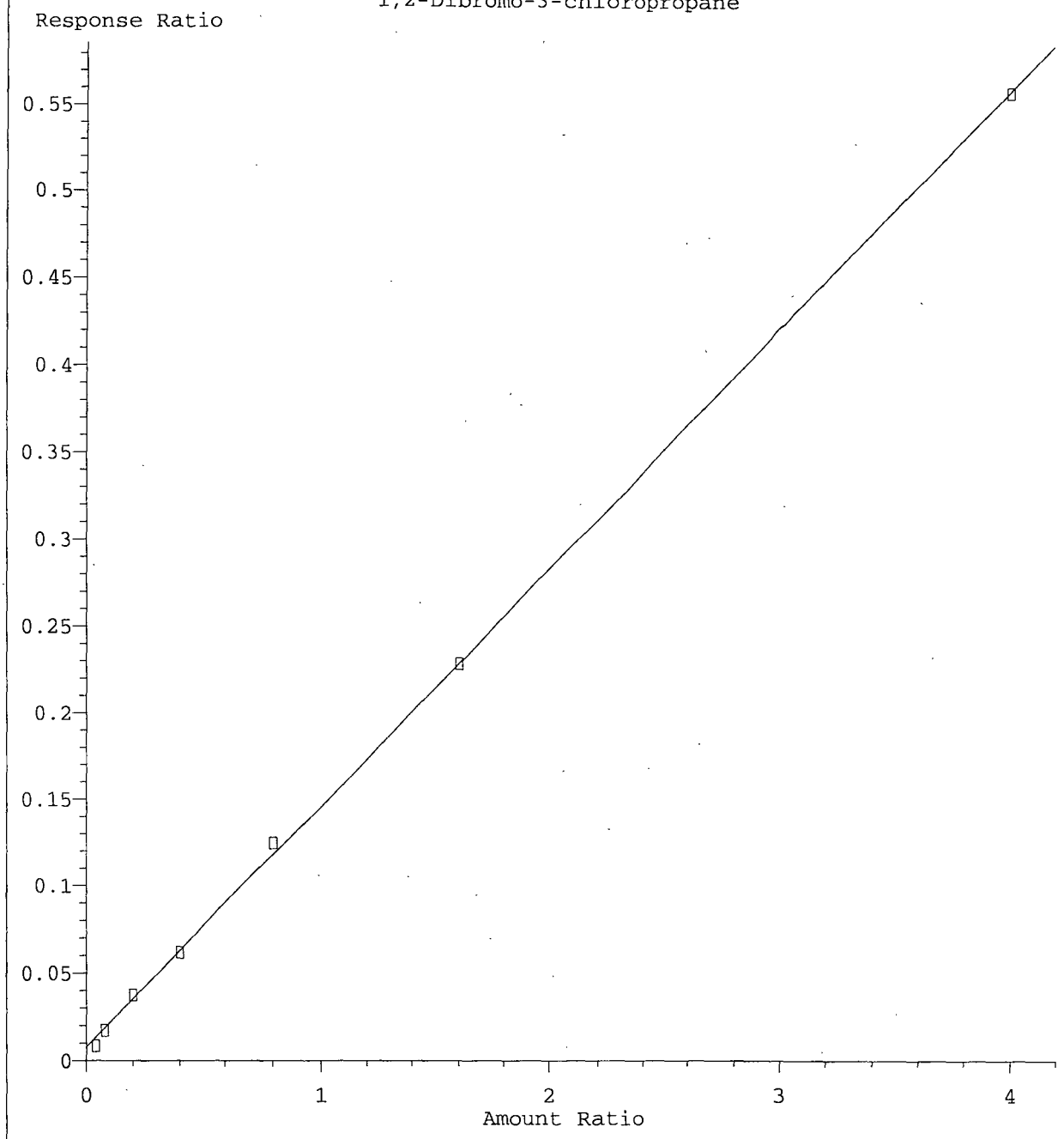
Response Ratio



Resp Ratio = 1.26e+000 \* Amt - 1.22e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018

1,2-Dibromo-3-chloropropane



Resp Ratio = 1.38e-001 \* Amt + 7.80e-003  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181213\L1213W.M  
Calibration Table Last Updated: Fri Dec 14 09:12:25 2018



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/13/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1213L13.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	Dichlorodifluoromethane	0.2110	0.2060	2.4	TM	
2	TM	Freon 114	0.1841	0.1664	9.6	TM	
3	TM**L	Chloromethane	0.4825	0.3906	19	TM**L	6.6
4	TM*	Vinyl chloride	0.3813	0.3811	0.05	TM*	
5	TM	Bromomethane	0.3148	0.3128	0.66	TM	
6	TML	Chloroethane	0.2845	0.2683	5.7	TML	4.8
7	TM	Dichlorofluoromethane	0.6522	0.6125	6.1	TM	
8	TM	Trichlorofluoromethane	0.5159	0.5243	1.6	TM	
9	TM	Acrolein	0.0356	0.0331	6.9	TM	
10	TML	Acetone	0.1533	0.1291	16	TML	17
11	TM	Freon-113	0.2495	0.2453	1.7	TM	
12	TM*	1,1-DCE	0.1615	0.1506	6.8	TM*	
13	TM	t-Butanol	0.0420	0.0329	22	TM	*NT
14	TM	Acetonitrile	0.0611	0.0537	12	TM	
15	TM	Methyl Acetate	0.4937	0.4732	4.2	TM	
16	TML	Iodomethane	0.1959	0.1981	1.2	TML	2.6
17	TML	Acrylonitrile	0.1668	0.1333	20	TML	5.2
18	TM	Methylene chloride	0.4372	0.4109	6.0	TM	
19	TM	Carbon disulfide	0.9826	0.9532	3.0	TM	
20	TM	Methyl t-butyl ether (MtBE)	0.9440	0.8781	7.0	TM	
21	TM	Trans-1,2-DCE	0.3759	0.3578	4.8	TM	
22	TM	Diisopropyl Ether	1.037	1.001	3.4	TM	
23	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.3090	5.9	TM**	
24	TM**	1,1-DCA	0.7329	0.7059	3.7	TM**	
25	TM	Vinyl Acetate	0.3863	0.3574	7.5	TM	
26	TM	Ethyl tert Butyl Ether	0.8226	0.8265	0.48	TM	
27	TML	MEK (2-Butanone)	0.1690	0.1450	14	TML	11
28	TM	Cis-1,2-DCE	0.1776	0.1746	1.7	TM	
29	TM	2,2-Dichloropropane	0.5224	0.4810	7.9	TM	
30	TML	2-Methylpentane	0.2114	0.1941	8.2	TML	0.08
31	TM	3-Methylpentane	0.6752	0.6362	5.8	TM	
32	TM*	Chloroform	0.6547	0.6488	0.90	TM*	
33	TM	Bromochloromethane	0.2045	0.2013	1.6	TM	
34	TM	1,1,1-TCA	0.5399	0.5241	2.9	TM	
35	TML	Cyclohexane	0.2395	0.2104	12	TML	3.4
36	TM	1,1-Dichloropropene	0.3778	0.3807	0.77	TM	
37	TM	2,2,4-Trimethylpentane	0.5590	0.5625	0.62	TM	
38	TM	Carbon Tetrachloride	0.4819	0.4508	6.5	TM	
39	TM	Tert Amyl Methyl Ether	0.7517	0.7094	5.6	TM	
40	TM	Methylcyclopentane	0.5682	0.5454	4.0	TM	

Average

6.3

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/13/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1213L13.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	1,2-DCA	0.4909	0.4865	0.88	TM	
42	TM	Benzene	1.340	1.292	3.6	TM	
43	TM	TCE	0.3511	0.3458	1.5	TM	
44	TM	2-Pentanone	0.2464	0.2243	9.0	TM	
45	TM*	1,2-Dichloropropane	0.3716	0.3611	2.8	TM*	
46	TM	Bromodichloromethane	0.5189	0.5197	0.17	TM	
47	TM	Methyl Cyclohexane	0.3213	0.3215	0.04	TM	
48	TM	Dibromomethane	0.2669	0.2544	4.7	TM	
49	TM	2-Chloroethyl vinyl ether	0.0782	0.0688	12	TM	
50	TML	MIBK (methyl isobutyl ketone)	0.3634	0.3016	17	TML	3.1
51	TM	1-Bromo-2-chloroethane	0.2565	0.2618	2.1	TM	
52	TM	Cis-1,3-Dichloropropene	0.5494	0.5204	5.3	TM	
53	TM*	Toluene	1.392	1.426	2.4	TM*	
54	TM	Trans-1,3-Dichloropropene	0.5019	0.4723	5.9	TM	
55	TM	1,1,2-TCA	0.3214	0.3100	3.6	TM	
56	TM	2-Hexanone	0.1960	0.1834	6.4	TM	
57	TM	1,2-EDB	0.3673	0.3399	7.5	TM	
58	TM	Tetrachloroethene	0.4103	0.3835	6.6	TM	
59	TM	1-Chlorohexane	0.2904	0.2855	1.7	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3672	5.5	TM	
61	TM	m&p-Xylene	1.030	0.9831	4.5	TM	
62	TM	o-Xylene	0.4868	0.4699	3.5	TM	
63	TML	Styrene	0.4775	0.4725	1.0	TML	13
64	TM	1,3-Dichloropropane	0.5789	0.5310	8.3	TM	
65	TM	Dibromochloromethane	0.4190	0.3866	7.7	TM	
66	TM**	Chlorobenzene	0.9647	0.9388	2.7	TM**	
67	TM*	Ethylbenzene	1.366	1.323	3.1	TM*	
68	TM**	Bromoform	0.3176	0.2847	10	TM**	
69	TM	Isopropylbenzene	2.022	1.937	4.2	TM	
70	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.7972	15	TM**	
71	TM	1,2,3-Trichloropropane	0.1562	0.1571	0.61	TM	
72	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1482	12	TM	
73	TM	Bromobenzene	0.7188	0.7062	1.8	TM	
74	TM	n-Propylbenzene	1.580	1.538	2.7	TM	
75	TM	4-Ethyltoluene	1.901	1.912	0.61	TM	
76	TM	2-Chlorotoluene	1.669	1.642	1.6	TM	
77	TML	1,3,5-Trimethylbenzene	1.091	1.142	4.7	TML	6.7
78	TM	4-Chlorotoluene	1.870	1.868	0.08	TM	
79	TM	Tert-Butylbenzene	1.509	1.439	4.7	TM	
80	TM	1,2,4-Trimethylbenzene	1.765	1.785	1.1	TM	

Average

4.7

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/13/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1213L13.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Sec-Butylbenzene	2.192	2.229	1.7	TM
82	TM	p-Isopropyltoluene	2.030	2.013	0.84	TM
83	TM	Benzyl Chloride	1.011	0.8510	16	TM
84	TM	1,3-DCB	1.332	1.312	1.5	TM
85	TM	1,4-DCB	1.409	1.359	3.6	TM
86	TM	n-Butylbenzene	1.678	1.664	0.85	TM
87	TM	1,2-DCB	1.306	1.252	4.1	TM
88	TM	Hexachloroethane	0.4320	0.4128	4.5	TM
89	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1407	18	TML 12
90	TM	1,2,4-Trichlorobenzene	0.8326	0.7711	7.4	TM
91	TM	Hexachlorobutadiene	0.4524	0.4121	8.9	TM
92	TM	Naphthalene	1.754	1.564	11	TM
93	TM	1,2,3-Trichlorobenzene	0.4925	0.4775	3.0	TM
94						
95						
96						
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98						
99						
100						
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117						
118						
119						
120						

Average

6.3

Data File : M:\LOKI\DATA\181213\1213L13.D  
 Acq On : 13 Dec 18 19:20  
 Sample : (SS)10ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 9:12 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	303424	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	328192	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	193408	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
35) Dibromofluoromethane(S)	3.64	111	196714	25.274	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.096%	
40) 1,2-DCA-D4(S)	4.14	65	221612	24.862	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.448%	
61) Toluene-D8(S)	6.74	98	662287	25.112	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.448%	
69) 4-Bromofluorobenzene(S)	9.68	95	242632	25.453	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.812%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.69	85	25000	9.764	ppb	98
3) Freon 114	0.75	85	20197	9.037	ppb	90
4) Chloromethane	0.77	50	47402	9.339	ppb	98
5) Vinyl chloride	0.82	62	46259	9.995	ppb	97
6) Bromomethane	0.98	94	37960	9.934	ppb	99
7) Chloroethane	1.03	64	32568	10.478	ppb	99
8) Dichlorofluoromethane	1.14	67	74339	9.391	ppb	98
9) Trichlorofluoromethane	1.17	101	63639	10.163	ppb	98
10) Acrolein	1.41	56	50216	116.360	ppb	99
11) Acetone	1.51	43	15663	8.334	ppb	# 84
12) Freon-113	1.48	101	29769	9.832	ppb	97
13) 1,1-DCE	1.46	63	18280	9.324	ppb	90
14) t-Butanol	1.93	59	49885	97.866	ppb	98
15) Acetonitrile	1.69	41	81460	109.822	ppb	98
16) Methyl Acetate	1.82	43	57427	9.584	ppb	100
17) Iodomethane	1.55	142	24048	9.738	ppb	97
18) Acrylonitrile	1.99	52	16179	9.476	ppb	99
19) Methylene chloride	1.79	84	49875	9.400	ppb	95
20) Carbon disulfide	1.59	76	115693	9.701	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	106573	9.302	ppb	98
22) Trans-1,2-DCE	2.00	96	43431	9.520	ppb	92
23) Diisopropyl Ether	2.49	45	121498	9.655	ppb	97
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	37499	9.414	ppb	93
25) 1,1-DCA	2.36	63	85680	9.632	ppb	99
26) Vinyl Acetate	2.46	43	43382	9.254	ppb	98
27) Ethyl tert Butyl Ether	2.88	59	100317	10.048	ppb	94
28) MEK (2-Butanone)	3.05	43	17594	8.911	ppb	100
29) Cis-1,2-DCE	2.99	96	21192	9.833	ppb	94
30) 2,2-Dichloropropane	2.97	77	58379	9.207	ppb	92
31) 2-Methylpentane	1.82	71	23559	10.008	ppb	91
32) 3-Methylpentane	2.01	57	77214	9.423	ppb	# 94
33) Chloroform	3.42	83	78749	9.910	ppb	99
34) Bromochloromethane	3.27	128	24435	9.845	ppb	98
36) 1,1,1-TCA	3.63	97	63611	9.707	ppb	94
37) Cyclohexane	3.69	41	25539	9.661	ppb	89
38) 1,1-Dichloropropene	3.89	75	46200	10.077	ppb	97
39) 2,2,4-Trimethylpentane	4.41	57	68265	10.062	ppb	100
41) Carbon Tetrachloride	3.88	117	54709	9.355	ppb	92
42) Tert Amyl Methyl Ether	4.50	73	86103	9.437	ppb	99

Data File : M:\LOKI\DATA\181213\1213L13.D  
 Acq On : 13 Dec 18 19:20  
 Sample : (SS)10ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 9:12 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)

Title : METHOD 8260B

Last Update : Fri Dec 14 09:12:25 2018

Response via : Initial Calibration

DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	66199	9.599	ppb	95
44) 1,2-DCA	4.26	62	59051	9.912	ppb #	91
45) Benzene	4.20	78	156830	9.642	ppb	99
46) TCE	5.19	130	41966	9.849	ppb	97
47) 2-Pentanone	5.53	43	340289	113.799	ppb	100
48) 1,2-Dichloropropane	5.46	63	43831	9.718	ppb	99
49) Bromodichloromethane	5.87	83	63081	10.017	ppb	94
50) Methyl Cyclohexane	5.41	83	39017	10.004	ppb	96
51) Dibromomethane	5.62	93	30882	9.535	ppb	97
52) 2-Chloroethyl vinyl ether	6.34	43	8355	8.806	ppb	98
53) MIBK (methyl isobutyl ket	6.69	43	36606	9.686	ppb #	95
54) 1-Bromo-2-chloroethane	6.21	63	31776	10.208	ppb	96
55) Cis-1,3-Dichloropropene	6.45	75	63165	9.472	ppb	98
56) Toluene	6.81	91	173094	10.242	ppb	97
57) Trans-1,3-Dichloropropene	7.14	75	57317	9.410	ppb	98
58) 1,1,2-TCA	7.32	83	37619	9.643	ppb	98
59) 2-Hexanone	7.68	43	22265	9.357	ppb	97
62) 1,2-EDB	7.82	107	44621	9.255	ppb	98
63) Tetrachloroethene	7.44	166	50339	9.345	ppb	97
64) 1-Chlorohexane	8.45	91	37483	9.833	ppb	99
65) 1,1,1,2-Tetrachloroethane	8.52	131	48200	9.448	ppb	99
66) m&p-Xylene	8.70	91	258110	19.091	ppb	100
67) o-Xylene	9.12	106	61681	9.652	ppb	99
68) Styrene	9.14	104	62032	8.725	ppb	97
70) 1,3-Dichloropropane	7.50	76	69707	9.173	ppb	97
71) Dibromochloromethane	7.74	129	50747	9.226	ppb	99
72) Chlorobenzene	8.40	112	123242	9.731	ppb	96
73) Ethylbenzene	8.56	91	173695	9.689	ppb	96
74) Bromoform	9.30	173	37369	8.963	ppb	97
76) Isopropylbenzene	9.54	105	149858	9.581	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.88	83	61671	8.543	ppb	98
78) 1,2,3-Trichloropropane	9.90	110	12155	10.061	ppb	99
79) t-1,4-Dichloro-2-Butene	9.94	53	11466	8.810	ppb	95
80) Bromobenzene	9.81	156	54635	9.825	ppb	94
81) n-Propylbenzene	9.99	91	118976	9.733	ppb	100
82) 4-Ethyltoluene	10.11	105	147950	10.061	ppb	98
83) 2-Chlorotoluene	10.04	91	127042	9.838	ppb	100
84) 1,3,5-Trimethylbenzene	10.19	105	88344	9.334	ppb	99
85) 4-Chlorotoluene	10.16	91	144518	9.992	ppb	95
86) Tert-Butylbenzene	10.53	119	111296	9.534	ppb	100
87) 1,2,4-Trimethylbenzene	10.58	105	138069	10.109	ppb	96
88) Sec-Butylbenzene	10.76	105	172439	10.169	ppb	99
89) p-Isopropyltoluene	10.93	119	155746	9.916	ppb	100
90) Benzyl Chloride	11.10	91	65838	8.418	ppb	93
91) 1,3-DCB	10.84	146	101527	9.850	ppb	98
92) 1,4-DCB	10.94	146	105107	9.641	ppb	97
93) n-Butylbenzene	11.37	91	128728	9.915	ppb	99
94) 1,2-DCB	11.32	146	96853	9.587	ppb	99
95) Hexachloroethane	11.59	117	31934	9.555	ppb	91
96) 1,2-Dibromo-3-chloropropan	12.16	75	10887	8.790	ppb #	84
97) 1,2,4-Trichlorobenzene	13.04	180	59655	9.261	ppb	98
98) Hexachlorobutadiene	13.26	225	31882	9.110	ppb	96
99) Naphthalene	13.28	128	120984	8.917	ppb	94
100) 1,2,3-Trichlorobenzene	13.55	180	36944	9.696	ppb	95

(#) = qualifier out of range (m) = manual integration  
 1213L13.D L1213W.M Fri Dec 14 09:12:25 2018 Page 683 of 1287

Quantitation Report

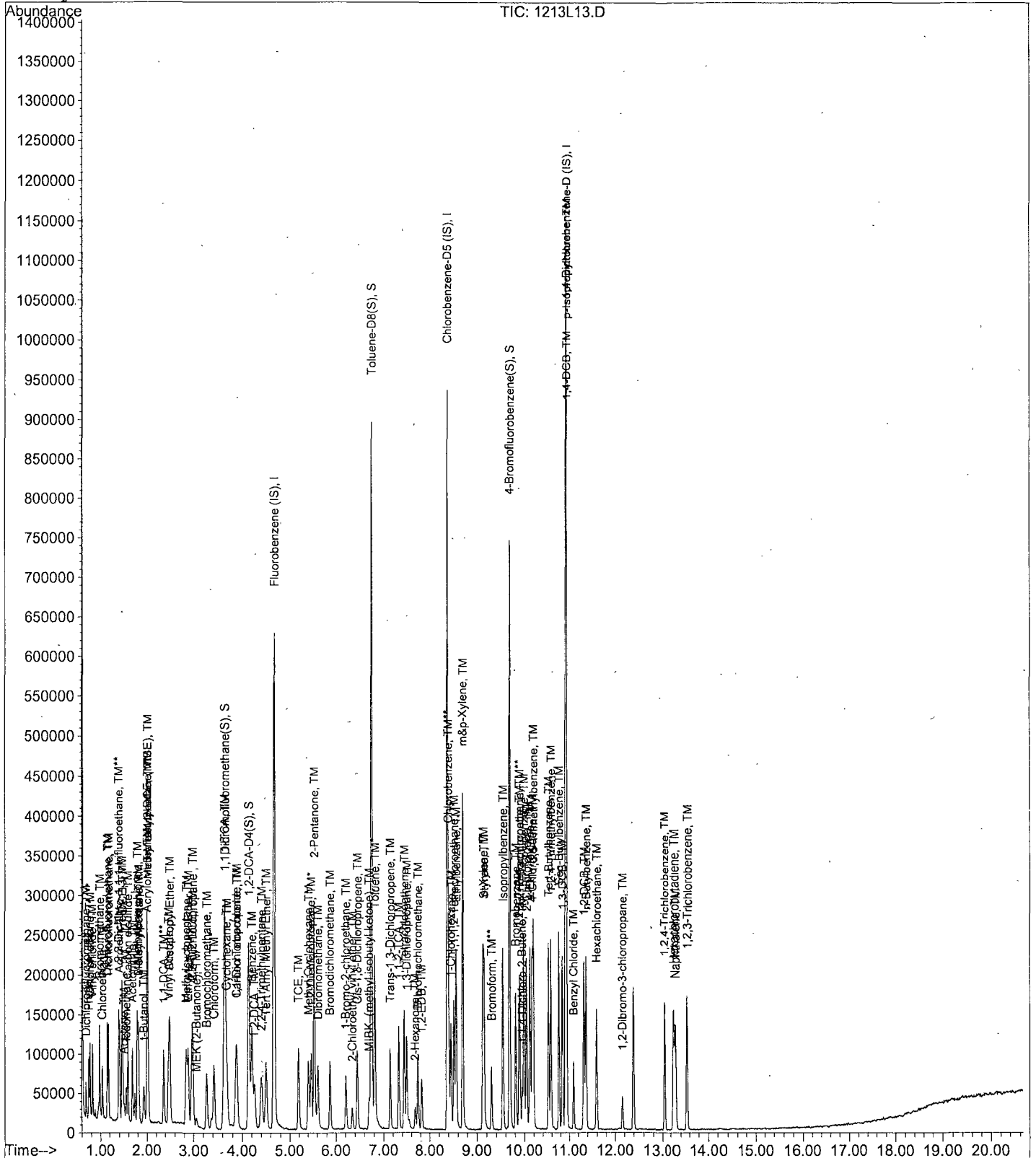
Data File : M:\LOKI\DATA\181213\1213L13.D  
Acq On : 13 Dec 18 19:20  
Sample : (SS)10ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 9:12 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/16/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1216L03.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.2110	0.1323	37	TM	*NT
3	TM	Freon 114	0.1841	0.1475	20	TM	
4	TM**L	Chloromethane	0.4825	0.3124	35	TM**L	26 *NT
5	TM*	Vinyl chloride	0.3813	0.2991	22	TM*	*NT
6	TM	Bromomethane	0.3148	0.2913	7.5	TM	
7	TML	Chloroethane	0.2845	0.2174	24	TML	16
8	TM	Dichlorofluoromethane	0.6522	0.5398	17	TM	
9	TM	Trichlorofluoromethane	0.5159	0.4211	18	TM	
10	TM	Acrolein	0.0356	0.0136	62	TM	*NT
11	TML	Acetone	0.1533	0.1130	26	TML	32 *NT
12	TM	Freon-113	0.2495	0.2372	4.9	TM	
13	TM*	1,1-DCE	0.1615	0.1318	18	TM*	
14	TM	t-Butanol	0.0420	0.0298	29	TM	*
15	TM	Acetonitrile	0.0611	0.0477	22	TM	*NT
16	TM	Methyl Acetate	0.4937	0.4545	7.9	TM	
17	TML	Iodomethane	0.1959	0.1327	32	TML	29 *NT
18	TML	Acrylonitrile	0.1668	0.1219	27	TML	14
19	TM	Methylene chloride	0.4372	0.3653	16	TM	
20	TM	Carbon disulfide	0.9826	0.8334	15	TM	
21	TM	Methyl t-butyl ether (MtBE)	0.9440	0.8676	8.1	TM	
22	TM	Trans-1,2-DCE	0.3759	0.3235	14	TM	
23	TM	Diisopropyl Ether	1.037	0.9379	9.5	TM	
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.2717	17	TM**	
25	TM**	1,1-DCA	0.7329	0.6151	16	TM**	
26	TM	Vinyl Acetate	0.3863	0.3374	13	TM	
27	TM	Ethyl tert Butyl Ether	0.8226	0.7706	6.3	TM	
28	TML	MEK (2-Butanone)	0.1690	0.1235	27	TML	26 *NT
29	TM	Cis-1,2-DCE	0.1776	0.1615	9.0	TM	
30	TM	2,2-Dichloropropane	0.5224	0.4616	12	TM	
31	TML	2-Methylpentane	0.2114	0.2045	3.2	TML	5.2
32	TM	3-Methylpentane	0.6752	0.6083	9.9	TM	
33	TM*	Chloroform	0.6547	0.5882	10	TM*	
34	TM	Bromochloromethane	0.2045	0.1886	7.8	TM	
35	S	Dibromofluoromethane(S)	0.6413	0.5926	7.6	S	
36	TM	1,1,1-TCA	0.5399	0.4681	13	TM	
37	TML	Cyclohexane	0.2395	0.1923	20	TML	12
38	TM	1,1-Dichloropropene	0.3778	0.3514	7.0	TM	
39	TM	2,2,4-Trimethylpentane	0.5590	0.5696	1.9	TM	
40	S	1,2-DCA-D4(S)	0.7344	0.6493	12	S	

Average

17.0

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/16/18

Matrix: water

Instrument: Loki

Cal. Date: 12/13/18

Data File: 1216L03.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	Carbon Tetrachloride	0.4819	0.4008	17	TM	
42	TM	Tert Amyl Methyl Ether	0.7517	0.7007	6.8	TM	
43	TM	Methylcyclopentane	0.5682	0.5030	11	TM	
44	TM	1,2-DCA	0.4909	0.4352	11	TM	
45	TM	Benzene	1.340	1.196	11	TM	
46	TM	TCE	0.3511	0.3221	8.3	TM	
47	TM	2-Pentanone	0.2464	0.2079	16	TM	
48	TM*	1,2-Dichloropropane	0.3716	0.3355	9.7	TM*	
49	TM	Bromodichloromethane	0.5189	0.4514	13	TM	
50	TM	Methyl Cyclohexane	0.3213	0.3055	4.9	TM	
51	TM	Dibromomethane	0.2669	0.2410	9.7	TM	
52	TM	2-Chloroethyl vinyl ether	0.0782	0.0488	38	TM	*NT
53	TML	MIBK (methyl isobutyl ketone)	0.3634	0.2490	31	TML	22 *NT
54	TM	1-Bromo-2-chloroethane	0.2565	0.2304	10	TM	
55	TM	Cis-1,3-Dichloropropene	0.5494	0.4772	13	TM	
56	TM*	Toluene	1.392	1.431	2.8	TM*	
57	TM	Trans-1,3-Dichloropropene	0.5019	0.4529	9.8	TM	
58	TM	1,1,2-TCA	0.3214	0.2885	10	TM	
59	TM	2-Hexanone	0.1960	0.1527	22	TM	*NT
60	I	Chlorobenzene-D5 (IS)	ISTD			I	
61	S	Toluene-D8(S)	2.009	1.901	5.4	S	
62	TM	1,2-EDB	0.3673	0.3166	14	TM	
63	TM	Tetrachloroethene	0.4103	0.3578	13	TM	
64	TM	1-Chlorohexane	0.2904	0.2764	4.8	TM	
65	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3428	12	TM	
66	TM	m&p-Xylene	1.030	1.001	2.8	TM	
67	TM	o-Xylene	0.4868	0.4613	5.2	TM	
68	TML	Styrene	0.4775	0.4434	7.1	TML	17
69	S	4-Bromofluorobenzene(S)	0.7261	0.7109	2.1	S	
70	TM	1,3-Dichloropropane	0.5789	0.4905	15	TM	
71	TM	Dibromochloromethane	0.4190	0.3570	15	TM	
72	TM**	Chlorobenzene	0.9647	0.8456	12	TM**	
73	TM*	Ethylbenzene	1.366	1.261	7.6	TM*	
74	TM**	Bromoform	0.3176	0.2736	14	TM**	
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
76	TM	Isopropylbenzene	2.022	1.876	7.2	TM	
77	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.7488	20	TM**	
78	TM	1,2,3-Trichloropropane	0.1562	0.1293	17	TM	
79	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1496	11	TM	
80	TM	Bromobenzene	0.7188	0.6656	7.4	TM	

Average

11.8



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/16/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1216L03.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.580	1.459	7.6	TM
82	TM	4-Ethyltoluene	1.901	1.830	3.7	TM
83	TM	2-Chlorotoluene	1.669	1.522	8.8	TM
84	TML	1,3,5-Trimethylbenzene	1.091	1.047	4.0	TML 14
85	TM	4-Chlorotoluene	1.870	1.806	3.4	TM
86	TM	Tert-Butylbenzene	1.509	1.388	8.0	TM
87	TM	1,2,4-Trimethylbenzene	1.765	1.716	2.8	TM
88	TM	Sec-Butylbenzene	2.192	2.117	3.4	TM
89	TM	p-Isopropyltoluene	2.030	1.898	6.5	TM
90	TM	Benzyl Chloride	1.011	0.8452	16	TM
91	TM	1,3-DCB	1.332	1.197	10	TM
92	TM	1,4-DCB	1.409	1.301	7.7	TM
93	TM	n-Butylbenzene	1.678	1.502	11	TM
94	TM	1,2-DCB	1.306	1.173	10	TM
95	TM	Hexachloroethane	0.4320	0.3610	16	TM
96	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1247	28	TML 24 *NT
97	TM	1,2,4-Trichlorobenzene	0.8326	0.7222	13	TM
98	TM	Hexachlorobutadiene	0.4524	0.3998	12	TM
99	TM	Naphthalene	1.754	1.405	20	TM
100	TM	1,2,3-Trichlorobenzene	0.4925	0.3918	20	TM
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						

Average

10.6

Data File : M:\LOKI\DATA\181213\1216L03.D  
 Acq On : 16 Dec 18 9:49  
 Sample : 181216A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 16 10:16 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	339968	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	365440	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	216512	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	201464	23.102	ppb	0.00
Spiked Amount			25.000			
			Recovery	=	92.408%	
40) 1,2-DCA-D4(S)	4.13	65	220729	22.101	ppb	0.00
Spiked Amount			25.000			
			Recovery	=	88.404%	
61) Toluene-D8(S)	6.74	98	694523	23.650	ppb	0.00
Spiked Amount			25.000			
			Recovery	=	94.600%	
69) 4-Bromofluorobenzene(S)	9.68	95	259782	24.475	ppb	0.00
Spiked Amount			25.000			
			Recovery	=	97.900%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	17992	6.271	ppb	97
3) Freon 114	0.75	85	20054	8.008	ppb	94
4) Chloromethane	0.77	50	42483	7.371	ppb	96
5) Vinyl chloride	0.82	62	40673	7.844	ppb	97
6) Bromomethane	0.98	94	39615	9.253	ppb	94
7) Chloroethane	1.03	64	29561	8.390	ppb	95
8) Dichlorofluoromethane	1.14	67	73400	8.275	ppb	99
9) Trichlorofluoromethane	1.17	101	57261	8.162	ppb	94
10) Acrolein	1.41	56	23088	47.748	ppb #	97
11) Acetone	1.51	43	15373	6.827	ppb	91
12) Freon-113	1.48	101	32250	9.506	ppb	98
13) 1,1-DCE	1.46	63	17919	8.157	ppb	90
14) t-Butanol	1.93	59	50652	88.689	ppb	100
15) Acetonitrile	1.68	41	81069	97.546	ppb	98
16) Methyl Acetate	1.81	43	61807	9.206	ppb	100
17) Iodomethane	1.55	142	18048	7.135	ppb	98
18) Acrylonitrile	1.98	52	16582	8.579	ppb	97
19) Methylene chloride	1.79	84	49677	8.356	ppb	97
20) Carbon disulfide	1.59	76	113329	8.481	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	117983	9.191	ppb	96
22) Trans-1,2-DCE	2.00	96	43994	8.607	ppb	91
23) Diisopropyl Ether	2.49	45	127540	9.046	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	36941	8.277	ppb	92
25) 1,1-DCA	2.36	63	83641	8.392	ppb	99
26) Vinyl Acetate	2.46	43	45887	8.736	ppb	95
27) Ethyl tert Butyl Ether	2.88	59	104798	9.369	ppb	95
28) MEK (2-Butanone)	3.05	43	16798	7.393	ppb	88
29) Cis-1,2-DCE	2.98	96	21968	9.098	ppb	98
30) 2,2-Dichloropropane	2.96	77	62769	8.835	ppb #	94
31) 2-Methylpentane	1.81	71	27811	10.523	ppb #	75
32) 3-Methylpentane	2.01	57	82726	9.010	ppb	93
33) Chloroform	3.42	83	79992	8.984	ppb	99
34) Bromochloromethane	3.27	128	25649	9.223	ppb	100
36) 1,1,1-TCA	3.62	97	63661	8.671	ppb	99
37) Cyclohexane	3.68	41	26148	8.811	ppb	87
38) 1,1-Dichloropropene	3.89	75	47780	9.301	ppb	95
39) 2,2,4-Trimethylpentane	4.41	57	77458	10.190	ppb	91
41) Carbon Tetrachloride	3.87	117	54499	8.317	ppb	97
42) Tert Amyl Methyl Ether	4.50	73	95285	9.321	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L03.D  
 Acq On : 16 Dec 18 9:49  
 Sample : 181216A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 16 10:16 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	68406	8.853	ppb	96
44) 1,2-DCA	4.26	62	59181	8.866	ppb	97
45) Benzene	4.20	78	162635	8.924	ppb	99
46) TCE	5.18	130	43799	9.174	ppb	94
47) 2-Pentanone	5.53	43	353358	105.467	ppb	99
48) 1,2-Dichloropropane	5.46	63	45623	9.028	ppb	98
49) Bromodichloromethane	5.87	83	61378	8.699	ppb	96
50) Methyl Cyclohexane	5.40	83	41547	9.508	ppb	99
51) Dibromomethane	5.61	93	32774	9.031	ppb	97
52) 2-Chloroethyl vinyl ether	6.34	43	6637	6.243	ppb	# 83
53) MIBK (methyl isobutyl ket	6.69	43	33864	7.827	ppb	95
54) 1-Bromo-2-chloroethane	6.21	63	31328	8.982	ppb	95
55) Cis-1,3-Dichloropropene	6.45	75	64892	8.685	ppb	95
56) Toluene	6.81	91	194603	10.277	ppb	97
57) Trans-1,3-Dichloropropene	7.14	75	61590	9.024	ppb	100
58) 1,1,2-TCA	7.32	83	39238	8.977	ppb	91
59) 2-Hexanone	7.68	43	20769	7.790	ppb	94
62) 1,2-EDB	7.82	107	46284	8.621	ppb	99
63) Tetrachloroethene	7.44	166	52300	8.719	ppb	97
64) 1-Chlorohexane	8.45	91	40401	9.518	ppb	93
65) 1,1,1,2-Tetrachloroethane	8.52	131	50115	8.822	ppb	92
66) m&p-Xylene	8.70	91	292627	19.438	ppb	99
67) o-Xylene	9.12	106	67437	9.477	ppb	97
68) Styrene	9.14	104	64808	8.268	ppb	99
70) 1,3-Dichloropropane	7.50	76	71697	8.473	ppb	99
71) Dibromochloromethane	7.74	129	52180	8.520	ppb	98
72) Chlorobenzene	8.40	112	123601	8.765	ppb	96
73) Ethylbenzene	8.56	91	184352	9.235	ppb	100
74) Bromoform	9.30	173	39999	8.616	ppb	96
76) Isopropylbenzene	9.54	105	162509	9.281	ppb	96
77) 1,1,2,2-Tetrachloroethane	9.88	83	64846	8.024	ppb	97
78) 1,2,3-Trichloropropane	9.90	110	11194	8.277	ppb	95
79) t-1,4-Dichloro-2-Butene	9.95	53	12959	8.895	ppb	97
80) Bromobenzene	9.81	156	57645	9.260	ppb	90
81) n-Propylbenzene	9.99	91	126376	9.235	ppb	96
82) 4-Ethyltoluene	10.12	105	158458	9.626	ppb	98
83) 2-Chlorotoluene	10.04	91	131830	9.120	ppb	97
84) 1,3,5-Trimethylbenzene	10.19	105	90656	8.576	ppb	99
85) 4-Chlorotoluene	10.16	91	156373	9.658	ppb	93
86) Tert-Butylbenzene	10.53	119	120191	9.198	ppb	97
87) 1,2,4-Trimethylbenzene	10.58	105	148649	9.723	ppb	100
88) Sec-Butylbenzene	10.76	105	183379	9.660	ppb	100
89) p-Isopropyltoluene	10.93	119	164391	9.349	ppb	98
90) Benzyl Chloride	11.10	91	73195	8.360	ppb	97
91) 1,3-DCB	10.84	146	103643	8.982	ppb	95
92) 1,4-DCB	10.94	146	112683	9.233	ppb	96
93) n-Butylbenzene	11.36	91	130072	8.950	ppb	97
94) 1,2-DCB	11.32	146	101627	8.986	ppb	100
95) Hexachloroethane	11.59	117	31262	8.355	ppb	85
96) 1,2-Dibromo-3-chloropropan	12.16	75	10800	7.628	ppb	90
97) 1,2,4-Trichlorobenzene	13.04	180	62543	8.673	ppb	94
98) Hexachlorobutadiene	13.25	225	34622	8.837	ppb	95
99) Naphthalene	13.29	128	121696	8.012	ppb	95
100) 1,2,3-Trichlorobenzene	13.55	180	33928	7.954	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

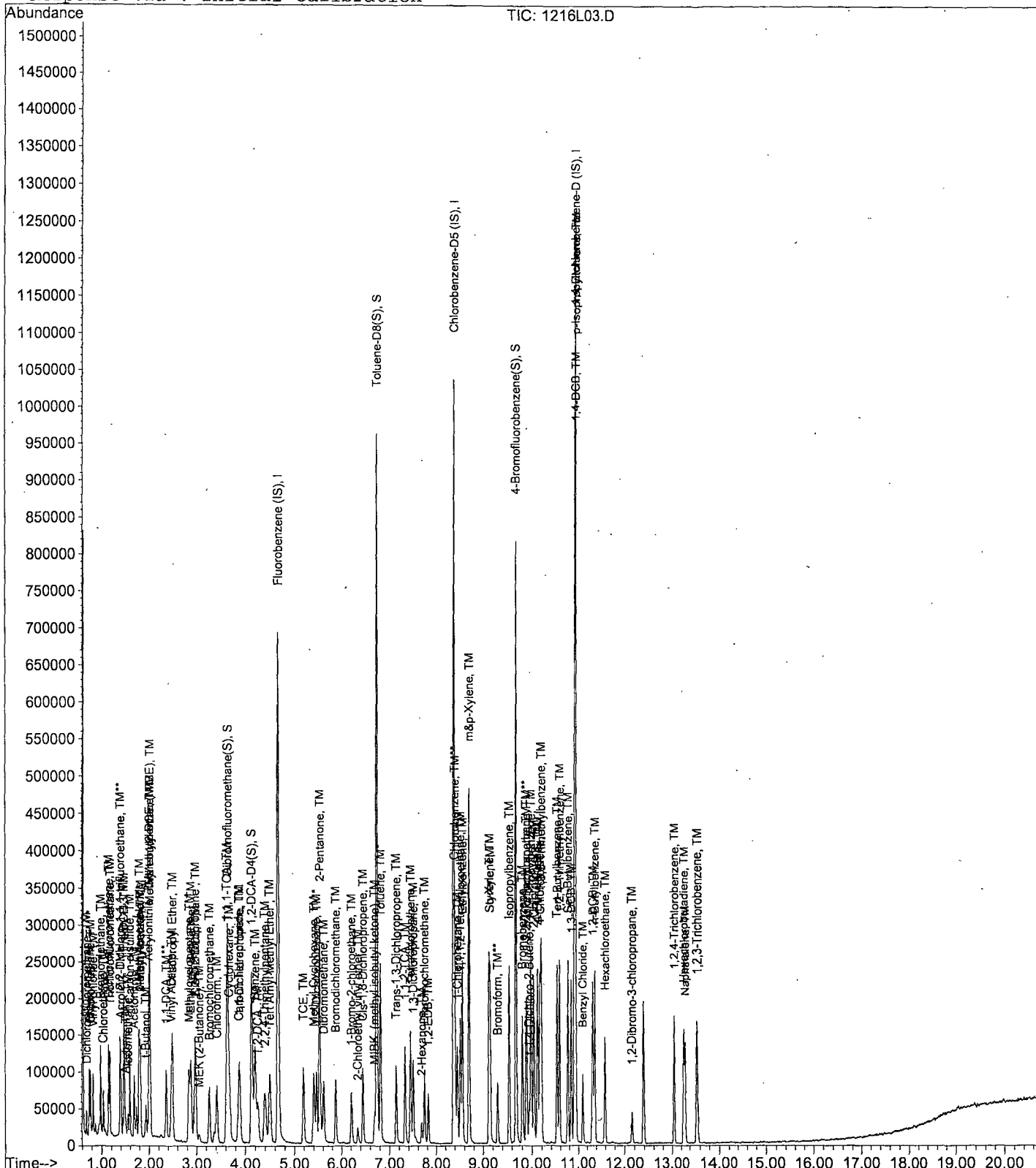
Data File : M:\LOKI\DATA\181213\1216L03.D  
 Acq On : 16 Dec 18 9:49  
 Sample : 181216A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 16 10:16 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/16/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1216L29.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TM	Dichlorodifluoromethane	0.2110	0.1310	38	TM
3	TM	Freon 114	0.1841	0.1221	34	TM
4	TM**L	Chloromethane	0.4825	0.3178	34	TM**L 25
5	TM*	Vinyl chloride	0.3813	0.3161	17	TM*
6	TM	Bromomethane	0.3148	0.3143	0.17	TM
7	TML	Chloroethane	0.2845	0.2238	21	TML 13
8	TM	Dichlorofluoromethane	0.6522	0.5882	9.8	TM
9	TM	Trichlorofluoromethane	0.5159	0.4311	16	TM
10	TM	Acrolein	0.0356	0.0238	33	TM
11	TML	Acetone	0.1533	0.1515	1.2	TML 4.4
12	TM	Freon-113	0.2495	0.2223	11	TM
13	TM*	1,1-DCE	0.1615	0.1417	12	TM*
14	TM	t-Butanol	0.0420	0.0400	4.7	TM
15	TM	Acetonitrile	0.0611	0.0594	2.8	TM
16	TM	Methyl Acetate	0.4937	0.4360	12	TM
17	TML	Iodomethane	0.1959	0.1667	15	TML 15
18	TML	Acrylonitrile	0.1668	0.1630	2.3	TML 18
19	TM	Methylene chloride	0.4372	0.4102	6.2	TM
20	TM	Carbon disulfide	0.9826	0.8782	11	TM
21	TM	Methyl t-butyl ether (MtBE)	0.9440	0.9863	4.5	TM
22	TM	Trans-1,2-DCE	0.3759	0.3452	8.2	TM
23	TM	Diisopropyl Ether	1.037	1.069	3.1	TM
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.3177	3.2	TM**
25	TM**	1,1-DCA	0.7329	0.7002	4.5	TM**
26	TM	Vinyl Acetate	0.3863	0.2643	32	TM
27	TM	Ethyl tert Butyl Ether	0.8226	0.8567	4.1	TM
28	TML	MEK (2-Butanone)	0.1690	0.1589	6.0	TML 1.0
29	TM	Cis-1,2-DCE	0.1776	0.1760	0.86	TM
30	TM	2,2-Dichloropropane	0.5224	0.3916	25	TM
31	TML	2-Methylpentane	0.2114	0.2003	5.2	TML 3.1
32	TM	3-Methylpentane	0.6752	0.6385	5.4	TM
33	TM*	Chloroform	0.6547	0.6557	0.14	TM*
34	TM	Bromochloromethane	0.2045	0.2073	1.4	TM
35	S	Dibromofluoromethane(S)	0.6413	0.6338	1.2	S
36	TM	1,1,1-TCA	0.5399	0.5043	6.6	TM
37	TML	Cyclohexane	0.2395	0.1959	18	TML 10
38	TM	1,1-Dichloropropene	0.3778	0.3503	7.3	TM
39	TM	2,2,4-Trimethylpentane	0.5590	0.4455	20	TM
40	S	1,2-DCA-D4(S)	0.7344	0.7503	2.2	S

Average

11.3

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/16/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1216L29.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.4819	0.4511	6.4	TM
42	TM	Tert Amyl Methyl Ether	0.7517	0.7251	3.5	TM
43	TM	Methylcyclopentane	0.5682	0.5665	0.30	TM
44	TM	1,2-DCA	0.4909	0.5194	5.8	TM
45	TM	Benzene	1.340	1.311	2.2	TM
46	TM	TCE	0.3511	0.3889	11	TM
47	TM	2-Pentanone	0.2464	0.2580	4.7	TM
48	TM*	1,2-Dichloropropane	0.3716	0.3699	0.46	TM*
49	TM	Bromodichloromethane	0.5189	0.5117	1.4	TM
50	TM	Methyl Cyclohexane	0.3213	0.2839	12	TM
51	TM	Dibromomethane	0.2669	0.2719	1.9	TM
52	TM	2-Chloroethyl vinyl ether	0.0782	0.0563	28	TM
53	TML	MIBK (methyl isobutyl ketone)	0.3634	0.3369	7.3	TML 9.3
54	TM	1-Bromo-2-chloroethane	0.2565	0.2583	0.70	TM
55	TM	Cis-1,3-Dichloropropene	0.5494	0.4995	9.1	TM
56	TM*	Toluene	1.392	1.455	4.5	TM*
57	TM	Trans-1,3-Dichloropropene	0.5019	0.4816	4.0	TM
58	TM	1,1,2-TCA	0.3214	0.3196	0.57	TM
59	TM	2-Hexanone	0.1960	0.1942	0.96	TM
60	I	Chlorobenzene-D5 (IS)	ISTD			I
61	S	Toluene-D8(S)	2.009	1.977	1.6	S
62	TM	1,2-EDB	0.3673	0.3451	6.0	TM
63	TM	Tetrachloroethene	0.4103	0.3659	11	TM
64	TM	1-Chlorohexane	0.2904	0.2537	13	TM
65	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3713	4.5	TM
66	TM	m&p-Xylene	1.030	0.9305	9.6	TM
67	TM	o-Xylene	0.4868	0.4474	8.1	TM
68	TML	Styrene	0.4775	0.4260	11	TML 20
69	S	4-Bromofluorobenzene(S)	0.7261	0.7253	0.12	S
70	TM	1,3-Dichloropropane	0.5789	0.5390	6.9	TM
71	TM	Dibromochloromethane	0.4190	0.3962	5.4	TM
72	TM**	Chlorobenzene	0.9647	0.8827	8.5	TM**
73	TM*	Ethylbenzene	1.366	1.232	9.8	TM*
74	TM**	Bromoform	0.3176	0.3129	1.5	TM**
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
76	TM	Isopropylbenzene	2.022	1.896	6.2	TM
77	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.8294	11	TM**
78	TM	1,2,3-Trichloropropane	0.1562	0.1621	3.8	TM
79	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1619	3.7	TM
80	TM	Bromobenzene	0.7188	0.7068	1.7	TM

Average

6.0

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/16/18

Matrix: water

Instrument: Loki

Cal. Date: 12/13/18

Data File: 1216L29.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.580	1.480	6.3	TM
82	TM	4-Ethyltoluene	1.901	1.881	1.0	TM
83	TM	2-Chlorotoluene	1.669	1.632	2.3	TM
84	TML	1,3,5-Trimethylbenzene	1.091	1.125	3.1	TML 8.0
85	TM	4-Chlorotoluene	1.870	1.896	1.4	TM
86	TM	Tert-Butylbenzene	1.509	1.397	7.4	TM
87	TM	1,2,4-Trimethylbenzene	1.765	1.710	3.1	TM
88	TM	Sec-Butylbenzene	2.192	2.132	2.7	TM
89	TM	p-Isopropyltoluene	2.030	1.897	6.6	TM
90	TM	Benzyl Chloride	1.011	0.6064	40	TM
91	TM	1,3-DCB	1.332	1.338	0.43	TM
92	TM	1,4-DCB	1.409	1.387	1.6	TM
93	TM	n-Butylbenzene	1.678	1.437	14	TM
94	TM	1,2-DCB	1.306	1.280	2.0	TM
95	TM	Hexachloroethane	0.4320	0.3881	10	TM
96	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1572	8.8	TML 0.18
97	TM	1,2,4-Trichlorobenzene	0.8326	0.7461	10	TM
98	TM	Hexachlorobutadiene	0.4524	0.4008	11	TM
99	TM	Naphthalene	1.754	1.591	9.3	TM
100	TM	1,2,3-Trichlorobenzene	0.4925	0.4168	15	TM
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Average

7.8

Data File : M:\LOKI\DATA\181213\1216L29.D  
 Acq On : 16 Dec 18 22:13  
 Sample : Ending CCV 10ug/L 12/16/18  
 Misc : IS&S 11/8/18

Vial: 28  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:08 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	301760	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	333440	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	186496	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	191268	24.710	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.840%	
40) 1,2-DCA-D4(S)	4.14	65	226421	25.541	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.164%	
61) Toluene-D8(S)	6.74	98	659194	24.601	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.404%	
69) 4-Bromofluorobenzene(S)	9.68	95	241843	24.971	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.884%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	15814	6.210	ppb	100
3) Freon 114	0.75	85	14736	6.630	ppb	91
4) Chloromethane	0.77	50	38361	7.507	ppb	96
5) Vinyl chloride	0.82	62	38152	8.289	ppb	97
6) Bromomethane	0.98	94	37936	9.983	ppb	98
7) Chloroethane	1.03	64	27015	8.654	ppb	94
8) Dichlorofluoromethane	1.14	67	70993	9.018	ppb	97
9) Trichlorofluoromethane	1.17	101	52039	8.356	ppb	99
10) Acrolein	1.41	56	35856	83.543	ppb	# 100
11) Acetone	1.51	43	18281	10.443	ppb	97
12) Freon-113	1.48	101	26828	8.910	ppb	98
13) 1,1-DCE	1.46	63	17109	8.775	ppb	95
14) t-Butanol	1.93	59	60412	119.171	ppb	97
15) Acetonitrile	1.69	41	89668	121.554	ppb	95
16) Methyl Acetate	1.81	43	52622	8.830	ppb	100
17) Iodomethane	1.55	142	20120	8.487	ppb	99
18) Acrylonitrile	1.99	52	19669	11.815	ppb	96
19) Methylene chloride	1.79	84	49515	9.384	ppb	98
20) Carbon disulfide	1.59	76	106004	8.938	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	119047	10.448	ppb	93
22) Trans-1,2-DCE	2.00	96	41668	9.184	ppb	94
23) Diisopropyl Ether	2.49	45	129029	10.310	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	38344	9.679	ppb	87
25) 1,1-DCA	2.36	63	84519	9.554	ppb	99
26) Vinyl Acetate	2.49	43	31904	6.843	ppb	# 77
27) Ethyl tert Butyl Ether	2.88	59	103403	10.415	ppb	97
28) MEK (2-Butanone)	3.06	43	19176	9.895	ppb	89
29) Cis-1,2-DCE	2.99	96	21248	9.914	ppb	96
30) 2,2-Dichloropropane	2.97	77	47273	7.496	ppb	# 95
31) 2-Methylpentane	1.81	71	24177	10.315	ppb	82
32) 3-Methylpentane	2.01	57	77073	9.457	ppb	96
33) Chloroform	3.42	83	79143	10.014	ppb	94
34) Bromochloromethane	3.27	128	25020	10.136	ppb	100
36) 1,1,1-TCA	3.62	97	60877	9.341	ppb	99
37) Cyclohexane	3.69	41	23641	8.979	ppb	92
38) 1,1-Dichloropropene	3.89	75	42287	9.274	ppb	98
39) 2,2,4-Trimethylpentane	4.40	57	53769	7.969	ppb	84
41) Carbon Tetrachloride	3.88	117	54445	9.361	ppb	95
42) Tert Amyl Methyl Ether	4.50	73	87517	9.645	ppb	95

(#) = qualifier out of range (m) = manual integration



Data File : M:\LOKI\DATA\181213\1216L29.D Vial: 28  
 Acq On : 16 Dec 18 22:13 Operator: PM,DG,SV,CMM,KV  
 Sample : Ending CCV 10ug/L 12/16/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 8:08 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.83	56	68382	9.970	ppb	# 94
44) 1,2-DCA	4.26	62	62690	10.581	ppb	97
45) Benzene	4.20	78	158235	9.782	ppb	98
46) TCE	5.18	130	46937	11.076	ppb	94
47) 2-Pentanone	5.53	43	389331	130.917	ppb	100
48) 1,2-Dichloropropane	5.46	63	44649	9.954	ppb	100
49) Bromodichloromethane	5.87	83	61767	9.862	ppb	98
50) Methyl Cyclohexane	5.40	83	34272	8.836	ppb	92
51) Dibromomethane	5.62	93	32817	10.188	ppb	96
52) 2-Chloroethyl vinyl ether	6.35	43	6796	7.202	ppb	# 85
53) MIBK (methyl isobutyl ket	6.70	43	40662	10.932	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	31176	10.070	ppb	92
55) Cis-1,3-Dichloropropene	6.45	75	60295	9.092	ppb	93
56) Toluene	6.81	91	175669	10.452	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	58126	9.595	ppb	96
58) 1,1,2-TCA	7.32	83	38578	9.943	ppb	96
59) 2-Hexanone	7.68	43	23437	9.904	ppb	98
62) 1,2-EDB	7.82	107	46025	9.396	ppb	98
63) Tetrachloroethene	7.44	166	48801	8.917	ppb	96
64) 1-Chlorohexane	8.45	91	33844	8.739	ppb	96
65) 1,1,1,2-Tetrachloroethane	8.52	131	49518	9.553	ppb	90
66) m&p-Xylene	8.70	91	248217	18.071	ppb	97
67) o-Xylene	9.12	106	59679	9.192	ppb	94
68) Styrene	9.14	104	56816	7.996	ppb	96
70) 1,3-Dichloropropane	7.50	76	71884	9.311	ppb	98
71) Dibromochloromethane	7.74	129	52837	9.455	ppb	96
72) Chlorobenzene	8.40	112	117735	9.150	ppb	99
73) Ethylbenzene	8.56	91	164319	9.021	ppb	97
74) Bromoform	9.30	173	41727	9.850	ppb	96
76) Isopropylbenzene	9.54	105	141442	9.378	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.88	83	61875	8.889	ppb	93
78) 1,2,3-Trichloropropane	9.90	110	12089	10.377	ppb	99
79) t-1,4-Dichloro-2-Butene	9.94	53	12081	9.626	ppb	99
80) Bromobenzene	9.81	156	52727	9.833	ppb	95
81) n-Propylbenzene	9.99	91	110440	9.370	ppb	100
82) 4-Ethyltoluene	10.11	105	140315	9.896	ppb	99
83) 2-Chlorotoluene	10.04	91	121712	9.775	ppb	97
84) 1,3,5-Trimethylbenzene	10.19	105	83936	9.200	ppb	99
85) 4-Chlorotoluene	10.16	91	141434	10.141	ppb	96
86) Tert-Butylbenzene	10.53	119	104222	9.259	ppb	98
87) 1,2,4-Trimethylbenzene	10.58	105	127581	9.688	ppb	99
88) Sec-Butylbenzene	10.76	105	159062	9.728	ppb	100
89) p-Isopropyltoluene	10.93	119	141527	9.345	ppb	98
90) Benzyl Chloride	11.10	91	45235	5.998	ppb	95
91) 1,3-DCB	10.84	146	99823	10.043	ppb	99
92) 1,4-DCB	10.94	146	103452	9.841	ppb	97
93) n-Butylbenzene	11.36	91	107164	8.560	ppb	98
94) 1,2-DCB	11.32	146	95498	9.803	ppb	97
95) Hexachloroethane	11.59	117	28955	8.984	ppb	93
96) 1,2-Dibromo-3-chloropropan	12.15	75	11724	9.982	ppb	96
97) 1,2,4-Trichlorobenzene	13.04	180	55661	8.961	ppb	96
98) Hexachlorobutadiene	13.25	225	29900	8.860	ppb	96
99) Naphthalene	13.29	128	118720	9.075	ppb	97
100) 1,2,3-Trichlorobenzene	13.54	180	31096	8.464	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

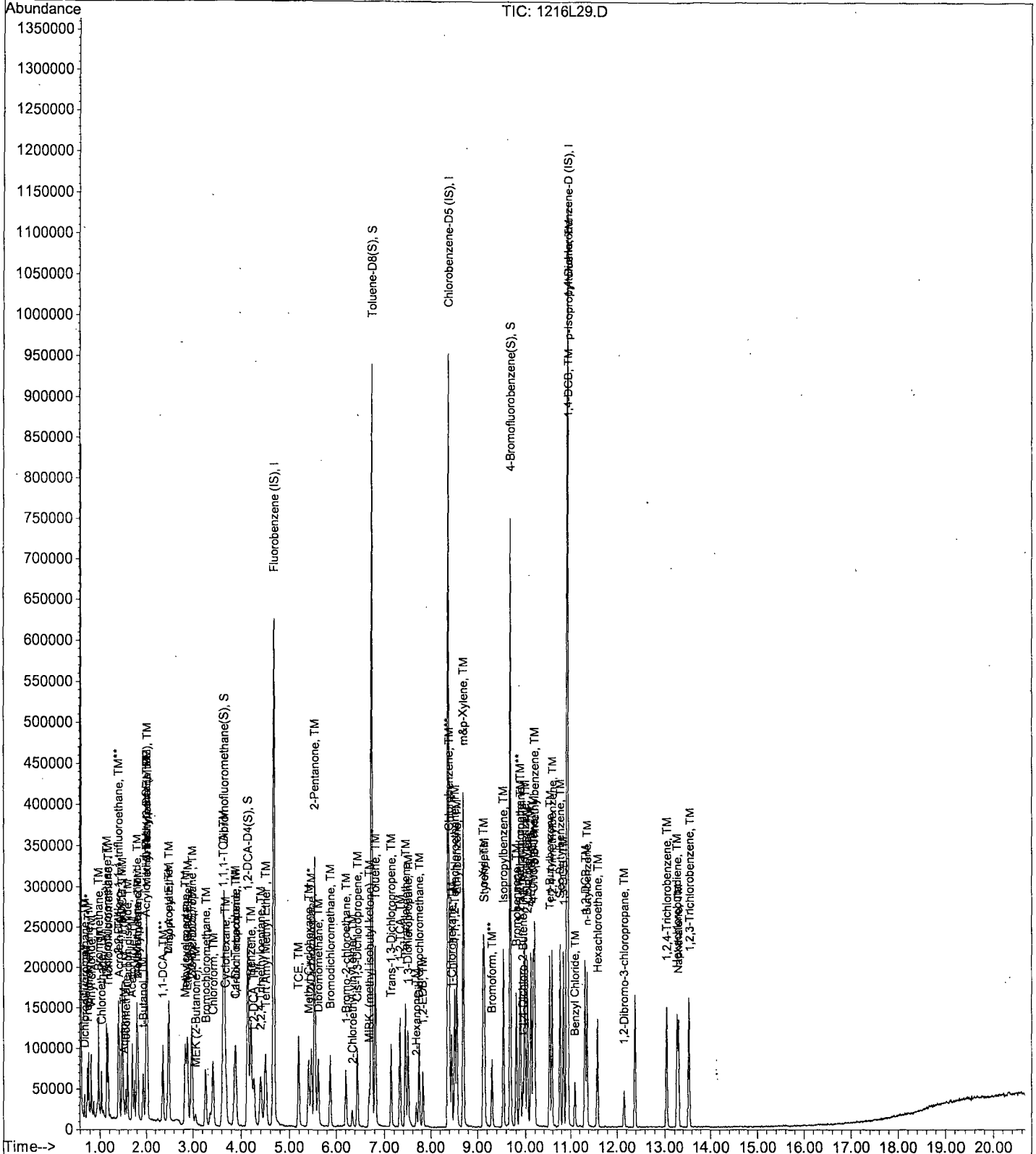
Data File : M:\LOKI\DATA\181213\1216L29.D  
Acq On : 16 Dec 18 22:13  
Sample : Ending CCV 10ug/L 12/16/18  
Misc : IS&S 11/8/18

Vial: 28  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 8:08 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1216L33.D

	Compound	MEAN	CCRF	%D	%Drift	
1	I Fluorobenzene (IS)	ISTD			I	
2	TM Dichlorodifluoromethane	0.2110	0.1382	35	TM	*NT
3	TM Freon 114	0.1841	0.1017	45	TM	*NT
4	TM**L Chloromethane	0.4825	0.3312	31	TM**L	22 *NT
5	TM* Vinyl chloride	0.3813	0.2948	23	TM*	*NT
6	TM Bromomethane	0.3148	0.2966	5.8	TM	
7	TML Chloroethane	0.2845	0.2279	20	TML	12
8	TM Dichlorofluoromethane	0.6522	0.5753	12	TM	
9	TM Trichlorofluoromethane	0.5159	0.4333	16	TM	
10	TM Acrolein	0.0356	0.0182	49	TM	*NT
11	TML Acetone	0.1533	0.1346	12	TML	11
12	TM Freon-113	0.2495	0.2092	16	TM	
13	TM* 1,1-DCE	0.1615	0.1350	16	TM*	
14	TM t-Butanol	0.0420	0.0350	17	TM	
15	TM Acetonitrile	0.0611	0.0577	5.6	TM	
16	TM Methyl Acetate	0.4937	0.4438	10	TM	
17	TML Iodomethane	0.1959	0.1308	33	TML	29 *NT
18	TML Acrylonitrile	0.1668	0.1473	12	TML	5.8
19	TM Methylene chloride	0.4372	0.4026	7.9	TM	
20	TM Carbon disulfide	0.9826	0.8103	18	TM	
21	TM Methyl t-butyl ether (MtBE)	0.9440	0.8879	5.9	TM	
22	TM Trans-1,2-DCE	0.3759	0.3362	11	TM	
23	TM Diisopropyl Ether	1.037	0.9645	7.0	TM	
24	TM** 2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.3162	3.6	TM**	
25	TM** 1,1-DCA	0.7329	0.6684	8.8	TM**	
26	TM Vinyl Acetate	0.3863	0.2747	29	TM	*NT
27	TM Ethyl tert Butyl Ether	0.8226	0.7847	4.6	TM	
28	TML MEK (2-Butanone)	0.1690	0.1601	5.2	TML	0.17
29	TM Cis-1,2-DCE	0.1776	0.1737	2.2	TM	
30	TM 2,2-Dichloropropane	0.5224	0.3960	24	TM	*NT
31	TML 2-Methylpentane	0.2114	0.1830	13	TML	5.4
32	TM 3-Methylpentane	0.6752	0.6161	8.7	TM	
33	TM* Chloroform	0.6547	0.6358	2.9	TM*	
34	TM Bromochloromethane	0.2045	0.1969	3.7	TM	
35	S Dibromofluoromethane(S)	0.6413	0.6266	2.3	S	
36	TM 1,1,1-TCA	0.5399	0.5092	5.7	TM	
37	TML Cyclohexane	0.2395	0.1795	25	TML	18
38	TM 1,1-Dichloropropene	0.3778	0.3291	13	TM	
39	TM 2,2,4-Trimethylpentane	0.5590	0.3936	30	TM	*NT
40	S 1,2-DCA-D4(S)	0.7344	0.7126	3.0	S	

Average

15.2

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1216L33.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.4819	0.4401	8.7	TM
42	TM	Tert Amyl Methyl Ether	0.7517	0.6595	12	TM
43	TM	Methylcyclopentane	0.5682	0.5506	3.1	TM
44	TM	1,2-DCA	0.4909	0.4779	2.6	TM
45	TM	Benzene	1.340	1.242	7.3	TM
46	TM	TCE	0.3511	0.3381	3.7	TM
47	TM	2-Pentanone	0.2464	0.2366	4.0	TM
48	TM*	1,2-Dichloropropane	0.3716	0.3455	7.0	TM*
49	TM	Bromodichloromethane	0.5189	0.5268	1.5	TM
50	TM	Methyl Cyclohexane	0.3213	0.2499	22	TM
51	TM	Dibromomethane	0.2669	0.2687	0.68	TM
52	TM	2-Chloroethyl vinyl ether	0.0782	0.0071	91	TM
53	TML	MIBK (methyl isobutyl ketone)	0.3634	0.2639	27	TML 16
54	TM	1-Bromo-2-chloroethane	0.2565	0.2443	4.7	TM
55	TM	Cis-1,3-Dichloropropene	0.5494	0.4567	17	TM
56	TM*	Toluene	1.392	1.384	0.64	TM*
57	TM	Trans-1,3-Dichloropropene	0.5019	0.4570	8.9	TM
58	TM	1,1,2-TCA	0.3214	0.3038	5.5	TM
59	TM	2-Hexanone	0.1960	0.1705	13	TM
60	I	Chlorobenzene-D5 (IS)	ISTD			I
61	S	Toluene-D8(S)	2.009	2.023	0.69	S
62	TM	1,2-EDB	0.3673	0.3741	1.9	TM
63	TM	Tetrachloroethene	0.4103	0.3712	9.5	TM
64	TM	1-Chlorohexane	0.2904	0.2484	14	TM
65	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3786	2.6	TM
66	TM	m&p-Xylene	1.030	0.9388	8.8	TM
67	TM	o-Xylene	0.4868	0.4519	7.2	TM
68	TML	Styrene	0.4775	0.4567	4.4	TML 15
69	S	4-Bromofluorobenzene(S)	0.7261	0.7274	0.17	S
70	TM	1,3-Dichloropropane	0.5789	0.5655	2.3	TM
71	TM	Dibromochloromethane	0.4190	0.4191	0.03	TM
72	TM**	Chlorobenzene	0.9647	0.8937	7.4	TM**
73	TM*	Ethylbenzene	1.366	1.233	9.7	TM*
74	TM**	Bromoform	0.3176	0.3136	1.3	TM**
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
76	TM	Isopropylbenzene	2.022	1.773	12	TM
77	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.8488	9.0	TM**
78	TM	1,2,3-Trichloropropane	0.1562	0.1515	3.0	TM
79	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1491	11	TM
80	TM	Bromobenzene	0.7188	0.6831	5.0	TM

Average

9.2

\*NT  
\*NT

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1216L33.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	n-Propylbenzene	1.580	1.390	12	TM	
82	TM	4-Ethyltoluene	1.901	1.676	12	TM	
83	TM	2-Chlorotoluene	1.669	1.511	9.5	TM	
84	TML	1,3,5-Trimethylbenzene	1.091	1.076	1.4	TML	12
85	TM	4-Chlorotoluene	1.870	1.790	4.3	TM	
86	TM	Tert-Butylbenzene	1.509	1.335	12	TM	
87	TM	1,2,4-Trimethylbenzene	1.765	1.583	10	TM	
88	TM	Sec-Butylbenzene	2.192	1.943	11	TM	
89	TM	p-Isopropyltoluene	2.030	1.801	11	TM	
90	TM	Benzyl Chloride	1.011	0.5701	44	TM	*NT
91	TM	1,3-DCB	1.332	1.247	6.4	TM	
92	TM	1,4-DCB	1.409	1.289	8.5	TM	
93	TM	n-Butylbenzene	1.678	1.398	17	TM	
94	TM	1,2-DCB	1.306	1.224	6.2	TM	
95	TM	Hexachloroethane	0.4320	0.3670	15	TM	
96	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1529	11	TML	3.3
97	TM	1,2,4-Trichlorobenzene	0.8326	0.6869	18	TM	
98	TM	Hexachlorobutadiene	0.4524	0.3996	12	TM	
99	TM	Naphthalene	1.754	1.392	21	TM	*NT
100	TM	1,2,3-Trichlorobenzene	0.4925	0.3892	21	TM	*NT
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Average

13.2

Data File : M:\LOKI\DATA\181213\1216L33.D  
 Acq On : 17 Dec 18 00:08  
 Sample : 181216B CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 32  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	297728	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	310464	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	187648	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.65	111	186569	24.429	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.716%	
40) 1,2-DCA-D4(S)	4.14	65	212150	24.255	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.020%	
61) Toluene-D8(S)	6.74	98	628014	25.172	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.688%	
69) 4-Bromofluorobenzene(S)	9.68	95	225829	25.043	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.172%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	16456	6.550	ppb	99
3) Freon 114	0.75	85	12117	5.525	ppb	94
4) Chloromethane	0.77	50	39449	7.845	ppb	94
5) Vinyl chloride	0.82	62	35112	7.732	ppb	99
6) Bromomethane	0.98	94	35324	9.421	ppb	97
7) Chloroethane	1.03	64	27140	8.821	ppb	99
8) Dichlorofluoromethane	1.14	67	68514	8.820	ppb	100
9) Trichlorofluoromethane	1.17	101	51603	8.399	ppb	99
10) Acrolein	1.41	56	27120	64.044	ppb	# 97
11) Acetone	1.51	43	16028	8.855	ppb	96
12) Freon-113	1.48	101	24911	8.385	ppb	99
13) 1,1-DCE	1.46	63	16077	8.357	ppb	92
14) t-Butanol	1.93	59	52035	104.036	ppb	99
15) Acetonitrile	1.69	41	85880	117.996	ppb	97
16) Methyl Acetate	1.82	43	52853	8.989	ppb	100
17) Iodomethane	1.55	142	15582	7.061	ppb	99
18) Acrylonitrile	1.99	52	17546	10.583	ppb	98
19) Methylene chloride	1.79	84	47944	9.209	ppb	99
20) Carbon disulfide	1.59	76	96495	8.246	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	105744	9.406	ppb	98
22) Trans-1,2-DCE	2.00	96	40042	8.945	ppb	97
23) Diisopropyl Ether	2.49	45	114867	9.303	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	37661	9.635	ppb	91
25) 1,1-DCA	2.36	63	79602	9.120	ppb	98
26) Vinyl Acetate	2.47	43	32713	7.111	ppb	97
27) Ethyl tert Butyl Ether	2.88	59	93453	9.540	ppb	100
28) MEK (2-Butanone)	3.05	43	19067	9.983	ppb	# 85
29) Cis-1,2-DCE	2.99	96	20688	9.783	ppb	95
30) 2,2-Dichloropropane	2.96	77	47164	7.580	ppb	96
31) 2-Methylpentane	1.82	71	21790	9.457	ppb	92
32) 3-Methylpentane	2.01	57	73372	9.125	ppb	99
33) Chloroform	3.42	83	75717	9.711	ppb	100
34) Bromochloromethane	3.27	128	23455	9.631	ppb	95
36) 1,1,1-TCA	3.63	97	60645	9.432	ppb	97
37) Cyclohexane	3.68	41	21377	8.212	ppb	86
38) 1,1-Dichloropropene	3.90	75	39187	8.711	ppb	95
39) 2,2,4-Trimethylpentane	4.40	57	46873	7.041	ppb	# 81
41) Carbon Tetrachloride	3.87	117	52415	9.134	ppb	91
42) Tert Amyl Methyl Ether	4.50	73	78544	8.774	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L33.D  
 Acq On : 17 Dec 18 00:08  
 Sample : 181216B CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 32  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	65573	9.690	ppb	100
44) 1,2-DCA	4.26	62	56912	9.735	ppb	99
45) Benzene	4.20	78	147953	9.270	ppb	99
46) TCE	5.19	130	40263	9.630	ppb	92
47) 2-Pentanone	5.53	43	352244	120.051	ppb	100
48) 1,2-Dichloropropane	5.47	63	41146	9.298	ppb	99
49) Bromodichloromethane	5.87	83	62736	10.153	ppb	96
50) Methyl Cyclohexane	5.41	83	29756	7.776	ppb	99
51) Dibromomethane	5.62	93	31997	10.068	ppb	94
52) 2-Chloroethyl vinyl ether	6.31	43	851	0.914	ppb #	30
53) MIBK (methyl isobutyl ket	6.69	43	31429	8.353	ppb	94
54) 1-Bromo-2-chloroethane	6.21	63	29096	9.526	ppb	99
55) Cis-1,3-Dichloropropene	6.45	75	54387	8.312	ppb	96
56) Toluene	6.82	91	164763	9.936	ppb	96
57) Trans-1,3-Dichloropropene	7.14	75	54423	9.105	ppb	98
58) 1,1,2-TCA	7.32	83	36185	9.453	ppb	98
59) 2-Hexanone	7.68	43	20302	8.696	ppb #	95
62) 1,2-EDB	7.82	107	46456	10.186	ppb	96
63) Tetrachloroethene	7.44	166	46101	9.047	ppb	98
64) 1-Chlorohexane	8.45	91	30853	8.556	ppb	96
65) 1,1,1,2-Tetrachloroethane	8.52	131	47019	9.742	ppb	90
66) m&p-Xylene	8.70	91	233173	18.232	ppb	98
67) o-Xylene	9.12	106	56114	9.282	ppb	96
68) Styrene	9.15	104	56712	8.476	ppb	98
70) 1,3-Dichloropropane	7.50	76	70225	9.769	ppb	96
71) Dibromochloromethane	7.74	129	52049	10.003	ppb	98
72) Chlorobenzene	8.40	112	110983	9.264	ppb	100
73) Ethylbenzene	8.56	91	153162	9.031	ppb	98
74) Bromoform	9.30	173	38944	9.874	ppb	98
76) Isopropylbenzene	9.54	105	133114	8.772	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.88	83	63712	9.097	ppb	92
78) 1,2,3-Trichloropropane	9.90	110	11373	9.702	ppb	87
79) t-1,4-Dichloro-2-Butene	9.95	53	11188	8.860	ppb	89
80) Bromobenzene	9.81	156	51274	9.503	ppb	100
81) n-Propylbenzene	9.99	91	104312	8.795	ppb	99
82) 4-Ethyltoluene	10.12	105	125771	8.816	ppb	97
83) 2-Chlorotoluene	10.04	91	113394	9.051	ppb	99
84) 1,3,5-Trimethylbenzene	10.19	105	80744	8.807	ppb	96
85) 4-Chlorotoluene	10.16	91	134340	9.573	ppb	97
86) Tert-Butylbenzene	10.53	119	100208	8.848	ppb	98
87) 1,2,4-Trimethylbenzene	10.58	105	118853	8.969	ppb	98
88) Sec-Butylbenzene	10.76	105	145818	8.863	ppb	99
89) p-Isopropyltoluene	10.93	119	135152	8.869	ppb	98
90) Benzyl Chloride	11.10	91	42792	5.639	ppb	98
91) 1,3-DCB	10.84	146	93586	9.358	ppb	97
92) 1,4-DCB	10.94	146	96747	9.147	ppb	98
93) n-Butylbenzene	11.37	91	104911	8.329	ppb	97
94) 1,2-DCB	11.32	146	91901	9.376	ppb	98
95) Hexachloroethane	11.59	117	27545	8.494	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.15	75	11476	9.672	ppb	91
97) 1,2,4-Trichlorobenzene	13.04	180	51558	8.250	ppb	95
98) Hexachlorobutadiene	13.25	225	29997	8.835	ppb	91
99) Naphthalene	13.29	128	104505	7.939	ppb	99
100) 1,2,3-Trichlorobenzene	13.55	180	29216	7.903	ppb	92

(#) = qualifier out of range (m) = manual integration





VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1216L40.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TM	Dichlorodifluoromethane	0.2110	0.1296	39	TM
3	TM	Freon 114	0.1841	0.0907	51	TM
4	TM**L	Chloromethane	0.4825	0.3646	24	TM**L 13
5	TM*	Vinyl chloride	0.3813	0.3252	15	TM*
6	TM	Bromomethane	0.3148	0.3226	2.5	TM
7	TML	Chloroethane	0.2845	0.2345	18	TML 9.1
8	TM	Dichlorofluoromethane	0.6522	0.5785	11	TM
9	TM	Trichlorofluoromethane	0.5159	0.4594	11	TM
10	TM	Acrolein	0.0356	0.0190	46	TM
11	TML	Acetone	0.1533	0.1397	8.9	TML 6.7
12	TM	Freon-113	0.2495	0.1989	20	TM
13	TM*	1,1-DCE	0.1615	0.1345	17	TM*
14	TM	t-Butanol	0.0420	0.0344	18	TM
15	TM	Acetonitrile	0.0611	0.0575	5.9	TM
16	TM	Methyl Acetate	0.4937	0.3718	25	TM
17	TML	Iodomethane	0.1959	0.1666	15	TML 15
18	TML	Acrylonitrile	0.1668	0.1345	19	TML 4.3
19	TM	Methylene chloride	0.4372	0.4159	4.9	TM
20	TM	Carbon disulfide	0.9826	0.8029	18	TM
21	TM	Methyl t-butyl ether (MtBE)	0.9440	0.8903	5.7	TM
22	TM	Trans-1,2-DCE	0.3759	0.3296	12	TM
23	TM	Diisopropyl Ether	1.037	0.9793	5.5	TM
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.3374	2.8	TM**
25	TM**	1,1-DCA	0.7329	0.6925	5.5	TM**
26	TM	Vinyl Acetate	0.3863	0.2685	30	TM
27	TM	Ethyl tert Butyl Ether	0.8226	0.8184	0.50	TM
28	TML	MEK (2-Butanone)	0.1690	0.1659	1.8	TML 3.9
29	TM	Cis-1,2-DCE	0.1776	0.1651	7.0	TM
30	TM	2,2-Dichloropropane	0.5224	0.3732	29	TM
31	TML	2-Methylpentane	0.2114	0.1545	27	TML 20
32	TM	3-Methylpentane	0.6752	0.5585	17	TM
33	TM*	Chloroform	0.6547	0.6432	1.8	TM*
34	TM	Bromochloromethane	0.2045	0.2058	0.65	TM
35	S	Dibromofluoromethane(S)	0.6413	0.6408	0.07	S
36	TM	1,1,1-TCA	0.5399	0.5013	7.2	TM
37	TML	Cyclohexane	0.2395	0.1575	34	TML 28
38	TM	1,1-Dichloropropene	0.3778	0.3387	10	TM
39	TM	2,2,4-Trimethylpentane	0.5590	0.2990	47	TM
40	S	1,2-DCA-D4(S)	0.7344	0.7276	0.93	S

\*NT

Average

15.8

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1216L40.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.4819	0.4253	12	TM
42	TM	Tert Amyl Methyl Ether	0.7517	0.6767	10.0	TM
43	TM	Methylcyclopentane	0.5682	0.5360	5.7	TM
44	TM	1,2-DCA	0.4909	0.4754	3.2	TM
45	TM	Benzene	1.340	1.262	5.8	TM
46	TM	TCE	0.3511	0.3458	1.5	TM
47	TM	2-Pentanone	0.2464	0.2276	7.6	TM
48	TM*	1,2-Dichloropropane	0.3716	0.3464	6.8	TM*
49	TM	Bromodichloromethane	0.5189	0.5066	2.4	TM
50	TM	Methyl Cyclohexane	0.3213	0.2246	30	TM
51	TM	Dibromomethane	0.2669	0.2634	1.3	TM
52	TM	2-Chloroethyl vinyl ether	0.0782	0.0010	99	TM
53	TML	MIBK (methyl isobutyl ketone)	0.3634	0.2707	26	TML 14
54	TM	1-Bromo-2-chloroethane	0.2565	0.2286	11	TM
55	TM	Cis-1,3-Dichloropropene	0.5494	0.4641	16	TM
56	TM*	Toluene	1.392	1.360	2.4	TM*
57	TM	Trans-1,3-Dichloropropene	0.5019	0.4568	9.0	TM
58	TM	1,1,2-TCA	0.3214	0.3109	3.3	TM
59	TM	2-Hexanone	0.1960	0.1593	19	TM
60	I	Chlorobenzene-D5 (IS)	ISTD			I
61	S	Toluene-D8(S)	2.009	1.966	2.1	S
62	TM	1,2-EDB	0.3673	0.3424	6.8	TM
63	TM	Tetrachloroethene	0.4103	0.3592	12	TM
64	TM	1-Chlorohexane	0.2904	0.2398	17	TM
65	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3783	2.7	TM
66	TM	m&p-Xylene	1.030	0.9197	11	TM
67	TM	o-Xylene	0.4868	0.4479	8.0	TM
68	TML	Styrene	0.4775	0.4429	7.2	TML 17
69	S	4-Bromofluorobenzene(S)	0.7261	0.7094	2.3	S
70	TM	1,3-Dichloropropane	0.5789	0.5454	5.8	TM
71	TM	Dibromochloromethane	0.4190	0.3992	4.7	TM
72	TM**	Chlorobenzene	0.9647	0.8716	9.7	TM**
73	TM*	Ethylbenzene	1.366	1.187	13	TM*
74	TM**	Bromoform	0.3176	0.3062	3.6	TM**
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
76	TM	Isopropylbenzene	2.022	1.821	10.0	TM
77	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.8552	8.4	TM**
78	TM	1,2,3-Trichloropropane	0.1562	0.1591	1.9	TM
79	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1433	15	TM
80	TM	Bromobenzene	0.7188	0.7077	1.6	TM

\*NT

Average

10.9

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1216L40.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	n-Propylbenzene	1.580	1.419	10	TM	
82	TM	4-Ethyltoluene	1.901	1.741	8.4	TM	
83	TM	2-Chlorotoluene	1.669	1.590	4.7	TM	
84	TML	1,3,5-Trimethylbenzene	1.091	1.076	1.4	TML	12
85	TM	4-Chlorotoluene	1.870	1.840	1.6	TM	
86	TM	Tert-Butylbenzene	1.509	1.335	12	TM	
87	TM	1,2,4-Trimethylbenzene	1.765	1.631	7.6	TM	
88	TM	Sec-Butylbenzene	2.192	2.060	6.0	TM	
89	TM	p-Isopropyltoluene	2.030	1.821	10	TM	
90	TM	Benzyl Chloride	1.011	0.5732	43	TM	
91	TM	1,3-DCB	1.332	1.316	1.2	TM	
92	TM	1,4-DCB	1.409	1.387	1.6	TM	
93	TM	n-Butylbenzene	1.678	1.397	17	TM	
94	TM	1,2-DCB	1.306	1.265	3.1	TM	
95	TM	Hexachloroethane	0.4320	0.4109	4.9	TM	
96	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1482	14	TML	6.7
97	TM	1,2,4-Trichlorobenzene	0.8326	0.7414	11	TM	
98	TM	Hexachlorobutadiene	0.4524	0.4132	8.7	TM	
99	TM	Naphthalene	1.754	1.463	17	TM	
100	TM	1,2,3-Trichlorobenzene	0.4925	0.4485	8.9	TM	
101							
102							
103							
104							
105							
106							
107							
108							
109							
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111							
112							
113							
114							
115							
116							
117							
118							
119							
120							

Average

9.6

Data File : M:\LOKI\DATA\181213\1216L40.D  
 Acq On : 17 Dec 18 3:27  
 Sample : Ending CCV 10ug/L 12/14/18  
 Misc : IS&S 11/8/18

Vial: 39  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	277632	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	298688	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	172224	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	177915	24.982	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.928%	
40) 1,2-DCA-D4(S)	4.14	65	202016	24.769	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.076%	
61) Toluene-D8(S)	6.74	98	587245	24.466	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.864%	
69) 4-Bromofluorobenzene(S)	9.68	95	211897	24.425	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.700%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	14388	6.141	ppb	95
3) Freon 114	0.75	85	10069	4.924	ppb	97
4) Chloromethane	0.77	50	40495	8.687	ppb	97
5) Vinyl chloride	0.82	62	36113	8.528	ppb	95
6) Bromomethane	0.98	94	35828	10.247	ppb	96
7) Chloroethane	1.03	64	26045	9.093	ppb	93
8) Dichlorofluoromethane	1.14	67	64248	8.870	ppb	96
9) Trichlorofluoromethane	1.17	101	51020	8.905	ppb	98
10) Acrolein	1.41	56	26408	66.877	ppb	# 98
11) Acetone	1.51	43	15511	9.334	ppb	# 86
12) Freon-113	1.48	101	22092	7.974	ppb	93
13) 1,1-DCE	1.46	63	14941	8.329	ppb	96
14) t-Butanol	1.93	59	47817	102.523	ppb	97
15) Acetonitrile	1.69	41	79851	117.654	ppb	98
16) Methyl Acetate	1.82	43	41294	7.532	ppb	100
17) Iodomethane	1.55	142	18504	8.484	ppb	97
18) Acrylonitrile	1.99	52	14937	9.571	ppb	88
19) Methylene chloride	1.79	84	46190	9.514	ppb	92
20) Carbon disulfide	1.59	76	89160	8.171	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	98869	9.431	ppb	99
22) Trans-1,2-DCE	2.00	96	36608	8.770	ppb	89
23) Diisopropyl Ether	2.49	45	108753	9.445	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	37470	10.280	ppb	94
25) 1,1-DCA	2.36	63	76907	9.449	ppb	99
26) Vinyl Acetate	2.46	43	29815	6.951	ppb	97
27) Ethyl tert Butyl Ether	2.88	59	90889	9.950	ppb	95
28) MEK (2-Butanone)	3.06	43	18419	10.390	ppb	100
29) Cis-1,2-DCE	2.99	96	18336	9.299	ppb	99
30) 2,2-Dichloropropane	2.96	77	41446	7.144	ppb	98
31) 2-Methylpentane	1.81	71	17154	8.045	ppb	92
32) 3-Methylpentane	2.01	57	62023	8.272	ppb	# 96
33) Chloroform	3.42	83	71431	9.824	ppb	98
34) Bromochloromethane	3.27	128	22859	10.065	ppb	96
36) 1,1,1-TCA	3.63	97	55669	9.285	ppb	99
37) Cyclohexane	3.68	41	17490	7.181	ppb	92
38) 1,1-Dichloropropene	3.89	75	37618	8.967	ppb	96
39) 2,2,4-Trimethylpentane	4.40	57	33205	5.349	ppb	# 71
41) Carbon Tetrachloride	3.87	117	47226	8.825	ppb	97
42) Tert Amyl Methyl Ether	4.50	73	75154	9.003	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L40.D  
 Acq On : 17 Dec 18 3:27  
 Sample : Ending CCV 10ug/L 12/14/18  
 Misc : IS&S 11/8/18

Vial: 39  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	59525	9.433	ppb	94
44) 1,2-DCA	4.26	62	52795	9.685	ppb	99
45) Benzene	4.21	78	140168	9.418	ppb	98
46) TCE	5.19	130	38405	9.850	ppb	94
47) 2-Pentanone	5.53	43	315967	115.481	ppb	99
48) 1,2-Dichloropropane	5.47	63	38464	9.321	ppb	99
49) Bromodichloromethane	5.87	83	56257	9.763	ppb	96
50) Methyl Cyclohexane	5.40	83	24941	6.989	ppb	97
51) Dibromomethane	5.62	93	29254	9.871	ppb	99
52) 2-Chloroethyl vinyl ether	6.33	43	114	0.131	ppb	# 30
53) MIBK (methyl isobutyl ket	6.69	43	30058	8.592	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	25392	8.915	ppb	91
55) Cis-1,3-Dichloropropene	6.45	75	51544	8.448	ppb	94
56) Toluene	6.82	91	150990	9.764	ppb	99
57) Trans-1,3-Dichloropropene	7.14	75	50732	9.102	ppb	100
58) 1,1,2-TCA	7.33	83	34528	9.673	ppb	99
59) 2-Hexanone	7.68	43	17689	8.125	ppb	97
62) 1,2-EDB	7.82	107	40910	9.323	ppb	99
63) Tetrachloroethene	7.44	166	42910	8.752	ppb	98
64) 1-Chlorohexane	8.45	91	28646	8.257	ppb	99
65) 1,1,1,2-Tetrachloroethane	8.52	131	45197	9.734	ppb	93
66) m&p-Xylene	8.70	91	219755	17.860	ppb	99
67) o-Xylene	9.12	106	53515	9.201	ppb	90
68) Styrene	9.14	104	52920	8.261	ppb	99
70) 1,3-Dichloropropane	7.50	76	65167	9.423	ppb	97
71) Dibromochloromethane	7.74	129	47691	9.527	ppb	98
72) Chlorobenzene	8.40	112	104132	9.034	ppb	99
73) Ethylbenzene	8.56	91	141842	8.693	ppb	97
74) Bromoform	9.30	173	36589	9.642	ppb	96
76) Isopropylbenzene	9.54	105	125421	9.005	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.89	83	58914	9.165	ppb	98
78) 1,2,3-Trichloropropane	9.90	110	10959	10.186	ppb	90
79) t-1,4-Dichloro-2-Butene	9.95	53	9873	8.519	ppb	86
80) Bromobenzene	9.81	156	48750	9.845	ppb	100
81) n-Propylbenzene	9.99	91	97736	8.979	ppb	96
82) 4-Ethyltoluene	10.12	105	119921	9.158	ppb	97
83) 2-Chlorotoluene	10.04	91	109548	9.527	ppb	98
84) 1,3,5-Trimethylbenzene	10.19	105	74104	8.807	ppb	96
85) 4-Chlorotoluene	10.17	91	126772	9.843	ppb	96
86) Tert-Butylbenzene	10.53	119	91969	8.848	ppb	99
87) 1,2,4-Trimethylbenzene	10.58	105	112376	9.240	ppb	97
88) Sec-Butylbenzene	10.76	105	141909	9.398	ppb	96
89) p-Isopropyltoluene	10.93	119	125475	8.971	ppb	99
90) Benzyl Chloride	11.10	91	39489	5.670	ppb	95
91) 1,3-DCB	10.84	146	90680	9.879	ppb	99
92) 1,4-DCB	10.94	146	95544	9.842	ppb	98
93) n-Butylbenzene	11.36	91	96245	8.325	ppb	96
94) 1,2-DCB	11.32	146	87166	9.689	ppb	97
95) Hexachloroethane	11.59	117	28309	9.512	ppb	94
96) 1,2-Dibromo-3-chloropropan	12.16	75	10210	9.332	ppb	91
97) 1,2,4-Trichlorobenzene	13.04	180	51075	8.904	ppb	99
98) Hexachlorobutadiene	13.26	225	28464	9.134	ppb	94
99) Naphthalene	13.29	128	100794	8.343	ppb	96
100) 1,2,3-Trichlorobenzene	13.55	180	30896	9.106	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

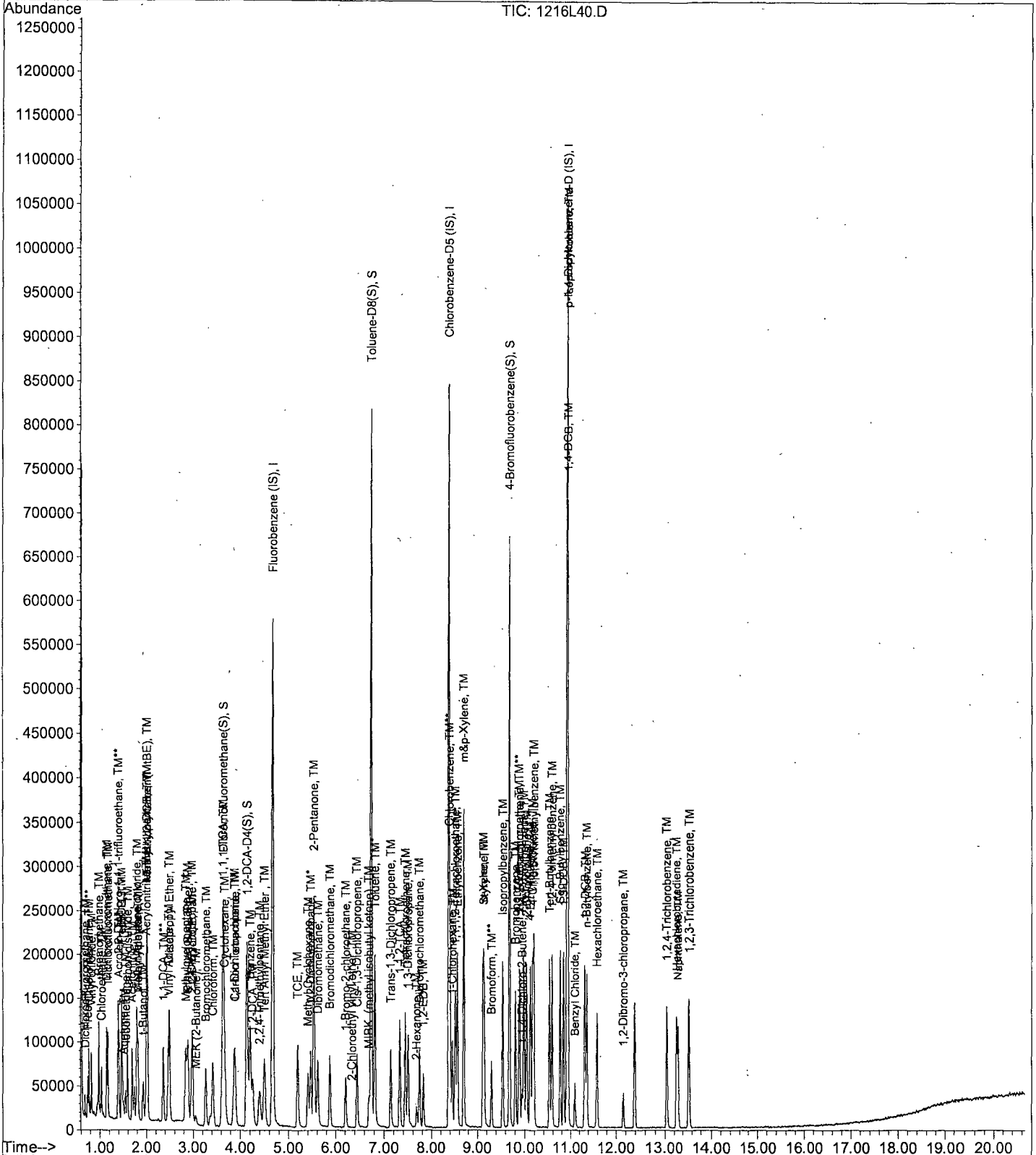
Data File : M:\LOKI\DATA\181213\1216L40.D  
 Acq On : 17 Dec 18 3:27  
 Sample : Ending CCV 10ug/L 12/14/18  
 Misc : IS&S 11/8/18

Vial: 39  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1217L04.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.2110	0.1472	30	TM	*NT
3	TM	Freon 114	0.1841	0.1143	38	TM	*NT
4	TM**L	Chloromethane	0.4825	0.3311	31	TM**L	22 *NT
5	TM*	Vinyl chloride	0.3813	0.3149	17	TM*	
6	TM	Bromomethane	0.3148	0.3359	6.7	TM	
7	TML	Chloroethane	0.2845	0.2320	18	TML	10
8	TM	Dichlorofluoromethane	0.6522	0.5482	16	TM	
9	TM	Trichlorofluoromethane	0.5159	0.4549	12	TM	
10	TM	Acrolein	0.0356	0.0168	53	TM	*NT
11	TML	Acetone	0.1533	0.1204	21	TML	25 *NT
12	TM	Freon-113	0.2495	0.2025	19	TM	
13	TM*	1,1-DCE	0.1615	0.1318	18	TM*	
14	TM	t-Butanol	0.0420	0.0321	24	TM	*
15	TM	Acetonitrile	0.0611	0.0531	13	TM	
16	TM	Methyl Acetate	0.4937	0.4612	6.6	TM	
17	TML	Iodomethane	0.1959	0.1050	46	TML	40 *NT
18	TML	Acrylonitrile	0.1668	0.1362	18	TML	2.9
19	TM	Methylene chloride	0.4372	0.3769	14	TM	
20	TM	Carbon disulfide	0.9826	0.7536	23	TM	*NT
21	TM	Methyl t-butyl ether (MtBE)	0.9440	0.8250	13	TM	
22	TM	Trans-1,2-DCE	0.3759	0.3150	16	TM	
23	TM	Diisopropyl Ether	1.037	0.8983	13	TM	
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.3124	4.8	TM**	
25	TM**	1,1-DCA	0.7329	0.6345	13	TM**	
26	TM	Vinyl Acetate	0.3863	0.3330	14	TM	
27	TM	Ethyl tert Butyl Ether	0.8226	0.7132	13	TM	
28	TML	MEK (2-Butanone)	0.1690	0.1319	22	TML	20
29	TM	Cis-1,2-DCE	0.1776	0.1583	11	TM	
30	TM	2,2-Dichloropropane	0.5224	0.4574	12	TM	
31	TML	2-Methylpentane	0.2114	0.1931	8.6	TML	0.41
32	TM	3-Methylpentane	0.6752	0.6093	9.8	TM	
33	TM*	Chloroform	0.6547	0.6087	7.0	TM*	
34	TM	Bromochloromethane	0.2045	0.1863	8.9	TM	
35	S	Dibromofluoromethane(S)	0.6413	0.6088	5.1	S	
36	TM	1,1,1-TCA	0.5399	0.4716	13	TM	
37	TML	Cyclohexane	0.2395	0.1665	30	TML	24 *NT
38	TM	1,1-Dichloropropene	0.3778	0.3247	14	TM	
39	TM	2,2,4-Trimethylpentane	0.5590	0.4444	21	TM	*NT
40	S	1,2-DCA-D4(S)	0.7344	0.6989	4.8	S	

Average

17.4

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1217L04.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	Carbon Tetrachloride	0.4819	0.4122	14	TM	
42	TM	Tert Amyl Methyl Ether	0.7517	0.6245	17	TM	
43	TM	Methylcyclopentane	0.5682	0.5009	12	TM	
44	TM	1,2-DCA	0.4909	0.4543	7.4	TM	
45	TM	Benzene	1.340	1.158	14	TM	
46	TM	TCE	0.3511	0.3220	8.3	TM	
47	TM	2-Pentanone	0.2464	0.2181	11	TM	
48	TM*	1,2-Dichloropropane	0.3716	0.3446	7.3	TM*	
49	TM	Bromodichloromethane	0.5189	0.4957	4.5	TM	
50	TM	Methyl Cyclohexane	0.3213	0.2529	21	TM	*NT
51	TM	Dibromomethane	0.2669	0.2286	14	TM	
52	TM	2-Chloroethyl vinyl ether	0.0782	0.0004	99	TM	*NT
53	TML	MIBK (methyl isobutyl ketone)	0.3634	0.2706	26	TML	14
54	TM	1-Bromo-2-chloroethane	0.2565	0.2183	15	TM	
55	TM	Cis-1,3-Dichloropropene	0.5494	0.4470	19	TM	
56	TM*	Toluene	1.392	1.262	9.3	TM*	
57	TM	Trans-1,3-Dichloropropene	0.5019	0.4384	13	TM	
58	TM	1,1,2-TCA	0.3214	0.2971	7.6	TM	
59	TM	2-Hexanone	0.1960	0.1667	15	TM	
60	I	Chlorobenzene-D5 (IS)	ISTD			I	
61	S	Toluene-D8(S)	2.009	1.898	5.5	S	
62	TM	1,2-EDB	0.3673	0.3158	14	TM	
63	TM	Tetrachloroethene	0.4103	0.3423	17	TM	
64	TM	1-Chlorohexane	0.2904	0.2480	15	TM	
65	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3409	12	TM	
66	TM	m&p-Xylene	1.030	0.8648	16	TM	
67	TM	o-Xylene	0.4868	0.3989	18	TM	
68	TML	Styrene	0.4775	0.4177	13	TML	21 *NT
69	S	4-Bromofluorobenzene(S)	0.7261	0.6900	5.0	S	
70	TM	1,3-Dichloropropane	0.5789	0.4920	15	TM	
71	TM	Dibromochloromethane	0.4190	0.3680	12	TM	
72	TM**	Chlorobenzene	0.9647	0.8087	16	TM**	
73	TM*	Ethylbenzene	1.366	1.120	18	TM*	
74	TM**	Bromoform	0.3176	0.2853	10	TM**	
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
76	TM	Isopropylbenzene	2.022	1.717	15	TM	
77	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.8272	11	TM**	
78	TM	1,2,3-Trichloropropane	0.1562	0.1378	12	TM	
79	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1488	12	TM	
80	TM	Bromobenzene	0.7188	0.6488	9.7	TM	

Average

15.3



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/17/18

Matrix: water

Instrument: Loki

Cal. Date: 12/13/18

Data File: 1217L04.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.580	1.347	15	TM
82	TM	4-Ethyltoluene	1.901	1.635	14	TM
83	TM	2-Chlorotoluene	1.669	1.509	9.6	TM
84	TML	1,3,5-Trimethylbenzene	1.091	1.014	7.1	TML 17
85	TM	4-Chlorotoluene	1.870	1.742	6.8	TM
86	TM	Tert-Butylbenzene	1.509	1.293	14	TM
87	TM	1,2,4-Trimethylbenzene	1.765	1.524	14	TM
88	TM	Sec-Butylbenzene	2.192	1.941	11	TM
89	TM	p-Isopropyltoluene	2.030	1.770	13	TM
90	TM	Benzyl Chloride	1.011	0.8562	15	TM
91	TM	1,3-DCB	1.332	1.224	8.2	TM
92	TM	1,4-DCB	1.409	1.290	8.4	TM
93	TM	n-Butylbenzene	1.678	1.422	15	TM
94	TM	1,2-DCB	1.306	1.168	11	TM
95	TM	Hexachloroethane	0.4320	0.3853	11	TM
96	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1376	20	TML 14
97	TM	1,2,4-Trichlorobenzene	0.8326	0.6899	17	TM
98	TM	Hexachlorobutadiene	0.4524	0.3935	13	TM
99	TM	Naphthalene	1.754	1.346	23	TM
100	TM	1,2,3-Trichlorobenzene	0.4925	0.3957	20	TM
101						
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115						
116						
117						
118						
119						
120						

\*NT

Average

13.3

Data File : M:\LOKI\DATA\181213\1217L04.D  
 Acq On : 17 Dec 18 11:00  
 Sample : 181217A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 11:22 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	299648	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	321792	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	184640	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	182437	23.735	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	94.940%	
40) 1,2-DCA-D4(S)	4.14	65	209432	23.791	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	95.164%	
61) Toluene-D8(S)	6.74	98	610653	23.614	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	94.456%	
69) 4-Bromofluorobenzene(S)	9.68	95	222024	23.755	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	95.020%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	17640	6.976	ppb	100
3) Freon.114	0.75	85	13694	6.204	ppb	85
4) Chloromethane	0.77	50	39689	7.842	ppb	93
5) Vinyl chloride	0.82	62	37746	8.259	ppb	99
6) Bromomethane	0.98	94	40256	10.668	ppb	93
7) Chloroethane	1.03	64	27806	8.989	ppb	92
8) Dichlorofluoromethane	1.14	67	65712	8.406	ppb	95
9) Trichlorofluoromethane	1.17	101	54525	8.817	ppb	99
10) Acrolein	1.41	56	25121	58.944	ppb	# 97
11) Acetone	1.51	43	14431	7.519	ppb	95
12) Freon-113	1.48	101	24266	8.115	ppb	97
13) 1,1-DCE	1.46	63	15798	8.160	ppb	92
14) t-Butanol	1.93	59	48079	95.511	ppb	100
15) Acetonitrile	1.68	41	79528	108.568	ppb	98
16) Methyl Acetate	1.82	43	55282	9.342	ppb	100
17) Iodomethane	1.55	142	12588	6.033	ppb	98
18) Acrylonitrile	1.98	52	16329	9.707	ppb	84
19) Methylene chloride	1.79	84	45174	8.621	ppb	94
20) Carbon disulfide	1.59	76	90331	7.670	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	98882	8.739	ppb	98
22) Trans-1,2-DCE	2.00	96	37761	8.382	ppb	98
23) Diisopropyl Ether	2.49	45	107670	8.664	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	37448	9.519	ppb	94
25) 1,1-DCA	2.36	63	76055	8.658	ppb	98
26) Vinyl Acetate	2.46	43	39915	8.621	ppb	99
27) Ethyl tert Butyl Ether	2.88	59	85484	8.670	ppb	94
28) MEK (2-Butanone)	3.05	43	15811	7.987	ppb	95
29) Cis-1,2-DCE	2.98	96	18976	8.916	ppb	96
30) 2,2-Dichloropropane	2.97	77	54828	8.756	ppb	95
31) 2-Methylpentane	1.82	71	23147	9.959	ppb	91
32) 3-Methylpentane	2.01	57	73025	9.024	ppb	# 94
33) Chloroform	3.42	83	72963	9.298	ppb	97
34) Bromochloromethane	3.27	128	22331	9.110	ppb	92
36) 1,1,1-TCA	3.62	97	56521	8.734	ppb	96
37) Cyclohexane	3.68	41	19959	7.604	ppb	90
38) 1,1-Dichloropropene	3.89	75	38923	8.596	ppb	99
39) 2,2,4-Trimethylpentane	4.40	57	53260	7.949	ppb	95
41) Carbon Tetrachloride	3.87	117	49411	8.555	ppb	96
42) Tert Amyl Methyl Ether	4.50	73	74854	8.308	ppb	95

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1217L04.D  
 Acq On : 17 Dec 18 11:00  
 Sample : 181217A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 11:22 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	60032	8.814	ppb	98
44) 1,2-DCA	4.26	62	54454	9.255	ppb	97
45) Benzene	4.21	78	138853	8.644	ppb	99
46) TCE	5.19	130	38597	9.172	ppb	92
47) 2-Pentanone	5.53	43	326727	110.640	ppb	98
48) 1,2-Dichloropropane	5.46	63	41300	9.273	ppb	98
49) Bromodichloromethane	5.87	83	59416	9.554	ppb	98
50) Methyl Cyclohexane	5.41	83	30308	7.869	ppb	98
51) Dibromomethane	5.61	93	27400	8.566	ppb	92
53) MIBK (methyl isobutyl ket.)	6.69	43	32439	8.591	ppb	# 94
54) 1-Bromo-2-chloroethane	6.21	63	26160	8.510	ppb	94
55) Cis-1,3-Dichloropropene	6.45	75	53579	8.136	ppb	96
56) Toluene	6.81	91	151310	9.066	ppb	99
57) Trans-1,3-Dichloropropene	7.14	75	52549	8.736	ppb	98
58) 1,1,2-TCA	7.32	83	35605	9.242	ppb	94
59) 2-Hexanone	7.68	43	19976	8.501	ppb	99
62) 1,2-EDB	7.82	107	40650	8.599	ppb	97
63) Tetrachloroethene	7.44	166	44055	8.341	ppb	98
64) 1-Chlorohexane	8.45	91	31925	8.542	ppb	98
65) 1,1,1,2-Tetrachloroethane	8.52	131	43881	8.772	ppb	94
66) m&p-Xylene	8.70	91	222641	16.795	ppb	98
67) o-Xylene	9.12	106	51348	8.195	ppb	98
68) Styrene	9.14	104	53760	7.866	ppb	97
70) 1,3-Dichloropropane	7.50	76	63330	8.500	ppb	96
71) Dibromochloromethane	7.74	129	47365	8.783	ppb	92
72) Chlorobenzene	8.40	112	104087	8.382	ppb	99
73) Ethylbenzene	8.56	91	144139	8.200	ppb	99
74) Bromoform	9.30	173	36720	8.982	ppb	89
76) Isopropylbenzene	9.54	105	126840	8.494	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.88	83	61096	8.865	ppb	94
78) 1,2,3-Trichloropropane	9.89	110	10180	8.826	ppb	98
79) t-1,4-Dichloro-2-Butene	9.95	53	10988	8.844	ppb	100
80) Bromobenzene	9.81	156	47916	9.025	ppb	97
81) n-Propylbenzene	9.99	91	99504	8.527	ppb	98
82) 4-Ethyltoluene	10.11	105	120765	8.603	ppb	99
83) 2-Chlorotoluene	10.04	91	111421	9.038	ppb	97
84) 1,3,5-Trimethylbenzene	10.19	105	74880	8.314	ppb	98
85) 4-Chlorotoluene	10.16	91	128651	9.317	ppb	97
86) Tert-Butylbenzene	10.53	119	95500	8.570	ppb	98
87) 1,2,4-Trimethylbenzene	10.58	105	112585	8.635	ppb	100
88) Sec-Butylbenzene	10.76	105	143331	8.854	ppb	100
89) p-Isopropyltoluene	10.93	119	130748	8.720	ppb	98
90) Benzyl Chloride	11.10	91	63232	8.469	ppb	96
91) 1,3-DCB	10.84	146	90368	9.183	ppb	96
92) 1,4-DCB	10.94	146	95282	9.155	ppb	98
93) n-Butylbenzene	11.36	91	105023	8.473	ppb	99
94) 1,2-DCB	11.32	146	86238	8.941	ppb	99
95) Hexachloroethane	11.59	117	28455	8.918	ppb	94
96) 1,2-Dibromo-3-chloropropan	12.15	75	10162	8.563	ppb	91
97) 1,2,4-Trichlorobenzene	13.04	180	50951	8.285	ppb	99
98) Hexachlorobutadiene	13.26	225	29060	8.698	ppb	92
99) Naphthalene	13.28	128	99398	7.674	ppb	97
100) 1,2,3-Trichlorobenzene	13.54	180	29224	8.034	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

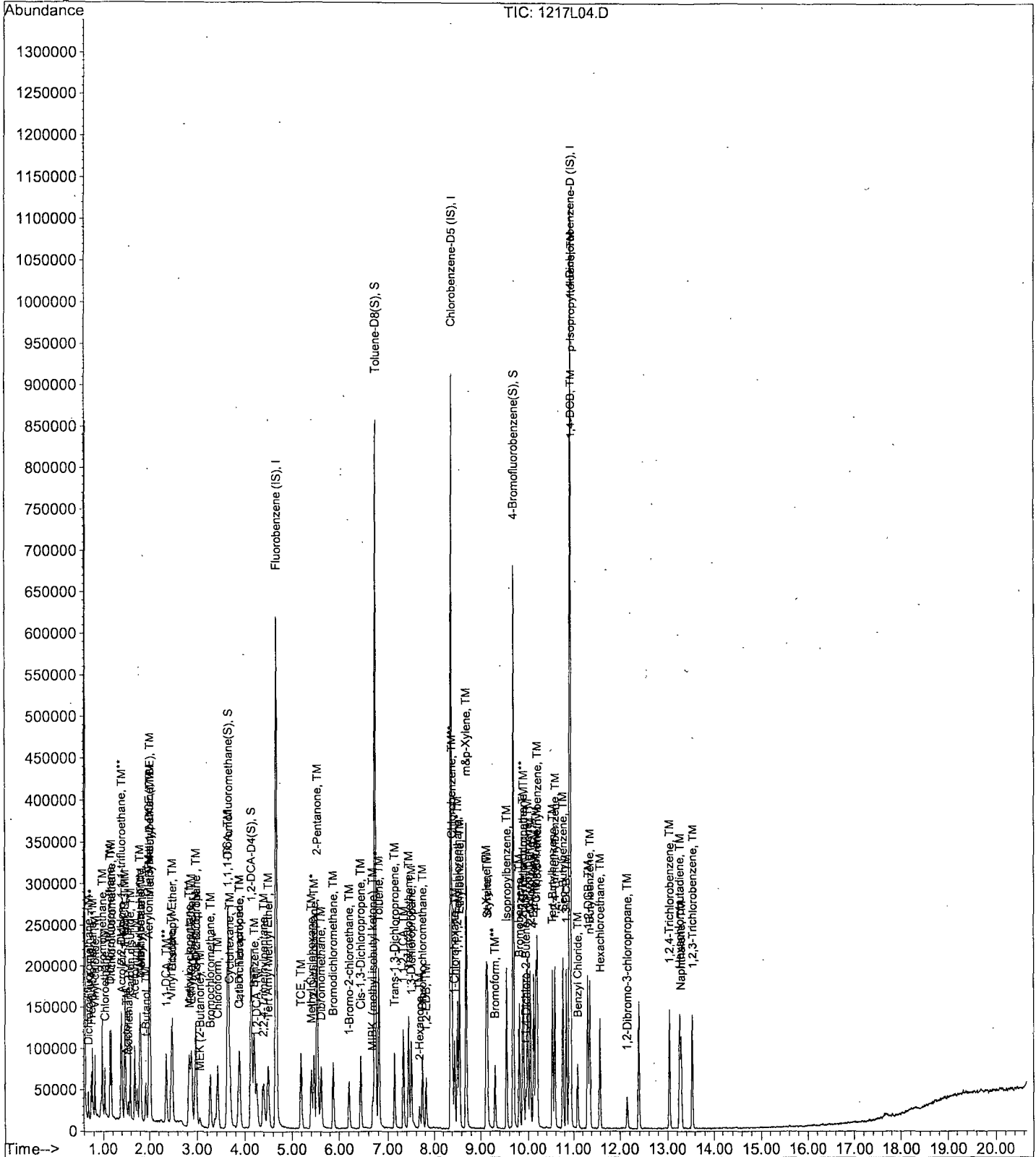
Data File : M:\LOKI\DATA\181213\1217L04.D  
Acq On : 17 Dec 18 11:00  
Sample : 181217A CCV 10ug/L  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 11:22 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1217L28.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TM Dichlorodifluoromethane	0.2110	0.1264	40	TM
3	TM Freon 114	0.1841	0.0893	51	TM
4	TM**L Chloromethane	0.4825	0.3281	32	TM**L 22
5	TM* Vinyl chloride	0.3813	0.3120	18	TM*
6	TM Bromomethane	0.3148	0.3403	8.1	TM
7	TML Chloroethane	0.2845	0.2332	18	TML 9.6
8	TM Dichlorofluoromethane	0.6522	0.5574	15	TM
9	TM Trichlorofluoromethane	0.5159	0.4132	20	TM
10	TM Acrolein	0.0356	0.0153	57	TM
11	TML Acetone	0.1533	0.1408	8.1	TML 5.6
12	TM Freon-113	0.2495	0.1927	23	TM
13	TM* 1,1-DCE	0.1615	0.1278	21	TM*
14	TM t-Butanol	0.0420	0.0356	15	TM
15	TM Acetonitrile	0.0611	0.0550	9.9	TM
16	TM Methyl Acetate	0.4937	0.4479	9.3	TM
17	TML Iodomethane	0.1959	0.0902	54	TML 46
18	TML Acrylonitrile	0.1668	0.1361	18	TML 3.1
19	TM Methylene chloride	0.4372	0.3996	8.6	TM
20	TM Carbon disulfide	0.9826	0.7532	23	TM
21	TM Methyl t-butyl ether (MtBE)	0.9440	0.8852	6.2	TM
22	TM Trans-1,2-DCE	0.3759	0.3214	14	TM
23	TM Diisopropyl Ether	1.037	0.9500	8.4	TM
24	TM** 2,2-Dichloro-1,1,1-trifluoroethane	0.3282	0.3285	0.09	TM**
25	TM** 1,1-DCA	0.7329	0.6538	11	TM**
26	TM Vinyl Acetate	0.3863	0.2472	36	TM
27	TM Ethyl tert Butyl Ether	0.8226	0.7874	4.3	TM
28	TML MEK (2-Butanone)	0.1690	0.1592	5.8	TML 0.82
29	TM Cis-1,2-DCE	0.1776	0.1667	6.1	TM
30	TM 2,2-Dichloropropane	0.5224	0.3913	25	TM
31	TML 2-Methylpentane	0.2114	0.1794	15	TML 7.2
32	TM 3-Methylpentane	0.6752	0.5862	13	TM
33	TM* Chloroform	0.6547	0.6193	5.4	TM*
34	TM Bromochloromethane	0.2045	0.2008	1.8	TM
35	S Dibromofluoromethane(S)	0.6413	0.6434	0.34	S
36	TM 1,1,1-TCA	0.5399	0.4827	11	TM
37	TML Cyclohexane	0.2395	0.1657	31	TML 24
38	TM 1,1-Dichloropropene	0.3778	0.3394	10	TM
39	TM 2,2,4-Trimethylpentane	0.5590	0.3675	34	TM
40	S 1,2-DCA-D4(S)	0.7344	0.7255	1.2	S

Average

17.7

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1217L28.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.4819	0.4202	13	TM
42	TM	Tert Amyl Methyl Ether	0.7517	0.6762	10	TM
43	TM	Methylcyclopentane	0.5682	0.5200	8.5	TM
44	TM	1,2-DCA	0.4909	0.4812	2.0	TM
45	TM	Benzene	1.340	1.243	7.3	TM
46	TM	TCE	0.3511	0.3503	0.22	TM
47	TM	2-Pentanone	0.2464	0.2306	6.4	TM
48	TM*	1,2-Dichloropropane	0.3716	0.3421	7.9	TM*
49	TM	Bromodichloromethane	0.5189	0.4974	4.1	TM
50	TM	Methyl Cyclohexane	0.3213	0.2354	27	TM
51	TM	Dibromomethane	0.2669	0.2601	2.5	TM
52	TM	2-Chloroethyl vinyl ether	0.0782	0.0006	99	TM
53	TML	MIBK (methyl isobutyl ketone)	0.3634	0.2879	21	TML 8.0
54	TM	1-Bromo-2-chloroethane	0.2565	0.2367	7.7	TM
55	TM	Cis-1,3-Dichloropropene	0.5494	0.4747	14	TM
56	TM*	Toluene	1.392	1.343	3.6	TM*
57	TM	Trans-1,3-Dichloropropene	0.5019	0.4546	9.4	TM
58	TM	1,1,2-TCA	0.3214	0.2985	7.1	TM
59	TM	2-Hexanone	0.1960	0.1659	15	TM
60	I	Chlorobenzene-D5 (IS)	ISTD			I
61	S	Toluene-D8(S)	2.009	1.968	2.0	S
62	TM	1,2-EDB	0.3673	0.3421	6.9	TM
63	TM	Tetrachloroethene	0.4103	0.3480	15	TM
64	TM	1-Chlorohexane	0.2904	0.2430	16	TM
65	TM	1,1,1,2-Tetrachloroethane	0.3886	0.3554	8.6	TM
66	TM	m&p-Xylene	1.030	0.8951	13	TM
67	TM	o-Xylene	0.4868	0.4251	13	TM
68	TML	Styrene	0.4775	0.4131	13	TML 22
69	S	4-Bromofluorobenzene(S)	0.7261	0.7128	1.8	S
70	TM	1,3-Dichloropropane	0.5789	0.5124	11	TM
71	TM	Dibromochloromethane	0.4190	0.3857	7.9	TM
72	TM**	Chlorobenzene	0.9647	0.8449	12	TM**
73	TM*	Ethylbenzene	1.366	1.202	12	TM*
74	TM**	Bromoform	0.3176	0.2959	6.8	TM**
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
76	TM	Isopropylbenzene	2.022	1.786	12	TM
77	TM**	1,1,2,2-Tetrachloroethane	0.9331	0.7974	15	TM**
78	TM	1,2,3-Trichloropropane	0.1562	0.1472	5.7	TM
79	TM	t-1,4-Dichloro-2-Butene	0.1682	0.1485	12	TM
80	TM	Bromobenzene	0.7188	0.7003	2.6	TM

\*NT

Average

11.9

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Cal. Date: 12/13/18  
Data File: 1217L28.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.580	1.479	6.4	TM
82	TM	4-Ethyltoluene	1.901	1.689	11	TM
83	TM	2-Chlorotoluene	1.669	1.520	8.9	TM
84	TML	1,3,5-Trimethylbenzene	1.091	1.069	2.0	TML 12
85	TM	4-Chlorotoluene	1.870	1.818	2.8	TM
86	TM	Tert-Butylbenzene	1.509	1.309	13	TM
87	TM	1,2,4-Trimethylbenzene	1.765	1.643	6.9	TM
88	TM	Sec-Butylbenzene	2.192	2.034	7.2	TM
89	TM	p-Isopropyltoluene	2.030	1.847	9.0	TM
90	TM	Benzyl Chloride	1.011	0.6280	38	TM
91	TM	1,3-DCB	1.332	1.279	4.0	TM
92	TM	1,4-DCB	1.409	1.327	5.8	TM
93	TM	n-Butylbenzene	1.678	1.425	15	TM
94	TM	1,2-DCB	1.306	1.264	3.2	TM
95	TM	Hexachloroethane	0.4320	0.3982	7.8	TM
96	TML	1,2-Dibromo-3-chloropropane	0.1724	0.1431	17	TML 10
97	TM	1,2,4-Trichlorobenzene	0.8326	0.7119	15	TM
98	TM	Hexachlorobutadiene	0.4524	0.3910	14	TM
99	TM	Naphthalene	1.754	1.611	8.1	TM
100	TM	1,2,3-Trichlorobenzene	0.4925	0.4324	12	TM
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						

Average

10.4

Data File : M:\LOKI\DATA\181213\1217L28.D  
 Acq On : 17 Dec 18 22:26  
 Sample : Ending: CCV 10ug/L 12/17/18  
 Misc : IS&S 11/8/18

Vial: 27  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:20 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.66	96	291200	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	321024	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	181504	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
35) Dibromofluoromethane(S)	3.64	111	187371	25.084	ppb	0.00
Spiked Amount						
						Recovery = 100.336%
40) 1,2-DCA-D4(S)	4.14	65	211272	24.697	ppb	0.00
Spiked Amount						
						Recovery = 98.788%
61) Toluene-D8(S)	6.74	98	631819	24.491	ppb	0.00
Spiked Amount						
						Recovery = 97.964%
69) 4-Bromofluorobenzene(S)	9.68	95	228825	24.541	ppb	0.00
Spiked Amount						
						Recovery = 98.164%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	14723	5.991	ppb	98
3) Freon 114	0.75	85	10407	4.852	ppb	95
4) Chloromethane	0.77	50	38212	7.765	ppb	94
5) Vinyl chloride	0.82	62	36343	8.182	ppb	96
6) Bromomethane	0.98	94	39634	10.808	ppb	91
7) Chloroethane	1.03	64	27166	9.039	ppb	95
8) Dichlorofluoromethane	1.14	67	64925	8.546	ppb	97
9) Trichlorofluoromethane	1.17	101	48133	8.009	ppb	96
10) Acrolein	1.41	56	22272	53.775	ppb	# 95
11) Acetone	1.51	43	16404	9.443	ppb	90
12) Freon-113	1.48	101	22441	7.723	ppb	94
13) 1,1-DCE	1.46	63	14892	7.915	ppb	97
14) t-Butanol	1.93	59	51807	105.903	ppb	98
15) Acetonitrile	1.68	41	80146	112.586	ppb	97
16) Methyl Acetate	1.82	43	52170	9.072	ppb	# 100
17) Iodomethane	1.55	142	10506	5.444	ppb	98
18) Acrylonitrile	1.99	52	15849	9.694	ppb	87
19) Methylene chloride	1.79	84	46549	9.142	ppb	96
20) Carbon disulfide	1.59	76	87729	7.665	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	103113	9.377	ppb	96
22) Trans-1,2-DCE	2.00	96	37434	8.550	ppb	96
23) Diisopropyl Ether	2.49	45	110658	9.163	ppb	95
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	38262	10.009	ppb	96
25) 1,1-DCA	2.36	63	76154	8.921	ppb	98
26) Vinyl Acetate	2.48	43	28795	6.400	ppb	# 81
27) Ethyl tert Butyl Ether	2.88	59	91722	9.573	ppb	99
28) MEK (2-Butanone)	3.05	43	18542	9.918	ppb	93
29) Cis-1,2-DCE	2.98	96	19416	9.387	ppb	99
30) 2,2-Dichloropropane	2.96	77	45575	7.489	ppb	93
31) 2-Methylpentane	1.82	71	20894	9.279	ppb	85
32) 3-Methylpentane	2.01	57	68275	8.682	ppb	# 94
33) Chloroform	3.42	83	72137	9.459	ppb	96
34) Bromochloromethane	3.27	128	23391	9.820	ppb	94
36) 1,1,1-TCA	3.62	97	56220	8.940	ppb	94
37) Cyclohexane	3.68	41	19300	7.565	ppb	91
38) 1,1-Dichloropropene	3.89	75	39534	8.985	ppb	99
39) 2,2,4-Trimethylpentane	4.40	57	42808	6.575	ppb	87
41) Carbon Tetrachloride	3.87	117	48950	8.721	ppb	90
42) Tert Amyl Methyl Ether	4.50	73	78767	8.996	ppb	94

(#) = qualifier out of range (m) = manual integration

1217L28.D L1213W.M Tue Dec 18 11:26:03 2018



Data File : M:\LOKI\DATA\181213\1217L28.D  
 Acq On : 17 Dec 18 22:26  
 Sample : Ending CCV 10ug/L 12/17/18  
 Misc : IS&S 11/8/18

Vial: 27  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:20 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	60565	9.150	ppb	99
44) 1,2-DCA	4.26	62	56046	9.802	ppb	99
45) Benzene	4.20	78	144767	9.274	ppb	99
46) TCE	5.19	130	40805	9.978	ppb	95
47) 2-Pentanone	5.53	43	335689	116.973	ppb	99
48) 1,2-Dichloropropane	5.46	63	39851	9.207	ppb	97
49) Bromodichloromethane	5.87	83	57941	9.587	ppb	99
50) Methyl Cyclohexane	5.41	83	27420	7.326	ppb	91
51) Dibromomethane	5.62	93	30301	9.748	ppb	90
52) 2-Chloroethyl vinyl ether	6.34	43	71	0.078	ppb	# 30
53) MIBK (methyl isobutyl ket	6.69	43	33535	9.201	ppb	93
54) 1-Bromo-2-chloroethane	6.21	63	27576	9.230	ppb	100
55) Cis-1,3-Dichloropropene	6.45	75	55291	8.640	ppb	97
56) Toluene	6.82	91	156417	9.644	ppb	96
57) Trans-1,3-Dichloropropene	7.14	75	52956	9.059	ppb	97
58) 1,1,2-TCA	7.33	83	34767	9.286	ppb	99
59) 2-Hexanone	7.68	43	19327	8.464	ppb	91
62) 1,2-EDB	7.82	107	43929	9.315	ppb	96
63) Tetrachloroethene	7.44	166	44688	8.481	ppb	99
64) 1-Chlorohexane	8.45	91	31201	8.368	ppb	98
65) 1,1,1,2-Tetrachloroethane	8.52	131	45632	9.144	ppb	89
66) m&p-Xylene	8.70	91	229880	17.383	ppb	100
67) o-Xylene	9.12	106	54586	8.732	ppb	99
68) Styrene	9.14	104	53040	7.794	ppb	96
70) 1,3-Dichloropropane	7.50	76	65795	8.852	ppb	93
71) Dibromochloromethane	7.74	129	49525	9.205	ppb	95
72) Chlorobenzene	8.40	112	108492	8.758	ppb	98
73) Ethylbenzene	8.56	91	154410	8.805	ppb	93
74) Bromoform	9.30	173	38002	9.318	ppb	91
76) Isopropylbenzene	9.54	105	129683	8.835	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.88	83	57890	8.545	ppb	100
78) 1,2,3-Trichloropropane	9.90	110	10687	9.426	ppb	98
79) t-1,4-Dichloro-2-Butene	9.95	53	10784	8.829	ppb	99
80) Bromobenzene	9.81	156	50841	9.742	ppb	100
81) n-Propylbenzene	9.99	91	107400	9.362	ppb	100
82) 4-Ethyltoluene	10.11	105	122635	8.887	ppb	99
83) 2-Chlorotoluene	10.04	91	110379	9.109	ppb	98
84) 1,3,5-Trimethylbenzene	10.19	105	77592	8.751	ppb	100
85) 4-Chlorotoluene	10.16	91	131959	9.722	ppb	98
86) Tert-Butylbenzene	10.53	119	95019	8.674	ppb	99
87) 1,2,4-Trimethylbenzene	10.58	105	119311	9.309	ppb	99
88) Sec-Butylbenzene	10.76	105	147652	9.279	ppb	99
89) p-Isopropyltoluene	10.93	119	134096	9.097	ppb	97
90) Benzyl Chloride	11.10	91	45594	6.212	ppb	96
91) 1,3-DCB	10.84	146	92849	9.598	ppb	98
92) 1,4-DCB	10.94	146	96376	9.420	ppb	97
93) n-Butylbenzene	11.36	91	103453	8.491	ppb	97
94) 1,2-DCB	11.32	146	91739	9.676	ppb	99
95) Hexachloroethane	11.59	117	28910	9.217	ppb	99
96) 1,2-Dibromo-3-chloropropan	12.15	75	10390	8.963	ppb	94
97) 1,2,4-Trichlorobenzene	13.04	180	51683	8.550	ppb	99
98) Hexachlorobutadiene	13.26	225	28385	8.643	ppb	94
99) Naphthalene	13.29	128	116987	9.188	ppb	93
100) 1,2,3-Trichlorobenzene	13.55	180	31392	8.779	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1217L28.D L1213W.M Tue Dec 18 11:26:04 2018

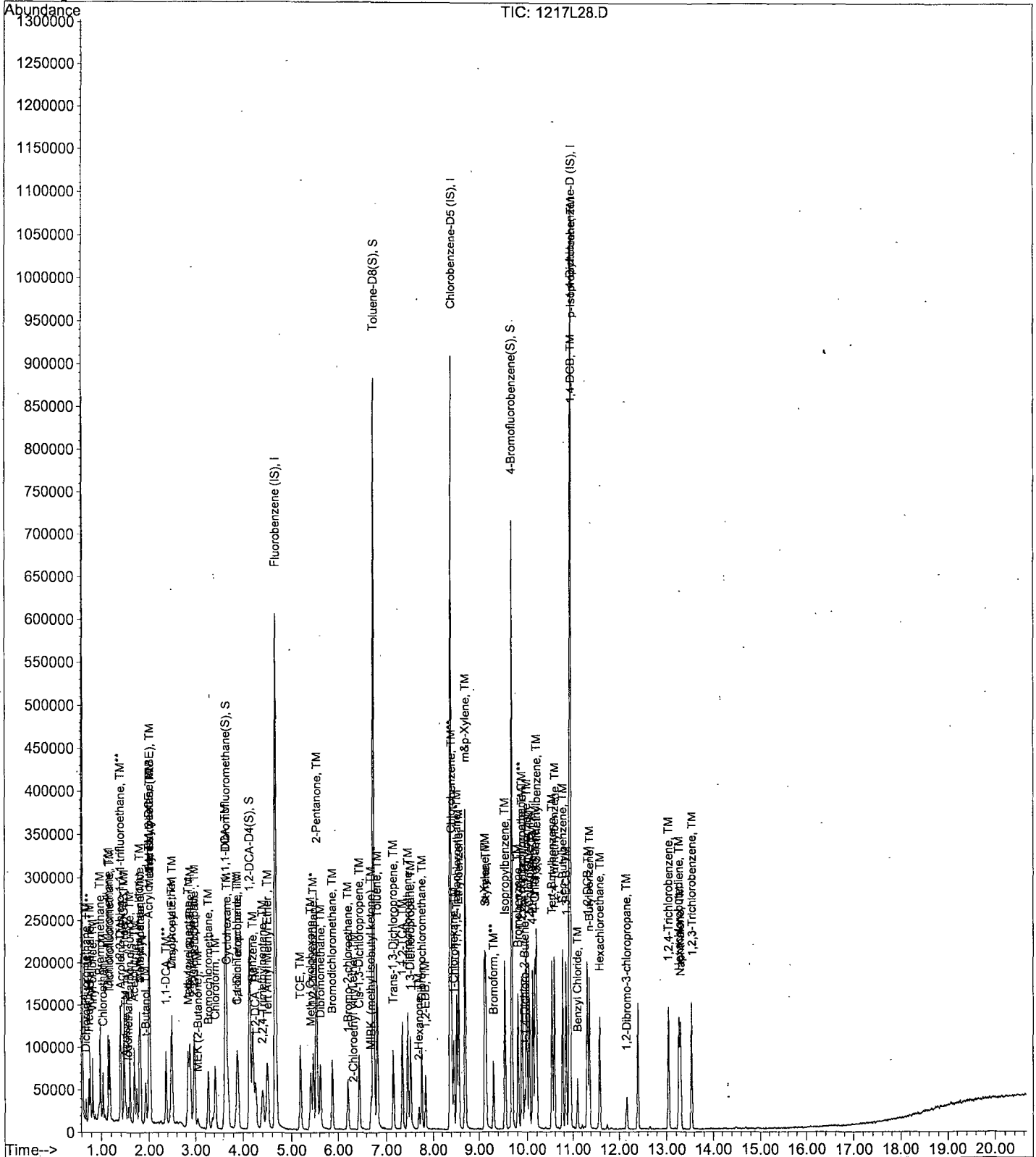
Data File : M:\LOKI\DATA\181213\1217L28.D  
Acq On : 17 Dec 18 22:26  
Sample : Ending CCV 10ug/L 12/17/18  
Misc : IS&S 11/8/18

Vial: 27  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:20 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: water \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/18/18 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

		1218L04.D	1218L05.D	1218L06.D	1218L07.D	1218L08.D	1218L09.D	1218L10.D	1218L11.D	1218L12.D						
1	Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD	Type	r^2	Q	MRF
1	I Fluorobenzene (IS)															
2	TM Dichlorodifluoromethane	0.3255	0.3219	0.3353	0.3083	0.3113	0.2933				0.32	4.7	TM			
3	TM Freon 114		0.3413	0.3581	0.3204	0.3229	0.3264	0.3302	0.3247	0.3226	0.33	3.9	TM			
4	TM** Chloromethane		0.6000	0.5846	0.5340	0.4536	0.5080	0.4694	0.4476	0.4494	0.51	12	TM**			
5	TM* Vinyl chloride		0.3788	0.4751	0.4009	0.3951	0.3955	0.3892	0.3845	0.3865	0.40	7.7	TM*			
6	TM Bromomethane		0.4003	0.4006	0.3976	0.3901	0.3596	0.3298	0.3077	0.2944	0.36	12	TM			
7	TM Chloroethane		0.3134	0.3097	0.2580	0.2527	0.2639	0.2623	0.2523		0.27	9.7	TM			
8	TM Dichlorofluoromethane		0.8611	0.6947	0.6445	0.6814	0.6364	0.6383	0.6196	0.6545	0.68	11	TM			
9	TM Trichlorofluoromethane		0.5138	0.5409	0.5114	0.5203	0.5211	0.5399	0.5158	0.5350	0.52	2.3	TM			
10	TM Acrolein		0.0340	0.0328	0.0319	0.0328	0.0319	0.0326	0.0304	0.0309	0.03	3.6	TM			
11	TML Acetone		0.3350	0.2589	0.1884	0.1578	0.1416	0.1403	0.1277	0.1257	0.18	41	TML	1.000		
12	TM Freon-113		0.3612	0.3177	0.2923	0.2860	0.3071	0.3066	0.2929	0.2996	0.31	7.7	TM			
13	TM* 1,1-DCE		0.1472	0.1280	0.1273	0.1292	0.1181	0.1169	0.1103	0.1181	0.12	9.1	TM*			
14	TM t-Butanol	0.0504	0.0421	0.0425	0.0399	0.0408	0.0364	0.0382	0.0321	0.0424	0.04	12	TM			
15	TM Acetonitrile		0.0628	0.0633	0.0643	0.0616	0.0581	0.0601	0.0565	0.0574	0.06	4.9	TM			
16	TM Methyl Acetate		0.6511	0.5625	0.4988	0.4806	0.4869	0.4612	0.4538	0.4624	0.51	13	TM			
17	TML Iodomethane		0.0509	0.0650	0.0962	0.0994	0.1375	0.1850	0.2272	0.2697	0.14	56	TML	0.994		
18	TM Acrylonitrile		0.1651	0.1854	0.1823	0.1609	0.1409	0.1429	0.1350	0.1358	0.16	13	TM			
19	TM Methylene chloride		0.5310	0.4600	0.4404	0.4117	0.3915	0.3749	0.3613	0.3714	0.42	14	TM			
20	TM Carbon disulfide		1.225	1.089	1.015	1.067	1.024	1.039	1.002	1.066	1.1	6.6	TM			
21	TM Methyl t-butyl ether (MtBE)		0.9087	0.9509	0.8959	1.009	0.9256	0.9115	0.9195	0.9881	0.94	4.3	TM			
22	TM Trans-1,2-DCE		0.3520	0.3452	0.3265	0.3635	0.3377	0.3218	0.3164	0.3391	0.34	4.7	TM			
23	TM Diisopropyl Ether		1.110	1.076	1.135	1.083	1.032	1.011	0.9980	1.083	1.1	4.5	TM			
24	TM** 2,2-Dichloro-1,1,1-trifluoroethane		0.3605	0.3323	0.3360	0.3196	0.3300	0.3259	0.3117	0.3110	0.33	4.8	TM**			
25	TM** 1,1-DCA		0.7179	0.6398	0.6396	0.6519	0.6269	0.6304	0.5936	0.6245	0.64	5.6	TM**			
26	TM Vinyl Acetate		0.4242	0.3510	0.3937	0.3489	0.3974	0.3099	0.3629	0.3039	0.36	12	TM			
27	TM Ethyl tert Butyl Ether		0.7615	0.7757	0.8157	0.8430	0.7998	0.8495	0.8497	0.9293	0.83	6.4	TM			
28	TML MEK (2-Butanone)		0.5439	0.1960	0.2287	0.1620	0.1570	0.1718	0.1583	0.1591	0.22	60	TML	1.000		
29	TM Cis-1,2-DCE		0.4966	0.4655	0.4788	0.4654	0.4689	0.4511	0.4531	0.4893	0.47	3.4	TM			
30	TM 2,2-Dichloropropane		0.5274	0.4816	0.4367	0.4616	0.4264	0.4209	0.4139	0.4341	0.45	8.5	TM			
31	TM 2-Methylpentane		0.2645	0.1930	0.2132	0.1996	0.1933	0.1953	0.1914	0.1952	0.21	12	TM			
32	TM 3-Methylpentane		0.7825	0.6793	0.6947	0.6575	0.6631	0.6364	0.6286	0.6604	0.68	7.1	TM			
33	TM* Chloroform		0.6337	0.5663	0.5977	0.6666	0.5883	0.5819	0.5609	0.5920	0.60	5.9	TM*			
34	TM Bromochloromethane		0.0916	0.0750	0.0720	0.0953	0.0818	0.0862	0.0801	0.0787	0.08	9.7	TM			
35	S Dibromofluoromethane(S)	0.7046	0.7228	0.5958	0.6105	0.6748	0.6497	0.6501	0.6257	0.6029	0.65	6.9	S			

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: water \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/18/18 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	Q	MRF
36	TM	1,1,1-TCA	0.1279	0.1622	0.1188	0.1060	0.1114	0.1090	0.1079	0.1060	0.1109		0.12	15	TM		
37	TML	Cyclohexane		0.3585	0.2409	0.2123	0.2350	0.2204	0.2366	0.2323	0.2502		0.25	19	TML	0.999	
38	TM	1,1-Dichloropropene		0.3473	0.3581	0.2911	0.3312	0.3192	0.3346	0.3526	0.3856		0.34	8.3	TM		
39	TM	2,2,4-Trimethylpentane		0.7092	0.6817	0.6238	0.6258	0.6421	0.6847	0.7149	0.7946		0.68	8.3	TM		
40	S	1,2-DCA-D4(S)	0.8210	0.8261	0.7102	0.6966	0.7666	0.7210	0.7410	0.7000	0.6785		0.74	7.3	S		
41	TML	Carbon Tetrachloride		0.4228	0.4106	0.3905	0.4243	0.4257	0.4222	0.4106	0.4288		0.42	3.0	TML	1.000	
42	TM	Tert Amyl Methyl Ether		0.6762	0.6426	0.6146	0.7212	0.6871	0.7434	0.7693	0.8815		0.72	12	TM		
43	TM	Methylcyclopentane		0.6572	0.5970	0.6633	0.5600	0.5331	0.5530	0.5820	0.5924		0.59	7.9	TM		
44	TM	1,2-DCA		0.4577	0.4282	0.3881	0.4658	0.4328	0.4273	0.4268	0.4485		0.43	5.5	TM		
45	TM	Benzene		1.338	1.163	1.088	1.208	1.157	1.191	1.162	1.268		1.2	6.4	TM		
46	TM	TCE	0.3755	0.3134	0.2925	0.2780	0.3263	0.3154	0.2999				0.31	10.0	TM		
47	TM	2-Pentanone		0.2224	0.2299	0.2353	0.2419	0.2411	0.2520	0.2463	0.2393		0.24	3.9	TM		
48	TM*	1,2-Dichloropropane		0.3398	0.2899	0.2913	0.3455	0.3298	0.3298	0.3221	0.3496		0.32	7.0	TM*		
49	TML	Bromodichloromethane		0.2263	0.2079	0.2226	0.2399	0.2322	0.2333	0.2186	0.2430		0.23	5.1	TML	0.998	
50	TM	Methyl Cyclohexane		0.3514	0.3162	0.3013	0.2977	0.3225	0.3382	0.3652	0.4351		0.34	13	TM		
51	TM	Dibromomethane		0.2593	0.2129	0.2530	0.2591	0.2384	0.2470	0.2351	0.2441		0.24	6.3	TM		
52	TML	2-Chloroethyl vinyl ether		0.0465	0.1161	0.0784	0.0599	0.0502	0.0541	0.0467	0.0581		0.06	37	TML	0.993	
53	TML	MIBK (methyl isobutyl ketone)		0.5109	0.3681	0.3146	0.3079	0.3053	0.3091	0.2929	0.3022		0.34	22	TML	1.000	
54	TM	1-Bromo-2-chloroethane		0.2202	0.2509	0.2246	0.2695	0.2544	0.2623	0.2581	0.2795		0.25	8.2	TM		
55	TM	Cis-1,3-Dichloropropene		0.4162	0.4422	0.4016	0.4659	0.4387	0.4531	0.4801	0.5582		0.46	11	TM		
56	TM*L	Toluene	0.6426	0.5823	0.5618	0.5678	0.6905	0.6748	0.7359	0.7076	0.7935		0.66	12	TM*L	0.998	
57	TM	Trans-1,3-Dichloropropene		0.3735	0.4139	0.3861	0.4615	0.4273	0.4389	0.4406	0.4996		0.43	9.4	TM		
58	TM	1,1,2-TCA		0.2292	0.2646	0.2522	0.2944	0.2800	0.2998	0.2796	0.2865		0.27	8.6	TM		
59	TM	2-Hexanone		0.1830	0.2623	0.1840	0.1844	0.1790	0.1908	0.1889	0.2089		0.20	14	TM		
60	I	Chlorobenzene-D5 (IS)															
61	S	Toluene-D8(S)	1.957	2.004	1.738	1.727	1.926	1.953	2.079	2.003	2.046		1.9	6.5	S		
62	TML	1,2-EDB		0.1654	0.1410	0.1368	0.1918	0.1713	0.1791	0.1775	0.1901		0.17	12	TML	0.999	
63	TM	Tetrachloroethene	0.3017	0.2490	0.2554	0.2647	0.2774	0.2732	0.2669	0.2574	0.2812		0.27	5.9	TM		
64	TML	1-Chlorohexane		0.2531	0.2685	0.2244	0.2629	0.2592	0.2879	0.3130	0.3822		0.28	17	TML	0.994	
65	TM	1,1,1,2-Tetrachloroethane		0.3352	0.3628	0.3327	0.3494	0.3298	0.3323	0.3195	0.3347		0.34	3.9	TM		
66	TML	m&p-Xylene		0.3771	0.3995	0.3714	0.4450	0.4736	0.5308	0.5838	0.6710		0.48	22	TML	0.997	
67	TML	o-Xylene		0.1877	0.1966	0.1961	0.2020	0.2269	0.2529	0.2681	0.3352		0.23	22	TML	0.993	
68	TML	Styrene		0.2472	0.3053	0.2538	0.3297	0.3818	0.4360	0.4997	0.6074		0.38	33	TML	0.994	
69	S	4-Bromofluorobenzene(S)	0.6565	0.6469	0.5725	0.5563	0.6759	0.6773	0.7675	0.7549	0.7626		0.67	12	S		
70	TM	1,3-Dichloropropane		0.4433	0.4988	0.4619	0.4994	0.4693	0.4810	0.4737	0.5157		0.48	4.9	TM		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.

Case No: \_\_\_\_\_

Matrix: water

SDG No: \_\_\_\_\_

Initial Cal. Date: 12/18/18

Instrument: Loki

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	Q	MRF
71	TML	Dibromochloromethane		0.1736	0.2280	0.1750	0.2152	0.2074	0.1999	0.1938	0.2129		0.20	9.6	TML	0.999	
72	TM**	Chlorobenzene		0.8431	0.8115	0.7749	0.8000	0.7905	0.8038	0.7785	0.8539		0.81	3.5	TM**		
73	TM*L	Ethylbenzene		0.5395	0.6163	0.5460	0.5796	0.6233	0.7076	0.7447			0.62	13	TM*L	0.998	
74	TM**	Bromoform		0.2922	0.2921	0.2384	0.2836	0.2750	0.2677	0.2629	0.2814		0.27	6.5	TM**		
75	I	1,4-Dichlorobenzene-D (IS)															
76	TM	Isopropylbenzene		1.788	1.562	1.446	1.567	1.647	1.753	1.744	2.152		1.7	13	TM		
77	TM**	1,1,2,2-Tetrachloroethane		0.8229	0.8571	0.7740	0.8251	0.8382	0.7350	0.6700	0.7233		0.78	8.5	TM**		
78	TML	1,2,3-Trichloropropane		0.2558	0.1712	0.1352	0.1448	0.1461	0.1346	0.1190	0.1305		0.15	28	TML	0.998	
79	TM	t-1,4-Dichloro-2-Butene		0.1067	0.1566	0.1733	0.1753	0.1650	0.1589	0.1492	0.1717		0.16	14	TM		
80	TML	Bromobenzene		0.2832	0.3006	0.3498	0.3618	0.3829	0.3821	0.3574	0.3885		0.35	11	TML	0.999	
81	TM	n-Propylbenzene		1.167	1.095	0.9576	1.299	1.321	1.423	1.477			1.2	15	TM		
82	TM	4-Ethyltoluene		1.542	1.527	1.426	1.670	1.822	2.021	2.024			1.7	14	TM		
83	TML	2-Chlorotoluene		0.7834	0.6782	0.6747	0.8408	0.8603	0.9109	0.8522	0.9762		0.82	13	TML	0.998	
84	TML	1,3,5-Trimethylbenzene		0.7631	0.7635	0.7049	0.8653	0.9638	1.085	1.089	1.190		0.93	19	TML	0.999	
85	TML	4-Chlorotoluene		0.6631	0.6968	0.7152	0.8597	0.9232	0.9812	0.9440	1.047		0.85	17	TML	0.999	
86	TM	Tert-Butylbenzene		1.188	1.140	1.021	1.181	1.223	1.288	1.309	1.607		1.2	14	TM		
87	TML	1,2,4-Trimethylbenzene		1.239	1.150	1.095	1.284	1.454	1.644	1.686	1.990		1.4	21	TML	0.996	
88	TML	Sec-Butylbenzene		1.686	1.496	1.501	1.703	1.864	2.005	2.045			1.8	13	TML	1.000	
89	TML	p-Isopropyltoluene		0.8965	0.8839	0.8414	1.022	1.027	1.103	1.157			0.99	12	TML	0.999	
90	TM	Benzyl Chloride		0.9741	0.8308	0.7613	0.8543	0.8303	0.8423	0.7974	1.001		0.86	9.7	TM		
91	TM	1,3-DCB		0.8129	0.6550	0.6587	0.6907	0.6947	0.6888	0.6865	0.7543		0.71	7.5	TM		
92	TM	1,4-DCB		1.541	1.164	1.104	1.285	1.261	1.246	1.166	1.296		1.3	11	TM		
93	TM	n-Butylbenzene		1.297	1.210	1.049	1.268	1.339	1.450	1.515			1.3	12	TM		
94	TM	1,2-DCB		1.280	1.008	1.066	1.128	1.176	1.146	1.073	1.269		1.1	8.4	TM		
95	TM	Hexachloroethane		0.4621	0.4765	0.3877	0.4324	0.4232	0.4039	0.3826	0.4277		0.42	7.8	TM		
96	TM	1,2-Dibromo-3-chloropropane		0.1462	0.1873	0.1523	0.1458	0.1364	0.1288	0.1246	0.1372		0.14	13	TM		
97	TM	1,2,4-Trichlorobenzene		0.6140	0.6179	0.5947	0.6404	0.6658	0.6629	0.6891	0.8797		0.67	13	TM		
98	TML	Hexachlorobutadiene		0.1622	0.4090	0.3838	0.3907	0.3808	0.3800	0.3556	0.4304		0.36	23	TML	0.995	
99	TML	Naphthalene		1.321	1.144	1.112	1.197	1.268	1.394	1.580			1.3	13	TML	0.996	
100	TM	1,2,3-Trichlorobenzene		0.3565	0.3299	0.3120	0.3310	0.3777	0.3847	0.4297			0.36	11	TM		
101																	
102																	
103																	
104																	
105																	

Data File : M:\LOKI\DATA\181218\1218L04.D  
 Acq On : 18 Dec 18 15:56  
 Sample : 0.3ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	286720	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	309312	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	154944	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	40407	5.433	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.732%	
40) 1,2-DCA-D4(S)	4.07	65	47077	5.546	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.184%	
61) Toluene-D8(S)	6.70	98	121057	5.052	ppb	0.00
Spiked Amount	25.000		Recovery	=	20.208%	
69) 4-Bromofluorobenzene(S)	9.65	95	40611	4.866	ppb	0.00
Spiked Amount	25.000		Recovery	=	19.464%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	1120	0.309	ppb	# 87
3) Freon 114	0.74	85	1327	0.350	ppb	91
4) Chloromethane	0.76	50	2530	0.436	ppb	# 81
5) Vinyl chloride	0.81	62	1536	0.334	ppb	# 63
6) Bromomethane	0.97	94	1774	0.430	ppb	82
7) Chloroethane	1.02	64	1102	0.352	ppb	89
8) Dichlorofluoromethane	1.12	67	2365	0.304	ppb	87
9) Trichlorofluoromethane	1.15	101	2103	0.349	ppb	# 76
10) Acrolein	1.39	56	3615	9.806	ppb	# 99
11) Acetone	1.48	43	2465	0.412	ppb	# 83
12) Freon-113	1.46	101	1181	0.334	ppb	91
13) 1,1-DCE	1.44	63	450	0.315	ppb	97
14) t-Butanol	1.91	59	5784	12.440	ppb	99
15) Acetonitrile	1.66	41	7832	11.287	ppb	# 83
16) Methyl Acetate	1.79	43	2169	0.373	ppb	# 98
17) Iodomethane	1.53	142	471	3.201	ppb	# 41
18) Acrylonitrile	2.07	52	1461	0.816	ppb	# 26
19) Methylene chloride	1.76	84	2234	0.466	ppb	99
20) Carbon disulfide	1.56	76	4417	0.361	ppb	95
21) Methyl t-butyl ether (MtBE)	1.99	73	3544	0.329	ppb	# 84
22) Trans-1,2-DCE	1.97	96	1610	0.416	ppb	97
23) Diisopropyl Ether	2.44	45	6104	0.499	ppb	# 81
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	1259	0.334	ppb	# 74
25) 1,1-DCA	2.32	63	2821	0.384	ppb	91
26) Vinyl Acetate	2.45	43	1620	0.391	ppb	# 73
27) Ethyl tert Butyl Ether	2.83	59	2592	0.273	ppb	97
28) MEK (2-Butanone)	3.01	43	1594	0.261	ppb	# 48
29) Cis-1,2-DCE	2.93	61	1569	0.290	ppb	# 81
30) 2,2-Dichloropropane	2.92	77	2227	0.431	ppb	# 86
31) 2-Methylpentane	1.78	71	1065	0.451	ppb	# 63
32) 3-Methylpentane	1.98	57	3343	0.432	ppb	# 87
33) Chloroform	3.36	83	3784	0.551	ppb	99
34) Bromochloromethane	3.22	128	446	0.471	ppb	# 51
36) 1,1,1-TCA	3.57	99	440	0.326	ppb	# 69
37) Cyclohexane	3.62	41	1507	1.153	ppb	# 36
38) 1,1-Dichloropropene	3.83	75	921	0.236	ppb	# 69
39) 2,2,4-Trimethylpentane	4.33	57	2358	0.300	ppb	# 30
41) Carbon Tetrachloride	3.80	117	1272	0.493	ppb	76
42) Tert Amyl Methyl Ether	4.44	73	2469	0.300	ppb	# 83

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L04.D  
 Acq On : 18 Dec 18 15:56  
 Sample : 0.3ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	2615	0.385	ppb	98
44) 1,2-DCA	4.19	62	1777	0.357	ppb #	71
45) Benzene	4.15	78	4497	0.328	ppb #	79
46) TCE	5.14	95	1292	0.358	ppb #	73
47) 2-Pentanone	5.49	43	25658	9.379	ppb	99
48) 1,2-Dichloropropane	5.41	63	829	0.223	ppb #	85
49) Bromodichloromethane	5.82	83	859	0.870	ppb #	85
50) Methyl Cyclohexane	5.36	83	1852	0.474	ppb #	57
51) Dibromomethane	5.58	93	611	0.219	ppb	84
52) 2-Chloroethyl vinyl ether	6.30	43	244	1.069	ppb #	31
53) MIBK (methyl isobutyl ket	6.65	43	1982	0.458	ppb #	88
54) 1-Bromo-2-chloroethane	6.17	63	847	0.293	ppb #	78
55) Cis-1,3-Dichloropropene	6.41	75	1524	0.291	ppb #	78
56) Toluene	6.78	91	2211	1.145	ppb	95
57) Trans-1,3-Dichloropropene	7.11	75	1262	0.256	ppb	95
58) 1,1,2-TCA	7.29	83	837	0.267	ppb #	61
59) 2-Hexanone	7.66	43	509	0.225	ppb #	80
62) 1,2-EDB	7.80	107	685	0.959	ppb #	75
63) Tetrachloroethene	7.40	164	1120	0.336	ppb #	77
64) 1-Chlorohexane	8.41	91	937	2.422	ppb #	57
65) 1,1,1,2-Tetrachloroethane	8.49	131	1277	0.306	ppb	78
66) m&p-Xylene	8.67	91	3429	4.365	ppb	92
67) o-Xylene	9.09	106	566	2.525	ppb #	50
68) Styrene	9.12	104	839	2.731	ppb	90
70) 1,3-Dichloropropane	7.47	76	1681	0.283	ppb #	63
71) Dibromochloromethane	7.71	129	757	0.829	ppb	80
72) Chlorobenzene	8.37	112	2984	0.299	ppb #	81
73) Ethylbenzene	8.54	91	2388	0.981	ppb	87
74) Bromoform	9.28	173	811	0.239	ppb	84
76) Isopropylbenzene	9.51	105	3022	0.286	ppb	97
77) 1,1,2,2-Tetrachloroethane	9.85	83	1775	0.367	ppb #	98
78) 1,2,3-Trichloropropane	9.87	110	335	0.157	ppb	90
79) t-1,4-Dichloro-2-Butene	9.91	53	175	0.180	ppb #	20
80) Bromobenzene	9.78	156	790	0.804	ppb	90
81) n-Propylbenzene	9.96	91	2863	0.370	ppb #	84
82) 4-Ethyltoluene	10.09	105	3084	0.290	ppb	97
83) 2-Chlorotoluene	10.01	91	1214	1.265	ppb	83
84) 1,3,5-Trimethylbenzene	10.16	105	1310	1.453	ppb	82
85) 4-Chlorotoluene	10.13	91	1292	1.219	ppb	95
86) Tert-Butylbenzene	10.50	119	2032	0.263	ppb	92
87) 1,2,4-Trimethylbenzene	10.55	105	2202	2.114	ppb	90
88) Sec-Butylbenzene	10.74	105	3342	0.788	ppb	92
89) p-Isopropyltoluene	10.90	119	1542	0.765	ppb #	90
90) Benzyl Chloride	11.08	91	1776	0.333	ppb #	88
91) 1,3-DCB	10.81	146	1360	0.311	ppb	85
92) 1,4-DCB	10.91	146	2225	0.285	ppb #	83
93) n-Butylbenzene	11.34	91	2719	0.336	ppb	97
94) 1,2-DCB	11.29	146	2120	0.299	ppb	87
95) Hexachloroethane	11.56	117	666	0.253	ppb #	83
96) 1,2-Dibromo-3-chloropropan	12.12	75	210	0.234	ppb #	55
97) 1,2,4-Trichlorobenzene	13.01	180	1179	0.284	ppb #	74
98) Hexachlorobutadiene	13.23	225	920	1.570	ppb #	52
99) Naphthalene	13.26	128	2876	1.208	ppb	98
100) 1,2,3-Trichlorobenzene	13.53	180	680	0.305	ppb #	88

Quantitation Report

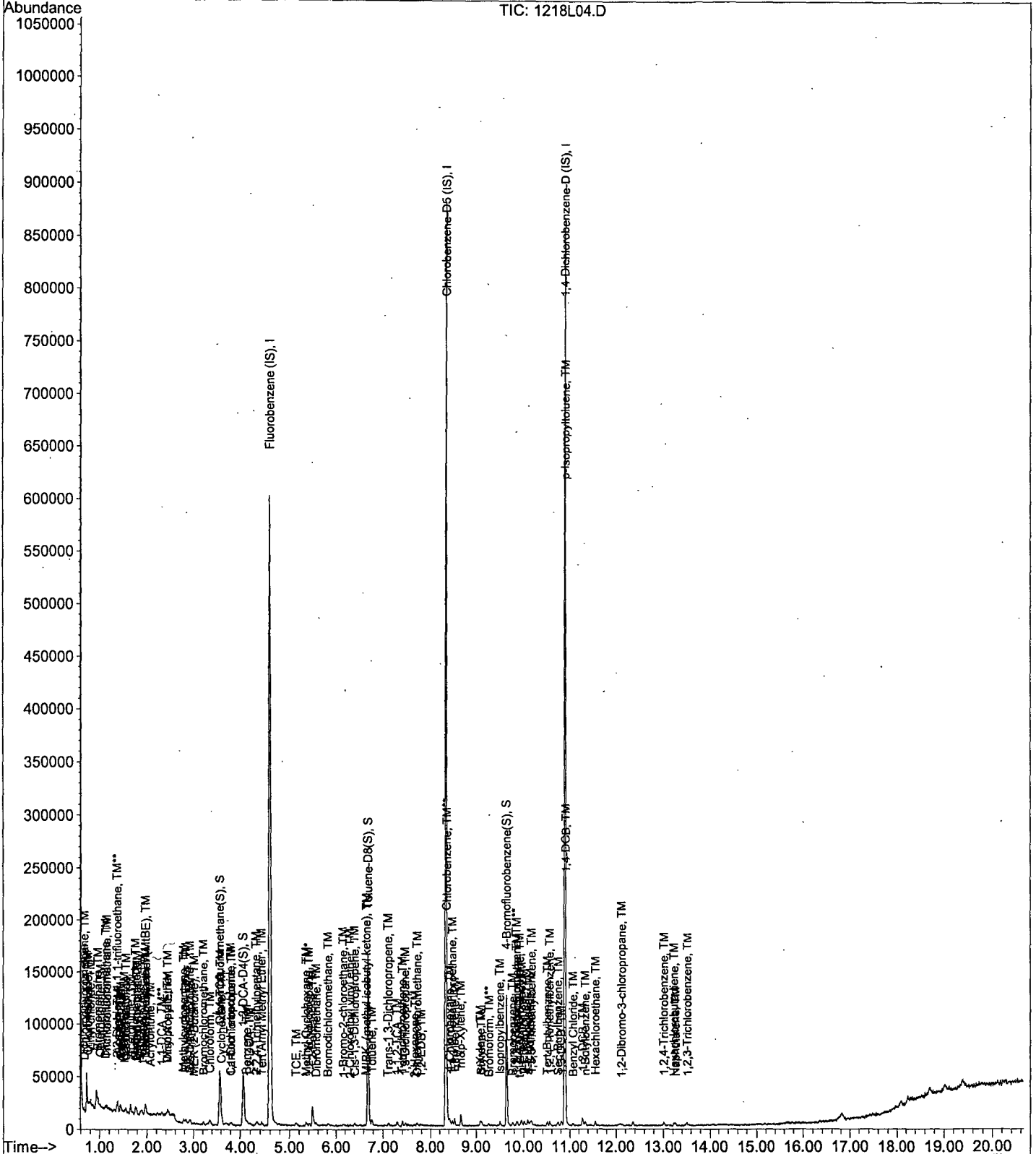
Data File : M:\LOKI\DATA\181218\1218L04.D  
Acq On : 18 Dec 18 15:56  
Sample : 0.3ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181218\1218L05.D  
 Acq On : 18 Dec 18 16:25  
 Sample : 0.5ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	276160	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	294144	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	140544	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	39921	5.572	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.288%	
40) 1,2-DCA-D4(S)	4.07	65	45629	5.581	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.324%	
61) Toluene-D8(S)	6.70	98	117901	5.174	ppb	0.00
Spiked Amount	25.000		Recovery	=	20.696%	
69) 4-Bromofluorobenzene(S)	9.65	95	38057	4.796	ppb	0.00
Spiked Amount	25.000		Recovery	=	19.184%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	1778	0.509	ppb	# 83
3) Freon 114	0.74	85	1885	0.516	ppb	78
4) Chloromethane	0.76	50	3314	0.593	ppb	# 83
5) Vinyl chloride	0.81	62	2092	0.473	ppb	100
6) Bromomethane	0.97	94	2211	0.556	ppb	81
7) Chloroethane	1.02	64	1731	0.574	ppb	97
8) Dichlorofluoromethane	1.12	67	4756	0.634	ppb	99
9) Trichlorofluoromethane	1.15	101	2838	0.490	ppb	91
10) Acrolein	1.39	56	9380	26.418	ppb	# 88
12) Freon-113	1.45	101	1995	0.586	ppb	85
13) 1,1-DCE	1.44	63	813	0.592	ppb	# 79
14) t-Butanol	1.90	59	11626	25.962	ppb	96
15) Acetonitrile	1.66	41	17346	25.954	ppb	94
16) Methyl Acetate	1.78	43	3596	0.642	ppb	# 98
17) Iodomethane	1.53	142	281	3.144	ppb	# 63
18) Acrylonitrile	1.99	52	912	0.529	ppb	# 1
19) Methylene chloride	1.76	84	2933	0.636	ppb	85
20) Carbon disulfide	1.56	76	6766	0.575	ppb	93
21) Methyl t-butyl ether (MtBE)	1.99	73	5019	0.484	ppb	# 87
22) Trans-1,2-DCE	1.97	96	1944	0.521	ppb	83
23) Diisopropyl Ether	2.45	45	6129	0.521	ppb	93
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	1991	0.549	ppb	98
25) 1,1-DCA	2.32	63	3965	0.560	ppb	94
26) Vinyl Acetate	2.43	43	2343	0.587	ppb	96
27) Ethyl tert Butyl Ether	2.83	59	4206	0.460	ppb	94
28) MEK (2-Butanone)	3.01	43	3004	1.102	ppb	# 48
29) Cis-1,2-DCE	2.93	61	2743	0.527	ppb	92
30) 2,2-Dichloropropane	2.92	77	2913	0.586	ppb	# 81
31) 2-Methylpentane	1.78	71	1461	0.643	ppb	83
32) 3-Methylpentane	1.97	57	4322	0.579	ppb	# 76
33) Chloroform	3.36	83	3500	0.529	ppb	100
34) Bromochloromethane	3.21	128	506	0.555	ppb	86
36) 1,1,1-TCA	3.56	99	896	0.689	ppb	# 53
37) Cyclohexane	3.61	41	1980	1.345	ppb	# 71
38) 1,1-Dichloropropene	3.82	75	1918	0.511	ppb	# 79
39) 2,2,4-Trimethylpentane	4.34	57	3917	0.518	ppb	# 36
41) Carbon Tetrachloride	3.80	117	2335	0.728	ppb	78
42) Tert Amyl Methyl Ether	4.44	73	3735	0.472	ppb	91
43) Methylcyclopentane	2.79	56	3630	0.555	ppb	# 73

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L05.D  
 Acq On : 18 Dec 18 16:25  
 Sample : 0.5ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) 1,2-DCA	4.19	62	2528	0.527	ppb	# 80
45) Benzene	4.13	78	7392	0.559	ppb	94
46) TCE	5.13	95	1731	0.498	ppb	# 70
47) 2-Pentanone	5.48	43	61422	23.311	ppb	99
48) 1,2-Dichloropropane	5.42	63	1877	0.523	ppb	# 85
49) Bromodichloromethane	5.82	83	1250	1.029	ppb	# 75
50) Methyl Cyclohexane	5.36	83	1941	0.515	ppb	90
51) Dibromomethane	5.57	93	1432	0.532	ppb	# 52
52) 2-Chloroethyl vinyl ether	6.30	43	257	1.104	ppb	# 31
53) MIBK (methyl isobutyl ket	6.66	43	2822	0.733	ppb	# 72
54) 1-Bromo-2-chloroethane	6.17	63	1216	0.436	ppb	92
55) Cis-1,3-Dichloropropene	6.41	75	2299	0.455	ppb	# 77
56) Toluene	6.78	91	3216	1.269	ppb	88
57) Trans-1,3-Dichloropropene	7.10	75	2063	0.434	ppb	95
58) 1,1,2-TCA	7.28	83	1266	0.419	ppb	95
59) 2-Hexanone	7.65	43	1011	0.463	ppb	# 84
62) 1,2-EDB	7.79	107	973	1.103	ppb	# 92
63) Tetrachloroethene	7.40	164	1465	0.462	ppb	92
64) 1-Chlorohexane	8.42	91	1489	2.555	ppb	# 83
65) 1,1,1,2-Tetrachloroethane	8.49	131	1972	0.497	ppb	95
66) m&p-Xylene	8.67	91	4437	4.514	ppb	93
67) o-Xylene	9.09	106	1104	2.669	ppb	93
68) Styrene	9.11	104	1454	2.823	ppb	93
70) 1,3-Dichloropropane	7.47	76	2608	0.461	ppb	85
71) Dibromochloromethane	7.70	129	1021	0.950	ppb	95
72) Chlorobenzene	8.36	112	4960	0.522	ppb	90
73) Ethylbenzene	8.53	91	3174	1.083	ppb	99
74) Bromoform	9.27	173	1719	0.533	ppb	# 32
76) Isopropylbenzene	9.51	105	5026	0.524	ppb	90
77) 1,1,2,2-Tetrachloroethane	9.86	83	2313	0.527	ppb	# 79
78) 1,2,3-Trichloropropane	9.87	110	719	0.731	ppb	78
79) t-1,4-Dichloro-2-Butene	9.92	53	300	0.340	ppb	93
80) Bromobenzene	9.78	156	796	0.840	ppb	# 34
81) n-Propylbenzene	9.95	91	3279	0.467	ppb	91
82) 4-Ethyltoluene	10.09	105	4335	0.449	ppb	96
83) 2-Chlorotoluene	10.01	91	2202	1.467	ppb	89
84) 1,3,5-Trimethylbenzene	10.16	105	2145	1.596	ppb	90
85) 4-Chlorotoluene	10.14	91	1864	1.337	ppb	88
86) Tert-Butylbenzene	10.50	119	3338	0.477	ppb	97
87) 1,2,4-Trimethylbenzene	10.55	105	3483	2.247	ppb	81
88) Sec-Butylbenzene	10.74	105	4740	0.935	ppb	97
89) p-Isopropyltoluene	10.91	119	2520	0.937	ppb	92
90) Benzyl Chloride	11.07	91	2738	0.565	ppb	92
91) 1,3-DCB	10.81	146	2285	0.576	ppb	84
92) 1,4-DCB	10.91	146	4332	0.613	ppb	# 83
93) n-Butylbenzene	11.34	91	3647	0.497	ppb	96
94) 1,2-DCB	11.30	146	3598	0.560	ppb	91
95) Hexachloroethane	11.56	117	1299	0.544	ppb	98
96) 1,2-Dibromo-3-chloropropan	12.13	75	411	0.505	ppb	# 61
97) 1,2,4-Trichlorobenzene	13.02	180	1726	0.458	ppb	# 96
98) Hexachlorobutadiene	13.22	225	456	1.412	ppb	# 44
99) Naphthalene	13.27	128	3714	1.333	ppb	# 90
100) 1,2,3-Trichlorobenzene	13.53	180	1002	0.495	ppb	# 71

(#) = qualifier out of range (m) = manual integration

Quantitation Report

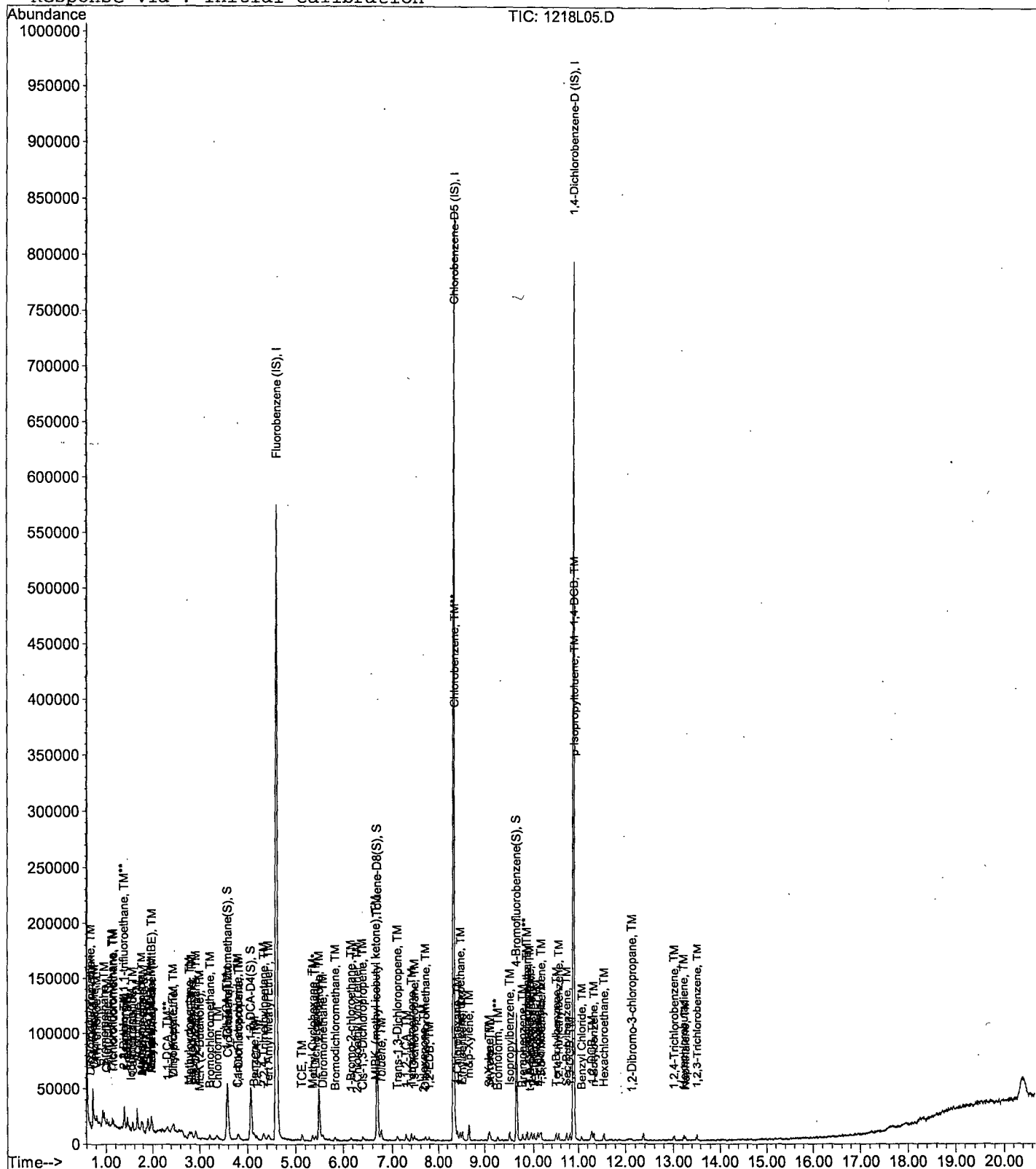
Data File : M:\LOKI\DATA\181218\1218L05.D  
 Acq On : 18 Dec 18 16:25  
 Sample : 0.5ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri, Dec 21 14:04:11 2018  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1218L06.D  
 Acq On : 18 Dec 18 16:53  
 Sample : lug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	276864	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	290240	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	150720	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	65977	9.186	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.744%	
40) 1,2-DCA-D4(S)	4.07	65	78651	9.596	ppb	0.00
Spiked Amount	25.000		Recovery	=	38.384%	
61) Toluene-D8(S)	6.70	98	201788	8.974	ppb	0.00
Spiked Amount	25.000		Recovery	=	35.896%	
69) 4-Bromofluorobenzene(S)	9.65	95	66463	8.488	ppb	0.00
Spiked Amount	25.000		Recovery	=	33.952%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	3713	1.061	ppb	98
3) Freon 114	0.73	85	3966	1.083	ppb	85
4) Chloromethane	0.76	50	6474	1.156	ppb	94
5) Vinyl chloride	0.81	62	5262	1.186	ppb	98
6) Bromomethane	0.96	94	4436	1.113	ppb	96
7) Chloroethane	1.02	64	3430	1.134	ppb	99
8) Dichlorofluoromethane	1.12	67	7694	1.023	ppb	95
9) Trichlorofluoromethane	1.15	101	5990	1.031	ppb	89
10) Acrolein	1.38	56	18184	51.084	ppb #	98
11) Acetone	1.48	43	2867	0.765	ppb	100
12) Freon-113	1.45	101	3518	1.032	ppb	90
13) 1,1-DCE	1.44	63	1417	1.029	ppb	93
14) t-Butanol	1.89	59	23549	52.453	ppb	99
15) Acetonitrile	1.66	41	35072	52.342	ppb	98
16) Methyl Acetate	1.79	43	6229	1.109	ppb #	98
17) Iodomethane	1.52	142	720	3.289	ppb #	90
18) Acrylonitrile	1.95	52	2053	1.188	ppb	70
19) Methylene chloride	1.76	84	5094	1.101	ppb	87
20) Carbon disulfide	1.56	76	12062	1.022	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	10531	1.013	ppb	90
22) Trans-1,2-DCE	1.97	96	3823	1.022	ppb	92
23) Diisopropyl Ether	2.44	45	11917	1.010	ppb	95
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	3680	1.012	ppb	91
25) 1,1-DCA	2.32	63	7086	0.999	ppb #	91
26) Vinyl Acetate	2.42	43	3887	0.971	ppb	98
27) Ethyl tert Butyl Ether	2.83	59	8590	0.937	ppb	97
28) MEK (2-Butanone)	3.00	43	2171	0.622	ppb #	81
29) Cis-1,2-DCE	2.94	61	5155	0.988	ppb	91
30) 2,2-Dichloropropane	2.91	77	5333	1.069	ppb	98
31) 2-Methylpentane	1.78	71	2137	0.938	ppb #	77
32) 3-Methylpentane	1.98	57	7523	1.006	ppb #	97
33) Chloroform	3.36	83	6271	0.946	ppb	90
34) Bromochloromethane	3.21	128	831	0.908	ppb	81
36) 1,1,1-TCA	3.56	99	1316	1.009	ppb #	77
37) Cyclohexane	3.61	41	2668	1.592	ppb	85
38) 1,1-Dichloropropene	3.81	75	3966	1.053	ppb	98
39) 2,2,4-Trimethylpentane	4.34	57	7550	0.996	ppb #	64
41) Carbon Tetrachloride	3.80	117	4547	1.193	ppb	76
42) Tert Amyl Methyl Ether	4.44	73	7117	0.896	ppb #	94

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L06.D  
 Acq On : 18 Dec 18 16:53  
 Sample : 1ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	6612	1.008	ppb	# 94
44) 1,2-DCA	4.20	62	4742	0.986	ppb	# 90
45) Benzene	4.13	78	12879	0.972	ppb	96
46) TCE	5.13	95	3239	0.930	ppb	91
47) 2-Pentanone	5.48	43	127306	48.193	ppb	100
48) 1,2-Dichloropropane	5.41	63	3211	0.893	ppb	# 85
49) Bromodichloromethane	5.82	83	2302	1.421	ppb	# 98
50) Methyl Cyclohexane	5.35	83	3502	0.927	ppb	83
51) Dibromomethane	5.57	93	2358	0.874	ppb	83
52) 2-Chloroethyl vinyl ether	6.30	43	1286	2.732	ppb	# 31
53) MIBK (methyl isobutyl ket	6.65	43	4076	1.108	ppb	# 95
54) 1-Bromo-2-chloroethane	6.16	63	2779	0.994	ppb	92
55) Cis-1,3-Dichloropropene	6.41	75	4897	0.968	ppb	92
56) Toluene	6.78	91	6222	1.612	ppb	96
57) Trans-1,3-Dichloropropene	7.10	75	4584	0.962	ppb	91
58) 1,1,2-TCA	7.28	83	2930	0.968	ppb	91
59) 2-Hexanone	7.65	43	2905	1.327	ppb	# 85
62) 1,2-EDB	7.78	107	1637	1.410	ppb	# 71
63) Tetrachloroethene	7.41	164	2965	0.947	ppb	93
64) 1-Chlorohexane	8.42	91	3117	2.928	ppb	88
65) 1,1,1,2-Tetrachloroethane	8.48	131	4212	1.076	ppb	95
66) m&p-Xylene	8.67	91	9277	5.142	ppb	100
67) o-Xylene	9.09	106	2282	2.976	ppb	76
68) Styrene	9.11	104	3544	3.122	ppb	93
70) 1,3-Dichloropropane	7.46	76	5791	1.038	ppb	99
71) Dibromochloromethane	7.70	129	2647	1.618	ppb	83
72) Chlorobenzene	8.36	112	9421	1.006	ppb	94
73) Ethylbenzene	8.53	91	7155	1.546	ppb	98
74) Bromoform	9.27	173	3391	1.065	ppb	97
76) Isopropylbenzene	9.51	105	9414	0.915	ppb	89
77) 1,1,2,2-Tetrachloroethane	9.85	83	5167	1.098	ppb	# 96
78) 1,2,3-Trichloropropane	9.87	110	1032	1.067	ppb	86
79) t-1,4-Dichloro-2-Butene	9.92	53	944	0.997	ppb	93
80) Bromobenzene	9.78	156	1812	1.251	ppb	84
81) n-Propylbenzene	9.96	91	6599	0.877	ppb	93
82) 4-Ethyltoluene	10.09	105	9207	0.889	ppb	97
83) 2-Chlorotoluene	10.01	91	4089	1.762	ppb	92
84) 1,3,5-Trimethylbenzene	10.16	105	4603	1.916	ppb	98
85) 4-Chlorotoluene	10.14	91	4201	1.686	ppb	84
86) Tert-Butylbenzene	10.49	119	6873	0.916	ppb	91
87) 1,2,4-Trimethylbenzene	10.55	105	6933	2.513	ppb	83
88) Sec-Butylbenzene	10.73	105	9018	1.251	ppb	100
89) p-Isopropyltoluene	10.90	119	5329	1.311	ppb	98
90) Benzyl Chloride	11.07	91	5009	0.964	ppb	89
91) 1,3-DCB	10.81	146	3949	0.929	ppb	95
92) 1,4-DCB	10.91	146	7016	0.925	ppb	94
93) n-Butylbenzene	11.34	91	7295	0.928	ppb	# 94
94) 1,2-DCB	11.29	146	6079	0.882	ppb	90
95) Hexachloroethane	11.56	117	2873	1.123	ppb	92
96) 1,2-Dibromo-3-chloropropan	12.13	75	1129	1.293	ppb	# 55
97) 1,2,4-Trichlorobenzene	13.01	180	3725	0.921	ppb	# 87
98) Hexachlorobutadiene	13.23	225	2466	2.181	ppb	# 80
99) Naphthalene	13.26	128	6899	1.639	ppb	99
100) 1,2,3-Trichlorobenzene	13.52	180	1989	0.916	ppb	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

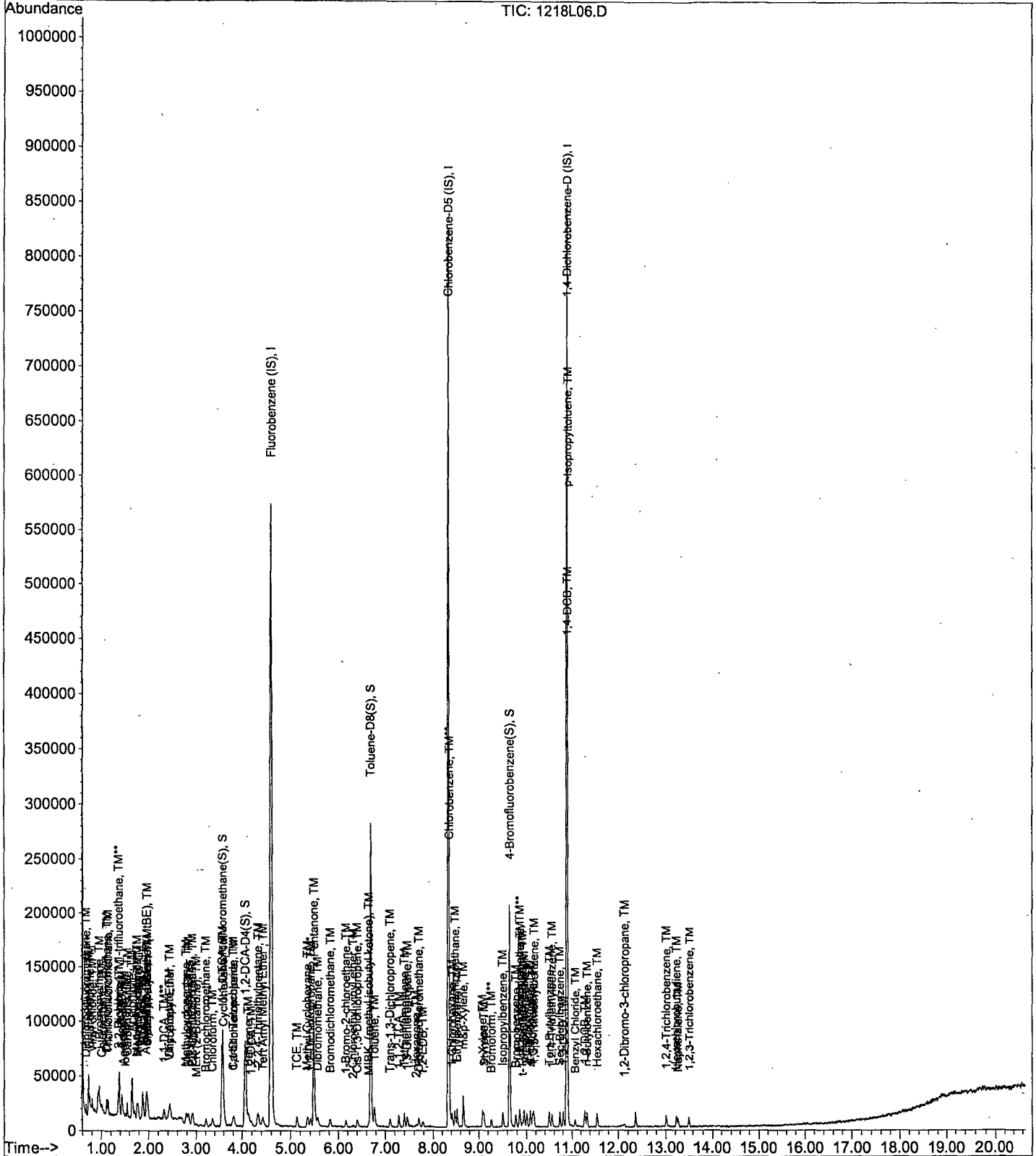
Data File : M:\LOKI\DATA\181218\1218L06.D  
 Acq On : 18 Dec 18 16:53  
 Sample : 1ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1218L07.D Vial: 5  
 Acq On : 18 Dec 18 17:22 Operator: PM, DG, SV, CMM, KV  
 Sample : 2ug/L VOC STD 12/18/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018 Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.60	96	275584	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	291712	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	153856	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
35) Dibromofluoromethane (S)	3.58	111	67300	9.414	ppb	0.00
Spiked Amount 25.000			Recovery =	37.656%		
40) 1,2-DCA-D4 (S)	4.07	65	76788	9.412	ppb	0.00
Spiked Amount 25.000			Recovery =	37.648%		
61) Toluene-D8 (S)	6.70	98	201519	8.917	ppb	0.00
Spiked Amount 25.000			Recovery =	35.668%		
69) 4-Bromofluorobenzene (S)	9.65	95	64916	8.248	ppb	0.00
Spiked Amount 25.000			Recovery =	32.992%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	6797	1.952	ppb	# 88
3) Freon 114	0.74	85	7063	1.937	ppb	100
4) Chloromethane	0.76	50	11772	2.111	ppb	100
5) Vinyl chloride	0.81	62	8839	2.001	ppb	99
6) Bromomethane	0.96	94	8765	2.209	ppb	98
7) Chloroethane	1.01	64	5693	1.890	ppb	89
8) Dichlorofluoromethane	1.12	67	14208	1.899	ppb	92
9) Trichlorofluoromethane	1.15	101	11275	1.949	ppb	94
10) Acrolein	1.38	56	26344	74.351	ppb	# 99
11) Acetone	1.48	43	4153	1.713	ppb	# 69
12) Freon-113	1.45	101	6445	1.899	ppb	91
13) 1,1-DCE	1.44	63	2806	2.047	ppb	84
14) t-Butanol	1.90	59	32973	73.785	ppb	100
15) Acetonitrile	1.66	41	53134	79.667	ppb	98
16) Methyl Acetate	1.78	43	10997	1.967	ppb	# 98
17) Iodomethane	1.52	142	2121	3.758	ppb	85
18) Acrylonitrile	1.95	52	4019	2.337	ppb	99
19) Methylene chloride	1.76	84	9709	2.108	ppb	96
20) Carbon disulfide	1.56	76	22374	1.905	ppb	# 92
21) Methyl t-butyl ether (MtBE)	1.98	73	19752	1.909	ppb	# 74
22) Trans-1,2-DCE	1.97	96	7198	1.933	ppb	86
23) Diisopropyl Ether	2.44	45	25028	2.130	ppb	92
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	7408	2.047	ppb	96
25) 1,1-DCA	2.32	63	14101	1.997	ppb	89
26) Vinyl Acetate	2.42	43	8680	2.178	ppb	98
27) Ethyl tert Butyl Ether	2.83	59	17984	1.970	ppb	94
28) MEK (2-Butanone)	3.00	43	5042	2.276	ppb	# 84
29) Cis-1,2-DCE	2.93	61	10557	2.033	ppb	# 92
30) 2,2-Dichloropropane	2.91	77	9628	1.940	ppb	# 90
31) 2-Methylpentane	1.79	71	4701	2.073	ppb	# 96
32) 3-Methylpentane	1.97	57	15316	2.057	ppb	# 95
33) Chloroform	3.36	83	13177	1.998	ppb	92
34) Bromochloromethane	3.21	128	1587	1.743	ppb	94
36) 1,1,1-TCA	3.55	99	2337	1.800	ppb	94
37) Cyclohexane	3.61	41	4681	2.329	ppb	89
38) 1,1-Dichloropropene	3.82	75	6417	1.712	ppb	91
39) 2,2,4-Trimethylpentane	4.34	57	13753	1.822	ppb	# 57
41) Carbon Tetrachloride	3.81	117	8610	2.060	ppb	85
42) Tert Amyl Methyl Ether	4.44	73	13551	1.715	ppb	# 98

Data File : M:\LOKI\DATA\181218\1218L07.D  
 Acq On : 18 Dec 18 17:22  
 Sample : 2ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	14623	2.240	ppb	93
44) 1,2-DCA	4.20	62	8557	1.787	ppb #	89
45) Benzene	4.13	78	23991	1.818	ppb	95
46) TCE	5.14	95	6130	1.769	ppb	95
47) 2-Pentanone	5.48	43	194497	73.971	ppb	98
48) 1,2-Dichloropropane	5.41	63	6422	1.794	ppb	98
49) Bromodichloromethane	5.82	83	4907	2.404	ppb	95
50) Methyl Cyclohexane	5.34	83	6643	1.767	ppb	98
51) Dibromomethane	5.56	93	5578	2.077	ppb	93
52) 2-Chloroethyl vinyl ether	6.30	43	1728	3.445	ppb #	77
53) MIBK (methyl isobutyl ket	6.65	43	6936	1.976	ppb #	84
54) 1-Bromo-2-chloroethane	6.16	63	4951	1.779	ppb	99
55) Cis-1,3-Dichloropropene	6.41	75	8854	1.758	ppb	96
56) Toluene	6.78	91	12518	2.339	ppb	95
57) Trans-1,3-Dichloropropene	7.10	75	8513	1.795	ppb	86
58) 1,1,2-TCA	7.28	83	5560	1.846	ppb	85
59) 2-Hexanone	7.66	43	4056	1.861	ppb #	76
62) 1,2-EDB	7.79	107	3192	2.109	ppb #	88
63) Tetrachloroethene	7.40	164	6177	1.963	ppb	93
64) 1-Chlorohexane	8.42	91	5236	3.401	ppb	95
65) 1,1,1,2-Tetrachloroethane	8.48	131	7764	1.974	ppb	97
66) m&p-Xylene	8.67	91	17336	6.163	ppb	100
67) o-Xylene	9.09	106	4577	3.562	ppb	93
68) Styrene	9.11	104	5922	3.454	ppb	93
70) 1,3-Dichloropropane	7.46	76	10780	1.923	ppb	100
71) Dibromochloromethane	7.71	129	4083	2.194	ppb	79
72) Chlorobenzene	8.37	112	18084	1.920	ppb	91
73) Ethylbenzene	8.53	91	12743	2.180	ppb	98
74) Bromoform	9.27	173	5563	1.739	ppb	93
76) Isopropylbenzene	9.51	105	17797	1.694	ppb	91
77) 1,1,2,2-Tetrachloroethane	9.86	83	9527	1.983	ppb	91
78) 1,2,3-Trichloropropane	9.87	110	1664	1.837	ppb	81
79) t-1,4-Dichloro-2-Butene	9.91	53	2133	2.206	ppb #	66
80) Bromobenzene	9.78	156	4305	2.283	ppb	98
81) n-Propylbenzene	9.96	91	11787	1.534	ppb	98
82) 4-Ethyltoluene	10.09	105	17546	1.659	ppb	88
83) 2-Chlorotoluene	10.01	91	8305	2.452	ppb	88
84) 1,3,5-Trimethylbenzene	10.16	105	8676	2.458	ppb	97
85) 4-Chlorotoluene	10.13	91	8803	2.388	ppb	87
86) Tert-Butylbenzene	10.50	119	12570	1.641	ppb	100
87) 1,2,4-Trimethylbenzene	10.55	105	13475	3.036	ppb	97
88) Sec-Butylbenzene	10.73	105	18474	1.981	ppb	98
89) p-Isopropyltoluene	10.91	119	10356	1.999	ppb	96
90) Benzyl Chloride	11.07	91	9371	1.767	ppb #	93
91) 1,3-DCB	10.81	146	8107	1.868	ppb	92
92) 1,4-DCB	10.91	146	13587	1.755	ppb	92
93) n-Butylbenzene	11.34	91	12912	1.609	ppb	99
94) 1,2-DCB	11.29	146	13119	1.865	ppb	91
95) Hexachloroethane	11.56	117	4772	1.827	ppb	93
96) 1,2-Dibromo-3-chloropropan	12.13	75	1875	2.104	ppb	90
97) 1,2,4-Trichlorobenzene	13.01	180	7320	1.774	ppb	98
98) Hexachlorobutadiene	13.23	225	4724	3.023	ppb	96
99) Naphthalene	13.26	128	13685	2.323	ppb	97
100) 1,2,3-Trichlorobenzene	13.53	180	3840	1.732	ppb	96

(#) = qualifier out of range (m) = manual integration



Quantitation Report

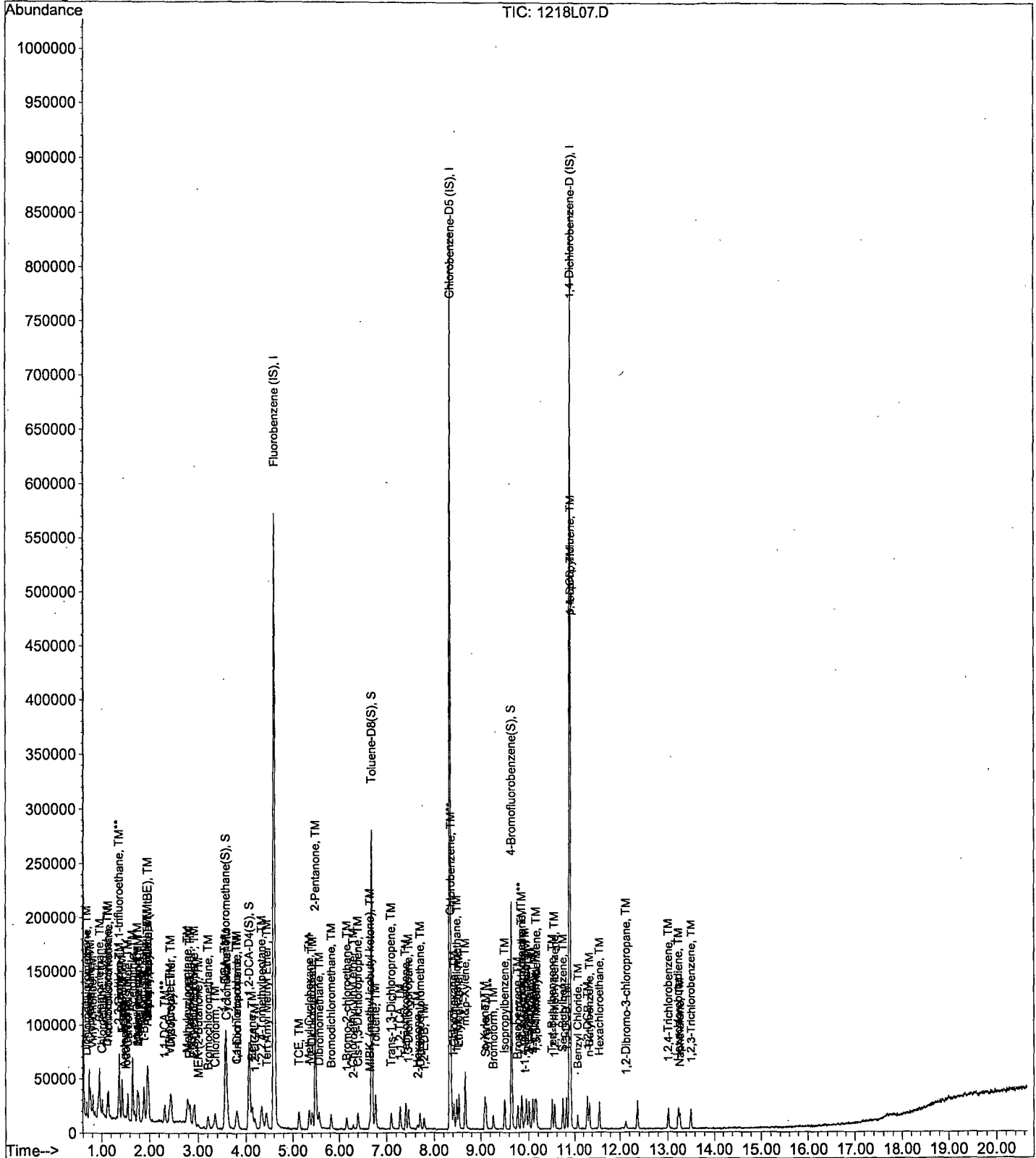
Data File : M:\LOKI\DATA\181218\1218L07.D  
Acq On : 18 Dec 18 17:22  
Sample : 2ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1218L08.D  
 Acq On : 18 Dec 18 17:50  
 Sample : 5ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	272448	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	306304	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	166144	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	183843	26.012	ppb	0.00
Spiked Amount	25.000		Recovery	=	104.048%	
40) 1,2-DCA-D4(S)	4.07	65	208850	25.893	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.572%	
61) Toluene-D8(S)	6.70	98	589834	24.855	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.420%	
69) 4-Bromofluorobenzene(S)	9.65	95	207037	25.053	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.212%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	17012	4.941	ppb	96
3) Freon 114	0.73	85	17593	4.880	ppb	86
4) Chloromethane	0.76	50	24716	4.484	ppb	92
5) Vinyl chloride	0.81	62	21527	4.930	ppb	100
6) Bromomethane	0.96	94	21256	5.418	ppb	96
7) Chloroethane	1.02	64	13767	4.624	ppb	98
8) Dichlorofluoromethane	1.12	67	37131	5.019	ppb	93
9) Trichlorofluoromethane	1.15	101	28350	4.957	ppb	99
10) Acrolein	1.38	56	35696	101.905	ppb	# 100
11) Acetone	1.48	43	8601	5.031	ppb	94
12) Freon-113	1.45	101	15586	4.644	ppb	87
13) 1,1-DCE	1.44	63	7041	5.195	ppb	92
14) t-Butanol	1.90	59	44479	100.677	ppb	94
15) Acetonitrile	1.66	41	67079	101.733	ppb	99
16) Methyl Acetate	1.79	43	26185	4.738	ppb	# 99
17) Iodomethane	1.52	142	5416	4.877	ppb	90
18) Acrylonitrile	1.95	52	8767	5.156	ppb	99
19) Methylene chloride	1.76	84	22436	4.928	ppb	91
20) Carbon disulfide	1.56	76	58122	5.004	ppb	99
21) Methyl t-butyl ether (MtBE)	1.99	73	54961	5.373	ppb	97
22) Trans-1,2-DCE	1.97	96	19806	5.381	ppb	97
23) Diisopropyl Ether	2.45	45	58998	5.079	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	17414	4.866	ppb	93
25) 1,1-DCA	2.32	63	35520	5.088	ppb	97
26) Vinyl Acetate	2.42	43	19010	4.826	ppb	94
27) Ethyl tert Butyl Ether	2.83	59	45933	5.090	ppb	98
28) MEK (2-Butanone)	3.00	43	8829	4.509	ppb	96
29) Cis-1,2-DCE	2.93	61	25359	4.939	ppb	95
30) 2,2-Dichloropropane	2.92	77	25151	5.125	ppb	94
31) 2-Methylpentane	1.79	71	10875	4.852	ppb	97
32) 3-Methylpentane	1.98	57	35825	4.868	ppb	98
33) Chloroform	3.36	83	36322	5.569	ppb	97
34) Bromochloromethane	3.22	128	5195	5.771	ppb	88
36) 1,1,1-TCA	3.56	99	6070	4.728	ppb	92
37) Cyclohexane	3.62	41	12804	5.338	ppb	96
38) 1,1-Dichloropropene	3.82	75	18048	4.872	ppb	96
39) 2,2,4-Trimethylpentane	4.35	57	34101	4.571	ppb	85
41) Carbon Tetrachloride	3.81	117	23121	5.195	ppb	84
42) Tert Amyl Methyl Ether	4.44	73	39298	5.029	ppb	93

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L08.D  
 Acq On : 18 Dec 18 17:50  
 Sample : 5ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	30515	4.728	ppb	95
44) 1,2-DCA	4.19	62	25381	5.361	ppb	96
45) Benzene	4.14	78	65799	5.045	ppb	98
46) TCE	5.13	95	17779	5.188	ppb	93
47) 2-Pentanone	5.48	43	263619	101.414	ppb	98
48) 1,2-Dichloropropane	5.41	63	18826	5.320	ppb	100
49) Bromodichloromethane	5.83	83	13074	5.531	ppb	100
50) Methyl Cyclohexane	5.35	83	16220	4.365	ppb	93
51) Dibromomethane	5.57	93	14118	5.318	ppb	93
52) 2-Chloroethyl vinyl ether	6.31	43	3263	5.947	ppb	# 80
53) MIBK (methyl isobutyl ket	6.65	43	16777	5.003	ppb	94
54) 1-Bromo-2-chloroethane	6.16	63	14686	5.338	ppb	94
55) Cis-1,3-Dichloropropene	6.41	75	25387	5.097	ppb	93
56) Toluene	6.77	91	37624	5.274	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	25145	5.363	ppb	96
58) 1,1,2-TCA	7.28	83	16041	5.386	ppb	97
59) 2-Hexanone	7.65	43	10050	4.665	ppb	96
62) 1,2-EDB	7.79	107	11750	5.721	ppb	# 92
63) Tetrachloroethene	7.40	164	16995	5.144	ppb	98
64) 1-Chlorohexane	8.42	91	16103	5.672	ppb	86
65) 1,1,1,2-Tetrachloroethane	8.48	131	21402	5.183	ppb	98
66) m&p-Xylene	8.67	91	54520	10.573	ppb	98
67) o-Xylene	9.09	106	12374	5.410	ppb	97
68) Styrene	9.11	104	20200	5.330	ppb	96
70) 1,3-Dichloropropane	7.46	76	30591	5.197	ppb	97
71) Dibromochloromethane	7.70	129	13185	5.626	ppb	91
72) Chlorobenzene	8.37	112	49006	4.956	ppb	97
73) Ethylbenzene	8.53	91	35504	4.589	ppb	97
74) Bromoform	9.27	173	17373	5.172	ppb	98
76) Isopropylbenzene	9.51	105	52063	4.589	ppb	97
77) 1,1,2,2-Tetrachloroethane	9.86	83	27417	5.284	ppb	96
78) 1,2,3-Trichloropropane	9.86	110	4810	5.359	ppb	95
79) t-1,4-Dichloro-2-Butene	9.92	53	5824	5.579	ppb	90
80) Bromobenzene	9.78	156	12021	5.151	ppb	84
81) n-Propylbenzene	9.96	91	43168	5.203	ppb	100
82) 4-Ethyltoluene	10.09	105	55484	4.858	ppb	99
83) 2-Chlorotoluene	10.01	91	27938	5.390	ppb	98
84) 1,3,5-Trimethylbenzene	10.16	105	28752	4.902	ppb	99
85) 4-Chlorotoluene	10.13	91	28568	5.132	ppb	96
86) Tert-Butylbenzene	10.50	119	39239	4.744	ppb	94
87) 1,2,4-Trimethylbenzene	10.55	105	42674	5.163	ppb	98
88) Sec-Butylbenzene	10.73	105	56586	4.652	ppb	99
89) p-Isopropyltoluene	10.91	119	33976	4.950	ppb	96
90) Benzyl Chloride	11.07	91	28388	4.958	ppb	95
91) 1,3-DCB	10.81	146	22952	4.897	ppb	98
92) 1,4-DCB	10.91	146	42703	5.108	ppb	97
93) n-Butylbenzene	11.34	91	42125	4.861	ppb	94
94) 1,2-DCB	11.29	146	37485	4.934	ppb	93
95) Hexachloroethane	11.56	117	14368	5.093	ppb	88
96) 1,2-Dibromo-3-chloropropan	12.13	75	4846	5.035	ppb	87
97) 1,2,4-Trichlorobenzene	13.01	180	21280	4.775	ppb	98
98) Hexachlorobutadiene	13.23	225	12981	5.806	ppb	84
99) Naphthalene	13.26	128	39787	4.708	ppb	95
100) 1,2,3-Trichlorobenzene	13.52	180	11000	4.595	ppb	88

(#) = qualifier out of range (m) = manual integration

Quantitation Report

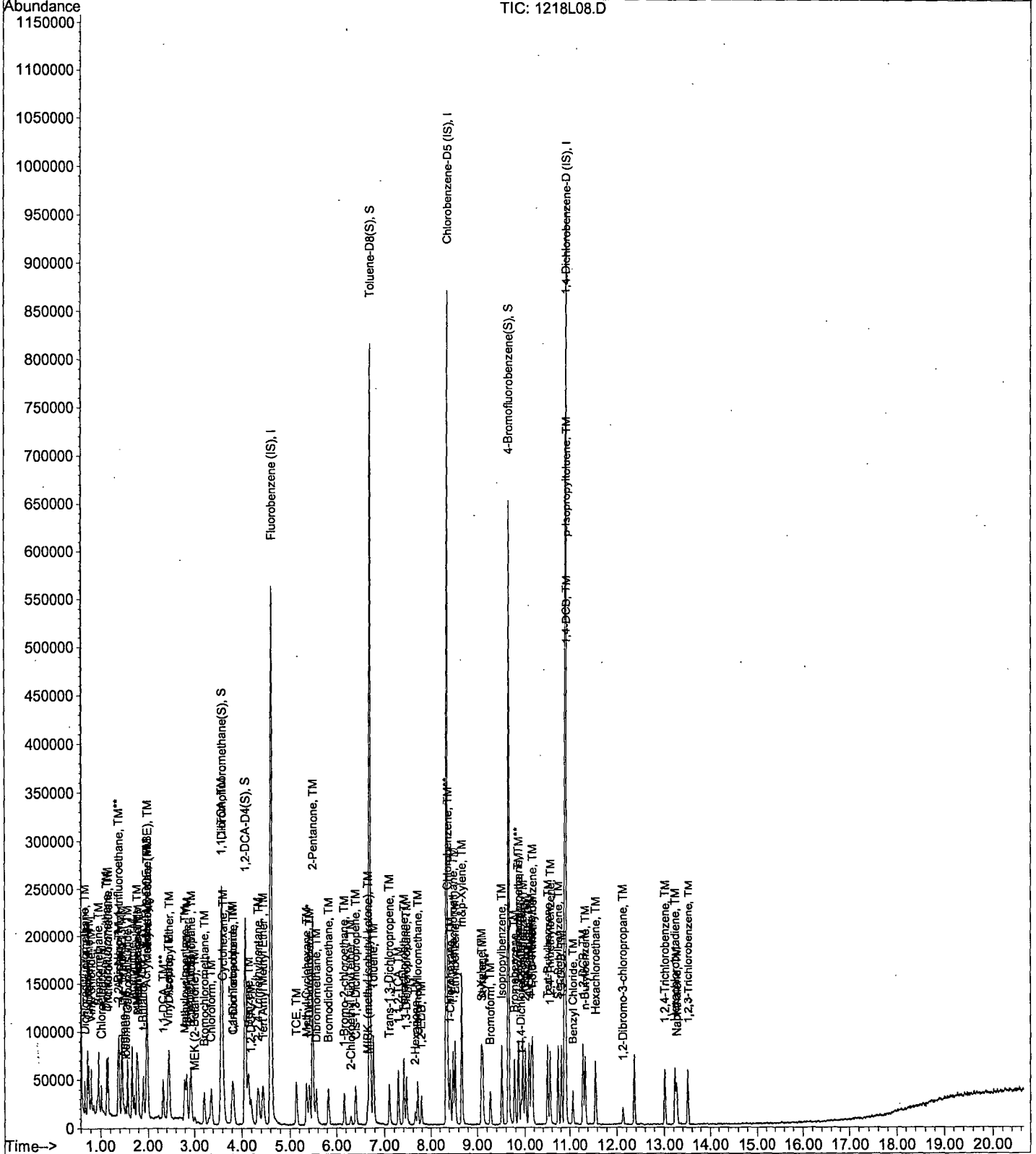
Data File : M:\LOKI\DATA\181218\1218L08.D  
Acq On : 18 Dec 18 17:50  
Sample : 5ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181218\1218L09.D  
 Acq On : 18 Dec 18 18:19  
 Sample : 10ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	283072	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	310464	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	172096	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	183912	25.045	ppb	0.00
Spiked Amount						Recovery = 100.180%
40) 1,2-DCA-D4(S)	4.07	65	204107	24.356	ppb	0.00
Spiked Amount						Recovery = 97.424%
61) Toluene-D8(S)	6.70	98	606326	25.208	ppb	0.00
Spiked Amount						Recovery = 100.832%
69) 4-Bromofluorobenzene(S)	9.65	95	210281	25.104	ppb	0.00
Spiked Amount						Recovery = 100.416%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	33212	9.284	ppb	100
3) Freon 114	0.74	85	36953	9.865	ppb	100
4) Chloromethane	0.76	50	57521	10.043	ppb	100
5) Vinyl chloride	0.81	62	44779	9.870	ppb	100
6) Bromomethane	0.96	94	40721	9.990	ppb	100
7) Chloroethane	1.02	64	29885	9.661	ppb	100
8) Dichlorofluoromethane	1.12	67	72062	9.376	ppb	100
9) Trichlorofluoromethane	1.15	101	59003	9.930	ppb	100
10) Acrolein	1.38	56	45104	123.930	ppb	# 100
11) Acetone	1.48	43	16037	10.076	ppb	100
12) Freon-113	1.45	101	34777	9.974	ppb	100
13) 1,1-DCE	1.44	63	13373	9.496	ppb	100
14) t-Butanol	1.90	59	51525	112.249	ppb	100
15) Acetonitrile	1.66	41	82196	119.981	ppb	100
16) Methyl Acetate	1.79	43	55126	9.600	ppb	100
17) Iodomethane	1.52	142	15570	8.106	ppb	100
18) Acrylonitrile	1.95	52	15949	9.027	ppb	100
19) Methylene chloride	1.76	84	44327	9.370	ppb	100
20) Carbon disulfide	1.56	76	115913	9.606	ppb	100
21) Methyl t-butyl ether (MtBE)	1.99	73	104809	9.862	ppb	100
22) Trans-1,2-DCE	1.97	96	38236	9.998	ppb	100
23) Diisopropyl Ether	2.45	45	116838	9.681	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	37367	10.050	ppb	100
25) 1,1-DCA	2.32	63	70985	9.787	ppb	100
26) Vinyl Acetate	2.42	43	44994	10.993	ppb	100
27) Ethyl tert Butyl Ether	2.83	59	90560	9.659	ppb	100
28) MEK (2-Butanone)	3.00	43	17777	9.318	ppb	100
29) Cis-1,2-DCE	2.93	61	53090	9.953	ppb	100
30) 2,2-Dichloropropane	2.91	77	48278	9.468	ppb	100
31) 2-Methylpentane	1.78	71	21882	9.396	ppb	100
32) 3-Methylpentane	1.98	57	75083	9.819	ppb	100
33) Chloroform	3.36	83	66614	9.831	ppb	100
34) Bromochloromethane	3.21	128	9258	9.899	ppb	100
36) 1,1,1-TCA	3.56	99	12341	9.253	ppb	100
37) Cyclohexane	3.63	41	24961	9.466	ppb	100
38) 1,1-Dichloropropene	3.82	75	36142	9.389	ppb	100
39) 2,2,4-Trimethylpentane	4.34	57	72703	9.379	ppb	100
41) Carbon Tetrachloride	3.81	117	48196	10.188	ppb	100
42) Tert Amyl Methyl Ether	4.44	73	77794	9.582	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L09.D  
 Acq On : 18 Dec 18 18:19  
 Sample : 10ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	60361	9.001	ppb	100
44) 1,2-DCA	4.19	62	49001	9.962	ppb	100
45) Benzene	4.13	78	131039	9.669	ppb	100
46) TCE	5.13	95	35713	10.031	ppb	100
47) 2-Pentanone	5.48	43	341225	126.342	ppb	100
48) 1,2-Dichloropropane	5.41	63	37348	10.157	ppb	100
49) Bromodichloromethane	5.82	83	26288	10.181	ppb	100
50) Methyl Cyclohexane	5.36	83	36516	9.458	ppb	100
51) Dibromomethane	5.56	93	26993	9.786	ppb	100
52) 2-Chloroethyl vinyl ether	6.30	43	5684	9.499	ppb	100
53) MIBK (methyl isobutyl ket	6.65	43	34571	10.036	ppb	100
54) 1-Bromo-2-chloroethane	6.16	63	28800	10.076	ppb	100
55) Cis-1,3-Dichloropropene	6.40	75	49671	9.599	ppb	100
56) Toluene	6.77	91	76408	9.449	ppb	100
57) Trans-1,3-Dichloropropene	7.10	75	48384	9.933	ppb	100
58) 1,1,2-TCA	7.28	83	31700	10.245	ppb	100
59) 2-Hexanone	7.64	43	20273	9.058	ppb	100
62) 1,2-EDB	7.78	107	21272	9.694	ppb	100
63) Tetrachloroethene	7.40	164	33925	10.131	ppb	100
64) 1-Chlorohexane	8.42	91	32191	9.025	ppb	100
65) 1,1,1,2-Tetrachloroethane	8.48	131	40959	9.785	ppb	100
66) m&p-Xylene	8.67	91	117640	18.045	ppb	100
67) o-Xylene	9.09	106	28176	9.177	ppb	100
68) Styrene	9.11	104	47408	8.895	ppb	100
70) 1,3-Dichloropropane	7.46	76	58286	9.770	ppb	100
71) Dibromochloromethane	7.70	129	25752	10.340	ppb	100
72) Chlorobenzene	8.37	112	98164	9.795	ppb	100
73) Ethylbenzene	8.53	91	77400	9.038	ppb	100
74) Bromoform	9.27	173	34145	10.029	ppb	100
76) Isopropylbenzene	9.51	105	113390	9.648	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.85	83	57703	10.737	ppb	100
78) 1,2,3-Trichloropropane	9.87	110	10059	11.086	ppb	100
79) t-1,4-Dichloro-2-Butene	9.92	53	11359	10.505	ppb	100
80) Bromobenzene	9.78	156	26360	10.376	ppb	100
81) n-Propylbenzene	9.96	91	90968	10.584	ppb	100
82) 4-Ethyltoluene	10.09	105	125407	10.599	ppb	100
83) 2-Chlorotoluene	10.01	91	59222	9.919	ppb	100
84) 1,3,5-Trimethylbenzene	10.16	105	66344	9.354	ppb	100
85) 4-Chlorotoluene	10.13	91	63552	9.850	ppb	100
86) Tert-Butylbenzene	10.50	119	84192	9.827	ppb	100
87) 1,2,4-Trimethylbenzene	10.55	105	100102	9.245	ppb	100
88) Sec-Butylbenzene	10.73	105	128313	9.559	ppb	100
89) p-Isopropyltoluene	10.91	119	70696	9.388	ppb	100
90) Benzyl Chloride	11.07	91	57159	9.638	ppb	100
91) 1,3-DCB	10.81	146	47824	9.851	ppb	100
92) 1,4-DCB	10.91	146	86812	10.026	ppb	100
93) n-Butylbenzene	11.34	91	92141	10.264	ppb	100
94) 1,2-DCB	11.29	146	80926	10.283	ppb	100
95) Hexachloroethane	11.56	117	29129	9.968	ppb	100
96) 1,2-Dibromo-3-chloropropan	12.13	75	9388	9.416	ppb	100
97) 1,2,4-Trichlorobenzene	13.01	180	45832	9.929	ppb	100
98) Hexachlorobutadiene	13.23	225	26214	10.159	ppb	100
99) Naphthalene	13.26	128	87308	8.951	ppb	100
100) 1,2,3-Trichlorobenzene	13.52	180	26000	10.485	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

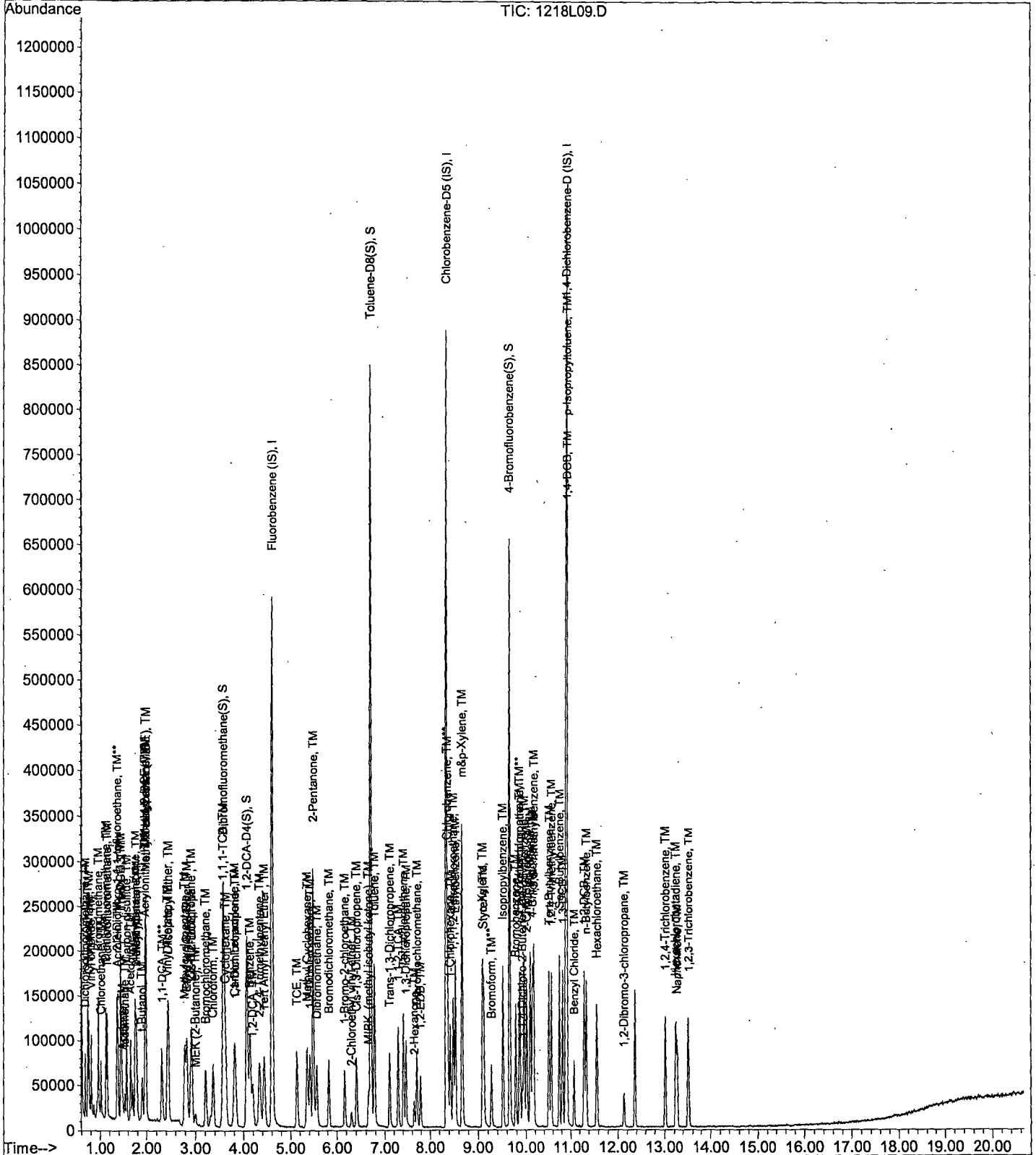
Data File : M:\LOKI\DATA\181218\1218L09.D  
Acq On : 18 Dec 18 18:19  
Sample : 10ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1218L10.D Vial: 8  
 Acq On : 18 Dec 18 18:48 Operator: PM, DG, SV, CMM, KV  
 Sample : 20ug/L VOC STD 12/18/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018 Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.61	96	280256	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	311360	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	181056	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
35) Dibromofluoromethane (S)	3.58	111	364384	50.120	ppb	0.00
Spiked Amount 25.000			Recovery =	200.480%		
40) 1,2-DCA-D4 (S)	4.07	65	415355	50.062	ppb	0.00
Spiked Amount 25.000			Recovery =	200.248%		
61) Toluene-D8 (S)	6.70	98	1294491	53.663	ppb	0.00
Spiked Amount 25.000			Recovery =	214.652%		
69) 4-Bromofluorobenzene (S)	9.65	95	477938	56.894	ppb	0.00
Spiked Amount 25.000			Recovery =	227.576%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	68750	19.411	ppb	96
3) Freon 114	0.73	85	74025	19.961	ppb	90
4) Chloromethane	0.76	50	105234	18.559	ppb	96
5) Vinyl chloride	0.81	62	87258	19.426	ppb	99
6) Bromomethane	0.96	94	73952	18.324	ppb	99
7) Chloroethane	1.01	64	58801	19.200	ppb	96
8) Dichlorofluoromethane	1.12	67	143112	18.807	ppb	95
9) Trichlorofluoromethane	1.15	101	121054	20.577	ppb	97
10) Acrolein	1.38	56	54824	152.151	ppb	# 99
11) Acetone	1.48	43	31466	21.262	ppb	99
12) Freon-113	1.45	101	68743	19.914	ppb	99
13) 1,1-DCE	1.44	63	26208	18.797	ppb	92
14) t-Butanol	1.90	59	64223	141.318	ppb	95
15) Acetonitrile	1.66	41	101063	149.004	ppb	95
16) Methyl Acetate	1.78	43	103412	18.190	ppb	# 98
17) Iodomethane	1.52	142	41488	16.658	ppb	94
18) Acrylonitrile	1.95	52	32043	18.319	ppb	91
19) Methylene chloride	1.76	84	84063	17.949	ppb	98
20) Carbon disulfide	1.56	76	232926	19.497	ppb	97
21) Methyl t-butyl ether (MtBE)	1.99	73	204373	19.423	ppb	96
22) Trans-1,2-DCE	1.97	96	72138	19.052	ppb	95
23) Diisopropyl Ether	2.45	45	226644	18.968	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	73063	19.848	ppb	98
25) 1,1-DCA	2.32	63	141343	19.683	ppb	95
26) Vinyl Acetate	2.42	43	69480	17.146	ppb	100
27) Ethyl tert Butyl Ether	2.83	59	190455	20.518	ppb	91
28) MEK (2-Butanone)	3.00	43	38520	21.129	ppb	99
29) Cis-1,2-DCE	2.93	61	104144	19.720	ppb	95
30) 2,2-Dichloropropane	2.91	77	94359	18.692	ppb	98
31) 2-Methylpentane	1.78	71	43779	18.988	ppb	97
32) 3-Methylpentane	1.98	57	142682	18.847	ppb	94
33) Chloroform	3.36	83	130473	19.449	ppb	99
34) Bromochloromethane	3.21	128	19336	20.882	ppb	92
36) 1,1,1-TCA	3.56	99	24192	18.320	ppb	97
37) Cyclohexane	3.62	41	53038	19.599	ppb	89
38) 1,1-Dichloropropene	3.82	75	75020	19.685	ppb	96
39) 2,2,4-Trimethylpentane	4.34	57	153516	20.003	ppb	92
41) Carbon Tetrachloride	3.81	117	94648	19.979	ppb	97
42) Tert Amyl Methyl Ether	4.44	73	166675	20.737	ppb	93



Data File : M:\LOKI\DATA\181218\1218L10.D  
 Acq On : 18 Dec 18 18:48  
 Sample : 20ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	123979	18.673	ppb	# 90
44) 1,2-DCA	4.19	62	95798	19.672	ppb	98
45) Benzene	4.13	78	267076	19.905	ppb	98
46) TCE	5.13	95	67243	19.077	ppb	89
47) 2-Pentanone	5.48	43	423786	158.488	ppb	99
48) 1,2-Dichloropropane	5.41	63	73934	20.309	ppb	98
49) Bromodichloromethane	5.82	83	52312	19.897	ppb	98
50) Methyl Cyclohexane	5.35	83	75826	19.838	ppb	100
51) Dibromomethane	5.56	93	55369	20.275	ppb	96
52) 2-Chloroethyl vinyl ether	6.29	43	12134	19.677	ppb	# 85
53) MIBK (methyl isobutyl ket	6.65	43	69294	20.437	ppb	95
54) 1-Bromo-2-chloroethane	6.16	63	58816	20.784	ppb	97
55) Cis-1,3-Dichloropropene	6.40	75	101592	19.830	ppb	98
56) Toluene	6.77	91	164992	19.545	ppb	97
57) Trans-1,3-Dichloropropene	7.10	75	98414	20.407	ppb	93
58) 1,1,2-TCA	7.28	83	67211	21.940	ppb	98
59) 2-Hexanone	7.64	43	42771	19.302	ppb	93
62) 1,2-EDB	7.78	107	44600	19.540	ppb	98
63) Tetrachloroethene	7.40	164	66479	19.795	ppb	95
64) 1-Chlorohexane	8.42	91	71708	17.331	ppb	90
65) 1,1,1,2-Tetrachloroethane	8.48	131	82779	19.720	ppb	100
66) m&p-Xylene	8.67	91	264436	35.538	ppb	98
67) o-Xylene	9.09	106	62992	17.523	ppb	96
68) Styrene	9.11	104	108600	16.952	ppb	99
70) 1,3-Dichloropropane	7.46	76	119815	20.025	ppb	96
71) Dibromochloromethane	7.70	129	49784	19.431	ppb	99
72) Chlorobenzene	8.36	112	200228	19.921	ppb	99
73) Ethylbenzene	8.53	91	176256	19.603	ppb	98
74) Bromoform	9.27	173	66680	19.529	ppb	89
76) Isopropylbenzene	9.51	105	253972	20.540	ppb	95
77) 1,1,2,2-Tetrachloroethane	9.85	83	106454	18.828	ppb	92
78) 1,2,3-Trichloropropane	9.87	110	19496	20.645	ppb	100
79) t-1,4-Dichloro-2-Butene	9.92	53	23023	20.238	ppb	100
80) Bromobenzene	9.78	156	55352	20.238	ppb	93
81) n-Propylbenzene	9.96	91	206144	22.798	ppb	100
82) 4-Ethyltoluene	10.09	105	292716	23.516	ppb	99
83) 2-Chlorotoluene	10.01	91	131940	19.815	ppb	93
84) 1,3,5-Trimethylbenzene	10.16	105	157120	19.459	ppb	98
85) 4-Chlorotoluene	10.13	91	142126	19.791	ppb	95
86) Tert-Butylbenzene	10.50	119	186565	20.698	ppb	99
87) 1,2,4-Trimethylbenzene	10.55	105	238065	18.459	ppb	100
88) Sec-Butylbenzene	10.73	105	290428	19.959	ppb	99
89) p-Isopropyltoluene	10.91	119	159808	19.538	ppb	99
90) Benzyl Chloride	11.07	91	122009	19.555	ppb	98
91) 1,3-DCB	10.81	146	99768	19.534	ppb	98
92) 1,4-DCB	10.91	146	180433	19.807	ppb	95
93) n-Butylbenzene	11.34	91	210026	22.239	ppb	99
94) 1,2-DCB	11.29	146	166029	20.053	ppb	95
95) Hexachloroethane	11.56	117	58508	19.030	ppb	96
96) 1,2-Dibromo-3-chloropropan	12.13	75	18663	17.793	ppb	97
97) 1,2,4-Trichlorobenzene	13.01	180	96012	19.770	ppb	98
98) Hexachlorobutadiene	13.23	225	55044	19.060	ppb	89
99) Naphthalene	13.26	128	201919	18.581	ppb	99
100) 1,2,3-Trichlorobenzene	13.52	180	55728	21.362	ppb	91

(#) = qualifier out of range (m) = manual integration  
 1218L10.D L1218W.M Sun Dec 23 08:14 Page 743 of 1287

Quantitation Report

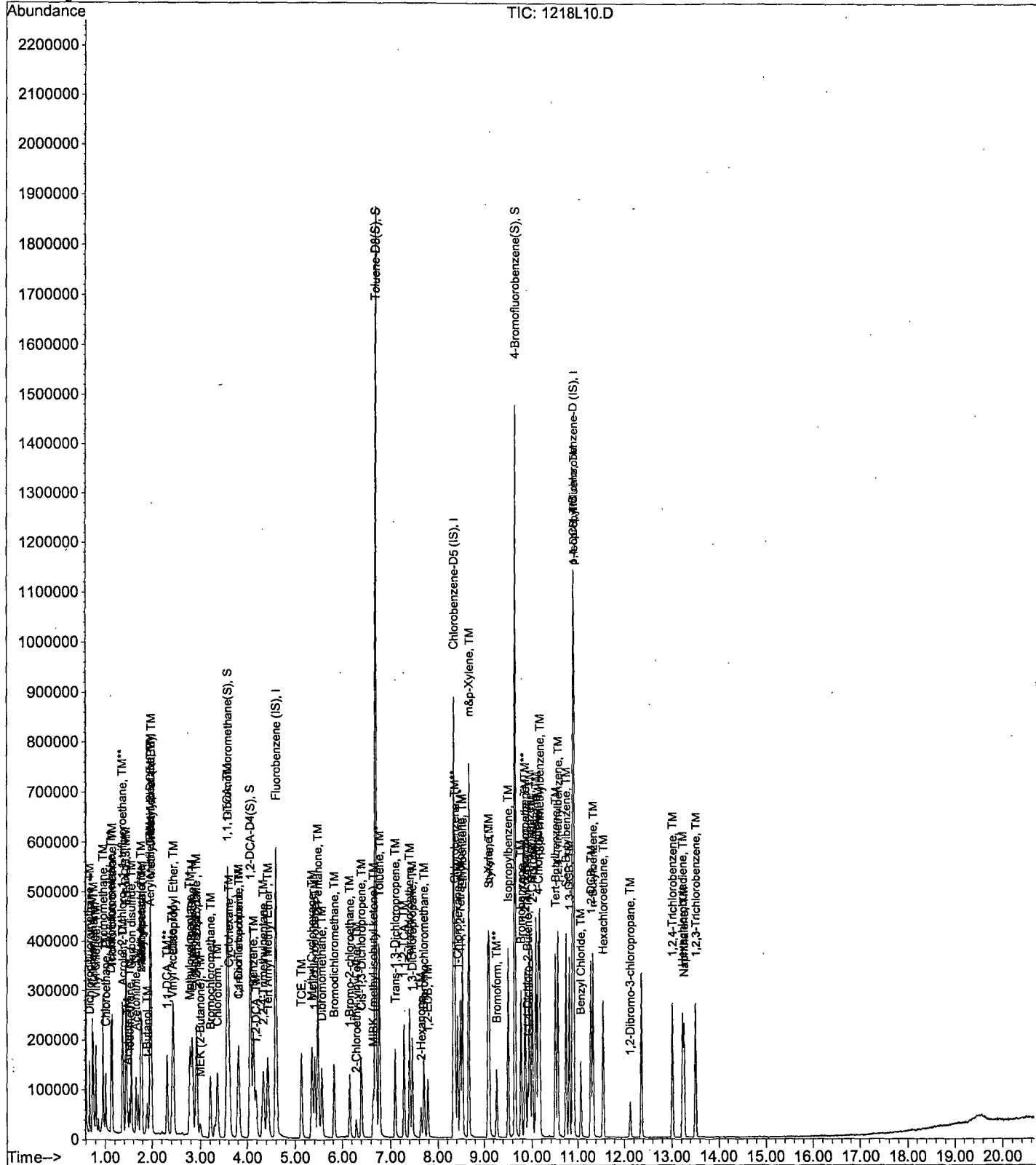
Data File : M:\LOKI\DATA\181218\1218L10.D  
Acq On : 18 Dec 18 18:48  
Sample : 20ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1218L11.D  
 Acq On : 18 Dec 18 19:16  
 Sample : 40ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	289024	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	324928	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	205376	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	361661	48.237	ppb	0.00
Spiked Amount	25.000		Recovery	=	192.948%	
40) 1,2-DCA-D4(S)	4.07	65	404639	47.290	ppb	0.00
Spiked Amount	25.000		Recovery	=	189.160%	
61) Toluene-D8(S)	6.70	98	1301512	51.701	ppb	0.00
Spiked Amount	25.000		Recovery	=	206.804%	
69) 4-Bromofluorobenzene(S)	9.65	95	490575	55.960	ppb	0.00
Spiked Amount	25.000		Recovery	=	223.840%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	140669	38.513	ppb	97
3) Freon 114	0.73	85	150151	39.261	ppb	90
4) Chloromethane	0.76	50	206994	35.397	ppb	97
5) Vinyl chloride	0.81	62	177823	38.387	ppb	97
6) Bromomethane	0.96	94	142298	34.189	ppb	99
7) Chloroethane	1.01	64	116693	36.948	ppb	100
8) Dichlorofluoromethane	1.12	67	286529	36.511	ppb	95
9) Trichlorofluoromethane	1.15	101	238505	39.312	ppb	98
10) Acrolein	1.38	56	61424	165.296	ppb	# 97
11) Acetone	1.48	43	59075	39.788	ppb	98
12) Freon-113	1.45	101	135446	38.046	ppb	98
13) 1,1-DCE	1.44	63	50992	35.463	ppb	95
14) t-Butanol	1.90	59	64913	138.503	ppb	98
15) Acetonitrile	1.66	41	114243	163.326	ppb	95
16) Methyl Acetate	1.78	43	209873	35.795	ppb	# 99
17) Iodomethane	1.52	142	105048	36.460	ppb	98
18) Acrylonitrile	1.95	52	62422	34.603	ppb	90
19) Methylene chloride	1.76	84	167087	34.593	ppb	97
20) Carbon disulfide	1.56	76	463166	37.592	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	425222	39.186	ppb	95
22) Trans-1,2-DCE	1.97	96	146311	37.470	ppb	98
23) Diisopropyl Ether	2.45	45	461527	37.453	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	144128	37.966	ppb	98
25) 1,1-DCA	2.32	63	274506	37.067	ppb	96
26) Vinyl Acetate	2.42	43	167821	40.157	ppb	99
27) Ethyl tert Butyl Ether	2.83	59	392926	41.047	ppb	96
28) MEK (2-Butanone)	3.00	43	73225	39.469	ppb	96
29) Cis-1,2-DCE	2.93	61	209549	38.476	ppb	95
30) 2,2-Dichloropropane	2.91	77	191414	36.767	ppb	99
31) 2-Methylpentane	1.78	71	88488	37.215	ppb	97
32) 3-Methylpentane	1.97	57	290686	37.233	ppb	93
33) Chloroform	3.36	83	259401	37.494	ppb	97
34) Bromochloromethane	3.21	128	37056	38.805	ppb	99
36) 1,1,1-TCA	3.56	99	49024	35.999	ppb	97
37) Cyclohexane	3.62	41	107414	37.886	ppb	89
38) 1,1-Dichloropropene	3.82	75	163036	41.483	ppb	95
39) 2,2,4-Trimethylpentane	4.34	57	330619	41.772	ppb	85
41) Carbon Tetrachloride	3.80	117	189864	38.642	ppb	91
42) Tert Amyl Methyl Ether	4.44	73	355731	42.916	ppb	95

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L11.D  
 Acq On : 18 Dec 18 19:16  
 Sample : 40ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	269130	39.306	ppb	93
44) 1,2-DCA	4.19	62	197365	39.300	ppb	97
45) Benzene	4.13	78	537311	38.831	ppb	99
46) TCE	5.13	95	136399	37.522	ppb	89
47) 2-Pentanone	5.48	43	498275	180.693	ppb	100
48) 1,2-Dichloropropane	5.41	63	148968	39.679	ppb	98
49) Bromodichloromethane	5.82	83	101088	36.793	ppb	98
50) Methyl Cyclohexane	5.35	83	168905	42.849	ppb	97
51) Dibromomethane	5.56	93	108701	38.597	ppb	98
52) 2-Chloroethyl vinyl ether	6.30	43	21603	33.463	ppb	97
53) MIBK (methyl isobutyl ket	6.65	43	135434	38.835	ppb	96
54) 1-Bromo-2-chloroethane	6.16	63	119368	40.902	ppb	100
55) Cis-1,3-Dichloropropene	6.40	75	222023	42.023	ppb	100
56) Toluene	6.77	91	327232	36.756	ppb	96
57) Trans-1,3-Dichloropropene	7.09	75	203749	40.968	ppb	93
58) 1,1,2-TCA	7.28	83	129281	40.921	ppb	98
59) 2-Hexanone	7.64	43	87350	38.224	ppb	90
62) 1,2-EDB	7.78	107	92256	38.076	ppb	99
63) Tetrachloroethene	7.40	164	133794	38.176	ppb	98
64) 1-Chlorohexane	8.42	91	162740	35.079	ppb	86
65) 1,1,1,2-Tetrachloroethane	8.48	131	166099	37.916	ppb	98
66) m&p-Xylene	8.67	91	607023	73.431	ppb	97
67) o-Xylene	9.09	106	139392	34.481	ppb	97
68) Styrene	9.11	104	259776	35.472	ppb	99
70) 1,3-Dichloropropane	7.46	76	246273	39.442	ppb	100
71) Dibromochloromethane	7.70	129	100752	37.175	ppb	100
72) Chlorobenzene	8.36	112	404723	38.586	ppb	96
73) Ethylbenzene	8.53	91	387143	40.460	ppb	99
74) Bromoform	9.27	173	136689	38.361	ppb	93
76) Isopropylbenzene	9.51	105	572942	40.850	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.85	83	220170	34.329	ppb	95
78) 1,2,3-Trichloropropane	9.87	110	39112	36.714	ppb	98
79) t-1,4-Dichloro-2-Butene	9.92	53	49011	37.981	ppb	97
80) Bromobenzene	9.78	156	117432	37.438	ppb	95
81) n-Propylbenzene	9.96	91	485376	47.323	ppb	100
82) 4-Ethyltoluene	10.09	105	665008	47.099	ppb	99
83) 2-Chlorotoluene	10.01	91	280049	36.152	ppb	94
84) 1,3,5-Trimethylbenzene	10.16	105	357696	37.769	ppb	98
85) 4-Chlorotoluene	10.13	91	310216	37.140	ppb	97
86) Tert-Butylbenzene	10.50	119	430232	42.080	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	554147	35.844	ppb	100
88) Sec-Butylbenzene	10.73	105	671981	40.164	ppb	99
89) p-Isopropyltoluene	10.91	119	380224	40.377	ppb	97
90) Benzyl Chloride	11.07	91	262013	37.022	ppb	98
91) 1,3-DCB	10.81	146	225600	38.941	ppb	97
92) 1,4-DCB	10.91	146	383060	37.071	ppb	96
93) n-Butylbenzene	11.34	91	497980	46.485	ppb	99
94) 1,2-DCB	11.29	146	352446	37.528	ppb	98
95) Hexachloroethane	11.56	117	125721	36.050	ppb	93
96) 1,2-Dibromo-3-chloropropan	12.13	75	40945	34.414	ppb	95
97) 1,2,4-Trichlorobenzene	13.01	180	226452	41.108	ppb	98
98) Hexachlorobutadiene	13.23	225	116854	34.607	ppb	90
99) Naphthalene	13.26	128	519229	40.966	ppb	98
100) 1,2,3-Trichlorobenzene	13.52	180	141184	47.711	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

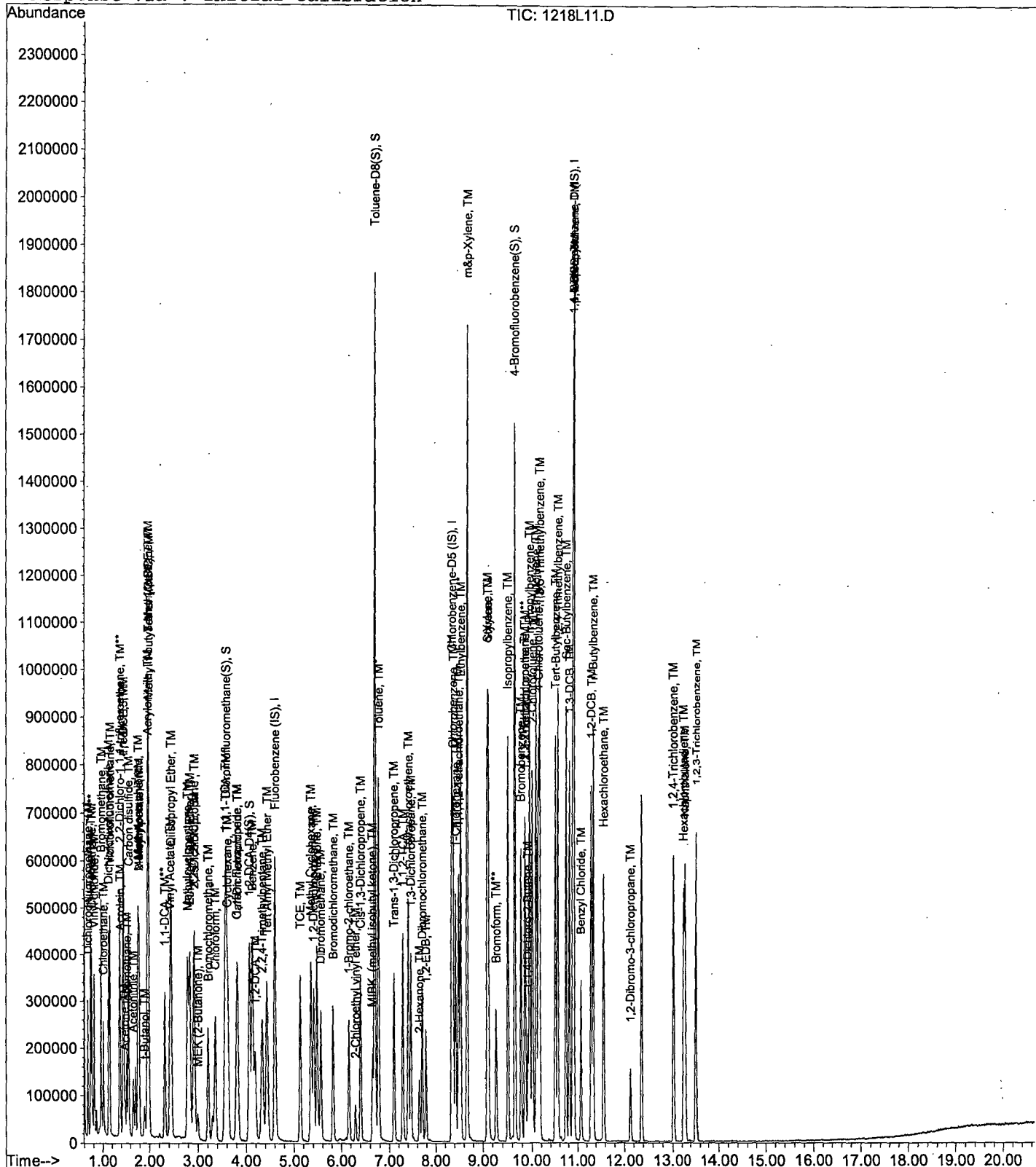
Data File : M:\LOKI\DATA\181218\1218L11.D  
Acq On : 18 Dec 18 19:16  
Sample : 40ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1218L12.D  
 Acq On : 18 Dec 18 19:45  
 Sample : 100ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	295872	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	329280	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	206976	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	713472	92.957	ppb	0.00
Spiked Amount	25.000		Recovery	=	371.828%	
40) 1,2-DCA-D4(S)	4.07	65	803026	91.678	ppb	0.00
Spiked Amount	25.000		Recovery	=	366.712%	
61) Toluene-D8(S)	6.70	98	2694306	105.613	ppb	0.00
Spiked Amount	25.000		Recovery	=	422.452%	
69) 4-Bromofluorobenzene(S)	9.65	95	1004490	113.068	ppb	0.00
Spiked Amount	25.000		Recovery	=	452.272%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	369126	98.722	ppb	100
3) Freon 114	0.73	85	381798	97.520	ppb	94
4) Chloromethane	0.76	50	531914	88.855	ppb	93
5) Vinyl chloride	0.81	62	457365	96.447	ppb	97
6) Bromomethane	0.96	94	348365	81.763	ppb	100
7) Chloroethane	1.00	64	176996	54.744	ppb	96
8) Dichlorofluoromethane	1.12	67	774545	96.412	ppb	93
9) Trichlorofluoromethane	1.14	101	633204	101.954	ppb	99
10) Acrolein	1.39	56	73104	192.175	ppb	# 97
11) Acetone	1.49	43	148813	99.833	ppb	99
12) Freon-113	1.45	101	354595	97.299	ppb	99
13) 1,1-DCE	1.44	63	139776	94.958	ppb	93
14) t-Butanol	1.93	59	100402	209.266	ppb	99
15) Acetonitrile	1.67	41	135899	189.789	ppb	92
16) Methyl Acetate	1.78	43	547204	91.170	ppb	# 99
17) Iodomethane	1.52	142	319168	102.209	ppb	98
18) Acrylonitrile	1.95	52	160769	87.059	ppb	99
19) Methylene chloride	1.76	84	439602	88.907	ppb	97
20) Carbon disulfide	1.56	76	1261457	100.015	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	1169401	105.271	ppb	# 84
22) Trans-1,2-DCE	1.96	96	401275	100.387	ppb	95
23) Diisopropyl Ether	2.45	45	1281247	101.568	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	368068	94.712	ppb	99
25) 1,1-DCA	2.32	63	739031	97.483	ppb	95
26) Vinyl Acetate	2.42	43	359682	84.075	ppb	100
27) Ethyl tert Butyl Ether	2.83	59	1099855	112.236	ppb	94
28) MEK (2-Butanone)	3.00	43	188286	100.075	ppb	99
29) Cis-1,2-DCE	2.93	61	579031	103.856	ppb	97
30) 2,2-Dichloropropane	2.91	77	513766	96.402	ppb	97
31) 2-Methylpentane	1.78	71	231033	94.915	ppb	99
32) 3-Methylpentane	1.97	57	781632	97.798	ppb	89
33) Chloroform	3.36	83	700682	98.933	ppb	98
34) Bromochloromethane	3.21	128	93120	95.258	ppb	98
36) 1,1,1-TCA	3.56	99	131264	94.157	ppb	98
37) Cyclohexane	3.62	41	296058	100.946	ppb	84
38) 1,1-Dichloropropene	3.82	75	456379	113.433	ppb	95
39) 2,2,4-Trimethylpentane	4.34	57	940375	116.063	ppb	# 79
41) Carbon Tetrachloride	3.80	117	507454	100.514	ppb	97
42) Tert Amyl Methyl Ether	4.44	73	1043224	122.942	ppb	# 90

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L12.D  
 Acq On : 18 Dec 18 19:45  
 Sample : 100ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	701155	100.032	ppb	92
44) 1,2-DCA	4.19	62	530784	103.246	ppb	98
45) Benzene	4.13	78	1500143	105.906	ppb	99
46) TCE	5.13	95	390736	105.000	ppb	92
47) 2-Pentanone	5.48	43	566498	200.678	ppb	97
48) 1,2-Dichloropropane	5.41	63	413748	107.656	ppb	98
49) Bromodichloromethane	5.82	83	287553	101.244	ppb	97
50) Methyl Cyclohexane	5.35	83	514971	127.618	ppb	93
51) Dibromomethane	5.56	93	288927	100.216	ppb	97
52) 2-Chloroethyl vinyl ether	6.30	43	68798	102.633	ppb	98
53) MIBK (methyl isobutyl ket	6.65	43	357681	100.373	ppb	97
54) 1-Bromo-2-chloroethane	6.16	63	330752	110.711	ppb	100
55) Cis-1,3-Dichloropropene	6.40	75	660592	122.138	ppb	97
56) Toluene	6.77	91	939045	101.411	ppb	97
57) Trans-1,3-Dichloropropene	7.09	75	591302	116.141	ppb	93
58) 1,1,2-TCA	7.28	83	339046	104.835	ppb	96
59) 2-Hexanone	7.64	43	247181	105.662	ppb	# 89
62) 1,2-EDB	7.78	107	250368	100.847	ppb	94
63) Tetrachloroethene	7.40	164	370332	104.271	ppb	98
64) 1-Chlorohexane	8.42	91	503378	102.508	ppb	83
65) 1,1,1,2-Tetrachloroethane	8.48	131	440882	99.311	ppb	97
66) m&p-Xylene	8.67	91	1767606	203.594	ppb	99
67) o-Xylene	9.09	106	441536	102.703	ppb	95
68) Styrene	9.11	104	800000	102.453	ppb	99
70) 1,3-Dichloropropane	7.46	76	679289	107.355	ppb	100
71) Dibromochloromethane	7.70	129	280448	101.166	ppb	98
72) Chlorobenzene	8.36	112	1124669	105.807	ppb	98
73) Ethylbenzene	8.53	91	1186107	120.858	ppb	99
74) Bromoform	9.27	173	370677	102.653	ppb	93
76) Isopropylbenzene	9.51	105	1781512	126.038	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.85	83	598836	92.650	ppb	96
78) 1,2,3-Trichloropropane	9.87	110	108008	101.060	ppb	98
79) t-1,4-Dichloro-2-Butene	9.92	53	142111	109.277	ppb	94
80) Bromobenzene	9.78	156	321600	100.922	ppb	93
81) n-Propylbenzene	9.95	91	1420800	137.454	ppb	99
82) 4-Ethyltoluene	10.08	105	1974828	138.785	ppb	99
83) 2-Chlorotoluene	10.01	91	808200	101.543	ppb	97
84) 1,3,5-Trimethylbenzene	10.16	105	985544	101.046	ppb	97
85) 4-Chlorotoluene	10.13	91	866891	101.175	ppb	98
86) Tert-Butylbenzene	10.50	119	1330051	129.083	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	1647929	101.993	ppb	98
88) Sec-Butylbenzene	10.73	105	2013093	118.353	ppb	97
89) p-Isopropyltoluene	10.90	119	1154048	120.496	ppb	97
90) Benzyl Chloride	11.07	91	829097	116.243	ppb	98
91) 1,3-DCB	10.81	146	624512	106.965	ppb	98
92) 1,4-DCB	10.91	146	1073249	103.061	ppb	95
93) n-Butylbenzene	11.34	91	1552338	143.787	ppb	97
94) 1,2-DCB	11.29	146	1050623	111.004	ppb	97
95) Hexachloroethane	11.56	117	354064	100.742	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.13	75	113554	94.703	ppb	93
97) 1,2,4-Trichlorobenzene	13.01	180	728293	131.186	ppb	97
98) Hexachlorobutadiene	13.23	225	356369	102.252	ppb	93
99) Naphthalene	13.26	128	1724532	132.911	ppb	98
100) 1,2,3-Trichlorobenzene	13.52	180	418304	140.266	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

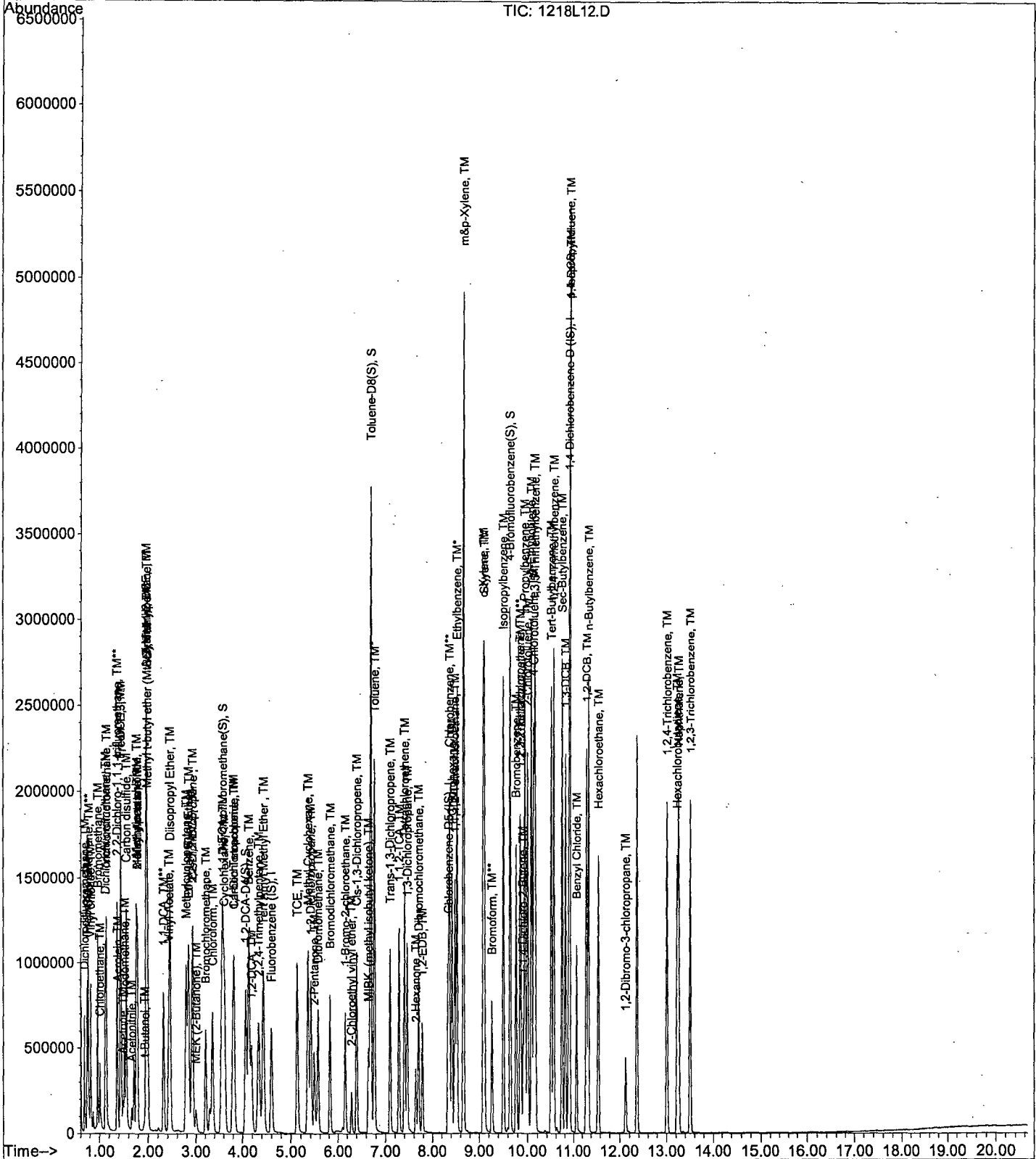
Data File : M:\LOKI\DATA\181218\1218L12.D  
Acq On : 18 Dec 18 19:45  
Sample : 100ug/L VOC STD 12/18/18  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

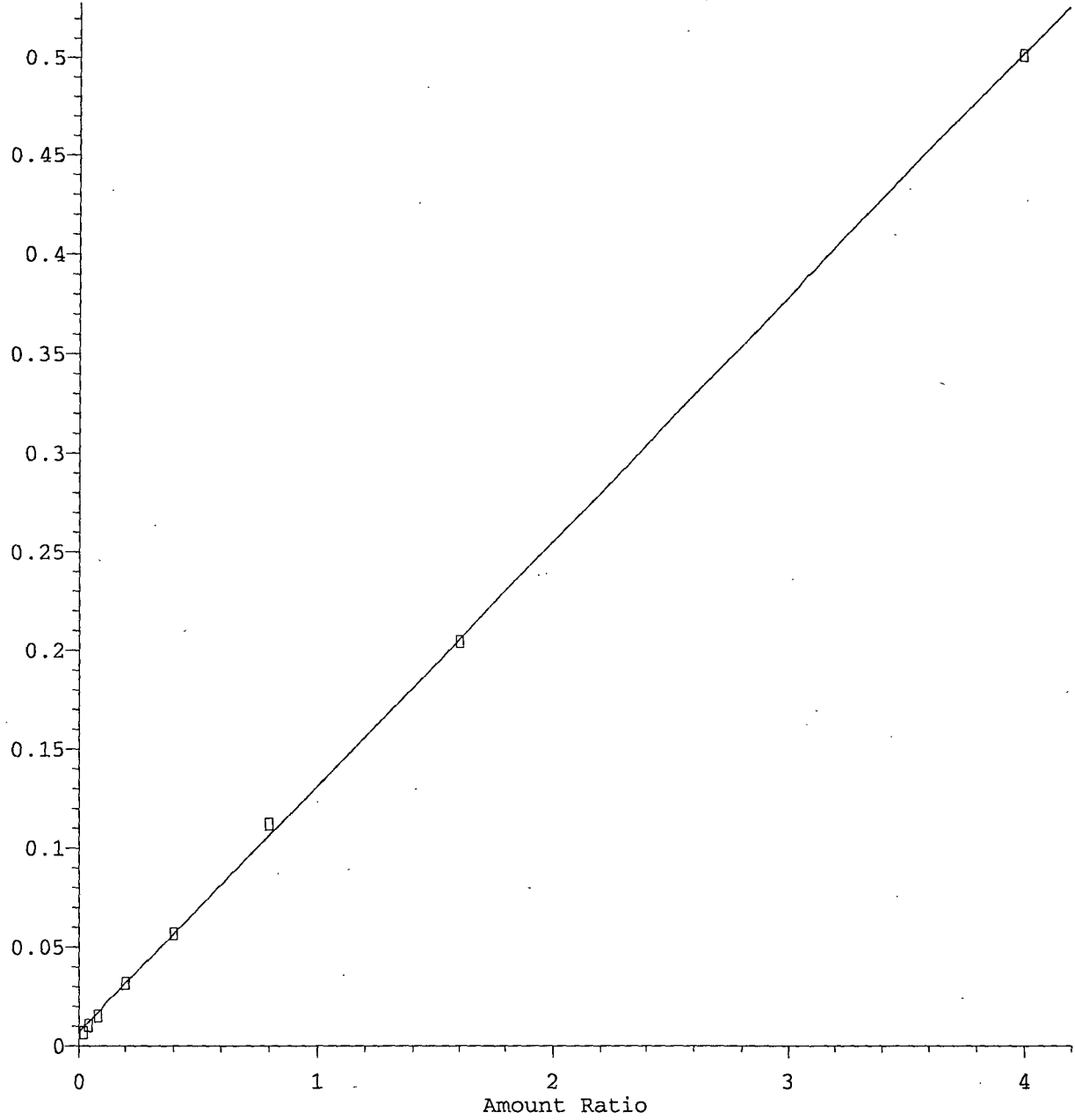
Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration





Acetone

Response Ratio

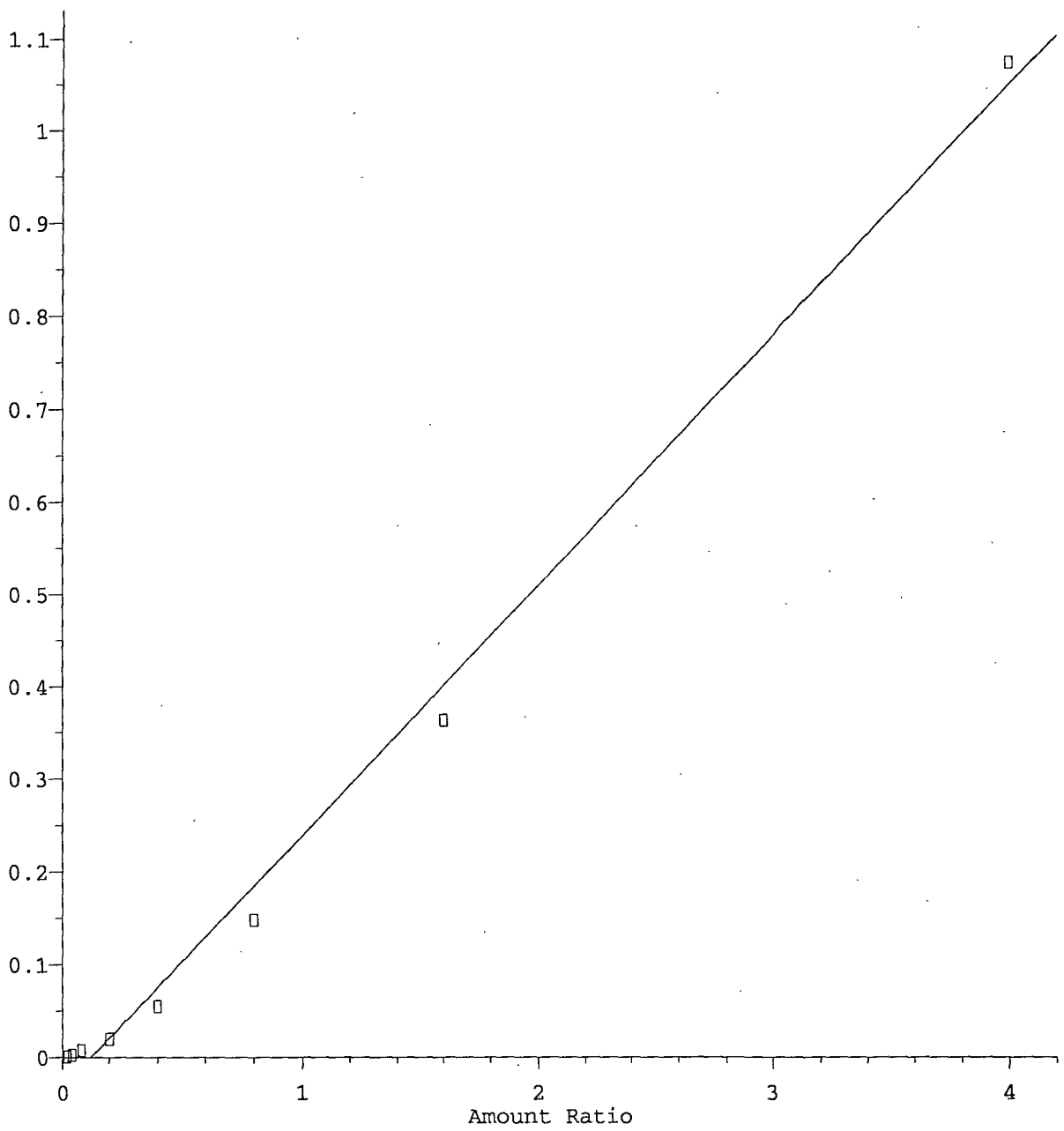


Resp Ratio = 1.24e-001 \* Amt + 6.55e-003  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

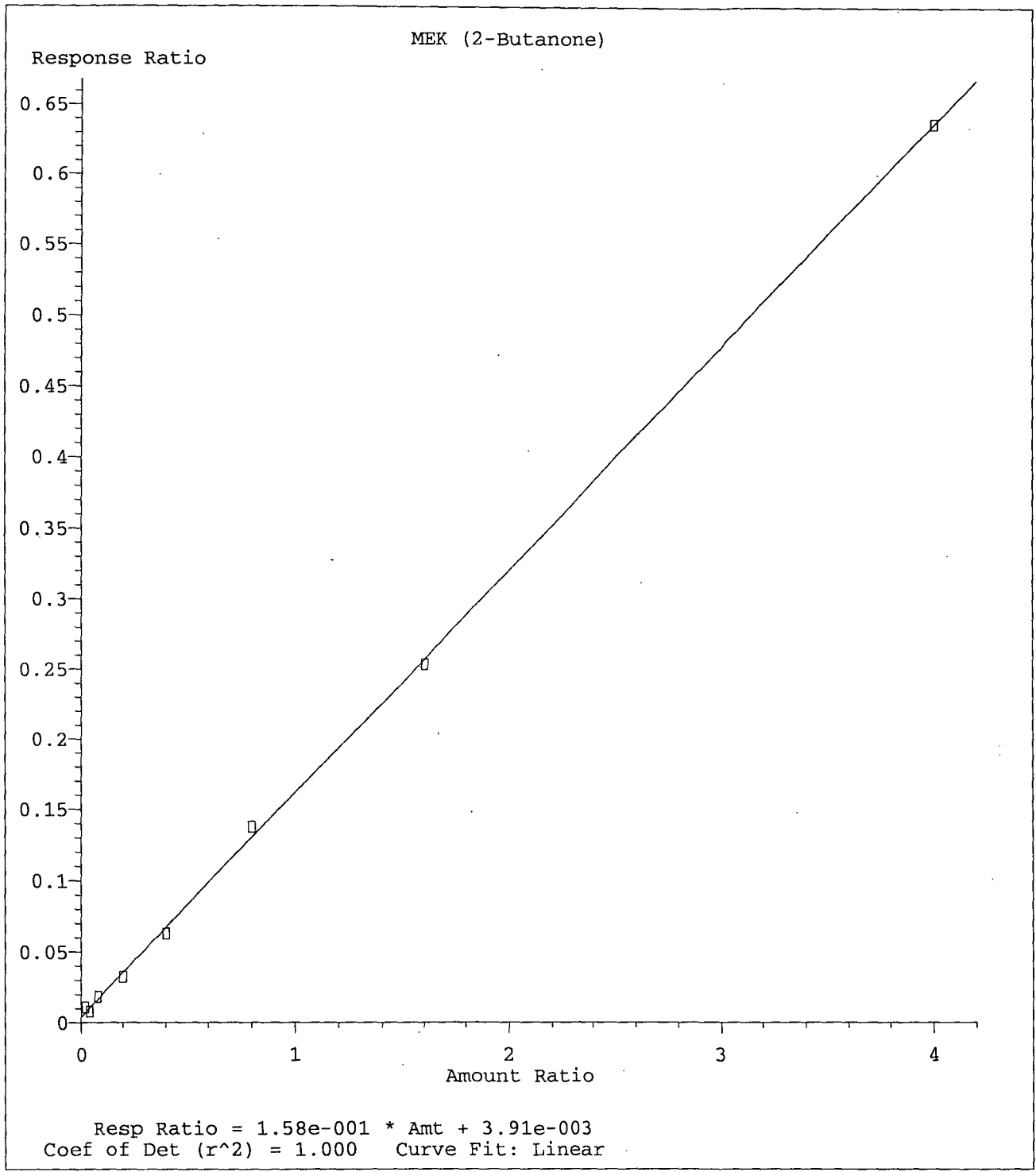
Iodomethane

Response Ratio



Resp Ratio = 2.72e-001 \* Amt - 3.32e-002  
Coef of Det (r^2) = 0.994 Curve Fit: Linear

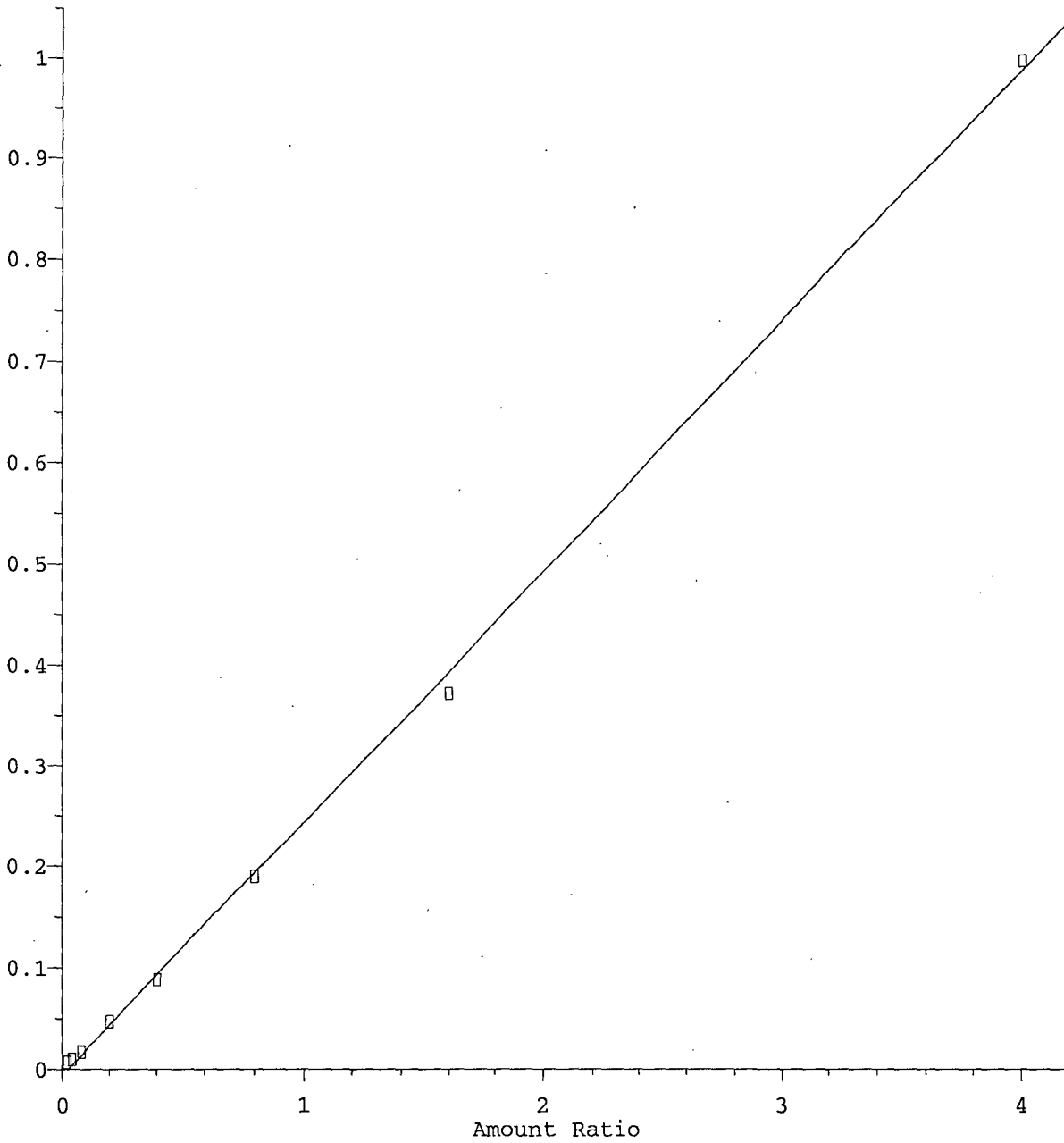
Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

Cyclohexane

Response Ratio

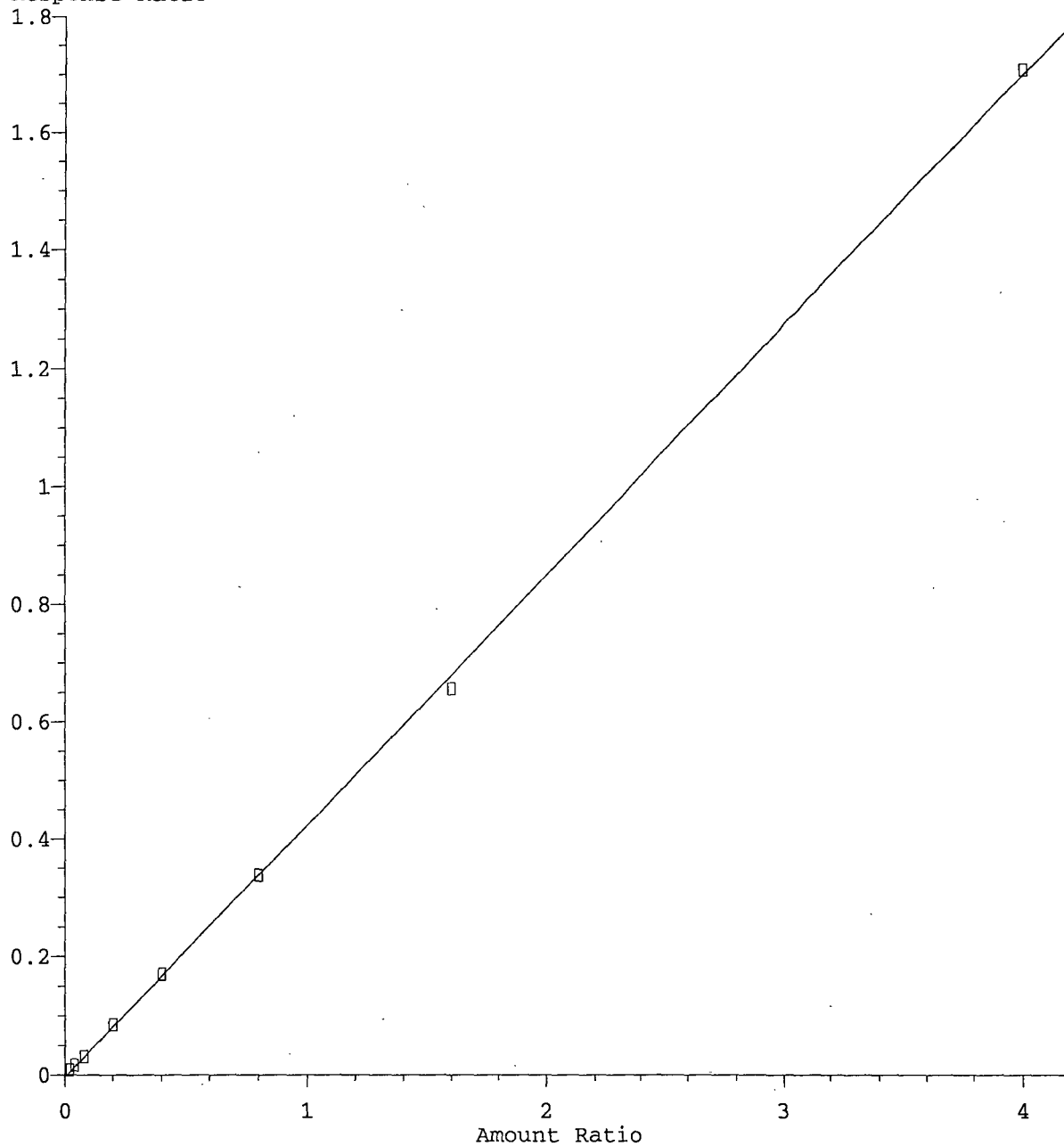


Resp Ratio = 2.49e-001 \* Amt - 6.24e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

Carbon Tetrachloride

Response Ratio

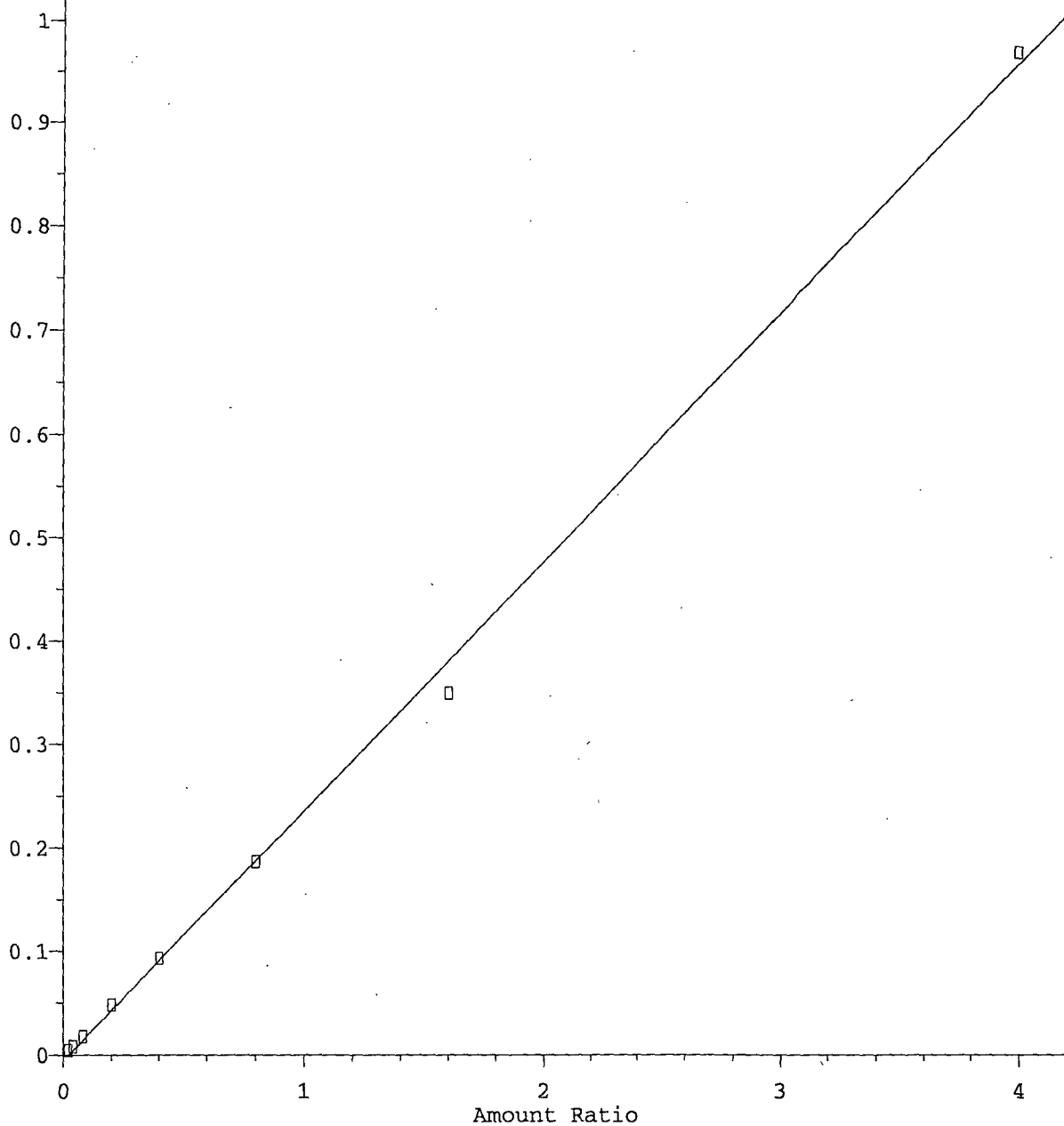


Resp Ratio = 4.28e-001 \* Amt - 3.99e-003  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

Bromodichloromethane

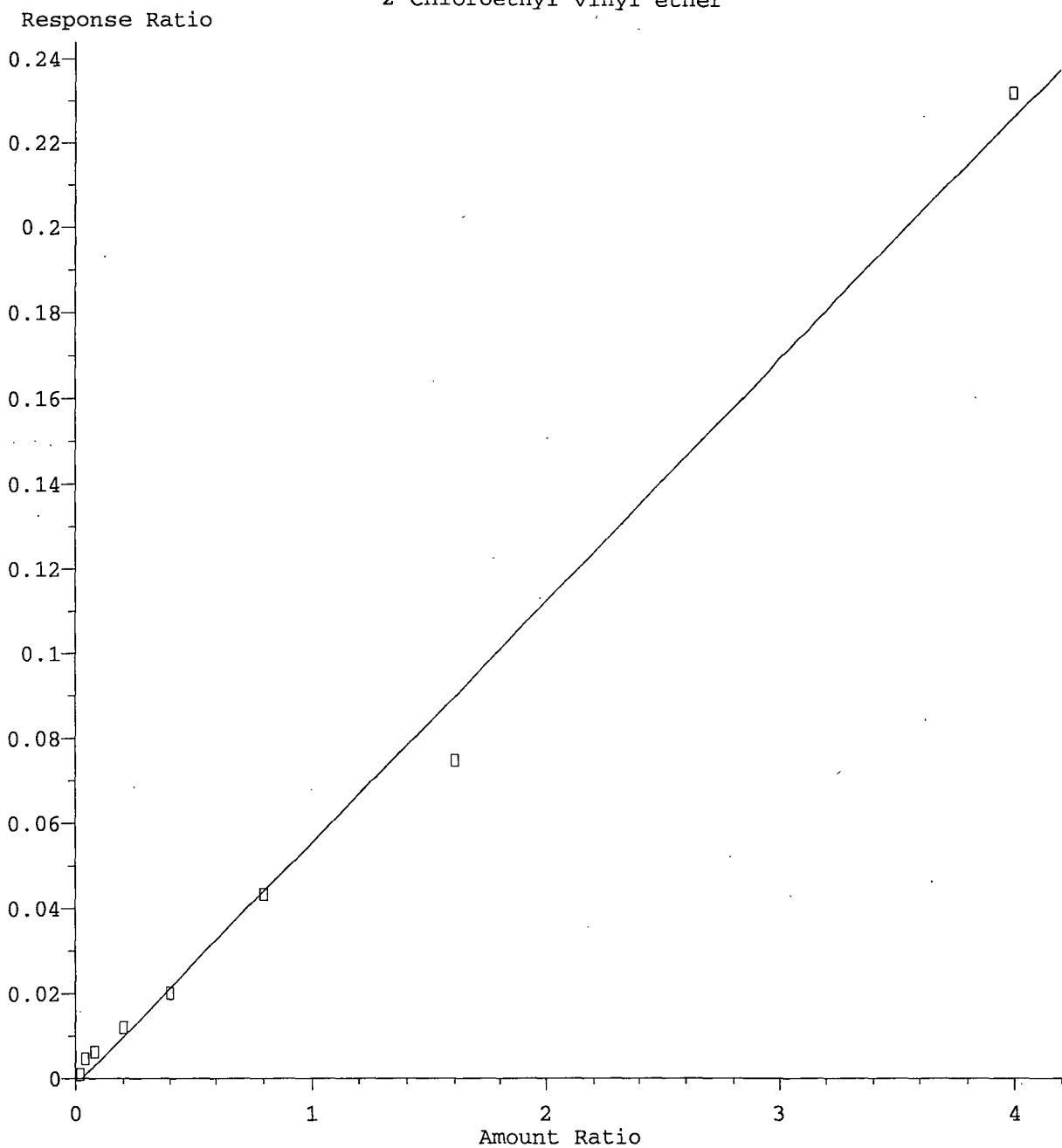
Response Ratio



Resp Ratio =  $2.41e-001 * Amt - 5.40e-003$   
Coef of Det ( $r^2$ ) = 0.998 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

2-Chloroethyl vinyl ether

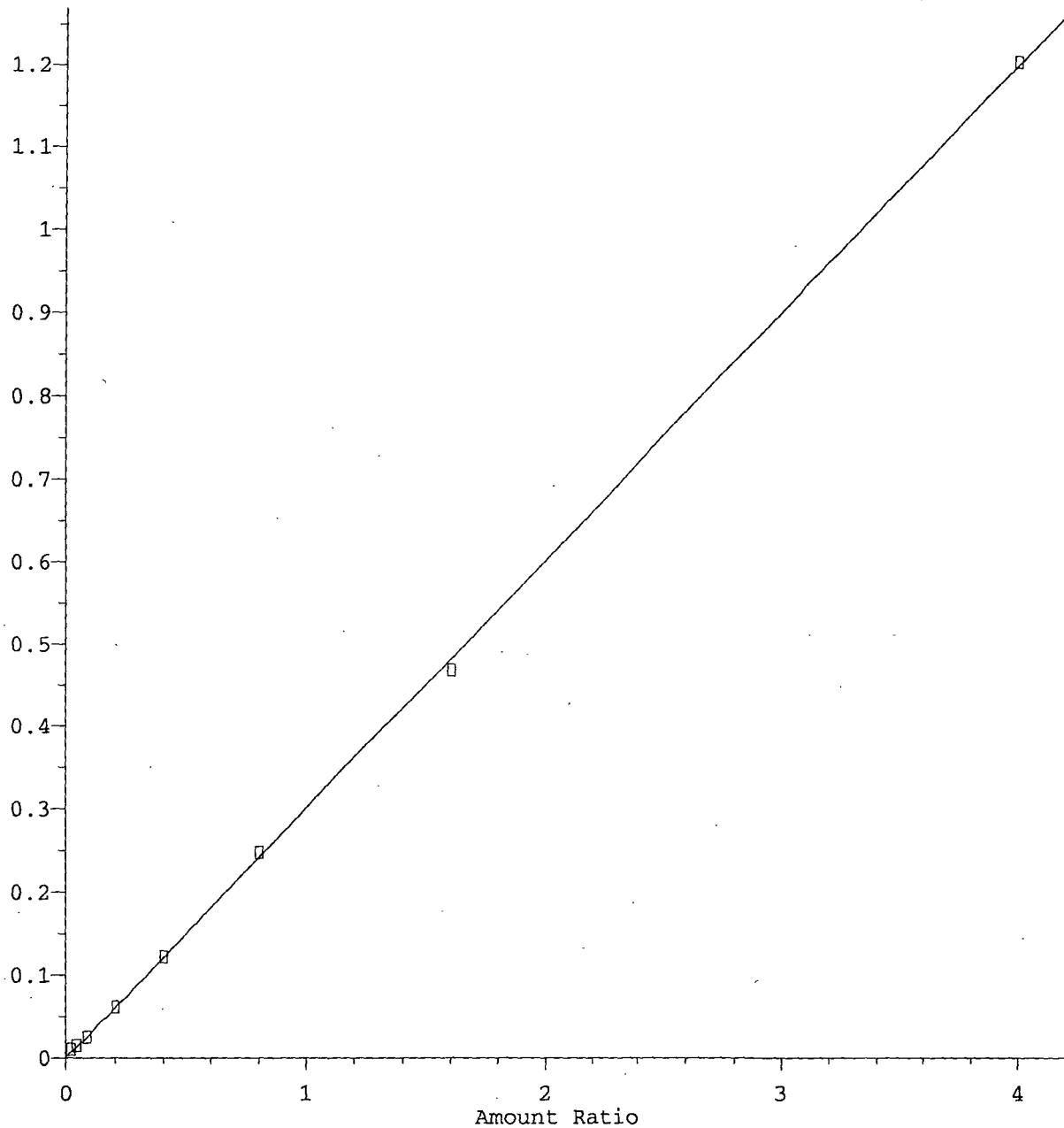


Resp Ratio =  $5.70e-002 * Amt - 1.59e-003$   
Coef of Det ( $r^2$ ) = 0.993 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

MIBK (methyl isobutyl ketone)

Response Ratio



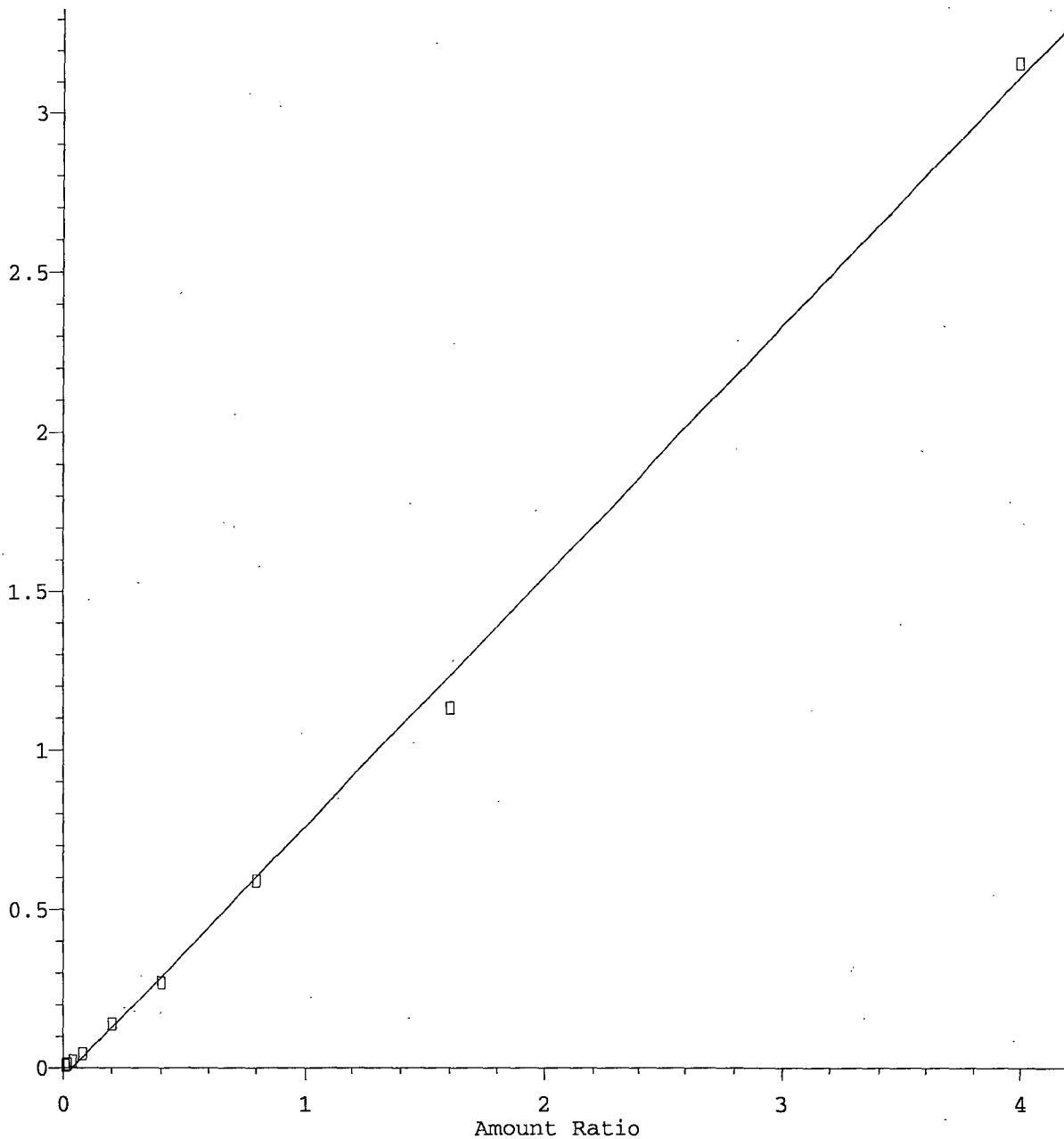
Resp Ratio =  $3.01e-001 * Amt + 1.40e-003$   
Coef of Det ( $r^2$ ) = 1.000 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



Toluene

Response Ratio

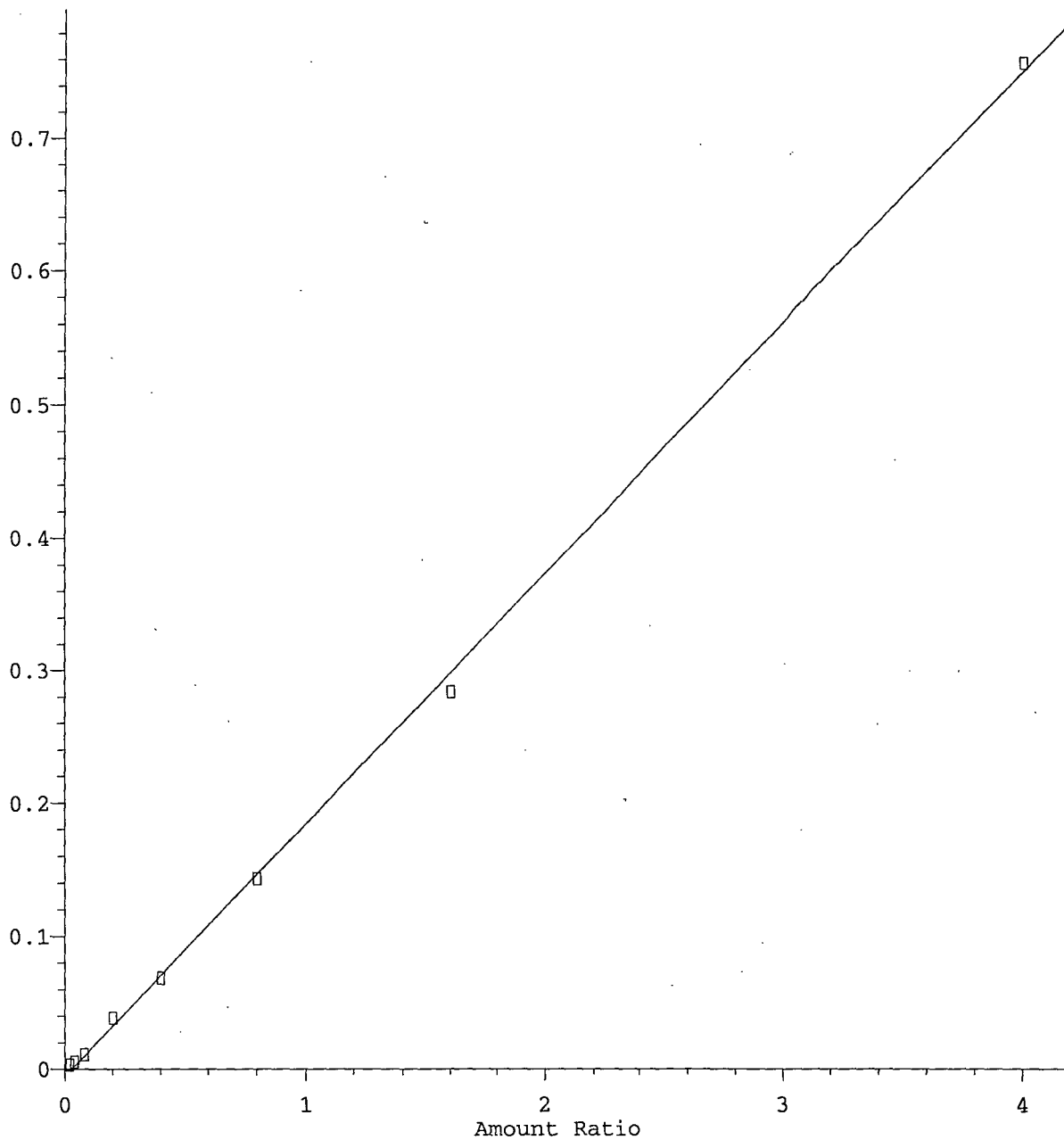


Resp Ratio = 7.89e-001 \* Amt - 2.84e-002  
Coef of Det (r^2) = 0.998 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

1,2-EDB

Response Ratio

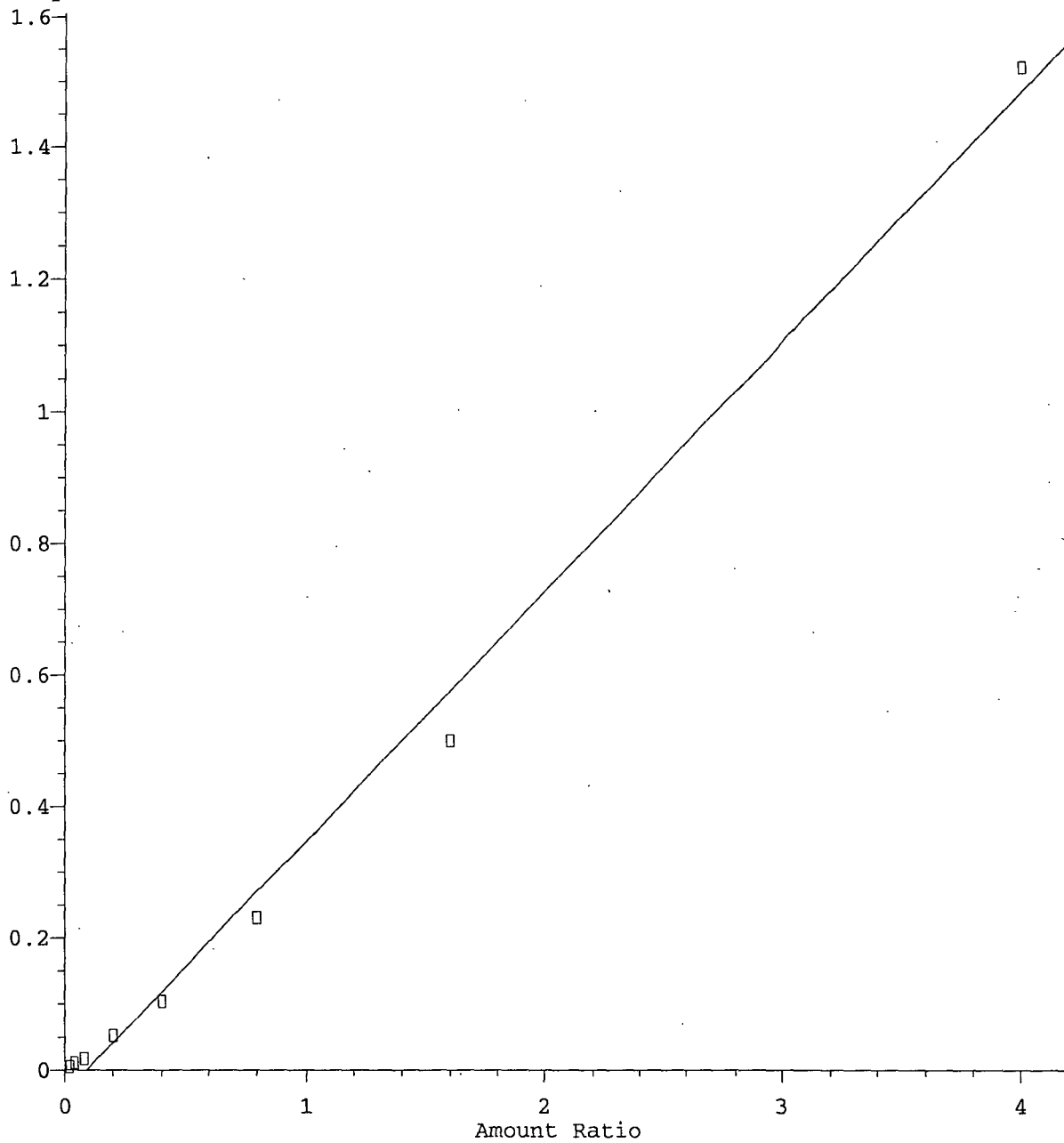


Resp Ratio = 1.90e-001 \* Amt - 5.06e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

1-Chlorohexane

Response Ratio

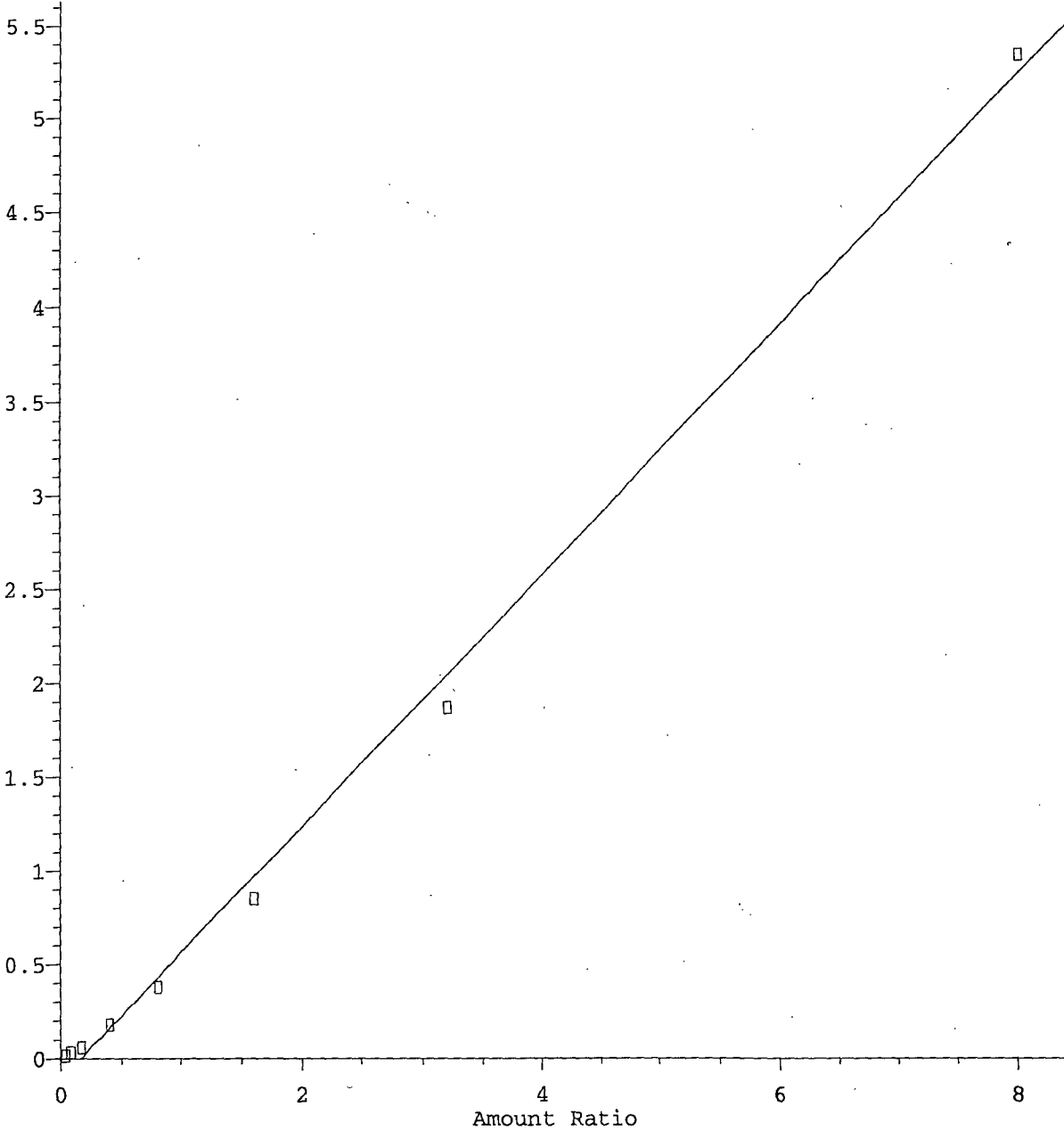


Resp Ratio =  $3.81e-001 * Amt - 3.39e-002$   
Coef of Det ( $r^2$ ) = 0.994 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

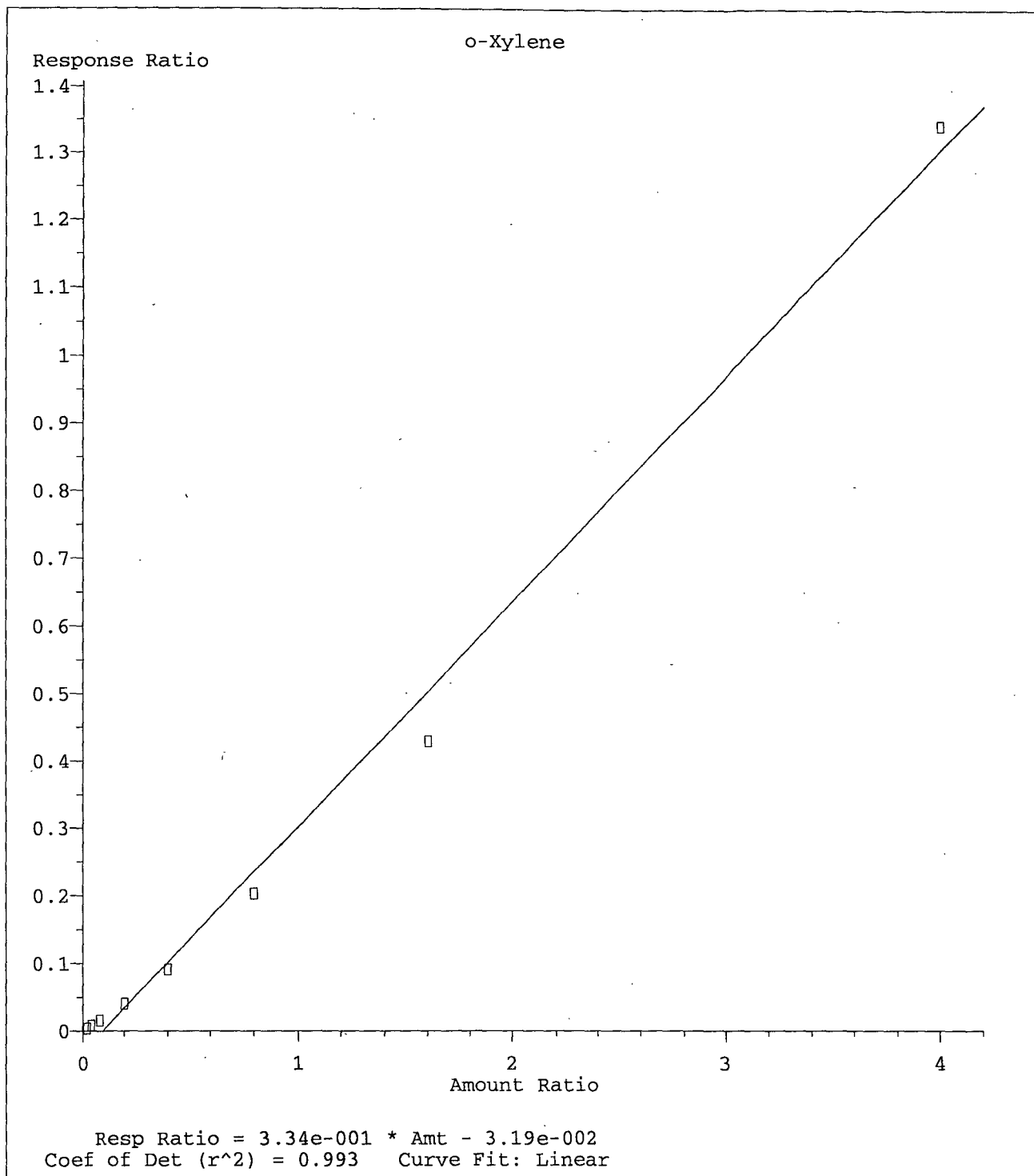
m&p-Xylene

Response Ratio



Resp Ratio = 6.72e-001 \* Amt - 1.06e-001  
Coef of Det (r^2) = 0.997 Curve Fit: Linear

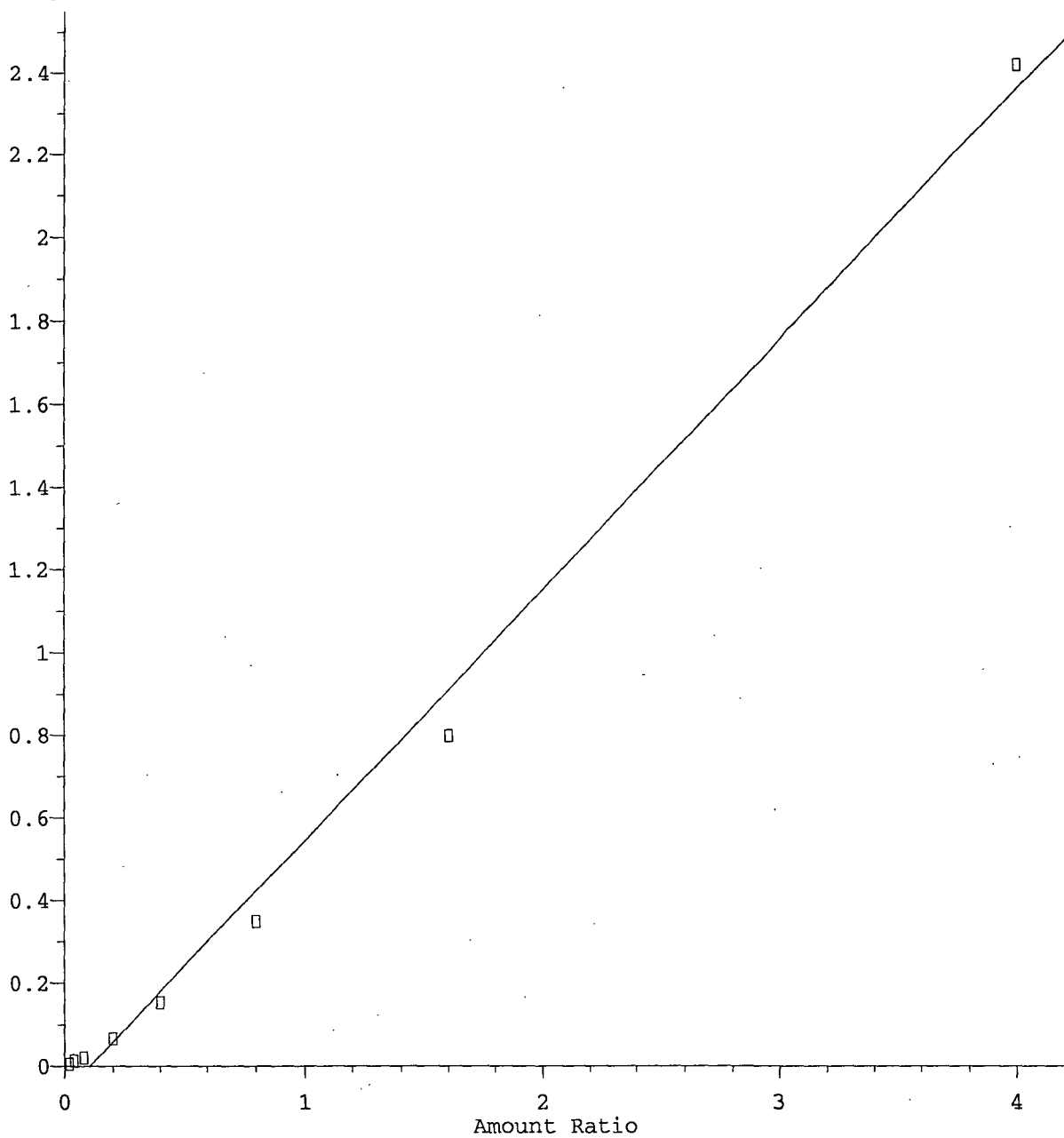
Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

Styrene

Response Ratio

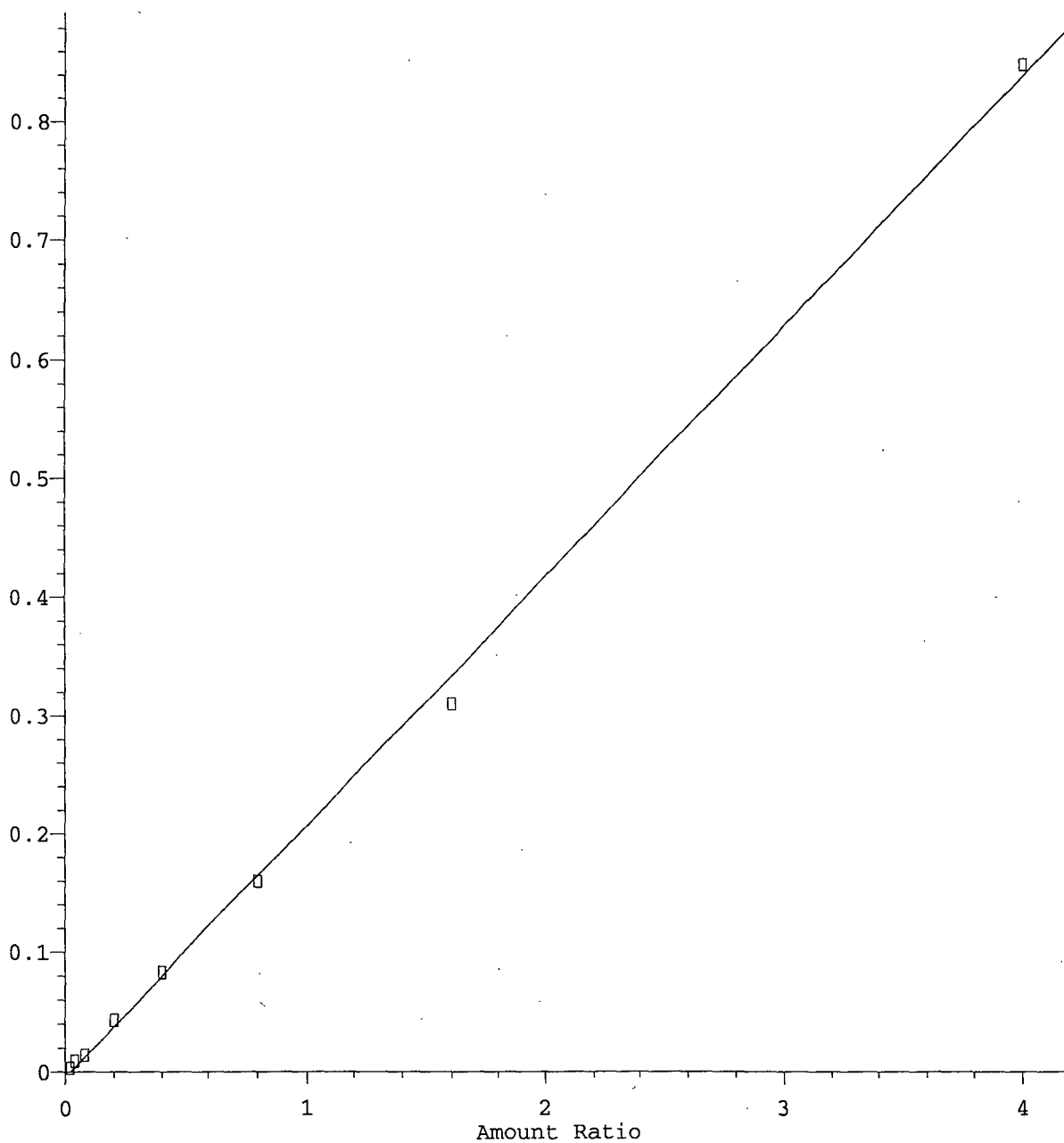


Resp Ratio = 6.08e-001 \* Amt - 6.38e-002  
Coef of Det (r^2) = 0.994 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

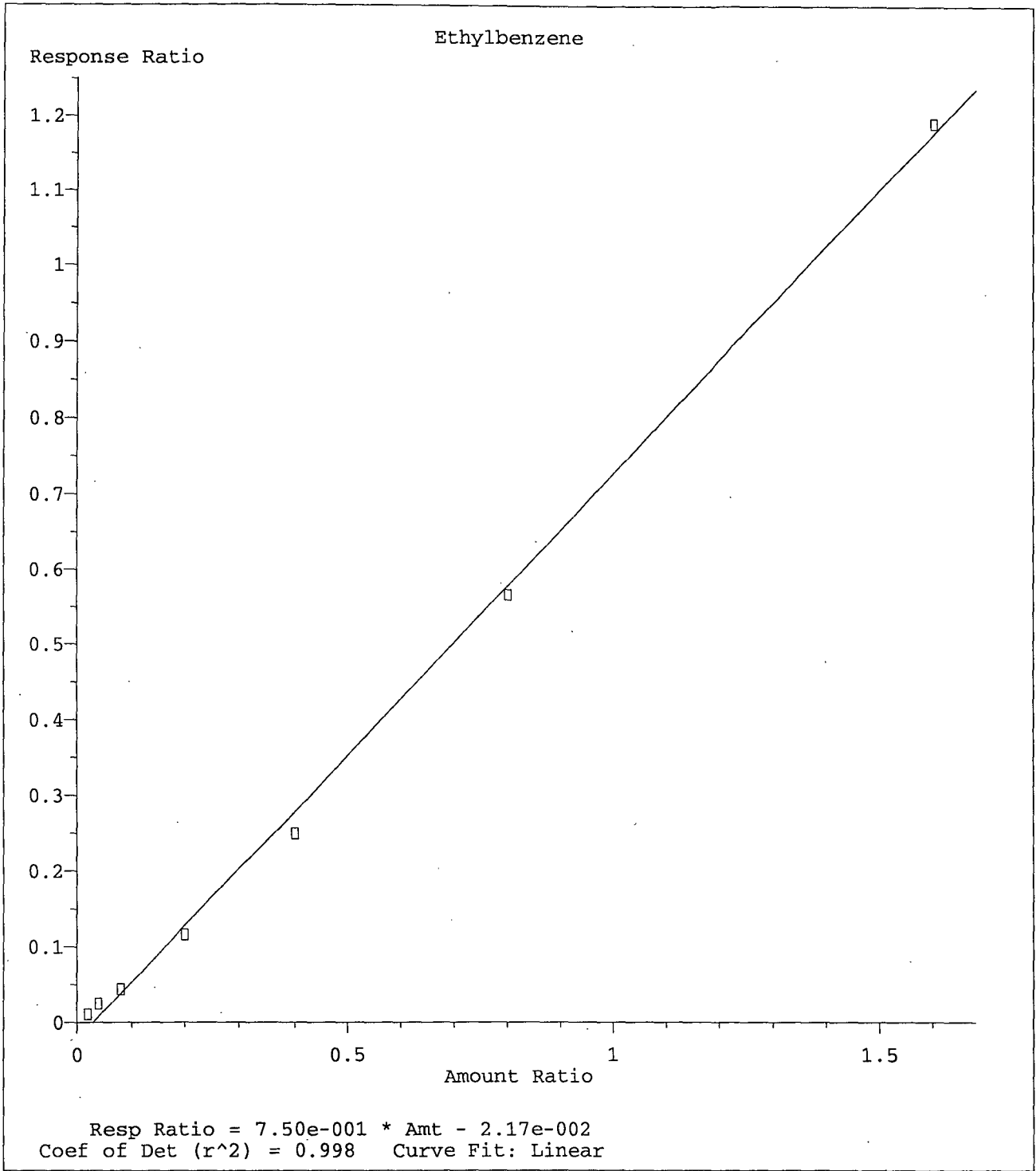
Dibromochloromethane

Response Ratio



Resp Ratio = 2.12e-001 \* Amt - 4.57e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

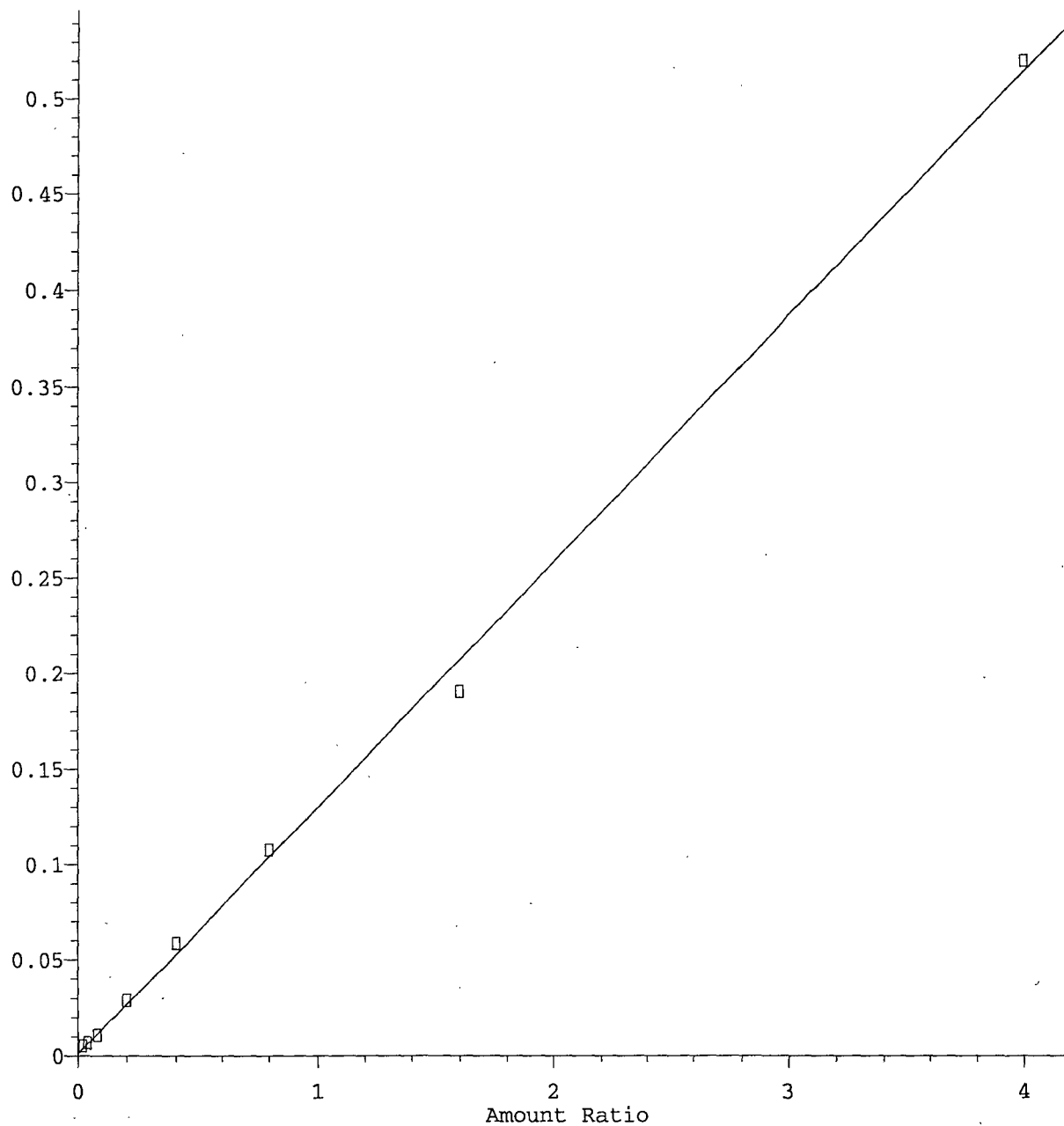


Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



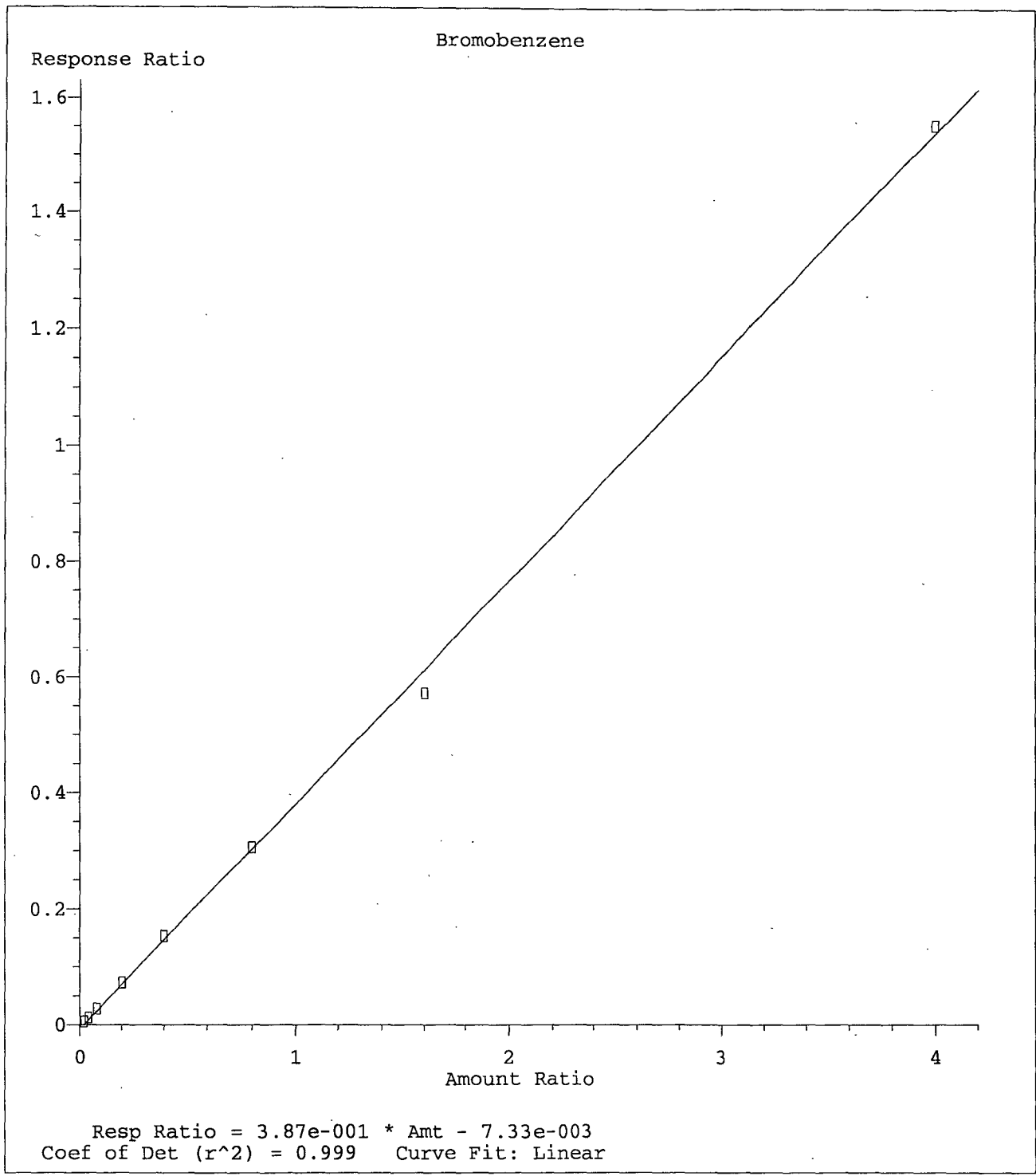
1,2,3-Trichloropropane

Response Ratio



Resp Ratio = 1.29e-001 \* Amt + 1.35e-003  
Coef of Det (r^2) = 0.998 Curve Fit: Linear

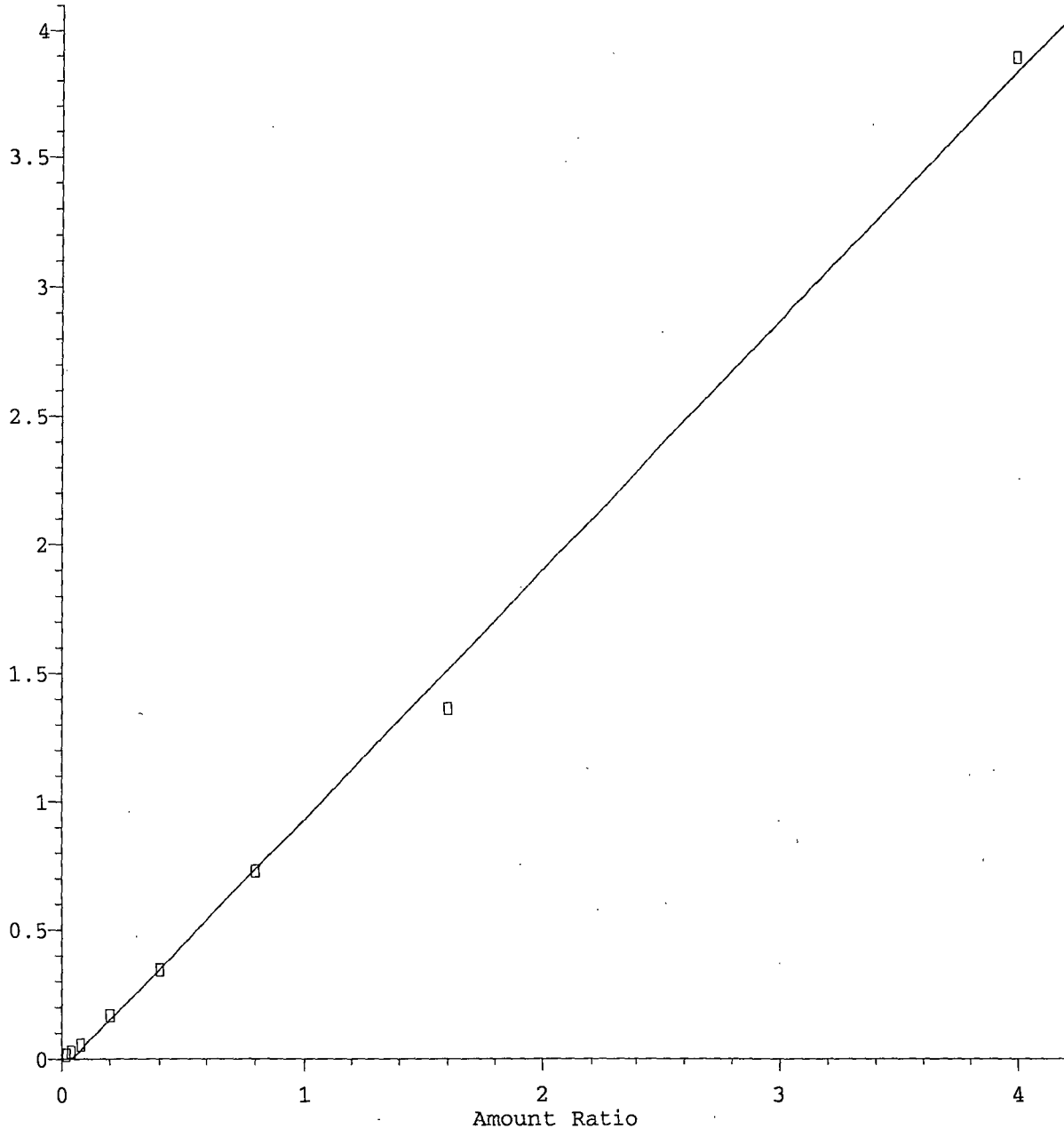
Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

2-Chlorotoluene

Response Ratio

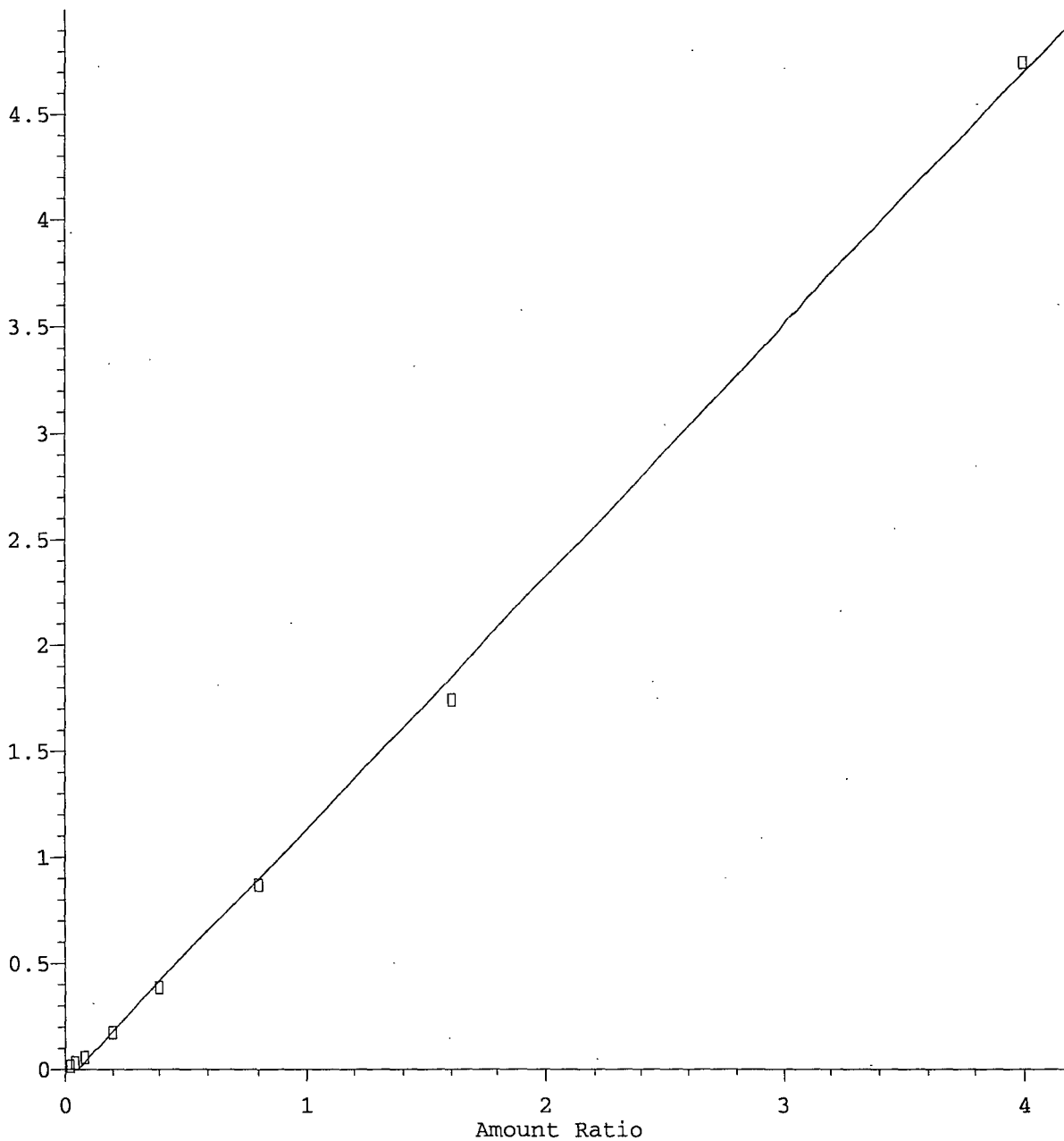


Resp Ratio =  $9.72e-001 * Amt - 4.13e-002$   
Coef of Det ( $r^2$ ) = 0.998 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

1,3,5-Trimethylbenzene

Response Ratio

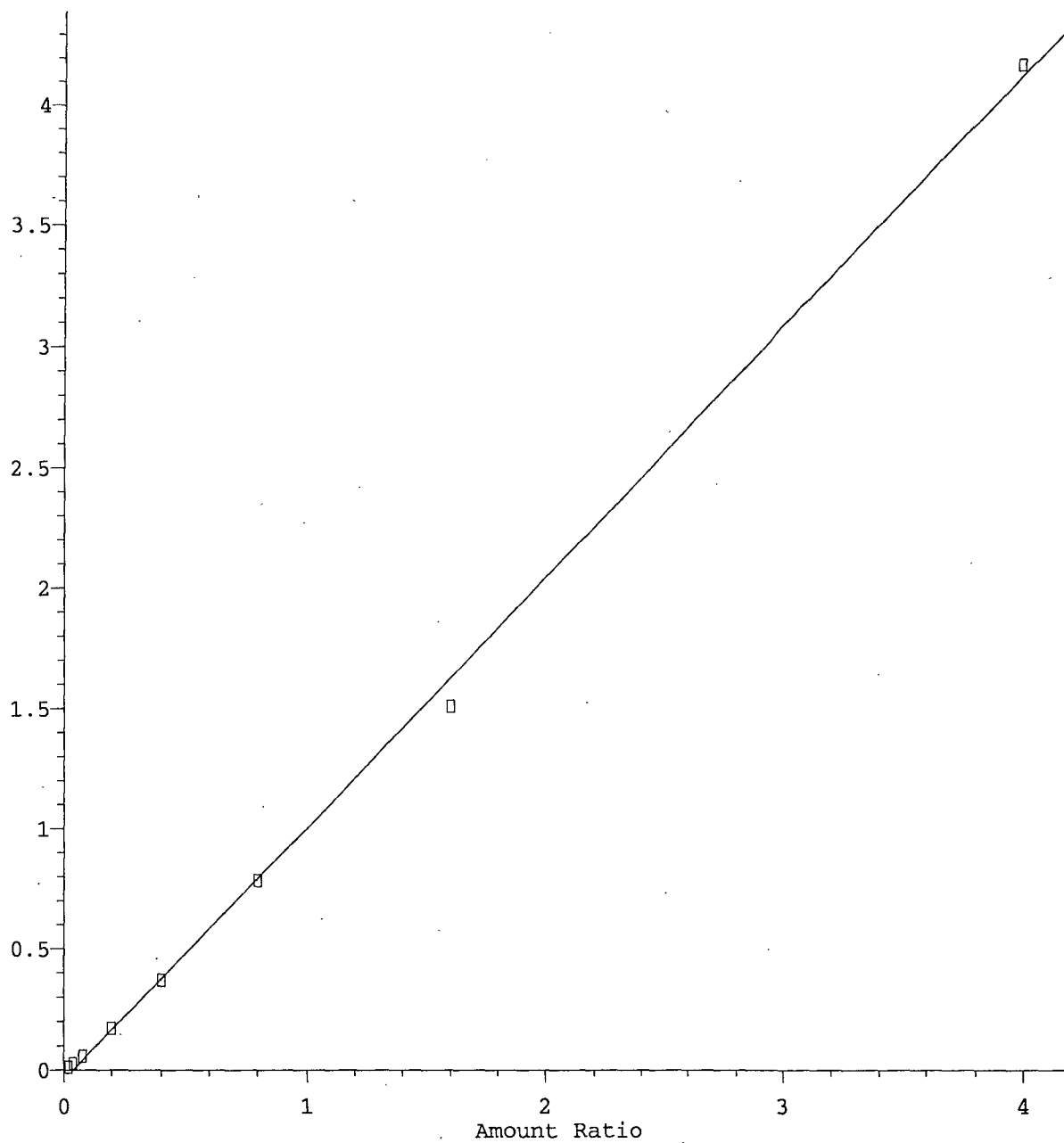


Resp Ratio = 1.19e+000 \* Amt - 6.09e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

4-Chlorotoluene

Response Ratio

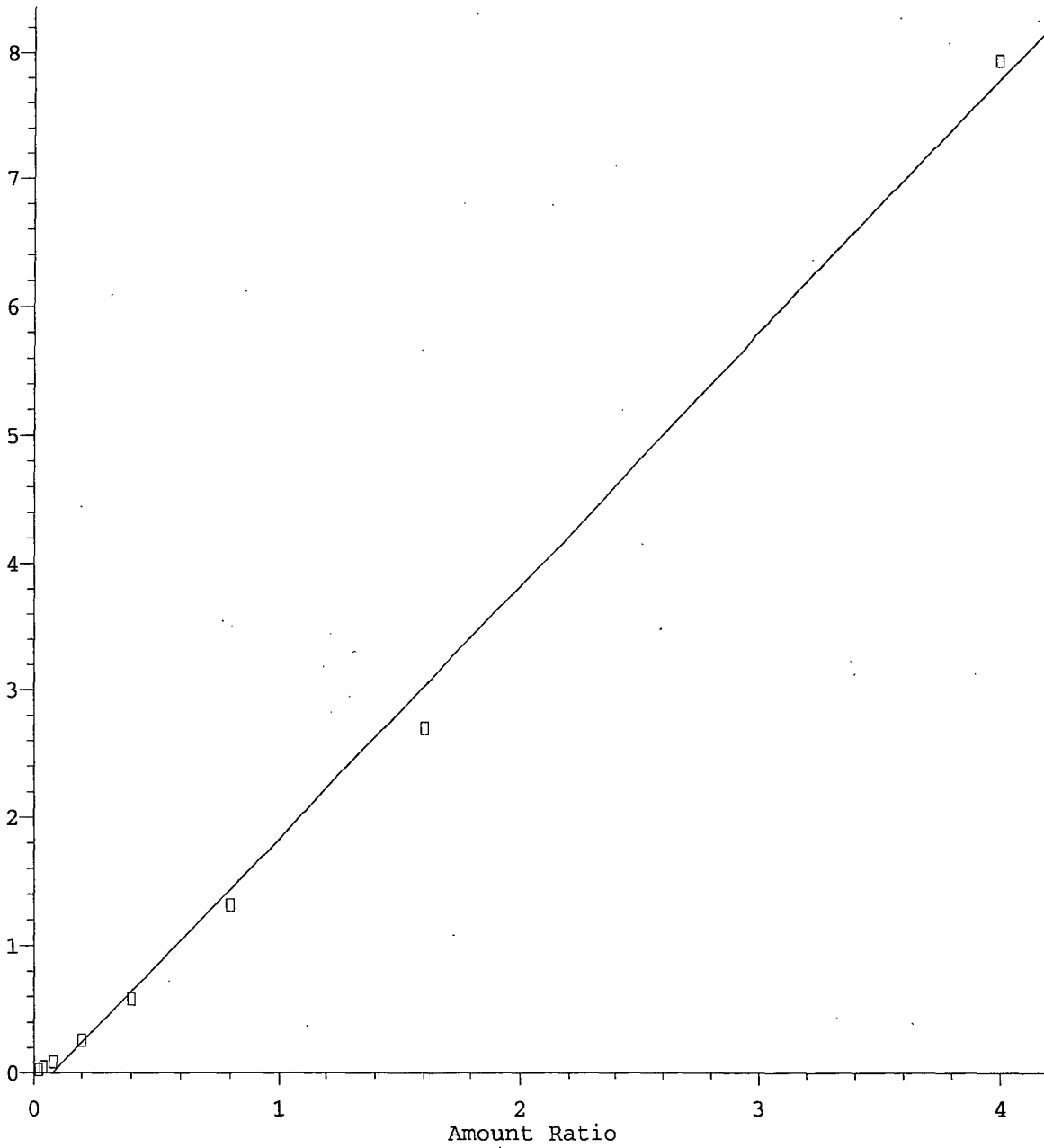


Resp Ratio = 1.05e+000 \* Amt - 4.27e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

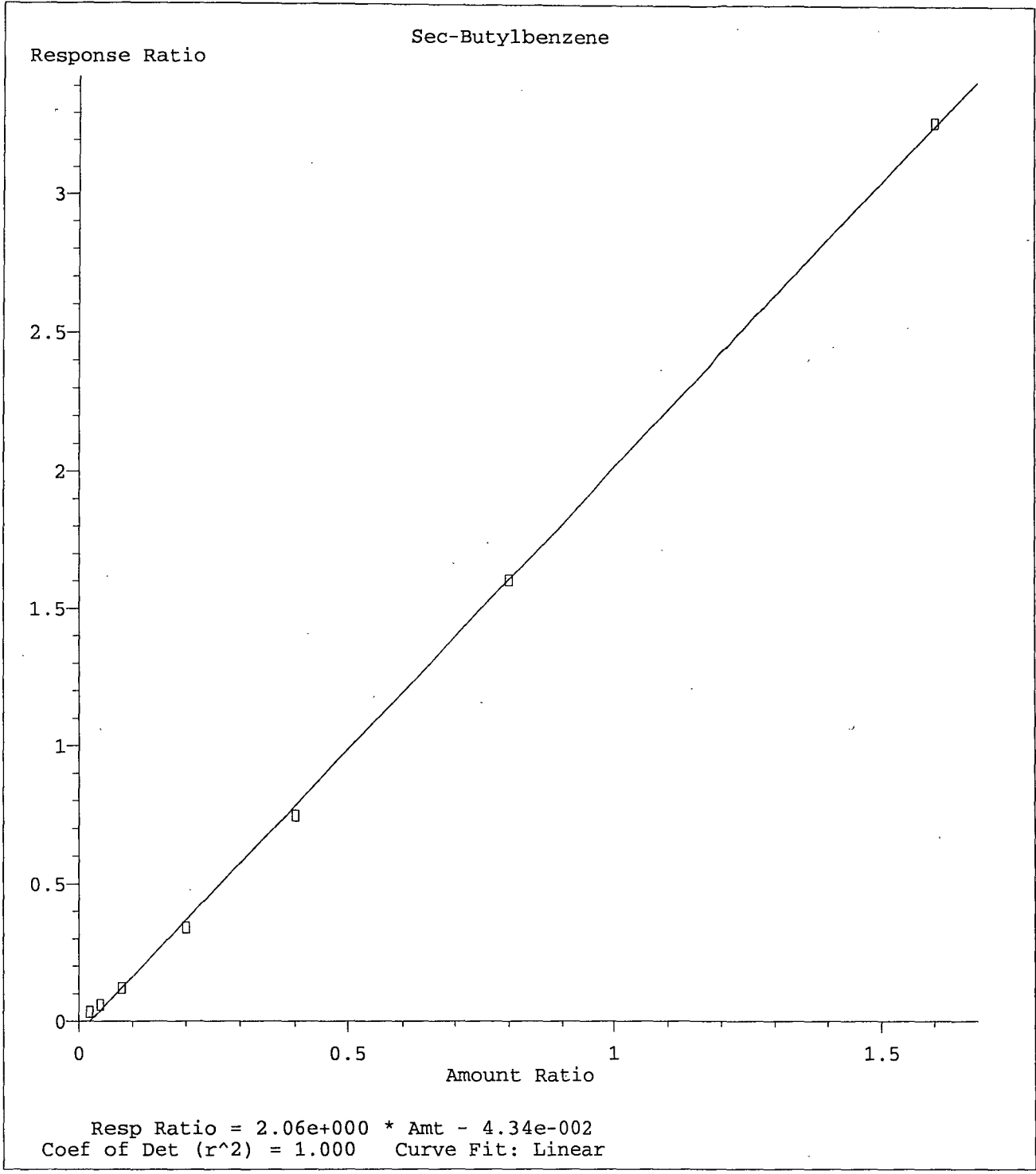
1,2,4-Trimethylbenzene

Response Ratio



Resp Ratio = 1.99e+000 \* Amt - 1.54e-001  
Coef of Det (r<sup>2</sup>) = 0.996 Curve Fit: Linear

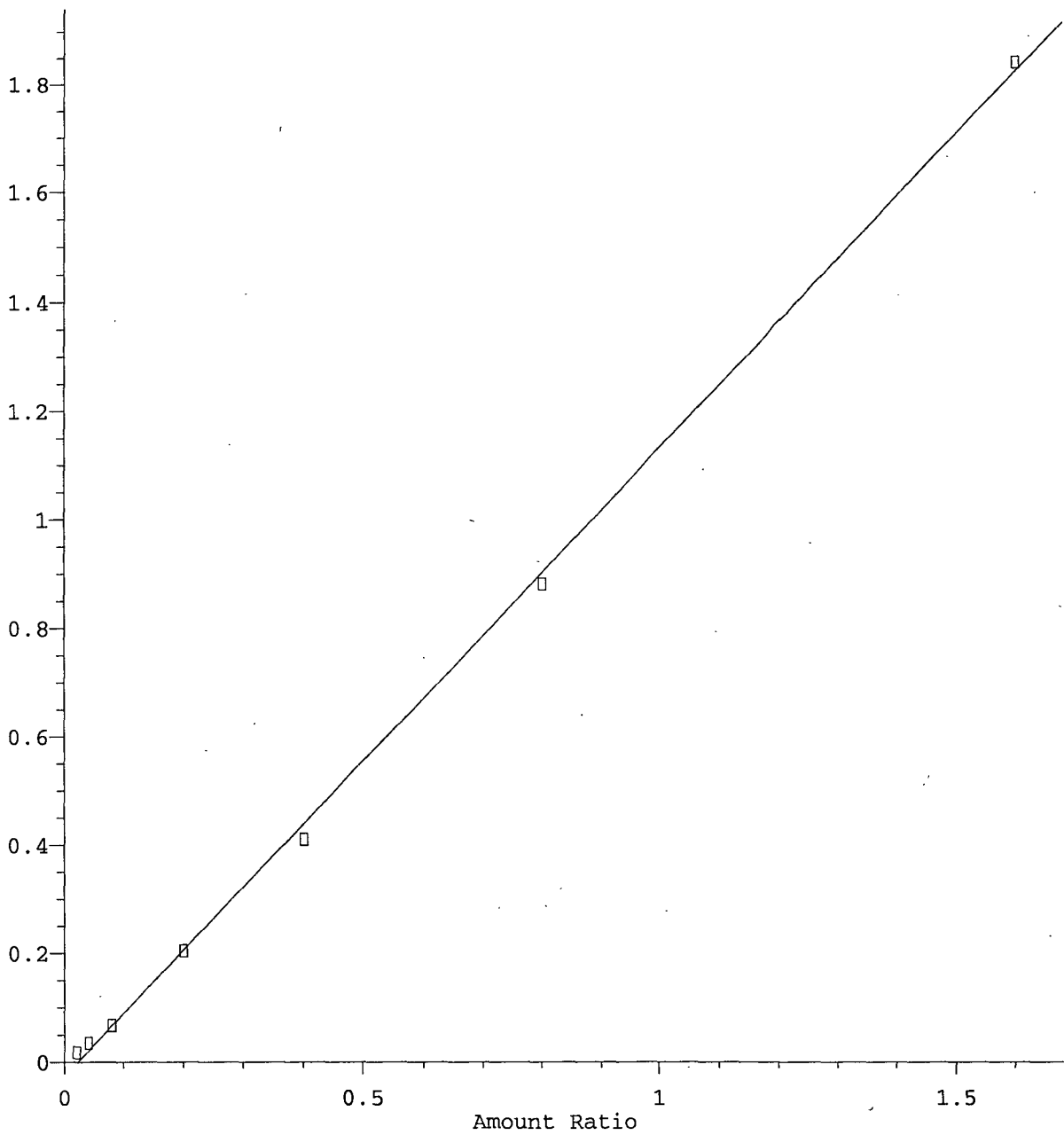
Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

p-Isopropyltoluene

Response Ratio



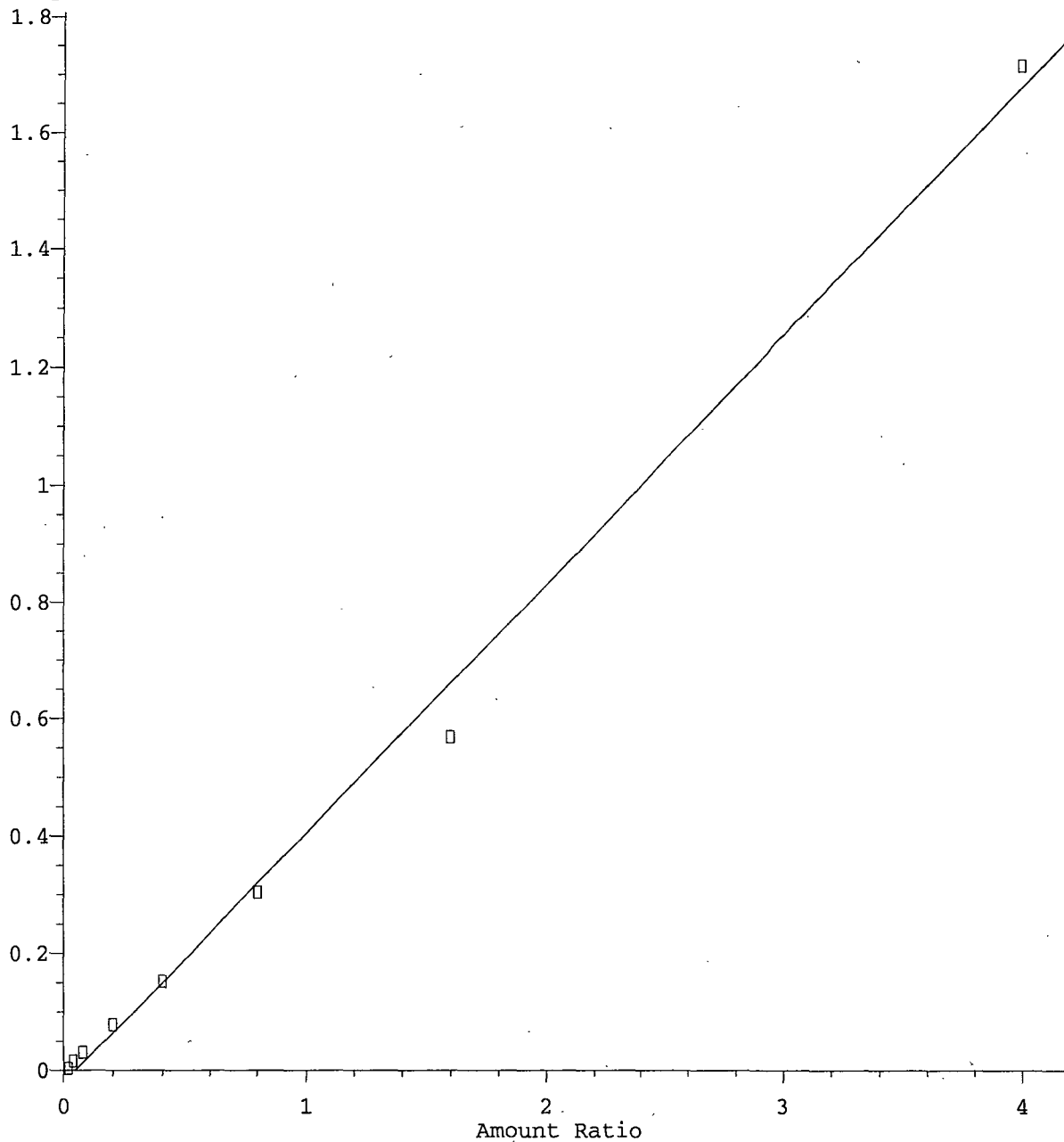
Resp Ratio = 1.16e+000 \* Amt - 2.56e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



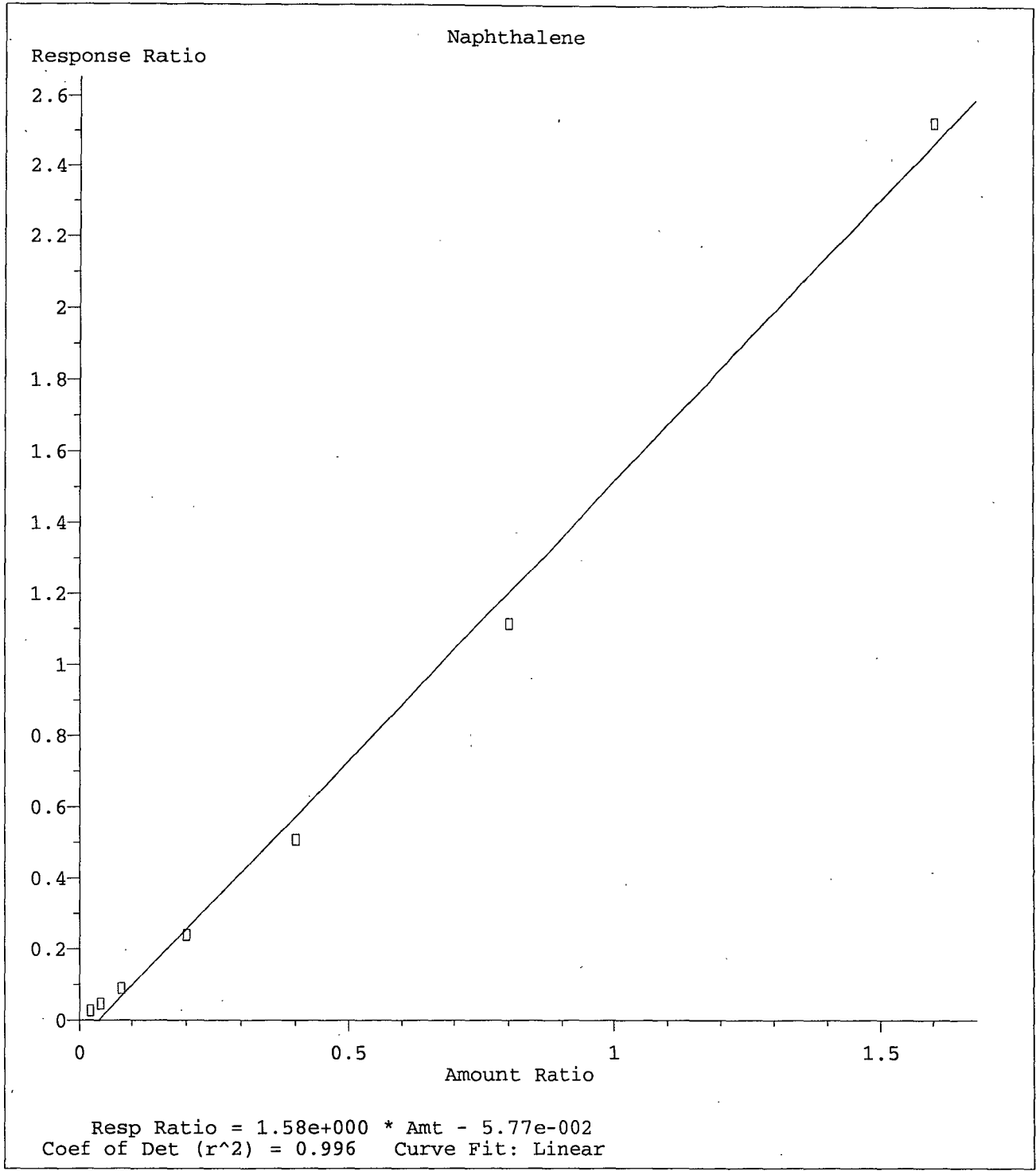
Hexachlorobutadiene

Response Ratio



Resp Ratio =  $4.26e-001 * Amt - 2.08e-002$   
Coef of Det ( $r^2$ ) = 0.995 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018



Method Name: M:\LOKI\DATA\181218\L1218W.M  
Calibration Table Last Updated: Fri Dec 21 14:04:11 2018

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/18/18  
Instrument: Loki  
Initial Cal. Date: 12/18/18  
Data File: 1218L15.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	Dichlorodifluoromethane	0.3159	0.3892	23	TM	* NT
2	TM	Freon 114	0.3308	0.3551	7.3	TM	
3	TM**	Chloromethane	0.5058	0.6007	19	TM**	
4	TM*	Vinyl chloride	0.4007	0.4764	19	TM*	
5	TM	Bromomethane	0.3600	0.4283	19	TM	
6	TM	Chloroethane	0.2732	0.2991	9.5	TM	
7	TM	Dichlorofluoromethane	0.6788	0.6746	0.63	TM	
8	TM	Trichlorofluoromethane	0.5248	0.6210	18	TM	
9	TM	Acrolein	0.0321	0.0341	6.2	TM	
10	TML	Acetone	0.1844	0.1468	20	TML	4.9
11	TM	Freon-113	0.3079	0.3193	3.7	TM	
12	TM*	1,1-DCE	0.1244	0.1456	17	TM*	
13	TM	t-Butanol	0.0405	0.0328	19	TM	
14	TM	Acetonitrile	0.0605	0.0565	6.7	TM	
15	TM	Methyl Acetate	0.5071	0.5218	2.9	TM	
16	TML	Iodomethane	0.1414	0.1669	18	TML	8.1
17	TM	Acrylonitrile	0.1560	0.1505	3.5	TM	
18	TM	Methylene chloride	0.4178	0.4635	11	TM	
19	TM	Carbon disulfide	1.066	1.074	0.75	TM	
20	TM	Methyl t-butyl ether (MtBE)	0.9386	0.9530	1.5	TM	
21	TM	Trans-1,2-DCE	0.3378	0.4021	19	TM	
22	TM	Diisopropyl Ether	1.066	1.026	3.7	TM	
23	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3284	0.3184	3.0	TM**	
24	TM**	1,1-DCA	0.6406	0.7657	20	TM**	
25	TM	Vinyl Acetate	0.3615	0.3267	9.6	TM	
26	TM	Ethyl tert Butyl Ether	0.8280	0.8571	3.5	TM	
27	TML	MEK (2-Butanone)	0.2221	0.1776	20	TML	6.2
28	TM	Cis-1,2-DCE	0.4711	0.5528	17	TM	
29	TM	2,2-Dichloropropane	0.4503	0.4891	8.6	TM	
30	TM	2-Methylpentane	0.2057	0.2160	5.0	TM	
31	TM	3-Methylpentane	0.6753	0.7245	7.3	TM	
32	TM*	Chloroform	0.5984	0.7023	17	TM*	
33	TM	Bromochloromethane	0.0826	0.1025	24	TM	*NT
34	TM	1,1,1-TCA	0.1178	0.1350	15	TM	
35	TML	Cyclohexane	0.2483	0.2356	5.1	TML	0.72
36	TM	1,1-Dichloropropene	0.3400	0.4027	18	TM	
37	TM	2,2,4-Trimethylpentane	0.6846	0.6487	5.2	TM	
38	TML	Carbon Tetrachloride	0.4169	0.5036	21	TML	20
39	TM	Tert Amyl Methyl Ether	0.7170	0.7203	0.46	TM	
40	TM	Methylcyclopentane	0.5923	0.5848	1.3	TM	

Average

11.2

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/18/18  
Instrument: Loki  
Cal. Date: 12/18/18  
Data File: 1218L15.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	1,2-DCA	0.4344	0.5111	18	TM	
42	TM	Benzene	1.197	1.397	17	TM	
43	TM	TCE	0.3144	0.3786	20	TM	
44	TM	2-Pentanone	0.2385	0.2280	4.4	TM	
45	TM*	1,2-Dichloropropane	0.3247	0.3772	16	TM*	
46	TML	Bromodichloromethane	0.2280	0.2804	23	TML	22 *NT
47	TM	Methyl Cyclohexane	0.3410	0.3337	2.1	TM	
48	TM	Dibromomethane	0.2436	0.2839	17	TM	
49	TML	2-Chloroethyl vinyl ether	0.0638	0.0506	21	TML	4.3
50	TML	MIBK (methyl isobutyl ketone)	0.3389	0.3217	5.1	TML	5.8
51	TM	1-Bromo-2-chloroethane	0.2524	0.2574	2.0	TM	
52	TM	Cis-1,3-Dichloropropene	0.4570	0.5322	16	TM	
53	TM*L	Toluene	0.6619	0.8270	25	TM*L	14
54	TM	Trans-1,3-Dichloropropene	0.4302	0.5070	18	TM	
55	TM	1,1,2-TCA	0.2733	0.3220	18	TM	
56	TM	2-Hexanone	0.1977	0.1964	0.66	TM	
57	TML	1,2-EDB	0.1691	0.2081	23	TML	16
58	TM	Tetrachloroethene	0.2697	0.3205	19	TM	
59	TML	1-Chlorohexane	0.2814	0.2862	1.7	TML	2.7
60	TM	1,1,1,2-Tetrachloroethane	0.3371	0.3980	18	TM	
61	TML	m&p-Xylene	0.4815	0.5883	22	TML	7.3
62	TML	o-Xylene	0.2332	0.2853	22	TML	9.2
63	TML	Styrene	0.3826	0.4907	28	TML	6.9
64	TM	1,3-Dichloropropane	0.4804	0.5645	18	TM	
65	TML	Dibromochloromethane	0.2007	0.2485	24	TML	23 *NT
66	TM**	Chlorobenzene	0.8070	0.9539	18	TM**	
67	TM*L	Ethylbenzene	0.6224	0.7839	26	TM*L	12
68	TM**	Bromoform	0.2742	0.3155	15	TM**	
69	TM	Isopropylbenzene	1.707	2.046	20	TM	
70	TM**	1,1,2,2-Tetrachloroethane	0.7807	0.8763	12	TM**	
71	TML	1,2,3-Trichloropropane	0.1546	0.1534	0.80	TML	17
72	TM	t-1,4-Dichloro-2-Butene	0.1571	0.1642	4.5	TM	
73	TML	Bromobenzene	0.3508	0.4305	23	TML	16
74	TM	n-Propylbenzene	1.249	1.610	29	TM	*NT
75	TM	4-Ethyltoluene	1.719	1.909	11	TM	
76	TML	2-Chlorotoluene	0.8221	1.032	26	TML	17
77	TML	1,3,5-Trimethylbenzene	0.9280	1.213	31	TML	14
78	TML	4-Chlorotoluene	0.8538	1.067	25	TML	12
79	TM	Tert-Butylbenzene	1.245	1.471	18	TM	
80	TML	1,2,4-Trimethylbenzene	1.443	1.776	23	TML	8.6
Average					17.0		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/18/18  
Instrument: Loki  
Cal. Date: 12/18/18  
Data File: 1218L15.D

		Compound	MEAN	CCRF	%D	%Drift
81	TML	Sec-Butylbenzene	1.757	2.252	28	TML 14
82	TML	p-Isopropyltoluene	0.9902	1.287	30	TML 16
83	TM	Benzyl Chloride	0.8615	0.0535	94	TM *NT
84	TM	1,3-DCB	0.7052	0.8364	19	TM
85	TM	1,4-DCB	1.258	1.465	16	TM
86	TM	n-Butylbenzene	1.304	1.609	23	TM *NT
87	TM	1,2-DCB	1.143	1.324	16	TM
88	TM	Hexachloroethane	0.4245	0.4528	6.7	TM
89	TM	1,2-Dibromo-3-chloropropane	0.1448	0.1456	0.56	TM
90	TM	1,2,4-Trichlorobenzene	0.6706	0.7315	9.1	TM
91	TML	Hexachlorobutadiene	0.3616	0.4457	23	TML 17
92	TML	Naphthalene	1.288	1.439	12	TML 0.30
93	TM	1,2,3-Trichlorobenzene	0.3602	0.4470	24	TM *NT
94						
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118						
119						
120		Average			23.2	

Data File : M:\LOKI\DATA\181218\1218L15.D  
 Acq On : 18 Dec 18 21:10  
 Sample : (SS) 10ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	275456	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	297408	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	171840	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	185297	25.931	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.724%	
40) 1,2-DCA-D4(S)	4.07	65	206474	25.319	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.276%	
61) Toluene-D8(S)	6.70	98	612604	26.587	ppb	0.00
Spiked Amount	25.000		Recovery	=	106.348%	
69) 4-Bromofluorobenzene(S)	9.65	95	224191	27.940	ppb	0.00
Spiked Amount	25.000		Recovery	=	111.760%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	42878	12.318	ppb	97
3) Freon 114	0.74	85	39128	10.735	ppb	95
4) Chloromethane	0.76	50	66191	11.877	ppb	98
5) Vinyl chloride	0.81	62	52493	11.890	ppb	96
6) Bromomethane	0.96	94	47193	11.897	ppb	96
7) Chloroethane	1.02	64	32960	10.950	ppb	100
8) Dichlorofluoromethane	1.12	67	74326	9.937	ppb	96
9) Trichlorofluoromethane	1.15	101	68420	11.833	ppb	99
10) Acrolein	1.38	56	47024	132.778	ppb	# 98
11) Acetone	1.48	43	16178	10.494	ppb	99
12) Freon-113	1.45	101	35184	10.370	ppb	96
13) 1,1-DCE	1.44	63	16047	11.710	ppb	97
14) t-Butanol	1.90	59	45176	101.139	ppb	97
15) Acetonitrile	1.66	41	77786	116.683	ppb	95
16) Methyl Acetate	1.79	43	57490	10.288	ppb	100
17) Iodomethane	1.53	142	18392	9.188	ppb	95
18) Acrylonitrile	1.95	52	16586	9.647	ppb	98
19) Methylene chloride	1.76	84	51068	11.094	ppb	94
20) Carbon disulfide	1.56	76	118305	10.075	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	105003	10.153	ppb	98
22) Trans-1,2-DCE	1.97	96	44299	11.904	ppb	96
23) Diisopropyl Ether	2.45	45	113069	9.628	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	35077	9.695	ppb	98
25) 1,1-DCA	2.32	63	84370	11.954	ppb	99
26) Vinyl Acetate	2.42	43	35992	9.037	ppb	92
27) Ethyl tert Butyl Ether	2.83	59	94434	10.351	ppb	100
28) MEK (2-Butanone)	3.00	43	19567	10.621	ppb	95
29) Cis-1,2-DCE	2.93	61	60910	11.735	ppb	94
30) 2,2-Dichloropropane	2.91	77	53892	10.862	ppb	97
31) 2-Methylpentane	1.79	71	23794	10.500	ppb	92
32) 3-Methylpentane	1.98	57	79829	10.729	ppb	92
33) Chloroform	3.36	83	77377	11.735	ppb	98
34) Bromochloromethane	3.21	128	11292	12.407	ppb	100
36) 1,1,1-TCA	3.56	99	14876	11.462	ppb	99
37) Cyclohexane	3.62	41	25954	10.072	ppb	98
38) 1,1-Dichloropropene	3.82	75	44370	11.846	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	71474	9.475	ppb	99
41) Carbon Tetrachloride	3.81	117	55486	12.011	ppb	98
42) Tert Amyl Methyl Ether	4.44	73	79360	10.046	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1218L15.D  
 Acq On : 18 Dec 18 21:10  
 Sample : (SS) 10ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	64433	9.874	ppb	92
44) 1,2-DCA	4.19	62	56315	11.766	ppb	99
45) Benzene	4.14	78	153935	11.673	ppb	100
46) TCE	5.13	95	41717	12.041	ppb	93
47) 2-Pentanone	5.48	43	313991	119.473	ppb	100
48) 1,2-Dichloropropane	5.41	63	41559	11.615	ppb	98
49) Bromodichloromethane	5.82	83	30896	12.180	ppb	97
50) Methyl Cyclohexane	5.35	83	36768	9.787	ppb	99
51) Dibromomethane	5.56	93	31280	11.654	ppb	99
52) 2-Chloroethyl vinyl ether	6.30	43	5575	9.569	ppb	99
53) MIBK (methyl isobutyl ket	6.65	43	35445	10.580	ppb	94
54) 1-Bromo-2-chloroethane	6.16	63	28360	10.196	ppb	99
55) Cis-1,3-Dichloropropene	6.40	75	58638	11.645	ppb	98
56) Toluene	6.77	91	91120	11.377	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	55863	11.786	ppb	96
58) 1,1,2-TCA	7.28	83	35475	11.782	ppb	95
59) 2-Hexanone	7.64	43	21635	9.934	ppb	# 96
62) 1,2-EDB	7.78	107	24752	11.632	ppb	# 100
63) Tetrachloroethene	7.40	164	38133	11.887	ppb	95
64) 1-Chlorohexane	8.42	91	34048	9.733	ppb	89
65) 1,1,1,2-Tetrachloroethane	8.48	131	47350	11.809	ppb	97
66) m&p-Xylene	8.67	91	139968	21.456	ppb	96
67) o-Xylene	9.09	106	33936	10.924	ppb	96
68) Styrene	9.11	104	58376	10.685	ppb	98
70) 1,3-Dichloropropane	7.46	76	67153	11.750	ppb	100
71) Dibromochloromethane	7.70	129	29560	12.283	ppb	99
72) Chlorobenzene	8.37	112	113479	11.820	ppb	94
73) Ethylbenzene	8.53	91	93254	11.181	ppb	99
74) Bromoform	9.27	173	37531	11.507	ppb	88
76) Isopropylbenzene	9.51	105	140663	11.986	ppb	97
77) 1,1,2,2-Tetrachloroethane	9.85	83	60230	11.224	ppb	100
78) 1,2,3-Trichloropropane	9.87	110	10544	11.651	ppb	94
79) t-1,4-Dichloro-2-Butene	9.92	53	11286	10.453	ppb	96
80) Bromobenzene	9.78	156	29592	11.607	ppb	86
81) n-Propylbenzene	9.96	91	110632	12.891	ppb	100
82) 4-Ethyltoluene	10.08	105	131185	11.104	ppb	98
83) 2-Chlorotoluene	10.01	91	70920	11.683	ppb	94
84) 1,3,5-Trimethylbenzene	10.16	105	83368	11.441	ppb	95
85) 4-Chlorotoluene	10.13	91	73352	11.227	ppb	99
86) Tert-Butylbenzene	10.50	119	101132	11.822	ppb	99
87) 1,2,4-Trimethylbenzene	10.55	105	122041	10.860	ppb	100
88) Sec-Butylbenzene	10.73	105	154792	11.439	ppb	100
89) p-Isopropyltoluene	10.90	119	88472	11.626	ppb	98
90) Benzyl Chloride	11.08	91	3679	0.621	ppb	98
91) 1,3-DCB	10.81	146	57488	11.860	ppb	97
92) 1,4-DCB	10.91	146	100709	11.648	ppb	92
93) n-Butylbenzene	11.34	91	110598	12.339	ppb	99
94) 1,2-DCB	11.29	146	90988	11.579	ppb	97
95) Hexachloroethane	11.56	117	31127	10.667	ppb	96
96) 1,2-Dibromo-3-chloropropan	12.12	75	10011	10.056	ppb	92
97) 1,2,4-Trichlorobenzene	13.01	180	50279	10.908	ppb	97
98) Hexachlorobutadiene	13.23	225	30639	11.683	ppb	84
99) Naphthalene	13.26	128	98879	10.030	ppb	94
100) 1,2,3-Trichlorobenzene	13.52	180	30728	12.411	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

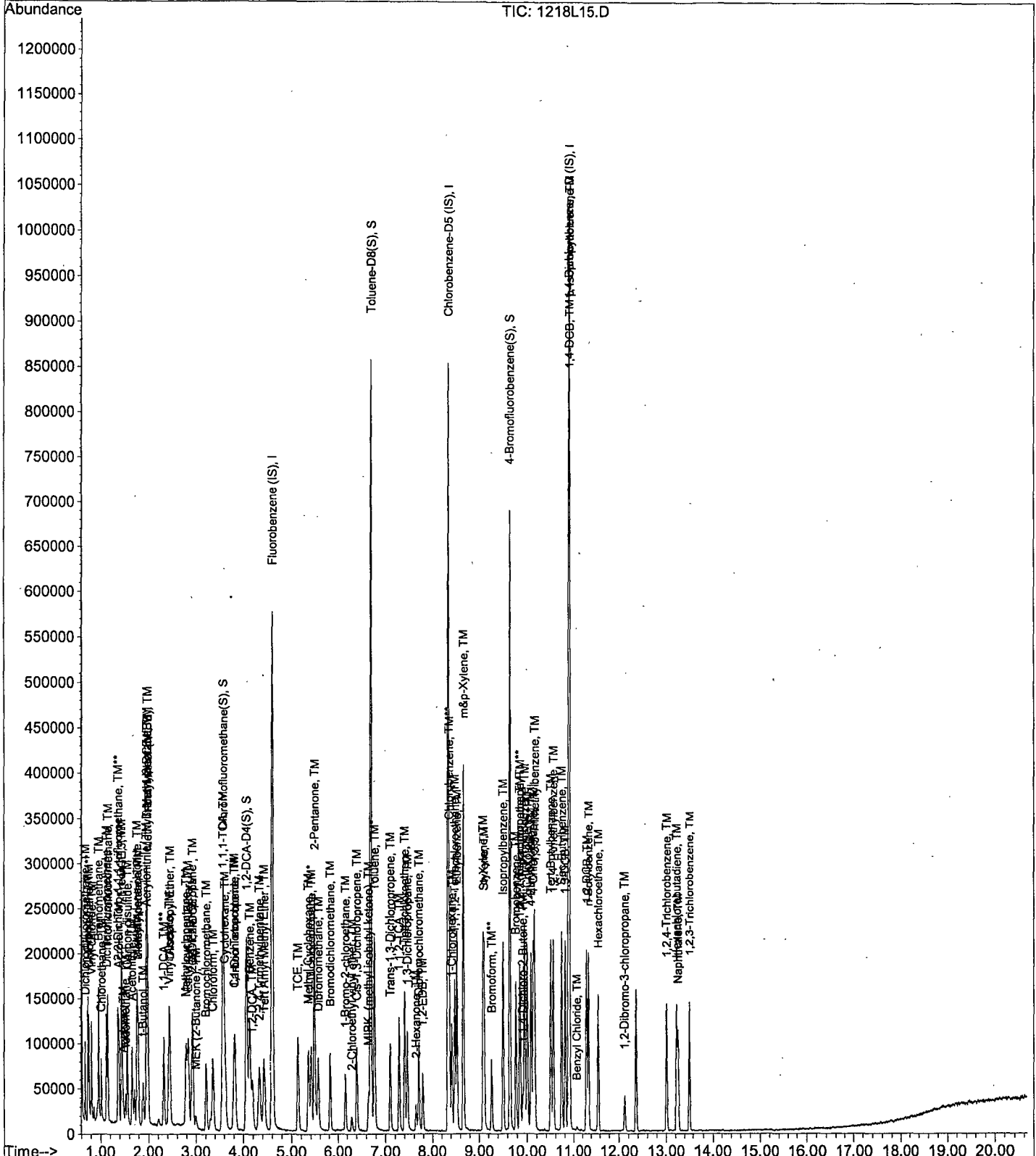
Data File : M:\LOKI\DATA\181218\1218L15.D  
 Acq On : 18 Dec 18 21:10  
 Sample : (SS) 10ug/L VOC STD 12/18/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:05 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration





VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Initial Cal. Date: 12/18/18  
Data File: 1219L31.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TM	Dichlorodifluoromethane	0.3159	0.3277	3.7	TM
3	TM	Freon 114	0.3308	0.3316	0.23	TM
4	TM**	Chloromethane	0.5058	0.5422	7.2	TM**
5	TM*	Vinyl chloride	0.4007	0.4141	3.3	TM*
6	TM	Bromomethane	0.3600	0.3870	7.5	TM
7	TM	Chloroethane	0.2732	0.2817	3.1	TM
8	TM	Dichlorofluoromethane	0.6788	0.7041	3.7	TM
9	TM	Trichlorofluoromethane	0.5248	0.5721	9.0	TM
10	TM	Acrolein	0.0321	0.0317	1.4	TM
11	TML	Acetone	0.1844	0.1452	21	TML 3.6
12	TM	Freon-113	0.3079	0.3163	2.7	TM
13	TM*	1,1-DCE	0.1244	0.1174	5.6	TM*
14	TM	t-Butanol	0.0405	0.0350	14	TM
15	TM	Acetonitrile	0.0605	0.0577	4.6	TM
16	TM	Methyl Acetate	0.5071	0.4747	6.4	TM
17	TML	Iodomethane	0.1414	0.1562	10	TML 12
18	TM	Acrylonitrile	0.1560	0.1479	5.2	TM
19	TM	Methylene chloride	0.4178	0.4230	1.2	TM
20	TM	Carbon disulfide	1.066	1.072	0.60	TM
21	TM	Methyl t-butyl ether (MtBE)	0.9386	0.9448	0.65	TM
22	TM	Trans-1,2-DCE	0.3378	0.3512	4.0	TM
23	TM	Diisopropyl Ether	1.066	1.053	1.3	TM
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3284	0.3454	5.2	TM**
25	TM**	1,1-DCA	0.6406	0.6785	5.9	TM**
26	TM	Vinyl Acetate	0.3615	0.2894	20	TM
27	TM	Ethyl tert Butyl Ether	0.8280	0.8244	0.43	TM
28	TML	MEK (2-Butanone)	0.2221	0.1790	19	TML 7.1
29	TM	Cis-1,2-DCE	0.4711	0.4583	2.7	TM
30	TM	2,2-Dichloropropane	0.4503	0.4120	8.5	TM
31	TM	2-Methylpentane	0.2057	0.1836	11	TM
32	TM	3-Methylpentane	0.6753	0.6505	3.7	TM
33	TM*	Chloroform	0.5984	0.6256	4.5	TM*
34	TM	Bromochloromethane	0.0826	0.0860	4.1	TM
35	S	Dibromofluoromethane(S)	0.6485	0.6744	4.0	S
36	TM	1,1,1-TCA	0.1178	0.1157	1.8	TM
37	TML	Cyclohexane	0.2483	0.2244	9.6	TML 3.7
38	TM	1,1-Dichloropropene	0.3400	0.2956	13	TM
39	TM	2,2,4-Trimethylpentane	0.6846	0.5766	16	TM
40	S	1,2-DCA-D4(S)	0.7401	0.7738	4.5	S

Average

6.4

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Cal. Date: 12/18/18  
Data File: 1219L31.D

		Compound	MEAN	CCRF	%D	%Drift
41	TML	Carbon Tetrachloride	0.4169	0.4344	4.2	TML 3.9
42	TM	Tert Amyl Methyl Ether	0.7170	0.6323	12	TM
43	TM	Methylcyclopentane	0.5923	0.5578	5.8	TM
44	TM	1,2-DCA	0.4344	0.4634	6.7	TM
45	TM	Benzene	1.197	1.148	4.1	TM
46	TM	TCE	0.3144	0.3025	3.8	TM
47	TM	2-Pentanone	0.2385	0.2163	9.3	TM
48	TM*	1,2-Dichloropropane	0.3247	0.3294	1.4	TM*
49	TML	Bromodichloromethane	0.2280	0.2375	4.2	TML 4.0
50	TM	Methyl Cyclohexane	0.3410	0.2999	12	TM
51	TM	Dibromomethane	0.2436	0.2560	5.1	TM
52	TML	2-Chloroethyl vinyl ether	0.0638	0.0376	41	TML 27 *NT
53	TML	MIBK (methyl isobutyl ketone)	0.3389	0.2849	16	TML 6.4
54	TM	1-Bromo-2-chloroethane	0.2524	0.2601	3.0	TM
55	TM	Cis-1,3-Dichloropropene	0.4570	0.4149	9.2	TM
56	TM*L	Toluene	0.6619	0.6489	2.0	TM*L 8.8
57	TM	Trans-1,3-Dichloropropene	0.4302	0.4020	6.6	TM
58	TM	1,1,2-TCA	0.2733	0.2866	4.9	TM
59	TM	2-Hexanone	0.1977	0.1583	20	TM
60	I	Chlorobenzene-D5 (IS)	ISTD			I
61	S	Toluene-D8(S)	1.937	2.050	5.9	S
62	TML	1,2-EDB	0.1691	0.1821	7.7	TML 2.6
63	TM	Tetrachloroethene	0.2697	0.2965	10.0	TM
64	TML	1-Chlorohexane	0.2814	0.2642	6.1	TML 8.4
65	TM	1,1,1,2-Tetrachloroethane	0.3371	0.3629	7.7	TM
66	TML	m&p-Xylene	0.4815	0.4636	3.7	TML 11
67	TML	o-Xylene	0.2332	0.2242	3.9	TML 9.0
68	TML	Styrene	0.3826	0.3774	1.4	TML 12
69	S	4-Bromofluorobenzene(S)	0.6745	0.7290	8.1	S
70	TM	1,3-Dichloropropane	0.4804	0.5067	5.5	TM
71	TML	Dibromochloromethane	0.2007	0.2244	12	TML 11
72	TM**	Chlorobenzene	0.8070	0.8699	7.8	TM**
73	TM*L	Ethylbenzene	0.6224	0.6404	2.9	TM*L 7.3
74	TM**	Bromoform	0.2742	0.2976	8.5	TM**
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
76	TM	Isopropylbenzene	1.707	1.547	9.4	TM
77	TM**	1,1,2,2-Tetrachloroethane	0.7807	0.7665	1.8	TM**
78	TML	1,2,3-Trichloropropane	0.1546	0.1479	4.3	TML 12
79	TM	t-1,4-Dichloro-2-Butene	0.1571	0.1489	5.2	TM
80	TML	Bromobenzene	0.3508	0.3801	8.4	TML 3.0

Average

7.7

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Cal. Date: 12/18/18  
Data File: 1219L31.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.249	1.279	2.4	TM
82	TM	4-Ethyltoluene	1.719	1.773	3.1	TM
83	TML	2-Chlorotoluene	0.8221	0.8802	7.1	TML 1.2
84	TML	1,3,5-Trimethylbenzene	0.9280	0.9858	6.2	TML 4.6
85	TML	4-Chlorotoluene	0.8538	0.8880	4.0	TML 4.9
86	TM	Tert-Butylbenzene	1.245	1.210	2.8	TM
87	TML	1,2,4-Trimethylbenzene	1.443	1.405	2.6	TML 10
88	TML	Sec-Butylbenzene	1.757	1.775	1.0	TML 8.7
89	TML	p-Isopropyltoluene	0.9902	1.014	2.4	TML 7.2
90	TM	Benzyl Chloride	0.8615	0.6857	20	TM
91	TM	1,3-DCB	0.7052	0.7000	0.73	TM
92	TM	1,4-DCB	1.258	1.269	0.91	TM
93	TM	n-Butylbenzene	1.304	1.310	0.49	TM
94	TM	1,2-DCB	1.143	1.123	1.8	TM
95	TM	Hexachloroethane	0.4245	0.4457	5.0	TM
96	TM	1,2-Dibromo-3-chloropropane	0.1448	0.1446	0.19	TM
97	TM	1,2,4-Trichlorobenzene	0.6706	0.6067	9.5	TM
98	TML	Hexachlorobutadiene	0.3616	0.3757	3.9	TML 0.39
99	TML	Naphthalene	1.288	1.155	10	TML 18
100	TM	1,2,3-Trichlorobenzene	0.3602	0.3443	4.4	TM
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						

Average

4.4

Data File : M:\LOKI\DATA\181218\1219L31.D  
 Acq On : 20 Dec 18 00:15  
 Sample : 181219B CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 30  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	254784	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	260032	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	153536	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	171814	25.995	ppb	0.00
Spiked Amount 25.000			Recovery = 103.980%			
40) 1,2-DCA-D4(S)	4.07	65	197149	26.137	ppb	0.00
Spiked Amount 25.000			Recovery = 104.548%			
61) Toluene-D8(S)	6.70	98	533188	26.466	ppb	0.00
Spiked Amount 25.000			Recovery = 105.864%			
69) 4-Bromofluorobenzene(S)	9.65	95	189562	27.020	ppb	0.00
Spiked Amount 25.000			Recovery = 108.080%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	33400	10.373	ppb	98
3) Freon 114	0.74	85	33792	10.023	ppb	93
4) Chloromethane	0.76	50	55257	10.719	ppb	94
5) Vinyl chloride	0.81	62	42202	10.334	ppb	100
6) Bromomethane	0.96	94	39438	10.749	ppb	97
7) Chloroethane	1.02	64	28707	10.311	ppb	99
8) Dichlorofluoromethane	1.12	67	71756	10.372	ppb	95
9) Trichlorofluoromethane	1.15	101	58306	10.902	ppb	99
10) Acrolein	1.38	56	40368	123.232	ppb #	100
11) Acetone	1.48	43	14797	10.362	ppb	97
12) Freon-113	1.45	101	32236	10.272	ppb	97
13) 1,1-DCE	1.44	63	11967	9.441	ppb	90
14) t-Butanol	1.90	59	44641	108.049	ppb	95
15) Acetonitrile	1.66	41	73512	119.219	ppb	96
16) Methyl Acetate	1.79	43	48377	9.360	ppb #	99
17) Iodomethane	1.52	142	15915	8.792	ppb	95
18) Acrylonitrile	1.95	52	15078	9.482	ppb	89
19) Methylene chloride	1.76	84	43110	10.125	ppb	96
20) Carbon disulfide	1.56	76	109268	10.060	ppb	99
21) Methyl t-butyl ether (MtBE)	1.99	73	96283	10.065	ppb	92
22) Trans-1,2-DCE	1.96	96	35791	10.398	ppb	94
23) Diisopropyl Ether	2.45	45	107270	9.875	ppb	95
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	35203	10.519	ppb	96
25) 1,1-DCA	2.32	63	69151	10.592	ppb	95
26) Vinyl Acetate	2.43	43	29498	8.007	ppb #	84
27) Ethyl tert Butyl Ether	2.83	59	84022	9.957	ppb	100
28) MEK (2-Butanone)	3.00	43	18242	10.710	ppb	99
29) Cis-1,2-DCE	2.93	61	46704	9.728	ppb	89
30) 2,2-Dichloropropane	2.91	77	41985	9.148	ppb	99
31) 2-Methylpentane	1.78	71	18708	8.925	ppb	90
32) 3-Methylpentane	1.98	57	66292	9.632	ppb	99
33) Chloroform	3.36	83	63755	10.454	ppb	94
34) Bromochloromethane	3.22	128	8767	10.415	ppb	99
36) 1,1,1-TCA	3.55	99	11793	9.823	ppb	91
37) Cyclohexane	3.61	41	22872	9.626	ppb	94
38) 1,1-Dichloropropene	3.82	75	30125	8.695	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	58760	8.422	ppb	93
41) Carbon Tetrachloride	3.80	117	44275	10.394	ppb	98
42) Tert Amyl Methyl Ether	4.44	73	64439	8.819	ppb	94

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1219L31.D  
 Acq On : 20 Dec 18 00:15  
 Sample : 181219B CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 30  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	56851	9.419	ppb	# 88
44) 1,2-DCA	4.19	62	47227	10.668	ppb	98
45) Benzene	4.13	78	116995	9.591	ppb	99
46) TCE	5.13	95	30834	9.622	ppb	92
47) 2-Pentanone	5.48	43	275503	113.334	ppb	99
48) 1,2-Dichloropropane	5.41	63	33574	10.145	ppb	98
49) Bromodichloromethane	5.82	83	24208	10.403	ppb	99
50) Methyl Cyclohexane	5.35	83	30560	8.795	ppb	99
51) Dibromomethane	5.56	93	26085	10.507	ppb	99
52) 2-Chloroethyl vinyl ether	6.30	43	3828	7.283	ppb	89
53) MIBK (methyl isobutyl ket	6.65	43	29032	9.356	ppb	97
54) 1-Bromo-2-chloroethane	6.16	63	26504	10.302	ppb	98
55) Cis-1,3-Dichloropropene	6.40	75	42287	9.079	ppb	96
56) Toluene	6.77	91	66128	9.120	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	40968	9.344	ppb	94
58) 1,1,2-TCA	7.28	83	29212	10.489	ppb	98
59) 2-Hexanone	7.64	43	16131	8.007	ppb	90
62) 1,2-EDB	7.78	107	18936	10.262	ppb	98
63) Tetrachloroethene	7.40	164	30842	10.996	ppb	95
64) 1-Chlorohexane	8.42	91	27485	9.157	ppb	94
65) 1,1,1,2-Tetrachloroethane	8.48	131	37746	10.767	ppb	96
66) m&p-Xylene	8.67	91	96440	17.746	ppb	96
67) o-Xylene	9.09	106	23320	9.097	ppb	97
68) Styrene	9.11	104	39256	8.823	ppb	99
70) 1,3-Dichloropropane	7.46	76	52703	10.547	ppb	94
71) Dibromochloromethane	7.70	129	23344	11.147	ppb	100
72) Chlorobenzene	8.36	112	90483	10.779	ppb	99
73) Ethylbenzene	8.53	91	66608	9.266	ppb	99
74) Bromoform	9.27	173	30952	10.854	ppb	92
76) Isopropylbenzene	9.51	105	95032	9.063	ppb	96
77) 1,1,2,2-Tetrachloroethane	9.85	83	47072	9.818	ppb	89
78) 1,2,3-Trichloropropane	9.87	110	9086	11.228	ppb	86
79) t-1,4-Dichloro-2-Butene	9.92	53	9144	9.479	ppb	95
80) Bromobenzene	9.78	156	23344	10.303	ppb	87
81) n-Propylbenzene	9.96	91	78552	10.245	ppb	99
82) 4-Ethyltoluene	10.09	105	108871	10.314	ppb	98
83) 2-Chlorotoluene	10.01	91	54060	10.124	ppb	96
84) 1,3,5-Trimethylbenzene	10.16	105	60544	9.539	ppb	95
85) 4-Chlorotoluene	10.13	91	54536	9.514	ppb	98
86) Tert-Butylbenzene	10.50	119	74289	9.719	ppb	99
87) 1,2,4-Trimethylbenzene	10.55	105	86278	8.997	ppb	96
88) Sec-Butylbenzene	10.73	105	109032	9.129	ppb	100
89) p-Isopropyltoluene	10.91	119	62280	9.277	ppb	100
90) Benzyl Chloride	11.07	91	42111	7.959	ppb	98
91) 1,3-DCB	10.81	146	42992	9.927	ppb	99
92) 1,4-DCB	10.91	146	77949	10.091	ppb	96
93) n-Butylbenzene	11.34	91	80480	10.049	ppb	97
94) 1,2-DCB	11.29	146	68952	9.821	ppb	95
95) Hexachloroethane	11.56	117	27370	10.498	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.13	75	8878	9.981	ppb	84
97) 1,2,4-Trichlorobenzene	13.01	180	37263	9.048	ppb	91
98) Hexachlorobutadiene	13.23	225	23073	10.039	ppb	94
99) Naphthalene	13.26	128	70953	8.235	ppb	94
100) 1,2,3-Trichlorobenzene	13.52	180	21144	9.558	ppb	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

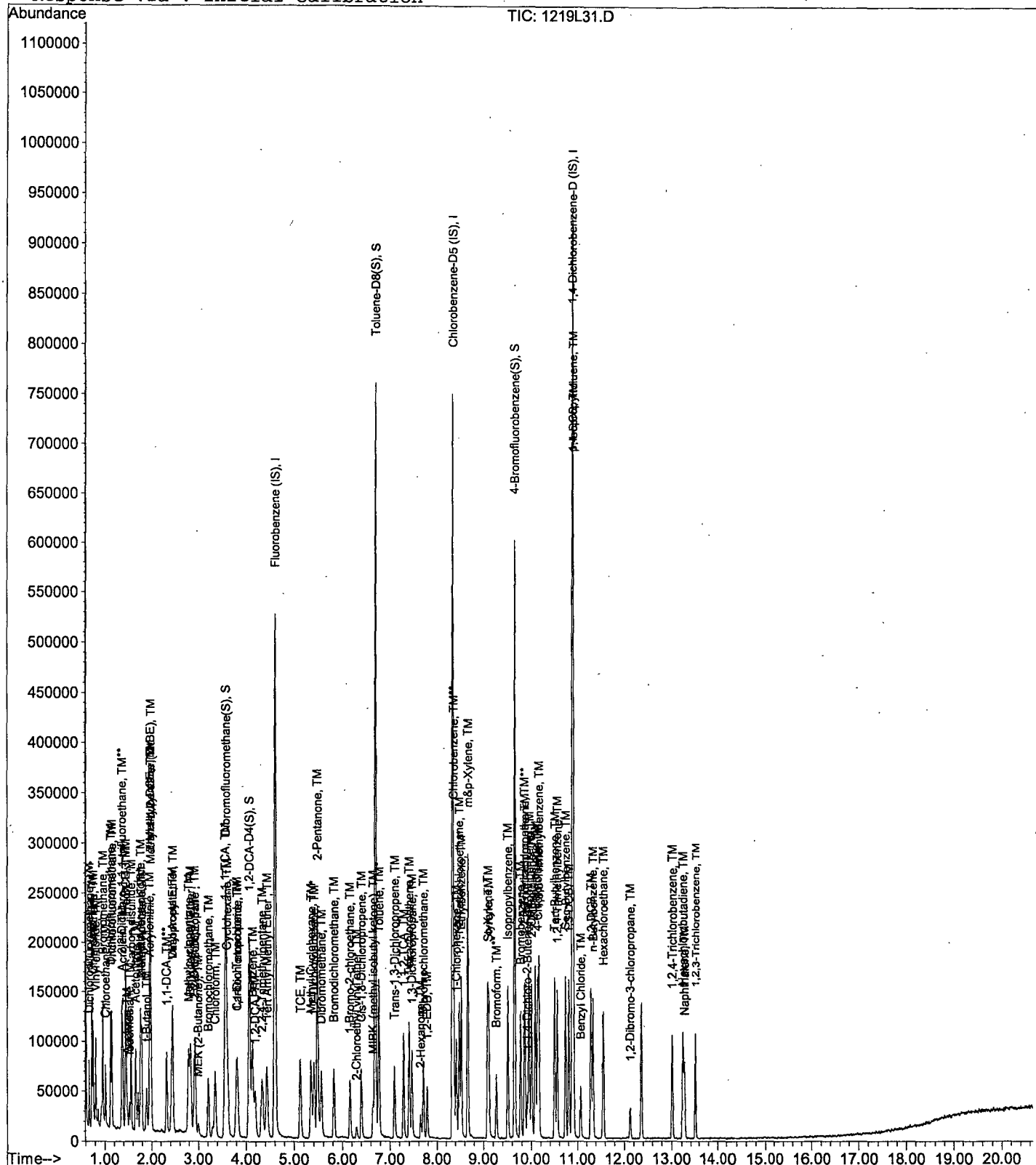
Data File : M:\LOKI\DATA\181218\1219L31.D  
Acq On : 20 Dec 18 00:15  
Sample : 181219B CCV 10ug/L  
Misc : IS&S 11/8/18

Vial: 30  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Initial Cal. Date: 12/18/18  
Data File: 1219L51.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TM	Dichlorodifluoromethane	0.3159	0.3031	4.1	TM
3	TM	Freon 114	0.3308	0.3251	1.7	TM
4	TM**	Chloromethane	0.5058	0.5247	3.7	TM**
5	TM*	Vinyl chloride	0.4007	0.4219	5.3	TM*
6	TM	Bromomethane	0.3600	0.3605	0.13	TM
7	TM	Chloroethane	0.2732	0.2805	2.7	TM
8	TM	Dichlorofluoromethane	0.6788	0.7188	5.9	TM
9	TM	Trichlorofluoromethane	0.5248	0.5740	9.4	TM
10	TM	Acrolein	0.0321	0.0252	22	TM
11	TML	Acetone	0.1844	0.1682	8.8	TML 22
12	TM	Freon-113	0.3079	0.3094	0.47	TM
13	TM*	1,1-DCE	0.1244	0.1247	0.28	TM*
14	TM	t-Butanol	0.0405	0.0372	8.3	TM
15	TM	Acetonitrile	0.0605	0.0638	5.4	TM
16	TM	Methyl Acetate	0.5071	0.4113	19	TM
17	TML	Iodomethane	0.1414	0.0941	33	TML 35
18	TM	Acrylonitrile	0.1560	0.1612	3.3	TM
19	TM	Methylene chloride	0.4178	0.4066	2.7	TM
20	TM	Carbon disulfide	1.066	1.107	3.9	TM
21	TM	Methyl t-butyl ether (MtBE)	0.9386	0.9789	4.3	TM
22	TM	Trans-1,2-DCE	0.3378	0.3512	4.0	TM
23	TM	Diisopropyl Ether	1.066	1.063	0.27	TM
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3284	0.3527	7.4	TM**
25	TM**	1,1-DCA	0.6406	0.7038	9.9	TM**
26	TM	Vinyl Acetate	0.3615	0.2715	25	TM
27	TM	Ethyl tert Butyl Ether	0.8280	0.7823	5.5	TM
28	TML	MEK (2-Butanone)	0.2221	0.1791	19	TML 7.2
29	TM	Cis-1,2-DCE	0.4711	0.4531	3.8	TM
30	TM	2,2-Dichloropropane	0.4503	0.3597	20	TM
31	TM	2-Methylpentane	0.2057	0.1839	11	TM
32	TM	3-Methylpentane	0.6753	0.6172	8.6	TM
33	TM*	Chloroform	0.5984	0.6263	4.7	TM*
34	TM	Bromochloromethane	0.0826	0.0830	0.43	TM
35	S	Dibromofluoromethane(S)	0.6485	0.6748	4.0	S
36	TM	1,1,1-TCA	0.1178	0.1149	2.5	TM
37	TML	Cyclohexane	0.2483	0.2089	16	TML 10.0
38	TM	1,1-Dichloropropene	0.3400	0.2923	14	TM
39	TM	2,2,4-Trimethylpentane	0.6846	0.5152	25	TM
40	S	1,2-DCA-D4(S)	0.7401	0.7746	4.7	S

Average

8.5

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Cal. Date: 12/18/18  
Data File: 1219L51.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TML	Carbon Tetrachloride	0.4169	0.4139	0.71	TML	0.86
42	TM	Tert Amyl Methyl Ether	0.7170	0.6419	10	TM	
43	TM	Methylcyclopentane	0.5923	0.5037	15	TM	
44	TM	1,2-DCA	0.4344	0.4605	6.0	TM	
45	TM	Benzene	1.197	1.122	6.2	TM	
46	TM	TCE	0.3144	0.3364	7.0	TM	
47	TM	2-Pentanone	0.2385	0.2292	3.9	TM	
48	TM*	1,2-Dichloropropane	0.3247	0.3251	0.11	TM*	
49	TML	Bromodichloromethane	0.2280	0.2348	3.0	TML	2.9
50	TM	Methyl Cyclohexane	0.3410	0.2732	20	TM	
51	TM	Dibromomethane	0.2436	0.2584	6.1	TM	
52	TML	2-Chloroethyl vinyl ether	0.0638	0.0551	14	TML	3.6
53	TML	MIBK (methyl isobutyl ketone)	0.3389	0.3085	9.0	TML	1.4
54	TM	1-Bromo-2-chloroethane	0.2524	0.2766	9.6	TM	
55	TM	Cis-1,3-Dichloropropene	0.4570	0.3995	13	TM	
56	TM*L	Toluene	0.6619	0.6499	1.8	TM*L	8.7
57	TM	Trans-1,3-Dichloropropene	0.4302	0.3927	8.7	TM	
58	TM	1,1,2-TCA	0.2733	0.2920	6.9	TM	
59	TM	2-Hexanone	0.1977	0.1859	6.0	TM	
60	I	Chlorobenzene-D5 (IS)	ISTD			I	
61	S	Toluene-D8(S)	1.937	1.985	2.5	S	
62	TML	1,2-EDB	0.1691	0.1788	5.7	TML	0.92
63	TM	Tetrachloroethene	0.2697	0.2673	0.86	TM	
64	TML	1-Chlorohexane	0.2814	0.2390	15	TML	15
65	TM	1,1,1,2-Tetrachloroethane	0.3371	0.3680	9.2	TM	
66	TML	m&p-Xylene	0.4815	0.4549	5.5	TML	13
67	TML	o-Xylene	0.2332	0.2158	7.5	TML	12
68	TML	Styrene	0.3826	0.3688	3.6	TML	13
69	S	4-Bromofluorobenzene(S)	0.6745	0.6973	3.4	S	
70	TM	1,3-Dichloropropane	0.4804	0.5021	4.5	TM	
71	TML	Dibromochloromethane	0.2007	0.2230	11	TML	11
72	TM**	Chlorobenzene	0.8070	0.8054	0.20	TM**	
73	TM*L	Ethylbenzene	0.6224	0.6263	0.62	TM*L	9.2
74	TM**	Bromoform	0.2742	0.3039	11	TM**	
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
76	TM	Isopropylbenzene	1.707	1.480	13	TM	
77	TM**	1,1,2,2-Tetrachloroethane	0.7807	0.7348	5.9	TM**	
78	TML	1,2,3-Trichloropropane	0.1546	0.1442	6.8	TML	9.4
79	TM	t-1,4-Dichloro-2-Butene	0.1571	0.1362	13	TM	
80	TML	Bromobenzene	0.3508	0.3492	0.46	TML	5.0

Average

7.0



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Cal. Date: 12/18/18  
Data File: 1219L51.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.249	1.212	2.9	TM
82	TM	4-Ethyltoluene	1.719	1.624	5.5	TM
83	TML	2-Chlorotoluene	0.8221	0.8223	0.03	TML 4.7
84	TML	1,3,5-Trimethylbenzene	0.9280	0.9079	2.2	TML 11
85	TML	4-Chlorotoluene	0.8538	0.8183	4.2	TML 12
86	TM	Tert-Butylbenzene	1.245	1.135	8.8	TM
87	TML	1,2,4-Trimethylbenzene	1.443	1.335	7.5	TML 14
88	TML	Sec-Butylbenzene	1.757	1.673	4.8	TML 14
89	TML	p-Isopropyltoluene	0.9902	0.9822	0.81	TML 10.0
90	TM	Benzyl Chloride	0.8615	0.5188	40	TM
91	TM	1,3-DCB	0.7052	0.6613	6.2	TM
92	TM	1,4-DCB	1.258	1.238	1.6	TM
93	TM	n-Butylbenzene	1.304	1.197	8.2	TM
94	TM	1,2-DCB	1.143	1.109	3.0	TM
95	TM	Hexachloroethane	0.4245	0.4482	5.6	TM
96	TM	1,2-Dibromo-3-chloropropane	0.1448	0.1277	12	TM
97	TM	1,2,4-Trichlorobenzene	0.6706	0.5765	14	TM
98	TML	Hexachlorobutadiene	0.3616	0.3668	1.4	TML 1.7
99	TML	Naphthalene	1.288	1.073	17	TML 23
100	TM	1,2,3-Trichlorobenzene	0.3602	0.3327	7.6	TM
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						

Average

7.7

Data File : M:\LOKI\DATA\181218\1219L51.D  
 Acq On : 20 Dec 18 9:45  
 Sample : Ending CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 50  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	251584	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	265280	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	156608	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	169761	26.011	ppb	0.00
Spiked Amount	25.000		Recovery	=	104.044%	
40) 1,2-DCA-D4(S)	4.07	65	194865	26.163	ppb	0.00
Spiked Amount	25.000		Recovery	=	104.652%	
61) Toluene-D8(S)	6.70	98	526707	25.627	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.508%	
69) 4-Bromofluorobenzene(S)	9.65	95	184985	25.846	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.384%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	30500	9.593	ppb	99
3) Freon 114	0.74	85	32711	9.826	ppb	94
4) Chloromethane	0.76	50	52800	10.373	ppb	92
5) Vinyl chloride	0.81	62	42457	10.529	ppb	96
6) Bromomethane	0.96	94	36277	10.013	ppb	93
7) Chloroethane	1.01	64	28230	10.268	ppb	98
8) Dichlorofluoromethane	1.12	67	72332	10.589	ppb	93
9) Trichlorofluoromethane	1.15	101	57764	10.938	ppb	96
10) Acrolein	1.38	56	31680	97.940	ppb	# 99
11) Acetone	1.48	43	16924	12.211	ppb	89
12) Freon-113	1.45	101	31136	10.047	ppb	99
13) 1,1-DCE	1.44	63	12551	10.028	ppb	95
14) t-Butanol	1.90	59	46751	114.596	ppb	99
15) Acetonitrile	1.66	41	80237	131.781	ppb	95
16) Methyl Acetate	1.78	43	41390	8.110	ppb	# 98
17) Iodomethane	1.52	142	9465	6.508	ppb	97
18) Acrylonitrile	1.95	52	16224	10.332	ppb	97
19) Methylene chloride	1.76	84	40913	9.731	ppb	99
20) Carbon disulfide	1.56	76	111423	10.389	ppb	99
21) Methyl t-butyl ether (MtBE)	1.99	73	98506	10.429	ppb	96
22) Trans-1,2-DCE	1.97	96	35338	10.397	ppb	95
23) Diisopropyl Ether	2.45	45	106970	9.973	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	35492	10.741	ppb	92
25) 1,1-DCA	2.32	63	70824	10.987	ppb	91
26) Vinyl Acetate	2.44	43	27319	7.510	ppb	# 76
27) Ethyl tert Butyl Ether	2.83	59	78726	9.448	ppb	95
28) MEK (2-Butanone)	3.00	43	18021	10.715	ppb	94
29) Cis-1,2-DCE	2.93	61	45599	9.618	ppb	95
30) 2,2-Dichloropropane	2.91	77	36201	7.988	ppb	92
31) 2-Methylpentane	1.78	71	18509	8.943	ppb	98
32) 3-Methylpentane	1.98	57	62109	9.139	ppb	98
33) Chloroform	3.36	83	63028	10.466	ppb	100
34) Bromochloromethane	3.21	128	8348	10.043	ppb	91
36) 1,1,1-TCA	3.56	99	11559	9.751	ppb	97
37) Cyclohexane	3.62	41	21018	9.002	ppb	93
38) 1,1-Dichloropropene	3.82	75	29418	8.599	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	51847	7.526	ppb	85
41) Carbon Tetrachloride	3.81	117	41657	9.914	ppb	95
42) Tert Amyl Methyl Ether	4.44	73	64597	8.953	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1219L51.D  
 Acq On : 20 Dec 18 9:45  
 Sample : Ending CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 50  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	50693	8.505	ppb	90
44) 1,2-DCA	4.19	62	46339	10.600	ppb	98
45) Benzene	4.14	78	112949	9.378	ppb	96
46) TCE	5.13	95	33851	10.698	ppb	97
47) 2-Pentanone	5.48	43	288316	120.113	ppb	99
48) 1,2-Dichloropropane	5.41	63	32715	10.011	ppb	97
49) Bromodichloromethane	5.82	83	23624	10.288	ppb	97
50) Methyl Cyclohexane	5.35	83	27490	8.012	ppb	94
51) Dibromomethane	5.56	93	26007	10.609	ppb	98
52) 2-Chloroethyl vinyl ether	6.30	43	5544	10.357	ppb	92
53) MIBK (methyl isobutyl ket	6.65	43	31047	10.142	ppb	92
54) 1-Bromo-2-chloroethane	6.16	63	27832	10.956	ppb	99
55) Cis-1,3-Dichloropropene	6.41	75	40208	8.743	ppb	97
56) Toluene	6.77	91	65400	9.133	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	39521	9.129	ppb	95
58) 1,1,2-TCA	7.28	83	29384	10.685	ppb	94
59) 2-Hexanone	7.64	43	18708	9.405	ppb	98
62) 1,2-EDB	7.79	107	18976	10.092	ppb	# 97
63) Tetrachloroethene	7.40	164	28367	9.914	ppb	98
64) 1-Chlorohexane	8.42	91	25362	8.495	ppb	97
65) 1,1,1,2-Tetrachloroethane	8.48	131	39054	10.919	ppb	98
66) m&p-Xylene	8.67	91	96549	17.488	ppb	98
67) o-Xylene	9.09	106	22896	8.845	ppb	99
68) Styrene	9.11	104	39136	8.682	ppb	98
70) 1,3-Dichloropropane	7.46	76	53282	10.452	ppb	98
71) Dibromochloromethane	7.70	129	23664	11.079	ppb	95
72) Chlorobenzene	8.36	112	85459	9.980	ppb	97
73) Ethylbenzene	8.53	91	66456	9.078	ppb	97
74) Bromoform	9.27	173	32244	11.084	ppb	95
76) Isopropylbenzene	9.51	105	92735	8.671	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.85	83	46029	9.412	ppb	99
78) 1,2,3-Trichloropropane	9.87	110	9033	10.937	ppb	97
79) t-1,4-Dichloro-2-Butene	9.92	53	8532	8.671	ppb	97
80) Bromobenzene	9.78	156	21872	9.503	ppb	90
81) n-Propylbenzene	9.96	91	75936	9.709	ppb	100
82) 4-Ethyltoluene	10.08	105	101727	9.448	ppb	98
83) 2-Chlorotoluene	10.01	91	51513	9.528	ppb	97
84) 1,3,5-Trimethylbenzene	10.16	105	56872	8.885	ppb	98
85) 4-Chlorotoluene	10.13	91	51264	8.848	ppb	100
86) Tert-Butylbenzene	10.50	119	71118	9.122	ppb	99
87) 1,2,4-Trimethylbenzene	10.55	105	83609	8.644	ppb	97
88) Sec-Butylbenzene	10.73	105	104819	8.634	ppb	99
89) p-Isopropyltoluene	10.90	119	61528	9.002	ppb	95
90) Benzyl Chloride	11.07	91	32501	6.022	ppb	97
91) 1,3-DCB	10.81	146	41424	9.377	ppb	97
92) 1,4-DCB	10.91	146	77539	9.841	ppb	99
93) n-Butylbenzene	11.34	91	75010	9.182	ppb	97
94) 1,2-DCB	11.29	146	69453	9.698	ppb	99
95) Hexachloroethane	11.56	117	28076	10.558	ppb	92
96) 1,2-Dibromo-3-chloropropan	12.13	75	8001	8.819	ppb	87
97) 1,2,4-Trichlorobenzene	13.01	180	36112	8.597	ppb	93
98) Hexachlorobutadiene	13.23	225	22976	9.830	ppb	90
99) Naphthalene	13.26	128	67242	7.716	ppb	# 90
100) 1,2,3-Trichlorobenzene	13.52	180	20840	9.236	ppb	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

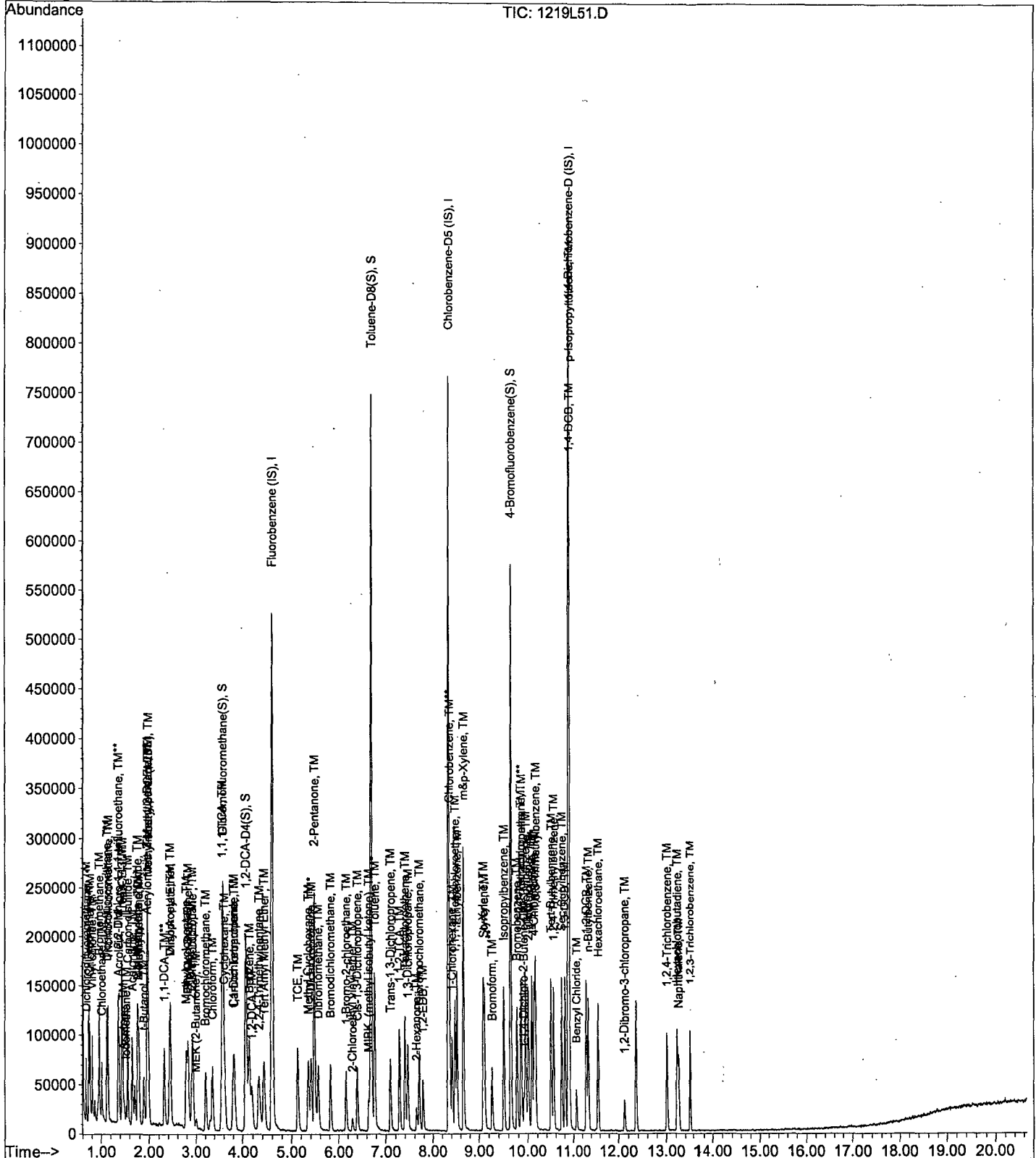
Data File : M:\LOKI\DATA\181218\1219L51.D  
Acq On : 20 Dec 18 9:45  
Sample : Ending CCV 10ug/L  
Misc : IS&S 11/8/18

Vial: 50  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/20/18  
Instrument: Loki

Initials: \_\_\_\_\_

1220L02.D 1220L03.D 1220L04.D 1220L05.D 1220L06.D 1220L07.D 1220L08.D 1220L09.D 1220L10.D

	Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)															
2	TM Dichlorodifluoromethane		0.3418	0.3530	0.3636	0.2921	0.2888	0.2972	0.2923		0.32	10	TM			
3	TM Freon 114		0.4386	0.4178	0.3869	0.3590	0.3370	0.3274	0.3165	0.3029	0.36	14	TM			
4	TM** Chloromethane			0.6656	0.6038	0.5156	0.5004	0.4753	0.4520		0.54	15	TM**			
5	TM* Vinyl chloride		0.5590	0.5234	0.4934	0.4193	0.4194	0.4082	0.3910		0.46	14	TM*			
6	TM Bromomethane		0.4986	0.4462	0.5842	0.4023	0.4314	0.4188	0.3797		0.45	15	TM			
7	TM Chloroethane		0.3341	0.3888	0.3085	0.2930	0.2637	0.2741	0.2757		0.31	14	TM			
8	TM Dichlorofluoromethane		0.9457	0.7756	0.8051	0.7651	0.7488	0.7097	0.6661	0.6250	0.76	13	TM			
9	TM Trichlorofluoromethane		0.6812	0.5846	0.6620	0.5839	0.5575	0.5701	0.5413	0.5063	0.59	10	TM			
10	TM Acrolein		0.0347	0.0292	0.0304	0.0293	0.0316	0.0319	0.0291	0.0284	0.03	6.8	TM			
11	TML Acetone		0.4154	0.3740	0.2540	0.1775	0.1853	0.1639	0.1492	0.1347	0.23	46	TML	0.998		
12	TML Freon-113		0.4705	0.3896	0.3340	0.3271	0.3463	0.3212	0.3051	0.2923	0.35	16	TML	0.999		
13	TM <sup>L</sup> 1,1-DCE		0.2063	0.1926	0.1726	0.1686	0.1328	0.1526	0.1432	0.1335	0.16	17	TM <sup>L</sup>	0.999		
14	TML t-Butanol	0.0562	0.0459	0.0502	0.0452	0.0412	0.0450	0.0423	0.0445	0.0399	0.05	11	TML	0.991		
15	TM Acetonitrile		0.0914	0.0820	0.0729	0.0691	0.0712	0.0686	0.0657	0.0617	0.07	13	TM			
16	TML Methyl Acetate		1.040	0.5888	0.4849	0.4041	0.5004	0.4923	0.4715	0.4253	0.55	37	TML	0.998		
17	TML Iodomethane		0.0666	0.0728	0.0959	0.0846	0.1144	0.1560	0.1993	0.2234	0.13	47	TML	0.996		
18	TML Acrylonitrile		0.3390	0.2625	0.2298	0.1836	0.1884	0.1697	0.1459	0.1397	0.21	32	TML	0.998		
19	TM Methylene chloride		0.5695	0.5405	0.4831	0.4452	-0.4389	0.4167	0.3863		0.47	14	TM			
20	TM Carbon disulfide		1.427	1.286	1.193	1.174	1.142	1.082	1.016	0.9548	1.2	13	TM			
21	TM Methyl t-butyl ether (MtBE)		1.209	1.101	1.105	1.025	1.014	1.001	0.9738	0.9403	1.0	8.3	TM			
22	TM Trans-1,2-DCE		0.3197	0.3182	0.2438	0.2864	0.2488	0.2491	0.2337	0.2237	0.27	14	TM			
23	TM Diisopropyl Ether		1.182	1.305	1.183	1.167	1.143	1.079	1.044	1.020	1.1	8.1	TM			
24	TM** 2,2-Dichloro-1,1,1-trifluoroethane		0.4460	0.4304	0.3848	0.3696	0.3995	0.3641	0.3393	0.3178	0.38	11	TM**			
25	TM** 1,1-DCA		0.8342	0.8114	0.7674	0.7372	0.7114	0.6988	0.6391	0.5953	0.72	11	TM**			
26	TM Vinyl Acetate		0.5575	0.4434	0.4310	0.4294	0.4332	0.4230	0.3829	0.4002	0.44	12	TM			
27	TM Ethyl tert Butyl Ether		0.9087	0.8224	0.7954	0.7569	0.7938	0.8117	0.8319	0.8590	0.82	5.6	TM			
28	TML MEK (2-Butanone)		0.3298	0.2207	0.2256	0.2080	0.1815	0.1831	0.1701	0.1647	0.21	25	TML	1.000		
29	TM Cis-1,2-DCE		0.4681	0.3825	0.3302	0.3384	0.3488	0.3387	0.3325	0.3233	0.36	13	TM			
30	TM 2,2-Dichloropropane		0.6131	0.5909	0.5017	0.5018	0.4908	0.4633	0.4306	0.4044	0.50	14	TM			
31	TM 2-Methylpentane		0.2474	0.2295	0.2006	0.1710	0.1965	0.2060	0.1972	0.1901	0.20	12	TM			
32	TM 3-Methylpentane		0.7125	0.7867	0.7156	0.6202	0.6893	0.6816	0.6598	0.6474	0.69	7.4	TM			
33	TM* Chloroform		0.7081	0.6762	0.6678	0.6489	0.6451	0.6350	0.5893	0.5449	0.64	8.0	TM*			
34	TML Bromochloromethane		0.1382	0.1003	0.1019	0.0830	0.0929	0.0901	0.0803		0.10	20	TML	0.996		
35	S Dibromofluoromethane(S)	0.8573	0.7603	0.6882	0.6573	0.7094	0.7119	0.6823	0.6459	0.5948	0.70	11	S			

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/20/18  
Instrument: Loki

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
36	TM	1,1,1-TCA		0.2192	0.2418	0.2043	0.1841	0.1910	0.1718	0.1705	0.1587		0.19	14	TM			
37	TML	Cyclohexane		0.3420	0.2999	0.2560	0.2253	0.2207	0.2411	0.2306	0.2338		0.26	17	TML	1.000		
38	TM	1,1-Dichloropropene		0.3523	0.3075	0.3327	0.3079	0.3317	0.3376	0.3349	0.3474		0.33	4.9	TM			
39	TM	2,2,4-Trimethylpentane		0.6691	0.6744	0.6174	0.6501	0.6451	0.6550	0.6704	0.7171		0.66	4.3	TM			
40	S	1,2-DCA-D4(S)	0.9594	0.9128	0.8007	0.7942	0.8175	0.8092	0.7858	0.7429	0.6798		0.81	10	S			
41	TM	Carbon Tetrachloride		0.5608	0.4925	0.4591	0.4601	0.4521	0.4488	0.4204	0.3966		0.46	11	TM			
42	TM	Tert Amyl Methyl Ether		0.6965	0.6448	0.5995	0.6557	0.6727	0.7317	0.7566	0.8115		0.70	9.8	TM			
43	TM	Methylcyclopentane		0.5669	0.6728	0.5539	0.4643	0.5185	0.5203	0.5116	0.5242		0.54	11	TM			
44	TM	1,2-DCA		0.5255	0.4441	0.4828	0.4699	0.4880	0.4774	0.4476	0.4206		0.47	6.8	TM			
45	TM	Benzene		1.210	1.171	1.109	1.152	1.199	1.203	1.169	1.156		1.2	2.8	TM			
46	TM	TCE		0.1927	0.1360	0.1525	0.1655	0.1488	0.1440	0.1362	0.1366		0.15	13	TM			
47	TM	2-Pentanone		0.2282	0.2244	0.2327	0.2402	0.2512	0.2637	0.2638	0.2519		0.24	6.3	TM			
48	TM*	1,2-Dichloropropane		0.3464	0.3725	0.3506	0.3434	0.3444	0.3401	0.3342	0.3215		0.34	4.2	TM*			
49	TM	Bromodichloromethane		0.2516	0.2550	0.2531	0.2561	0.2514	0.2473	0.2296	0.2234		0.25	5.0	TM			
50	TM	Methyl Cyclohexane		0.2584	0.2921	0.2888	0.2993	0.3091	0.3132	0.3362	0.3777		0.31	11	TM			
51	TM	Dibromomethane		0.3090	0.2886	0.2693	0.2701	0.2617	0.2577	0.2465	0.2283		0.27	9.3	TM			
52	TML	2-Chloroethyl vinyl ether		0.0942	0.0837	0.0739	0.0457	0.0525	0.0395	0.0442	0.0495		0.06	34	TML	0.996		
53	TML	MIBK (methyl isobutyl ketone)		0.0994	0.3510	0.3439	0.3004	0.3214	0.3293	0.3214	0.3095		0.30	27	TML	1.000		
54	TM	1-Bromo-2-chloroethane		0.2612	0.2706	0.2408	0.2574	0.2751	0.2827	0.2719	0.2591		0.26	4.9	TM			
55	TM	Cis-1,3-Dichloropropene		0.4554	0.4667	0.4049	0.4327	0.4330	0.4607	0.4691	0.4955		0.45	6.2	TM			
56	TM*L	Toluene		0.5338	0.5509	0.5257	0.6214	0.7009	0.7350	0.7274	0.7305		0.64	15	TM*L	1.000		
57	TM	Trans-1,3-Dichloropropene		0.4427	0.4358	0.3963	0.4117	0.4492	0.4482	0.4385	0.4573		0.43	4.8	TM			
58	TM	1,1,2-TCA		0.3227	0.3089	0.3136	0.3144	0.3094	0.3032	0.2875	0.2721		0.30	5.4	TM			
59	TM	2-Hexanone		0.1951	0.1453	0.1678	0.1800	0.1959	0.1907	0.2040	0.2156		0.19	12	TM			
60	I	Chlorobenzene-D5 (IS)																
61	S	Toluene-D8(S)	1.991	1.850	1.696	1.766	2.028	2.079	2.113	2.126	2.050		2.0	8.0	S			
62	TM	1,2-EDB		0.1757	0.1904	0.1757	0.1904	0.1877	0.1861	0.1780	0.1748		0.18	3.8	TM			
63	TM	Tetrachloroethene		0.2387	0.1857	0.2154	0.1988	0.2203	0.1990	0.1971	0.1863		0.21	8.9	TM			
64	TM	1-Chlorohexane		0.2728	0.2013	0.2530	0.2412	0.2705	0.2675	0.3156		0.26	13	TM				
65	TM	1,1,1,2-Tetrachloroethane		0.3489	0.3661	0.3769	0.3847	0.3931	0.3640	0.3407	0.3179		0.36	6.8	TM			
66	TML	m&p-Xylene		0.3148	0.3845	0.3676	0.4249	0.4642	0.5277	0.6074	0.6290		0.47	25	TML	0.999		
67	TM	o-Xylene		0.2135	0.2440	0.1939	0.2135	0.2332	0.2331	0.2719	0.3017		0.24	15	TM			
68	TML	Styrene		0.2989	0.2816	0.2758	0.3526	0.3779	0.4260	0.5114	0.5512		0.38	27	TML	0.998		
69	S	4-Bromofluorobenzene(S)	0.6277	0.6154	0.5238	0.5678	0.6735	0.7219	0.7578	0.7772	0.7524		0.67	14	S			
70	TM	1,3-Dichloropropane		0.5179	0.5006	0.4997	0.4926	0.5242	0.4992	0.4981	0.4818		0.50	2.7	TM			

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/20/18  
Instrument: Loki

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
71	TML	Dibromochloromethane		0.3230	0.4587	0.4024	0.4136	0.4109	0.3745	0.3646	0.3495		0.39	11	TML	1.000		
72	TM**	Chlorobenzene		0.9330	0.8991	0.8111	0.8479	0.8368	0.8086	0.7980	0.7826		0.84	6.2	TM**			
73	TM*L	Ethylbenzene		0.5020	0.5686	0.4973	0.5790	0.6746	0.7013	0.7770	0.8126		0.64	19	TM*L	0.999		
74	TM**	Bromoform		0.3865	0.3205	0.2814	0.3082	0.3170	0.3002	0.2847	0.2736		0.31	12	TM**			
75	I	1,4-Dichlorobenzene-D (IS)																
76	TM	Isopropylbenzene		1.589	1.617	1.504	1.553	1.542	1.627	1.698	1.877		1.6	7.2	TM			
77	TM**	1,1,2,2-Tetrachloroethane		1.068	1.036	0.9919	1.015	0.8833	0.8448	0.7354	0.7132		0.91	15	TM**			
78	TM	1,2,3-Trichloropropane		0.2143	0.1911	0.1818	0.1588	0.1550	0.1486				0.17	14	TM			
79	TM	t-1,4-Dichloro-2-Butene		0.1442	0.1548	0.1670	0.1608	0.1716	0.1642	0.1608	0.1605		0.16	5.2	TM			
80	TM	Bromobenzene		0.3355	0.3650	0.3046	0.4040	0.3744	0.3882	0.3612	0.3462		0.36	8.7	TM			
81	TM	n-Propylbenzene		1.310	1.194	1.173	1.242	1.245	1.411	1.462	1.567		1.3	11	TM			
82	TM	4-Ethyltoluene		1.618	1.574	1.507	1.649	1.711	1.981	2.053	2.139		1.8	14	TM			
83	TM	2-Chlorotoluene		0.7806	0.7682	0.6890	0.8083	0.8479	0.8915	0.8936	0.9052		0.82	9.2	TM			
84	TML	1,3,5-Trimethylbenzene		0.8436	0.7548	0.7151	0.8839	0.9199	1.059	1.147	1.090		0.93	17	TML	0.999		
85	TML	4-Chlorotoluene		0.6514	0.7715	0.7561	0.7971	0.8337	1.007	0.9657	0.9577		0.84	15	TML	1.000		
86	TM	Tert-Butylbenzene		1.244	1.136	1.125	1.156	1.166	1.227	1.291	1.422		1.2	8.2	TM			
87	TML	1,2,4-Trimethylbenzene		1.169	1.242	1.085	1.309	1.369	1.606	1.702	1.794		1.4	18	TML	0.999		
88	TM	Sec-Butylbenzene		1.781	1.568	1.541	1.703	1.815	1.962	2.031	2.168		1.8	12	TM			
89	TM	p-Isopropyltoluene		0.9528	0.9513	0.9187	0.9244	0.9674	1.115	1.154	1.248		1.0	12	TM			
90	TM	Benzyl Chloride		0.9608	0.8528	0.9031	0.8147	0.8215	0.8164	0.8329	0.9376		0.87	6.7	TM			
91	TM	1,3-DCB		0.7313	0.6886	0.6325	0.7032	0.6794	0.7243	0.6918	0.6812		0.69	4.4	TM			
92	TM	1,4-DCB		1.493	1.297	1.360	1.325	1.292	1.262	1.211	1.185		1.3	7.3	TM			
93	TM	n-Butylbenzene		1.513	1.353	1.165	1.286	1.300	1.425	1.538	1.696		1.4	12	TM			
94	TM	1,2-DCB		1.306	1.295	1.147	1.167	1.169	1.125	1.091	1.135		1.2	6.7	TM			
95	TM	Hexachloroethane		0.5685	0.5558	0.5582	0.4532	0.4398	0.4349	0.3948			0.49	15	TM			
96	TML	1,2-Dibromo-3-chloropropane		0.1163	0.1715	0.1991	0.1501	0.1530	0.1392	0.1329	0.1409		0.15	17	TML	0.999		
97	TM	1,2,4-Trichlorobenzene		0.6656	0.6833	0.6890	0.6186	0.5979	0.6106	0.6560	0.7712		0.66	8.4	TM			
98	TM	Hexachlorobutadiene		0.4917	0.3408	0.3978	0.4274	0.3861	0.3797	0.3579	0.3860		0.40	12	TM			
99	TML	Naphthalene		1.143	1.052	1.099	1.188	1.147	1.280	1.523	1.938		1.3	23	TML	0.991		
100	TM	1,2,3-Trichlorobenzene		0.3714	0.4340	0.4429	0.3674	0.3469	0.3960	0.4089	0.4705		0.40	10	TM			
101																		
102																		
103																		
104																		
105																		

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\181220\1220L02.D  
 Acq On : 20 Dec 18 11:36  
 Sample : 0.3ug/L VOC STD 12/20/18  
 Misc : 1uL-5ppb

Vial: 2  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 7:23 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 07:21:24 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	222656	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	240128	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	106984	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	38176	6.1165	ppb	0.00
Spiked Amount	25.000		Recovery	=	24.464%	
40) 1,2-DCA-D4(S)	4.07	65	42722	5.9120	ppb	0.00
Spiked Amount	25.000		Recovery	=	23.648%	
61) Toluene-D8(S)	6.70	98	95605	5.0618	ppb	0.00
Spiked Amount	25.000		Recovery	=	20.248%	
69) 4-Bromofluorobenzene(S)	9.65	95	30146	4.6941	ppb	0.00
Spiked Amount	25.000		Recovery	=	18.776%	
Target Compounds						
14) t-Butanol	1.90	59	5008	12.3268	ppb	Qvalue # 81



Quantitation Report

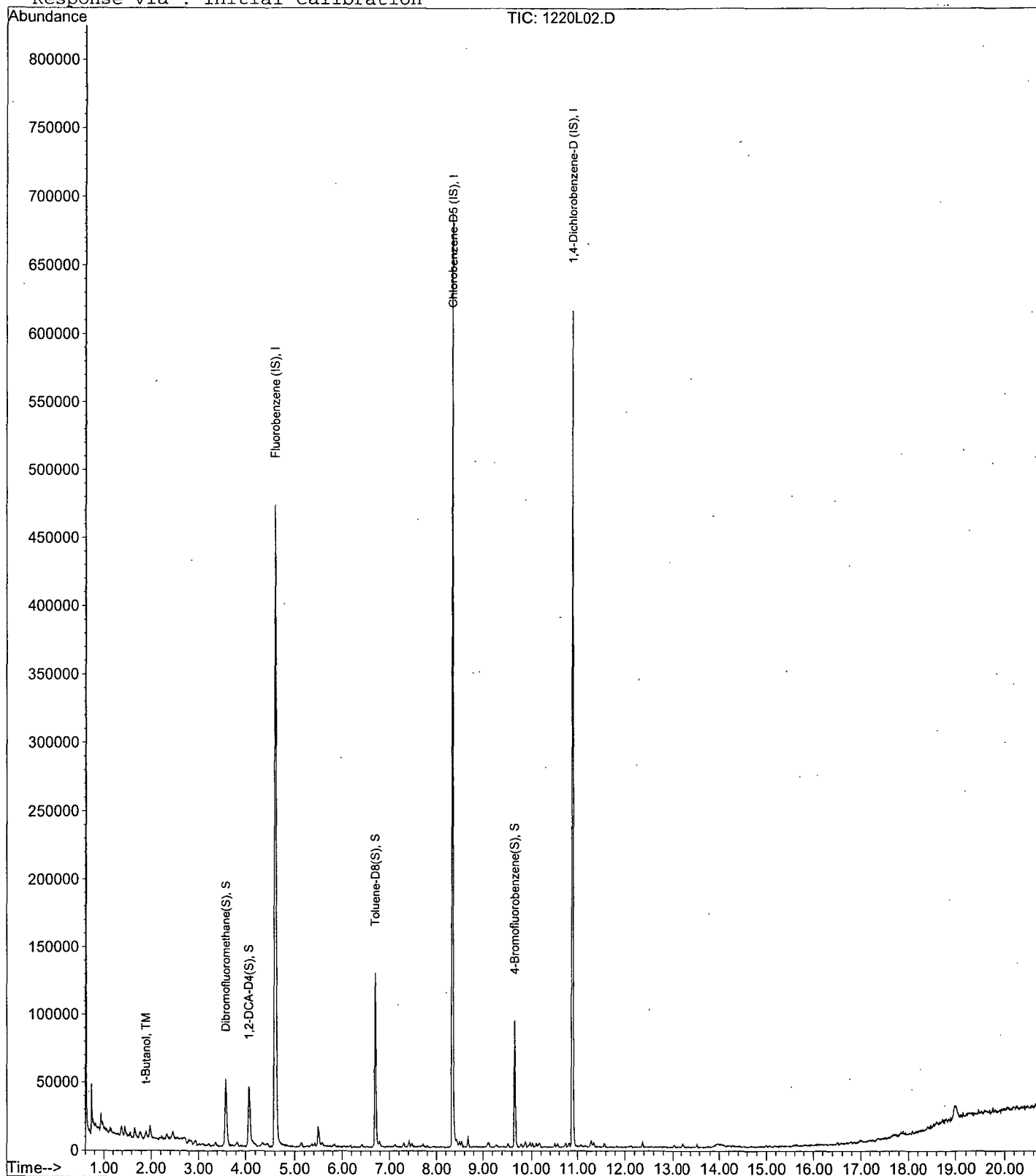
Data File : M:\LOKI\DATA\181220\1220L02.D  
Acq On : 20 Dec 18 11:36  
Sample : 0.3ug/L VOC STD 12/20/18  
Misc : 1uL-5ppb

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 7:23 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L03.D  
 Acq On : 20 Dec 18 12:04  
 Sample : 0.5ug/L VOC STD 12/20/18  
 Misc : 1uL-5ppb

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	228352	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	241920	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	112672	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	34721	5.4241	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.696%	
40) 1,2-DCA-D4(S)	4.07	65	41690	5.6253	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.500%	
61) Toluene-D8(S)	6.70	98	89498	4.7034	ppb	0.00
Spiked Amount	25.000		Recovery	=	18.812%	
69) 4-Bromofluorobenzene(S)	9.65	95	29776	4.6021	ppb	0.00
Spiked Amount	25.000		Recovery	=	18.408%	
Target Compounds						
2) Dichlorodifluoromethane	0.68	85	1561	0.5367	ppb	# 87
3) Freon 114	0.74	85	2003	0.6078	ppb	95
4) Chloromethane	0.76	50	3449	0.6839	ppb	98
5) Vinyl chloride	0.81	62	2553	0.6088	ppb	83
6) Bromomethane	0.97	94	2277	0.5520	ppb	91
7) Chloroethane	1.02	64	1526	0.5470	ppb	85
8) Dichlorofluoromethane	1.12	67	4319	0.6262	ppb	93
9) Trichlorofluoromethane	1.15	101	3111	0.5814	ppb	100
10) Acrolein	1.38	56	7915	28.3549	ppb	# 87
11) Acetone	1.48	43	1897	-1.0819	ppb	95
12) Freon-113	1.46	101	2149	-0.1562	ppb	87
13) 1,1-DCE	1.44	63	942	0.6588	ppb	# 70
14) t-Butanol	1.90	59	10470	25.1359	ppb	97
15) Acetonitrile	1.66	41	20882	31.3865	ppb	92
17) Iodomethane	1.53	142	304	2.9428	ppb	# 83
18) Acrylonitrile	1.95	52	1548	-0.8461	ppb	# 61
19) Methylene chloride	1.76	84	2601	0.6077	ppb	99
20) Carbon disulfide	1.56	76	6516	0.6153	ppb	# 77
21) Methyl t-butyl ether (MtBE)	1.99	73	5522	0.5779	ppb	91
22) Trans-1,2-DCE	1.97	96	1460	0.6022	ppb	87
23) Diisopropyl Ether	2.44	45	5399	0.5182	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	2037	0.5847	ppb	81
25) 1,1-DCA	2.32	63	3810	0.5758	ppb	# 81
26) Vinyl Acetate	2.43	43	2546	0.6370	ppb	97
27) Ethyl tert Butyl Ether	2.83	59	4150	0.5524	ppb	# 86
29) Cis-1,2-DCE	2.94	96	2138	0.6541	ppb	79
30) 2,2-Dichloropropane	2.91	77	2800	0.6136	ppb	# 88
31) 2-Methylpentane	1.79	71	1130	0.6041	ppb	# 89
32) 3-Methylpentane	1.98	57	3254	0.5170	ppb	# 98
33) Chloroform	3.36	83	3234	0.5537	ppb	95
34) Bromochloromethane	3.21	128	631	0.1638	ppb	78
36) 1,1,1-TCA	3.56	97	1001	0.5688	ppb	96
37) Cyclohexane	3.62	41	1562	0.6840	ppb	# 45
38) 1,1-Dichloropropene	3.83	75	1609	0.5314	ppb	# 80
39) 2,2,4-Trimethylpentane	4.34	57	3056	0.5051	ppb	# 68
41) Carbon Tetrachloride	3.81	117	2561	0.6078	ppb	83
42) Tert Amyl Methyl Ether	4.43	73	3181	0.5003	ppb	99
43) Methylcyclopentane	2.79	56	2589	0.5234	ppb	# 80
44) 1,2-DCA	4.20	62	2400	0.5597	ppb	# 68

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L03.D  
 Acq On : 20 Dec 18 12:04  
 Sample : 0.5ug/L VOC STD 12/20/18  
 Misc : 1uL-5ppb

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) Benzene	4.13	78	5526	0.5166	ppb	94
46) TCE	5.13	130	880	0.6357	ppb #	85
47) 2-Pentanone	5.48	43	52115	23.3354	ppb	95
48) 1,2-Dichloropropane	5.42	63	1582	0.5033	ppb #	63
49) Bromodichloromethane	5.82	83	1149	0.5115	ppb #	83
50) Methyl Cyclohexane	5.35	83	1180	0.4176	ppb	88
51) Dibromomethane	5.57	93	1411	0.5799	ppb #	80
52) 2-Chloroethyl vinyl ether	6.30	43	430	1.4167	ppb #	47
53) MIBK (methyl isobutyl ket	6.64	43	454	-0.1615	ppb #	48
54) 1-Bromo-2-chloroethane	6.17	63	1193	0.4931	ppb #	79
55) Cis-1,3-Dichloropropene	6.41	75	2080	0.5035	ppb #	85
56) Toluene	6.78	91	2438	0.7232	ppb	97
57) Trans-1,3-Dichloropropene	7.10	75	2022	0.5089	ppb	98
58) 1,1,2-TCA	7.30	83	1474	0.5309	ppb #	78
59) 2-Hexanone	7.65	43	891	0.5222	ppb #	77
62) 1,2-EDB	7.78	107	850	0.4817	ppb #	57
63) Tetrachloroethene	7.41	166	1155	0.5818	ppb	90
64) 1-Chlorohexane	8.43	91	1320	0.5241	ppb #	79
65) 1,1,1,2-Tetrachloroethane	8.49	131	1688	0.4825	ppb	87
66) m&p-Xylene	8.66	91	3046	3.4533	ppb	99
67) o-Xylene	9.09	106	1033	0.4484	ppb	88
68) Styrene	9.12	104	1446	2.1936	ppb	85
70) 1,3-Dichloropropane	7.46	76	2506	0.5161	ppb	84
71) Dibromochloromethane	7.71	129	1563	-0.3999	ppb #	70
72) Chlorobenzene	8.37	112	4514	0.5556	ppb	93
73) Ethylbenzene	8.53	91	2429	1.5411	ppb #	67
74) Bromoform	9.27	173	1870	0.6254	ppb	97
76) Isopropylbenzene	9.51	105	3580	0.4886	ppb	92
77) 1,1,2,2-Tetrachloroethane	9.86	83	2407	0.5863	ppb #	97
78) 1,2,3-Trichloropropane	9.87	110	483	0.6127	ppb	99
79) t-1,4-Dichloro-2-Butene	9.92	53	325	0.4493	ppb #	18
80) Bromobenzene	9.78	156	756	0.4661	ppb #	66
81) n-Propylbenzene	9.95	91	2953	0.4943	ppb	96
82) 4-Ethyltoluene	10.08	105	3646	0.4547	ppb	86
83) 2-Chlorotoluene	10.02	91	1759	0.4742	ppb	99
84) 1,3,5-Trimethylbenzene	10.16	105	1901	0.9019	ppb	99
85) 4-Chlorotoluene	10.14	91	1468	0.6657	ppb	94
86) Tert-Butylbenzene	10.49	119	2803	0.5094	ppb	93
87) 1,2,4-Trimethylbenzene	10.56	105	2634	1.5869	ppb	82
88) Sec-Butylbenzene	10.73	105	4013	0.4890	ppb	92
89) p-Isopropyltoluene	10.91	119	2147	0.4630	ppb	91
90) Benzyl Chloride	11.08	91	2165	0.5538	ppb #	76
91) 1,3-DCB	10.81	146	1648	0.5288	ppb	86
92) 1,4-DCB	10.91	146	3364	0.5728	ppb #	84
93) n-Butylbenzene	11.35	91	3410	0.5368	ppb	90
94) 1,2-DCB	11.29	146	2942	0.5535	ppb	94
95) Hexachloroethane	11.56	117	1281	0.5843	ppb	94
96) 1,2-Dibromo-3-chloropropan	12.13	75	262	0.2523	ppb #	60
97) 1,2,4-Trichlorobenzene	13.02	180	1500	0.5031	ppb #	83
98) Hexachlorobutadiene	13.23	225	1108	0.6210	ppb	86
99) Naphthalene	13.27	128	2575	3.1109	ppb	97
100) 1,2,3-Trichlorobenzene	13.52	180	837	0.4588	ppb #	72

Quantitation Report

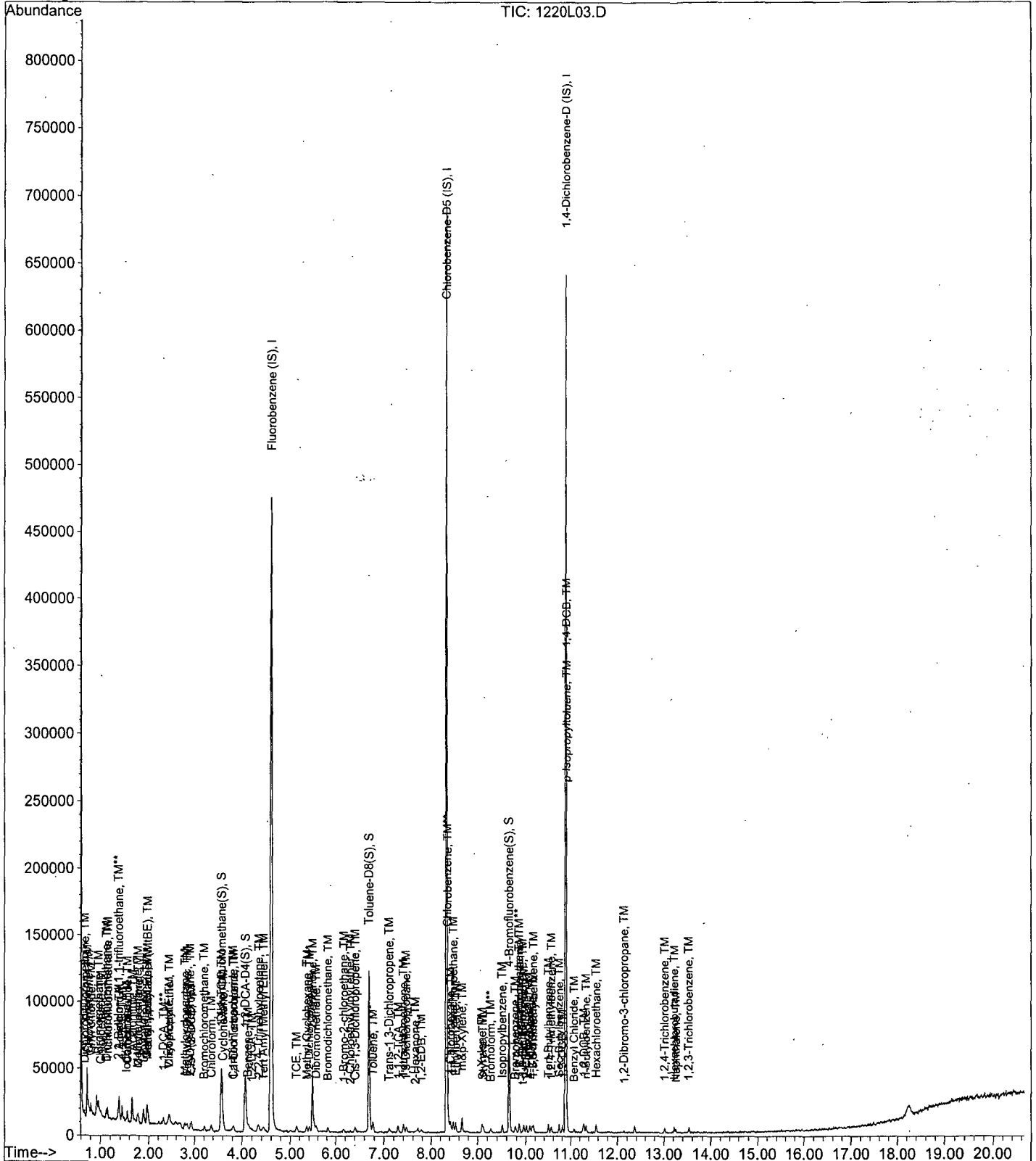
Data File : M:\LOKI\DATA\181220\1220L03.D  
Acq On : 20 Dec 18 12:04  
Sample : 0.5ug/L VOC STD 12/20/18  
Misc : 1uL-5ppb

Vial: 3  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L04.D  
 Acq On : 20 Dec 18 12:33  
 Sample : 1.0ug/L VOC STD 12/20/18  
 Misc : 2uL-10ppb

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.61	96	227328	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	240896	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	113712	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	62576	9.8197	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.280%	
40) 1,2-DCA-D4(S)	4.07	65	72812	9.8689	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.476%	
61) Toluene-D8(S)	6.70	98	163385	8.6229	ppb	0.00
Spiked Amount	25.000		Recovery	=	34.492%	
69) 4-Bromofluorobenzene(S)	9.65	95	50477	7.8348	ppb	0.00
Spiked Amount	25.000		Recovery	=	31.340%	
Target Compounds						
2) Dichlorodifluoromethane	0.68	85	3210	1.1087	ppb	98
3) Freon 114	0.74	85	3799	1.1581	ppb	82
4) Chloromethane	0.76	50	6052	1.2054	ppb	93
5) Vinyl chloride	0.81	62	4759	1.1400	ppb	83
6) Bromomethane	0.96	94	4057	0.9880	ppb	92
7) Chloroethane	1.02	64	3535	1.2729	ppb	86
8) Dichlorofluoromethane	1.12	67	7053	1.0271	ppb	91
9) Trichlorofluoromethane	1.15	101	5316	0.9979	ppb	# 73
10) Acrolein	1.38	56	13262	47.7241	ppb	96
11) Acetone	1.48	43	3401	0.1692	ppb	96
12) Freon-113	1.45	101	3543	0.3737	ppb	# 81
13) 1,1-DCE	1.44	63	1480	1.0397	ppb	# 68
14) t-Butanol	1.90	59	22840	55.0803	ppb	96
15) Acetonitrile	1.66	41	37298	56.3129	ppb	97
16) Methyl Acetate	1.79	43	5354	0.1461	ppb	# 93
17) Iodomethane	1.52	142	662	3.1176	ppb	# 72
18) Acrylonitrile	1.96	52	2387	-0.1712	ppb	83
19) Methylene chloride	1.76	84	4915	1.1535	ppb	99
20) Carbon disulfide	1.56	76	11691	1.1089	ppb	99
21) Methyl t-butyl ether (MtBE)	1.99	73	10007	1.0521	ppb	96
22) Trans-1,2-DCE	1.97	96	2893	1.1987	ppb	95
23) Diisopropyl Ether	2.44	45	11871	1.1445	ppb	91
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	3914	1.1285	ppb	87
25) 1,1-DCA	2.32	63	7378	1.1201	ppb	94
26) Vinyl Acetate	2.42	43	4032	1.0133	ppb	98
27) Ethyl tert Butyl Ether	2.83	59	7478	0.9999	ppb	# 87
28) MEK (2-Butanone)	3.01	43	2007	0.2727	ppb	# 50
29) Cis-1,2-DCE	2.93	96	3478	1.0689	ppb	86
30) 2,2-Dichloropropane	2.91	77	5373	1.1828	ppb	94
31) 2-Methylpentane	1.79	71	2087	1.1207	ppb	# 84
32) 3-Methylpentane	1.98	57	7154	1.1417	ppb	# 95
33) Chloroform	3.36	83	6149	1.0576	ppb	92
34) Bromochloromethane	3.23	128	912	0.5502	ppb	84
36) 1,1,1-TCA	3.56	97	2199	1.2552	ppb	82
37) Cyclohexane	3.62	41	2727	1.2363	ppb	# 51
38) 1,1-Dichloropropene	3.84	75	2796	0.9275	ppb	# 87
39) 2,2,4-Trimethylpentane	4.33	57	6132	1.0182	ppb	# 71
41) Carbon Tetrachloride	3.81	117	4478	1.0676	ppb	76
42) Tert Amyl Methyl Ether	4.44	73	5863	0.9262	ppb	# 90

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L04.D  
 Acq On : 20 Dec 18 12:33  
 Sample : 1.0ug/L VOC STD 12/20/18  
 Misc : 2uL-10ppb

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	6118	1.2424	ppb	90
44) 1,2-DCA	4.20	62	4038	0.9459	ppb #	88
45) Benzene	4.14	78	10647	0.9998	ppb	96
46) TCE	5.14	130	1237	0.8977	ppb #	87
47) 2-Pentanone	5.48	43	102003	45.8794	ppb	99
48) 1,2-Dichloropropane	5.42	63	3387	1.0824	ppb #	89
49) Bromodichloromethane	5.82	83	2319	1.0370	ppb #	99
50) Methyl Cyclohexane	5.35	83	2656	0.9442	ppb #	58
51) Dibromomethane	5.56	93	2624	1.0833	ppb #	76
52) 2-Chloroethyl vinyl ether	6.31	43	761	2.1662	ppb #	47
53) MIBK (methyl isobutyl ket	6.65	43	3192	0.8094	ppb	99
54) 1-Bromo-2-chloroethane	6.17	63	2461	1.0219	ppb	94
55) Cis-1,3-Dichloropropene	6.41	75	4244	1.0320	ppb #	86
56) Toluene	6.78	91	5009	1.1103	ppb	88
57) Trans-1,3-Dichloropropene	7.10	75	3963	1.0020	ppb	95
58) 1,1,2-TCA	7.29	83	2809	1.0162	ppb	87
59) 2-Hexanone	7.65	43	1321	0.7777	ppb #	79
62) 1,2-EDB	7.79	107	1835	1.0443	ppb #	63
63) Tetrachloroethene	7.40	166	1789	0.9050	ppb	86
64) 1-Chlorohexane	8.42	91	1940	0.7735	ppb	91
65) 1,1,1,2-Tetrachloroethane	8.48	131	3528	1.0127	ppb	84
66) m&p-Xylene	8.67	91	7410	4.1689	ppb	88
67) o-Xylene	9.09	106	2351	1.0248	ppb	73
68) Styrene	9.11	104	2713	2.4314	ppb	99
70) 1,3-Dichloropropane	7.46	76	4824	0.9977	ppb	98
71) Dibromochloromethane	7.70	129	4420	0.4526	ppb	79
72) Chlorobenzene	8.37	112	8664	1.0709	ppb	92
73) Ethylbenzene	8.53	91	5479	1.9297	ppb	98
74) Bromoform	9.27	173	3088	1.0371	ppb	92
76) Isopropylbenzene	9.51	105	7355	0.9946	ppb	90
77) 1,1,2,2-Tetrachloroethane	9.85	83	4713	1.1374	ppb	91
78) 1,2,3-Trichloropropane	9.87	110	869	1.0922	ppb	92
79) t-1,4-Dichloro-2-Butene	9.92	53	704	0.9644	ppb	85
80) Bromobenzene	9.78	156	1660	1.0142	ppb	96
81) n-Propylbenzene	9.96	91	5431	0.9007	ppb	95
82) 4-Ethyltoluene	10.09	105	7158	0.8846	ppb	99
83) 2-Chlorotoluene	10.01	91	3494	0.9333	ppb	98
84) 1,3,5-Trimethylbenzene	10.16	105	3433	1.2038	ppb	90
85) 4-Chlorotoluene	10.14	91	3509	1.1283	ppb	92
86) Tert-Butylbenzene	10.49	119	5167	0.9304	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	5647	1.9512	ppb	92
88) Sec-Butylbenzene	10.73	105	7130	0.8608	ppb #	85
89) p-Isopropyltoluene	10.91	119	4327	0.9246	ppb	88
90) Benzyl Chloride	11.07	91	3879	0.9831	ppb #	87
91) 1,3-DCB	10.81	146	3132	0.9957	ppb #	92
92) 1,4-DCB	10.91	146	5901	0.9955	ppb #	88
93) n-Butylbenzene	11.34	91	6156	0.9602	ppb	90
94) 1,2-DCB	11.30	146	5892	1.0983	ppb	82
95) Hexachloroethane	11.56	117	2528	1.1426	ppb	89
96) 1,2-Dibromo-3-chloropropan	12.13	75	780	1.0645	ppb #	66
97) 1,2,4-Trichlorobenzene	13.01	180	3108	1.0329	ppb	81
98) Hexachlorobutadiene	13.23	225	1550	0.8607	ppb #	64
99) Naphthalene	13.26	128	4784	3.3594	ppb	95
100) 1,2,3-Trichlorobenzene	13.53	180	1974	1.0722	ppb	95

Quantitation Report

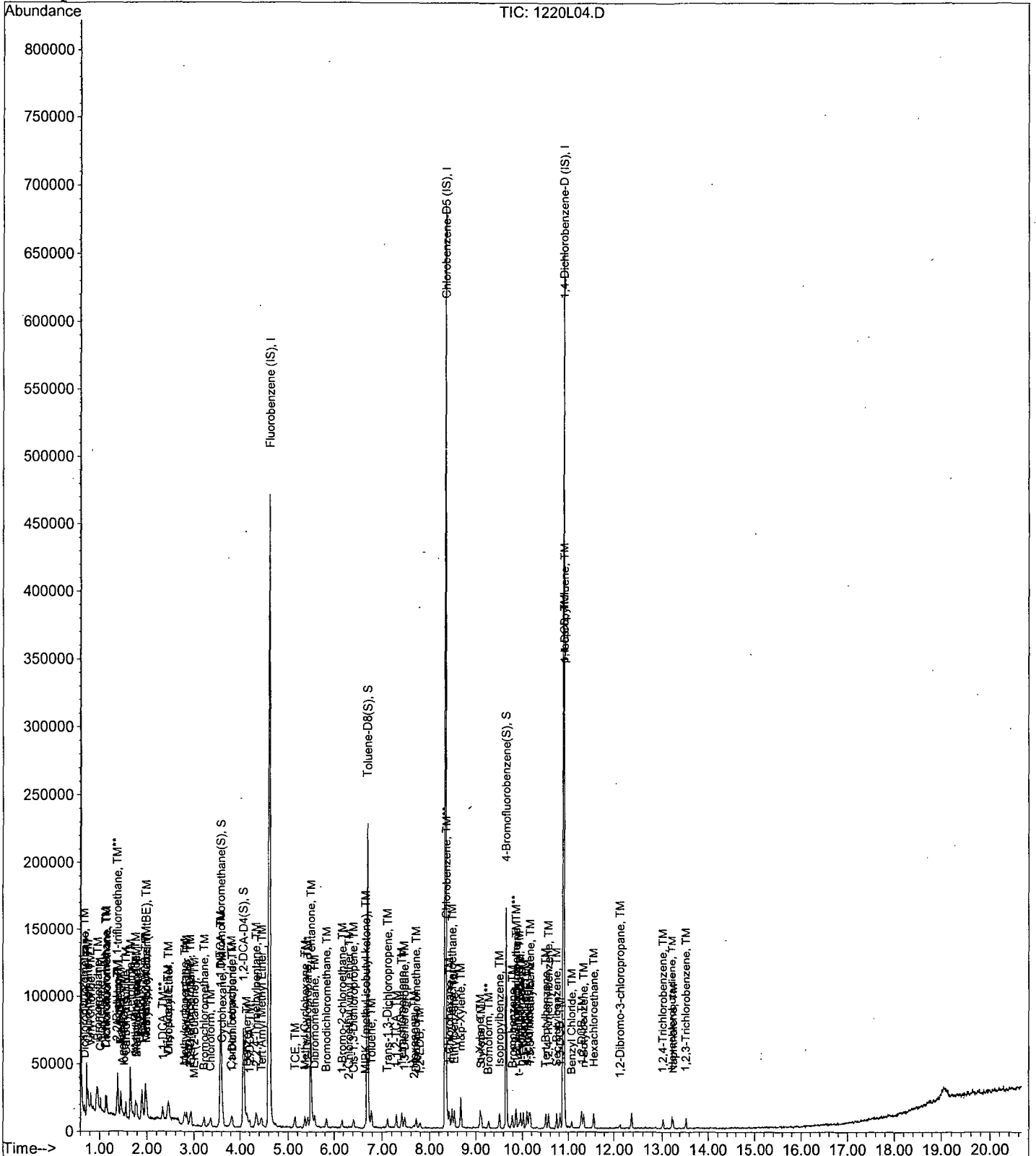
Data File : M:\LOKI\DATA\181220\1220L04.D  
Acq On : 20 Dec 18 12:33  
Sample : 1.0ug/L VOC STD 12/20/18  
Misc : 2uL-10ppb

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L05.D  
 Acq On : 20 Dec 18 13:02  
 Sample : 2.0ug/L VOC STD 12/20/18  
 Misc : 2uL-10ppb

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	228032	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	232896	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	116360	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	59951	9.3787	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.516%	
40) 1,2-DCA-D4(S)	4.07	65	72444	9.7887	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.156%	
61) Toluene-D8(S)	6.70	98	164516	8.9809	ppb	0.00
Spiked Amount	25.000		Recovery	=	35.924%	
69) 4-Bromofluorobenzene(S)	9.65	95	52891	8.4915	ppb	0.00
Spiked Amount	25.000		Recovery	=	33.964%	
Target Compounds						
2) Dichlorodifluoromethane	0.68	85	6633	2.2839	ppb	Qvalue 98
3) Freon 114	0.74	85	7058	2.1449	ppb	89
4) Chloromethane	0.76	50	11014	2.1870	ppb	96
5) Vinyl chloride	0.81	62	9000	2.1492	ppb	84
6) Bromomethane	0.96	94	10658	2.5875	ppb	82
7) Chloroethane	1.01	64	5628	2.0202	ppb	96
8) Dichlorofluoromethane	1.12	67	14687	2.1323	ppb	100
9) Trichlorofluoromethane	1.15	101	12077	2.2600	ppb	96
10) Acrolein	1.38	56	20824	74.7051	ppb	# 98
11) Acetone	1.48	43	4633	1.1764	ppb	98
12) Freon-113	1.45	101	6093	1.3292	ppb	93
13) 1,1-DCE	1.44	63	2636	1.8460	ppb	95
14) t-Butanol	1.90	59	30924	74.3452	ppb	99
15) Acetonitrile	1.66	41	49892	75.0949	ppb	97
16) Methyl Acetate	1.78	43	8845	1.0392	ppb	# 96
17) Iodomethane	1.52	142	1749	3.6437	ppb	88
18) Acrylonitrile	1.95	52	4192	1.2587	ppb	99
19) Methylene chloride	1.76	84	8813	2.0619	ppb	94
20) Carbon disulfide	1.56	76	21768	2.0584	ppb	96
21) Methyl t-butyl ether (MtBE)	1.99	73	20155	2.1124	ppb	96
22) Trans-1,2-DCE	1.97	96	4447	1.8370	ppb	95
23) Diisopropyl Ether	2.45	45	21590	2.0752	ppb	95
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	7020	2.0178	ppb	95
25) 1,1-DCA	2.32	63	14000	2.1189	ppb	94
26) Vinyl Acetate	2.42	43	7863	1.9700	ppb	96
27) Ethyl tert Butyl Ether	2.83	59	14511	1.9343	ppb	93
28) MEK (2-Butanone)	3.00	43	4115	1.6801	ppb	# 78
29) Cis-1,2-DCE	2.93	96	6023	1.8454	ppb	97
30) 2,2-Dichloropropane	2.91	77	9152	2.0084	ppb	97
31) 2-Methylpentane	1.78	71	3660	1.9593	ppb	# 94
32) 3-Methylpentane	1.97	57	13054	2.0768	ppb	# 89
33) Chloroform	3.36	83	12182	2.0887	ppb	99
34) Bromochloromethane	3.21	128	1858	1.8304	ppb	83
36) 1,1,1-TCA	3.56	97	3727	2.1208	ppb	98
37) Cyclohexane	3.62	41	4670	2.1452	ppb	79
38) 1,1-Dichloropropene	3.82	75	6070	2.0074	ppb	# 82
39) 2,2,4-Trimethylpentane	4.34	57	11263	1.8643	ppb	# 65
41) Carbon Tetrachloride	3.81	117	8376	1.9907	ppb	93
42) Tert Amyl Methyl Ether	4.44	73	10937	1.7225	ppb	# 84



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L05.D  
 Acq On : 20 Dec 18 13:02  
 Sample : 2.0ug/L VOC STD 12/20/18  
 Misc : 2uL-10ppb

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	10104	2.0455	ppb	96
44) 1,2-DCA	4.19	62	8807	2.0566	ppb	95
45) Benzene	4.13	78	20232	1.8941	ppb	95
46) TCE	5.13	130	2782	2.0126	ppb #	88
47) 2-Pentanone	5.48	43	159200	71.3846	ppb	98
48) 1,2-Dichloropropane	5.42	63	6396	2.0376	ppb #	91
49) Bromodichloromethane	5.82	83	4618	2.0586	ppb	95
50) Methyl Cyclohexane	5.34	83	5268	1.8669	ppb	97
51) Dibromomethane	5.56	93	4912	2.0217	ppb	93
52) 2-Chloroethyl vinyl ether	6.30	43	1348	3.4782	ppb #	88
53) MIBK (methyl isobutyl ket	6.66	43	6274	1.8945	ppb #	96
54) 1-Bromo-2-chloroethane	6.16	63	4392	1.8180	ppb #	82
55) Cis-1,3-Dichloropropene	6.40	75	7386	1.7904	ppb	94
56) Toluene	6.78	91	9590	1.7926	ppb	93
57) Trans-1,3-Dichloropropene	7.10	75	7229	1.8221	ppb	86
58) 1,1,2-TCA	7.29	83	5721	2.0633	ppb	81
59) 2-Hexanone	7.65	43	3062	1.7971	ppb #	72
62) 1,2-EDB	7.79	107	3273	1.9266	ppb	90
63) Tetrachloroethene	7.40	166	4013	2.0998	ppb	95
64) 1-Chlorohexane	8.42	91	4713	1.9437	ppb	97
65) 1,1,1,2-Tetrachloroethane	8.48	131	7023	2.0851	ppb	97
66) m&p-Xylene	8.67	91	13699	5.2740	ppb	89
67) o-Xylene	9.09	106	3612	1.6286	ppb	99
68) Styrene	9.11	104	5139	2.9176	ppb	93
70) 1,3-Dichloropropane	7.46	76	9310	1.9917	ppb	97
71) Dibromochloromethane	7.70	129	7498	1.4457	ppb	92
72) Chlorobenzene	8.37	112	15112	1.9320	ppb	89
73) Ethylbenzene	8.53	91	9265	2.4509	ppb	99
74) Bromoform	9.27	173	5243	1.8213	ppb	97
76) Isopropylbenzene	9.51	105	13996	1.8496	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.85	83	9233	2.1776	ppb #	91
78) 1,2,3-Trichloropropane	9.87	110	1692	2.0782	ppb	94
79) t-1,4-Dichloro-2-Butene	9.92	53	1555	2.0816	ppb	77
80) Bromobenzene	9.78	156	2835	1.6926	ppb	75
81) n-Propylbenzene	9.96	91	10921	1.7700	ppb	98
82) 4-Ethyltoluene	10.09	105	14032	1.6946	ppb	95
83) 2-Chlorotoluene	10.01	91	6414	1.6744	ppb	94
84) 1,3,5-Trimethylbenzene	10.17	105	6657	1.8164	ppb	100
85) 4-Chlorotoluene	10.14	91	7038	1.8969	ppb	98
86) Tert-Butylbenzene	10.50	119	10477	1.8437	ppb	94
87) 1,2,4-Trimethylbenzene	10.55	105	10104	2.4663	ppb	79
88) Sec-Butylbenzene	10.73	105	14347	1.6927	ppb	92
89) p-Isopropyltoluene	10.91	119	8552	1.7858	ppb	94
90) Benzyl Chloride	11.07	91	8407	2.0822	ppb #	88
91) 1,3-DCB	10.81	146	5888	1.8293	ppb	97
92) 1,4-DCB	10.91	146	12661	2.0873	ppb	94
93) n-Butylbenzene	11.34	91	10848	1.6535	ppb	95
94) 1,2-DCB	11.30	146	10673	1.9443	ppb	94
95) Hexachloroethane	11.56	117	5196	2.2950	ppb	82
96) 1,2-Dibromo-3-chloropropan	12.13	75	1853	2.6885	ppb #	76
97) 1,2,4-Trichlorobenzene	13.01	180	6414	2.0831	ppb	95
98) Hexachlorobutadiene	13.23	225	3703	2.0095	ppb	85
99) Naphthalene	13.26	128	10226	3.9518	ppb	96
100) 1,2,3-Trichlorobenzene	13.53	180	4123	2.1886	ppb	83

Quantitation Report

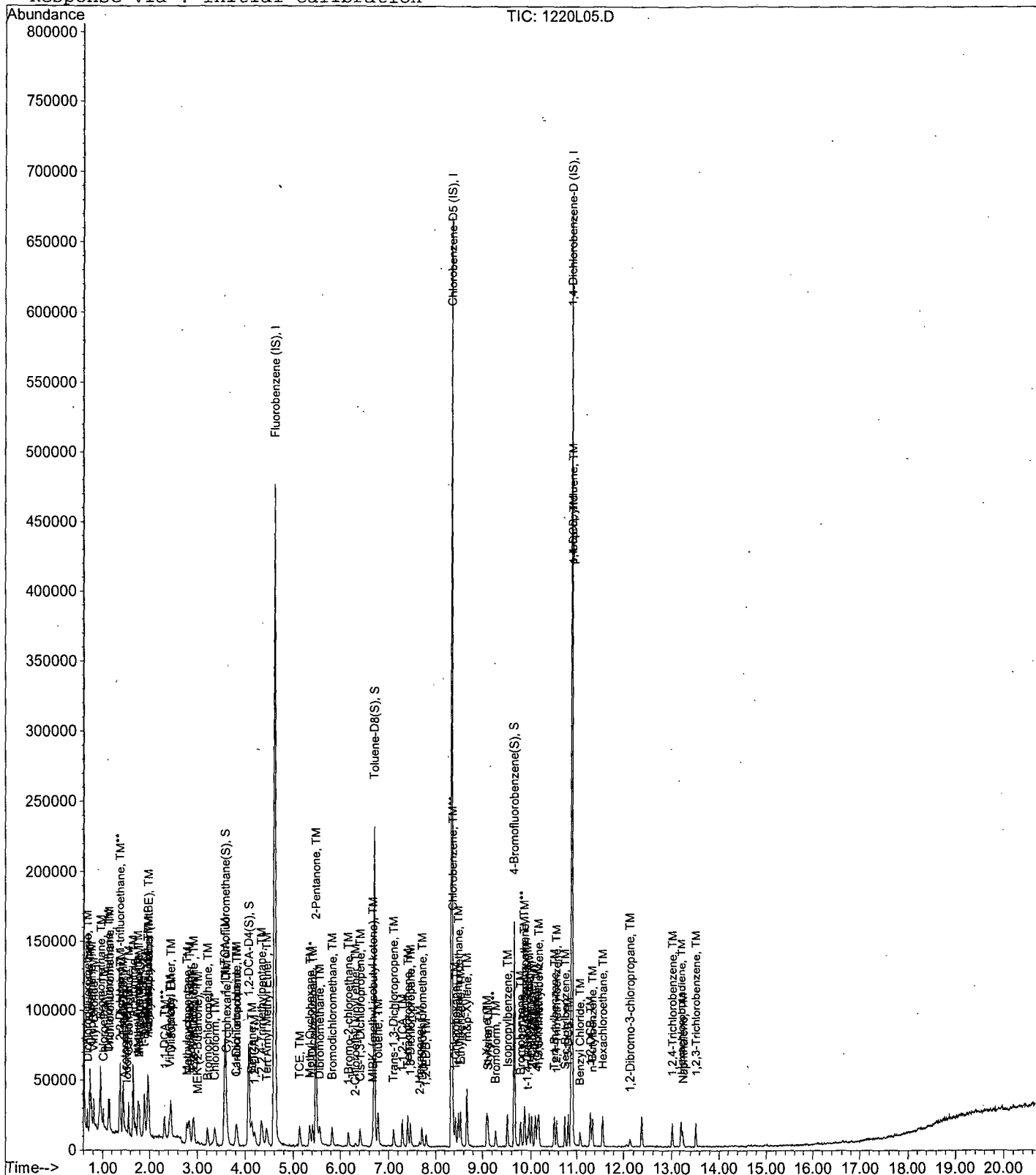
Data File : M:\LOKI\DATA\181220\1220L05.D  
Acq On : 20 Dec 18 13:02  
Sample : 2.0ug/L VOC STD 12/20/18  
Misc : 2uL-10ppb

Vial: 5  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L06.D  
 Acq On : 20 Dec 18 13:30  
 Sample : 5.0ug/L VOC STD 12/20/18  
 Misc : 5uL-25ppb

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	244864	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	250688	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	137600	25.0000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	173697	25.3053	ppb	0.00
Spiked Amount	25.000		Recovery	= 101.220%		
40) 1,2-DCA-D4(S)	4.07	65	200176	25.1888	ppb	0.00
Spiked Amount	25.000		Recovery	= 100.756%		
61) Toluene-D8(S)	6.70	98	508418	25.7845	ppb	0.00
Spiked Amount	25.000		Recovery	= 103.140%		
69) 4-Bromofluorobenzene(S)	9.65	95	168844	25.1834	ppb	0.00
Spiked Amount	25.000		Recovery	= 100.732%		

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	14305	4.5870	ppb	97
3) Freon 114	0.74	85	17581	4.9755	ppb	90
4) Chloromethane	0.76	50	25250	4.6692	ppb	98
5) Vinyl chloride	0.81	62	20535	4.5667	ppb	97
6) Bromomethane	0.96	94	19704	4.4547	ppb	93
7) Chloroethane	1.02	64	14349	4.7967	ppb	96
8) Dichlorofluoromethane	1.13	67	37470	5.0661	ppb	97
9) Trichlorofluoromethane	1.15	101	28594	4.9830	ppb	98
10) Acrolein	1.38	56	28656	95.7354	ppb	# 91
11) Acetone	1.48	43	8693	4.0316	ppb	# 87
12) Freon-113	1.45	101	16021	4.6510	ppb	95
13) 1,1-DCE	1.44	63	6221	4.0572	ppb	90
14) t-Butanol	1.90	59	40343	90.3226	ppb	100
15) Acetonitrile	1.66	41	67673	94.8562	ppb	94
16) Methyl Acetate	1.79	43	19792	3.5037	ppb	# 99
17) Iodomethane	1.53	142	4142	4.6661	ppb	92
18) Acrylonitrile	1.95	52	8989	4.5827	ppb	85
19) Methylene chloride	1.76	84	21802	4.7501	ppb	100
20) Carbon disulfide	1.56	76	57498	5.0633	ppb	96
21) Methyl t-butyl ether (MtBE)	1.99	73	50201	4.8999	ppb	97
22) Trans-1,2-DCE	1.97	96	14026	5.3956	ppb	84
23) Diisopropyl Ether	2.45	45	57165	5.1169	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	18098	4.8443	ppb	99
25) 1,1-DCA	2.32	63	36105	5.0889	ppb	99
26) Vinyl Acetate	2.42	43	21031	4.9069	ppb	99
27) Ethyl tert Butyl Ether	2.83	59	37069	4.6015	ppb	100
28) MEK (2-Butanone)	3.01	43	10187	5.2774	ppb	91
29) Cis-1,2-DCE	2.93	96	16573	4.7287	ppb	90
30) 2,2-Dichloropropane	2.91	77	24576	5.0225	ppb	97
31) 2-Methylpentane	1.79	71	8372	4.1737	ppb	94
32) 3-Methylpentane	1.98	57	30374	4.5000	ppb	# 97
33) Chloroform	3.36	83	31780	5.0744	ppb	93
34) Bromochloromethane	3.22	128	4065	4.4466	ppb	98
36) 1,1,1-TCA	3.56	97	9014	4.7766	ppb	94
37) Cyclohexane	3.62	41	11033	4.7783	ppb	81
38) 1,1-Dichloropropene	3.82	75	15080	4.6443	ppb	93
39) 2,2,4-Trimethylpentane	4.34	57	31837	4.9076	ppb	92
41) Carbon Tetrachloride	3.81	117	22532	4.9870	ppb	96
42) Tert Amyl Methyl Ether	4.43	73	32109	4.7093	ppb	94

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L06.D  
 Acq On : 20 Dec 18 13:30  
 Sample : 5.0ug/L VOC STD 12/20/18  
 Misc : 5uL-25ppb

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	22736	4.2864	ppb	98
44) 1,2-DCA	4.20	62	23010	5.0039	ppb #	89
45) Benzene	4.13	78	56404	4.9175	ppb	92
46) TCE	5.13	130	8105	5.4605	ppb	98
47) 2-Pentanone	5.48	43	235281	98.2470	ppb	99
48) 1,2-Dichloropropane	5.41	63	16816	4.9890	ppb #	92
49) Bromodichloromethane	5.82	83	12541	5.2062	ppb #	98
50) Methyl Cyclohexane	5.36	83	14659	4.8378	ppb	86
51) Dibromomethane	5.56	93	13226	5.0693	ppb	95
52) 2-Chloroethyl vinyl ether	6.30	43	2237	5.1281	ppb #	63
53) MIBK (methyl isobutyl ket	6.65	43	14713	4.5183	ppb #	93
54) 1-Bromo-2-chloroethane	6.16	63	12607	4.8598	ppb	99
55) Cis-1,3-Dichloropropene	6.41	75	21192	4.7840	ppb	95
56) Toluene	6.77	91	30432	4.5950	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	20161	4.7323	ppb	95
58) 1,1,2-TCA	7.28	83	15398	5.1716	ppb	92
59) 2-Hexanone	7.64	43	8815	4.8180	ppb #	89
62) 1,2-EDB	7.79	107	9545	5.2198	ppb	93
63) Tetrachloroethene	7.40	166	9965	4.8441	ppb	92
64) 1-Chlorohexane	8.42	91	12094	4.6337	ppb	91
65) 1,1,1,2-Tetrachloroethane	8.48	131	19288	5.3202	ppb	90
66) m&p-Xylene	8.67	91	42610	9.6517	ppb	98
67) o-Xylene	9.09	106	10703	4.4833	ppb	92
68) Styrene	9.11	104	17680	5.0982	ppb	93
70) 1,3-Dichloropropane	7.46	76	24696	4.9084	ppb	97
71) Dibromochloromethane	7.71	129	20737	5.0694	ppb	99
72) Chlorobenzene	8.37	112	42510	5.0490	ppb	97
73) Ethylbenzene	8.53	91	29032	4.7765	ppb	96
74) Bromoform	9.27	173	15453	4.9870	ppb	96
76) Isopropylbenzene	9.51	105	42745	4.7768	ppb	93
77) 1,1,2,2-Tetrachloroethane	9.85	83	27932	5.5708	ppb	93
78) 1,2,3-Trichloropropane	9.87	110	4370	4.5390	ppb	92
79) t-1,4-Dichloro-2-Butene	9.92	53	4426	5.0104	ppb #	73
80) Bromobenzene	9.78	156	11117	5.6127	ppb	93
81) n-Propylbenzene	9.96	91	34183	4.6850	ppb	98
82) 4-Ethyltoluene	10.09	105	45378	4.6343	ppb	98
83) 2-Chlorotoluene	10.01	91	22244	4.9104	ppb	97
84) 1,3,5-Trimethylbenzene	10.16	105	24325	4.5271	ppb	92
85) 4-Chlorotoluene	10.14	91	21936	4.4636	ppb	99
86) Tert-Butylbenzene	10.50	119	31818	4.7348	ppb	93
87) 1,2,4-Trimethylbenzene	10.55	105	36022	4.8907	ppb	94
88) Sec-Butylbenzene	10.73	105	46865	4.6758	ppb	97
89) p-Isopropyltoluene	10.91	119	25440	4.4922	ppb	97
90) Benzyl Chloride	11.07	91	22420	4.6958	ppb	96
91) 1,3-DCB	10.81	146	19352	5.0842	ppb	94
92) 1,4-DCB	10.91	146	36454	5.0823	ppb	96
93) n-Butylbenzene	11.34	91	35397	4.5624	ppb	98
94) 1,2-DCB	11.29	146	32126	4.9489	ppb	98
95) Hexachloroethane	11.56	117	12471	4.6580	ppb	96
96) 1,2-Dibromo-3-chloropropan	12.13	75	4132	5.2153	ppb #	83
97) 1,2,4-Trichlorobenzene	13.01	180	17025	4.6757	ppb	93
98) Hexachlorobutadiene	13.23	225	11761	5.3971	ppb	97
99) Naphthalene	13.26	128	32685	5.8870	ppb	91
100) 1,2,3-Trichlorobenzene	13.52	180	10111	4.5387	ppb	94

Quantitation Report

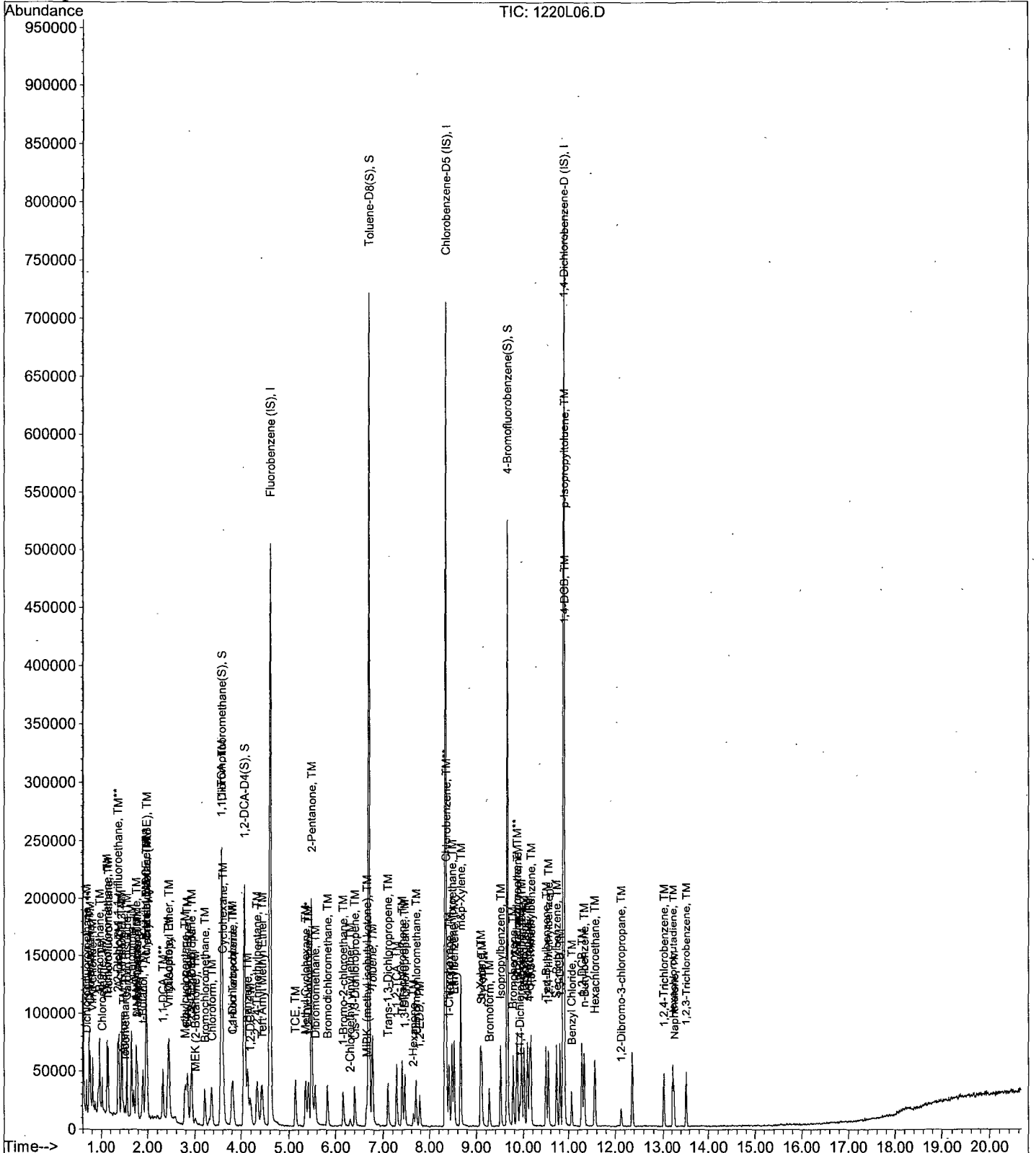
Data File : M:\LOKI\DATA\181220\1220L06.D  
Acq On : 20 Dec 18 13:30  
Sample : 5.0ug/L VOC STD 12/20/18  
Misc : 5uL-25ppb

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L07.D  
 Acq On : 20 Dec 18 13:59  
 Sample : 10ug/L VOC STD 12/20/18  
 Misc : 5uL-25ppb

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.61	96	249600	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	263232	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	159936	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	177679	25.3942	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.576%	
40) 1,2-DCA-D4(S)	4.07	65	201987	24.9344	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.736%	
61) Toluene-D8(S)	6.70	98	547322	26.4348	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.740%	
69) 4-Bromofluorobenzene(S)	9.65	95	190037	26.9937	ppb	0.00
Spiked Amount	25.000		Recovery	=	107.976%	
Target Compounds						
2) Dichlorodifluoromethane	0.68	85	28835	9.0707	ppb	100
3) Freon 114	0.73	85	33648	9.3418	ppb	100
4) Chloromethane	0.76	50	49963	9.0637	ppb	100
5) Vinyl chloride	0.81	62	41872	9.1351	ppb	100
6) Bromomethane	0.96	94	43070	9.5526	ppb	100
7) Chloroethane	1.01	64	26324	8.6328	ppb	100
8) Dichlorofluoromethane	1.12	67	74759	9.9159	ppb	100
9) Trichlorofluoromethane	1.15	101	55656	9.5151	ppb	100
10) Acrolein	1.38	56	39488	129.4203	ppb	100
11) Acetone	1.49	43	18500	11.2931	ppb	100
12) Freon-113	1.45	101	34579	10.9248	ppb	100
13) 1,1-DCE	1.44	63	13254	8.4800	ppb	100
14) t-Butanol	1.90	59	56335	123.7333	ppb	100
15) Acetonitrile	1.66	41	88844	122.1684	ppb	100
16) Methyl Acetate	1.78	43	49960	10.4990	ppb	100
17) Iodomethane	1.53	142	11418	7.8539	ppb	100
18) Acrylonitrile	1.95	52	18808	11.5915	ppb	100
19) Methylene chloride	1.76	84	43821	9.3663	ppb	100
20) Carbon disulfide	1.56	76	114029	9.8509	ppb	100
21) Methyl t-butyl ether (MtBE)	1.99	73	101241	9.6941	ppb	100
22) Trans-1,2-DCE	1.97	96	24840	9.3742	ppb	100
23) Diisopropyl Ether	2.45	45	114144	10.0232	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	39883	10.4730	ppb	100
25) 1,1-DCA	2.32	63	71024	9.8208	ppb	100
26) Vinyl Acetate	2.42	43	43255	9.9007	ppb	100
27) Ethyl tert Butyl Ether	2.83	59	79257	9.6517	ppb	100
28) MEK (2-Butanone)	3.01	43	18123	10.0120	ppb	100
29) Cis-1,2-DCE	2.93	96	34829	9.7490	ppb	100
30) 2,2-Dichloropropane	2.91	77	49002	9.8243	ppb	100
31) 2-Methylpentane	1.78	71	19620	9.5955	ppb	100
32) 3-Methylpentane	1.98	57	68816	10.0019	ppb	100
33) Chloroform	3.36	83	64406	10.0887	ppb	100
34) Bromochloromethane	3.22	128	9280	10.8155	ppb	100
36) 1,1,1-TCA	3.56	97	19072	9.9148	ppb	100
37) Cyclohexane	3.62	41	22035	9.4089	ppb	100
38) 1,1-Dichloropropene	3.82	75	33112	10.0044	ppb	100
39) 2,2,4-Trimethylpentane	4.34	57	64408	9.7400	ppb	100
41) Carbon Tetrachloride	3.80	117	45133	9.7998	ppb	100
42) Tert Amyl Methyl Ether	4.44	73	67159	9.6631	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L07.D  
 Acq On : 20 Dec 18 13:59  
 Sample : 10ug/L VOC STD 12/20/18  
 Misc : 5uL-25ppb

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	51769	9.5747	ppb	100
44) 1,2-DCA	4.19	62	48725	10.3951	ppb	100
45) Benzene	4.13	78	119641	10.2327	ppb	100
46) TCE	5.13	130	14861	9.8221	ppb	100
47) 2-Pentanone	5.48	43	313223	128.3118	ppb	100
48) 1,2-Dichloropropane	5.41	63	34386	10.0082	ppb	100
49) Bromodichloromethane	5.82	83	25096	10.2205	ppb	100
50) Methyl Cyclohexane	5.35	83	30865	9.9929	ppb	100
51) Dibromomethane	5.56	93	26128	9.8244	ppb	100
52) 2-Chloroethyl vinyl ether	6.30	43	5246	11.2084	ppb	100
53) MIBK (methyl isobutyl ket	6.65	43	32092	10.0349	ppb	100
54) 1-Bromo-2-chloroethane	6.16	63	27464	10.3861	ppb	100
55) Cis-1,3-Dichloropropene	6.40	75	43231	9.5740	ppb	100
56) Toluene	6.77	91	69976	9.9141	ppb	100
57) Trans-1,3-Dichloropropene	7.10	75	44851	10.3278	ppb	100
58) 1,1,2-TCA	7.28	83	30886	10.1766	ppb	100
59) 2-Hexanone	7.64	43	19555	10.4853	ppb	100
62) 1,2-EDB	7.78	107	19768	10.2953	ppb	100
63) Tetrachloroethene	7.40	166	23200	10.7404	ppb	100
64) 1-Chlorohexane	8.42	91	28483	10.3930	ppb	100
65) 1,1,1,2-Tetrachloroethane	8.48	131	41388	10.8720	ppb	100
66) m&p-Xylene	8.67	91	97744	17.5818	ppb	100
67) o-Xylene	9.09	106	24552	9.7943	ppb	100
68) Styrene	9.11	104	39792	8.7268	ppb	100
70) 1,3-Dichloropropane	7.46	76	55192	10.4467	ppb	100
71) Dibromochloromethane	7.70	129	43267	10.9252	ppb	100
72) Chlorobenzene	8.36	112	88111	9.9665	ppb	100
73) Ethylbenzene	8.53	91	71033	9.4884	ppb	100
74) Bromoform	9.27	173	33381	10.2593	ppb	100
76) Isopropylbenzene	9.51	105	98629	9.4826	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.85	83	56510	9.6964	ppb	100
78) 1,2,3-Trichloropropane	9.86	110	9918	8.8628	ppb	100
79) t-1,4-Dichloro-2-Butene	9.92	53	10981	10.6949	ppb	100
80) Bromobenzene	9.78	156	23952	10.4039	ppb	100
81) n-Propylbenzene	9.96	91	79624	9.3889	ppb	100
82) 4-Ethyltoluene	10.08	105	109461	9.6177	ppb	100
83) 2-Chlorotoluene	10.01	91	54215	10.2967	ppb	100
84) 1,3,5-Trimethylbenzene	10.16	105	58848	8.8610	ppb	100
85) 4-Chlorotoluene	10.13	91	53335	8.9793	ppb	100
86) Tert-Butylbenzene	10.50	119	74581	9.5484	ppb	100
87) 1,2,4-Trimethylbenzene	10.55	105	87610	8.8539	ppb	100
88) Sec-Butylbenzene	10.73	105	116087	9.9647	ppb	100
89) p-Isopropyltoluene	10.90	119	61888	9.4020	ppb	100
90) Benzyl Chloride	11.07	91	52554	9.4700	ppb	100
91) 1,3-DCB	10.81	146	43464	9.8243	ppb	100
92) 1,4-DCB	10.91	146	82659	9.9146	ppb	100
93) n-Butylbenzene	11.34	91	83155	9.2213	ppb	100
94) 1,2-DCB	11.29	146	74800	9.9135	ppb	100
95) Hexachloroethane	11.56	117	28133	9.0404	ppb	100
96) 1,2-Dibromo-3-chloropropan	12.13	75	9788	10.7993	ppb	100
97) 1,2,4-Trichlorobenzene	13.01	180	38248	9.0374	ppb	100
98) Hexachlorobutadiene	13.23	225	24701	9.7522	ppb	100
99) Naphthalene	13.26	128	73389	8.7490	ppb	100
100) 1,2,3-Trichlorobenzene	13.52	180	22192	8.5705	ppb	100

Quantitation Report

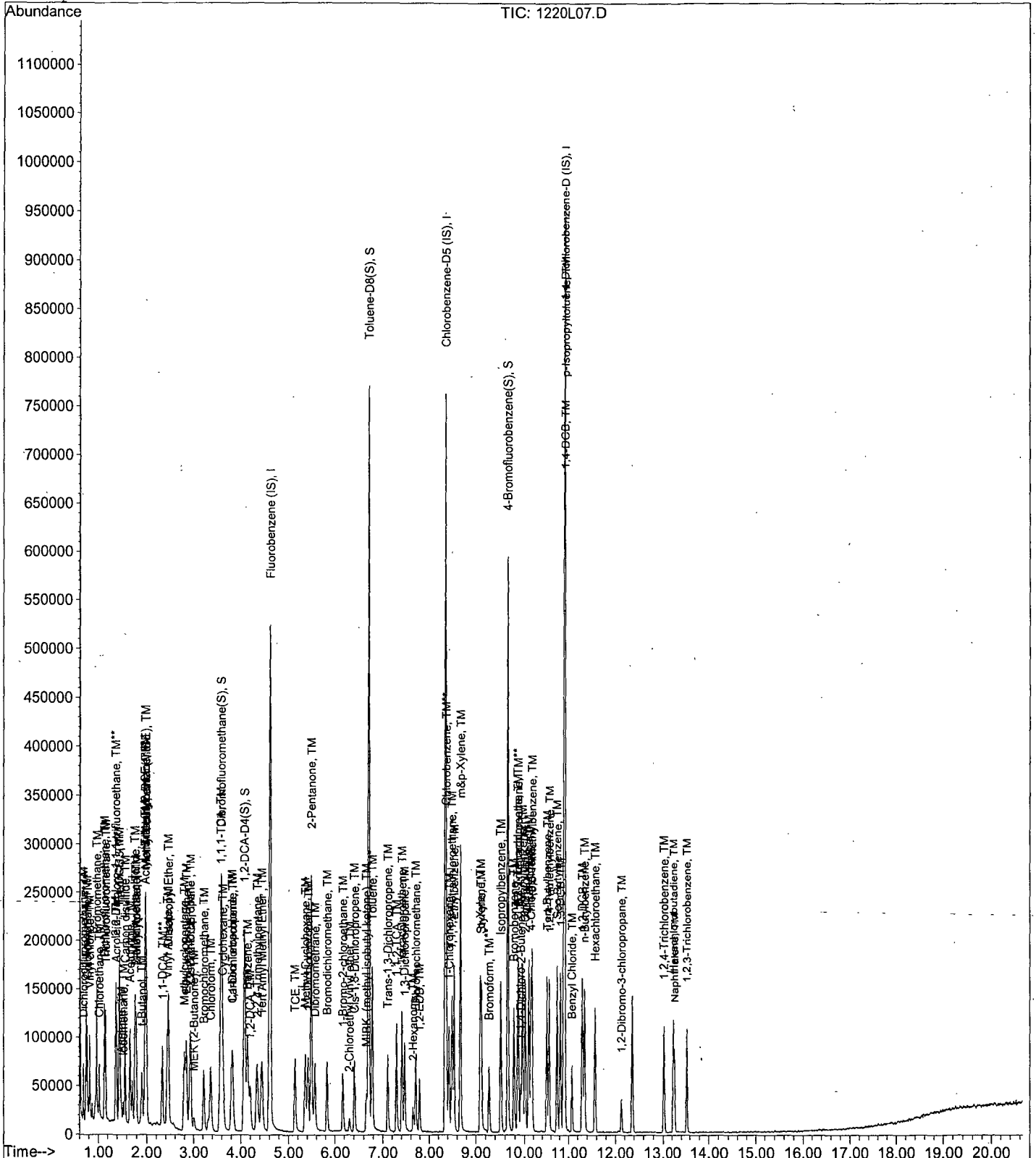
Data File : M:\LOKI\DATA\181220\1220L07.D  
Acq On : 20 Dec 18 13:59  
Sample : 10ug/L VOC STD 12/20/18  
Misc : 5uL-25ppb

Vial: 7  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration





Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L08.D  
 Acq On : 20 Dec 18 14:27  
 Sample : 20ug/L VOC STD 12/20/18  
 Misc : 10uL-50ppb

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	260032	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	285760	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	170240	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
35) Dibromofluoromethane(S)	3.58	111	354832	48.6788	ppb	0.00
Spiked Amount	25.000		Recovery	=	194.716%	
40) 1,2-DCA-D4(S)	4.07	65	408664	48.4238	ppb	0.00
Spiked Amount	25.000		Recovery	=	193.696%	
61) Toluene-D8(S)	6.70	98	1207565	53.7255	ppb	0.00
Spiked Amount	25.000		Recovery	=	214.904%	
69) 4-Bromofluorobenzene(S)	9.65	95	433096	56.6690	ppb	0.00
Spiked Amount	25.000		Recovery	=	226.676%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	0.68	85	61822	18.6673	ppb	99
3) Freon 114	0.73	85	68112	18.1515	ppb	92
4) Chloromethane	0.76	50	98874	17.2170	ppb	100
5) Vinyl chloride	0.81	62	84924	17.7843	ppb	96
6) Bromomethane	0.96	94	87112	18.5457	ppb	94
7) Chloroethane	1.01	64	57029	17.9520	ppb	98
8) Dichlorofluoromethane	1.12	67	147628	18.7955	ppb	98
9) Trichlorofluoromethane	1.15	101	118602	19.4630	ppb	99
10) Acrolein	1.38	56	49744	156.4933	ppb	# 94
11) Acetone	1.48	43	34100	22.0149	ppb	93
12) Freon-113	1.45	101	66815	21.0863	ppb	99
13) 1,1-DCE	1.44	63	26984	16.5718	ppb	96
14) t-Butanol	1.90	59	65952	139.0446	ppb	98
15) Acetonitrile	1.66	41	107001	141.2330	ppb	92
16) Methyl Acetate	1.78	43	102406	21.8516	ppb	# 99
17) Iodomethane	1.52	142	32448	16.5936	ppb	93
18) Acrylonitrile	1.95	52	35294	22.5424	ppb	94
19) Methylene chloride	1.76	84	86691	17.7860	ppb	99
20) Carbon disulfide	1.56	76	225138	18.6692	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	208162	19.1325	ppb	97
22) Trans-1,2-DCE	1.97	96	51824	18.7729	ppb	98
23) Diisopropyl Ether	2.45	45	224494	18.9224	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	75735	19.0896	ppb	99
25) 1,1-DCA	2.32	63	145371	19.2946	ppb	99
26) Vinyl Acetate	2.42	43	88004	19.3352	ppb	99
27) Ethyl tert Butyl Ether	2.83	59	168855	19.7378	ppb	100
28) MEK (2-Butanone)	3.00	43	38079	21.2863	ppb	100
29) Cis-1,2-DCE	2.93	96	70468	18.9334	ppb	96
30) 2,2-Dichloropropane	2.91	77	96385	18.5488	ppb	98
31) 2-Methylpentane	1.79	71	42851	20.1163	ppb	96
32) 3-Methylpentane	1.97	57	141790	19.7814	ppb	97
33) Chloroform	3.36	83	132089	19.8606	ppb	96
34) Bromochloromethane	3.21	128	18736	21.6086	ppb	99
36) 1,1,1-TCA	3.56	97	35736	17.8324	ppb	99
37) Cyclohexane	3.62	41	50159	20.6164	ppb	84
38) 1,1-Dichloropropene	3.82	75	70237	20.3698	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	136254	19.7781	ppb	86
41) Carbon Tetrachloride	3.80	117	93355	19.4571	ppb	90
42) Tert Amyl Methyl Ether	4.44	73	152203	21.0211	ppb	92

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L08.D  
 Acq On : 20 Dec 18 14:27  
 Sample : 20ug/L VOC STD 12/20/18  
 Misc : 10uL-50ppb

Vial: 8'  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	108232	19.2146	ppb	97
44) 1,2-DCA	4.19	62	99303	20.3356	ppb	91
45) Benzene	4.13	78	250288	20.5480	ppb	97
46) TCE	5.13	130	29952	19.0020	ppb	95
47) 2-Pentanone	5.48	43	411347	161.7481	ppb	97
48) 1,2-Dichloropropane	5.41	63	70742	19.7637	ppb	99
49) Bromodichloromethane	5.82	83	51448	20.1119	ppb #	96
50) Methyl Cyclohexane	5.35	83	65159	20.2497	ppb	98
51) Dibromomethane	5.56	93	53599	19.3452	ppb	96
52) 2-Chloroethyl vinyl ether	6.29	43	8225	16.6394	ppb #	64
53) MIBK (methyl isobutyl ket	6.65	43	68494	20.8956	ppb	95
54) 1-Bromo-2-chloroethane	6.16	63	58816	21.3501	ppb	98
55) Cis-1,3-Dichloropropene	6.40	75	95841	20.3736	ppb	97
56) Toluene	6.77	91	152896	20.3987	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	93240	20.6090	ppb	97
58) 1,1,2-TCA	7.28	83	63067	19.9462	ppb	94
59) 2-Hexanone	7.64	43	39665	20.4149	ppb #	89
62) 1,2-EDB	7.79	107	42552	20.4142	ppb	93
63) Tetrachloroethene	7.40	166	45488	19.3984	ppb	95
64) 1-Chlorohexane	8.42	91	61151	20.5541	ppb	93
65) 1,1,1,2-Tetrachloroethane	8.48	131	83213	20.1355	ppb	99
66) m&p-Xylene	8.67	91	241267	36.2098	ppb	99
67) o-Xylene	9.09	106	53280	19.5789	ppb	92
68) Styrene	9.11	104	97376	17.2582	ppb	92
70) 1,3-Dichloropropane	7.46	76	114117	19.8972	ppb	97
71) Dibromochloromethane	7.70	129	85608	20.6226	ppb	99
72) Chlorobenzene	8.37	112	184842	19.2597	ppb	97
73) Ethylbenzene	8.53	91	160320	18.3953	ppb	98
74) Bromoform	9.27	173	68637	19.4319	ppb	99
76) Isopropylbenzene	9.51	105	221644	20.0200	ppb	93
77) 1,1,1,2-Tetrachloroethane	9.85	83	115056	18.5472	ppb	100
78) 1,2,3-Trichloropropane	9.87	110	20232	16.9852	ppb	95
79) t-1,4-Dichloro-2-Butene	9.92	53	22360	20.4593	ppb	89
80) Bromobenzene	9.78	156	52872	21.5757	ppb	94
81) n-Propylbenzene	9.96	91	192192	21.2908	ppb	100
82) 4-Ethyltoluene	10.09	105	269835	22.2738	ppb	98
83) 2-Chlorotoluene	10.01	91	121420	21.6648	ppb	100
84) 1,3,5-Trimethylbenzene	10.16	105	144276	19.7325	ppb	97
85) 4-Chlorotoluene	10.13	91	137211	21.2378	ppb	98
86) Tert-Butylbenzene	10.50	119	167104	20.0990	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	218734	19.0679	ppb	96
88) Sec-Butylbenzene	10.73	105	267153	21.5439	ppb	96
89) p-Isopropyltoluene	10.91	119	151808	21.6667	ppb	99
90) Benzyl Chloride	11.07	91	111188	18.8229	ppb	96
91) 1,3-DCB	10.81	146	98648	20.9481	ppb	97
92) 1,4-DCB	10.91	146	171911	19.3719	ppb	97
93) n-Butylbenzene	11.34	91	194010	20.2121	ppb	97
94) 1,2-DCB	11.29	146	153250	19.0813	ppb	97
95) Hexachloroethane	11.56	117	59232	17.8818	ppb	94
96) 1,2-Dibromo-3-chloropropan	12.13	75	18960	19.7876	ppb #	77
97) 1,2,4-Trichlorobenzene	13.02	180	83165	18.4613	ppb	99
98) Hexachlorobutadiene	13.23	225	51708	19.1792	ppb	95
99) Naphthalene	13.26	128	174326	16.0569	ppb	99
100) 1,2,3-Trichlorobenzene	13.52	180	53936	19.5691	ppb	98

Quantitation Report

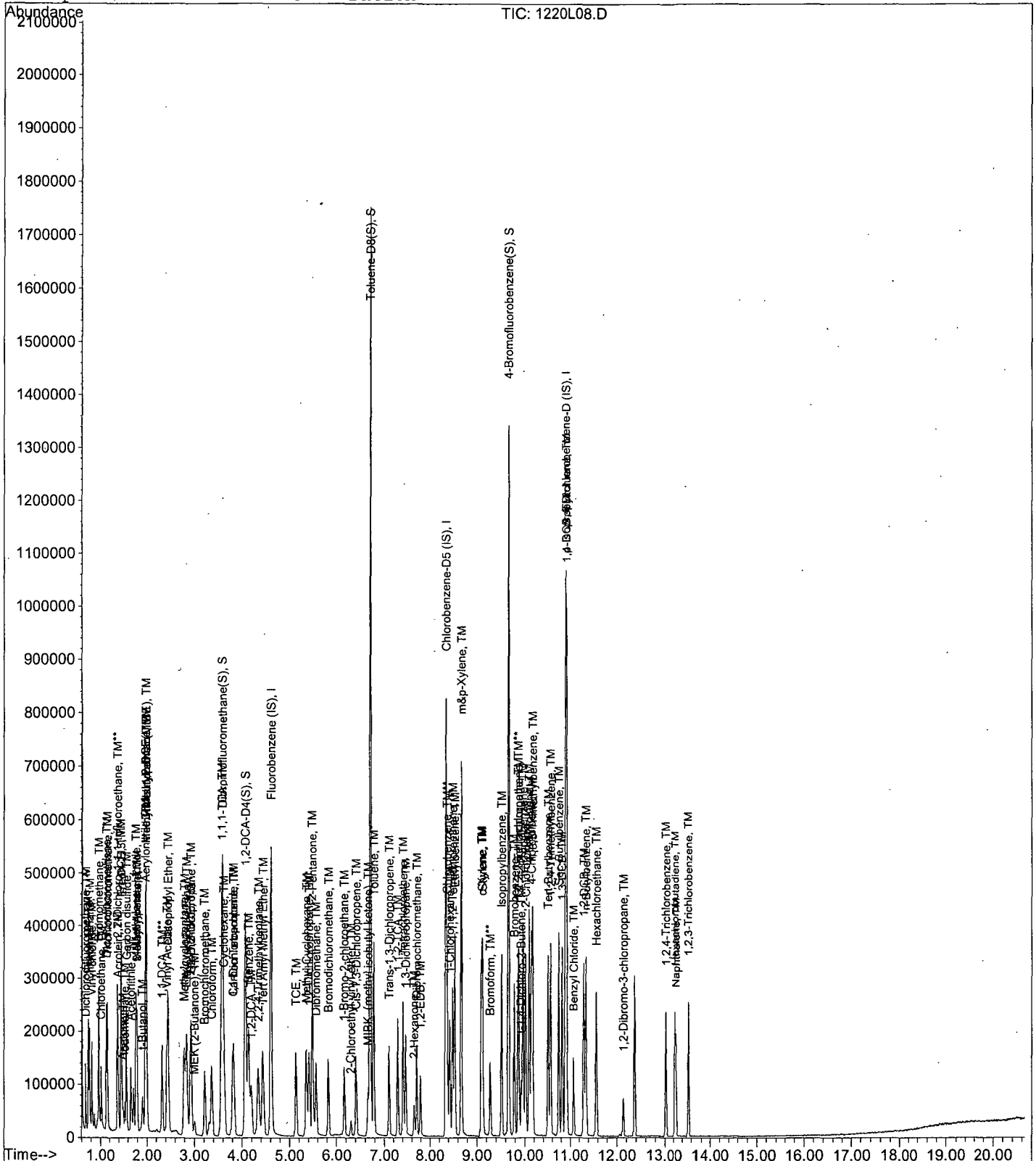
Data File : M:\LOKI\DATA\181220\1220L08.D  
Acq On : 20 Dec 18 14:27  
Sample : 20ug/L VOC STD 12/20/18  
Misc : 10uL-50ppb

Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L09.D  
 Acq On : 20 Dec 18 14:56  
 Sample : 40ug/L VOC STD 12/20/18  
 Misc : 10uL-50ppb

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	277312	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	300608	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	192704	25.0000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	358243	46.0843	ppb	0.00
Spiked Amount	25.000		Recovery	=	184.336%	
40) 1,2-DCA-D4(S)	4.07	65	412011	45.7783	ppb	0.00
Spiked Amount	25.000		Recovery	=	183.112%	
61) Toluene-D8(S)	6.70	98	1277914	54.0472	ppb	0.00
Spiked Amount	25.000		Recovery	=	216.188%	
69) 4-Bromofluorobenzene(S)	9.65	95	467267	58.1202	ppb	0.00
Spiked Amount	25.000		Recovery	=	232.480%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	129691	36.7204	ppb	99
3) Freon 114	0.73	85	140442	35.0948	ppb	95
4) Chloromethane	0.76	50	200534	32.7432	ppb	99
5) Vinyl chloride	0.81	62	173498	34.0690	ppb	97
6) Bromomethane	0.96	94	168467	33.6309	ppb	95
7) Chloroethane	1.01	64	122343	36.1122	ppb	100
8) Dichlorofluoromethane	1.12	67	295568	35.2859	ppb	98
9) Trichlorofluoromethane	1.15	101	240190	36.9599	ppb	99
10) Acrolein	1.38	56	56400	166.3766	ppb	97
11) Acetone	1.49	43	66203	42.2466	ppb	98
12) Freon-113	1.45	101	135394	40.9342	ppb	98
13) 1,1-DCE	1.44	63	52055	29.9768	ppb	93
14) t-Butanol	1.91	59	86383	170.7704	ppb	96
15) Acetonitrile	1.66	41	127545	157.8592	ppb	93
16) Methyl Acetate	1.78	43	209184	42.9848	ppb	# 99
17) Iodomethane	1.52	142	88440	38.0599	ppb	97
18) Acrylonitrile	1.95	52	64727	40.2591	ppb	94
19) Methylene chloride	1.76	84	171431	32.9801	ppb	98
20) Carbon disulfide	1.56	76	450925	35.0622	ppb	97
21) Methyl t-butyl ether (MtBE)	1.99	73	432058	37.2366	ppb	91
22) Trans-1,2-DCE	1.96	96	103672	35.2144	ppb	98
23) Diisopropyl Ether	2.45	45	463326	36.6198	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	150533	35.5787	ppb	97
25) 1,1-DCA	2.32	63	283573	35.2924	ppb	98
26) Vinyl Acetate	2.42	43	169897	35.0018	ppb	100
27) Ethyl tert Butyl Ether	2.83	59	369128	40.4595	ppb	99
28) MEK (2-Butanone)	3.00	43	75489	40.4929	ppb	98
29) Cis-1,2-DCE	2.93	96	147546	37.1726	ppb	98
30) 2,2-Dichloropropane	2.91	77	191056	34.4766	ppb	97
31) 2-Methylpentane	1.78	71	87516	38.5241	ppb	95
32) 3-Methylpentane	1.97	57	292734	38.2951	ppb	95
33) Chloroform	3.36	83	261489	36.8669	ppb	93
34) Bromochloromethane	3.21	128	35640	39.0849	ppb	93
36) 1,1,1-TCA	3.56	97	75632	35.3890	ppb	96
37) Cyclohexane	3.61	41	102330	39.4836	ppb	92
38) 1,1-Dichloropropene	3.82	75	148608	40.4131	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	297471	40.4891	ppb	82
41) Carbon Tetrachloride	3.80	117	186551	36.4582	ppb	92
42) Tert Amyl Methyl Ether	4.44	73	335723	43.4782	ppb	89

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L09.D  
 Acq On : 20 Dec 18 14:56  
 Sample : 40ug/L VOC STD 12/20/18  
 Misc : 10uL-50ppb

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	227000	37.7884	ppb	# 95
44) 1,2-DCA	4.19	62	198611	38.1378	ppb	93
45) Benzene	4.13	78	518750	39.9342	ppb	98
46) TCE	5.13	130	60448	35.9595	ppb	93
47) 2-Pentanone	5.48	43	512112	188.8225	ppb	99
48) 1,2-Dichloropropane	5.41	63	148299	38.8496	ppb	# 96
49) Bromodichloromethane	5.82	83	101856	37.3361	ppb	# 99
50) Methyl Cyclohexane	5.35	83	149184	43.4735	ppb	97
51) Dibromomethane	5.56	93	109369	37.0143	ppb	93
52) 2-Chloroethyl vinyl ether	6.30	43	19592	36.6065	ppb	# 77
53) MIBK (methyl isobutyl ket	6.65	43	142605	41.1002	ppb	95
54) 1-Bromo-2-chloroethane	6.16	63	120640	41.0633	ppb	99
55) Cis-1,3-Dichloropropene	6.40	75	208157	41.4921	ppb	98
56) Toluene	6.77	91	322752	40.0250	ppb	98
57) Trans-1,3-Dichloropropene	7.09	75	194547	40.3215	ppb	98
58) 1,1,2-TCA	7.28	83	127579	37.8352	ppb	96
59) 2-Hexanone	7.64	43	90525	43.6884	ppb	# 89
62) 1,2-EDB	7.78	107	85608	39.0416	ppb	97
63) Tetrachloroethene	7.40	166	94784	38.4242	ppb	95
64) 1-Chlorohexane	8.42	91	151818	48.5086	ppb	86
65) 1,1,1,2-Tetrachloroethane	8.48	131	163881	37.6965	ppb	92
66) m&p-Xylene	8.67	91	584257	79.5046	ppb	97
67) o-Xylene	9.09	106	130768	45.6801	ppb	96
68) Styrene	9.11	104	245952	38.7410	ppb	96
70) 1,3-Dichloropropane	7.46	76	239561	39.7062	ppb	99
71) Dibromochloromethane	7.70	129	175354	40.9732	ppb	100
72) Chlorobenzene	8.36	112	383824	38.0173	ppb	96
73) Ethylbenzene	8.53	91	373731	39.2637	ppb	99
74) Bromoform	9.27	173	136923	36.8498	ppb	98
76) Isopropylbenzene	9.51	105	523481	41.7716	ppb	94
77) 1,1,2,2-Tetrachloroethane	9.85	83	226745	32.2907	ppb	99
78) 1,2,3-Trichloropropane	9.87	110	40992	30.4020	ppb	95
79) t-1,4-Dichloro-2-Butene	9.92	53	49577	40.0747	ppb	93
80) Bromobenzene	9.78	156	111360	40.1458	ppb	94
81) n-Propylbenzene	9.95	91	450857	44.1232	ppb	98
82) 4-Ethyltoluene	10.08	105	633034	46.1631	ppb	97
83) 2-Chlorotoluene	10.01	91	275511	43.4285	ppb	98
84) 1,3,5-Trimethylbenzene	10.16	105	353536	42.1112	ppb	99
85) 4-Chlorotoluene	10.13	91	297740	40.4120	ppb	99
86) Tert-Butylbenzene	10.50	119	398192	42.3107	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	524797	39.0016	ppb	96
88) Sec-Butylbenzene	10.73	105	626357	44.6227	ppb	96
89) p-Isopropyltoluene	10.90	119	355776	44.8587	ppb	98
90) Benzyl Chloride	11.07	91	256792	38.4045	ppb	96
91) 1,3-DCB	10.81	146	213312	40.0168	ppb	99
92) 1,4-DCB	10.91	146	373524	37.1842	ppb	97
93) n-Butylbenzene	11.34	91	474305	43.6531	ppb	98
94) 1,2-DCB	11.29	146	336532	37.0173	ppb	98
95) Hexachloroethane	11.56	117	121716	32.4619	ppb	96
96) 1,2-Dibromo-3-chloropropan	12.13	75	40970	37.9232	ppb	# 69
97) 1,2,4-Trichlorobenzene	13.01	180	202270	39.6664	ppb	96
98) Hexachlorobutadiene	13.23	225	110351	36.1594	ppb	95
99) Naphthalene	13.26	128	469476	34.3188	ppb	98
100) 1,2,3-Trichlorobenzene	13.52	180	126064	40.4068	ppb	98

Quantitation Report

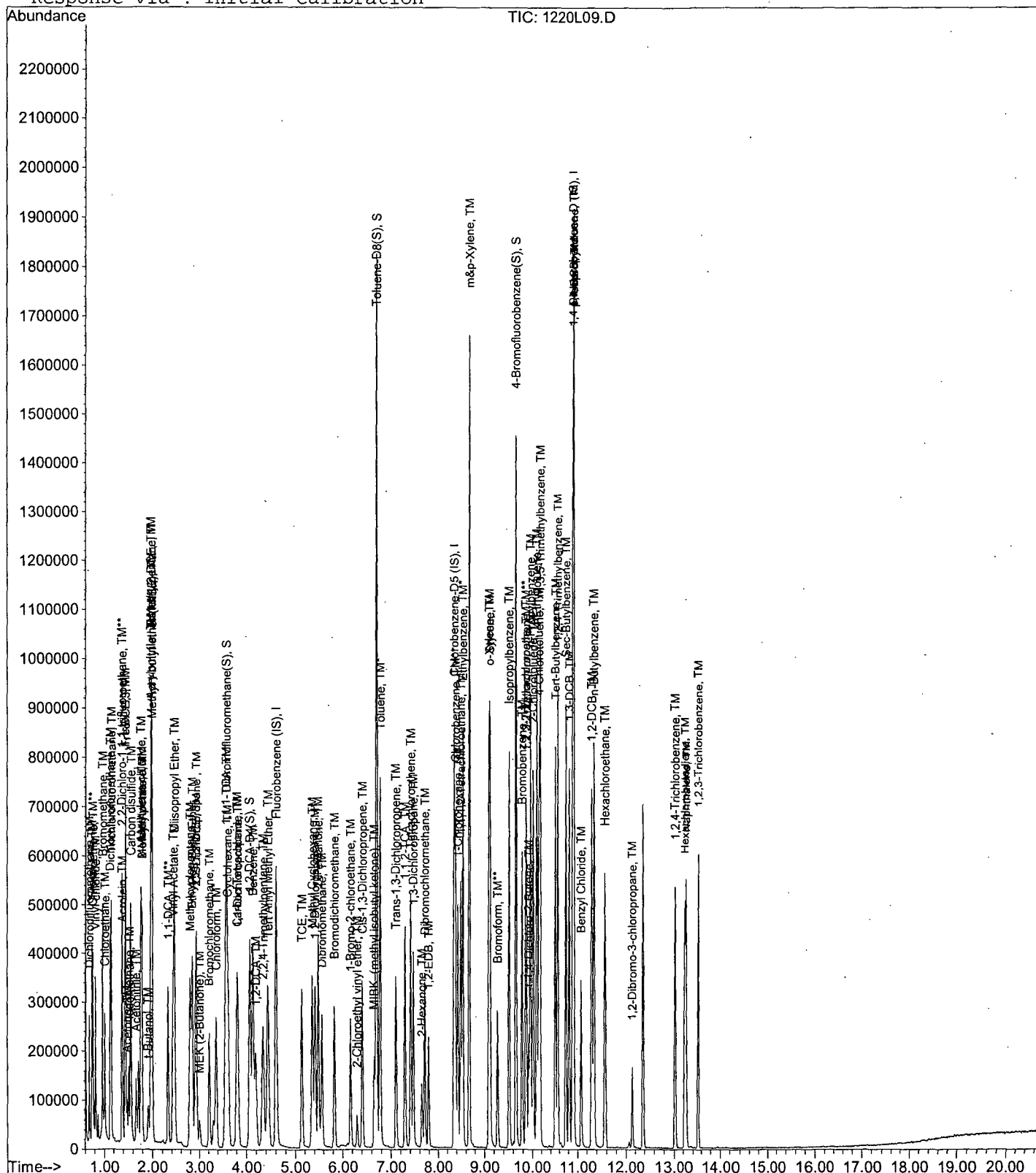
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 Acq On : 20 Dec 18 14:56  
 Sample : 40ug/L VOC STD 12/20/18  
 Misc : 10uL-50ppb

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L10.D  
 Acq On : 20 Dec 18 15:25  
 Sample : 100ug/L VOC STD 12/20/18  
 Misc : 20uL-100ppb

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	289152	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	315712	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.88	152	205312	25.0000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	687992	84.8792	ppb	0.00
Spiked Amount	25.000		Recovery	=	339.516%	
40) 1,2-DCA-D4(S)	4.07	65	786222	83.7797	ppb	0.00
Spiked Amount	25.000		Recovery	=	335.120%	
61) Toluene-D8(S)	6.70	98	2588618	104.2434	ppb	0.00
Spiked Amount	25.000		Recovery	=	416.972%	
69) 4-Bromofluorobenzene(S)	9.65	95	950136	112.5272	ppb	0.00
Spiked Amount	25.000		Recovery	=	450.108%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	317301	86.1611	ppb	97
3) Freon 114	0.73	85	350338	83.9607	ppb	96
4) Chloromethane	0.76	50	482279	75.5220	ppb	99
5) Vinyl chloride	0.81	62	410352	77.2795	ppb	95
6) Bromomethane	0.96	94	362170	69.3392	ppb	95
7) Chloroethane	1.00	64	167733	47.4827	ppb	98
8) Dichlorofluoromethane	1.12	67	722863	82.7641	ppb	98
9) Trichlorofluoromethane	1.14	101	585558	86.4149	ppb	98
10) Acrolein	1.39	56	65640	185.7053	ppb	# 94
11) Acetone	1.49	43	155763	98.6502	ppb	98
12) Freon-113	1.45	101	338030	99.3570	ppb	98
13) 1,1-DCE	1.44	63	127410	70.3669	ppb	93
14) t-Butanol	1.93	59	92357	175.1042	ppb	96
15) Acetonitrile	1.66	41	142798	169.5006	ppb	92
16) Methyl Acetate	1.78	43	491903	98.4910	ppb	# 99
17) Iodomethane	1.52	142	258432	101.6224	ppb	94
18) Acrylonitrile	1.95	52	161587	99.2829	ppb	93
19) Methylene chloride	1.76	84	406911	75.0766	ppb	98
20) Carbon disulfide	1.55	76	1104365	82.3550	ppb	97
21) Methyl t-butyl ether (MtBE)	1.99	73	1087502	89.8878	ppb	# 82
22) Trans-1,2-DCE	1.96	96	258701	84.2751	ppb	98
23) Diisopropyl Ether	2.45	45	1179599	89.4141	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	367574	83.3192	ppb	97
25) 1,1-DCA	2.32	63	688501	82.1796	ppb	98
26) Vinyl Acetate	2.42	43	462837	91.4481	ppb	100
27) Ethyl tert Butyl Ether	2.83	59	993474	104.4342	ppb	96
28) MEK (2-Butanone)	3.00	43	190534	99.5470	ppb	97
29) Cis-1,2-DCE	2.93	96	373941	90.3526	ppb	95
30) 2,2-Dichloropropane	2.91	77	467773	80.9547	ppb	98
31) 2-Methylpentane	1.78	71	219892	92.8319	ppb	94
32) 3-Methylpentane	1.97	57	748762	93.9412	ppb	89
33) Chloroform	3.36	83	630271	85.2223	ppb	97
34) Bromochloromethane	3.21	128	79352	84.2437	ppb	99
36) 1,1,1-TCA	3.56	97	183552	82.3690	ppb	99
37) Cyclohexane	3.62	41	270432	100.1473	ppb	96
38) 1,1-Dichloropropene	3.82	75	401779	104.7875	ppb	91
39) 2,2,4-Trimethylpentane	4.34	57	829458	108.2757	ppb	# 72
41) Carbon Tetrachloride	3.80	117	458705	85.9753	ppb	91
42) Tert Amyl Methyl Ether	4.44	73	938572	116.5736	ppb	# 85

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L10.D  
 Acq On : 20 Dec 18 15:25  
 Sample : 100ug/L VOC STD 12/20/18  
 Misc : 20uL-100ppb

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:37:15 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	606246	96.7886	ppb	97
44) 1,2-DCA	4.19	62	486518	89.5970	ppb	93
45) Benzene	4.13	78	1336932	98.7050	ppb	97
46) TCE	5.13	130	157952	90.1155	ppb	96
47) 2-Pentanone	5.48	43	582629	206.0267	ppb	99
48) 1,2-Dichloropropane	5.41	63	371824	93.4175	ppb	99
49) Bromodichloromethane	5.82	83	258432	90.8514	ppb	# 99
50) Methyl Cyclohexane	5.35	83	436903	122.1039	ppb	93
51) Dibromomethane	5.56	93	264067	85.7101	ppb	98
52) 2-Chloroethyl vinyl ether	6.29	43	57298	101.8565	ppb	# 63
53) MIBK (methyl isobutyl ket	6.65	43	358006	99.4087	ppb	# 89
54) 1-Bromo-2-chloroethane	6.16	63	299659	97.8211	ppb	99
55) Cis-1,3-Dichloropropene	6.40	75	573128	109.5641	ppb	98
56) Toluene	6.77	91	844872	99.9410	ppb	98
57) Trans-1,3-Dichloropropene	7.09	75	528963	105.1429	ppb	95
58) 1,1,2-TCA	7.28	83	314766	89.5255	ppb	92
59) 2-Hexanone	7.64	43	249382	115.4263	ppb	# 86
62) 1,2-EDB	7.78	107	220800	95.8787	ppb	99
63) Tetrachloroethene	7.40	166	235264	90.8101	ppb	97
64) 1-Chlorohexane	8.42	91	444629	135.2703	ppb	78
65) 1,1,1,2-Tetrachloroethane	8.48	131	401506	87.9376	ppb	94
66) m&p-Xylene	8.67	91	1588787	201.1560	ppb	97
67) o-Xylene	9.09	106	380947	126.7066	ppb	96
68) Styrene	9.11	104	696064	101.1332	ppb	98
70) 1,3-Dichloropropane	7.46	76	608481	96.0282	ppb	98
71) Dibromochloromethane	7.70	129	441410	99.4113	ppb	95
72) Chlorobenzene	8.36	112	988342	93.2108	ppb	96
73) Ethylbenzene	8.53	91	1026127	100.6542	ppb	99
74) Bromoform	9.27	173	345522	88.5408	ppb	99
76) Isopropylbenzene	9.51	105	1541529	115.4537	ppb	95
77) 1,1,1,2-Tetrachloroethane	9.85	83	585687	78.2856	ppb	100
78) 1,2,3-Trichloropropane	9.87	110	100120	69.6949	ppb	92
79) t-1,4-Dichloro-2-Butene	9.91	53	131776	99.9775	ppb	89
80) Bromobenzene	9.77	156	284288	96.1935	ppb	96
81) n-Propylbenzene	9.95	91	1287033	118.2208	ppb	99
82) 4-Ethyltoluene	10.08	105	1756466	120.2220	ppb	98
83) 2-Chlorotoluene	10.01	91	743359	109.9792	ppb	98
84) 1,3,5-Trimethylbenzene	10.16	105	895001	99.3462	ppb	97
85) 4-Chlorotoluene	10.13	91	786546	99.7165	ppb	99
86) Tert-Butylbenzene	10.50	119	1167563	116.4433	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	1472981	100.6816	ppb	97
88) Sec-Butylbenzene	10.73	105	1780429	119.0516	ppb	97
89) p-Isopropyltoluene	10.90	119	1025071	121.3110	ppb	98
90) Benzyl Chloride	11.07	91	769963	108.0803	ppb	96
91) 1,3-DCB	10.81	146	559424	98.5020	ppb	99
92) 1,4-DCB	10.91	146	973054	90.9186	ppb	97
93) n-Butylbenzene	11.34	91	1392664	120.3040	ppb	95
94) 1,2-DCB	11.29	146	931789	96.1995	ppb	98
95) Hexachloroethane	11.56	117	317621	79.5082	ppb	98
96) 1,2-Dibromo-3-chloropropan	12.12	75	115676	100.7693	ppb	# 77
97) 1,2,4-Trichlorobenzene	13.01	180	633332	116.5734	ppb	98
98) Hexachlorobutadiene	13.23	225	317032	97.5043	ppb	96
99) Naphthalene	13.26	128	1591719	103.0662	ppb	97
100) 1,2,3-Trichlorobenzene	13.52	180	386368	116.2361	ppb	99



Quantitation Report

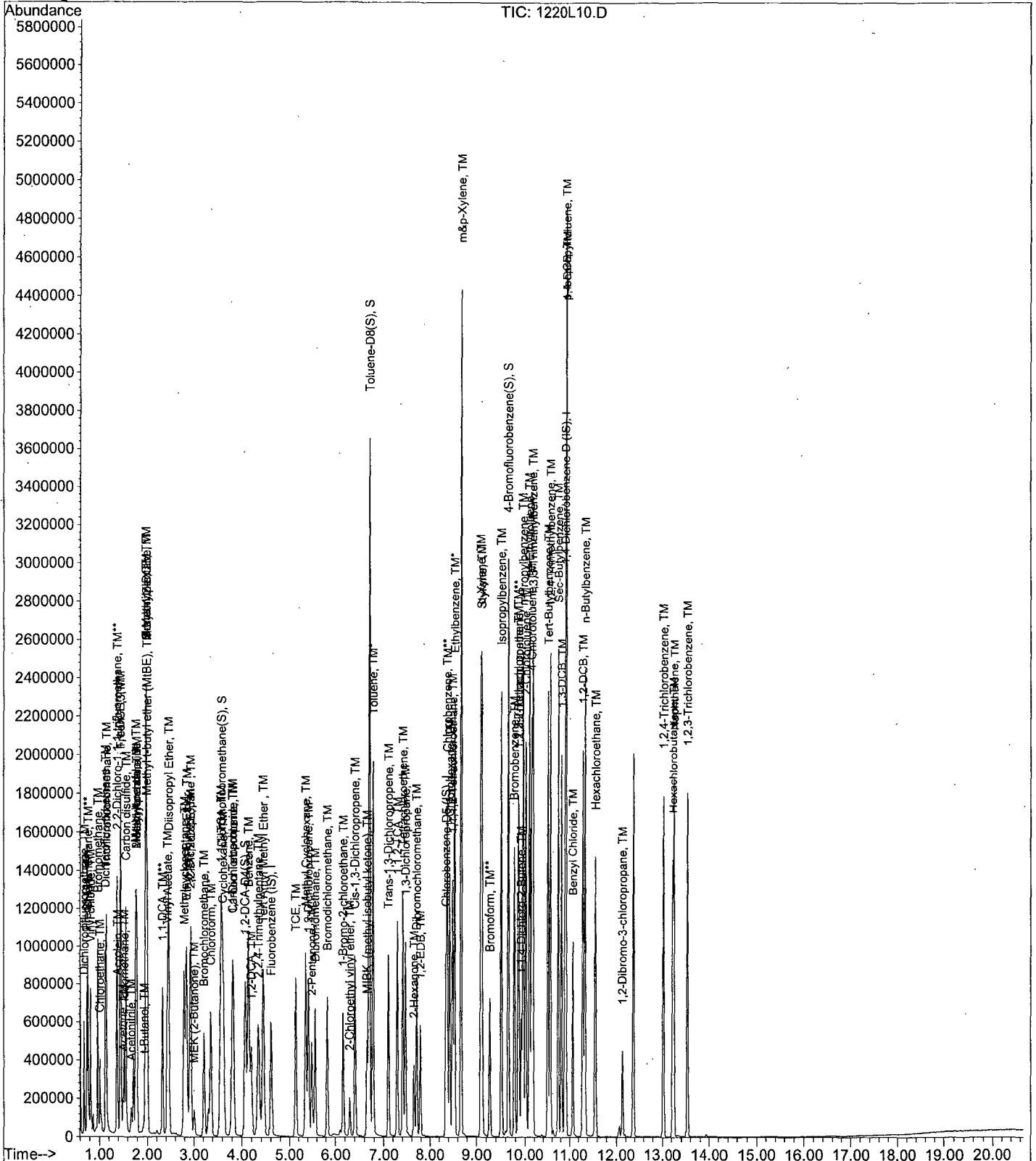
Data File : M:\LOKI\DATA\181220\1220L10.D  
Acq On : 20 Dec 18 15:25  
Sample : 100ug/L VOC STD 12/20/18  
Misc : 20uL-100ppb

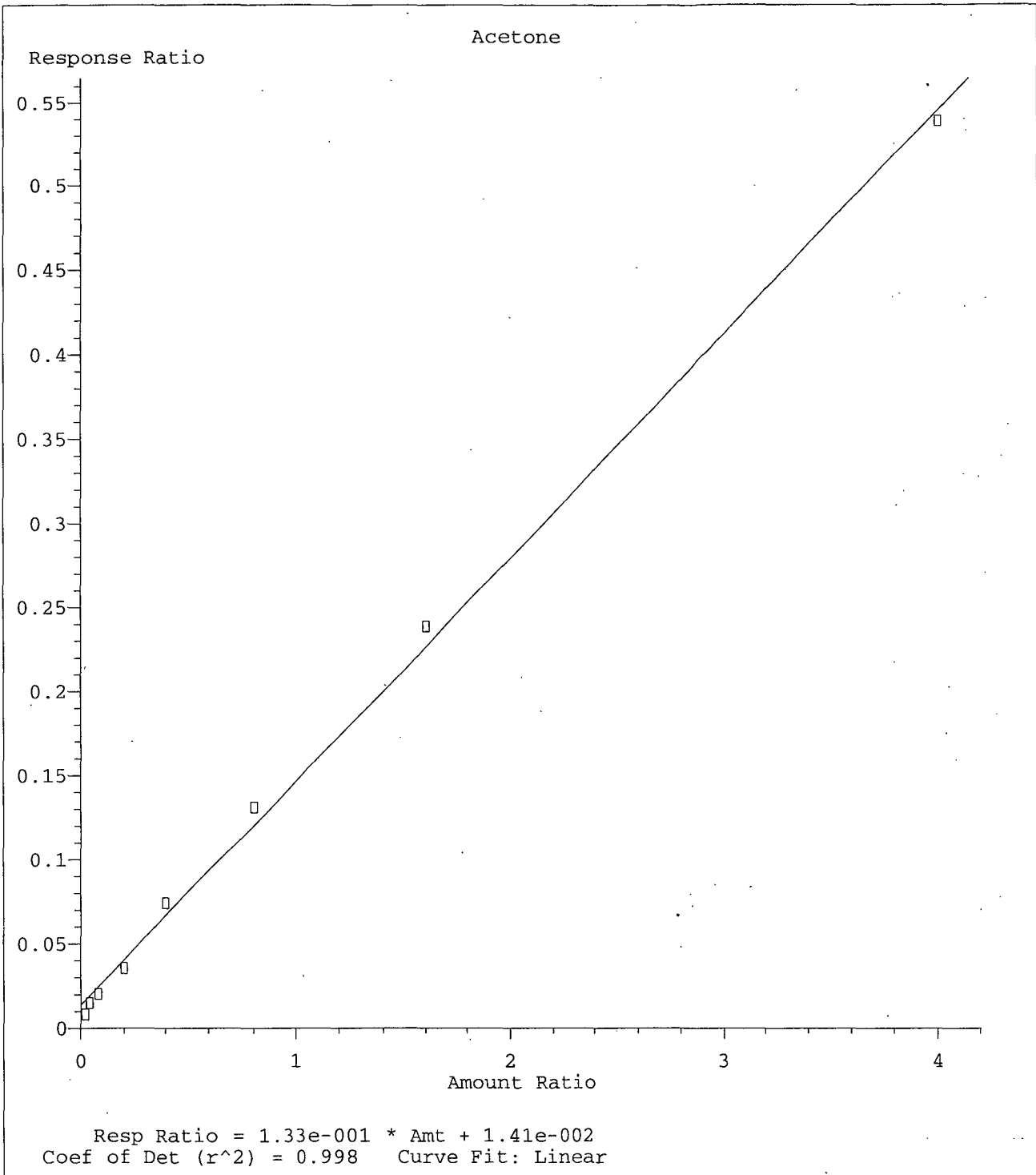
Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:38 2018

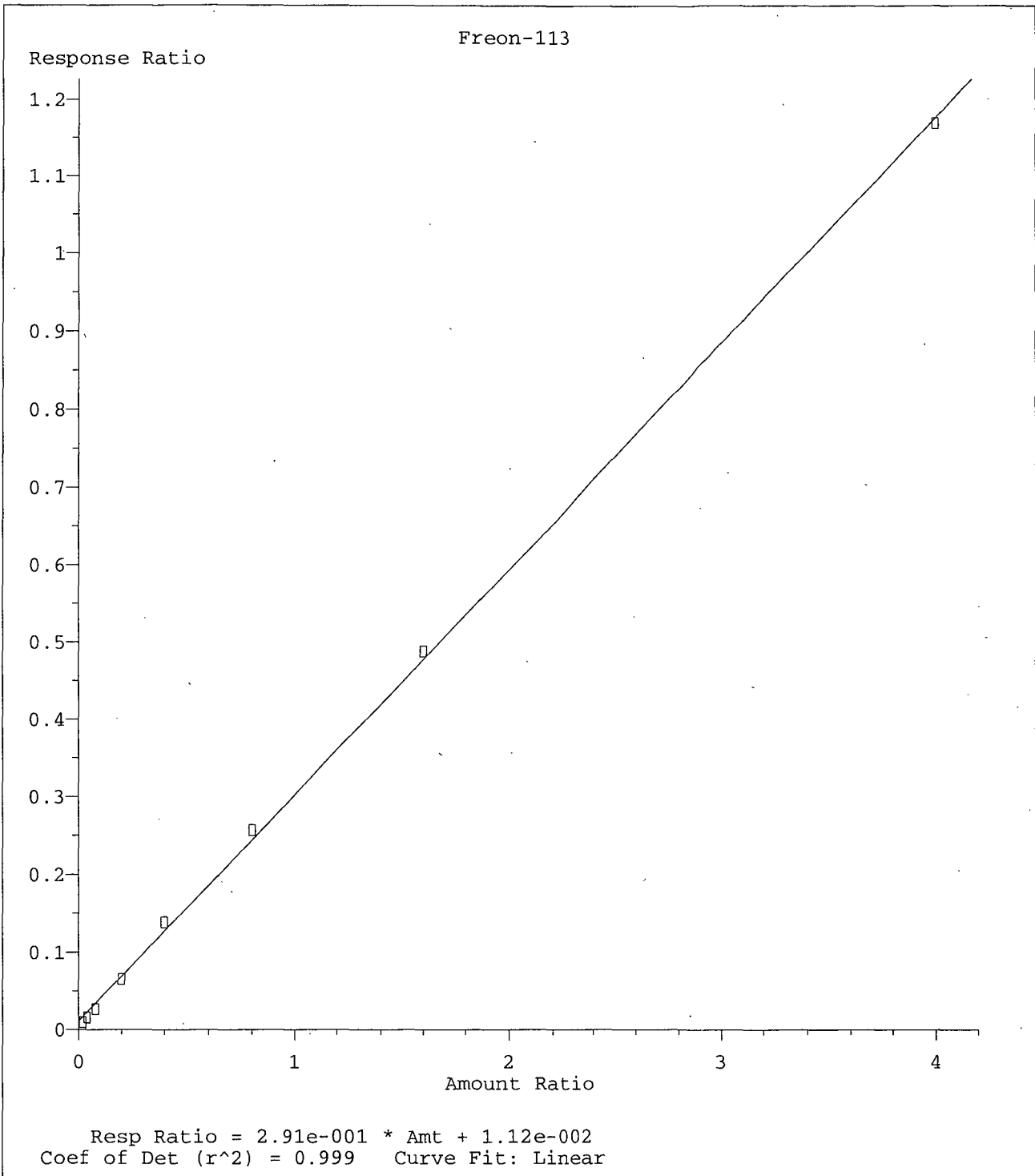
Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration





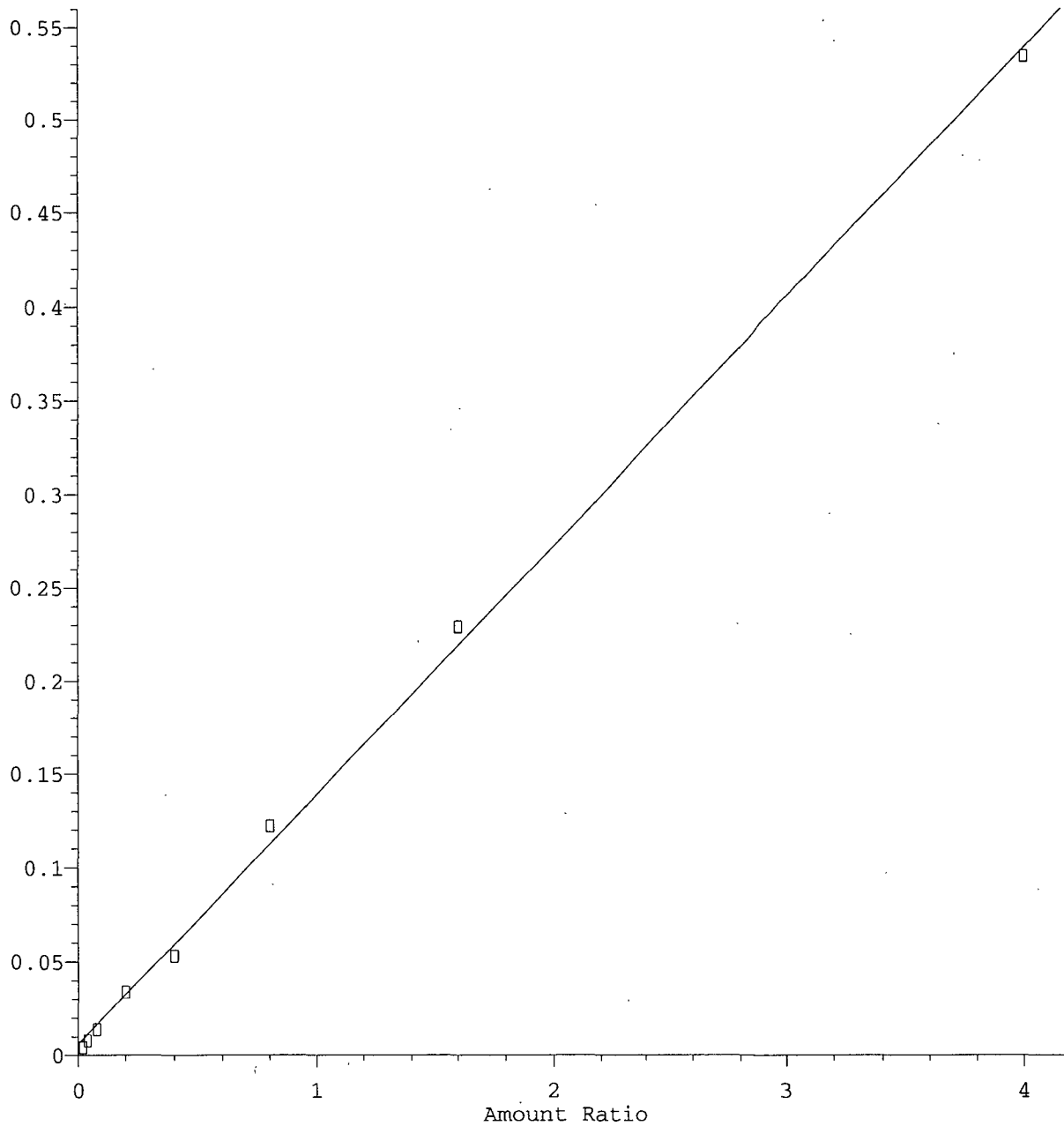
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

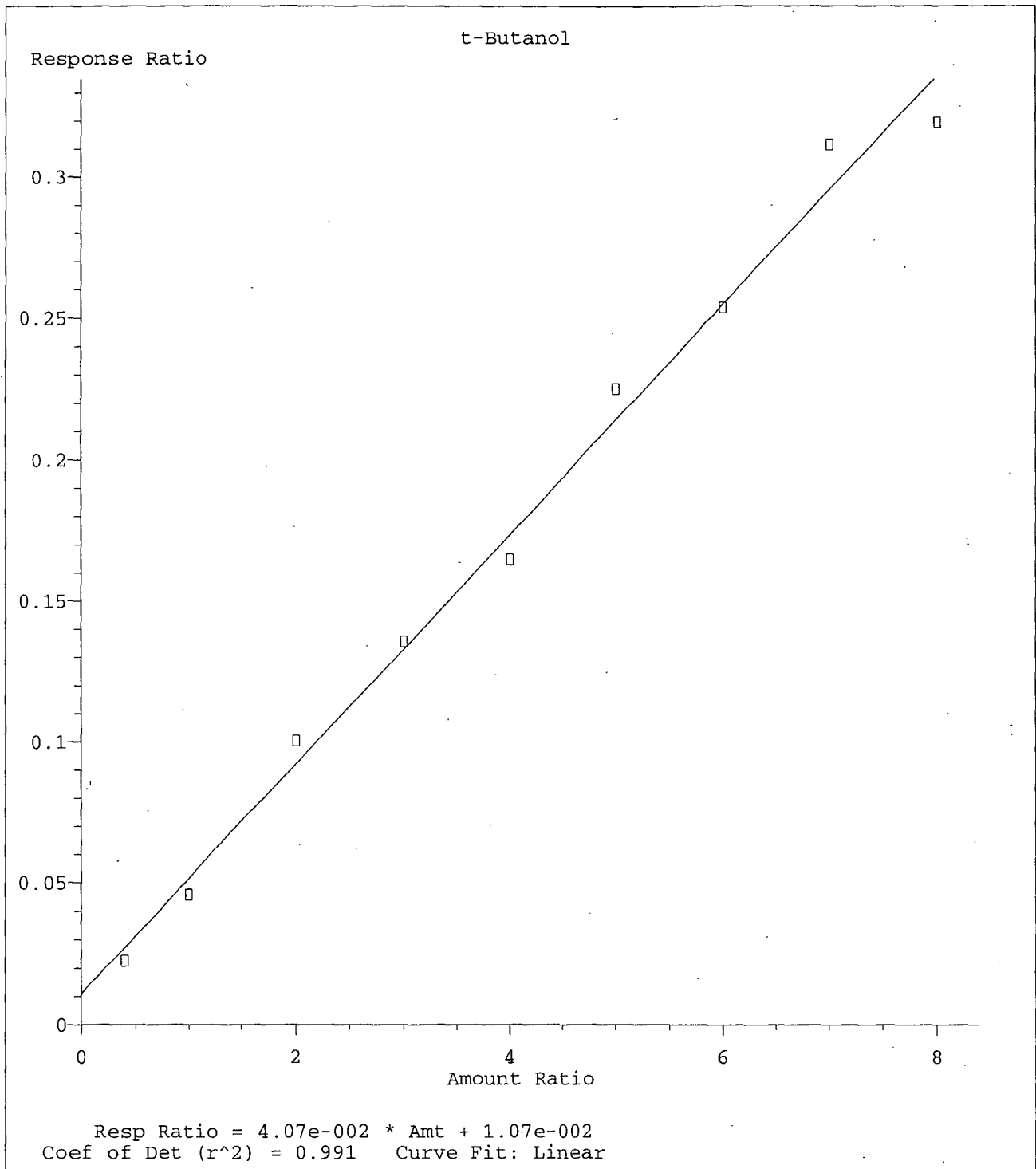
1,1-DCE

Response Ratio

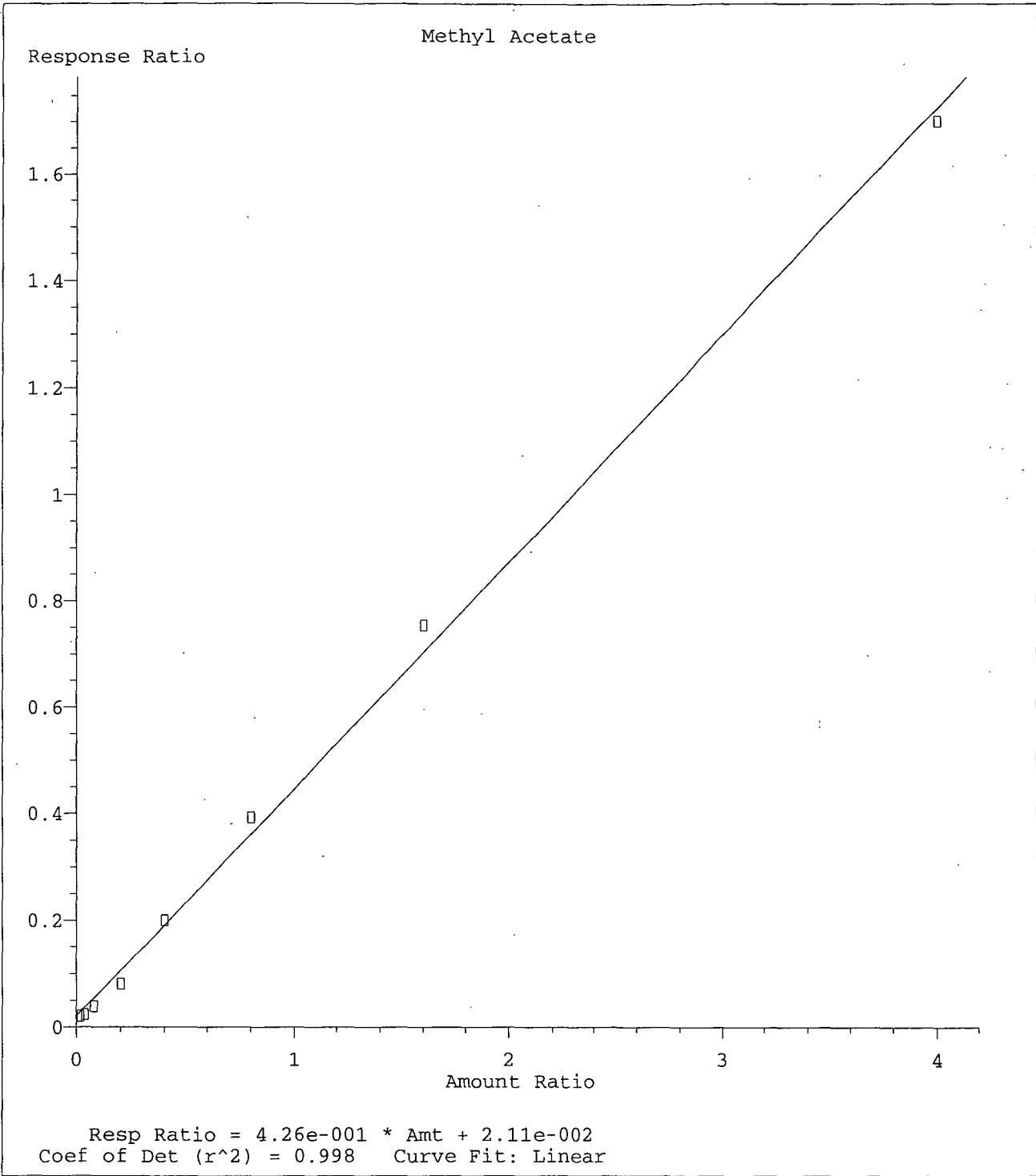


Resp Ratio = 1.33e-001 \* Amt + 5.62e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

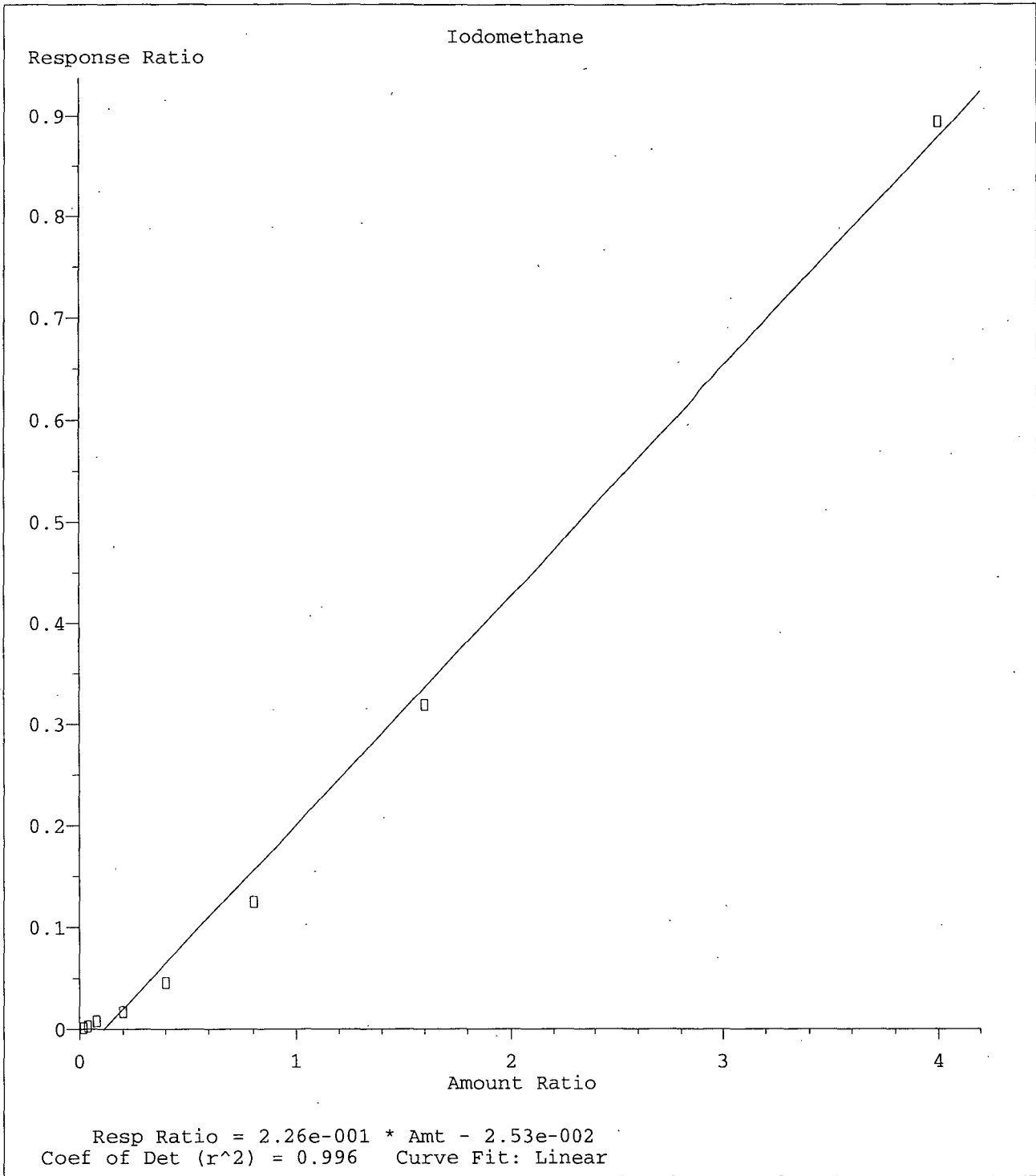
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



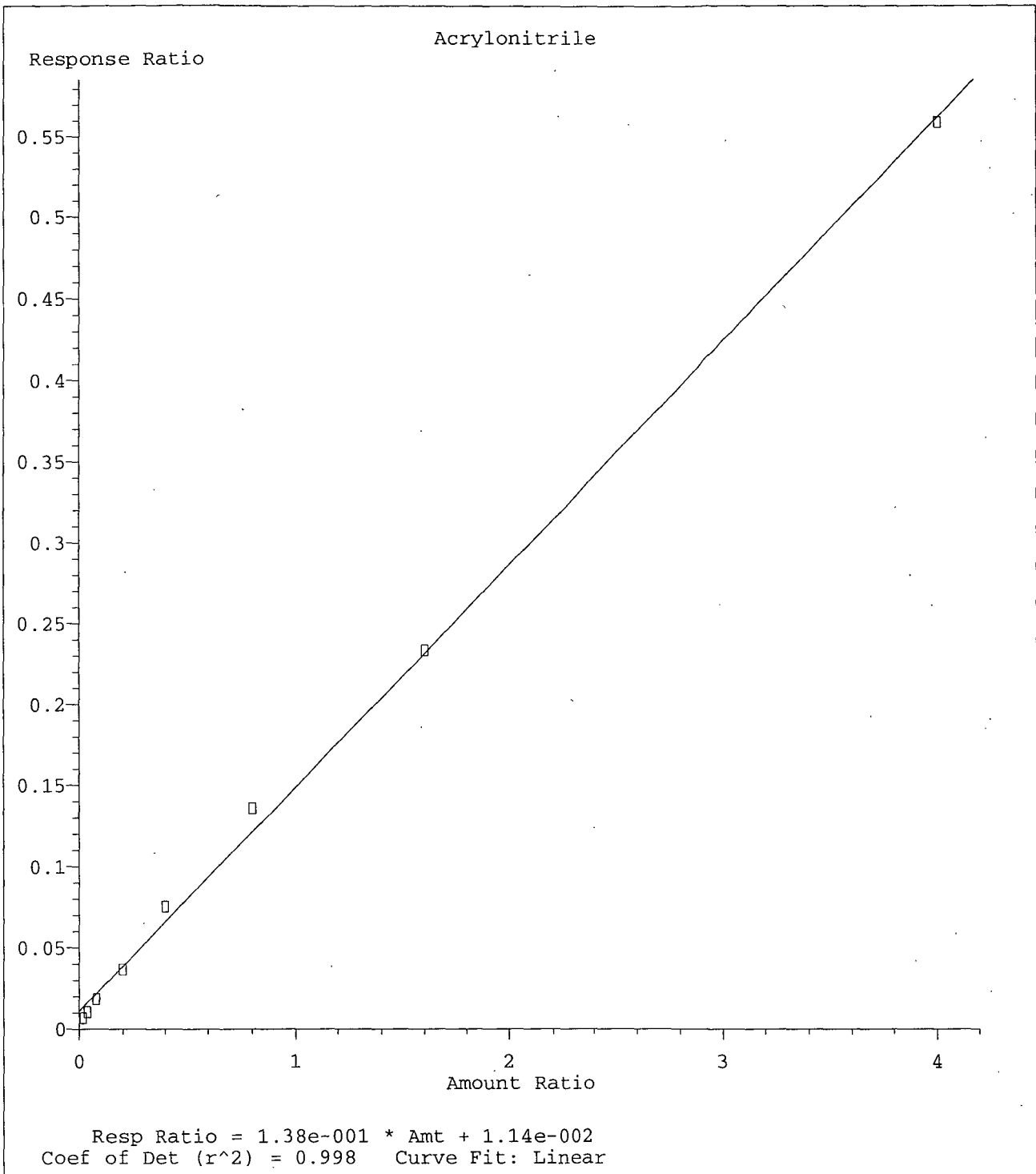
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

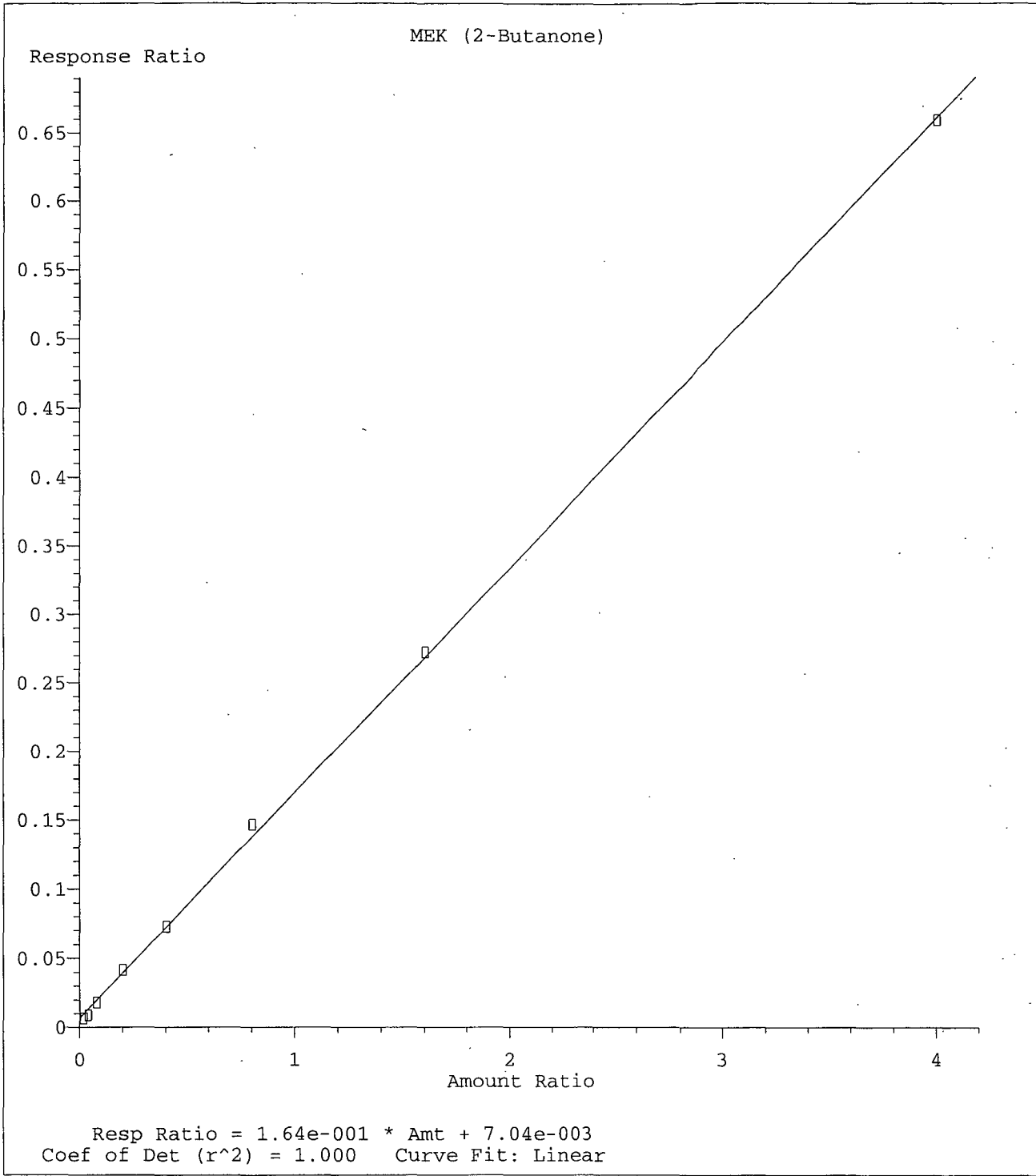


Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

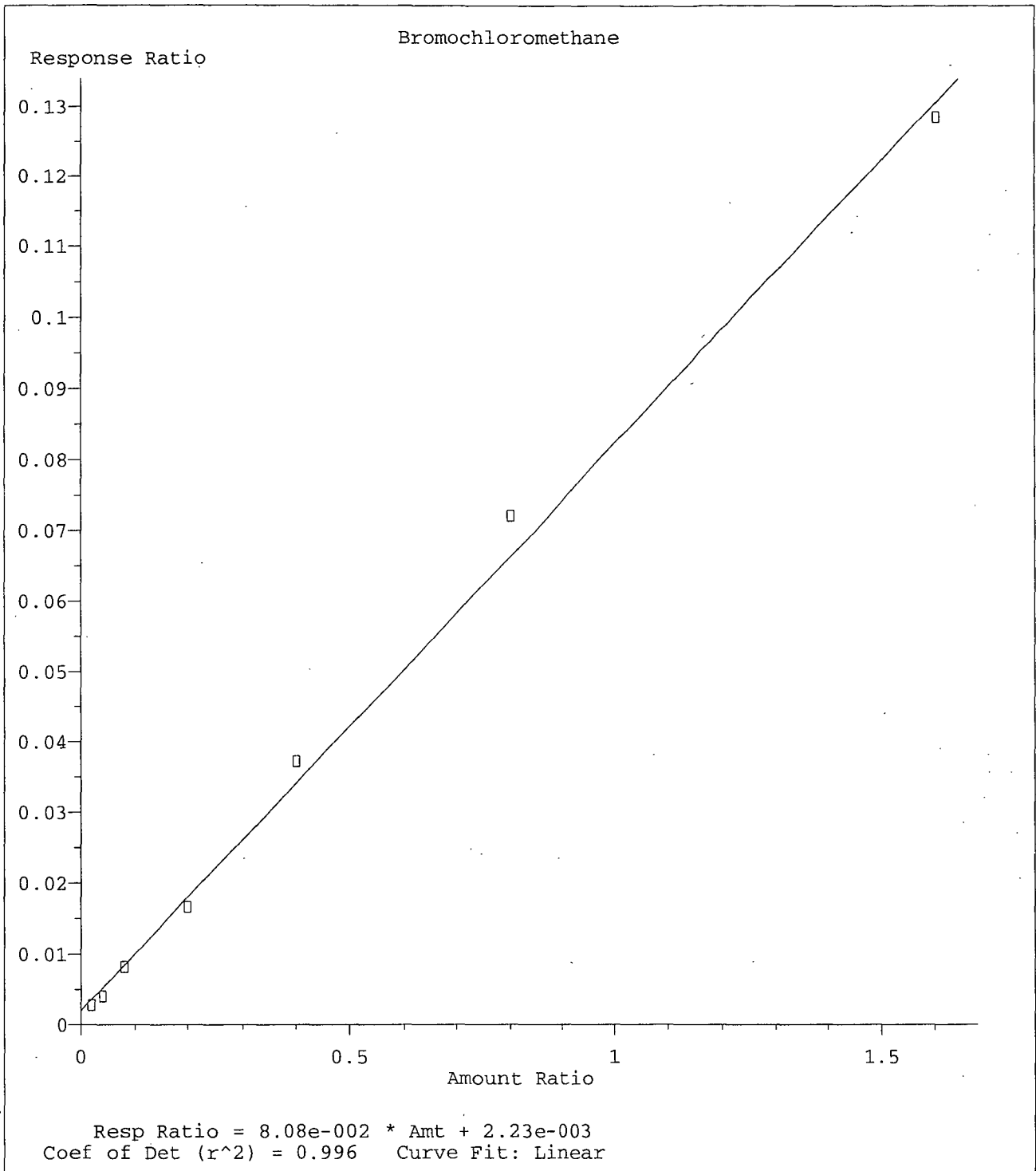


Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

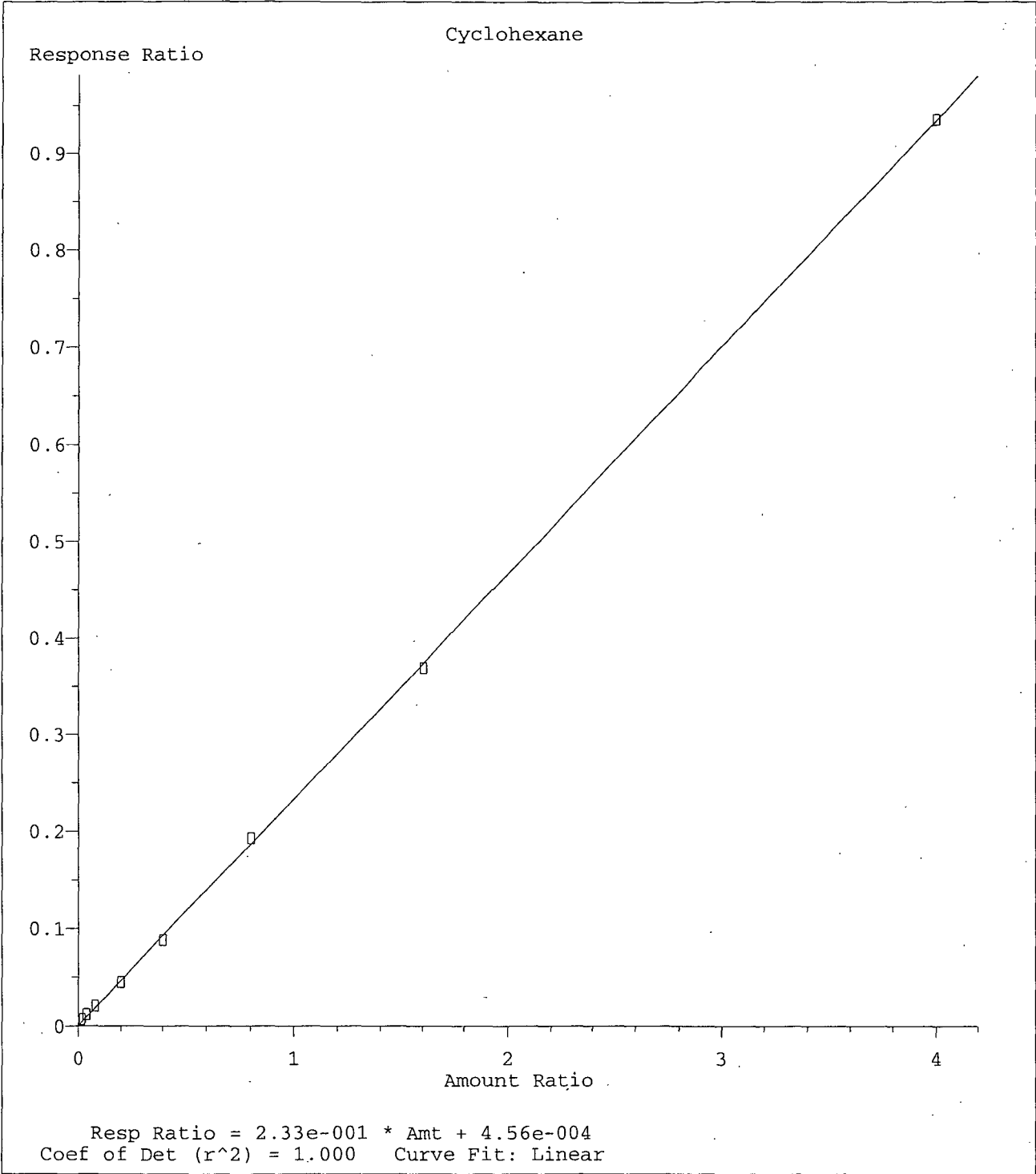




Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

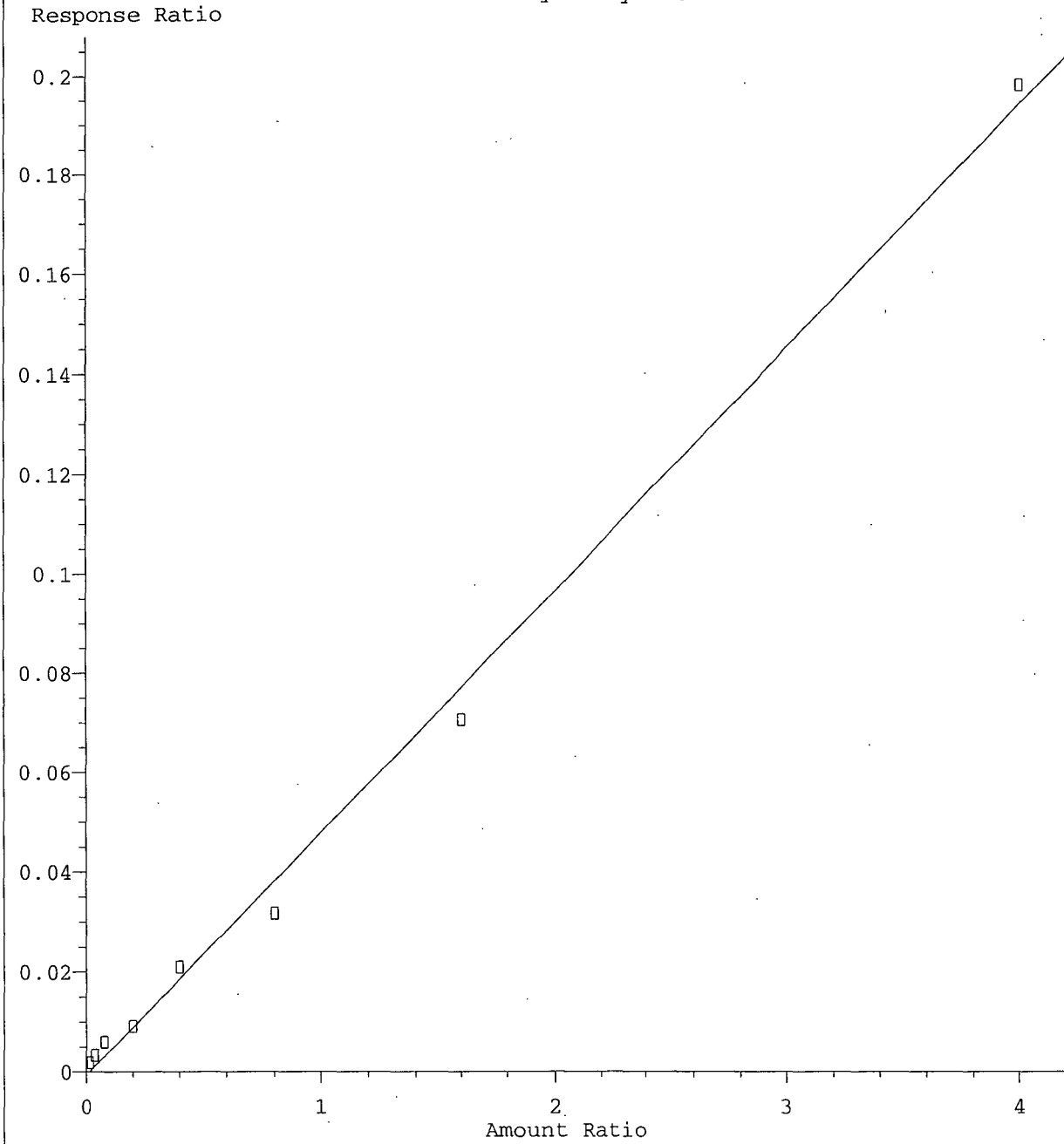


Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

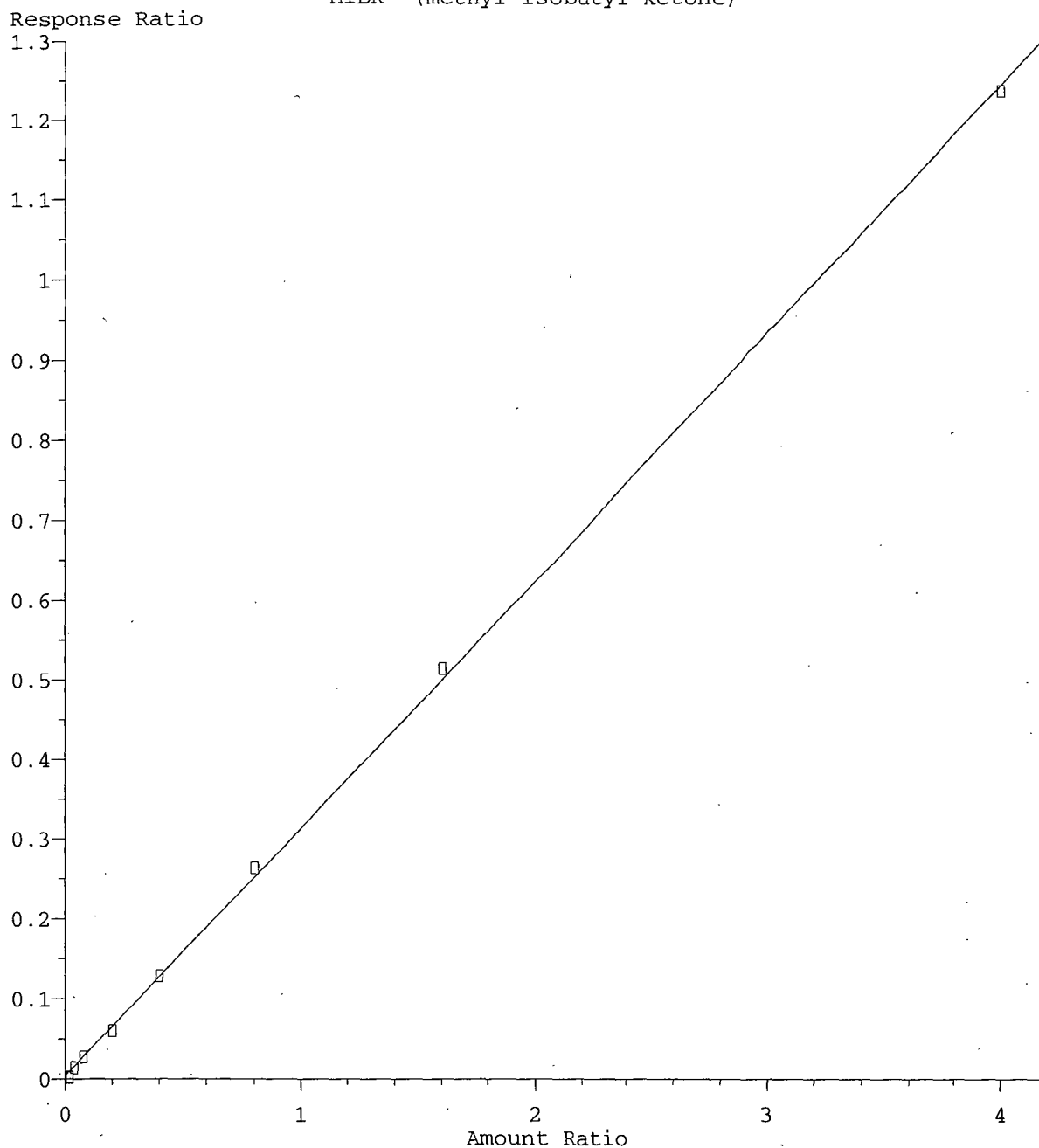
2-Chloroethyl vinyl ether



Resp Ratio =  $4.89e-002 * Amt - 8.85e-004$   
Coef of Det ( $r^2$ ) = 0.996 Curve Fit: Linear

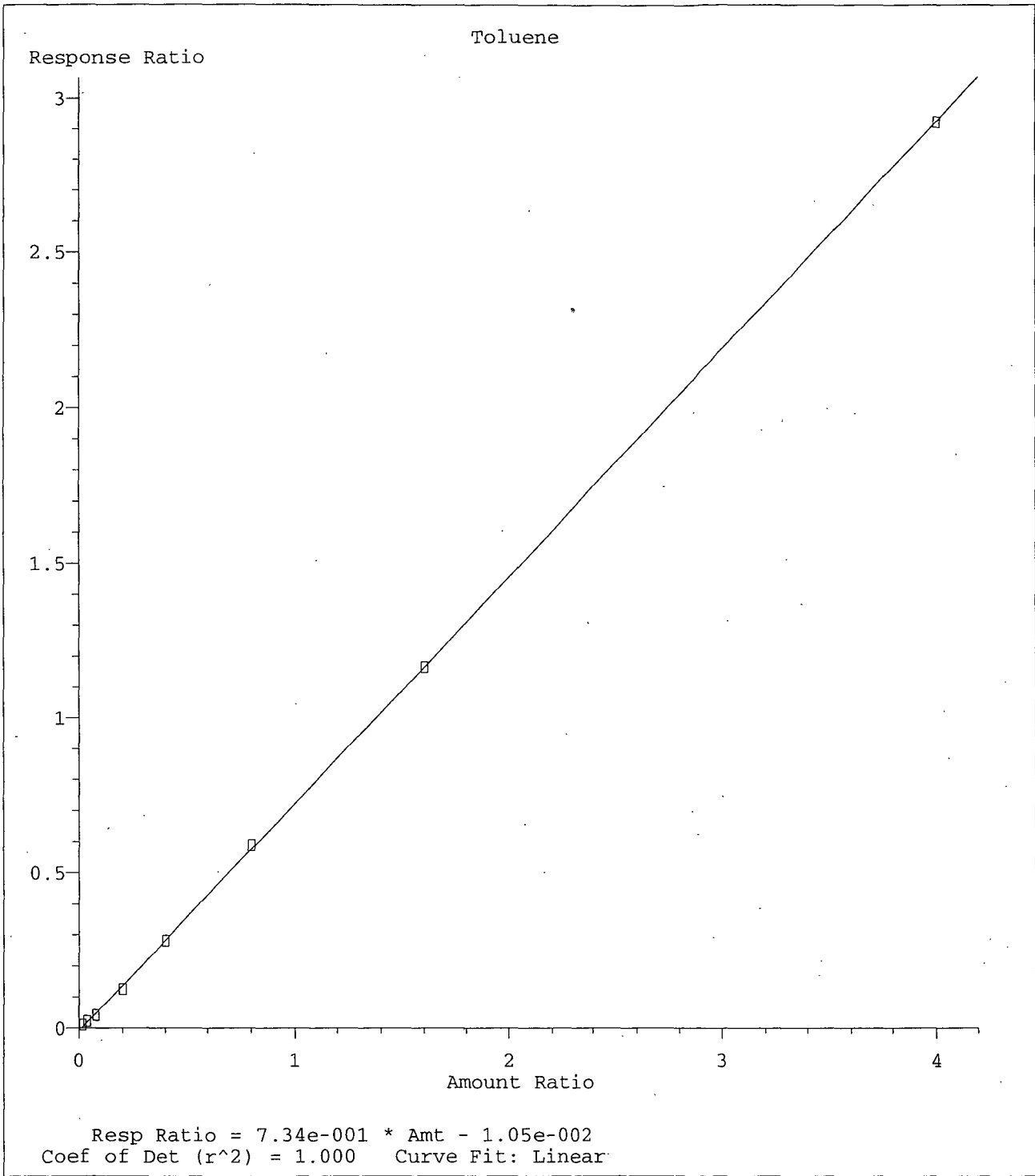
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

MIBK (methyl isobutyl ketone)

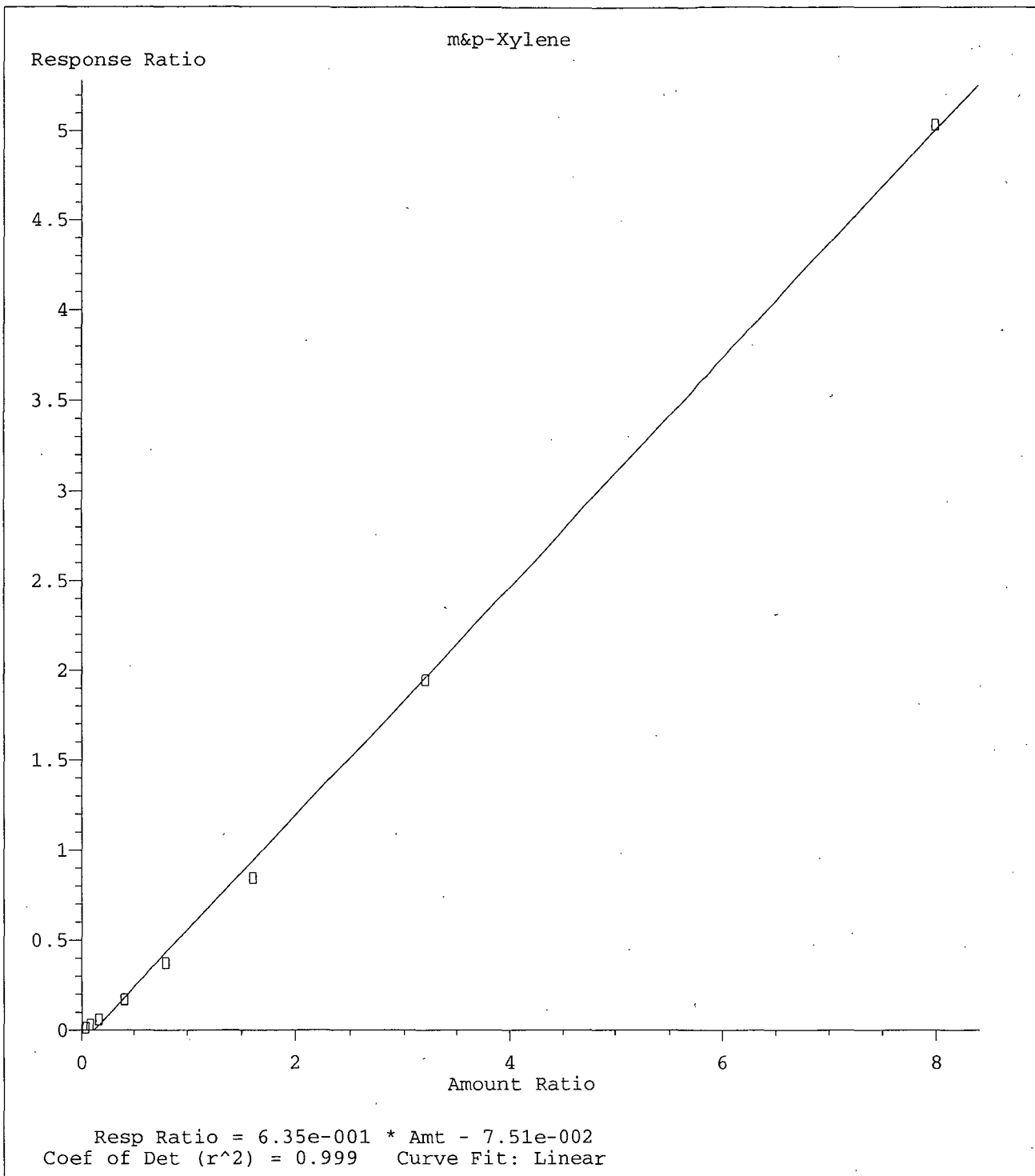


Resp Ratio = 3.10e-001 \* Amt + 3.99e-003  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

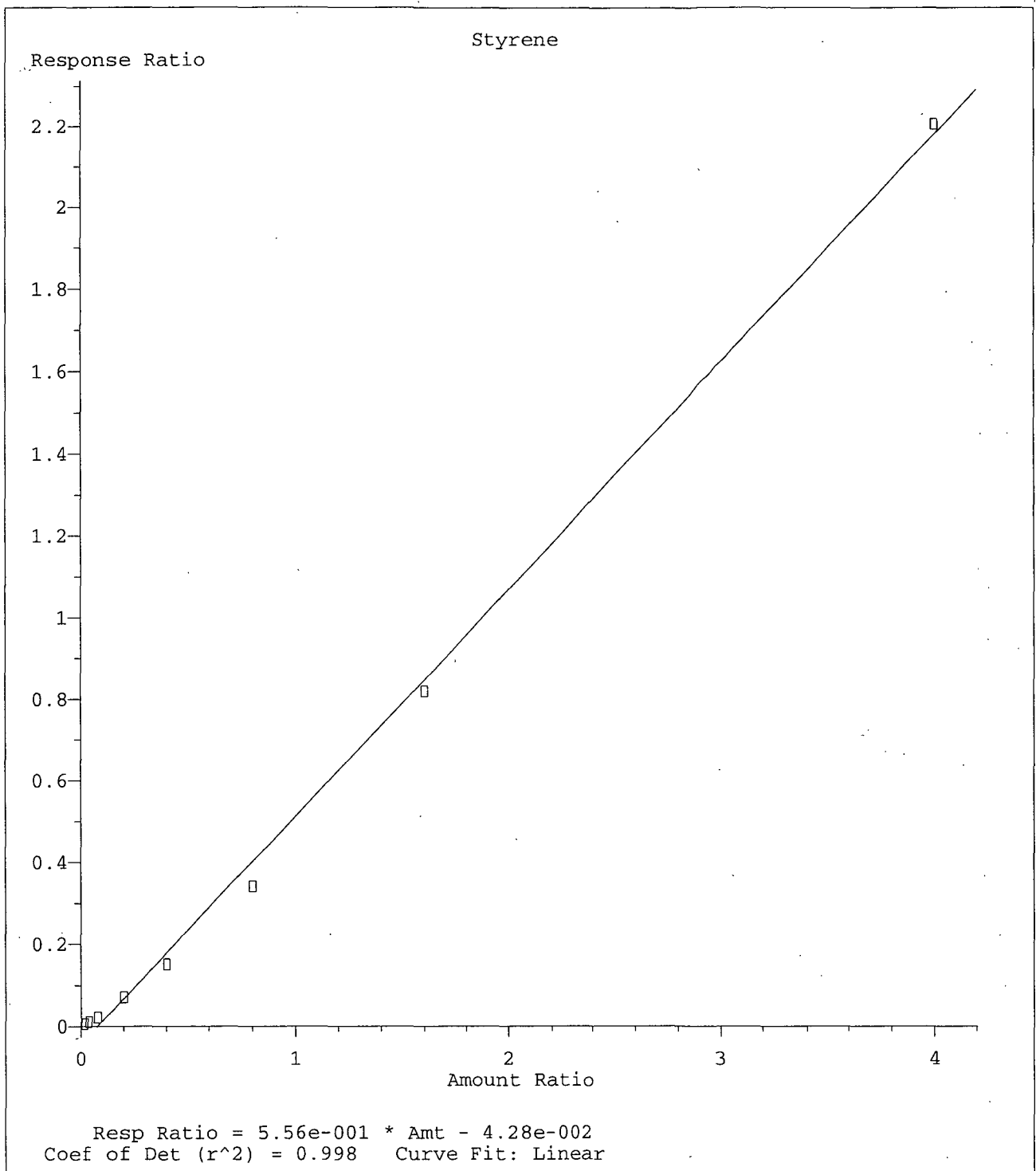
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

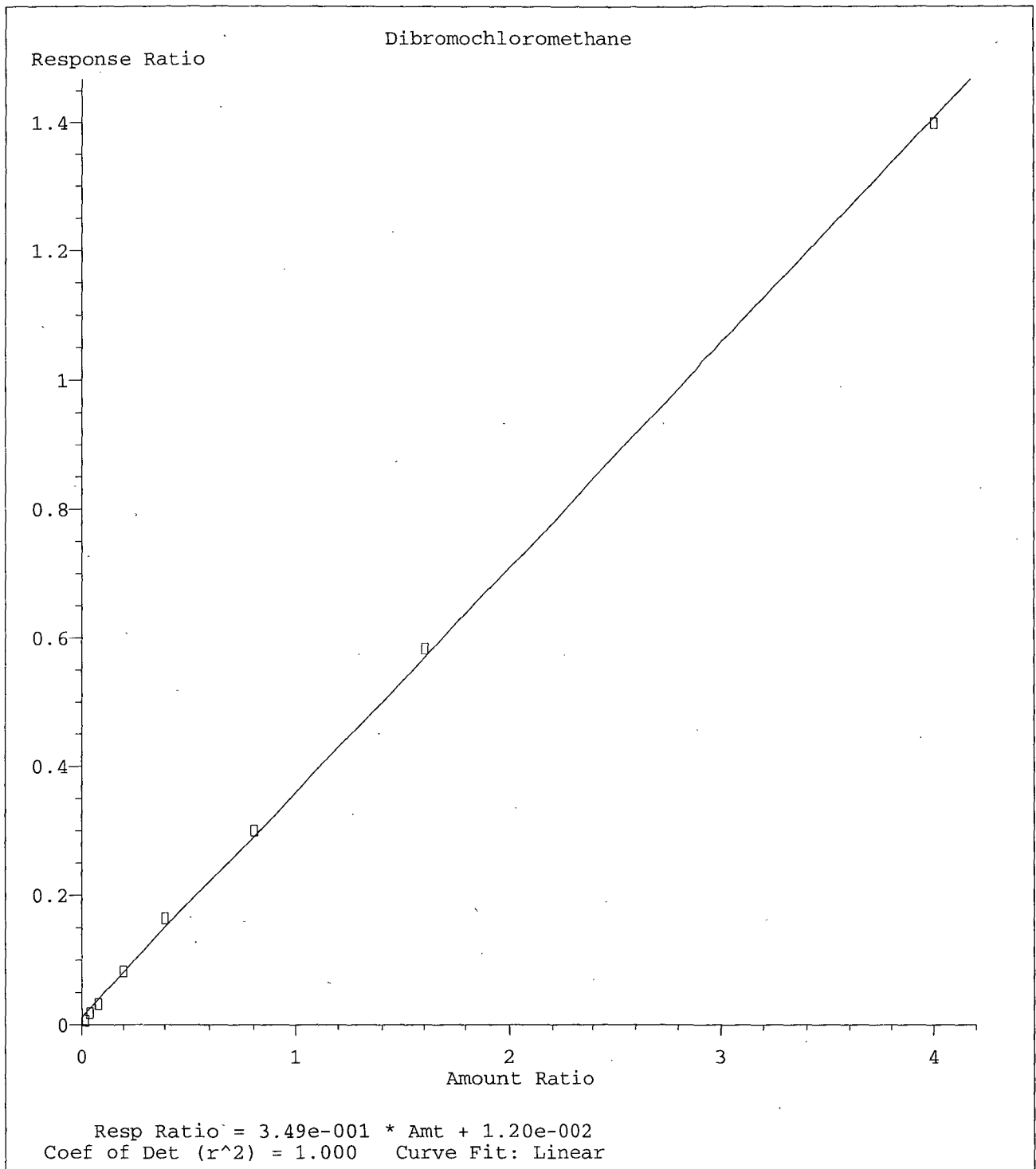


Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

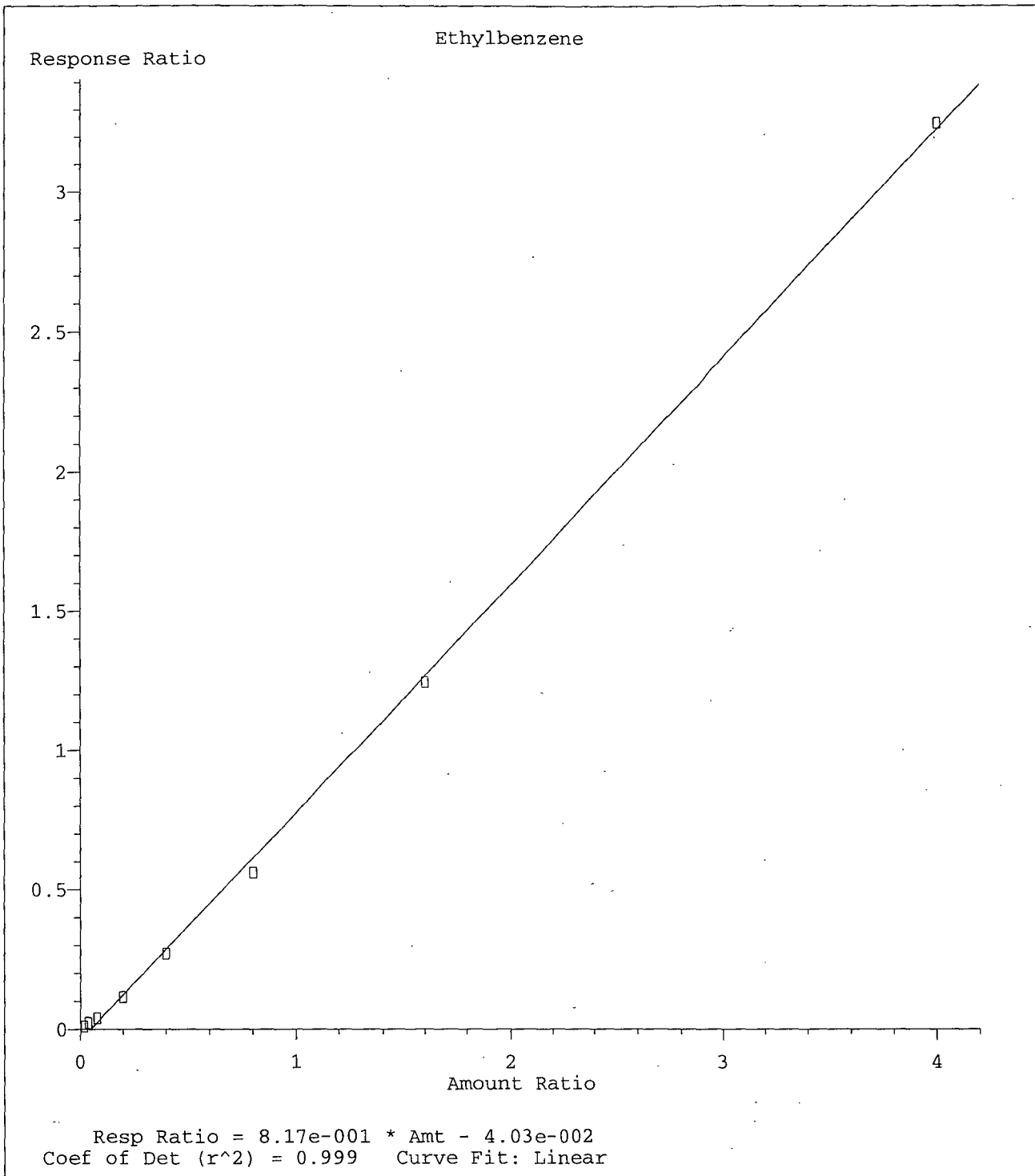


Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018





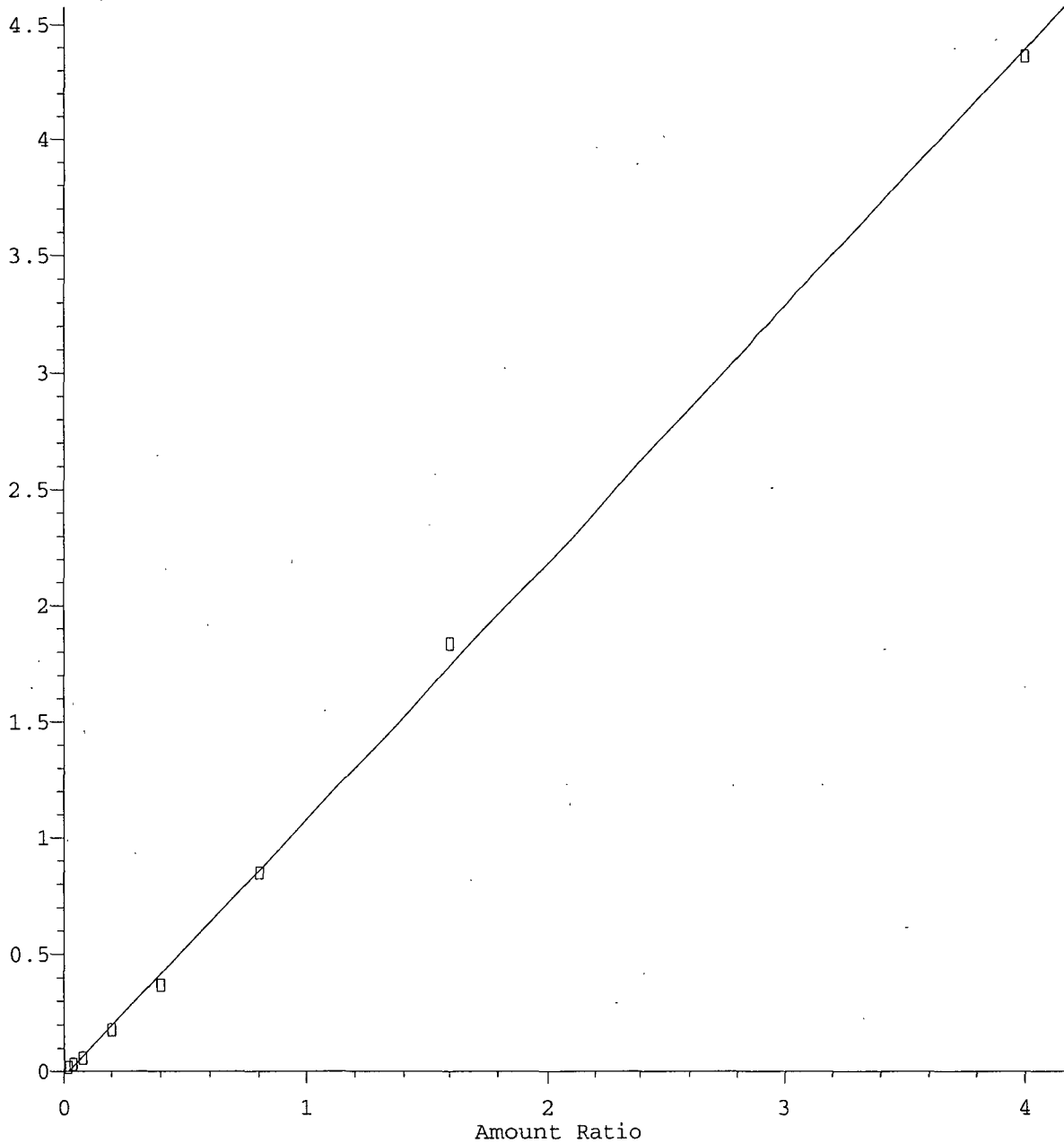
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

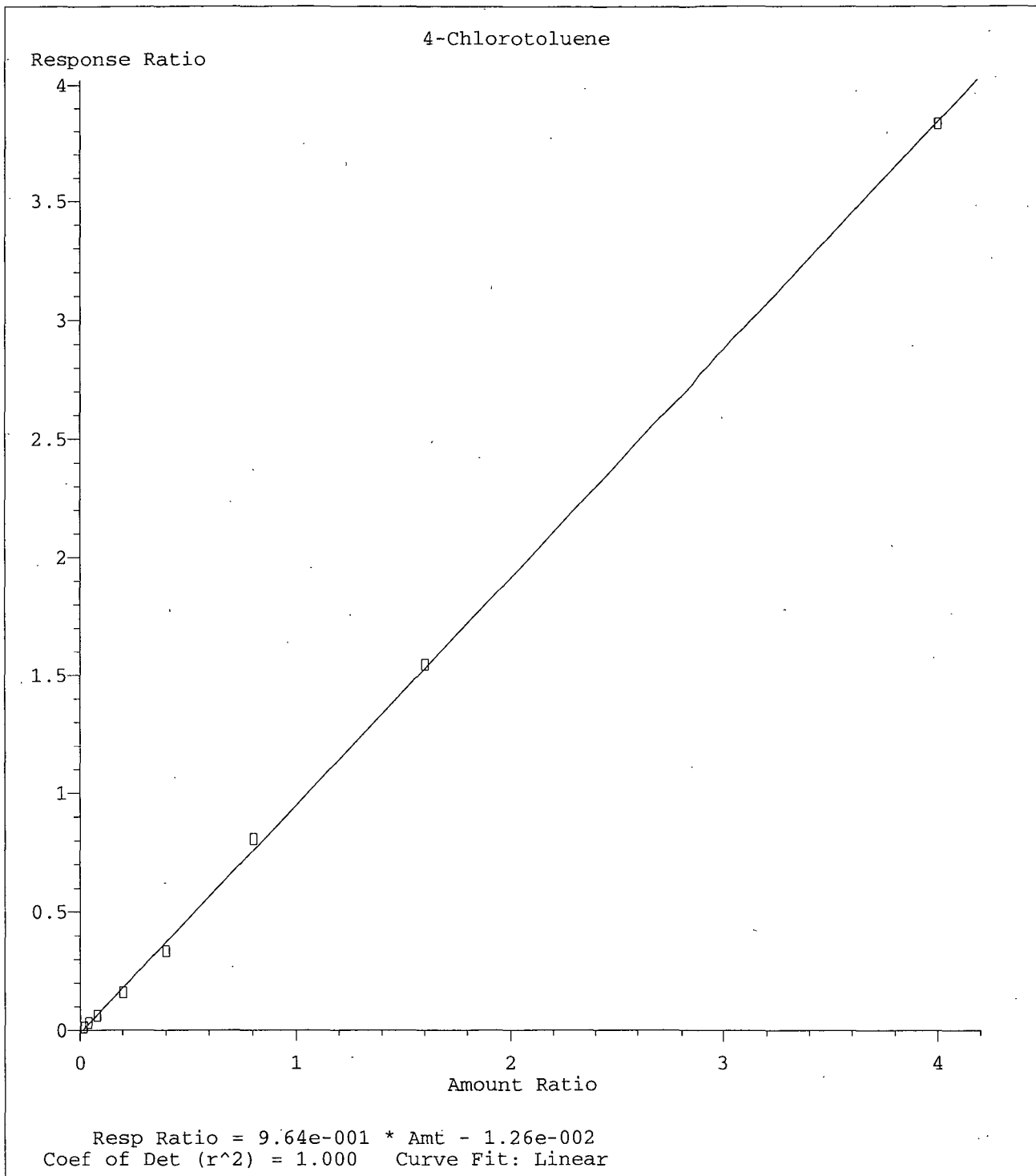
1,3,5-Trimethylbenzene

Response Ratio



Resp Ratio = 1.10e+000 \* Amt - 2.29e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

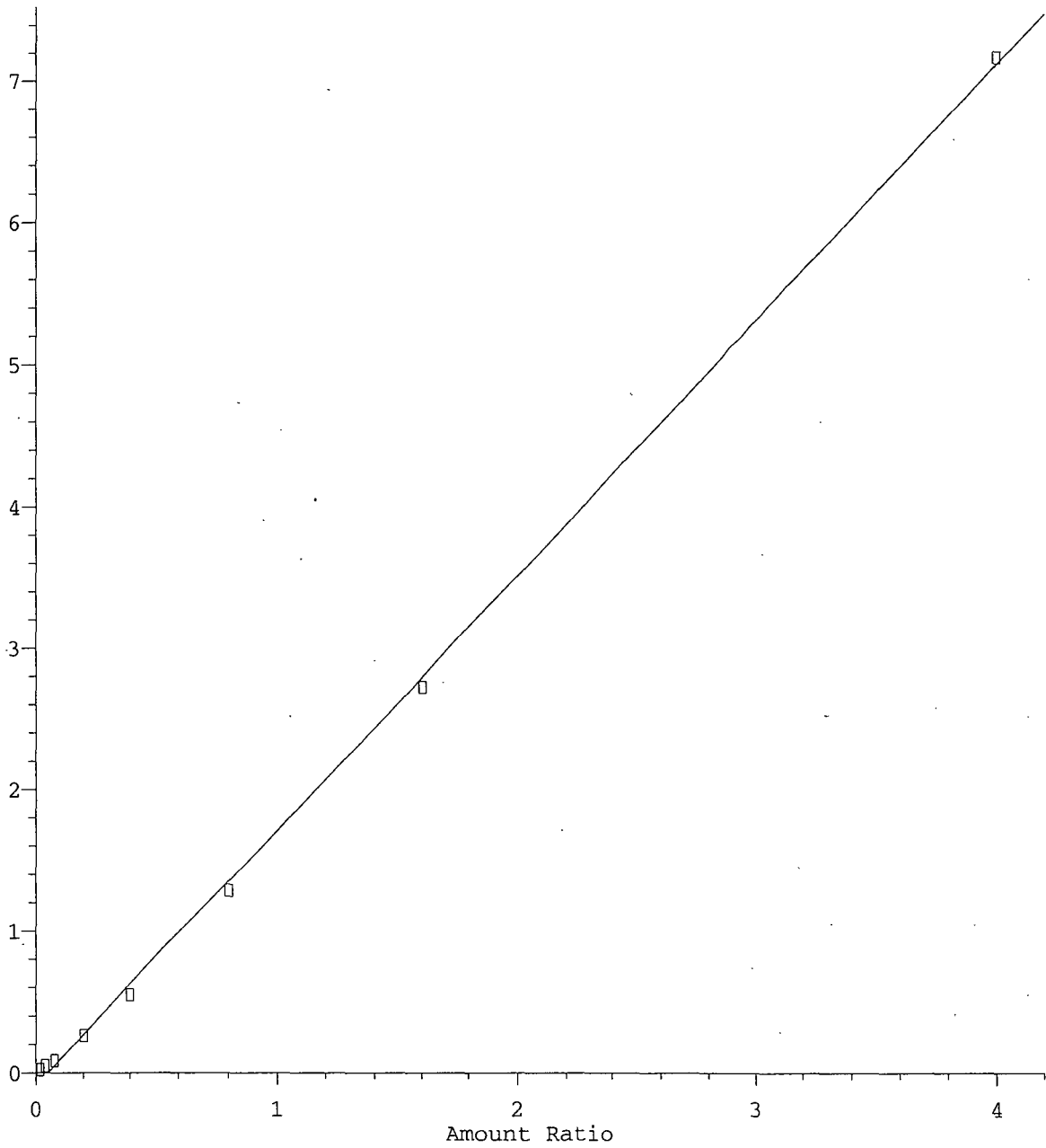
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

1,2,4-Trimethylbenzene

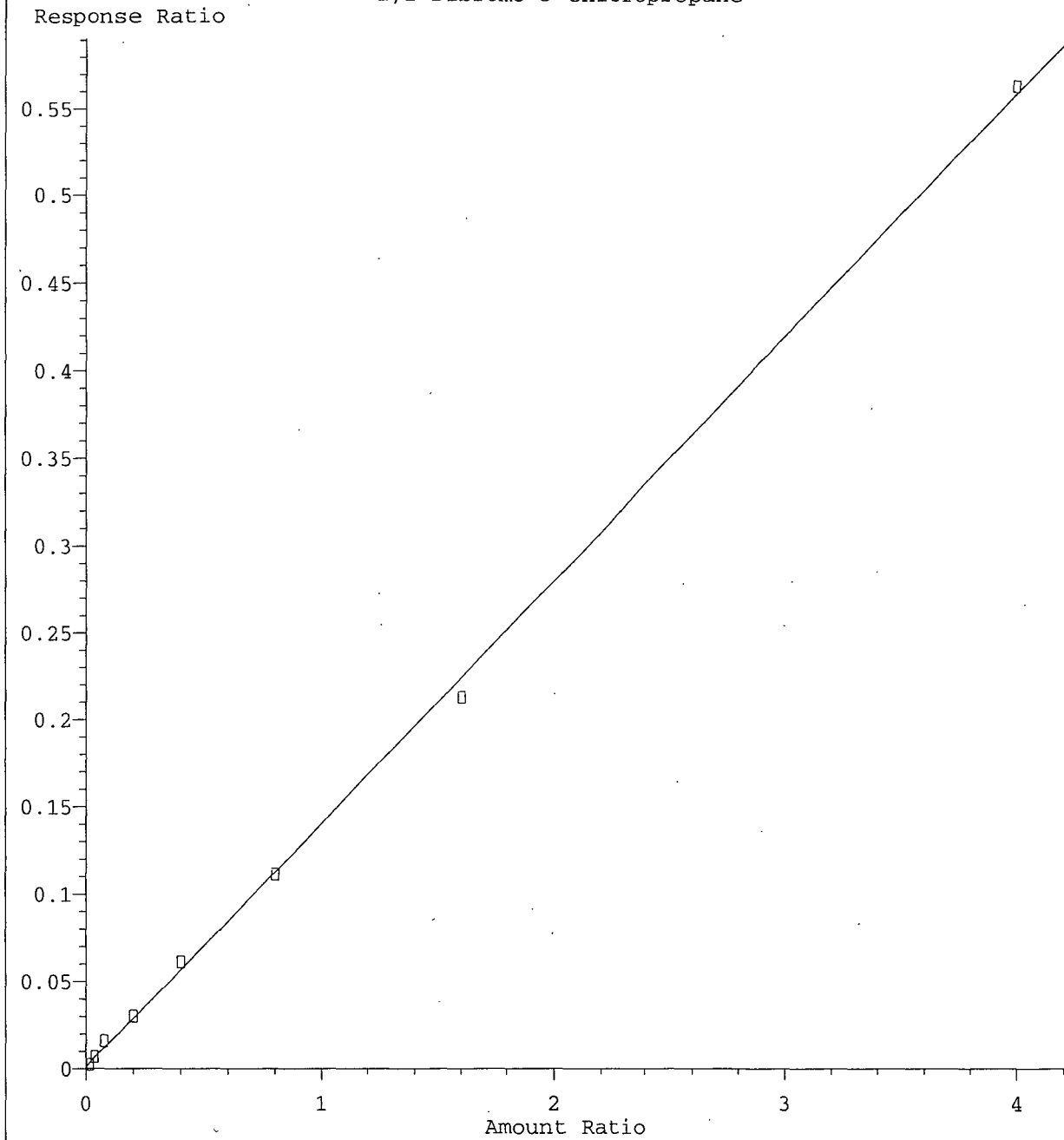
Response Ratio



Resp Ratio = 1.80e+000 \* Amt - 9.11e-002  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

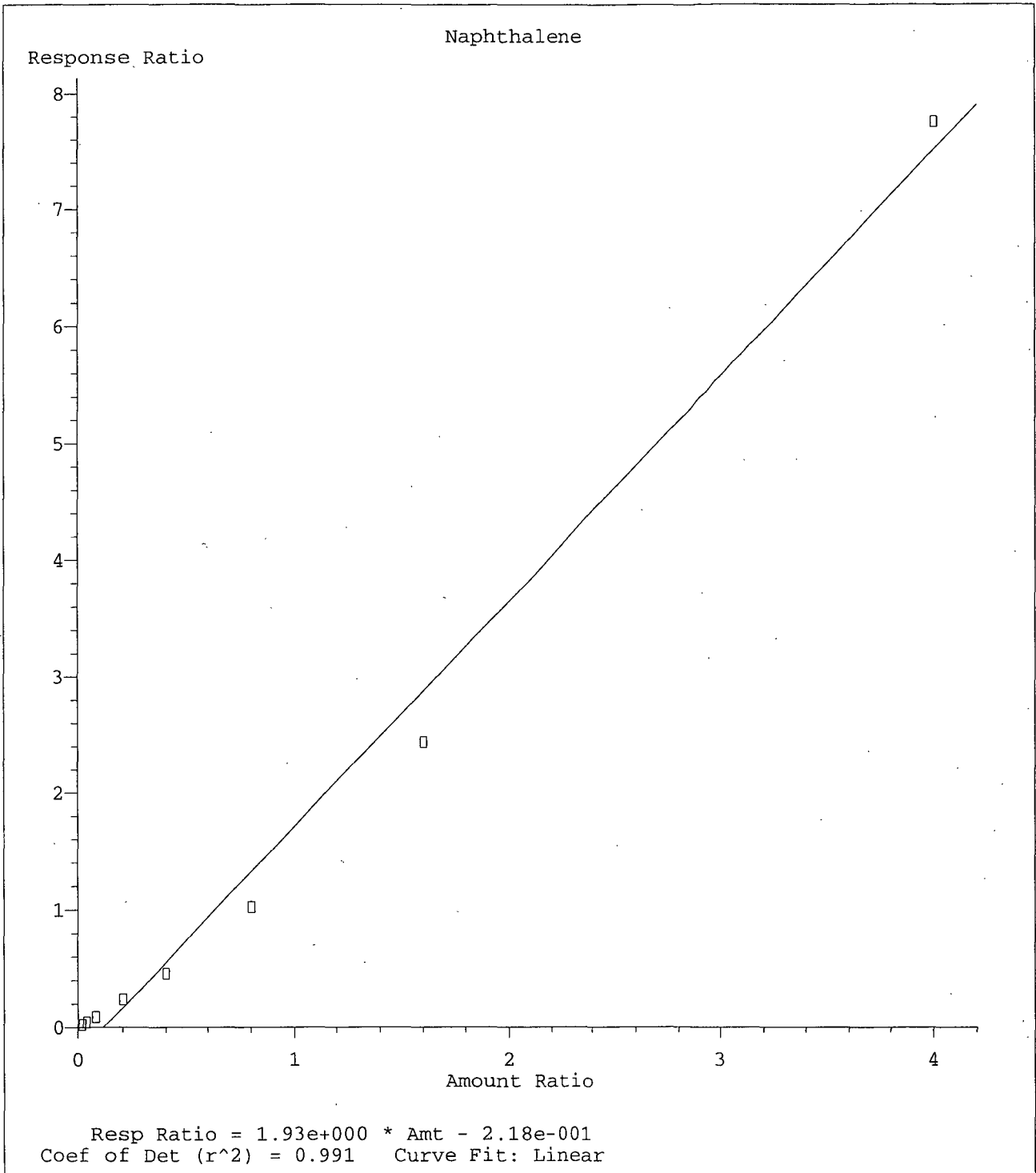
Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

1,2-Dibromo-3-chloropropane



Resp Ratio = 1.40e-001 \* Amt + 9.17e-004  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018



Method Name: M:\LOKI\DATA\181220\L1220W.M  
Calibration Table Last Updated: Fri Dec 21 08:47:47 2018

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Initial Cal. Date: 12/20/18  
Data File: 1220L13.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Dichlorodifluoromethane	0.3184	0.3773	19	TM
2	TM	Freon 114	0.3608	0.3456	4.2	TM
3	TM**	Chloromethane	0.5354	0.6281	17	TM**
4	TM*	Vinyl chloride	0.4591	0.5263	15	TM*
5	TM	Bromomethane	0.4516	0.5206	15	TM
6	TM	Chloroethane	0.3054	0.3242	6.1	TM
7	TM	Dichlorofluoromethane	0.7551	0.7216	4.4	TM
8	TM	Trichlorofluoromethane	0.5859	0.6464	10	TM
9	TM	Acrolein	0.0306	0.0318	4.2	TM
10	TML	Acetone	0.2317	0.1634	30	TML 3.6
11	TML	Freon-113	0.3483	0.3130	10	TML 2.2
12	TM*L	1,1-DCE	0.1628	0.1536	5.6	TM*L 4.6
13	TML	t-Butanol	0.0456	0.0409	10	TML 4.8
14	TM	Acetonitrile	0.0728	0.0647	11	TM
15	TML	Methyl Acetate	0.5509	0.4629	16	TML 3.8
16	TML	Iodomethane	0.1266	0.1430	13	TML 8.8
17	TML	Acrylonitrile	0.2073	0.1607	22	TML 4.2
18	TM	Methylene chloride	0.4686	0.4914	4.9	TM
19	TM	Carbon disulfide	1.159	1.119	3.5	TM
20	TM	Methyl t-butyl ether (MtBE)	1.046	0.9863	5.7	TM
21	TM	Trans-1,2-DCE	0.2654	0.2974	12	TM
22	TM	Diisopropyl Ether	1.141	1.070	6.2	TM
23	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3814	0.3302	13	TM**
24	TM**	1,1-DCA	0.7244	0.7931	9.5	TM**
25	TM	Vinyl Acetate	0.4376	0.3983	9.0	TM
26	TM	Ethyl tert Butyl Ether	0.8225	0.7837	4.7	TM
27	TML	MEK (2-Butanone)	0.2104	0.1744	17	TML 4.2
28	TM	Cis-1,2-DCE	0.3578	0.4033	13	TM
29	TM	2,2-Dichloropropane	0.4996	0.5304	6.2	TM
30	TM	2-Methylpentane	0.2048	0.1912	6.7	TM
31	TM	3-Methylpentane	0.6891	0.6632	3.8	TM
32	TM*	Chloroform	0.6394	0.7303	14	TM*
33	TML	Bromochloromethane	0.0981	0.0997	1.6	TML 17
34	TM	1,1,1-TCA	0.1927	0.2145	11	TM
35	TML	Cyclohexane	0.2562	0.2140	16	TML 8.8
36	TM	1,1-Dichloropropene	0.3315	0.3838	16	TM
37	TM	2,2,4-Trimethylpentane	0.6623	0.5960	10	TM
38	TM	Carbon Tetrachloride	0.4613	0.5013	8.7	TM
39	TM	Tert Amyl Methyl Ether	0.6961	0.6662	4.3	TM
40	TM	Methylcyclopentane	0.5415	0.5034	7.0	TM

Average

10.4



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Cal. Date: 12/20/18  
Data File: 1220L13.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	1,2-DCA	0.4695	0.5427	16	TM	
42	TM	Benzene	1.171	1.406	20	TM	
43	TM	TCE	0.1515	0.1761	16	TM	
44	TM	2-Pentanone	0.2445	0.2438	0.29	TM	
45	TM*	1,2-Dichloropropane	0.3441	0.3896	13	TM*	
46	TM	Bromodichloromethane	0.2459	0.2724	11	TM	
47	TM	Methyl Cyclohexane	0.3094	0.3031	2.0	TM	
48	TM	Dibromomethane	0.2664	0.2838	6.5	TM	
49	TML	2-Chloroethyl vinyl ether	0.0604	0.0475	21	TML	1.7
50	TML	MIBK (methyl isobutyl ketone)	0.2971	0.3272	10	TML	2.2
51	TM	1-Bromo-2-chloroethane	0.2649	0.2532	4.4	TM	
52	TM	Cis-1,3-Dichloropropene	0.4523	0.5068	12	TM	
53	TM*L	Toluene	0.6407	0.7905	23	TM*L	.11
54	TM	Trans-1,3-Dichloropropene	0.4350	0.4973	14	TM	
55	TM	1,1,2-TCA	0.3040	0.3231	6.3	TM	
56	TM	2-Hexanone	0.1868	0.1960	4.9	TM	
57	TM	1,2-EDB	0.1824	0.2063	13	TM	
58	TM	Tetrachloroethene	0.2051	0.2456	20	TM	
59	TM	1-Chlorohexane	0.2603	0.2682	3.0	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.3615	0.4074	13	TM	
61	TML	m&p-Xylene	0.4650	0.5403	16	TML	0.09
62	TM	o-Xylene	0.2381	0.2487	4.5	TM	
63	TML	Styrene	0.3844	0.4319	12	TML	3.0
64	TM	1,3-Dichloropropane	0.5018	0.5537	10	TM	
65	TML	Dibromochloromethane	0.3872	0.4353	12	TML	16
66	TM**	Chlorobenzene	0.8396	0.9456	13	TM**	
67	TM*L	Ethylbenzene	0.6391	0.7409	16	TM*L	3.0
68	TM**	Bromoform	0.3090	0.3311	7.2	TM**	
69	TM	Isopropylbenzene	1.626	1.793	10	TM	
70	TM**	1,1,2,2-Tetrachloroethane	0.9110	0.9508	4.4	TM**	
71	TM	1,2,3-Trichloropropane	0.1749	0.1801	3.0	TM	
72	TM	t-1,4-Dichloro-2-Butene	0.1605	0.1535	4.3	TM	
73	TM	Bromobenzene	0.3599	0.4145	15	TM	
74	TM	n-Propylbenzene	1.326	1.441	8.7	TM	
75	TM	4-Ethyltoluene	1.779	1.728	2.9	TM	
76	TM	2-Chlorotoluene	0.8230	0.9859	20	TM	
77	TML	1,3,5-Trimethylbenzene	0.9266	1.079	16	TML	3.1
78	TML	4-Chlorotoluene	0.8426	1.054	25	TML	13
79	TM	Tert-Butylbenzene	1.221	1.335	9.4	TM	
80	TML	1,2,4-Trimethylbenzene	1.409	1.625	15	TML	2.7

Average

11.3

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: Loki  
Cal. Date: 12/20/18  
Data File: 1220L13.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Sec-Butylbenzene	1.821	2.055	13	TM
82	TM	p-Isopropyltoluene	1.029	1.172	14	TM
83	TM	Benzyl Chloride	0.8675	0.0206	98	TM
84	TM	1,3-DCB	0.6915	0.8016	16	TM
85	TM	1,4-DCB	1.303	1.435	10	TM
86	TM	n-Butylbenzene	1.410	1.476	4.7	TM
87	TM	1,2-DCB	1.179	1.219	3.3	TM
88	TM	Hexachloroethane	0.4864	0.4299	12	TM
89	TML	1,2-Dibromo-3-chloropropane	0.1504	0.1538	2.3	TML 8.6
90	TM	1,2,4-Trichlorobenzene	0.6615	0.6743	1.9	TM
91	TM	Hexachlorobutadiene	0.3959	0.4433	12	TM
92	TML	Naphthalene	1.296	1.342	3.6	TML 2.4
93	TM	1,2,3-Trichlorobenzene	0.4047	0.4045	0.06	TM
94						
95						
96						
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120		Average			14.7	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L13.D  
 Acq On : 20 Dec 18 16:50  
 Sample : SS 10ug/L VOC STD 12/20/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:47 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	256384	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	278464	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	165824	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	176985	24.6257	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.504%	
40) 1,2-DCA-D4(S)	4.07	65	198814	23.8933	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.572%	
61) Toluene-D8(S)	6.70	98	556078	25.3886	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.556%	
69) 4-Bromofluorobenzene(S)	9.65	95	195828	26.2947	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.180%	
Target Compounds						
2) Dichlorodifluoromethane	0.68	85	38696	11.8506	ppb	Qvalue 96
3) Freon 114	0.74	85	35443	9.5798	ppb	93
4) Chloromethane	0.76	50	64416	11.7311	ppb	96
5) Vinyl chloride	0.81	62	53973	11.4636	ppb	95
6) Bromomethane	0.96	94	53386	11.5273	ppb	95
7) Chloroethane	1.01	64	33244	10.6137	ppb	97
8) Dichlorofluoromethane	1.12	67	74002	9.5557	ppb	99
9) Trichlorofluoromethane	1.15	101	66292	11.0335	ppb	99
10) Acrolein	1.38	56	40808	130.2076	ppb	# 94
11) Acetone	1.48	43	16753	9.6430	ppb	96
12) Freon-113	1.45	101	32096	9.7792	ppb	98
13) 1,1-DCE	1.44	63	15757	10.4625	ppb	93
14) t-Butanol	1.90	59	52426	118.9492	ppb	96
15) Acetonitrile	1.66	41	82893	110.9691	ppb	91
16) Methyl Acetate	1.79	43	47467	9.6185	ppb	# 99
17) Iodomethane	1.52	142	14665	9.1204	ppb	97
18) Acrylonitrile	1.95	52	16482	9.5844	ppb	91
19) Methylene chloride	1.76	84	50390	10.4854	ppb	97
20) Carbon disulfide	1.56	76	114777	9.6531	ppb	97
21) Methyl t-butyl ether (MtBE)	1.99	73	101146	9.4288	ppb	96
22) Trans-1,2-DCE	1.97	96	30504	11.2071	ppb	99
23) Diisopropyl Ether	2.45	45	109753	9.3826	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	33867	8.6579	ppb	93
25) 1,1-DCA	2.32	63	81338	10.9493	ppb	99
26) Vinyl Acetate	2.42	43	40844	9.1014	ppb	99
27) Ethyl tert Butyl Ether	2.83	59	80376	9.5290	ppb	100
28) MEK (2-Butanone)	3.00	43	17884	9.5763	ppb	100
29) Cis-1,2-DCE	2.93	96	41365	11.2721	ppb	96
30) 2,2-Dichloropropane	2.91	77	54395	10.6170	ppb	95
31) 2-Methylpentane	1.79	71	19606	9.3350	ppb	# 93
32) 3-Methylpentane	1.97	57	68011	9.6234	ppb	93
33) Chloroform	3.36	83	74897	11.4216	ppb	98
34) Bromochloromethane	3.21	128	10224	11.6506	ppb	98
36) 1,1,1-TCA	3.56	97	22000	11.1343	ppb	96
37) Cyclohexane	3.62	41	21942	9.1198	ppb	94
38) 1,1-Dichloropropene	3.82	75	39359	11.5771	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	61127	8.9992	ppb	100
41) Carbon Tetrachloride	3.81	117	51407	10.8667	ppb	99
42) Tert Amyl Methyl Ether	4.44	73	68319	9.5699	ppb	# 88

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L13.D  
 Acq On : 20 Dec 18 16:50  
 Sample : SS 10ug/L VOC STD 12/20/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:47 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	51624	9.2953	ppb	# 95
44) 1,2-DCA	4.19	62	55658	11.5600	ppb	94
45) Benzene	4.13	78	144168	12.0042	ppb	97
46) TCE	5.13	130	18064	11.6231	ppb	96
47) 2-Pentanone	5.48	43	312518	124.6355	ppb	99
48) 1,2-Dichloropropane	5.41	63	39950	11.3199	ppb	99
49) Bromodichloromethane	5.82	83	27936	11.0760	ppb	98
50) Methyl Cyclohexane	5.35	83	31089	9.7991	ppb	95
51) Dibromomethane	5.56	93	29105	10.6542	ppb	100
52) 2-Chloroethyl vinyl ether	6.30	43	4870	10.1734	ppb	93
53) MIBK (methyl isobutyl ket	6.65	43	33559	10.2217	ppb	98
54) 1-Bromo-2-chloroethane	6.16	63	25968	9.5605	ppb	99
55) Cis-1,3-Dichloropropene	6.40	75	51979	11.2068	ppb	98
56) Toluene	6.77	91	81064	11.1352	ppb	100
57) Trans-1,3-Dichloropropene	7.10	75	50999	11.4328	ppb	96
58) 1,1,2-TCA	7.28	83	33140	10.6303	ppb	95
59) 2-Hexanone	7.64	43	20098	10.4913	ppb	# 87
62) 1,2-EDB	7.79	107	22976	11.3115	ppb	98
63) Tetrachloroethene	7.40	166	27360	11.9734	ppb	97
64) 1-Chlorohexane	8.42	91	29872	10.3036	ppb	87
65) 1,1,1,2-Tetrachloroethane	8.48	131	45382	11.2691	ppb	94
66) m&p-Xylene	8.67	91	120368	19.9816	ppb	96
67) o-Xylene	9.09	106	27704	10.4472	ppb	90
68) Styrene	9.11	104	48104	9.6979	ppb	97
70) 1,3-Dichloropropane	7.46	76	61678	11.0358	ppb	97
71) Dibromochloromethane	7.70	129	48491	11.6258	ppb	97
72) Chlorobenzene	8.37	112	105326	11.2620	ppb	95
73) Ethylbenzene	8.53	91	82520	10.2987	ppb	97
74) Bromoform	9.27	173	36885	10.7162	ppb	97
76) Isopropylbenzene	9.51	105	118944	11.0298	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.86	83	63069	10.4376	ppb	97
78) 1,2,3-Trichloropropane	9.87	110	11945	10.2952	ppb	98
79) t-1,4-Dichloro-2-Butene	9.92	53	10183	9.5655	ppb	83
80) Bromobenzene	9.78	156	27496	11.5192	ppb	96
81) n-Propylbenzene	9.96	91	95608	10.8734	ppb	98
82) 4-Ethyltoluene	10.09	105	114613	9.7128	ppb	97
83) 2-Chlorotoluene	10.01	91	65395	11.9791	ppb	99
84) 1,3,5-Trimethylbenzene	10.16	105	71600	10.3082	ppb	95
85) 4-Chlorotoluene	10.14	91	69911	11.2654	ppb	99
86) Tert-Butylbenzene	10.50	119	88577	10.9376	ppb	96
87) 1,2,4-Trimethylbenzene	10.55	105	107765	10.2686	ppb	99
88) Sec-Butylbenzene	10.73	105	136287	11.2832	ppb	97
89) p-Isopropyltoluene	10.91	119	77760	11.3938	ppb	99
90) Benzyl Chloride	11.08	91	1365	0.2372	ppb	# 91
91) 1,3-DCB	10.81	146	53168	11.5910	ppb	97
92) 1,4-DCB	10.91	146	95161	11.0088	ppb	98
93) n-Butylbenzene	11.34	91	97884	10.4692	ppb	96
94) 1,2-DCB	11.30	146	80835	10.3329	ppb	97
95) Hexachloroethane	11.56	117	28515	8.8378	ppb	93
96) 1,2-Dibromo-3-chloropropan	12.13	75	10203	10.8584	ppb	# 85
97) 1,2,4-Trichlorobenzene	13.02	180	44724	10.1924	ppb	98
98) Hexachlorobutadiene	13.23	225	29407	11.1979	ppb	98
99) Naphthalene	13.26	128	89021	9.7573	ppb	95
100) 1,2,3-Trichlorobenzene	13.53	180	26832	9.9945	ppb	98

Quantitation Report

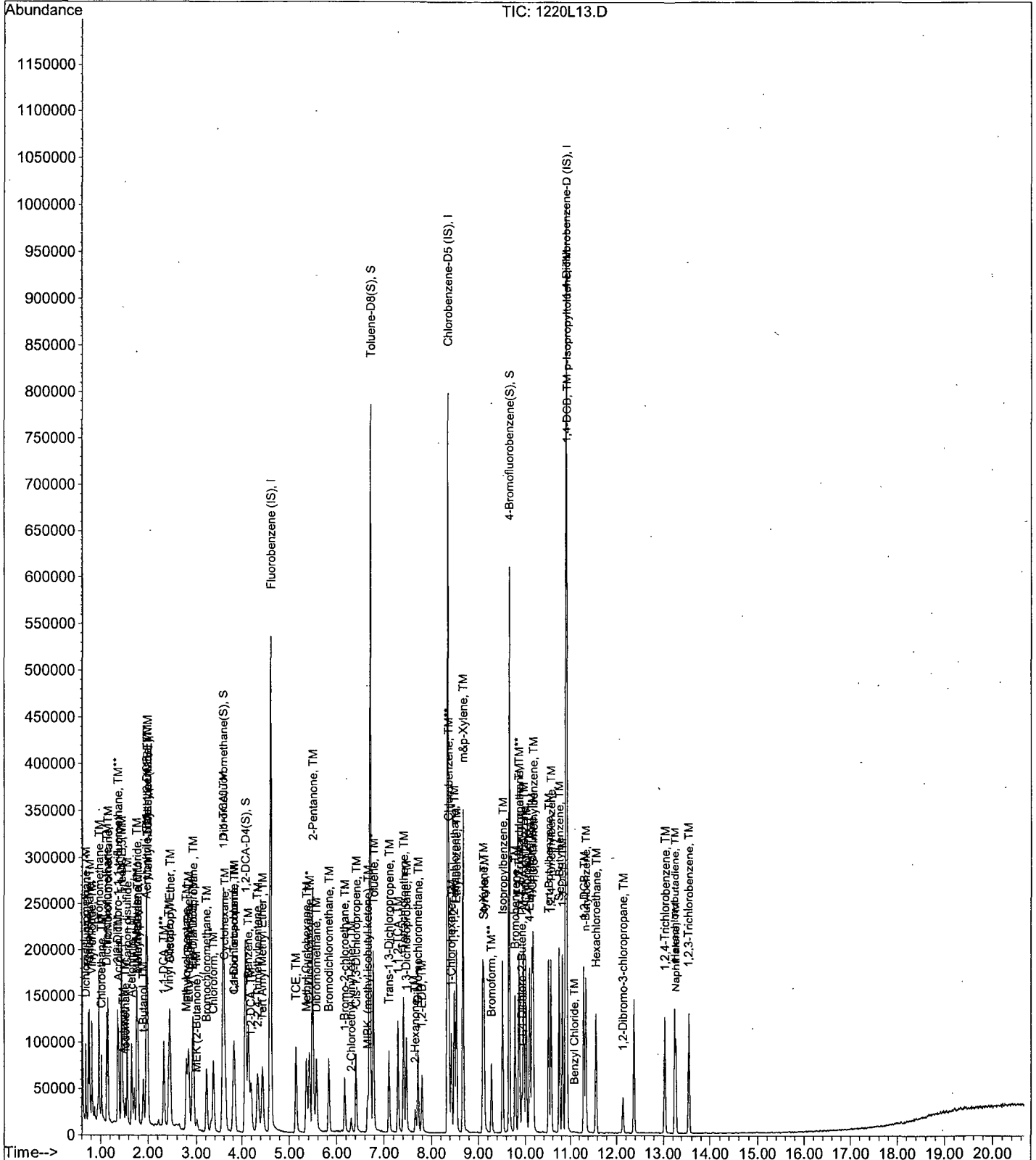
Data File : M:\LOKI\DATA\181220\1220L13.D  
 Acq On : 20 Dec 18 ,16:50  
 Sample : SS 10ug/L VOC STD 12/20/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:47 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/21/18  
Instrument: Loki  
Initial Cal. Date: 12/20/18  
Data File: 1220L37.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TM	Dichlorodifluoromethane	0.3184	0.3656	15	TM
3	TM	Freon 114	0.3608	0.3542	1.8	TM
4	TM**	Chloromethane	0.5354	0.5704	6.5	TM**
5	TM*	Vinyl chloride	0.4591	0.4444	3.2	TM*
6	TM	Bromomethane	0.4516	0.4763	5.5	TM
7	TM	Chloroethane	0.3054	0.3066	0.39	TM
8	TM	Dichlorofluoromethane	0.7551	0.7855	4.0	TM
9	TM	Trichlorofluoromethane	0.5859	0.6488	11	TM
10	TM	Acrolein	0.0306	0.0325	6.3	TM
11	TML	Acetone	0.2317	0.1479	36	TML 15
12	TML	Freon-113	0.3483	0.3633	4.3	TML 15
13	TM*L	1,1-DCE	0.1628	0.1365	16	TM*L 8.2
14	TML	t-Butanol	0.0456	0.0360	21	TML 17
15	TM	Acetonitrile	0.0728	0.0632	13	TM
16	TML	Methyl Acetate	0.5509	0.4356	21	TML 10
17	TML	Iodomethane	0.1266	0.1042	18	TML 26
18	TML	Acrylonitrile	0.2073	0.1877	9.4	TML 15
19	TM	Methylene chloride	0.4686	0.4562	2.7	TM
20	TM	Carbon disulfide	1.159	1.207	4.1	TM
21	TM	Methyl t-butyl ether (MtBE)	1.046	1.027	1.8	TM
22	TM	Trans-1,2-DCE	0.2654	0.2674	0.75	TM
23	TM	Diisopropyl Ether	1.141	1.178	3.3	TM
24	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.3814	0.3873	1.6	TM**
25	TM**	1,1-DCA	0.7244	0.7527	3.9	TM**
26	TM	Vinyl Acetate	0.4376	0.4427	1.2	TM
27	TM	Ethyl tert Butyl Ether	0.8225	0.8867	7.8	TM
28	TML	MEK (2-Butanone)	0.2104	0.1635	22	TML 11
29	TM	Cis-1,2-DCE	0.3578	0.3646	1.9	TM
30	TM	2,2-Dichloropropane	0.4996	0.4082	18	TM
31	TM	2-Methylpentane	0.2048	0.1807	12	TM
32	TM	3-Methylpentane	0.6891	0.6560	4.8	TM
33	TM*	Chloroform	0.6394	0.7199	13	TM*
34	TML	Bromochloromethane	0.0981	0.0978	0.26	TML 14
35	S	Dibromofluoromethane(S)	0.7008	0.6901	1.5	S
36	TM	1,1,1-TCA	0.1927	0.2087	8.3	TM
37	TML	Cyclohexane	0.2562	0.2525	1.4	TML 7.7
38	TM	1,1-Dichloropropene	0.3315	0.3456	4.2	TM
39	TM	2,2,4-Trimethylpentane	0.6623	0.5941	10	TM
40	S	1,2-DCA-D4(S)	0.8114	0.7929	2.3	S

Average

8.2

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/21/18  
Instrument: Loki  
Cal. Date: 12/20/18  
Data File: 1220L37.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	Carbon Tetrachloride	0.4613	0.4950	7.3	TM	
42	TM	Tert Amyl Methyl Ether	0.6961	0.6967	0.09	TM	
43	TM	Methylcyclopentane	0.5415	0.5591	3.2	TM	
44	TM	1,2-DCA	0.4695	0.5157	9.9	TM	
45	TM	Benzene	1.171	1.246	6.4	TM	
46	TM	TCE	0.1515	0.1623	7.1	TM	
47	TM	2-Pentanone	0.2445	0.2285	6.6	TM	
48	TM*	1,2-Dichloropropane	0.3441	0.3661	6.4	TM*	
49	TM	Bromodichloromethane	0.2459	0.2656	8.0	TM	
50	TM	Methyl Cyclohexane	0.3094	0.3236	4.6	TM	
51	TM	Dibromomethane	0.2664	0.2842	6.7	TM	
52	TML	2-Chloroethyl vinyl ether	0.0604	0.0509	16	TML	8.7
53	TML	MIBK (methyl isobutyl ketone)	0.2971	0.2945	0.85	TML	8.3
54	TM	1-Bromo-2-chloroethane	0.2649	0.2909	9.8	TM	
55	TM	Cis-1,3-Dichloropropene	0.4523	0.4504	0.42	TM	
56	TM*L	Toluene	0.6407	0.7237	13	TM*L	2.3
57	TM	Trans-1,3-Dichloropropene	0.4350	0.4547	4.5	TM	
58	TM	1,1,2-TCA	0.3040	0.3460	14	TM	
59	TM	2-Hexanone	0.1868	0.1701	8.9	TM	
60	I	Chlorobenzene-D5 (IS)	ISTD			I	
61	S	Toluene-D8(S)	1.966	1.947	0.98	S	
62	TM	1,2-EDB	0.1824	0.1988	9.0	TM	
63	TM	Tetrachloroethene	0.2051	0.2176	6.1	TM	
64	TM	1-Chlorohexane	0.2603	0.2823	8.5	TM	
65	TM	1,1,1,2-Tetrachloroethane	0.3615	0.4142	15	TM	
66	TML	m&p-Xylene	0.4650	0.5047	8.5	TML	5.7
67	TM	o-Xylene	0.2381	0.2431	2.1	TM	
68	TML	Styrene	0.3844	0.3984	3.6	TML	9.0
69	S	4-Bromofluorobenzene(S)	0.6686	0.6886	3.0	S	
70	TM	1,3-Dichloropropane	0.5018	0.5294	5.5	TM	
71	TML	Dibromochloromethane	0.3872	0.4283	11	TML	14
72	TM**	Chlorobenzene	0.8396	0.9084	8.2	TM**	
73	TM*L	Ethylbenzene	0.6391	0.6803	6.4	TM*L	4.4
74	TM**	Bromoform	0.3090	0.3302	6.8	TM**	
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
76	TM	Isopropylbenzene	1.626	1.633	0.44	TM	
77	TM**	1,1,2,2-Tetrachloroethane	0.9110	0.9121	0.12	TM**	
78	TM	1,2,3-Trichloropropane	0.1749	0.1628	7.0	TM	
79	TM	t-1,4-Dichloro-2-Butene	0.1605	0.1460	9.0	TM	
80	TM	Bromobenzene	0.3599	0.4044	12	TM	

Average

6.8

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 12/21/18  
Instrument: Loki  
Cal. Date: 12/20/18  
Data File: 1220L37.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	n-Propylbenzene	1.326	1.289	2.8	TM
82	TM	4-Ethyltoluene	1.779	1.834	3.1	TM
83	TM	2-Chlorotoluene	0.8230	0.8830	7.3	TM
84	TML	1,3,5-Trimethylbenzene	0.9266	1.014	9.4	TML 2.8
85	TML	4-Chlorotoluene	0.8426	0.9464	12	TML 1.5
86	TM	Tert-Butylbenzene	1.221	1.240	1.6	TM
87	TML	1,2,4-Trimethylbenzene	1.409	1.414	0.34	TML 9.0
88	TM	Sec-Butylbenzene	1.821	1.892	3.9	TM
89	TM	p-Isopropyltoluene	1.029	1.137	10	TM
90	TM	Benzyl Chloride	0.8675	0.5991	31	TM
91	TM	1,3-DCB	0.6915	0.7814	13	TM
92	TM	1,4-DCB	1.303	1.365	4.8	TM
93	TM	n-Butylbenzene	1.410	1.335	5.3	TM
94	TM	1,2-DCB	1.179	1.202	1.9	TM
95	TM	Hexachloroethane	0.4864	0.5048	3.8	TM
96	TML	1,2-Dibromo-3-chloropropane	0.1504	0.1413	6.1	TML 0.42
97	TM	1,2,4-Trichlorobenzene	0.6615	0.6445	2.6	TM
98	TM	Hexachlorobutadiene	0.3959	0.3904	1.4	TM
99	TML	Naphthalene	1.296	1.147	12	TML 13
100	TM	1,2,3-Trichlorobenzene	0.4047	0.3521	13	TM
101						
102						
103						
104						
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107						
108						
109						
110						
111						
112						
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115						
116						
117						
118						
119						
120						

Average

7.3



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L37.D  
 Acq On : 21 Dec 18 4:15  
 Sample : Ending CCV 10ug/L 12/20/18  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:57 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.60	96	248256	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	263168	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	156736	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	171329	24.6193	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.476%	
40) 1,2-DCA-D4(S)	4.07	65	196842	24.4308	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.724%	
61) Toluene-D8(S)	6.70	98	512401	24.7542	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.016%	
69) 4-Bromofluorobenzene(S)	9.65	95	181225	25.7482	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.992%	
Target Compounds						
2) Dichlorodifluoromethane	0.68	85	36307	11.4830	ppb	Qvalue 94
3) Freon 114	0.74	85	35169	9.8169	ppb	90
4) Chloromethane	0.76	50	56640	10.6527	ppb	100
5) Vinyl chloride	0.81	62	44126	9.6790	ppb	98
6) Bromomethane	0.96	94	47293	10.5461	ppb	97
7) Chloroethane	1.02	64	30447	10.0389	ppb	97
8) Dichlorofluoromethane	1.12	67	78005	10.4024	ppb	98
9) Trichlorofluoromethane	1.15	101	64432	11.0751	ppb	100
10) Acrolein	1.38	56	40312	132.8362	ppb	# 88
11) Acetone	1.48	43	14690	8.4827	ppb	# 86
12) Freon-113	1.45	101	36073	11.5056	ppb	98
13) 1,1-DCE	1.44	63	13553	9.1760	ppb	92
14) t-Butanol	1.90	59	44630	103.7831	ppb	94
15) Acetonitrile	1.66	41	78394	108.3823	ppb	91
16) Methyl Acetate	1.78	43	43252	8.9786	ppb	100
17) Iodomethane	1.52	142	10351	7.4060	ppb	93
18) Acrylonitrile	1.95	52	18642	11.5442	ppb	92
19) Methylene chloride	1.76	84	45299	9.7346	ppb	98
20) Carbon disulfide	1.56	76	119895	10.4137	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	101960	9.8158	ppb	97
22) Trans-1,2-DCE	1.96	96	26552	10.0745	ppb	98
23) Diisopropyl Ether	2.44	45	116983	10.3281	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	38464	10.1550	ppb	98
25) 1,1-DCA	2.32	63	74744	10.3911	ppb	98
26) Vinyl Acetate	2.42	43	43962	10.1170	ppb	97
27) Ethyl tert Butyl Ether	2.83	59	88055	10.7812	ppb	96
28) MEK (2-Butanone)	3.00	43	16239	8.9132	ppb	99
29) Cis-1,2-DCE	2.93	96	36203	10.1885	ppb	93
30) 2,2-Dichloropropane	2.91	77	40540	8.1718	ppb	98
31) 2-Methylpentane	1.79	71	17941	8.8219	ppb	92
32) 3-Methylpentane	1.97	57	65140	9.5189	ppb	# 96
33) Chloroform	3.36	83	71486	11.2583	ppb	100
34) Bromochloromethane	3.21	128	9716	11.4214	ppb	95
36) 1,1,1-TCA	3.56	97	20728	10.8340	ppb	99
37) Cyclohexane	3.62	41	25073	10.7711	ppb	87
38) 1,1-Dichloropropene	3.82	75	34317	10.4246	ppb	87
39) 2,2,4-Trimethylpentane	4.33	57	58992	8.9692	ppb	97
41) Carbon Tetrachloride	3.80	117	49153	10.7304	ppb	100
42) Tert Amyl Methyl Ether	4.44	73	69187	10.0088	ppb	97

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L37.D  
 Acq On : 21 Dec 18 4:15  
 Sample : Ending CCV 10ug/L 12/20/18  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:57 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	55524	10.3248	ppb	# 97
44) 1,2-DCA	4.19	62	51213	10.9850	ppb	96
45) Benzene	4.13	78	123775	10.6436	ppb	96
46) TCE	5.13	130	16113	10.7072	ppb	96
47) 2-Pentanone	5.48	43	283601	116.8061	ppb	100
48) 1,2-Dichloropropane	5.41	63	36350	10.6371	ppb	98
49) Bromodichloromethane	5.82	83	26376	10.7999	ppb	# 95
50) Methyl Cyclohexane	5.35	83	32130	10.4588	ppb	95
51) Dibromomethane	5.56	93	28219	10.6681	ppb	97
52) 2-Chloroethyl vinyl ether	6.29	43	5055	10.8729	ppb	92
53) MIBK (methyl isobutyl ket	6.65	43	29246	9.1675	ppb	91
54) 1-Bromo-2-chloroethane	6.16	63	28888	10.9837	ppb	98
55) Cis-1,3-Dichloropropene	6.40	75	44721	9.9576	ppb	97
56) Toluene	6.77	91	71864	10.2250	ppb	98
57) Trans-1,3-Dichloropropene	7.10	75	45149	10.4527	ppb	96
58) 1,1,2-TCA	7.28	83	34359	11.3822	ppb	89
59) 2-Hexanone	7.64	43	16895	9.1080	ppb	92
62) 1,2-EDB	7.79	107	20928	10.9021	ppb	99
63) Tetrachloroethene	7.40	166	22904	10.6059	ppb	97
64) 1-Chlorohexane	8.42	91	29717	10.8460	ppb	91
65) 1,1,1,2-Tetrachloroethane	8.48	131	43600	11.4558	ppb	95
66) m&p-Xylene	8.67	91	106261	18.8599	ppb	99
67) o-Xylene	9.09	106	25592	10.2117	ppb	95
68) Styrene	9.11	104	41936	9.0951	ppb	99
70) 1,3-Dichloropropane	7.46	76	55727	10.5506	ppb	100
71) Dibromochloromethane	7.70	129	45081	11.4224	ppb	97
72) Chlorobenzene	8.37	112	95624	10.8189	ppb	97
73) Ethylbenzene	8.53	91	71608	9.5573	ppb	98
74) Bromoform	9.27	173	34756	10.6845	ppb	98
76) Isopropylbenzene	9.51	105	102379	10.0441	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.85	83	57184	10.0124	ppb	97
78) 1,2,3-Trichloropropane	9.87	110	10204	9.3046	ppb	93
79) t-1,4-Dichloro-2-Butene	9.92	53	9154	9.0975	ppb	91
80) Bromobenzene	9.78	156	25352	11.2369	ppb	93
81) n-Propylbenzene	9.96	91	80808	9.7231	ppb	96
82) 4-Ethyltoluene	10.08	105	114983	10.3092	ppb	99
83) 2-Chlorotoluene	10.01	91	55356	10.7281	ppb	99
84) 1,3,5-Trimethylbenzene	10.16	105	63576	9.7152	ppb	95
85) 4-Chlorotoluene	10.13	91	59335	10.1490	ppb	98
86) Tert-Butylbenzene	10.50	119	77770	10.1600	ppb	97
87) 1,2,4-Trimethylbenzene	10.55	105	88666	9.1022	ppb	99
88) Sec-Butylbenzene	10.73	105	118623	10.3902	ppb	99
89) p-Isopropyltoluene	10.90	119	71256	11.0462	ppb	96
90) Benzyl Chloride	11.07	91	37558	6.9060	ppb	91
91) 1,3-DCB	10.81	146	48992	11.2999	ppb	97
92) 1,4-DCB	10.91	146	85604	10.4774	ppb	97
93) n-Butylbenzene	11.34	91	83713	9.4727	ppb	95
94) 1,2-DCB	11.29	146	75357	10.1912	ppb	99
95) Hexachloroethane	11.56	117	31649	10.3779	ppb	88
96) 1,2-Dibromo-3-chloropropan	12.13	75	8856	9.9579	ppb	# 72
97) 1,2,4-Trichlorobenzene	13.01	180	40407	9.7425	ppb	94
98) Hexachlorobutadiene	13.23	225	24476	9.8607	ppb	95
99) Naphthalene	13.26	128	71883	8.7459	ppb	98
100) 1,2,3-Trichlorobenzene	13.52	180	22072	8.6982	ppb	98

Quantitation Report

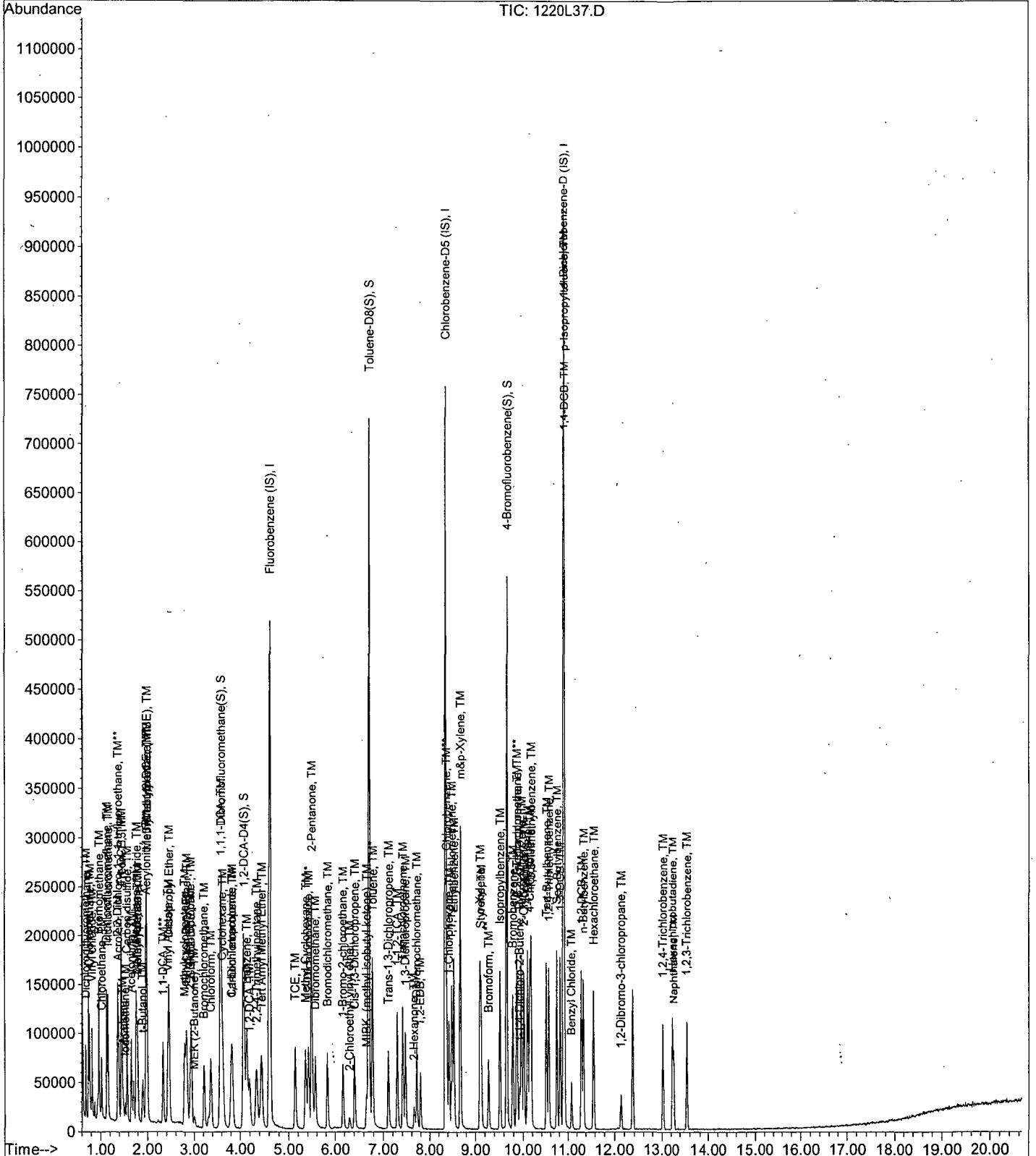
Data File : M:\LOKI\DATA\181220\1220L37.D  
Acq On : 21 Dec 18 4:15  
Sample : Ending CCV 10ug/L 12/20/18  
Misc : IS&S 11/8/18

Vial: 37  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:57 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

**APPL, INC.**

Data File : M:\LOKI\DATA\181218\1219L35.D Vial: 34  
 Acq On : 20 Dec 18 2:09 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84057W08 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 21 14:18 2018 Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	239360	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	260736	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	117128	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	182538	29.3975	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	117.588%
40) 1,2-DCA-D4(S)	4.07	65	197930	27.9318	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	111.728%
61) Toluene-D8(S)	6.70	98	496120	24.5597	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	98.240%
69) 4-Bromofluorobenzene(S)	9.65	95	154425	21.9521	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	87.808%

Target Compounds Qvalue

Quantitation Report

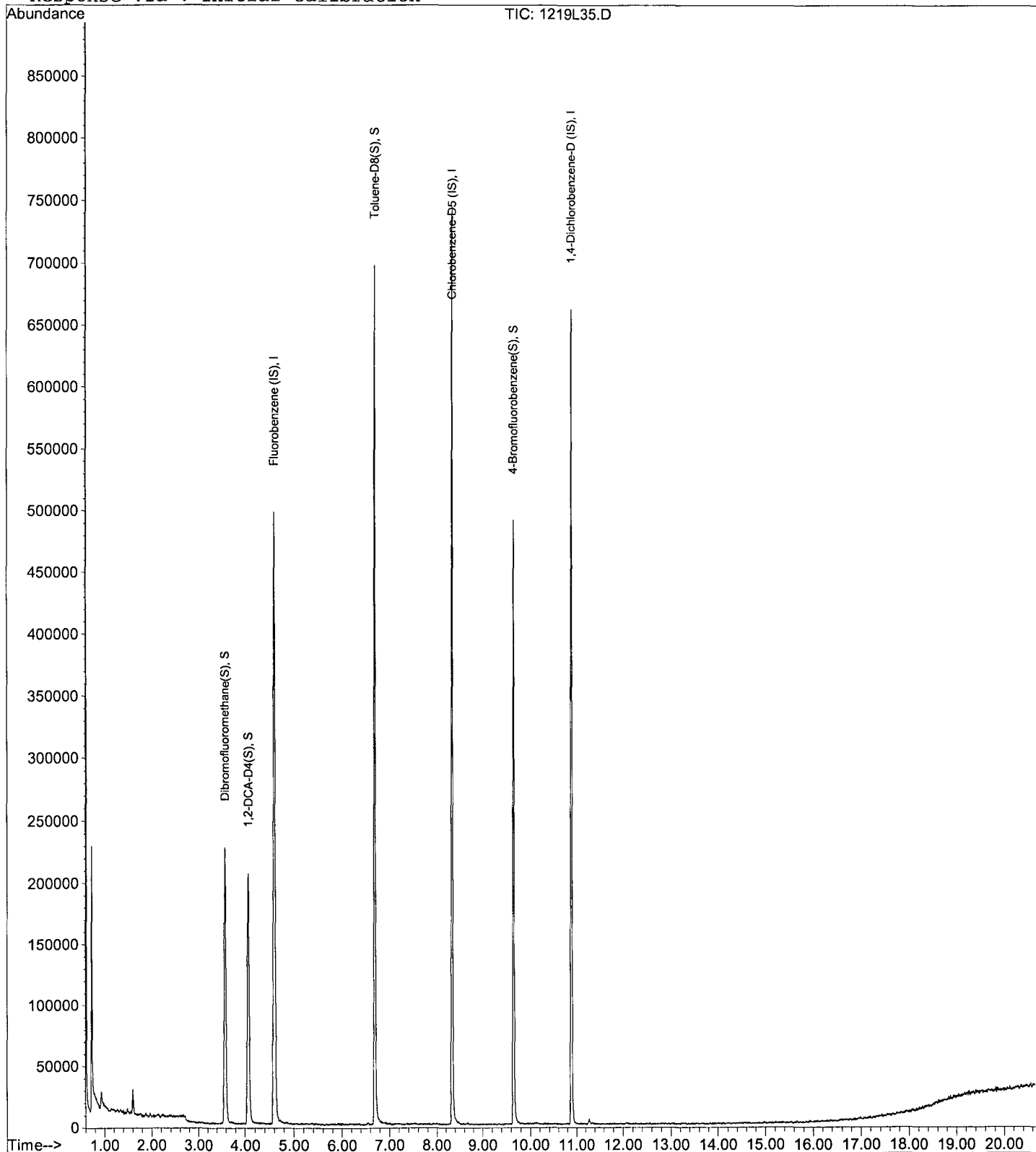
Data File : M:\LOKI\DATA\181218\1219L35.D  
Acq On : 20 Dec 18 2:09  
Sample : AZ84057W08  
Misc : IS&S 11/8/18

Vial: 34  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:18 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1219L36.D Vial: 35  
 Acq On : 20 Dec 18 2:37 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84058W03 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 21 14:18 2018 Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	223808	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	252544	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	117864	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	168516	29.0251	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	116.100%
40) 1,2-DCA-D4(S)	4.07	65	188366	28.4293	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	113.716%
61) Toluene-D8(S)	6.70	98	471703	24.1084	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	96.432%
69) 4-Bromofluorobenzene(S)	9.65	95	152467	22.3768	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	89.508%

Target Compounds Qvalue

Quantitation Report

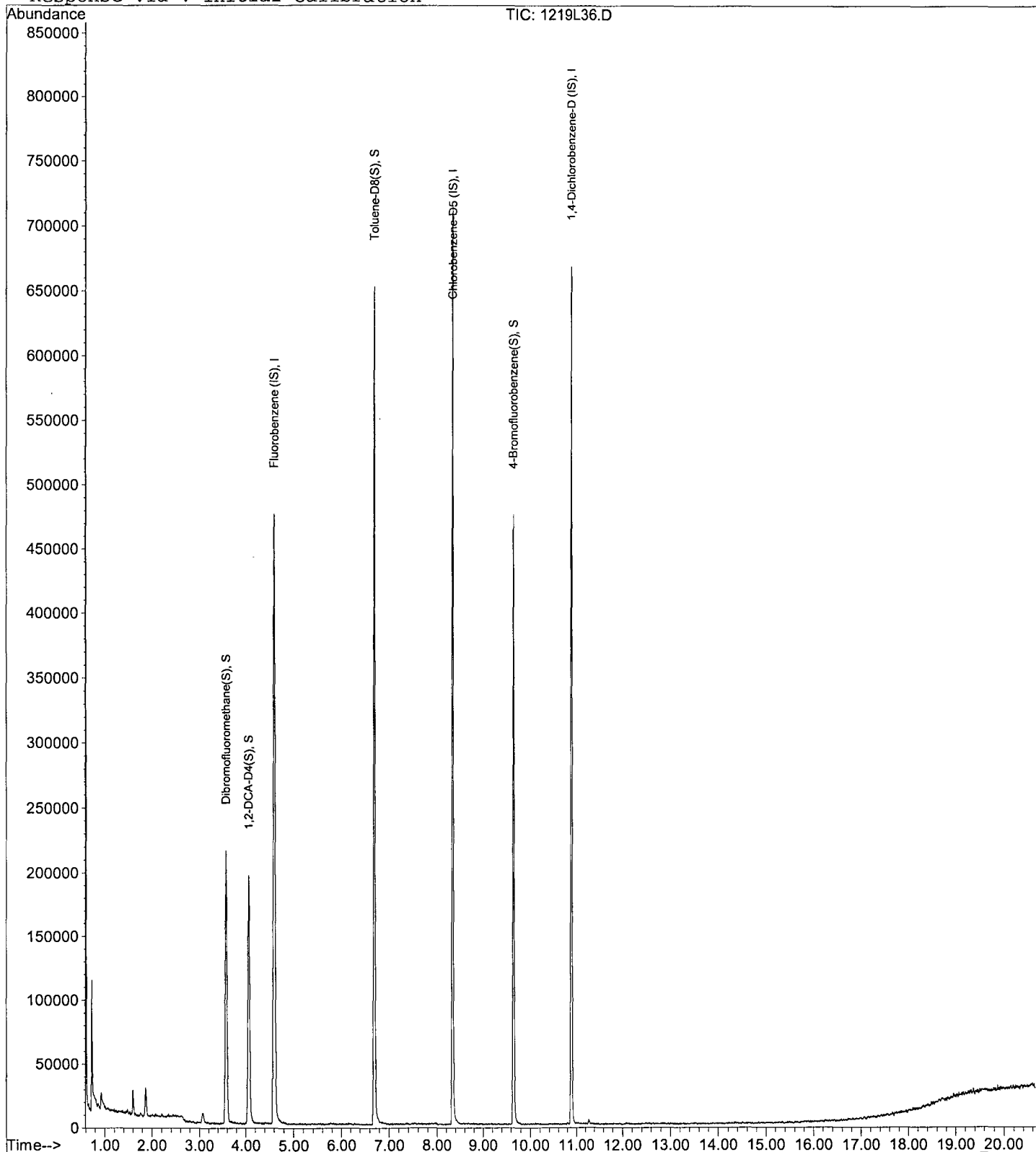
Data File : M:\LOKI\DATA\181218\1219L36.D  
Acq On : 20 Dec 18 2:37  
Sample : AZ84058W03  
Misc : IS&S 11/8/18

Vial: 35  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:18 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1217L16.D Vial: 15  
 Acq On : 17 Dec 18 16:43 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ84059W02 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 11:48 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	274688	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	289984	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	154176	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.64	111	180772	25.6556	ppb	0.00
Spiked Amount				25.000		
					Recovery = 102.624%	
40) 1,2-DCA-D4(S)	4.14	65	204853	25.3857	ppb	0.00
Spiked Amount				25.000		
					Recovery = 101.544%	
61) Toluene-D8(S)	6.74	98	552796	23.7218	ppb	0.00
Spiked Amount				25.000		
					Recovery = 94.888%	
69) 4-Bromofluorobenzene(S)	9.68	95	180457	21.4251	ppb	0.00
Spiked Amount				25.000		
					Recovery = 85.700%	

Target Compounds Qvalue

Quantitation Report

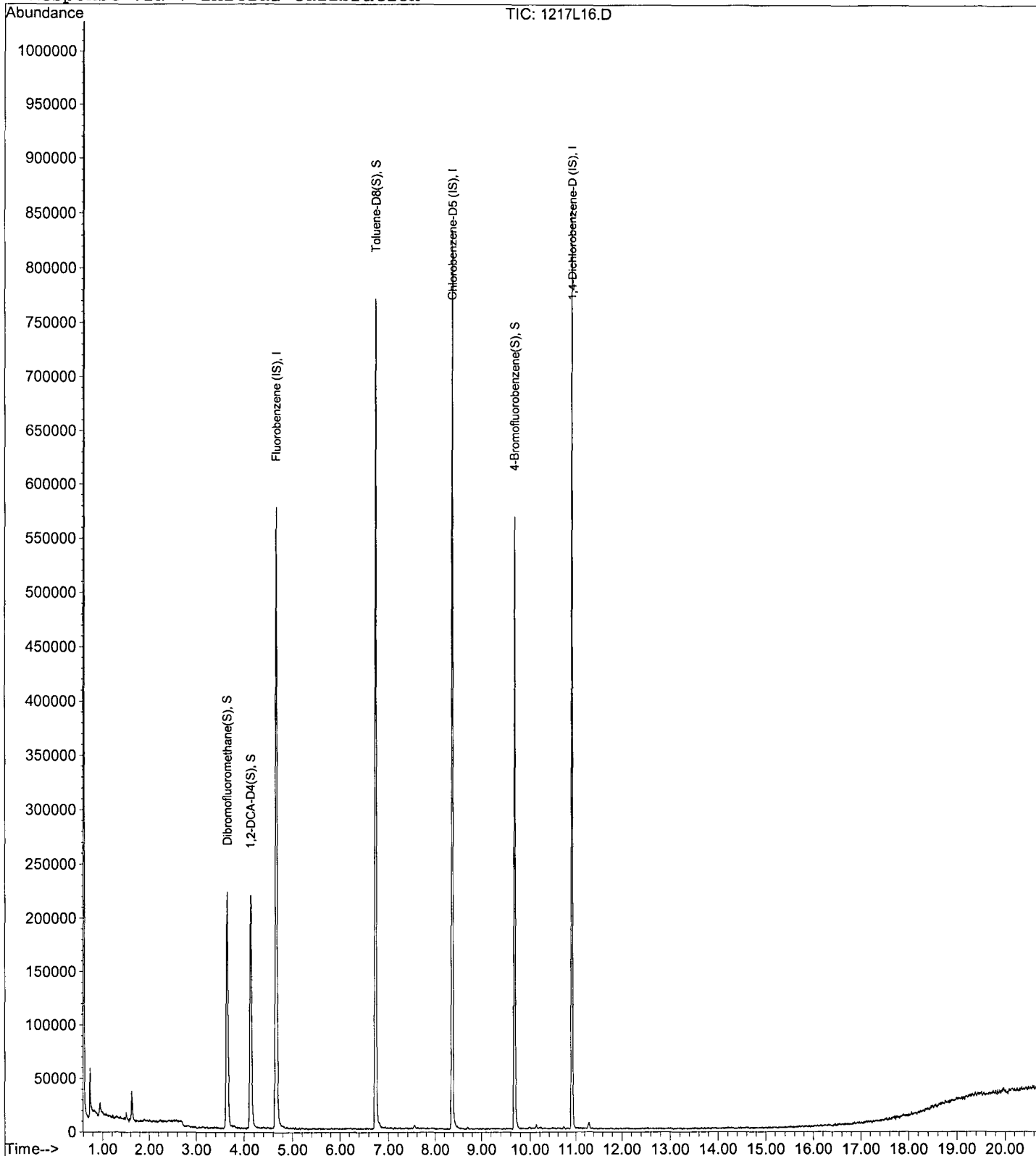
Data File : M:\LOKI\DATA\181213\1217L16.D  
Acq On : 17 Dec 18 16:43  
Sample : AZ84059W02  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 11:48 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L17.D Vial: 16  
 Acq On : 17 Dec 18 17:12 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84060W02 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 11:49 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	264384	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	282304	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	140096	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	180387	26.5987	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	106.396%
40) 1,2-DCA-D4(S)	4.14	65	204362	26.3118	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	105.248%
61) Toluene-D8(S)	6.74	98	547864	24.1497	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	96.600%
69) 4-Bromofluorobenzene(S)	9.68	95	181476	22.1322	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	88.528%

Target Compounds Qvalue

Quantitation Report

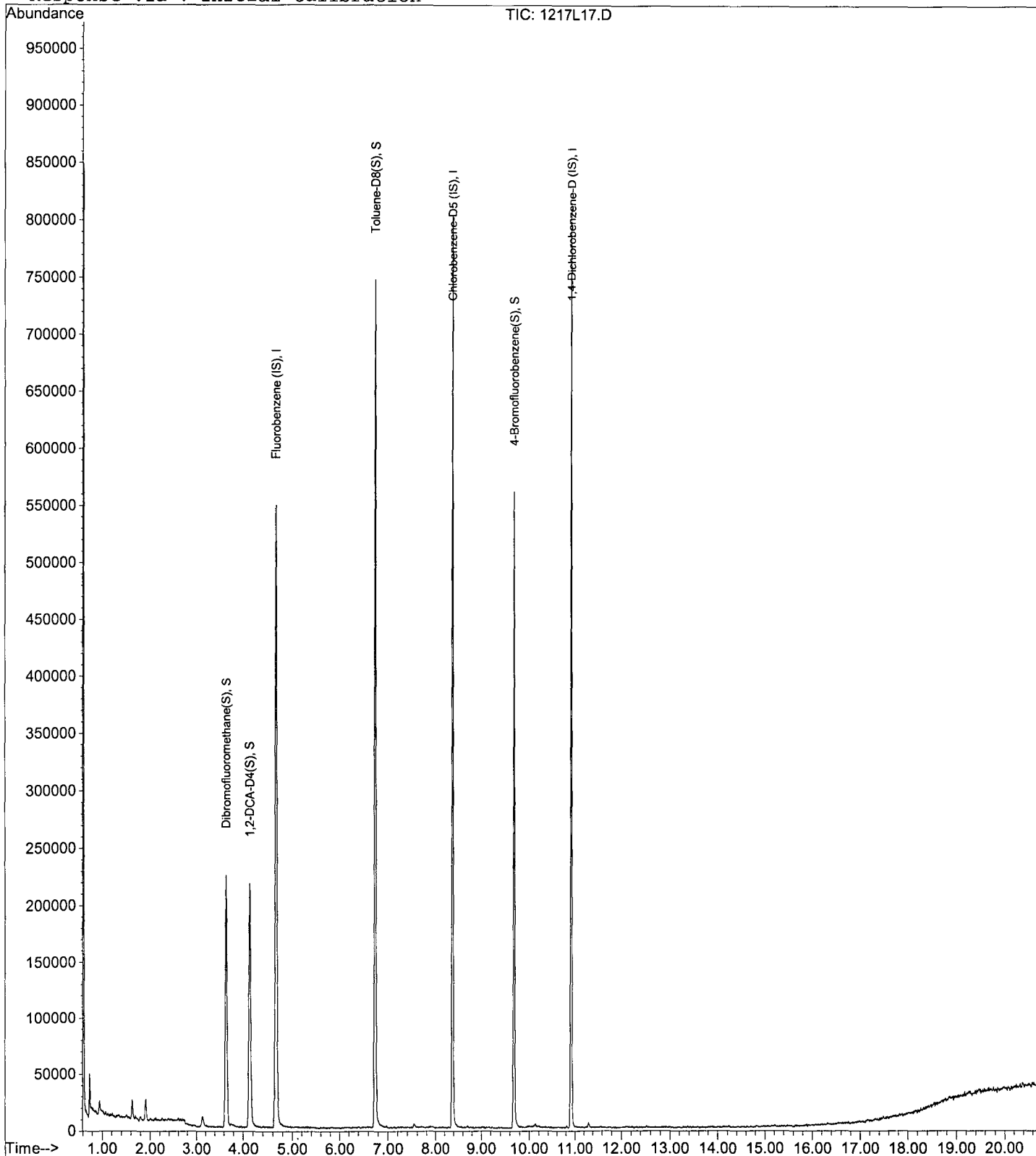
Data File : M:\LOKI\DATA\181213\1217L17.D  
Acq On : 17 Dec 18 17:12  
Sample : AZ84060W02  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 11:49 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L18.D  
 Acq On : 17 Dec 18 17:40  
 Sample : AZ84061W07  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 11:50 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	240128	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	264704	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	127480	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.64	111	171809	27.8929	ppb	0.00
Spiked Amount				25.000		
					Recovery =	111.572%
40) 1,2-DCA-D4(S)	4.14	65	191406	27.1331	ppb	0.00
Spiked Amount				25.000		
					Recovery =	108.532%
61) Toluene-D8(S)	6.74	98	511682	24.0545	ppb	0.00
Spiked Amount				25.000		
					Recovery =	96.216%
69) 4-Bromofluorobenzene(S)	9.68	95	163530	21.2696	ppb	0.00
Spiked Amount				25.000		
					Recovery =	85.080%

Target Compounds

Qvalue

Quantitation Report

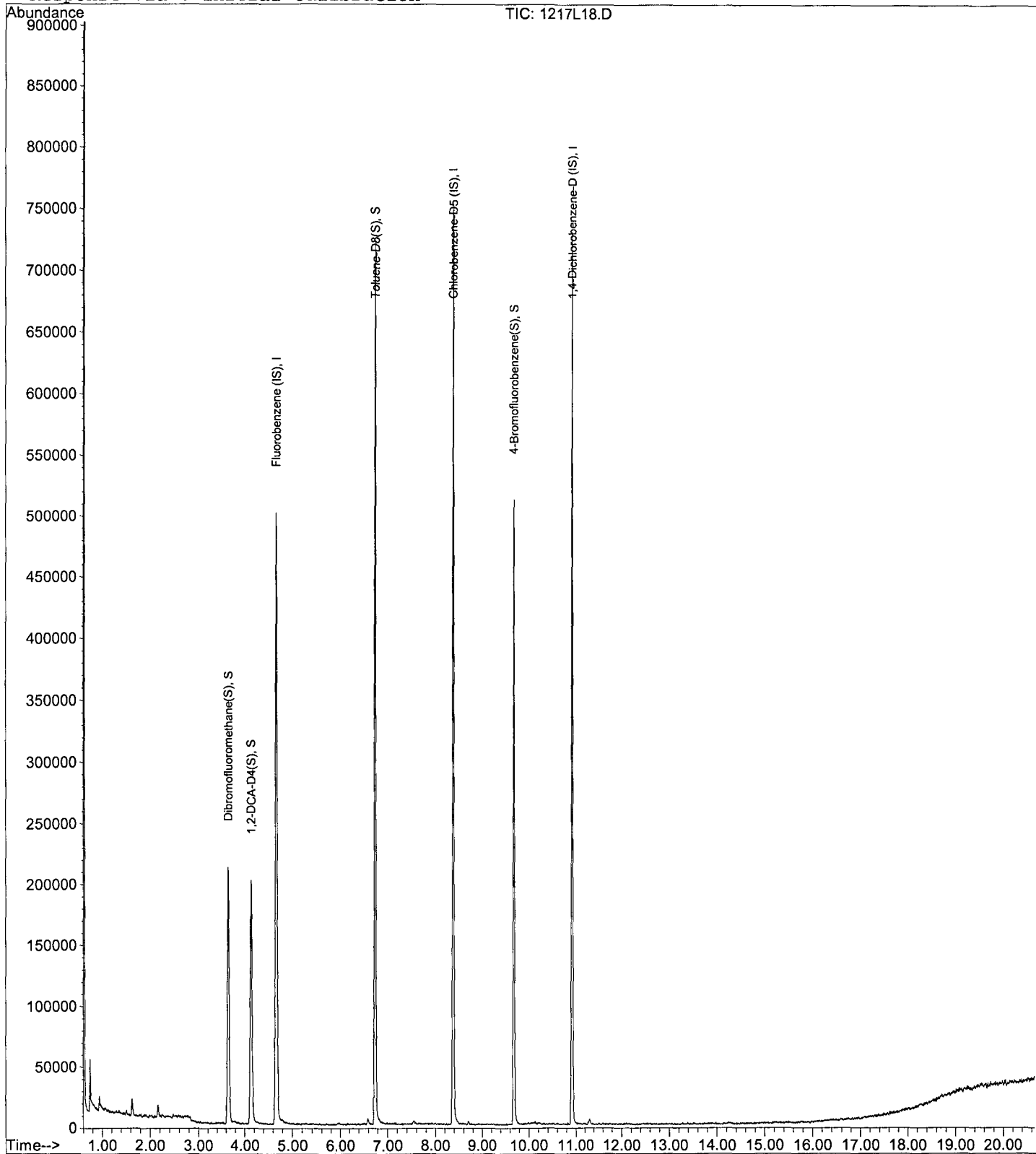
Data File : M:\LOKI\DATA\181213\1217L18.D  
Acq On : 17 Dec 18 17:40  
Sample : AZ84061W07  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 11:50 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181220\1220L22.D Vial: 22  
 Acq On : 20 Dec 18 21:07 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84062W03 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 21 14:09 2018 Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	225024	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	243776	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	111872	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	173829	27.5573	ppb	0.00
Spiked Amount 25.000						
					Recovery =	110.228%
40) 1,2-DCA-D4(S)	4.07	65	191347	26.2007	ppb	0.00
Spiked Amount 25.000						
					Recovery =	104.804%
61) Toluene-D8(S)	6.70	98	465448	24.2746	ppb	0.00
Spiked Amount 25.000						
					Recovery =	97.100%
69) 4-Bromofluorobenzene(S)	9.65	95	150411	23.0702	ppb	0.00
Spiked Amount 25.000						
					Recovery =	92.280%

Target Compounds Qvalue

Quantitation Report

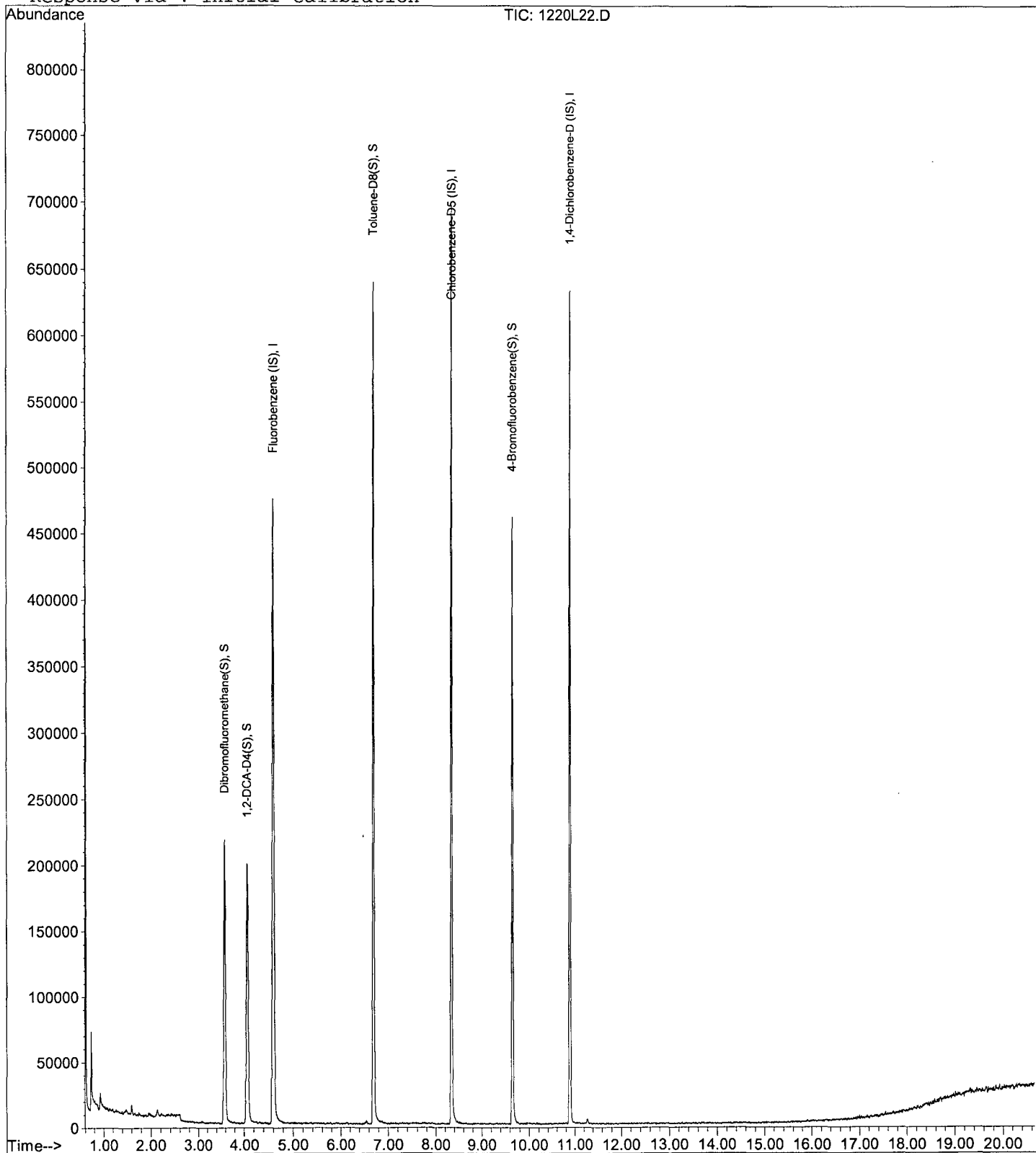
Data File : M:\LOKI\DATA\181220\1220L22.D  
Acq On : 20 Dec 18 21:07  
Sample : AZ84062W03  
Misc : IS&S 11/8/18

Vial: 22  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:09 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1217L11.D  
 Acq On : 17 Dec 18 14:20  
 Sample : 181217A blk  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 11:45 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	269888	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	291904	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	147328	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	186131	26.8859	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	107.544%
40) 1,2-DCA-D4(S)	4.14	65	211556	26.6826	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	106.732%
61) Toluene-D8(S)	6.74	98	569073	24.2596	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	97.040%
69) 4-Bromofluorobenzene(S)	9.68	95	190702	22.4925	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	89.968%

Target Compounds Qvalue

Quantitation Report

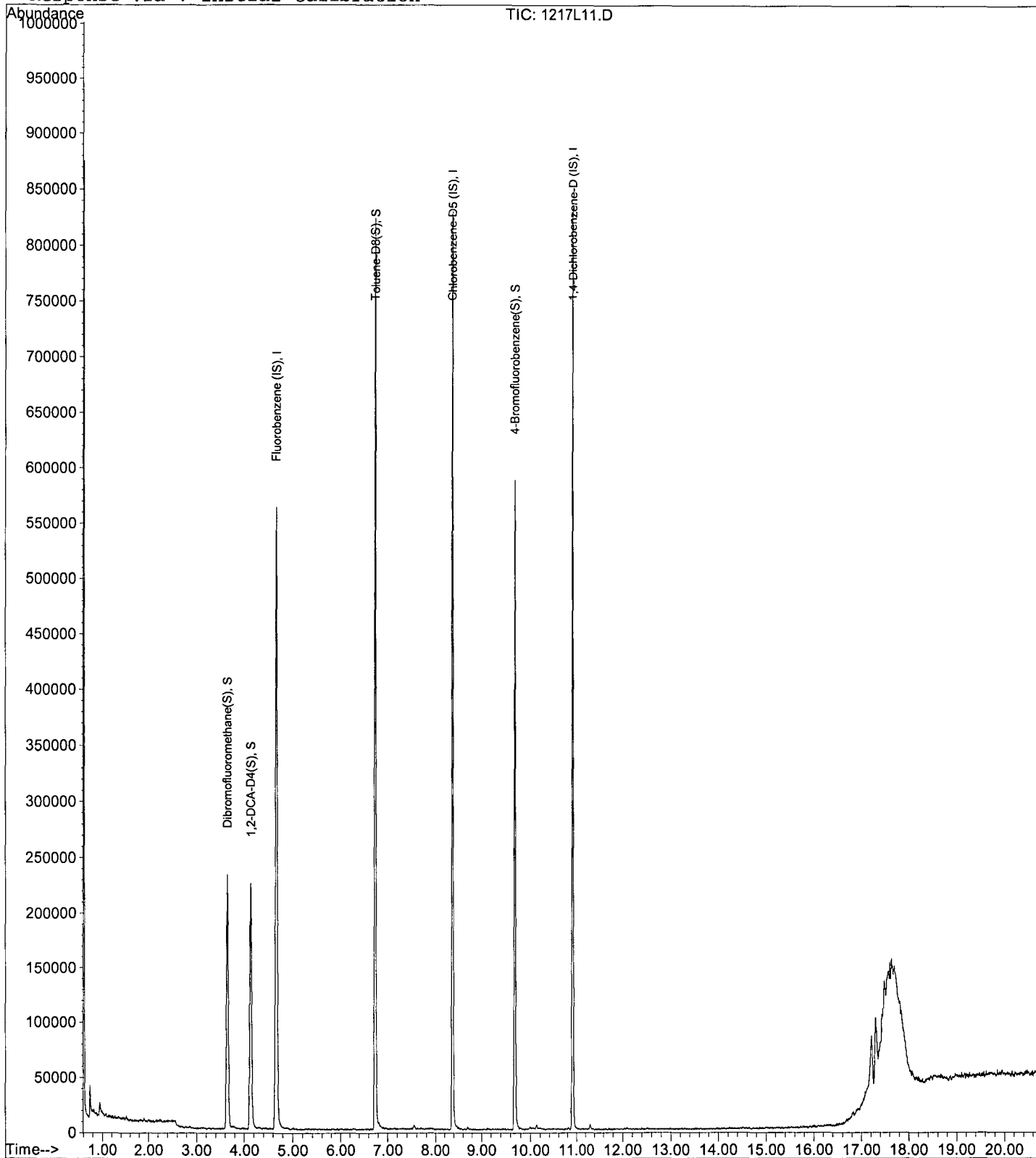
Data File : M:\LOKI\DATA\181213\1217L11.D  
Acq On : 17 Dec 18 14:20  
Sample : 181217A blk  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 11:45 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1219L34.D  
 Acq On : 20 Dec 18 1:40  
 Sample : 181219B Blk  
 Misc : IS&S 11/8/18

Vial: 33  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:17 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	244160	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	264000	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	120680	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	172454	27.2275	ppb	0.00
Spiked Amount				25.000		
					Recovery = 108.908%	
40) 1,2-DCA-D4(S)	4.07	65	193181	26.7257	ppb	0.00
Spiked Amount				25.000		
					Recovery = 106.904%	
61) Toluene-D8(S)	6.70	98	504278	24.6549	ppb	0.00
Spiked Amount				25.000		
					Recovery = 98.620%	
69) 4-Bromofluorobenzene(S)	9.65	95	166215	23.3360	ppb	0.00
Spiked Amount				25.000		
					Recovery = 93.344%	

Target Compounds Qvalue

Quantitation Report

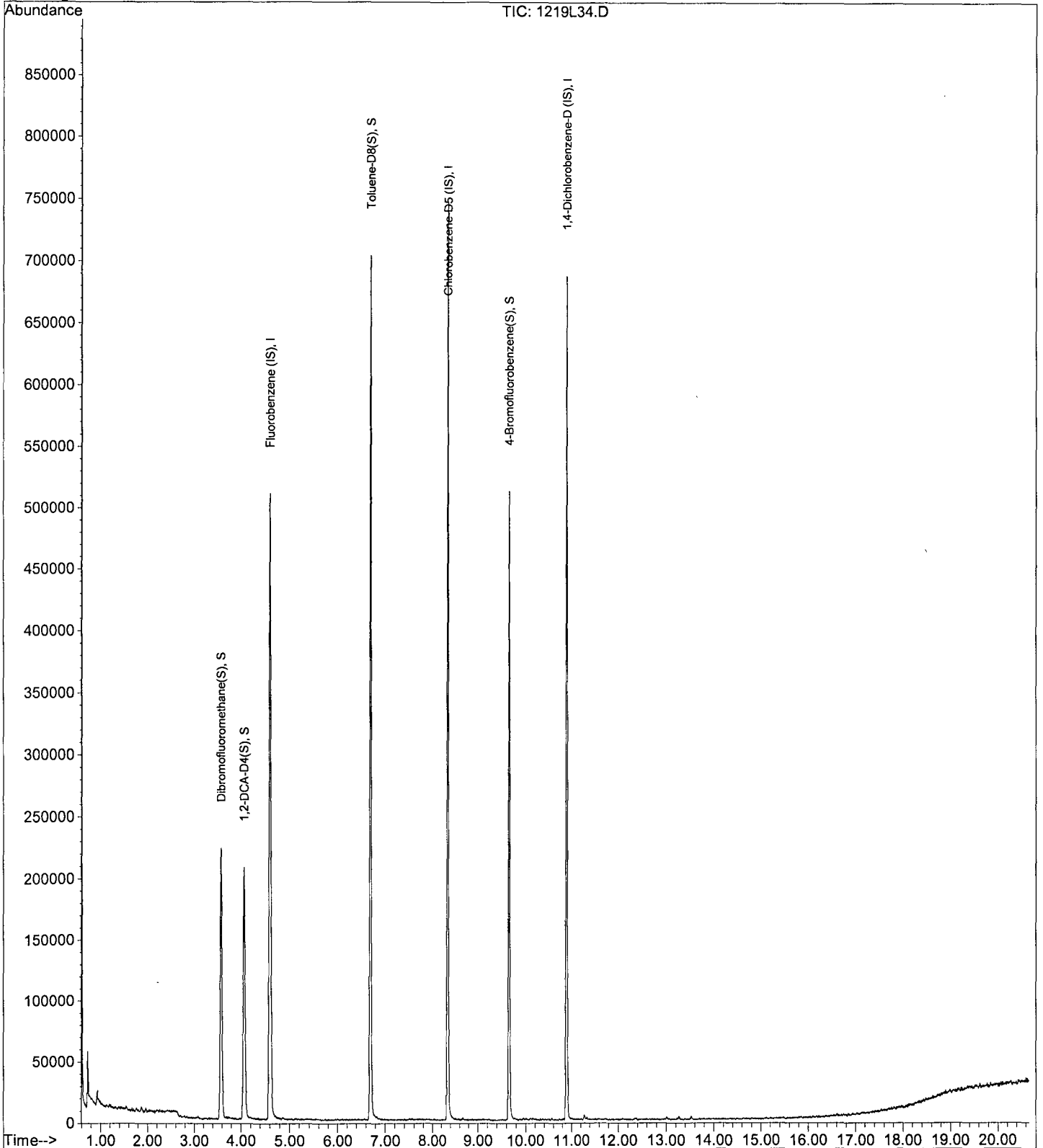
Data File : M:\LOKI\DATA\181218\1219L34.D  
Acq On : 20 Dec 18 1:40  
Sample : 181219B Blk  
Misc : IS&S 11/8/18

Vial: 33  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:17 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181220\1220L18.D  
 Acq On : 20 Dec 18 19:13  
 Sample : 181220A Blk  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 9:00 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	236480	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	251456	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	118112	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	177252	26.7387	ppb	0.00
Spiked Amount				25.000		
					Recovery =	106.956%
40) 1,2-DCA-D4(S)	4.07	65	196118	25.5530	ppb	0.00
Spiked Amount				25.000		
					Recovery =	102.212%
61) Toluene-D8(S)	6.70	98	491001	24.8252	ppb	0.00
Spiked Amount				25.000		
					Recovery =	99.300%
69) 4-Bromofluorobenzene(S)	9.65	95	154265	22.9387	ppb	0.00
Spiked Amount				25.000		
					Recovery =	91.756%

Target Compounds Qvalue

Quantitation Report

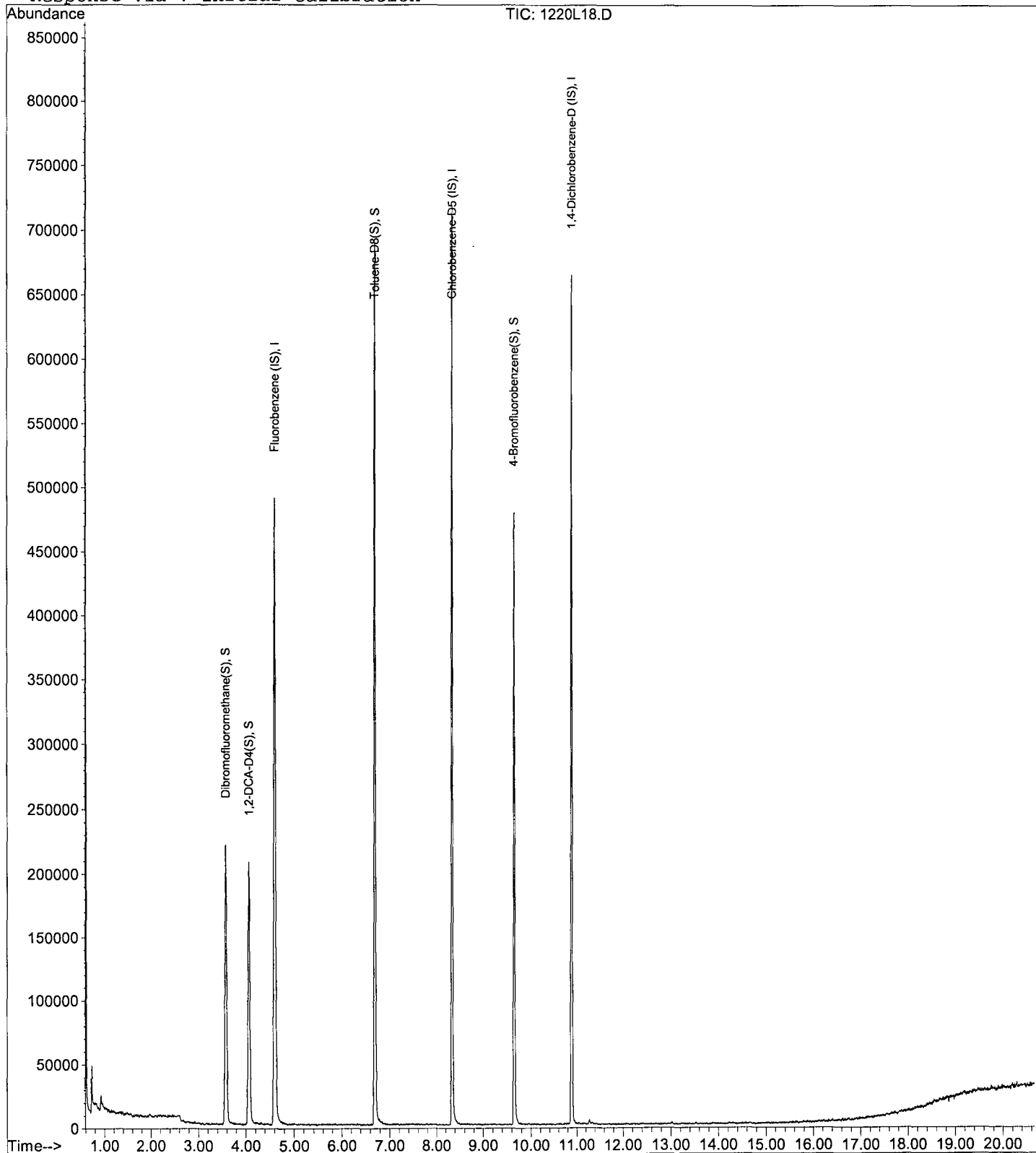
Data File : M:\LOKI\DATA\181220\1220L18.D  
Acq On : 20 Dec 18 19:13  
Sample : 181220A Blk  
Misc : IS&S 11/8/18

Vial: 18  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 9:00 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L05.D  
 Acq On : 17 Dec 18 11:29  
 Sample : 181217A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 12:34 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	297344	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	313600	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	180992	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
35) Dibromofluoromethane(S)	3.64	111	187474	24.579	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.316%	
40) 1,2-DCA-D4(S)	4.14	65	211923	24.261	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.044%	
61) Toluene-D8(S)	6.74	98	620289	24.614	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.456%	
69) 4-Bromofluorobenzene(S)	9.68	95	224487	24.645	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.580%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	18528	7.384	ppb	98
3) Freon 114	0.75	85	13472	6.151	ppb	93
4) Chloromethane	0.77	50	39992	7.971	ppb	93
5) Vinyl chloride	0.82	62	38932	8.584	ppb	93
6) Bromomethane	0.98	94	38167	10.193	ppb	98
7) Chloroethane	1.03	64	27855	9.079	ppb	100
8) Dichlorofluoromethane	1.14	67	64213	8.277	ppb	98
9) Trichlorofluoromethane	1.17	101	55006	8.964	ppb	99
10) Acrolein	1.41	56	24760	58.547	ppb #	100
11) Acetone	1.51	43	14578	7.723	ppb	90
12) Freon-113	1.48	101	23993	8.086	ppb	94
13) 1,1-DCE	1.46	63	14811	7.709	ppb	92
14) t-Butanol	1.93	59	50952	102.003	ppb	98
15) Acetonitrile	1.69	41	81147	111.637	ppb	95
16) Methyl Acetate	1.81	43	57631	9.815	ppb	100
17) Iodomethane	1.55	142	14735	6.784	ppb	98
18) Acrylonitrile	1.99	52	17208	10.373	ppb	97
19) Methylene chloride	1.79	84	44839	8.624	ppb	98
20) Carbon disulfide	1.59	76	90769	7.767	ppb	99
21) Methyl t-butyl ether (MtBE)	2.02	73	100936	8.990	ppb	98
22) Trans-1,2-DCE	2.00	96	39425	8.819	ppb	94
23) Diisopropyl Ether	2.49	45	112056	9.087	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	36558	9.365	ppb	92
25) 1,1-DCA	2.36	63	74771	8.578	ppb	97
26) Vinyl Acetate	2.46	43	38032	8.278	ppb	99
27) Ethyl tert Butyl Ether	2.89	59	88019	8.997	ppb	94
28) MEK (2-Butanone)	3.06	43	16798	8.647	ppb	99
29) Cis-1,2-DCE	2.98	96	19768	9.360	ppb	98
30) 2,2-Dichloropropane	2.97	77	55880	8.993	ppb	94
31) 2-Methylpentane	1.81	71	22710	9.851	ppb	88
32) 3-Methylpentane	2.01	57	71971	8.962	ppb #	94
33) Chloroform	3.42	83	72062	9.254	ppb	95
34) Bromochloromethane	3.27	128	22705	9.335	ppb	96
36) 1,1,1-TCA	3.63	97	56377	8.779	ppb	100
37) Cyclohexane	3.68	41	20224	7.769	ppb	97
38) 1,1-Dichloropropene	3.90	75	38513	8.572	ppb	93
39) 2,2,4-Trimethylpentane	4.41	57	51073	7.682	ppb	90
41) Carbon Tetrachloride	3.87	117	49799	8.689	ppb	95
42) Tert Amyl Methyl Ether	4.50	73	75812	8.479	ppb #	92

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1217L05.D  
 Acq On : 17 Dec 18 11:29  
 Sample : 181217A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 12:34 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.84	56	60495	8.951	ppb	# 97
44) 1,2-DCA	4.26	62	54914	9.406	ppb	98
45) Benzene	4.20	78	142398	8.934	ppb	99
46) TCE	5.19	130	38668	9.260	ppb	94
47) 2-Pentanone	5.53	43	339037	115.699	ppb	100
48) 1,2-Dichloropropane	5.47	63	39645	8.970	ppb	99
49) Bromodichloromethane	5.87	83	58970	9.556	ppb	96
50) Methyl Cyclohexane	5.41	83	28598	7.483	ppb	93
51) Dibromomethane	5.62	93	28658	9.029	ppb	92
52) 2-Chloroethyl vinyl ether	6.34	43	168	0.181	ppb	# 30
53) MIBK (methyl isobutyl ket	6.69	43	33534	8.990	ppb	# 95
54) 1-Bromo-2-chloroethane	6.21	63	26464	8.675	ppb	92
55) Cis-1,3-Dichloropropene	6.45	75	53766	8.228	ppb	93
56) Toluene	6.81	91	155980	9.418	ppb	100
57) Trans-1,3-Dichloropropene	7.14	75	53897	9.029	ppb	98
58) 1,1,2-TCA	7.33	83	34735	9.086	ppb	98
59) 2-Hexanone	7.68	43	20093	8.617	ppb	# 95
62) 1,2-EDB	7.82	107	41649	9.040	ppb	98
63) Tetrachloroethene	7.44	166	45548	8.849	ppb	97
64) 1-Chlorohexane	8.45	91	30686	8.425	ppb	100
65) 1,1,1,2-Tetrachloroethane	8.52	131	45184	9.269	ppb	95
66) m&p-Xylene	8.70	91	225064	17.422	ppb	98
67) o-Xylene	9.12	106	53781	8.807	ppb	96
68) Styrene	9.14	104	52952	7.936	ppb	100
70) 1,3-Dichloropropane	7.50	76	64279	8.852	ppb	94
71) Dibromochloromethane	7.74	129	47856	9.106	ppb	97
72) Chlorobenzene	8.40	112	108872	8.996	ppb	97
73) Ethylbenzene	8.56	91	147018	8.582	ppb	99
74) Bromoform	9.30	173	36262	9.102	ppb	95
76) Isopropylbenzene	9.54	105	127959	8.742	ppb	98
77) 1,1,2,2-Tetrachloroethane	9.88	83	60846	9.007	ppb	97
78) 1,2,3-Trichloropropane	9.90	110	10582	9.360	ppb	97
79) t-1,4-Dichloro-2-Butene	9.95	53	10971	9.008	ppb	91
80) Bromobenzene	9.81	156	48588	9.337	ppb	97
81) n-Propylbenzene	9.99	91	103408	9.040	ppb	99
82) 4-Ethyltoluene	10.11	105	124176	9.024	ppb	95
83) 2-Chlorotoluene	10.04	91	109921	9.096	ppb	95
84) 1,3,5-Trimethylbenzene	10.19	105	78000	8.820	ppb	97
85) 4-Chlorotoluene	10.16	91	129296	9.553	ppb	94
86) Tert-Butylbenzene	10.53	119	96137	8.801	ppb	99
87) 1,2,4-Trimethylbenzene	10.58	105	115221	9.015	ppb	99
88) Sec-Butylbenzene	10.76	105	146456	9.229	ppb	97
89) p-Isopropyltoluene	10.93	119	132551	9.018	ppb	99
90) Benzyl Chloride	11.10	91	62400	8.526	ppb	96
91) 1,3-DCB	10.84	146	90833	9.417	ppb	97
92) 1,4-DCB	10.94	146	92125	9.030	ppb	96
93) n-Butylbenzene	11.36	91	106469	8.763	ppb	98
94) 1,2-DCB	11.32	146	86972	9.199	ppb	97
95) Hexachloroethane	11.59	117	29054	9.289	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.15	75	9961	8.562	ppb	89
97) 1,2,4-Trichlorobenzene	13.04	180	50753	8.420	ppb	92
98) Hexachlorobutadiene	13.26	225	28988	8.851	ppb	94
99) Naphthalene	13.28	128	104242	8.210	ppb	97
100) 1,2,3-Trichlorobenzene	13.55	180	29800	8.358	ppb	96

(#) = qualifier out of range (m) = manual integration  
 1217L05.D L1213W.M Tue Dec 18 11:29 Page 878 of 1287



Quantitation Report

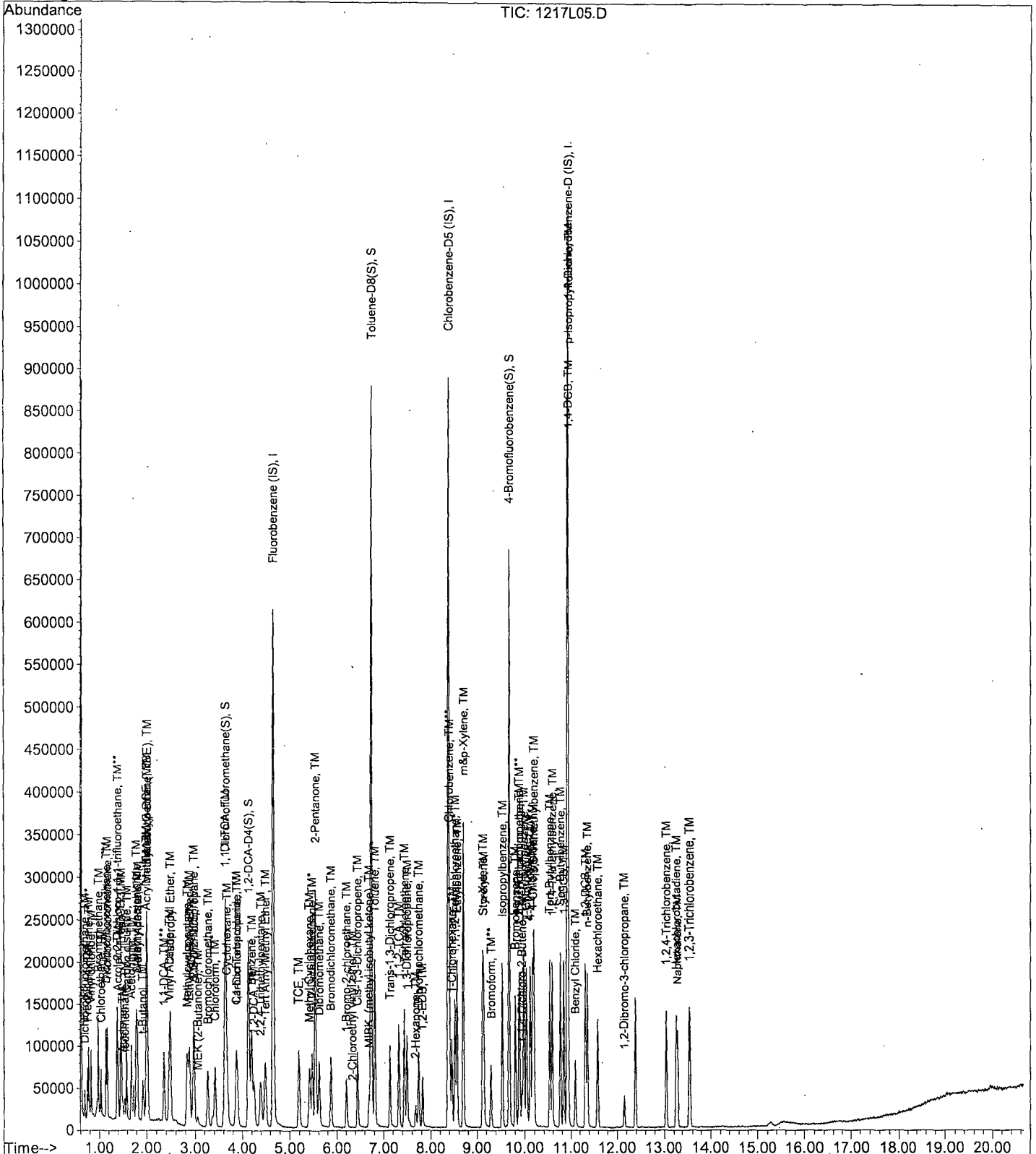
Data File : M:\LOKI\DATA\181213\1217L05.D  
Acq On : 17 Dec 18 11:29  
Sample : 181217A LCS 10ug/L  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 12:34 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181218\1219L32.D  
 Acq On : 20 Dec 18 00:43  
 Sample : 181219B LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 31  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	258432	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	281408	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	156416	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.58	111	177093	26.416	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.664%	
40) 1,2-DCA-D4(S)	4.07	65	202642	26.486	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.944%	
61) Toluene-D8(S)	6.70	98	563465	25.844	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.376%	
69) 4-Bromofluorobenzene(S)	9.65	95	196764	25.916	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.664%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	34386	10.529	ppb	96
3) Freon 114	0.74	85	33692	9.852	ppb	93
4) Chloromethane	0.76	50	57966	11.086	ppb	90
5) Vinyl chloride	0.81	62	43792	10.572	ppb	99
6) Bromomethane	0.96	94	39803	10.695	ppb	100
7) Chloroethane	1.02	64	29372	10.401	ppb	99
8) Dichlorofluoromethane	1.13	67	74315	10.591	ppb	97
9) Trichlorofluoromethane	1.15	101	60079	11.075	ppb	98
10) Acrolein	1.38	56	41056	123.563	ppb	# 98
11) Acetone	1.48	43	16747	11.715	ppb	98
12) Freon-113	1.46	101	32951	10.351	ppb	95
13) 1,1-DCE	1.44	63	13056	10.155	ppb	98
14) t-Butanol	1.90	59	47865	114.218	ppb	96
15) Acetonitrile	1.66	41	80029	127.956	ppb	95
16) Methyl Acetate	1.79	43	48242	9.202	ppb	# 98
17) Iodomethane	1.53	142	18832	9.748	ppb	93
18) Acrylonitrile	1.95	52	16378	10.154	ppb	95
19) Methylene chloride	1.76	84	44392	10.279	ppb	98
20) Carbon disulfide	1.56	76	118455	10.752	ppb	99
21) Methyl t-butyl ether (MtBE)	1.99	73	98778	10.180	ppb	97
22) Trans-1,2-DCE	1.97	96	37837	10.837	ppb	98
23) Diisopropyl Ether	2.45	45	116284	10.554	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	36943	10.883	ppb	93
25) 1,1-DCA	2.32	63	72408	10.935	ppb	97
26) Vinyl Acetate	2.43	43	30648	8.202	ppb	94
27) Ethyl tert Butyl Ether	2.83	59	87193	10.187	ppb	98
28) MEK (2-Butanone)	3.00	43	17881	10.329	ppb	100
29) Cis-1,2-DCE	2.93	61	50891	10.450	ppb	93
30) 2,2-Dichloropropane	2.91	77	44045	9.462	ppb	97
31) 2-Methylpentane	1.79	71	18756	8.822	ppb	# 83
32) 3-Methylpentane	1.98	57	67735	9.703	ppb	94
33) Chloroform	3.36	83	67180	10.860	ppb	99
34) Bromochloromethane	3.21	128	9516	11.145	ppb	93
36) 1,1,1-TCA	3.56	99	11476	9.424	ppb	96
37) Cyclohexane	3.62	41	23846	9.877	ppb	91
38) 1,1-Dichloropropene	3.82	75	34457	9.805	ppb	91
39) 2,2,4-Trimethylpentane	4.34	57	63463	8.967	ppb	92
41) Carbon Tetrachloride	3.81	117	45858	10.608	ppb	95
42) Tert Amyl Methyl Ether	4.44	73	70889	9.564	ppb	94

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181218\1219L32.D  
 Acq On : 20 Dec 18 00:43  
 Sample : 181219B LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 31  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	57612	9.410	ppb	92
44) 1,2-DCA	4.19	62	49623	11.051	ppb	99
45) Benzene	4.13	78	125751	10.164	ppb	98
46) TCE	5.13	95	33493	10.304	ppb	88
47) 2-Pentanone	5.48	43	297123	120.502	ppb	99
48) 1,2-Dichloropropane	5.41	63	33221	9.896	ppb	# 95
49) Bromodichloromethane	5.82	83	25408	10.745	ppb	99
50) Methyl Cyclohexane	5.35	83	32970	9.354	ppb	99
51) Dibromomethane	5.56	93	27870	11.067	ppb	98
52) 2-Chloroethyl vinyl ether	6.30	43	4724	8.710	ppb	96
53) MIBK (methyl isobutyl ket	6.65	43	32789	10.430	ppb	95
54) 1-Bromo-2-chloroethane	6.16	63	28712	11.003	ppb	98
55) Cis-1,3-Dichloropropene	6.40	75	47336	10.020	ppb	95
56) Toluene	6.77	91	71624	9.678	ppb	97
57) Trans-1,3-Dichloropropene	7.10	75	45460	10.223	ppb	87
58) 1,1,2-TCA	7.28	83	31169	11.034	ppb	98
59) 2-Hexanone	7.64	43	19359	9.474	ppb	99
62) 1,2-EDB	7.78	107	21384	10.679	ppb	100
63) Tetrachloroethene	7.40	164	31668	10.433	ppb	98
64) 1-Chlorohexane	8.42	91	28909	8.962	ppb	96
65) 1,1,1,2-Tetrachloroethane	8.48	131	41677	10.985	ppb	99
66) m&p-Xylene	8.67	91	111994	18.754	ppb	100
67) o-Xylene	9.09	106	25664	9.210	ppb	97
68) Styrene	9.11	104	43952	9.038	ppb	98
70) 1,3-Dichloropropane	7.46	76	56755	10.495	ppb	100
71) Dibromochloromethane	7.70	129	25584	11.281	ppb	96
72) Chlorobenzene	8.37	112	95778	10.544	ppb	98
73) Ethylbenzene	8.53	91	71384	9.184	ppb	100
74) Bromoform	9.27	173	31133	10.088	ppb	95
76) Isopropylbenzene	9.51	105	104454	9.779	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.85	83	48069	9.841	ppb	92
78) 1,2,3-Trichloropropane	9.87	110	9407	11.415	ppb	98
79) t-1,4-Dichloro-2-Butene	9.92	53	10097	10.274	ppb	90
80) Bromobenzene	9.78	156	24776	10.714	ppb	94
81) n-Propylbenzene	9.96	91	84424	10.808	ppb	100
82) 4-Ethyltoluene	10.08	105	116686	10.851	ppb	97
83) 2-Chlorotoluene	10.01	91	57087	10.455	ppb	95
84) 1,3,5-Trimethylbenzene	10.16	105	63512	9.784	ppb	96
85) 4-Chlorotoluene	10.13	91	59096	10.054	ppb	94
86) Tert-Butylbenzene	10.50	119	79280	10.181	ppb	98
87) 1,2,4-Trimethylbenzene	10.55	105	90693	9.222	ppb	99
88) Sec-Butylbenzene	10.73	105	116914	9.581	ppb	99
89) p-Isopropyltoluene	10.90	119	63984	9.351	ppb	99
90) Benzyl Chloride	11.07	91	42859	7.951	ppb	96
91) 1,3-DCB	10.81	146	46792	10.605	ppb	99
92) 1,4-DCB	10.91	146	85486	10.862	ppb	98
93) n-Butylbenzene	11.34	91	84152	10.314	ppb	99
94) 1,2-DCB	11.29	146	77317	10.810	ppb	97
95) Hexachloroethane	11.56	117	28841	10.859	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.13	75	8061	8.896	ppb	96
97) 1,2,4-Trichlorobenzene	13.01	180	38935	9.280	ppb	99
98) Hexachlorobutadiene	13.23	225	23743	10.128	ppb	87
99) Naphthalene	13.26	128	71511	8.157	ppb	96
100) 1,2,3-Trichlorobenzene	13.52	180	23192	10.291	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

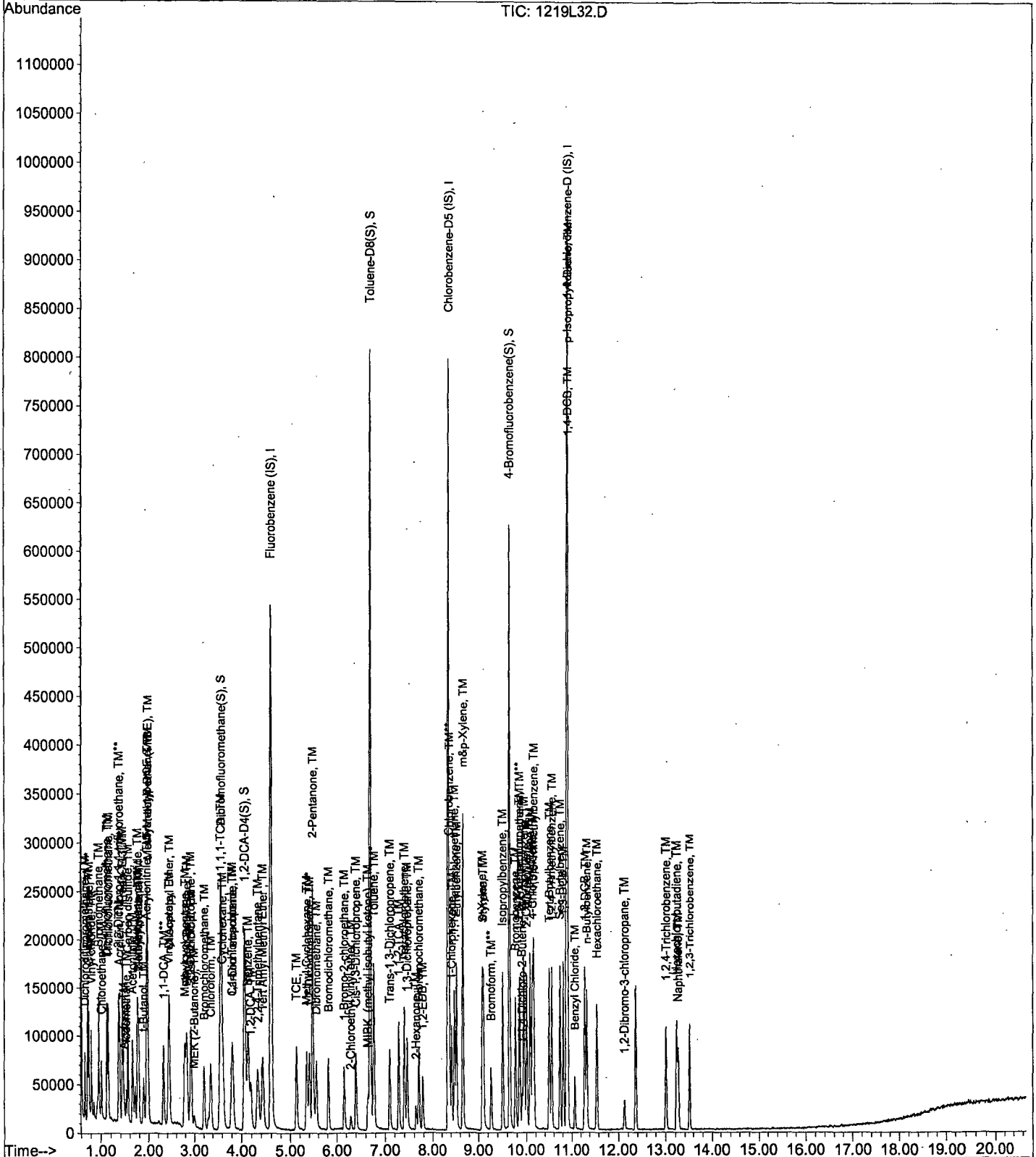
Data File : M:\LOKI\DATA\181218\1219L32.D  
Acq On : 20 Dec 18 00:43  
Sample : 181219B LCS 10ug/L  
Misc : IS&S 11/8/18

Vial: 31  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L15.D  
 Acq On : 20 Dec 18 17:48  
 Sample : 181220A LCS 10ug/L x4 Ketone  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:55 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	258624	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	279936	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	162560	25.0000	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane(S)	3.58	111	177702	24.5114	ppb	0.00
Spiked Amount			Recovery	=	98.044%	
40) 1,2-DCA-D4(S)	4.07	65	204377	24.3491	ppb	0.00
Spiked Amount			Recovery	=	97.396%	
61) Toluene-D8(S)	6.70	98	603600	27.4134	ppb	0.00
Spiked Amount			Recovery	=	109.652%	
69) 4-Bromofluorobenzene(S)	9.65	95	198615	26.5287	ppb	0.00
Spiked Amount			Recovery	=	106.116%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.68	85	32778	9.9513	ppb	95
3) Freon 114	0.73	85	35160	9.4210	ppb	98
4) Chloromethane	0.76	50	51525	9.3022	ppb	100
5) Vinyl chloride	0.81	62	43277	9.1122	ppb	99
6) Bromomethane	0.96	94	48065	10.2885	ppb	93
7) Chloroethane	1.01	64	28185	8.9206	ppb	98
8) Dichlorofluoromethane	1.12	67	74098	9.4853	ppb	94
9) Trichlorofluoromethane	1.15	101	59219	9.7710	ppb	98
10) Acrolein	1.38	56	41448	131.1042	ppb	# 98
11) Acetone	1.48	43	58098	39.5974	ppb	96
12) Freon-113	1.45	101	34870	10.6066	ppb	97
13) 1,1-DCE	1.44	63	13681	8.8586	ppb	94
14) t-Butanol	1.90	59	49727	111.4564	ppb	100
15) Acetonitrile	1.66	41	81970	108.7831	ppb	96
16) Methyl Acetate	1.79	43	48971	9.8654	ppb	# 99
17) Iodomethane	1.53	142	15088	9.2465	ppb	92
18) Acrylonitrile	1.95	52	16116	9.2267	ppb	93
19) Methylene chloride	1.76	84	45076	9.2984	ppb	96
20) Carbon disulfide	1.56	76	115210	9.6056	ppb	98
21) Methyl t-butyl ether (MtBE)	1.99	73	103138	9.5312	ppb	97
22) Trans-1,2-DCE	1.97	96	23672	8.6217	ppb	95
23) Diisopropyl Ether	2.45	45	113560	9.6240	ppb	97
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	36739	9.3108	ppb	92
25) 1,1-DCA	2.32	63	71461	9.5364	ppb	98
26) Vinyl Acetate	2.45	43	29781	6.5788	ppb	# 76
27) Ethyl tert Butyl Ether	2.83	59	87373	10.2688	ppb	97
28) MEK (2-Butanone)	3.00	43	69193	39.7792	ppb	98
29) Cis-1,2-DCE	2.93	96	34300	9.2659	ppb	94
30) 2,2-Dichloropropane	2.91	77	44817	8.6718	ppb	# 95
31) 2-Methylpentane	1.79	71	20784	9.8101	ppb	90
32) 3-Methylpentane	1.98	57	68703	9.6371	ppb	# 99
33) Chloroform	3.36	83	66342	10.0293	ppb	97
34) Bromochloromethane	3.21	128	9228	10.3518	ppb	97
36) 1,1,1-TCA	3.56	97	18488	9.2758	ppb	98
37) Cyclohexane	3.62	41	23248	9.5814	ppb	100
38) 1,1-Dichloropropene	3.82	75	34345	10.0148	ppb	89
39) 2,2,4-Trimethylpentane	4.34	57	67548	9.8584	ppb	94
41) Carbon Tetrachloride	3.81	117	46102	9.6609	ppb	97
42) Tert Amyl Methyl Ether	4.44	73	70908	9.8466	ppb	# 93

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L15.D  
 Acq On : 20 Dec 18 17:48  
 Sample : 181220A LCS 10ug/L x4 Ketone  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:55 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	56011	9.9978	ppb #	98
44) 1,2-DCA	4.19	62	49646	10.2220	ppb	93
45) Benzene	4.14	78	122513	10.1127	ppb	96
46) TCE	5.13	130	16349	10.4285	ppb	94
47) 2-Pentanone	5.48	43	315149	124.5962	ppb	98
48) 1,2-Dichloropropane	5.41	63	35094	9.8578	ppb #	94
49) Bromodichloromethane	5.82	83	25152	9.8859	ppb #	99
50) Methyl Cyclohexane	5.35	83	32371	10.1148	ppb	90
51) Dibromomethane	5.56	93	27533	9.9915	ppb	91
52) 2-Chloroethyl vinyl ether	6.30	43	4988	10.3227	ppb #	77
53) MIBK (methyl isobutyl ket	6.65	43	119804	36.9918	ppb #	93
54) 1-Bromo-2-chloroethane	6.16	63	28448	10.3828	ppb	97
55) Cis-1,3-Dichloropropene	6.40	75	45279	9.6777	ppb	95
56) Toluene	6.77	91	75976	10.3714	ppb	96
57) Trans-1,3-Dichloropropene	7.10	75	45680	10.1517	ppb	97
58) 1,1,2-TCA	7.28	83	31665	10.0692	ppb	98
59) 2-Hexanone	7.64	43	76701	39.6915	ppb #	89
62) 1,2-EDB	7.79	107	21368	10.4645	ppb	94
63) Tetrachloroethene	7.40	166	22112	9.6259	ppb	94
64) 1-Chlorohexane	8.42	91	31358	10.7593	ppb	88
65) 1,1,1,2-Tetrachloroethane	8.48	131	40861	10.0931	ppb	100
66) m&p-Xylene	8.67	91	107952	18.1453	ppb	98
67) o-Xylene	9.09	106	26568	9.9661	ppb	97
68) Styrene	9.11	104	42344	8.7312	ppb	100
70) 1,3-Dichloropropane	7.46	76	55391	9.8588	ppb	98
71) Dibromochloromethane	7.70	129	43748	10.3450	ppb	97
72) Chlorobenzene	8.37	112	93396	9.9339	ppb	99
73) Ethylbenzene	8.53	91	77248	9.6750	ppb	97
74) Bromoform	9.27	173	32199	9.3056	ppb	93
76) Isopropylbenzene	9.51	105	105137	9.9452	ppb	91
77) 1,1,2,2-Tetrachloroethane	9.85	83	50320	8.4949	ppb	97
78) 1,2,3-Trichloropropane	9.87	110	9070	7.9742	ppb	93
79) t-1,4-Dichloro-2-Butene	9.92	53	10299	9.8687	ppb	90
80) Bromobenzene	9.78	156	24488	10.4650	ppb	99
81) n-Propylbenzene	9.96	91	86632	10.0504	ppb	99
82) 4-Ethyltoluene	10.09	105	114295	9.8803	ppb	99
83) 2-Chlorotoluene	10.01	91	53733	10.0405	ppb	96
84) 1,3,5-Trimethylbenzene	10.16	105	61696	9.1235	ppb	97
85) 4-Chlorotoluene	10.13	91	59848	9.8790	ppb	98
86) Tert-Butylbenzene	10.50	119	77197	9.7238	ppb	99
87) 1,2,4-Trimethylbenzene	10.55	105	94199	9.2930	ppb	100
88) Sec-Butylbenzene	10.73	105	117682	9.9385	ppb	98
89) p-Isopropyltoluene	10.91	119	67296	10.0586	ppb	97
90) Benzyl Chloride	11.07	91	47890	8.4903	ppb	95
91) 1,3-DCB	10.81	146	44904	9.9860	ppb	99
92) 1,4-DCB	10.91	146	85368	10.0742	ppb	95
93) n-Butylbenzene	11.34	91	86026	9.3856	ppb	97
94) 1,2-DCB	11.29	146	75219	9.8081	ppb	98
95) Hexachloroethane	11.56	117	29009	9.1714	ppb	95
96) 1,2-Dibromo-3-chloropropan	12.12	75	8433	9.1291	ppb #	85
97) 1,2,4-Trichlorobenzene	13.01	180	40235	9.3535	ppb	99
98) Hexachlorobutadiene	13.23	225	25725	9.9926	ppb	94
99) Naphthalene	13.26	128	79502	9.1395	ppb	96
100) 1,2,3-Trichlorobenzene	13.52	180	23464	8.9154	ppb	97

Quantitation Report

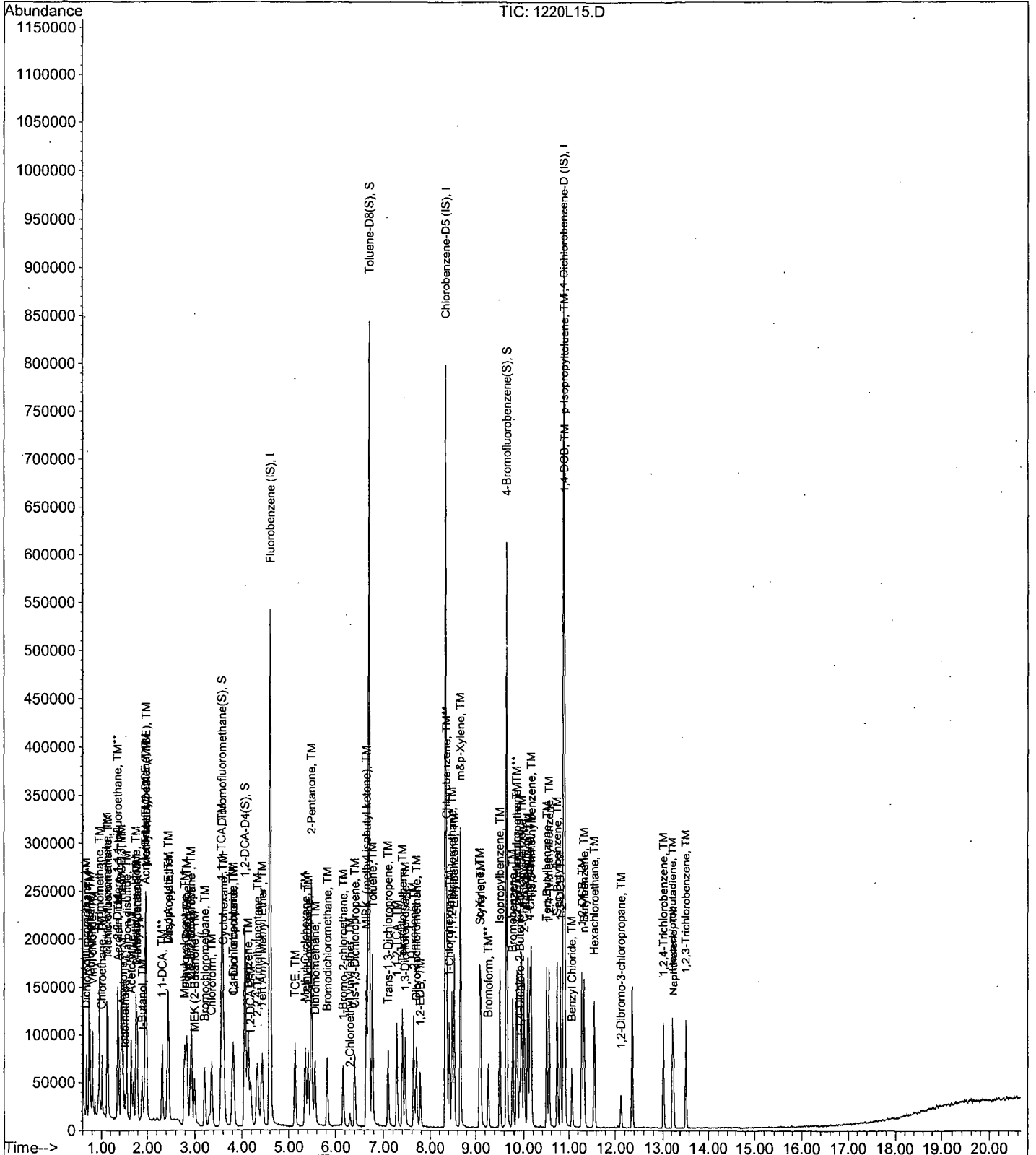
Data File : M:\LOKI\DATA\181220\1220L15.D  
Acq On : 20 Dec 18 17:48  
Sample : 181220A LCS 10ug/L x4 Ketone  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:55 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L06.D Vial: 5  
 Acq On : 17 Dec 18 11:57 Operator: PM, DG, SV, CMM, KV  
 Sample : 181217A LCSD 10ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 12:35 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	293632	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	320704	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	185344	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	185606	24.642	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.568%	
40) 1,2-DCA-D4(S)	4.14	65	212516	24.636	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.544%	
61) Toluene-D8(S)	6.74	98	616844	23.935	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.740%	
69) 4-Bromofluorobenzene(S)	9.68	95	227791	24.454	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.816%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	15129	6.106	ppb	91
3) Freon 114	0.75	85	10977	5.075	ppb	98
4) Chloromethane	0.77	50	37783	7.605	ppb	96
5) Vinyl chloride	0.82	62	37739	8.426	ppb	98
6) Bromomethane	0.98	94	38283	10.353	ppb	95
7) Chloroethane	1.03	64	27387	9.037	ppb	97
8) Dichlorofluoromethane	1.14	67	65674	8.573	ppb	96
9) Trichlorofluoromethane	1.17	101	49865	8.229	ppb	97
10) Acrolein	1.41	56	25096	60.091	ppb #	95
11) Acetone	1.51	43	16647	9.528	ppb #	86
12) Freon-113	1.48	101	23663	8.076	ppb	96
13) 1,1-DCE	1.46	63	16052	8.461	ppb	89
14) t-Butanol	1.93	59	53817	109.100	ppb	99
15) Acetonitrile	1.69	41	84031	117.066	ppb	93
16) Methyl Acetate	1.82	43	55626	9.593	ppb #	100
17) Iodomethane	1.55	142	15425	7.080	ppb	97
18) Acrylonitrile	1.98	52	17464	10.690	ppb	100
19) Methylene chloride	1.79	84	46614	9.078	ppb	99
20) Carbon disulfide	1.59	76	92356	8.002	ppb	98
21) Methyl t-butyl ether (MtBE)	2.02	73	101367	9.142	ppb	98
22) Trans-1,2-DCE	2.00	96	39314	8.905	ppb	91
23) Diisopropyl Ether	2.49	45	114598	9.410	ppb	100
24) 2,2-Dichloro-1,1,1-trifluo	1.39	85	38470	9.980	ppb	93
25) 1,1-DCA	2.36	63	78201	9.085	ppb	97
26) Vinyl Acetate	2.46	43	40757	8.984	ppb	98
27) Ethyl tert Butyl Ether	2.88	59	92233	9.547	ppb	99
28) MEK (2-Butanone)	3.05	43	17744	9.343	ppb	88
29) Cis-1,2-DCE	2.98	96	18696	8.964	ppb	96
30) 2,2-Dichloropropane	2.96	77	56663	9.234	ppb	93
31) 2-Methylpentane	1.82	71	23358	10.244	ppb	94
32) 3-Methylpentane	2.01	57	73844	9.312	ppb	98
33) Chloroform	3.42	83	75640	9.836	ppb	95
34) Bromochloromethane	3.27	128	23176	9.649	ppb	91
36) 1,1,1-TCA	3.62	97	59354	9.360	ppb	89
37) Cyclohexane	3.68	41	18327	7.113	ppb	91
38) 1,1-Dichloropropene	3.89	75	38809	8.747	ppb	95
39) 2,2,4-Trimethylpentane	4.40	57	49900	7.600	ppb	88
41) Carbon Tetrachloride	3.88	117	48880	8.637	ppb	96
42) Tert Amyl Methyl Ether	4.50	73	77488	8.776	ppb	96

(#) = qualifier out of range (m) = manual integration



Data File : M:\LOKI\DATA\181213\1217L06.D  
 Acq On : 17 Dec 18 11:57  
 Sample : 181217A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 12:35 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.83	56	62191	9.318	ppb	# 97
44) 1,2-DCA	4.26	62	54214	9.403	ppb	96
45) Benzene	4.20	78	144461	9.178	ppb	99
46) TCE	5.19	130	39299	9.530	ppb	96
47) 2-Pentanone	5.53	43	349975	120.941	ppb	99
48) 1,2-Dichloropropane	5.46	63	40533	9.287	ppb	99
49) Bromodichloromethane	5.87	83	58967	9.676	ppb	99
50) Methyl Cyclohexane	5.40	83	29437	7.800	ppb	100
51) Dibromomethane	5.61	93	29764	9.496	ppb	94
52) 2-Chloroethyl vinyl ether	6.32	43	843	0.918	ppb	# 30
53) MIBK (methyl isobutyl ket	6.69	43	35419	9.684	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	28288	9.390	ppb	95
55) Cis-1,3-Dichloropropene	6.45	75	56522	8.759	ppb	95
56) Toluene	6.82	91	155859	9.530	ppb	100
57) Trans-1,3-Dichloropropene	7.14	75	53906	9.145	ppb	96
58) 1,1,2-TCA	7.32	83	37042	9.812	ppb	99
59) 2-Hexanone	7.68	43	20723	9.000	ppb	99
62) 1,2-EDB	7.82	107	43931	9.324	ppb	96
63) Tetrachloroethene	7.44	166	47017	8.932	ppb	98
64) 1-Chlorohexane	8.45	91	31004	8.323	ppb	97
65) 1,1,1,2-Tetrachloroethane	8.52	131	45610	9.149	ppb	92
66) m&p-Xylene	8.70	91	230149	17.421	ppb	99
67) o-Xylene	9.12	106	55881	8.948	ppb	93
68) Styrene	9.14	104	54392	7.965	ppb	97
70) 1,3-Dichloropropane	7.50	76	65119	8.769	ppb	99
71) Dibromochloromethane	7.74	129	49254	9.164	ppb	88
72) Chlorobenzene	8.40	112	108389	8.758	ppb	95
73) Ethylbenzene	8.56	91	154495	8.819	ppb	98
74) Bromoform	9.30	173	38925	9.554	ppb	87
76) Isopropylbenzene	9.54	105	131447	8.770	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.88	83	63602	9.194	ppb	96
78) 1,2,3-Trichloropropane	9.90	110	11239	9.707	ppb	94
79) t-1,4-Dichloro-2-Butene	9.94	53	11569	9.276	ppb	94
80) Bromobenzene	9.81	156	51166	9.601	ppb	98
81) n-Propylbenzene	9.99	91	106088	9.056	ppb	97
82) 4-Ethyltoluene	10.11	105	124787	8.855	ppb	96
83) 2-Chlorotoluene	10.04	91	112364	9.080	ppb	97
84) 1,3,5-Trimethylbenzene	10.19	105	80008	8.834	ppb	99
85) 4-Chlorotoluene	10.17	91	131346	9.476	ppb	94
86) Tert-Butylbenzene	10.53	119	98818	8.834	ppb	95
87) 1,2,4-Trimethylbenzene	10.58	105	119649	9.142	ppb	98
88) Sec-Butylbenzene	10.76	105	151312	9.312	ppb	98
89) p-Isopropyltoluene	10.93	119	134260	8.920	ppb	98
90) Benzyl Chloride	11.09	91	60206	8.033	ppb	95
91) 1,3-DCB	10.84	146	94180	9.534	ppb	99
92) 1,4-DCB	10.94	146	100140	9.585	ppb	97
93) n-Butylbenzene	11.36	91	109434	8.796	ppb	99
94) 1,2-DCB	11.32	146	89096	9.202	ppb	99
95) Hexachloroethane	11.59	117	27918	8.716	ppb	90
96) 1,2-Dibromo-3-chloropropan	12.15	75	10961	9.306	ppb	98
97) 1,2,4-Trichlorobenzene	13.04	180	52372	8.484	ppb	95
98) Hexachlorobutadiene	13.26	225	29921	8.922	ppb	98
99) Naphthalene	13.29	128	108699	8.360	ppb	96
100) 1,2,3-Trichlorobenzene	13.55	180	29824	8.168	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

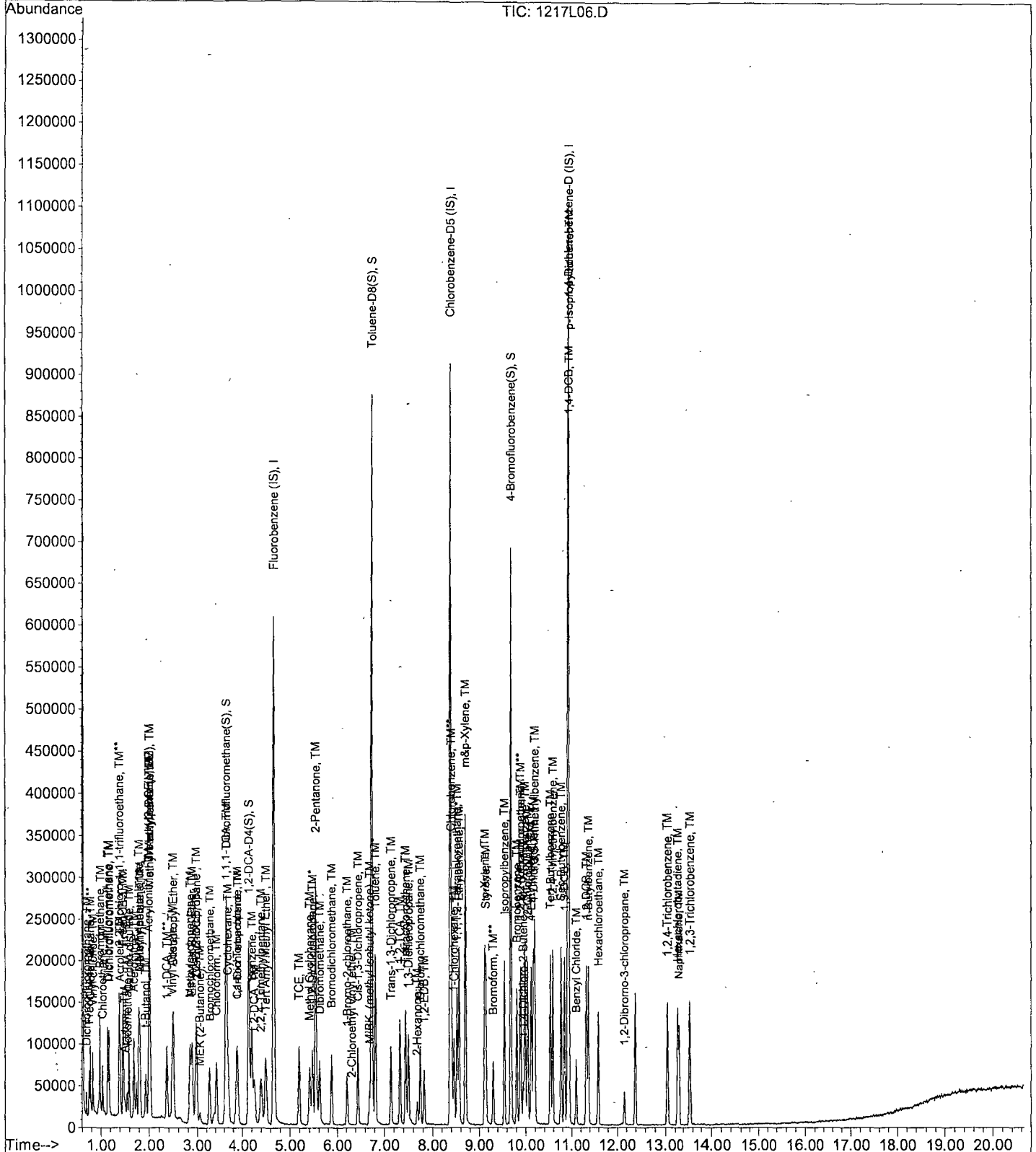
Data File : M:\LOKI\DATA\181213\1217L06.D  
Acq On : 17 Dec 18 11:57  
Sample : 181217A LCSD 10ug/L  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 12:35 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181218\1219L33.D  
 Acq On : 20 Dec 18 1:12  
 Sample : 181219B LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 32  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.60	96	260608	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	272128	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	161600	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	176377	26.089	ppb	0.00
Spiked Amount 25.000			Recovery = 104.356%			
40) 1,2-DCA-D4(S)	4.07	65	197865	25.646	ppb	0.00
Spiked Amount 25.000			Recovery = 102.584%			
61) Toluene-D8(S)	6.70	98	551698	26.168	ppb	0.00
Spiked Amount 25.000			Recovery = 104.672%			
69) 4-Bromofluorobenzene(S)	9.65	95	195965	26.691	ppb	0.00
Spiked Amount 25.000			Recovery = 106.764%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	33792	10.260	ppb	97
3) Freon 114	0.74	85	34046	9.873	ppb	95
4) Chloromethane	0.76	50	57202	10.848	ppb	97
5) Vinyl chloride	0.81	62	44544	10.664	ppb	98
6) Bromomethane	0.96	94	39924	10.638	ppb	93
7) Chloroethane	1.02	64	30108	10.572	ppb	99
8) Dichlorofluoromethane	1.12	67	76098	10.754	ppb	93
9) Trichlorofluoromethane	1.15	101	61197	11.187	ppb	96
10) Acrolein	1.38	56	40192	119.953	ppb	# 98
11) Acetone	1.48	43	16599	11.492	ppb	96
12) Freon-113	1.45	101	33427	10.413	ppb	98
13) 1,1-DCE	1.44	63	12323	9.505	ppb	90
14) t-Butanol	1.90	59	45026	106.546	ppb	93
15) Acetonitrile	1.66	41	80221	127.192	ppb	99
16) Methyl Acetate	1.79	43	47221	8.932	ppb	# 99
17) Iodomethane	1.52	142	19192	9.819	ppb	95
18) Acrylonitrile	1.95	52	16558	10.180	ppb	94
19) Methylene chloride	1.76	84	42898	9.850	ppb	99
20) Carbon disulfide	1.56	76	115979	10.440	ppb	99
21) Methyl t-butyl ether (MtBE)	1.99	73	98687	10.086	ppb	98
22) Trans-1,2-DCE	1.97	96	37765	10.726	ppb	97
23) Diisopropyl Ether	2.45	45	113352	10.202	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.36	85	37388	10.923	ppb	98
25) 1,1-DCA	2.32	63	73415	10.994	ppb	93
26) Vinyl Acetate	2.44	43	29761	7.898	ppb	# 78
27) Ethyl tert Butyl Ether	2.83	59	86804	10.057	ppb	95
28) MEK (2-Butanone)	3.00	43	18250	10.462	ppb	98
29) Cis-1,2-DCE	2.93	61	51565	10.500	ppb	97
30) 2,2-Dichloropropane	2.91	77	43757	9.321	ppb	97
31) 2-Methylpentane	1.79	71	19601	9.142	ppb	93
32) 3-Methylpentane	1.98	57	65762	9.342	ppb	99
33) Chloroform	3.36	83	66194	10.611	ppb	98
34) Bromochloromethane	3.21	128	9508	11.042	ppb	99
36) 1,1,1-TCA	3.56	99	12853	10.467	ppb	89
37) Cyclohexane	3.62	41	23624	9.714	ppb	94
38) 1,1-Dichloropropene	3.82	75	33953	9.581	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	62366	8.739	ppb	93
41) Carbon Tetrachloride	3.80	117	47111	10.803	ppb	96
42) Tert Amyl Methyl Ether	4.44	73	68974	9.228	ppb	95

Data File : M:\LOKI\DATA\181218\1219L33.D  
 Acq On : 20 Dec 18 1:12  
 Sample : 181219B LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 32  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Quant Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 14:04:11 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	58769	9.519	ppb	95
44) 1,2-DCA	4.19	62	48861	10.790	ppb	96
45) Benzene	4.14	78	124169	9.952	ppb	97
46) TCE	5.13	95	34465	10.515	ppb	# 87
47) 2-Pentanone	5.48	43	288326	115.958	ppb	98
48) 1,2-Dichloropropane	5.41	63	34745	10.264	ppb	98
49) Bromodichloromethane	5.82	83	25632	10.749	ppb	98
50) Methyl Cyclohexane	5.35	83	31384	8.830	ppb	93
51) Dibromomethane	5.56	93	27199	10.711	ppb	97
52) 2-Chloroethyl vinyl ether	6.30	43	4903	8.944	ppb	# 85
53) MIBK (methyl isobutyl ket	6.65	43	30094	9.483	ppb	95
54) 1-Bromo-2-chloroethane	6.16	63	28064	10.665	ppb	99
55) Cis-1,3-Dichloropropene	6.41	75	46557	9.773	ppb	96
56) Toluene	6.77	91	72192	9.673	ppb	99
57) Trans-1,3-Dichloropropene	7.10	75	44880	10.008	ppb	91
58) 1,1,2-TCA	7.28	83	30041	10.546	ppb	94
59) 2-Hexanone	7.64	43	17929	8.701	ppb	99
62) 1,2-EDB	7.79	107	19584	10.149	ppb	94
63) Tetrachloroethene	7.40	164	32409	11.042	ppb	92
64) 1-Chlorohexane	8.42	91	29372	9.304	ppb	94
65) 1,1,1,2-Tetrachloroethane	8.48	131	40139	10.940	ppb	89
66) m&p-Xylene	8.67	91	104848	18.282	ppb	99
67) o-Xylene	9.09	106	26232	9.599	ppb	90
68) Styrene	9.11	104	41800	8.932	ppb	97
70) 1,3-Dichloropropane	7.46	76	57442	10.985	ppb	99
71) Dibromochloromethane	7.70	129	24040	10.977	ppb	97
72) Chlorobenzene	8.37	112	93687	10.665	ppb	96
73) Ethylbenzene	8.53	91	73712	9.757	ppb	99
74) Bromoform	9.27	173	32629	10.934	ppb	100
76) Isopropylbenzene	9.51	105	105237	9.536	ppb	95
77) 1,1,2,2-Tetrachloroethane	9.85	83	48485	9.608	ppb	97
78) 1,2,3-Trichloropropane	9.87	110	9487	11.136	ppb	95
79) t-1,4-Dichloro-2-Butene	9.92	53	9878	9.729	ppb	98
80) Bromobenzene	9.78	156	25744	10.773	ppb	96
81) n-Propylbenzene	9.96	91	82296	10.197	ppb	100
82) 4-Ethyltoluene	10.08	105	115023	10.353	ppb	99
83) 2-Chlorotoluene	10.01	91	57021	10.143	ppb	100
84) 1,3,5-Trimethylbenzene	10.16	105	63992	9.573	ppb	99
85) 4-Chlorotoluene	10.13	91	57672	9.554	ppb	96
86) Tert-Butylbenzene	10.50	119	76359	9.492	ppb	99
87) 1,2,4-Trimethylbenzene	10.55	105	90951	9.008	ppb	99
88) Sec-Butylbenzene	10.73	105	116765	9.280	ppb	100
89) p-Isopropyltoluene	10.91	119	69616	9.818	ppb	95
90) Benzyl Chloride	11.07	91	42940	7.711	ppb	99
91) 1,3-DCB	10.81	146	47696	10.463	ppb	98
92) 1,4-DCB	10.91	146	82751	10.178	ppb	96
93) n-Butylbenzene	11.34	91	83645	9.923	ppb	98
94) 1,2-DCB	11.29	146	74283	10.052	ppb	95
95) Hexachloroethane	11.56	117	28335	10.326	ppb	88
96) 1,2-Dibromo-3-chloropropan	12.13	75	8699	9.292	ppb	# 82
97) 1,2,4-Trichlorobenzene	13.01	180	40838	9.422	ppb	98
98) Hexachlorobutadiene	13.23	225	24253	10.028	ppb	98
99) Naphthalene	13.26	128	73052	8.075	ppb	92
100) 1,2,3-Trichlorobenzene	13.52	180	24688	10.603	ppb	99

(#)=qualifier out of range (m)=manual integration

Quantitation Report

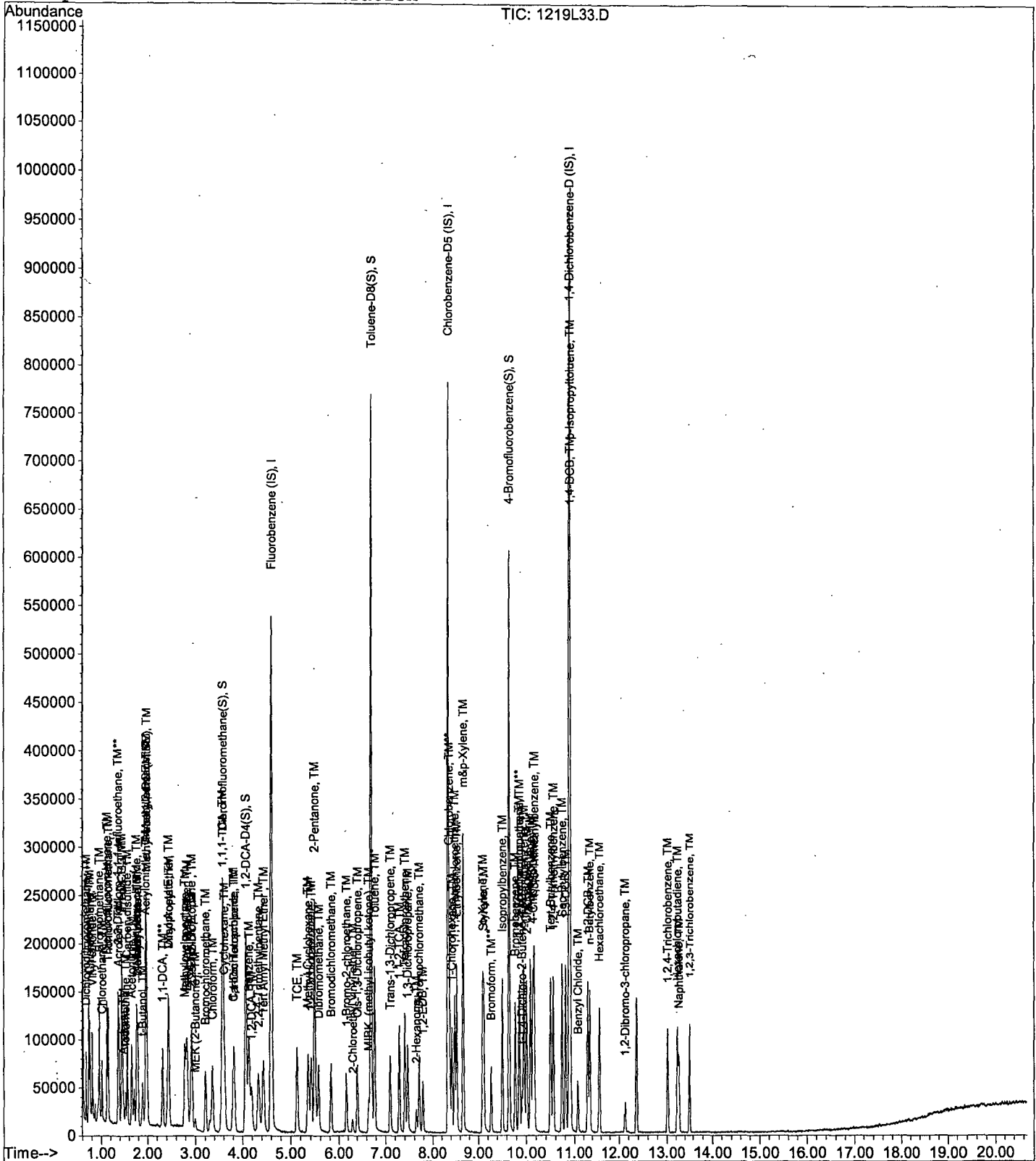
Data File : M:\LOKI\DATA\181218\1219L33.D  
Acq On : 20 Dec 18 1:12  
Sample : 181219B LCSD 10ug/L  
Misc : IS&S 11/8/18

Vial: 32  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 14:06 2018

Quant Results File: L1218W.RES

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 14:04:11 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L16.D  
 Acq On : 20 Dec 18 18:16  
 Sample : 181220A LCSD 10ug/L x4 Ketone  
 Misc : IS&S 11/8/18

Vial: 16  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:55 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.61	96	258496	25.0000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.34	117	275840	25.0000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.89	152	162560	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.58	111	177266	24.4633	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.852%	
40) 1,2-DCA-D4(S)	4.07	65	199064	23.7279	ppb	0.00
Spiked Amount	25.000		Recovery	=	94.912%	
61) Toluene-D8(S)	6.70	98	591924	27.2823	ppb	0.00
Spiked Amount	25.000		Recovery	=	109.128%	
69) 4-Bromofluorobenzene(S)	9.65	95	193082	26.1726	ppb	0.00
Spiked Amount	25.000		Recovery	=	104.692%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.68	85	33139	10.0659	ppb	100
3) Freon 114	0.73	85	36018	9.6556	ppb	94
4) Chloromethane	0.76	50	53725	9.7042	ppb	99
5) Vinyl chloride	0.81	62	45533	9.5919	ppb	100
6) Bromomethane	0.96	94	49811	10.6675	ppb	94
7) Chloroethane	1.01	64	29534	9.3522	ppb	98
8) Dichlorofluoromethane	1.12	67	79014	10.1196	ppb	98
9) Trichlorofluoromethane	1.15	101	62879	10.3800	ppb	98
10) Acrolein	1.38	56	42296	133.8527	ppb	# 98
11) Acetone	1.48	43	57391	39.1040	ppb	96
12) Freon-113	1.45	101	35250	10.7384	ppb	98
13) 1,1-DCE	1.44	63	12851	8.2619	ppb	83
14) t-Butanol	1.90	59	50889	114.2741	ppb	97
15) Acetonitrile	1.66	41	82080	108.9830	ppb	93
16) Methyl Acetate	1.78	43	50645	10.2506	ppb	100
17) Iodomethane	1.52	142	15672	9.4995	ppb	98
18) Acrylonitrile	1.95	52	15928	9.1004	ppb	76
19) Methylene chloride	1.76	84	44400	9.1635	ppb	98
20) Carbon disulfide	1.56	76	118222	9.8616	ppb	96
21) Methyl t-butyl ether (MtBE)	1.99	73	102749	9.4999	ppb	95
22) Trans-1,2-DCE	1.97	96	27832	10.1419	ppb	95
23) Diisopropyl Ether	2.45	45	117873	9.9944	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.37	85	38551	9.7748	ppb	98
25) 1,1-DCA	2.32	63	75099	10.0269	ppb	97
26) Vinyl Acetate	2.42	43	37555	8.3002	ppb	97
27) Ethyl tert Butyl Ether	2.83	59	85045	10.0002	ppb	99
28) MEK (2-Butanone)	3.00	43	69110	39.7504	ppb	93
29) Cis-1,2-DCE	2.93	96	37575	10.1557	ppb	97
30) 2,2-Dichloropropane	2.91	77	48241	9.3389	ppb	94
31) 2-Methylpentane	1.78	71	21167	9.9958	ppb	97
32) 3-Methylpentane	1.98	57	69819	9.7985	ppb	# 95
33) Chloroform	3.36	83	67330	10.1837	ppb	96
34) Bromochloromethane	3.22	128	9154	10.2686	ppb	94
36) 1,1,1-TCA	3.56	97	19440	9.7583	ppb	95
37) Cyclohexane	3.62	41	25643	10.5787	ppb	83
38) 1,1-Dichloropropene	3.82	75	36136	10.5423	ppb	94
39) 2,2,4-Trimethylpentane	4.34	57	69142	10.0960	ppb	94
41) Carbon Tetrachloride	3.81	117	48356	10.1383	ppb	91
42) Tert Amyl Methyl Ether	4.44	73	72131	10.0214	ppb	92

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\181220\1220L16.D  
 Acq On : 20 Dec 18 18:16  
 Sample : 181220A LCSD 10ug/L x4 Ketone  
 Misc : IS&S 11/8/18

Vial: 16  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 21 8:55 2018

Quant Results File: L1220W.RES

Quant Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 21 08:47:47 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.79	56	57779	10.3185	ppb	98
44) 1,2-DCA	4.19	62	49213	10.1379	ppb	92
45) Benzene	4.13	78	129062	10.6586	ppb	99
46) TCE	5.13	130	16278	10.3884	ppb	95
47) 2-Pentanone	5.48	43	308954	122.2074	ppb	97
48) 1,2-Dichloropropane	5.41	63	37437	10.5212	ppb	98
49) Bromodichloromethane	5.82	83	26144	10.2809	ppb #	98
50) Methyl Cyclohexane	5.35	83	34649	10.8320	ppb	94
51) Dibromomethane	5.56	93	26984	9.7971	ppb	94
52) 2-Chloroethyl vinyl ether	6.29	43	5074	10.4978	ppb #	86
53) MIBK (methyl isobutyl ket	6.65	43	119627	36.9551	ppb #	93
54) 1-Bromo-2-chloroethane	6.16	63	27584	10.0724	ppb	93
55) Cis-1,3-Dichloropropene	6.40	75	48296	10.3276	ppb	95
56) Toluene	6.77	91	76400	10.4322	ppb	99
57) Trans-1,3-Dichloropropene	7.09	75	46668	10.3764	ppb	91
58) 1,1,2-TCA	7.28	83	31841	10.1302	ppb	95
59) 2-Hexanone	7.64	43	78930	40.8652	ppb	95
62) 1,2-EDB	7.79	107	20184	10.0315	ppb	98
63) Tetrachloroethene	7.40	166	23808	10.5181	ppb	98
64) 1-Chlorohexane	8.42	91	31899	11.1075	ppb	96
65) 1,1,1,2-Tetrachloroethane	8.48	131	42055	10.5423	ppb	94
66) m&p-Xylene	8.67	91	110563	18.7436	ppb	100
67) o-Xylene	9.09	106	26720	10.1720	ppb	96
68) Styrene	9.11	104	42888	8.9210	ppb	90
70) 1,3-Dichloropropane	7.46	76	55571	10.0377	ppb	100
71) Dibromochloromethane	7.70	129	44406	10.6825	ppb	90
72) Chlorobenzene	8.37	112	96834	10.4525	ppb	96
73) Ethylbenzene	8.53	91	76432	9.7098	ppb	98
74) Bromoform	9.27	173	33116	9.7127	ppb	96
76) Isopropylbenzene	9.51	105	105771	10.0051	ppb	94
77) 1,1,2,2-Tetrachloroethane	9.85	83	53093	8.9630	ppb	99
78) 1,2,3-Trichloropropane	9.87	110	9608	8.4472	ppb	94
79) t-1,4-Dichloro-2-Butene	9.92	53	9653	9.2497	ppb	91
80) Bromobenzene	9.78	156	26216	11.2035	ppb	97
81) n-Propylbenzene	9.96	91	86448	10.0291	ppb	98
82) 4-Ethyltoluene	10.08	105	116515	10.0723	ppb	97
83) 2-Chlorotoluene	10.01	91	55797	10.4261	ppb	98
84) 1,3,5-Trimethylbenzene	10.16	105	62136	9.1849	ppb	100
85) 4-Chlorotoluene	10.13	91	59800	9.8714	ppb	98
86) Tert-Butylbenzene	10.50	119	79785	10.0498	ppb	97
87) 1,2,4-Trimethylbenzene	10.55	105	94403	9.3104	ppb	92
88) Sec-Butylbenzene	10.73	105	119147	10.0622	ppb	96
89) p-Isopropyltoluene	10.91	119	67224	10.0478	ppb	97
90) Benzyl Chloride	11.07	91	47091	8.3486	ppb	93
91) 1,3-DCB	10.81	146	47216	10.5001	ppb	97
92) 1,4-DCB	10.91	146	87269	10.2986	ppb	98
93) n-Butylbenzene	11.34	91	88504	9.6560	ppb	97
94) 1,2-DCB	11.29	146	74933	9.7708	ppb	98
95) Hexachloroethane	11.56	117	28968	9.1584	ppb	95
96) 1,2-Dibromo-3-chloropropan	12.12	75	8790	9.5225	ppb	86
97) 1,2,4-Trichlorobenzene	13.01	180	39986	9.2956	ppb	98
98) Hexachlorobutadiene	13.23	225	25402	9.8671	ppb	97
99) Naphthalene	13.26	128	80513	9.2199	ppb	96
100) 1,2,3-Trichlorobenzene	13.52	180	24616	9.3532	ppb	96

Quantitation Report

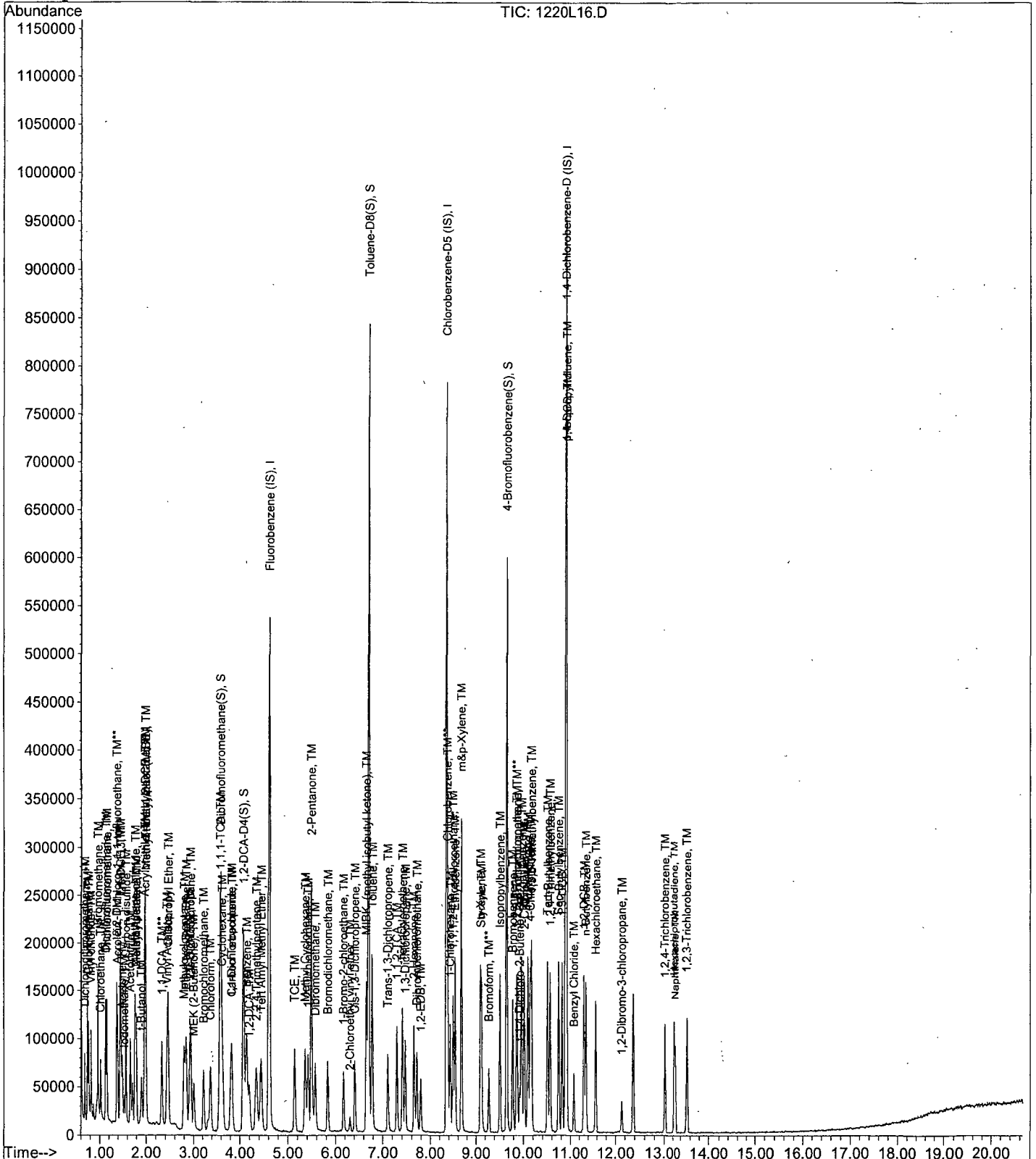
Data File : M:\LOKI\DATA\181220\1220L16.D  
Acq On : 20 Dec 18 18:16  
Sample : 181220A LCSD 10ug/L x4 Ketone  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 21 8:55 2018

Quant Results File: L1220W.RES

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 21 08:47:47 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1216L23.D  
 Acq On : 16 Dec 18 19:22  
 Sample : AZ84061W03 MS10ug/L  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	327040	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	361280	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	197440	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	201458	24.015	ppb	0.00
Spiked Amount	25.000		Recovery	=	96.060%	
40) 1,2-DCA-D4(S)	4.14	65	229490	23.886	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.544%	
61) Toluene-D8(S)	6.74	98	709136	24.425	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.700%	
69) 4-Bromofluorobenzene(S)	9.68	95	261340	24.905	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.620%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	40456	14.659	ppb	100
3) Freon 114	0.75	85	29691	12.326	ppb	92
4) Chloromethane	0.77	50	46244	8.406	ppb	93
5) Vinyl chloride	0.82	62	49151	9.853	ppb	93
6) Bromomethane	0.98	94	35464	8.611	ppb	96
7) Chloroethane	1.03	64	29534	8.734	ppb	96
8) Dichlorofluoromethane	1.14	67	59843	7.014	ppb	99
9) Trichlorofluoromethane	1.17	101	61457	9.106	ppb	100
10) Acrolein	1.41	56	37800	81.265	ppb	# 98
11) Acetone	1.51	43	17635	8.876	ppb	98
12) Freon-113	1.47	101	28693	8.792	ppb	96
13) 1,1-DCE	1.46	63	18363	8.690	ppb	90
14) t-Butanol	1.93	59	60195	109.564	ppb	98
15) Acetonitrile	1.69	41	88445	110.628	ppb	96
16) Methyl Acetate	1.74	43	27532	4.263	ppb	# 100
17) Iodomethane	1.55	142	19552	7.801	ppb	94
18) Acrylonitrile	1.98	52	12810	6.685	ppb	94
19) Methylene chloride	1.79	84	45281	7.918	ppb	92
20) Carbon disulfide	1.59	76	93972	7.311	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	96627	7.825	ppb	# 71
22) Trans-1,2-DCE	2.00	96	40189	8.173	ppb	93
23) Diisopropyl Ether	2.49	45	98374	7.253	ppb	98
24) 2,2-Dichloro-1,1,1-trifluo	1.47	85	11657	2.715	ppb	# 1
25) 1,1-DCA	2.36	63	77592	8.093	ppb	99
26) Vinyl Acetate	2.46	43	40102	7.936	ppb	99
27) Ethyl tert Butyl Ether	2.88	59	83795	7.787	ppb	95
28) MEK (2-Butanone)	3.06	43	19779	9.352	ppb	91
29) Cis-1,2-DCE	2.98	96	18880	8.128	ppb	92
30) 2,2-Dichloropropane	2.96	77	51358	7.515	ppb	94
31) 2-Methylpentane	1.81	71	602	0.624	ppb	# 14
32) 3-Methylpentane	2.02	57	22730	2.574	ppb	# 82
33) Chloroform	3.42	83	69658	8.133	ppb	100
34) Bromochloromethane	3.27	128	22791	8.519	ppb	98
36) 1,1,1-TCA	3.63	97	57350	8.120	ppb	100
37) Cyclohexane	3.68	41	21782	7.603	ppb	93
38) 1,1-Dichloropropene	3.89	75	43468	8.796	ppb	96
39) 2,2,4-Trimethylpentane	4.41	57	64253	8.787	ppb	97
41) Carbon Tetrachloride	3.87	117	49883	7.914	ppb	93
42) Tert Amyl Methyl Ether	4.50	73	72770	7.400	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L23.D  
 Acq On : 16 Dec 18 19:22  
 Sample : AZ84061W03 MS10ug/L  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.87	56	7437	1.000	ppb	# 42
44) 1,2-DCA	4.26	62	53967	8.404	ppb	97
45) Benzene	4.20	78	174898	9.977	ppb	99
46) TCE	5.19	130	39807	8.667	ppb	97
47) 2-Pentanone	5.53	43	386690	119.978	ppb	99
48) 1,2-Dichloropropane	5.47	63	39160	8.056	ppb	99
49) Bromodichloromethane	5.87	83	53919	7.944	ppb	98
50) Methyl Cyclohexane	5.41	83	34614	8.235	ppb	97
51) Dibromomethane	5.62	93	29089	8.333	ppb	99
53) MIBK (methyl isobutyl ket	6.69	43	37683	9.207	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	23536	7.015	ppb	100
55) Cis-1,3-Dichloropropene	6.45	75	55850	7.771	ppb	97
56) Toluene	6.82	91	247168	13.569	ppb	95
57) Trans-1,3-Dichloropropene	7.14	75	54557	8.310	ppb	98
58) 1,1,2-TCA	7.33	83	33141	7.882	ppb	98
59) 2-Hexanone	7.68	43	22918	8.936	ppb	# 90
62) 1,2-EDB	7.82	107	41825	7.880	ppb	100
63) Tetrachloroethene	7.44	166	47353	7.985	ppb	95
64) 1-Chlorohexane	8.45	91	29929	7.132	ppb	93
65) 1,1,1,2-Tetrachloroethane	8.52	131	44184	7.867	ppb	100
66) m&p-Xylene	8.70	91	279185	18.759	ppb	98
67) o-Xylene	9.12	106	63583	9.038	ppb	93
68) Styrene	9.14	104	56760	7.476	ppb	98
70) 1,3-Dichloropropane	7.50	76	65500	7.830	ppb	95
71) Dibromochloromethane	7.74	129	46008	7.599	ppb	92
72) Chlorobenzene	8.40	112	109124	7.827	ppb	99
73) Ethylbenzene	8.56	91	170570	8.643	ppb	97
74) Bromoform	9.30	173	35863	7.814	ppb	87
76) Isopropylbenzene	9.54	105	141165	8.841	ppb	99
77) 1,1,2,2-Tetrachloroethane	9.88	83	60967	8.273	ppb	99
78) 1,2,3-Trichloropropane	9.90	110	10354	8.395	ppb	95
79) t-1,4-Dichloro-2-Butene	9.95	53	9627	7.246	ppb	88
80) Bromobenzene	9.81	156	50311	8.862	ppb	99
81) n-Propylbenzene	9.99	91	115264	9.237	ppb	98
82) 4-Ethyltoluene	10.11	105	122785	8.180	ppb	98
83) 2-Chlorotoluene	10.04	91	114189	8.662	ppb	98
84) 1,3,5-Trimethylbenzene	10.19	105	82248	8.534	ppb	99
85) 4-Chlorotoluene	10.16	91	134912	9.137	ppb	98
86) Tert-Butylbenzene	10.53	119	104234	8.747	ppb	94
87) 1,2,4-Trimethylbenzene	10.58	105	128613	9.225	ppb	99
88) Sec-Butylbenzene	10.76	105	155845	9.003	ppb	100
89) p-Isopropyltoluene	10.93	119	140825	8.783	ppb	99
91) 1,3-DCB	10.84	146	92005	8.743	ppb	100
92) 1,4-DCB	10.94	146	96524	8.673	ppb	98
93) n-Butylbenzene	11.36	91	108020	8.150	ppb	98
94) 1,2-DCB	11.32	146	87904	8.523	ppb	100
95) Hexachloroethane	11.59	117	26960	7.902	ppb	83
96) 1,2-Dibromo-3-chloropropan	12.15	75	9664	7.458	ppb	# 88
97) 1,2,4-Trichlorobenzene	13.04	180	55523	8.444	ppb	99
98) Hexachlorobutadiene	13.26	225	27794	7.780	ppb	95
99) Naphthalene	13.29	128	147433	10.645	ppb	92
100) 1,2,3-Trichlorobenzene	13.55	180	32440	8.340	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

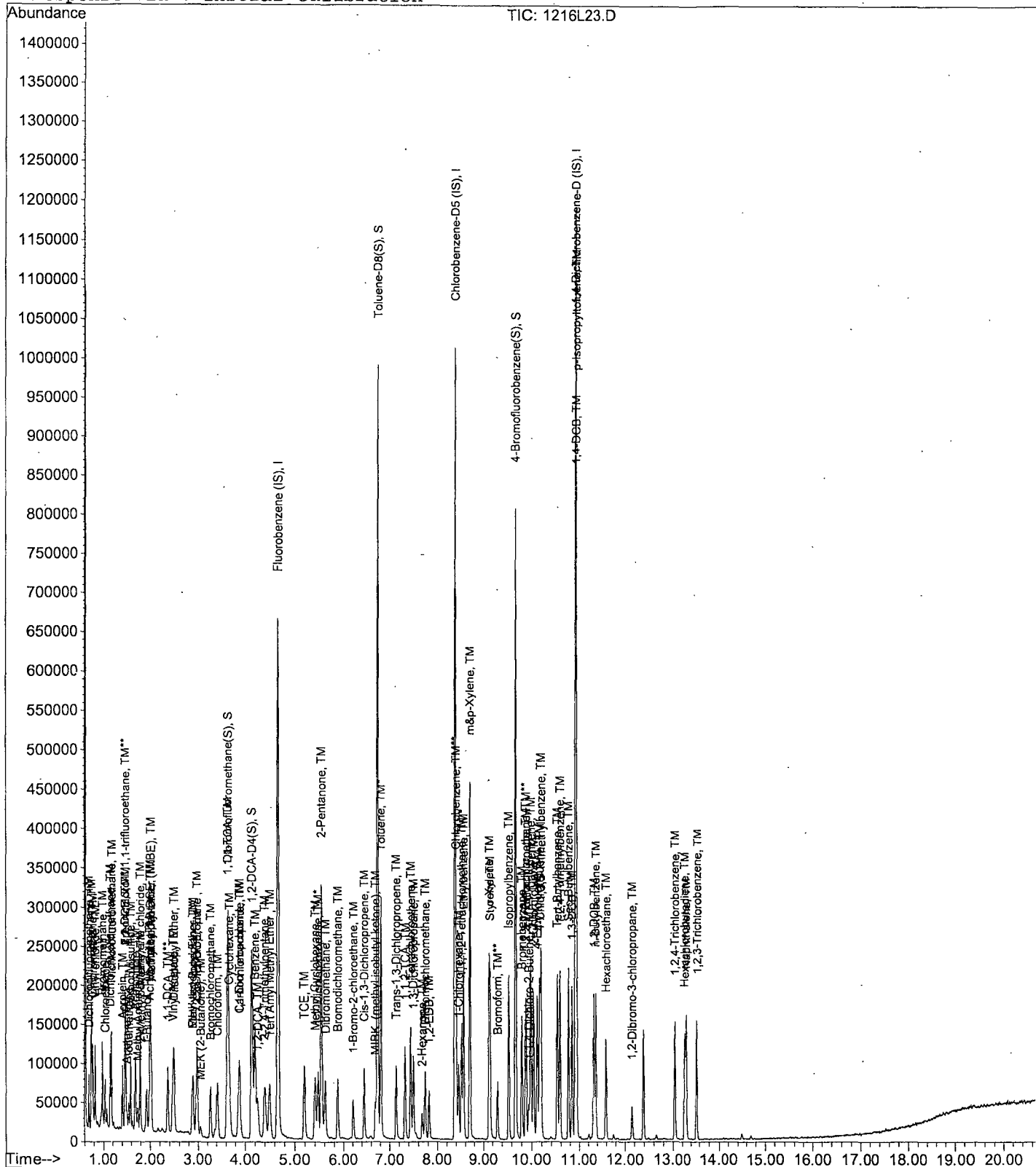
Data File : M:\LOKI\DATA\181213\1216L23.D  
 Acq On : 16 Dec 18 19:22  
 Sample : AZ84061W03 MS10ug/L  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L38.D Vial: 37  
 Acq On : 17 Dec 18 2:30 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ84057W02 MS10ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	277824	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	290496	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	172224	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	183674	25.773	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.092%	
40) 1,2-DCA-D4(S)	4.14	65	204821	25.095	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.380%	
61) Toluene-D8(S)	6.74	98	593045	25.404	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.616%	
69) 4-Bromofluorobenzene(S)	9.68	95	210412	24.937	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.748%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	34264	14.615	ppb	96
3) Freon 114	0.75	85	29698	14.513	ppb	88
4) Chloromethane	0.77	50	43539	9.370	ppb	96
5) Vinyl chloride	0.82	62	42662	10.067	ppb	97
6) Bromomethane	0.98	94	34750	9.932	ppb	100
7) Chloroethane	1.03	64	27654	9.679	ppb	93
8) Dichlorofluoromethane	1.14	67	63849	8.809	ppb	96
9) Trichlorofluoromethane	1.17	101	53861	9.394	ppb	97
10) Acrolein	1.41	56	30936	78.290	ppb	# 99
11) Acetone	1.51	43	16379	10.060	ppb	97
12) Freon-113	1.48	101	29343	10.584	ppb	97
13) 1,1-DCE	1.46	63	15843	8.826	ppb	93
14) t-Butanol	1.93	59	45510	97.509	ppb	98
15) Acetonitrile	1.69	41	78564	115.677	ppb	96
16) Methyl Acetate	1.74	43	25253	4.603	ppb	# 100
17) Iodomethane	1.55	142	17248	8.030	ppb	100
18) Acrylonitrile	1.99	52	14226	9.059	ppb	96
19) Methylene chloride	1.79	84	41071	8.454	ppb	98
20) Carbon disulfide	1.59	76	102056	9.346	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	91885	8.759	ppb	# 76
22) Trans-1,2-DCE	2.00	96	37124	8.888	ppb	90
23) Diisopropyl Ether	2.49	45	100567	8.728	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.48	85	12219	3.350	ppb	# 1
25) 1,1-DCA	2.36	63	66736	8.194	ppb	99
26) Vinyl Acetate	2.46	43	29519	6.877	ppb	100
27) Ethyl tert Butyl Ether	2.88	59	80125	8.765	ppb	97
28) MEK (2-Butanone)	3.06	43	15921	8.790	ppb	88
29) Cis-1,2-DCE	2.99	96	16840	8.534	ppb	96
30) 2,2-Dichloropropane	2.96	77	37981	6.542	ppb	97
31) 2-Methylpentane	1.82	71	247	0.506	ppb	# 12
32) 3-Methylpentane	2.02	57	21901	2.919	ppb	# 74
33) Chloroform	3.42	83	64256	8.831	ppb	95
34) Bromochloromethane	3.27	128	20507	9.023	ppb	81
36) 1,1,1-TCA	3.62	97	50738	8.456	ppb	100
37) Cyclohexane	3.68	41	22320	9.212	ppb	94
38) 1,1-Dichloropropene	3.89	75	34686	8.262	ppb	96
39) 2,2,4-Trimethylpentane	4.40	57	59121	9.517	ppb	97
41) Carbon Tetrachloride	3.88	117	46269	8.641	ppb	93
42) Tert Amyl Methyl Ether	4.50	73	67364	8.064	ppb	93

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L38.D  
 Acq On : 17 Dec 18 2:30  
 Sample : AZ84057W02 MS10ug/L  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) 1,2-DCA	4.27	62	48773	8.941	ppb	96
45) Benzene	4.21	78	126555	8.498	ppb	97
46) TCE	5.19	130	35109	8.999	ppb	93
47) 2-Pentanone	5.53	43	304510	111.217	ppb	100
48) 1,2-Dichloropropane	5.46	63	34918	8.456	ppb	99
49) Bromodichloromethane	5.87	83	49573	8.597	ppb	99
50) Methyl Cyclohexane	5.41	83	32256	9.033	ppb	95
51) Dibromomethane	5.62	93	25278	8.524	ppb	98
52) 2-Chloroethyl vinyl ether	6.34	43	415	0.478	ppb	# 30
53) MIBK (methyl isobutyl ket	6.69	43	28791	8.182	ppb	97
54) 1-Bromo-2-chloroethane	6.21	63	24984	8.765	ppb	94
55) Cis-1,3-Dichloropropene	6.45	75	45929	7.522	ppb	98
56) Toluene	6.82	91	136906	8.848	ppb	97
57) Trans-1,3-Dichloropropene	7.14	75	45032	8.074	ppb	95
58) 1,1,2-TCA	7.33	83	30385	8.506	ppb	95
59) 2-Hexanone	7.68	43	17638	8.096	ppb	96
62) 1,2-EDB	7.82	107	36525	8.559	ppb	95
63) Tetrachloroethene	7.44	166	39002	8.180	ppb	92
64) 1-Chlorohexane	8.45	91	30779	9.122	ppb	100
65) 1,1,1,2-Tetrachloroethane	8.52	131	40144	8.890	ppb	90
66) m&p-Xylene	8.70	91	194936	16.290	ppb	98
67) o-Xylene	9.12	106	44749	7.911	ppb	95
68) Styrene	9.15	104	41504	6.919	ppb	97
70) 1,3-Dichloropropane	7.50	76	56237	8.361	ppb	99
71) Dibromochloromethane	7.74	129	41122	8.447	ppb	92
72) Chlorobenzene	8.40	112	95536	8.522	ppb	100
73) Ethylbenzene	8.56	91	125431	7.904	ppb	97
74) Bromoform	9.30	173	30768	8.337	ppb	93
76) Isopropylbenzene	9.54	105	110003	7.898	ppb	97
77) 1,1,2,2-Tetrachloroethane	9.88	83	52744	8.205	ppb	98
78) 1,2,3-Trichloropropane	9.90	110	9663	8.982	ppb	99
79) t-1,4-Dichloro-2-Butene	9.95	53	8884	7.666	ppb	97
80) Bromobenzene	9.81	156	43003	8.684	ppb	98
81) n-Propylbenzene	9.99	91	84696	7.781	ppb	98
82) 4-Ethyltoluene	10.12	105	110587	8.446	ppb	99
83) 2-Chlorotoluene	10.04	91	93346	8.118	ppb	99
84) 1,3,5-Trimethylbenzene	10.19	105	65216	7.779	ppb	99
85) 4-Chlorotoluene	10.17	91	111418	8.651	ppb	94
86) Tert-Butylbenzene	10.53	119	83869	8.069	ppb	96
87) 1,2,4-Trimethylbenzene	10.58	105	96233	7.913	ppb	97
88) Sec-Butylbenzene	10.76	105	123212	8.160	ppb	98
89) p-Isopropyltoluene	10.93	119	111240	7.954	ppb	98
90) Benzyl Chloride	10.93	91	25925	3.722	ppb	# 55
91) 1,3-DCB	10.84	146	78474	8.549	ppb	99
92) 1,4-DCB	10.94	146	83529	8.605	ppb	98
93) n-Butylbenzene	11.37	91	85504	7.396	ppb	99
94) 1,2-DCB	11.32	146	76154	8.465	ppb	98
95) Hexachloroethane	11.59	117	24124	8.106	ppb	93
96) 1,2-Dibromo-3-chloropropan	12.15	75	8885	7.938	ppb	# 87
97) 1,2,4-Trichlorobenzene	13.04	180	40760	7.106	ppb	91
98) Hexachlorobutadiene	13.26	225	24488	7.858	ppb	92
99) Naphthalene	13.29	128	79279	6.562	ppb	93
100) 1,2,3-Trichlorobenzene	13.55	180	25280	7.451	ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

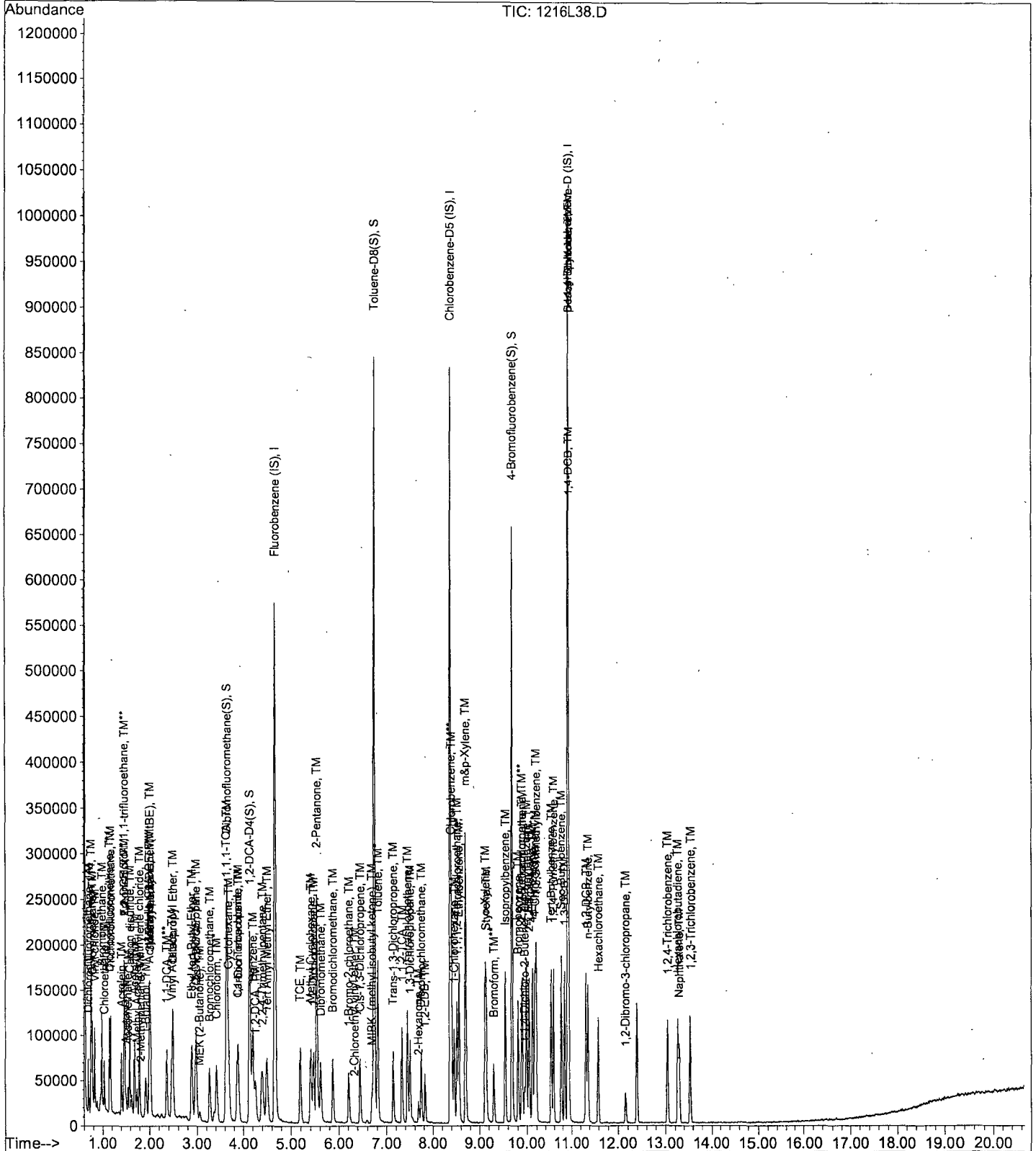
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 Acq On : 17 Dec 18 2:30  
 Sample : AZ84057W02 MS10ug/L  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L24.D Vial: 23  
 Acq On : 16 Dec 18 19:50 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ84061W04 MSD10ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018 Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	326976	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	351936	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	192576	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Dibromofluoromethane(S)	3.64	111	201630	24.040	ppb	0.00
Spiked Amount 25.000			Recovery =	96.160%		
40) 1,2-DCA-D4(S)	4.14	65	230559	24.002	ppb	0.00
Spiked Amount 25.000			Recovery =	96.008%		
61) Toluene-D8(S)	6.74	98	698179	24.687	ppb	0.00
Spiked Amount 25.000			Recovery =	98.748%		
69) 4-Bromofluorobenzene(S)	9.68	95	253930	24.841	ppb	0.00
Spiked Amount 25.000			Recovery =	99.364%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	40912	14.827	ppb	96
3) Freon 114	0.75	85	29363	12.192	ppb	90
4) Chloromethane	0.77	50	48405	8.824	ppb	95
5) Vinyl chloride	0.82	62	49374	9.900	ppb	99
6) Bromomethane	0.98	94	33298	8.086	ppb	97
7) Chloroethane	1.03	64	30348	8.991	ppb	98
8) Dichlorofluoromethane	1.14	67	57779	6.773	ppb	99
9) Trichlorofluoromethane	1.17	101	59424	8.806	ppb	100
10) Acrolein	1.41	56	40320	86.699	ppb #	97
11) Acetone	1.51	43	17531	8.803	ppb #	87
12) Freon-113	1.48	101	27698	8.489	ppb	98
13) 1,1-DCE	1.46	63	17736	8.395	ppb	97
14) t-Butanol	1.93	59	59148	107.680	ppb	98
15) Acetonitrile	1.69	41	81440	101.886	ppb	97
16) Methyl Acetate	1.74	43	427503	4.259	ppb #	100
17) Iodomethane	1.55	142	18704	7.545	ppb	98
18) Acrylonitrile	1.99	52	13237	6.944	ppb	85
19) Methylene chloride	1.79	84	46057	8.055	ppb	96
20) Carbon disulfide	1.59	76	95317	7.417	ppb	100
21) Methyl t-butyl ether (MtBE)	2.02	73	92427	7.486	ppb #	74
22) Trans-1,2-DCE	2.00	96	42832	8.713	ppb	91
23) Diisopropyl Ether	2.49	45	97161	7.165	ppb	95
24) 2,2-Dichloro-1,1,1-trifluo	1.48	85	11691	2.724	ppb #	1
25) 1,1-DCA	2.36	63	77287	8.063	ppb	99
26) Vinyl Acetate	2.46	43	37691	7.461	ppb	97
27) Ethyl tert Butyl Ether	2.88	59	82297	7.650	ppb	98
28) MEK (2-Butanone)	3.06	43	19278	9.083	ppb	98
29) Cis-1,2-DCE	2.99	96	19864	8.553	ppb	99
30) 2,2-Dichloropropane	2.96	77	48757	7.135	ppb	98
31) 2-Methylpentane	1.82	71	583	0.616	ppb #	1
32) 3-Methylpentane	2.02	57	22020	2.494	ppb #	84
33) Chloroform	3.42	83	71191	8.314	ppb	96
34) Bromochloromethane	3.27	128	22255	8.320	ppb	97
36) 1,1,1-TCA	3.63	97	58798	8.327	ppb	98
37) Cyclohexane	3.68	41	21329	7.443	ppb	83
38) 1,1-Dichloropropene	3.89	75	45625	9.234	ppb	98
39) 2,2,4-Trimethylpentane	4.41	57	64598	8.836	ppb	98
41) Carbon Tetrachloride	3.87	117	50256	7.974	ppb	90
42) Tert Amyl Methyl Ether	4.50	73	71232	7.245	ppb	91

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L24.D  
 Acq On : 16 Dec 18 19:50  
 Sample : AZ84061W04 MSD10ug/L  
 Misc : IS&S 11/8/18

Vial: 23  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) Methylcyclopentane	2.89	56	6496	0.874	ppb	# 42
44) 1,2-DCA	4.26	62	52461	8.171	ppb	95
45) Benzene	4.20	78	155615	8.878	ppb	99
46) TCE	5.19	130	40926	8.913	ppb	92
47) 2-Pentanone	5.53	43	374060	116.082	ppb	99
48) 1,2-Dichloropropane	5.46	63	39789	8.187	ppb	98
49) Bromodichloromethane	5.87	83	56827	8.374	ppb	98
50) Methyl Cyclohexane	5.41	83	37051	8.816	ppb	91
51) Dibromomethane	5.62	93	28865	8.270	ppb	98
52) 2-Chloroethyl vinyl ether	6.33	43	251	0.245	ppb	# 30
53) MIBK (methyl isobutyl ket	6.69	43	36373	8.855	ppb	96
54) 1-Bromo-2-chloroethane	6.21	63	22728	6.775	ppb	91
55) Cis-1,3-Dichloropropene	6.45	75	55817	7.768	ppb	94
56) Toluene	6.81	91	198488	10.899	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	52509	7.999	ppb	98
58) 1,1,2-TCA	7.32	83	34067	8.103	ppb	99
59) 2-Hexanone	7.68	43	22718	8.860	ppb	97
62) 1,2-EDB	7.82	107	41611	8.048	ppb	99
63) Tetrachloroethene	7.44	166	47839	8.281	ppb	96
64) 1-Chlorohexane	8.45	91	29865	7.306	ppb	95
65) 1,1,1,2-Tetrachloroethane	8.52	131	42972	7.855	ppb	81
66) m&p-Xylene	8.70	91	256221	17.673	ppb	99
67) o-Xylene	9.12	106	60974	8.898	ppb	93
68) Styrene	9.14	104	53440	7.270	ppb	98
70) 1,3-Dichloropropane	7.50	76	65734	8.067	ppb	98
71) Dibromochloromethane	7.74	129	46400	7.867	ppb	99
72) Chlorobenzene	8.40	112	110341	8.125	ppb	100
73) Ethylbenzene	8.56	91	162647	8.460	ppb	98
74) Bromoform	9.30	173	35047	7.839	ppb	97
76) Isopropylbenzene	9.54	105	141311	9.074	ppb	100
77) 1,1,2,2-Tetrachloroethane	9.88	83	59162	8.231	ppb	97
78) 1,2,3-Trichloropropane	9.90	110	11756	9.772	ppb	95
79) t-1,4-Dichloro-2-Butene	9.95	53	9419	7.268	ppb	98
80) Bromobenzene	9.81	156	49355	8.913	ppb	97
81) n-Propylbenzene	9.99	91	109520	8.998	ppb	99
82) 4-Ethyltoluene	10.11	105	117362	8.016	ppb	96
83) 2-Chlorotoluene	10.04	91	115435	8.978	ppb	98
84) 1,3,5-Trimethylbenzene	10.19	105	80416	8.554	ppb	99
85) 4-Chlorotoluene	10.16	91	131981	9.165	ppb	97
86) Tert-Butylbenzene	10.53	119	101595	8.741	ppb	98
87) 1,2,4-Trimethylbenzene	10.58	105	123994	9.118	ppb	98
88) Sec-Butylbenzene	10.76	105	154314	9.140	ppb	100
89) p-Isopropyltoluene	10.93	119	138894	8.881	ppb	99
90) Benzyl Chloride	10.93	91	30615	3.931	ppb	# 51
91) 1,3-DCB	10.84	146	91996	8.963	ppb	98
92) 1,4-DCB	10.94	146	94297	8.687	ppb	98
93) n-Butylbenzene	11.36	91	109255	8.452	ppb	97
94) 1,2-DCB	11.32	146	89608	8.908	ppb	98
95) Hexachloroethane	11.59	117	28052	8.429	ppb	97
96) 1,2-Dibromo-3-chloropropan	12.15	75	10163	8.152	ppb	93
97) 1,2,4-Trichlorobenzene	13.04	180	53824	8.392	ppb	98
98) Hexachlorobutadiene	13.25	225	28296	8.120	ppb	92
99) Naphthalene	13.29	128	119039	8.812	ppb	99
100) 1,2,3-Trichlorobenzene	13.55	180	30992	8.169	ppb	97

(#) = qualifier out of range (m) = manual integration



Quantitation Report

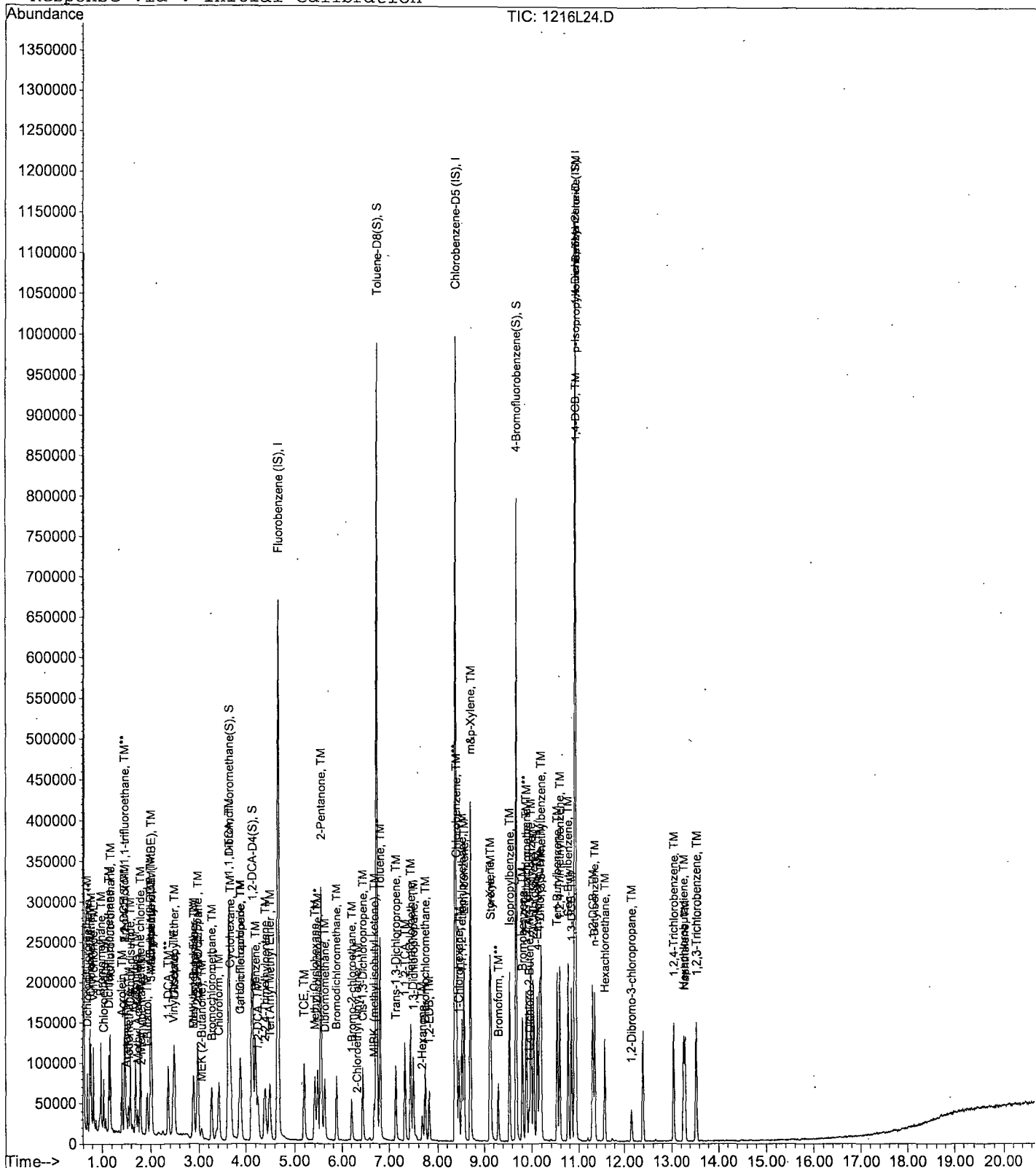
Data File : M:\LOKI\DATA\181213\1216L24.D  
Acq On : 16 Dec 18 19:50  
Sample : AZ84061W04 MSD10ug/L  
Misc : IS&S 11/8/18

Vial: 23  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L39.D  
 Acq On : 17 Dec 18 2:59  
 Sample : AZ84057W03 MSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 38  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	279040	25.000	ppb	0.00
60) Chlorobenzene-D5 (IS)	8.37	117	288704	25.000	ppb	0.00
75) 1,4-Dichlorobenzene-D (IS)	10.91	152	170496	25.000	ppb	0.00

System Monitoring Compounds

35) Dibromofluoromethane(S)	3.64	111	178001	24.868	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.472%	
40) 1,2-DCA-D4(S)	4.14	65	206346	25.172	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.688%	
61) Toluene-D8(S)	6.74	98	596665	25.718	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.872%	
69) 4-Bromofluorobenzene(S)	9.68	95	215843	25.740	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.960%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.69	85	35256	14.972	ppb	99
3) Freon 114	0.75	85	29583	14.393	ppb	91
4) Chloromethane	0.77	50	45999	9.882	ppb	93
5) Vinyl chloride	0.82	62	44939	10.559	ppb	98
6) Bromomethane	0.98	94	35778	10.181	ppb	93
7) Chloroethane	1.03	64	28080	9.791	ppb	94
8) Dichlorofluoromethane	1.14	67	66587	9.147	ppb	97
9) Trichlorofluoromethane	1.17	101	55736	9.679	ppb	99
10) Acrolein	1.41	56	33344	84.016	ppb	# 97
11) Acetone	1.51	43	16899	10.438	ppb	93
12) Freon-113	1.48	101	30701	11.026	ppb	98
13) 1,1-DCE	1.46	63	16440	9.118	ppb	88
14) t-Butanol	1.93	59	50475	107.676	ppb	98
15) Acetonitrile	1.69	41	81105	118.898	ppb	96
16) Methyl Acetate	1.74	43	25684	4.661	ppb	# 100
17) Iodomethane	1.55	142	18472	8.439	ppb	99
18) Acrylonitrile	1.98	52	14772	9.400	ppb	84
19) Methylene chloride	1.79	84	41131	8.430	ppb	97
20) Carbon disulfide	1.59	76	105639	9.632	ppb	98
21) Methyl t-butyl ether (MtBE)	2.02	73	95011	9.017	ppb	# 76
22) Trans-1,2-DCE	2.00	96	37035	8.828	ppb	98
23) Diisopropyl Ether	2.49	45	102151	8.827	ppb	99
24) 2,2-Dichloro-1,1,1-trifluo	1.48	85	13519	3.690	ppb	# 1
25) 1,1-DCA	2.36	63	72474	8.860	ppb	98
26) Vinyl Acetate	2.47	43	31013	7.193	ppb	97
27) Ethyl tert Butyl Ether	2.88	59	85494	9.312	ppb	98
28) MEK (2-Butanone)	3.05	43	16012	8.804	ppb	88
29) Cis-1,2-DCE	2.99	96	17504	8.832	ppb	96
30) 2,2-Dichloropropane	2.97	77	41498	7.116	ppb	98
31) 2-Methylpentane	1.82	71	174	0.473	ppb	# 18
32) 3-Methylpentane	2.02	57	22576	2.996	ppb	# 75
33) Chloroform	3.42	83	66250	9.066	ppb	95
34) Bromochloromethane	3.27	128	20288	8.888	ppb	97
36) 1,1,1-TCA	3.63	97	53804	8.928	ppb	96
37) Cyclohexane	3.68	41	22046	9.056	ppb	95
38) 1,1-Dichloropropene	3.89	75	37532	8.901	ppb	92
39) 2,2,4-Trimethylpentane	4.40	57	59437	9.526	ppb	97
41) Carbon Tetrachloride	3.87	117	48543	9.026	ppb	100
42) Tert Amyl Methyl Ether	4.50	73	69967	8.339	ppb	# 91

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1216L39.D  
 Acq On : 17 Dec 18 2:59  
 Sample : AZ84057W03 MSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 38  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 8:23 2018

Quant Results File: L1213W.RES

Quant Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) 1,2-DCA	4.26	62	46908	8.562	ppb	98
45) Benzene	4.20	78	132212	8.839	ppb	99
46) TCE	5.19	130	35606	9.086	ppb	94
47) 2-Pentanone	5.53	43	309851	112.675	ppb	97
48) 1,2-Dichloropropane	5.47	63	37206	8.970	ppb	98
49) Bromodichloromethane	5.87	83	52423	9.052	ppb	98
50) Methyl Cyclohexane	5.41	83	34285	9.559	ppb	100
51) Dibromomethane	5.62	93	27007	9.067	ppb	92
53) MIBK (methyl isobutyl ket	6.70	43	30232	8.598	ppb	95
54) 1-Bromo-2-chloroethane	6.21	63	25816	9.018	ppb	96
55) Cis-1,3-Dichloropropene	6.45	75	45790	7.467	ppb	91
56) Toluene	6.82	91	144976	9.328	ppb	98
57) Trans-1,3-Dichloropropene	7.14	75	44916	8.018	ppb	97
58) 1,1,2-TCA	7.32	83	31132	8.677	ppb	93
59) 2-Hexanone	7.68	43	18162	8.300	ppb	96
62) 1,2-EDB	7.82	107	37657	8.879	ppb	98
63) Tetrachloroethene	7.44	166	42626	8.995	ppb	94
64) 1-Chlorohexane	8.45	91	29616	8.832	ppb	98
65) 1,1,1,2-Tetrachloroethane	8.52	131	40737	9.077	ppb	90
66) m&p-Xylene	8.70	91	200310	16.843	ppb	99
67) o-Xylene	9.12	106	45414	8.078	ppb	91
68) Styrene	9.14	104	42072	7.031	ppb	94
70) 1,3-Dichloropropane	7.50	76	58166	8.701	ppb	100
71) Dibromochloromethane	7.74	129	42856	8.857	ppb	98
72) Chlorobenzene	8.40	112	95576	8.579	ppb	97
73) Ethylbenzene	8.56	91	134932	8.556	ppb	99
74) Bromoform	9.30	173	32621	8.894	ppb	99
76) Isopropylbenzene	9.54	105	116652	8.460	ppb	97
77) 1,1,2,2-Tetrachloroethane	9.88	83	53373	8.387	ppb	99
78) 1,2,3-Trichloropropane	9.90	110	8892	8.349	ppb	81
79) t-1,4-Dichloro-2-Butene	9.95	53	9225	8.041	ppb	98
80) Bromobenzene	9.81	156	44118	8.999	ppb	97
81) n-Propylbenzene	9.99	91	94640	8.783	ppb	98
82) 4-Ethyltoluene	10.12	105	114010	8.795	ppb	99
83) 2-Chlorotoluene	10.04	91	94502	8.302	ppb	97
84) 1,3,5-Trimethylbenzene	10.19	105	66640	8.022	ppb	98
85) 4-Chlorotoluene	10.17	91	113337	8.889	ppb	98
86) Tert-Butylbenzene	10.53	119	86311	8.388	ppb	95
87) 1,2,4-Trimethylbenzene	10.58	105	100385	8.338	ppb	98
88) Sec-Butylbenzene	10.76	105	126559	8.467	ppb	97
89) p-Isopropyltoluene	10.93	119	115786	8.362	ppb	99
91) 1,3-DCB	10.84	146	79487	8.748	ppb	96
92) 1,4-DCB	10.94	146	85690	8.917	ppb	98
93) n-Butylbenzene	11.37	91	89446	7.815	ppb	95
94) 1,2-DCB	11.32	146	78073	8.766	ppb	96
95) Hexachloroethane	11.59	117	26726	9.071	ppb	93
96) 1,2-Dibromo-3-chloropropan	12.15	75	8701	7.837	ppb	95
97) 1,2,4-Trichlorobenzene	13.04	180	43262	7.619	ppb	97
98) Hexachlorobutadiene	13.26	225	26208	8.495	ppb	94
99) Naphthalene	13.29	128	86703	7.249	ppb	96
100) 1,2,3-Trichlorobenzene	13.55	180	25296	7.531	ppb	99

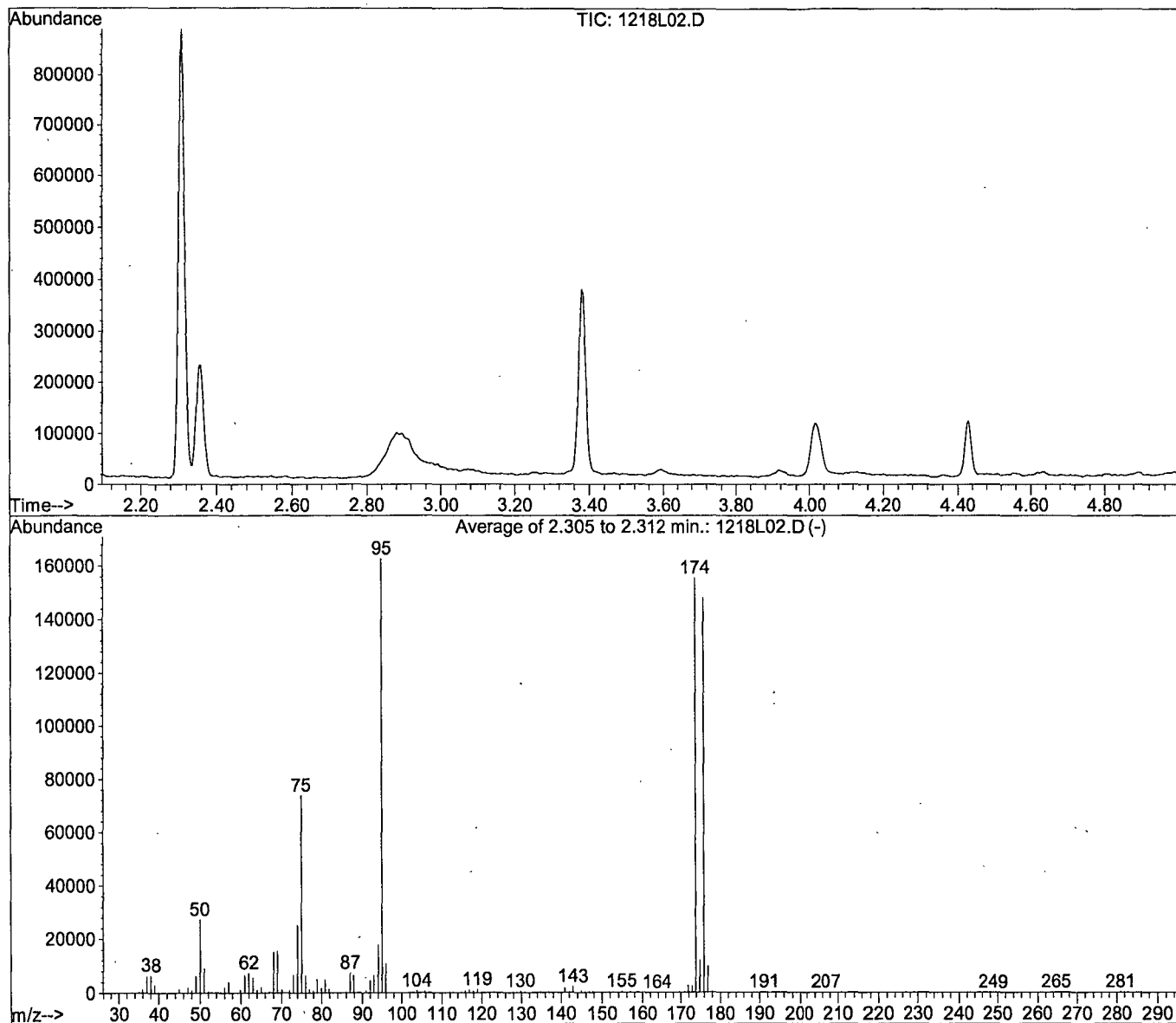


BFB

Data File : M:\LOKI\DATA\181218\1218L02.D  
Acq On : 18 Dec 18 15:06  
Sample : 25ug/L BFB STD 11/7/18  
Misc : 2ul

Vial: 1  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
Title : METHOD 8260B



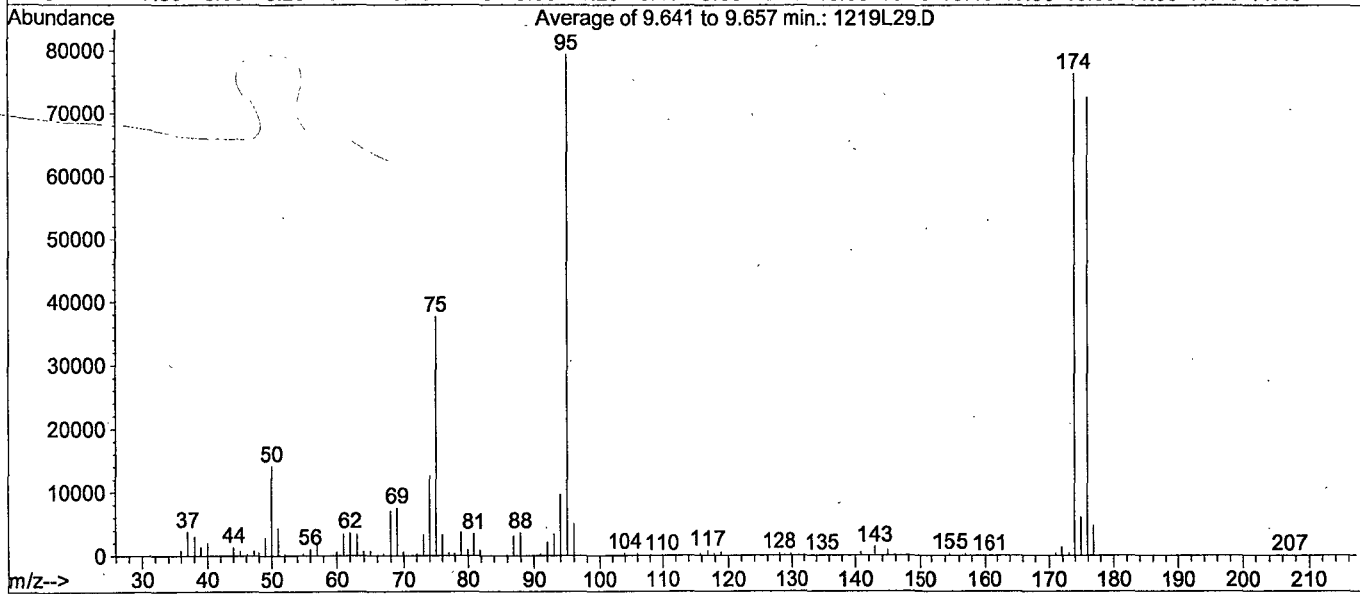
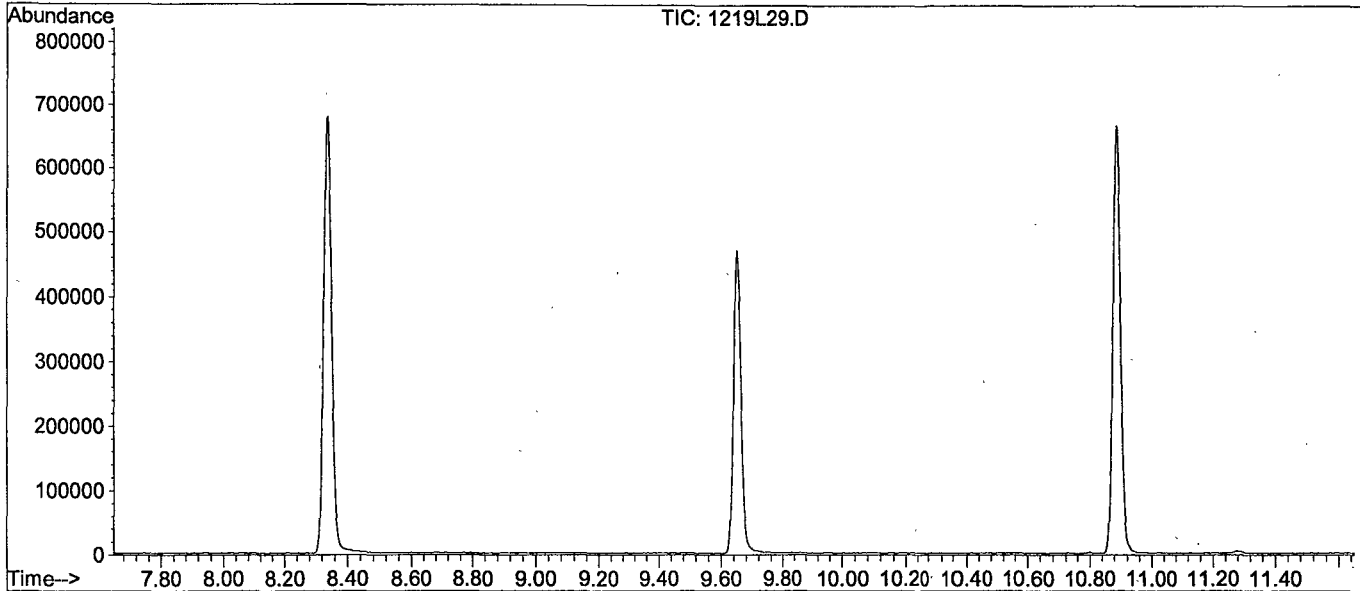
Spectrum Information: Average of 2.305 to 2.312 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	27264	PASS
75	95	30	60	45.4	73904	PASS
95	95	100	100	100.0	162667	PASS
96	95	5	9	6.7	10918	PASS
173	174	0.00	2	1.5	2380	PASS
174	95	50	100	95.5	155371	PASS
175	174	5	9	7.7	11931	PASS
176	174	95	101	95.3	148011	PASS
177	176	5	9	6.6	9803	PASS

Data File : M:\LOKI\DATA\181218\1219L29.D  
 Acq On : 19 Dec 18 23:18  
 Sample : 25ug/L BFB STD 11/7/18  
 Misc : IS&S 11/8/18

Vial: 28  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Method : M:\LOKI\DATA\181218\L1218W.M (RTE Integrator)  
 Title : METHOD 8260B



Spectrum Information: Average of 9.641 to 9.657 min.

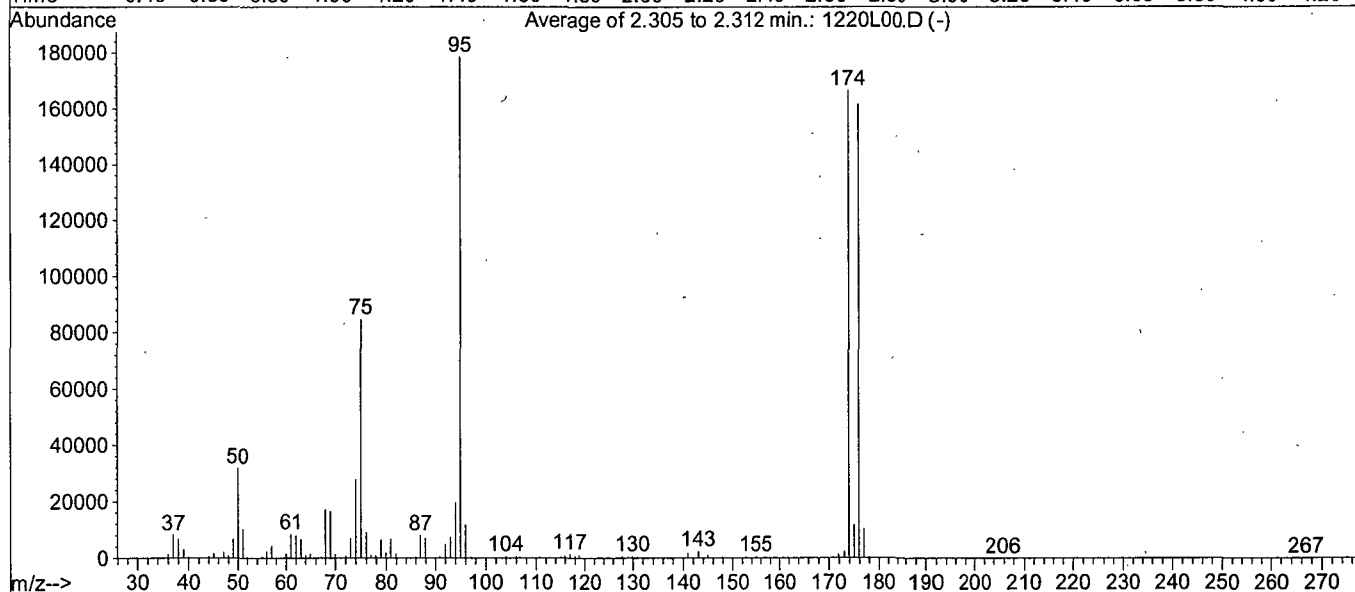
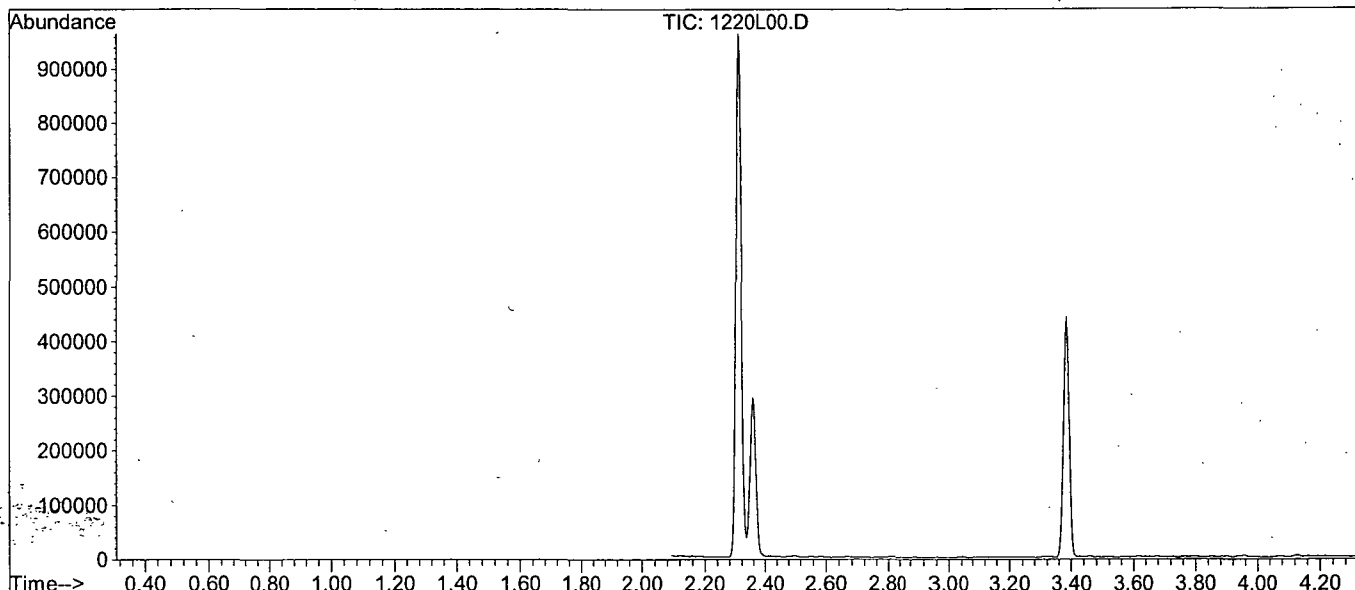
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	14149	PASS
75	95	30	60	47.5	37677	PASS
95	95	100	100	100.0	79403	PASS
96	95	5	9	6.4	5054	PASS
173	174	0.00	2	0.6	421	PASS
174	95	50	100	96.2	76416	PASS
175	174	5	9	7.9	6057	PASS
176	174	95	101	95.1	72668	PASS
177	176	5	9	6.6	4760	PASS

BFB

Data File : M:\LOKI\DATA\181220\1220L00.D  
Acq On : 20 Dec 18 10:45  
Sample : 25ug/L BFB STD 11/7/18  
Misc : 2ul

Vial: 1  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B



Spectrum Information: Average of 2.305 to 2.312 min.

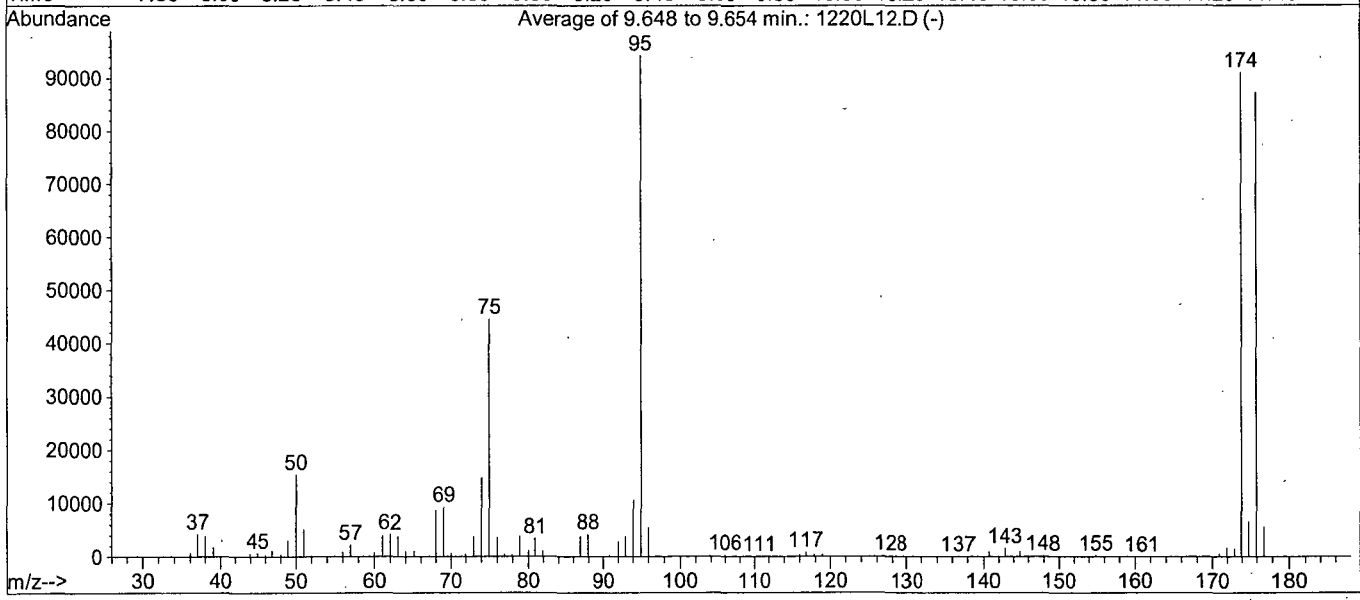
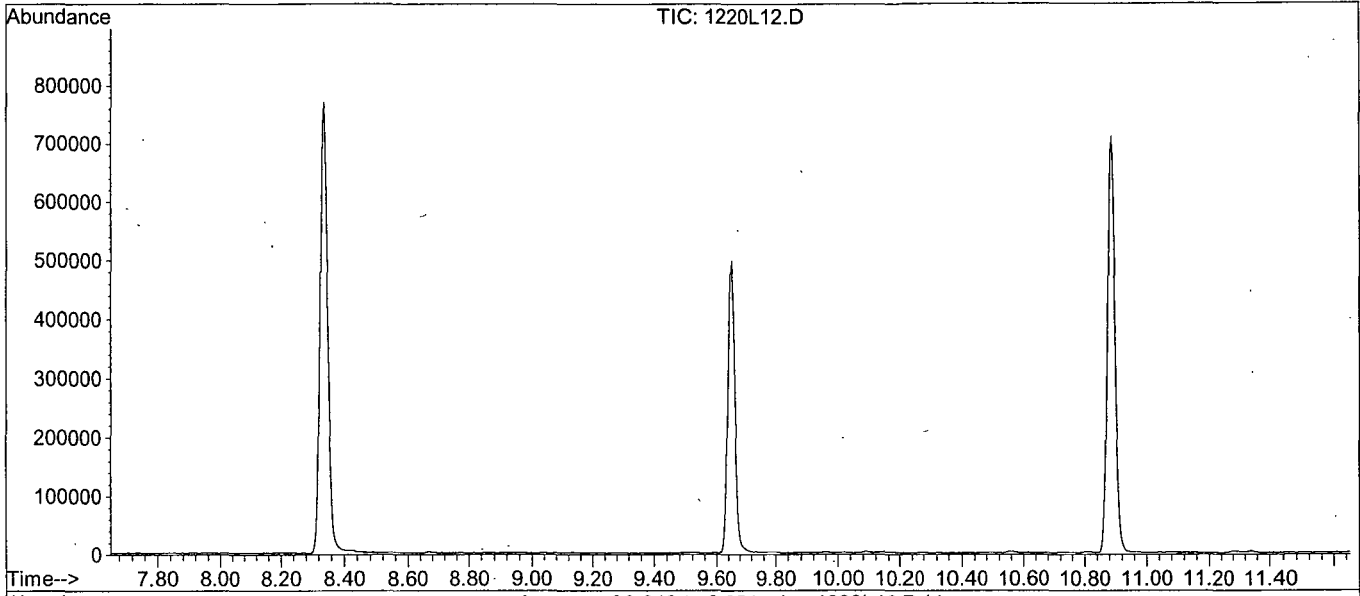
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	31816	PASS
75	95	30	60	47.5	84840	PASS
95	95	100	100	100.0	178581	PASS
96	95	5	9	6.6	11755	PASS
173	174	0.00	2	1.5	2432	PASS
174	95	50	100	93.3	166613	PASS
175	174	5	9	7.0	11700	PASS
176	174	95	101	97.0	161664	PASS
177	176	5	9	6.4	10315	PASS

BFB

Data File : M:\LOKI\DATA\181220\1220L12.D  
Acq On : 20 Dec 18 16:22  
Sample : 25ug/L BFB STD 11/7/18  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\181220\L1220W.M (RTE Integrator)  
Title : METHOD 8260B



AutoFind: Scans 2817, 2818, 2819; Background Corrected with Scan 2803

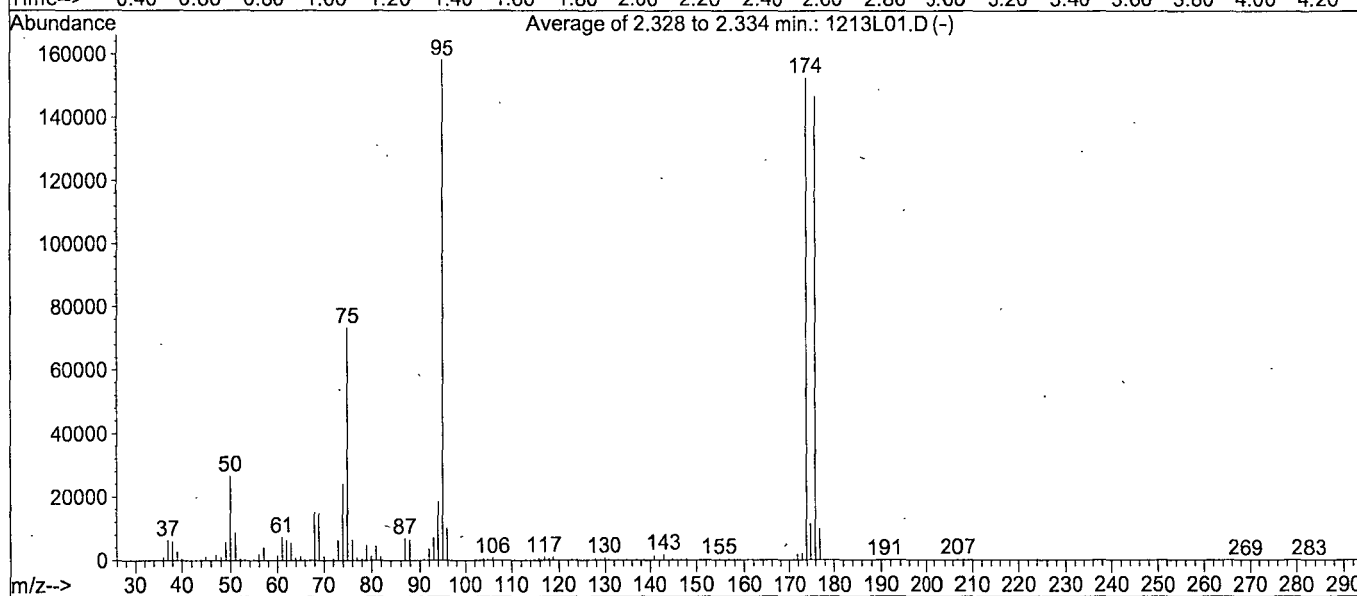
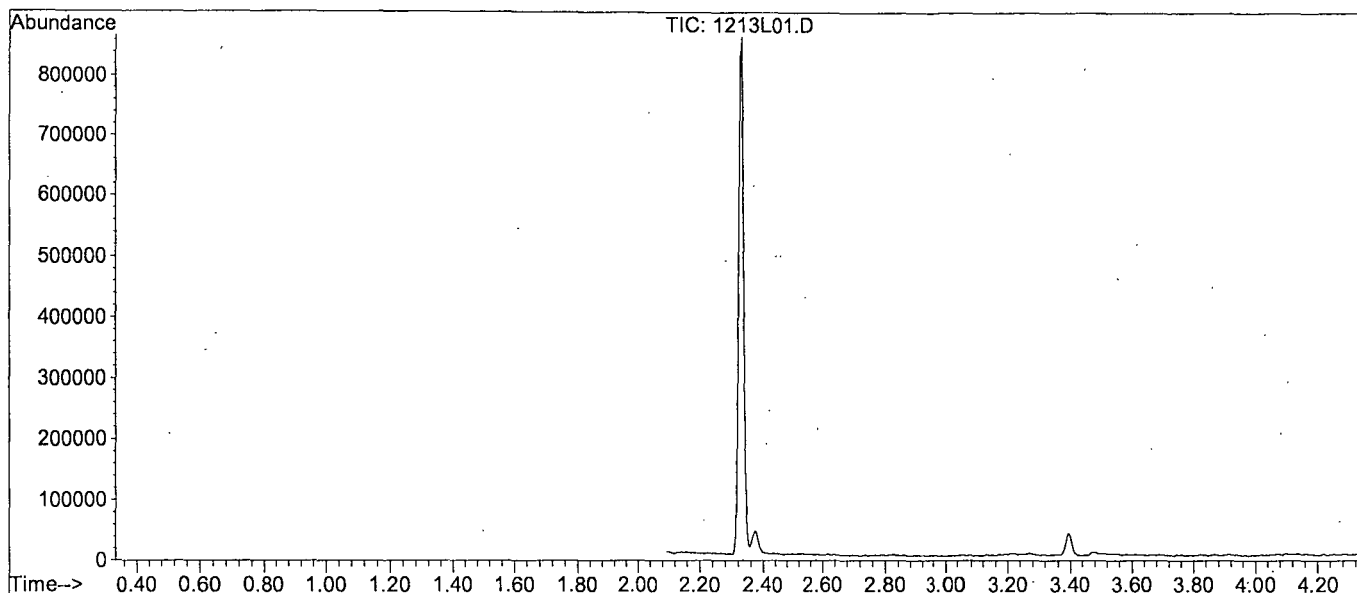
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	15396	PASS
75	95	30	60	47.2	44573	PASS
95	95	100	100	100.0	94336	PASS
96	95	5	9	5.9	5531	PASS
173	174	0.00	2	1.6	1492	PASS
174	95	50	100	96.6	91085	PASS
175	174	5	9	7.3	6611	PASS
176	174	95	101	95.9	87352	PASS
177	176	5	9	6.5	5671	PASS



Data File : M:\LOKI\DATA\181213\1213L01.D  
 Acq On : 13 Dec 18 13:50  
 Sample : 25ug/L BFB STD 11/7/18  
 Misc : 2ul

Vial: 1  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B



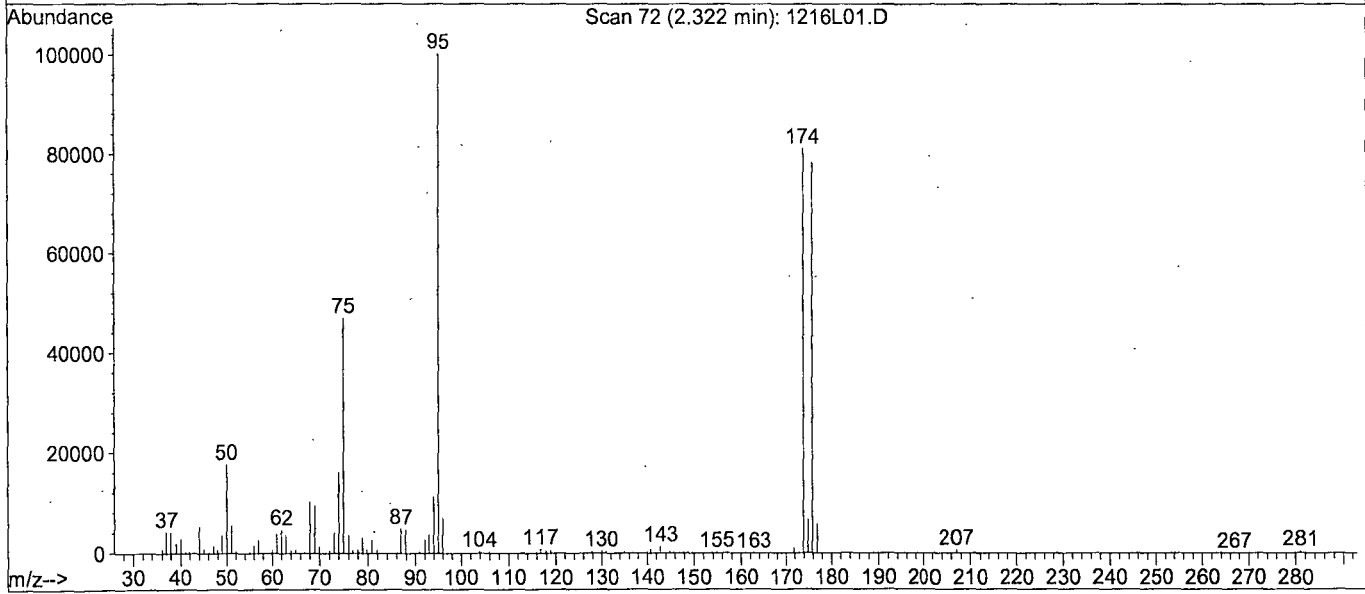
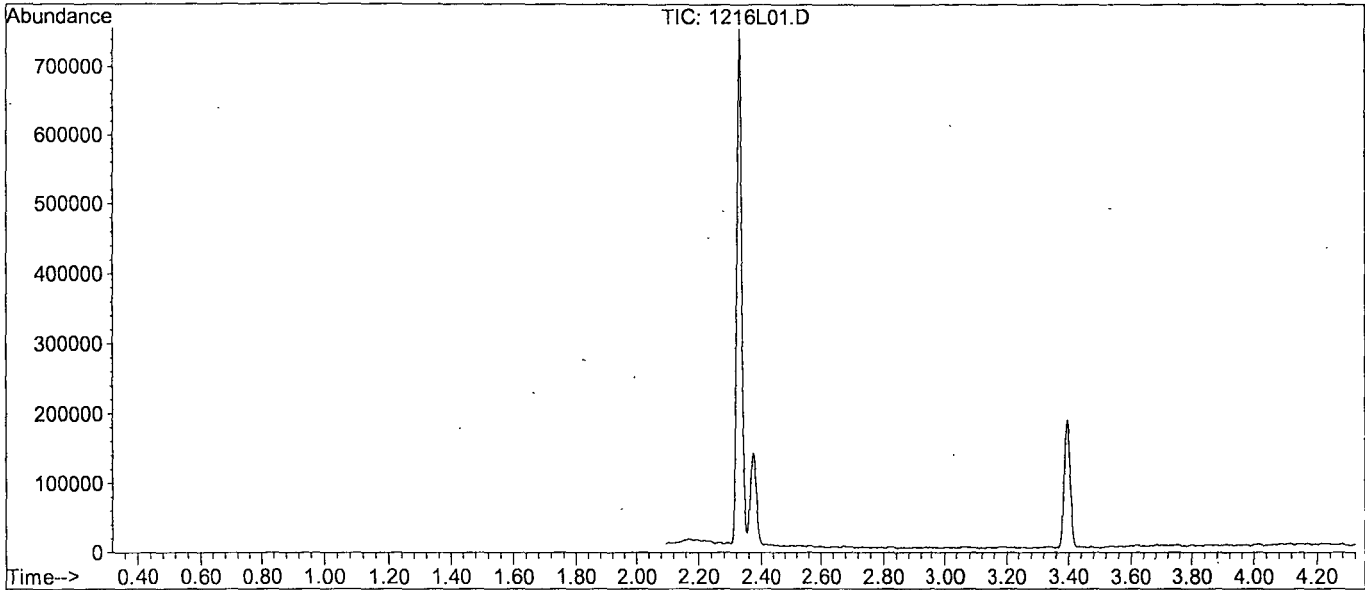
Spectrum Information: Average of 2.328 to 2.334 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	26613	PASS
75	95	30	60	46.4	73327	PASS
95	95	100	100	100.0	158037	PASS
96	95	5	9	6.3	10035	PASS
173	174	0.00	2	1.4	2102	PASS
174	95	50	100	96.5	152576	PASS
175	174	5	9	7.5	11420	PASS
176	174	95	101	96.1	146581	PASS
177	176	5	9	6.7	9822	PASS

Data File : M:\LOKI\DATA\181213\1216L01.D  
 Acq On : 16 Dec 18 9:04  
 Sample : 25ug/L BFB STD 11/7/18  
 Misc : 2ul

Vial: 1  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
 Title : METHOD 8260B



Spectrum Information: Scan 72

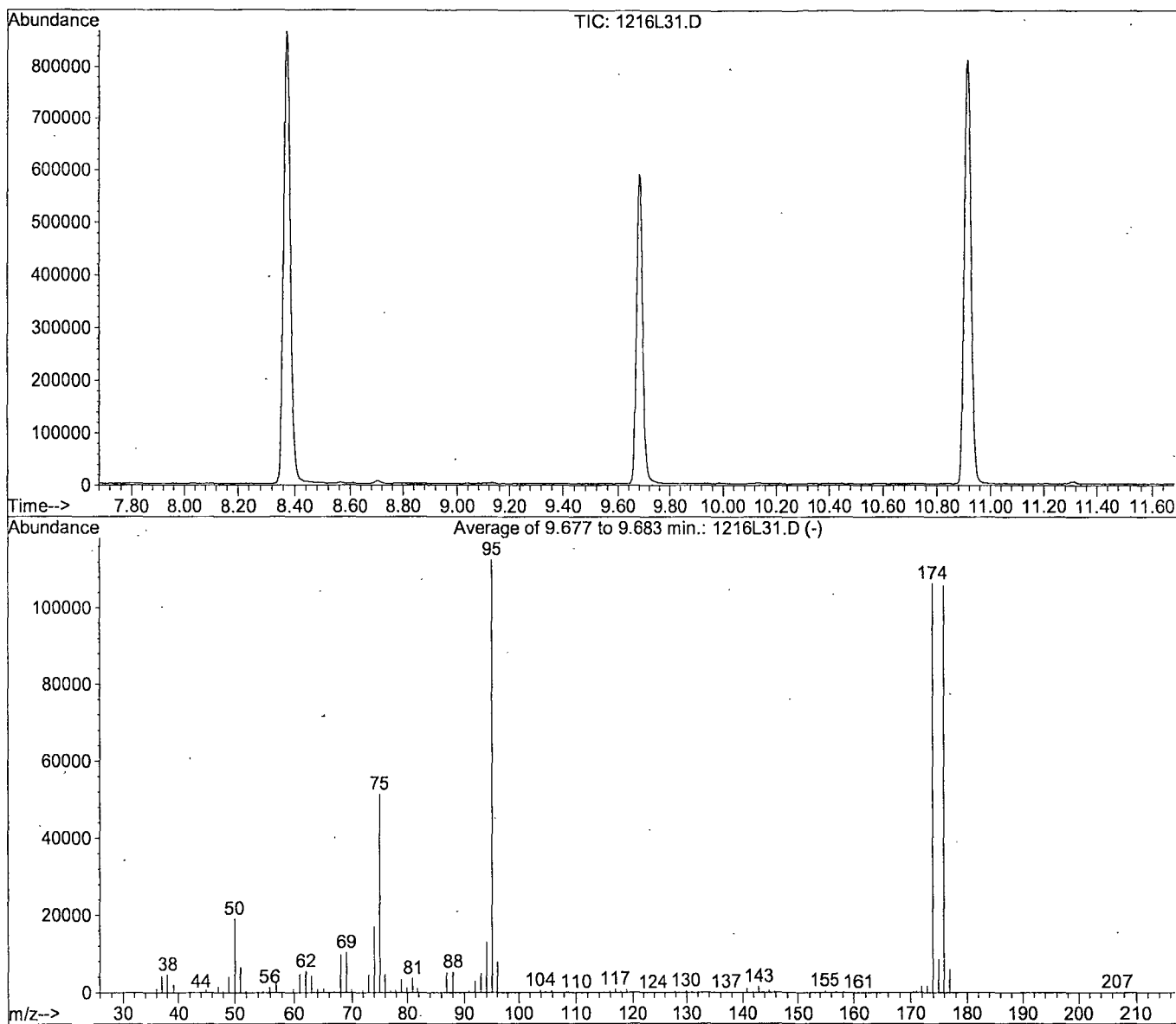
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	17760	PASS
75	95	30	60	46.9	47088	PASS
95	95	100	100	100.0	100336	PASS
96	95	5	9	6.9	6966	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.9	81192	PASS
175	174	5	9	8.3	6712	PASS
176	174	95	101	96.4	78288	PASS
177	176	5	9	7.5	5850	PASS

BFB

Data File : M:\LOKI\DATA\181213\1216L31.D  
Acq On : 16 Dec 18 23:10  
Sample : 25ug/L BFB STD 11/7/18  
Misc : IS&S 11/8/18

Vial: 30  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B



AutoFind: Scans 2826, 2827, 2828; Background Corrected with Scan 2813

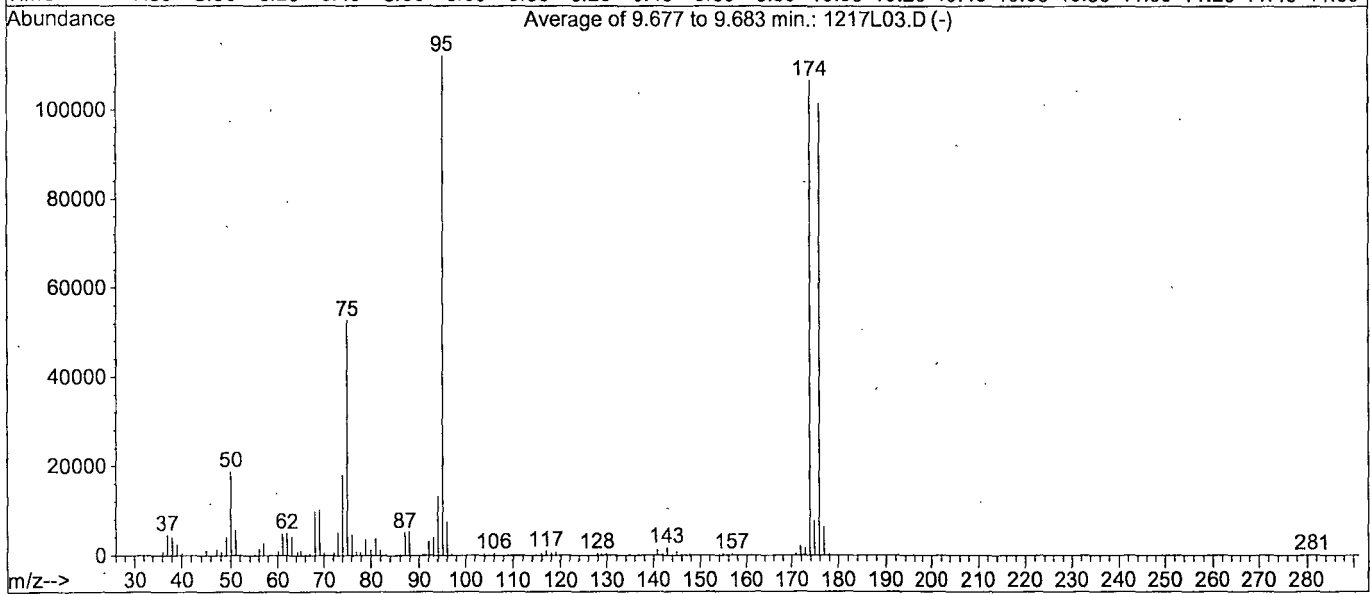
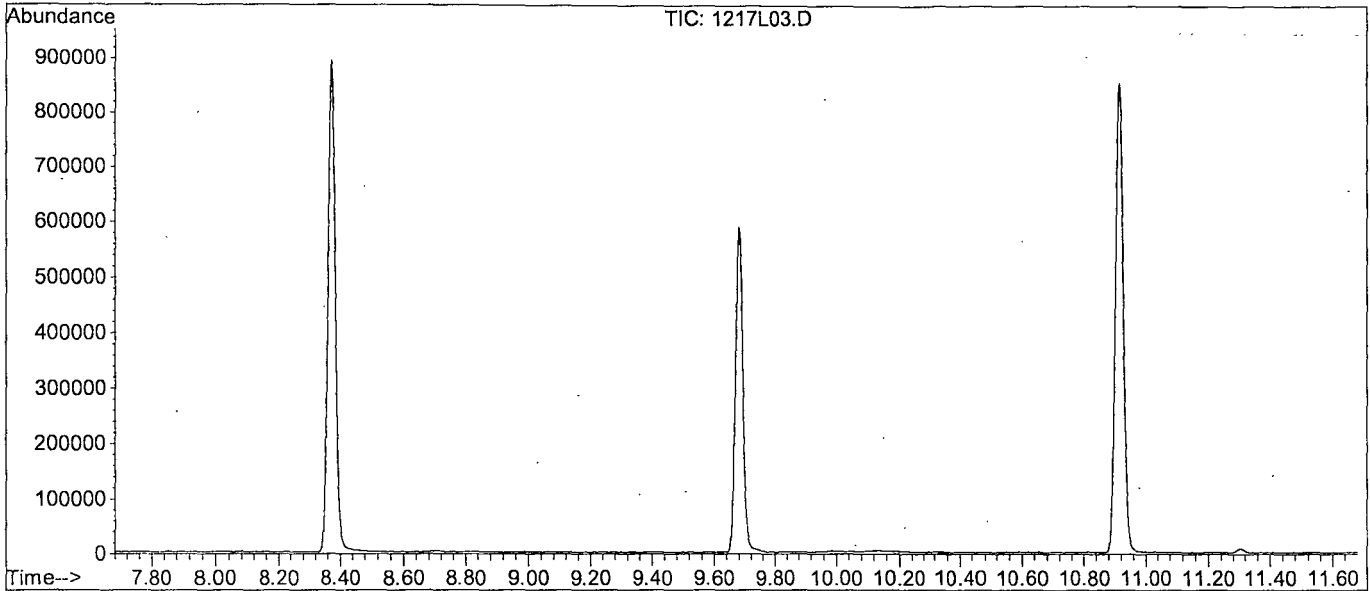
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	19144	PASS
75	95	30	60	45.7	51520	PASS
95	95	100	100	100.0	112669	PASS
96	95	5	9	7.0	7871	PASS
173	174	0.00	2	1.7	1779	PASS
174	95	50	100	94.6	106552	PASS
175	174	5	9	8.0	8568	PASS
176	174	95	101	99.4	105923	PASS
177	176	5	9	5.7	6001	PASS

BFB

Data File : M:\LOKI\DATA\181213\1217L03.D  
Acq On : 17 Dec 18 10:32  
Sample : 25ug/L BFB STD 12/12/18  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\181213\L1213W.M (RTE Integrator)  
Title : METHOD 8260B



Spectrum Information: Average of 9.677 to 9.683 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	18757	PASS
75	95	30	60	47.0	52664	PASS
95	95	100	100	100.0	112155	PASS
96	95	5	9	6.8	7574	PASS
173	174	0.00	2	1.5	1608	PASS
174	95	50	100	95.1	106651	PASS
175	174	5	9	7.3	7781	PASS
176	174	95	101	95.2	101549	PASS
177	176	5	9	6.3	6437	PASS

## Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
0.3ug/L										
Prepared By (Initials): <u>          DG          </u>										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 12/12/18	12/19/18	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	2uL			10
0.5ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 12/12/18	12/19/18	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	5uL			25
1.0ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 12/12/18	12/19/18	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	10uL			50
2.0ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 12/12/18	12/19/18	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	15uL			75
5ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 12/12/18	02/10/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	20uL			100
10ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	25uL			125

20ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 12/12/18	02/10/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	30uL			150
40ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 12/12/18	02/10/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	35uL			175
100ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 12/12/18	02/10/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 6	Various		50	Prepared 12/12/18	10/31/18	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/12/18	10/31/18	N/A	25uL			250
8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)										
Prepared: 12/13/18										
Expires: 12/14/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 12/13/18										
Expires: 12/14/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	25uL			125

Loki 8260 Water Surrogate										
Prepared: 11/20/18							Prepared By (Initials): DG			
Expires: 04/02/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36336	07/28/19	04/02/19	375uL	15mL	Methanol	50
Loki 8260 Water Internal Standard										
Prepared: 11/08/18							Prepared By (Initials): DG			
Expires: 10/05/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Internal Standard Solution	O2SI	120004-02	2,000	326533-38441	10/05/19	04/27/21	375uL	15mL	Methanol	50

### Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
0.3ug/L						Prepared By (Initials): <u>PC</u>				
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 12/17/18	12/19/18	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	2uL			10
0.5ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 12/17/18	12/19/18	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	5uL			25
1.0ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 12/17/18	12/19/18	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	10uL			50
2.0ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 12/17/18	12/19/18	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	15uL			75
5ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 12/17/18	02/15/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	20uL			100
10ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	25uL			125



20ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 12/17/18	02/15/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	30uL			150
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	30uL			150
40ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 12/17/18	02/15/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	35uL			175
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	35uL			175
100ug/L										
Prepared: 12/18/18										
Expires: 01/17/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 12/17/18	02/15/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	40uL			200
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 12/18/18										
Expires: 01/17/19										
						Prepared By (Initials): PC				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI	8260 Water SS	50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 6	Various	8260 Water SS	50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. TBA	Various	8260 Water SS	250	Prepared 12/17/18	02/15/19	N/A	25uL			250
VOA STD. TBA	Various	8260 Water SS	250	Prepared 12/17/18	02/15/19	N/A	25uL			250
VOA STD. TBA	Various	8260 Water SS	250	Prepared 12/17/18	02/15/19	N/A	25uL			250
8260 Water Continuing Calibrations (CCV/ Lab Control Spikes (LCS))										
Prepared: 12/18/18										
Expires: 12/19/18										
						Prepared By (Initials): PC				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 12/17/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI	CCV/ LCS	50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 2	O2SI	CCV/ LCS	50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 12/17/18	02/15/19	N/A	25uL			125
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 12/17/18	02/15/19	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 12/18/18										
Expires: 12/19/18										
						Prepared By (Initials): PC				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	LCS X4 Ketones	50	Prepared 12/17/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI	LCS X4 Ketones	50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 2	O2SI	LCS X4 Ketones	50	Prepared 12/17/18	02/15/19	N/A	40uL			40
VOA STD. TBA	Various	LCS X4 Ketones	250	Prepared 12/17/18	02/15/19	N/A	25uL			125
VOA STD. TBA	Various	LCS X4 Ketones	250	Prepared 12/17/18	02/15/19	N/A	25uL			125

<b>Loki 8260 Water Surrogate</b>											
Prepared: 11/20/18						Prepared By (Initials): <u>DG</u>					
Expires: 04/02/19											
Methanol Lot No: 202404-9077											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36336	07/28/19	04/02/19	375uL	15mL	Methanol	50	
<b>Loki 8260 Water Internal Standard</b>											
Prepared: 12/18/18						Prepared By (Initials): <u>DG</u>					
Expires: 10/05/19											
Methanol Lot No: 202404-9077											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
Internal Standard Solution	O2SI	120004-02	2,000	326533-38438	10/05/19	04/27/21	375uL	15mL	Methanol	50	

## Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
0.3ug/L										
Prepared By (Initials): <u>DG</u>										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 12/17/18	12/19/18	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	2uL			10
0.5ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 12/17/18	12/19/18	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	5uL			25
1.0ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 12/17/18	12/19/18	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	10uL			50
2.0ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 12/17/18	12/19/18	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 12/17/18	02/15/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 12/17/18	02/15/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	15uL			75
5ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 12/17/18	02/15/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	20uL			100
10ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	25uL			125

20ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 12/17/18	02/15/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	30uL			150
40ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 12/17/18	02/15/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	35uL			175
100ug/L										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 12/17/18	02/15/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 12/20/18										
Expires: 01/19/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 6	Various		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	25uL			250
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	10uL			10
8260 Water Continuing Calibrations (CCV/ Lab Control Spikes (LCS)										
Prepared: 12/20/18										
Expires: 12/21/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 12/20/18										
Expires: 12/21/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 12/17/18	02/15/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/17/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/17/18	02/15/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/17/18	02/15/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/17/18	02/15/19	N/A	25uL			125

Loki 8260 Water Surrogate										
Prepared: 11/20/18						Prepared By (Initials): DG				
Expires: 04/02/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36336	07/28/19	04/02/19	375uL	15mL	Methanol	50
Loki 8260 Water Internal Standard										
Prepared: 12/18/18						Prepared By (Initials): DG				
Expires: 10/05/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Internal Standard Solution	O2SI	120004-02	2,000	326533-38438	10/05/19	04/27/21	375uL	15mL	Methanol	50

Primary Standards										
VOA STD 7										
Prepared: 12/12/18 Q										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL12966	11/08/19	10/01/23	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	071317-39703	10/30/19	07/13/22	200uL			50
Benzyl Chloride	O2SI	020228-02	1,000	041918-39815	09/04/19	08/22/19	200uL			50
VOA STD 8										
Prepared: 12/12/18 R										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-101206	2,000	CL12622-39481	10/30/19	06/30/20	100uL	4mL	Methanol	50
VOC's-54 COMP	Phenova	ALO-101200	2,000	CL12490-39299	10/30/19	05/31/23	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13034-39917	12/19/18	12/19/18	100uL			50
VOA STD TBA										
Prepared: 12/12/18 S										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL12542-39868	10/30/19	05/01/20	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL13038-39918	12/03/19	12/19/18	100uL			250
VOA STD 1										
Prepared: 12/12/18 T										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	O2SI	020145-02	2,000	292247-38477	10/30/19	11/12/19	50	2mL	Methanol	50
VOA STD 2										
Prepared: 12/12/18 U										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
HSL's Ketone Solution	O2SI	121020-05	2,000	CL10956-39504	10/30/19	08/01/23	100	4mL	Methanol	50
VOA STD 9										
Prepared: 12/12/18 V										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7	O2SI	VOA STD. 9	50	Prepared 12/12/18	02/10/19	N/A	200uL	2mL	Methanol	5
VOA STD. 8	O2SI		50	Prepared 12/12/18	12/19/18	N/A	200uL			5
VOA STD. 10										
Prepared: 12/12/18 W										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1	O2SI	VOA STD. 10	50	Prepared 12/12/18	02/10/19	N/A	200uL	2mL	Methanol	5
VOA STD. 12										
Prepared: 12/12/18 X										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2	O2SI	VOA STD. 12	50	Prepared 12/12/18	02/10/19	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards											
VOA STD. 3											
Prepared: 12/12/18 Y											
Expires: 02/10/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): PC											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
Ketones Standard	Phenova	ALO-101211	2,000	CL12730	10/30/19	08/01/28	50uL	2mL	Methanol	50	
VOA STD. 5											
Prepared: 12/12/18 Z											
Expires: 02/10/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): PC											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL12965-39981	11/08/19	10/01/23	50uL	2mL	Methanol	50	
2-CEVE (SS)	O2SI	020145-02-02-SS	2,000	071018-39810	10/30/19	07/10/21	50uL	2mL	Methanol	50	
VOA STD. 6											
Prepared: 12/12/18 AA											
Expires: 10/31/18											
Methanol Lot No. 907702-202404											
Prepared By (Initials): PC											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL12489-39486	10/30/19	05/01/23	50uL	2mL	Methanol	50	
Vinyl Acetate	Phenova	ALO-101228	1,000	CL12869-39767	09/06/19	10/31/18	50uL	2mL	Methanol	50	
Hexachloroethane	O2SI	020049-02	1,000	218051281-39856	10/30/19	05/14/28	50uL	2mL	Methanol	50	
Benzyl Chloride	Accustan	M-8010-01	200	214101335-04	12/03/19	10/18/20	500uL	2mL	Methanol	50	
VOA STD. TBA											
Prepared: 12/12/18 AB											
Expires: 10/31/18											
Methanol Lot No. 907702-202404											
Prepared By (Initials): PC											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12542-39672	10/30/19	05/01/20	250uL	2mL	Methanol	250	
Acrolein	Phenova	ALO-101224	5,000	CL12868-39769	09/06/19	10/31/18	100uL	2mL	Methanol	250	
VOA STD. 0											
Prepared: 12/12/18 AC											
Expires: 02/10/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): PC											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
VOA Addition STD.	Phenova	ALO-130175	2,000	CL12230-39139	10/30/19	01/31/20	50uL	2mL	Methanol	50	
BFB Tune											
Prepared: 12/12/18											
Expires: 12/12/19											
Methanol Lot No. 202404-00943											
Prepared By (Initials): DG											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
4-Bromofluorobenzene	O2SI	020135-03	2,500	342387-39075	12/12/19	01/19/21	20uL	2mL	Methanol	25	

**Primary and Secondary Working Standards**

Primary Standards										
VOA STD 7										
Prepared: 12/17/18 C										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL12966-399899	11/08/19	10/31/23	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	071317-39703	10/30/19	07/13/22	200uL			50
Benzyl Chloride	O2SI	020228-02	1,000	041918-39815	09/04/19	08/22/19	200uL			50
VOA STD 8										
Prepared: 12/17/18 D										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-101206	2,000	CL12622-39481	10/30/19	06/30/20	100uL	4mL	Methanol	50
VOC's-54 COMP	Phenova	ALO-101200	2,000	CL12490-39299	10/30/19	05/31/23	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13034-39917	12/19/18	12/19/2018-NT	100uL			50
VOA STD TBA										
Prepared: 12/17/18 E										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL12542-39868	10/30/19	05/01/20	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL13038-39918	12/03/19	12/19/2018-NT	100uL			250
VOA STD 1										
Prepared: 12/17/18 F										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	O2SI	020145-02	2,000	292247-38477	10/30/19	11/12/19	50	2mL	Methanol	50
VOA STD 2										
Prepared: 12/17/18 G										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
HSL's Ketone Solution	O2SI	121020-05	2,000	CL10956-39504	10/30/19	08/01/23	100	4mL	Methanol	50
VOA STD 9										
Prepared: 12/17/18 H										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7	O2SI	VOA STD. 9	50	Prepared 12/17/18	02/15/19	N/A	200uL	2mL	Methanol	5
VOA STD. 8	O2SI	VOA STD. 9	50	Prepared 12/17/18	12/19/18	N/A	200uL			5
VOA STD. 10										
Prepared: 12/17/18 I										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1	O2SI	VOA STD. 10	50	Prepared 12/17/18	02/15/19	N/A	200uL	2mL	Methanol	5
VOA STD. 12										
Prepared: 12/17/18 J										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2	O2SI	VOA STD. 12	50	Prepared 12/17/18	02/15/19	N/A	200uL	2mL	Methanol	5



Second Source (SS) Standards										
VOA STD. 3										
Prepared: 12/17/18 K										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL12730	10/30/19	08/01/28	50uL	2mL	Methanol	50
VOA STD. 5										
Prepared: 12/17/18 L										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL12965-39982	11/08/19	10/31/23	50uL	2mL	Methanol	50
2-CEVE (SS)	O2SI	020145-02-02-SS	2,000	071018-39810	10/30/19	07/10/21	50uL			50
VOA STD. 6										
Prepared: 12/17/18 M										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL12489-39486	10/30/19	05/01/23	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	1,000	CL12869-39767	09/06/19	10/31/2018-NT	50uL			50
Hexachloroethane	O2SI	020049-02	1,000	218051281-39856	10/30/19	05/14/28	50uL			50
Benzyl Chloride	Accustan	M-8010-01	200	214101335-04	12/03/19	10/18/20	500uL			50
VOA STD. 7BA										
Prepared: 12/17/18 N										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12542-39672	10/30/19	05/01/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	5,000	CL12868-39769	09/06/19	10/31/2018-NT	100uL			250
VOA STD. 0										
Prepared: 12/17/18 O										
Expires: 02/15/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL12230-39139	10/30/19	01/31/20	50uL	2mL	Methanol	50
BFB Tune										
Prepared: 12/12/18										
Expires: 12/12/19										
Methanol Lot No. 202404-00943										
Prepared By (Initials): DG										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
4-Bromofluorobenzene	O2SI	020135-03	2,500	342387-39075	12/12/19	01/19/21	20uL	2mL	Methanol	25

## Injection Log

Directory: M:\LOKI\DATA\181213\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1213L01.D	1	25ug/L BFB STD 11/7/18	2ul	13 Dec 18 13:50
2	2	1213L03.D	1	0.3ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 14:34
3	3	1213L04.D	1	0.5ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 15:03
4	4	1213L05.D	1	1.0ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 15:31
5	5	1213L06.D	1	2.0ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 16:00
6	6	1213L07.D	1	5.0ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 16:29
7	7	1213L08.D	1	10ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 16:57
8	8	1213L09.D	1	20ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 17:26
9	9	1213L10.D	1	40ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 17:54
10	10	1213L11.D	1	100ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 18:23
11	12	1213L13.D	1	(SS)10ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 19:20
12	1	1216L01.D	1	25ug/L BFB STD 11/7/18	2ul	16 Dec 18 9:04
13	2	1216L03.D	1	181216A CCV 10ug/L	IS&S 11/8/18	16 Dec 18 9:49
14	22	1216L23.D	1	AZ84061W03 MS10ug/L	IS&S 11/8/18	16 Dec 18 19:22
15	23	1216L24.D	1	AZ84061W04 MSD10ug/L	IS&S 11/8/18	16 Dec 18 19:50
16	28	1216L29.D	1	Ending CCV 10ug/L 12/16/18	IS&S 11/8/18	16 Dec 18 22:13
17	30	1216L31.D	1	25ug/L BFB STD 11/7/18	IS&S 11/8/18	16 Dec 18 23:10
18	32	1216L33.D	1	181216B CCV 10ug/L	IS&S 11/8/18	17 Dec 18 00:08
19	37	1216L38.D	1	AZ84057W02 MS10ug/L	IS&S 11/8/18	17 Dec 18 2:30
20	38	1216L39.D	1	AZ84057W03 MSD 10ug/L	IS&S 11/8/18	17 Dec 18 2:59
21	39	1216L40.D	1	Ending CCV 10ug/L 12/14/18	IS&S 11/8/18	17 Dec 18 3:27
22	2	1217L03.D	1	25ug/L BFB STD 12/12/18	IS&S 11/8/18	17 Dec 18 10:32
23	3	1217L04.D	1	181217A CCV 10ug/L	IS&S 11/8/18	17 Dec 18 11:00
24	4	1217L05.D	1	181217A LCS 10ug/L	IS&S 11/8/18	17 Dec 18 11:29
25	5	1217L06.D	1	181217A LCSD 10ug/L	IS&S 11/8/18	17 Dec 18 11:57
26	10	1217L11.D	1	181217A blk	IS&S 11/8/18	17 Dec 18 14:20
27	15	1217L16.D	1	AZ84059W02	IS&S 11/8/18	17 Dec 18 16:43
28	16	1217L17.D	1	AZ84060W02	IS&S 11/8/18	17 Dec 18 17:12
29	17	1217L18.D	1	AZ84061W07	IS&S 11/8/18	17 Dec 18 17:40
30	27	1217L28.D	1	Ending CCV 10ug/L 12/17/18	IS&S 11/8/18	17 Dec 18 22:26

## Injection Log

Directory: M:\LOKIDATA\181218\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1218L02.D	1	25ug/L BFB STD 11/7/18	2ul	18 Dec 18 15:06
2	2	1218L04.D	1	0.3ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 15:56
3	3	1218L05.D	1	0.5ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 16:25
4	4	1218L06.D	1	1ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 16:53
5	5	1218L07.D	1	2ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 17:22
6	6	1218L08.D	1	5ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 17:50
7	7	1218L09.D	1	10ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 18:19
8	8	1218L10.D	1	20ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 18:48
9	9	1218L11.D	1	40ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 19:16
10	10	1218L12.D	1	100ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 19:45
11	13	1218L15.D	1	(SS) 10ug/L VOC STD 12/18/18	IS&S 11/8/18	18 Dec 18 21:10
12	28	1219L29.D	1	25ug/L BFB STD 11/7/18	IS&S 11/8/18	19 Dec 18 23:18
13	30	1219L31.D	1	181219B CCV 10ug/L	IS&S 11/8/18	20 Dec 18 00:15
14	31	1219L32.D	1	181219B LCS 10ug/L	IS&S 11/8/18	20 Dec 18 00:43
15	32	1219L33.D	1	181219B LCSD 10ug/L	IS&S 11/8/18	20 Dec 18 1:12
16	33	1219L34.D	1	181219B Blk	IS&S 11/8/18	20 Dec 18 1:40
17	34	1219L35.D	1	AZ84057W08	IS&S 11/8/18	20 Dec 18 2:09
18	35	1219L36.D	1	AZ84058W03	IS&S 11/8/18	20 Dec 18 2:37
19	50	1219L51.D	1	Ending CCV 10ug/L	IS&S 11/8/18	20 Dec 18 9:45

## Injection Log

Directory: M:\LOK\DATA\181220\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1220L00.D	1	25ug/L BFB STD 11/7/18	2ul	20 Dec 18 10:45
2	2	1220L02.D	1	0.3ug/L VOC STD 12/20/18	1uL-5ppb	20 Dec 18 11:36
3	3	1220L03.D	1	0.5ug/L VOC STD 12/20/18	1uL-5ppb	20 Dec 18 12:04
4	4	1220L04.D	1	1.0ug/L VOC STD 12/20/18	2uL-10ppb	20 Dec 18 12:33
5	5	1220L05.D	1	2.0ug/L VOC STD 12/20/18	2uL-10ppb	20 Dec 18 13:02
6	6	1220L06.D	1	5.0ug/L VOC STD 12/20/18	5uL-25ppb	20 Dec 18 13:30
7	7	1220L07.D	1	10ug/L VOC STD 12/20/18	5uL-25ppb	20 Dec 18 13:59
8	8	1220L08.D	1	20ug/L VOC STD 12/20/18	10uL-50ppb	20 Dec 18 14:27
9	9	1220L09.D	1	40ug/L VOC STD 12/20/18	10uL-50ppb	20 Dec 18 14:56
10	10	1220L10.D	1	100ug/L VOC STD 12/20/18	20uL-100ppb	20 Dec 18 15:25
11	12	1220L12.D	1	25ug/L BFB STD 11/7/18	IS&S 11/8/18	20 Dec 18 16:22
12	13	1220L13.D	1	SS 10ug/L VOC STD 12/20/18	IS&S 11/8/18	20 Dec 18 16:50
13	15	1220L15.D	1	181220A LCS 10ug/L x4 Ketone	IS&S 11/8/18	20 Dec 18 17:48
14	16	1220L16.D	1	181220A LCSD 10ug/L x4 Ketone	IS&S 11/8/18	20 Dec 18 18:16
15	18	1220L18.D	1	181220A Blk	IS&S 11/8/18	20 Dec 18 19:13
16	22	1220L22.D	1	AZ84062W03	IS&S 11/8/18	20 Dec 18 21:07
17	37	1220L37.D	1	Ending CCV 10ug/L 12/20/18	IS&S 11/8/18	21 Dec 18 4:15

**ORGANICS  
Calibration Data**

**APPL, INC.**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Initial Cal. Date: 12/13/18  
Instrument: Loki

Initials: DG

1213L03.D 1213L04.D 1213L05.D 1213L06.D 1213L07.D 1213L08.D 1213L09.D 1213L10.D 1213L11.D

	Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	r^2	Q	MRF
1	I Fluorobenzene (IS)																
2	S Dibromofluoromethane(S)	0.7289	0.7414	0.6173	0.6182	0.6430	0.6363	0.6222	0.6004	0.5637		0.64	9.0	S			
3	S 1,2-DCA-D4(S)	0.8170	0.8761	0.7031	0.7176	0.7358	0.7177	0.7032	0.6922	0.6473		0.73	9.5	S			
4	I Chlorobenzene-D5 (IS)																
5	S Toluene-D8(S)	1.926	2.194	1.771	1.824	2.055	2.030	2.138	2.157	1.986		2.0	7.3	S			
6	S 4-Bromofluorobenzene(S)	0.6339	0.7901	0.6259	0.6288	0.7316	0.7462	0.8027	0.8160	0.7600		0.73	11	S			
7	I 1,4-Dichlorobenzene-D (IS)																
8																	
9																	
10																	
11																	
12																	
13																	
14																	
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32																	
33																	
34																	
35																	

Data File : M:\LOKI\DATA\181213\1213L03.D  
 Acq On : 13 Dec 18 14:34  
 Sample : 0.3ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	305536	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	328128	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	172992	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.65	111	44544	5.684	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.736%	
3) 1,2-DCA-D4(S)	4.14	65	49922	5.562	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.248%	
5) Toluene-D8(S)	6.74	98	126403	4.794	ppb	0.00
Spiked Amount	25.000		Recovery	=	19.176%	
6) 4-Bromofluorobenzene(S)	9.68	95	41598	4.365	ppb	0.00
Spiked Amount	25.000		Recovery	=	17.460%	

Target Compounds Qvalue

Quantitation Report

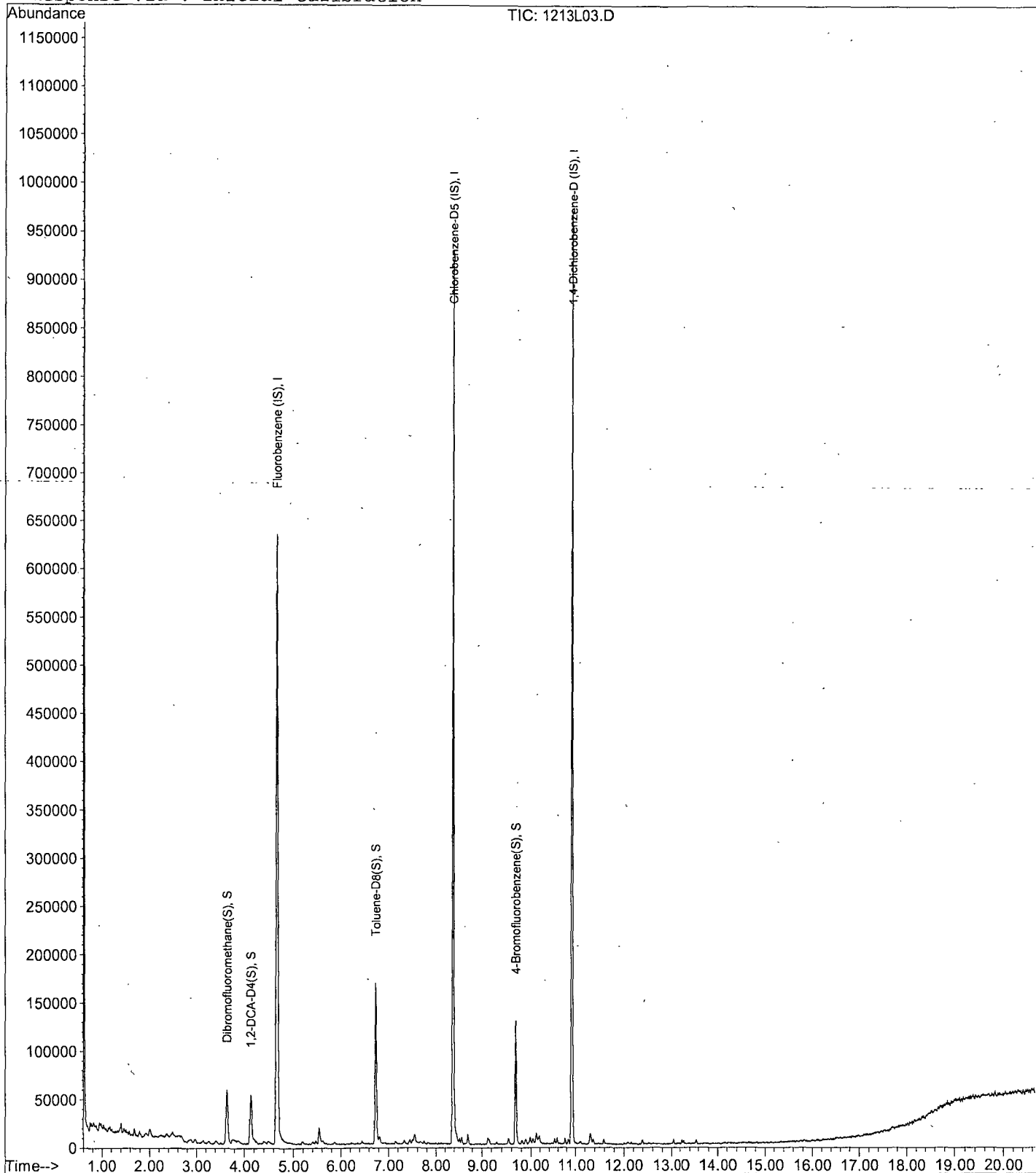
Data File : M:\LOKI\DATA\181213\1213L03.D  
Acq On : 13 Dec 18 14:34  
Sample : 0.3ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1213L04.D  
 Acq On : 13 Dec 18 15:03  
 Sample : 0.5ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev.(Min)
1) Fluorobenzene (IS)	4.67	96	288768	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	299776	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	163648	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	42821	5.781	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	23.124%	
3) 1,2-DCA-D4(S)	4.14	65	50600	5.965	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	23.860%	
5) Toluene-D8(S)	6.74	98	131521	5.460	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	21.840%	
6) 4-Bromofluorobenzene(S)	9.68	95	47370	5.440	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	21.760%	

Target Compounds Qvalue

Quantitation Report

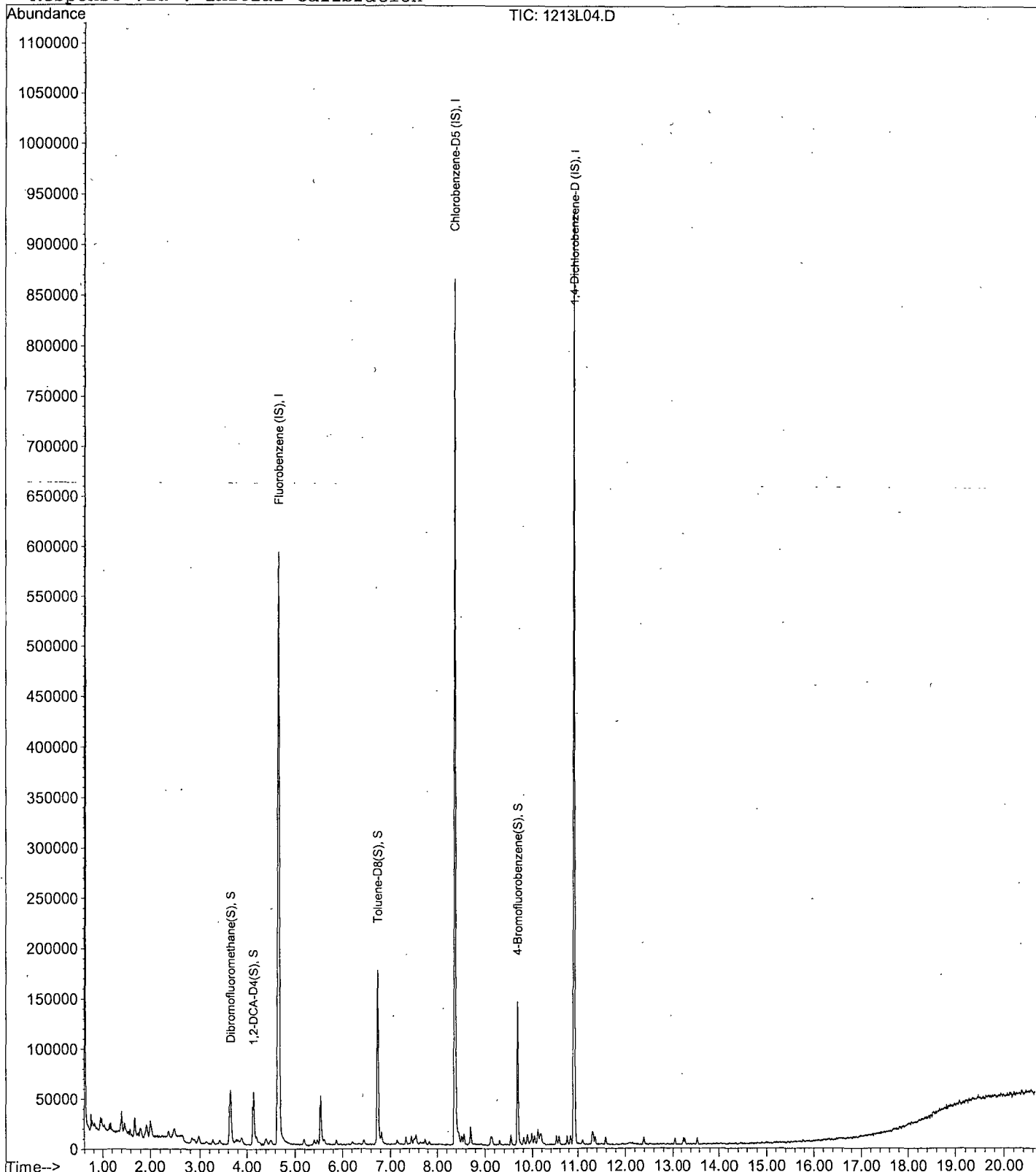
Data File : M:\LOKI\DATA\181213\1213L04.D  
Acq On : 13 Dec 18 15:03  
Sample : 0.5ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L05.D  
 Acq On : 13 Dec 18 15:31  
 Sample : 1.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	285568	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	306432	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	160000	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	70514	9.626	ppb	0.00
Spiked Amount	25.000		Recovery	=	38.504%	
3) 1,2-DCA-D4(S)	4.14	65	80308	9.573	ppb	0.00
Spiked Amount	25.000		Recovery	=	38.292%	
5) Toluene-D8(S)	6.74	98	217030	8.813	ppb	0.00
Spiked Amount	25.000		Recovery	=	35.252%	
6) 4-Bromofluorobenzene(S)	9.68	95	76718	8.620	ppb	0.00
Spiked Amount	25.000		Recovery	=	34.480%	

Target Compounds

Qvalue

Quantitation Report

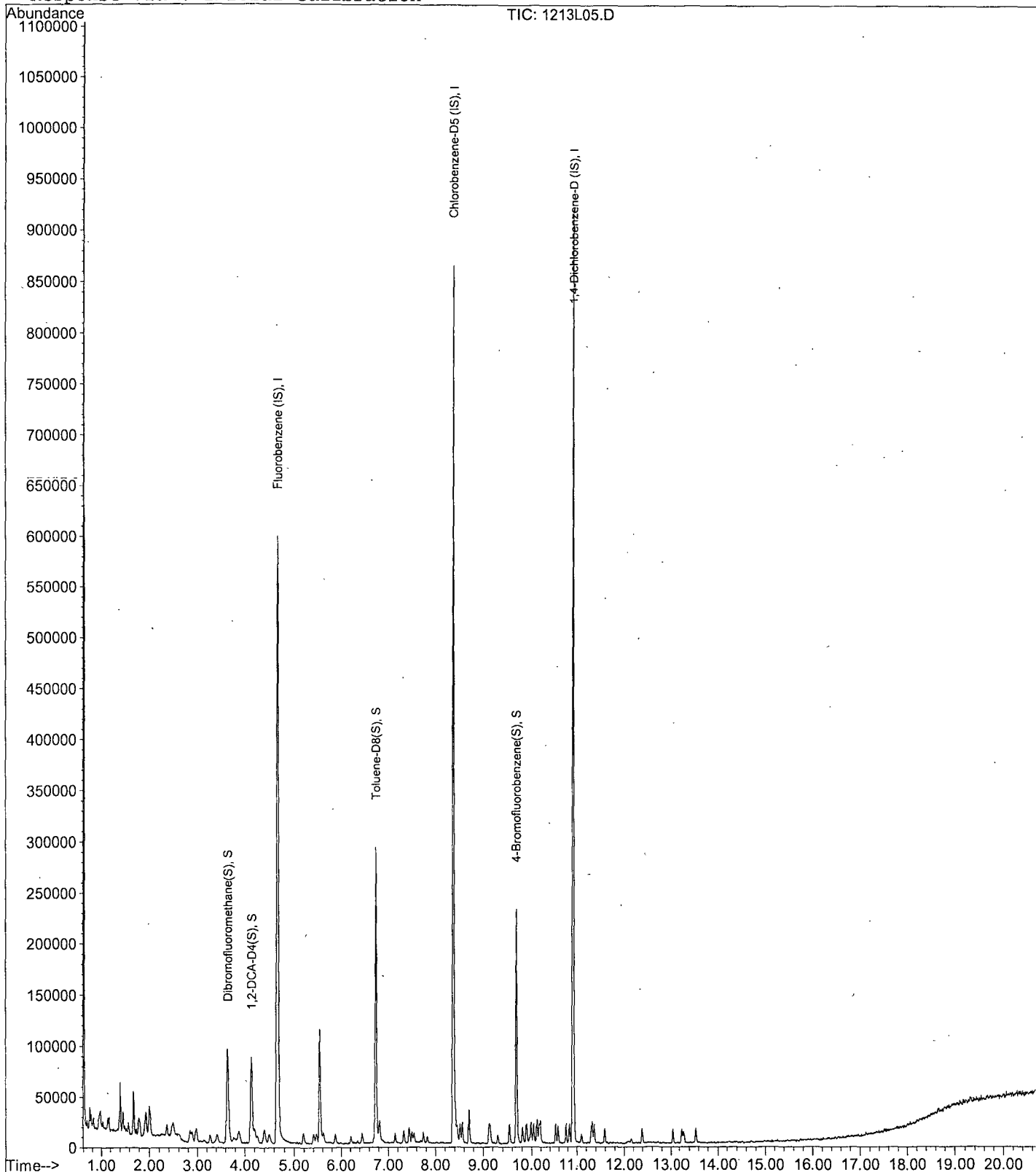
Data File : M:\LOKI\DATA\181213\1213L05.D  
Acq On : 13 Dec 18 15:31  
Sample : 1.0ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L06.D  
 Acq On : 13 Dec 18 16:00  
 Sample : 2.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	295872	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	304128	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	160768	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.65	111	73169	9.641	ppb	0.00
Spiked Amount	25.000		Recovery	=	38.564%	
3) 1,2-DCA-D4(S)	4.14	65	84928	9.771	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.084%	
5) Toluene-D8(S)	6.74	98	221952	9.082	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.328%	
6) 4-Bromofluorobenzene(S)	9.68	95	76492	8.659	ppb	0.00
Spiked Amount	25.000		Recovery	=	34.636%	

Target Compounds

Qvalue

Quantitation Report

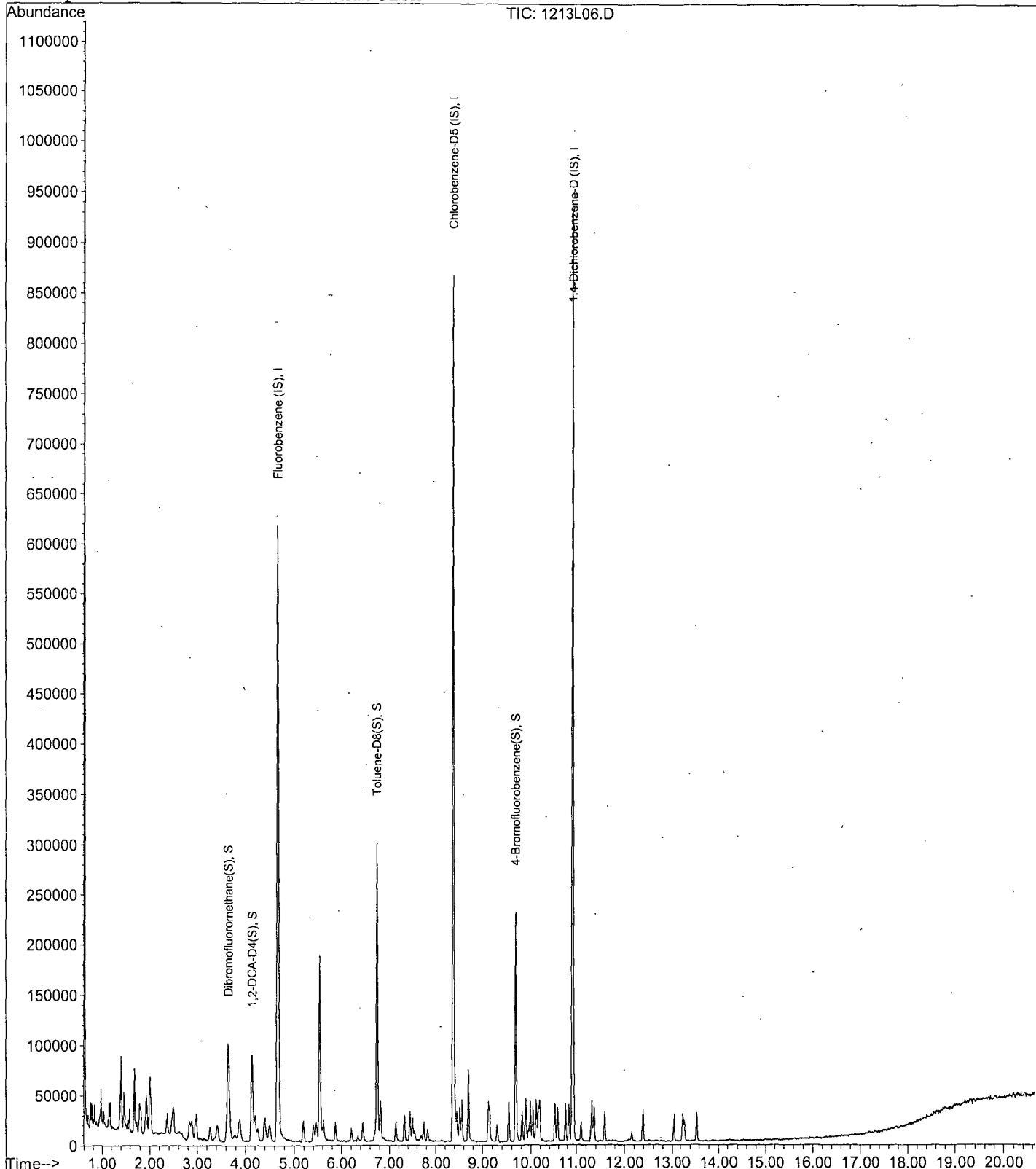
Data File : M:\LOKI\DATA\181213\1213L06.D  
Acq On : 13 Dec 18 16:00  
Sample : 2.0ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L07.D  
 Acq On : 13 Dec 18 16:29  
 Sample : 5.0ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	301312	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	306304	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	176832	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane (S)	3.64	111	193757	25.069	ppb	0.00
Spiked Amount				25.000		
			Recovery			= 100.276%
3) 1,2-DCA-D4 (S)	4.14	65	221691	25.045	ppb	0.00
Spiked Amount				25.000		
			Recovery			= 100.180%
5) Toluene-D8 (S)	6.74	98	629569	25.577	ppb	0.00
Spiked Amount				25.000		
			Recovery			= 102.308%
6) 4-Bromofluorobenzene (S)	9.68	95	224093	25.188	ppb	0.00
Spiked Amount				25.000		
			Recovery			= 100.752%

Target Compounds

Qvalue

Quantitation Report

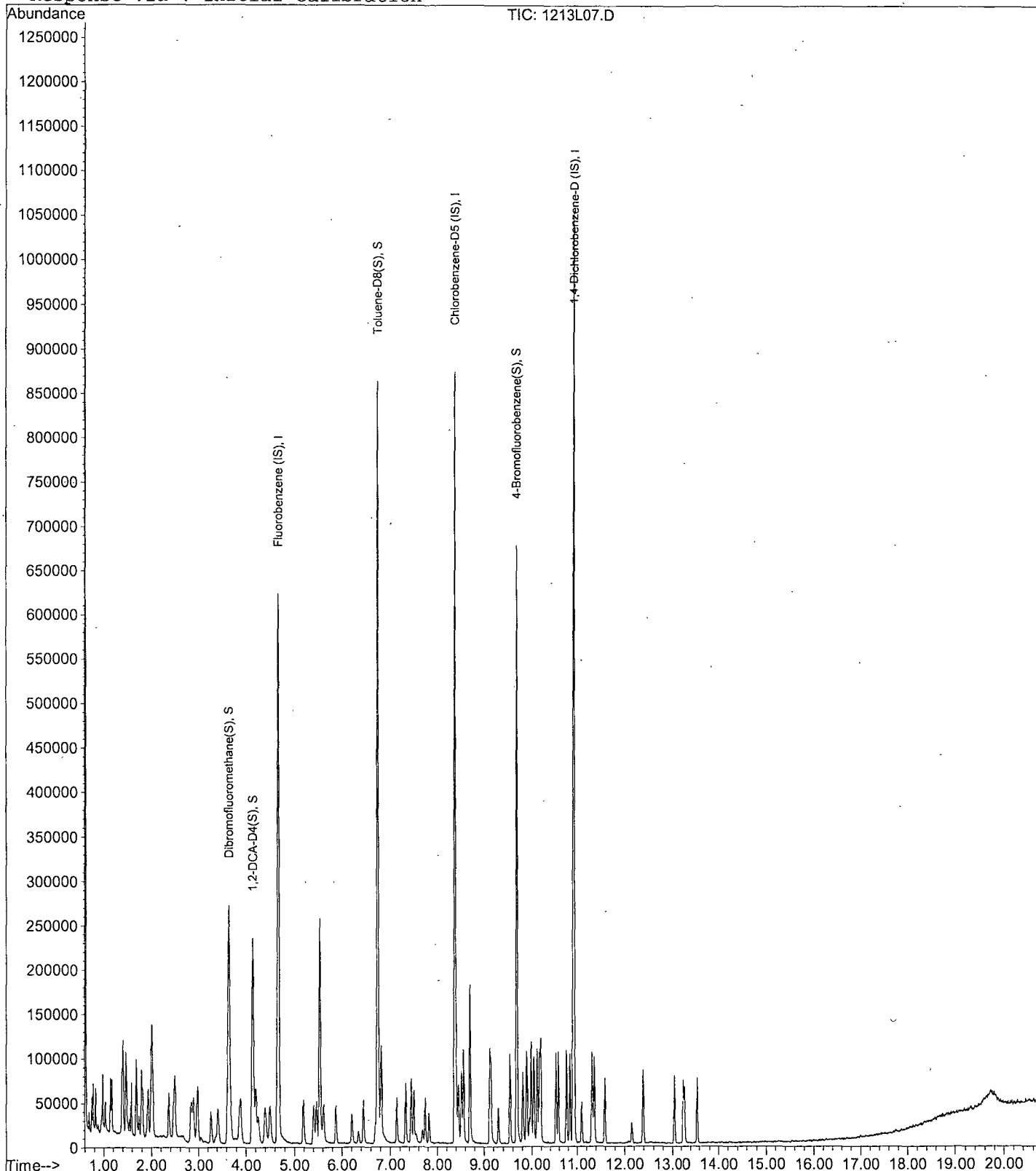
Data File : M:\LOKI\DATA\181213\1213L07.D  
Acq On : 13 Dec 18 16:29  
Sample : 5.0ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1213L08.D  
 Acq On : 13 Dec 18 16:57  
 Sample : 10ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	305088	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	318016	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	191936	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	3.64	111	194135	24.807	ppb	0.00
Spiked Amount				25.000		
					Recovery =	99.228%
3) 1,2-DCA-D4(S)	4.14	65	218968	24.431	ppb	0.00
Spiked Amount				25.000		
					Recovery =	97.724%
5) Toluene-D8(S)	6.74	98	645576	25.261	ppb	0.00
Spiked Amount				25.000		
					Recovery =	101.044%
6) 4-Bromofluorobenzene(S)	9.68	95	237313	25.692	ppb	0.00
Spiked Amount				25.000		
					Recovery =	102.768%

Target Compounds

Qvalue

Quantitation Report

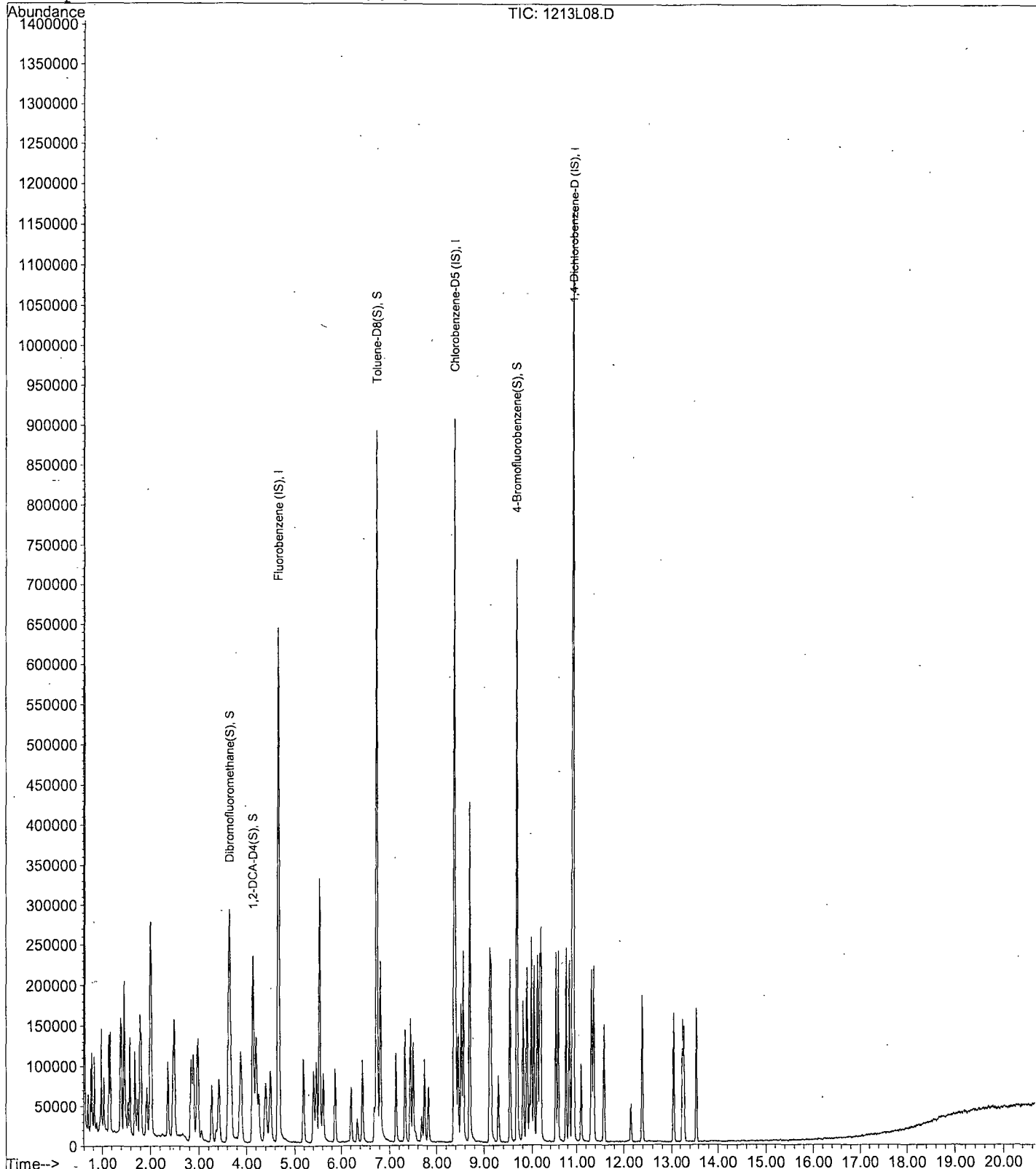
Data File : M:\LOKI\DATA\181213\1213L08.D  
Acq On : 13 Dec 18 16:57  
Sample : 10ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L09.D Vial: 8  
 Acq On : 13 Dec 18 17:26 Operator: PM,DG,SV,CMM,KV  
 Sample : 20ug/L VOC STD 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	304768	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	316992	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	198336	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	379226	48.509	ppb	0.00
Spiked Amount				25.000		
					Recovery = 194.036%	
3) 1,2-DCA-D4(S)	4.14	65	428606	47.871	ppb	0.00
Spiked Amount				25.000		
					Recovery = 191.484%	
5) Toluene-D8(S)	6.74	98	1355723	53.221	ppb	0.00
Spiked Amount				25.000		
					Recovery = 212.884%	
6) 4-Bromofluorobenzene(S)	9.68	95	508930	55.275	ppb	0.00
Spiked Amount				25.000		
					Recovery = 221.100%	

Target Compounds Qvalue

Quantitation Report

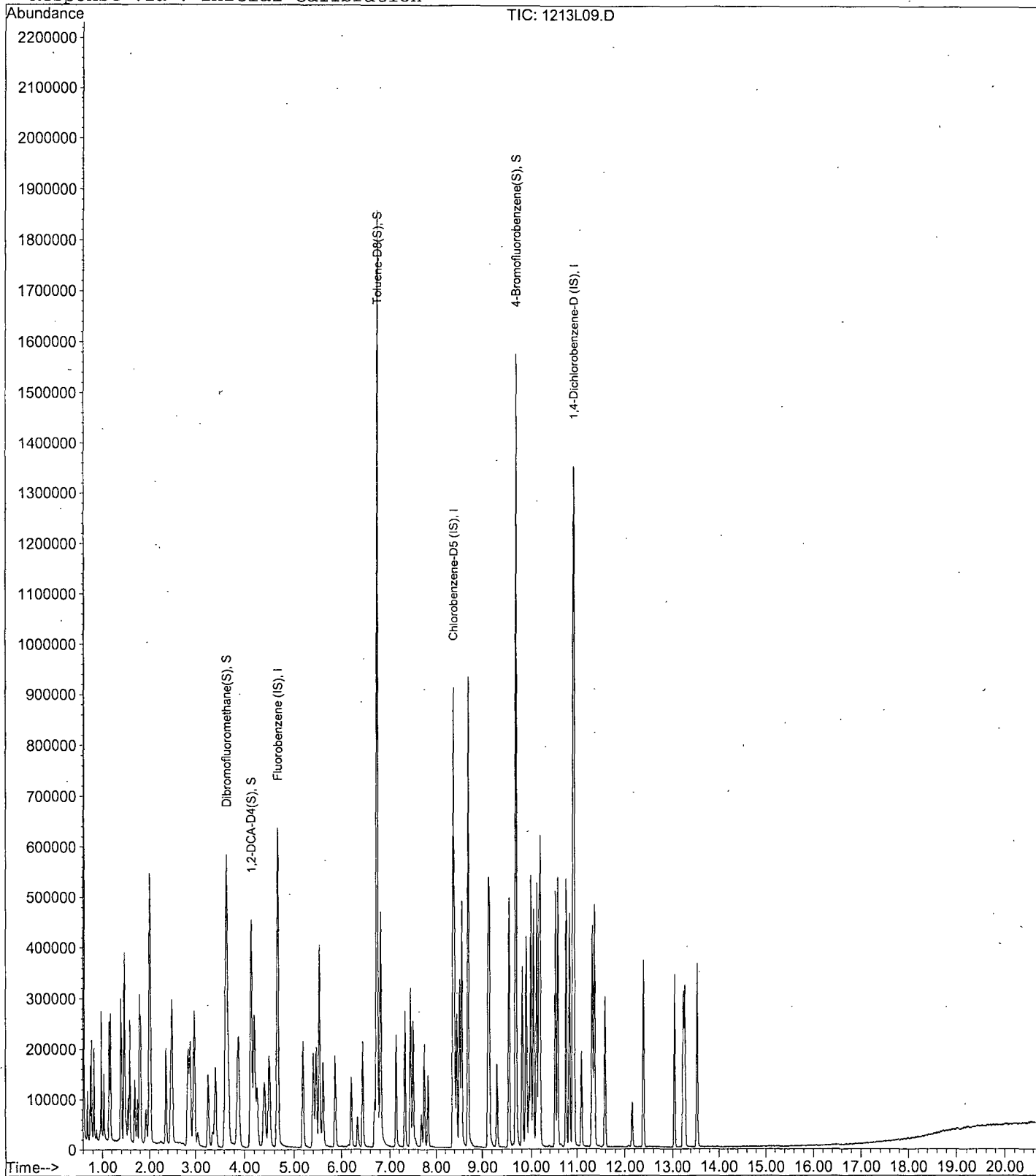
Data File : M:\LOKI\DATA\181213\1213L09.D  
Acq On : 13 Dec 18 17:26  
Sample : 20ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L10.D  
 Acq On : 13 Dec 18 17:54  
 Sample : 40ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	323904	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	328704	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	208000	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	3.64	111	388951	46.813	ppb	0.00
Spiked Amount				25.000		
					Recovery = 187.252%	
3) 1,2-DCA-D4(S)	4.14	65	448432	47.127	ppb	0.00
Spiked Amount				25.000		
					Recovery = 188.508%	
5) Toluene-D8(S)	6.74	98	1417814	53.675	ppb	0.00
Spiked Amount				25.000		
					Recovery = 214.700%	
6) 4-Bromofluorobenzene(S)	9.68	95	536451	56.188	ppb	0.00
Spiked Amount				25.000		
					Recovery = 224.752%	

Target Compounds

Qvalue

Quantitation Report

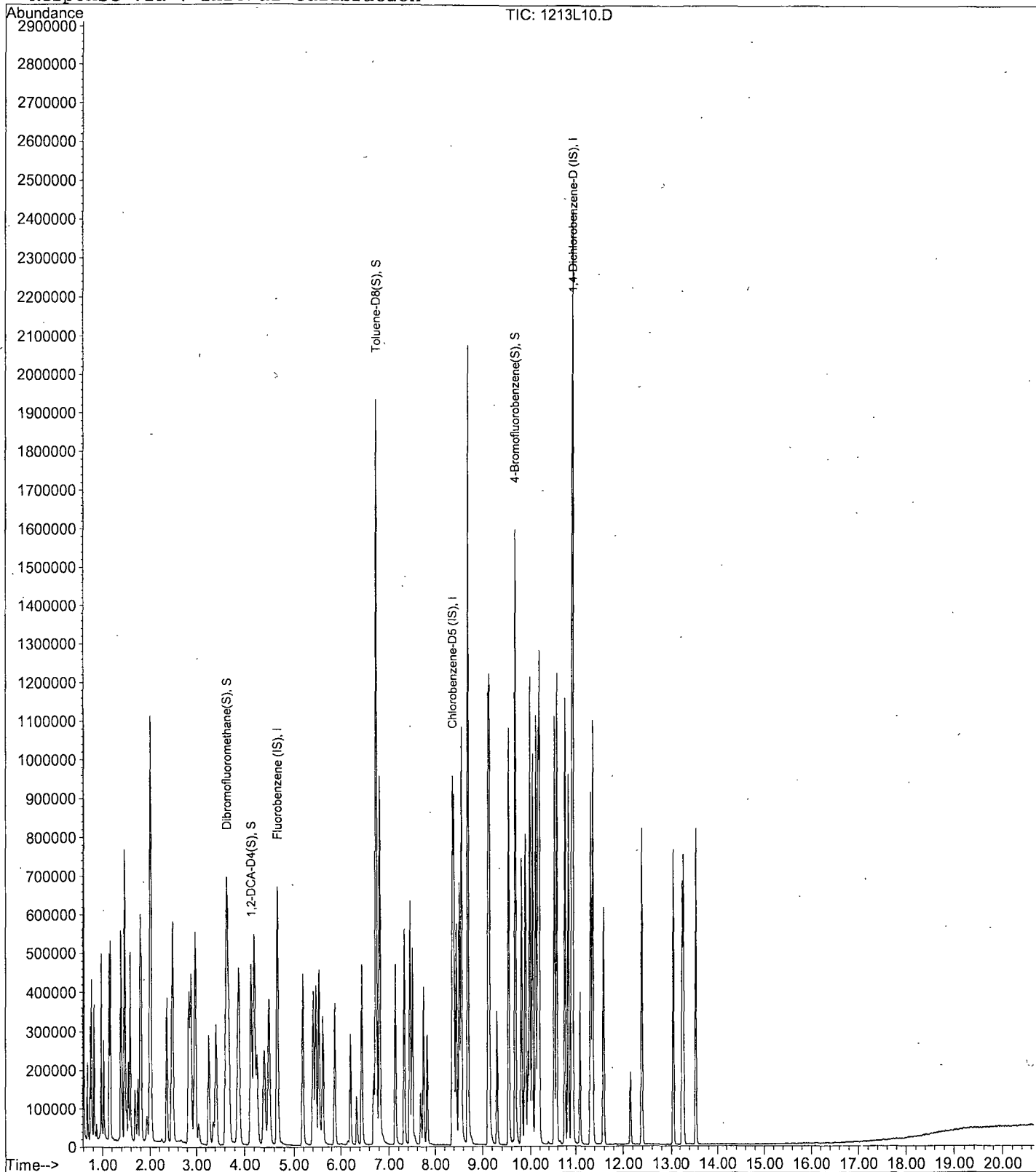
Data File : M:\LOKI\DATA\181213\1213L10.D  
Acq On : 13 Dec 18 17:54  
Sample : 40ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L11.D  
 Acq On : 13 Dec 18 18:23  
 Sample : 100ug/L VOC STD 12/13/18  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.66	96	322368	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	346880	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	232384	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	3.64	111	726825	87.896	ppb	0.00
Spiked Amount				25.000		
					Recovery =	351.584%
3) 1,2-DCA-D4(S)	4.14	65	834674	88.136	ppb	0.00
Spiked Amount				25.000		
					Recovery =	352.544%
5) Toluene-D8(S)	6.74	98	2755305	98.843	ppb	0.00
Spiked Amount				25.000		
					Recovery =	395.372%
6) 4-Bromofluorobenzene(S)	9.68	95	1054503	104.662	ppb	0.00
Spiked Amount				25.000		
					Recovery =	418.648%

Target Compounds

Qvalue

Quantitation Report

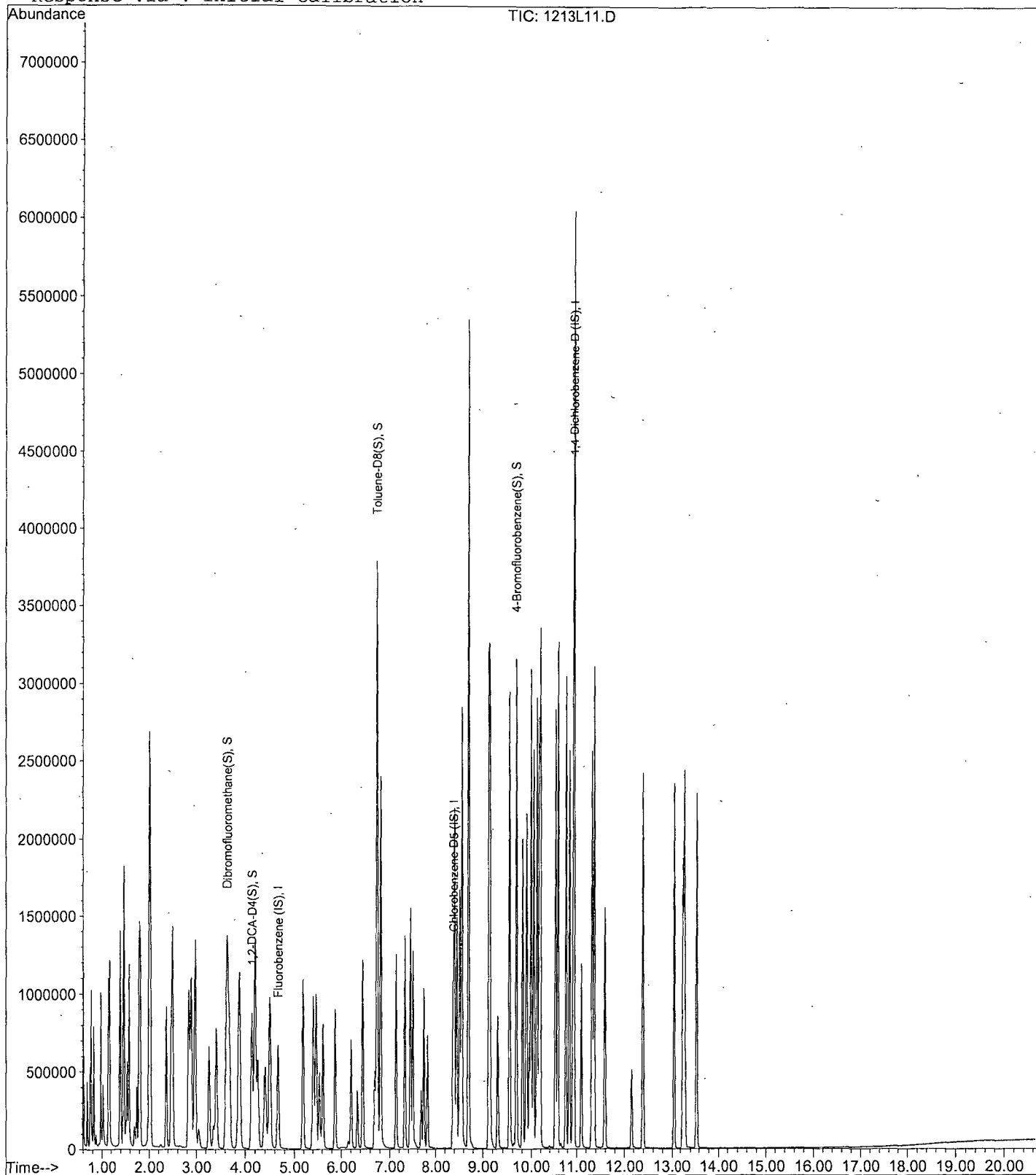
Data File : M:\LOKI\DATA\181213\1213L11.D  
Acq On : 13 Dec 18 18:23  
Sample : 100ug/L VOC STD 12/13/18  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
Title : METHOD. 8260B  
Last Update : Fri Dec 14 09:12:25 2018  
Response via : Initial Calibration





VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

Case No: \_\_\_\_\_

Matrix: water

SDG No: \_\_\_\_\_

Initial Cal Date: 12/13/18

Instrument: Loki

Initials: DG

1213L14.D    1213L15.D    1213L16.D    1213L17.D    1213L18.D    1213L19.D    1213L20.D

	Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TMHBL Gasoline C6-C10	15.9	6.594	3.815	1.613	1.136	1.009	0.9351				4.4	124	TMHBL	0.999		
3	I Chlorobenzene-D5 (IS)																
4	I 1,4-Dichlorobenzene-D (IS)																
5																	
6																	
7																	
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9																	
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34																	
35																	

Data File : M:\LOKI\DATA\181213\1213L14.D  
 Acq On : 13 Dec 18 19:48  
 Sample : 20ug/L GAS Std 12/13/18  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:31 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	662338	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	945624	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	994170	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	8439049m	27.140	ppb	100

Quantitation Report

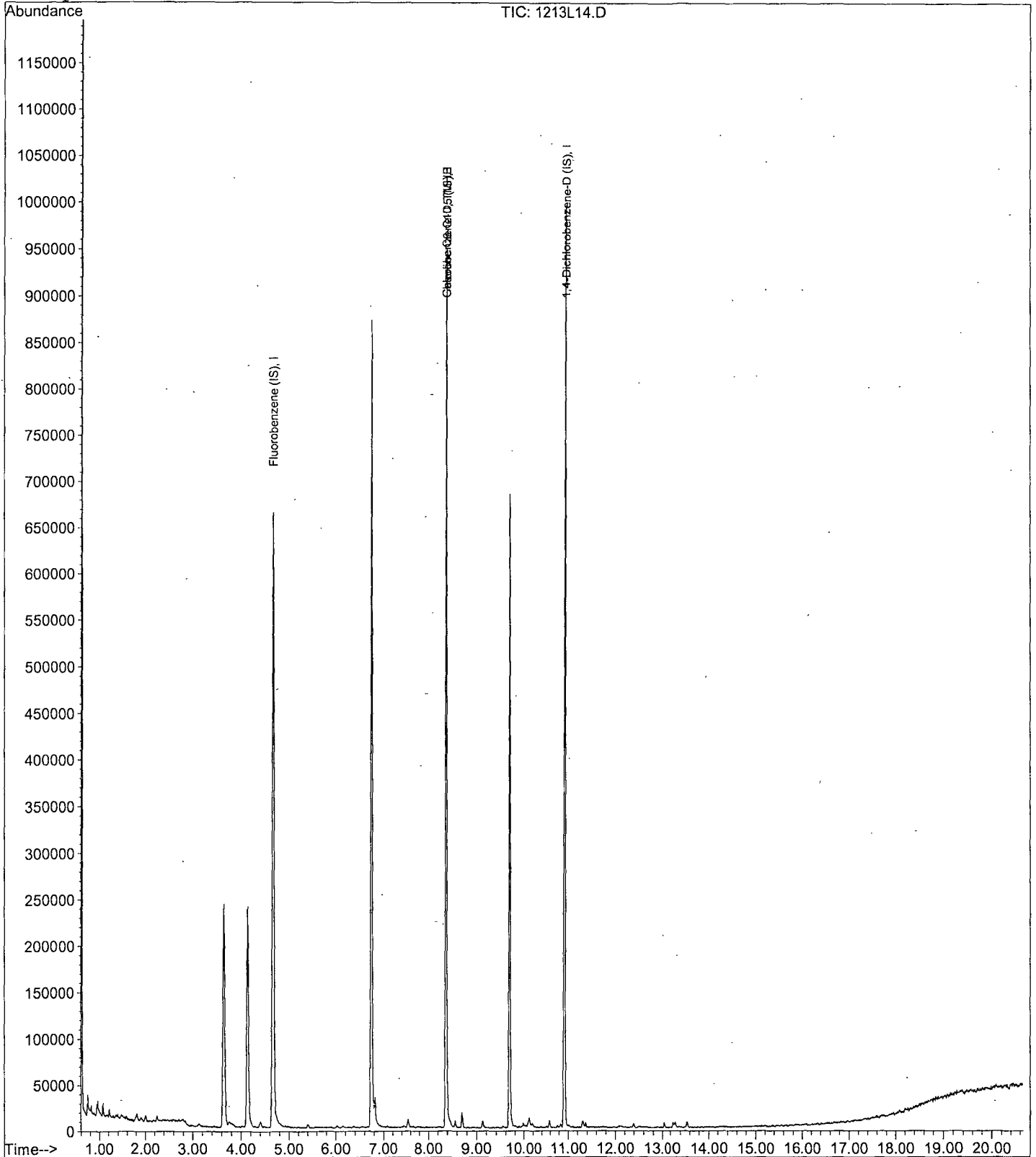
Data File : M:\LOKI\DATA\181213\1213L14.D  
Acq On : 13 Dec 18 19:48  
Sample : 20ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 13  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L15.D  
 Acq On : 13 Dec 18 20:17  
 Sample : 50ug/L GAS Std 12/13/18  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:31 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	695272	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	1004846	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	1081121	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	9169420m	44.889	ppb	100

Quantitation Report

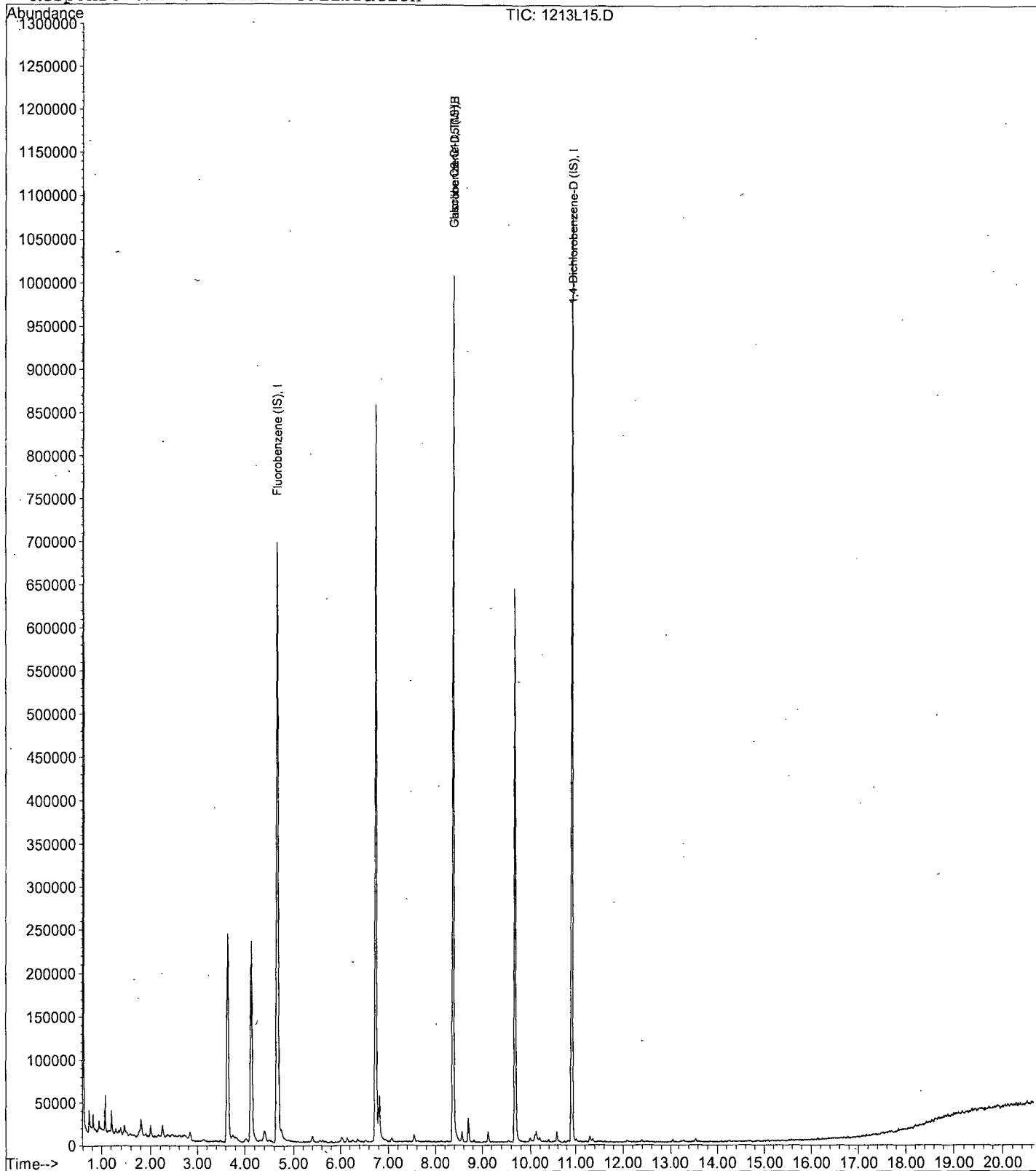
Data File : M:\LOKI\DATA\181213\1213L15.D  
Acq On : 13 Dec 18 20:17  
Sample : 50ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L16.D Vial: 15  
 Acq On : 13 Dec 18 20:46 Operator: PM, DG, SV, CMM, KV  
 Sample : 100ug/L GAS Std 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 10:31 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	608226	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	920254	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	940861	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	9282133m	127.200	ppb	100

Quantitation Report

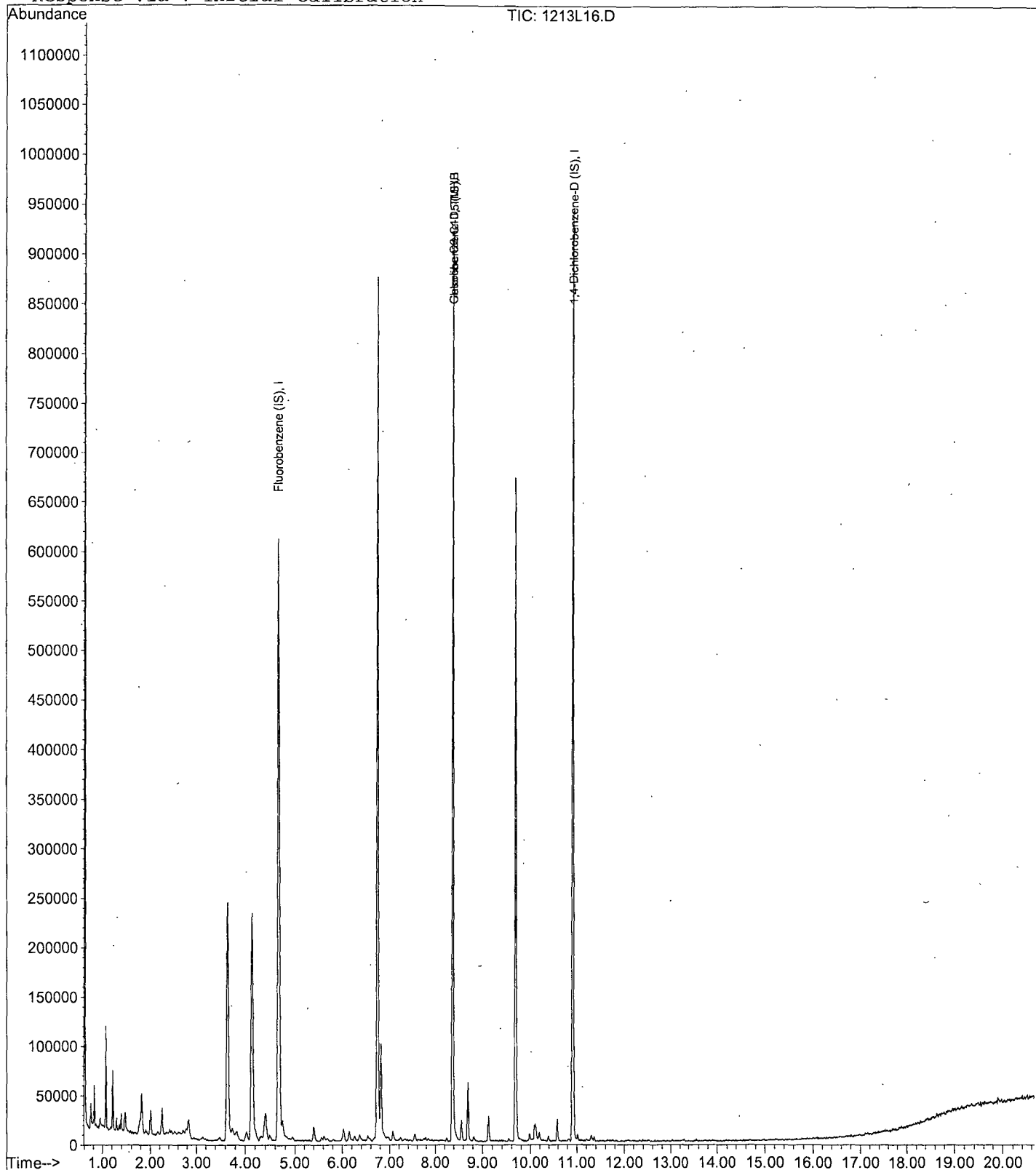
Data File : M:\LOKI\DATA\181213\1213L16.D  
Acq On : 13 Dec 18 20:46  
Sample : 100ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L17.D Vial: 16  
 Acq On : 13 Dec 18 21:14 Operator: PM,DG,SV,CMM,KV  
 Sample : 300ug/L GAS Std 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 10:32 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	627450	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	932234	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	983020	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	12145627m	289.862	ppb	100



Quantitation Report

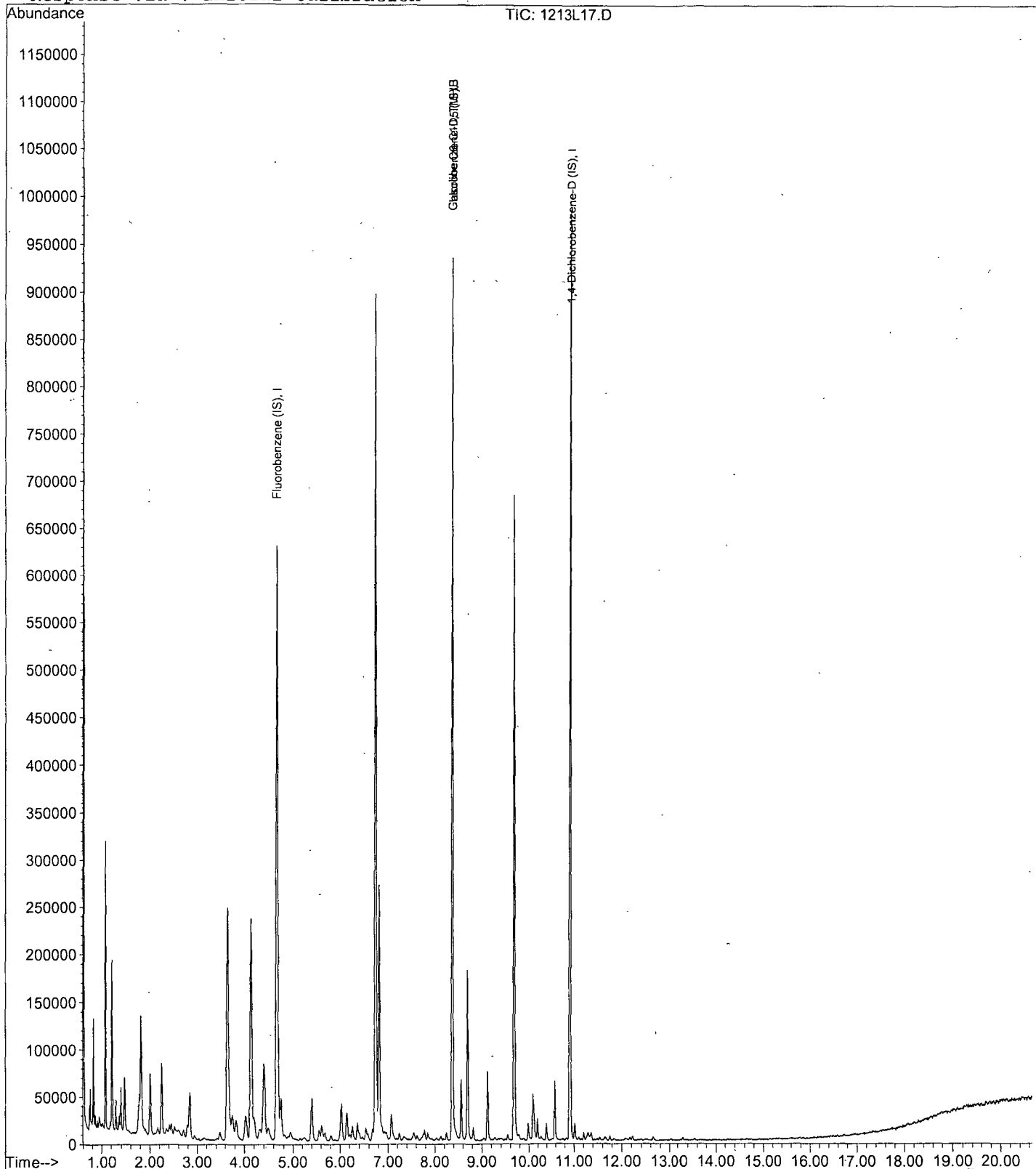
Data File : M:\LOKI\DATA\181213\1213L17.D  
Acq On : 13 Dec 18 21:14  
Sample : 300ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:32 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\181213\1213L18.D  
 Acq On : 13 Dec 18 21:43  
 Sample : 600ug/L GAS Std 12/13/18  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:33 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	636852	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	966601	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	1073076	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	17370518m	604.313	ppb	100

Quantitation Report

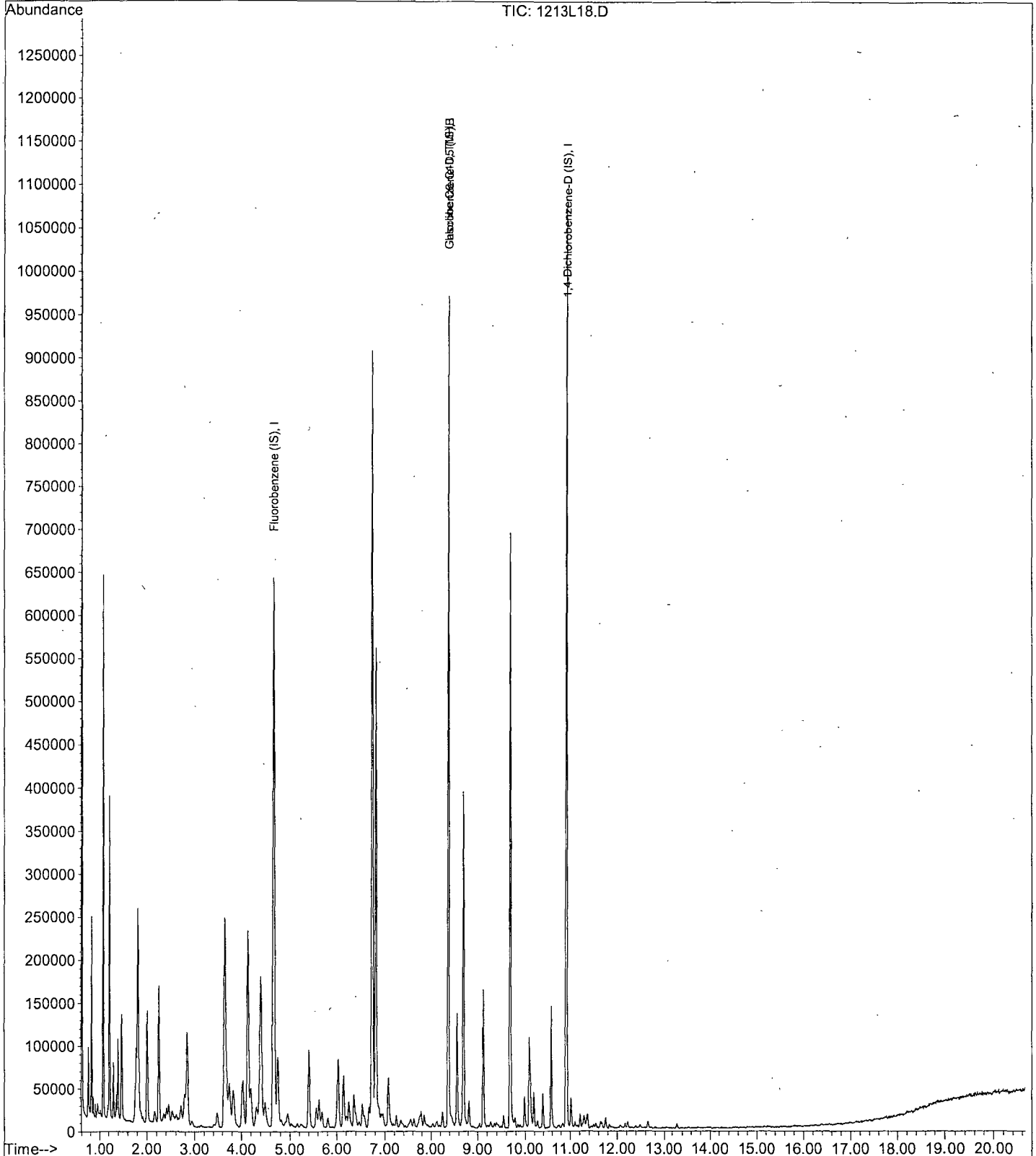
Data File : M:\LOKI\DATA\181213\1213L18.D  
Acq On : 13 Dec 18 21:43  
Sample : 600ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:33 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\181213\1213L19.D Vial: 18  
 Acq On : 13 Dec 18 22:11 Operator: PM,DG,SV,CMM,KV  
 Sample : 800ug/L GAS Std 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 10:34 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	621952	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	931028	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	1007622	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	20090048m	803.901	ppb	100

Quantitation Report

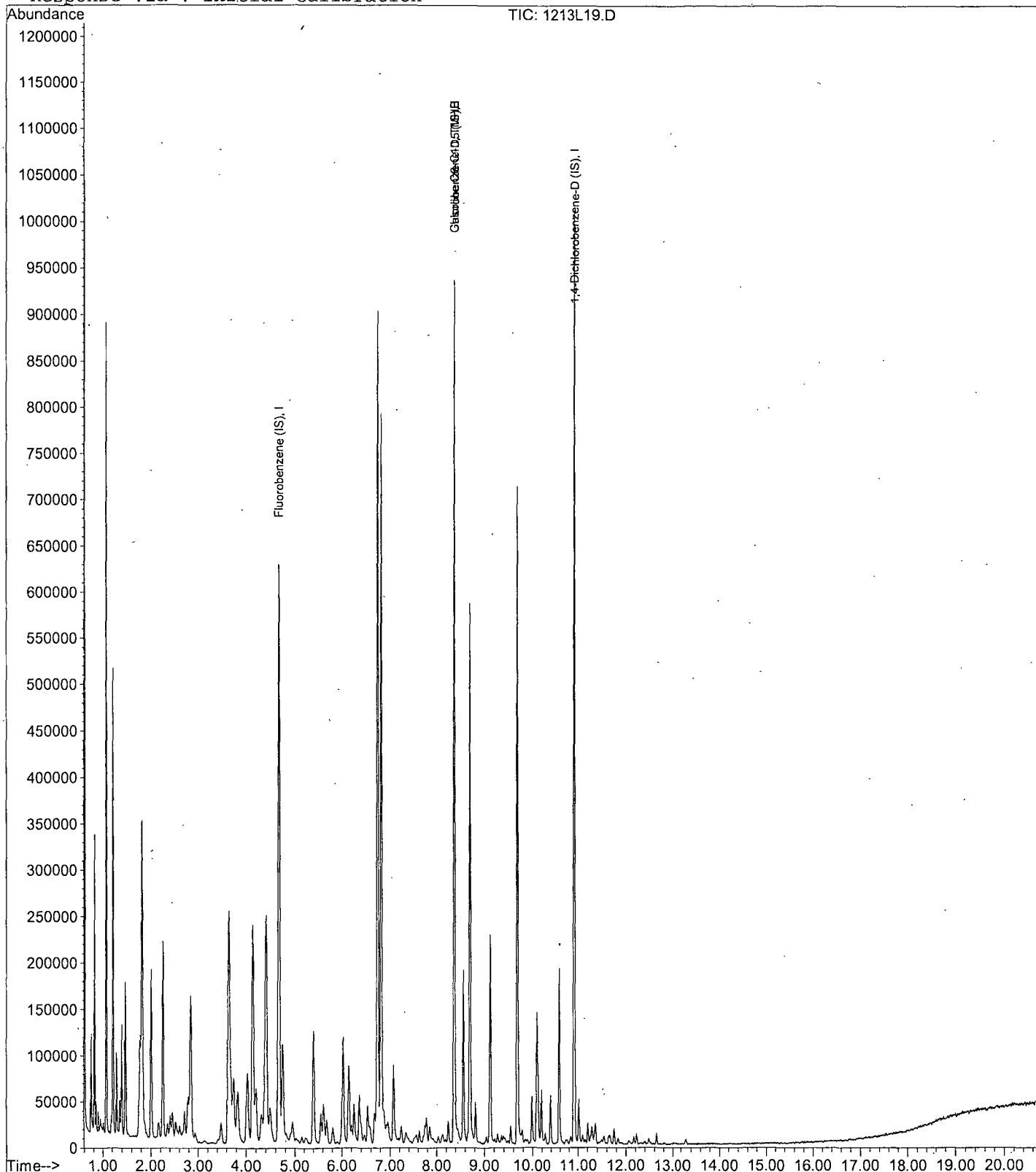
Data File : M:\LOKI\DATA\181213\1213L19.D  
Acq On : 13 Dec 18 22:11  
Sample : 800ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 18  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:34 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1213L20.D Vial: 19  
 Acq On : 13 Dec 18 22:39 Operator: PM,DG,SV,CMM,KV  
 Sample : 1000ug/L GAS Std 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 10:34 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:29:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	632276	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	960874	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	998083	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.81	TIC	23648601m	1006.457	ppb	100

Quantitation Report

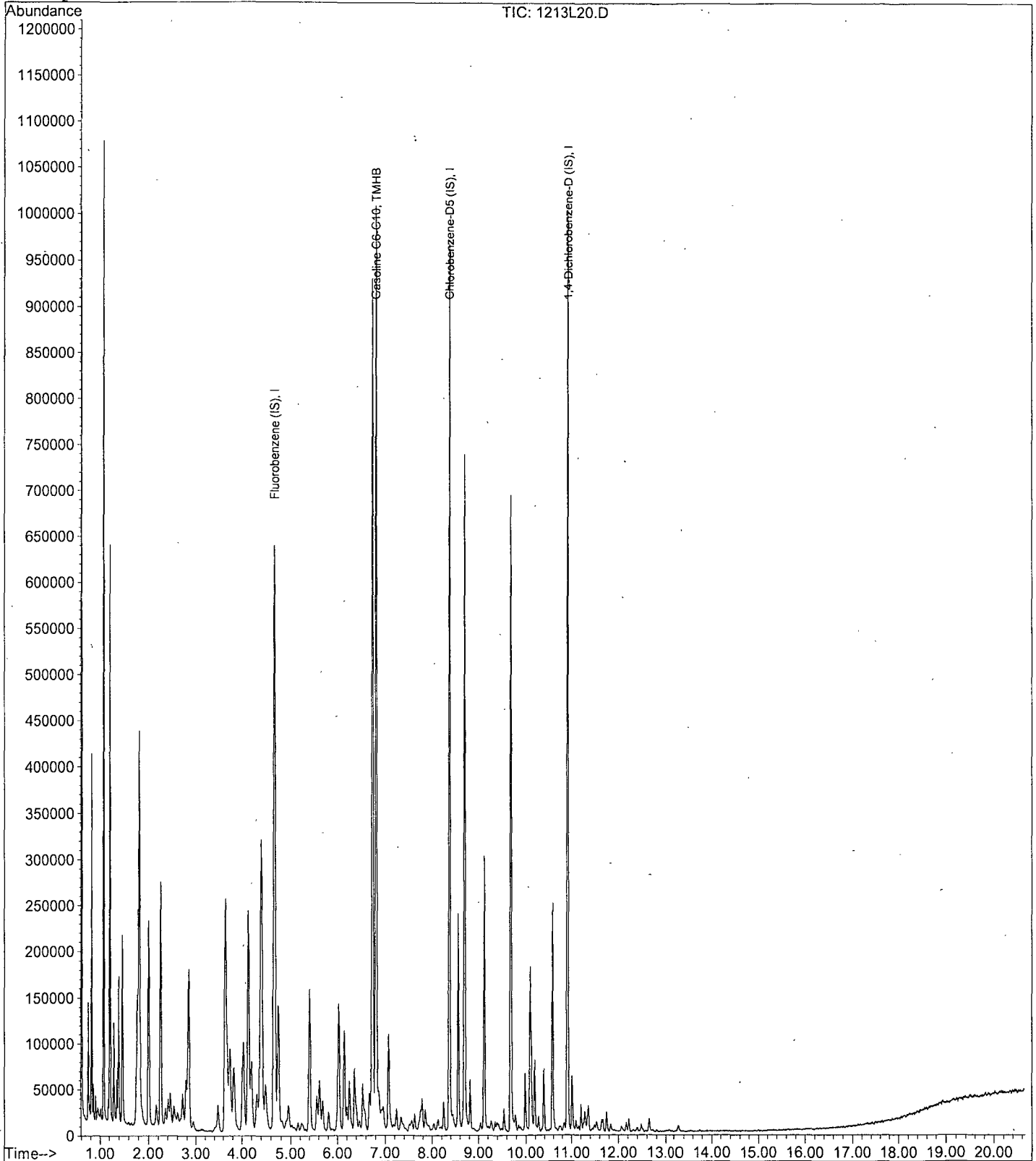
Data File : M:\LOKI\DATA\181213\1213L20.D  
Acq On : 13 Dec 18 22:39  
Sample : 1000ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

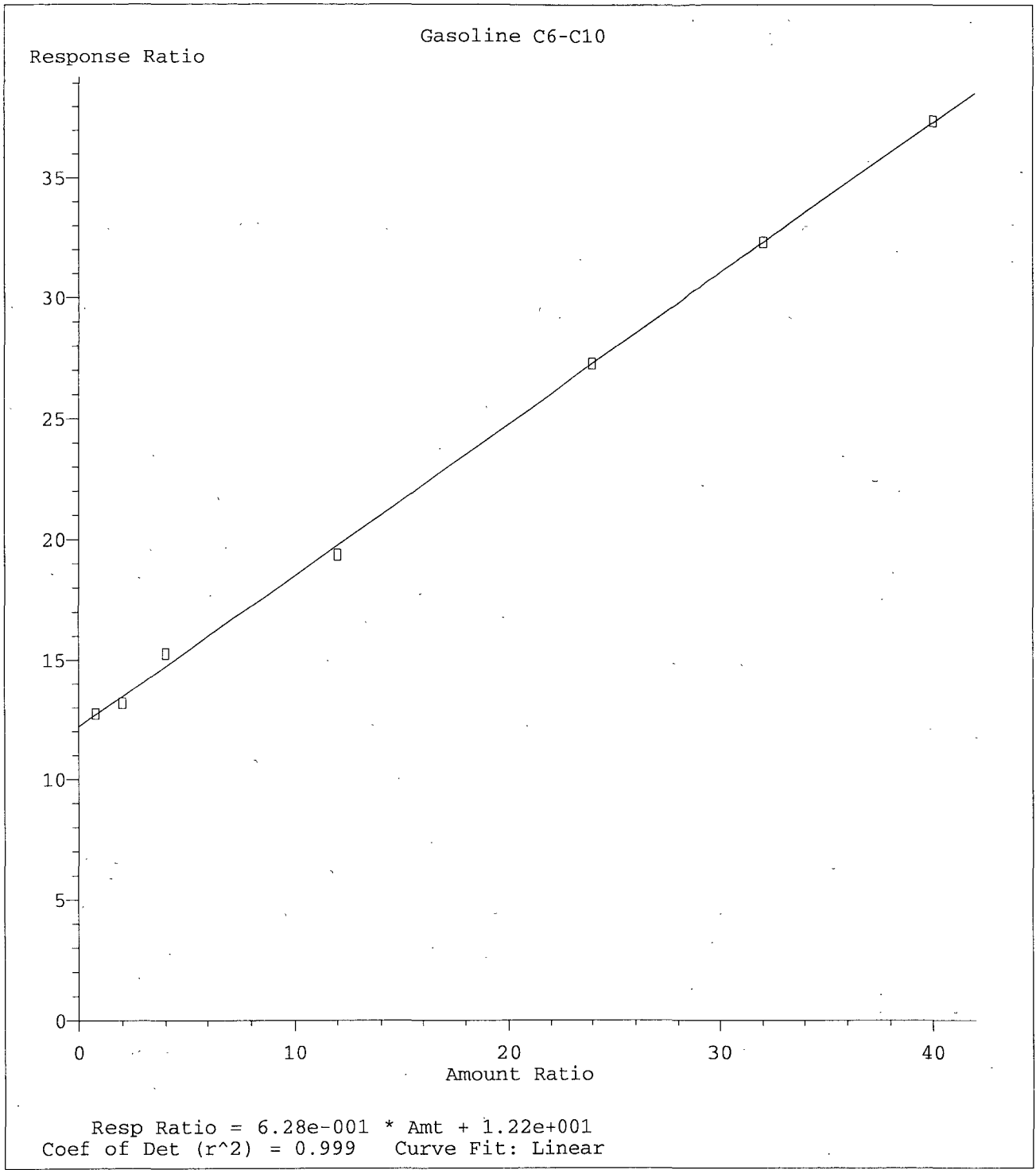
Vial: 19  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:34 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration





Method Name: M:\LOKI\DATA\181213\LGAS1213.M  
Calibration Table Last Updated: Fri Dec 14 10:37:19 2018



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/14/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1213L25.D

	Compound	MEAN	CCRF	%D	%Drift
1	TMHB Gasoline C6-C10	4.433	1.642	63	TMHBL 0.43
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
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36					
37					
38					
39					
40	Average			63.0	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\181213\1213L25.D Vial: 24  
 Acq On : 14 Dec 18 1:02 Operator: PM, DG, SV, CMM, KV  
 Sample : (SS)300ug/L GAS Std 12/13/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 14 10:38 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	598050	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	888316	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	934408	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.74	TIC	11786133m	298.703	ppb	100

Data File : M:\LOKI\DATA\181213\1213L25.D  
 Acq On : 14 Dec 18 1:02  
 Sample : (SS)300ug/L GAS Std 12/13/18  
 Misc : IS&S 11/8/18

Vial: 24  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 14 10:52 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	294592	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	308992	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.92	152	165696	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.65	111	191395	25.328	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.312%	
3) 1,2-DCA-D4(S)	4.14	65	213718	24.695	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.780%	
5) Toluene-D8(S)	6.74	98	637797	25.686	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.744%	
6) 4-Bromofluorobenzene(S)	9.68	95	218147	24.307	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.228%	

Target Compounds Qvalue

Quantitation Report

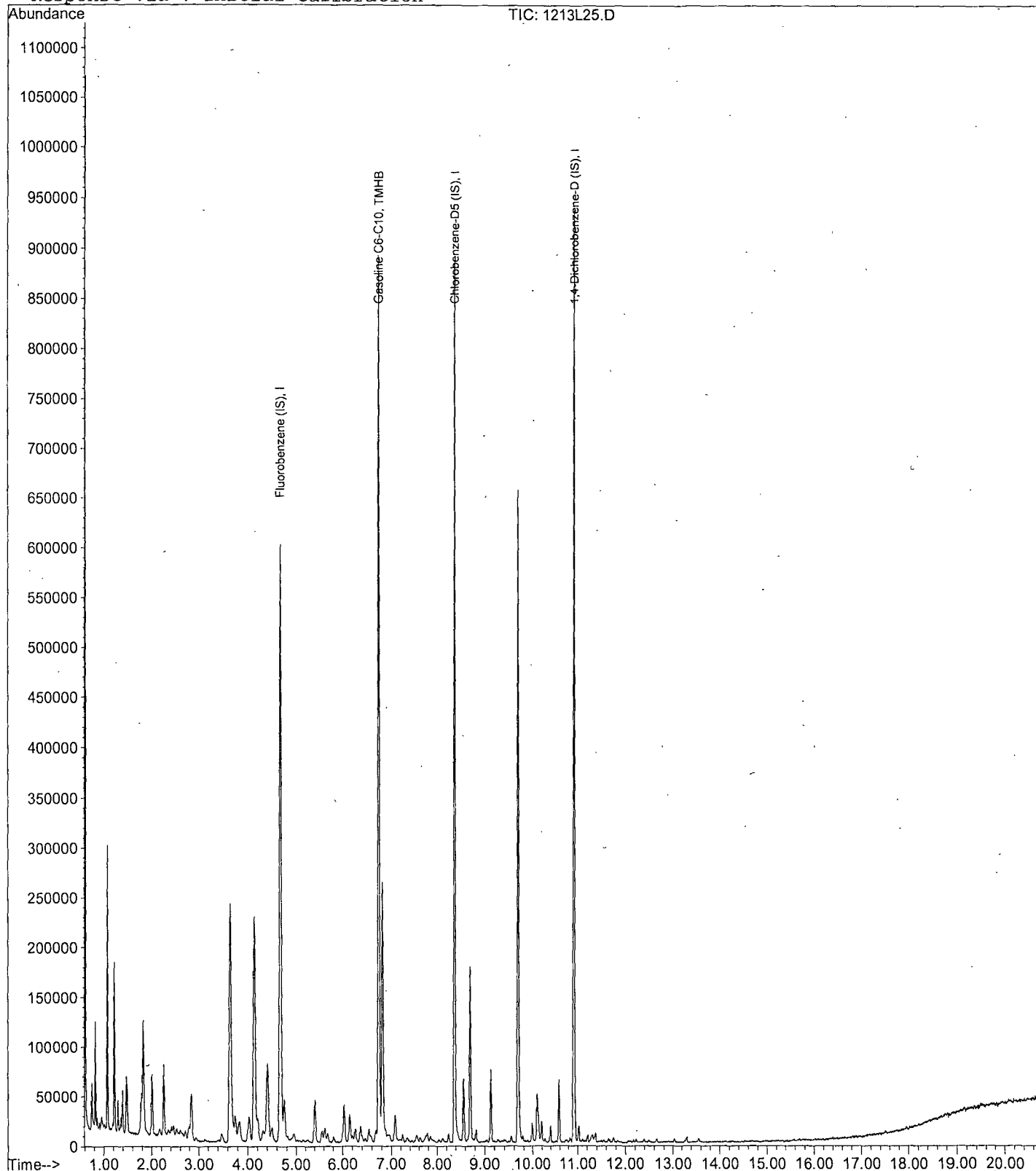
Data File : M:\LOKI\DATA\181213\1213L25.D  
Acq On : 14 Dec 18 1:02  
Sample : (SS)300ug/L GAS Std 12/13/18  
Misc : IS&S 11/8/18

Vial: 24  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 14 10:38 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/16/18

Matrix: water

Instrument: Loki

Initial Cal. Date: 12/13/18

Data File: 1216L06.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	S	Dibromofluoromethane(S)	0.6413	0.5804	9.5	S
3	S	1,2-DCA-D4(S)	0.7344	0.6452	12	S
4	I	Chlorobenzene-D5 (IS)	ISTD			I
5	S	Toluene-D8(S)	2.009	1.867	7.1	S
6	S	4-Bromofluorobenzene(S)	0.7261	0.6576	9.4	S
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
8						
9						
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37						
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39						
40						

Average

9.5

Data File : M:\LOKI\DATA\181213\1216L06.D Vial: 5  
 Acq On : 16 Dec 18 11:15 Operator: PM,DG,SV,CMM,KV  
 Sample : 181216A CCV 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 9:26 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	344960	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	372288	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	195776	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.65	111	200205	22.625	ppb	0.00
Spiked Amount						
						Recovery = 90.500%
3) 1,2-DCA-D4(S)	4.14	65	222571	21.963	ppb	0.00
Spiked Amount						
						Recovery = 87.852%
5) Toluene-D8(S)	6.74	98	694919	23.228	ppb	0.00
Spiked Amount						
						Recovery = 92.912%
6) 4-Bromofluorobenzene(S)	9.68	95	244827	22.641	ppb	0.00
Spiked Amount						
						Recovery = 90.564%
Target Compounds						Qvalue

Quantitation Report

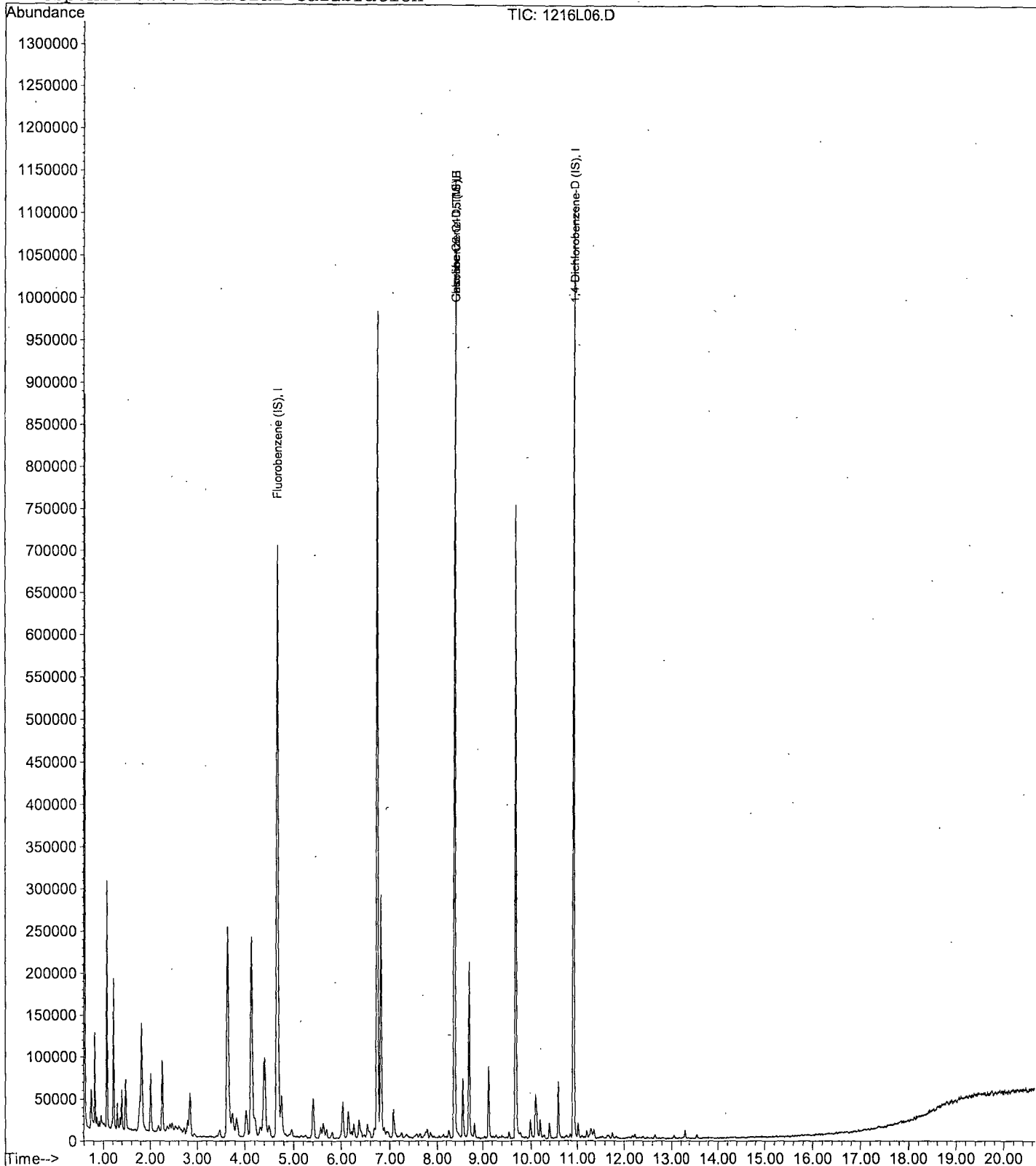
Data File : M:\LOKI\DATA\181213\1216L06.D  
Acq On : 16 Dec 18 11:15  
Sample : 181216A CCV 300ug/L  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 11:02 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/16/18

Matrix: water

Instrument: Loki

Initial Cal. Date: 12/13/18

Data File: 1216L30.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TMHB	Gasoline C6-C10	4.433	1.643	63	TMHBL 0.36
3	I	Chlorobenzene-D5 (IS)	ISTD			I
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
5						
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37						
38						
39						
40						

Average

63.0



Data File : M:\LOKI\DATA\181213\1216L30.D Vial: 29  
 Acq On : 16 Dec 18 22:42 Operator: PM, DG, SV, CMM, KV  
 Sample : Ending CCV 300ug/L 12/16/18 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 9:58 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	TIC	608705	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	914572	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	924484	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11999632m	298.933	ppb	100

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/16/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1216L30.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	S	Dibromofluoromethane(S)	0.6413	0.6175	3.7	S
3	S	1,2-DCA-D4(S)	0.7344	0.7074	3.7	S
4	I	Chlorobenzene-D5 (IS)	ISTD			I
5	S	Toluene-D8(S)	2.009	1.930	3.9	S
6	S	4-Bromofluorobenzene(S)	0.7261	0.6584	9.3	S
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
8						
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39						
40						

Average

5.2

Data File : M:\LOKI\DATA\181213\1216L30.D  
 Acq On : 16 Dec 18 22:42  
 Sample : Ending CCV 300ug/L 12/16/18  
 Misc : IS&S 11/8/18

Vial: 29  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 9:28 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	295616	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	321600	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	162752	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	3.64	111	182544	24.073	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	96.292%	
3) 1,2-DCA-D4(S)	4.14	65	209109	24.079	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	96.316%	
5) Toluene-D8(S)	6.74	98	620610	24.014	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	96.056%	
6) 4-Bromofluorobenzene(S)	9.68	95	211757	22.670	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	90.680%	

Target Compounds

Qvalue

Quantitation Report

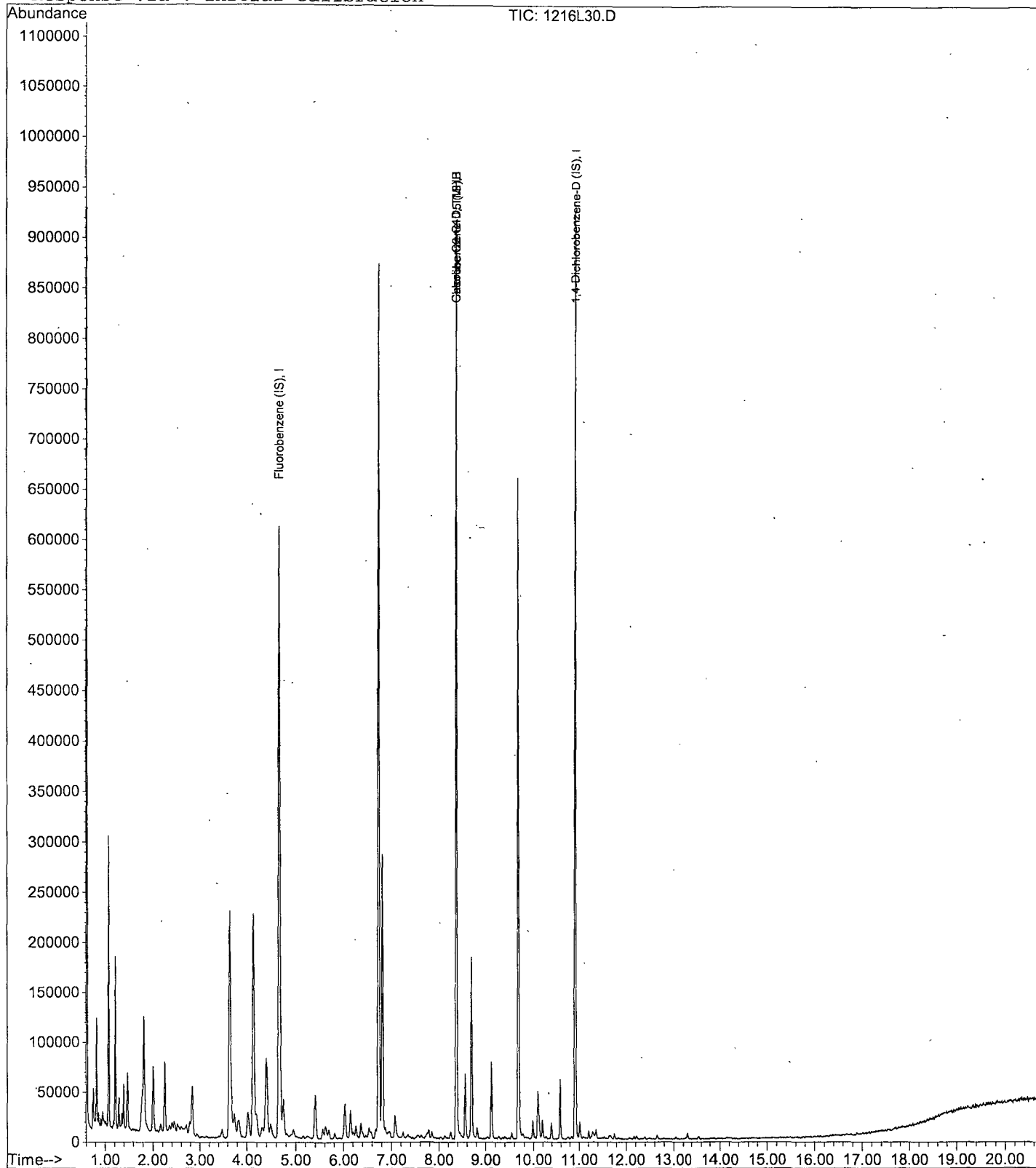
Data File : M:\LOKI\DATA\181213\1216L30.D  
Acq On : 16 Dec 18 22:42  
Sample : Ending CCV 300ug/L 12/16/18  
Misc : IS&S 11/8/18

Vial: 29  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 9:58 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1217L07.D

		Compound	MEAN	CCRF	%D		%Drift
1		Fluorobenzene (IS)	ISTD				
2	TMHB	Gasoline C6-C10	4.433	1.664	62	TMHBL	3.0
3		Chlorobenzene-D5 (IS)	ISTD				
4		1,4-Dichlorobenzene-D (IS)	ISTD				
5							
6							
7							
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40							

Average

62.0

Data File : M:\LOKI\DATA\181213\1217L07.D Vial: 6  
 Acq On : 17 Dec 18 12:26 Operator: PM, DG, SV, CMM, KV  
 Sample : 181217A CCV 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:24 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	609772	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	887623	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	905593	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	12172964m	308.874	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1217L07.D Vial: 6  
 Acq On : 17 Dec 18 12:26 Operator: PM,DG,SV,CMM,KV  
 Sample : 181217A CCV 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	96	294720	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	308864	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	160640	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	188858	24.981	ppb	0.00
Spiked Amount				25.000		
					Recovery =	99.924%
3) 1,2-DCA-D4(S)	4.14	65	211056	24.377	ppb	0.00
Spiked Amount				25.000		
					Recovery =	97.508%
5) Toluene-D8(S)	6.74	98	608481	24.515	ppb	0.00
Spiked Amount				25.000		
					Recovery =	98.060%
6) 4-Bromofluorobenzene(S)	9.68	95	211709	23.599	ppb	0.00
Spiked Amount				25.000		
					Recovery =	94.396%

Target Compounds Qvalue

Quantitation Report

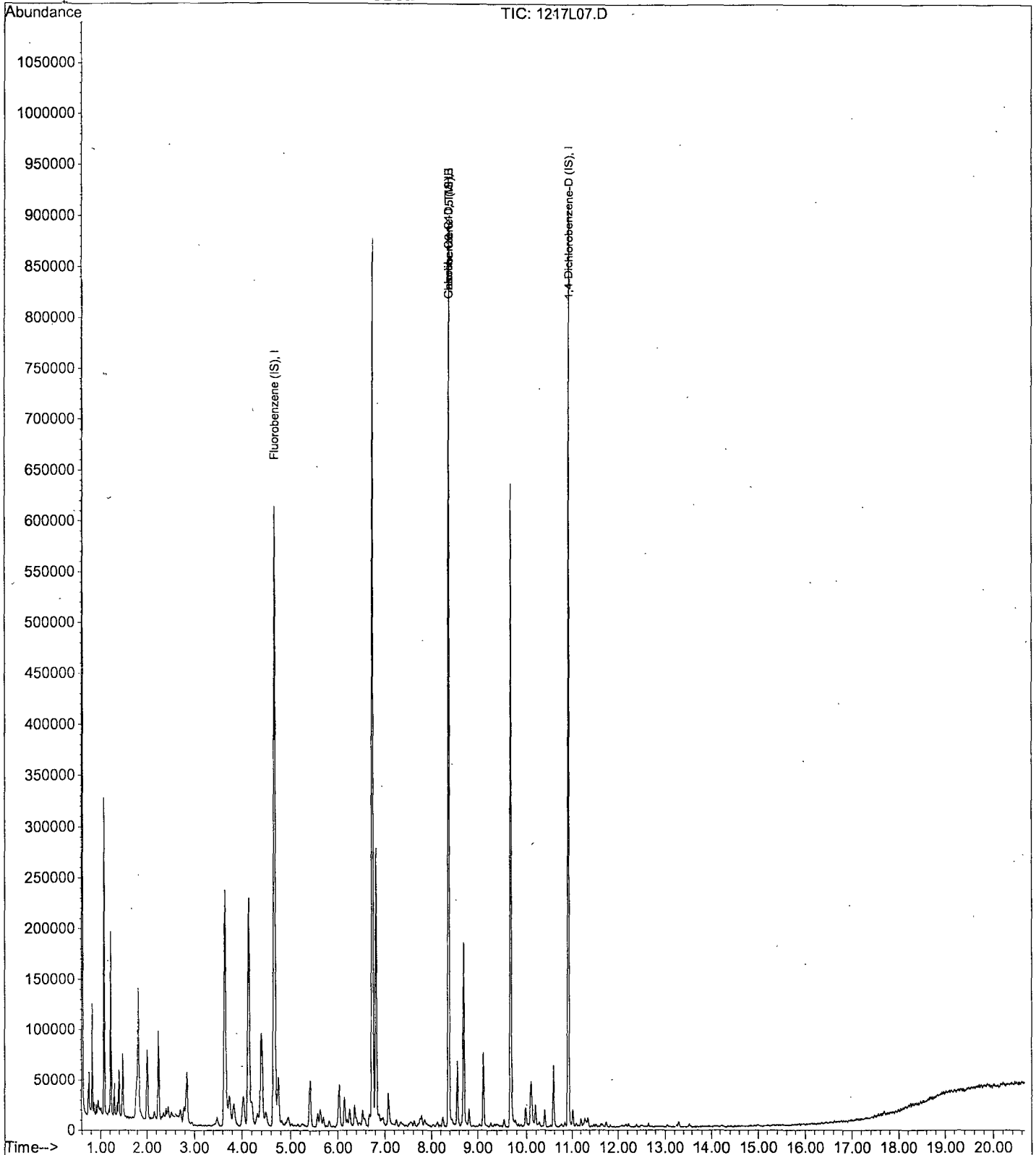
Data File : M:\LOKI\DATA\181213\1217L07.D  
Acq On : 17 Dec 18 12:26  
Sample : 181217A CCV 300ug/L  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:24 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration





VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 12/17/18  
Instrument: Loki  
Initial Cal. Date: 12/13/18  
Data File: 1217L29.D

	Compound	MEAN	CCRF	%D	%Drift
1	Fluorobenzene (IS)	ISTD			
2	TMHB Gasoline C6-C10	4.433	1.645	63	TMHBL 0.03
3	Chlorobenzene-D5 (IS)	ISTD			
4	1,4-Dichlorobenzene-D (IS)	ISTD			
5					
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39					
40	Average			63.0	

Data File : M:\LOKI\DATA\181213\1217L29.D  
 Acq On : 17 Dec 18 22:54  
 Sample : Ending CCV 300ug/L 12/17/18  
 Misc : IS&S 11/8/18

Vial: 28  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:31 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	615642	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	911274	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	935199	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	12154272m	300.089	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\181213\1217L29.D  
 Acq On : 17 Dec 18 22:54  
 Sample : Ending CCV 300ug/L 12/17/18  
 Misc : IS&S 11/8/18

Vial: 28  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	297792	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	321792	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	164224	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	3.64	111	189321	24.784	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	99.136%	
3) 1,2-DCA-D4(S)	4.14	65	213935	24.454	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	97.816%	
5) Toluene-D8(S)	6.74	98	619982	23.975	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	95.900%	
6) 4-Bromofluorobenzene(S)	9.68	95	212624	22.749	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	90.996%	

Target Compounds

Qvalue

Quantitation Report

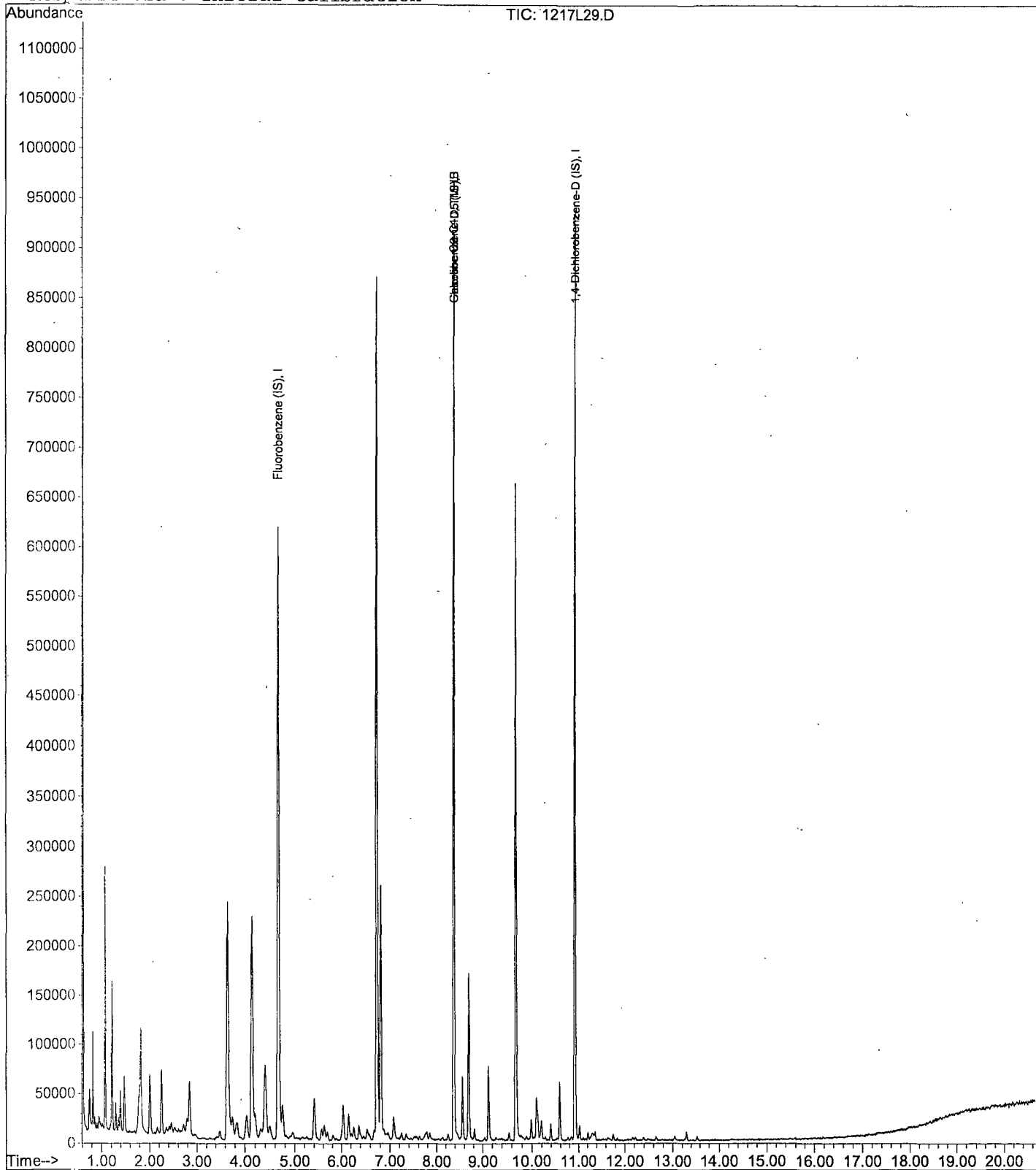
Data File : M:\LOKI\DATA\181213\1217L29.D  
Acq On : 17 Dec 18 22:54  
Sample : Ending CCV 300ug/L 12/17/18  
Misc : IS&S 11/8/18

Vial: 28  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**



Data File : M:\LOKI\DATA\181213\1216L13.D  
 Acq On : 16 Dec 18 14:35  
 Sample : AZ84057W01  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 10:31 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	639956	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	951482	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	958272	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Data File : M:\LOKI\DATA\181213\1216L13.D Vial: 12  
 Acq On : 16 Dec 18 14:35 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ84057W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 10:30 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	313664	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	341504	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	170496	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	202756	25.20	ppb	0.00
Spiked Amount 25.000			Recovery =	100.800%		
3) 1,2-DCA-D4(S)	4.14	65	225018	24.42	ppb	0.00
Spiked Amount 25.000			Recovery =	97.680%		
5) Toluene-D8(S)	6.74	98	663953	24.19	ppb	0.00
Spiked Amount 25.000			Recovery =	96.772%		
6) 4-Bromofluorobenzene(S)	9.68	95	226539	22.84	ppb	0.00
Spiked Amount 25.000			Recovery =	91.356%		

Target Compounds Qvalue

Quantitation Report

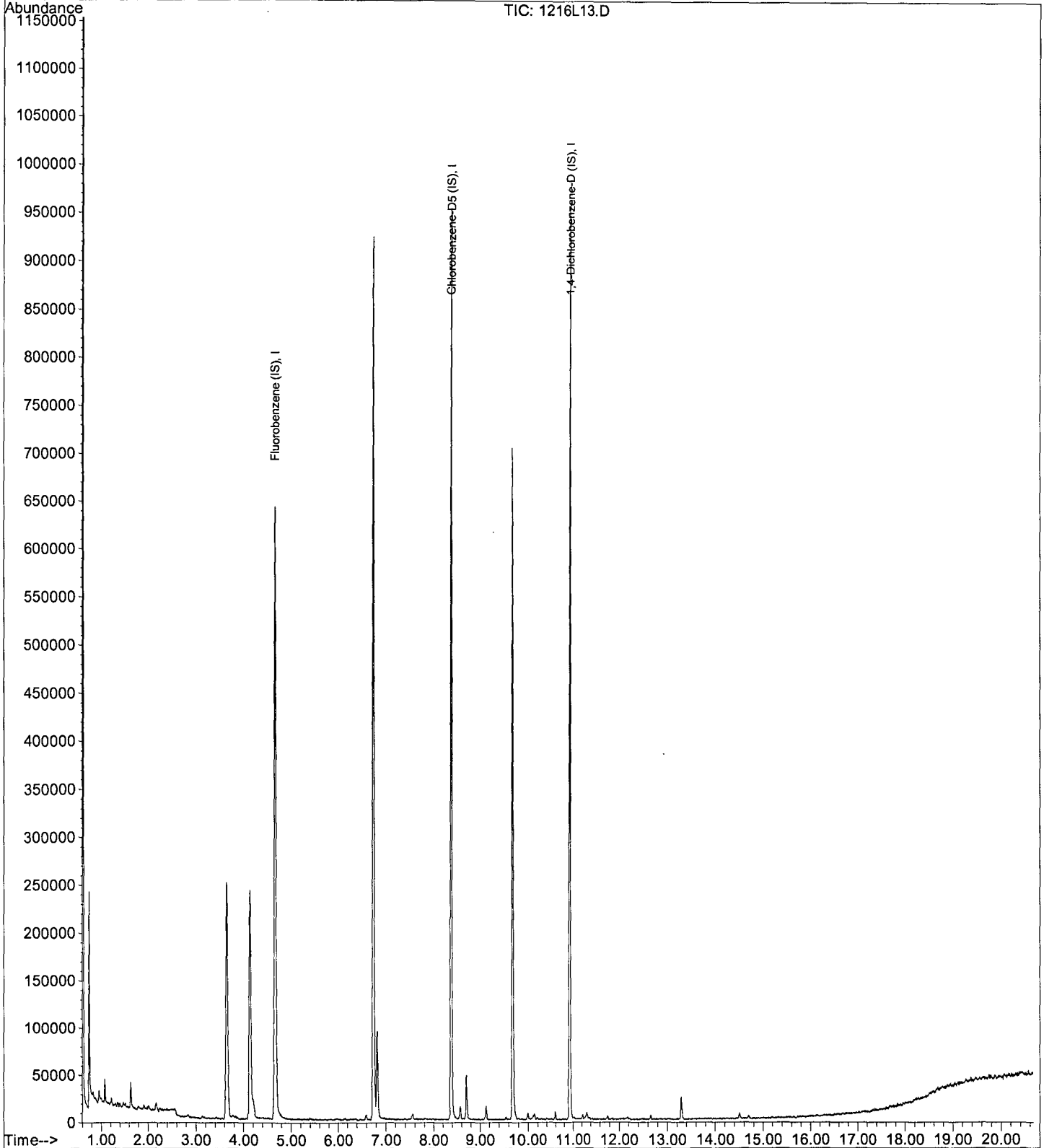
Data File : M:\LOKI\DATA\181213\1216L13.D  
Acq On : 16 Dec 18 14:35  
Sample : AZ84057W01  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 10:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1216L14.D  
 Acq On : 16 Dec 18 15:04  
 Sample : AZ84058W01  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 10:31 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	611763	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	907343	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	894814	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\181213\1216L14.D Vial: 13  
 Acq On : 16 Dec 18 15:04 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84058W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 10:30 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	298240	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	321920	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	159168	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	198067	25.89	ppb	0.00
Spiked Amount 25.000			Recovery =	103.560%		
3) 1,2-DCA-D4(S)	4.14	65	220422	25.16	ppb	0.00
Spiked Amount 25.000			Recovery =	100.632%		
5) Toluene-D8(S)	6.74	98	638602	24.69	ppb	0.00
Spiked Amount 25.000			Recovery =	98.740%		
6) 4-Bromofluorobenzene(S)	9.68	95	216700	23.18	ppb	0.00
Spiked Amount 25.000			Recovery =	92.704%		

Target Compounds Qvalue

Quantitation Report

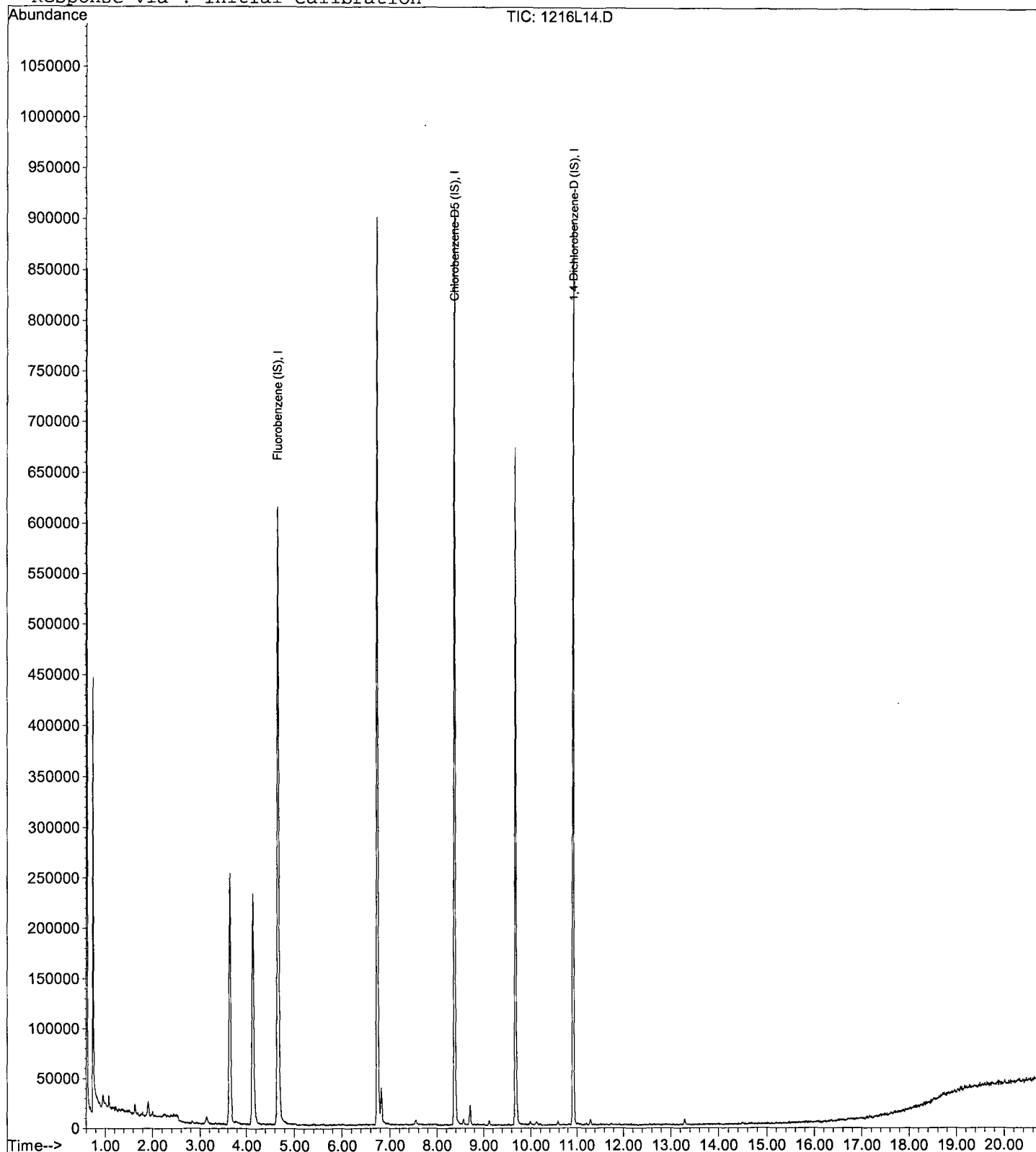
Data File : M:\LOKI\DATA\181213\1216L14.D  
Acq On : 16 Dec 18 15:04  
Sample : AZ84058W01  
Misc : IS&S 11/8/18

Vial: 13  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 10:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L16.D Vial: 15  
 Acq On : 17 Dec 18 16:43 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84059W02 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:29 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	574588	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	832105	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	853601	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\181213\1217L16.D  
 Acq On : 17 Dec 18 16:43  
 Sample : AZ84059W02  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	274688	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	289984	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	154176	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	180772	25.66	ppb	0.00
Spiked Amount 25.000			Recovery =	102.624%		
3) 1,2-DCA-D4(S)	4.14	65	204853	25.39	ppb	0.00
Spiked Amount 25.000			Recovery =	101.544%		
5) Toluene-D8(S)	6.74	98	552796	23.72	ppb	0.00
Spiked Amount 25.000			Recovery =	94.888%		
6) 4-Bromofluorobenzene(S)	9.68	95	180457	21.43	ppb	0.00
Spiked Amount 25.000			Recovery =	85.700%		

Target Compounds Qvalue

Quantitation Report

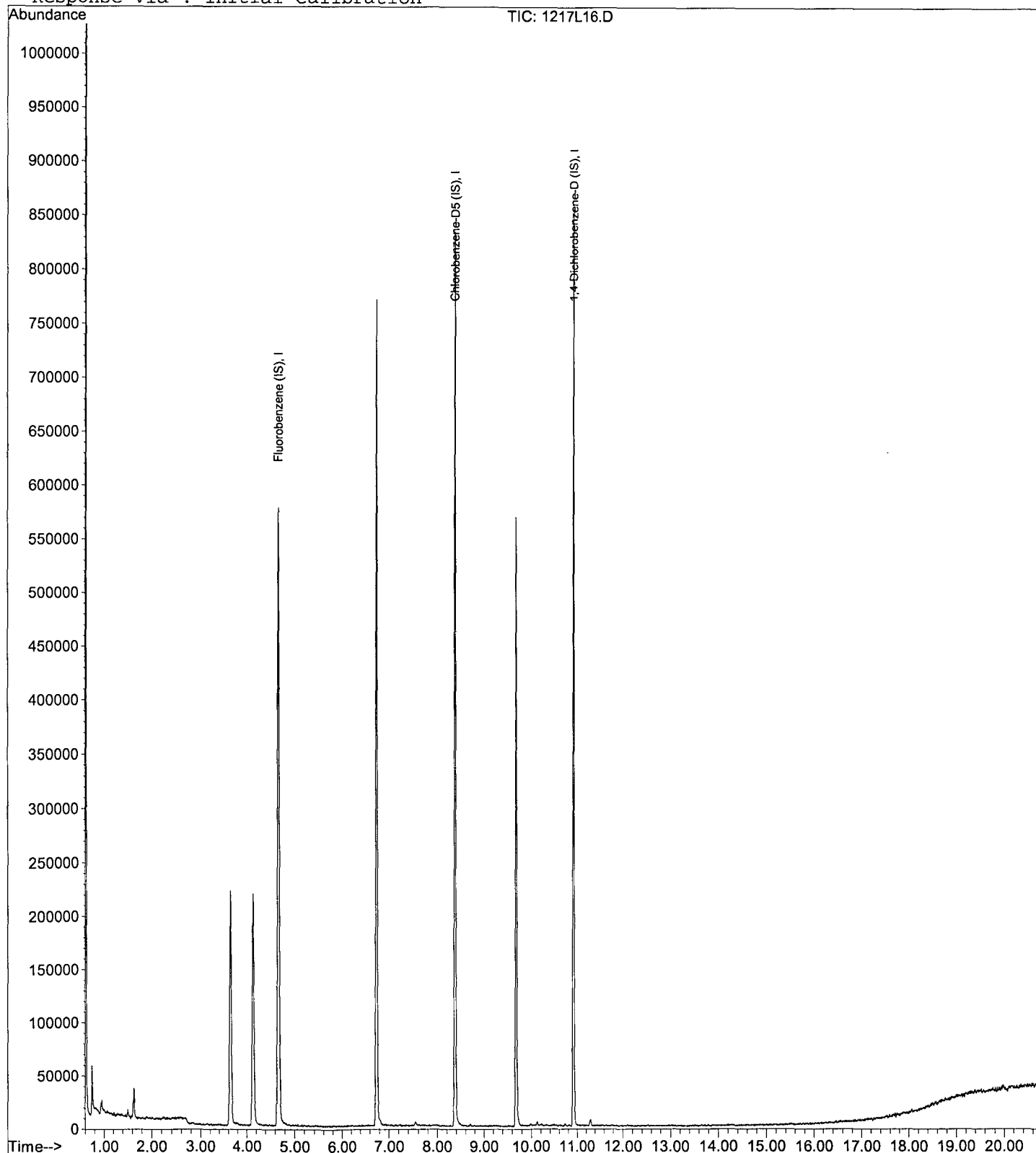
Data File : M:\LOKI\DATA\181213\1217L16.D  
Acq On : 17 Dec 18 16:43  
Sample : AZ84059W02  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:29 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L17.D Vial: 16  
 Acq On : 17 Dec 18 17:12 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84060W02 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:29 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	546502	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	801367	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	807708	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\181213\1217L17.D  
 Acq On : 17 Dec 18 17:12  
 Sample : AZ84060W02  
 Misc : IS&S 11/8/18

Vial: 16  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	264384	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	282304	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	140096	25.00	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	3.64	111	180387	26.60	ppb	0.00
Spiked Amount 25.000			Recovery =	106.396%		
3) 1,2-DCA-D4(S)	4.14	65	204362	26.31	ppb	0.00
Spiked Amount 25.000			Recovery =	105.248%		
5) Toluene-D8(S)	6.74	98	547864	24.15	ppb	0.00
Spiked Amount 25.000			Recovery =	96.600%		
6) 4-Bromofluorobenzene(S)	9.68	95	181476	22.13	ppb	0.00
Spiked Amount 25.000			Recovery =	88.528%		

Target Compounds

Qvalue



Quantitation Report

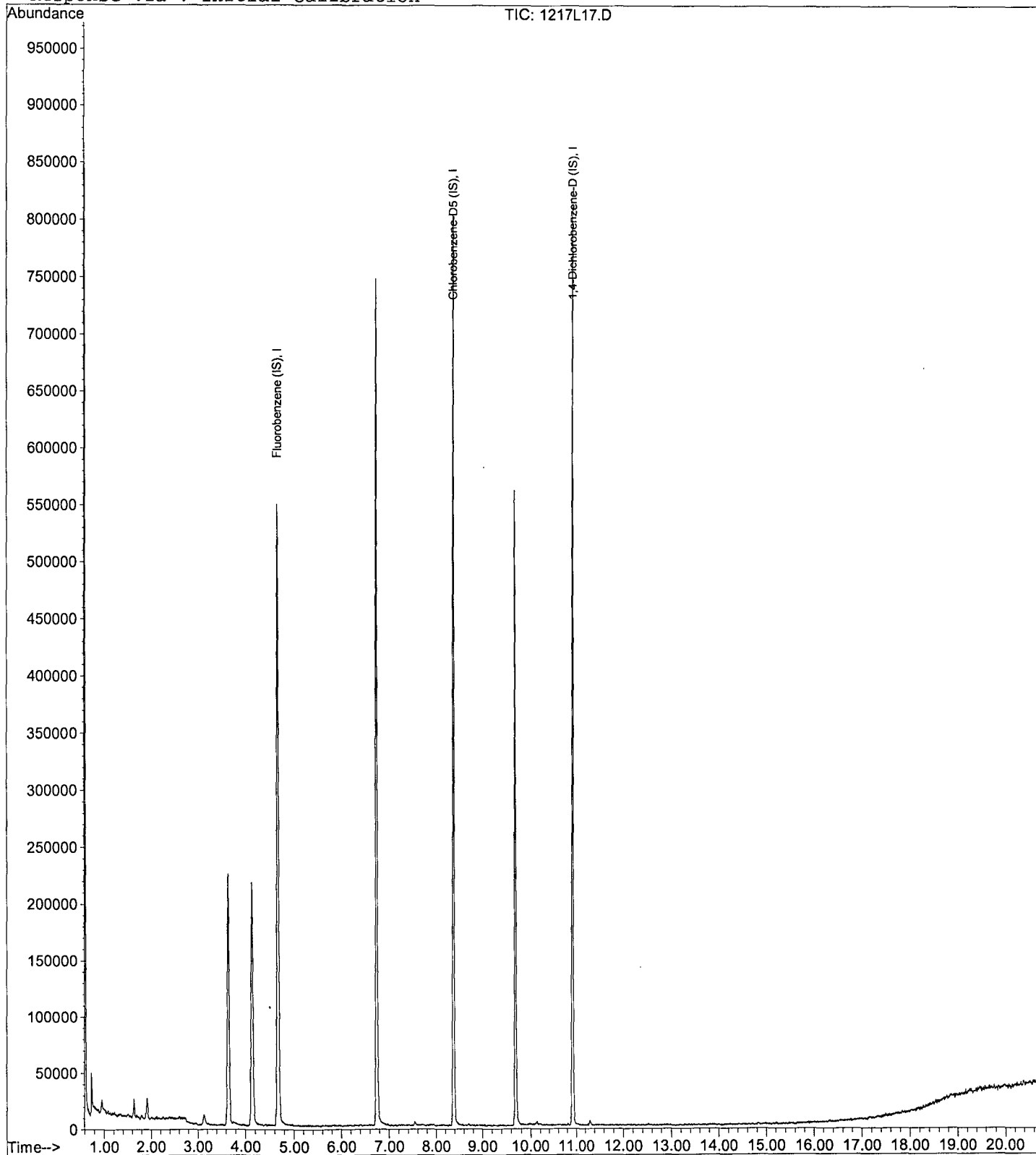
Data File : M:\LOKI\DATA\181213\1217L17.D  
Acq On : 17 Dec 18 17:12  
Sample : AZ84060W02  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:29 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L18.D Vial: 17  
 Acq On : 17 Dec 18 17:40 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84061W07 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:29 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	499396	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	749171	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	728502	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\181213\1217L18.D Vial: 17  
 Acq On : 17 Dec 18 17:40 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84061W07 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	240128	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	264704	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	127480	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	171809	27.89	ppb	0.00
Spiked Amount 25.000			Recovery =	111.572%		
3) 1,2-DCA-D4(S)	4.14	65	191406	27.13	ppb	0.00
Spiked Amount 25.000			Recovery =	108.532%		
5) Toluene-D8(S)	6.74	98	511682	24.05	ppb	0.00
Spiked Amount 25.000			Recovery =	96.216%		
6) 4-Bromofluorobenzene(S)	9.68	95	163530	21.27	ppb	0.00
Spiked Amount 25.000			Recovery =	85.080%		

Target Compounds Qvalue

Quantitation Report

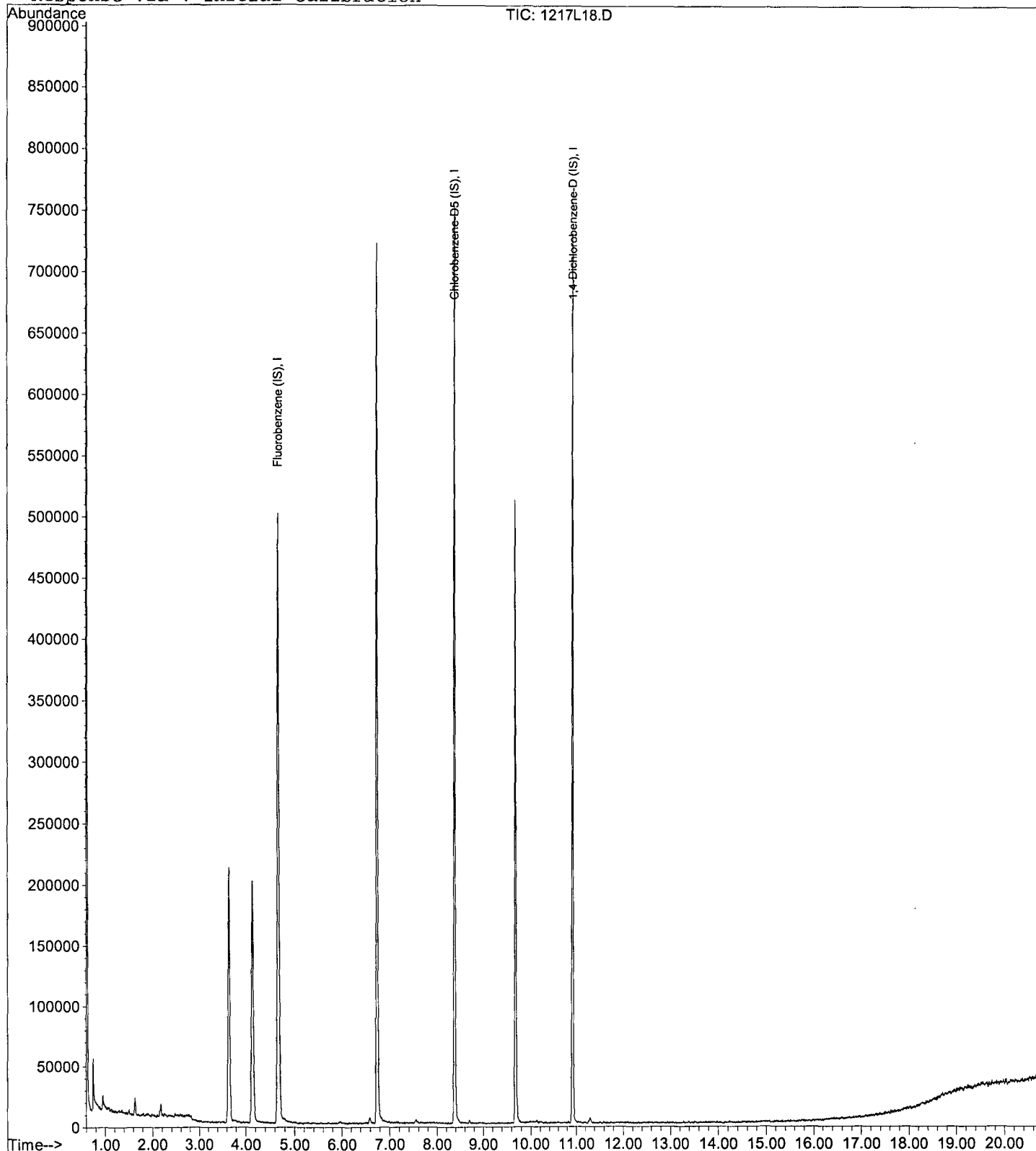
Data File : M:\LOKI\DATA\181213\1217L18.D  
Acq On : 17 Dec 18 17:40  
Sample : AZ84061W07  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:29 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L18.D Vial: 17  
 Acq On : 16 Dec 18 16:59 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84062W02 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 10:31 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	589746	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	860633	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	855596	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\181213\1216L18.D  
 Acq On : 16 Dec 18 16:59  
 Sample : AZ84062W02  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 10:30 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	288064	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	307328	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	150464	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	189637	25.66	ppb	0.00
Spiked Amount 25.000			Recovery =	102.656%		
3) 1,2-DCA-D4(S)	4.14	65	217364	25.69	ppb	0.00
Spiked Amount 25.000			Recovery =	102.740%		
5) Toluene-D8(S)	6.74	98	595270	24.10	ppb	0.00
Spiked Amount 25.000			Recovery =	96.412%		
6) 4-Bromofluorobenzene(S)	9.68	95	195101	21.86	ppb	0.00
Spiked Amount 25.000			Recovery =	87.424%		

Target Compounds Qvalue

Quantitation Report

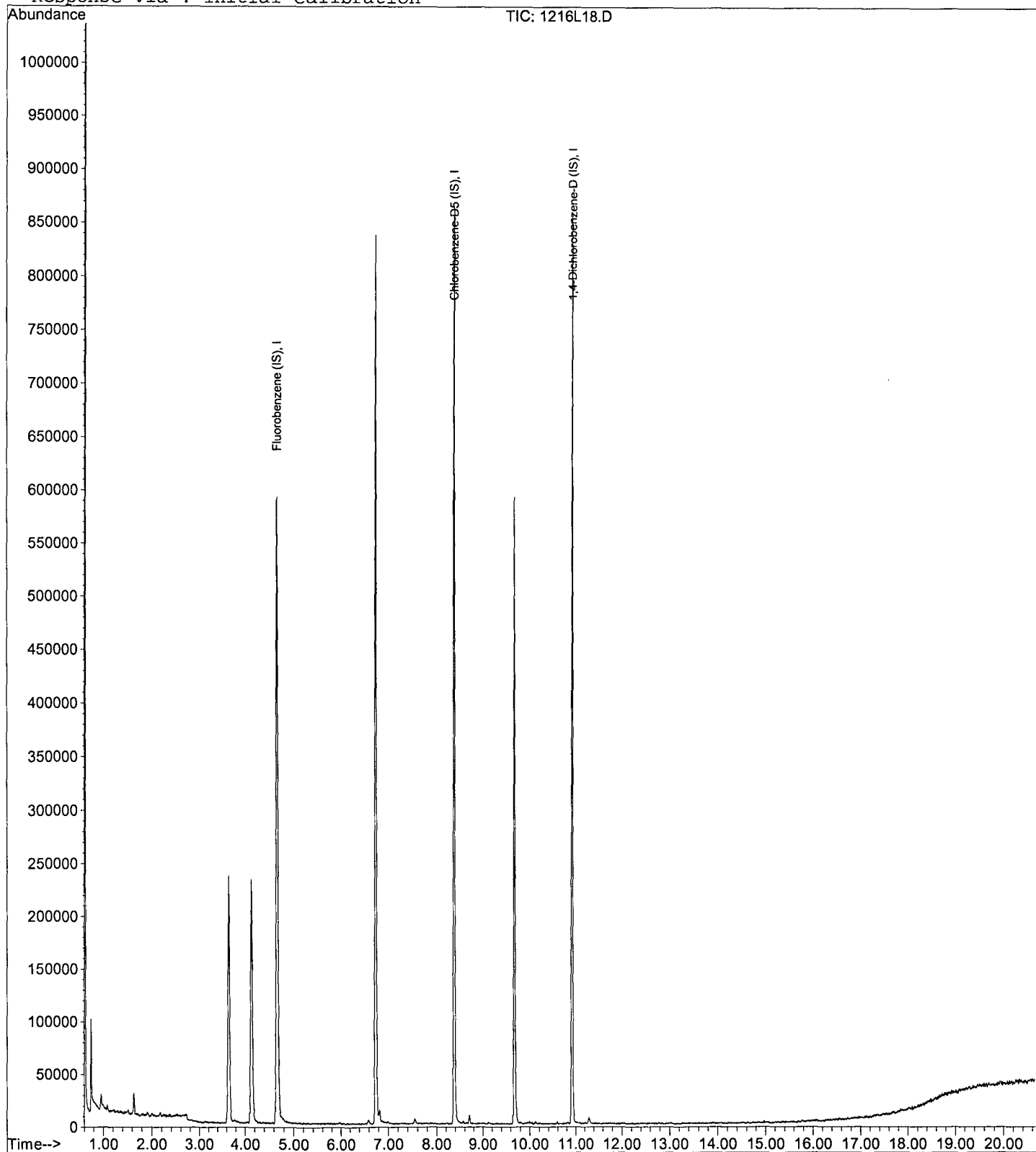
Data File : M:\LOKI\DATA\181213\1216L18.D  
Acq On : 16 Dec 18 16:59  
Sample : AZ84062W02  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 10:31 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L10.D  
Acq On : 16 Dec 18 13:09  
Sample : 181216A blk  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 11:08 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	619260	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	894190	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	898901	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue



Data File : M:\LOKI\DATA\181213\1216L10.D  
 Acq On : 16 Dec 18 13:09  
 Sample : 181216A blk  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 9:26 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	302784	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	320256	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	159808	25.00	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	3.64	111	192495	24.78	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	99.136%	
3) 1,2-DCA-D4(S)	4.14	65	223011	25.07	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	100.284%	
5) Toluene-D8(S)	6.74	98	631339	24.53	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	98.124%	
6) 4-Bromofluorobenzene(S)	9.68	95	206888	22.24	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	88.964%	

Target Compounds

Qvalue

Quantitation Report

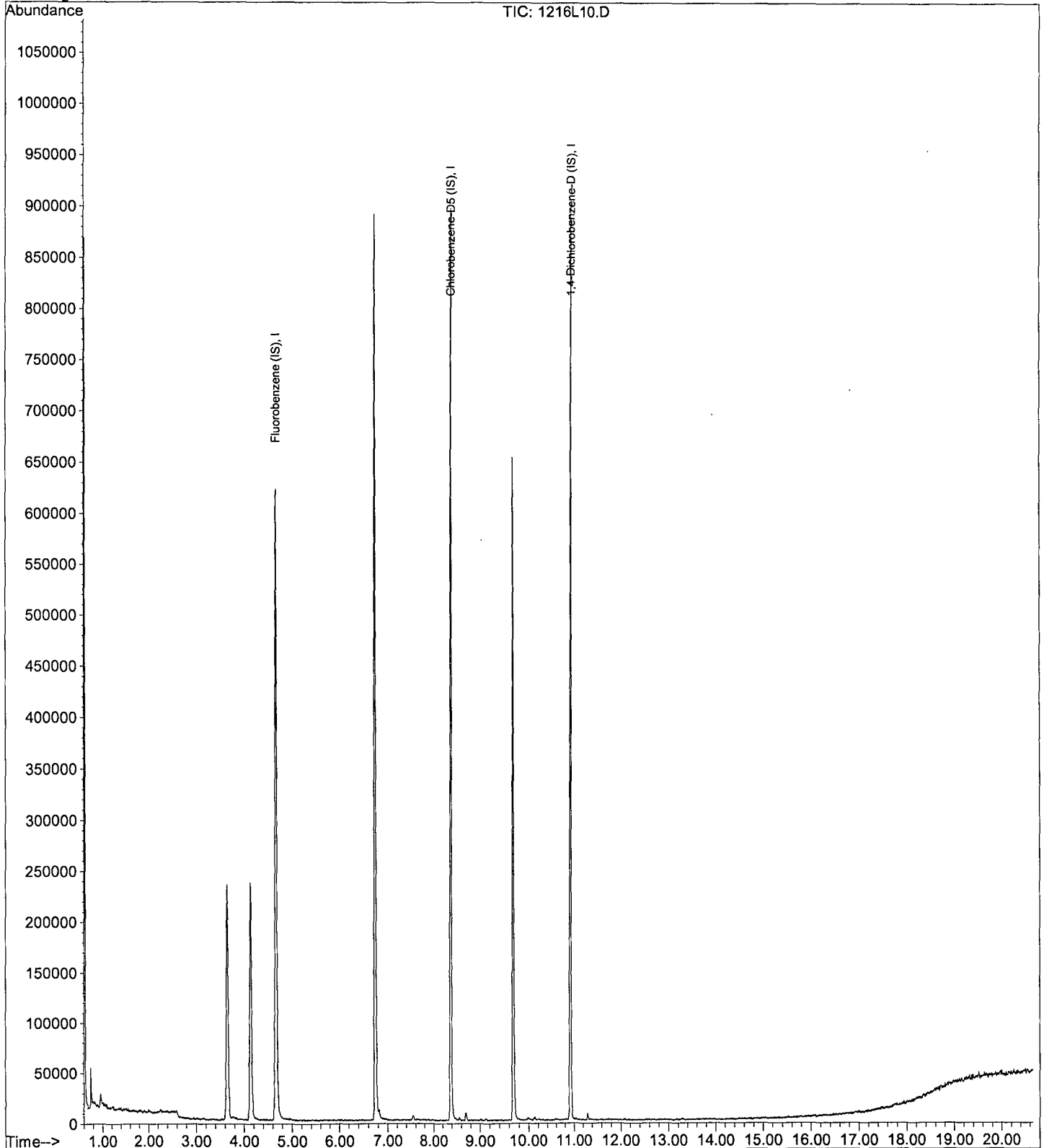
Data File : M:\LOKI\DATA\181213\1216L10.D  
Acq On : 16 Dec 18 13:09  
Sample : 181216A blk  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 11:08 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L11.D Vial: 10  
 Acq On : 17 Dec 18 14:20 Operator: PM,DG,SV,CMM,KV  
 Sample : 181217A blk Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:28 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	561140	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	827651	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	831119	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\181213\1217L11.D  
 Acq On : 17 Dec 18 14:20  
 Sample : 181217A blk  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	269888	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	291904	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	147328	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	186131	26.89	ppb	0.00
Spiked Amount 25.000			Recovery =	107.544%		
3) 1,2-DCA-D4(S)	4.14	65	211556	26.68	ppb	0.00
Spiked Amount 25.000			Recovery =	106.732%		
5) Toluene-D8(S)	6.74	98	569073	24.26	ppb	0.00
Spiked Amount 25.000			Recovery =	97.040%		
6) 4-Bromofluorobenzene(S)	9.68	95	190702	22.49	ppb	0.00
Spiked Amount 25.000			Recovery =	89.968%		

Target Compounds Qvalue

Quantitation Report

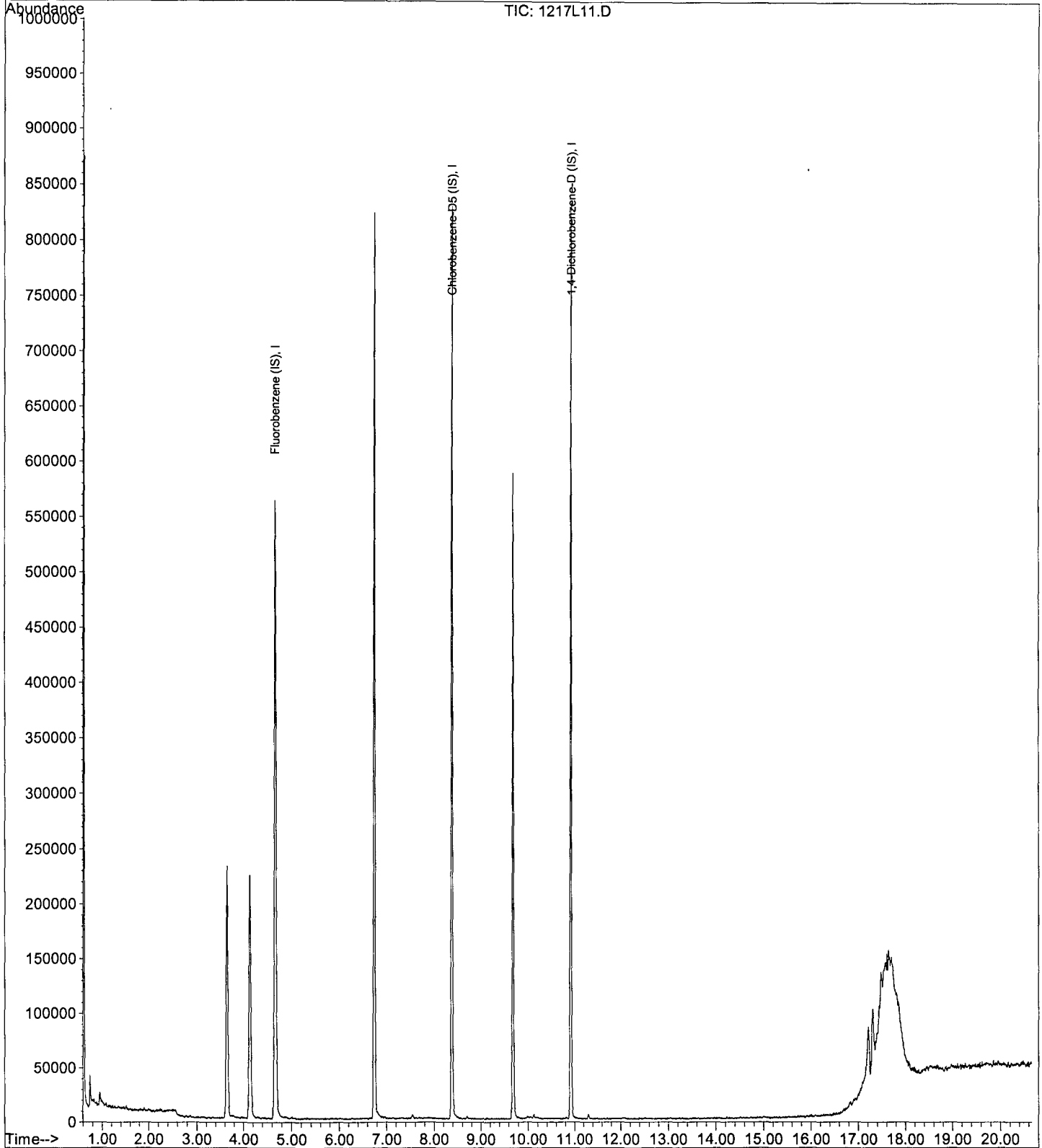
Data File : M:\LOKI\DATA\181213\1217L11.D  
Acq On : 17 Dec 18 14:20  
Sample : 181217A blk  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:28 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L07.D  
 Acq On : 16 Dec 18 11:44  
 Sample : 181216A LCS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 17 11:02 2018

Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	710352	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	1076520	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	1126994	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	13558546m	274.005	ppb	100

Data File : M:\LOKI\DATA\181213\1216L07.D Vial: 6  
 Acq On : 16 Dec 18 11:44 Operator: PM,DG,SV,CMM,KV  
 Sample : 181216A LCS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 9:26 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	348032	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	383040	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	200896	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	199947	22.397	ppb	0.00
Spiked Amount 25.000			Recovery =		89.588%	
3) 1,2-DCA-D4(S)	4.14	65	227593	22.260	ppb	0.00
Spiked Amount 25.000			Recovery =		89.040%	
5) Toluene-D8(S)	6.74	98	693960	22.545	ppb	0.00
Spiked Amount 25.000			Recovery =		90.180%	
6) 4-Bromofluorobenzene(S)	9.68	95	243376	21.875	ppb	0.00
Spiked Amount 25.000			Recovery =		87.500%	

Target Compounds Qvalue

Quantitation Report

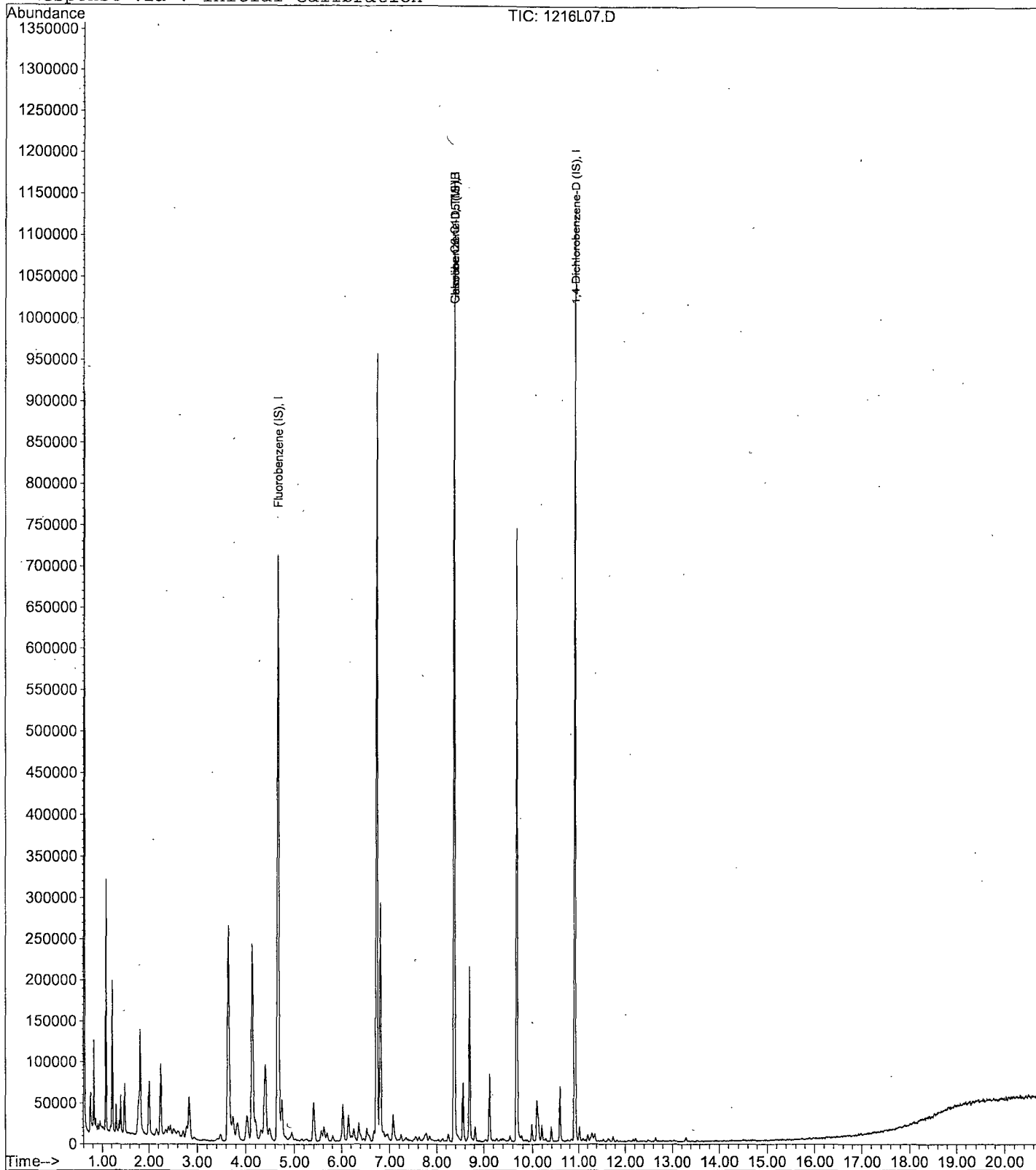
Data File : M:\LOKI\DATA\181213\1216L07.D  
Acq On : 16 Dec 18 11:44  
Sample : 181216A LCS 300ug/L  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 11:02 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\181213\1217L08.D Vial: 7  
 Acq On : 17 Dec 18 12:54 Operator: PM,DG,SV,CMM,KV  
 Sample : 181217A LCS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:25 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	TIC	617951	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	911807	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	925941	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	12346036m	309.504	ppb	100

Data File : M:\LOKI\DATA\181213\1217L08.D  
 Acq On : 17 Dec 18 12:54  
 Sample : 181217A LCS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	300288	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	317888	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	164096	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	3.64	111	184075	23.897	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	95.588%	
3) 1,2-DCA-D4(S)	4.14	65	210701	23.884	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	95.536%	
5) Toluene-D8(S)	6.74	98	609122	23.844	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	95.376%	
6) 4-Bromofluorobenzene(S)	9.68	95	205876	22.297	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	89.188%	

Target Compounds

Qvalue

Quantitation Report

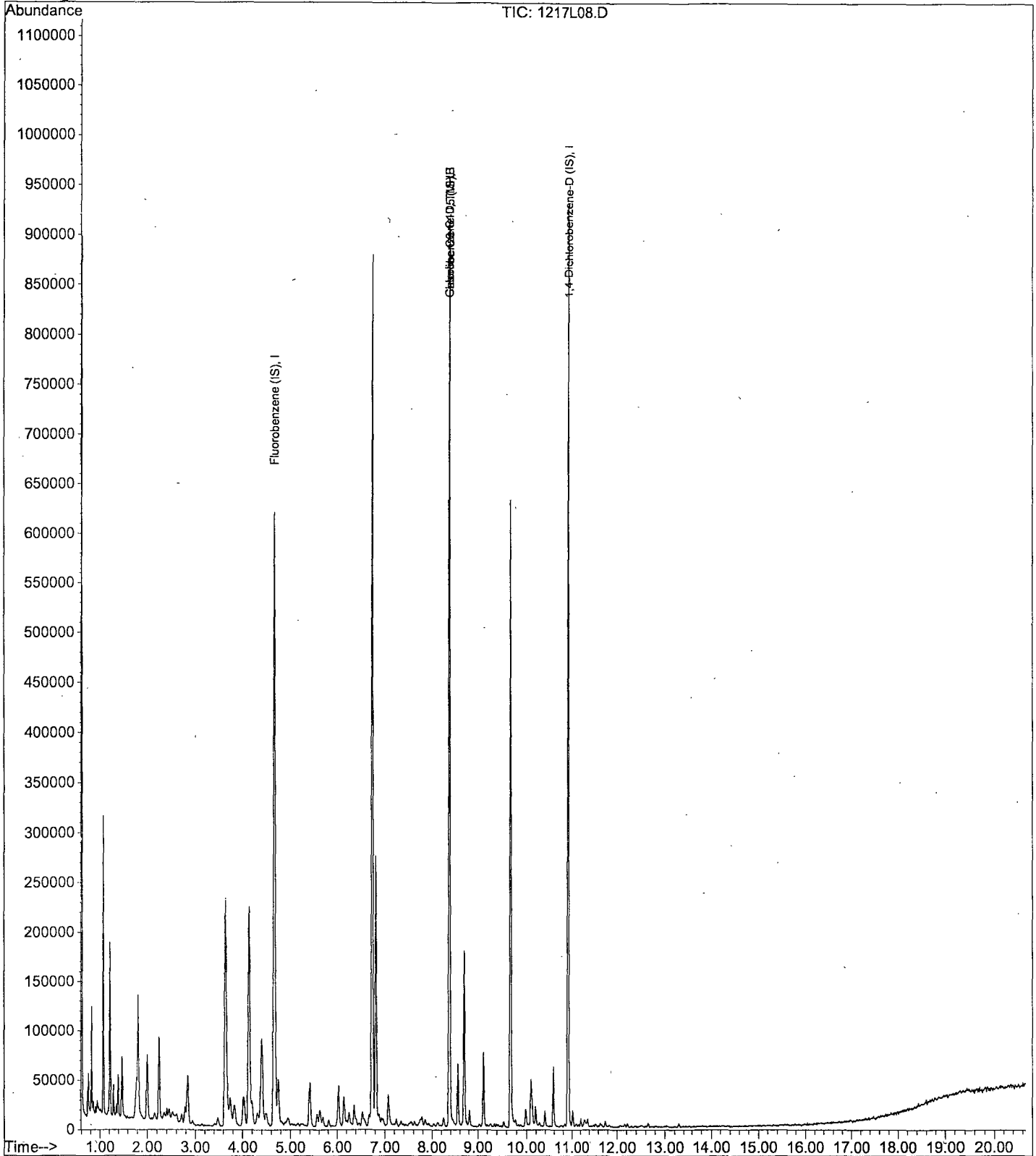
Data File : M:\LOKI\DATA\181213\1217L08.D  
Acq On : 17 Dec 18 12:54  
Sample : 181217A LCS 300ug/L  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:25 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L08.D Vial: 7  
 Acq On : 16 Dec 18 12:12 Operator: PM,DG,SV,CMM,KV  
 Sample : 181216A LCSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 11:04 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	TIC	714604	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	1066463	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	1129687	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	13387450m	259.955	ppb	100

Data File : M:\LOKI\DATA\181213\1216L08.D  
 Acq On : 16 Dec 18 12:12  
 Sample : 181216A LCSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 9:26 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	351488	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	377664	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	203008	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	3.64	111	195091	21.638	ppb	0.00
Spiked Amount						
						Recovery = 86.552%
3) 1,2-DCA-D4(S)	4.14	65	222267	21.525	ppb	0.00
Spiked Amount						
						Recovery = 86.100%
5) Toluene-D8(S)	6.74	98	679794	22.399	ppb	0.00
Spiked Amount						
						Recovery = 89.596%
6) 4-Bromofluorobenzene(S)	9.68	95	234960	21.420	ppb	0.00
Spiked Amount						
						Recovery = 85.680%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

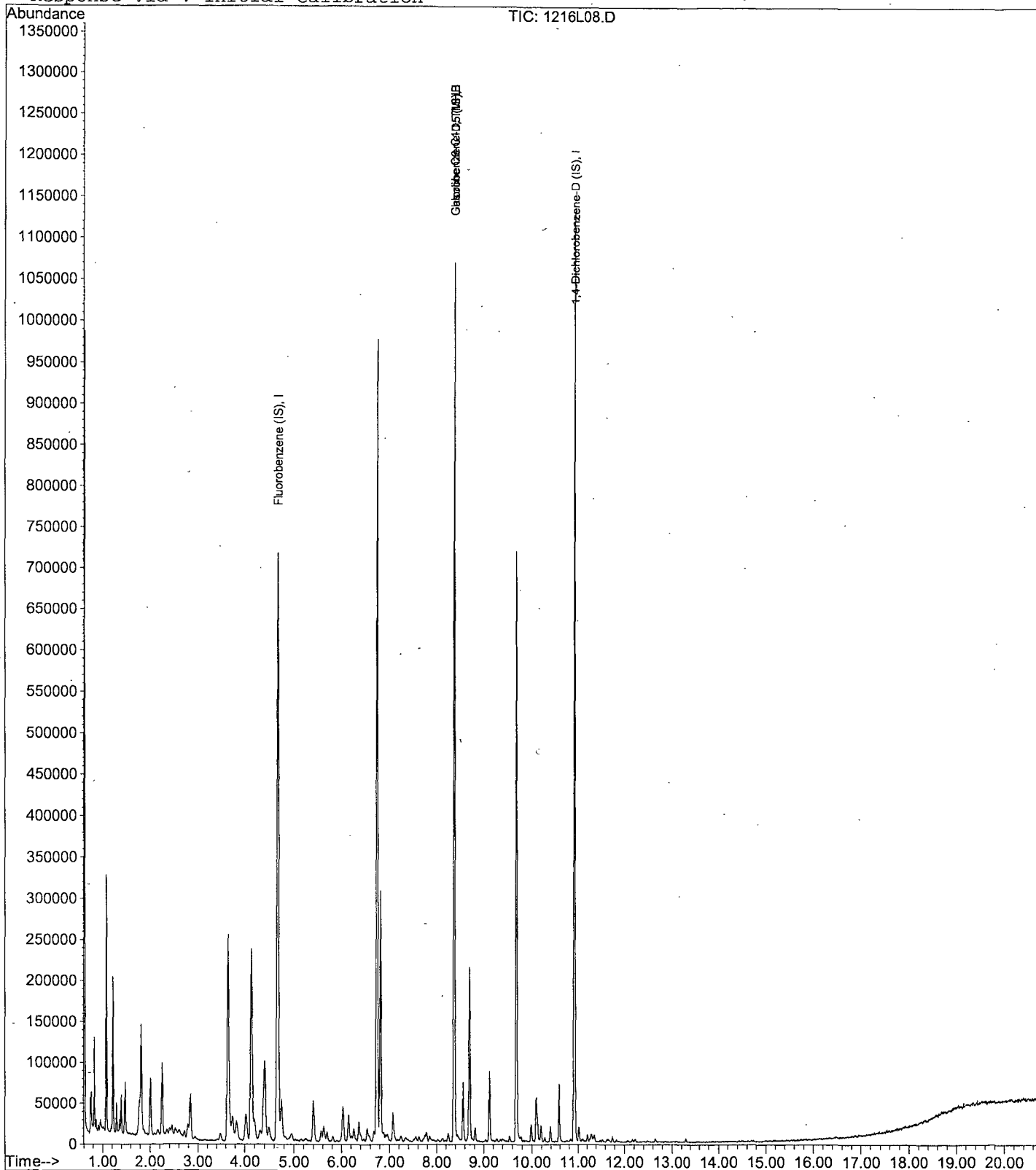
Data File : M:\LOKI\DATA\181213\1216L08.D  
Acq On : 16 Dec 18 12:12  
Sample : 181216A LCSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 11:04 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1217L09.D Vial: 8  
 Acq On : 17 Dec 18 13:23 Operator: PM,DG,SV,CMM,KV  
 Sample : 181217A LCSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 8:26 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	586596	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	879448	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	869390	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11803619m	315.206	ppb	100

Data File : M:\LOKI\DATA\181213\1217L09.D  
 Acq On : 17 Dec 18 13:23  
 Sample : 181217A LCSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 8:35 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	285120	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	309632	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	152192	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	182733	24.985	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.940%	
3) 1,2-DCA-D4(S)	4.14	65	209026	24.955	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.820%	
5) Toluene-D8(S)	6.74	98	604942	24.312	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.248%	
6) 4-Bromofluorobenzene(S)	9.68	95	202426	22.508	ppb	0.00
Spiked Amount	25.000		Recovery	=	90.032%	

Target Compounds

Qvalue



Quantitation Report

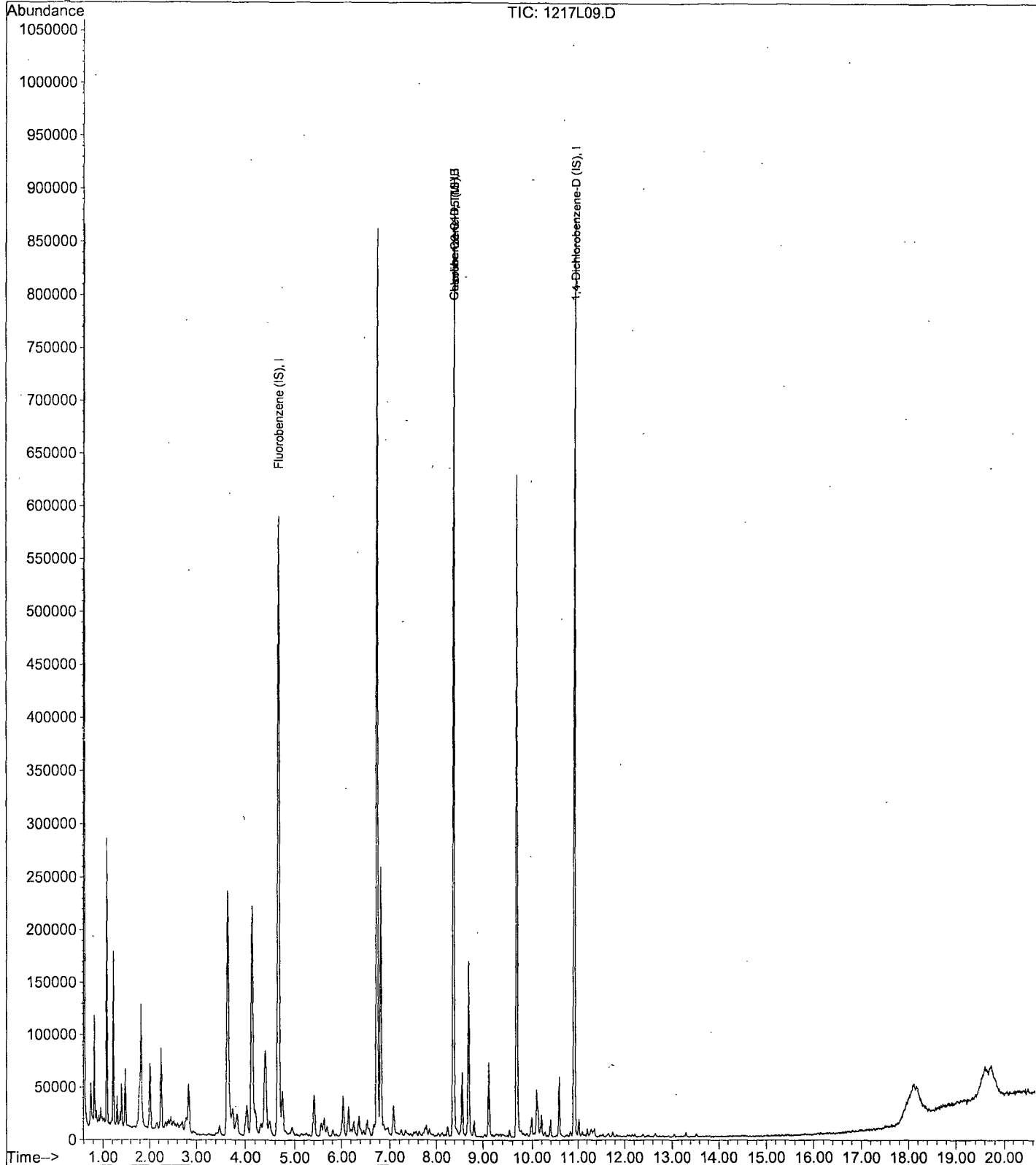
Data File : M:\LOKI\DATA\181213\1217L09.D  
Acq On : 17 Dec 18 13:23  
Sample : 181217A LCSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 18 8:26 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L25.D Vial: 24  
 Acq On : 16 Dec 18 20:19 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84057W05 MS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 9:55 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	TIC	667144	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	971522	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	1009540	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	12740811m	274.421	ppb	100

Data File : M:\LOKI\DATA\181213\1216L25.D Vial: 24  
 Acq On : 16 Dec 18 20:19 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84057W05 MS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 9:20 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	328704	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	346816	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	180544	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	3.64	111	194027	23.012	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	92.048%	
3) 1,2-DCA-D4 (S)	4.14	65	223423	23.137	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	92.548%	
5) Toluene-D8(S)	6.74	98	679701	24.388	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	97.552%	
6) 4-Bromofluorobenzene(S)	9.68	95	233590	23.189	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	92.756%	

Target Compounds Qvalue

Quantitation Report

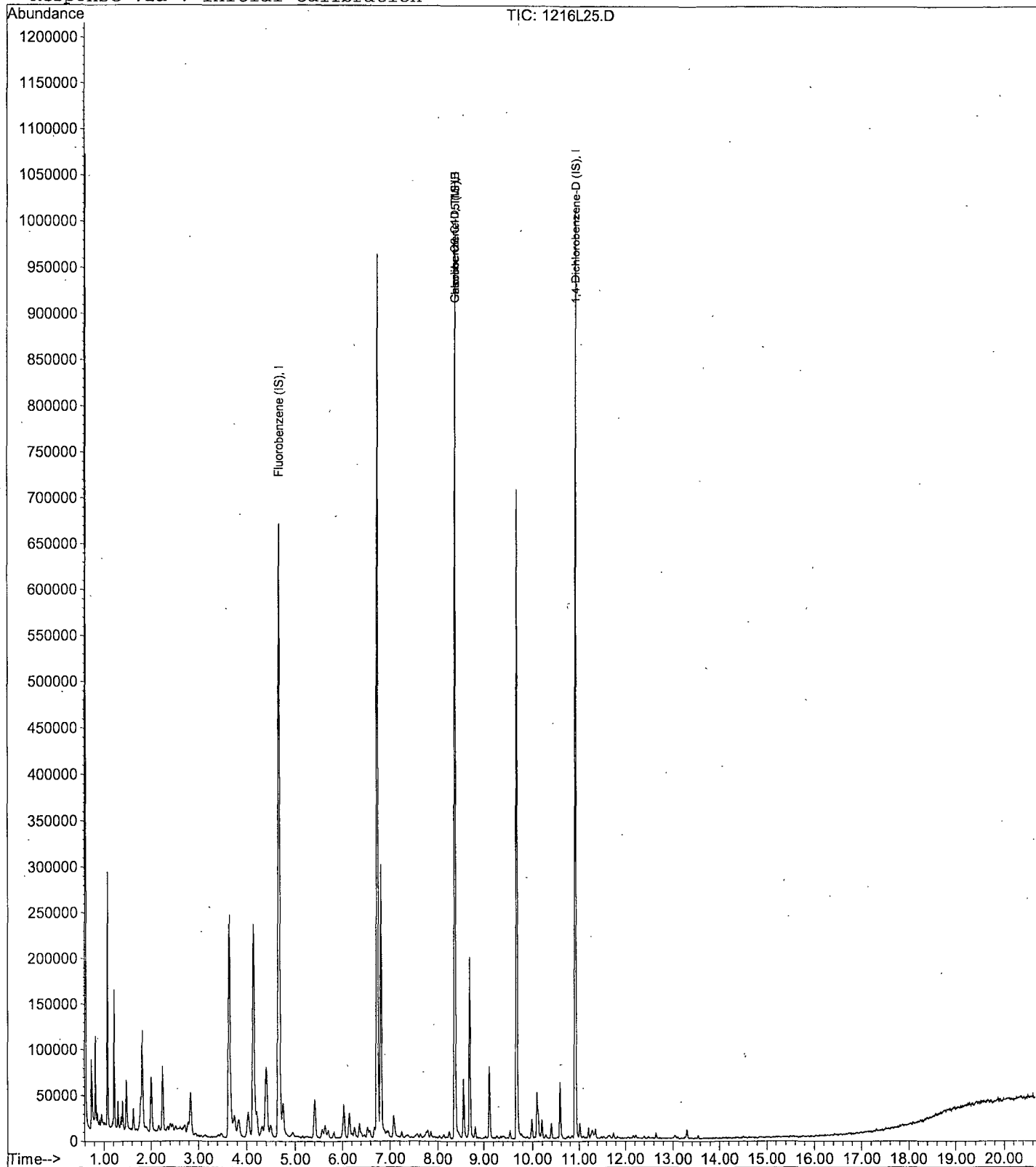
Data File : M:\LOKI\DATA\181213\1216L25.D  
Acq On : 16 Dec 18 20:19  
Sample : AZ84057W05 MS 300ug/L  
Misc : IS&S 11/8/18

Vial: 24  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 9:55 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L26.D Vial: 25  
 Acq On : 16 Dec 18 20:47 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84057W06 MSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 9:56 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	642153	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	954932	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	968685	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.74	TIC	12231930m	272.462	ppb	100

Data File : M:\LOKI\DATA\181213\1216L26.D Vial: 25  
 Acq On : 16 Dec 18 20:47 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ84057W06 MSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 18 9:20 2018 Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	312256	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	337280	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	174336	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	201061	25.102	ppb	0.00
Spiked Amount				25.000		
					Recovery =	100.408%
3) 1,2-DCA-D4(S)	4.14	65	224384	24.461	ppb	0.00
Spiked Amount				25.000		
					Recovery =	97.844%
5) Toluene-D8(S)	6.74	98	680950	25.124	ppb	0.00
Spiked Amount				25.000		
					Recovery =	100.496%
6) 4-Bromofluorobenzene(S)	9.68	95	230338	23.512	ppb	0.00
Spiked Amount				25.000		
					Recovery =	94.048%

Target Compounds Qvalue

Quantitation Report

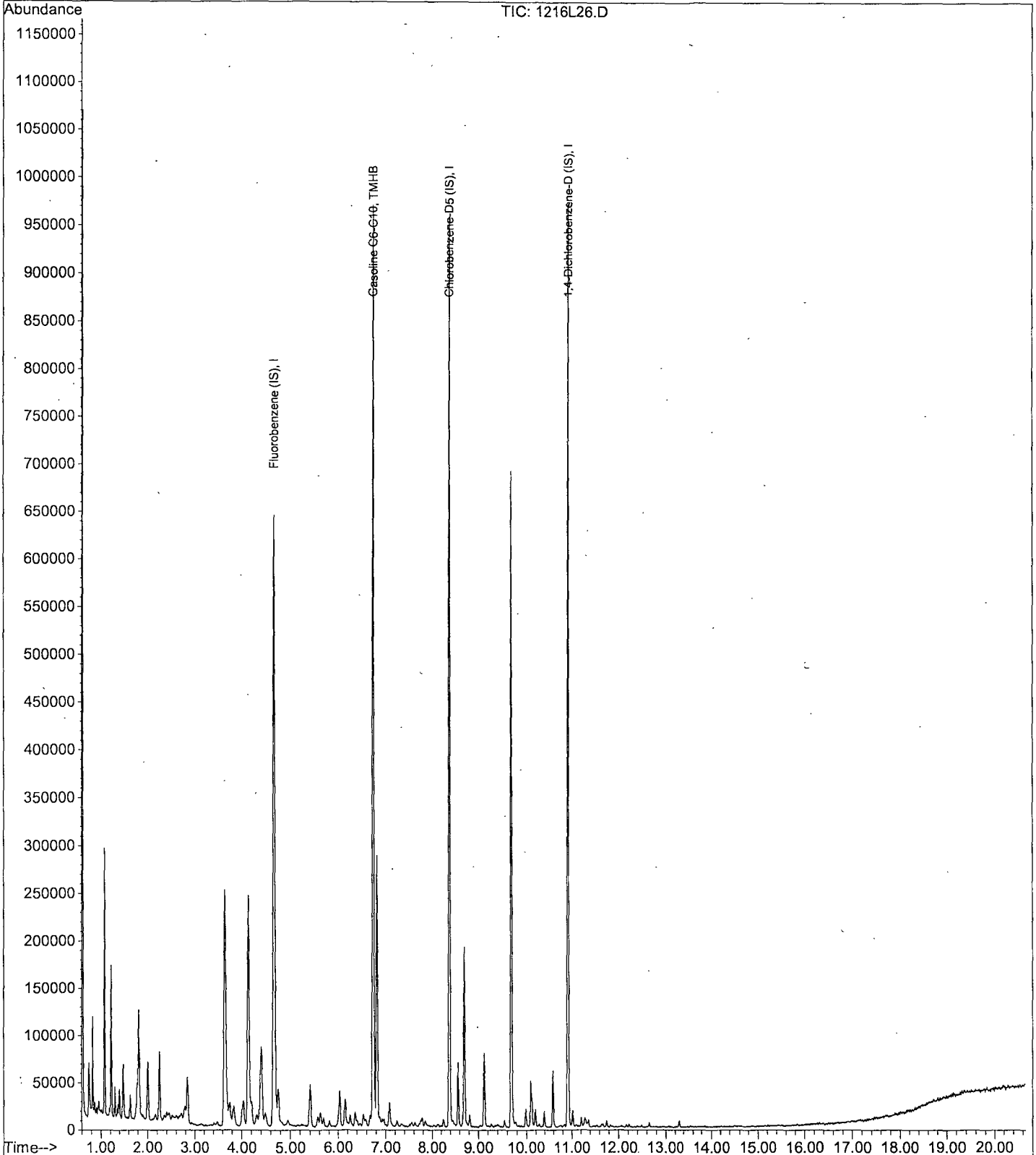
Data File : M:\LOKI\DATA\181213\1216L26.D  
Acq On : 16 Dec 18 20:47  
Sample : AZ84057W06 MSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 25  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 9:56 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L27.D Vial: 26  
 Acq On : 16 Dec 18 21:16 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ84061W06 MS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18\ Multiplr: 1.00

Quant Time: Dec 17 9:57 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	4.67	TIC	624762	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	920407	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	919670	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.74	TIC	12292307m	297.412	ppb	100



Data File : M:\LOKI\DATA\181213\1216L27.D  
 Acq On : 16 Dec 18 21:16  
 Sample : AZ84061W06 MS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 26  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 9:20 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	306176	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	320896	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	164480	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.65	111	196426	25.010	ppb	0.00
Spiked Amount	25.000					
					Recovery =	100.040%
3) 1,2-DCA-D4(S)	4.14	65	220946	24.564	ppb	0.00
Spiked Amount	25.000					
					Recovery =	98.256%
5) Toluene-D8(S)	6.74	98	660215	25.602	ppb	0.00
Spiked Amount	25.000					
					Recovery =	102.408%
6) 4-Bromofluorobenzene(S)	9.68	95	225207	24.162	ppb	0.00
Spiked Amount	25.000					
					Recovery =	96.648%

Target Compounds

Qvalue

Quantitation Report

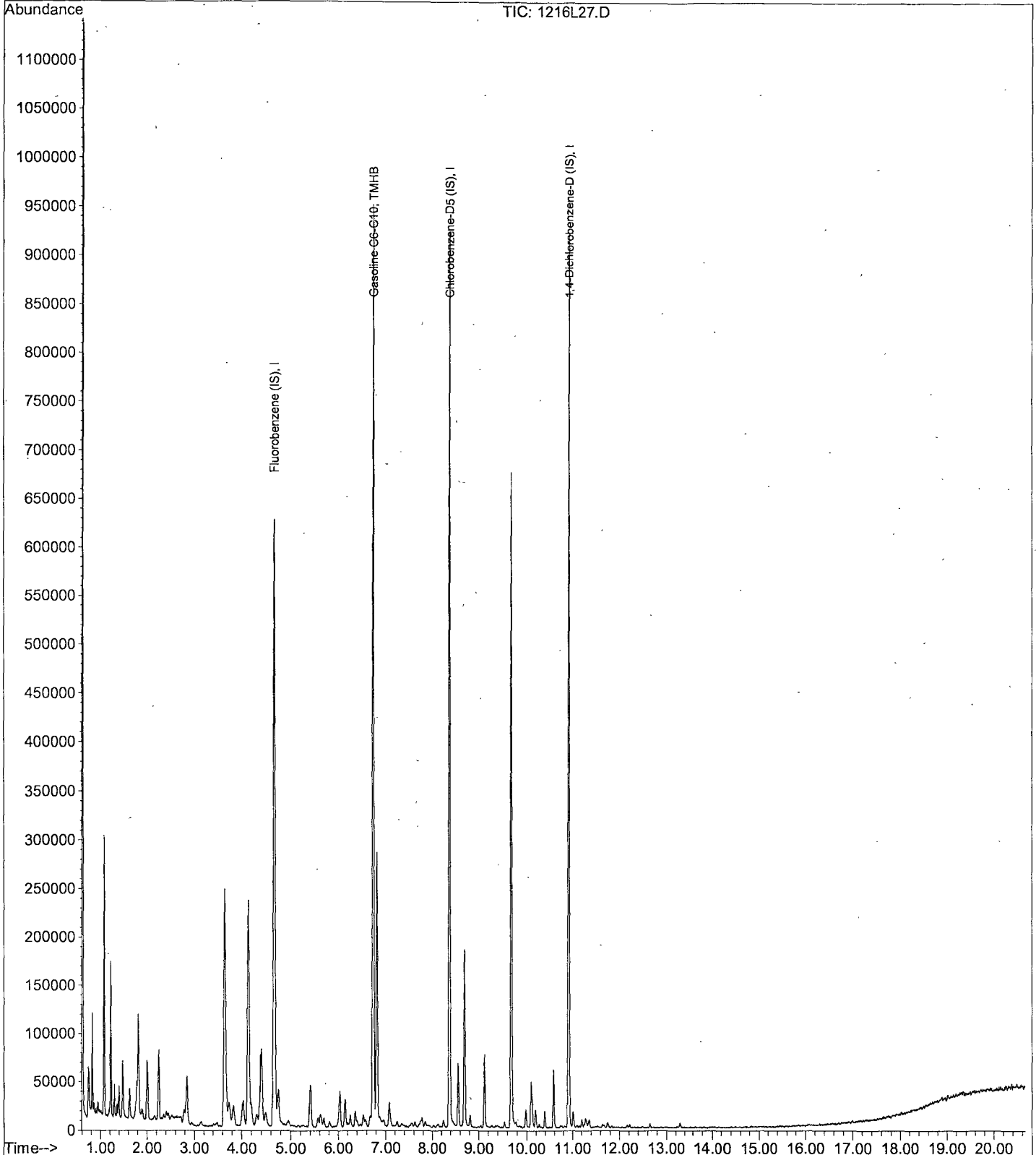
Data File : M:\LOKI\DATA\181213\1216L27.D  
Acq On : 16 Dec 18 21:16  
Sample : AZ84061W06 MS 300ug/L  
Misc : IS&S 11/8/18

Vial: 26  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 9:57 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\181213\1216L28.D Vial: 27  
 Acq On : 16 Dec 18 21:45 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ84061W02 MSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Dec 17 9:58 2018 Quant Results File: LGAS1213.RES

Quant Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 10:37:19 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	TIC	607824	25.000 ppb	0.00
3) Chlorobenzene-D5 (IS)	8.37	TIC	889358	25.000 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	10.91	TIC	920988	25.000 ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11306022m	254.651 ppb	100

Data File : M:\LOKI\DATA\181213\1216L28.D  
 Acq On : 16 Dec 18 21:45  
 Sample : AZ84061W02 MSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 27  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Dec 18 9:20 2018

Quant Results File: LSUR1213.RES

Quant Method : M:\LOKI\DATA\181213\LSUR1213.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Fri Dec 14 09:12:25 2018  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	4.67	96	296000	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	8.37	117	315008	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	10.91	152	163648	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	3.64	111	188194	24.786	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.144%	
3) 1,2-DCA-D4(S)	4.14	65	209623	24.106	ppb	0.00
Spiked Amount	25.000		Recovery	=	96.424%	
5) Toluene-D8(S)	6.74	98	615870	24.329	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.316%	
6) 4-Bromofluorobenzene(S)	9.68	95	210656	23.024	ppb	0.00
Spiked Amount	25.000		Recovery	=	92.096%	

Target Compounds

Qvalue

Quantitation Report

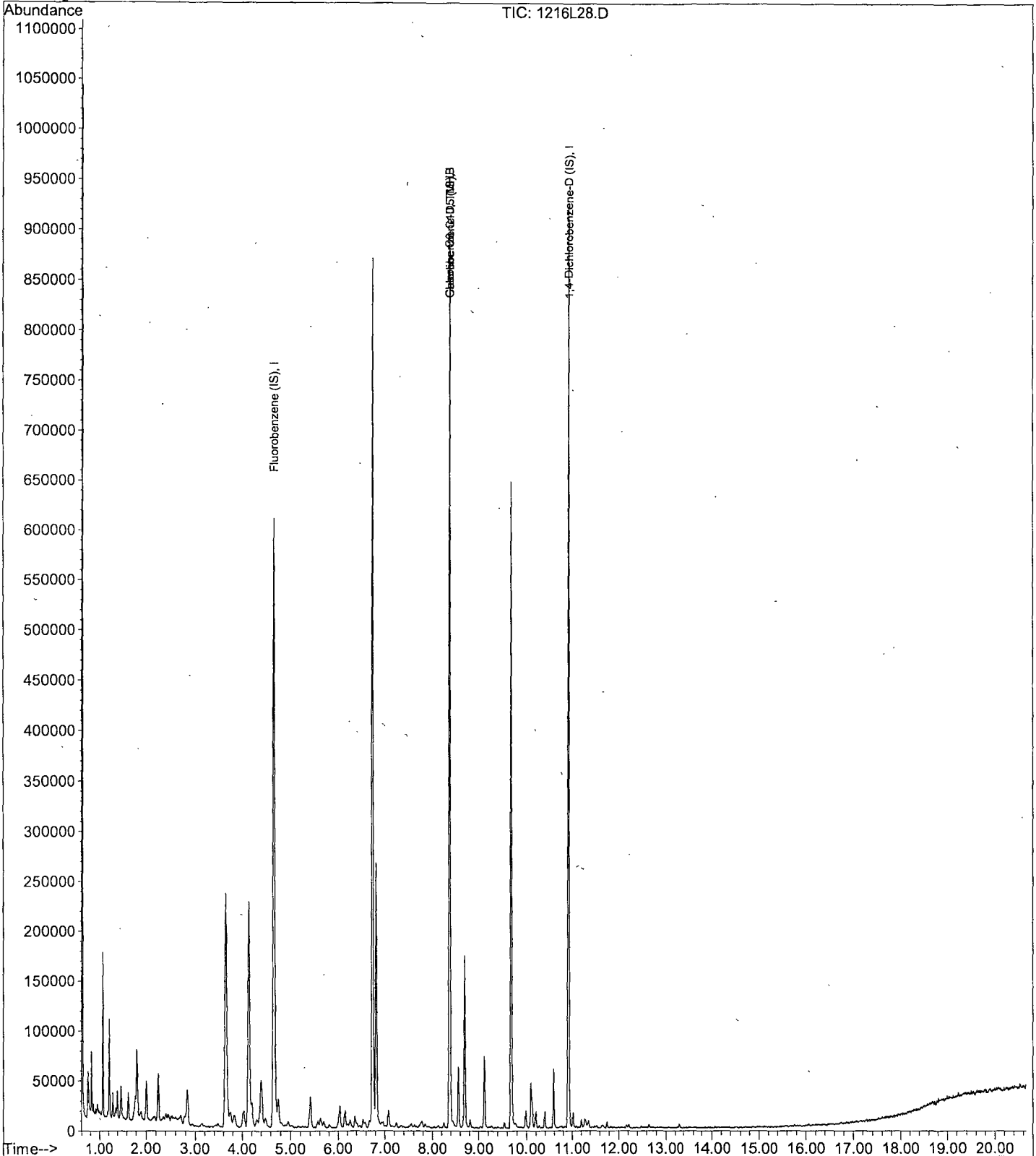
Data File : M:\LOKI\DATA\181213\1216L28.D  
Acq On : 16 Dec 18 21:45  
Sample : AZ84061W02 MSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 27  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Dec 17 9:58 2018

Quant Results File: LGAS1213.RES

Method : M:\LOKI\DATA\181213\LGAS1213.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Fri Dec 14 10:37:19 2018  
Response via : Initial Calibration



<b>Gas Primary Working Standard</b>										
Prepared: 11/01/18						Prepared By (Initials): KV				
Expires: 12/31/24										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39861	11/01/19	12/31/24	80uL	2mL	Methanol	2,000
<b>Gas Second Source (SS) Working Standard</b>										
Prepared: 11/01/18						Prepared By (Initials): KV				
Expires: 10/31/20										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (5,000ppm)	O2SI	020246-06	5,000	G34-326538-39192	11/01/19	10/31/20	800uL	2mL	Methanol	2,000

### Loki Gas Standard Prep

Gas Primary Working Standard										
Prepared: 11/01/18						Prepared By (Initials): KV				
Expires: 11/01/19										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39861	11/01/19	12/31/24	80uL	2mL	Methanol	2,000
Gas Second Source (SS) Working Standard										
Prepared: 11/01/18						Prepared By (Initials): KV				
Expires: 11/01/19										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (5,000ppm)	O2SI	020246-06	5,000	G34-326538-39192	11/01/19	10/31/20	800uL	2mL	Methanol	2,000
Loki Gas Calibration Curve										
Prepared: 12/13/18						Prepared By (Initials): DG				
Expires: 02/11/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA Gasses Standards	Phenova	20ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	1uL	100mL	P&T Water	20
VOA Gasses Standards	Phenova	50ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	2.5uL	100mL	P&T Water	50
VOA Gasses Standards	Phenova	100ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	5uL	100mL	P&T Water	100
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	15uL	100mL	P&T Water	300
VOA Gasses Standards	Phenova	600ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	30uL	100mL	P&T Water	600
VOA Gasses Standards	Phenova	800ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	40uL	100mL	P&T Water	800
VOA Gasses Standards	Phenova	1,000ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	50uL	100mL	P&T Water	1,000
Loki Gas Second Source										
Prepared: 12/13/18						Prepared By (Initials): DG				
Expires: 02/11/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
50,000ug/mL Gas STD	Phenova	SS 300ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	15uL	100mL	P&T Water	300
Loki Gas Continuing Calibrations/Lab Control Spikes										
Prepared: 12/13/18						Prepared By (Initials): DG				
Expires: 12/14/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 11/01/18	11/01/19	N/A	15uL	100mL	P&T Water	300

Primary Standards										
VOA STD 7										
Prepared: 12/12/18 Q										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL12966	11/08/19	10/01/23	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	071317-39703	10/30/19	07/13/22	200uL			50
Benzyl Chloride	O2SI	020228-02	1,000	041918-39815	09/04/19	08/22/19	200uL			50
VOA STD 8										
Prepared: 12/12/18 R										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-101206	2,000	CL12622-39481	10/30/19	06/30/20	100uL	4mL	Methanol	50
VOC's-54 COMP	Phenova	ALO-101200	2,000	CL12490-39299	10/30/19	05/31/23	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13034-39917	12/19/18	12/19/18	100uL			50
VOA STD TBA										
Prepared: 12/12/18 S										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL12542-39868	10/30/19	05/01/20	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL13038-39918	12/03/19	12/19/18	100uL			250
VOA STD 1										
Prepared: 12/12/18 T										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	O2SI	020145-02	2,000	292247-38477	10/30/19	11/12/19	50	2mL	Methanol	50
VOA STD 2										
Prepared: 12/12/18 U										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
HSL's Ketone Solution	O2SI	121020-05	2,000	CL10956-39504	10/30/19	08/01/23	100	4mL	Methanol	50
VOA STD 9										
Prepared: 12/12/18 V										
Expires: 12/19/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7	O2SI	VOA STD. 9	50	Prepared 12/12/18	02/10/19	N/A	200uL	2mL	Methanol	5
VOA STD. 8	O2SI		50	Prepared 12/12/18	12/19/18	N/A	200uL			5
VOA STD. 10										
Prepared: 12/12/18 W										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1	O2SI	VOA STD. 10	50	Prepared 12/12/18	02/10/19	N/A	200uL	2mL	Methanol	5
VOA STD. 12										
Prepared: 12/12/18 X										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2	O2SI	VOA STD. 12	50	Prepared 12/12/18	02/10/19	N/A	200uL	2mL	Methanol	5



Second Source (SS) Standards										
VOA STD. 3										
Prepared: 12/12/18 Y										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL12730	10/30/19	08/01/28	50uL	2mL	Methanol	50
VOA STD. 5										
Prepared: 12/12/18 Z										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL12965-39981	11/08/19	10/01/23	50uL	2mL	Methanol	50
2-CEVE (SS)	O2SI	020145-02-02-SS	2,000	071018-39810	10/30/19	07/10/21	50uL			50
VOA STD. 6										
Prepared: 12/12/18 AA										
Expires: 10/31/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL12489-39486	10/30/19	05/01/23	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	1,000	CL12869-39767	09/06/19	10/31/18	50uL			50
Hexachloroethane	O2SI	020049-02	1,000	218051281-39856	10/30/19	05/14/28	50uL			50
Benzyl Chloride	Accustan	M-8010-01	200	214101335-04	12/03/19	10/18/20	500uL			50
VOA STD. TBA										
Prepared: 12/12/18 AB										
Expires: 10/31/18										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12542-39672	10/30/19	05/01/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	5,000	CL12868-39769	09/06/19	10/31/18	100uL			250
VOA STD. 0										
Prepared: 12/12/18 AC										
Expires: 02/10/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): PC										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL12230-39139	10/30/19	01/31/20	50uL	2mL	Methanol	50
BFB Tune										
Prepared: 12/12/18										
Expires: 12/12/19										
Methanol Lot No. 202404-00943										
Prepared By (Initials): DG										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
4-Bromofluorobenzene	O2SI	020135-03	2,500	342387-39075	12/12/19	01/19/21	20uL	2mL	Methanol	25

## Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
0.3ug/L										
Prepared By (Initials): <u>DG</u>										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 12/12/18	12/19/18	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	2uL			10
0.5ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 12/12/18	12/19/18	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	5uL			25
1.0ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 12/12/18	12/19/18	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	10uL			50
2.0ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 12/12/18	12/19/18	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 12/12/18	02/10/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 12/12/18	02/10/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	15uL			75
5ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 12/12/18	02/10/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	20uL			100
10ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	25uL			125

20ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 12/12/18	02/10/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	30uL			150
40ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 12/12/18	02/10/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	35uL			175
100ug/L										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 12/12/18	02/10/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 12/13/18										
Expires: 01/12/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 6	Various		50	Prepared 12/12/18	10/31/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/12/18	10/31/18	N/A	25uL			250
8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)										
Prepared: 12/13/18										
Expires: 12/14/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 12/13/18										
Expires: 12/14/18										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 12/12/18	02/10/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 12/12/18	12/19/18	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 12/12/18	02/10/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 12/12/18	02/10/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 12/12/18	12/19/18	N/A	25uL			125

<b>Loki 8260 Water Surrogate</b>										
Prepared: 11/20/18						Prepared By (Initials): <u>DG</u>				
Expires: 04/02/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36336	07/28/19	04/02/19	375uL	15mL	Methanol	50
<b>Loki 8260 Water Internal Standard</b>										
Prepared: 11/08/18						Prepared By (Initials): <u>DG</u>				
Expires: 10/05/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Internal Standard Solution	O2SI	120004-02	2,000	326533-38441	10/05/19	04/27/21	375uL	15mL	Methanol	50

## Injection Log

Directory: M:\LOKI\DATA\181213\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1213L03.D	1	0.3ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 14:34
2	3	1213L04.D	1	0.5ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 15:03
3	4	1213L05.D	1	1.0ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 15:31
4	5	1213L06.D	1	2.0ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 16:00
5	6	1213L07.D	1	5.0ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 16:29
6	7	1213L08.D	1	10ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 16:57
7	8	1213L09.D	1	20ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 17:26
8	9	1213L10.D	1	40ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 17:54
9	10	1213L11.D	1	100ug/L VOC STD 12/13/18	IS&S 11/8/18	13 Dec 18 18:23
10	13	1213L14.D	1	20ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 19:48
11	14	1213L15.D	1	50ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 20:17
12	15	1213L16.D	1	100ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 20:46
13	16	1213L17.D	1	300ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 21:14
14	17	1213L18.D	1	600ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 21:43
15	18	1213L19.D	1	800ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 22:11
16	19	1213L20.D	1	1000ug/L GAS Std 12/13/18	IS&S 11/8/18	13 Dec 18 22:39
17	24	1213L25.D	1	(SS)300ug/L GAS Std 12/13/18	IS&S 11/8/18	14 Dec 18 1:02
18	5	1216L06.D	1	181216A CCV 300ug/L	IS&S 11/8/18	16 Dec 18 11:15
19	6	1216L07.D	1	181216A LCS 300ug/L	IS&S 11/8/18	16 Dec 18 11:44
20	7	1216L08.D	1	181216A LCSD 300ug/L	IS&S 11/8/18	16 Dec 18 12:12
21	9	1216L10.D	1	181216A blk	IS&S 11/8/18	16 Dec 18 13:09
22	12	1216L13.D	1	AZ84057W01	IS&S 11/8/18	16 Dec 18 14:35
23	13	1216L14.D	1	AZ84058W01	IS&S 11/8/18	16 Dec 18 15:04
24	17	1216L18.D	1	AZ84062W02	IS&S 11/8/18	16 Dec 18 16:59
25	24	1216L25.D	1	AZ84057W05 MS 300ug/L	IS&S 11/8/18	16 Dec 18 20:19
26	25	1216L26.D	1	AZ84057W06 MSD 300ug/L	IS&S 11/8/18	16 Dec 18 20:47
27	26	1216L27.D	1	AZ84061W06 MS 300ug/L	IS&S 11/8/18	16 Dec 18 21:16
28	27	1216L28.D	1	AZ84061W02 MSD 300ug/L	IS&S 11/8/18	16 Dec 18 21:45
29	29	1216L30.D	1	Ending CCV 300ug/L 12/16/18	IS&S 11/8/18	16 Dec 18 22:42
30	6	1217L07.D	1	181217A CCV 300ug/L	IS&S 11/8/18	17 Dec 18 12:26
31	7	1217L08.D	1	181217A LCS 300ug/L	IS&S 11/8/18	17 Dec 18 12:54
32	8	1217L09.D	1	181217A LCSD 300ug/L	IS&S 11/8/18	17 Dec 18 13:23
33	10	1217L11.D	1	181217A blk	IS&S 11/8/18	17 Dec 18 14:20
34	15	1217L16.D	1	AZ84059W02	IS&S 11/8/18	17 Dec 18 16:43
35	16	1217L17.D	1	AZ84060W02	IS&S 11/8/18	17 Dec 18 17:12
36	17	1217L18.D	1	AZ84061W07	IS&S 11/8/18	17 Dec 18 17:40
37	28	1217L29.D	1	Ending CCV 300ug/L 12/17/18	IS&S 11/8/18	17 Dec 18 22:54

**ORGANICS  
Calibration Data**

**APPL, INC.**

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 11/18/18  
Instrument: 7890

Initials: \_\_\_\_\_

18111800.D    18111801.D    18111802.D    18111803.D    18111804.D    18111805.D    18111806.D

		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q
1	ATM	Methane	18570	11062	10735	14054	14422	14662	11005				13501	21	ATM		*
2	ATM	Ethane	13565	8854	8365	10923	11006	11301	8400				10345	19	ATM		*
3	ATM	Ethene	10753	7095	6644	8697	8953	9178	6866				8312	18	ATM		*
4																	
5																	
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35																	

1.645255

Data File : G:\ROCKY\DATA\181118RS\18111800.D Vial: 1  
 Acq On : 18 Nov 18 16:24 Operator: cmm  
 Sample : RSK Std 1 11/18/18 Inst : 7890  
 Misc : 125 uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Nov 18 16:51:34 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	19313	2.861 ppb
2) ATM Ethane	1.11	26520	5.127 ppb
3) ATM Ethene	1.20	19625	4.722 ppb

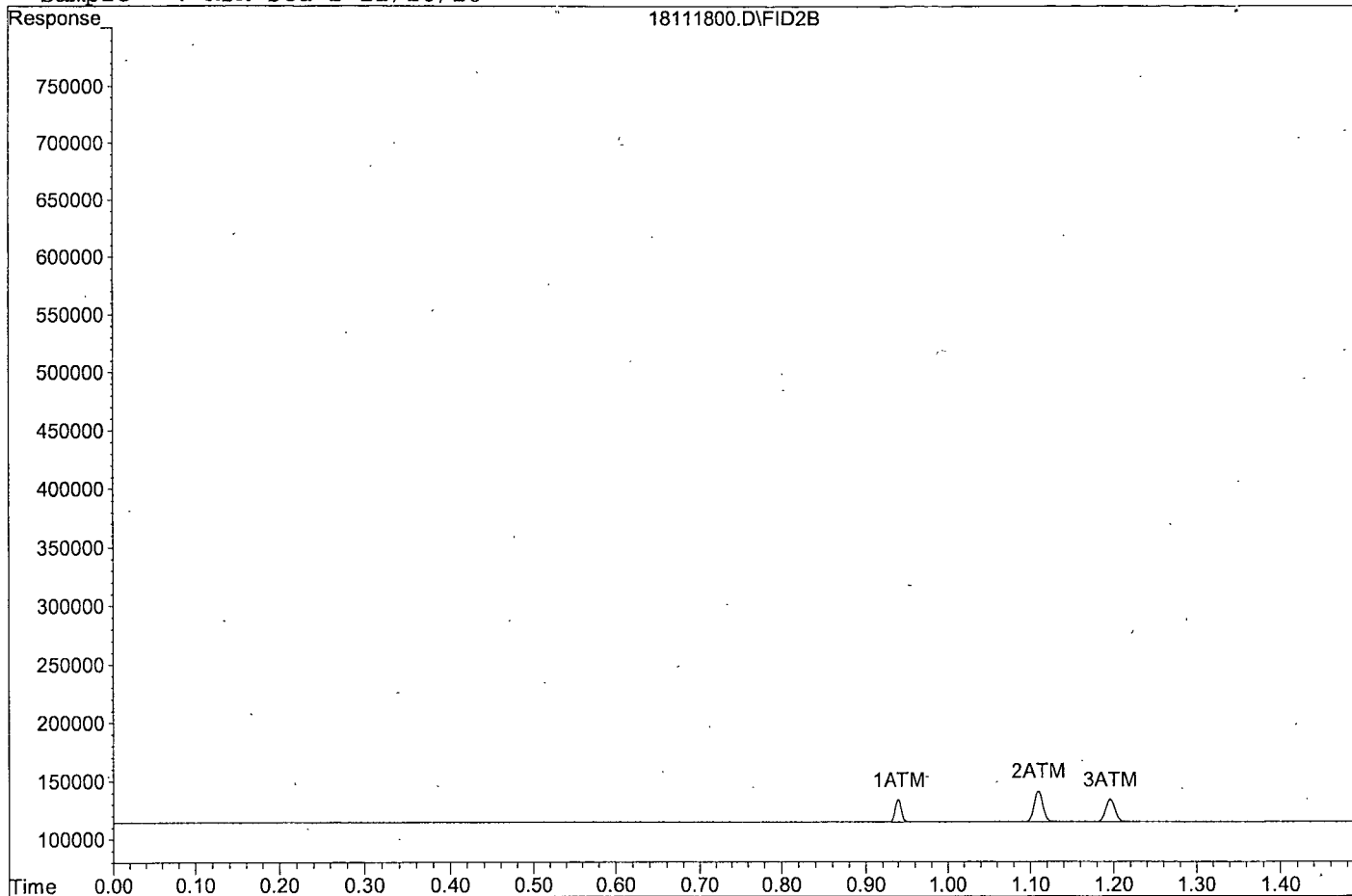
Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111800.D

Sample : RSK Std 1 11/18/18



Data File : G:\ROCKY\DATA\181118RS\18111801.D Vial: 2  
 Acq On : 18 Nov 18 16:27 Operator: cmm  
 Sample : RSK Std 2 11/18/18 Inst : 7890  
 Misc : 250 uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Nov 18 16:51:34 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

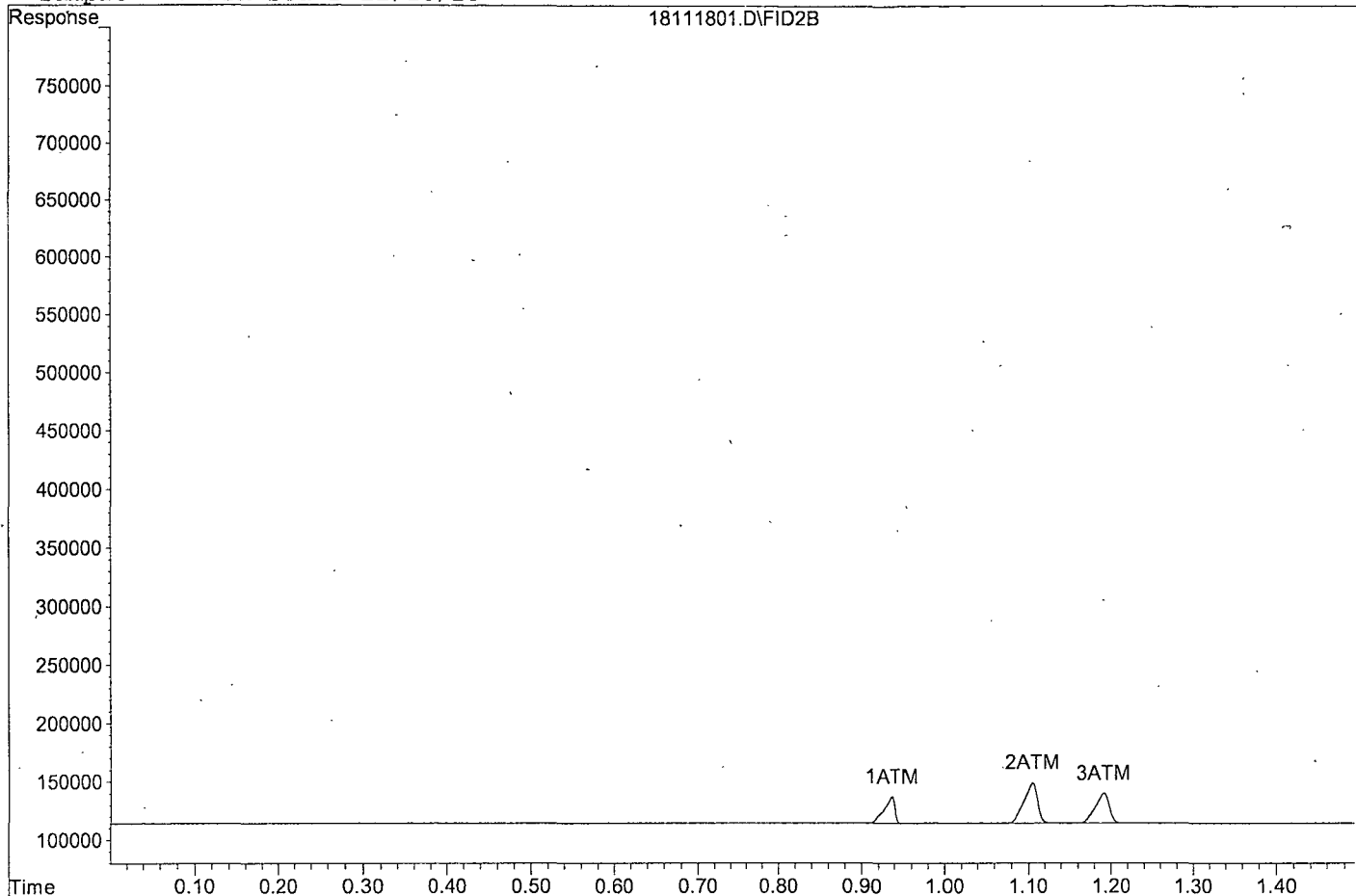
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	23009	3.408 ppb
2) ATM Ethane	1.11	34575	6.684 ppb
3) ATM Ethene	1.19	25897	6.231 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111801.D

Sample : RSK Std 2 11/18/18



Data File : G:\ROCKY\DATA\181118RS\18111802.D Vial: 3  
 Acq On : 18 Nov 18 16:29 Operator: cmm  
 Sample : RSK Std 3 11/18/18 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Nov 18 16:51:34 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

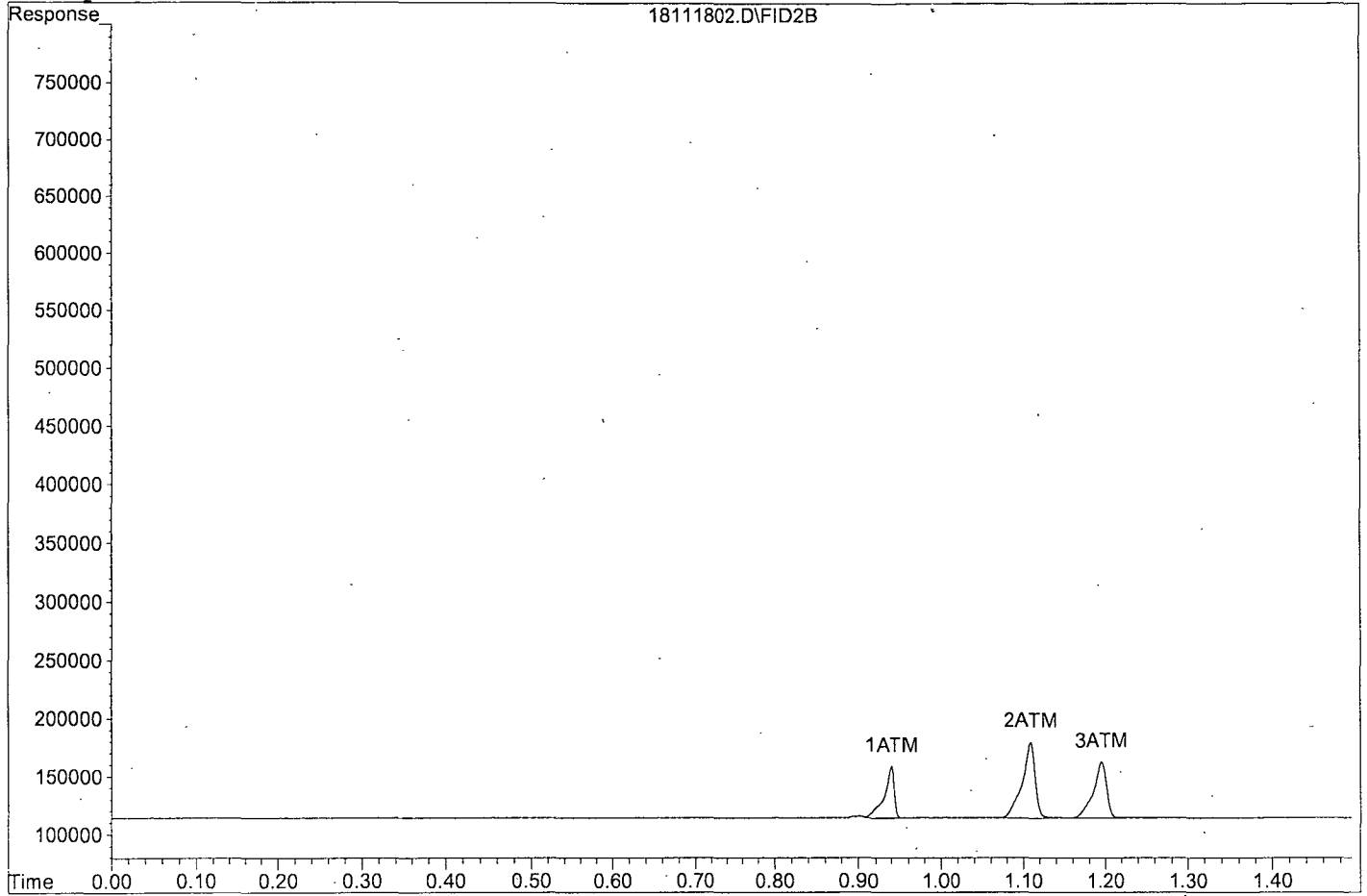
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	44765	6.631 ppb
2) ATM Ethane	1.11	65250	12.615 ppb
3) ATM Ethene	1.20	48499	11.669 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111802.D

Sample : RSK Std 3 11/18/18



Data File : G:\ROCKY\DATA\181118RS\18111803.D Vial: 4  
Acq On : 18 Nov 18 16:31 Operator: cmm  
Sample : RSK Std 4 11/18/18 Inst : 7890  
Misc : Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
Title : RSK 175  
Last Update : Sun Nov 18 16:51:34 2018  
Response via : Multiple Level Calibration

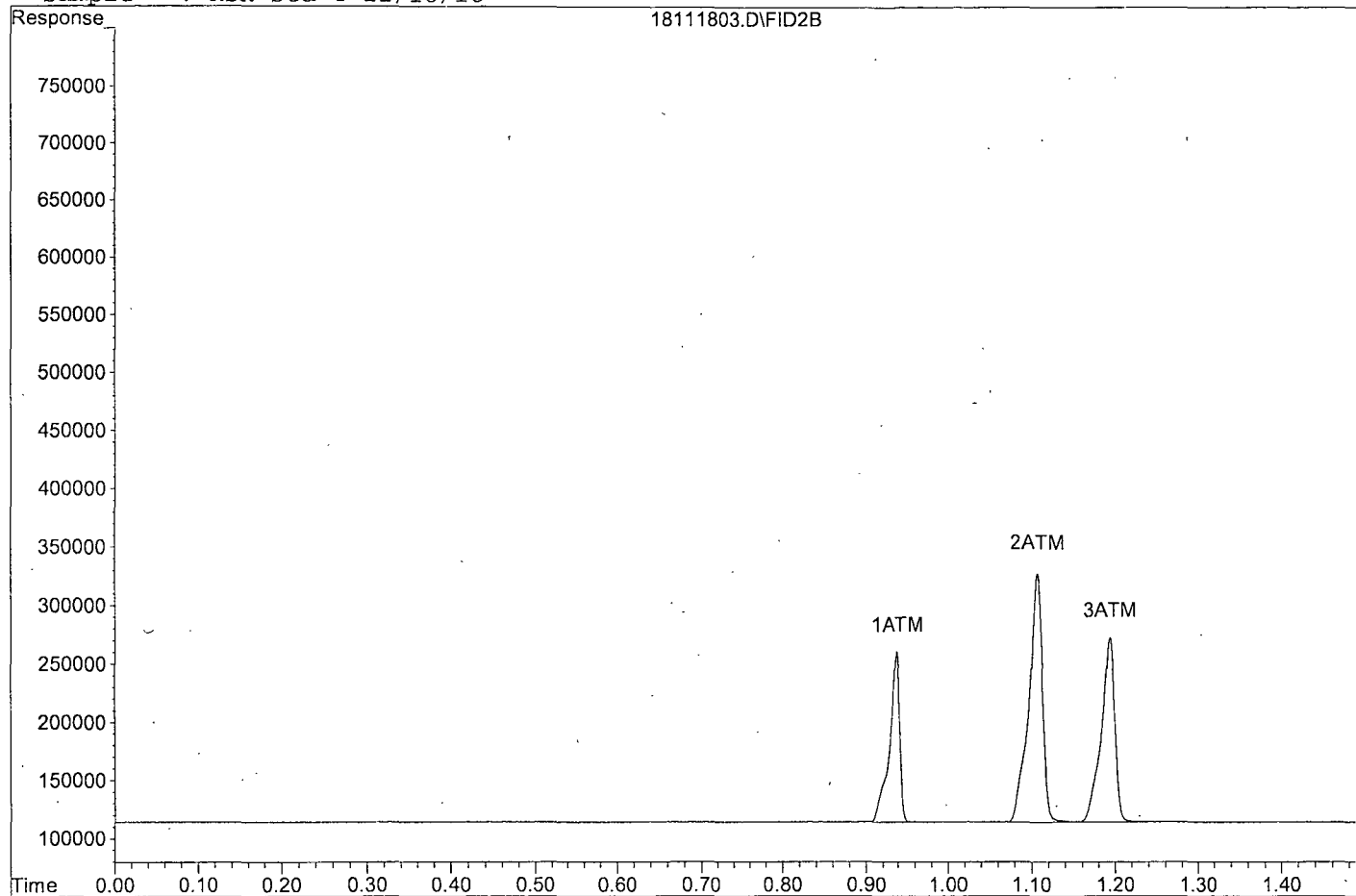
Volume Inj. : 0.500 mL  
Signal Phase : CARBOPACK  
Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	146514	21.703 ppb
2) ATM Ethane	1.11	213481	41.273 ppb
3) ATM Ethene	1.19	158547	38.148 ppb

Target Compounds

Data File: G:\ROCKY\DATA\181118RS\18111803.D

Sample : RSK Std 4 11/18/18



Data File : G:\ROCKY\DATA\181118RS\18111804.D Vial: 5  
 Acq On : 18 Nov 18 16:34 Operator: cmm  
 Sample : RSK Std 5 11/18/18 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Nov 18 16:51:34 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	601400	89.087 ppb
2) ATM Ethane	1.11	860379	166.340 ppb
3) ATM Ethene	1.19	652829	157.076 ppb

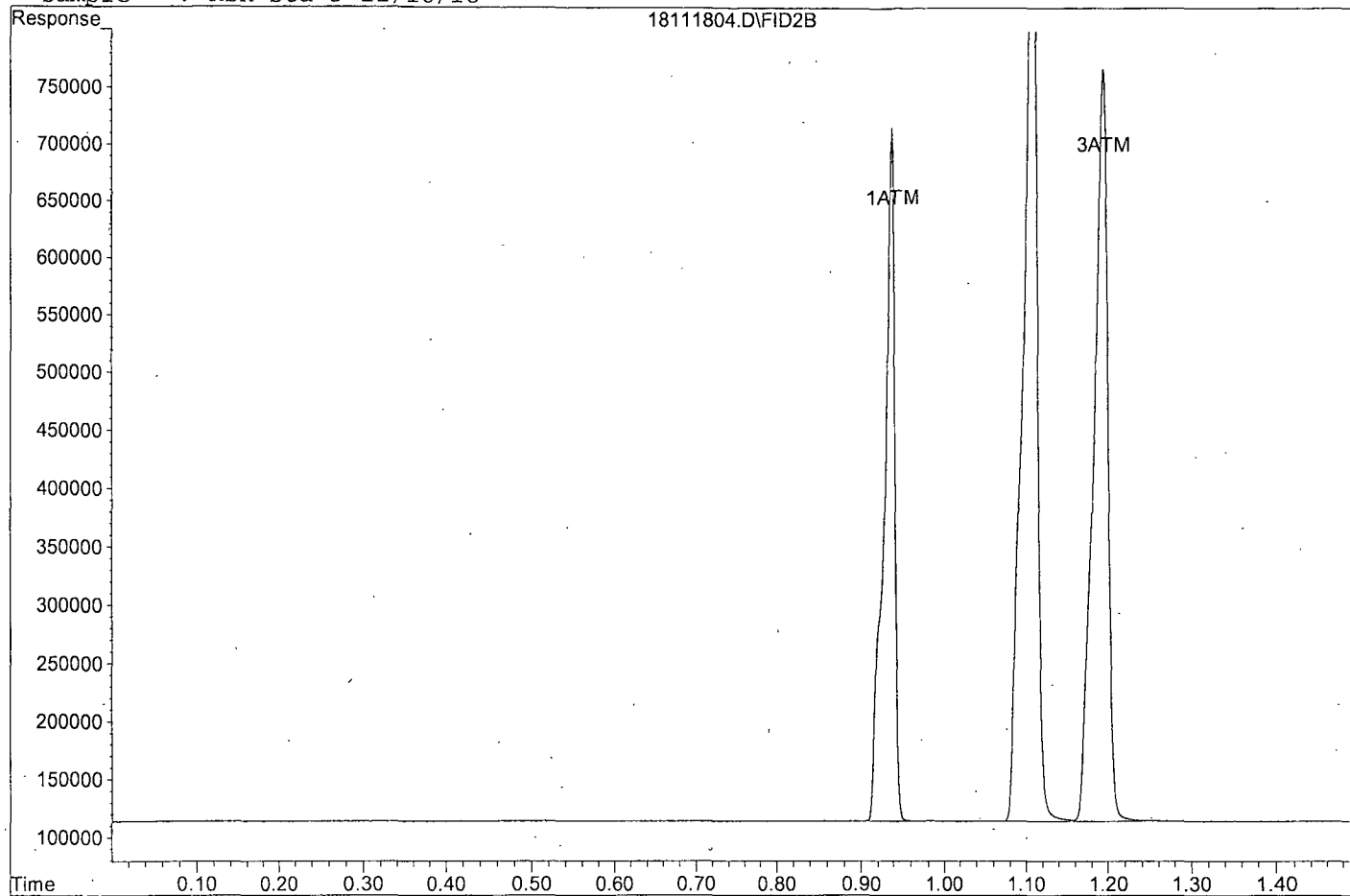
Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111804.D

Sample : RSK Std 5 11/18/18



Data File : G:\ROCKY\DATA\181118RS\18111805.D Vial: 6  
 Acq On : 18 Nov 18 16:36 Operator: cmm  
 Sample : RSK Std 6 11/18/18 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Nov 18 16:51:34 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

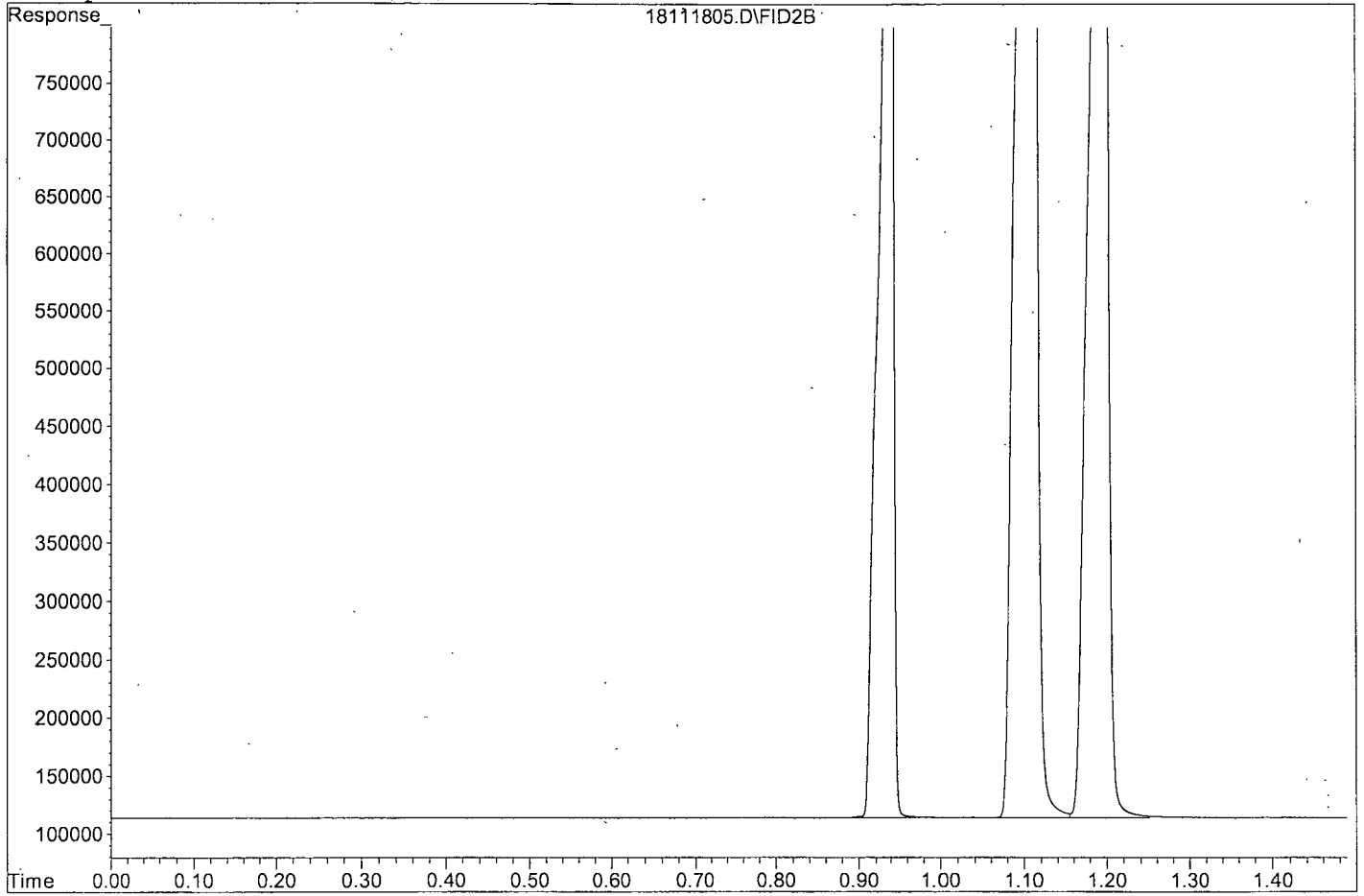
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	1528533	226.425 ppb
2) ATM Ethane	1.11	2208777	427.030 ppb
3) ATM Ethene	1.19	1673096	402.561 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111805.D

Sample : RSK Std 6 11/18/18



Data File : G:\ROCKY\DATA\181118RS\18111806.D Vial: 7
Acq On : 18 Nov 18 16:38 Operator: cmm
Sample : RSK Std 7 11/18/18 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 18 16:49 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Nov 18 16:51:34 2018
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

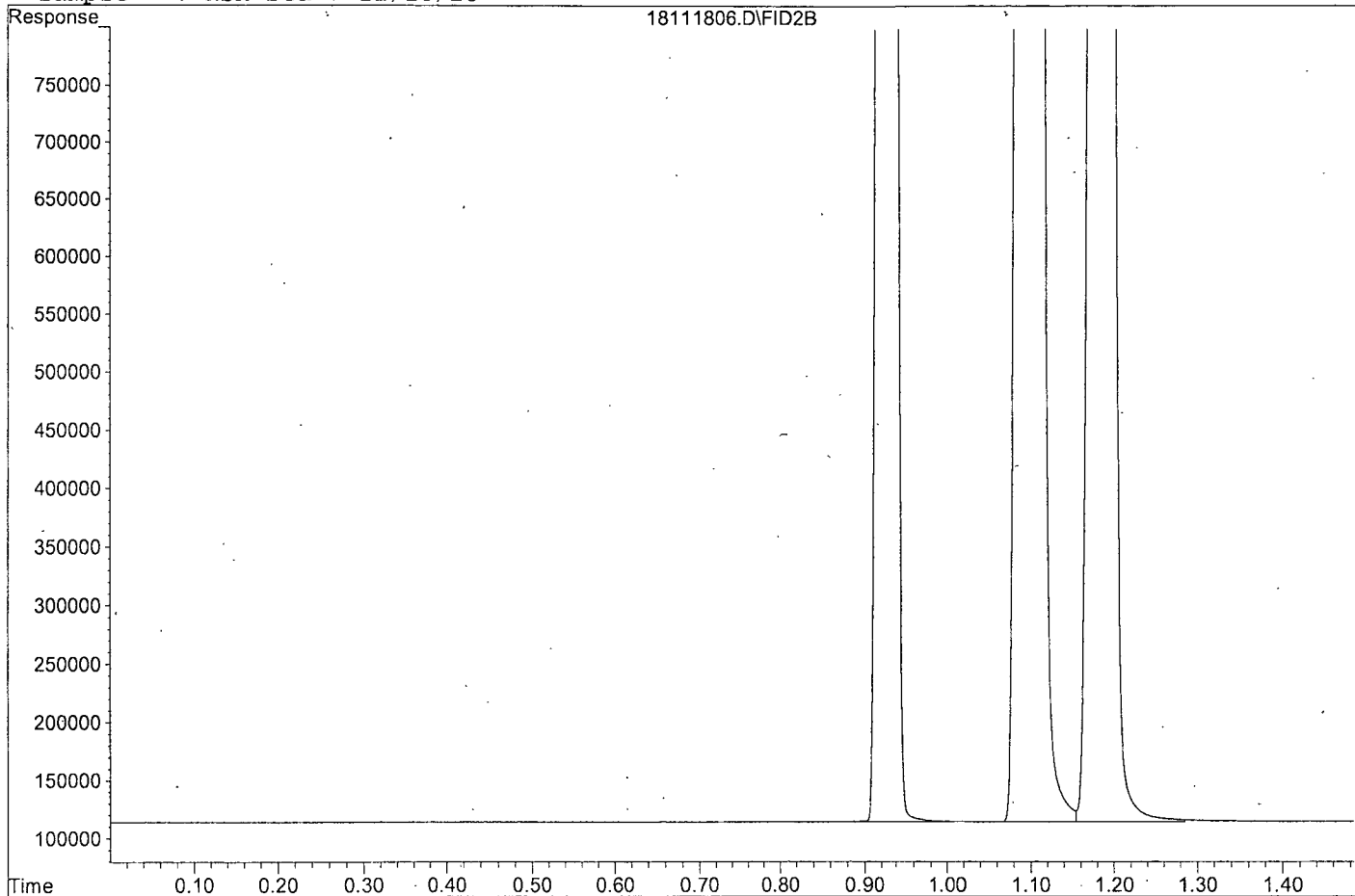
Table with 4 columns: Compound, R.T., Response, Conc Units. Contains 3 rows of target compounds: ATM Methane, ATM Ethane, ATM Ethene.

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111806.D

Sample : RSK Std 7 11/18/18



RSK 175  
RSK 175

Form 7

### Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 11/18/18  
Instrument: 7890  
Initial Cal. Date: 11/18/18  
Data File: 18111807.D

		Compound	MEAN	CCRF	%D	%Drift
1	ATM	Methane	13501	12750	5.6	ATM
2	ATM	Ethane	10345	10099	2.4	ATM
3	ATM	Ethene	8312	8251	0.74	ATM
4						
5						
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Average

2.9

Data File : G:\ROCKY\DATA\181118RS\18111807.D Vial: 8  
 Acq On : 18 Nov 18 16:48 Operator: cmm  
 Sample : SS RSK Std 5 11/18/18 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Nov 18 16:51 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Nov 18 16:51:34 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

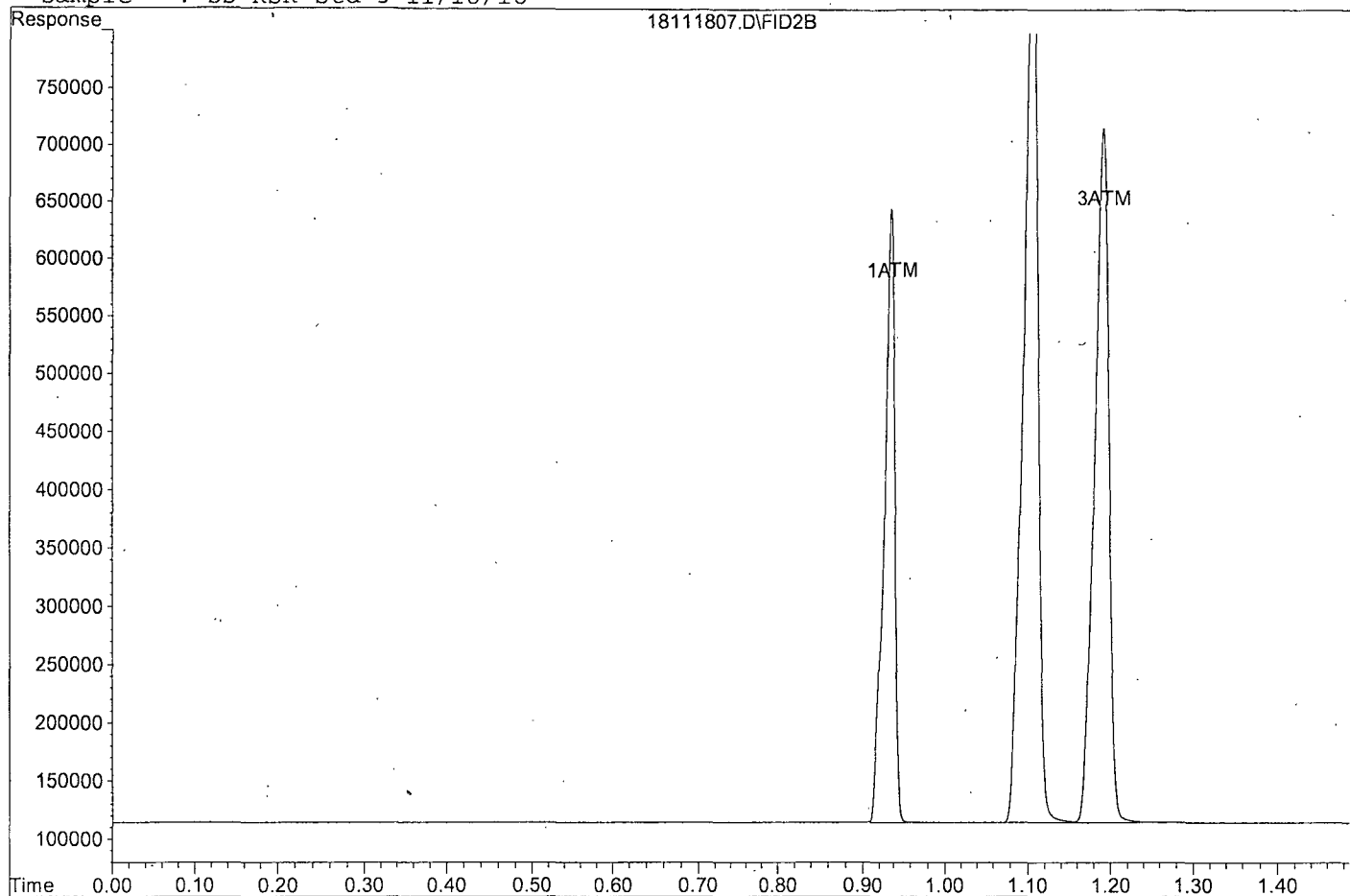
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.94	531688	78.760 ppb
2) ATM Ethane	1.11	789467	152.630 ppb
3) ATM Ethene	1.19	601656	144.764 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18111807.D

Sample : SS RSK Std 5 11/18/18





RSK 175  
RSK 175

Form 7

### Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: 7890  
Initial Cal. Date: 11/18/18  
Data File: 18122000.D

		Compound	MEAN	CCRF	%D	%Drift
1	ATM	Methane	13501	12087	10	ATM
2	ATM	Ethane	10345	10187	1.5	ATM
3	ATM	Ethene	8312	9492	14	ATM
4						
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37						
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39						
40						

Average

8.5

Data File : G:\ROCKY\DATA\181118RS\18122000.D Vial: 1  
 Acq On : 20 Dec 18 18:34 Operator: cmm  
 Sample : 181220A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 18:38 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 18:38:11 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

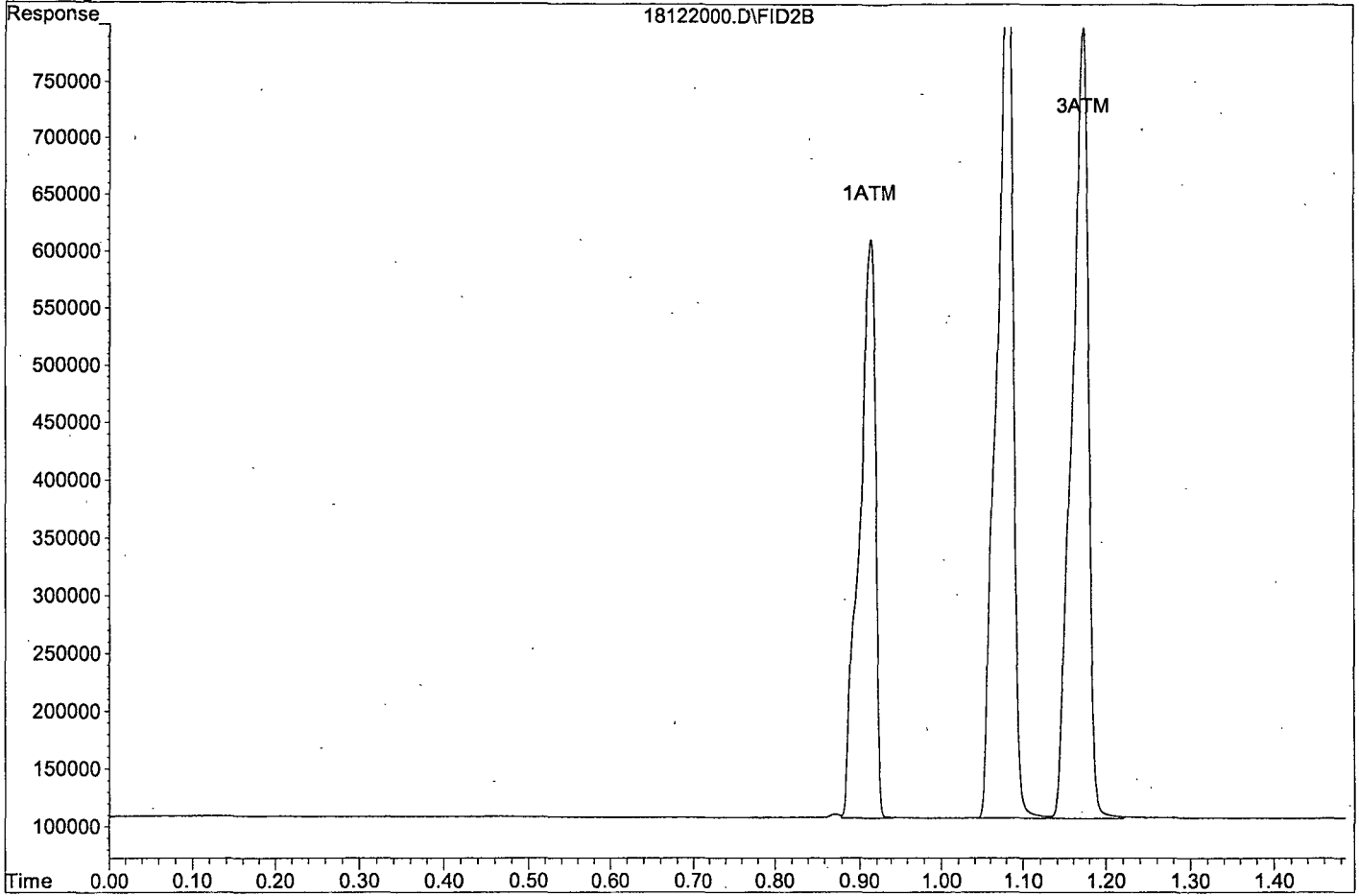
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	504035	74.664 ppb
2) ATM Ethane	1.08	796349	153.961 ppb
3) ATM Ethene	1.17	692165	166.541 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122000.D

Sample : 181220A LCS/CCV RSK Std 5



RSK 175  
RSK 175

Form 7  
Ending Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/20/18  
Instrument: 7890  
Initial Cal. Date: 11/18/18  
Data File: 18122008.D

		Compound	MEAN	CCRF	%D	%Drift
1	ATM	Methane	13501	12344	8.6	ATM
2	ATM	Ethane	10345	10050	2.9	ATM
3	ATM	Ethene	8312	9160	10	ATM
4						
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39						
40						

Average

7.2

Data File : G:\ROCKY\DATA\181118RS\18122008.D Vial: 9  
 Acq On : 20 Dec 18 19:02 Operator: cmm  
 Sample : Ending CCV RSK Std 5 12/20/18 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 19:05 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 19:05:51 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

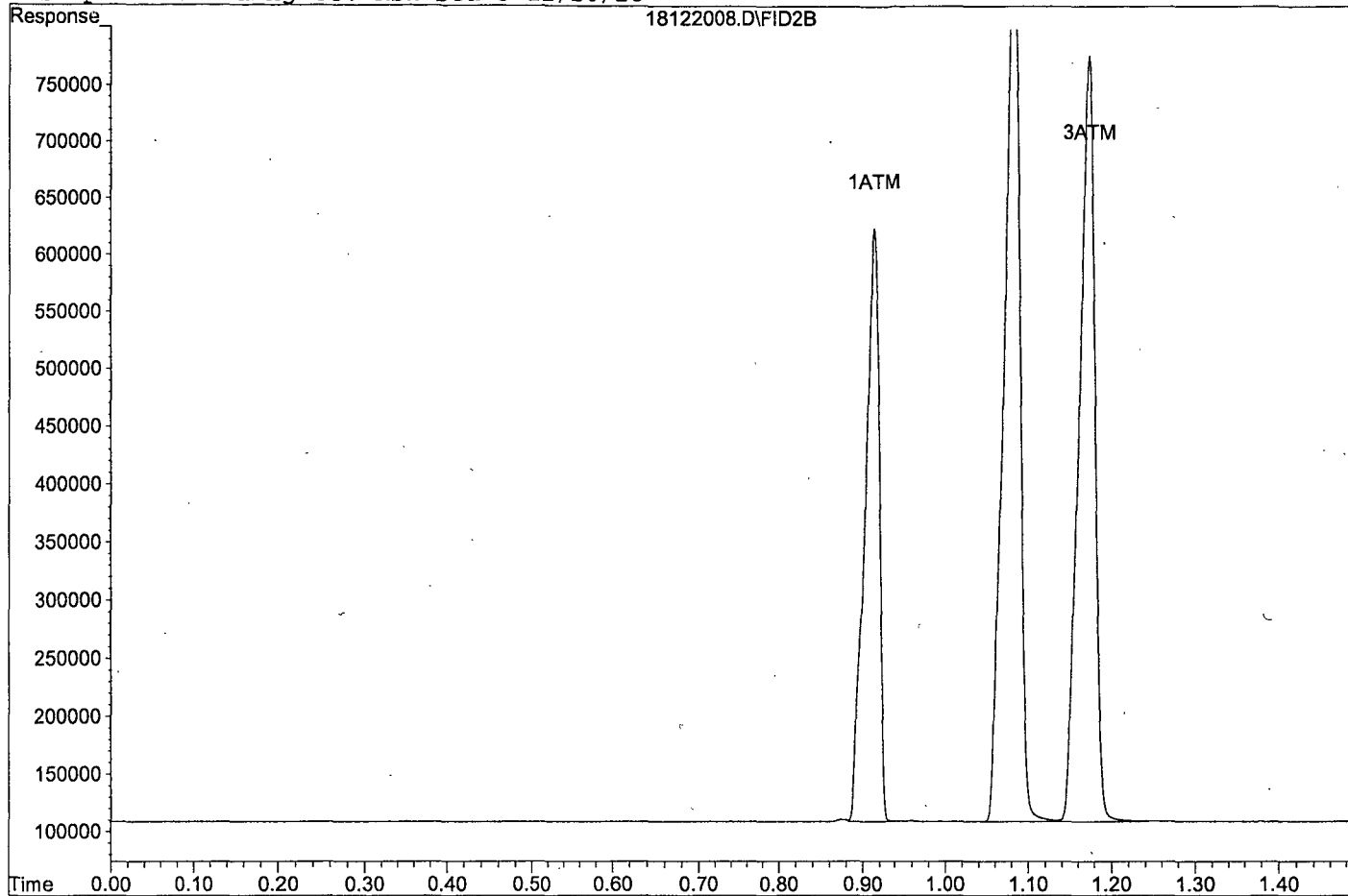
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	514739	76.250 ppb
2) ATM Ethane	1.08	785647	151.892 ppb
3) ATM Ethene	1.17	667940	160.712 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122008.D

Sample : Ending CCV RSK Std 5 12/20/18



RSK 175  
RSK 175

Form 7

### Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 12/21/18  
Instrument: 7890  
Initial Cal. Date: 11/18/18  
Data File: 18122100.D

		Compound	MEAN	CCRF	%D	%Drift
1	ATM	Methane	13501	12204	9.6	ATM
2	ATM	Ethane	10345	10559	2.1	ATM
3	ATM	Ethene	8312	9610	16	ATM
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40						

Average

9.2

Data File : G:\ROCKY\DATA\181118RS\18122100.D Vial: 1  
 Acq On : 21 Dec 18 10:42 Operator: cmm  
 Sample : 181221A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 21 10:45 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Dec 21 10:45:04 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	508889	75.383 ppb
2) ATM Ethane	1.08	825414	159.580 ppb
3) ATM Ethene	1.17	700766	168.610 ppb

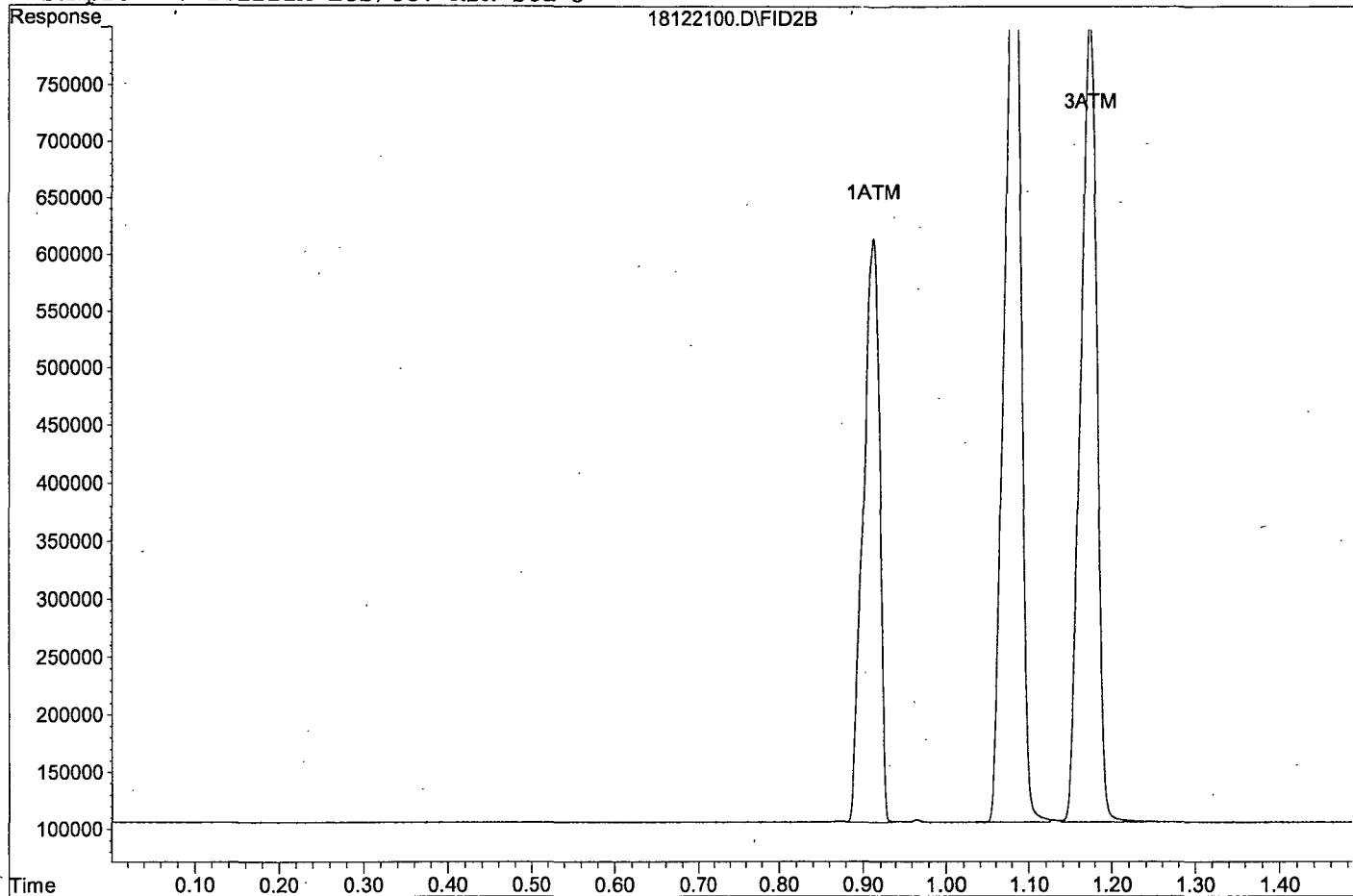
Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122100.D

Sample : 181221A LCS/CCV RSK Std 5



RSK 175  
RSK 175

Form 7

### Ending Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 12/21/18

Matrix: \_\_\_\_\_

Instrument: 7890

Initial Cal. Date: 11/18/18

Data File: 18122105.D

		Compound	MEAN	CCRF	%D	%Drift
1	ATM	Methane	13501	11176	17	ATM
2	ATM	Ethane	10345	9911	4.2	ATM
3	ATM	Ethene	8312	8815	6.0	ATM
4						
5						
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Average

9.1

Data File : G:\ROCKY\DATA\181118RS\18122105.D Vial: 6  
 Acq On : 21 Dec 18 11:01 Operator: cmm  
 Sample : Ending CCV RSK Std 5 12/21/18 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 21 11:04 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Dec 21 11:04:26 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

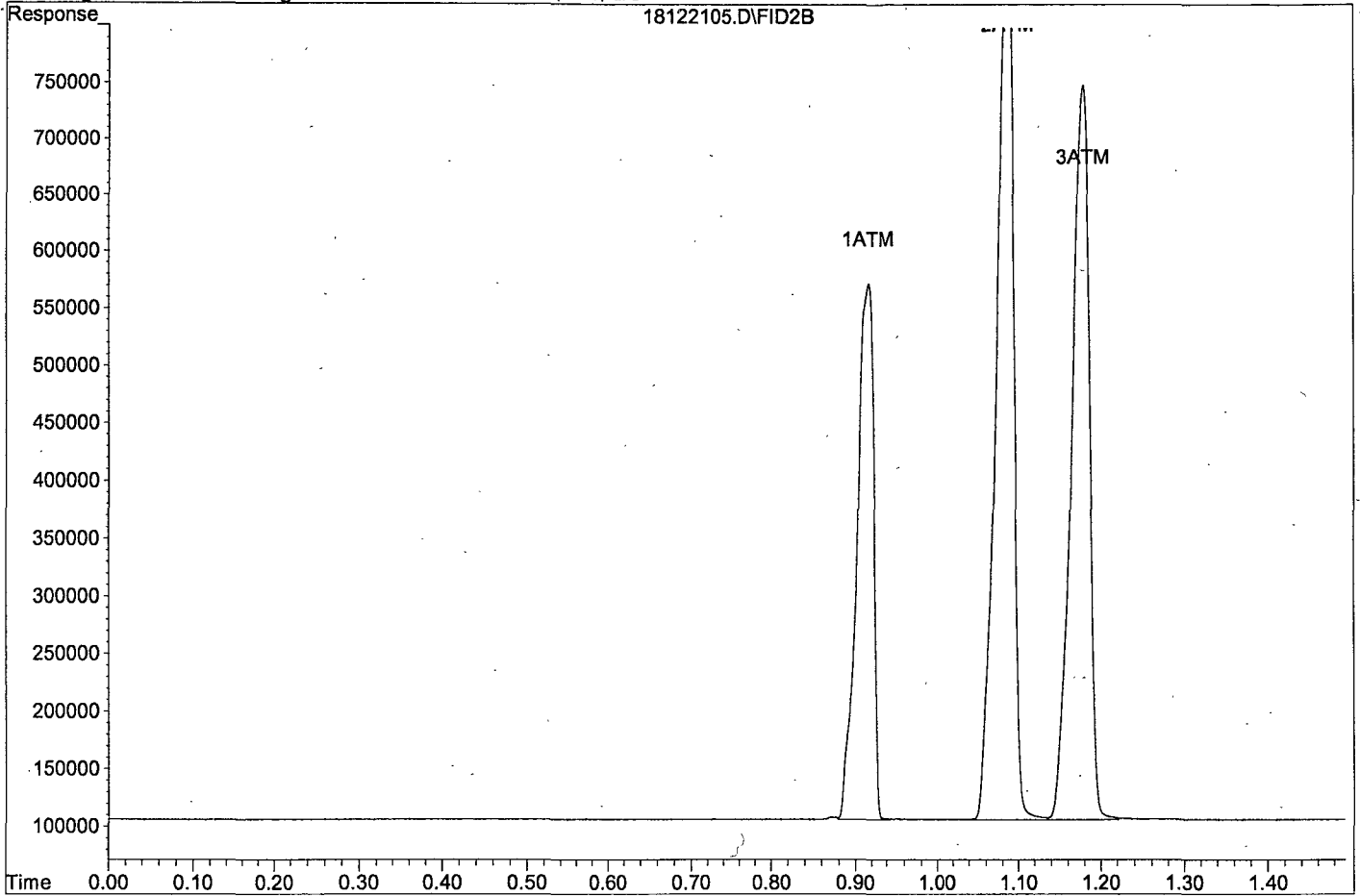
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.92	466049	69.037 ppb
2) ATM Ethane	1.09	774799	149.794 ppb
3) ATM Ethene	1.18	642771	154.656 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122105.D

Sample : Ending CCV RSK Std 5 12/21/18



**ORGANICS**  
**Raw Data**

**APPL, INC.**

Data File : G:\ROCKY\DATA\181118RS\18122104.D Vial: 5  
 Acq On : 21 Dec 18 10:59 Operator: cmm  
 Sample : AZ84057W08 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 21 11:03 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Dec 21 10:56:43 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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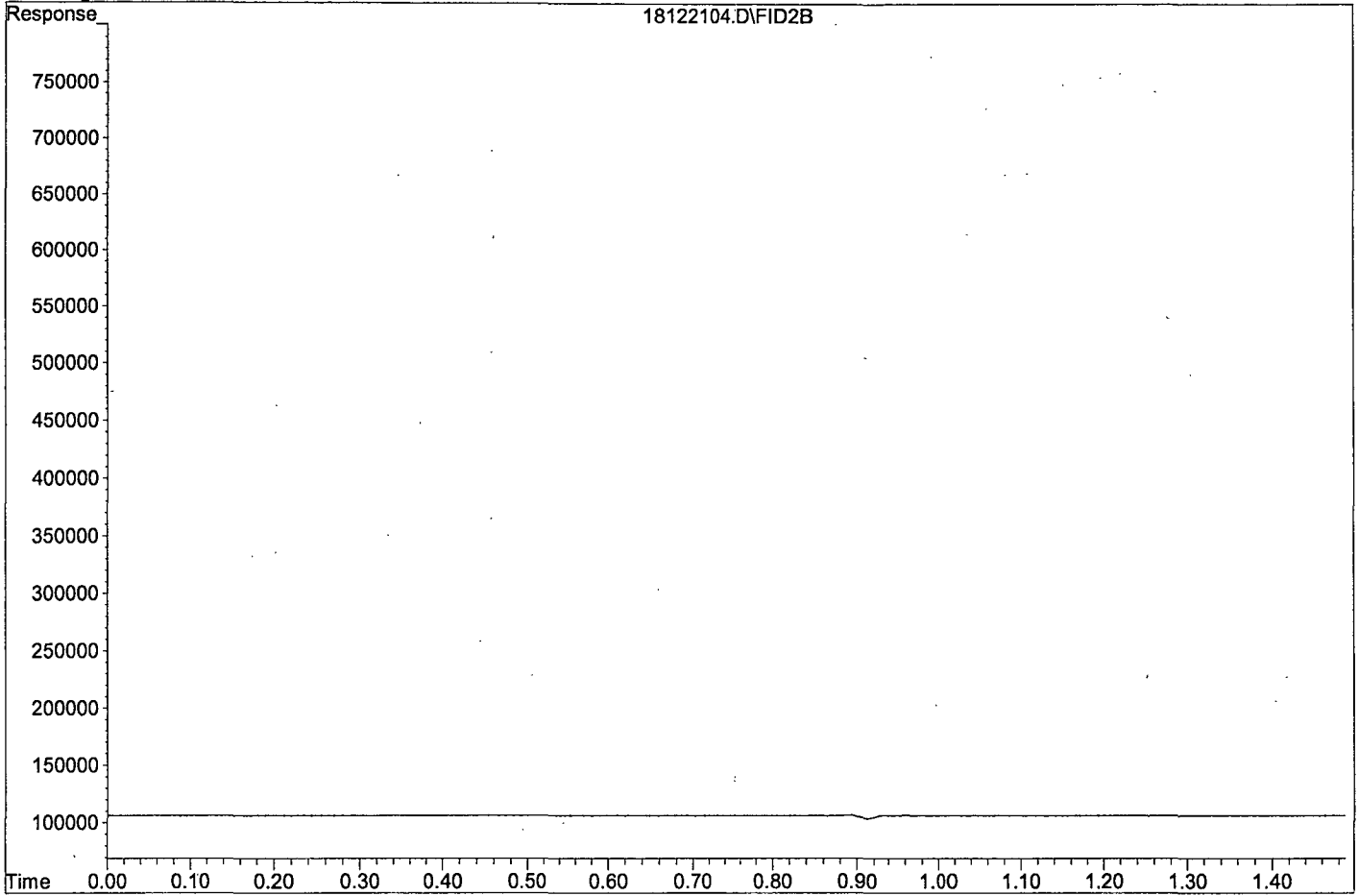
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122104.D

Sample : AZ84057W08



Data File : G:\ROCKY\DATA\181118RS\18122005.D Vial: 6  
 Acq On : 20 Dec 18 18:54 Operator: cmm  
 Sample : AZ84058W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 18:58 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 18:50:07 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

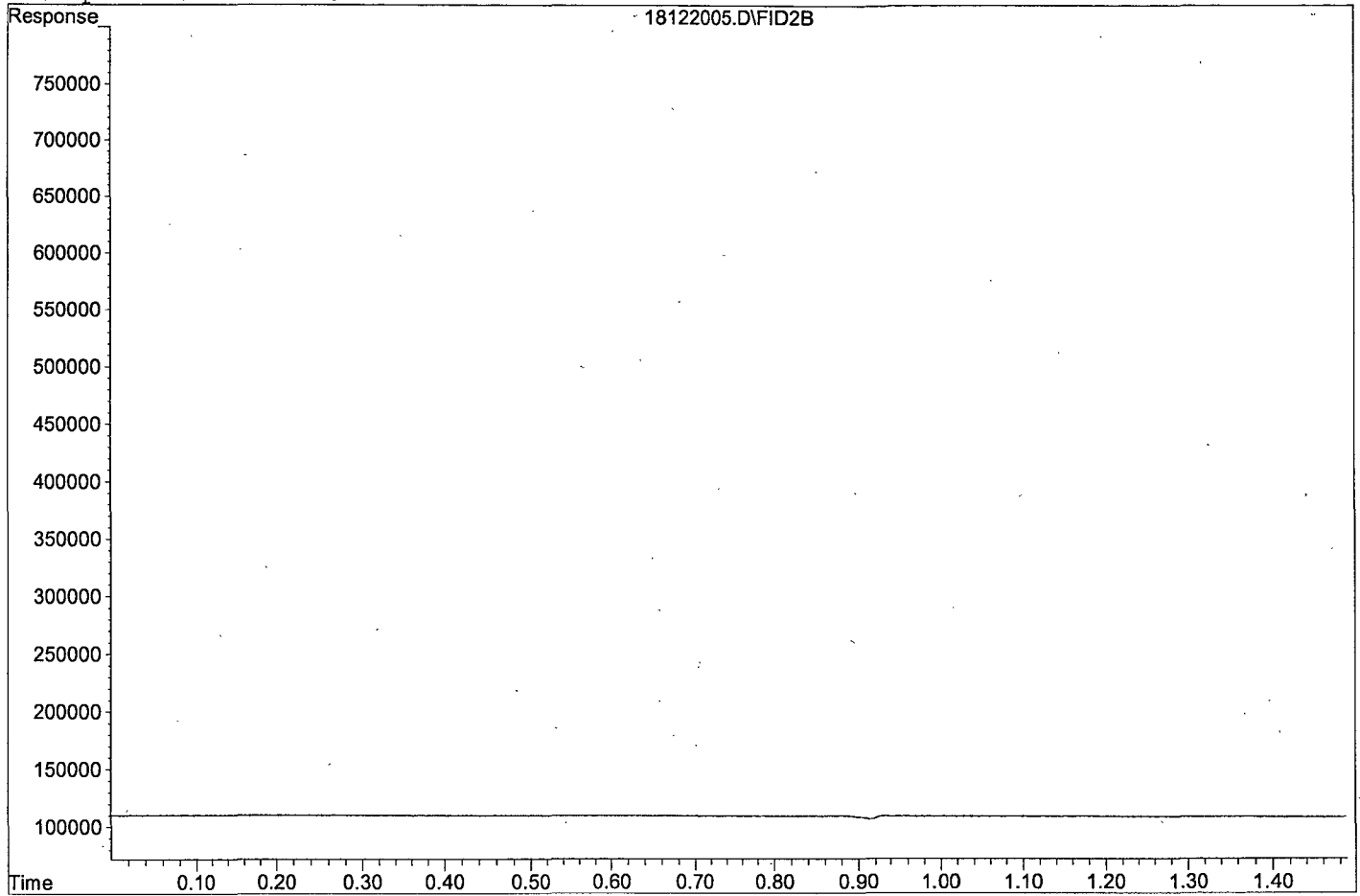
Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d



Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122005.D

Sample : AZ84058W04



Data File : G:\ROCKY\DATA\181118RS\18122006.D Vial: 7  
 Acq On : 20 Dec 18 18:57 Operator: cmm  
 Sample : AZ84060W03 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 19:01 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 18:50:07 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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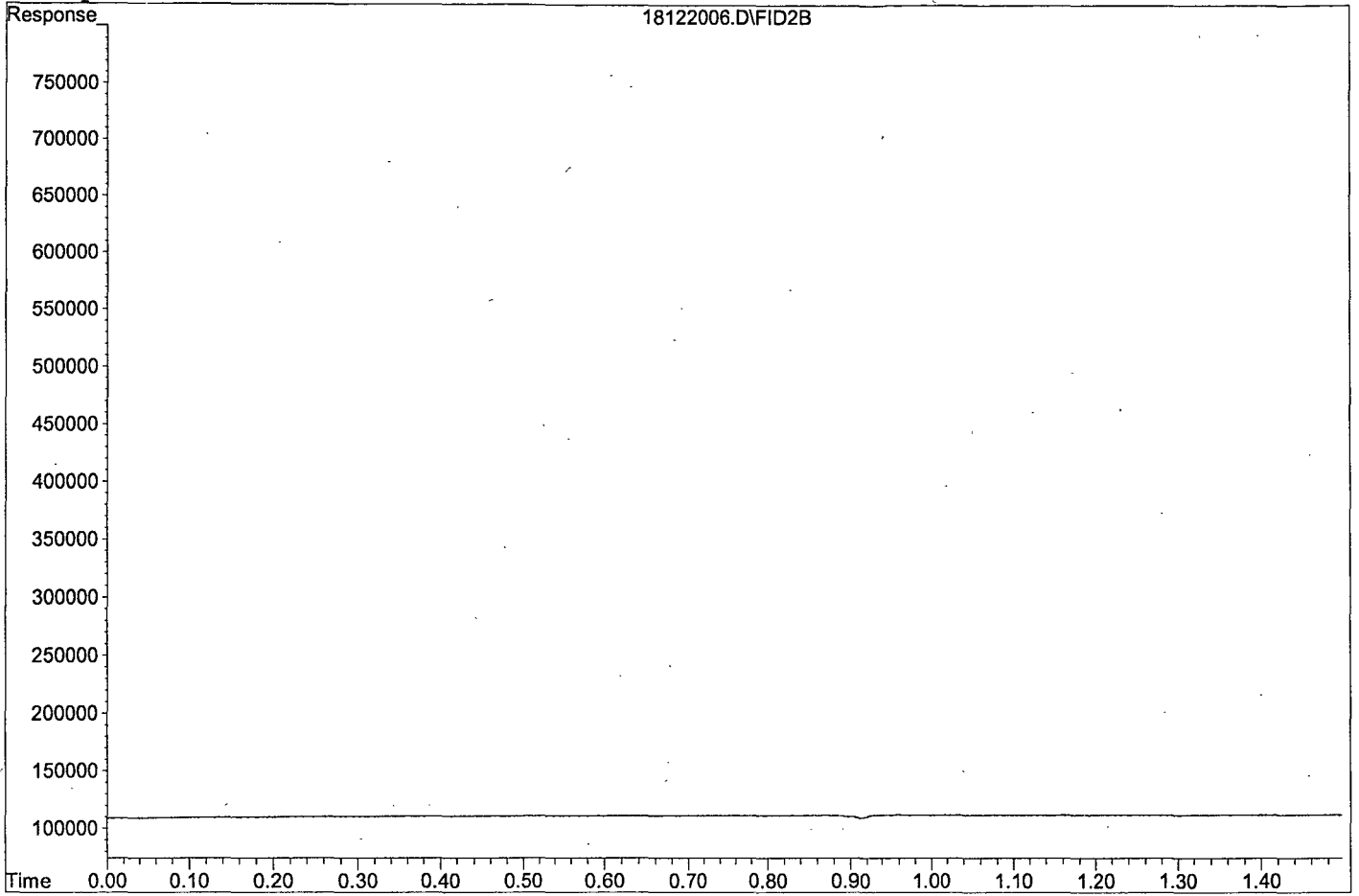
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122006.D

Sample : AZ84060W03



Data File : G:\ROCKY\DATA\181118RS\18122004.D Vial: 5  
 Acq On : 20 Dec 18 18:50 Operator: cmm  
 Sample : 181220A Blk Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 18:56 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 18:50:07 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

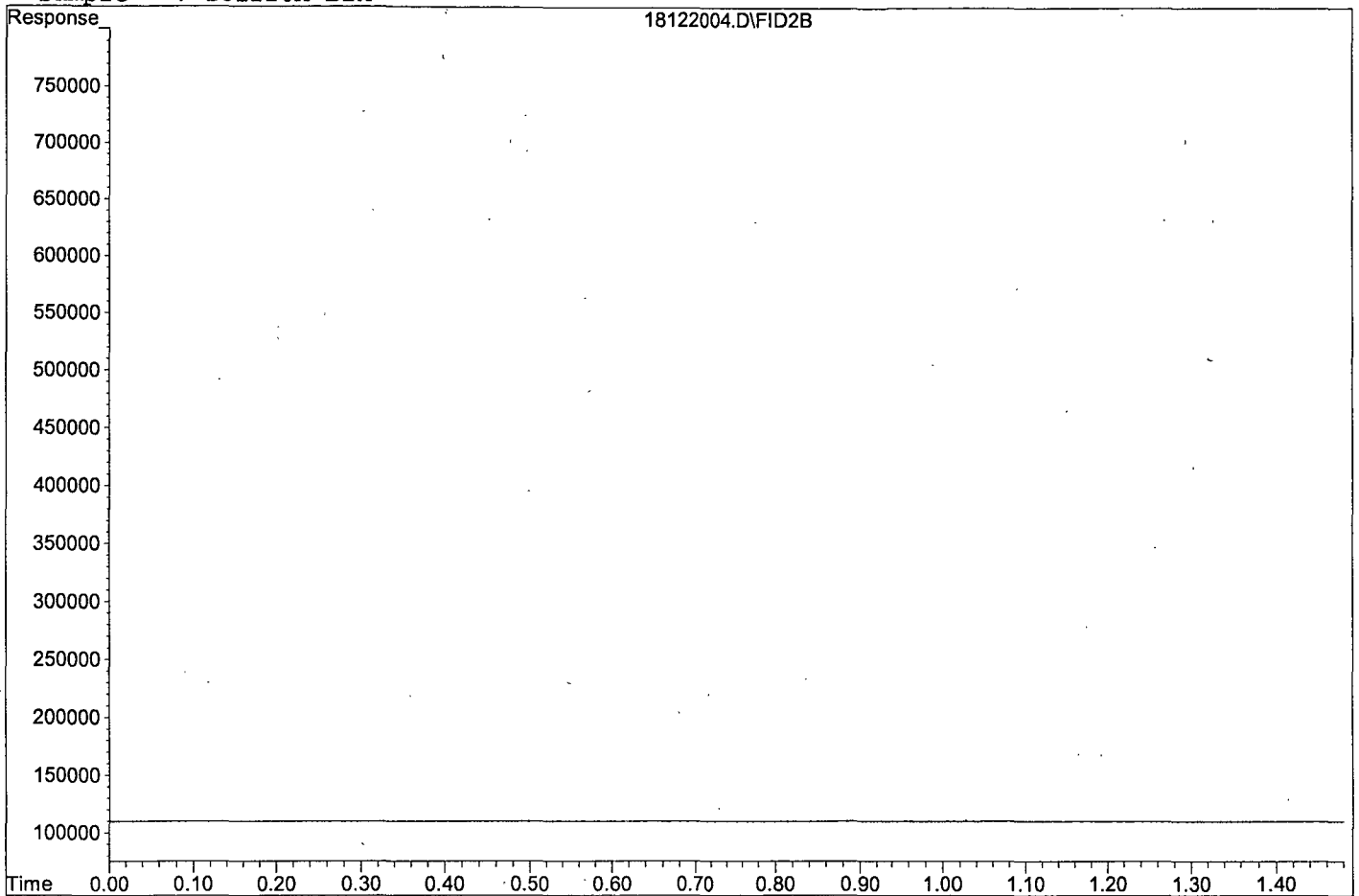
Compound	R.T.	Response	Conc	Units
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Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122004.D  
Sample : 181220A Blk



Data File : G:\ROCKY\DATA\181118RS\18122000.D Vial: 1  
 Acq On : 20 Dec 18 18:34 Operator: cmm  
 Sample : 181220A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 18:38 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 18:38:11 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

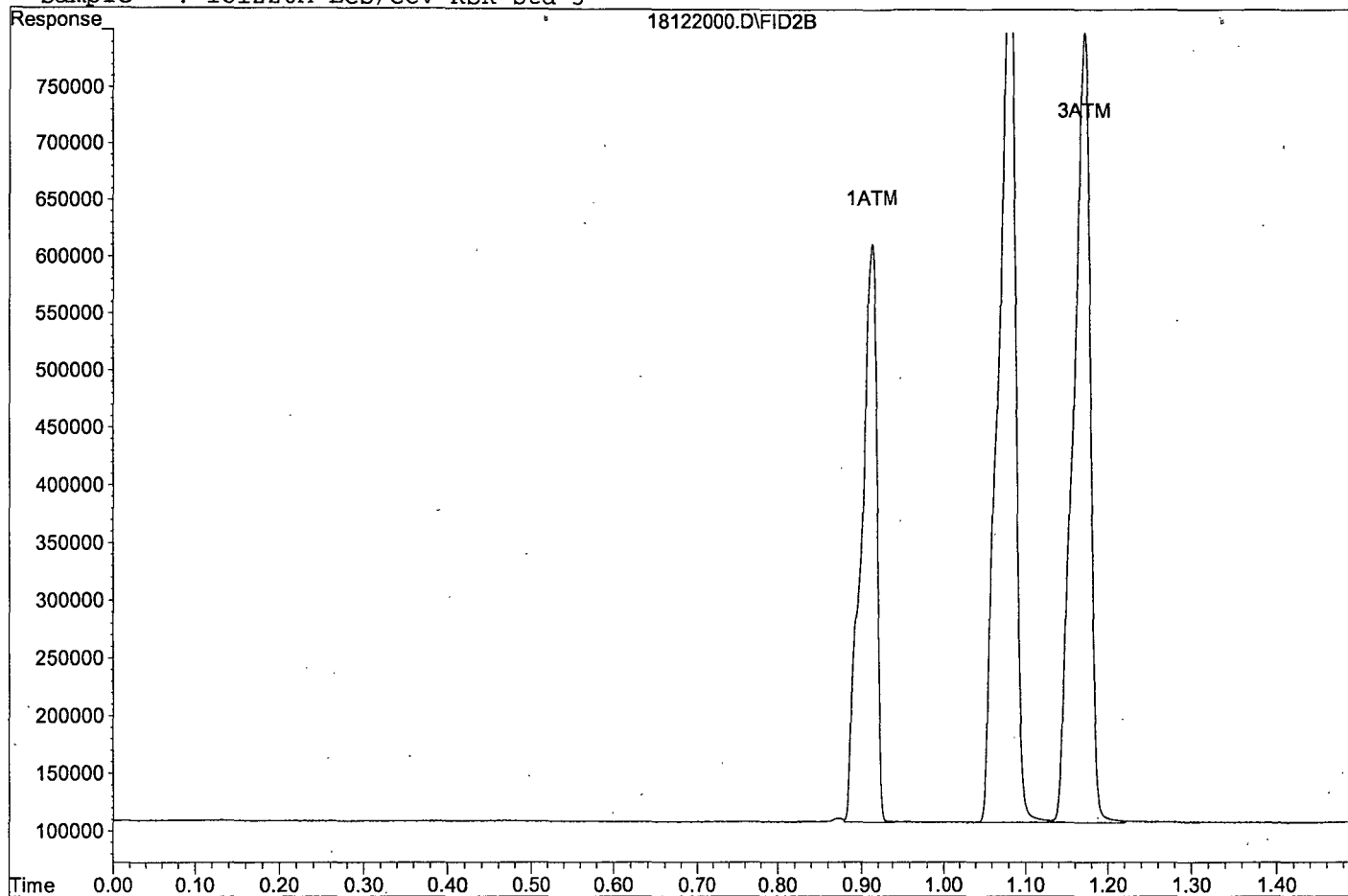
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	504035	74.664 ppb
2) ATM Ethane	1.08	796349	153.961 ppb
3) ATM Ethene	1.17	692165	166.541 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122000.D

Sample : 181220A LCS/CCV RSK Std 5



Data File : G:\ROCKY\DATA\181118RS\18122003.D Vial: 4  
 Acq On : 20 Dec 18 18:47 Operator: cmm  
 Sample : 181220A LCSD RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 20 18:50 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Thu Dec 20 18:50:07 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

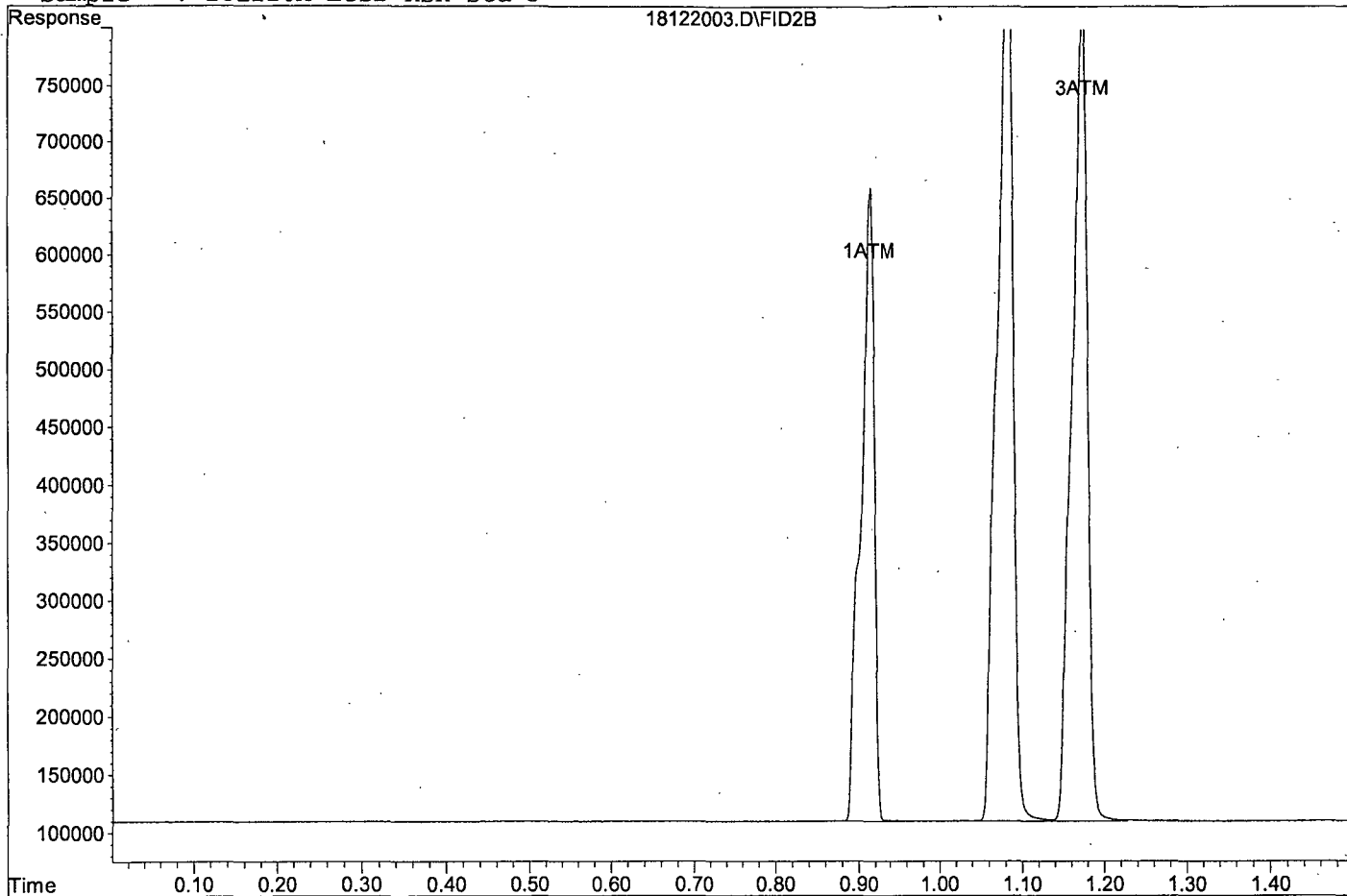
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	549592	81.412 ppb
2) ATM Ethane	1.08	832353	160.922 ppb
3) ATM Ethene	1.17	710869	171.041 ppb

Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122003.D  
Sample : 181220A LCSD RSK Std 5



Data File : G:\ROCKY\DATA\181118RS\18122103.D Vial: 4  
 Acq On : 21 Dec 18 10:57 Operator: cmm  
 Sample : 181221A Blk Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 21 11:00 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Dec 21 10:56:43 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
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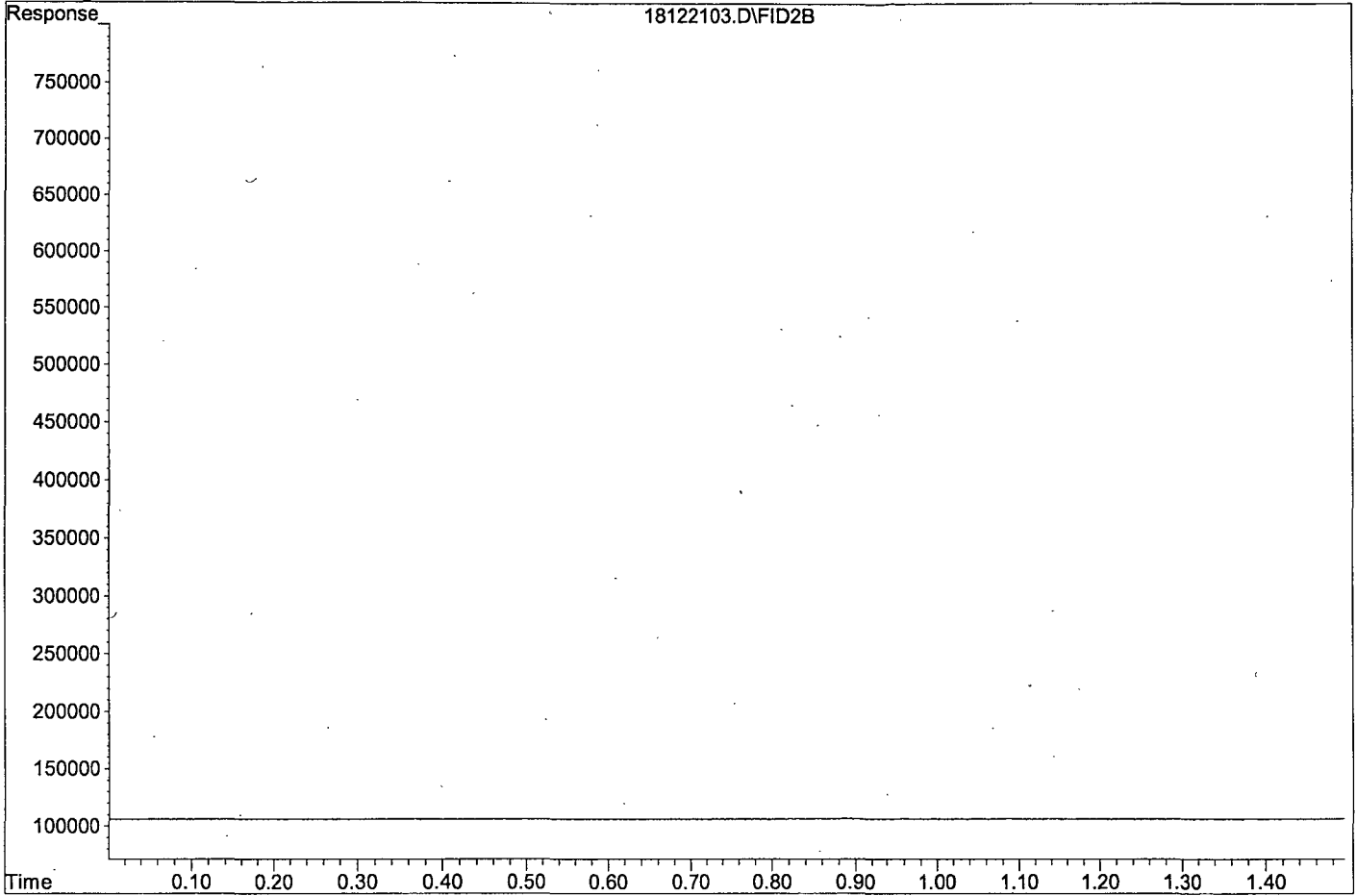
Target Compounds

Target Compounds	R.T.	Response	Conc Units
1) ATM Methane	0.00	0	N.D. ppb d
2) ATM Ethane	0.00	0	N.D. ppb d
3) ATM Ethene	0.00	0	N.D. ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122103.D

Sample : 181221A Blk



Data File : G:\ROCKY\DATA\181118RS\18122100.D Vial: 1  
 Acq On : 21 Dec 18 10:42 Operator: cmm  
 Sample : 181221A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 21 10:45 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Dec 21 10:45:04 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

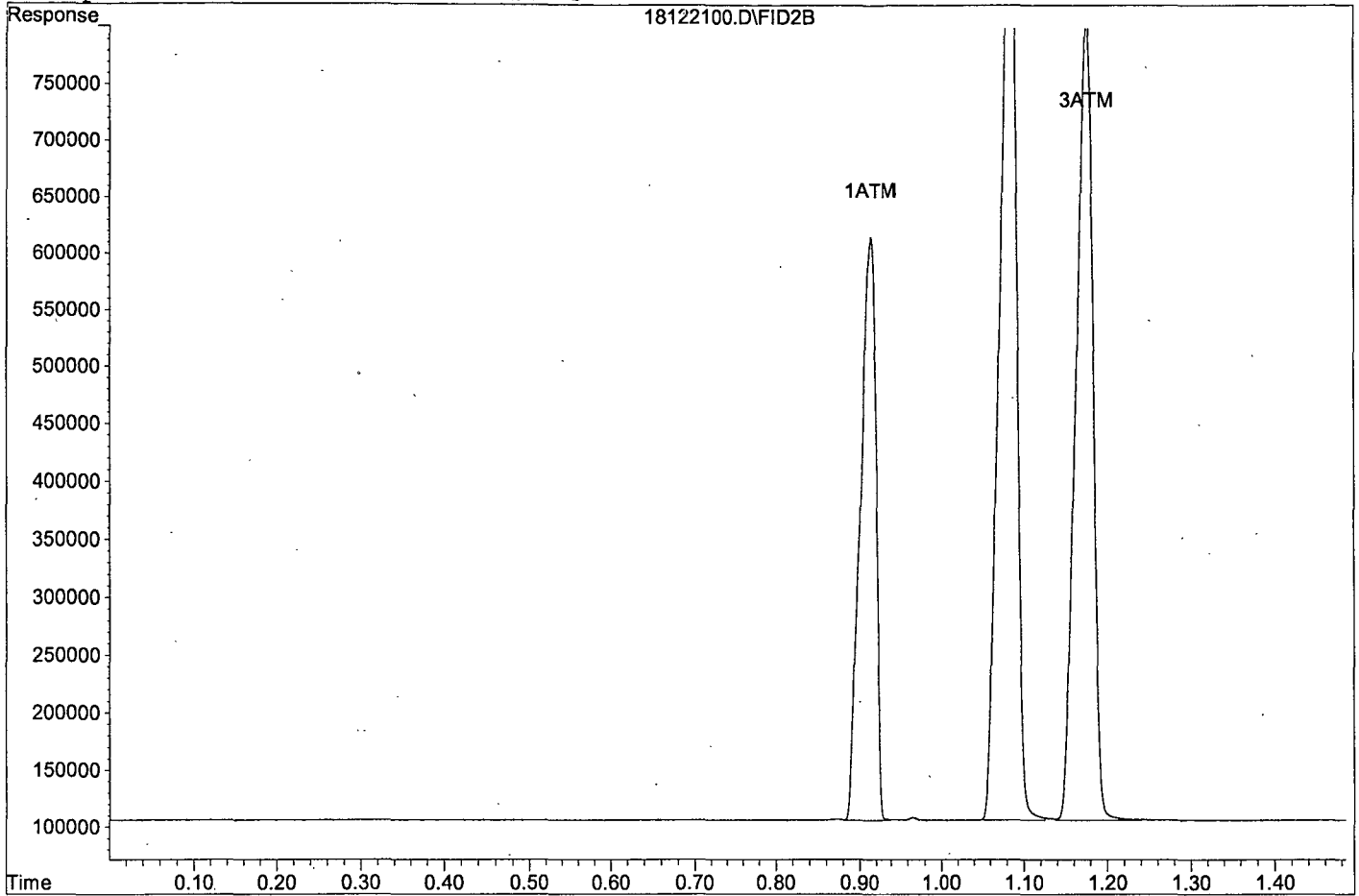
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	508889	75.383 ppb
2) ATM Ethane	1.08	825414	159.580 ppb
3) ATM Ethene	1.17	700766	168.610 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122100.D

Sample : 181221A LCS/CCV RSK Std 5



Data File : G:\ROCKY\DATA\181118RS\18122102.D Vial: 3  
 Acq On : 21 Dec 18 10:54 Operator: cmm  
 Sample : 181221A LCSD RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Dec 21 10:56 2018 Quant Results File: RSK1118.RES

Method : G:\ROCKY\DATA\181118RS\RSK1118.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Dec 21 10:56:43 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

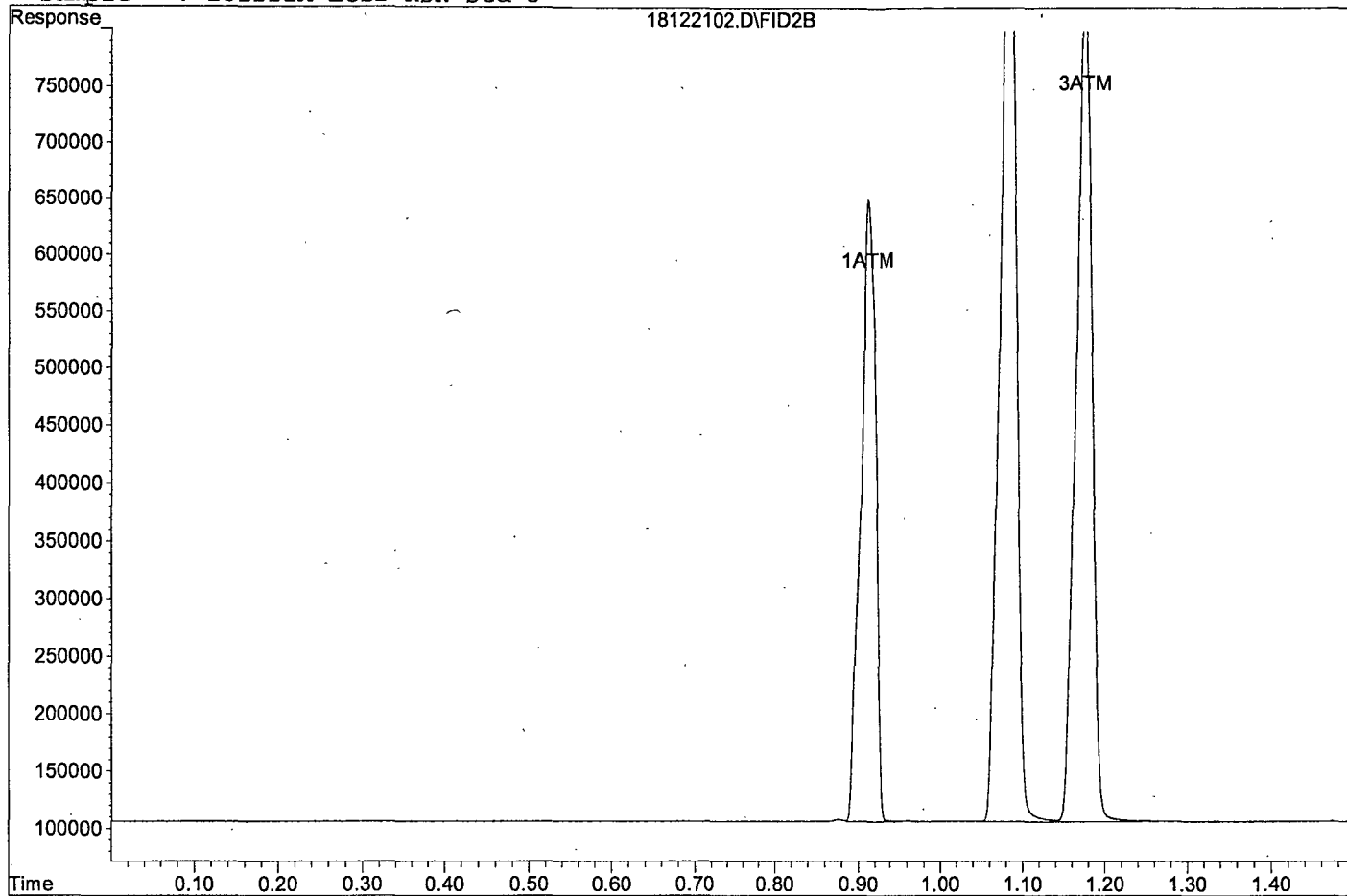
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.91	544216	80.616 ppb
2) ATM Ethane	1.08	870408	168.279 ppb
3) ATM Ethene	1.18	720331	173.318 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\181118RS\18122102.D

Sample : 181221A LCSD RSK Std 5



**Primary Source Stock Standard 10,000ppmV**

Manufacturer Exp Date 09-21-2021

RSK Gas Mix (Scott Mini-Mix) Cat.# X04NI97CP140001, Lot # 16-401303031-1

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

**RSK Calibration Curve (prepared in 1.0 L Tedlar Bags at room temp)****Expires 12/24/18****CMM 11/18/18**

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL

**Second Source Stock Standard 10,000ppmV**

Manufacturer Exp date 09/21/2021

RSK Gas Mix (Scott Mini-Mix) Cat.# 23452, Lot #160-401303032-1

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

**Second Source****Expires 11/18/18****CMM 11/18/18**Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace  
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene**CCV/LCS/LCSD****CMM 12/20/18**Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace  
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene**CCV/LCS/LCSD****CMM 12/21/18**Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace  
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene



## Injection Log

Directory: G:\ROCKY\DATA\181118RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	18111800.D	1	RSK Std 1 11/18/18	125 uL from RSK Std 3	18 Nov 18 16:24
2	2	18111801.D	1	RSK Std 2 11/18/18	250 uL from RSK Std 3	18 Nov 18 16:27
3	3	18111802.D	1	RSK Std 3 11/18/18		18 Nov 18 16:29
4	4	18111803.D	1	RSK Std 4 11/18/18		18 Nov 18 16:31
5	5	18111804.D	1	RSK Std 5 11/18/18		18 Nov 18 16:34
6	6	18111805.D	1	RSK Std 6 11/18/18		18 Nov 18 16:36
7	7	18111806.D	1	RSK Std 7 11/18/18		18 Nov 18 16:38
8	8	18111807.D	1	SS RSK Std 5 11/18/18		18 Nov 18 16:48
9	1	18122000.D	1	181220A LCS/CCV RSK Std 5		20 Dec 18 18:34
10	4	18122003.D	1	181220A LCSD RSK Std 5		20 Dec 18 18:47
11	5	18122004.D	1	181220A Blk		20 Dec 18 18:50
12	6	18122005.D	1	AZ84058W04		20 Dec 18 18:54
13	7	18122006.D	1	AZ84060W03		20 Dec 18 18:57
14	8	18122007.D	1	AZ84061W08		20 Dec 18 19:00
15	9	18122008.D	1	Ending CCV RSK Std 5 12/20/18		20 Dec 18 19:02
16	1	18122100.D	1	181221A LCS/CCV RSK Std 5		21 Dec 18 10:42
17	3	18122102.D	1	181221A LCSD RSK Std 5		21 Dec 18 10:54
18	4	18122103.D	1	181221A Blk		21 Dec 18 10:57
19	5	18122104.D	1	AZ84057W08		21 Dec 18 10:59
20	6	18122105.D	1	Ending CCV RSK Std 5 12/21/18		21 Dec 18 11:01

**INORGANIC ANALYSIS**  
**Calibration Data**

**APPL, INC.**

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87650 SDG: 87650

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/15/18

Analyte	Calibration Verification									M
	True ICV	Found 12:31	%R(1)	True CCV1	Found 10:49	%R(1)	True CCV1	Found 11:35	%R(1)	
Ferrous Iron	3	3.16507	106	4	3.99494	99.9	4	4.01494	100	

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87650

SDG: 87650

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB 06/15/18 12:32	C	CCB 12/14/18 10:50	C	CCB 12/14/18 11:35	C		C		C	
Ferrous Iron	1.000	U	1.000	U	1.000	U					

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: \_\_\_\_\_

ARF No: \_\_\_\_\_ SDG: \_\_\_\_\_

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 11/27/18

Analyte	Calibration Verification									M
	True ICV	Found 12:45	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
bromide	12.5	12.6119	101							
chloride	20	18.4454	92.2							
fluoride	2.5	2.5065	100							
Nitrate(NO3)	22.1	21.6341	97.9							
Nitrate(NO3)-N	5	4.8851	97.7							
Nitrite(NO2)	9.98	10.1323	102							
Nitrite(NO2)-N	3.04	3.0848	101							
orthophosphate	15.3	13.8837	90.7							
orthophosphate-p	5	4.5305	90.6							
phosphate	15.3225	13.8837	90.6							
phosphate-p	5	4.5305	90.6							
sulfate	20	19.3976	97.0							

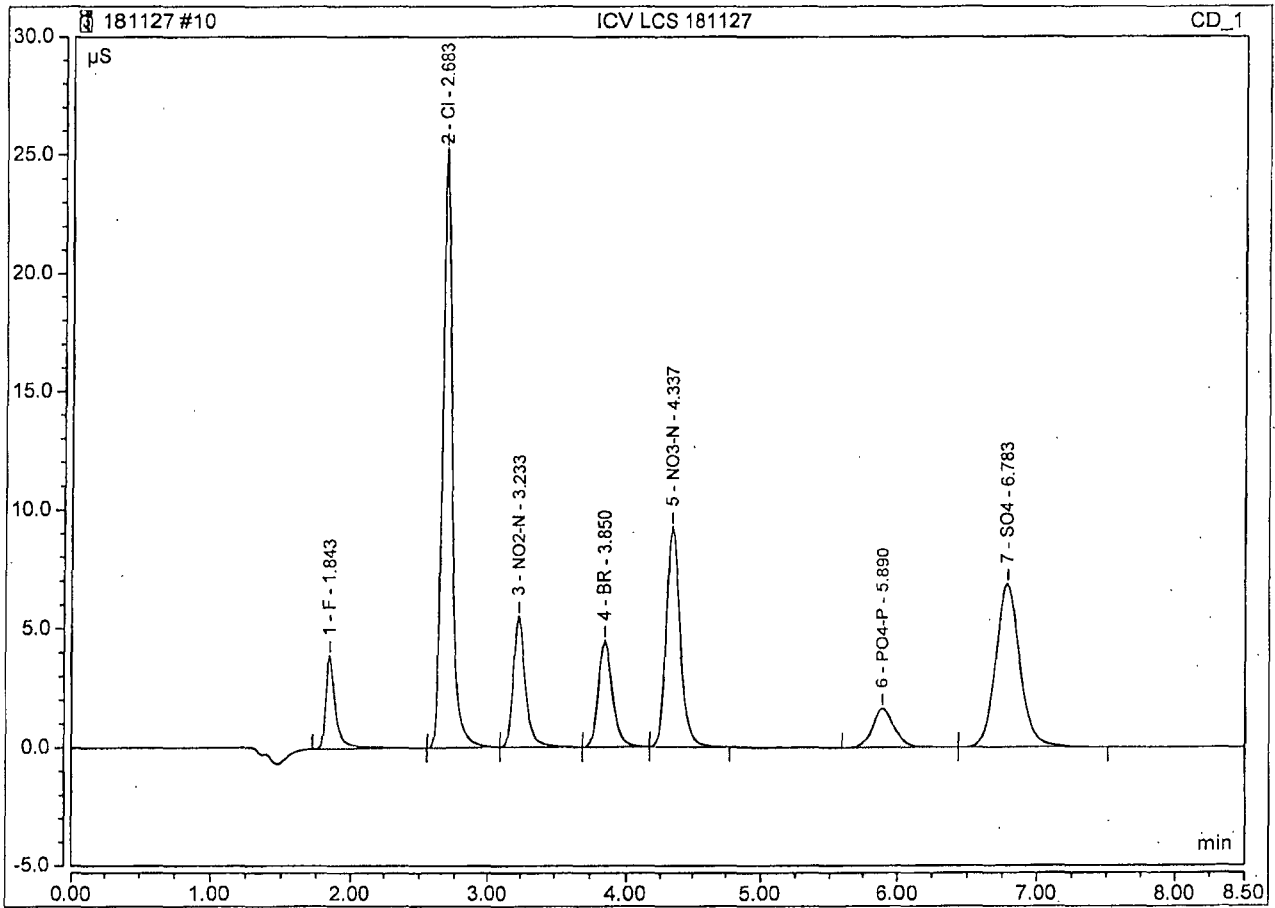
(1) Control Limits: 90-110

ILM02.0

Peak Integration Report

Sample Name:	ICV LCS 181127	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 12:45	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.335	3.916	2.5065
2	2.68	Cl	BMB	2.045	25.252	18.4454
3	3.23	NO2-N	BMB	0.584	5.471	3.0848
4	3.85	BR	BMB	0.501	4.455	12.6119
5	4.34	NO3-N	BMB	1.159	9.229	4.8851
6	5.89	PO4-P	BMB	0.310	1.633	4.5305
7	6.78	SO4	BMB	1.386	6.839	19.3976
TOTAL:				6.32	56.79	65.46



Algorithm Check: HH 181130  
 $y = \text{Peak Area}$   
 $x = \text{mg/L Br}$   
 $y = .0398 x - .0011$   
 $y = .501 \therefore x = 12.61 \checkmark$

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: \_\_\_\_\_

ARF No.: \_\_\_\_\_

SDG: \_\_\_\_\_

Preparation Blank Matrix (soil/water): water

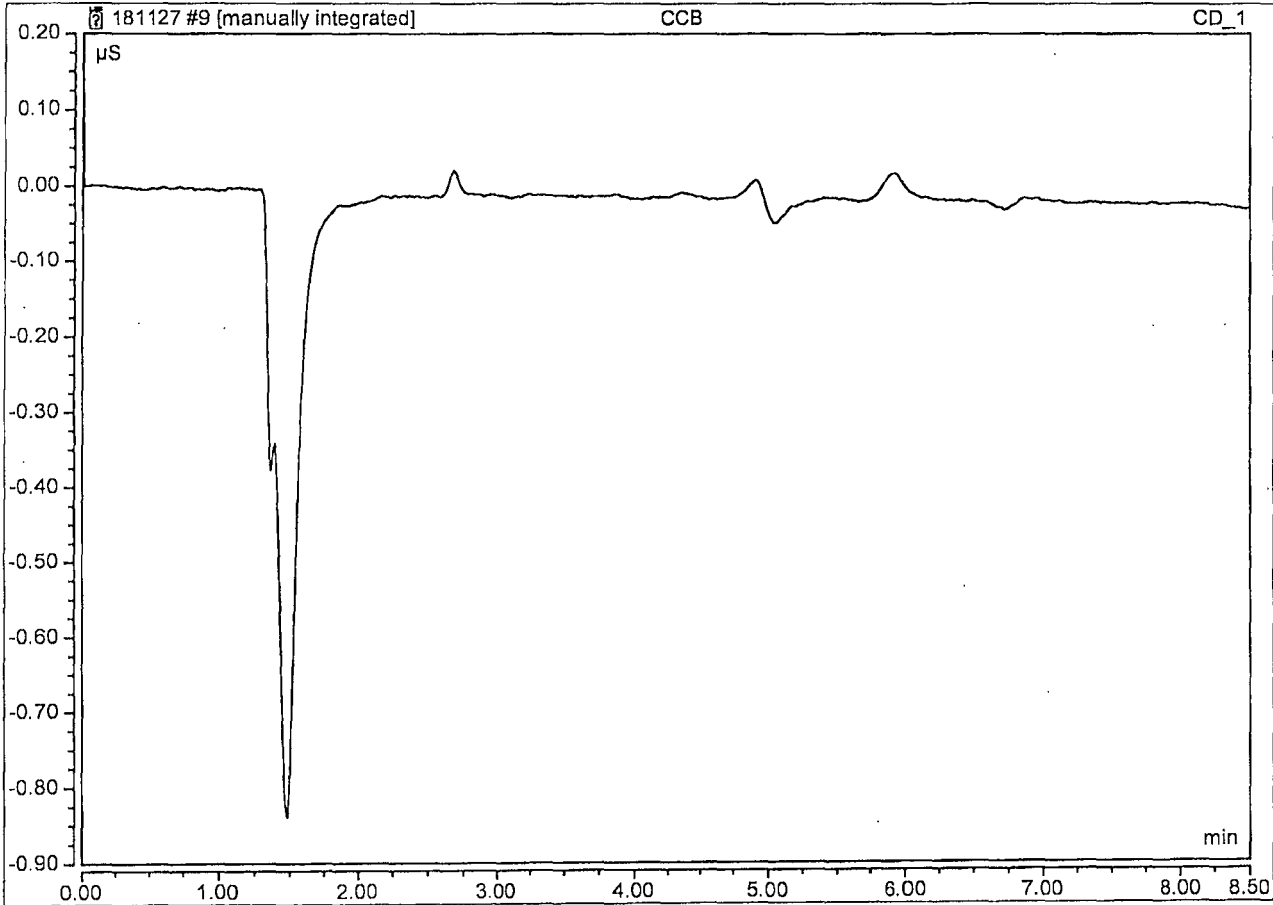
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 11/27/18 10:03	C	CCB 11/27/18 11:37	C		C		C		C	
bromide	.500	U	.500	U							
chloride	1.000	U	1.000	U							
fluoride	.100	U	.100	U							
Nitrate(NO3)	.500	U	.500	U							
Nitrate(NO3)-N	.200	U	.200	U							
Nitrite(NO2)	.300	U	.300	U							
Nitrite(NO2)-N	.100	U	.100	U							
orthophosphate	.600	U	.600	U							
orthophosphate-p	.200	U	.200	U							
phosphate	.600	U	.600	U							
phosphate-p	.200	U	.200	U							
sulfate	1.000	U	1.000	U							

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 11:37	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount n.a.
TOTAL:				0.00	0.00	0.00





INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87650 SDG: 87650

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

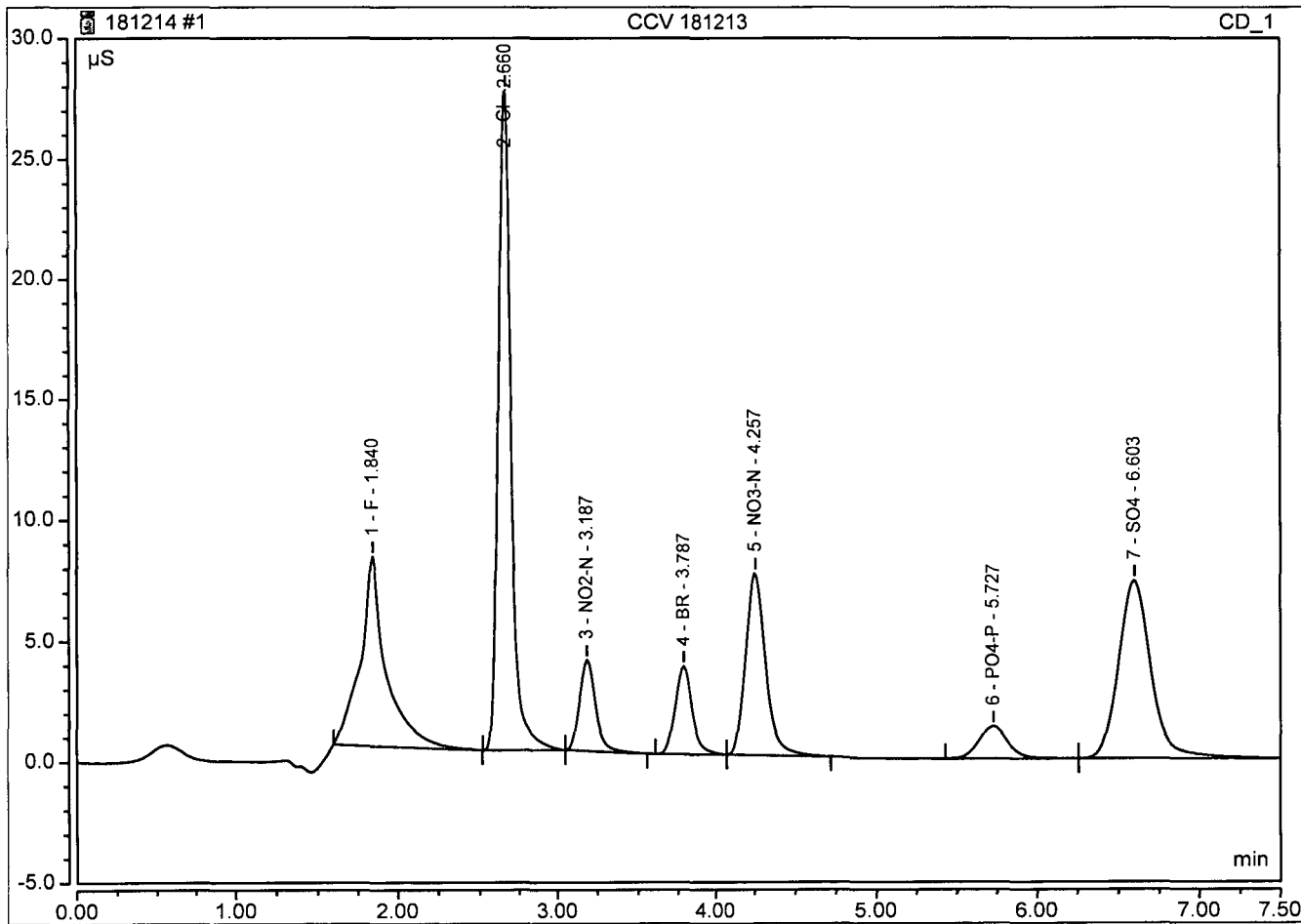
Analysis Date: 12/14/18

Analyte	Calibration Verification									M
	True CCV1	Found 9:26	%R(1)	True CCV1	Found 10:05	%R(1)	True CCV1	Found 13:01	%R(1)	
Nitrate(NO3)	22.1	20.3578	92.1	22.1	20.7568	93.9	22.1	20.7927	94.1	
sulfate	25	23.8724	95.5	25	23.811	95.2	25	24.1285	96.5	

### Peak Integration Report

Sample Name:	CCV 181213	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 09:26	Run Time:	7.50

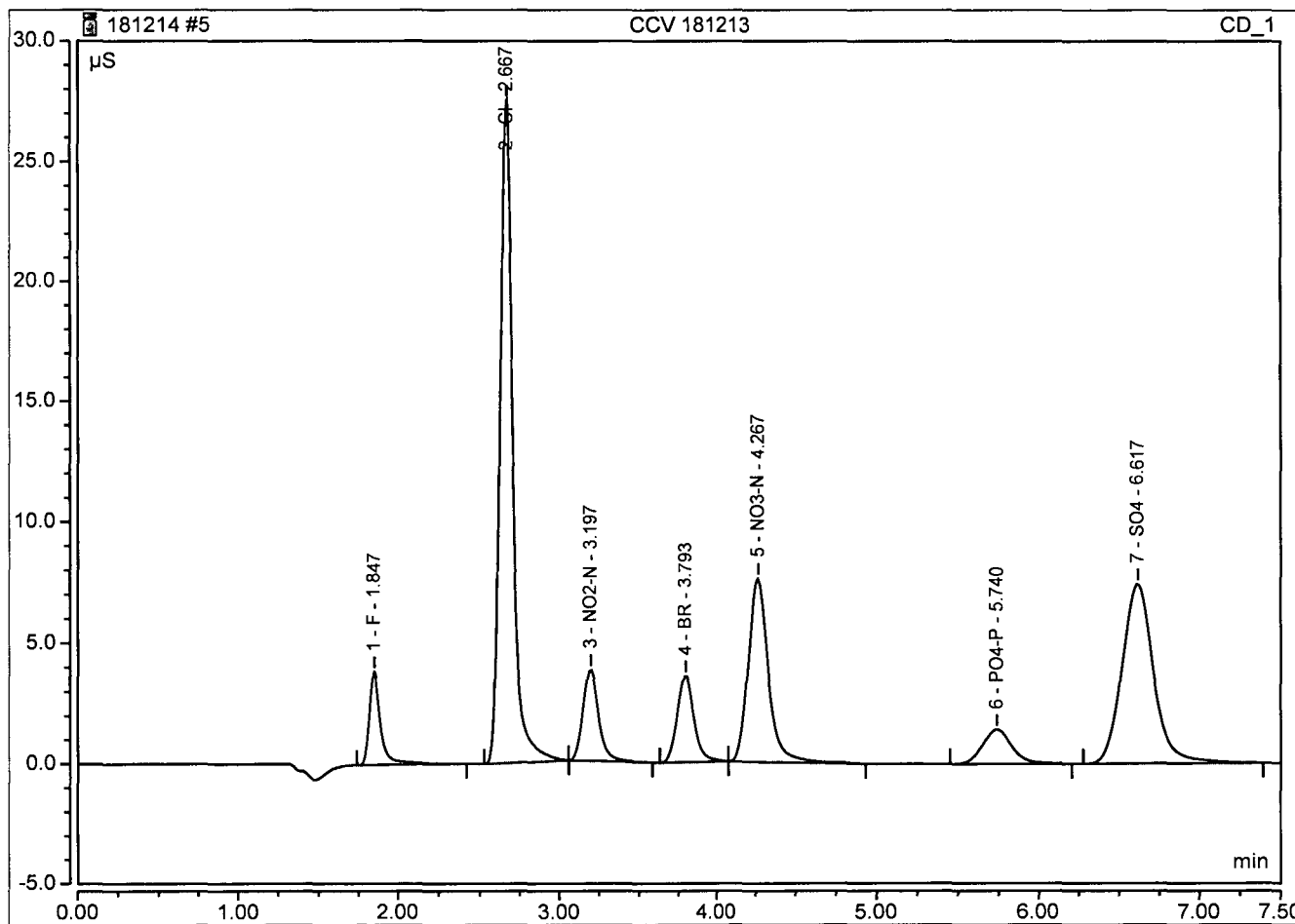
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	1.470	7.843	10.9298
2	2.66	Cl	BMB	2.543	27.364	22.9094
3	3.19	NO <sub>2</sub> -N	BMB	0.438	3.769	2.3149
4	3.79	BR	BMB	0.474	3.635	11.9254
5	4.26	NO <sub>3</sub> -N	BMB	1.091	7.531	4.5969
6	5.73	PO <sub>4</sub> -P	BMB	0.281	1.335	4.1408
7	6.60	SO <sub>4</sub>	BMB	1.707	7.355	23.8724
TOTAL:				8.00	58.83	80.69



### Peak Integration Report

Sample Name:	CCV 181213	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 10:05	Run Time:	7.50

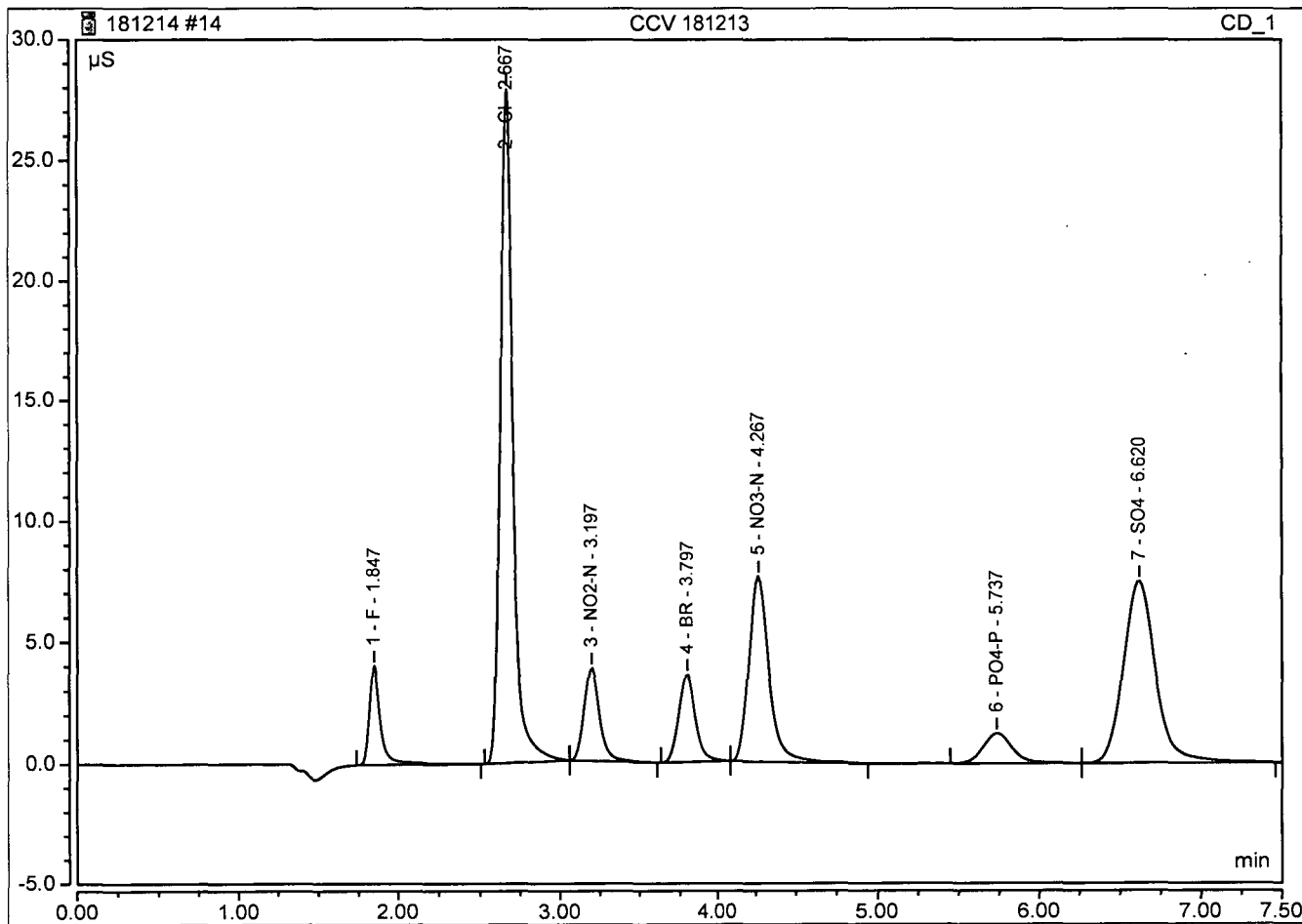
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.321	3.856	2.3966
2	2.67	Cl	BMB	2.530	27.527	22.7896
3	3.20	NO2-N	BMB	0.434	3.783	2.2959
4	3.79	BR	BMB	0.455	3.578	11.4483
5	4.27	NO3-N	BMB	1.112	7.593	4.6870
6	5.74	PO4-P	BMB	0.299	1.426	4.3841
7	6.62	SO4	BMB	1.703	7.426	23.8110
TOTAL:				6.85	55.19	71.81



### Peak Integration Report

Sample Name:	CCV 181213	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 13:01	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.338	4.061	2.5288
2	2.67	Cl	BMB	2.545	27.886	22.9289
3	3.20	NO <sub>2</sub> -N	BMB	0.434	3.804	2.2952
4	3.80	BR	BMB	0.456	3.596	11.4700
5	4.27	NO <sub>3</sub> -N	BMB	1.114	7.635	4.6951
6	5.74	PO <sub>4</sub> -P	BMB	0.260	1.237	3.8412
7	6.62	SO <sub>4</sub>	BMB	1.725	7.491	24.1285
TOTAL:				6.87	55.71	71.89



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87650

SDG: 87650

Preparation Blank Matrix (soil/water): water

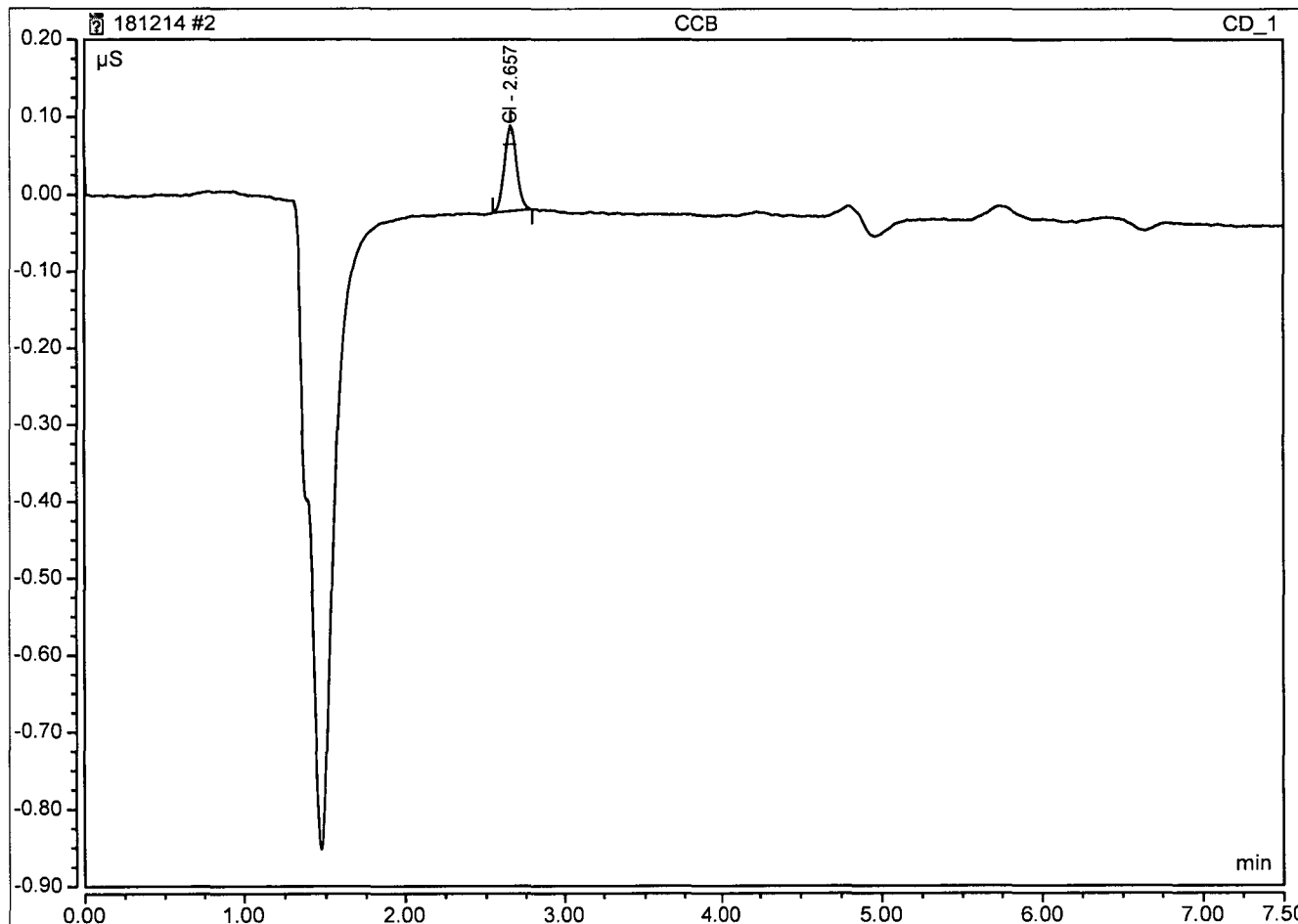
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 12/14/18 09:36	C	CCB 12/14/18 10:15	C	CCB 12/14/18 13:11	C		C		C	
Nitrate(NO3)	.500	U	.500	U	.500	U					
sulfate	1.000	U	1.000	U	1.000	U					

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 09:36	Run Time:	7.50

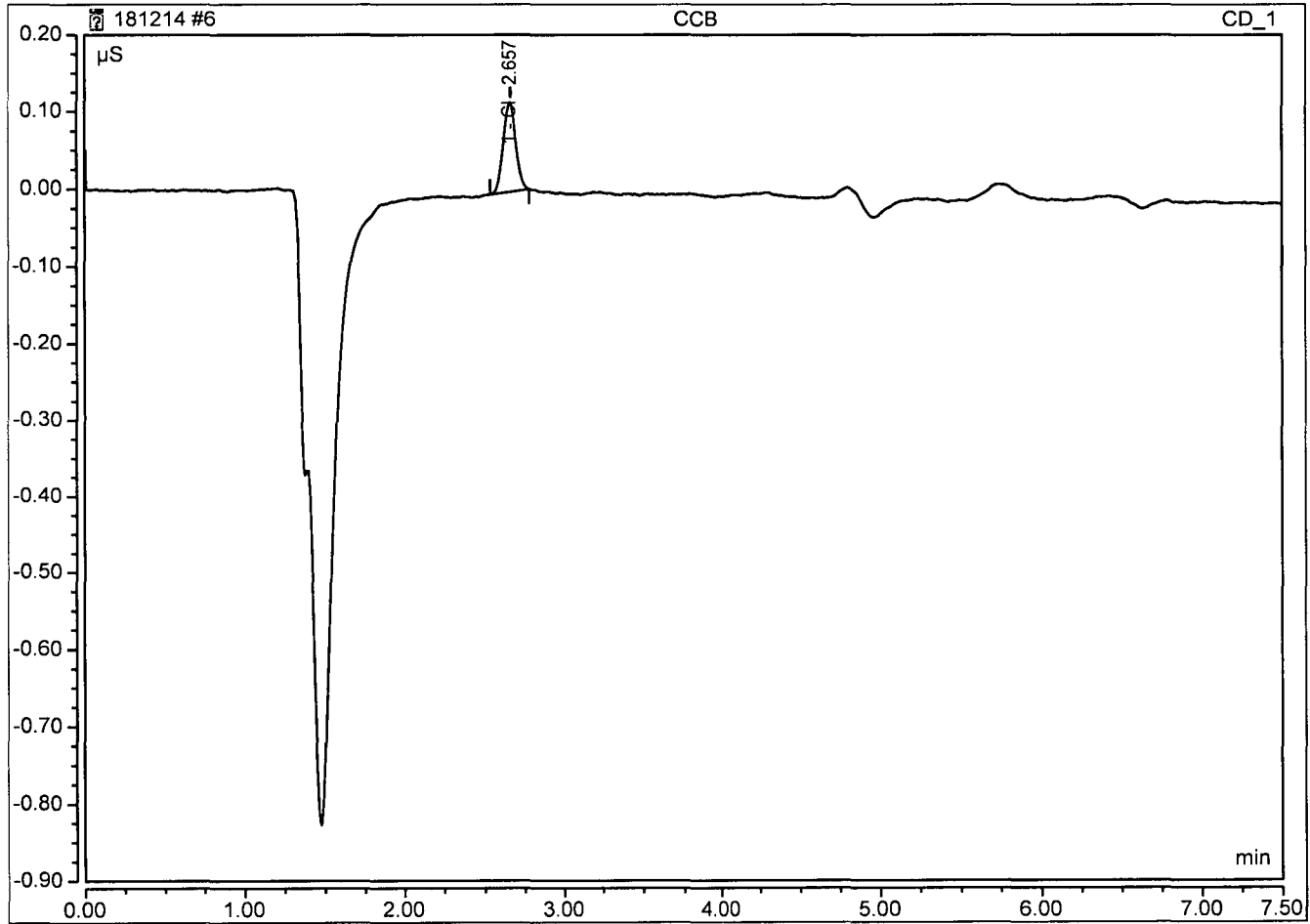
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	2.66	Cl	BMB	0.010	0.111	0.2046
TOTAL:				0.01	0.11	0.20



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 10:15	Run Time:	7.50

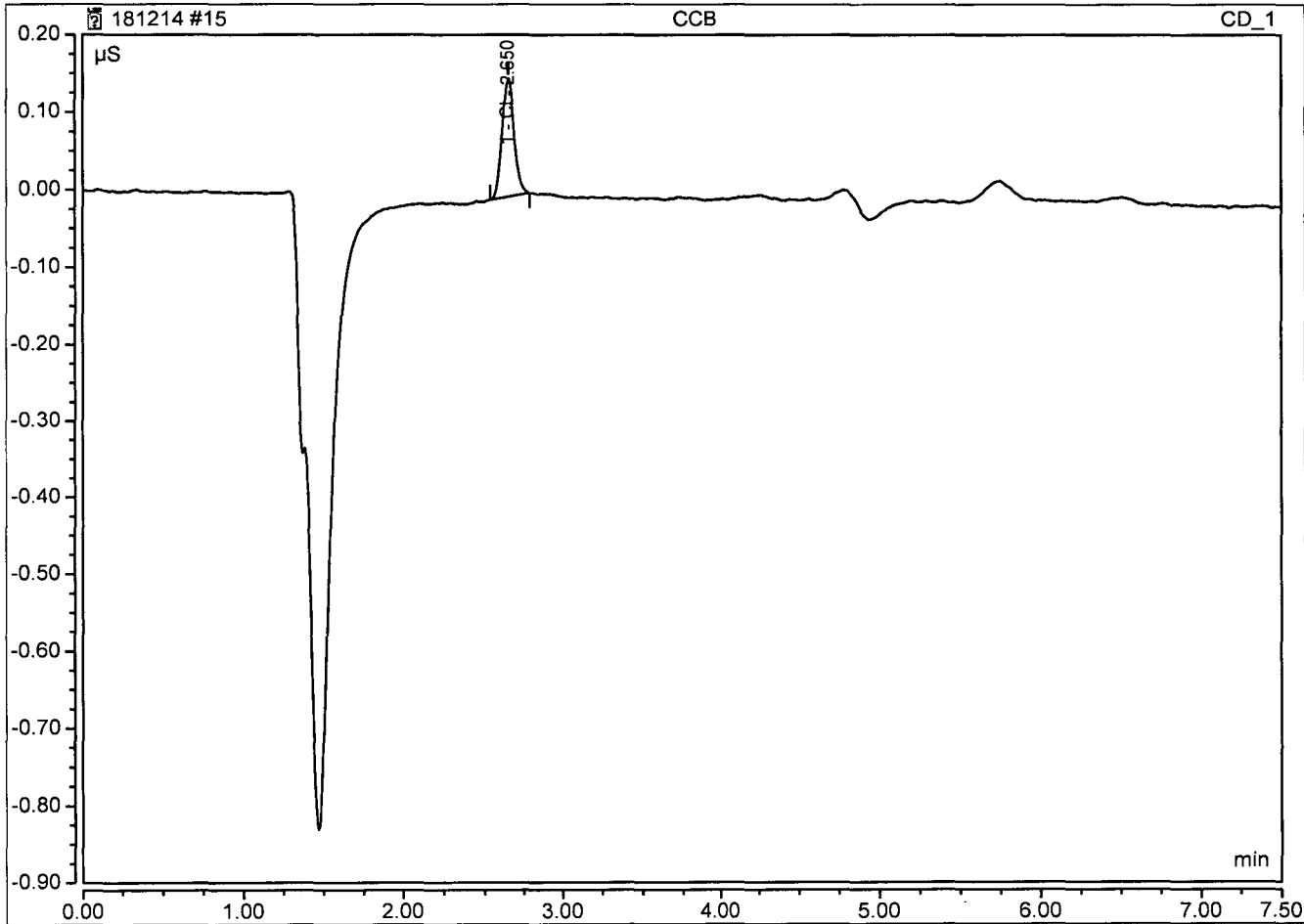
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	2.66	Cl	BMB	0.010	0.116	0.2090
TOTAL:				0.01	0.12	0.21



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 13:11	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	2.65	Cl	BMB	0.013	0.153	0.2371
TOTAL:				0.01	0.15	0.24





A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87650 SDG: 87650

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

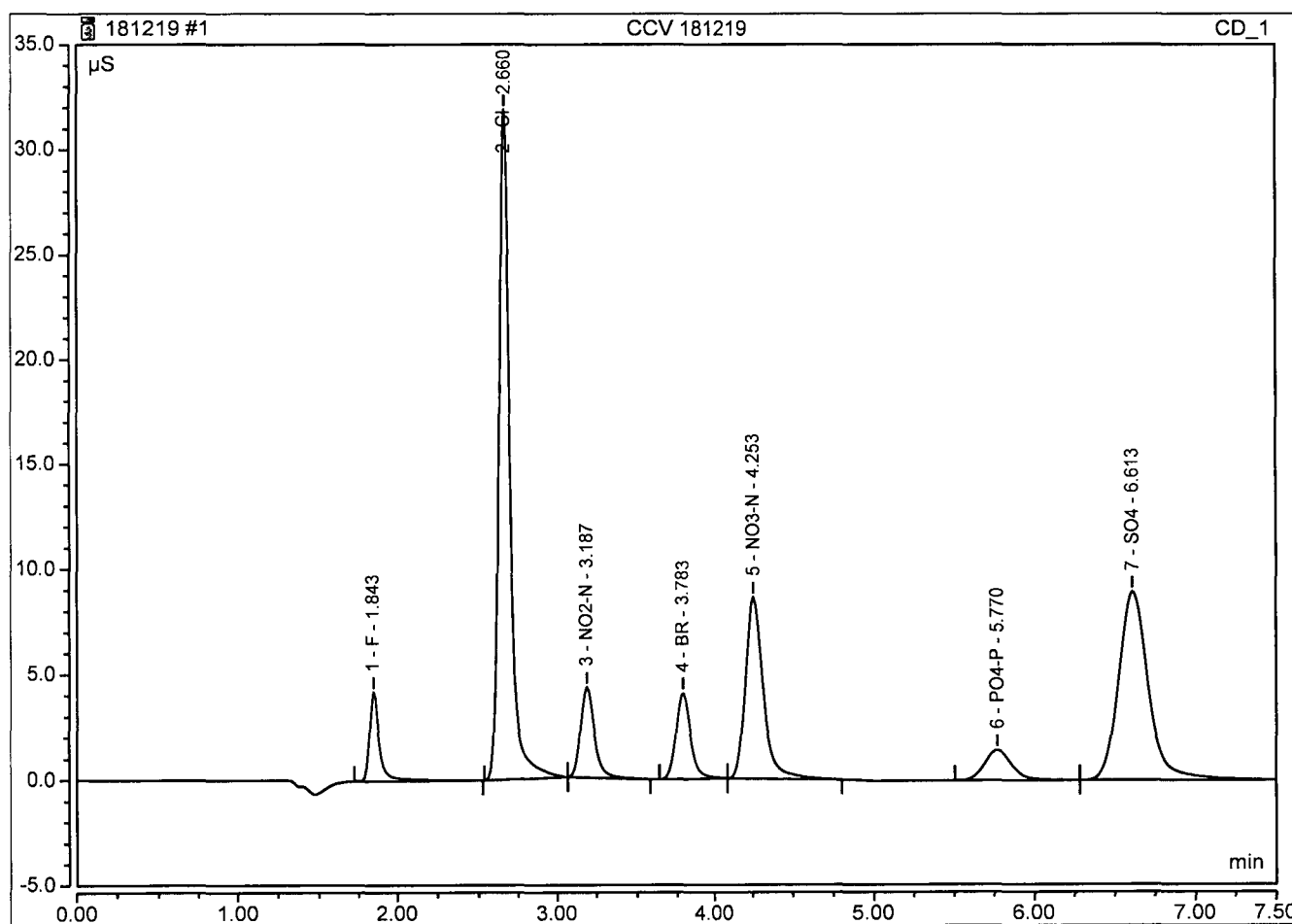
Analysis Date: 12/19/18

Analyte	Calibration Verification									M
	True CCV1	Found 9:16	%R(1)	True CCV1	Found 10:16	%R(1)	True	Found	%R(1)	
chloride	25	23.0855	92.3	25	23.0985	92.4				

### Peak Integration Report

Sample Name:	CCV 181219	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 09:16	Run Time:	7.50

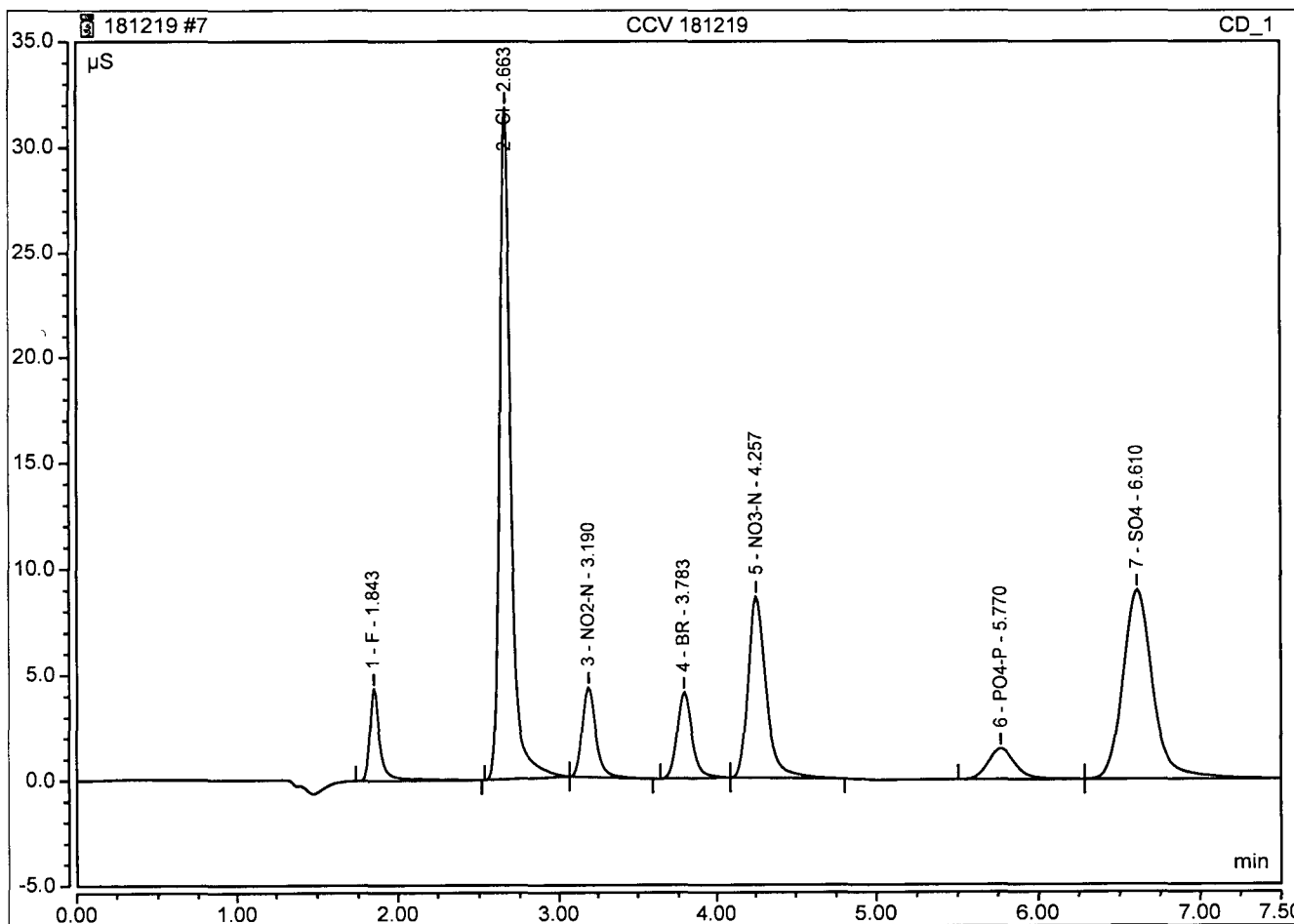
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.321	4.216	2.3981
2	2.66	Cl	BMB	2.563	31.871	23.0855
3	3.19	NO2-N	BMB	0.435	4.272	2.3021
4	3.78	BR	BMB	0.458	4.072	11.5171
5	4.25	NO3-N	BMB	1.116	8.600	4.7046
6	5.77	PO4-P	BMB	0.283	1.427	4.1679
7	6.61	SO4	BMB	1.920	8.932	26.8371
TOTAL:				7.10	63.39	75.01



### Peak Integration Report

Sample Name:	CCV 181219	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 10:16	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.329	4.361	2.4615
2	2.66	Cl	BMB	2.564	31.830	23.0985
3	3.19	NO <sub>2</sub> -N	BMB	0.436	4.269	2.3062
4	3.78	BR	BMB	0.459	4.074	11.5517
5	4.26	NO <sub>3</sub> -N	BMB	1.117	8.589	4.7081
6	5.77	PO <sub>4</sub> -P	BMB	0.286	1.448	4.1982
7	6.61	SO <sub>4</sub>	BMB	1.920	8.953	26.8430
TOTAL:				7.11	63.52	75.17



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87650

SDG: 87650

Preparation Blank Matrix (soil/water): water

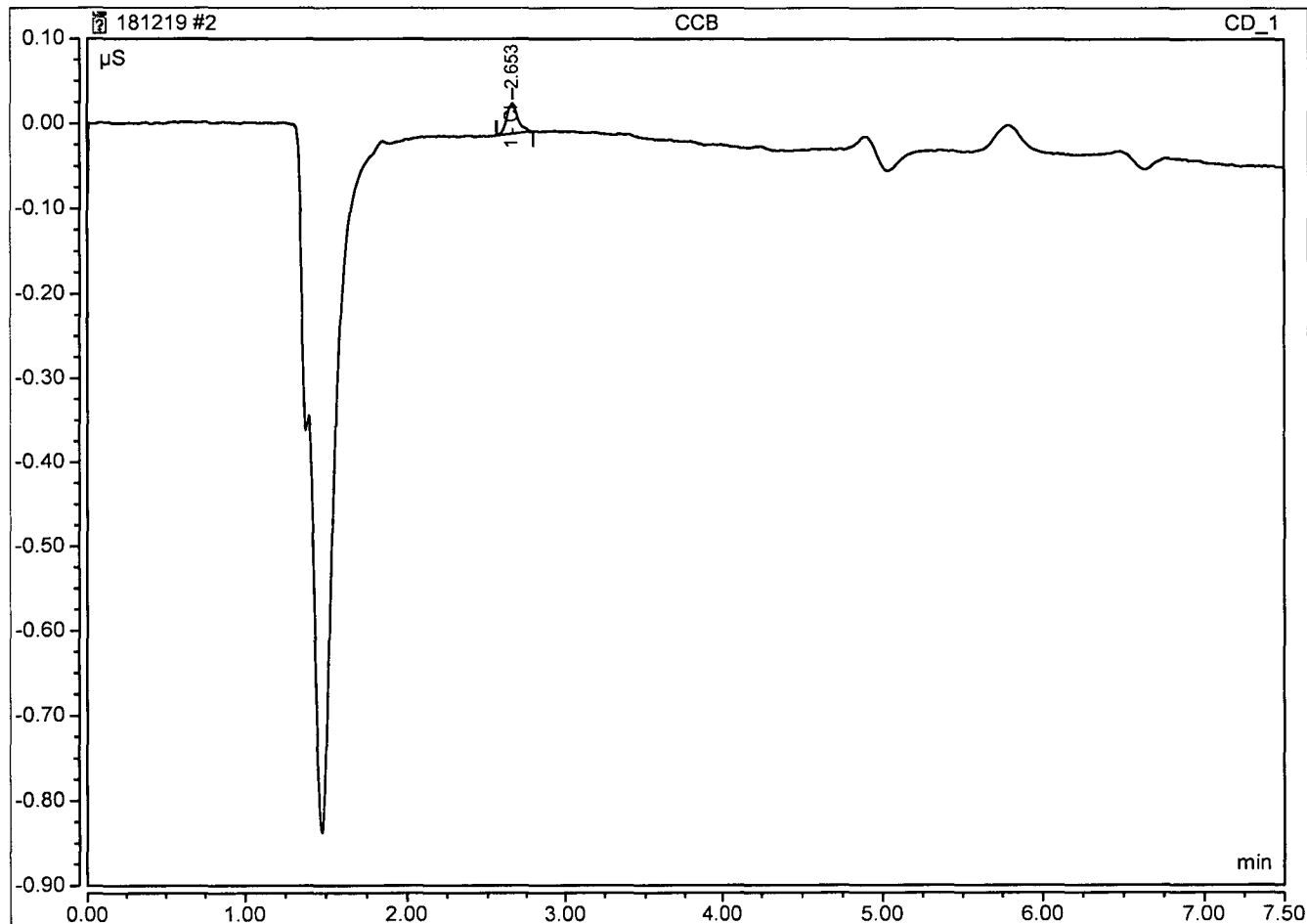
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 12/19/18 09:26	C	CCB 12/19/18 10:26	C		C		C		C	
chloride	.143	J	.146	J							

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 09:26	Run Time:	7.50

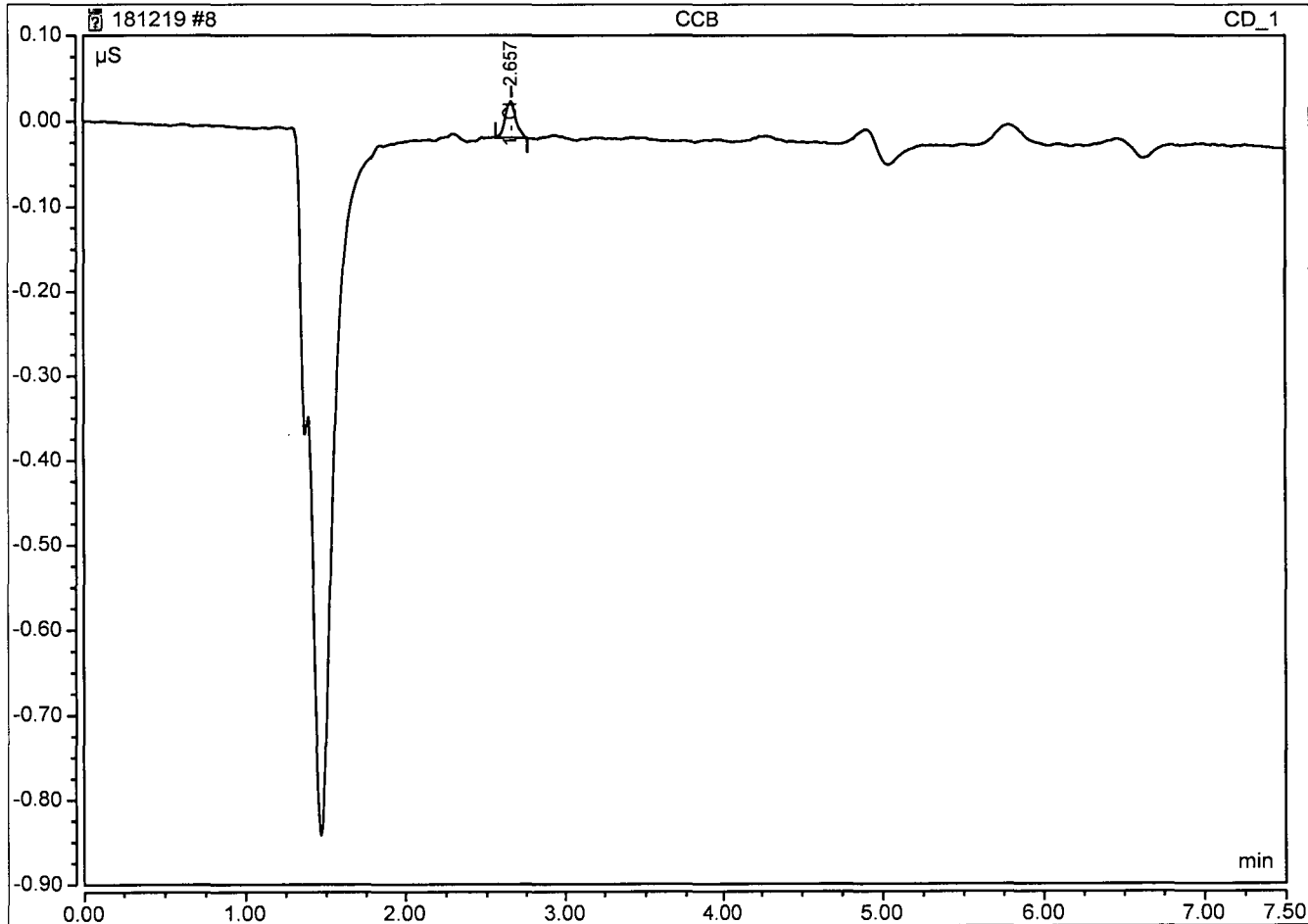
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	2.65	Cl	BMB	0.003	0.036	0.1432
TOTAL:				0.00	0.04	0.14



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 10:26	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	2.66	Cl	BMB	0.003	0.043	0.1462
TOTAL:				0.00	0.04	0.15



A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87650 SDG: 87650

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 12/19/18

Analyte	Calibration Verification									M
	True ICV	Found 16:38	%R(1)	True CCV1	Found 16:42	%R(1)	True CCV1	Found 17:08	%R(1)	
TOXN	3	3.025	101	3	2.9889	99.6	3	2.9247	97.5	

(1) Control Limits: 90-110

ILM02.0

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87650 SDG: 87650

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 12/19/18

Analyte	Calibration Verification									M
	True CCV1	Found 17:29	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
TOXN	3	2.9721	99.1							



BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87650

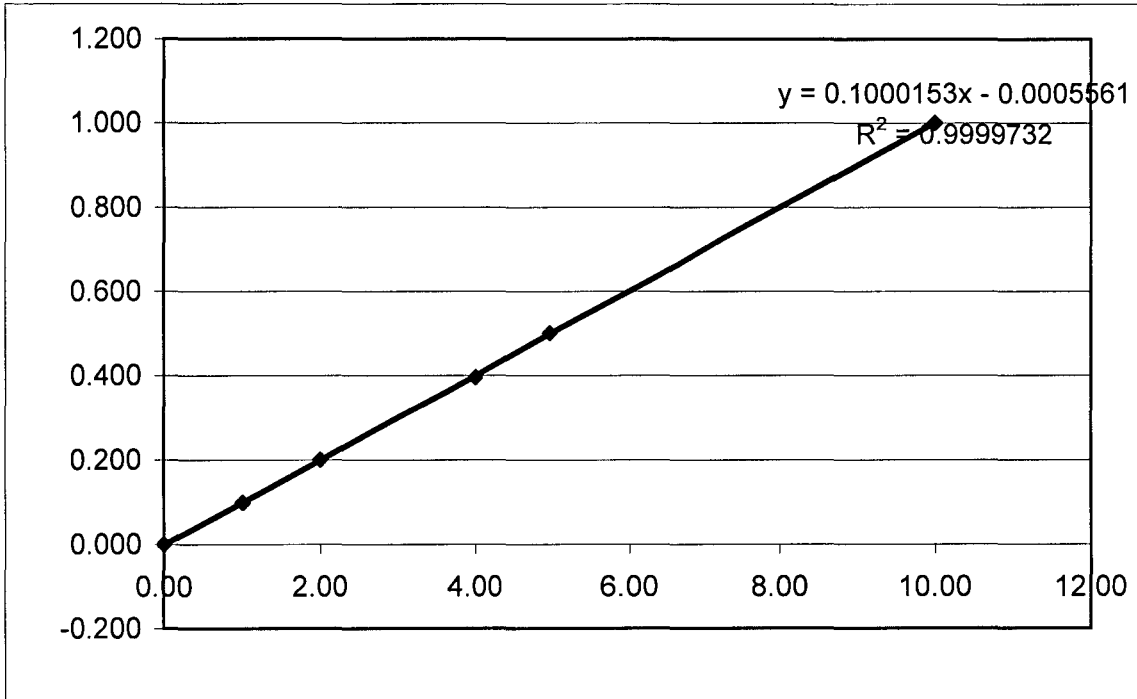
SDG: 87650

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB 12/19/18 16:40	C	CCB 12/19/18 16:44	C	CCB 12/19/18 17:11	C	CCB 12/19/18 17:30	C		C	
TOXN	.100	U	.100	U	.100	U	.100	U			

181214 Ferrous Iron



X	Y
0.00	0.000
1.00	0.099
2.00	0.201
4.00	0.396
5.00	0.501
10.00	1.000

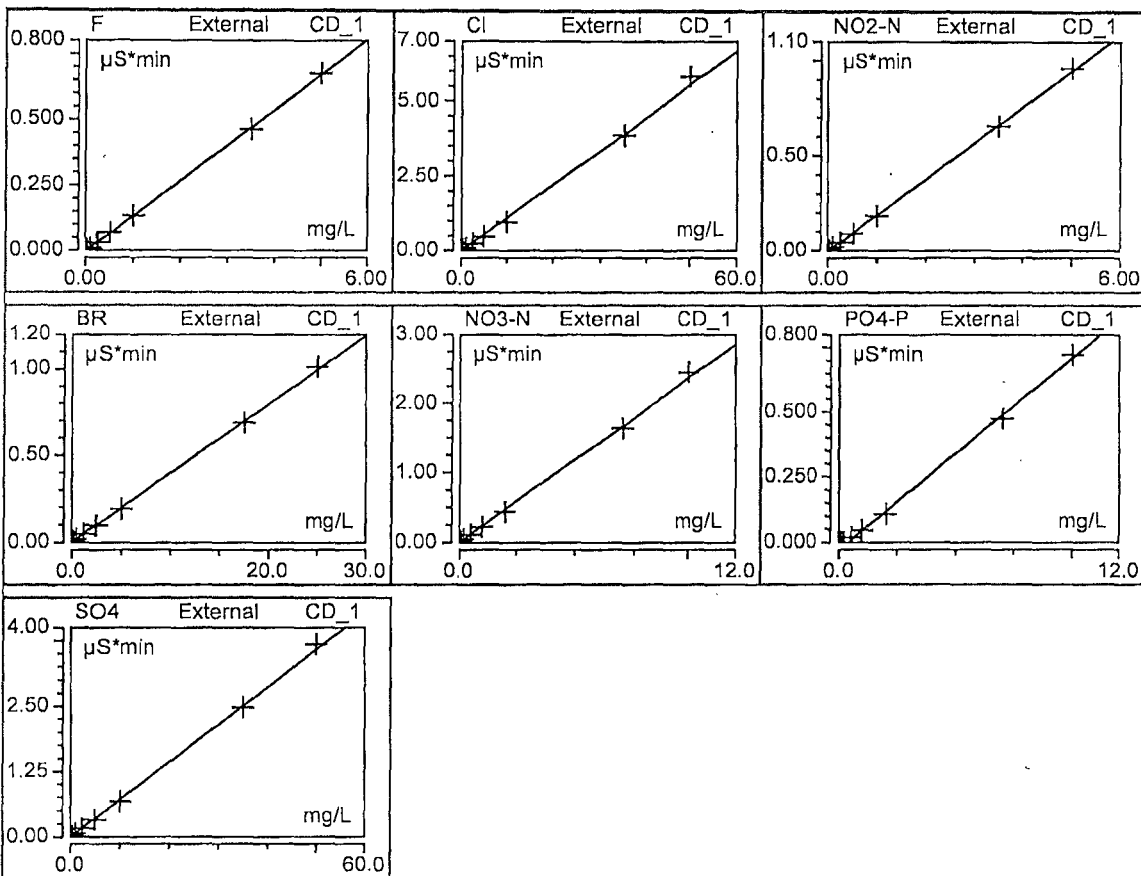
Algorithm Check  
 reading (y)= 0.314  
 dilution= 1  
 result (x)= 3.15  
 Compares to: 3.14507983

12/19/18 15:21  
 HH

### Calibration Batch Report

Sequence:	181127	Injection Volume:	25.00
Instrument Method:	Anions IM	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 11:26	Run Time:	8.5

Calibration Summary						
Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Coeff.Det. %
F	Area	Lin, WithOffset, 1/A	7	-0.002163	0.134634	99.94
Cl	Area	Lin, WithOffset, 1/A	7	-0.012940	0.111571	99.53
NO2-N	Area	Lin, WithOffset, 1/A	7	-0.001391	0.189745	99.96
BR	Area	Lin, WithOffset, 1/A	7	-0.001090	0.039849	99.96
NO3-N	Area	Lin, WithOffset, 1/A	7	-0.003776	0.238062	99.84
PO4-P	Area	Lin, WithOffset	5	-0.030312	0.074041	99.86
SO4	Area	Lin, WithOffset, 1/A	7	-0.004838	0.071702	99.86

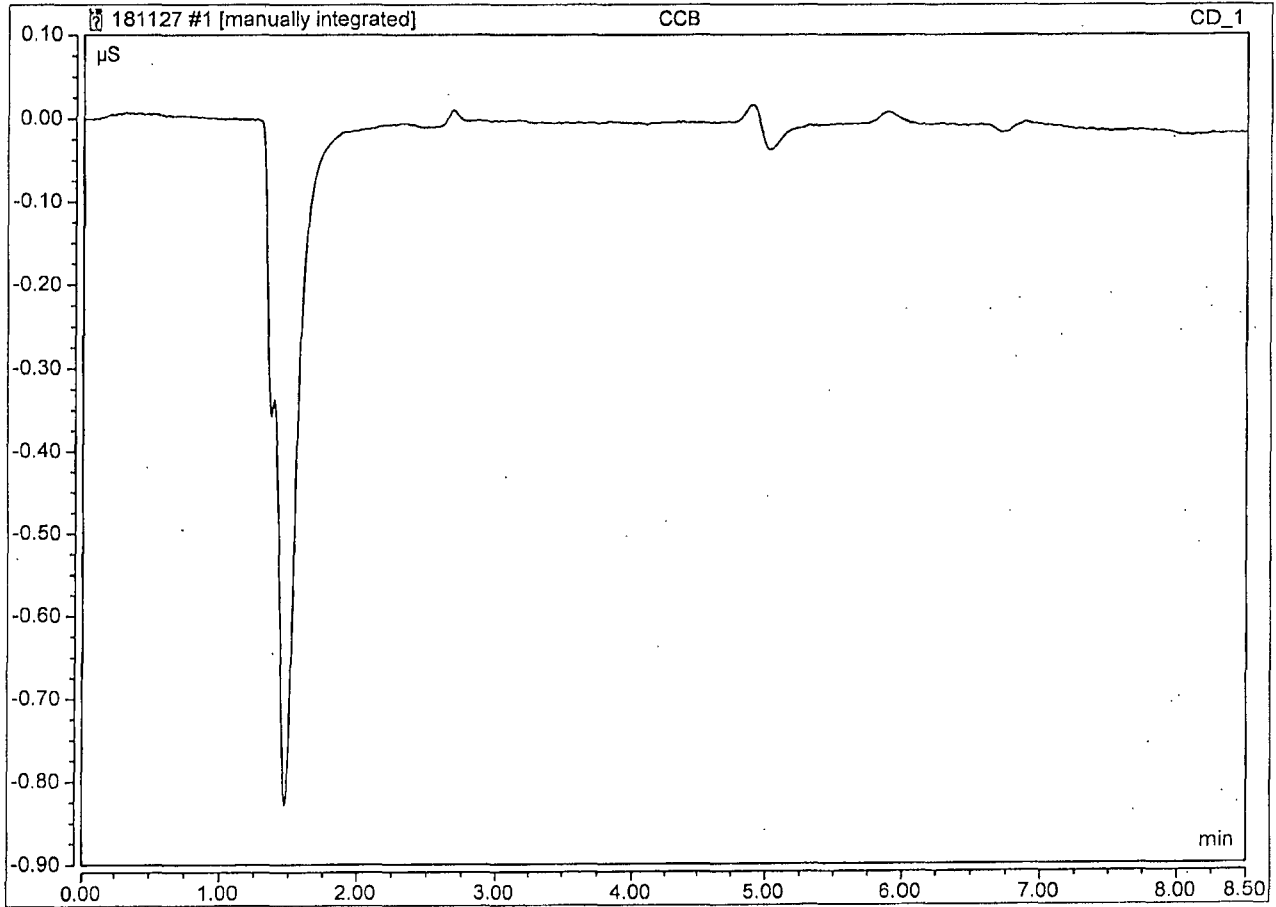


Injection Name	Amount mg/L CD 1	Amount mg/L CD 1	Amount mg/L CD 1	Amount mg/L CD 1	Amount mg/L CD 1	Amount mg/L CD 1	Amount mg/L CD 1
	F	Cl	NO2-N	BR	NO3-N	PO4-P	SO4
i cal 1	0.045	0.5423	0.0406	0.2120	0.0913	n.a.	0.4797
i cal 2	0.086	0.9617	0.1085	0.4986	0.2055	n.a.	0.9817
i cal 3	0.240	2.2667	0.2405	1.2444	0.4791	0.6492	2.3293
i cal 4	0.523	4.3095	0.4780	2.4463	0.9272	1.0224	4.6465
i cal 5	1.009	8.7534	0.9747	4.8156	1.8570	1.8703	9.3979
i cal 6	3.450	34.6964	3.4715	17.2923	6.8974	6.8061	34.6349
i cal 7	5.037	52.3700	5.0763	25.4408	10.3225	10.1520	51.4300

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 180923	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:03	Run Time:	8.50

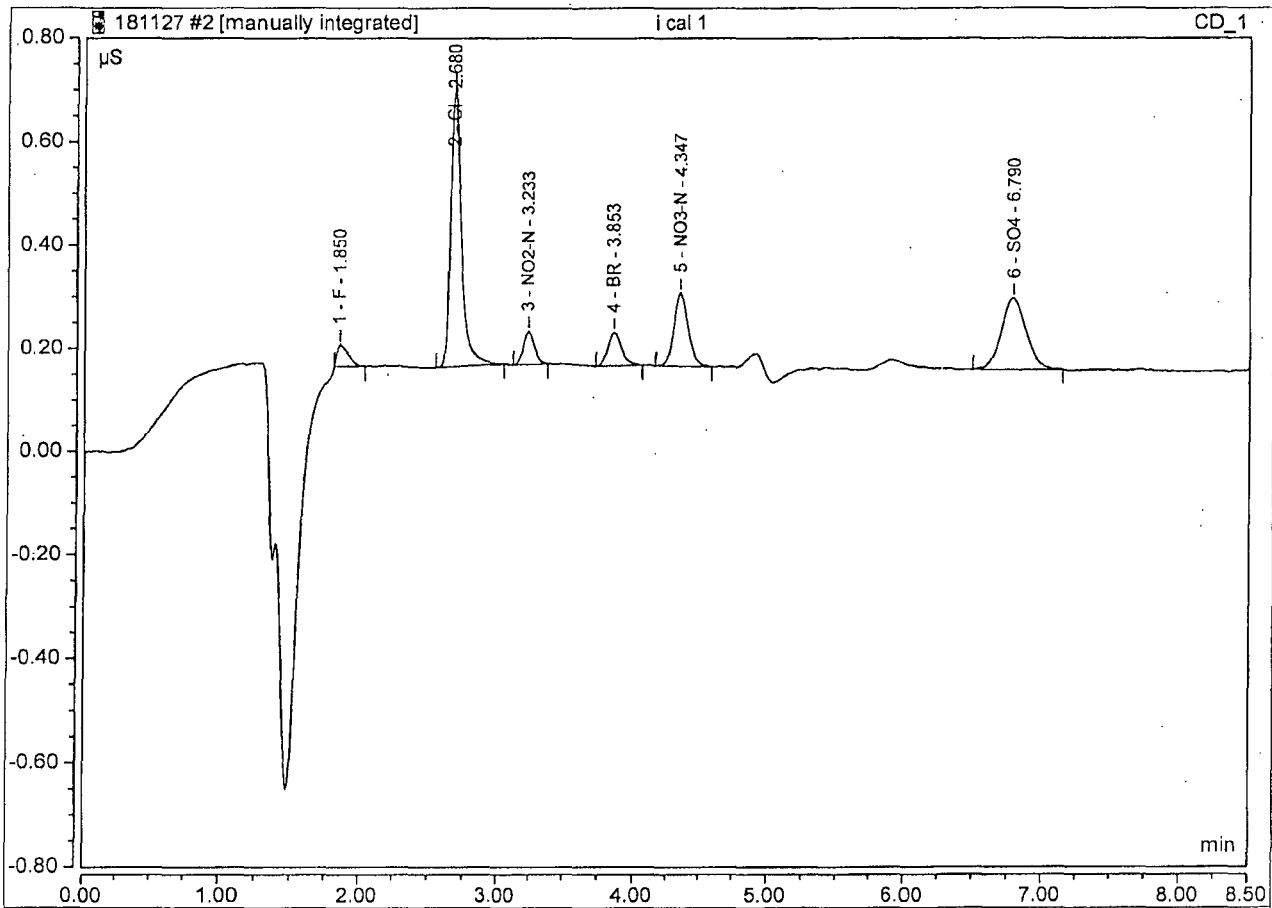
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount n.a.
TOTAL:				0.00	0.00	0.00



**Peak Integration Report**

Sample Name:	i cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:20	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB*	0.004	0.043	0.0459
2	2.68	Cl	BMB	0.048	0.544	0.5431
3	3.23	NO2-N	BMB	0.006	0.064	0.0420
4	3.85	BR	BMB	0.007	0.065	0.2122
5	4.35	NO3-N	BMB	0.018	0.142	0.0921
6	6.79	SO4	BMB	0.030	0.140	0.4882
TOTAL:				0.11	1.00	1.42



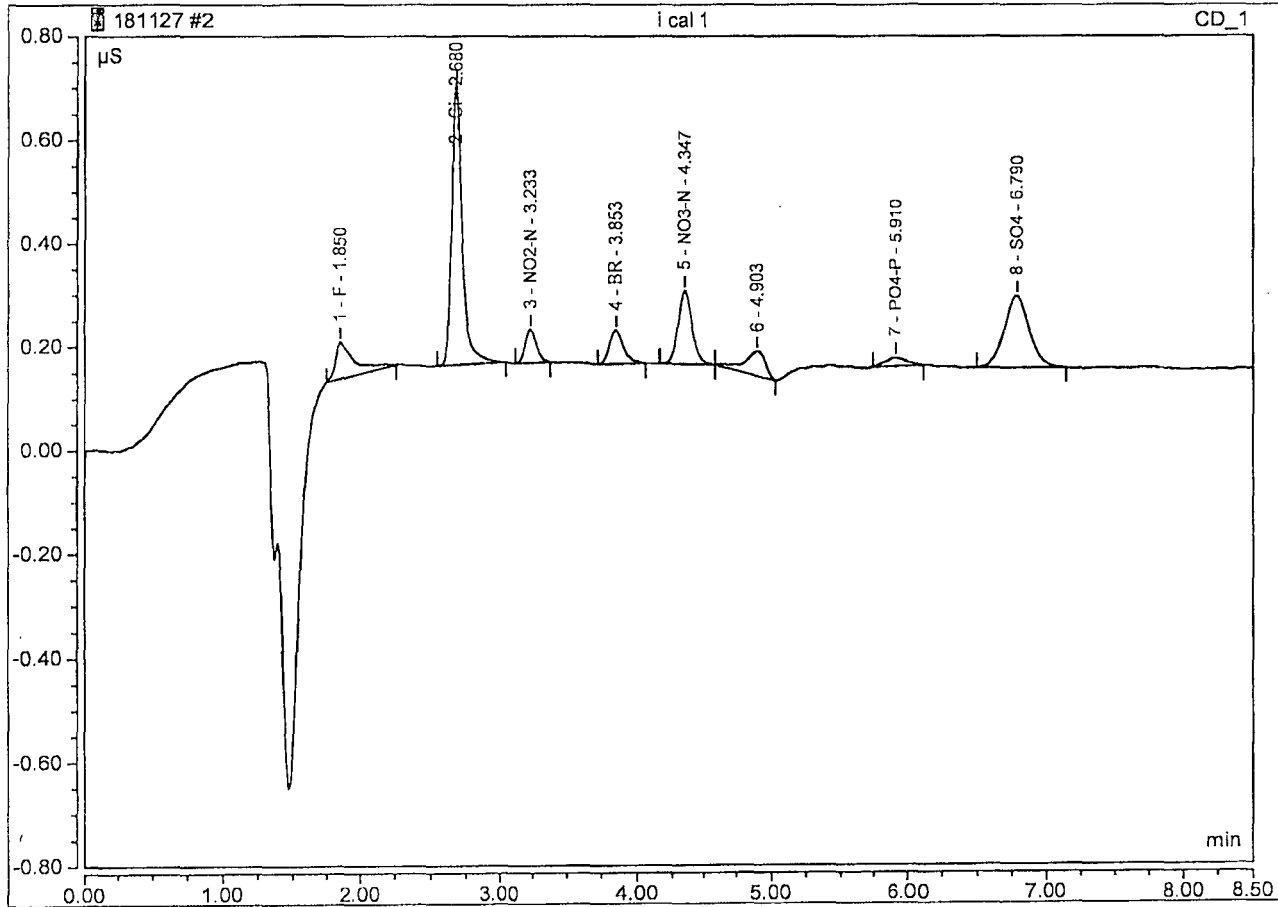
F M:1 HH 181130

JR  
 11.30.18

### Peak Integration Report

Sample Name:	i cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:20	Run Time:	8.50

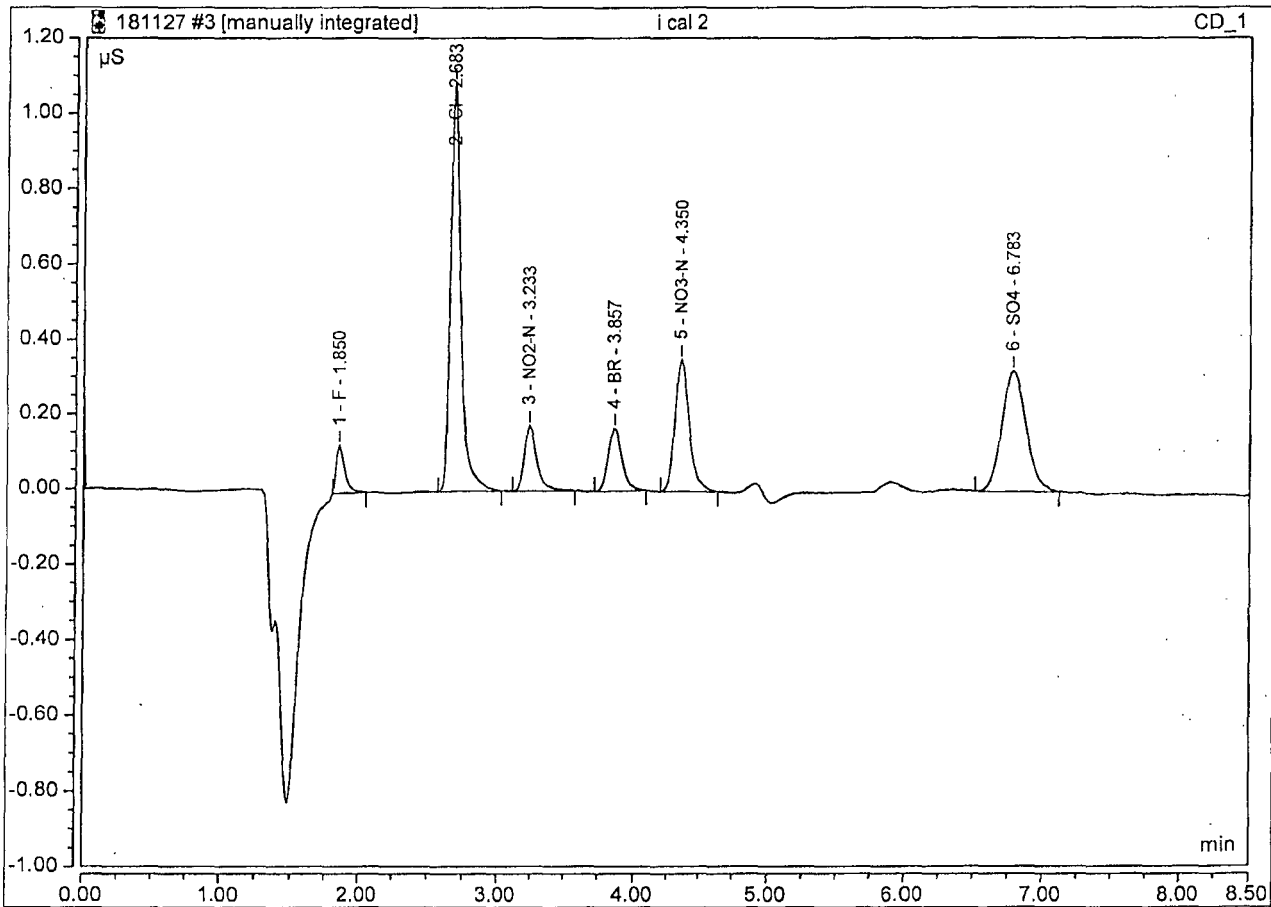
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.011	0.069	0.0996
2	2.68	Cl	BMB	0.048	0.544	0.5431
3	3.23	NO2-N	BMB	0.006	0.064	0.0420
4	3.85	BR	BMB	0.007	0.065	0.2122
5	4.35	NO3-N	BMB	0.018	0.142	0.0921
7	5.91	PO4-P	BMB	0.003	0.017	0.3029
8	6.79	SO4	BMB	0.030	0.140	0.4882
TOTAL:				0.12	1.04	1.78



**Peak Integration Report**

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:31	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB*	0.009	0.128	0.0869
2	2.68	Cl	BMB	0.094	1.091	0.9625
3	3.23	NO2-N	BMB	0.019	0.175	0.1098
4	3.86	BR	BMB	0.019	0.167	0.4988
5	4.35	NO3-N	BMB	0.045	0.352	0.2063
6	6.78	SO4	BMB	0.066	0.321	0.9899
TOTAL:				0.25	2.23	2.85



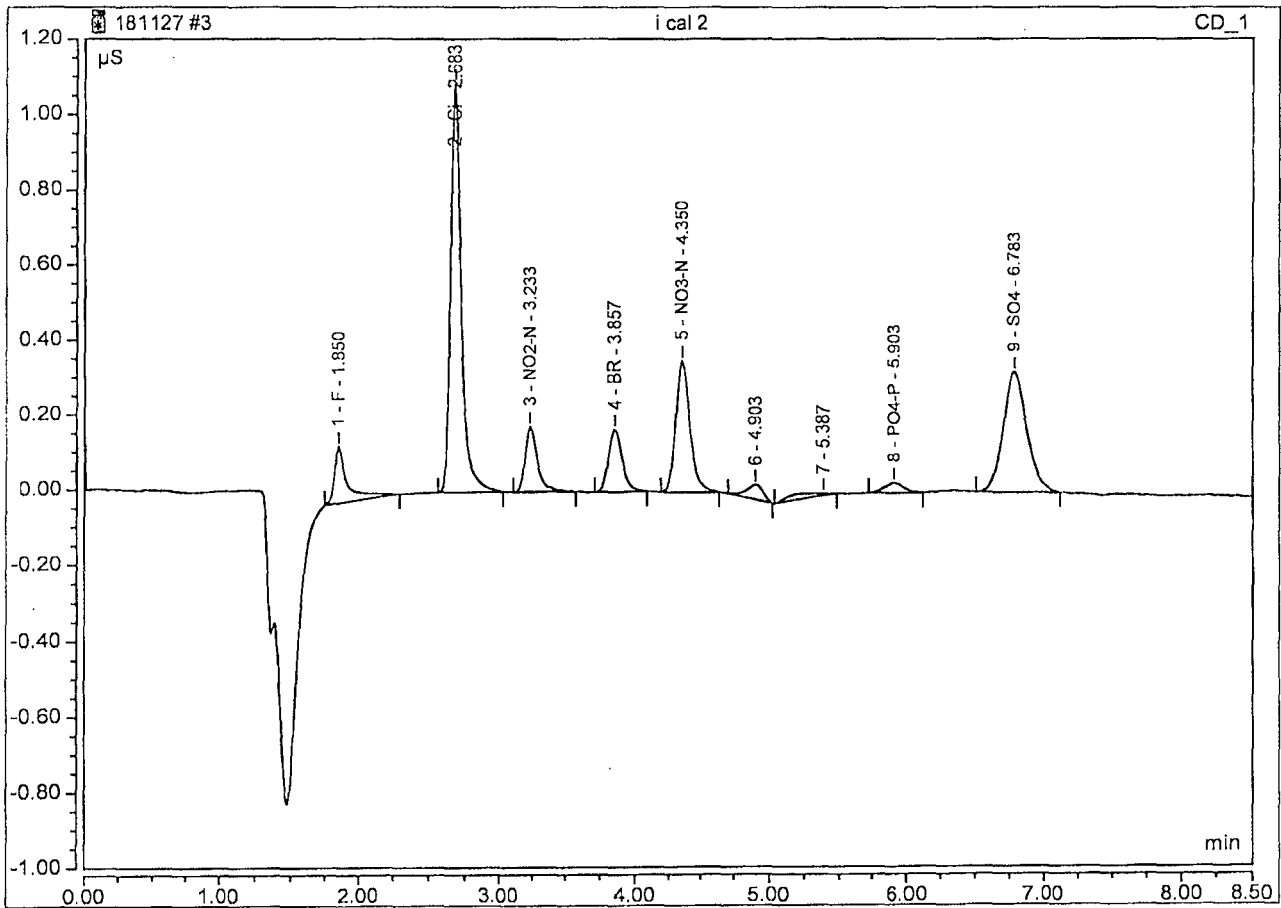
F M:1 HM 181130

JR  
 11-30-18

### Peak Integration Report

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:31	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.017	0.152	0.1413
2	2.68	Cl	BMB	0.094	1.091	0.9625
3	3.23	NO2-N	BMB	0.019	0.175	0.1098
4	3.86	BR	BMB	0.019	0.167	0.4988
5	4.35	NO3-N	BMB	0.045	0.352	0.2063
8	5.90	PO4-P	BMB	0.005	0.028	0.3245
9	6.78	SO4	BMB	0.066	0.321	0.9899
TOTAL:				0.26	2.29	3.23

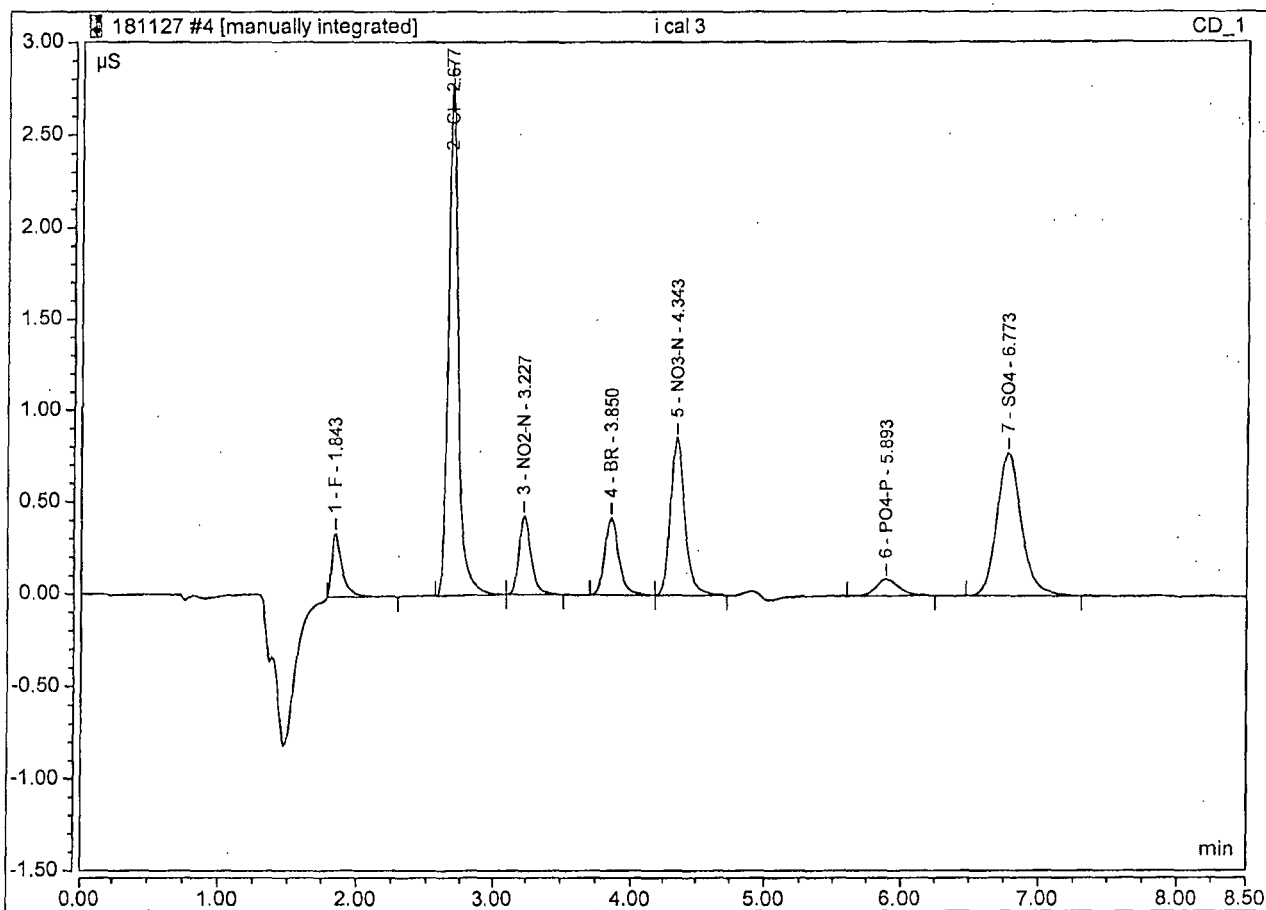




### Peak Integration Report

Sample Name:	i cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:42	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB*	0.030	0.349	0.2403
2	2.68	Cl	BMB	0.240	2.813	2.2674
3	3.23	NO2-N	BMB	0.044	0.429	0.2417
4	3.85	BR	BMB	0.048	0.420	1.2446
5	4.34	NO3-N	BMB	0.110	0.851	0.4798
6	5.89	PO4-P	BMB	0.018	0.090	0.5059
7	6.77	SO4	BMB	0.162	0.773	2.3369
TOTAL:				0.65	5.73	7.32



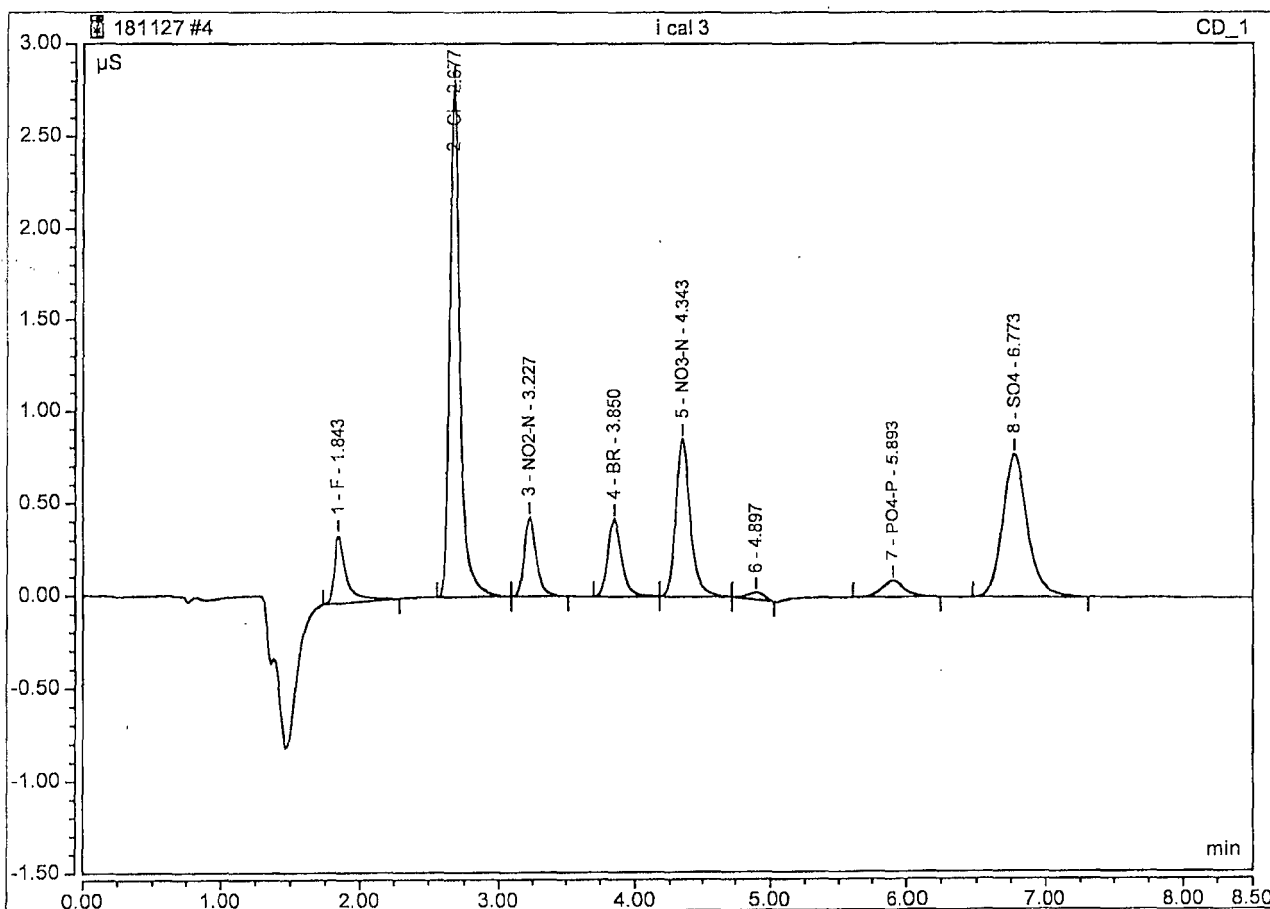
F M:1 HH 18430

11-30-18  
 J12

### Peak Integration Report

Sample Name:	i cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:42	Run Time:	8.50

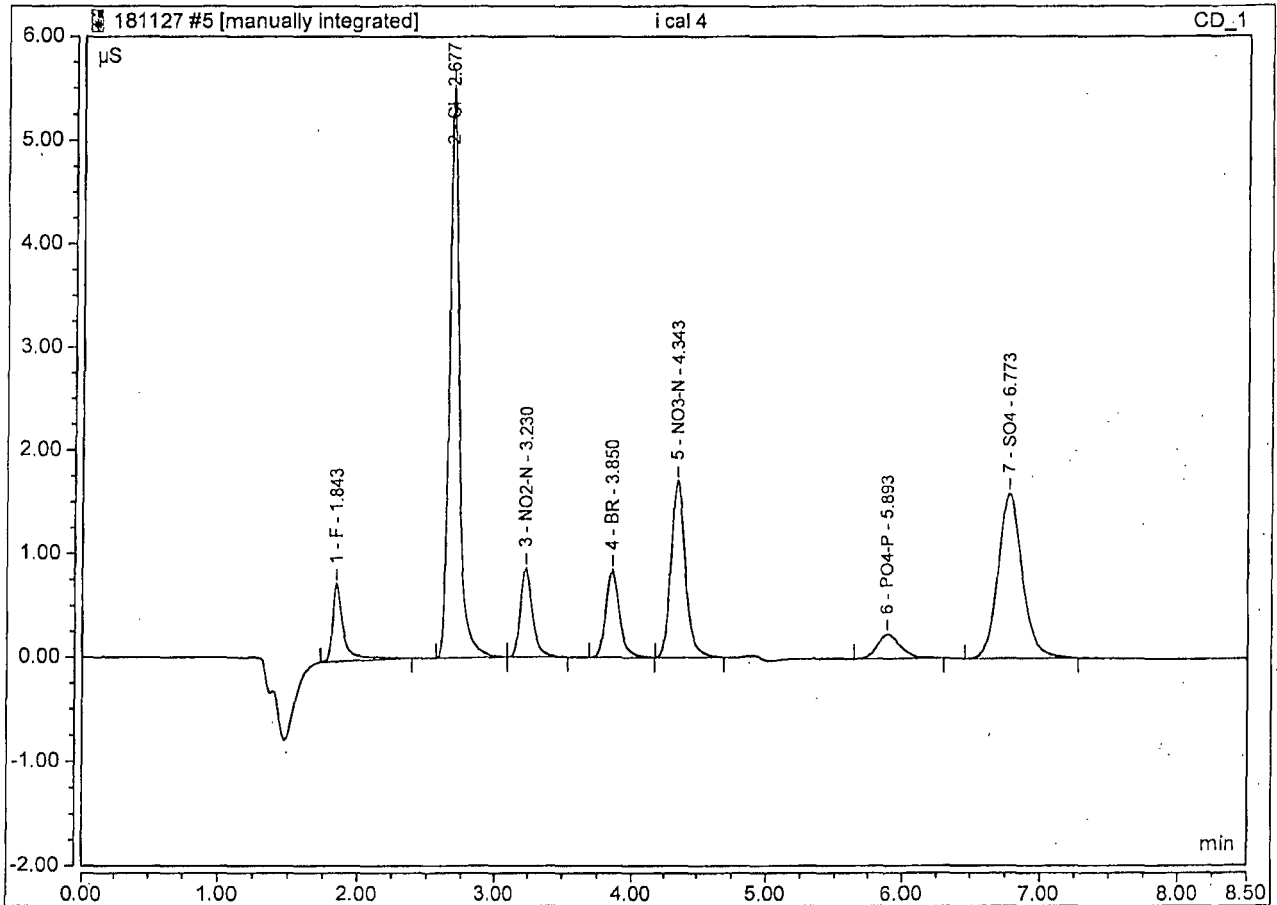
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.038	0.374	0.2955
2	2.68	Cl	BMB	0.240	2.813	2.2674
3	3.23	NO2-N	BMB	0.044	0.429	0.2417
4	3.85	BR	BMB	0.048	0.420	1.2446
5	4.34	NO3-N	BMB	0.110	0.851	0.4798
7	5.89	PO4-P	BMB	0.018	0.090	0.5059
8	6.77	SO4	BMB	0.162	0.773	2.3369
TOTAL:				0.66	5.75	7.37



Peak Integration Report

Sample Name:	i cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 10:53	Run Time:	8.50

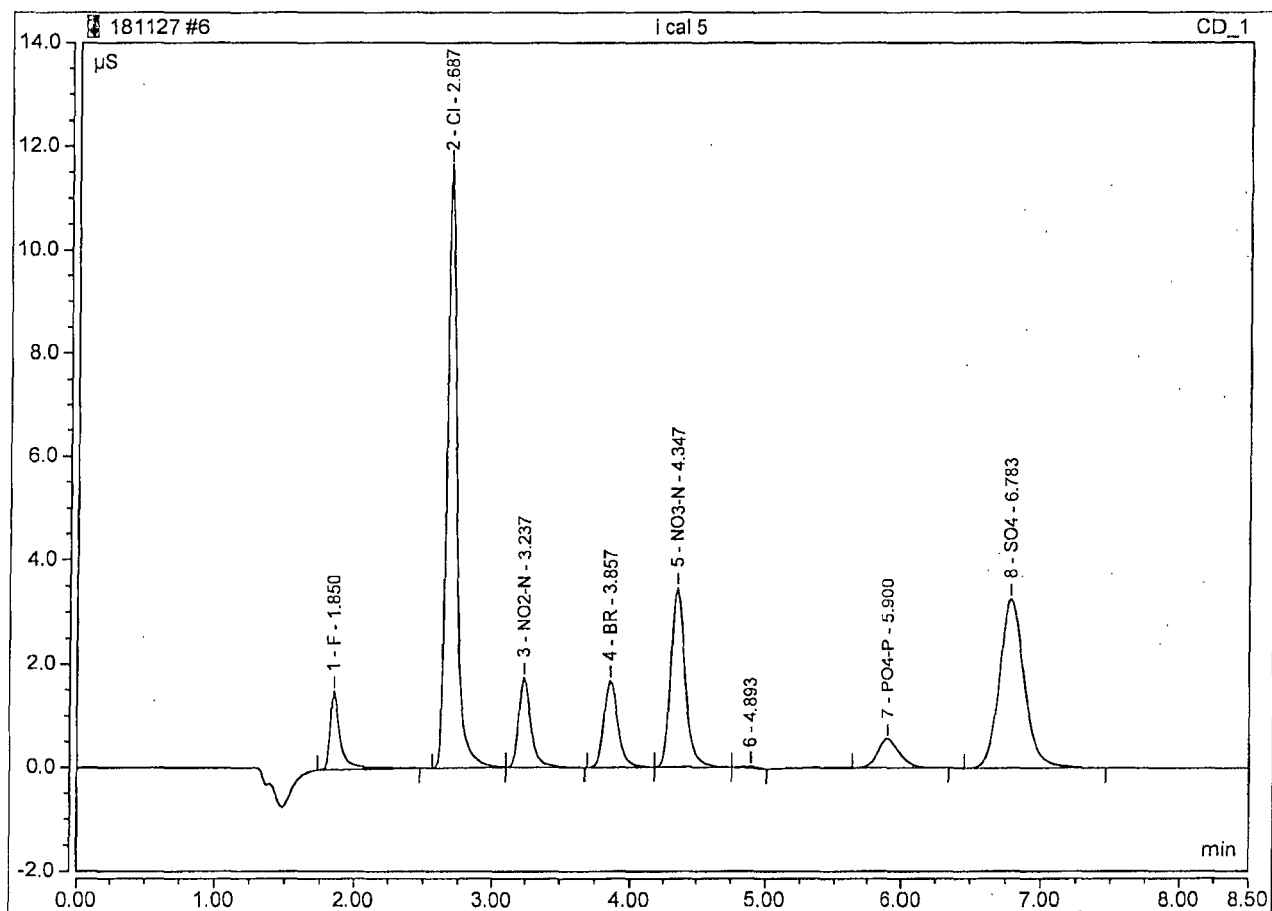
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.068	0.748	0.5233
2	2.68	Cl	BMB	0.468	5.537	4.3101
3	3.23	NO2-N	BMB	0.089	0.861	0.4790
4	3.85	BR	BMB	0.096	0.841	2.4465
5	4.34	NO3-N	BMB	0.217	1.701	0.9278
6	5.89	PO4-P	BMB	0.045	0.235	0.8867
7	6.77	SO4	BMB	0.328	1.585	4.6530
TOTAL:				1.31	11.51	14.23



### Peak Integration Report

Sample Name:	I cal 5	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 11:04	Run Time:	8.50

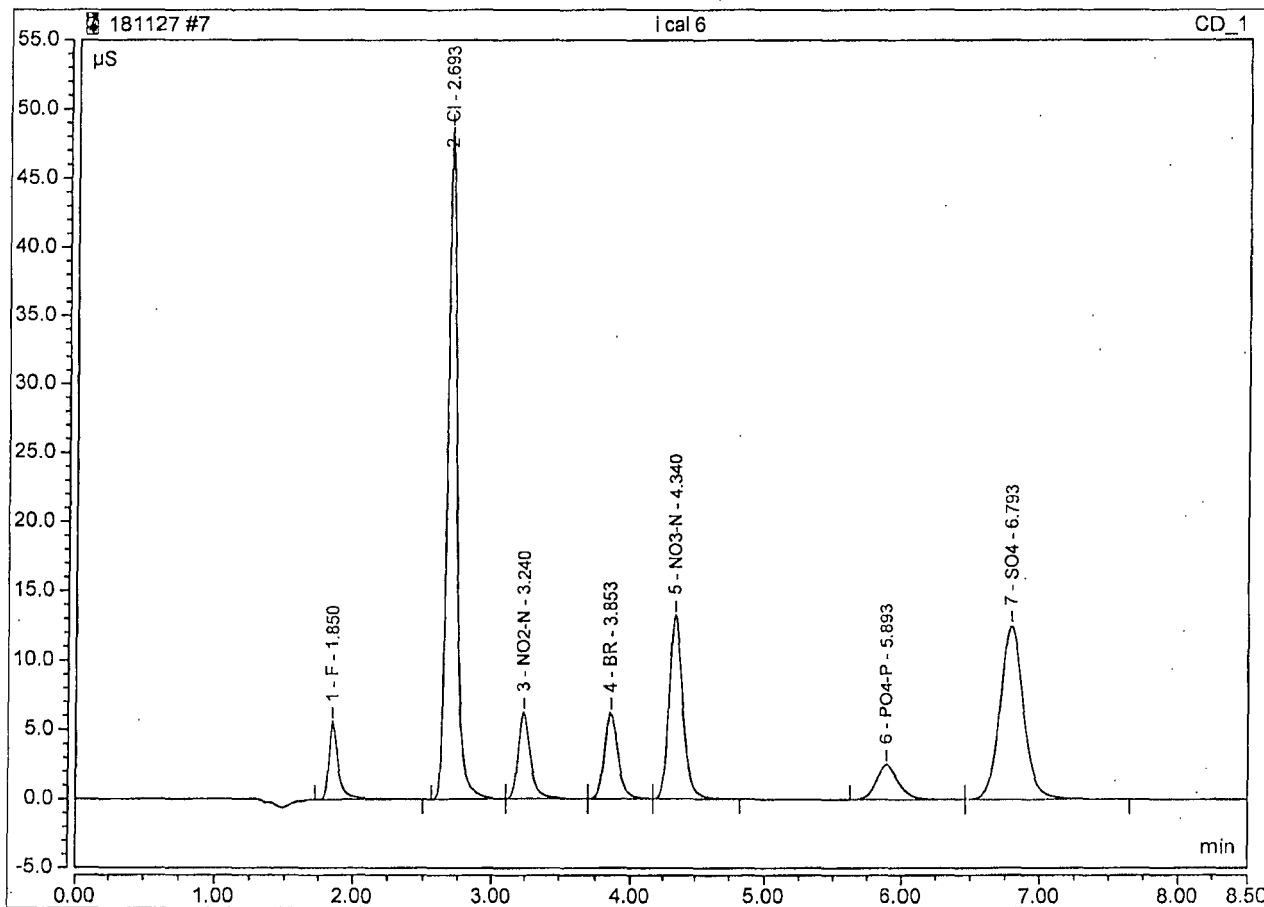
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.134	1.513	1.0091
2	2.69	Cl	BMB	0.964	11.645	8.7538
3	3.24	NO2-N	BMB	0.184	1.730	0.9753
4	3.86	BR	BMB	0.191	1.677	4.8158
5	4.35	NO3-N	BMB	0.438	3.440	1.8574
7	5.90	PO4-P	BMB	0.108	0.568	1.7521
8	6.78	SO4	BMB	0.669	3.239	9.4023
TOTAL:				2.69	23.81	28.57



Peak Integration Report

Sample Name:	I cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 11:15	Run Time:	8.50

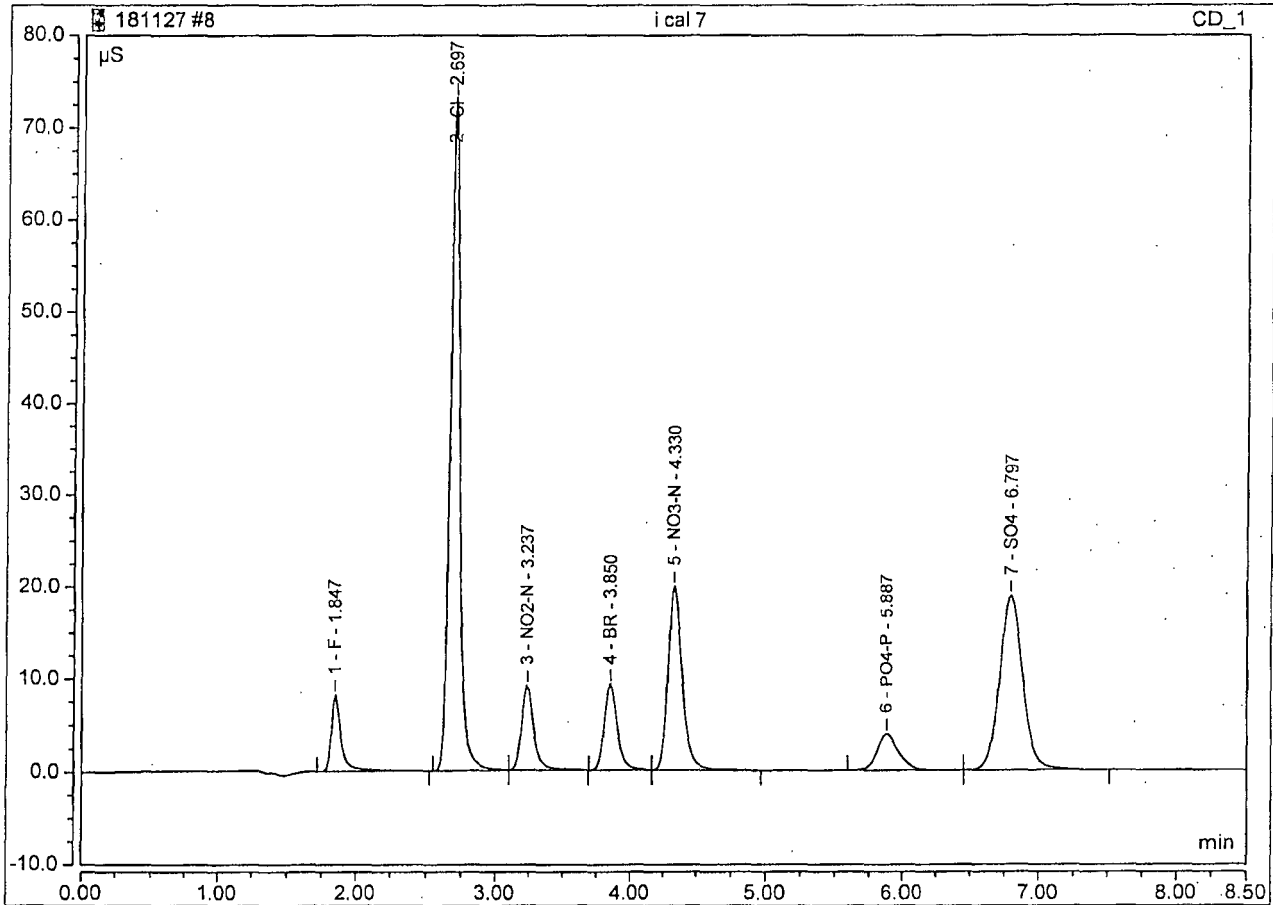
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.462	5.577	3.4493
2	2.69	Cl	BMB	3.858	48.545	34.6958
3	3.24	NO <sub>2</sub> -N	BMB	0.657	6.197	3.4703
4	3.85	BR	BMB	0.688	6.173	17.2921
5	4.34	NO <sub>3</sub> -N	BMB	1.638	13.163	6.8967
6	5.89	PO <sub>4</sub> -P	BMB	0.474	2.509	6.7892
7	6.79	SO <sub>4</sub>	BMB	2.479	12.413	34.6278
TOTAL:				10.26	94.58	107.22

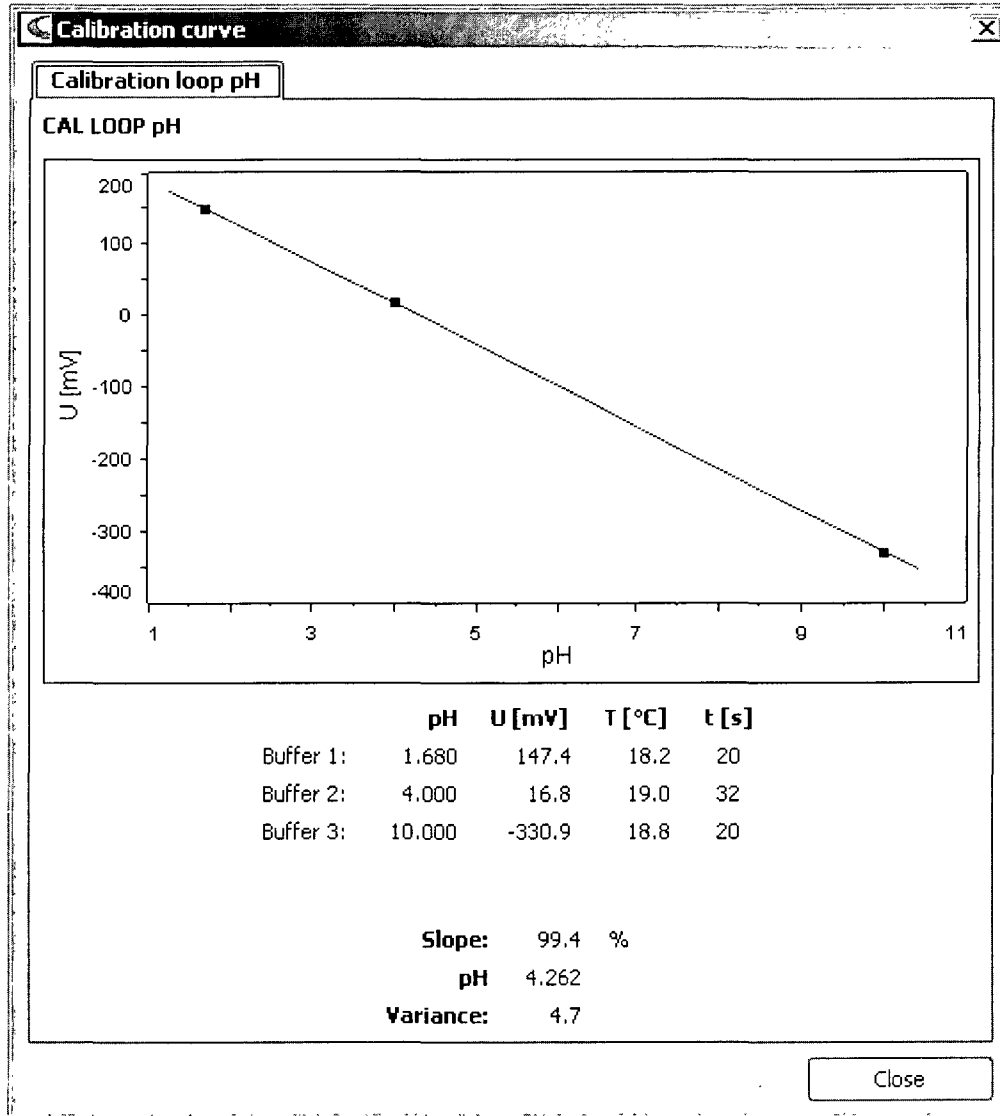


### Peak Integration Report

Sample Name:	i cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	27-Nov-2018 / 11:26	Run Time:	8.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.85	F	BMB	0.676	8.149	5.0363
2	2.70	Cl	BMB	5.830	73.072	52.3686
3	3.24	NO2-N	BMB	0.962	9.024	5.0739
4	3.85	BR	BMB	1.013	9.168	25.4404
5	4.33	NO3-N	BMB	2.454	19.773	10.3211
6	5.89	PO4-P	BMB	0.721	3.863	10.2038
7	6.80	SO4	BMB	3.683	18.737	51.4152
TOTAL:				15.34	141.79	159.86





**INORGANIC ANALYSIS**  
**Raw Data**

**APPL, INC.**



**SPECTROPHOTOMETRIC ANALYSIS (Ferrous Iron)**

Method: SM3500Fe  
 Analyte: Ferrous Iron  
 Analyst: HH  
 Units: mg/L  
 QCG: 181214  
 Notes:  
 Final Volume: 50mL

Instrument: GENESYS 10UV  
 Raw Spec: abs. @ 510nm  
 R-Squared: 0.99997  
 Reagent (lot#): COLORIZING REAGENT (181205/181214  
 BUFFER (09/19/18)

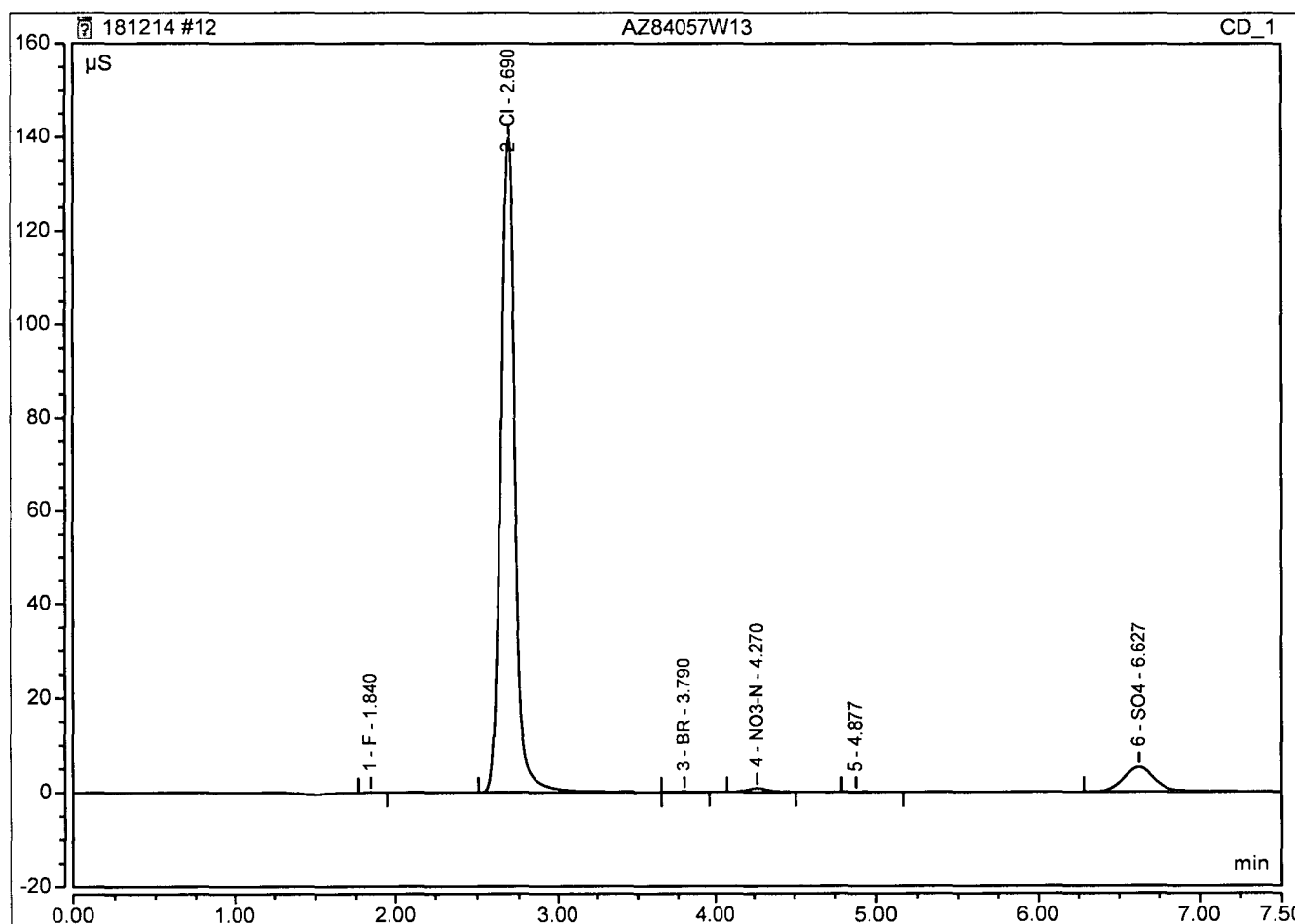
Analyst Completes  
 Formula Locked Cells

Date	Time	APPL ID	DF	Raw Result	SubSample Amt	Raw BLK	Calc Conc	Result	QC True	QC%
06/15/18	12:27	0 HH 180615	1	0.000	25mL					
06/15/18	12:27	1	1	0.099	25mL					
06/15/18	12:28	2	1	0.201	25mL					
06/15/18	12:28	3	1	0.396	25mL					
06/15/18	12:29	4	1	0.501	25mL					
06/15/18	12:30	5	1	1.000	25mL					
06/15/18	12:31	180615A ICV	1	0.316	25mL		3.17	3.17	3.000	105.5%
06/15/18	12:32	180615A ICB	1	0.000	25mL		0.01	0.01		
12/14/18	10:49	CCV 4.0 181214	1	0.399	25mL		3.99	3.995	4.000	99.9%
12/14/18	10:50	CCB 181214	1	0.002	25mL		0.03	0.026		
12/14/18	10:51	181214A LCS	1	0.314	25mL		3.15	3.145	3.000	104.8%
12/14/18	10:51	181214A LCSD	1	0.312	25mL		3.13	3.125	3.000	104.2%
12/14/18	10:52	AZ84227W09 df2	2	0.535	12.5mL		5.35	10.709		
12/14/18	10:53	AZ84225W09	1	0.220	25mL		2.21	2.205		
12/14/18	10:53	AZ84226W09	1	0.171	25mL		1.72	1.715		
12/14/18	10:54	AZ84217W09	1	0.086	25mL		0.87	0.865		
12/14/18	11:33	AZ84057W15	1	0.029	25mL		0.30	0.296		
12/14/18	11:33	AZ84057W15 DUP	1	0.029	25mL		0.30	0.296		
12/14/18	11:34	AZ84057W15 MS	1	0.345	25mL		3.46	3.455		
12/14/18	11:34	AZ84061W15	1	0.034	25mL		0.35	0.346		
12/14/18	11:35	CCV 4.0 181214	1	0.401	25mL		4.01	4.015	4.00	100.4%
12/14/18	11:35	CCB 181214	1	0.004	25mL		0.05	0.046		
12/14/18	15:40	CCV 4.0 181214	1	0.397	25mL		3.97	3.975	4.00	99.4%
12/14/18	15:41	CCB 181214	1	0.002	25mL		0.03	0.026		
12/14/18	15:41	AZ84220W09	1	0.146	25mL		1.47	1.465		
12/14/18	15:42	AZ84218W09	1	0.227	25mL		2.28	2.275		
12/14/18	15:43	AZ84223W09	1	0.190	25mL		1.91	1.905		
12/14/18	15:44	AZ84221W09	1	0.065	25mL		0.66	0.655		
12/14/18	15:45	AZ84216W09	1	0.073	25mL		0.74	0.735		
12/14/18	15:46	CCV 4.0 181214	1	0.401	25mL		4.01	4.015	4.000	100.4%
12/14/18	15:46	CCB 181214	1	0.002	25mL		0.03	0.026		

### Peak Integration Report

Sample Name:	AZ84057W13	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 11:51	Run Time:	7.50

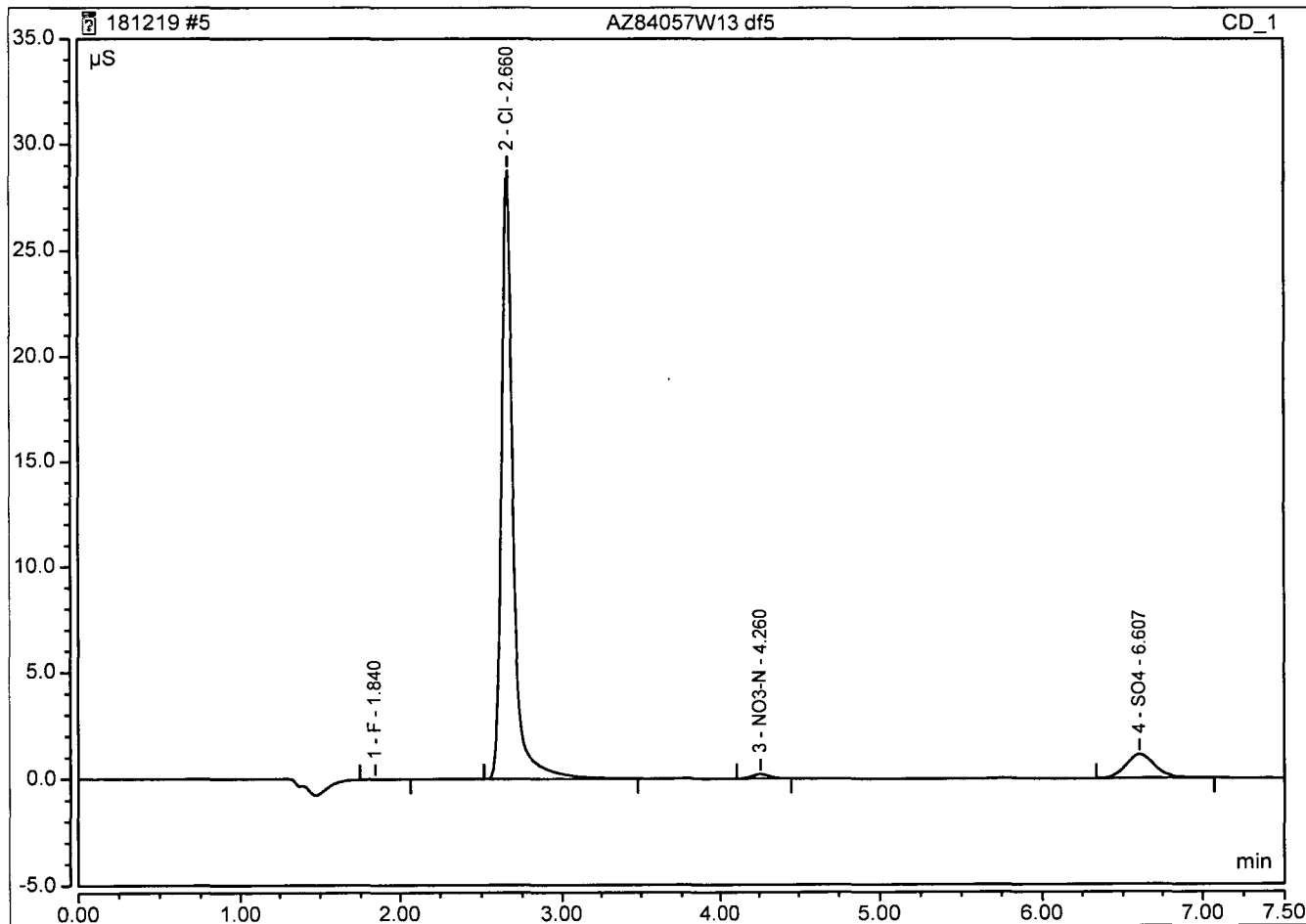
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.005	0.083	0.0558
2	2.69	Cl	BMB	14.032	139.677	125.8784
3	3.79	BR	BMB	0.013	0.107	0.3509
4	4.27	NO3-N	BMB	0.119	0.832	0.5171
6	6.63	SO4	BMB	1.213	5.216	16.9821
TOTAL:				15.38	145.92	143.78



### Peak Integration Report

Sample Name:	AZ84057W13 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 09:56	Run Time:	7.50

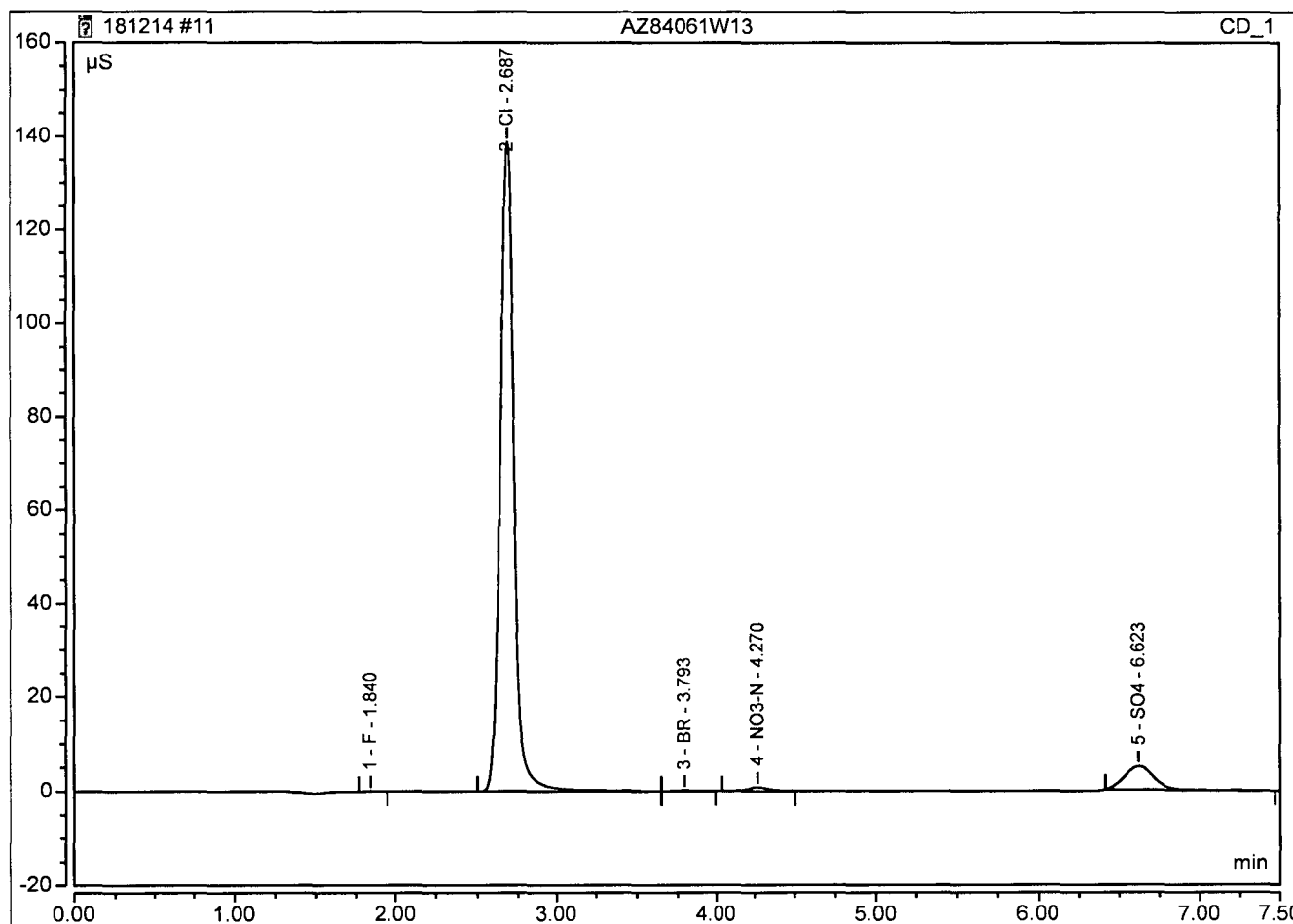
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.003	0.031	0.2020
2	2.66	Cl	BMB	2.372	28.753	106.8595
3	4.26	NO3-N	BMB	0.026	0.207	0.6196
4	6.61	SO4	BMB	0.236	1.114	16.8200
TOTAL:				2.64	30.11	124.50



### Peak Integration Report

Sample Name:	AZ84061W13	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 11:41	Run Time:	7.50

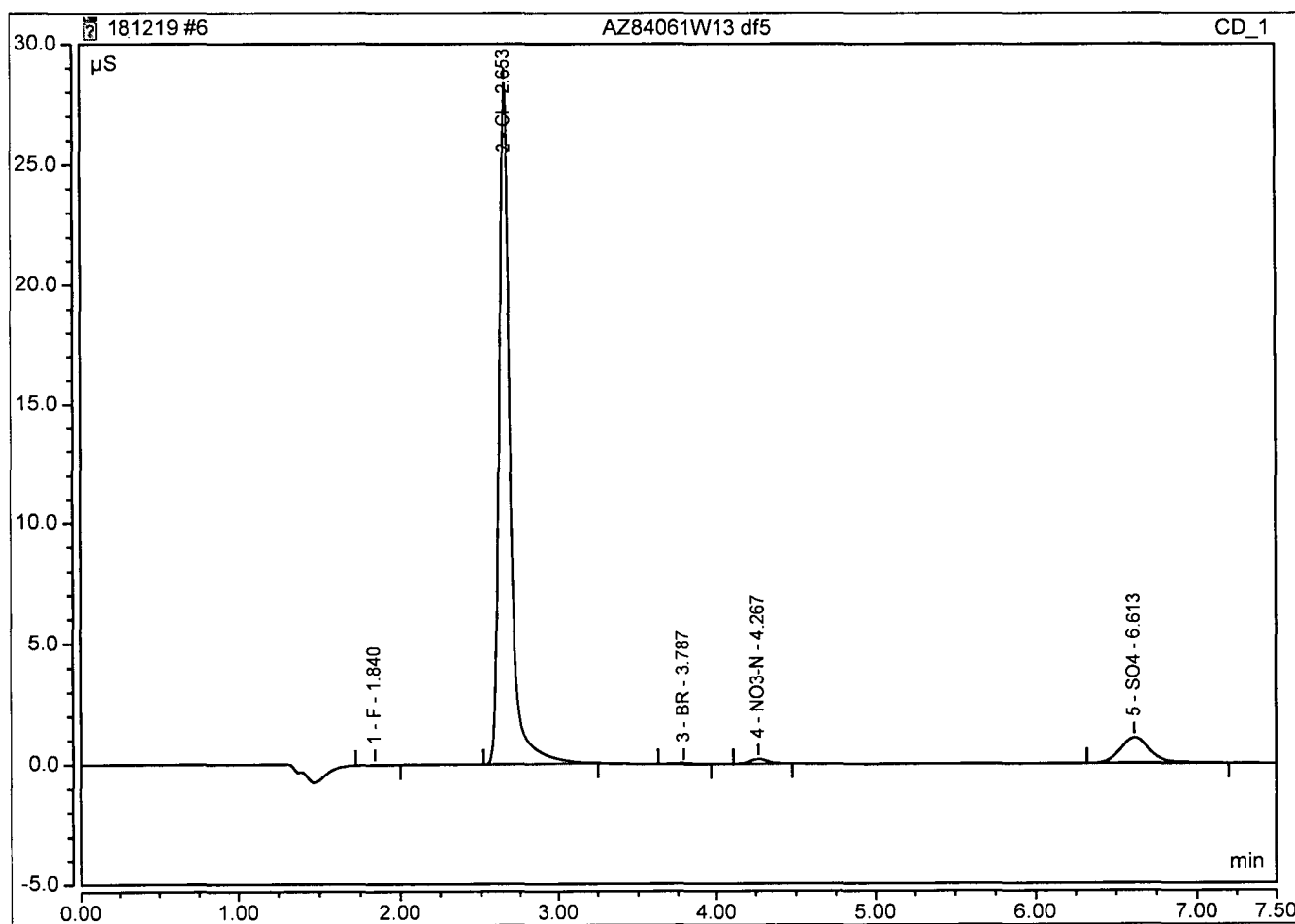
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.005	0.073	0.0513
2	2.69	Cl	BMB	13.919	138.767	124.8623
3	3.79	BR	BMB	0.013	0.107	0.3618
4	4.27	NO3-N	BMB	0.114	0.803	0.4973
5	6.62	SO4	BMB	1.025	4.899	14.3639
TOTAL:				15.08	144.65	140.14



### Peak Integration Report

Sample Name:	AZ84061W13 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 10:06	Run Time:	7.50

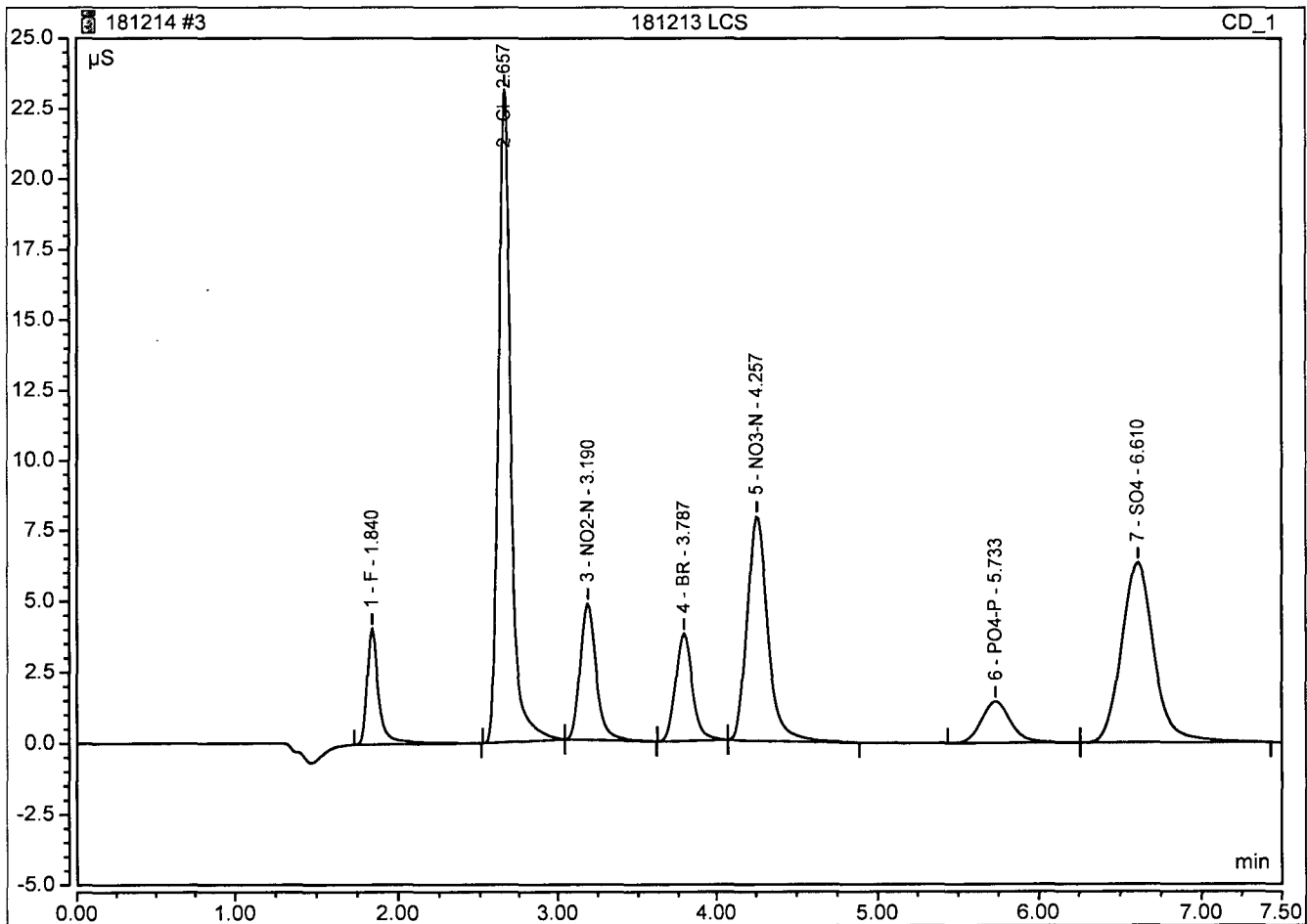
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.003	0.025	0.1785
2	2.65	Cl	BMB	2.322	28.373	104.6584
3	3.79	BR	BMB	0.004	0.028	0.6036
4	4.27	NO3-N	BMB	0.024	0.191	0.5880
5	6.61	SO4	BMB	0.226	1.047	16.1233
TOTAL:				2.58	29.66	122.15



### Peak Integration Report

Sample Name:	181213 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 09:45	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.343	4.070	2.5618
2	2.66	Cl	BMB	2.143	23.138	19.3229
3	3.19	NO2-N	BMB	0.558	4.796	2.9473
4	3.79	BR	BMB	0.481	3.770	12.0877
5	4.26	NO3-N	BMB	1.158	7.924	4.8818
6	5.73	PO4-P	BMB	0.306	1.454	4.4823
7	6.61	SO4	BMB	1.465	6.337	20.5005
TOTAL:				6.45	51.49	66.78

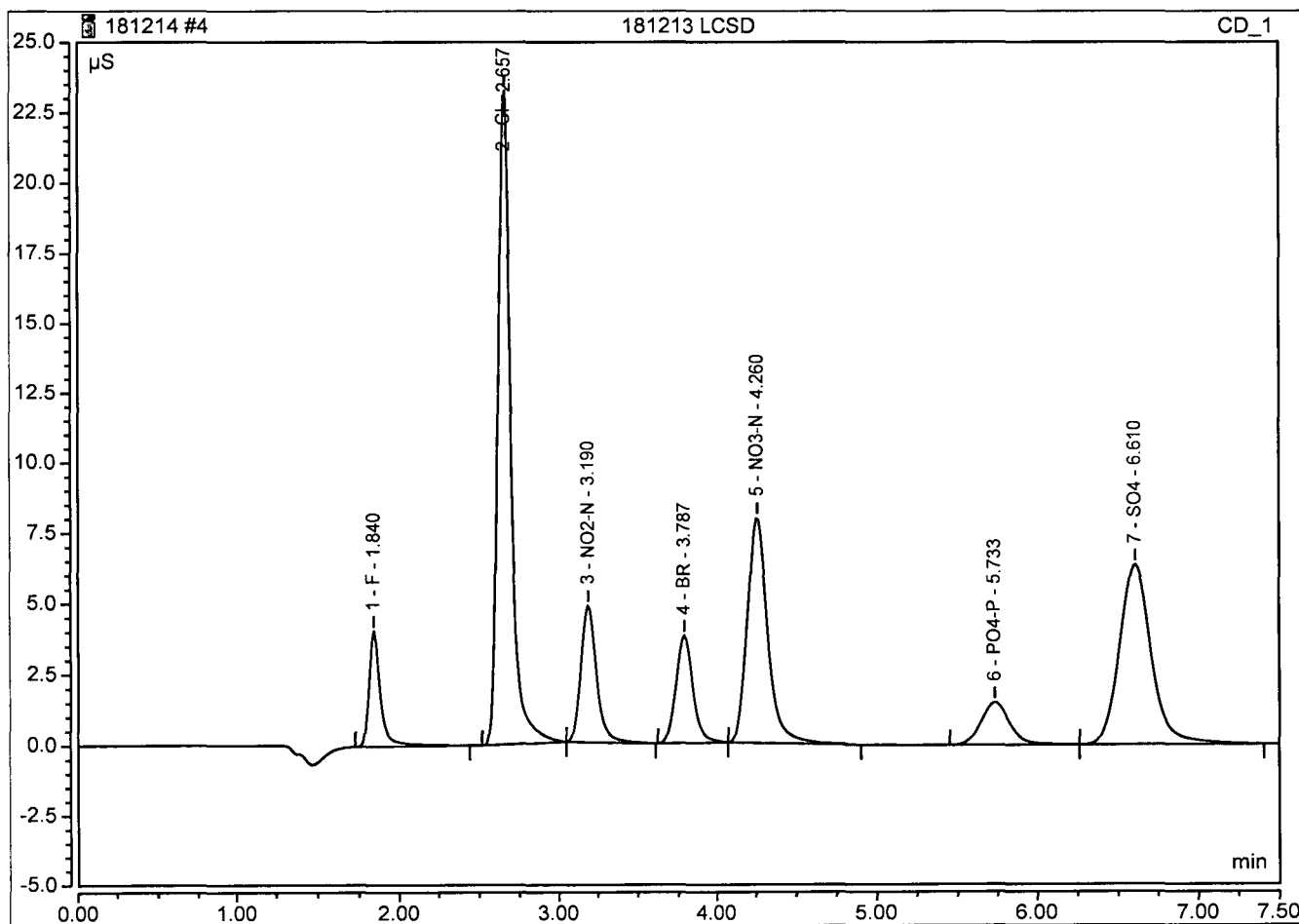


Algorithm Check HH 181219  
 $y = \text{peak Area}$   
 $x = \text{mg/L Cl}$   
 $y = .0717 x - .0055 \therefore \text{Cl}$   
 $y = 1.465 \therefore x = 20.50 \checkmark$

### Peak Integration Report

Sample Name:	181213 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	14-Dec-2018 / 09:55	Run Time:	7.50

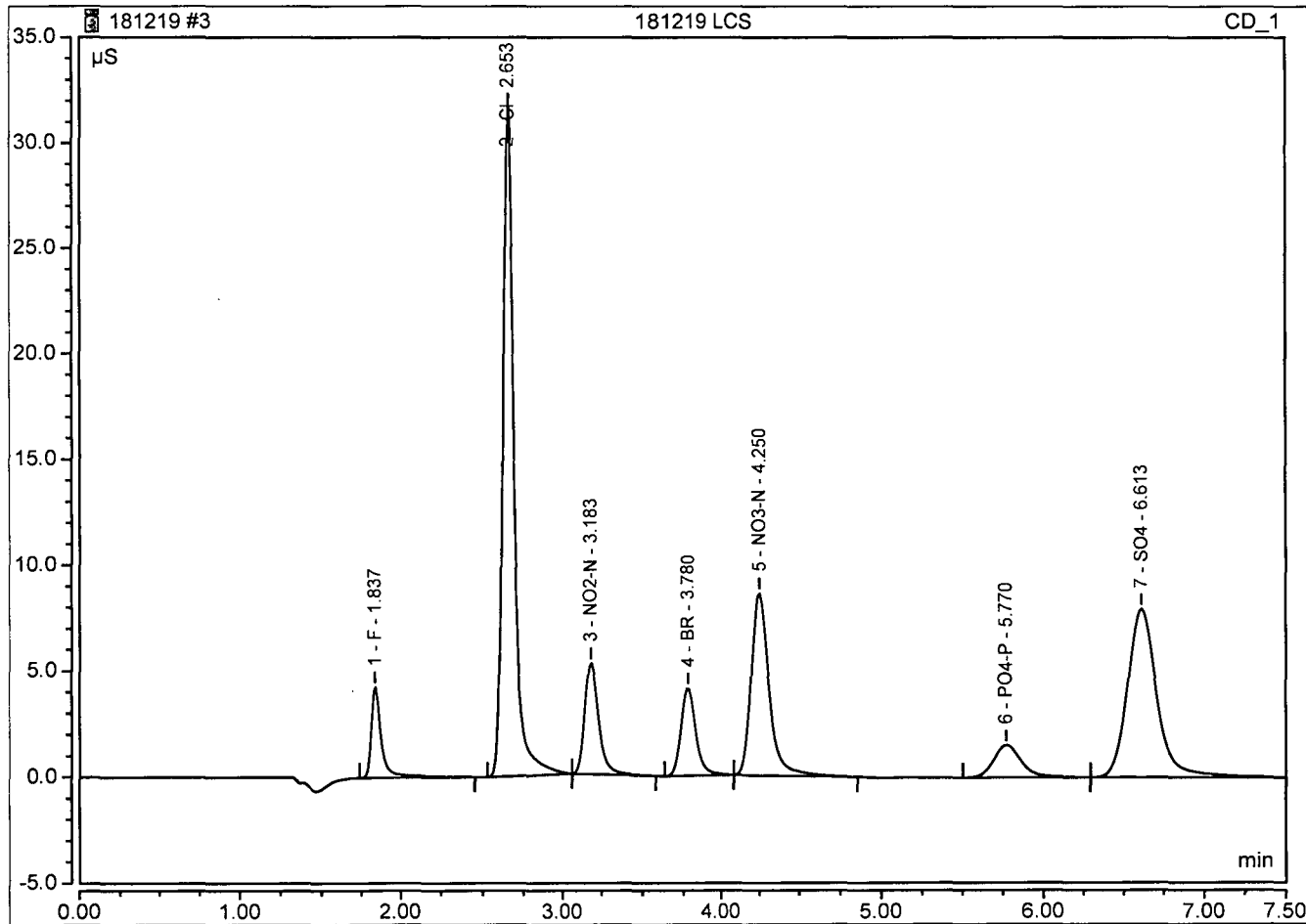
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.339	4.074	2.5367
2	2.66	Cl	BMB	2.145	23.233	19.3395
3	3.19	NO2-N	BMB	0.558	4.818	2.9488
4	3.79	BR	BMB	0.481	3.784	12.1103
5	4.26	NO3-N	BMB	1.164	7.956	4.9044
6	5.73	PO4-P	BMB	0.314	1.500	4.5948
7	6.61	SO4	BMB	1.462	6.341	20.4503
TOTAL:				6.46	51.71	66.88



### Peak Integration Report

Sample Name:	181219 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 09:36	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.323	4.286	2.4184
2	2.65	Cl	BMB	2.545	31.620	22.9237
3	3.18	NO2-N	BMB	0.538	5.251	2.8441
4	3.78	BR	BMB	0.467	4.152	11.7439
5	4.25	NO3-N	BMB	1.122	8.633	4.7282
6	5.77	PO4-P	BMB	0.304	1.534	4.4470
7	6.61	SO4	BMB	1.711	7.963	23.9347
TOTAL:				7.01	63.44	73.04



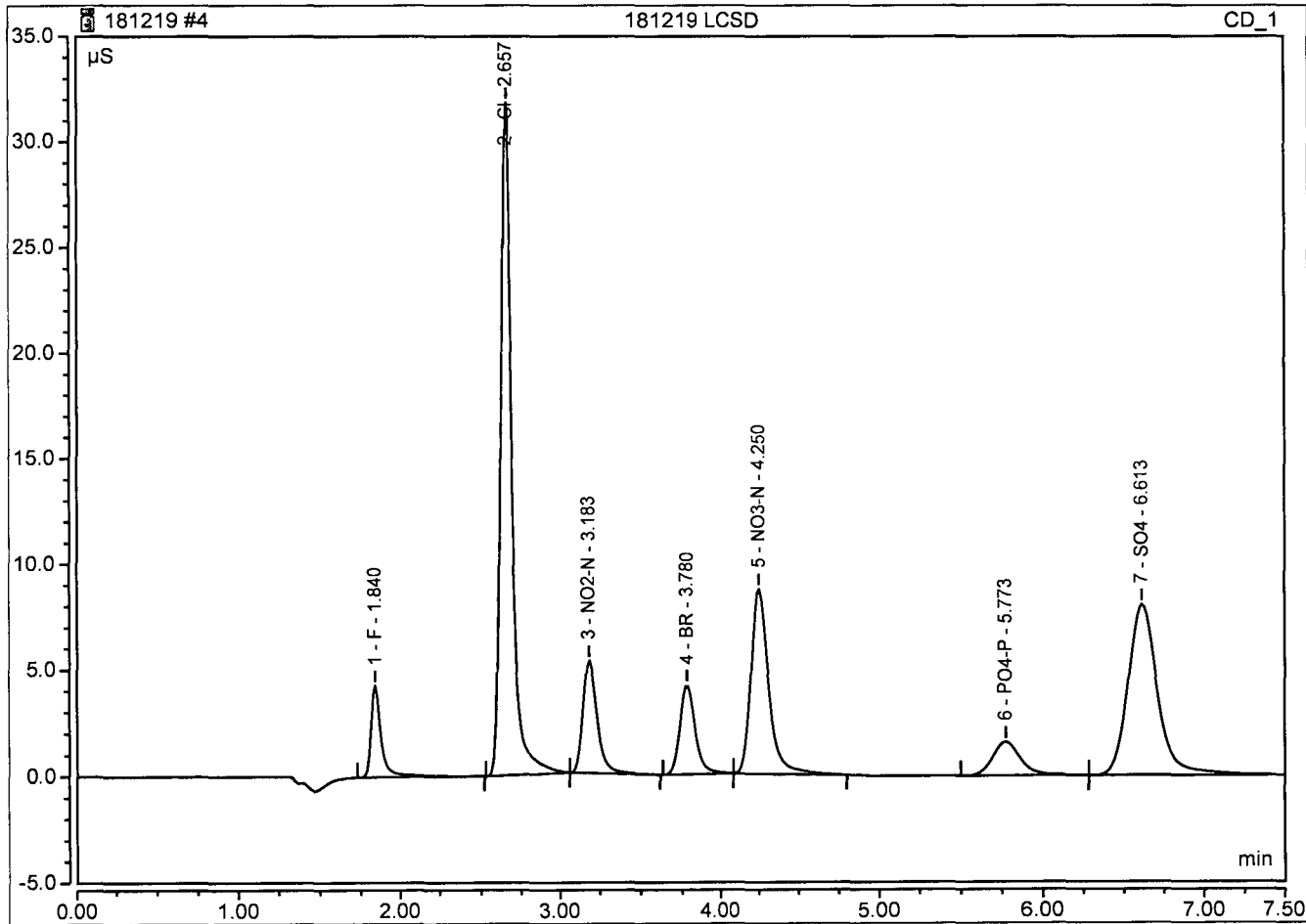
Algorithm Check HH 181219  
 $y = \text{Peak Area}$   
 $x = \text{mg/L SO}_4$   
 $y = 0.0717x - 0.0015$   
 $y = 1.711 \dots x = 23.94 \checkmark$



### Peak Integration Report

Sample Name:	181219 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 181127	Operator:	chemist_wetlab
Inj. Date / Time:	19-Dec-2018 / 09:46	Run Time:	7.50

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
1	1.84	F	BMB	0.327	4.294	2.4458
2	2.66	Cl	BMB	2.566	31.817	23.1121
3	3.18	NO <sub>2</sub> -N	BMB	0.544	5.275	2.8726
4	3.78	BR	BMB	0.472	4.193	11.8817
5	4.25	NO <sub>3</sub> -N	BMB	1.133	8.707	4.7747
6	5.77	PO <sub>4</sub> -P	BMB	0.315	1.587	4.5961
7	6.61	SO <sub>4</sub>	BMB	1.728	8.036	24.1689
TOTAL:				7.08	63.91	73.85



## Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume		OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
			(to 8.3)	(total)									
AZ84061W13	2018-12-18 18:31:19 UTC-8	Alkalinity	0.000	1.514	0.00	0.00	62.68	62.68	mg/L	25 mL	0.0207	181218A	AR
AZ84057W13	2018-12-18 18:25:17 UTC-8	Alkalinity	0.000	1.724	0.00	0.00	71.37	71.37	mg/L	25 mL	0.0207	181218A	AR
181218A LCSD	2018-12-18 15:16:27 UTC-8	Alkalinity	0.000	6.036	0.00	0.00	249.89	249.89	mg/L	25 mL	0.0207	181218A	AR
181218A LCS	2018-12-18 15:06:22 UTC-8	Alkalinity	0.000	6.004	0.00	0.00	248.57	248.57	mg/L	25 mL	0.0207	181218A	AR
181218A BLK	2018-12-18 15:02:51 UTC-8	Alkalinity	0.000	0.066	0.00	0.00	2.73	2.73	mg/L	25 mL	0.0207	181218A	AR

# AQ2 Tray Report



**Serial Number:** 190170  
**Software Version:** 2.1.0  
**Report Requested By:** Joel  
**Date & Time:** 2018-12-22 13:01:49  
**Tray Number:** 4  
**Tray Name:** 181219A TOXN

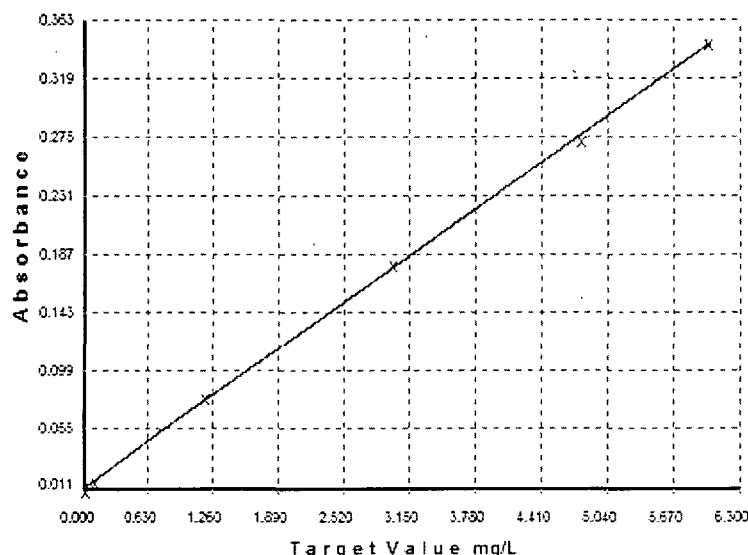
## TOXN

### Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0106	-0.0289	0.0000	
S90	0.0170	0.0867	0.1000	-13.27
S91	0.0811	1.2421	1.2000	3.51
S92	0.1809	3.0426	3.0000	1.42
S93	0.2748	4.7351	4.8000	-1.35
S94	0.3462	6.0225	6.0000	0.37
S0	0.0122	-0.0008	0.0000	

Polynomial Order: 1  
 Correlation Coefficient: 0.9999  
 Carryover(%): 0.5  
 Calibration equation:  $y = bx + a$   
 y = Concentration mg/L  
 x = Measured absorbance  
 a = -2.204531E-001  
 b = 1.803392E+001  
 Date & Time: 2018-12-19 16:35:47

### Calibration Graph



## Reagents

Name	Batch	Prepared By	Expiry Date
NO3 W Buffer		Joel	
Sulfa-NEDD		Joel	

*Algorithm Check*  
 $y = 18.034x - 22045$   
 $y = 3.025$  mm 12/22/18

## Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
S1	Standard	1	0.0106			0.010621			JR	2018-12-19 16:22:30
S90	Standard	90	0.0170			0.017034			JR	2018-12-19 16:24:45
S91	Standard	91	0.0811			0.081099			JR	2018-12-19 16:26:58
S92	Standard	92	0.1809			0.180939			JR	2018-12-19 16:29:09
S93	Standard	93	0.2748			0.274789			JR	2018-12-19 16:31:21
S94	Standard	94	0.3462			0.346176			JR	2018-12-19 16:33:33
S0	Standard	0	0.0122			0.012181			JR	2018-12-19 16:35:47
3	ICV	ICV	3.0250	mg/L	✓	0.179962			JR	2018-12-19 16:38:00
4	ICB	ICB	-0.0053	mg/L		0.011931			JR	2018-12-19 16:40:14
	CCV	CCV	2.9889	mg/L		0.177961			JR	2018-12-19 16:42:28
	CCB	CCB	-0.0060	mg/L		0.011893			JR	2018-12-19 16:44:42
5	U1	181219A BLK	-0.0121	mg/L		0.011556			JR	2018-12-19 16:46:55
6	U2	181219A LCS	2.9625	mg/L		0.176499			JR	2018-12-19 16:49:07
7	U3	181219A LCSD	2.9823	mg/L		0.177595			JR	2018-12-19 16:51:20
8	U4	1PPM NO3	0.9789	mg/L		0.066503			JR	2018-12-19 16:53:32
9	U5	AZ83576W08	0.1394	mg/L		0.019952			JR	2018-12-19 16:55:44
10	U6	AZ83577W08	0.9340	mg/L		0.064017			JR	2018-12-19 16:57:57

11	U7	AZ83578W08	0.0329	mg/L	0.014048	JR	2018-12-19 17:00:09
12	U8	AZ83579W08	0.0225	mg/L	0.013470	JR	2018-12-19 17:02:21
13	U9	AZ84057W14	0.6103	mg/L	0.046064	JR	2018-12-19 17:04:34
14	U10	AZ84057W14 MS	2.9988	mg/L	0.178511	JR	2018-12-19 17:06:46
	CCV	CCV	2.9247	mg/L	0.174405	JR	2018-12-19 17:08:59
	CCB	CCB	0.0067	mg/L	0.012593	JR	2018-12-19 17:11:12
15	U11	AZ84057W14 MSD	3.0522	mg/L	0.181474	JR	2018-12-19 17:13:25
16	U12	AZ84061W14	0.6051	mg/L	0.045780	JR	2018-12-19 17:15:37
17	U13	AZ84216W08	0.0447	mg/L	0.014701	JR	2018-12-19 17:17:50
18	U14	AZ84217W08	0.0281	mg/L	0.013784	JR	2018-12-19 17:20:03
19	U15	AZ84218W08	0.0130	mg/L	0.012944	JR	2018-12-19 17:22:15
20	U16	AZ84220W08	0.0874	mg/L	0.017072	JR	2018-12-19 17:24:28
21	U17	AZ84221W08	0.0139	mg/L	0.012994	JR	2018-12-19 17:25:35
22	U18	AZ84223W08	0.0053	mg/L	0.012518	JR	2018-12-19 17:26:31
23	U19	AZ84225W08	0.0076	mg/L	0.012643	JR	2018-12-19 17:27:27
24	U20	AZ84226W08	0.0080	mg/L	0.012669	JR	2018-12-19 17:28:23
	CCV	CCV	2.9721	mg/L	0.177028	JR	2018-12-19 17:29:19
	CCB	CCB	-0.0015	mg/L	0.012143	JR	2018-12-19 17:30:16
25	U21	AZ84227W08	0.0259	mg/L	0.013658	JR	2018-12-19 17:31:13
	CCV	CCV	3.0193	mg/L	0.179650	JR	2018-12-19 17:32:09
	CCB	CCB	0.0370	mg/L	0.014274	JR	2018-12-19 17:33:06

Method Ferrous Iron Standards Prep'd By (Initials) HH  
 Prep Date 06/15/18  
 Exp Date 06/15/19

Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.249	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L

Method Ferrous Iron CCV/LCS/MS/ICV Prep'd By (Initials) HH  
 Prep Date See Injection Log  
 Exp Date 24 Hours

Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	06/14/19	500uL	25mL	Deionized water	4mg/L
Ferrous Iron LCS	Mallinckrodt	Lot 5056 KDRX	06/14/19	375uL	25mL	Deionized water	3mg/L

Method Ferrous Iron Calibration Curve Prep'd By (Initials) HH  
 Prep Date 06/15/18  
 Exp Date 06/16/18

Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
0 HH 180615	J.T.Baker	0000184592	06/14/19	0	25mL	Deionized water	0mg/L
1	J.T.Baker	0000184592	06/14/19	0.125	25mL	Deionized water	1mg/L
2	J.T.Baker	0000184592	06/14/19	0.25	25mL	Deionized water	2mg/L
3	J.T.Baker	0000184592	06/14/19	0.5	25mL	Deionized water	4mg/L
4	J.T.Baker	0000184592	06/14/19	0.625	25mL	Deionized water	5mg/L
5	J.T.Baker	0000184592	06/14/19	1.25	25mL	Deionized water	10mg/L
Ferrous Iron ICV	Mallinckrodt	Lot 5056 KDRX	06/14/19	375uL	25mL	Deionized water	3mg/L

Anion Chromatography Working Standard									
Prep Date: 11/27/18					Prep'd By (Initials): HH				
Exp Date: 11/28/18									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H2O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H2O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H2O	o2si	062001-08-03	5000	10084781-1-39378	02/21/20	250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H2O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	250 µL	25 mL	Millipore Water	10
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-5372-39521	12/31/21	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Ultra Scientific	ICC-006	1000	G34-CR-2905-39056	07/31/21	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve									
Prep Date: 11/27/18					Prep'd By (Initials): HH				
Exp Date: 11/28/18									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Conc Range (ug/mL)
Anion Chromatography Working Standard	Varries	ICal1	5.0-50.0	Prepared 11/27/18	11/28/18	200 µL	25000 µL	Millipore Water	0.08-0.40
Anion Chromatography Working Standard	Varries	ICal2	5.0-50.0	Prepared 11/27/18	11/28/18	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varries	ICal3	5.0-50.0	Prepared 11/27/18	11/28/18	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varries	ICal4	5.0-50.0	Prepared 11/27/18	11/28/18	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varries	ICal5	5.0-50.0	Prepared 11/27/18	11/28/18	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varries	ICal6	5.0-50.0	Prepared 11/27/18	11/28/18	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varries	ICal7	5.0-50.0	Prepared 11/27/18	11/28/18	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography LCS/ICV									
Prep Date: See injection Log					Prep'd By (Initials): HH				
Exp Date: 24 hours after prep									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Flouride	Inorganic Ventures	ICF1	993-999	K-F652018-39801	10/23/19	62.5 µL	25 mL	Millipore Water	2.5
Nitrite	Inorganic Ventures	ICNO21	993-1001	M2-NOX660562-39802	10/23/19	250 µL	25 mL	Millipore Water	3.04
Chloride	Inorganic Ventures	ICCL1	995-1001	N2Cl.664868-39904	11/26/19	500 µL	25 mL	Millipore Water	20
O-Phosphate as P	Inorganic Ventures	IPPO41	1001-1009	M2-POX655826-39803	10/23/19	125 µL	25 mL	Millipore Water	5
Nitrate as N	Inorganic Ventures	ICNNO31	994-1002	N2-NOX667147-39510	10/23/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Bromide Standard	CPI International	4400-IC8M	1000	161681-8-39539	02/06/20	312.5 µL	25 mL	Millipore Water	12.5
Sulfate	Inorganic Ventures	ICSO41	998-1006	K2-SOX01111-38875	08/13/19	500 µL	25 mL	Millipore Water	20

Anion Chromatography CCV									
Prep Date: See injection Log					Prep'd By (Initials): HH				
Exp Date: 24 hours after prep									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H2O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	62.5 µL	25 mL	Millipore Water	2.5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H2O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	62.5 µL	25 mL	Millipore Water	2.5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H2O	o2si	062001-08-03	5000	10084781-1-39378	02/21/20	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H2O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	125 µL	25 mL	Millipore Water	5
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-5372-39521	12/31/21	312.5 µL	25 mL	Millipore Water	12.5
Sulfate Standard	Ultra Scientific	ICC-006	1000	G34-CR-2905-39056	07/31/21	625 µL	25 mL	Millipore Water	25

Tiamo Alkalinity Standard Prep										
Prep Date: _____										
Exp Date: _____										
Prep'd By (Initials): <u>AR</u>										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	J.T.Baker	NA	NA	167828	NA	NA	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	J.T.Baker	Normality	0.1N	167828	11/29/18	11/29/19	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	J.T Baker	Normality	0.02N	167828	11/29/18	11/29/19	200mL	1L	DI	0.02N
Inorganic Spike(NaHCO <sub>3</sub> )	BDH	NA	NA	1575C510	10/18/18	08/14/20	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	1575C510	11/27/18	11/27/19	3.5g	500mL	DI	250mg/L
Standarizing Solution(NaCO <sub>3</sub> )	J.T.Baker	Normality	1N	178494	07/25/17	07/25/19	PURCHASED	NA	NA	NA

## Nitrite

### High Point @ 1.5 mg/L

0.075 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24 - 38408 exp: 4/20/19  
50 mL DI Water

### CCV @ 0.75 mg/L

0.0375 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24-38408 exp: 4/20/19  
50 mL DI Water

### ICV/LCS @ 0.73 mg/L

0.12mL NO<sub>2</sub> Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>2</sub>

400 uL of High point and 200 uL of DI made directly into a sample cup

Prep  
Exp  
Initials

## Nitrate/TOXN

### High Point @ 6 mg/L

0.30 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### CCV @ 3.0 mg/L

0.15 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### ICV/LCS @ 3.0 mg/L

0.150 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>3</sub>

100 uL of High point and 500 uL of DI made directly into a sample cup

### MS @ 2.5 mg/L NO<sub>3</sub> and 0.73 mg/L NO<sub>2</sub>

0.125 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
and 0.12mL Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
Final volume 50 mL of sample

Prep 12/19/18  
Exp 12/26/18  
EV



# SM3500FeB Injection Log

Directory: I:\Spec Sheets\Ferrous Iron (Fe2)\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
2	15 Jun 2018	12:27	0 HH 180615		Upload Temp	1.
1	15 Jun 2018	12:27	1		Upload Temp	1.
3	15 Jun 2018	12:28	3		Upload Temp	1.
4	15 Jun 2018	12:28	2		Upload Temp	1.
5	15 Jun 2018	12:29	4		Upload Temp	1.
6	15 Jun 2018	12:30	5		Upload Temp	1.
7	15 Jun 2018	12:31	180615A ICV		Upload Temp	1.
8	15 Jun 2018	12:32	180615A ICB		Upload Temp	1.
9	14 Dec 2018	10:49	CCV 4.0 181214		Upload Temp	1.
10	14 Dec 2018	10:50	CCB 181214		Upload Temp	1.
11	14 Dec 2018	10:51	181214A LCSD		Upload Temp	1.
12	14 Dec 2018	10:51	181214A LCS		Upload Temp	1.
17	14 Dec 2018	11:33	AZ84057W15		Upload Temp	1.
20	14 Dec 2018	11:34	AZ84061W15		Upload Temp	1.
22	14 Dec 2018	11:35	CCV 4.0 181214		Upload Temp	1.
21	14 Dec 2018	11:35	CCB 181214		Upload Temp	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	27 Nov 2018	10:03	CCB		Anions	1.
2	27 Nov 2018	10:20	i cal 1		Anions	1.
3	27 Nov 2018	10:31	i cal 2		Anions	1.
4	27 Nov 2018	10:42	i cal 3		Anions	1.
5	27 Nov 2018	10:53	i cal 4		Anions	1.
6	27 Nov 2018	11:04	i cal 5		Anions	1.
7	27 Nov 2018	11:15	i cal 6		Anions	1.
8	27 Nov 2018	11:26	i cal 7		Anions	1.
9	27 Nov 2018	11:37	CCB		Anions	1.
10	27 Nov 2018	12:45	ICV LCS 181127		Anions	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	14 Dec 2018	09:26	CCV 181213		Anions	1.
2	14 Dec 2018	09:36	CCB		Anions	1.
3	14 Dec 2018	09:45	181213 LCS		Anions	1.
4	14 Dec 2018	09:55	181213 LCSD		Anions	1.
5	14 Dec 2018	10:05	CCV 181213		Anions	1.
6	14 Dec 2018	10:15	CCB		Anions	1.
11	14 Dec 2018	11:41	AZ84061W13		Anions	1.
12	14 Dec 2018	11:51	AZ84057W13		Anions	1.
14	14 Dec 2018	13:01	CCV 181213		Anions	1.
15	14 Dec 2018	13:11	CCB		Anions	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
4	19 Dec 2018	09:16	CCV 181219		Anions	1.
5	19 Dec 2018	09:26	CCB		Anions	1.
6	19 Dec 2018	09:36	181219 LCS		Anions	1.
7	19 Dec 2018	09:46	181219 LCSD		Anions	1.
8	19 Dec 2018	09:56	AZ84057W13 df5		Anions	5.
9	19 Dec 2018	10:06	AZ84061W13 df5		Anions	5.
10	19 Dec 2018	10:16	CCV 181219		Anions	1.
11	19 Dec 2018	10:26	CCB		Anions	1.

# SM 2320B Injection Log

Directory: I:\Tiamo\EXPORT\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	18 Dec 2018	15:02	181218A BLK		181218A_AL	1.
2	18 Dec 2018	15:06	181218A LCS		181218A_AL	1.
3	18 Dec 2018	15:16	181218A LCSD		181218A_AL	1.
17	18 Dec 2018	18:25	AZ84057W13		181218A_AL	1.
18	18 Dec 2018	18:31	AZ84061W13		181218A_AL	1.

# EPA 353.2 Injection Log

Directory: I:\EVE\Export\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	19 Dec 2018	16:22	Standard 1 TOXN/NO3		181219A TO	1.
2	19 Dec 2018	16:24	Standard 90 TOXN/NO3		181219A TO	1.
3	19 Dec 2018	16:26	Standard 91 TOXN/NO3		181219A TO	1.
4	19 Dec 2018	16:29	Standard 92 TOXN/NO3		181219A TO	1.
5	19 Dec 2018	16:31	Standard 93 TOXN/NO3		181219A TO	1.
6	19 Dec 2018	16:33	Standard 94 TOXN/NO3		181219A TO	1.
7	19 Dec 2018	16:35	Standard 0 TOXN/NO3		181219A TO	1.
8	19 Dec 2018	16:38	ICV TOXN/NO3		181219A TO	1.
9	19 Dec 2018	16:40	ICB TOXN/NO3		181219A TO	1.
10	19 Dec 2018	16:42	CCV TOXN/NO3		181219A TO	1.
11	19 Dec 2018	16:44	CCB TOXN/NO3		181219A TO	1.
12	19 Dec 2018	16:46	181219A BLK TOXN/NO3		181219A TO	1.
13	19 Dec 2018	16:49	181219A LCS TOXN/NO3		181219A TO	1.
14	19 Dec 2018	16:51	181219A LCSD TOXN/NO3		181219A TO	1.
20	19 Dec 2018	17:04	AZ84057W14 TOXN/NO3		181219A TO	1.
22	19 Dec 2018	17:08	CCV TOXN/NO3		181219A TO	1.
23	19 Dec 2018	17:11	CCB TOXN/NO3		181219A TO	1.
25	19 Dec 2018	17:15	AZ84061W14 TOXN/NO3		181219A TO	1.
34	19 Dec 2018	17:29	CCV TOXN/NO3		181219A TO	1.
35	19 Dec 2018	17:30	CCB TOXN/NO3		181219A TO	1.



27 December 2018

Greg Salata, Ph.D.  
APPL, Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

RE: ARF: 87650

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

<u>Associated Work Order(s)</u>	<u>Associated SDG ID(s)</u>
18L0338	N/A

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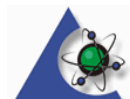
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Amanda Volgardsen, Project Manager



# SUBCONTRACT ORDER

APPL, Inc.

ARF: 87650

1860338

PO: 00-87650

**SENDING LABORATORY:**

APPL Labs

908 North Temperance Ave.

Clovis, CA 93611

Phone: (559) 275-2175

Fax: (559) 275-4422

Project Manager: Libby Cheeseborough (libby@applinc.com)

**RECEIVING LABORATORY:**

Analytical Resources, Inc.

4611 S. 134th Place, Suite 100

Tukwila, WA 98168-3240

Phone: (206) 695-6214x

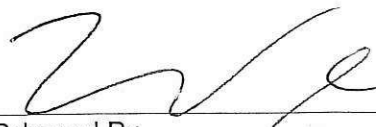

Fax:

DOD Expiration Date:

✓ *ae* 12-17-18

Comments: DOD QSM v5.1; 1 WEEK TAT; Tier IV; AECOM v 2.5.3 EDD; please email report and EDD to Libby

APPL ID	Sample ID	LOC ID	Matrix	Collected	Analysis	Price
1. AZ84057	ERH719	RHMW2254-01	Water	12/12/18 09:25	TOC by 9060A	
2. AZ84061	ERH722	RHMW2254-01	Water	12/13/18 09:05	TOC by 9060A	

 12-17-18 1450  
Released By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 12/18/18 1030  
Received By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Released By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

**Upon receipt, please email signed COC to APPL Inc.  
To ensure timely payment, please include the PO number on your invoice.**





WORK ORDER

18L0338

**Client:** APPL, Inc. **Project Manager:** Amanda Volgardsen  
**Project:** ARF: 87650 **Project Number:** [none]

**Report To:**  
APPL, Inc.  
Greg Salata, Ph.D.  
908 North Temperance Avenue  
Clovis, CA 93611  
Phone: (555) 862-2133  
Fax: -

**Invoice To:**  
APPL, Inc.  
Libby Cheeseborough  
908 North Temperance Avenue  
Clovis, CA 93611  
Phone : (559) 275-2175  
Fax: -

Date Due: 26-Dec-2018 18:00 (5 day TAT)

Received By: Jasmine Bowman

Date Received: 18-Dec-2018 10:30

Logged In By: Jacob Walter

Date Logged In: 18-Dec-2018 16:00

Samples Received at: 1.1°C	
Intact, properly signed and dated custody seals attached to outside of cooler(s).....	No
Custody papers properly filled out (in, signed, analyses requested, etc).....	Yes
Was sufficient ice used (if appropriate).....	Yes
All bottles arrived in good condition (unbroken).....	Yes
Number of containers listed on COC match number received.....	Yes
Correct bottles used for the requested analyses.....	Yes
Analyses/bottles require preservation (attach preservation sheet excluding VOC).Yes	Yes
Sample split at ARI.....	No
Custody papers included with the cooler.....	Yes
Was a temperature blank included in the cooler.....	Yes
All bottles sealed in individual plastic bags.....	No
All bottle labels complete and legible.....	Yes
Bottle labels and tags agree with COC.....	Yes
All VOC vials free of air bubbles.....	No
Sufficient amount of sample sent in each bottle.....	Yes

18L0338-01 ERH719 [Water] Sampled 12-Dec-2018 09:25

Carbon, Organic Total, 9060A 12/26/2018 5 1/9/2019

18L0338-02 ERH722 [Water] Sampled 13-Dec-2018 09:05

Carbon, Organic Total, 9060A 12/26/2018 5 1/10/2019

Preservation Confirmation

Container ID	Container Type	pH
18L0338-01 A	VOA Vial, Clear, 40 mL	
18L0338-01 B	VOA Vial, Clear, 40 mL	
18L0338-01 C	VOA Vial, Clear, 40 mL	
18L0338-01 D	VOA Vial, Clear, 40 mL	
18L0338-02 A	VOA Vial, Clear, 40 mL	
18L0338-02 B	VOA Vial, Clear, 40 mL	
18L0338-02 C	VOA Vial, Clear, 40 mL	
18L0338-02 D	VOA Vial, Clear, 40 mL	

Set for IBW  
Preservation Confirmed By

12-18-18  
Date



# Cooler Receipt Form

ARI Client: APPL  
 COC No(s): \_\_\_\_\_ NA  
 Assigned ARI Job No: 1860338

Project Name: 87650  
 Delivered by: Fed-Ex UPS Courier Hand Delivered Other: \_\_\_\_\_  
 Tracking No: 4682 8237 7631 NA

**Preliminary Examination Phase:**

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES  NO   
 Were custody papers included with the cooler? ..... YES  NO   
 Were custody papers properly filled out (ink, signed, etc.) ..... YES  NO   
 Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) \_\_\_\_\_  
 Time: 1030 11  
 If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: PO05706  
 Cooler Accepted by: TJB Date: 12/18/18 Time: 1030

*Complete custody forms and attach all shipping documents*

**Log-In Phase:**

Was a temperature blank included in the cooler? ..... YES  NO  JBW  
 What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: \_\_\_\_\_  
 Was sufficient ice used (if appropriate)? ..... NA YES  NO   
 Were all bottles sealed in individual plastic bags? ..... YES  NO   
 Did all bottles arrive in good condition (unbroken)? ..... YES  NO   
 Were all bottle labels complete and legible? ..... YES  NO   
 Did the number of containers listed on COC match with the number of containers received? ..... YES  NO   
 Did all bottle labels and tags agree with custody papers? ..... YES  NO   
 Were all bottles used correct for the requested analyses? ..... YES  NO   
 Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA YES  NO   
 Were all VOC vials free of air bubbles? ..... NA YES  NO   
 Was sufficient amount of sample sent in each bottle? ..... YES  NO   
 Date VOC Trip Blank was made at ARI: ..... NA   
 Was Sample Split by ARI: NA YES Date/Time: \_\_\_\_\_ Equipment: \_\_\_\_\_ Split by: \_\_\_\_\_

Samples Logged by: JBW Date: 12/18/18 Time: 1600  
 \*\* Notify Project Manager of discrepancies or concerns \*\*

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

*Additional Notes, Discrepancies, & Resolutions:*

By: \_\_\_\_\_ Date: \_\_\_\_\_

			Small → "sm" (< 2 mm)
			Peabubbles → "pb" ( 2 to < 4 mm )
			Large → "lg" ( 4 to < 6 mm )
			Headspace → "hs" (> 6 mm )



APPL, Inc.  
908 North Temperance Avenue  
Clovis CA, 93611

Project: ARF: 87650  
Project Number: [none]  
Project Manager: Greg Salata, Ph.D.

**Reported:**  
27-Dec-2018 12:04

## Case Narrative

### Sample receipt

Samples as listed on the preceding page were received December 18, 2018 under ARI work order 18L0338. For details regarding sample receipt, please refer to the Cooler Receipt Form.

### Total Organic Carbon - EPA Method 9060A

The samples were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank was clean at the reporting limits.

The LCS percent recoveries were within control limits.

A matrix spike, matrix spike duplicate and duplicate were prepared in conjunction with sample ERH722. The matrix spike, matrix spike duplicate and duplicate percent recoveries and RPD were within QC limits.



APPL, Inc.

908 North Temperance Avenue

Clovis, CA 93611

Project: ARF: 87650

Project Number: [none]

Project Manager: Greg Salata, Ph.D.

**Reported:**

12/27/2018 12:04

**ANALYTICAL REPORT FOR SAMPLES**

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
18L0338-01	ERH719	Water	12/12/18 09:25	12/18/18 10:30
18L0338-02	ERH722	Water	12/13/18 09:05	12/18/18 10:30



**INTERNAL CHAIN OF CUSTODY**

**Work Order: 18L0338**

Client:	APPL, Inc.	Received:	18-Dec-2018 10:30
Project:	ARF: 87650	Received By:	Jasmine Bowman
Number:	[none]	Temp (°C):	1.10

**18L0338-01 (ERH719) Sampled 12/12/2018 09:25**

<i>Current Status</i>	<i>Out</i>	<i>Location</i>	<i>In</i>	<i>Hazard Info:</i>
<i>18L0338-01 A [VOA Vial, Clear, 40 mL]</i>				
Sample Receiving	12/18/2018 16:02 by JBW	***START***	12/18/2018 16:02 by JBW	

**18L0338-02 (ERH722) Sampled 12/13/2018 09:05**

<i>Current Status</i>	<i>Out</i>	<i>Location</i>	<i>In</i>	<i>Hazard Info:</i>
<i>18L0338-02 A [VOA Vial, Clear, 40 mL]</i>				
Sample Receiving	12/18/2018 16:02 by JBW	***START***	12/18/2018 16:02 by JBW	
Conventionals	12/20/2018 10:05 by BF	R-33 j	12/20/2018 10:05 by BF	



## QUALIFIERS AND NOTES

<u>Qualifier</u>	<u>Definition</u>
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



**Form I**  
**INORGANIC ANALYSIS DATA SHEET**  
**EPA 9060A**

ERH719
--------

Laboratory: Analytical Resources, Inc.

Client: APPL, Inc.

Project: ARF: 87650

Matrix: Water                      Laboratory ID: 18L0338-01                      SDG: 18L0338

Sampled: 12/12/18 09:25                      Prepared: 12/19/18 12:03                      File ID: ShimadzuData\_12242018@0854-025

% Solids: 0.00                      Preparation: No Prep Wet Chem                      Analyzed: 12/20/18 19:34

Batch: BGL0534                      Sequence: SGL0336                      Initial/Final: 20 mL / 20 mL

Instrument: TOC-LCSH                      Calibration: BJ00092

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	MDL	LOD	LOQ	Q
	Total Organic Carbon	0.50	1	0.50	0.50	0.50	U



**Form I**  
**INORGANIC ANALYSIS DATA SHEET**  
**EPA 9060A**

ERH722
--------

Laboratory: Analytical Resources, Inc.

Client: APPL, Inc.

Project: ARF: 87650

Matrix: Water                      Laboratory ID: 18L0338-02                      SDG: 18L0338

Sampled: 12/13/18 09:05                      Prepared: 12/19/18 12:03                      File ID: ShimadzuData\_12242018@0854-028

% Solids: 0.00                      Preparation: No Prep Wet Chem                      Analyzed: 12/20/18 20:50

Batch: BGL0534                      Sequence: SGL0336                      Initial/Final: 20 mL / 20 mL

Instrument: TOC-LCSH                      Calibration: BJ00092

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	MDL	LOD	LOQ	Q
	Total Organic Carbon	0.50	1	0.50	0.50	0.50	U





## PREPARATION BATCH SUMMARY

### EPA 9060A

Laboratory: Analytical Resources, Inc. SDG: 18L0338  
Client: APPL, Inc. Project: ARF: 87650  
Batch: BGL0534 Batch Matrix: Water Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
ERH719	18L0338-01	dzuData_12242018@085	12/19/18 12:03	
ERH722	18L0338-02	dzuData_12242018@085	12/19/18 12:03	
Blank	BGL0534-BLK1	dzuData_12242018@085	12/19/18 12:03	
LCS	BGL0534-BS1	dzuData_12242018@085	12/19/18 12:03	
ERH722	BGL0534-DUP2	dzuData_12242018@085	12/19/18 12:03	
MRL Check	BGL0534-MRL1	dzuData_12242018@085	12/19/18 12:03	
ERH722	BGL0534-MS2	dzuData_12242018@085	12/19/18 12:03	
ERH722	BGL0534-MSD2	dzuData_12242018@085	12/19/18 12:03	



**Form I**  
**METHOD BLANK DATA SHEET**

Blank

**EPA 9060A**  
TotalAnalytes

Batch: BGL0534

Laboratory ID: BGL0534-BLK1

Prepared: 12/19/18 12:03

Matrix: Water

Preparation: No Prep Wet Chem

Analyzed: 12/20/18 13:01

Sequence: SGL0336

Calibration: BJ00092

Instrument: TOC-LCSH

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	MDL	LOD	LOQ	Q
	Total Organic Carbon	ND	1	0.50	0.50	0.50	U



**DUPLICATES**  
**EPA 9060A**

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Matrix: Water

Laboratory ID: BGL0534-DUP2

Batch: BGL0534

Lab Source ID: 18L0338-02

Preparation: No Prep Wet Chem

Initial/Final: 20 mL / 20 mL

Source Sample Name: ERH722

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q
Total Organic Carbon	20	ND	U	ND	U		

\*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/-RL instead of 20% RPD



**MS / MS DUPLICATE RECOVERY**  
**EPA 9060A**

Laboratory:	<u>Analytical Resources, Inc.</u>	SDG:	<u>18L0338</u>
Client:	<u>APPL, Inc.</u>	Project:	<u>ARF: 87650</u>
Matrix:	<u>Water</u>	Analyzed:	<u>12/20/18 21:37</u>
Batch:	<u>BGL0534</u>	Laboratory ID:	<u>BGL0534-MS2</u>
Preparation:	<u>No Prep Wet Chem</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>20 mL / 20 mL</u>	Source Sample:	<u>ERH722</u>

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	Q	MS CONCENTRATION (mg/L)	Q	MS % REC. #	QC LIMITS REC.
Total Organic Carbon	20.03	ND	U	16.14		80.6	75 - 125

\* Values outside of QC limits



**MS / MS DUPLICATE RECOVERY**  
**EPA 9060A**

Laboratory:	<u>Analytical Resources, Inc.</u>	SDG:	<u>18L0338</u>
Client:	<u>APPL, Inc.</u>	Project:	<u>ARF: 87650</u>
Matrix:	<u>Water</u>	Analyzed:	<u>12/20/18 21:59</u>
Batch:	<u>BGL0534</u>	Laboratory ID:	<u>BGL0534-MSD2</u>
Preparation:	<u>No Prep Wet Chem</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>20 mL / 20 mL</u>	Source Sample:	<u>ERH722</u>

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Total Organic Carbon	20.03	16.53		82.5	2.39	20	75 - 125

\* Values outside of QC limits



**LCS / LCS DUPLICATE RECOVERY**  
**EPA 9060A**

Laboratory:	<u>Analytical Resources, Inc.</u>	SDG:	<u>18L0338</u>
Client:	<u>APPL, Inc.</u>	Project:	<u>ARF: 87650</u>
Matrix:	<u>Water</u>	Analyzed:	<u>12/20/18 13:30</u>
Batch:	<u>BGL0534</u>	Laboratory ID:	<u>BGL0534-BS1</u>
Preparation:	<u>No Prep Wet Chem</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>20 mL / 20 mL</u>		

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	20.00	19.18		95.9	90 - 110

\* Indicates values outside of QC limits



## ANALYSIS BATCH (SEQUENCE) SUMMARY

### EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Sequence: SGJ0495

Instrument: TOC-LCSH

Calibration: BJ00092

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SGJ0495-CAL1	adzuData_10312018@092'	NA	10/29/18 17:20
Cal Standard	SGJ0495-CAL2	adzuData_10312018@092'	NA	10/29/18 17:37
Cal Standard	SGJ0495-CAL3	adzuData_10312018@092'	NA	10/29/18 18:00
Cal Standard	SGJ0495-CAL4	adzuData_10312018@092'	NA	10/29/18 18:17
Cal Standard	SGJ0495-CAL5	adzuData_10312018@092'	NA	10/29/18 18:34
Cal Standard	SGJ0495-CAL6	adzuData_10312018@092'	NA	10/29/18 18:54
Cal Standard	SGJ0495-CAL7	adzuData_10312018@092'	NA	10/29/18 19:14
Cal Standard	SGJ0495-CAL8	adzuData_10312018@092'	NA	10/29/18 19:33

Type	Analysi	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes	Status	Date / Time	Vial
1	Unknown	NPOC Rinse		NPOC 0.5-	1.000	NPOC:0.1029mg/L		Completed	10/29/2018 5:09:15 PM	0
2	Standard	NPOC SEQ-CAL	Curve	NPOC 0.5-	1.000			Completed	10/29/2018 7:43:01 PM	0, 1, 1, 1, 1,
3	Control	NPOC SEQ-ICV1	CVS 20	CVS 20 pp	1.000	NPOC:19.28ppm	Control val	Completed	10/29/2018 8:02:31 PM	3
4	Control	NPOC SEQ-ICB1		ICB CCB:tpl	1.000	NPOC:0.2659mg/L	Control val	Completed	10/29/2018 8:26:28 PM	4
5	Unknown	NPOC SEQ-IFAI		NPOC 0.5-	1.000	NPOC:18.78mg/L		Completed	10/29/2018 8:45:38 PM	9
6	Unknown	NPOC 18J0334-25 DOC		NPOC 0.5-	1.000	NPOC:0.6122mg/L		Completed	10/29/2018 9:11:02 PM	10
7	Unknown	NPOC 18J0334-27 DOC		NPOC 0.5-	1.000	NPOC:0.9334mg/L		Completed	10/29/2018 9:28:47 PM	11
8	Unknown	NPOC 18J0334-29 DOC		NPOC 0.5-	1.000	NPOC:0.6165mg/L		Completed	10/29/2018 9:46:50 PM	12
9	Unknown	NPOC 18J0334-31 DOC		NPOC 0.5-	1.000	NPOC:0.4808mg/L		Completed	10/29/2018 10:08:06 PM	13
10	Unknown	NPOC 18J0334-33 DOC		NPOC 0.5-	1.000	NPOC:0.6551mg/L		Completed	10/29/2018 10:29:28 PM	14
11	Unknown	NPOC 18J0334-35 DOC		NPOC 0.5-	1.000	NPOC:0.8127mg/L		Completed	10/29/2018 10:47:08 PM	15
12	Unknown	NPOC 18J0334-37 DOC		NPOC 0.5-	1.000	NPOC:0.7432mg/L		Completed	10/29/2018 11:04:42 PM	16
13	Unknown	NPOC 18J0334-39 DOC		NPOC 0.5-	1.000	NPOC:1.443mg/L		Completed	10/29/2018 11:22:45 PM	17
14	Unknown	NPOC BGJ0804-MRL1		NPOC 0.5-	1.000	NPOC:0.8213mg/L		Completed	10/29/2018 11:44:21 PM	18
15	Control	NPOC SEQ-CCV1	CVS 20	CVS 20 pp	1.000	NPOC:19.01ppm	Control val	Completed	10/30/2018 12:04:00 AM	3
16	Control	NPOC SEQ-CCB1		ICB CCB:tpl	1.000	NPOC:0.2336mg/L	Control val	Completed	10/30/2018 12:28:20 AM	4
17	Unknown	NPOC BGJ0804-BLK1		NPOC 0.5-	1.000	NPOC:0.1448mg/L		Completed	10/30/2018 12:49:42 AM	19
18	Unknown	NPOC BGJ0804-BS1		NPOC 0.5-	1.000	NPOC:20.26mg/L		Completed	10/30/2018 1:08:48 AM	20
19	Unknown	NPOC 18J0334-47		NPOC 0.5-	1.000	NPOC:1.443mg/L		Completed	10/30/2018 1:30:33 AM	21
20	Unknown	NPOC BGJ0804-DUP1		NPOC 0.5-	1.000	NPOC:1.398mg/L		Completed	10/30/2018 1:52:48 AM	22
21	Unknown	NPOC BGJ0804-MS1		NPOC 0.5-	1.000	NPOC:20.32mg/L		Completed	10/30/2018 2:12:37 AM	23
22	Unknown	NPOC 18J0334-49		NPOC 0.5-	1.000	NPOC:0.2863mg/L		Completed	10/30/2018 2:37:50 AM	24
23	Unknown	NPOC 18J0334-51		NPOC 0.5-	1.000	NPOC:0.2909mg/L		Completed	10/30/2018 2:59:22 AM	25
24	Unknown	NPOC 18J0334-53		NPOC 0.5-	1.000	NPOC:0.3362mg/L		Completed	10/30/2018 3:16:52 AM	26
25	Unknown	NPOC 18J0334-55		NPOC 0.5-	1.000	NPOC:0.3555mg/L		Completed	10/30/2018 3:41:53 AM	27
26	Unknown	NPOC 18J0334-57		NPOC 0.5-	1.000	NPOC:0.2106mg/L		Completed	10/30/2018 3:59:13 AM	28
27	Control	NPOC SEQ-CCV2	CVS 20	CVS 20 pp	1.000	NPOC:19.03ppm	Control val	Completed	10/30/2018 4:18:24 AM	3
28	Control	NPOC SEQ-CCB2		ICB CCB:tpl	1.000	NPOC:0.1235mg/L	Control val	Completed	10/30/2018 4:35:12 AM	4
29	Unknown	NPOC 18J0334-59		NPOC 0.5-	1.000	NPOC:1.786mg/L		Completed	10/30/2018 5:03:33 AM	29
30	Unknown	NPOC 18J0334-60		NPOC 0.5-	1.000	NPOC:1.104mg/L		Completed	10/30/2018 5:29:30 AM	30
31	Unknown	NPOC 18J0334-61		NPOC 0.5-	1.000	NPOC:0.2459mg/L		Completed	10/30/2018 5:54:39 AM	31
32	Unknown	NPOC 18J0334-63		NPOC 0.5-	1.000	NPOC:0.3079mg/L		Completed	10/30/2018 6:12:05 AM	32
33	Unknown	NPOC 18J0334-65		NPOC 0.5-	1.000	NPOC:0.4700mg/L		Completed	10/30/2018 6:37:14 AM	33
34	Unknown	NPOC 18J0334-67		NPOC 0.5-	1.000	NPOC:0.4519mg/L		Completed	10/30/2018 6:54:48 AM	34
35	Unknown	NPOC 18J0334-69		NPOC 0.5-	1.000	NPOC:0.5122mg/L		Completed	10/30/2018 7:19:54 AM	35
36	Unknown	NPOC 18J0334-71		NPOC 0.5-	1.000	NPOC:0.6477mg/L		Completed	10/30/2018 7:37:36 AM	36
37	Unknown	NPOC 18J0334-73		NPOC 0.5-	1.000	NPOC:0.4127mg/L		Completed	10/30/2018 7:58:58 AM	37
38	Unknown	NPOC 18J0334-75		NPOC 0.5-	1.000	NPOC:1.110mg/L		Completed	10/30/2018 8:16:39 AM	38
39	Control	NPOC SEQ-CCV3	CVS 20	CVS 20 pp	1.000	NPOC:19.01ppm	Control val	Completed	10/30/2018 8:35:53 AM	5
40	Control	NPOC SEQ-CCB3		ICB CCB:tpl	1.000	NPOC:0.2164mg/L	Control val	Completed	10/30/2018 8:56:22 AM	6



Type	Analysi	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes	Status	Date / Time	Vial
Unknown	NPOC	18J0334-77		NPOC 0.5-	1.000	NPOC:0.4036mg/L		Completed	10/30/2018 9:17:44 AM	39
Unknown	NPOC	18J0334-79		NPOC 0.5-	1.000	NPOC:28.23mg/L		Completed	10/30/2018 9:36:13 AM	40
Unknown	NPOC	18J0334-81		NPOC 0.5-	1.000	NPOC:0.3661mg/L		Completed	10/30/2018 10:01:27 AM	41
Unknown	NPOC	18J0334-83		NPOC 0.5-	1.000	NPOC:1.139mg/L		Completed	10/30/2018 10:19:06 AM	42
Unknown	NPOC	BGJ0819-MRL1		NPOC 0.5-	1.000	NPOC:0.8497mg/L		Completed	10/30/2018 10:40:30 AM	43
Unknown	NPOC	BGJ0819-BLK1		NPOC 0.5-	1.000	NPOC:0.1074mg/L		Completed	10/30/2018 10:57:42 AM	44
Unknown	NPOC	BGJ0819-BS1		NPOC 0.5-	1.000	NPOC:20.34mg/L		Completed	10/30/2018 11:16:51 AM	45
Unknown	NPOC	18J0334-41 DOC		NPOC 0.5-	1.000	NPOC:0.5049mg/L		Completed	10/30/2018 11:42:09 AM	46
Unknown	NPOC	18J0334-43 DOC		NPOC 0.5-	1.000	NPOC:0.3766mg/L		Completed	10/30/2018 12:03:29 PM	47
Unknown	NPOC	BGJ0819-DUP1		NPOC 0.5-	1.000	NPOC:0.3681mg/L		Completed	10/30/2018 12:21:04 PM	48
Control	NPOC	SEQ-CCV4	CVS 20	CVS 20 pp	1.000	NPOC:19.03ppm	Control val	Completed	10/30/2018 12:39:55 PM	5
Control	NPOC	SEQ-CCB4		ICB CCB:tpl	1.000	NPOC:0.2063mg/L	Control val	Completed	10/30/2018 1:03:48 PM	6
Unknown	NPOC	BGJ0819-MS1		NPOC 0.5-	1.000	NPOC:22.08mg/L		Completed	10/30/2018 1:23:43 PM	49
Unknown	NPOC	BGJ0819-MSD1		NPOC 0.5-	1.000	NPOC:21.45mg/L		Completed	10/30/2018 1:43:30 PM	50
Unknown	NPOC	18J0334-45 DOC		NPOC 0.5-	1.000	NPOC:0.4186mg/L		Completed	10/30/2018 2:08:46 PM	51
Unknown	NPOC	18J0334-47 DOC		NPOC 0.5-	1.000	NPOC:1.437mg/L		Completed	10/30/2018 2:26:37 PM	52
Unknown	NPOC	18J0334-49 DOC		NPOC 0.5-	1.000	NPOC:0.4350mg/L		Completed	10/30/2018 2:44:23 PM	53
Unknown	NPOC	18J0334-51 DOC		NPOC 0.5-	1.000	NPOC:0.4554mg/L		Completed	10/30/2018 3:01:53 PM	54
Unknown	NPOC	18J0334-53 DOC		NPOC 0.5-	1.000	NPOC:0.5624mg/L		Completed	10/30/2018 3:19:23 PM	55
Unknown	NPOC	18J0334-55 DOC		NPOC 0.5-	1.000	NPOC:0.3932mg/L		Completed	10/30/2018 3:36:55 PM	56
Unknown	NPOC	18J0334-57 DOC		NPOC 0.5-	1.000	NPOC:0.3285mg/L		Completed	10/30/2018 3:54:22 PM	57
Unknown	NPOC	18J0334-61 DOC		NPOC 0.5-	1.000	NPOC:0.4828mg/L		Completed	10/30/2018 4:15:41 PM	58
Control	NPOC	SEQ-CCV5	CVS 20	CVS 20 pp	1.000	NPOC:19.09ppm	Control val	Completed	10/30/2018 4:34:55 PM	5
Control	NPOC	SEQ-CCB5		ICB CCB:tpl	1.000	NPOC:0.2105mg/L	Control val	Completed	10/30/2018 4:58:46 PM	6
Unknown	NPOC	18J0334-63 DOC		NPOC 0.5-	1.000	NPOC:0.4579mg/L		Completed	10/30/2018 5:16:18 PM	59
Unknown	NPOC	18J0334-65 DOC		NPOC 0.5-	1.000	NPOC:0.6268mg/L		Completed	10/30/2018 5:33:58 PM	60
Unknown	NPOC	18J0334-67 DOC		NPOC 0.5-	1.000	NPOC:0.6132mg/L		Completed	10/30/2018 5:51:37 PM	61
Unknown	NPOC	18J0334-69 DOC		NPOC 0.5-	1.000	NPOC:1.325mg/L		Completed	10/30/2018 6:09:29 PM	62
Unknown	NPOC	18J0334-71 DOC		NPOC 0.5-	1.000	NPOC:0.7786mg/L		Completed	10/30/2018 6:27:28 PM	63
Unknown	NPOC	18J0334-73 DOC		NPOC 0.5-	1.000	NPOC:0.5304mg/L		Completed	10/30/2018 6:45:02 PM	64
Unknown	NPOC	18J0334-75 DOC		NPOC 0.5-	1.000	NPOC:1.262mg/L		Completed	10/30/2018 7:02:41 PM	65
Unknown	NPOC	18J0334-77 DOC		NPOC 0.5-	1.000	NPOC:0.6324mg/L		Completed	10/30/2018 7:20:11 PM	66
Unknown	NPOC	18J0334-79 DOC		NPOC 0.5-	1.000	NPOC:23.82mg/L		Completed	10/30/2018 7:38:30 PM	67
Unknown	NPOC	18J0334-81 DOC		NPOC 0.5-	1.000	NPOC:0.5634mg/L		Completed	10/30/2018 8:03:46 PM	68
Control	NPOC	SEQ-CCV6	CVS 20	CVS 20 pp	1.000	NPOC:19.13ppm	Control val	Completed	10/30/2018 8:22:38 PM	7
Control	NPOC	SEQ-CCB6		ICB CCB:tpl	1.000	NPOC:0.2019mg/L	Control val	Completed	10/30/2018 8:43:06 PM	8

# TOC-Control L Report

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## Instr.Information

Instrument Options  
Catalyst

TOC/ASI/IC Unit/  
Regular Sensitivity

## Sample

Sample Name: Rinse  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

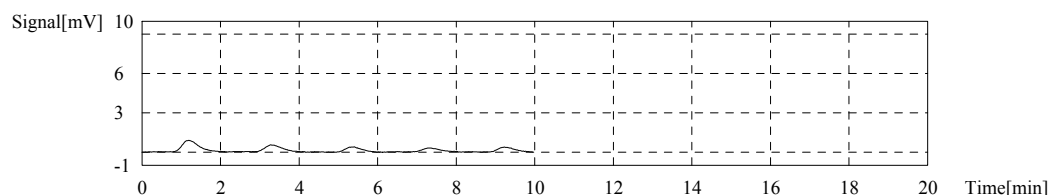
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1029mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.608	0.2647mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 4:55:26 PM
2	1.499	0.1522mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 4:58:53 PM
3	1.157	0.1174mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 5:02:18 PM
4	0.7809	0.07926mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 5:05:45 PM
5	1.103	0.1120mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 5:09:15 PM

Mean Area 1.014  
Mean Conc. 0.1029mg/L



## Cal. Curve

Sample Name: SEQ-CAL  
Sample ID: Curve  
Cal. Curve: NPOC 0.5 - 50 ppm.2018\_10\_29\_17\_09\_16.cal  
Status: Completed

Type	Anal.
Standard	NPOC

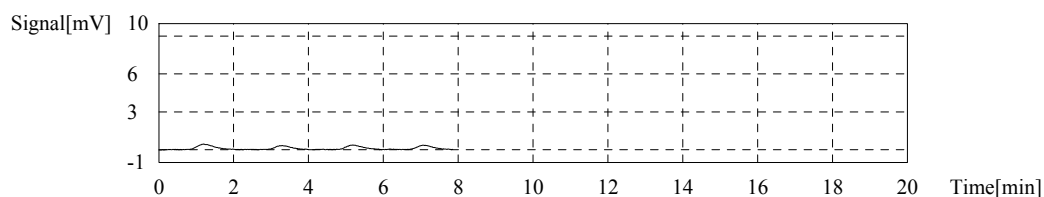
Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.312	100uL	1.000	*****	E	10/29/2018 5:16:56 PM
2	0.8324	100uL	1.000	*****		10/29/2018 5:20:15 PM
3	0.9657	100uL	1.000	*****		10/29/2018 5:23:45 PM
4	0.9431	100uL	1.000	*****		10/29/2018 5:27:19 PM

# TOC-Control L Report

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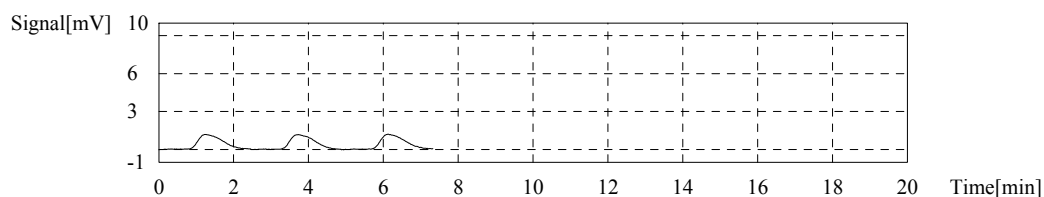
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 0.9137



Conc: 0.5000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.069	100uL	10.00	*****		10/29/2018 5:37:58 PM
2	5.147	100uL	10.00	*****		10/29/2018 5:42:48 PM
3	4.983	100uL	10.00	*****		10/29/2018 5:47:42 PM

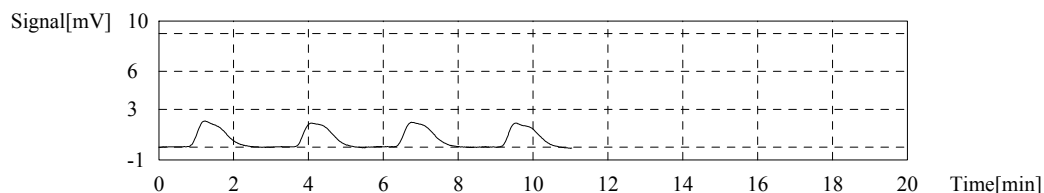
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 5.066



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.35	100uL	5.000	*****	E	10/29/2018 5:56:53 PM
2	9.744	100uL	5.000	*****		10/29/2018 6:00:34 PM
3	10.05	100uL	5.000	*****		10/29/2018 6:04:22 PM
4	9.968	100uL	5.000	*****		10/29/2018 6:08:05 PM

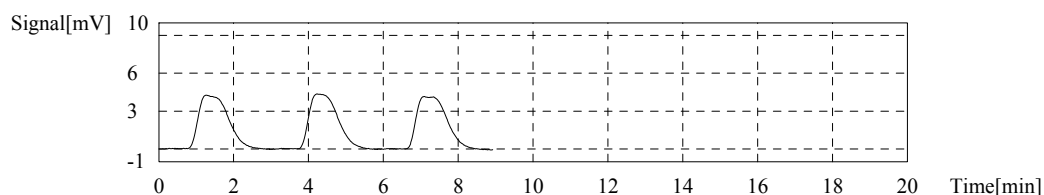
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 9.921



Conc: 2.500mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	23.44	100uL	2.000	*****		10/29/2018 6:17:33 PM
2	23.28	100uL	2.000	*****		10/29/2018 6:21:26 PM
3	23.54	100uL	2.000	*****		10/29/2018 6:25:31 PM

Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 23.42



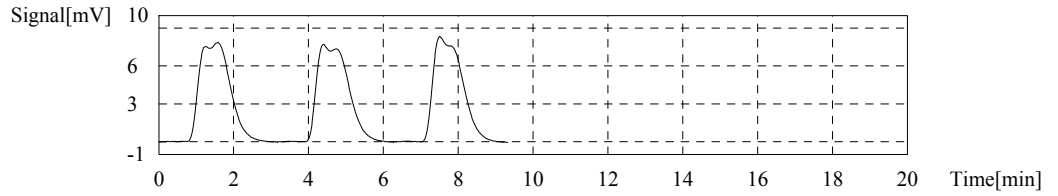
Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	45.35	100uL	1.000	*****		10/29/2018 6:34:36 PM
2	45.19	100uL	1.000	*****		10/29/2018 6:38:42 PM
3	45.29	100uL	1.000	*****		10/29/2018 6:42:45 PM

# TOC-Control L Report

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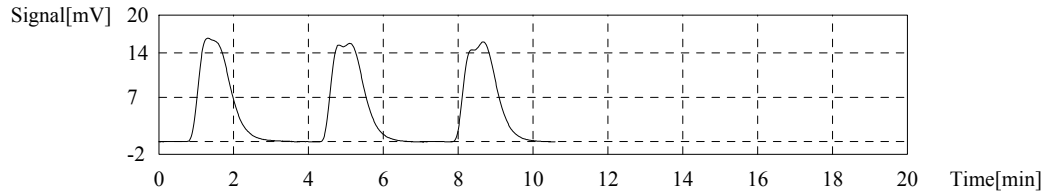
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 45.28



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	93.16	100uL	5.000	*****		10/29/2018 6:54:48 PM
2	93.43	100uL	5.000	*****		10/29/2018 6:59:20 PM
3	93.01	100uL	5.000	*****		10/29/2018 7:03:50 PM

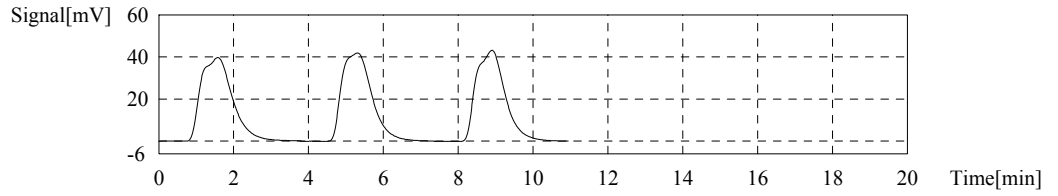
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 93.20



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	234.8	100uL	2.000	*****		10/29/2018 7:14:08 PM
2	236.3	100uL	2.000	*****		10/29/2018 7:18:42 PM
3	235.7	100uL	2.000	*****		10/29/2018 7:23:17 PM

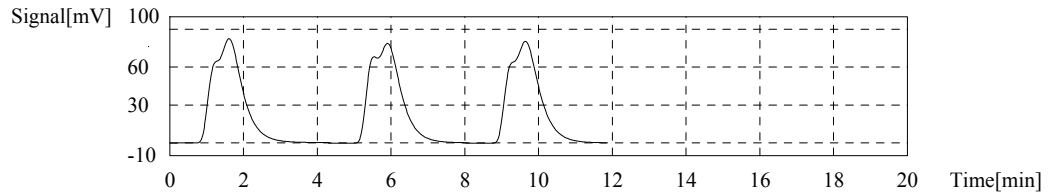
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 235.6



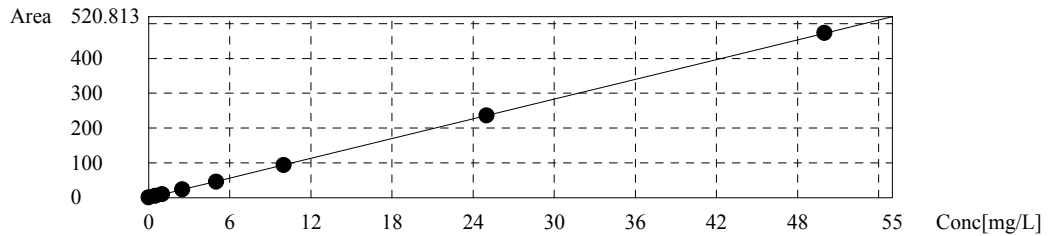
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	475.4	100uL	1.000	*****		10/29/2018 7:33:29 PM
2	471.5	100uL	1.000	*****		10/29/2018 7:38:13 PM
3	473.5	100uL	1.000	*****		10/29/2018 7:43:01 PM

Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 473.5



Slope: 9.462  
Intercept: 0.000  
r<sup>2</sup>: 1.0000  
r: 1.0000  
Zero Shift: Yes



# TOC-Control L Report

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## Control Sample

Sample Name: SEQ-ICV1  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.28 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

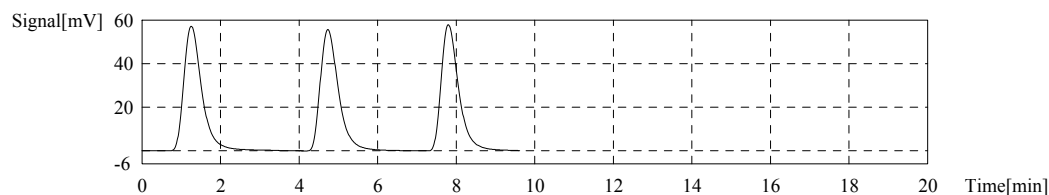
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.28ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	183.9	19.47ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 7:54:24 PM
2	181.2	19.18ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 7:58:28 PM
3	181.1	19.17ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:02:31 PM

Mean Area: 182.1  
 Mean Conc.: 19.28ppm



## Control Sample

Sample Name: SEQ-ICB1  
 Sample ID: ICB CCB.tpl  
 Method: ICB CCB.tpl  
 Status: Completed  
 Chk. Result: Control value: 0.2659 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2659mg/L

1. Det.

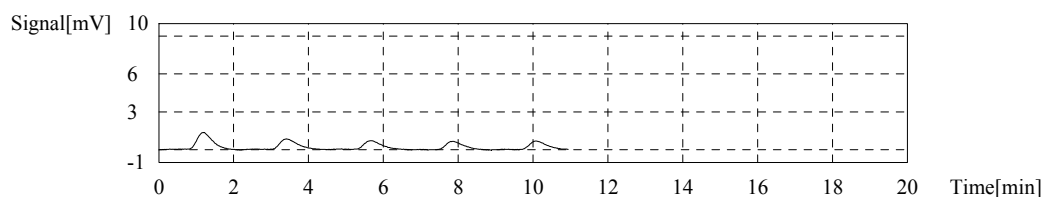
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.924	0.4488mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:12:38 PM
2	2.744	0.3241mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:16:10 PM
3	2.210	0.2677mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:19:36 PM
4	2.292	0.2763mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:23:09 PM
5	2.077	0.2536mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:26:28 PM

# TOC-Control L Report

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Mean Area 2.193  
Mean Conc. 0.2659mg/L



## Sample

Sample Name: SEQ-IFA1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

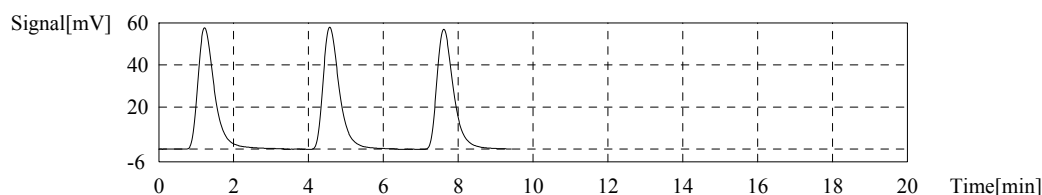
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.1	18.93mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:37:34 PM
2	176.4	18.64mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:41:36 PM
3	177.6	18.77mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:45:38 PM

Mean Area 177.7  
Mean Conc. 18.78mg/L



## Sample

Sample Name: 18J0334-25 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6122mg/L

1. Det

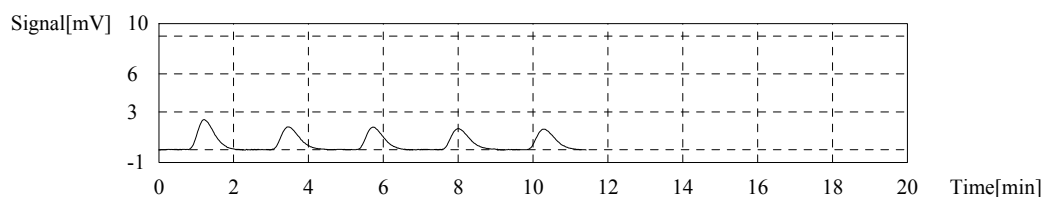
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.587	0.8018mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:55:46 PM
2	6.106	0.6453mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:59:35 PM
3	5.965	0.6304mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:03:22 PM
4	5.728	0.6054mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:07:10 PM
5	5.684	0.6007mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:11:02 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 5.792  
Mean Conc. 0.6122mg/L



## Sample

Sample Name: 18J0334-27 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

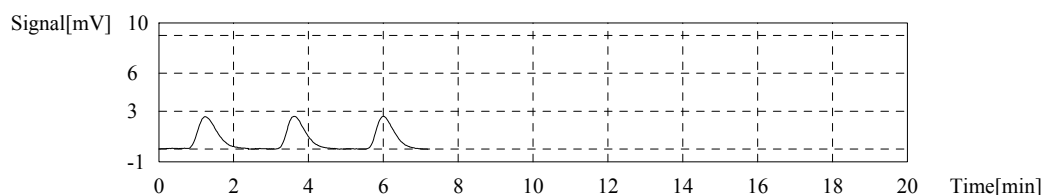
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9334mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.876	0.9381mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:21:08 PM
2	8.855	0.9358mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:24:55 PM
3	8.764	0.9262mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:28:47 PM

Mean Area 8.832  
Mean Conc. 0.9334mg/L



## Sample

Sample Name: 18J0334-29 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6165mg/L

1. Det

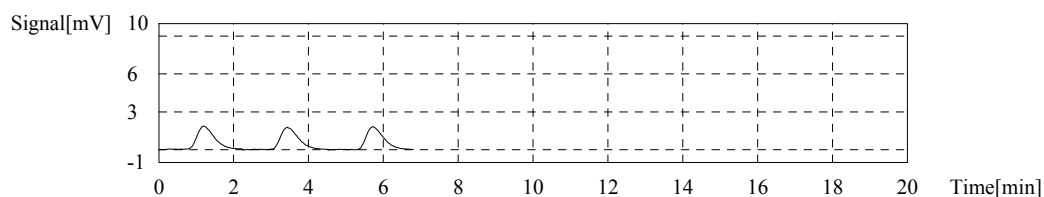
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.761	0.6088mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:39:13 PM
2	5.861	0.6194mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:43:03 PM
3	5.877	0.6211mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:46:50 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 5.833  
Mean Conc. 0.6165mg/L



## Sample

Sample Name: 18J0334-31 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

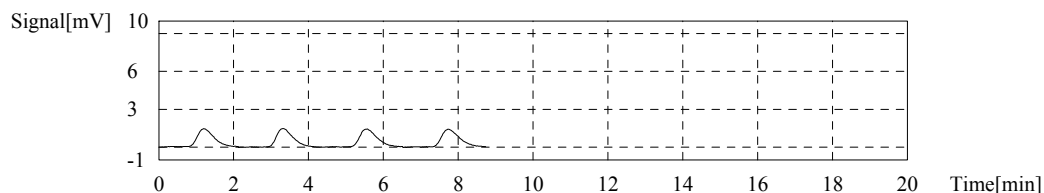
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4808mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.265	0.4507mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:56:39 PM
2	4.556	0.4815mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:00:32 PM
3	4.486	0.4741mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:04:17 PM
4	4.607	0.4869mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:08:06 PM

Mean Area 4.550  
Mean Conc. 0.4808mg/L



## Sample

Sample Name: 18J0334-33 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6551mg/L

1. Det

Anal.: NPOC

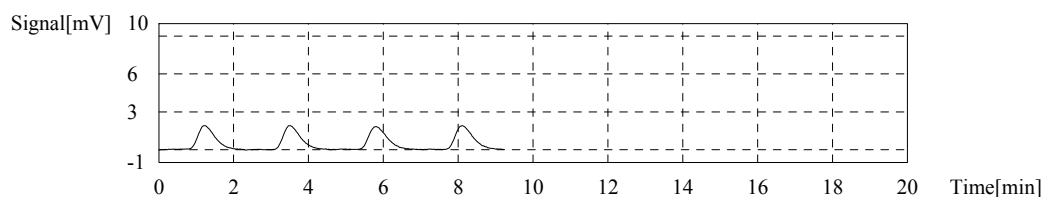
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.877	0.6211mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:18:05 PM
2	6.135	0.6484mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:21:52 PM
3	6.157	0.6507mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:25:40 PM
4	6.303	0.6661mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:29:28 PM



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 6.198  
Mean Conc. 0.6551mg/L



## Sample

Sample Name: 18J0334-35 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

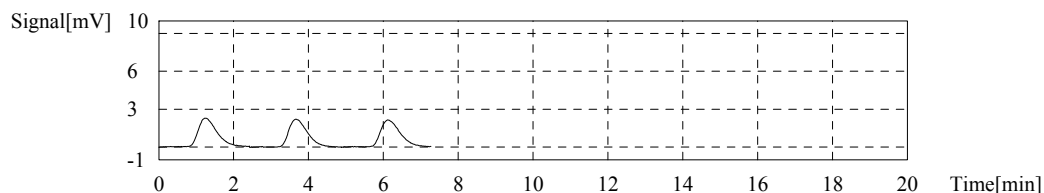
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8127mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.716	0.8155mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:39:35 PM
2	7.749	0.8189mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:43:24 PM
3	7.606	0.8038mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:47:08 PM

Mean Area 7.690  
Mean Conc. 0.8127mg/L



## Sample

Sample Name: 18J0334-37 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7432mg/L

1. Det

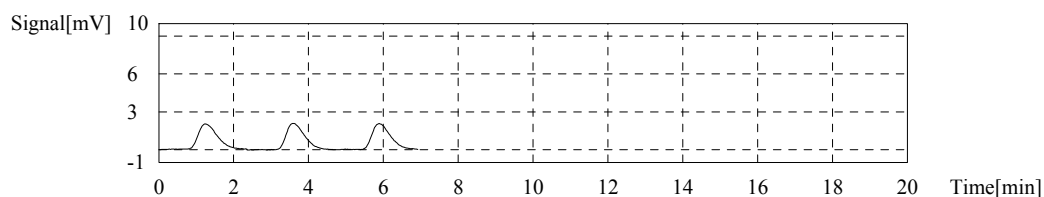
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.982	0.7379mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:57:11 PM
2	7.139	0.7545mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:00:55 PM
3	6.975	0.7371mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:04:42 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 7.032  
Mean Conc. 0.7432mg/L



## Sample

Sample Name: 18J0334-39 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

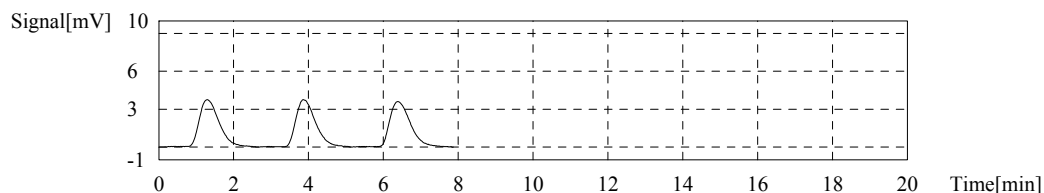
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.443mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.58	1.435mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:15:00 PM
2	13.67	1.445mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:18:43 PM
3	13.71	1.449mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:22:45 PM

Mean Area 13.65  
Mean Conc. 1.443mg/L



## Sample

Sample Name: BGJ0804-MRL1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8213mg/L

1. Det

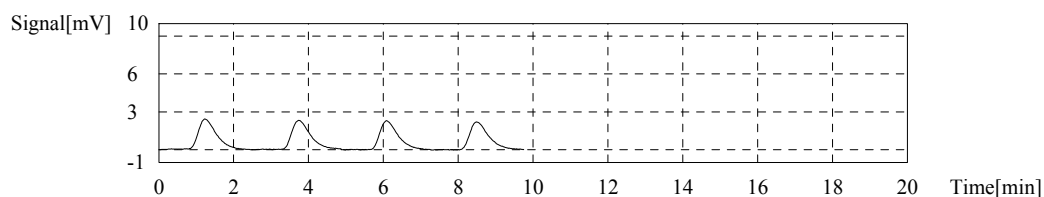
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.023	0.8479mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:33:01 PM
2	7.816	0.8260mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:36:40 PM
3	7.703	0.8141mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:40:29 PM
4	7.795	0.8238mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:44:21 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 7.771  
Mean Conc. 0.8213mg/L



## Control Sample

Sample Name: SEQ-CCV1  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.01 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

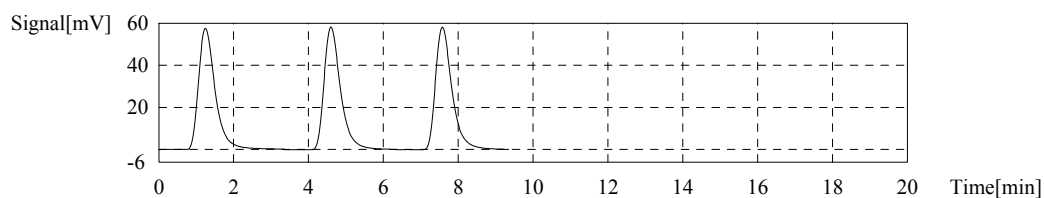
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.01ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.2	18.97ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:56:00 PM
2	179.6	19.01ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:59:59 PM
3	179.9	19.05ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:04:00 AM

Mean Area 179.6  
Mean Conc. 19.01ppm



## Control Sample

Sample Name: SEQ-CCB1  
Sample ID: ICB CCB.tpl  
Method: Completed  
Status: Completed  
Chk. Result: Control value: 0.2336 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2336mg/L

1. Det.

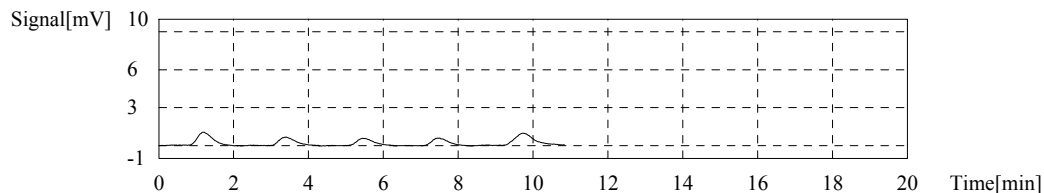
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.955	0.3464mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:14:05 AM
2	1.981	0.2435mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:17:29 AM
3	1.732	0.2171mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:20:54 AM
4	1.951	0.2403mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:24:32 AM
5	3.445	0.3982mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:28:20 AM

Mean Area 1.888  
Mean Conc. 0.2336mg/L



## Sample

Sample Name: BGJ0804-BLK1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

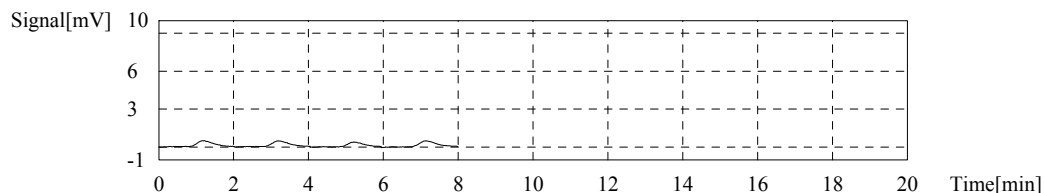
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1448mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.336	0.1412mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:38:19 AM
2	1.348	0.1425mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:42:06 AM
3	1.003	0.1060mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:45:46 AM
4	1.426	0.1507mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:49:42 AM

Mean Area 1.370  
Mean Conc. 0.1448mg/L



## Sample

Sample Name: BGJ0804-BS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.26mg/L

1. Det

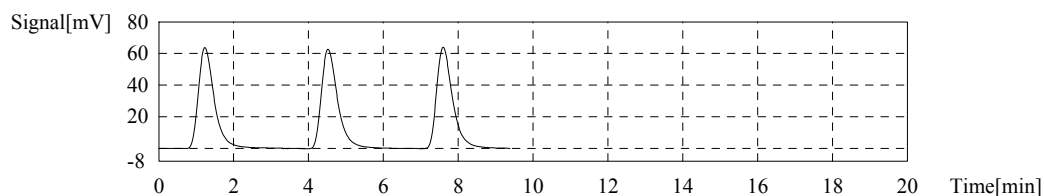
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	190.2	20.10mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:00:43 AM
2	191.7	20.26mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:04:47 AM
3	193.3	20.43mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:08:48 AM

Mean Area 191.7  
Mean Conc. 20.26mg/L



## Sample

Sample Name: 18J0334-47  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

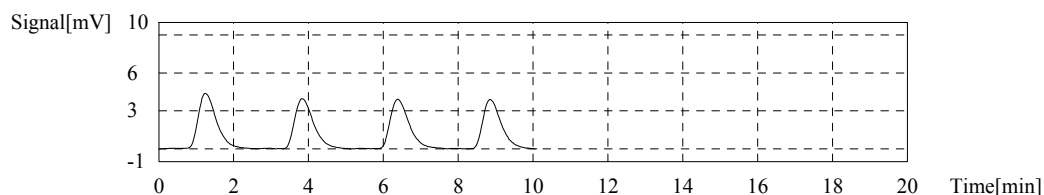
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.443mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.79	1.563mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:19:16 AM
2	13.93	1.472mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:23:02 AM
3	13.56	1.433mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:26:45 AM
4	13.47	1.424mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:30:33 AM

Mean Area 13.65  
Mean Conc. 1.443mg/L



## Sample

Sample Name: BGJ0804-DUP1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.398mg/L

1. Det

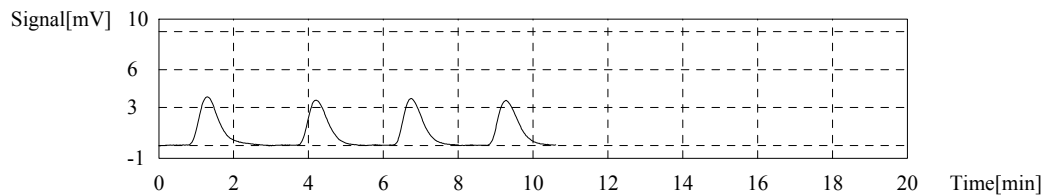
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.48	1.530mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:41:39 AM
2	13.13	1.388mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:45:12 AM
3	13.20	1.395mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:48:56 AM
4	13.35	1.411mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:52:48 AM

Mean Area 13.23  
Mean Conc. 1.398mg/L



## Sample

Sample Name: BGJ0804-MS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

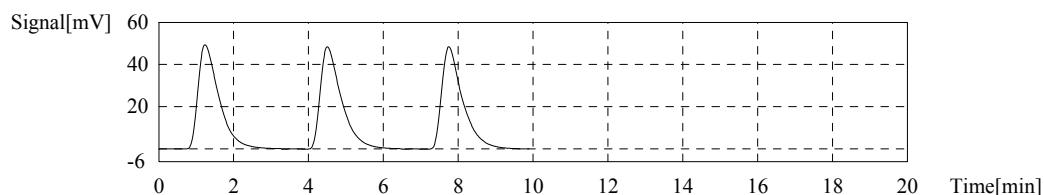
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	193.7	20.47mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:04:00 AM
2	191.9	20.28mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:08:14 AM
3	191.2	20.21mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:12:37 AM

Mean Area 192.3  
Mean Conc. 20.32mg/L



## Sample

Sample Name: 18J0334-49  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2863mg/L

1. Det

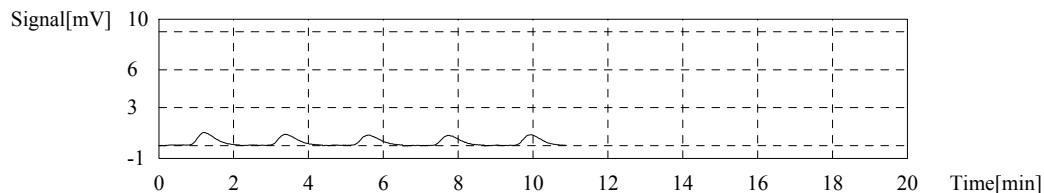
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.213	0.3396mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:22:41 AM
2	2.943	0.3110mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:26:30 AM
3	2.709	0.2863mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:30:14 AM
4	2.637	0.2787mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:34:03 AM
5	2.780	0.2938mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:37:50 AM

Mean Area 2.709  
Mean Conc. 0.2863mg/L



## Sample

Sample Name: 18J0334-51  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

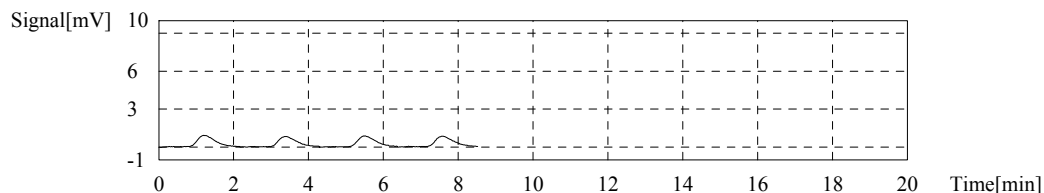
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2909mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.830	0.2991mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:47:51 AM
2	2.579	0.2726mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:51:41 AM
3	2.755	0.2912mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:55:29 AM
4	2.672	0.2824mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:59:22 AM

Mean Area 2.752  
Mean Conc. 0.2909mg/L



## Sample

Sample Name: 18J0334-53  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3362mg/L

1. Det

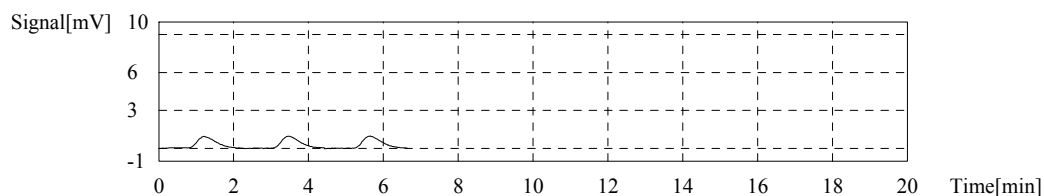
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.104	0.3280mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:09:20 AM
2	3.146	0.3325mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:13:02 AM
3	3.293	0.3480mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:16:52 AM

Mean Area 3.181  
Mean Conc. 0.3362mg/L



## Sample

Sample Name: 18J0334-55  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

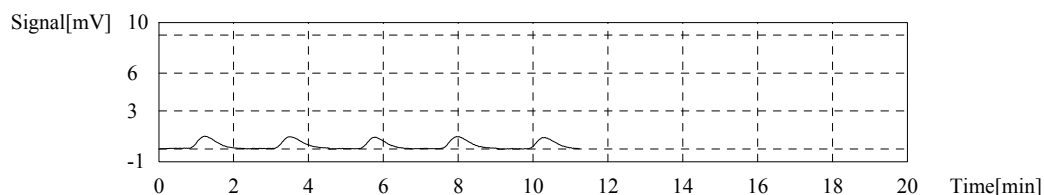
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3555mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.280	0.3466mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:26:51 AM
2	3.320	0.3509mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:30:40 AM
3	3.040	0.3213mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:34:21 AM
4	3.490	0.3688mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:38:17 AM
5	3.096	0.3272mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:41:53 AM

Mean Area 3.363  
Mean Conc. 0.3555mg/L



## Sample

Sample Name: 18J0334-57  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2106mg/L

1. Det

Anal.: NPOC

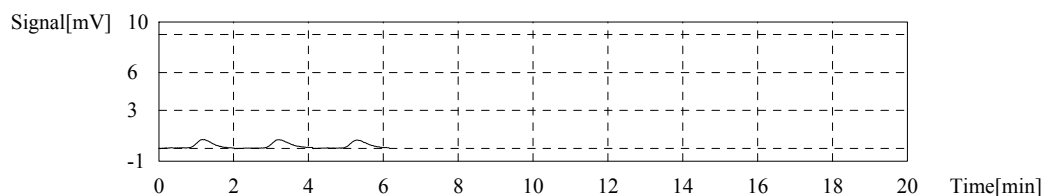


# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.985	0.2098mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:51:38 AM
2	2.054	0.2171mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:55:30 AM
3	1.939	0.2049mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:59:13 AM

Mean Area 1.993  
Mean Conc. 0.2106mg/L



## Control Sample

Sample Name: SEQ-CCV2  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.03 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

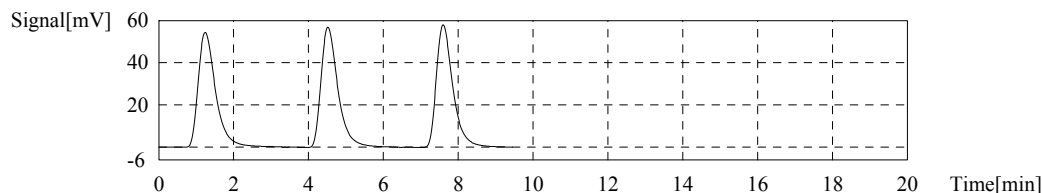
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.03ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	177.8	18.82ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:10:14 AM
2	180.6	19.12ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:14:19 AM
3	180.7	19.13ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:18:24 AM

Mean Area 179.7  
Mean Conc. 19.03ppm



## Control Sample

Sample Name: SEQ-CCB2  
Sample ID: ICB CCB.tpl  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.1235 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.1235mg/L

# TOC-Control L Report

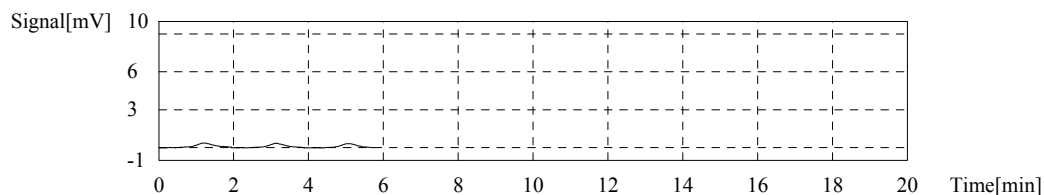
BF  
2018\_10\_29\_002.thx

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9125	0.1305mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:28:14 AM
2	0.8145	0.1202mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:31:44 AM
3	0.8107	0.1198mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:35:12 AM

Mean Area 0.8459  
Mean Conc. 0.1235mg/L



## Sample

Sample Name: 18J0334-59  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

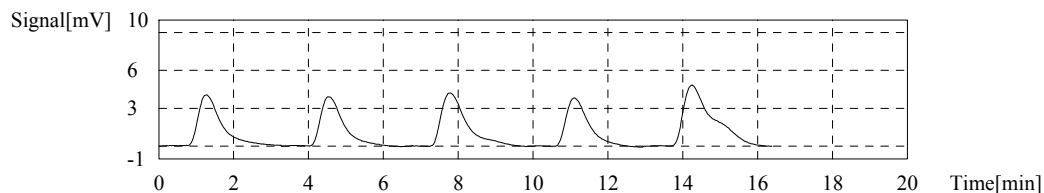
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.786mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.42	1.841mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:46:27 AM
2	16.75	1.770mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:50:40 AM
3	20.12	2.126mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:54:59 AM
4	16.52	1.746mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:59:06 AM
5	26.82	2.834mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:03:33 AM

Mean Area 16.90  
Mean Conc. 1.786mg/L



## Sample

Sample Name: 18J0334-60  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.104mg/L

# TOC-Control L Report

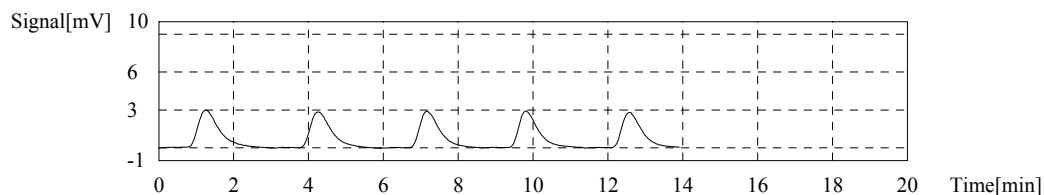
BF  
2018\_10\_29\_002.thx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.74	1.241mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:14:28 AM
2	11.26	1.190mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:18:23 AM
3	10.73	1.134mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:22:02 AM
4	10.48	1.108mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:25:54 AM
5	10.14	1.072mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:29:30 AM

Mean Area 10.45  
Mean Conc. 1.104mg/L



## Sample

Sample Name: 18J0334-61  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

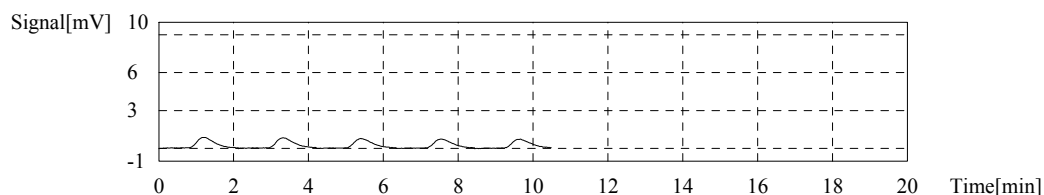
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2459mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.652	0.2803mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:39:36 AM
2	2.522	0.2665mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:43:20 AM
3	2.393	0.2529mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:47:10 AM
4	2.304	0.2435mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:50:55 AM
5	2.284	0.2414mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:54:39 AM

Mean Area 2.327  
Mean Conc. 0.2459mg/L



## Sample

Sample Name: 18J0334-63  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

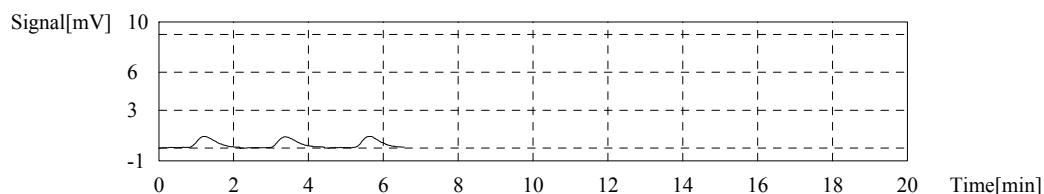
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3079mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.919	0.3085mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:04:34 AM
2	2.906	0.3071mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:08:26 AM
3	2.914	0.3080mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:12:05 AM

Mean Area 2.913  
Mean Conc. 0.3079mg/L



## Sample

Sample Name: 18J0334-65  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

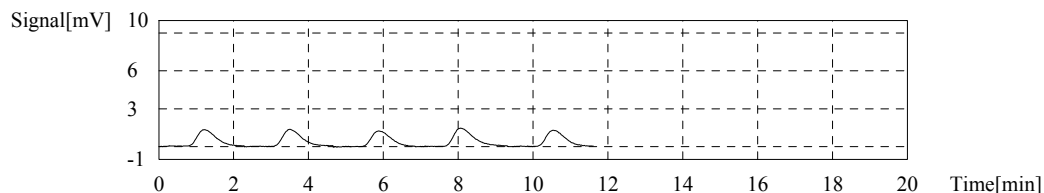
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4700mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.496	0.4752mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:22:06 AM
2	4.615	0.4877mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:25:58 AM
3	4.408	0.4659mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:29:35 AM
4	5.227	0.5524mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:33:38 AM
5	4.438	0.4690mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:37:14 AM

Mean Area 4.447  
Mean Conc. 0.4700mg/L



## Sample

Sample Name: 18J0334-67  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

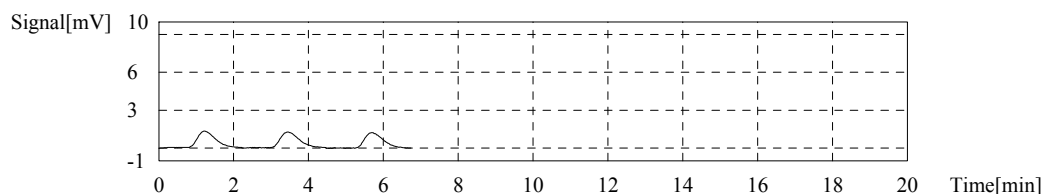
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4519mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.310	0.4555mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:47:11 AM
2	4.277	0.4520mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:51:00 AM
3	4.242	0.4483mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:54:48 AM

Mean Area 4.276  
Mean Conc. 0.4519mg/L



## Sample

Sample Name: 18J0334-69  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

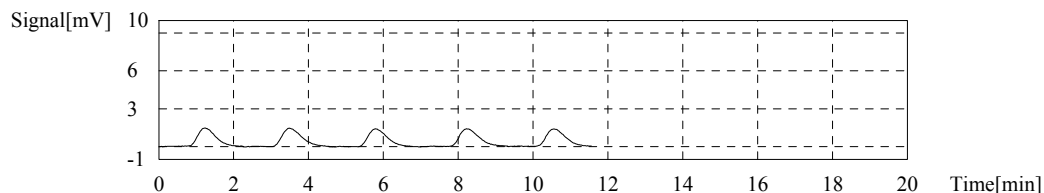
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5122mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.715	0.4983mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:04:47 AM
2	5.239	0.5537mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:08:37 AM
3	5.170	0.5464mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:12:33 AM
4	4.954	0.5236mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:16:12 AM
5	4.872	0.5149mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:19:54 AM

Mean Area 4.847  
Mean Conc. 0.5122mg/L



## Sample

Sample Name: 18J0334-71  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

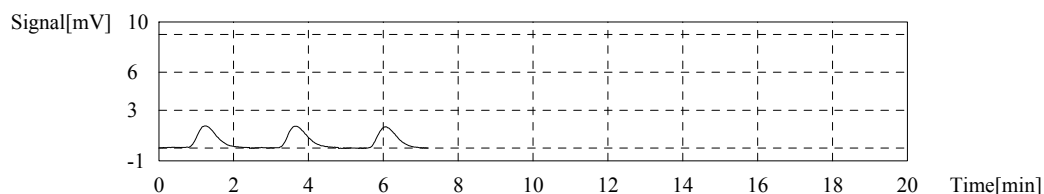
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6477mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.074	0.6419mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:30:03 AM
2	6.194	0.6546mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:33:48 AM
3	6.119	0.6467mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:37:36 AM

Mean Area 6.129  
Mean Conc. 0.6477mg/L



## Sample

Sample Name: 18J0334-73  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

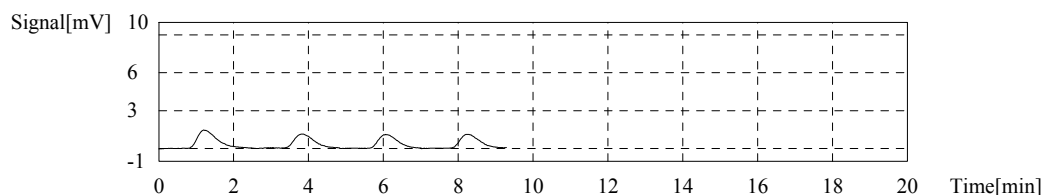
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4127mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.415	0.5723mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:47:55 AM
2	3.943	0.4167mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:51:22 AM
3	3.857	0.4076mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:55:05 AM
4	3.916	0.4139mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:58:58 AM

Mean Area 3.905  
Mean Conc. 0.4127mg/L



## Sample

Sample Name: 18J0334-75  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

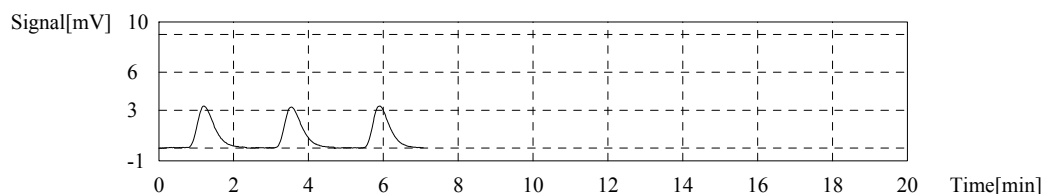
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.110mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.55	1.115mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:09:02 AM
2	10.45	1.104mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:12:50 AM
3	10.51	1.111mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:16:39 AM

Mean Area 10.50  
Mean Conc. 1.110mg/L



## Control Sample

Sample Name: SEQ-CCV3  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.01 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

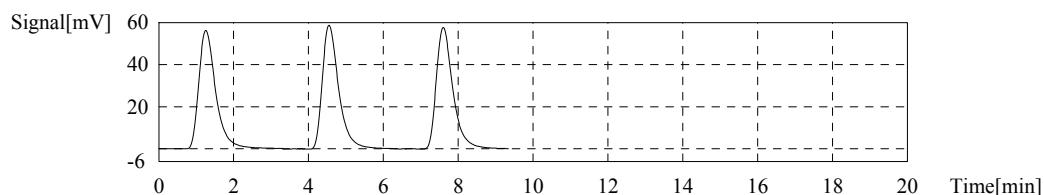
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.01ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	178.5	18.90ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:27:52 AM
2	180.6	19.12ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:31:54 AM
3	179.6	19.01ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:35:53 AM

Mean Area 179.6  
Mean Conc. 19.01ppm



## Control Sample

Sample Name: SEQ-CCB3  
Sample ID: ICB CCB.tpl  
Method: Completed  
Status: Completed  
Chk. Result: Control value: 0.2164 / Control within range!

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

( Zero shift setting of cal. curve has been ignored in conc. calculation )

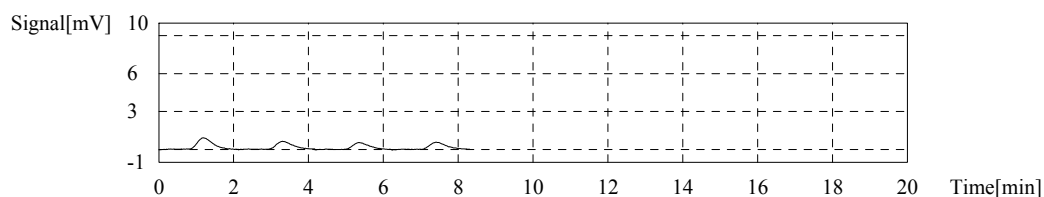
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2164mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.541	0.3026mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:45:54 AM
2	1.804	0.2247mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:49:20 AM
3	1.693	0.2130mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:52:50 AM
4	1.678	0.2114mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:56:22 AM

Mean Area 1.725  
Mean Conc. 0.2164mg/L



## Sample

Sample Name: 18J0334-77  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

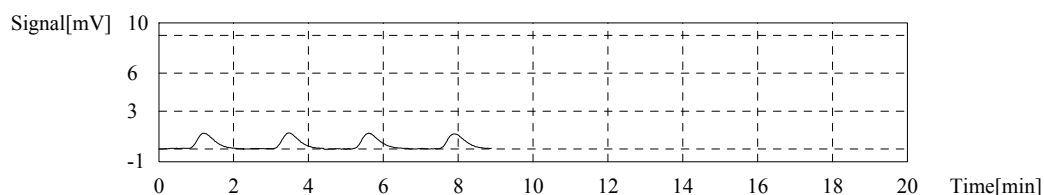
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4036mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.794	0.4010mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:06:27 AM
2	3.803	0.4019mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:10:06 AM
3	4.071	0.4302mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:14:02 AM
4	3.860	0.4079mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:17:44 AM

Mean Area 3.819  
Mean Conc. 0.4036mg/L



## Sample



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-79  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

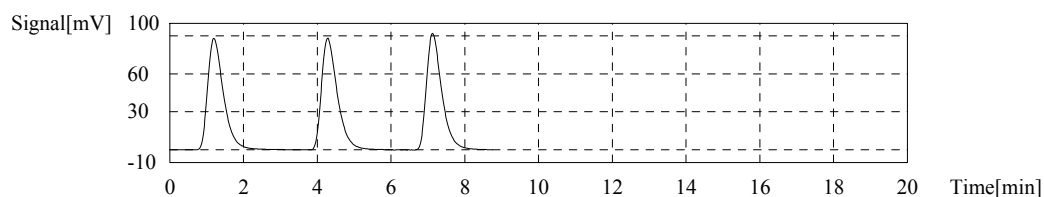
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.5	28.06mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:28:33 AM
2	266.3	28.14mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:32:24 AM
3	269.6	28.49mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:36:13 AM

Mean Area 267.1  
Mean Conc. 28.23mg/L



## Sample

Sample Name: 18J0334-81  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

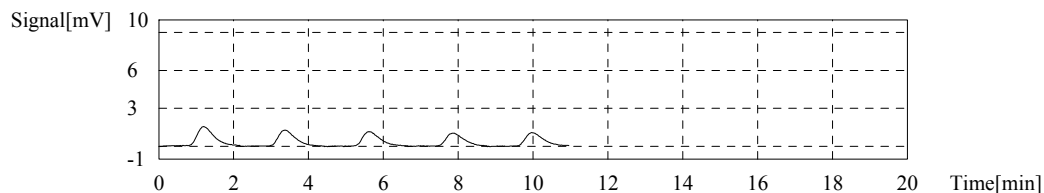
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3661mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.547	0.4805mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:46:18 AM
2	3.966	0.4191mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:50:10 AM
3	3.664	0.3872mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:53:56 AM
4	3.341	0.3531mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:57:36 AM
5	3.387	0.3580mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:01:27 AM

Mean Area 3.464  
Mean Conc. 0.3661mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-83  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

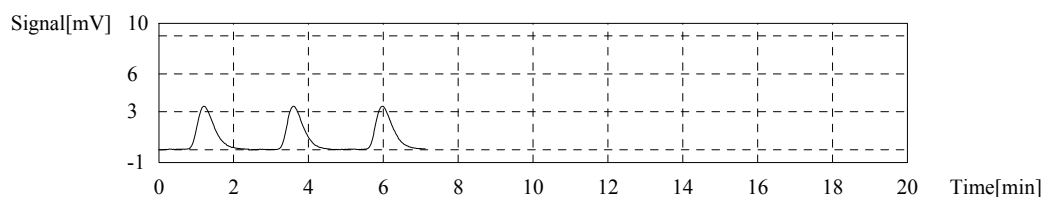
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.139mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.86	1.148mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:11:35 AM
2	10.64	1.124mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:15:20 AM
3	10.82	1.144mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:19:06 AM

Mean Area 10.77  
Mean Conc. 1.139mg/L



## Sample

Sample Name: BGJ0819-MRL1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

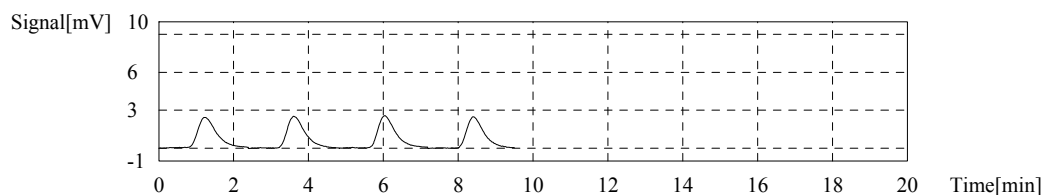
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8497mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.050	0.8508mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:29:13 AM
2	8.476	0.8958mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:33:03 AM
3	8.133	0.8595mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:36:46 AM
4	7.937	0.8388mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:40:30 AM

Mean Area 8.040  
Mean Conc. 0.8497mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: BGJ0819-BLK1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

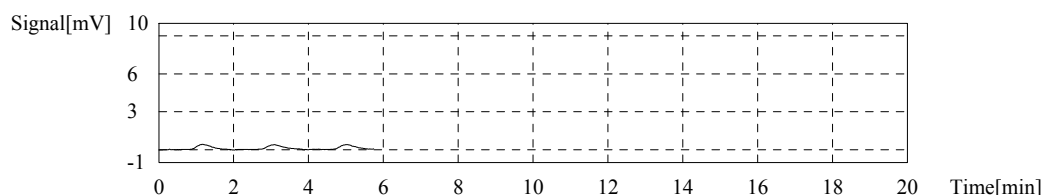
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1074mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.066	0.1127mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:50:08 AM
2	0.9721	0.1027mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:53:57 AM
3	1.012	0.1070mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:57:42 AM

Mean Area 1.017  
Mean Conc. 0.1074mg/L



## Sample

Sample Name: BGJ0819-BS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

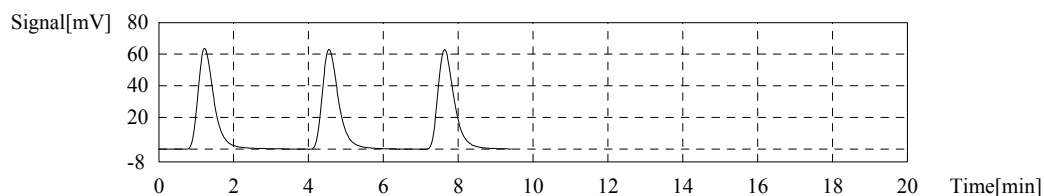
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	190.8	20.16mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:08:45 AM
2	193.2	20.42mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:12:51 AM
3	193.5	20.45mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:16:51 AM

Mean Area 192.5  
Mean Conc. 20.34mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-41 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

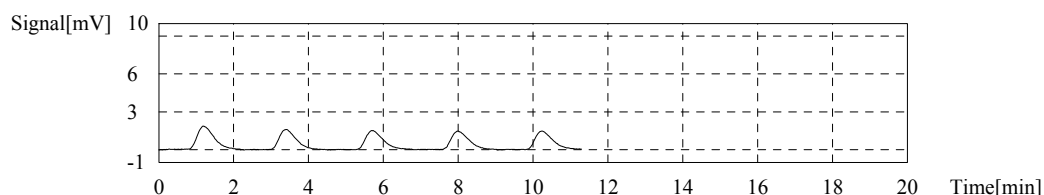
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5049mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.645	0.5966mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:26:57 AM
2	5.119	0.5410mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:30:52 AM
3	4.940	0.5221mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:34:37 AM
4	4.678	0.4944mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:38:22 AM
5	4.715	0.4983mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:42:09 AM

Mean Area 4.778  
Mean Conc. 0.5049mg/L



## Sample

Sample Name: 18J0334-43 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

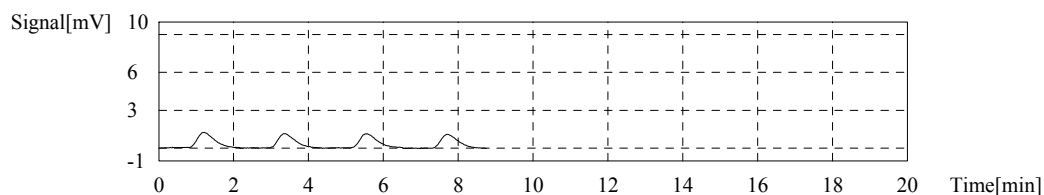
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3766mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.750	0.3963mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:52:04 AM
2	3.649	0.3856mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:55:52 AM
3	3.518	0.3718mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:59:38 AM
4	3.522	0.3722mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:03:29 PM

Mean Area 3.563  
Mean Conc. 0.3766mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: BGJ0819-DUP1  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

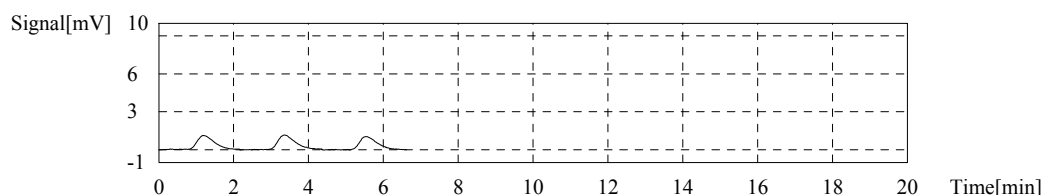
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3681mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.464	0.3661mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:13:24 PM
2	3.550	0.3752mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:17:12 PM
3	3.435	0.3630mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:21:04 PM

Mean Area: 3.483  
 Mean Conc.: 0.3681mg/L



## Control Sample

Sample Name: SEQ-CCV4  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.03 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

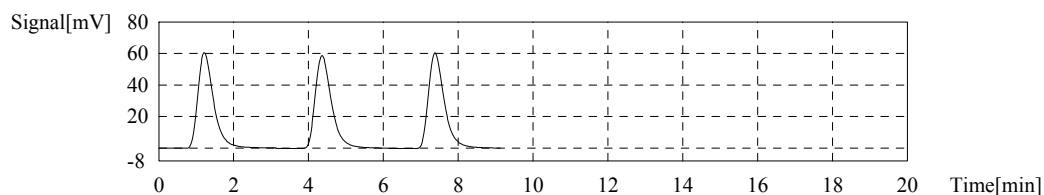
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.03ppm

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.2	18.97ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:31:57 PM
2	179.7	19.03ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:35:57 PM
3	180.2	19.08ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:39:55 PM

Mean Area: 179.7  
 Mean Conc.: 19.03ppm



## Control Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: SEQ-CCB4  
Sample ID:  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.2063 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

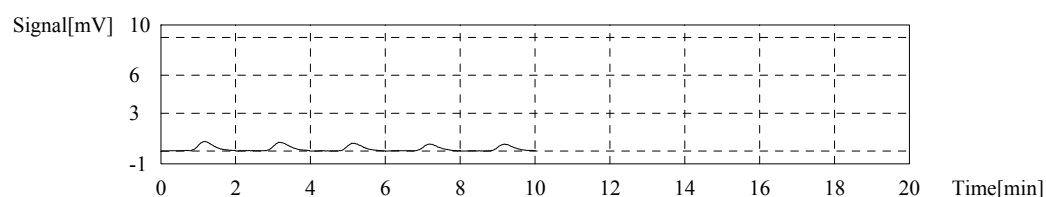
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2063mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.012	0.2467mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:49:49 PM
2	1.935	0.2386mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:53:16 PM
3	1.766	0.2207mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:56:50 PM
4	1.546	0.1975mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:00:18 PM
5	1.576	0.2006mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:03:48 PM

Mean Area: 1.629  
Mean Conc.: 0.2063mg/L



## Sample

Sample Name: BGJ0819-MS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

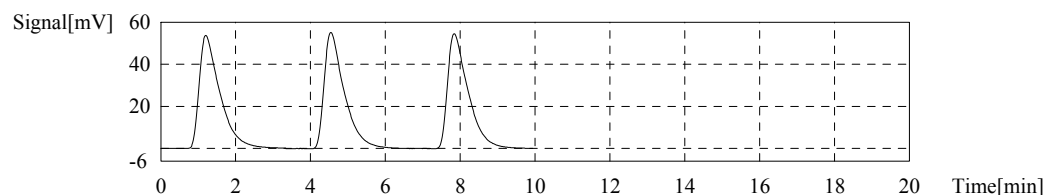
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	208.2	22.00mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:15:07 PM
2	208.7	22.06mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:19:25 PM
3	210.0	22.19mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:23:43 PM

Mean Area: 209.0  
Mean Conc.: 22.08mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: BGJ0819-MSD1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

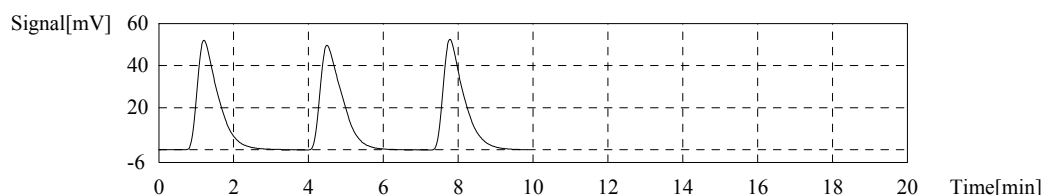
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	202.7	21.42mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:34:56 PM
2	203.0	21.45mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:39:13 PM
3	203.3	21.49mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:43:30 PM

Mean Area 203.0  
Mean Conc. 21.45mg/L



## Sample

Sample Name: 18J0334-45 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

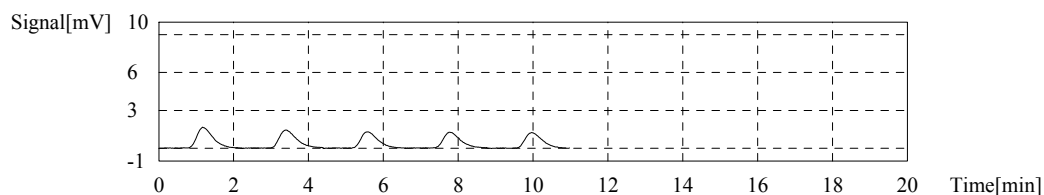
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4186mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.888	0.5166mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:53:38 PM
2	4.447	0.4700mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:57:24 PM
3	4.098	0.4331mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:01:12 PM
4	3.817	0.4034mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:04:58 PM
5	3.969	0.4195mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:08:46 PM

Mean Area 3.961  
Mean Conc. 0.4186mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: 18J0334-47 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

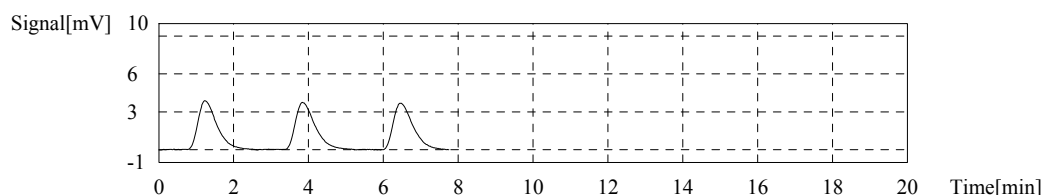
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.437mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.52	1.429mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:19:07 PM
2	13.61	1.438mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:22:55 PM
3	13.65	1.443mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:26:37 PM

Mean Area 13.59  
Mean Conc. 1.437mg/L



## Sample

Sample Name: 18J0334-49 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

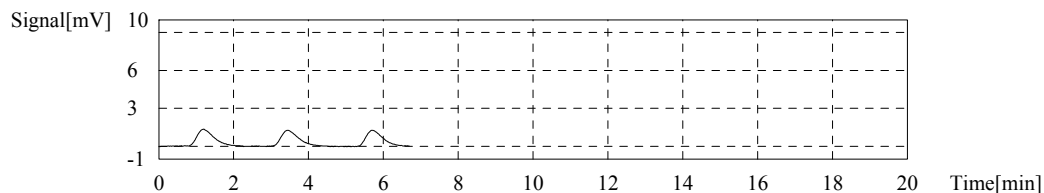
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4350mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.213	0.4452mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:36:54 PM
2	4.078	0.4310mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:40:42 PM
3	4.056	0.4287mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:44:23 PM

Mean Area 4.116  
Mean Conc. 0.4350mg/L



## Sample



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-51 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

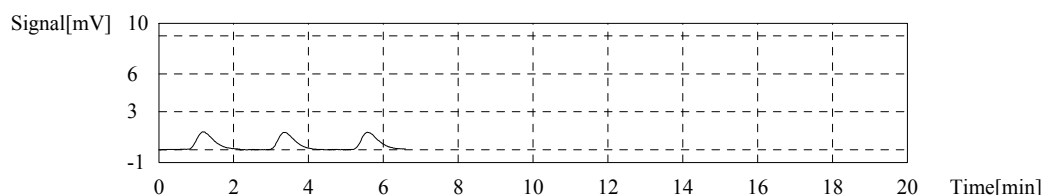
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4554mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.286	0.4530mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:54:18 PM
2	4.303	0.4548mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:58:09 PM
3	4.338	0.4585mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:01:53 PM

Mean Area 4.309  
 Mean Conc. 0.4554mg/L



## Sample

Sample Name: 18J0334-53 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

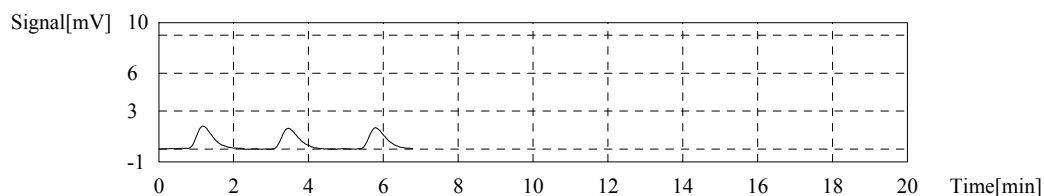
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5624mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.346	0.5650mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:11:54 PM
2	5.379	0.5685mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:15:45 PM
3	5.241	0.5539mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:19:23 PM

Mean Area 5.322  
 Mean Conc. 0.5624mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-55 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

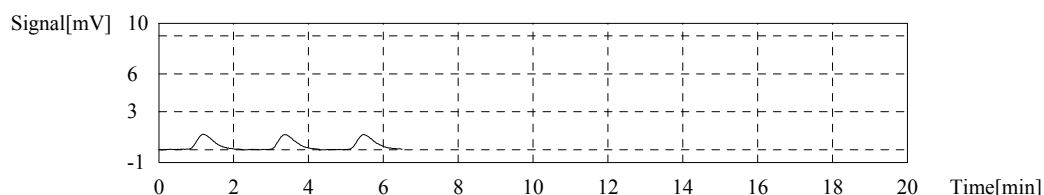
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3932mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.698	0.3908mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:29:19 PM
2	3.681	0.3890mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:33:01 PM
3	3.783	0.3998mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:36:55 PM

Mean Area 3.721  
Mean Conc. 0.3932mg/L



## Sample

Sample Name: 18J0334-57 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

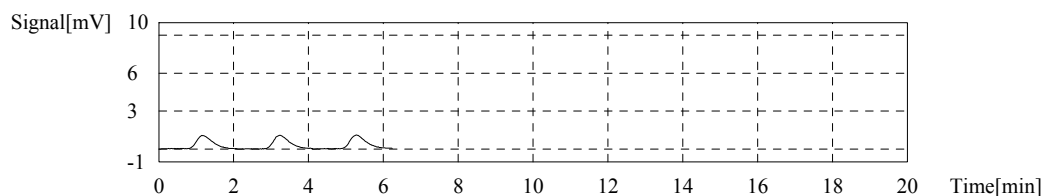
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3285mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.036	0.3209mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:46:43 PM
2	3.115	0.3292mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:50:30 PM
3	3.175	0.3355mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:54:22 PM

Mean Area 3.109  
Mean Conc. 0.3285mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.th

Sample Name: 18J0334-61 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

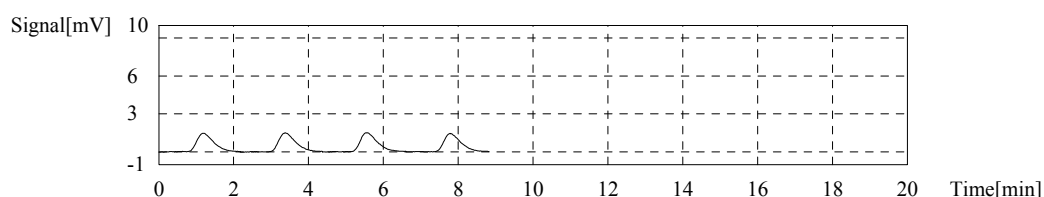
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4828mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.505	0.4761mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:04:18 PM
2	4.672	0.4938mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:08:05 PM
3	4.701	0.4968mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:11:55 PM
4	4.529	0.4786mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:15:41 PM

Mean Area 4.569  
 Mean Conc. 0.4828mg/L



## Control Sample

Sample Name: SEQ-CCV5  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.09 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

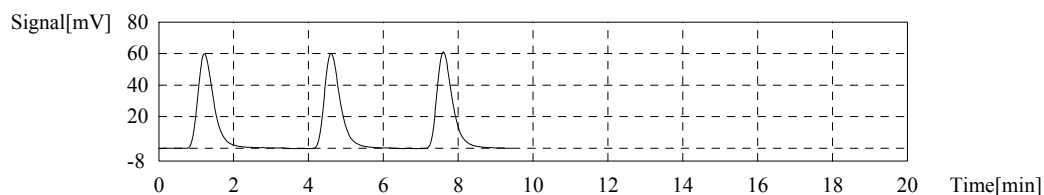
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.09ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.8	19.04ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:26:53 PM
2	180.9	19.15ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:30:53 PM
3	180.1	19.07ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:34:55 PM

Mean Area 180.3  
 Mean Conc. 19.09ppm



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Control Sample

Sample Name: SEQ-CCB5  
Sample ID:  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.2105 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

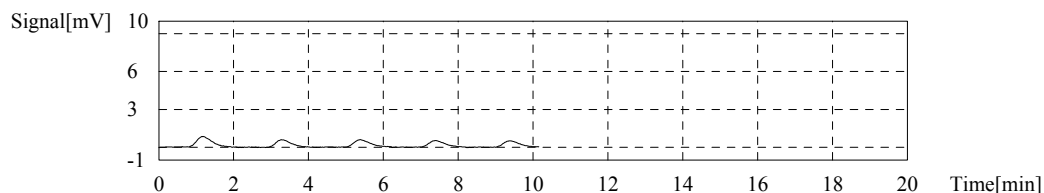
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2105mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.437	0.2916mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:44:56 PM
2	1.764	0.2205mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:48:24 PM
3	1.706	0.2144mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:51:50 PM
4	1.537	0.1965mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:55:18 PM
5	1.315	0.1731mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:58:46 PM

Mean Area: 1.669  
Mean Conc.: 0.2105mg/L



## Sample

Sample Name: 18J0334-63 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result:

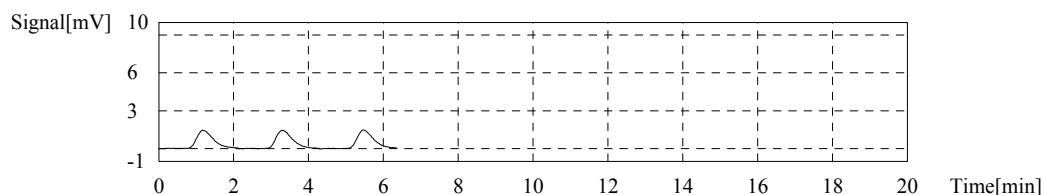
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4579mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.321	0.4567mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:08:47 PM
2	4.436	0.4688mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:12:37 PM
3	4.242	0.4483mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:16:18 PM

Mean Area: 4.333  
Mean Conc.: 0.4579mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: 18J0334-65 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

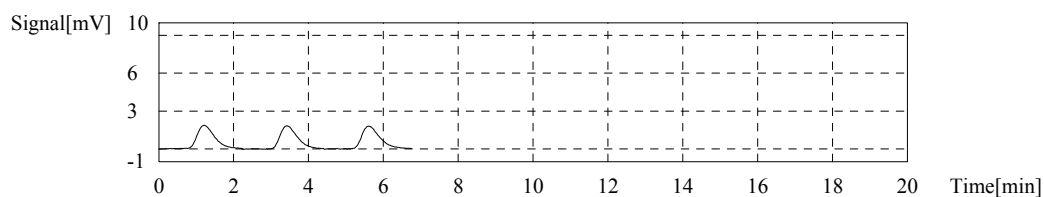
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6268mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.952	0.6290mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:26:16 PM
2	5.832	0.6163mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:30:01 PM
3	6.008	0.6349mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:33:58 PM

Mean Area 5.931  
Mean Conc. 0.6268mg/L



## Sample

Sample Name: 18J0334-67 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

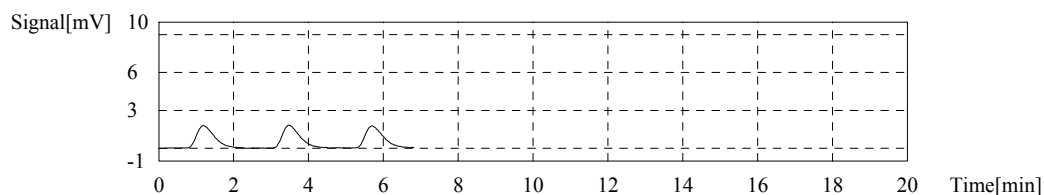
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6132mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.906	0.6242mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:44:01 PM
2	5.751	0.6078mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:47:44 PM
3	5.751	0.6078mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:51:37 PM

Mean Area 5.803  
Mean Conc. 0.6132mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: 18J0334-69 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

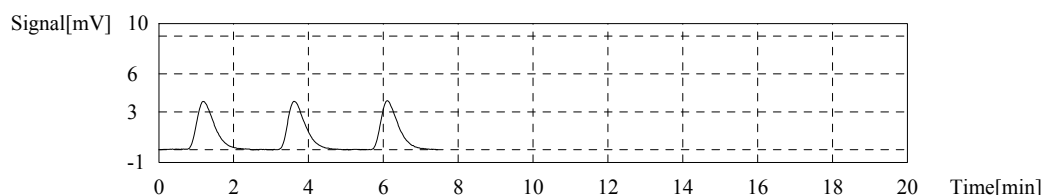
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.325mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.36	1.306mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:01:49 PM
2	12.65	1.337mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:05:39 PM
3	12.61	1.333mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:09:29 PM

Mean Area 12.54  
Mean Conc. 1.325mg/L



## Sample

Sample Name: 18J0334-71 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

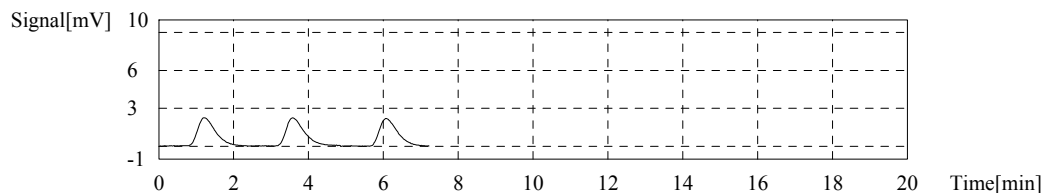
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7786mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.300	0.7715mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:19:54 PM
2	7.463	0.7887mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:23:48 PM
3	7.338	0.7755mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:27:28 PM

Mean Area 7.367  
Mean Conc. 0.7786mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-73 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

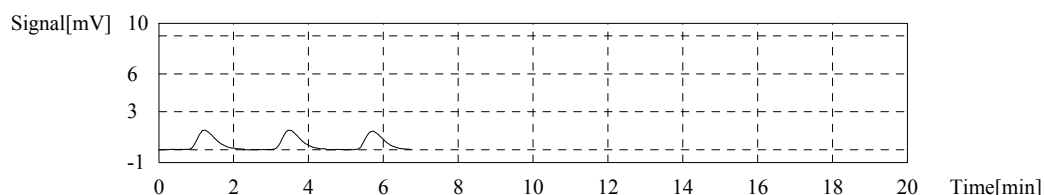
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5304mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.065	0.5353mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:37:30 PM
2	5.058	0.5345mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:41:14 PM
3	4.932	0.5212mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:45:02 PM

Mean Area 5.018  
 Mean Conc. 0.5304mg/L



## Sample

Sample Name: 18J0334-75 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

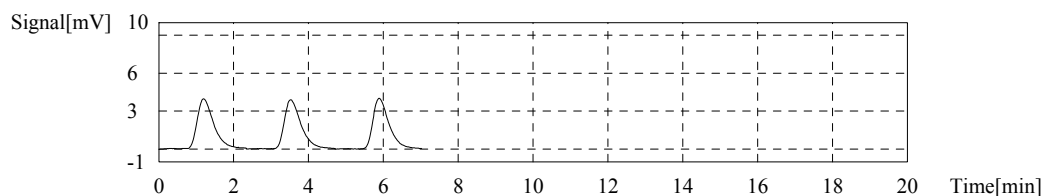
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.262mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.95	1.263mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:55:08 PM
2	11.94	1.262mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:58:57 PM
3	11.94	1.262mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:02:41 PM

Mean Area 11.94  
 Mean Conc. 1.262mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-77 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

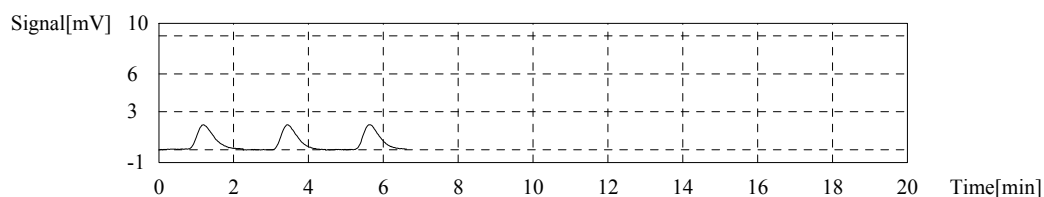
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6324mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.985	0.6325mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:12:42 PM
2	6.010	0.6352mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:16:26 PM
3	5.958	0.6297mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:20:11 PM

Mean Area 5.984  
Mean Conc. 0.6324mg/L



## Sample

Sample Name: 18J0334-79 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

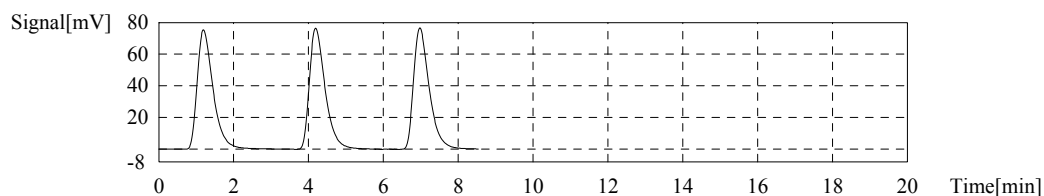
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	224.6	23.74mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:30:58 PM
2	225.6	23.84mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:34:45 PM
3	225.9	23.87mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:38:30 PM

Mean Area 225.4  
Mean Conc. 23.82mg/L



## Sample



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-81 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

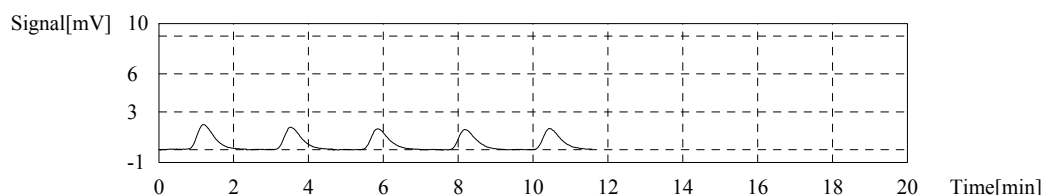
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5634mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.300	0.6658mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:48:39 PM
2	5.579	0.5896mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:52:25 PM
3	5.426	0.5734mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:56:13 PM
4	5.220	0.5517mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:59:56 PM
5	5.346	0.5650mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:03:46 PM

Mean Area 5.331  
 Mean Conc. 0.5634mg/L



## Control Sample

Sample Name: SEQ-CCV6  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.13 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

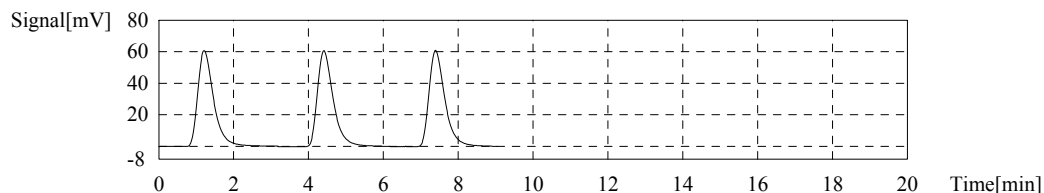
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.13ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	180.8	19.14ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:14:47 PM
2	180.3	19.09ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:18:46 PM
3	181.0	19.16ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:22:38 PM

Mean Area 180.7  
 Mean Conc. 19.13ppm



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Control Sample

Sample Name: SEQ-CCB6  
Sample ID:  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.2019 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

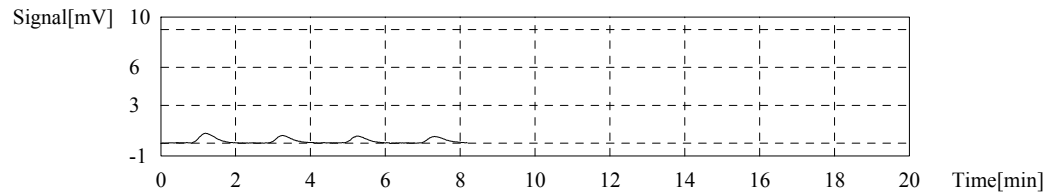
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2019mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.226	0.2693mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:32:36 PM
2	1.670	0.2106mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:36:03 PM
3	1.495	0.1921mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:39:34 PM
4	1.598	0.2030mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:43:06 PM

Mean Area: 1.588  
Mean Conc.: 0.2019mg/L





## ANALYSIS BATCH (SEQUENCE) SUMMARY

### EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Sequence: SGL0336

Instrument: TOC-LCSH

Calibration: BJ00092

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
1	SGL0336-ICV1	adzuData_12242018@085	NA	12/20/18 10:22
1	SGL0336-ICB1	adzuData_12242018@085	NA	12/20/18 10:50
1	SGL0336-IFA1	adzuData_12242018@085	NA	12/20/18 11:12
MRL Check	BGL0534-MRL1	adzuData_12242018@085	Water	12/20/18 12:40
Blank	BGL0534-BLK1	adzuData_12242018@085	Water	12/20/18 13:01
LCS	BGL0534-BS1	adzuData_12242018@085	Water	12/20/18 13:30
1	SGL0336-CCV1	adzuData_12242018@085	NA	12/20/18 15:04
1	SGL0336-CCB1	adzuData_12242018@085	NA	12/20/18 15:32
ERH719	18L0338-01	adzuData_12242018@085	Water	12/20/18 19:34
1	SGL0336-CCV2	adzuData_12242018@085	NA	12/20/18 19:57
1	SGL0336-CCB2	adzuData_12242018@085	NA	12/20/18 20:26
ERH722	18L0338-02	adzuData_12242018@085	Water	12/20/18 20:50
ERH722	BGL0534-DUP2	adzuData_12242018@085	Water	12/20/18 21:15
ERH722	BGL0534-MS2	adzuData_12242018@085	Water	12/20/18 21:37
ERH722	BGL0534-MSD2	adzuData_12242018@085	Water	12/20/18 21:59
1	SGL0336-CCV3	adzuData_12242018@085	NA	12/20/18 22:22
1	SGL0336-CCB3	adzuData_12242018@085	NA	12/20/18 22:51

# TOC-Control L Report

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## Instr. Information

Instrument Options  
Catalyst

TOC/ASI/IC Unit/  
Regular Sensitivity

## Sample

Sample Name: Rinse  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

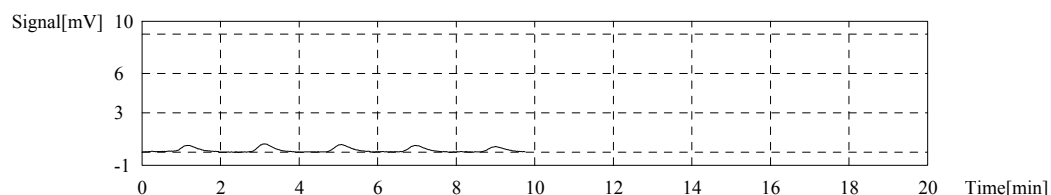
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1655mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.189	0.1257mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:53:31 AM
2	1.727	0.1825mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:57:01 AM
3	1.529	0.1616mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:00:28 AM
4	1.442	0.1524mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:04:06 AM
5	1.141	0.1206mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:07:29 AM

Mean Area 1.566  
Mean Conc. 0.1655mg/L



## Control Sample

Sample Name: SEQ-ICV1  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.13 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.13ppm

1. Det.

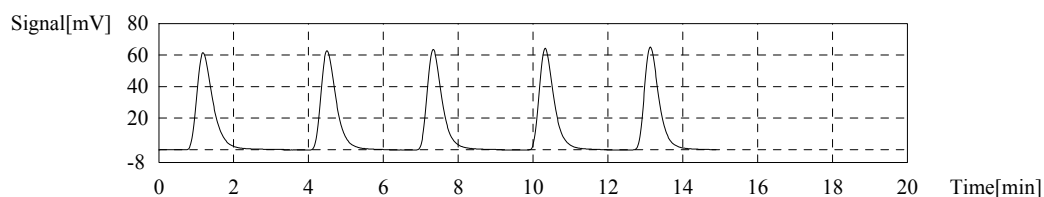
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	187.9	19.89ppm	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:18:31 AM
2	180.5	19.11ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:22:20 AM
3	180.7	19.13ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:26:19 AM
4	180.5	19.11ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:30:06 AM
5	180.9	19.15ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:34:00 AM

# TOC-Control L Report

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Mean Area 180.7  
Mean Conc. 19.13ppm



## Control Sample

Sample Name: SEQ-ICB1  
Sample ID:  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.1757 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

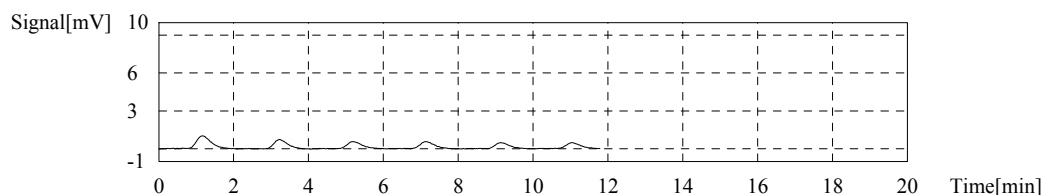
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.1757mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.682	0.3175mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:43:56 AM
2	1.931	0.2382mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:47:20 AM
3	1.516	0.1943mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:50:49 AM
4	1.453	0.1876mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:54:22 AM
5	1.228	0.1639mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:57:46 AM
6	1.164	0.1571mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:01:16 AM

Mean Area 1.340  
Mean Conc. 0.1757mg/L



## Sample

Sample Name: SEQ-IFA1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.05mg/L

1. Det

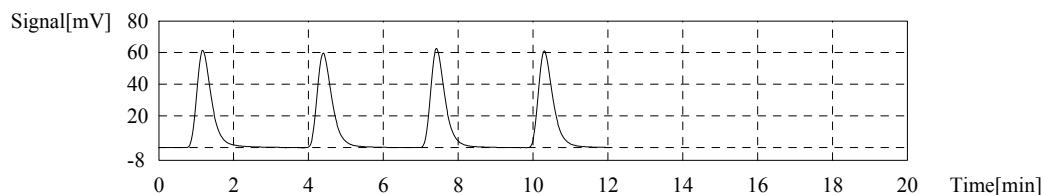
Anal.: NPOC

# TOC-Control L Report

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	172.7	18.25mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:12:13 AM
2	169.1	17.87mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:16:14 AM
3	171.1	18.08mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:20:06 AM
4	170.4	18.01mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:24:01 AM

Mean Area 170.8  
Mean Conc. 18.05mg/L



## Sample

Sample Name: BGL0477-DUP2  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

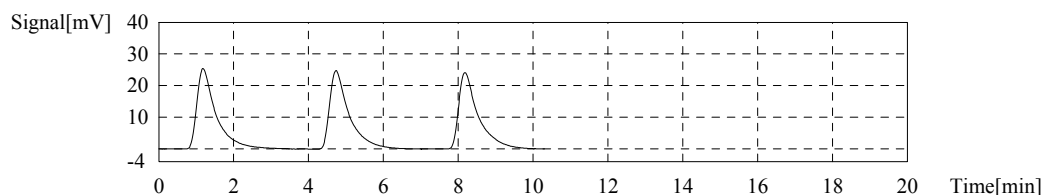
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.503mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.50	9.564mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:35:26 AM
2	90.83	9.599mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:39:52 AM
3	88.43	9.346mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:44:10 AM

Mean Area 89.92  
Mean Conc. 9.503mg/L



## Sample

Sample Name: BGL0477-MS2  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.23mg/L

1. Det

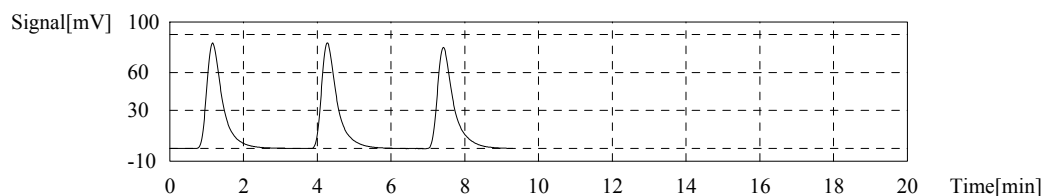
Anal.: NPOC

# TOC-Control L Report

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	249.7	26.39mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:55:10 AM
2	249.2	26.34mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:59:18 AM
3	245.8	25.98mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:03:21 PM

Mean Area 248.2  
Mean Conc. 26.23mg/L



## Sample

Sample Name: BGL0477-MSD2  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

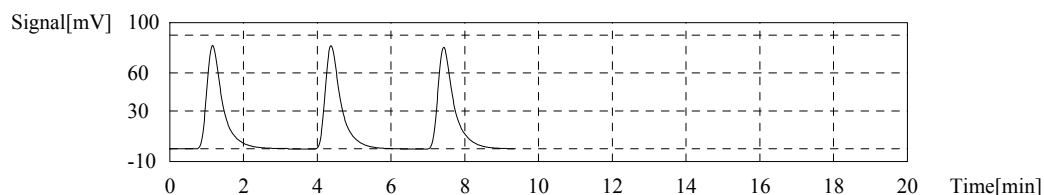
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	246.5	26.05mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:14:27 PM
2	245.0	25.89mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:18:30 PM
3	245.5	25.95mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:22:34 PM

Mean Area 245.7  
Mean Conc. 25.96mg/L



## Sample

Sample Name: BGL0534-MRL1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6345mg/L

1. Det

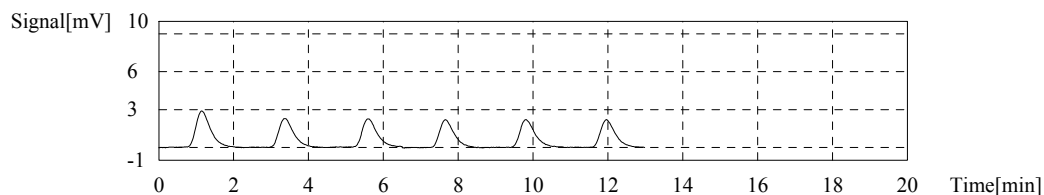
Anal.: NPOC

# TOC-Control L Report

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.702	0.8140mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:32:39 PM
2	6.323	0.6682mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:36:28 PM
3	5.991	0.6332mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:40:05 PM
4	5.980	0.6320mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:43:57 PM
5	6.010	0.6352mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:47:44 PM
6	6.035	0.6378mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 12:51:33 PM

Mean Area 6.004  
Mean Conc. 0.6345mg/L



## Sample

Sample Name: BGL0534-BLK1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

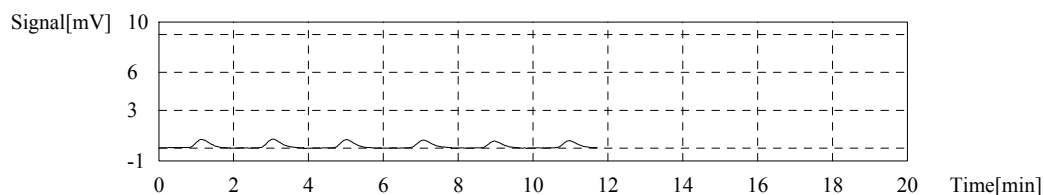
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1786mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.654	0.1748mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:01:10 PM
2	1.825	0.1929mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:05:01 PM
3	1.716	0.1814mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:08:53 PM
4	1.563	0.1652mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:12:31 PM
5	1.340	0.1416mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:16:24 PM
6	1.449	0.1531mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:20:05 PM

Mean Area 1.690  
Mean Conc. 0.1786mg/L



## Sample

Sample Name: BGL0534-BS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.18mg/L



# TOC-Control L Report

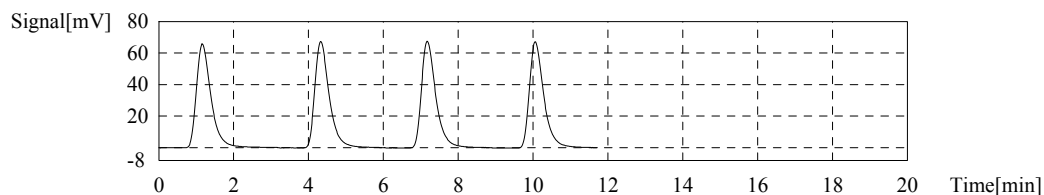
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1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	180.3	19.05mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:30:58 PM
2	181.7	19.20mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:34:49 PM
3	182.1	19.25mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:38:42 PM
4	181.9	19.22mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:42:31 PM

Mean Area 181.5  
Mean Conc. 19.18mg/L



## Sample

Sample Name: 18L0336-01  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

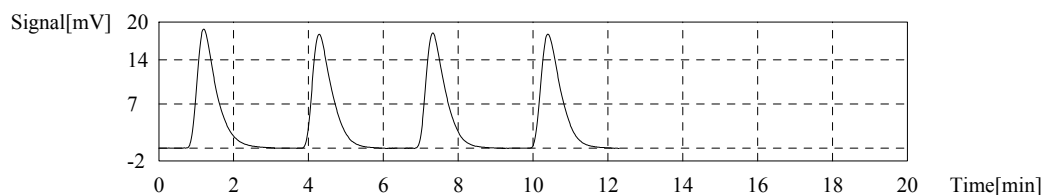
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.135mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.66	7.256mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:53:29 PM
2	66.77	7.057mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 1:57:31 PM
3	66.68	7.047mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:01:35 PM
4	67.94	7.180mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:05:42 PM

Mean Area 67.51  
Mean Conc. 7.135mg/L



## Sample

Sample Name: BGL0534-DUP1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.053mg/L

# TOC-Control L Report

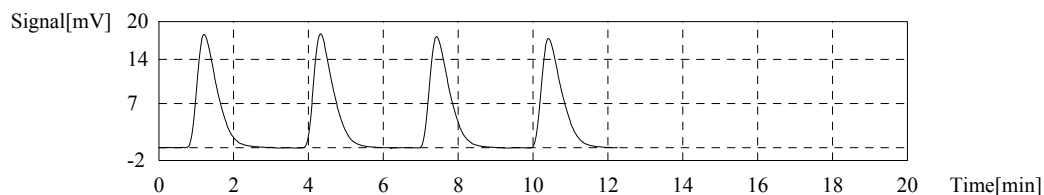
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1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.72	7.157mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:16:42 PM
2	66.97	7.078mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:20:48 PM
3	66.13	6.989mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:24:47 PM
4	66.12	6.988mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:28:50 PM

Mean Area 66.73  
Mean Conc. 7.053mg/L



## Sample

Sample Name: BGL0534-MS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

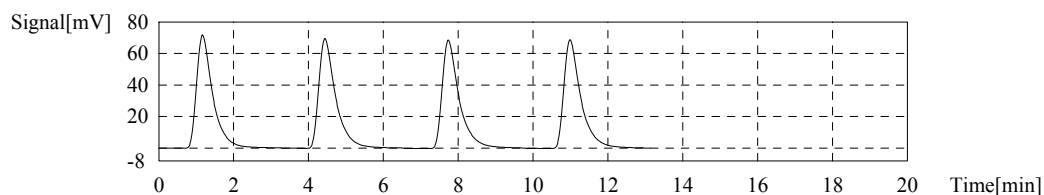
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	218.8	23.12mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:39:59 PM
2	220.7	23.32mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:44:17 PM
3	219.2	23.17mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:48:32 PM
4	219.9	23.24mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 2:52:51 PM

Mean Area 219.7  
Mean Conc. 23.21mg/L



## Control Sample

Sample Name: SEQ-CCV1  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.16 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

# TOC-Control L Report

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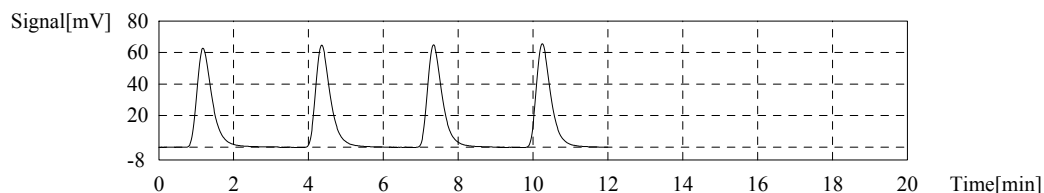
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.16ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.9	19.05ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:04:02 PM
2	181.4	19.21ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:08:01 PM
3	181.0	19.16ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:11:56 PM
4	181.5	19.22ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:15:51 PM

Mean Area 180.9  
Mean Conc. 19.16ppm



## Control Sample

Sample Name: SEQ-CCB1  
Sample ID:  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control vlu: 0.2333 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

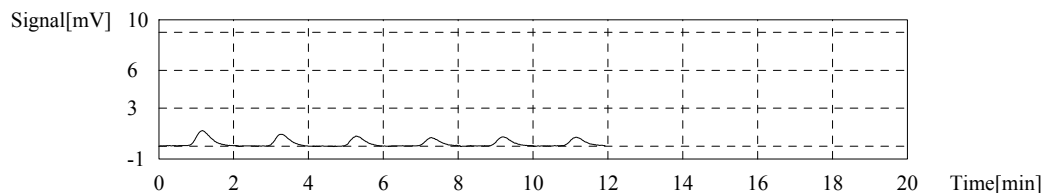
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2333mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.271	0.3798mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:25:51 PM
2	2.614	0.3103mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:29:15 PM
3	2.190	0.2655mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:32:44 PM
4	1.712	0.2150mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:36:09 PM
5	1.891	0.2339mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:39:41 PM
6	1.748	0.2188mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:43:09 PM

Mean Area 1.885  
Mean Conc. 0.2333mg/L



## Sample

# TOC-Control L Report

BF  
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Sample Name: BGL0534-MSD1  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

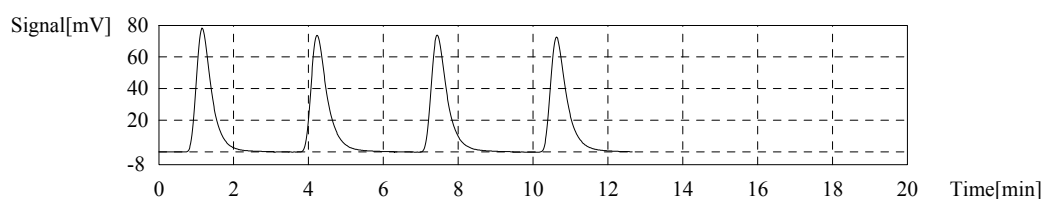
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	229.0	24.20mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:54:06 PM
2	228.6	24.16mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 3:58:19 PM
3	225.7	23.85mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:02:30 PM
4	225.4	23.82mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:06:41 PM

Mean Area: 227.2  
 Mean Conc.: 24.01mg/L



## Sample

Sample Name: 18L0336-02  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

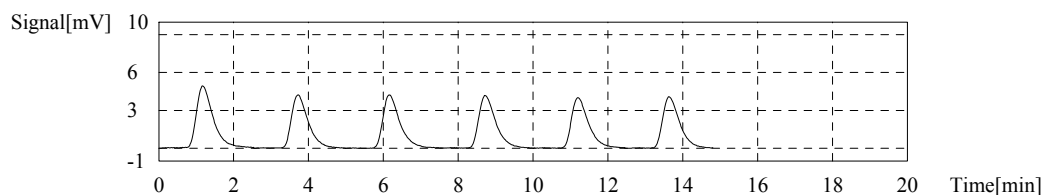
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.387mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.08	1.594mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:17:06 PM
2	13.16	1.391mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:20:48 PM
3	13.32	1.408mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:24:41 PM
4	13.26	1.401mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:28:24 PM
5	12.56	1.327mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:32:08 PM
6	12.75	1.347mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:35:50 PM

Mean Area: 13.12  
 Mean Conc.: 1.387mg/L



# TOC-Control L Report

BF  
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## Sample

Sample Name: 18L0336-03  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

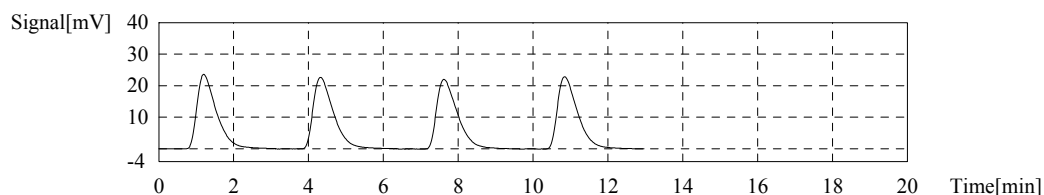
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.117mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.04	9.093mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:46:39 PM
2	86.53	9.145mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:50:57 PM
3	85.96	9.085mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:55:11 PM
4	86.54	9.146mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 4:59:31 PM

Mean Area 86.27  
Mean Conc. 9.117mg/L



## Sample

Sample Name: 18L0336-04  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

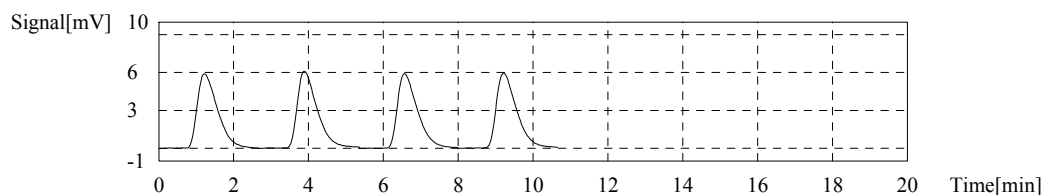
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.32	23.59mg/L	100uL	10.00		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:10:34 PM
2	22.04	23.29mg/L	100uL	10.00		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:15:27 PM
3	21.71	22.94mg/L	100uL	10.00		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:20:16 PM
4	22.03	23.28mg/L	100uL	10.00		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:25:10 PM

Mean Area 22.02  
Mean Conc. 23.28mg/L



# TOC-Control L Report

BF  
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## Sample

Sample Name: 18L0336-05  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

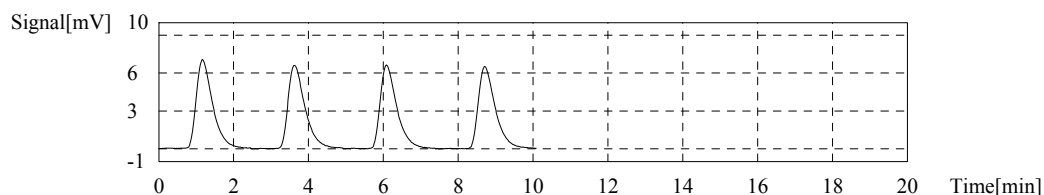
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.207mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.35	2.256mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:35:20 PM
2	20.71	2.189mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:39:08 PM
3	20.92	2.211mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:43:04 PM
4	20.57	2.174mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:46:47 PM

Mean Area 20.89  
Mean Conc. 2.207mg/L



## Sample

Sample Name: 18L0336-06  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

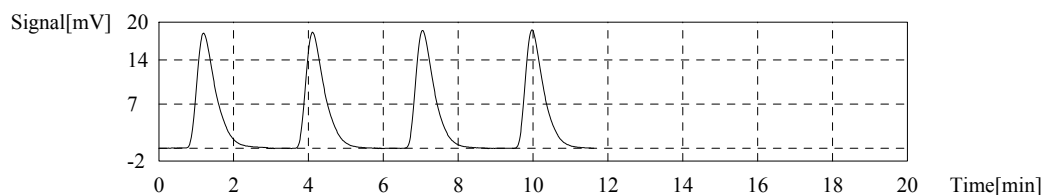
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.856mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.43	6.809mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 5:57:40 PM
2	65.17	6.887mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:01:36 PM
3	65.13	6.883mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:05:32 PM
4	64.76	6.844mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:09:22 PM

Mean Area 64.87  
Mean Conc. 6.856mg/L



# TOC-Control L Report

BF  
2018\_12\_20\_001.thx

## Sample

Sample Name: 18L0336-07  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

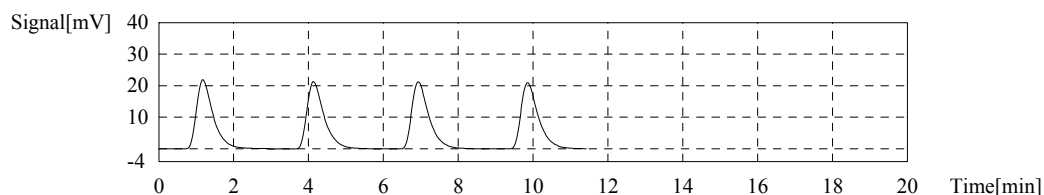
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.234mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.38	7.227mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:20:11 PM
2	68.78	7.269mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:23:59 PM
3	68.42	7.231mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:27:53 PM
4	68.21	7.209mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:31:38 PM

Mean Area 68.45  
Mean Conc. 7.234mg/L



## Sample

Sample Name: 18L0336-08  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

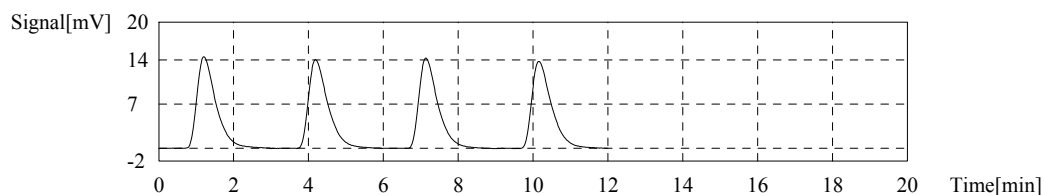
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.388mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.37	5.429mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:42:22 PM
2	50.89	5.378mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:46:18 PM
3	50.91	5.380mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:50:18 PM
4	50.75	5.363mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 6:54:21 PM

Mean Area 50.98  
Mean Conc. 5.388mg/L



# TOC-Control L Report

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## Sample

Sample Name: 18L0336-09  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

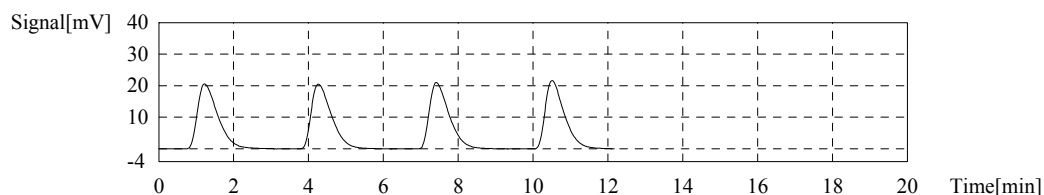
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.245mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.11	8.255mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:05:17 PM
2	78.04	8.248mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:09:25 PM
3	78.13	8.257mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:13:30 PM
4	77.78	8.220mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:17:21 PM

Mean Area 78.02  
Mean Conc. 8.245mg/L



## Sample

Sample Name: 18L0338-01  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

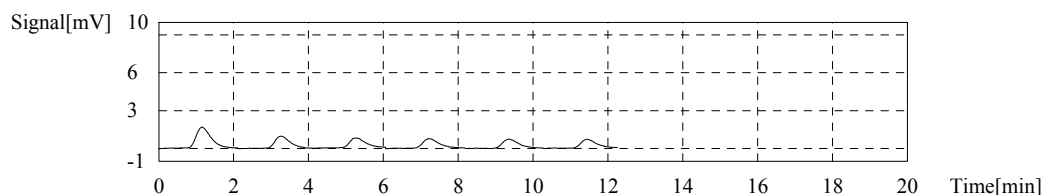
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2248mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.430	0.4682mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:27:21 PM
2	2.707	0.2861mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:31:02 PM
3	2.135	0.2256mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:34:46 PM
4	2.266	0.2395mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:38:44 PM
5	2.151	0.2273mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:42:28 PM
6	1.955	0.2066mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:46:09 PM

Mean Area 2.127  
Mean Conc. 0.2248mg/L





# TOC-Control L Report

BF  
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## Control Sample

Sample Name: SEQ-CCV2  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 18.77 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

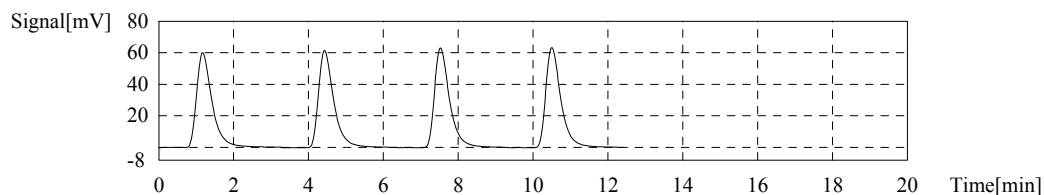
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:18.77ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.6	18.49ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 7:57:09 PM
2	176.1	18.65ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:01:14 PM
3	178.6	18.91ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:05:11 PM
4	179.7	19.03ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:09:14 PM

Mean Area: 177.3  
Mean Conc.: 18.77ppm



## Control Sample

Sample Name: SEQ-CCB2  
Sample ID: ICB CCB.tpl  
Method: Completed  
Status: Completed  
Chk. Result: Control value: 0.2367 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2367mg/L

1. Det.

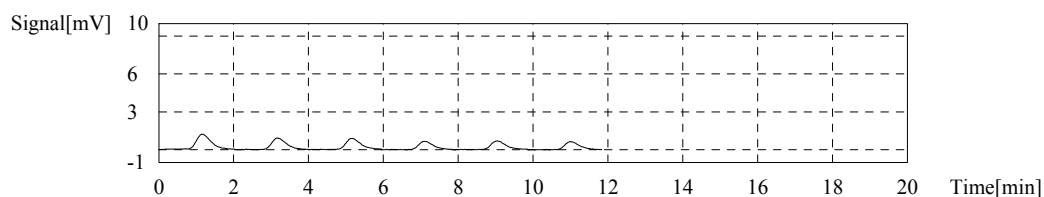
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.168	0.3689mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:19:08 PM
2	2.485	0.2967mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:22:37 PM
3	2.292	0.2763mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:26:05 PM
4	1.773	0.2215mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:29:34 PM
5	1.836	0.2281mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:33:06 PM
6	1.767	0.2208mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:36:37 PM

# TOC-Control L Report

BF  
2018\_12\_20\_001.thx

Mean Area 1.917  
Mean Conc. 0.2367mg/L



## Sample

Sample Name: 18L0338-02  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

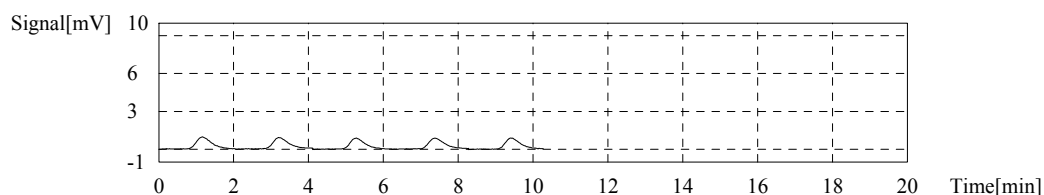
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2541mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.674	0.2826mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:46:38 PM
2	2.491	0.2633mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:50:26 PM
3	2.382	0.2517mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:54:15 PM
4	2.370	0.2505mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 8:57:59 PM
5	2.373	0.2508mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:01:43 PM

Mean Area 2.404  
Mean Conc. 0.2541mg/L



## Sample

Sample Name: BGL0534-DUP2  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2769mg/L

1. Det

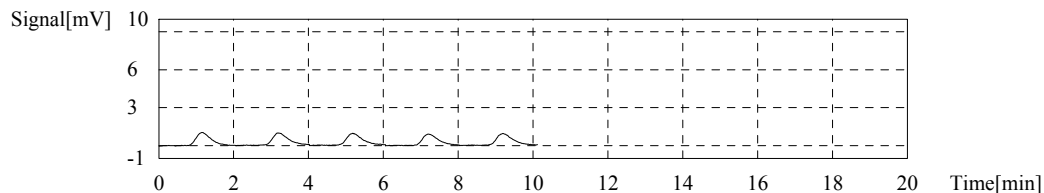
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_12\_20\_001.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.875	0.3038mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:11:30 PM
2	2.606	0.2754mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:15:12 PM
3	2.629	0.2778mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:19:03 PM
4	2.510	0.2653mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:22:47 PM
5	2.735	0.2890mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:26:40 PM

Mean Area 2.620  
Mean Conc. 0.2769mg/L



## Sample

Sample Name: BGL0534-MS2  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

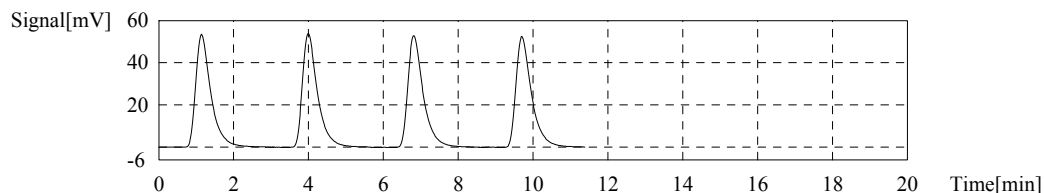
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	151.8	16.04mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:37:15 PM
2	152.7	16.14mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:41:04 PM
3	152.7	16.14mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:44:57 PM
4	153.7	16.24mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:48:47 PM

Mean Area 152.7  
Mean Conc. 16.14mg/L



## Sample

Sample Name: BGL0534-MSD2  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.53mg/L

1. Det

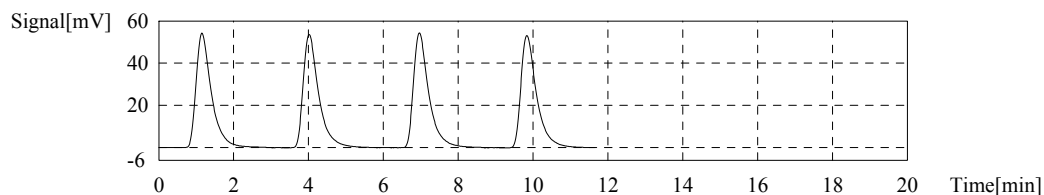
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_12\_20\_001.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	155.6	16.44mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 9:59:34 PM
2	156.5	16.54mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:03:31 PM
3	157.0	16.59mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:07:23 PM
4	156.6	16.55mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:11:21 PM

Mean Area 156.4  
Mean Conc. 16.53mg/L



## Control Sample

Sample Name: SEQ-CCV3  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 18.98 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

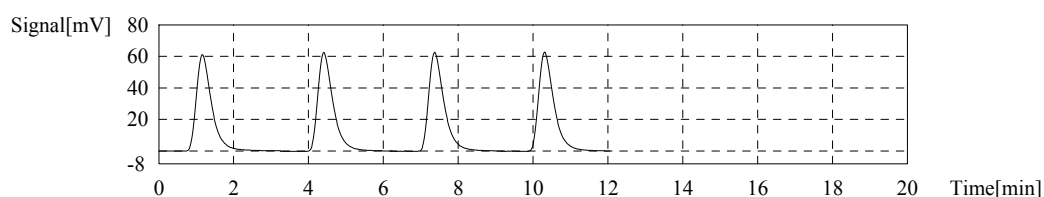
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:18.98ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	176.3	18.67ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:22:46 PM
2	179.6	19.01ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:26:44 PM
3	180.9	19.15ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:30:40 PM
4	180.3	19.09ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:34:34 PM

Mean Area 179.3  
Mean Conc. 18.98ppm



## Control Sample

Sample Name: SEQ-CCB3  
Sample ID: ICB CCB.tpl  
Method: Completed  
Status: Completed  
Chk. Result: Control value: 0.2258 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

# TOC-Control L Report

BF  
2018\_12\_20\_001.thx

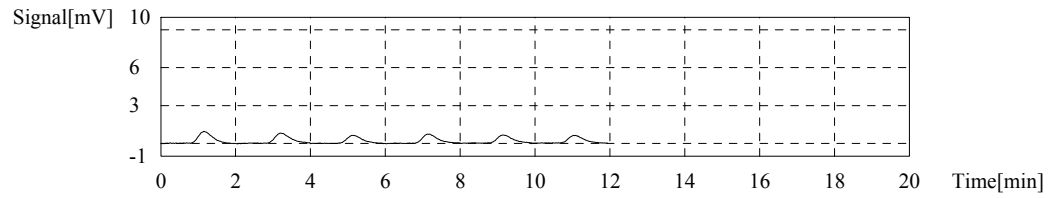
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2258mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.544	0.3030mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:44:31 PM
2	2.188	0.2653mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:47:54 PM
3	1.831	0.2276mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:51:29 PM
4	1.983	0.2437mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:54:58 PM
5	1.742	0.2182mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 10:58:22 PM
6	1.700	0.2138mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	12/20/2018 11:02:00 PM

Mean Area 1.814  
Mean Conc. 0.2258mg/L



	Type	Analysis	Sample Name	Sample	Origin	Manual Diluti	Result	Notes	Status	Date / Time	Vial
1	Unknown	NPOC	Rinse		NPOC 0.5 -	1.000	NPOC:0.16		Completed	12/20/2018 10:07:29	0
2	Control	NPOC	SEQ-JCV1	CVS 20	CVS 20 pp	1.000	NPOC:19.1	Control valu	Completed	12/20/2018 10:34:00	3
3	Control	NPOC	SEQ-ICB1		ICB CCB.tpl	1.000	NPOC:0.17	Control valu	Completed	12/20/2018 11:01:16	4
4	Unknown	NPOC	SEQ-IFAI		NPOC 0.5 -	1.000	NPOC:18.0		Completed	12/20/2018 11:24:01	9
5	Unknown	NPOC	BGL0477-DUP2		NPOC 0.5 -	1.000	NPOC:9.50		Completed	12/20/2018 11:44:10	10
6	Unknown	NPOC	BGL0477-MS2		NPOC 0.5 -	1.000	NPOC:26.2		Completed	12/20/2018 12:03:21	11
7	Unknown	NPOC	BGL0477-MSD2		NPOC 0.5 -	1.000	NPOC:25.9		Completed	12/20/2018 12:22:34	12
8	Unknown	NPOC	BGL0534-MRL1		NPOC 0.5 -	1.000	NPOC:0.63		Completed	12/20/2018 12:51:33	13
9	Unknown	NPOC	BGL0534-BLK1		NPOC 0.5 -	1.000	NPOC:0.17		Completed	12/20/2018 1:20:05 P	14
10	Unknown	NPOC	BGL0534-BS1		NPOC 0.5 -	1.000	NPOC:19.1		Completed	12/20/2018 1:42:31 P	15
11	Unknown	NPOC	18L0336-01		NPOC 0.5 -	1.000	NPOC:7.13		Completed	12/20/2018 2:05:42 P	16
12	Unknown	NPOC	BGL0534-DUP1		NPOC 0.5 -	1.000	NPOC:7.05		Completed	12/20/2018 2:28:50 P	17
13	Unknown	NPOC	BGL0534-MS1		NPOC 0.5 -	1.000	NPOC:23.2		Completed	12/20/2018 2:52:51 P	18
14	Control	NPOC	SEQ-CCV1	CVS 20	CVS 20 pp	1.000	NPOC:19.1	Control valu	Completed	12/20/2018 3:15:51 P	3
15	Control	NPOC	SEQ-CCB1		ICB CCB.tpl	1.000	NPOC:0.23	Control valu	Completed	12/20/2018 3:43:09 P	4
16	Unknown	NPOC	BGL0534-MSD1		NPOC 0.5 -	1.000	NPOC:24.0		Completed	12/20/2018 4:06:41 P	19
17	Unknown	NPOC	18L0336-02		NPOC 0.5 -	1.000	NPOC:1.38		Completed	12/20/2018 4:35:50 P	20
18	Unknown	NPOC	18L0336-03		NPOC 0.5 -	1.000	NPOC:9.11		Completed	12/20/2018 4:59:31 P	21
19	Unknown	NPOC	18L0336-04		NPOC 0.5 -	1.000	NPOC:23.2		Completed	12/20/2018 5:25:10 P	22
20	Unknown	NPOC	18L0336-05		NPOC 0.5 -	1.000	NPOC:2.20		Completed	12/20/2018 5:46:47 P	23
21	Unknown	NPOC	18L0336-06		NPOC 0.5 -	1.000	NPOC:6.85		Completed	12/20/2018 6:09:22 P	24
22	Unknown	NPOC	18L0336-07		NPOC 0.5 -	1.000	NPOC:7.23		Completed	12/20/2018 6:31:38 P	25
23	Unknown	NPOC	18L0336-08		NPOC 0.5 -	1.000	NPOC:5.38		Completed	12/20/2018 6:54:21 P	26
24	Unknown	NPOC	18L0336-09		NPOC 0.5 -	1.000	NPOC:8.24		Completed	12/20/2018 7:17:21 P	27
25	Unknown	NPOC	18L0338-01		NPOC 0.5 -	1.000	NPOC:0.22		Completed	12/20/2018 7:46:09 P	28
26	Control	NPOC	SEQ-CCV2	CVS 20	CVS 20 pp	1.000	NPOC:18.7	Control valu	Completed	12/20/2018 8:09:14 P	5
27	Control	NPOC	SEQ-CCB2		ICB CCB.tpl	1.000	NPOC:0.23	Control valu	Completed	12/20/2018 8:36:37 P	6
28	Unknown	NPOC	18L0338-02		NPOC 0.5 -	1.000	NPOC:0.25		Completed	12/20/2018 9:01:43 P	29
29	Unknown	NPOC	BGL0534-DUP2		NPOC 0.5 -	1.000	NPOC:0.27		Completed	12/20/2018 9:26:40 P	30
30	Unknown	NPOC	BGL0534-MS2		NPOC 0.5 -	1.000	NPOC:16.1		Completed	12/20/2018 9:48:47 P	31
31	Unknown	NPOC	BGL0534-MSD2		NPOC 0.5 -	1.000	NPOC:16.5		Completed	12/20/2018 10:11:21	32
32	Control	NPOC	SEQ-CCV3	CVS 20	CVS 20 pp	1.000	NPOC:18.9	Control valu	Completed	12/20/2018 10:34:34	5
33	Control	NPOC	SEQ-CCB3		ICB CCB.tpl	1.000	NPOC:0.22	Control valu	Completed	12/20/2018 11:02:00	6



## INITIAL CALIBRATION DATA

### EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Calibration: BJ00092

Instrument: TOC-LCSH

Calibration Date: 10/29/2018 16:55

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Total Organic Carbon	0	0	0.50002	10.13759	1	9.744	2.5001	9.375626	5.0002	9.069637	10	9.316



## INITIAL CALIBRATION DATA

### EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Calibration: BJ00092

Instrument: TOC-LCSH

Calibration Date: 10/29/2018 16:55

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Total Organic Carbon	25.001	9.391624	50.002	9.50762								





# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Instr.Information

Instrument Options  
Catalyst

TOC/ASI/IC Unit/  
Regular Sensitivity

## Sample

Sample Name: Rinse  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

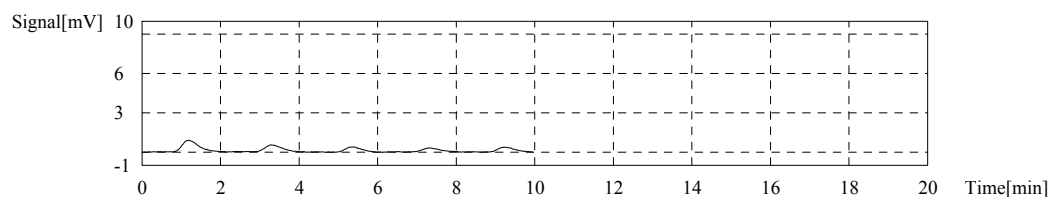
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1029mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.608	0.2647mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 4:55:26 PM
2	1.499	0.1522mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 4:58:53 PM
3	1.157	0.1174mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 5:02:18 PM
4	0.7809	0.07926mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 5:05:45 PM
5	1.103	0.1120mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_26_16_39_06.cal	10/29/2018 5:09:15 PM

Mean Area 1.014  
Mean Conc. 0.1029mg/L



## Cal. Curve

Sample Name: SEQ-CAL  
Sample ID: Curve  
Cal. Curve: NPOC 0.5 - 50 ppm.2018\_10\_29\_17\_09\_16.cal  
Status: Completed

Type	Anal.
Standard	NPOC

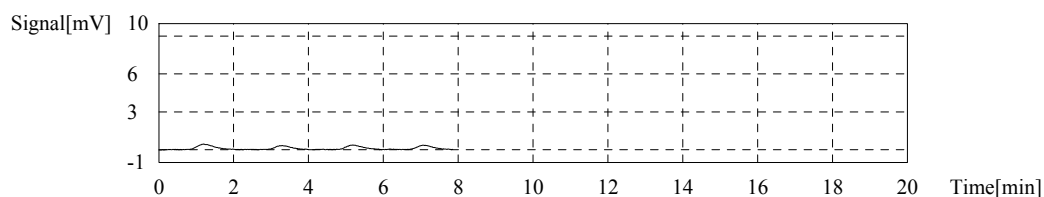
Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.312	100uL	1.000	*****	E	10/29/2018 5:16:56 PM
2	0.8324	100uL	1.000	*****		10/29/2018 5:20:15 PM
3	0.9657	100uL	1.000	*****		10/29/2018 5:23:45 PM
4	0.9431	100uL	1.000	*****		10/29/2018 5:27:19 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

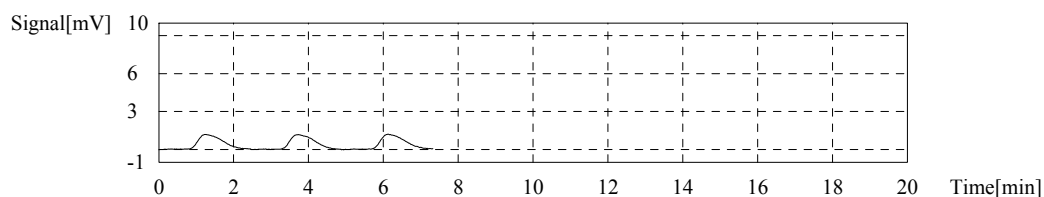
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 0.9137



Conc: 0.5000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.069	100uL	10.00	*****		10/29/2018 5:37:58 PM
2	5.147	100uL	10.00	*****		10/29/2018 5:42:48 PM
3	4.983	100uL	10.00	*****		10/29/2018 5:47:42 PM

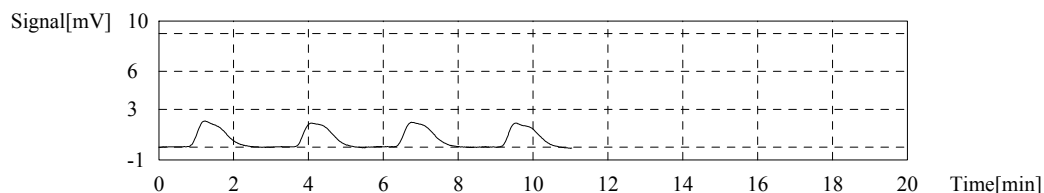
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 5.066



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.35	100uL	5.000	*****	E	10/29/2018 5:56:53 PM
2	9.744	100uL	5.000	*****		10/29/2018 6:00:34 PM
3	10.05	100uL	5.000	*****		10/29/2018 6:04:22 PM
4	9.968	100uL	5.000	*****		10/29/2018 6:08:05 PM

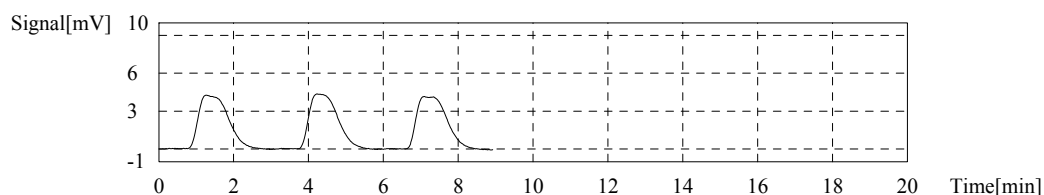
Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 9.921



Conc: 2.500mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	23.44	100uL	2.000	*****		10/29/2018 6:17:33 PM
2	23.28	100uL	2.000	*****		10/29/2018 6:21:26 PM
3	23.54	100uL	2.000	*****		10/29/2018 6:25:31 PM

Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 23.42



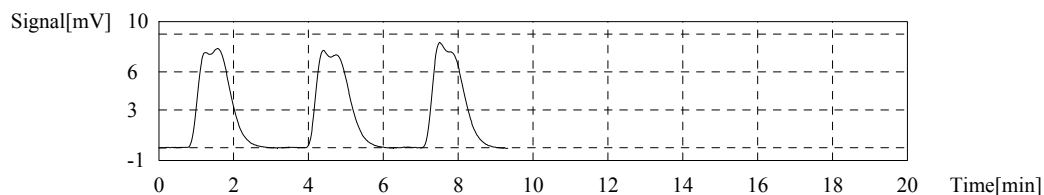
Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	45.35	100uL	1.000	*****		10/29/2018 6:34:36 PM
2	45.19	100uL	1.000	*****		10/29/2018 6:38:42 PM
3	45.29	100uL	1.000	*****		10/29/2018 6:42:45 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

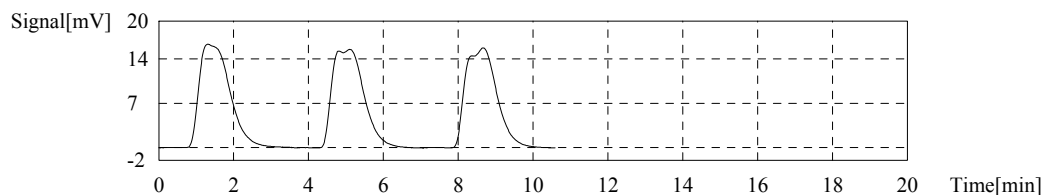
Acid Add. 1.500%  
Sparge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 45.28



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	93.16	100uL	5.000	*****		10/29/2018 6:54:48 PM
2	93.43	100uL	5.000	*****		10/29/2018 6:59:20 PM
3	93.01	100uL	5.000	*****		10/29/2018 7:03:50 PM

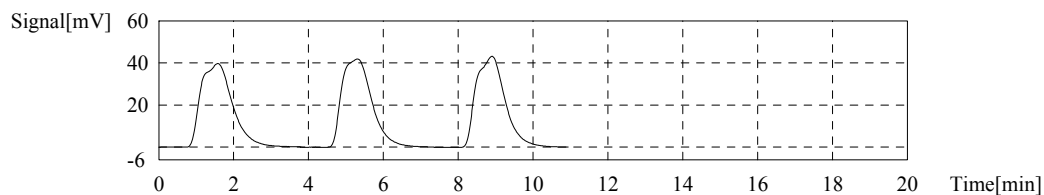
Acid Add. 1.500%  
Sparge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 93.20



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	234.8	100uL	2.000	*****		10/29/2018 7:14:08 PM
2	236.3	100uL	2.000	*****		10/29/2018 7:18:42 PM
3	235.7	100uL	2.000	*****		10/29/2018 7:23:17 PM

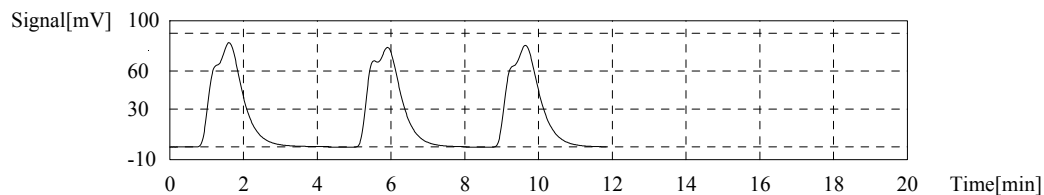
Acid Add. 1.500%  
Sparge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 235.6



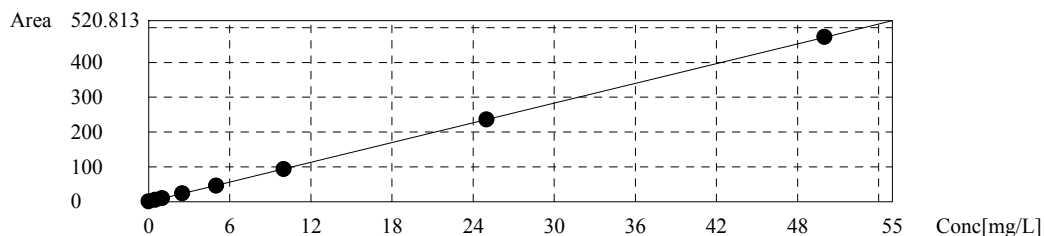
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	475.4	100uL	1.000	*****		10/29/2018 7:33:29 PM
2	471.5	100uL	1.000	*****		10/29/2018 7:38:13 PM
3	473.5	100uL	1.000	*****		10/29/2018 7:43:01 PM

Acid Add. 1.500%  
Sparge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 473.5



Slope: 9.462  
Intercept: 0.000  
r<sup>2</sup>: 1.0000  
r: 1.0000  
Zero Shift: Yes



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Control Sample

Sample Name: SEQ-ICV1  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.28 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

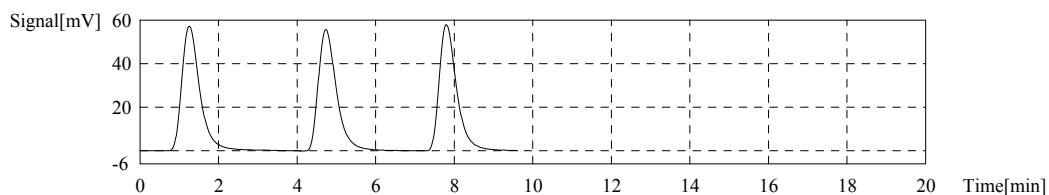
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.28ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	183.9	19.47ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 7:54:24 PM
2	181.2	19.18ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 7:58:28 PM
3	181.1	19.17ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:02:31 PM

Mean Area: 182.1  
 Mean Conc.: 19.28ppm



## Control Sample

Sample Name: SEQ-ICB1  
 Sample ID: ICB CCB.tpl  
 Method: ICB CCB.tpl  
 Status: Completed  
 Chk. Result: Control value: 0.2659 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2659mg/L

1. Det.

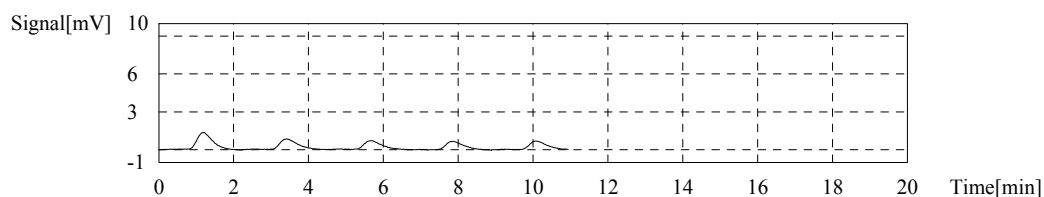
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.924	0.4488mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:12:38 PM
2	2.744	0.3241mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:16:10 PM
3	2.210	0.2677mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:19:36 PM
4	2.292	0.2763mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:23:09 PM
5	2.077	0.2536mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:26:28 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 2.193  
Mean Conc. 0.2659mg/L



## Sample

Sample Name: SEQ-IFA1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

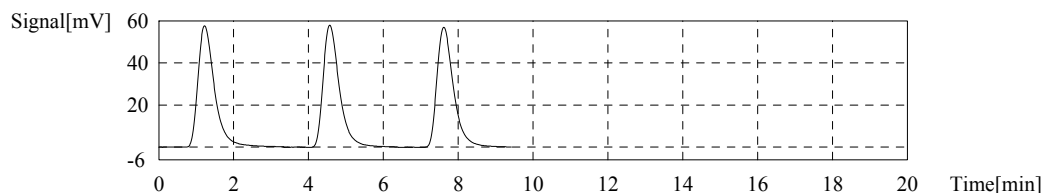
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.1	18.93mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:37:34 PM
2	176.4	18.64mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:41:36 PM
3	177.6	18.77mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:45:38 PM

Mean Area 177.7  
Mean Conc. 18.78mg/L



## Sample

Sample Name: 18J0334-25 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6122mg/L

1. Det

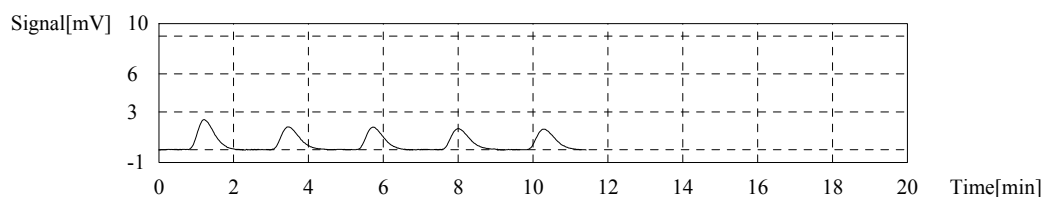
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.587	0.8018mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:55:46 PM
2	6.106	0.6453mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 8:59:35 PM
3	5.965	0.6304mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:03:22 PM
4	5.728	0.6054mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:07:10 PM
5	5.684	0.6007mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:11:02 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 5.792  
Mean Conc. 0.6122mg/L



## Sample

Sample Name: 18J0334-27 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

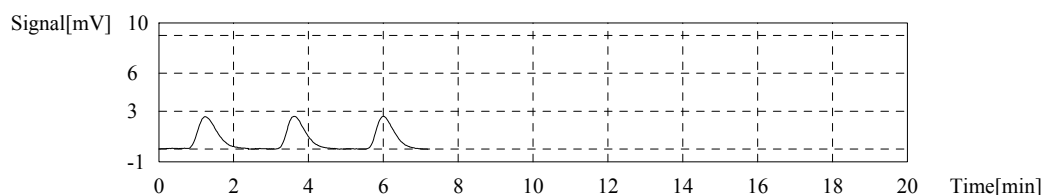
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9334mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.876	0.9381mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:21:08 PM
2	8.855	0.9358mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:24:55 PM
3	8.764	0.9262mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:28:47 PM

Mean Area 8.832  
Mean Conc. 0.9334mg/L



## Sample

Sample Name: 18J0334-29 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6165mg/L

1. Det

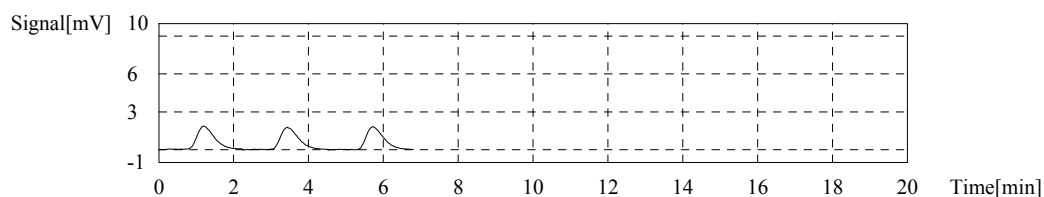
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.761	0.6088mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:39:13 PM
2	5.861	0.6194mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:43:03 PM
3	5.877	0.6211mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:46:50 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 5.833  
Mean Conc. 0.6165mg/L



## Sample

Sample Name: 18J0334-31 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

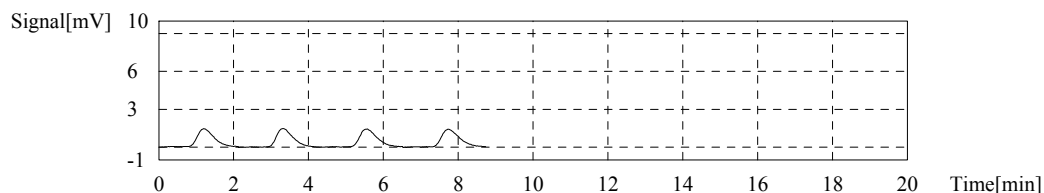
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4808mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.265	0.4507mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 9:56:39 PM
2	4.556	0.4815mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:00:32 PM
3	4.486	0.4741mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:04:17 PM
4	4.607	0.4869mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:08:06 PM

Mean Area 4.550  
Mean Conc. 0.4808mg/L



## Sample

Sample Name: 18J0334-33 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6551mg/L

1. Det

Anal.: NPOC

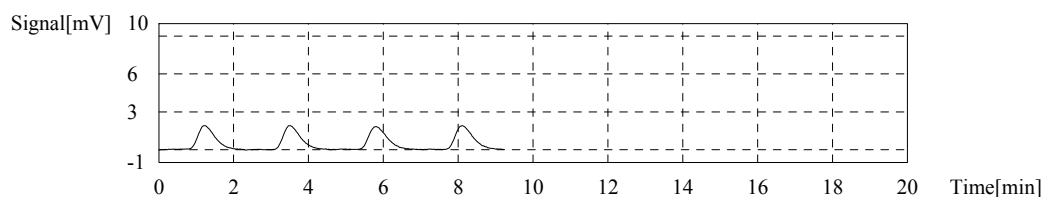
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.877	0.6211mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:18:05 PM
2	6.135	0.6484mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:21:52 PM
3	6.157	0.6507mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:25:40 PM
4	6.303	0.6661mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:29:28 PM



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 6.198  
Mean Conc. 0.6551mg/L



## Sample

Sample Name: 18J0334-35 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

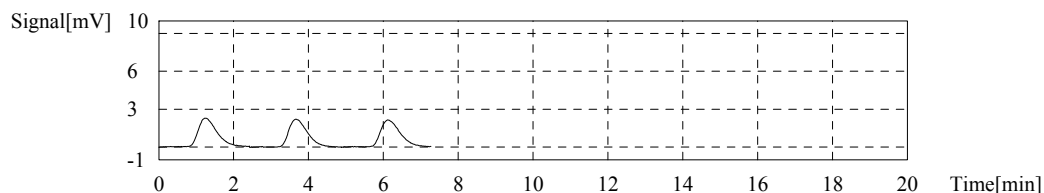
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8127mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.716	0.8155mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:39:35 PM
2	7.749	0.8189mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:43:24 PM
3	7.606	0.8038mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:47:08 PM

Mean Area 7.690  
Mean Conc. 0.8127mg/L



## Sample

Sample Name: 18J0334-37 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7432mg/L

1. Det

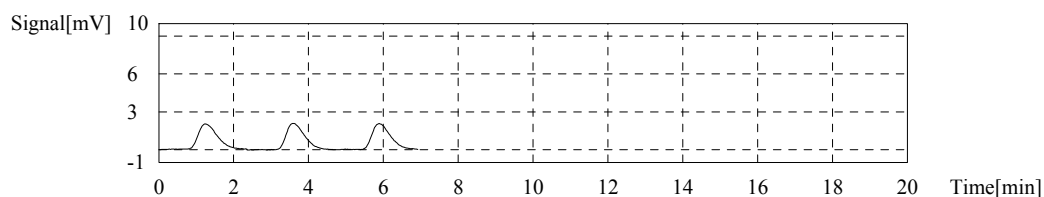
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.982	0.7379mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 10:57:11 PM
2	7.139	0.7545mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:00:55 PM
3	6.975	0.7371mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:04:42 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 7.032  
Mean Conc. 0.7432mg/L



## Sample

Sample Name: 18J0334-39 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

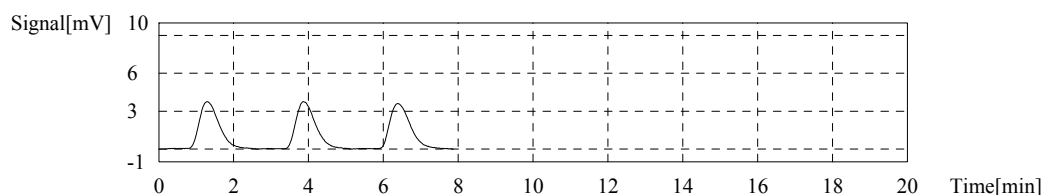
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.443mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.58	1.435mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:15:00 PM
2	13.67	1.445mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:18:43 PM
3	13.71	1.449mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:22:45 PM

Mean Area 13.65  
Mean Conc. 1.443mg/L



## Sample

Sample Name: BGJ0804-MRL1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8213mg/L

1. Det

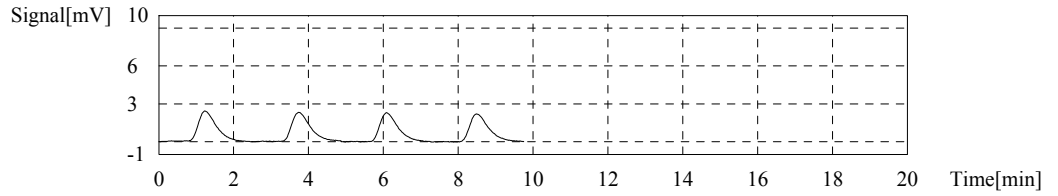
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.023	0.8479mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:33:01 PM
2	7.816	0.8260mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:36:40 PM
3	7.703	0.8141mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:40:29 PM
4	7.795	0.8238mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:44:21 PM

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Mean Area 7.771  
Mean Conc. 0.8213mg/L



## Control Sample

Sample Name: SEQ-CCV1  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.01 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

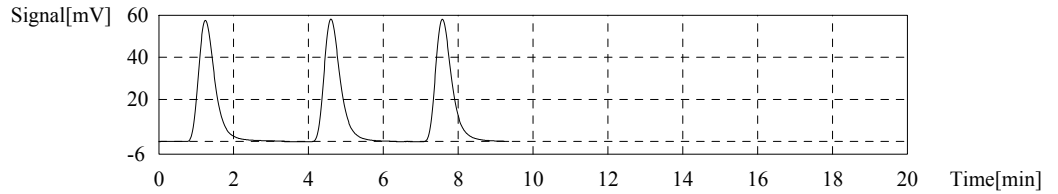
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.01ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.2	18.97ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:56:00 PM
2	179.6	19.01ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/29/2018 11:59:59 PM
3	179.9	19.05ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:04:00 AM

Mean Area 179.6  
Mean Conc. 19.01ppm



## Control Sample

Sample Name: SEQ-CCB1  
Sample ID: ICB CCB.tpl  
Method: Completed  
Status: Completed  
Chk. Result: Control value: 0.2336 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2336mg/L

1. Det.

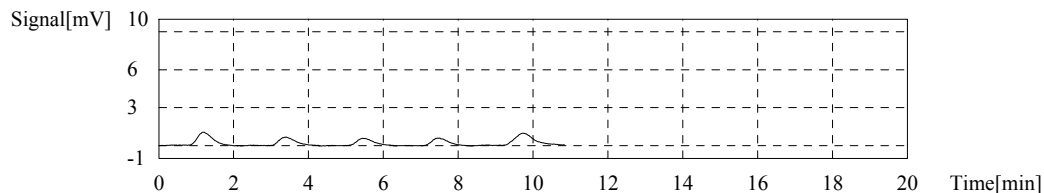
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.955	0.3464mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:14:05 AM
2	1.981	0.2435mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:17:29 AM
3	1.732	0.2171mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:20:54 AM
4	1.951	0.2403mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:24:32 AM
5	3.445	0.3982mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:28:20 AM

Mean Area 1.888  
Mean Conc. 0.2336mg/L



## Sample

Sample Name: BGJ0804-BLK1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

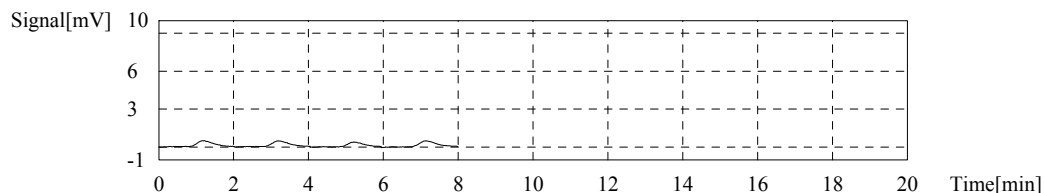
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1448mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.336	0.1412mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:38:19 AM
2	1.348	0.1425mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:42:06 AM
3	1.003	0.1060mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:45:46 AM
4	1.426	0.1507mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:49:42 AM

Mean Area 1.370  
Mean Conc. 0.1448mg/L



## Sample

Sample Name: BGJ0804-BS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.26mg/L

1. Det

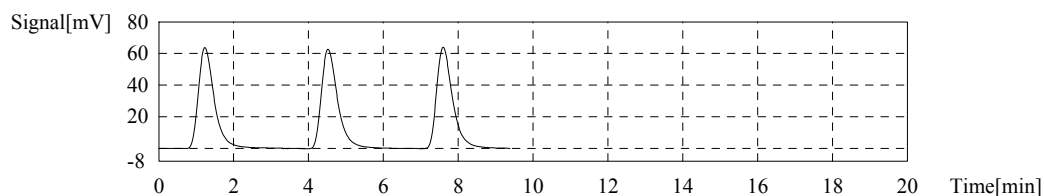
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	190.2	20.10mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:00:43 AM
2	191.7	20.26mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:04:47 AM
3	193.3	20.43mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:08:48 AM

Mean Area 191.7  
Mean Conc. 20.26mg/L



## Sample

Sample Name: 18J0334-47  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

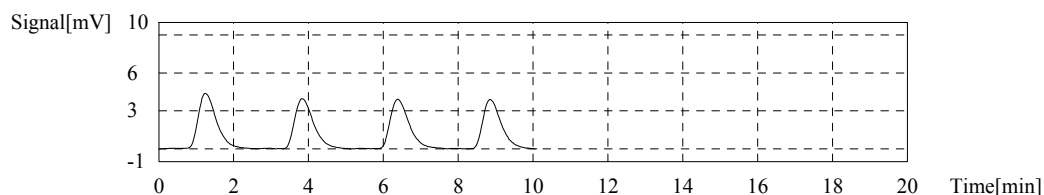
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.443mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.79	1.563mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:19:16 AM
2	13.93	1.472mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:23:02 AM
3	13.56	1.433mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:26:45 AM
4	13.47	1.424mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:30:33 AM

Mean Area 13.65  
Mean Conc. 1.443mg/L



## Sample

Sample Name: BGJ0804-DUP1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.398mg/L

1. Det

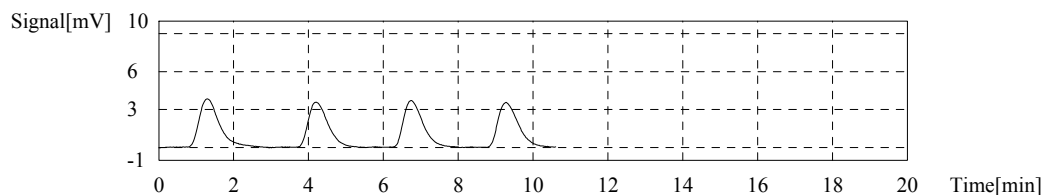
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.48	1.530mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:41:39 AM
2	13.13	1.388mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:45:12 AM
3	13.20	1.395mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:48:56 AM
4	13.35	1.411mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:52:48 AM

Mean Area  
Mean Conc. 13.23  
1.398mg/L



## Sample

Sample Name: BGI0804-MS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

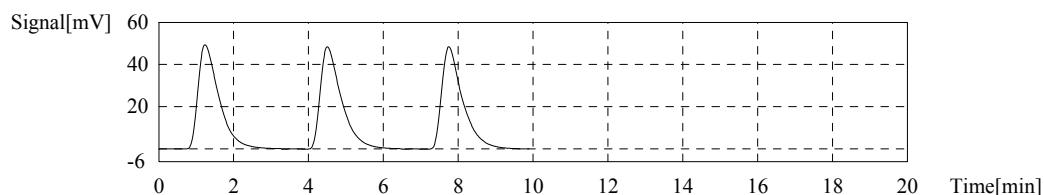
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	193.7	20.47mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:04:00 AM
2	191.9	20.28mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:08:14 AM
3	191.2	20.21mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:12:37 AM

Mean Area  
Mean Conc. 192.3  
20.32mg/L



## Sample

Sample Name: 18J0334-49  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2863mg/L

1. Det

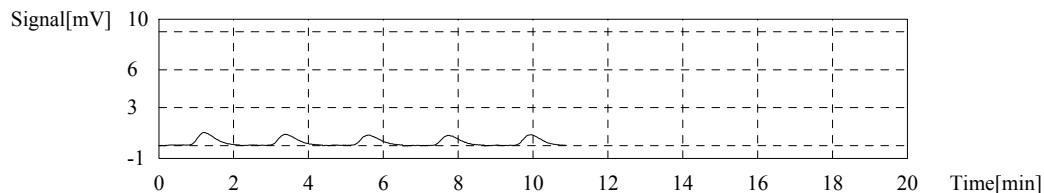
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.213	0.3396mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:22:41 AM
2	2.943	0.3110mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:26:30 AM
3	2.709	0.2863mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:30:14 AM
4	2.637	0.2787mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:34:03 AM
5	2.780	0.2938mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:37:50 AM

Mean Area 2.709  
Mean Conc. 0.2863mg/L



## Sample

Sample Name: 18J0334-51  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

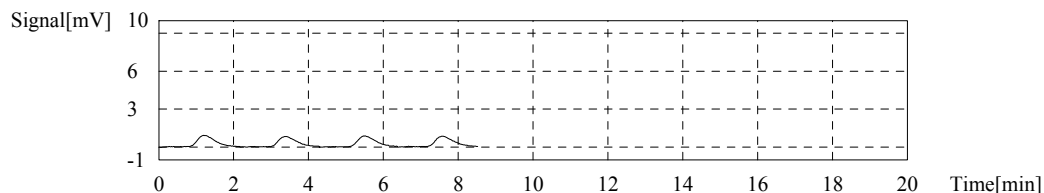
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2909mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.830	0.2991mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:47:51 AM
2	2.579	0.2726mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:51:41 AM
3	2.755	0.2912mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:55:29 AM
4	2.672	0.2824mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:59:22 AM

Mean Area 2.752  
Mean Conc. 0.2909mg/L



## Sample

Sample Name: 18J0334-53  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3362mg/L

1. Det

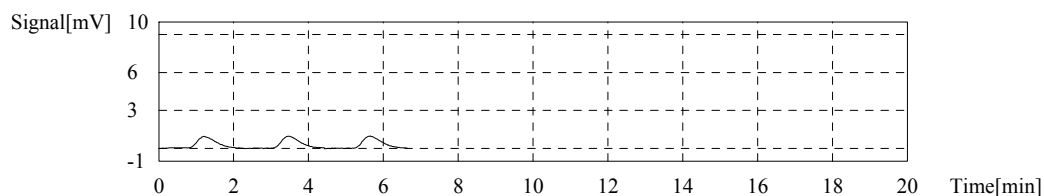
Anal.: NPOC

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.104	0.3280mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:09:20 AM
2	3.146	0.3325mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:13:02 AM
3	3.293	0.3480mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:16:52 AM

Mean Area 3.181  
Mean Conc. 0.3362mg/L



## Sample

Sample Name: 18J0334-55  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

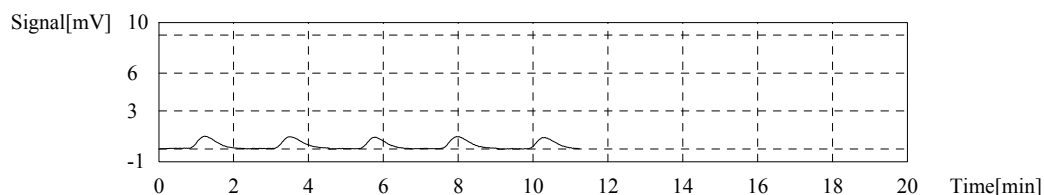
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3555mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.280	0.3466mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:26:51 AM
2	3.320	0.3509mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:30:40 AM
3	3.040	0.3213mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:34:21 AM
4	3.490	0.3688mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:38:17 AM
5	3.096	0.3272mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:41:53 AM

Mean Area 3.363  
Mean Conc. 0.3555mg/L



## Sample

Sample Name: 18J0334-57  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2106mg/L

1. Det

Anal.: NPOC

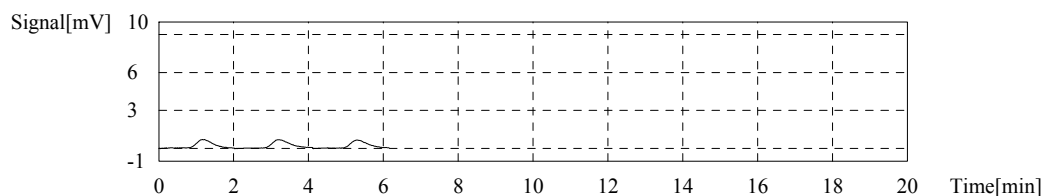


# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.985	0.2098mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:51:38 AM
2	2.054	0.2171mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:55:30 AM
3	1.939	0.2049mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:59:13 AM

Mean Area 1.993  
Mean Conc. 0.2106mg/L



## Control Sample

Sample Name: SEQ-CCV2  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.03 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

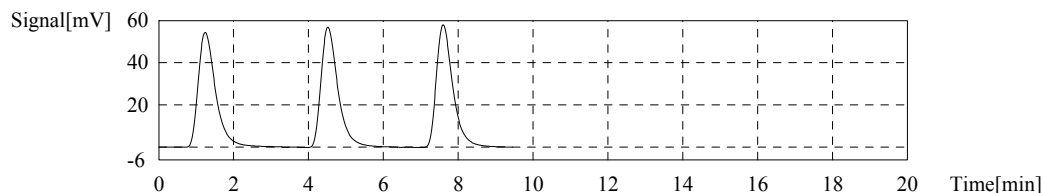
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.03ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	177.8	18.82ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:10:14 AM
2	180.6	19.12ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:14:19 AM
3	180.7	19.13ppm	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:18:24 AM

Mean Area 179.7  
Mean Conc. 19.03ppm



## Control Sample

Sample Name: SEQ-CCB2  
Sample ID: ICB CCB.tpl  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.1235 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.1235mg/L

# TOC-Control L Report

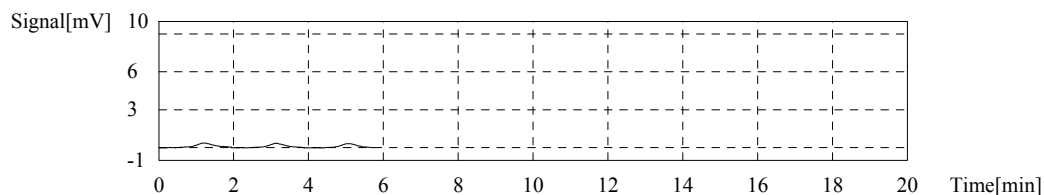
BF  
2018\_10\_29\_002.thx

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9125	0.1305mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:28:14 AM
2	0.8145	0.1202mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:31:44 AM
3	0.8107	0.1198mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:35:12 AM

Mean Area 0.8459  
Mean Conc. 0.1235mg/L



## Sample

Sample Name: 18J0334-59  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

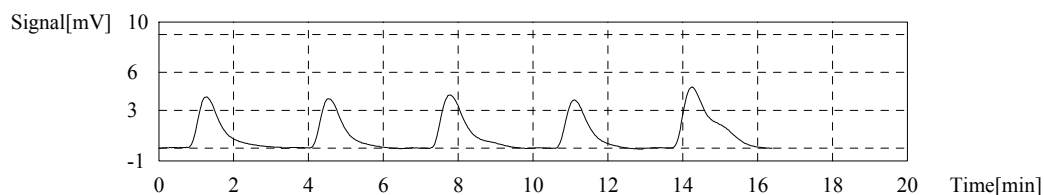
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.786mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.42	1.841mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:46:27 AM
2	16.75	1.770mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:50:40 AM
3	20.12	2.126mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:54:59 AM
4	16.52	1.746mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:59:06 AM
5	26.82	2.834mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:03:33 AM

Mean Area 16.90  
Mean Conc. 1.786mg/L



## Sample

Sample Name: 18J0334-60  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.104mg/L

# TOC-Control L Report

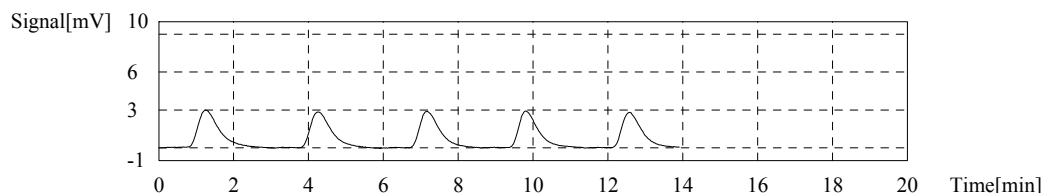
BF  
2018\_10\_29\_002.thx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.74	1.241mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:14:28 AM
2	11.26	1.190mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:18:23 AM
3	10.73	1.134mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:22:02 AM
4	10.48	1.108mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:25:54 AM
5	10.14	1.072mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:29:30 AM

Mean Area 10.45  
Mean Conc. 1.104mg/L



## Sample

Sample Name: 18J0334-61  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

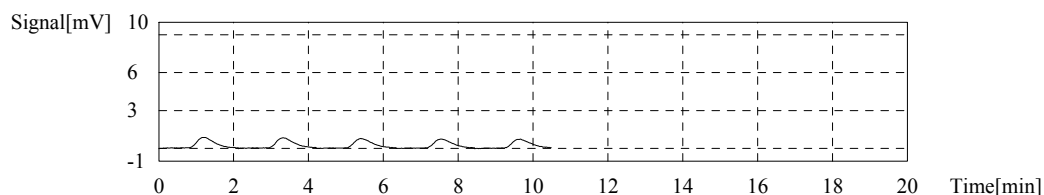
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2459mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.652	0.2803mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:39:36 AM
2	2.522	0.2665mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:43:20 AM
3	2.393	0.2529mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:47:10 AM
4	2.304	0.2435mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:50:55 AM
5	2.284	0.2414mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:54:39 AM

Mean Area 2.327  
Mean Conc. 0.2459mg/L



## Sample

Sample Name: 18J0334-63  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

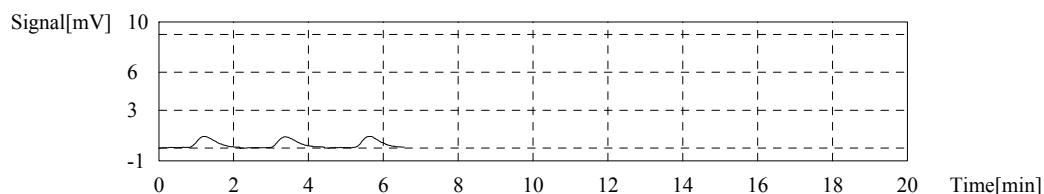
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3079mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.919	0.3085mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:04:34 AM
2	2.906	0.3071mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:08:26 AM
3	2.914	0.3080mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:12:05 AM

Mean Area 2.913  
Mean Conc. 0.3079mg/L



## Sample

Sample Name: 18J0334-65  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

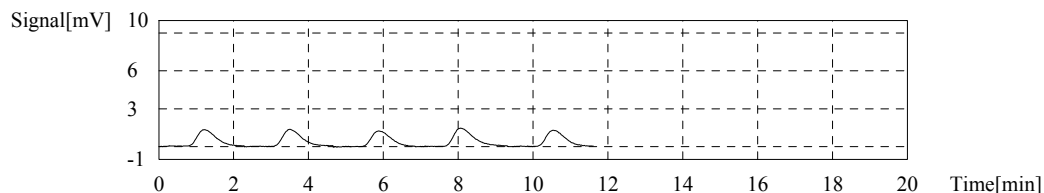
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4700mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.496	0.4752mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:22:06 AM
2	4.615	0.4877mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:25:58 AM
3	4.408	0.4659mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:29:35 AM
4	5.227	0.5524mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:33:38 AM
5	4.438	0.4690mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:37:14 AM

Mean Area 4.447  
Mean Conc. 0.4700mg/L



## Sample

Sample Name: 18J0334-67  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

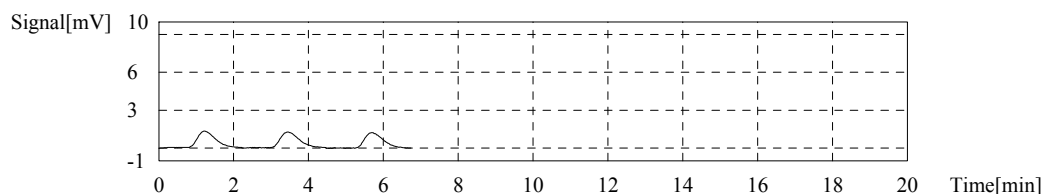
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4519mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.310	0.4555mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:47:11 AM
2	4.277	0.4520mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:51:00 AM
3	4.242	0.4483mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:54:48 AM

Mean Area 4.276  
Mean Conc. 0.4519mg/L



## Sample

Sample Name: 18J0334-69  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

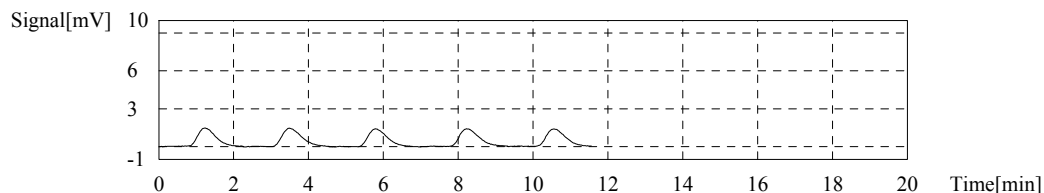
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5122mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.715	0.4983mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:04:47 AM
2	5.239	0.5537mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:08:37 AM
3	5.170	0.5464mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:12:33 AM
4	4.954	0.5236mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:16:12 AM
5	4.872	0.5149mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:19:54 AM

Mean Area 4.847  
Mean Conc. 0.5122mg/L



## Sample

Sample Name: 18J0334-71  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

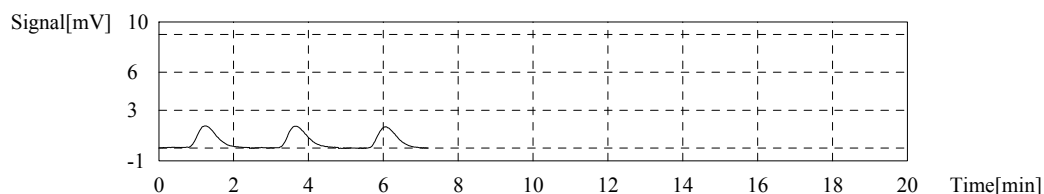
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6477mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.074	0.6419mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:30:03 AM
2	6.194	0.6546mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:33:48 AM
3	6.119	0.6467mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:37:36 AM

Mean Area 6.129  
Mean Conc. 0.6477mg/L



## Sample

Sample Name: 18J0334-73  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

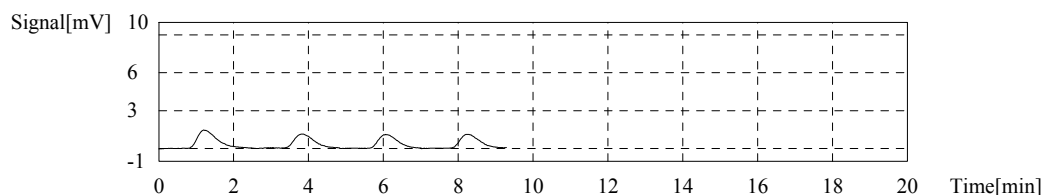
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4127mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.415	0.5723mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:47:55 AM
2	3.943	0.4167mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:51:22 AM
3	3.857	0.4076mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:55:05 AM
4	3.916	0.4139mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:58:58 AM

Mean Area 3.905  
Mean Conc. 0.4127mg/L



## Sample

Sample Name: 18J0334-75  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

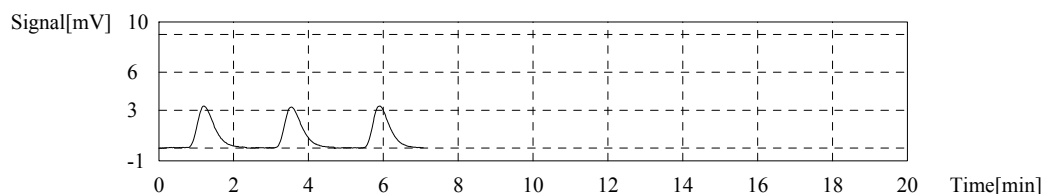
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.110mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.55	1.115mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:09:02 AM
2	10.45	1.104mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:12:50 AM
3	10.51	1.111mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:16:39 AM

Mean Area 10.50  
Mean Conc. 1.110mg/L



### Control Sample

Sample Name: SEQ-CCV3  
Sample ID: CVS 20  
Method: CVS 20 ppm.tpl  
Status: Completed  
Chk. Result: Control value: 19.01 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

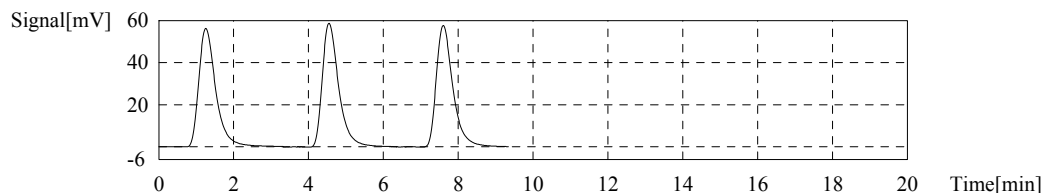
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.01ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	178.5	18.90ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:27:52 AM
2	180.6	19.12ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:31:54 AM
3	179.6	19.01ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:35:53 AM

Mean Area 179.6  
Mean Conc. 19.01ppm



### Control Sample

Sample Name: SEQ-CCB3  
Sample ID: ICB CCB.tpl  
Method: Completed  
Status: Completed  
Chk. Result: Control value: 0.2164 / Control within range!

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

( Zero shift setting of cal. curve has been ignored in conc. calculation )

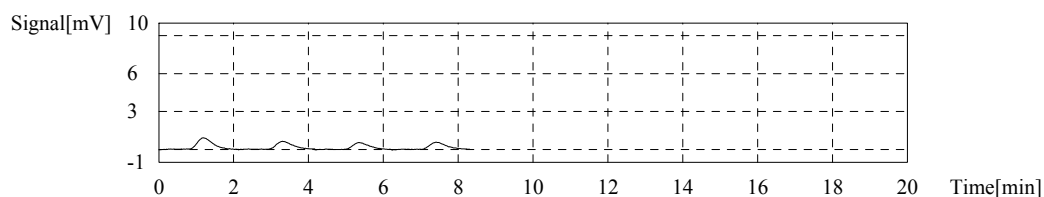
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2164mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.541	0.3026mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:45:54 AM
2	1.804	0.2247mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:49:20 AM
3	1.693	0.2130mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:52:50 AM
4	1.678	0.2114mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:56:22 AM

Mean Area 1.725  
Mean Conc. 0.2164mg/L



## Sample

Sample Name: 18J0334-77  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

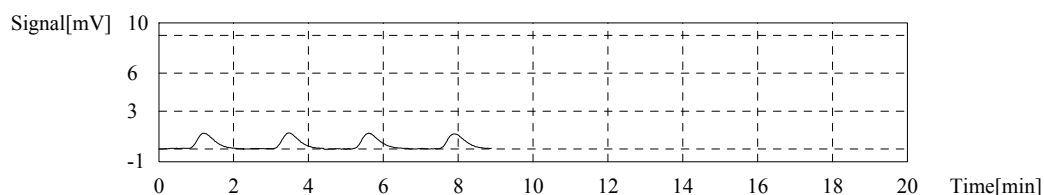
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4036mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.794	0.4010mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:06:27 AM
2	3.803	0.4019mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:10:06 AM
3	4.071	0.4302mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:14:02 AM
4	3.860	0.4079mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:17:44 AM

Mean Area 3.819  
Mean Conc. 0.4036mg/L



## Sample



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-79  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

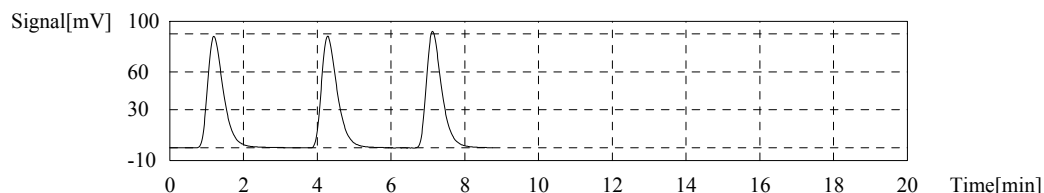
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.5	28.06mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:28:33 AM
2	266.3	28.14mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:32:24 AM
3	269.6	28.49mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:36:13 AM

Mean Area 267.1  
 Mean Conc. 28.23mg/L



## Sample

Sample Name: 18J0334-81  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

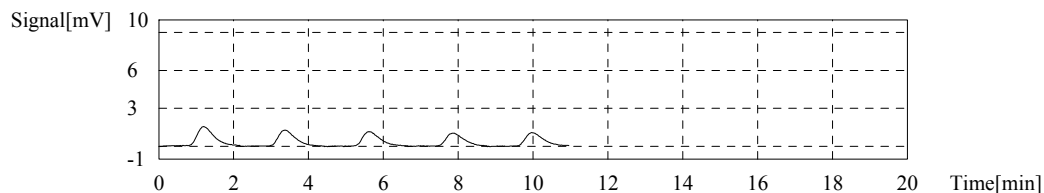
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3661mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.547	0.4805mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:46:18 AM
2	3.966	0.4191mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:50:10 AM
3	3.664	0.3872mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:53:56 AM
4	3.341	0.3531mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 9:57:36 AM
5	3.387	0.3580mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:01:27 AM

Mean Area 3.464  
 Mean Conc. 0.3661mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-83  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

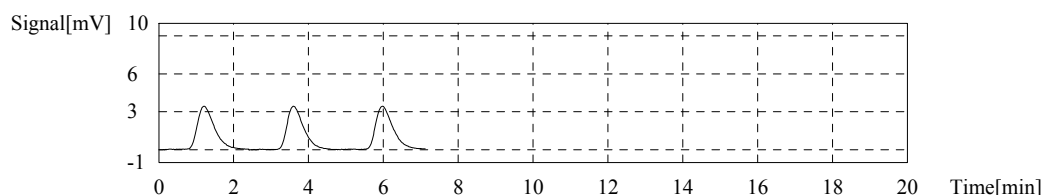
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.139mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.86	1.148mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:11:35 AM
2	10.64	1.124mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:15:20 AM
3	10.82	1.144mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:19:06 AM

Mean Area 10.77  
 Mean Conc. 1.139mg/L



## Sample

Sample Name: BGJ0819-MRL1  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

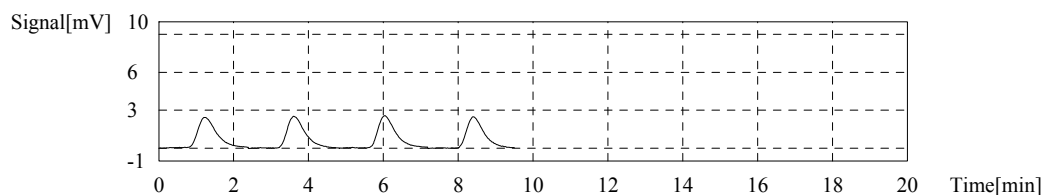
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8497mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.050	0.8508mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:29:13 AM
2	8.476	0.8958mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:33:03 AM
3	8.133	0.8595mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:36:46 AM
4	7.937	0.8388mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:40:30 AM

Mean Area 8.040  
 Mean Conc. 0.8497mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: BGJ0819-BLK1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

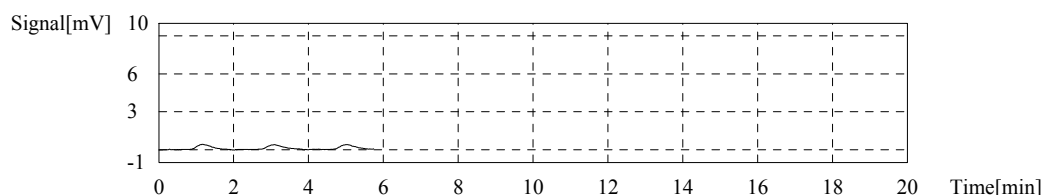
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1074mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.066	0.1127mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:50:08 AM
2	0.9721	0.1027mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:53:57 AM
3	1.012	0.1070mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 10:57:42 AM

Mean Area 1.017  
Mean Conc. 0.1074mg/L



## Sample

Sample Name: BGJ0819-BS1  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

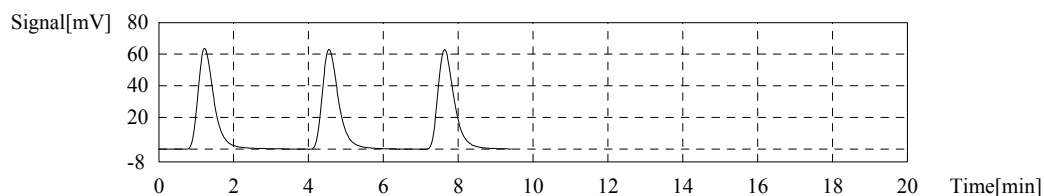
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	190.8	20.16mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:08:45 AM
2	193.2	20.42mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:12:51 AM
3	193.5	20.45mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:16:51 AM

Mean Area 192.5  
Mean Conc. 20.34mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-41 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

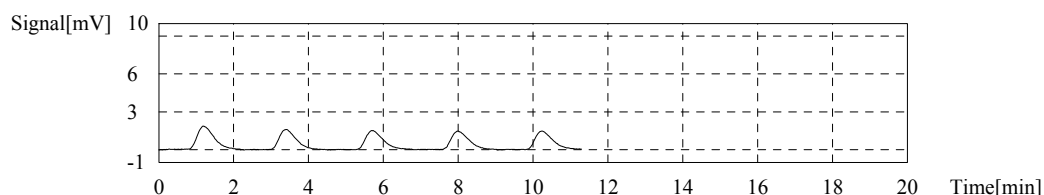
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5049mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.645	0.5966mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:26:57 AM
2	5.119	0.5410mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:30:52 AM
3	4.940	0.5221mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:34:37 AM
4	4.678	0.4944mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:38:22 AM
5	4.715	0.4983mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:42:09 AM

Mean Area 4.778  
 Mean Conc. 0.5049mg/L



## Sample

Sample Name: 18J0334-43 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

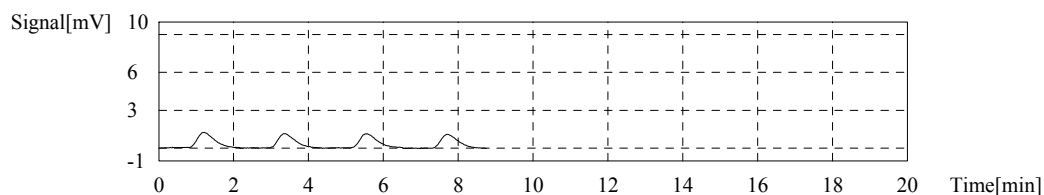
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3766mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.750	0.3963mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:52:04 AM
2	3.649	0.3856mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:55:52 AM
3	3.518	0.3718mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 11:59:38 AM
4	3.522	0.3722mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:03:29 PM

Mean Area 3.563  
 Mean Conc. 0.3766mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: BGJ0819-DUP1  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

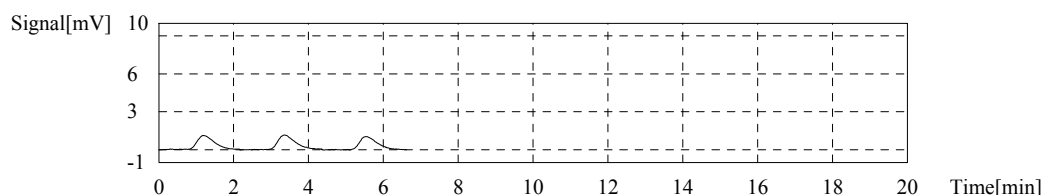
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3681mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.464	0.3661mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:13:24 PM
2	3.550	0.3752mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:17:12 PM
3	3.435	0.3630mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:21:04 PM

Mean Area: 3.483  
 Mean Conc.: 0.3681mg/L



## Control Sample

Sample Name: SEQ-CCV4  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.03 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

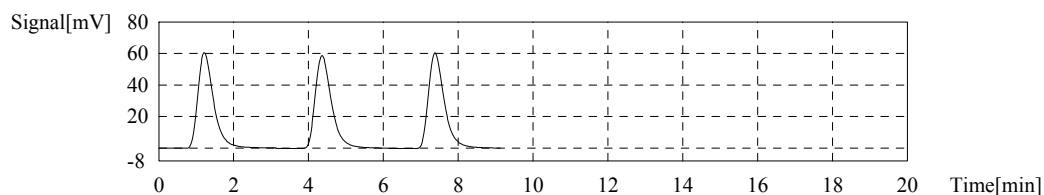
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.03ppm

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.2	18.97ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:31:57 PM
2	179.7	19.03ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:35:57 PM
3	180.2	19.08ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:39:55 PM

Mean Area: 179.7  
 Mean Conc.: 19.03ppm



## Control Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: SEQ-CCB4  
 Sample ID:  
 Method: ICB CCB.tpl  
 Status: Completed  
 Chk. Result: Control value: 0.2063 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

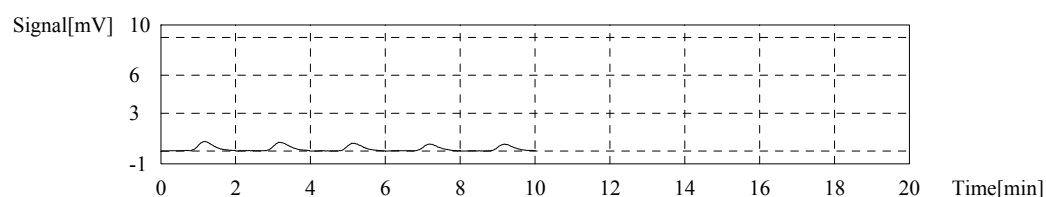
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2063mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.012	0.2467mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:49:49 PM
2	1.935	0.2386mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:53:16 PM
3	1.766	0.2207mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 12:56:50 PM
4	1.546	0.1975mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:00:18 PM
5	1.576	0.2006mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:03:48 PM

Mean Area: 1.629  
 Mean Conc.: 0.2063mg/L



## Sample

Sample Name: BGJ0819-MS1  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result:

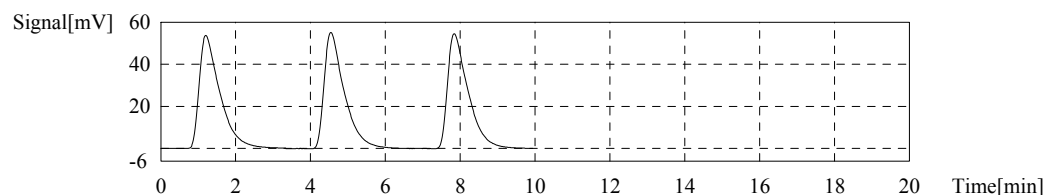
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.08mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	208.2	22.00mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:15:07 PM
2	208.7	22.06mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:19:25 PM
3	210.0	22.19mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:23:43 PM

Mean Area: 209.0  
 Mean Conc.: 22.08mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: BGJ0819-MSD1  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

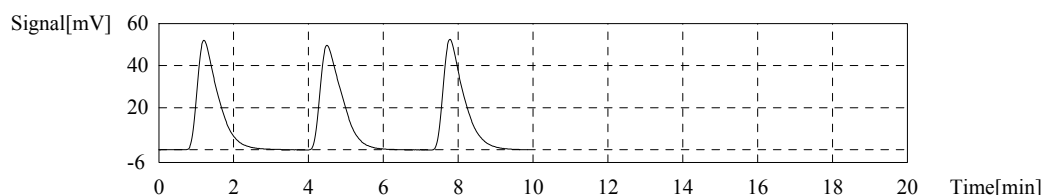
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	202.7	21.42mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:34:56 PM
2	203.0	21.45mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:39:13 PM
3	203.3	21.49mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:43:30 PM

Mean Area: 203.0  
 Mean Conc.: 21.45mg/L



## Sample

Sample Name: 18J0334-45 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

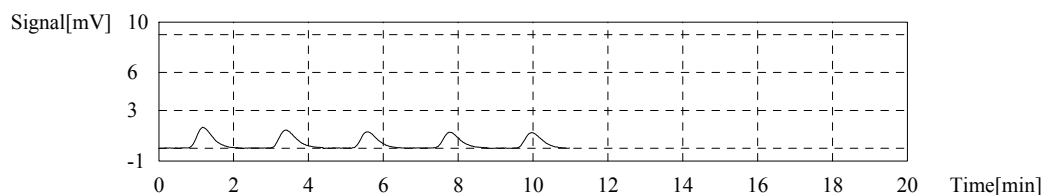
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4186mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.888	0.5166mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:53:38 PM
2	4.447	0.4700mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 1:57:24 PM
3	4.098	0.4331mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:01:12 PM
4	3.817	0.4034mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:04:58 PM
5	3.969	0.4195mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:08:46 PM

Mean Area: 3.961  
 Mean Conc.: 0.4186mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: 18J0334-47 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

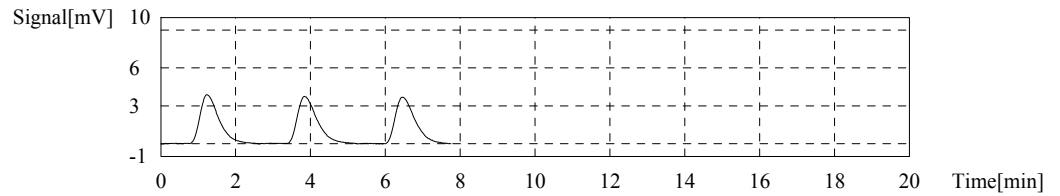
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.437mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.52	1.429mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:19:07 PM
2	13.61	1.438mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:22:55 PM
3	13.65	1.443mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:26:37 PM

Mean Area 13.59  
Mean Conc. 1.437mg/L



## Sample

Sample Name: 18J0334-49 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

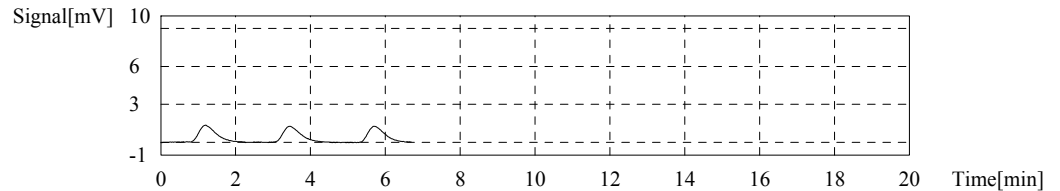
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4350mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.213	0.4452mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:36:54 PM
2	4.078	0.4310mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:40:42 PM
3	4.056	0.4287mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:44:23 PM

Mean Area 4.116  
Mean Conc. 0.4350mg/L



## Sample



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-51 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

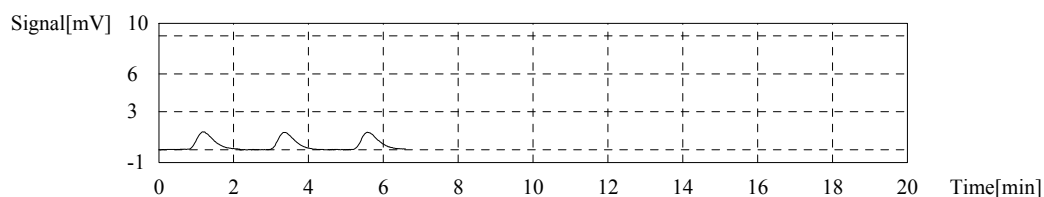
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4554mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.286	0.4530mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:54:18 PM
2	4.303	0.4548mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 2:58:09 PM
3	4.338	0.4585mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:01:53 PM

Mean Area 4.309  
Mean Conc. 0.4554mg/L



## Sample

Sample Name: 18J0334-53 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

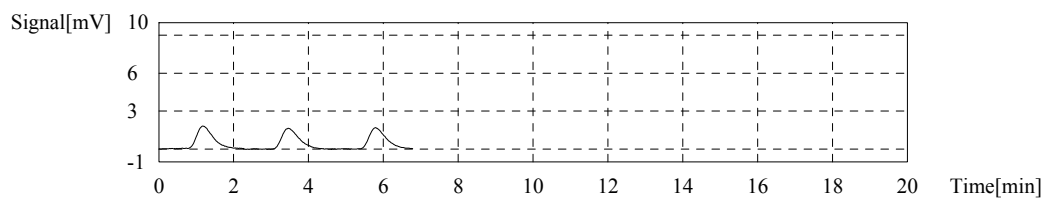
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5624mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.346	0.5650mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:11:54 PM
2	5.379	0.5685mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:15:45 PM
3	5.241	0.5539mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:19:23 PM

Mean Area 5.322  
Mean Conc. 0.5624mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-55 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

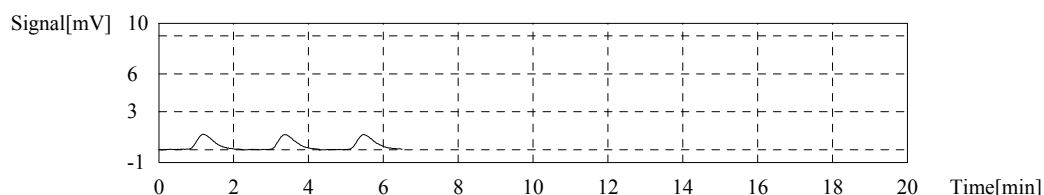
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3932mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.698	0.3908mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:29:19 PM
2	3.681	0.3890mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:33:01 PM
3	3.783	0.3998mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:36:55 PM

Mean Area 3.721  
Mean Conc. 0.3932mg/L



## Sample

Sample Name: 18J0334-57 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

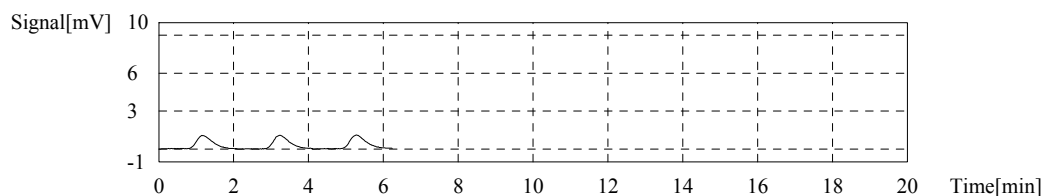
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3285mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.036	0.3209mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:46:43 PM
2	3.115	0.3292mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:50:30 PM
3	3.175	0.3355mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 3:54:22 PM

Mean Area 3.109  
Mean Conc. 0.3285mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-61 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

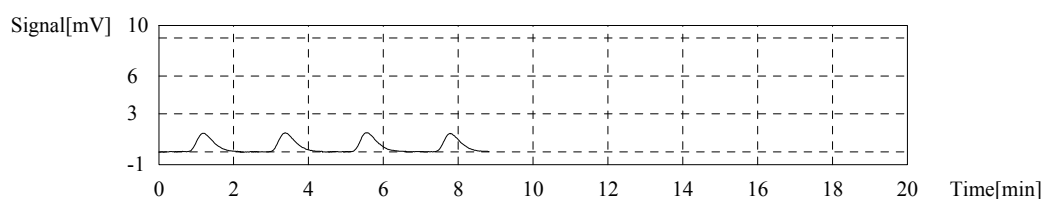
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4828mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.505	0.4761mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:04:18 PM
2	4.672	0.4938mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:08:05 PM
3	4.701	0.4968mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:11:55 PM
4	4.529	0.4786mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:15:41 PM

Mean Area 4.569  
 Mean Conc. 0.4828mg/L



## Control Sample

Sample Name: SEQ-CCV5  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.09 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

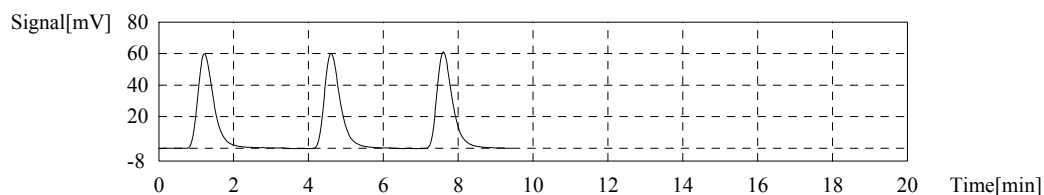
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.09ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.8	19.04ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:26:53 PM
2	180.9	19.15ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:30:53 PM
3	180.1	19.07ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:34:55 PM

Mean Area 180.3  
 Mean Conc. 19.09ppm



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Control Sample

Sample Name: SEQ-CCB5  
 Sample ID:  
 Method: ICB CCB.tpl  
 Status: Completed  
 Chk. Result: Control value: 0.2105 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

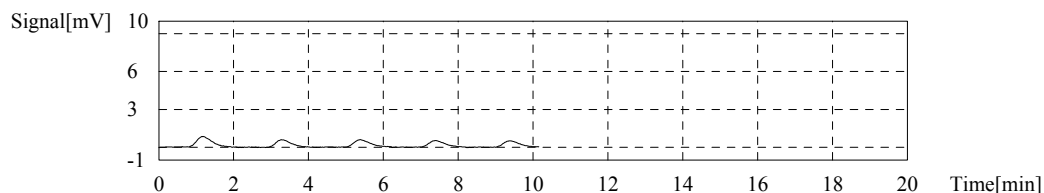
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2105mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.437	0.2916mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:44:56 PM
2	1.764	0.2205mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:48:24 PM
3	1.706	0.2144mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:51:50 PM
4	1.537	0.1965mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:55:18 PM
5	1.315	0.1731mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 4:58:46 PM

Mean Area: 1.669  
 Mean Conc.: 0.2105mg/L



## Sample

Sample Name: 18J0334-63 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result:

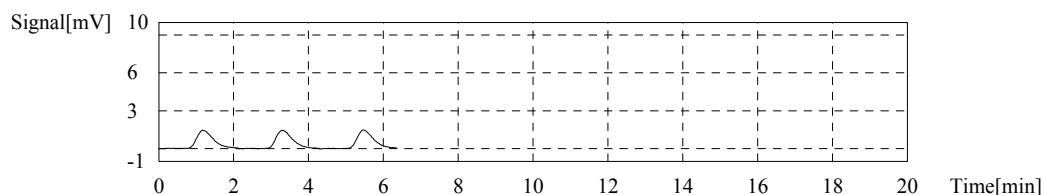
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4579mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.321	0.4567mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:08:47 PM
2	4.436	0.4688mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:12:37 PM
3	4.242	0.4483mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:16:18 PM

Mean Area: 4.333  
 Mean Conc.: 0.4579mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: 18J0334-65 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

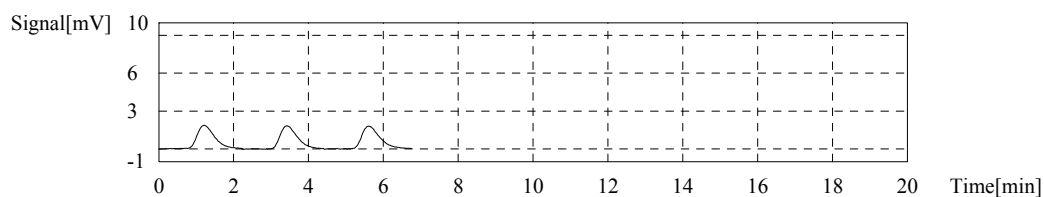
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6268mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.952	0.6290mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:26:16 PM
2	5.832	0.6163mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:30:01 PM
3	6.008	0.6349mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:33:58 PM

Mean Area 5.931  
Mean Conc. 0.6268mg/L



## Sample

Sample Name: 18J0334-67 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

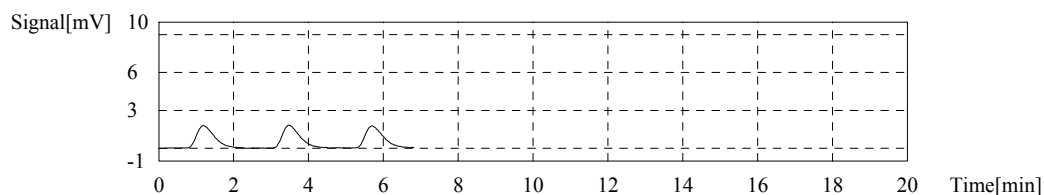
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6132mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.906	0.6242mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:44:01 PM
2	5.751	0.6078mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:47:44 PM
3	5.751	0.6078mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 5:51:37 PM

Mean Area 5.803  
Mean Conc. 0.6132mg/L



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Sample

Sample Name: 18J0334-69 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

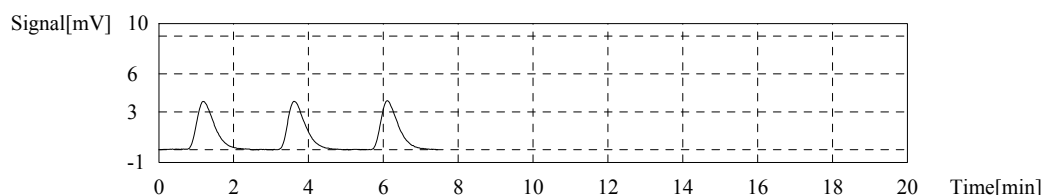
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.325mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.36	1.306mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:01:49 PM
2	12.65	1.337mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:05:39 PM
3	12.61	1.333mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:09:29 PM

Mean Area 12.54  
Mean Conc. 1.325mg/L



## Sample

Sample Name: 18J0334-71 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

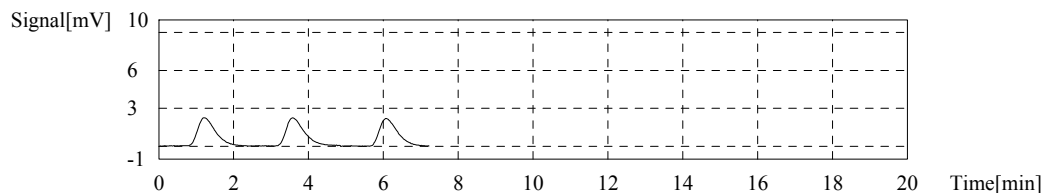
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7786mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.300	0.7715mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:19:54 PM
2	7.463	0.7887mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:23:48 PM
3	7.338	0.7755mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:27:28 PM

Mean Area 7.367  
Mean Conc. 0.7786mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-73 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

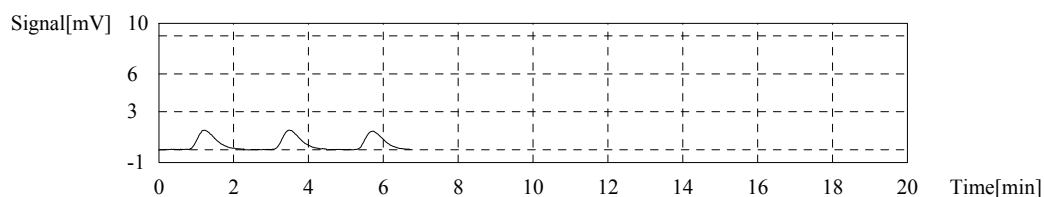
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5304mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.065	0.5353mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:37:30 PM
2	5.058	0.5345mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:41:14 PM
3	4.932	0.5212mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:45:02 PM

Mean Area 5.018  
Mean Conc. 0.5304mg/L



## Sample

Sample Name: 18J0334-75 DOC  
Sample ID:  
Origin: NPOC 0.5 - 50 ppm.cal  
Status: Completed  
Chk. Result

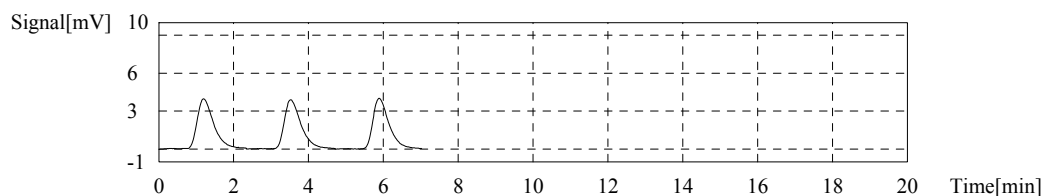
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.262mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.95	1.263mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:55:08 PM
2	11.94	1.262mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 6:58:57 PM
3	11.94	1.262mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:02:41 PM

Mean Area 11.94  
Mean Conc. 1.262mg/L



## Sample

# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-77 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

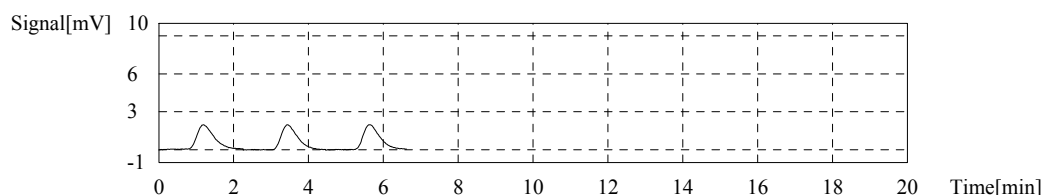
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6324mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.985	0.6325mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:12:42 PM
2	6.010	0.6352mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:16:26 PM
3	5.958	0.6297mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:20:11 PM

Mean Area 5.984  
 Mean Conc. 0.6324mg/L



## Sample

Sample Name: 18J0334-79 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

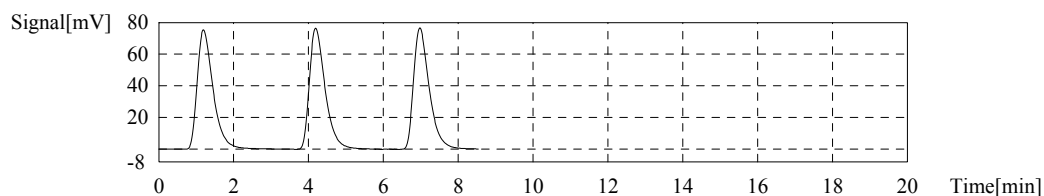
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	224.6	23.74mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:30:58 PM
2	225.6	23.84mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:34:45 PM
3	225.9	23.87mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:38:30 PM

Mean Area 225.4  
 Mean Conc. 23.82mg/L



## Sample



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

Sample Name: 18J0334-81 DOC  
 Sample ID:  
 Origin: NPOC 0.5 - 50 ppm.cal  
 Status: Completed  
 Chk. Result

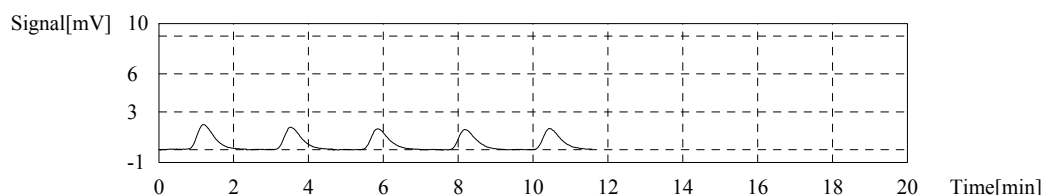
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5634mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.300	0.6658mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:48:39 PM
2	5.579	0.5896mg/L	100ul	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:52:25 PM
3	5.426	0.5734mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:56:13 PM
4	5.220	0.5517mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 7:59:56 PM
5	5.346	0.5650mg/L	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:03:46 PM

Mean Area 5.331  
 Mean Conc. 0.5634mg/L



## Control Sample

Sample Name: SEQ-CCV6  
 Sample ID: CVS 20  
 Method: CVS 20 ppm.tpl  
 Status: Completed  
 Chk. Result: Control value: 19.13 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

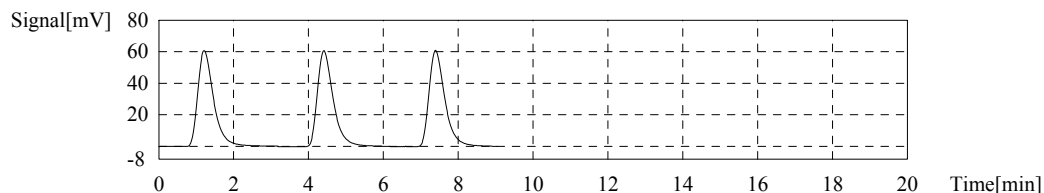
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:19.13ppm

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	180.8	19.14ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:14:47 PM
2	180.3	19.09ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:18:46 PM
3	181.0	19.16ppm	100ul	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:22:38 PM

Mean Area 180.7  
 Mean Conc. 19.13ppm



# TOC-Control L Report

BF  
2018\_10\_29\_002.thx

## Control Sample

Sample Name: SEQ-CCB6  
Sample ID:  
Method: ICB CCB.tpl  
Status: Completed  
Chk. Result: Control value: 0.2019 / Control within range!

( Zero shift setting of cal. curve has been ignored in conc. calculation )

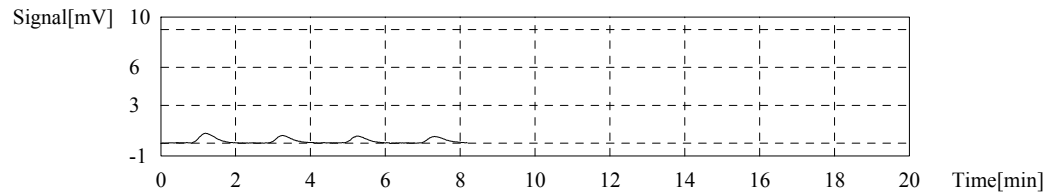
Type	Anal.	Manual Dilution	Result
Control	NPOC	1.000	NPOC:0.2019mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.226	0.2693mg/L	100uL	1.000	E	NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:32:36 PM
2	1.670	0.2106mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:36:03 PM
3	1.495	0.1921mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:39:34 PM
4	1.598	0.2030mg/L	100uL	1.000		NPOC 0.5 - 50 ppm.2018_10_29_17_09_16.cal	10/30/2018 8:43:06 PM

Mean Area: 1.588  
Mean Conc.: 0.2019mg/L



Date of Creation 10/29/2018 7:43:01 PM  
 User BF  
 System TOC-L SUSPENDED SOLIDS

**Cal. Curve**

Sample Name: SEQ-CAL  
 Sample ID: Curve  
 Object ID: 0L-10000101463-10101000-133F02527CC3-0001  
 Cal. Curve: NPOC 0.5 - 50 ppm.2018\_10\_29\_17\_09\_16.cal  
 Status: Completed  
 Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.312	100uL	1.000	*****	E	10/29/2018 5:16:56 PM
2	0.8324	100uL	1.000	*****		10/29/2018 5:20:15 PM
3	0.9657	100uL	1.000	*****		10/29/2018 5:23:45 PM
4	0.9431	100uL	1.000	*****		10/29/2018 5:27:19 PM

Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 0.9137  
 SD Area 0.07134  
 CV Area 7.81%  
 Vial 0

Conc: 0.5000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.069	100uL	10.00	*****		10/29/2018 5:37:58 PM
2	5.147	100uL	10.00	*****		10/29/2018 5:42:48 PM
3	4.983	100uL	10.00	*****		10/29/2018 5:47:42 PM

Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 5.066  
 SD Area 0.08203  
 CV Area 1.62%  
 Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.35	100uL	5.000	*****	E	10/29/2018 5:56:53 PM
2	9.744	100uL	5.000	*****		10/29/2018 6:00:34 PM
3	10.05	100uL	5.000	*****		10/29/2018 6:04:22 PM
4	9.968	100uL	5.000	*****		10/29/2018 6:08:05 PM

Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 9.921  
 SD Area 0.1584  
 CV Area 1.60%  
 Vial 1

Conc: 2.500mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	23.44	100uL	2.000	*****		10/29/2018 6:17:33 PM
2	23.28	100uL	2.000	*****		10/29/2018 6:21:26 PM
3	23.54	100uL	2.000	*****		10/29/2018 6:25:31 PM

Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 23.42  
 SD Area 0.1311  
 CV Area 0.56%  
 Vial 1

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	45.35	100uL	1.000	*****		10/29/2018 6:34:36 PM
2	45.19	100uL	1.000	*****		10/29/2018 6:38:42 PM
3	45.29	100uL	1.000	*****		10/29/2018 6:42:45 PM

Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 45.28  
 SD Area 0.08083  
 CV Area 0.18%  
 Vial 1

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	93.16	100uL	5.000	*****		10/29/2018 6:54:48 PM
2	93.43	100uL	5.000	*****		10/29/2018 6:59:20 PM
3	93.01	100uL	5.000	*****		10/29/2018 7:03:50 PM

Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 93.20  
 SD Area 0.2128  
 CV Area 0.23%  
 Vial 2

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	234.8	100uL	2.000	*****		10/29/2018 7:14:08 PM
2	236.3	100uL	2.000	*****		10/29/2018 7:18:42 PM
3	235.7	100uL	2.000	*****		10/29/2018 7:23:17 PM

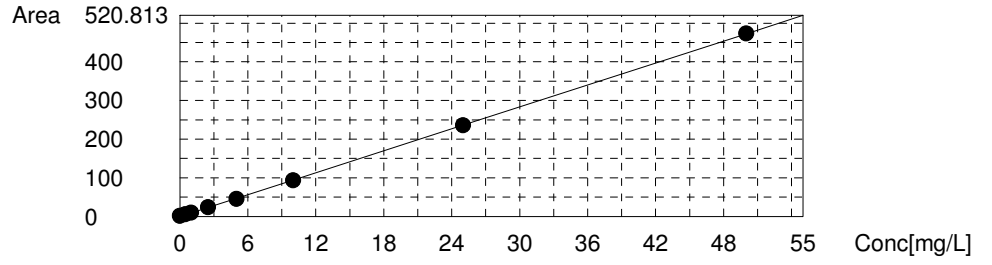
Acid Add. 1.500%  
 Sparge Gas Flow 80ml  
 Sp. Time 90.00sec  
 Mean Area 235.6  
 SD Area 0.7550  
 CV Area 0.32%  
 Vial 2

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	475.4	100uL	1.000	*****		10/29/2018 7:33:29 PM
2	471.5	100uL	1.000	*****		10/29/2018 7:38:13 PM
3	473.5	100uL	1.000	*****		10/29/2018 7:43:01 PM

Acid Add. 1.500%  
Spurge Gas Flow 80ml  
Sp. Time 90.00sec  
Mean Area 473.5  
SD Area 1.950  
CV Area 0.41%  
Vial 2

Slope: 9.462  
Intercept 0.000  
 $r^2$  1.0000  
r 1.0000  
Zero Shift Yes





## INSTRUMENT BLANKS EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Instrument ID: TOC-LCSH

Calibration: BJ00092

Sequence: SGL0336

Date Analyzed: 12/20/18 10:50

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SGL0336-ICB1	Total Organic Carbon	0.18	0.5	0.50	mg/L	
SGL0336-CCB1	Total Organic Carbon	0.23	0.5	0.50	mg/L	
SGL0336-CCB2	Total Organic Carbon	0.24	0.5	0.50	mg/L	
SGL0336-CCB3	Total Organic Carbon	0.23	0.5	0.50	mg/L	



## INITIAL AND CONTINUING CALIBRATION CHECK

### EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Instrument ID: TOC-LCSH

Calibration: BJ00092

Control Limit: +/- 10.00%

Sequence: SGL0336

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SGL0336-ICV1	Total Organic Carbon	20.000	19.13	95.7	mg/L	EPA 9060A
SGL0336-CCV1	Total Organic Carbon	20.000	19.16	95.8	mg/L	EPA 9060A
SGL0336-CCV2	Total Organic Carbon	20.000	18.77	93.9	mg/L	EPA 9060A
SGL0336-CCV3	Total Organic Carbon	20.000	18.98	94.9	mg/L	EPA 9060A

\* Values outside of QC limits



## HOLDING TIME SUMMARY

Analysis: EPA 9060A

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
ERH719 18L0338-01	12/12/18 09:25	12/18/18 10:30	12/19/18 12:03	7	28	12/20/18 19:34	8	28	
ERH722 18L0338-02	12/13/18 09:05	12/18/18 10:30	12/19/18 12:03	6	28	12/20/18 20:50	7	28	
Duplicate BGL0534-DUP2	12/13/18 09:05	12/18/18 10:30	12/19/18 12:03	6	28	12/20/18 21:15	8	28	
Matrix Spike BGL0534-MS2	12/13/18 09:05	12/18/18 10:30	12/19/18 12:03	6	28	12/20/18 21:37	8	28	
Matrix Spike Dup BGL0534-MSD2	12/13/18 09:05	12/18/18 10:30	12/19/18 12:03	6	28	12/20/18 21:59	8	28	

\* Indicates hold time exceedance.





**METHOD DETECTION  
AND REPORTING LIMITS**

**EPA 9060A**

Laboratory: Analytical Resources, Inc.

SDG: 18L0338

Client: APPL, Inc.

Project: ARF: 87650

Matrix: Water

Instrument: TOC-LCSH

<b>Analyte</b>	<b>MDL</b>	<b>LOD</b>	<b>Units</b>
Total Organic Carbon	0.50	0.50	mg/L



908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

Certification Number: CA1312  
NELAP Certification number: CA00046  
DoD-ELAP Certificate number: 4064.01

## Data Validatable Report

February 18, 2019

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, Hawaii 96813

Attn: Margie Pascua

Title: Report of Data: Case 87918

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126  
Subcontract: 18S-22209-HI27

Dear Ms. Pascua:

Four water samples were received January 22, 2019. Written results for the requested analyses are being provided on this February 18, 2019.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, [libby@applinc.com](mailto:libby@applinc.com), at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Paula McCartney, Laboratory Director  
APPL, Inc.

PM/lac  
Enclosure  
cc: File

Data Validation Package  
for  
60481245 CIV 0053 Red Hill Fuel Storage  
APPL SDG 87918

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## **CASE NARRATIVE**

# Case Narrative

ARF: 87918

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

## Sample Receipt Information:

Four water samples were received January 22, 2019, at 3.0°C, and 3.0°C. The sample group was assigned Analytical Request Form (ARF) number 87918.

## Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D SIM analysis, the samples were extracted according to EPA method 3520C.

For the EPA 8270D Phenol analysis, the samples were extracted according to EPA method 3520C. The samples were screened for Tentatively Identified Compounds (TICs).

For the APPL SOP ANA2MEE analysis, the samples were extracted according to EPA method 3535.

For the EPA 8260B analyses, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the samples were allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 300.0, 353.2, SM 2320B, and SM 3500FeB analyses, the sample was prepared according to the methods.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

## Analytical Exceptions, Deviations and Abnormalities.

**EPA 8270D SIM:** In the (190123A) LCS, 2-Methylnaphtalene recovered above the 114% upper control limit Corrective action: None, 2-Methylnaphtalene was not detected in the associated samples.

In the (190123A) LCS, 1-Methylnaphtalene recovered above the 115% upper control limit Corrective action: None, 2-Methylnaphtalene was not detected in the associated samples.

The surrogate 2-Methylnaphtalene recovered above the 114 % upper control limit in both samples, in the blank and the LCS and LCSD. Corrective action: None, no target compound were detected in the samples.

The surrogate Fluoranthene recovered above the 120% upper control limit in one sample. Corrective action: None, no target compounds were detected in the sample.

**EPA 8270D:** Manual integrations were performed in accordance with APPL's SOP. Chromatograms of before and after manual integration are enclosed.

**Inorganics:** The samples were analyzed as soon as possible for ferrous iron.

**APPL Inc.**  
**Abbreviations and Flags**

<b>FLAG</b>	<b>DESCRIPTION</b>
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
87918	01/22/19	ERH744	AZ85417	01/21/19 8:20:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87918	01/22/19	ERH744	AZ85417	01/21/19 8:20:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87918	01/22/19	ERH744	AZ85417	01/21/19 8:20:00 AM	WATER	RSK 175	METHANE BY RSK 175
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	SM3500FeB	Ferrous Iron
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87918	01/22/19	ERH745	AZ85418	01/21/19 8:45:00 AM	WATER	SW846 9060A	9060A TOC & DOC
87918	01/22/19	ERH746	AZ85419	01/21/19 8:35:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87918	01/22/19	ERH746	AZ85419	01/21/19 8:35:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87918	01/22/19	ERH746	AZ85419	01/21/19 8:35:00 AM	WATER	RSK 175	METHANE BY RSK 175
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	SM3500FeB	Ferrous Iron
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87918	01/22/19	ERH747	AZ85420	01/21/19 9:45:00 AM	WATER	SW846 9060A	9060A TOC & DOC




**SAMPLE RECORDS MANAGEMENT  
CHAIN OF CUSTODY,  
ARF, CRF, AND  
CLIENT COMMUNICATION**

# APPL - Analysis Request Form

87918




Client: AECOM  
 Address: 1001 Bishop Street, Suite 1600  
Honolulu, HI 96813  
 Attn: Margie Pascua  
 Phone: 808-356-5373 Fax: 808-523-8950  
 Job: 60571032 CV18F0126 Red Hill Fuel Storage  
 PO #: 18S-22209-HI27 PO# 102604  
 Chain of Custody (Y/N): Y # 006-007  
 RAD Screen (Y/N): Y pH (Y/N): Y  
 Turn Around Type: 1 WEEK

Received by: AAR   
 Date Received: 01/22/19 Time: 10:10  
 Delivered by: FEDEX  
 Shuttle Custody Seals (Y/N): Y Time Zone: -10  
 Chest Temp(s): 3.0,3.0°C  
 Color: VOA/J-PurpBlack  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Libby Cheesebor  
 QC Report Type: DVP4DOD/EQUIS/HI  
 Due Date: 01/29/19

**Comments:**

*PM: login and F1s to Margie.Pascua@aecom.com*  
*AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms (LOQ/LOD database/DL)*  
*8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.*  
*TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections*  
*RSK: Methane only; \$87DC53W5: report phenol + TICs; \$87DMEEW5: 2-MEE (LCS Spk 80ppb).*  
*CHANGE IN ARF: added TOC/DOC analysis to 2 samples.*  
*FR: HC to LDC, 2 labeled CDs to Margie Pascua.*  
*EDD: AECOM EQUIS EDD 2.5.3 Red Hill 87DMEE->3535A to Margie.Pascua@aecom.com & jecklund@lab-data.com*

<u>Sample Distribution:</u>	<u>Charges:</u>	<u>Invoice To:</u>
GC: 2-\$87DC53W5, 2-\$87DMEEW5, 2-\$DOC53W5LIQ, 2-\$SIM53LIQ51		ACCOUNTS PAYABLE
Extractions: 2- LIQ003, 2- LIQ005, 2- MWE2MEE		1001 Bishop Street, Ste 1600
VOA: 4-\$86BTOTXDOD5W, 4-\$GASBL, 4-\$GRO86BW, 4-\$RSKMETH		USAPImaging@aecom.com
Wetlab: 2-\$232W(HCO3,CO3,ALK), 2-\$300W(NO3,CL,SO4), 2-\$35FE, 2-\$35OF, 2-\$TOCDOCW		maryl.basano@aecom.com

Client ID	APPL ID	Sampled	Analyses Requested
1. ERH744	LCSD AZ85417W 	01/21/19 08:20	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
2. ERH745	LCSD AZ85418W 	01/21/19 08:45	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O SGC analysis if detections
3. ERH746	LCSD AZ85419W 	01/21/19 08:35	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH

APPL - Analysis Request Form

87918

4. ERH747

LCSD AZ85420W 01/21/19 09:45



\$232W(HCO3,CO3,ALK),  
\$300W(NO3,CL,SO4), \$35FE, \$35OF,  
\$86BTOTXDOD5W, \$87DC53W5,  
\$87DMEEW5, \$DOC53W5LIQ, \$GASBL,  
\$GRO86BW, \$RSKMETH, \$SIM53LIQ51,  
\$TOCDOCW -- D&O SGC analysis if  
detections

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

# APPL Sample Receipt Form

ARF# 87918

Sample	Container Type	Count	p
AZ85417	<sup>13</sup> VOAs - HCL	4	NA
AZ85418	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85419	<sup>13</sup> VOAs - HCL	4	NA
AZ85420	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA

Sample    Container Type    Count    p



APPL, Inc.  
 908 N Temperance Ave  
 Clovis, CA 93611  
 www.applinc.com

CHAIN OF CUSTODY RECORD

Phone: (559) 275-2175  
 Fax: (559) 275-4422  
 coc@applinc.com

C.O.C. 006

87918

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>AECOM</u>	Company Name: <u>AECOM</u>
Address: <u>1001 Bishop St, Suite 1600</u>	Address: <u>1001 Bishop St, Suite 1600</u>
<u>Honolulu, HI 96813</u>	<u>Honolulu, HI 96813</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
Phone: <u>808-356-5373</u>	Phone: <u>808-529-7249</u>
Fax: <u>808-523-8950</u>	Fax: <u>808-523-8950</u>

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number														Date Shipped: <u>1/21/19</u>											
		Purchase Order Number	Sampler (Signature)	No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca Mg Mn X-Ng	SM4500 Total & Dissolved Silica	9060A TOC/DOC	Carrier: FedEx		
Aq	Sed.				Soil	Comments:																					
Sample Identification	Location	Date Collected	Time Collected	Time Zone																							
ERH744	PHMWDS - Trip Blank	1/21/19	08:45	HST	4	X					X					X											
ERH745	PHMWDS	1/21/19	08:45	HST	24	X			X	X*	X	X	X	X	X	X	X	X						X			
<p><i>DUPLICATE 1/21/19</i></p>																											

\*Analyze TPH w/SGT only if TPH-d/o detected.  
 TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature: <u>2 x 3.0°C</u>	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: <u>AECOM</u>	Date: <u>1/21/19</u> Time: <u>11:25</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by: <u>Morgen Donohue</u>	Date:	Time:	Received by:	Date: <u>1/22/19</u>	Time: <u>1010</u>	Received by: <u>Jon Butts</u>



APPL, Inc.  
908 N Temperance Ave  
Clovis, CA 93611  
www.applinc.com

**CHAIN OF CUSTODY RECORD**

Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com

C.O.C. 007

Report to: <b>PLEASE PRINT</b>	Invoice to: <b>PLEASE PRINT</b>
Company Name: <u>AECOM</u>	Company Name: <u>AECOM</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
Phone: <u>808-356-5373</u>	Phone: <u>808-529-7249</u>
Fax: <u>808-523-8950</u>	Fax: <u>808-523-8950</u>

Project Name/Number CV18F0126 / 60571032	Sampler (Print)	Analysis Requested/Method Number										Date Shipped: <u>1/21/19</u>															
		Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, Ni	SM4600 Total & Dissolved Silica	9960A TOC	Carrier: <u>FedEx</u>					
Purchase Order Number 102604	Sampler (Signature)	No. of Containers	Aq	Sed.	Soil	Comments:																					
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, Ni	SM4600 Total & Dissolved Silica	9960A TOC		
<u>ERH746</u>	<u>RHMWD6 - Trip Blank</u>	<u>1/21/19</u>	<u>08:35</u>	<u>HST</u>	<u>4</u>	<u>X</u>			<u>X</u>								<u>X</u>										
<u>ERH747</u>	<u>RHMWD6</u>	<u>1/21/19</u>	<u>09:45</u>	<u>HST</u>	<u>24</u>	<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<i>MD 1/21/19</i>																											

Shuttle Temperature: <u>3.0x2</u>	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: <u>AECOM</u> <u>Morgen Donohue</u>	Date: <u>1/21/19</u> Time: <u>11:25</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by: <u>Morgen Donohue</u>	Date:	Time:	Received by:	Relinquished by:	Date: <u>1/22/19</u> Time: <u>1010</u>	Received at lab by: <u>Ron Buder</u>

COOLER RECEIPT FORM

ARF: 87918

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 01/22/19

2) Coolers: Number of Coolers: 1

3) YES Were custody seals present and intact? How many? 0 Name/Date on seal?

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap popcorn foam X plastic bags other X wet ice dry ice no ice gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of certified NIST thermometer use R1

8) Cooler temp(s): In °C 1: 3.0°C x2 2: 3: 4: 5: 6: 7: 8: 9: 10: 11: 12:

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)?

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) YES Were bubbles present in volatile samples?

If yes, the following were received with air bubbles:

Larger than a pea:

Smaller than a pea: AZ85417W01-4, AZ85418W01-2, AZ85419W01-4

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide >9?

22) NO Were unpreserved VOA Vials received?

23) NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?

pH strip lot number: 90b2031

Lab notified if pH was not adequate:

Notes/Deficiencies:

CUSTODY SEAL AECOM (808) 521-751 initials MD Date 1/22/19

Personnel receiving samples: ZG Second reviewer: AP

Personnel labeling samples: ZG

Project manager notified: RB Date/Time of notification 01/22/19

Name of client notified: Date/Time of notification

## **SAMPLE RESULTS**



# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918

**Sample ID: ERH745**

**APPL ID: AZ85418**

Sample Collection Date: 01/21/19

QCG: #DOC53-190123A-236871

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/23/19	01/24/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/23/19	01/24/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	107	60-142			%	01/23/19	01/24/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	104	56-125			%	01/23/19	01/24/19

Quant Method: DOC0117.M
Run #: 124016
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/25/19 10:05:00 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85420**

QCG: #DOC53-190123A-236871

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/23/19	01/24/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/23/19	01/24/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	112	60-142			%	01/23/19	01/24/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	107	56-125			%	01/23/19	01/24/19

Quant Method: DOC0117.M
Run #: 124017
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/25/19 10:05:00 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH745**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85418**

QCG: #SIM53-190123A-236911

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALE	129 #	39-114			%	01/23/19	01/25/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (	105	58-120			%	01/23/19	01/25/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L023
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 01/28/19 12:11:33 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

ARF: 87918

**APPL ID: AZ85420**

QCG: #SIM53-190123A-236911

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALE	120 #	39-114			%	01/23/19	01/25/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (	99.3	58-120			%	01/23/19	01/25/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L024
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 01/28/19 12:11:33 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH745

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

APPL ID: AZ85418

QCG: #87DC5-190123A-236945

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	19 T	TIC			TIC ug/L	01/23/19	01/28/19
EPA 8270D	PENTANEDIOIC ACID, DIMETHYL ESTE	11 T	TIC			TIC ug/L	01/23/19	01/28/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/23/19	01/28/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	96.3	43-140			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	86.1	44-119			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	80.8	19-119			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	86.9	44-120			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	79.4	10-115			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	84.0	50-134			%	01/23/19	01/28/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y047  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 01/29/19 12:55:39 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85420**

QCG: #87DC5-190123A-236945

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	48 T				ug/L	01/23/19	01/28/19
EPA 8270D	PENTANEDIOIC ACID, DIMETHYL ESTE	9.6 T				ug/L	01/23/19	01/28/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/23/19	01/28/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	100	43-140			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	88.8	44-119			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	84.5	19-119			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	88.4	44-120			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	79.0	10-115			%	01/23/19	01/28/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	81.8	50-134			%	01/23/19	01/28/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y048  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 01/29/19 12:55:39 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918  
APPL ID: **AZ85418**  
QCG: #87DME-190124A-236977

**Sample ID: ERH745**

Sample Collection Date: 01/21/19

---

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/24/19	01/29/19

---

Quant Method: YMEE1128.M
Run #: 1128Y061
Instrument: Yoda
Sequence: Y181128M
Dilution Factor: 1
Initials: AAB

Printed: 01/29/19 12:44:03 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918

**Sample ID: ERH747**

**APPL ID: AZ85420**

Sample Collection Date: 01/21/19

QCG: #87DME-190124A-236977

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/24/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y062  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/29/19 12:44:03 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



## EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918

**Sample ID: ERH744**

**APPL ID: AZ85417**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190123-236909

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/23/19	01/23/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	112	81-118			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	103	85-114			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	117	80-119			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	107	89-112			%	01/23/19	01/23/19

Quant Method: L0121W.M
Run #: 0123L21
Instrument: Loki
Sequence: 190121
Dilution Factor: 1
Initials: KVA

Printed: 01/28/19 10:39:47 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918

**Sample ID: ERH745**

**APPL ID: AZ85418**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190123-236909

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/23/19	01/23/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	112	81-118			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	102	85-114			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	118	80-119			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	106	89-112			%	01/23/19	01/23/19

Quant Method: L0121W.M  
Run #: 0123L22  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 10:39:47 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918

**Sample ID: ERH746**

**APPL ID: AZ85419**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190123-236909

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/23/19	01/23/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	113	81-118			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	99.2	85-114			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	115	80-119			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	106	89-112			%	01/23/19	01/23/19

Quant Method: L0121W.M  
Run #: 0123L23  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 10:39:47 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

ARF: 87918

**APPL ID: AZ85420**

QCG: #86BTO-AL190123-236909

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/23/19	01/23/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	113	81-118			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	96.1	85-114			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	117	80-119			%	01/23/19	01/23/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	101	89-112			%	01/23/19	01/23/19

Quant Method: L0121W.M  
Run #: 0123L24  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 10:39:47 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87918

**Sample ID: ERH744**

**APPL ID: AZ85417**

Sample Collection Date: 01/21/19

QCG: #GRO86-AL190123-236915

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	103	85-114			%	01/23/19	01/23/19

Quant Method: LGAS0122.M  
Run #: 0123L21  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 11:11:25 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH745**

Sample Collection Date: 01/21/19

ARF: 87918

**APPL ID: AZ85418**

QCG: #GRO86-AL190123-236915

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	102	85-114			%	01/23/19	01/23/19

Quant Method: LGAS0122.M  
Run #: 0123L22  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 11:11:25 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH746**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85419**

QCG: #GRO86-AL190123-236915

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	99.2	85-114			%	01/23/19	01/23/19

Quant Method: LGAS0122.M  
Run #: 0123L23  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 11:11:25 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85420**

QCG: #GRO86-AL190123-236915

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/23/19	01/23/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	96.1	85-114			%	01/23/19	01/23/19

Quant Method: LGAS0122.M  
Run #: 0123L24  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: KVA

Printed: 01/28/19 11:11:25 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH744**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85417**

QCG: #RSKME-190125B-236902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/25/19	01/25/19

Quant Method: RSK0120.M  
Run #: 19012540  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 9:07:16 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH745**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918  
**APPL ID: AZ85418**  
QCG: #RSKME-190125B-236902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/25/19	01/25/19

Quant Method: RSK0120.M  
Run #: 19012541  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 9:07:16 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH746**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918  
**APPL ID: AZ85419**  
QCG: #RSKME-190125B-236902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/25/19	01/25/19

Quant Method: RSK0120.M  
Run #: 19012542  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 9:07:16 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87918

**APPL ID: AZ85420**

QCG: #RSKME-190125B-236902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/25/19	01/25/19

Quant Method: RSK0120.M  
Run #: 19012543  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 9:07:16 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH745**

Sample Collection Date: 01/21/19

**APPL ID: AZ85418**

ARF: 87918

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	NITRATE	3.3	0.5	0.18	0.04	mg/L	1	01/22/19	01/22/19
EPA 300.0	SULFATE	41.4	1.0	0.20	0.09	mg/L	1	01/22/19	01/22/19
EPA 300.0	CHLORIDE	145	5.0	1.00	0.40	mg/L	5	01/22/19	01/22/19
EPA 353.2	NITRATE-NITRITE-N	0.77	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO3	91.8	2.0	1.70	0.85	mg/L	1	01/22/19	01/22/19
SM 2320B	CARBONATE AS CaCO3	1.70 U	2.0	1.70	0.85	mg/L	1	01/22/19	01/22/19
SM 2320B	TOTAL ALKALINITY AS CaCO3	91.8	2.0	1.70	0.85	mg/L	1	01/22/19	01/22/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/22/19	01/22/19
SW846 9060A	TOTAL ORGANIC CARBON	0.71 J	0.93	0.350	0.130	mg/L	1	02/12/19	02/12/19

J = Estimated value.

Printed: 02/17/19 9:32:47 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH747**

Sample Collection Date: 01/21/19

**APPL ID: AZ85420**

ARF: 87918

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	NITRATE	2.5	0.5	0.18	0.04	mg/L	1	01/22/19	01/22/19
EPA 300.0	CHLORIDE	457	10.0	2.00	0.80	mg/L	10	01/22/19	01/22/19
EPA 300.0	SULFATE	92.1	10.0	2.00	0.90	mg/L	10	01/22/19	01/22/19
EPA 353.2	NITRATE-NITRITE-N	0.53	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	108	2.0	1.70	0.85	mg/L	1	01/22/19	01/22/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/22/19	01/22/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	108	2.0	1.70	0.85	mg/L	1	01/22/19	01/22/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/22/19	01/22/19
SW846 9060A	TOTAL ORGANIC CARBON	0.76 J	0.93	0.350	0.130	mg/L	1	02/12/19	02/12/19

J = Estimated value.

Printed: 02/17/19 9:32:47 AM

APPL-F1-SC-NoMC-REG MDLs

# QC FORMS

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/24/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190123A-BLK	Blank	60-142	109		56-125	106	
190123A-LCS	Lab Control Spike	60-142	108		56-125	96.0	
190123A-LCSD	Lab Control SpikeD	60-142	93.2		56-125	96.5	
AZ85418	ERH745	60-142	107		56-125	104	
AZ85420	ERH747	60-142	112		56-125	107	

Comments: Batch: #DOC53-190123A

Printed: 01/25/19 10:05:07 AM  
Form 2 & 8, Surrogate Recovery Summary



**EPA 8015B-eL**

Form 4

**Blank Summary**

Lab Name: APPL, Inc. SDG No: 87918  
Case No: 87918 Date Analyzed: 01/24/19  
Matrix: WATER Instrument: Apollo  
Blank ID: 190123A-BLK Time Analyzed: 1719

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190123A-BLK	Blank	124012	01/24/19 1719
190123A-LCS	Lab Control Spike	124013	01/24/19 1739
190123A-LCSD	Lab Control SpikeD	124014	01/24/19 1759
AZ85418	ERH745	124016	01/24/19 1838
AZ85420	ERH747	124017	01/24/19 1858

Comments: Batch: #DOC53-190123A

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **190123W-85418 - 236871**  
Batch ID: #DOC53-190123A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/23/19	01/24/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/23/19	01/24/19
BLANK	SURROGATE: OCTACOSANE (S)	109	60-142			%	01/23/19	01/24/19
BLANK	SURROGATE: ORTHO-TERPHEN	106	56-125			%	01/23/19	01/24/19

Quant Method:DOC0117.M  
Run #:124012  
Instrument:Apollo  
Sequence:190124  
Initials:DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/25/19 10:05:09 AM

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/24/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190123A-LCS

Time Analyzed: 1739

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190123A-BLK	Blank	124012	01/24/19 1719
190123A-LCS	Lab Control Spike	124013	01/24/19 1739
190123A-LCSD	Lab Control SpikeD	124014	01/24/19 1759
AZ85418	ERH745	124016	01/24/19 1838
AZ85420	ERH747	124017	01/24/19 1858

Comments: Batch: #DOC53-190123A

Printed: 01/25/19 10:05:02 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## EPA 8015B TPH LIQ-LIQ

APPL ID: 190123W-85418 LCS - 236871

Batch ID: #DOC53-190123A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1320	1300	106	104	36-132	1.5	30
OIL (C24-C40)	1250	1290	1190	103	95.2	41-113	8.1	30
-----								
SURROGATE: OCTACOSANE (S)	75.0	80.9	69.9	108	93.2	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	72.0	72.4	96.0	96.5	56-125		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/23/19	01/23/19
Analysis Date :	01/24/19	01/24/19
Instrument :	Apollo	Apollo
Run :	124013	124014
Initials :	DPO	

# 8270D-SIM

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190123A-BLK	Blank	39-114	124	#	58-120	120	
190123A-LCS	Lab Control Spike	39-114	138	*	58-120	119	
190123A-LCSD	Lab Control SpikeD	39-114	133	*	58-120	135	*
AZ85418	ERH745	39-114	129	#	58-120	105	
AZ85420	ERH747	39-114	120	#	58-120	99.3	

Comments: Batch: #SIM53-190123A

\* = Recovery outside of Control Limits on QC Sample.

# = Recovery outside of Control Limits on Sample.

Printed: 01/28/19 12:11:52 PM  
Form 2 & 8, Surrogate Recovery Summary

# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Linus

Blank ID: 190123A-BLK

Time Analyzed: 1336

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190123A-BLK	Blank	0122L020	01/25/19 1336
190123A-LCS	Lab Control Spike	0122L021	01/25/19 1357
190123A-LCSD	Lab Control SpikeD	0122L022	01/25/19 1419
AZ85418	ERH745	0122L023	01/25/19 1441
AZ85420	ERH747	0122L024	01/25/19 1503

Comments: Batch: #SIM53-190123A

Printed: 01/28/19 12:11:58 PM  
Form 4, Blank Summary

## Method Blank

### EPA 8270D SIM LIQ-LIQ

Blank Name/QCG: **190123W-85418 - 236911**  
 Batch ID: #SIM53-190123A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/23/19	01/25/19
BLANK	SURROGATE: 2-METHYLNAPHT	124 #	39-114			%	01/23/19	01/25/19
BLANK	SURROGATE: FLUORANTHENE-	120	58-120			%	01/23/19	01/25/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M Run #: 0122L020 Instrument: Linus Sequence: L190122 Initials: AAB
---

GC SC-Blank-REG MDLs-DOD  
 Printed: 01/28/19 12:12:02 PM

# 8270D-SIM

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Linus

LCS ID: 190123A-LCS

Time Analyzed: 1357

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190123A-BLK	Blank	0122L020	01/25/19 1336
190123A-LCS	Lab Control Spike	0122L021	01/25/19 1357
190123A-LCSD	Lab Control SpikeD	0122L022	01/25/19 1419
AZ85418	ERH745	0122L023	01/25/19 1441
AZ85420	ERH747	0122L024	01/25/19 1503

Comments: Batch: #SIM53-190123A

Printed: 01/28/19 12:13:54 PM  
Form 4, LCS Summary



## Laboratory Control Spike Recoveries

### EPA 8270D SIM LIQ-LIQ

APPL ID: 190123W-85418 LCS - 236911  
 Batch ID: #SIM53-190123A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	7.40	7.16	118 #	115	41-115	3.3	20
2-METHYLNAPHTHALENE	6.25	7.63	7.52	122 #	120 #	39-114	1.5	20
NAPHTHALENE	6.25	6.79	7.05	109	113	43-114	3.8	20
-----								
SURROGATE: 2-METHYLNAPHTHALEN	6.25	8.62	8.33	138 #	133 #	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	7.43	8.42	119	135 #	58-120		
-----								

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0122.M	L0122.M
Extraction Date :	01/23/19	01/23/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Linus	Linus
Run :	0122L021	0122L022
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0122L002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Linus  
Time Analyzed: 9:21

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.1 SIM 01/18/19	0122L003.D	01/22/19 9:37
2		0.2 SIM 01/18/19	0122L004.D	01/22/19 9:59
3		0.5 SIM 01/18/19	0122L005.D	01/22/19 10:21
4		1 SIM 01/18/19	0122L006.D	01/22/19 10:43
5		5 SIM 01/18/19	0122L007.D	01/22/19 11:30
6		10 SIM 01/18/19	0122L008.D	01/22/19 11:53
7		50 SIM 01/18/19	0122L009.D	01/22/19 12:15
8		100 SIM 01/18/19	0122L010.D	01/22/19 12:37
9		SS SIM 01/18/19	0122L011.D	01/22/19 12:59
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17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80% of mass 198	<u>52.3</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.8</u>
127 10 - 80% of mass 198	<u>58.6</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>22.8</u>
365 1 - 100% of mass 198	<u>3.3</u>
441 0.01 - 24% of mass 442	<u>16.7</u>
442 50 - 150% of mass 198	<u>68.2</u>
443 15 - 24% of mass 442	<u>19.2</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87918  
Matrix: Water  
ID: 0122L013.D

SDG No: 87918  
Date Analyzed: 01/25/19  
Instrument: Linus  
Time Analyzed: 9:14

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	5 SIM 01/18/19	0122L014.D	01/25/19 9:30
2	Blank	190123A BIK 1/800	01/25/19 13:36
3	Lab Control Spike	190123A LCS- 1/800	01/25/19 13:57
4	Lab Control SpikeD	190123A LCSD- 1/800	01/25/19 14:19
5	ERH745	AZ85418W12 1/800	01/25/19 14:41
6	ERH747	AZ85420W14 1/800	01/25/19 15:03
7	5 SIM 01/18/19	0122L026.D	01/25/19 15:48
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14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80% of mass 198	<u>54.9</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>56.8</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.5</u>
275 10 - 60% of mass 198	<u>20.6</u>
365 1 - 100% of mass 198	<u>2.4</u>
441 0.01 - 24% of mass 442	<u>17.1</u>
442 50 - 150% of mass 198	<u>53.6</u>
443 15 - 24% of mass 442	<u>19.9</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87918  
 Lab File ID (Standard): 0122L014.D Date Analyzed: 01/25/19  
 Instrument ID: Linus Time Analyzed: 9:30  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Naphthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		17325	4.05	7724	6.07	15332	7.80
UPPER LIMIT		34650	4.22	15448	6.24	30664	7.97
LOWER LIMIT		8663	3.88	3862	5.90	7666	7.63
SAMPLE NO.							
01	190123A Bik 1/800	14325	4.05	7100	6.07	13482	7.80
02	190123A LCS- 1/800	12737	4.05	6659	6.07	13499	7.80
03	190123A LCSD- 1/800	12397	4.05	5708	6.07	11280	7.80
04	AZ85418W12 1/800	14042	4.05	6746	6.07	15367	7.80
05	AZ85420W14 1/800	14932	4.05	6714	6.07	15775	7.80
06	5 SIM 01/18/19	17873	4.05	7449	6.07	14341	7.80
07							
08							
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22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190123A-BLK	Blank	43-140	94.9		44-119	88.5	
190123A-LCS	Lab Control Spike	43-140	96.8		44-119	83.2	
190123A-LCSD	Lab Control SpikeD	43-140	96.4		44-119	82.4	
AZ85418	ERH745	43-140	96.3		44-119	86.1	
AZ85420	ERH747	43-140	100		44-119	88.8	

Comments: Batch: #87DC5-190123A

Printed: 01/29/19 8:05:45 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190123A-BLK	Blank	19-119	99.4		44-120	102	
190123A-LCS	Lab Control Spike	19-119	76.8		44-120	79.3	
190123A-LCSD	Lab Control SpikeD	19-119	88.0		44-120	88.8	
AZ85418	ERH745	19-119	80.8		44-120	86.9	
AZ85420	ERH747	19-119	84.5		44-120	88.4	

Comments: Batch: #87DC5-190123A

Printed: 01/29/19 8:05:45 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190123A-BLK	Blank	10-115	95.7		50-134	85.1	
190123A-LCS	Lab Control Spike	10-115	75.2		50-134	87.2	
190123A-LCSD	Lab Control SpikeD	10-115	88.4		50-134	82.4	
AZ85418	ERH745	10-115	79.4		50-134	84.0	
AZ85420	ERH747	10-115	79.0		50-134	81.8	

Comments: Batch: #87DC5-190123A

Printed: 01/29/19 8:05:45 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190123A-BLK

Time Analyzed: 1721

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190123A-BLK	Blank	0124Y041	01/28/19 1721
190123A-LCS	Lab Control Spike	0124Y042	01/28/19 1749
190123A-LCSD	Lab Control SpikeD	0124Y043	01/28/19 1816
AZ85418	ERH745	0124Y047	01/28/19 2008
AZ85420	ERH747	0124Y048	01/28/19 2035

Comments: Batch: #87DC5-190123A

Printed: 01/29/19 8:05:56 AM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8270D WATER**

Blank Name/QCG: **190123W-85418 - 236945**  
Batch ID: #87DC5-190123A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/23/19	01/28/19
BLANK	SURROGATE: 2,4,6-TRIBROMOP	94.9	43-140			%	01/23/19	01/28/19
BLANK	SURROGATE: 2-FLUORBIPHENY	88.5	44-119			%	01/23/19	01/28/19
BLANK	SURROGATE: 2-FLUOROPHENO	99.4	19-119			%	01/23/19	01/28/19
BLANK	SURROGATE: NITROBENZENE-	102	44-120			%	01/23/19	01/28/19
BLANK	SURROGATE: PHENOL-D6 (S)	95.7	10-115			%	01/23/19	01/28/19
BLANK	SURROGATE: TERPHENYL-D14 (	85.1	50-134			%	01/23/19	01/28/19

Quant Method:Y0125NC.M  
Run #:0124Y041  
Instrument:Yoda  
Sequence:Y190124  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/29/19 8:06:07 AM

# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190123A-LCS

Time Analyzed: 1749

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190123A-BLK	Blank	0124Y041	01/28/19 1721
190123A-LCS	Lab Control Spike	0124Y042	01/28/19 1749
190123A-LCSD	Lab Control SpikeD	0124Y043	01/28/19 1816
AZ85418	ERH745	0124Y047	01/28/19 2008
AZ85420	ERH747	0124Y048	01/28/19 2035

Comments: Batch: #87DC5-190123A

Printed: 01/29/19 8:06:03 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: 190123W-85418 LCS - 236945  
 Batch ID: #87DC5-190123A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	42.3	50.8	67.7	81.3	10-115	18.3	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	242	241	96.8	96.4	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	104	103	83.2	82.4	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	192	220	76.8	88.0	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	99.1	111	79.3	88.8	44-120		
SURROGATE: PHENOL-D6 (S)	250	188	221	75.2	88.4	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	109	103	87.2	82.4	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/23/19	01/23/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Yoda	Yoda
Run :	0124Y042	0124Y043
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0124Y014.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/25/19  
 Instrument: Yoda  
 Time Analyzed: 7:05

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/mL 8270 01/24/	0124Y015.D	01/25/19 7:20
2		4ug/mL 8270 01/24/1	0124Y016.D	01/25/19 9:53
3		5ug/mL 8270 01/24/1	0124Y017.D	01/25/19 10:21
4		10ug/mL 8270 01/24/	0124Y018.D	01/25/19 10:49
5		40ug/mL 8270 01/24/	0124Y020.D	01/25/19 11:44
6		60ug/mL 8270 01/24/	0124Y021.D	01/25/19 12:11
7		80ug/mL 8270 01/24/	0124Y022.D	01/25/19 12:39
8		100ug/mL 8270 01/24	0124Y023.D	01/25/19 13:07
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20				
21				
22				

m/e	
51	9.95 - 80.04% of mass 198 <span style="float: right;">38.0</span>
68	0 - 2% of mass 69 <span style="float: right;">0.0</span>
70	0 - 2% of mass 69 <span style="float: right;">0.2</span>
127	10 - 80% of mass 198 <span style="float: right;">52.7</span>
197	0 - 2% of mass 198 <span style="float: right;">0.0</span>
198	100 - 100% of mass 198.05 <span style="float: right;">100.0</span>
199	5 - 9% of mass 198 <span style="float: right;">6.9</span>
275	10 - 60% of mass 198 <span style="float: right;">26.4</span>
365	1 - 100% of mass 198 <span style="float: right;">3.2</span>
441	0.01 - 24% of mass 442 <span style="float: right;">16.3</span>
442	50 - 150% of mass 198.05 <span style="float: right;">96.4</span>
443	15 - 24% of mass 442 <span style="float: right;">19.1</span>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0124Y030.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/28/19  
 Instrument: Yoda  
 Time Analyzed: 11:49

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		20ug/mL 8270 01/24/	0124Y033.D	01/28/19 13:36
2		SS-8270 01/24/19	0124Y034.D	01/28/19 14:11
3				
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14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>36.7</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.5</u>
127 10 - 80% of mass 198	<u>51.8</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>26.6</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>10.6</u>
442 50 - 150% of mass 198	<u>104.5</u>
443 15 - 24% of mass 442	<u>19.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87918  
Matrix: Water  
ID: 0124Y035.D

SDG No: 87918  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Time Analyzed: 14:47

Client Sample No.	APPL ID.	File ID.	Date Analyzed	
1	Blank	190123A BLK 1/800	0124Y041.D	01/28/19 17:21
2	Lab Control Spike	190123A LCS-1 1/800	0124Y042.D	01/28/19 17:49
3	Lab Control SpikeD	190123A LCSD-1 1/800	0124Y043.D	01/28/19 18:16
4	ERH745	AZ85418W12 1/800	0124Y047.D	01/28/19 20:08
5	ERH747	AZ85420W14 1/800	0124Y048.D	01/28/19 20:35
6		50ug/mL 8270 01/24/	0124Y050.D	01/28/19 21:31
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13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>36.5</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.2</u>
127 10 - 80% of mass 198	<u>51.1</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>7.0</u>
275 10 - 60% of mass 198	<u>27.2</u>
365 1 - 100% of mass 198	<u>3.5</u>
441 0.01 - 24% of mass 442	<u>12.1</u>
442 50 - 150% of mass 198	<u>104.8</u>
443 15 - 24% of mass 442	<u>19.6</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87918  
 Lab File ID (Standard): 0124Y015.D Date Analyzed: 01/25/19  
 Instrument ID: Yoda Time Analyzed: 7:20  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		414061	5.46	1774390	6.90	1005370	8.92
UPPER LIMIT		828122	5.63	3548780	7.07	2010740	9.09
LOWER LIMIT		207031	5.29	887195	6.73	502685	8.75
SAMPLE NO.							
01	SS-8270 01/24/19	458368	5.46	1938810	6.90	1014850	8.92
02	190123A BLK 1/800	387629	5.47	1641930	6.90	1053790	8.92
03	190123A LCS-1 1/800	468823	5.47	1956710	6.91	1030330	8.92
04	190123A LCSD-1 1/800	395343	5.47	1724140	6.91	1018240	8.92
05	AZ85418W12 1/800	459838	5.47	1936610	6.90	1088810	8.92
06	AZ85420W14 1/800	468548	5.47	1960350	6.90	1074240	8.92
07	50ug/mL 8270 01/24/19	418738	5.47	1830210	6.91	1029220	8.92
08							
09							
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16							
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18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87918  
 Lab File ID (Standard): 0124Y015.D Date Analyzed: 01/25/19  
 Instrument ID: Yoda Time Analyzed: 7:20  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)			
	AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD	1908760		10.66		1698050		13.76	
UPPER LIMIT	3817520		10.83		3396100		13.93	
LOWER LIMIT	954380		10.49		849025		13.59	
SAMPLE NO.								
01 SS-8270 01/24/19	1912270		10.66		1708230		13.75	
02 190123A BLK 1/800	2091340		10.66		1901550		13.75	
03 190123A LCS-1 1/800	1951270		10.66		1712290		13.76	
04 190123A LCSD-1 1/800	1994220		10.66		1758040		13.75	
05 AZ85418W12 1/800	2160910		10.66		1928780		13.75	
06 AZ85420W14 1/800	2228100		10.66		1978530		13.75	
07 50ug/mL 8270 01/24/19	1958450		10.66		1765480		13.76	
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.



# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190124A-BLK

Time Analyzed: 0914

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190124A-BLK	Blank	1128Y058	01/29/19 0914
AZ85418	ERH745	1128Y061	01/29/19 1025
AZ85420	ERH747	1128Y062	01/29/19 1049
190124A-LCS	Lab Control Spike	1128Y063	01/29/19 1133
190124A-LCSD	Lab Control SpikeD	1128Y064	01/29/19 1156

Comments: Batch: #87DME-190124A

Printed: 01/29/19 12:43:51 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D MODIFIED WATER**

Blank Name/QCG: **190124W-85418 - 236977**  
Batch ID: #87DME-190124A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	01/24/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y058  
Instrument: Yoda  
Sequence: Y181128M  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/29/19 12:44:07 PM

**EPA 8270D**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190124A-LCS

Time Analyzed: 1133

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190124A-BLK	Blank	1128Y058	01/29/19 0914
AZ85418	ERH745	1128Y061	01/29/19 1025
AZ85420	ERH747	1128Y062	01/29/19 1049
190124A-LCS	Lab Control Spike	1128Y063	01/29/19 1133
190124A-LCSD	Lab Control SpikeD	1128Y064	01/29/19 1156

Comments: Batch: #87DME-190124A

## Laboratory Control Spike Recoveries

### EPA 8270D MODIFIED WATER

APPL ID: 190124W-85418 LCS - 236977  
 Batch ID: #87DME-190124A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	71.8	74.5	89.8	93.1	30-130	3.7	20

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	01/24/19	01/24/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Yoda	Yoda
Run :	1128Y063	1128Y064
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1128Y002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 11/28/18  
Instrument: Yoda  
Time Analyzed: 7:30

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/ml MEE 08/01/18	1128Y004.D	11/28/18 8:08
2	100ug/ml MEE 08/01/1	1128Y005.D	11/28/18 8:32
3	200ug/ml MEE 08/01/1	1128Y006.D	11/28/18 8:55
4	400ug/ml MEE 08/01/1	1128Y007.D	11/28/18 9:19
5	600ug/ml MEE 08/01/1	1128Y008.D	11/28/18 9:43
6	800ug/ml MEE 08/01/1	1128Y009.D	11/28/18 10:06
7	1000ug/ml MEE 08/01/	1128Y010.D	11/28/18 10:30
8	500ug/ml MEE 08/01/1	1128Y012.D	11/28/18 11:17
9	SS ug/ml MEE 08/01/1	1128Y014.D	11/28/18 12:26
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>37.6</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.4</u>
127 10 - 80% of mass 198	<u>49.3</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.6</u>
275 10 - 60% of mass 198	<u>27.6</u>
365 1 - 100% of mass 198	<u>3.7</u>
441 0.01 - 24% of mass 442	<u>15.6</u>
442 50 - 150% of mass 198	<u>104.9</u>
443 15 - 24% of mass 442	<u>19.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87918  
 Matrix: Water  
 ID: 1128Y056.D

SDG No: 87918  
 Date Analyzed: 01/29/19  
 Instrument: Yoda  
 Time Analyzed: 8:36

Client Sample No.	APPL ID.	File ID.	Date Analyzed	
1		500ug/mL mee 12/12/1	1128Y057.D	01/29/19 8:51
2	Blank	190124A Blk 2/500	1128Y058.D	01/29/19 9:14
3	ERH745	AZ85418W08 2/500	1128Y061.D	01/29/19 10:25
4	ERH747	AZ85420W09 2/500	1128Y062.D	01/29/19 10:49
5	Lab Control Spike	190124A LCS-1 2/500	1128Y063.D	01/29/19 11:33
6	Lab Control SpikeD	190124A LCSD-1 2/500	1128Y064.D	01/29/19 11:56
7		500ug/ml MEE 12/19/1	1128Y088.D	01/29/19 21:24
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>35.4</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.6</u>
127 10 - 80% of mass 198	<u>50.5</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>26.7</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>16.9</u>
442 50 - 150% of mass 198	<u>103.1</u>
443 15 - 24% of mass 442	<u>19.9</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87918  
 Lab File ID (Standard): 1128Y057.D Date Analyzed: 01/29/19  
 Instrument ID: Yoda Time Analyzed: 8:51  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		614573	5.22	2630250	6.65	1440510	8.67
UPPER LIMIT		1229146	5.39	5260500	6.82	2881020	8.84
LOWER LIMIT		307287	5.05	1315125	6.48	720255	8.50
SAMPLE							
NO.							
01	190124A BIK 2/500	455707	5.24	1896670	6.65	977692	8.67
02	AZ85418W08 2/500	381064	5.24	1574760	6.65	847693	8.67
03	AZ85420W09 2/500	375476	5.24	1520480	6.66	802252	8.67
04	190124A LCS-1 2/500	434011	5.23	1783070	6.65	962007	8.67
05	190124A LCSD-1 2/500	375812	5.24	1552490	6.65	735699	8.67
06	500ug/ml MEE 12/19/18	611145	5.23	2644720	6.66	1462930	8.67
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87918  
Matrix: WATER

SDG No: 87918  
Date Analyzed: 01/23/19  
Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190123-LCS	Lab Control Spike	81-118	105		85-114	99.2	
AL190123-LCSD	Lab Control Spiked	81-118	106		85-114	98.0	
AL190123-BLK	Blank	81-118	103		85-114	89.9	
AZ85417	ERH744	81-118	112		85-114	103	
AZ85418	ERH745	81-118	112		85-114	102	
AZ85419	ERH746	81-118	113		85-114	99.2	
AZ85420	ERH747	81-118	113		85-114	96.1	

Comments: Batch: #86BTO-AL190123



# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190123-LCS	Lab Control Spike	80-119	107		89-112	101	
AL190123-LCSD	Lab Control SpikeD	80-119	108		89-112	101	
AL190123-BLK	Blank	80-119	103		89-112	93.2	
AZ85417	ERH744	80-119	117		89-112	107	
AZ85418	ERH745	80-119	118		89-112	106	
AZ85419	ERH746	80-119	115		89-112	106	
AZ85420	ERH747	80-119	117		89-112	101	

Comments: Batch: #86BTO-AL190123

Printed: 01/28/19 10:39:30 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Loki

Blank ID: AL190123-BLK

Time Analyzed: 1240

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190123-LCS	Lab Control Spike	0123L04	01/23/19 0852
AL190123-LCSD	Lab Control SpikeD	0123L05	01/23/19 0920
AL190123-BLK	Blank	0123L12	01/23/19 1240
AZ85417	ERH744	0123L21	01/23/19 1657
AZ85418	ERH745	0123L22	01/23/19 1726
AZ85419	ERH746	0123L23	01/23/19 1755
AZ85420	ERH747	0123L24	01/23/19 1823

Comments: Batch: #86BTO-AL190123

Printed: 01/28/19 10:39:27 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **AL1901W-85417 - 236909**  
Batch ID: #86BTO-AL190123

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/23/19	01/23/19
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/23/19	01/23/19
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/23/19	01/23/19
BLANK	SURROGATE: 1,2-DICHLOROET	103	81-118			%	01/23/19	01/23/19
BLANK	SURROGATE: 4-BROMOFLUORO	89.9	85-114			%	01/23/19	01/23/19
BLANK	SURROGATE: DIBROMOFLUOR	103	80-119			%	01/23/19	01/23/19
BLANK	SURROGATE: TOLUENE-D8 (S)	93.2	89-112			%	01/23/19	01/23/19

Quant Method: L0121W.M
Run #: 0123L12
Instrument: Loki
Sequence: 190121
Initials: KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 10:39:52 AM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Loki

LCS ID: AL190123-LCS

Time Analyzed: 0852

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
AL190123-LCS	Lab Control Spike	0123L04	01/23/19 0852
AL190123-LCSD	Lab Control SpikeD	0123L05	01/23/19 0920
AL190123-BLK	Blank	0123L12	01/23/19 1240
AZ85417	ERH744	0123L21	01/23/19 1657
AZ85418	ERH745	0123L22	01/23/19 1726
AZ85419	ERH746	0123L23	01/23/19 1755
AZ85420	ERH747	0123L24	01/23/19 1823

Comments: Batch: #86BTO-AL190123

**Laboratory Control Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: 190123W-85417 LCS - 236909  
 Batch ID: #86BTO-AL190123

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.3	10.3	103	103	79-120	0.0	20
ETHYLBENZENE	10.00	9.64	10.1	96.4	101	79-121	4.7	20
TOLUENE	10.00	9.99	10.4	99.9	104	80-121	4.0	20
XYLENES (TOTAL)	30.0	30.0	30.5	100	102	79-121	1.7	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	26.3	26.5	105	106	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.8	24.5	99.2	98.0	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	26.7	26.9	107	108	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	25.3	25.2	101	101	89-112		
-----								

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	L0121W.M	L0121W.M
Extraction Date :	01/23/19	01/23/19
Analysis Date :	01/23/19	01/23/19
Instrument :	Loki	Loki
Run :	0123L04	0123L05
Initials :	KVA	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0121L01.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Time Analyzed: 15:04

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 1/21	0121L07.D	01/21/19 17:50
2	0.5ug/L VOC STD 1/21	0121L08.D	01/21/19 18:18
3	1.0ug/L VOC STD 1/21	0121L09.D	01/21/19 18:47
4	2.0ug/L VOC STD 1/21	0121L10.D	01/21/19 19:16
5	5.0ug/L VOC STD 1/21	0121L11.D	01/21/19 19:44
6	10ug/L VOC STD 1/21/	0121L12.D	01/21/19 20:13
7	20ug/L VOC STD 1/21/	0121L13.D	01/21/19 20:41
8	40ug/L VOC STD 1/21/	0121L14.D	01/21/19 21:10
9	50ug/L VOC STD 1/21/	0121L15.D	01/21/19 21:38
10	100ug/L VOC STD 1/21	0121L16.D	01/21/19 22:07
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>17.6</u>
75 30 - 60% of mass 95	<u>49.8</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.5</u>
173 0 - 2% of mass 174	<u>1.0</u>
174 50 - 100% of mass 95	<u>97.7</u>
175 5 - 9% of mass 174	<u>8.0</u>
176 94.95 - 101% of mass 174	<u>98.3</u>
177 5 - 9% of mass 176	<u>7.2</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0121L18.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/21/19  
 Instrument: Loki  
 Time Analyzed: 23:04

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	(SS)10ug/L VOC STD 1	0121L19.D	01/21/19 23:32
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>15.5</u>
75 30 - 60% of mass 95	<u>43.8</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.3</u>
173 0 - 2% of mass 174	<u>1.0</u>
174 50 - 100% of mass 95	<u>92.1</u>
175 5 - 9% of mass 174	<u>7.4</u>
176 94.95 - 101% of mass 174	<u>98.3</u>
177 5 - 9% of mass 176	<u>6.6</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87918  
Matrix: Water  
ID: 0123L01.D

SDG No: 87918  
Date Analyzed: 01/23/19  
Instrument: Loki  
Time Analyzed: 7:33

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		190123A CCV 10ug/L	0123L03.D
2	Lab Control Spike	190123A LCS 10ug/L	0123L04.D
3	Lab Control SpikeD	190123A LCSD 10ug/L	0123L05.D
4	Blank	190123A BLK	0123L12.D
5	ERH744	AZ85417W01	0123L21.D
6	ERH745	AZ85418W01	0123L22.D
7	ERH746	AZ85419W01	0123L23.D
8	ERH747	AZ85420W01	0123L24.D
9		Ending CCV 10ug/L 1/	0123L26.D
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>18.1</u>
75 30 - 60% of mass 95	<u>48.4</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.3</u>
173 0 - 2% of mass 174	<u>1.1</u>
174 50 - 100% of mass 95	<u>96.7</u>
175 5 - 9% of mass 174	<u>7.5</u>
176 94.95 - 101% of mass 174	<u>98.9</u>
177 5 - 9% of mass 176	<u>7.7</u>



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 0121L12.D Date Analyzed: 01/21/19  
 Instrument ID: Loki Time Analyzed: 20:13  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	368896	6.50	312384	9.97	171968	12.53
UPPER LIMIT	737792	6.67	624768	10.14	343936	12.70
LOWER LIMIT	184448	6.33	156192	9.80	85984	12.36
SAMPLE NO.						
01 (SS)10ug/L VOC STD 1	352704	6.50	315584	9.97	177920	12.54
02						
03						
04						
05						
06						
07						
08						
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14						
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16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87918  
 Lab File ID (Standard): 0123L03.D Date Analyzed: 01/23/19  
 Instrument ID: Loki Time Analyzed: 8:23  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	311680	6.50	262080	9.97	154432	12.54
	UPPER LIMIT	623360	6.67	524160	10.14	308864	12.71
	LOWER LIMIT	155840	6.33	131040	9.80	77216	12.37
	SAMPLE NO.						
01	190123A LCS 10ug/L	291648	6.50	248192	9.97	143744	12.54
02	190123A LCSD 10ug/L	307520	6.50	261248	9.97	145664	12.54
03	190123A BLK	327360	6.50	280640	9.97	149440	12.54
04	AZ85417W01	285440	6.50	234624	9.97	132032	12.54
05	AZ85418W01	282368	6.50	233856	9.97	129128	12.54
06	AZ85419W01	289408	6.50	241152	9.97	131392	12.54
07	AZ85420W01	282496	6.50	247808	9.97	130520	12.54
08	Ending CCV 10ug/L 1/23	285120	6.50	246720	9.97	146496	12.54
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)			Limits	Result	Qualifier
		Limits	Result	Qualifier			
AL190123-LCS	Lab Control Spike	85-114	98.0				
AL190123-LCSD	Lab Control SpikeD	85-114	98.0				
AL190123-BLK	Blank	85-114	89.9				
AZ85417	ERH744	85-114	103				
AZ85418	ERH745	85-114	102				
AZ85419	ERH746	85-114	99.2				
AZ85420	ERH747	85-114	96.1				

Comments: Batch: #GRO86-AL190123

**EPA 8260B**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.  
Case No: 87918  
Matrix: WATER  
Blank ID: AL190123-BLK

SDG No: 87918  
Date Analyzed: 01/23/19  
Instrument: Loki  
Time Analyzed: 1240

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AL190123-LCS	Lab Control Spike	0123L07	01/23/19 1017
AL190123-LCSD	Lab Control SpikeD	0123L08	01/23/19 1046
AL190123-BLK	Blank	0123L12	01/23/19 1240
AZ85417	ERH744	0123L21	01/23/19 1657
AZ85418	ERH745	0123L22	01/23/19 1726
AZ85419	ERH746	0123L23	01/23/19 1755
AZ85420	ERH747	0123L24	01/23/19 1823

Comments: Batch: #GRO86-AL190123

**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **AL1901W-85417 - 236915**  
Batch ID: #GRO86-AL190123

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/23/19	01/23/19
BLANK	SURROGATE: 4-BROMOFLUORO	89.9	85-114			%	01/23/19	01/23/19

Quant Method: LGAS0122.M  
Run #: 0123L12  
Instrument: Loki  
Sequence: 190121  
Initials: KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 11:11:28 AM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Loki

LCS ID: AL190123-LCS

Time Analyzed: 1017

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190123-LCS	Lab Control Spike	0123L07	01/23/19 1017
AL190123-LCSD	Lab Control SpikeD	0123L08	01/23/19 1046
AL190123-BLK	Blank	0123L12	01/23/19 1240
AZ85417	ERH744	0123L21	01/23/19 1657
AZ85418	ERH745	0123L22	01/23/19 1726
AZ85419	ERH746	0123L23	01/23/19 1755
AZ85420	ERH747	0123L24	01/23/19 1823

Comments: Batch: #GRO86-AL190123

## Laboratory Control Spike Recoveries

### EPA 8260B GRO WATER

APPL ID: 190123W-85417 LCS - 236915

Batch ID: #GRO86-AL190123

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	270	290	90.0	96.7	78-122	7.1	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.5	24.5	98.0	98.0	85-114		

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	LGAS0122.M	LGAS0122.M
Extraction Date :	01/23/19	01/23/19
Analysis Date :	01/23/19	01/23/19
Instrument :	Loki	Loki
Run :	0123L07	0123L08
Initials :	KVA	

# RSK 175

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Rocky

Blank ID: 190125B-BLK

Time Analyzed: 1152

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125B-LCS	Lab Control Spike	19012535	01/25/19 1141
190125B-LCSD	Lab Control SpikeD	19012538	01/25/19 1150
190125B-BLK	Blank	19012539	01/25/19 1152
AZ85417	ERH744	19012540	01/25/19 1154
AZ85418	ERH745	19012541	01/25/19 1156
AZ85419	ERH746	19012542	01/25/19 1159
AZ85420	ERH747	19012543	01/25/19 1201

Comments: Batch: #RSKME-190125B

Printed: 01/28/19 9:07:09 AM  
Form 4, Blank Summary



**Method Blank**  
**METHANE**

Blank Name/QCG: **190125W-85417 - 236902**  
Batch ID: #RSKME-190125B

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/25/19	01/25/19

Quant Method:RSK0120.M  
Run #: 19012539  
Instrument:Rocky  
Sequence:190120  
Initials:CMO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 9:07:19 AM

# RSK 175

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Rocky

LCS ID: 190125B-LCS

Time Analyzed: 1141

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125B-LCS	Lab Control Spike	19012535	01/25/19 1141
190125B-LCSD	Lab Control SpikeD	19012538	01/25/19 1150
190125B-BLK	Blank	19012539	01/25/19 1152
AZ85417	ERH744	19012540	01/25/19 1154
AZ85418	ERH745	19012541	01/25/19 1156
AZ85419	ERH746	19012542	01/25/19 1159
AZ85420	ERH747	19012543	01/25/19 1201

Comments: Batch: #RSKME-190125B

Printed: 01/28/19 9:07:06 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## METHANE

APPL ID: 190125W-85417 LCS - 236902

Batch ID: #RSKME-190125B

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	76.0	89.7	91.1	108	72-125	16.5	30

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	RSK0120.M	RSK0120.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Rocky	Rocky
Run :	19012535	19012538
Initials :	CMO	

# SM3500FeB

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/22/19

Matrix: WATER

Instrument: Manual Spec

Blank ID: 190122A1-BLK

Time Analyzed: 0828

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190122A1-BLK	Blank	14	01/22/19 0828
190122A1-LCS	Lab Control Spike	17	01/22/19 0839
190122A1-LCSD	Lab Control SpikeD	18	01/22/19 0840
AZ85420	ERH747	29	01/22/19 1235
AZ85418	ERH745	30	01/22/19 1235

Comments: Batch: #35FE-190122A1

Printed: 02/17/19 9:32:52 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	01/22/19	01/22/19	#35FE-190122A1-AZ85418

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:32:55 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/22/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190122A3-BLK

Time Analyzed: 0909

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85418	ERH745	28	01/22/19 1244
AZ85420	ERH747	29	01/22/19 1252
190122A3-BLK	Blank	3	01/22/19 0909
AZ85418	ERH745	32	01/22/19 1455
AZ85420	ERH747	33	01/22/19 1502
190122A3-LCS	Lab Control Spike	4	01/22/19 0916
190122A3-LCSD	Lab Control SpikeD	5	01/22/19 0924

Comments: Batch: #300W-190122A3

Printed: 02/17/19 9:32:52 AM

Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.18 J	1.0	0.20	0.08	mg/L	01/22/19	01/22/19	#300W-190122A3-AZ85418
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	01/22/19	01/22/19	#300W-190122A3-AZ85418
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/22/19	01/22/19	#300W-190122A3-AZ85418

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:32:55 AM

# SM 2320B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/22/19

Matrix: WATER

Instrument: Tiamo

Blank ID: 190122A2-BLK

Time Analyzed: 1159

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190122A2-BLK	Blank	1	01/22/19 1159
190122A2-LCS	Lab Control Spike	2	01/22/19 1203
AZ85418	ERH745	25	01/22/19 1705
AZ85420	ERH747	26	01/22/19 1711
190122A2-LCSD	Lab Control SpikeD	3	01/22/19 1213

Comments: Batch: #232W-190122A2

Printed: 02/17/19 9:32:52 AM

Form 4, Blank Summary



# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS CA	1.70 U	2.0	1.70	0.85	mg/L	01/22/19	01/22/19	#232W-190122A2-AZ85418
SM 2320B	CARBONATE AS CACO	1.70 U	2.0	1.70	0.85	mg/L	01/22/19	01/22/19	#232W-190122A2-AZ85418
SM 2320B	TOTAL ALKALINITY AS	1.70 U	2.0	1.70	0.85	mg/L	01/22/19	01/22/19	#232W-190122A2-AZ85418

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:32:55 AM

**EPA 353.2**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.  
Case No: 87918  
Matrix: WATER  
Blank ID: 190128A-BLK

SDG No: 87918  
Date Analyzed: 01/28/19  
Instrument: EVE  
Time Analyzed: 1642

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85418	ERH745	16	01/28/19 1651
AZ85420	ERH747	17	01/28/19 1653

Comments: Batch: #35OF-190128A

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	01/28/19	01/28/19	#35OF-190128A-AZ85562

# SW846 9060A

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 02/12/19

Matrix: WATER

Instrument: Manual

Blank ID: 190212A-BLK

Time Analyzed: 1513

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85420	ERH747		02/12/19 2022
190212A-BLK	Blank		02/12/19 1513
190212A-LCS	Lab Control Spike		02/13/19 1258
190212A-LCSD	Lab Control SpikeD		02/13/19 1113
AZ85418	ERH745		02/12/19 1918

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:32:52 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SW846 90	TOTAL ORGANIC CAR	0.23 J	0.93	0.350	0.130	mg/L	02/12/19	02/12/19	CDOCW-190212A-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:32:55 AM

# SM3500FeB

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/22/19

Matrix: WATER

Instrument: Manual Spec

LCS ID: 190122A1-LCS

Time Analyzed: 0839

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190122A1-BLK	Blank	14	01/22/19 0828
190122A1-LCS	Lab Control Spike	17	01/22/19 0839
190122A1-LCSD	Lab Control SpikeD	18	01/22/19 0840
AZ85420	ERH747	29	01/22/19 1235
AZ85418	ERH745	30	01/22/19 1235

Comments: Batch: #35FE-190122A1

Printed: 02/17/19 9:32:58 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.08	3.11	103	104	0.97	20	80-120	01/22/19	01/22/19	01/22/19	01/22/19	#35FE-190122A1-AZ85418

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/22/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190122A3-LCS

Time Analyzed: 0916

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
AZ85418	ERH745	28	01/22/19 1244
AZ85420	ERH747	29	01/22/19 1252
190122A3-BLK	Blank	3	01/22/19 0909
AZ85418	ERH745	32	01/22/19 1455
AZ85420	ERH747	33	01/22/19 1502
190122A3-LCS	Lab Control Spike	4	01/22/19 0916
190122A3-LCSD	Lab Control SpikeD	5	01/22/19 0924

Comments: Batch: #300W-190122A3

Printed: 02/17/19 9:32:58 AM  
Form 4, LCS Summary



# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	24.7	24.7	98.8	98.8	0.0	20	90-110	01/22/19	01/22/19	01/22/19	01/22/19	#300W-190122A3-AZ8541
EPA 300.0	NITRATE	22.1	22.6	22.6	102	102	0.0	20	90-110	01/22/19	01/22/19	01/22/19	01/22/19	#300W-190122A3-AZ8541
EPA 300.0	SULFATE	25.0	25.5	25.5	102	102	0.0	20	90-110	01/22/19	01/22/19	01/22/19	01/22/19	#300W-190122A3-AZ8541

Comments: \_\_\_\_\_

# SM 2320B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/22/19

Matrix: WATER

Instrument: Tiamo

LCS ID: 190122A2-LCS

Time Analyzed: 1203

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190122A2-BLK	Blank	1	01/22/19 1159
190122A2-LCS	Lab Control Spike	2	01/22/19 1203
AZ85418	ERH745	25	01/22/19 1705
AZ85420	ERH747	26	01/22/19 1711
190122A2-LCSD	Lab Control SpikeD	3	01/22/19 1213

Comments: Batch: #232W-190122A2

Printed: 02/17/19 9:32:58 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM 2320B	BICARBONATE AS CaCO3	250	244	241	97.6	96.4	1.2	20	90-110	01/22/19	01/22/19	01/22/19	01/22/19	#232W-190122A2-AZ8541
SM 2320B	TOTAL ALKALINITY AS CA	250	244	241	97.6	96.4	1.2	20	90-110	01/22/19	01/22/19	01/22/19	01/22/19	#232W-190122A2-AZ8541

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# EPA 353.2

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87918

Case No: 87918

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

LCS ID: 190128A-LCS

Time Analyzed: 1644

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85418	ERH745	16	01/28/19 1651
AZ85420	ERH747	17	01/28/19 1653

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:32:58 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE-N	3.00	2.99	3.07	99.7	102	2.6	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#35OF-190128A-AZ85562

Comments: \_\_\_\_\_

**SW846 9060A**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87918  
Matrix: WATER  
LCS ID: 190212A-LCS

SDG No: 87918  
Date Analyzed: 02/13/19  
Instrument: Manual  
Time Analyzed: 1258

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85420	ERH747		02/12/19 2022
190212A-BLK	Blank		02/12/19 1513
190212A-LCS	Lab Control Spike		02/13/19 1258
190212A-LCSD	Lab Control SpikeD		02/13/19 1113
AZ85418	ERH745		02/12/19 1918

Comments: Batch: #TOCDOCW-19021

## Laboratory Control Spike Recoveries

### WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SW846 90	TOTAL ORGANIC CARBO	2.00	2.17	2.17	109	109	0.0	20	90-110	02/13/19	02/13/19	02/13/19	02/13/19	#TOCDOCW-190212A-AZ8

Comments: \_\_\_\_\_

**ORGANICS  
Calibration Data**



TPH Extractables  
DOC0117

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/17/19  
Instrument: Apollo

Initials: \_\_\_\_\_

117002.D 117003.D 117004.D 117005.D 117006.D 117007.D

	Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATM Diesel (C10-C24)	1247225	1163187	1209913	1221573	1152277	1133164					1187890	3.8	HATM		
2	HBTM Motor Oil (C24-C40)	1046830	917795	948443	920306	882639	861594					929601	7.0	HBTM		
3	SC Decanoic Acid(S)	648675	1095549	1090928	1053315	1004335	1065935					993123	17	SC		
4	SA Ortho-Terphenyl(S)	2315091	2079412	2039254	2009486	1862079	1811493					2019469	8.8	SA		
5	SA Octacosane(S)	2056338	1855545	1881468	1912913	1840710	1711226					1876367	6.0	SA		
6																
7																
8																
9																
10																
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33																
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35																

1.225349

Data File : G:\APOLLO\DATA\190117\117002.D Vial: 2  
 Acq On : 1-17-19 16:38:28 Operator: DP  
 Sample : Diesel / Motor Oil - 1 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

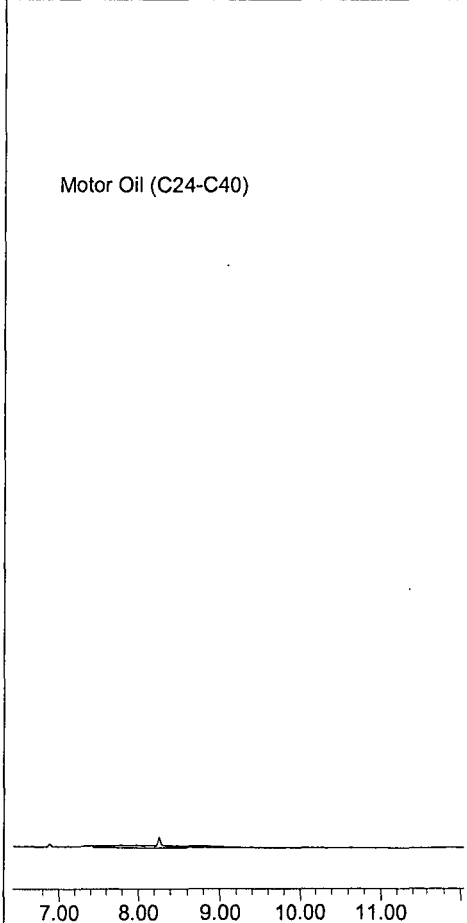
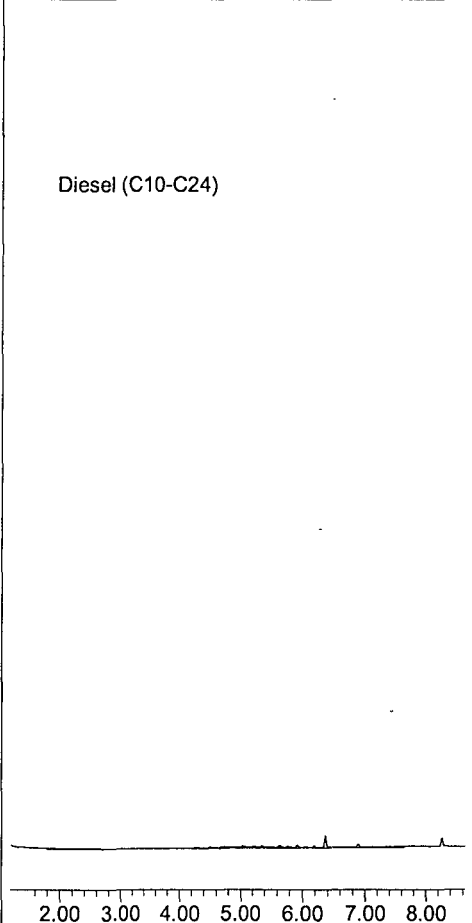
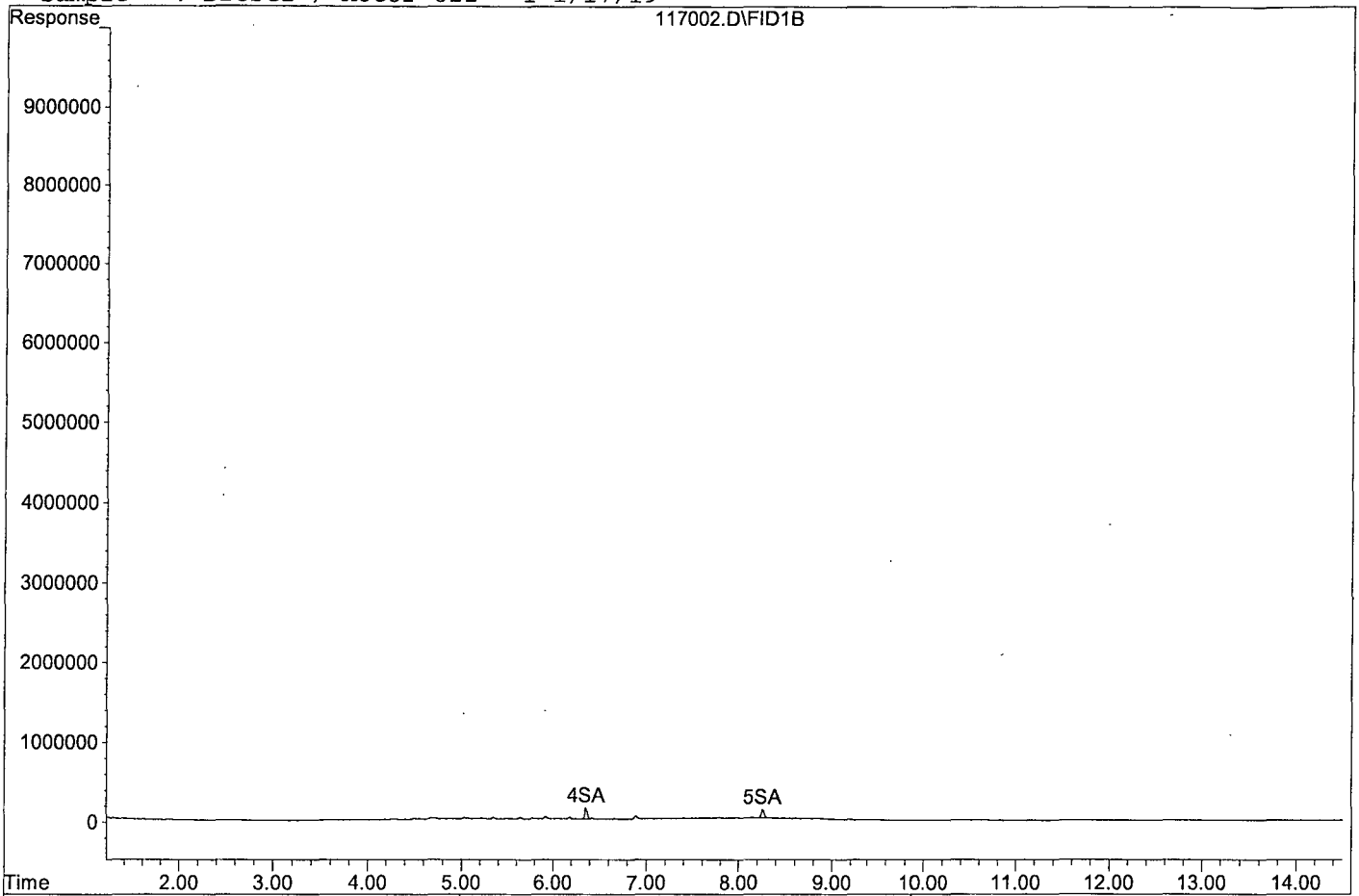
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	2315091	0.573 ppb
Surrogate Spike 30.000		Recovery =	1.91%
5) SA Octacosane(S)	8.26	2056338	0.548 ppb
Surrogate Spike 30.000		Recovery =	1.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	24944497	10.500 ppb
2) HBTM Motor Oil (C24-C40)	9.23	20936598	11.261 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117002.D  
Sample : Diesel / Motor Oil - 1 1/17/19



Data File : G:\APOLLO\DATA\190117\117003.D Vial: 3  
 Acq On : 1-17-19 16:58:29 Operator: DP  
 Sample : Diesel / Motor Oil - 2 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

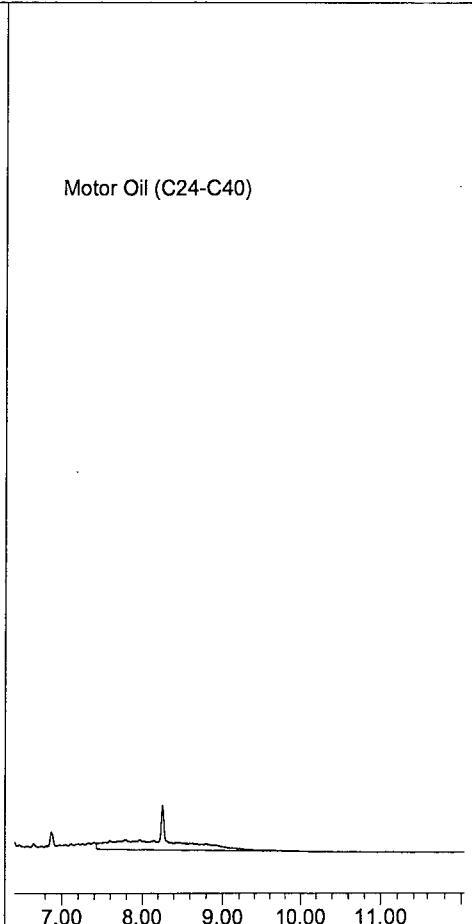
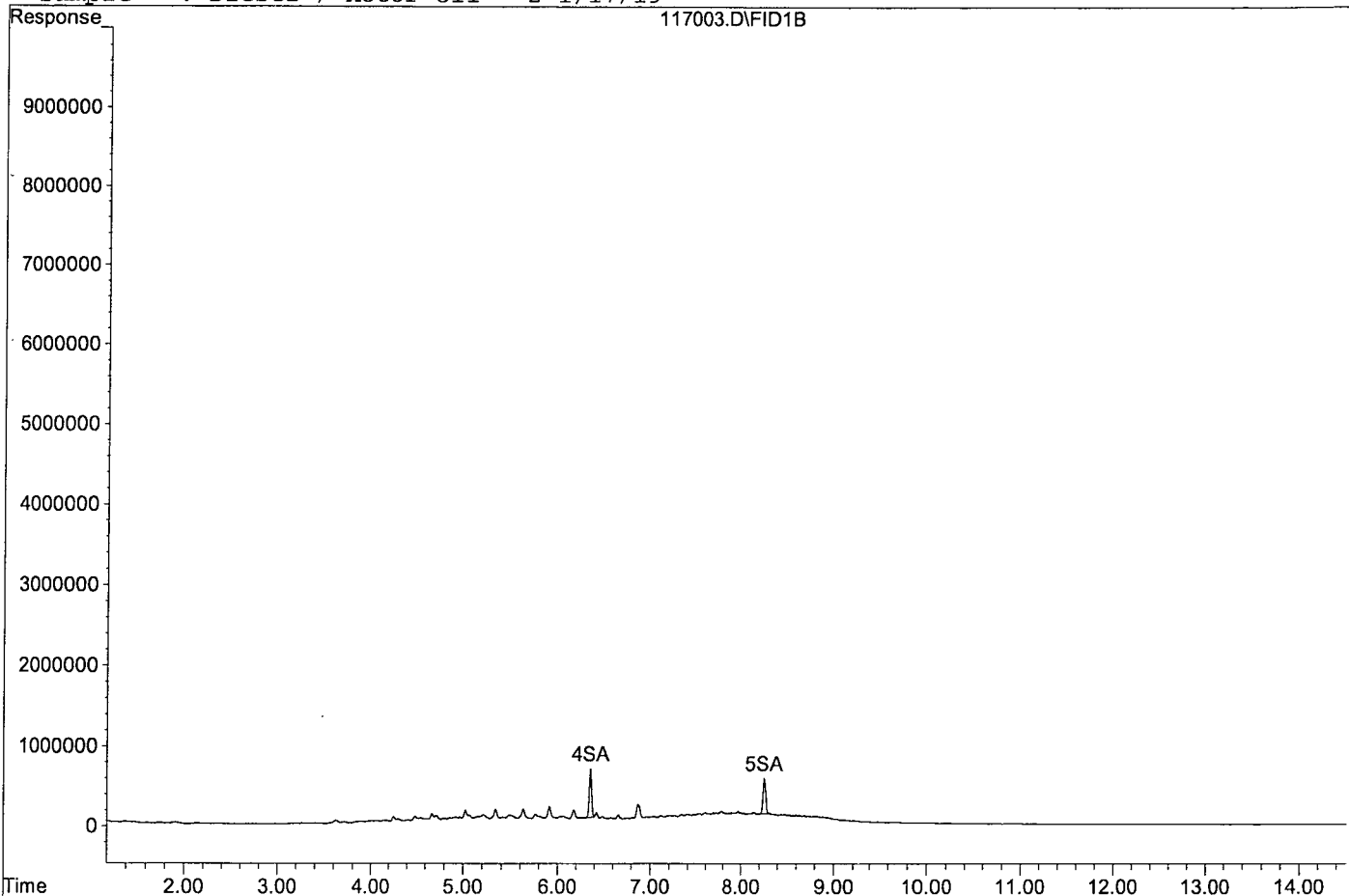
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	10397059	2.574 ppb
Surrogate Spike 30.000		Recovery =	8.58%
5) SA Octacosane(S)	8.26	9277725	2.472 ppb
Surrogate Spike 30.000		Recovery =	8.24%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	116318686	48.960 ppb
2) HBTM Motor Oil (C24-C40)	9.23	91779450	49.365 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117003.D

Sample : Diesel / Motor Oil - 2 1/17/19



Data File : G:\APOLLO\DATA\190117\117004.D Vial: 4  
 Acq On : 1-17-19 17:17:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

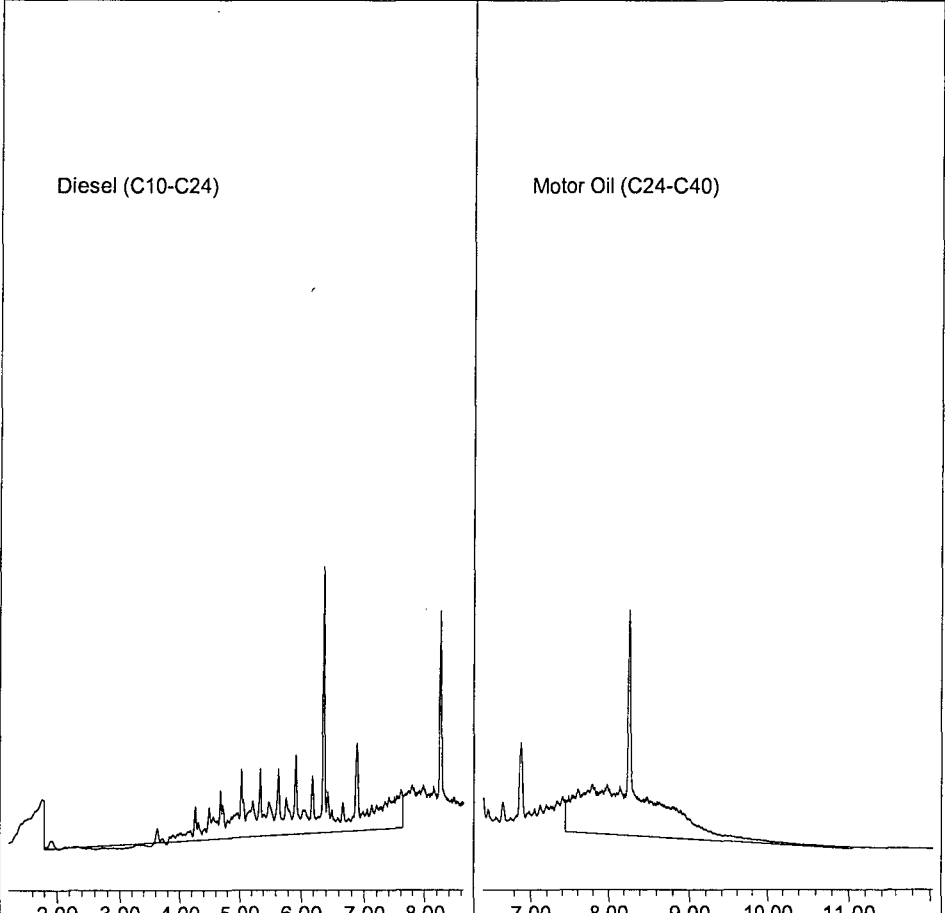
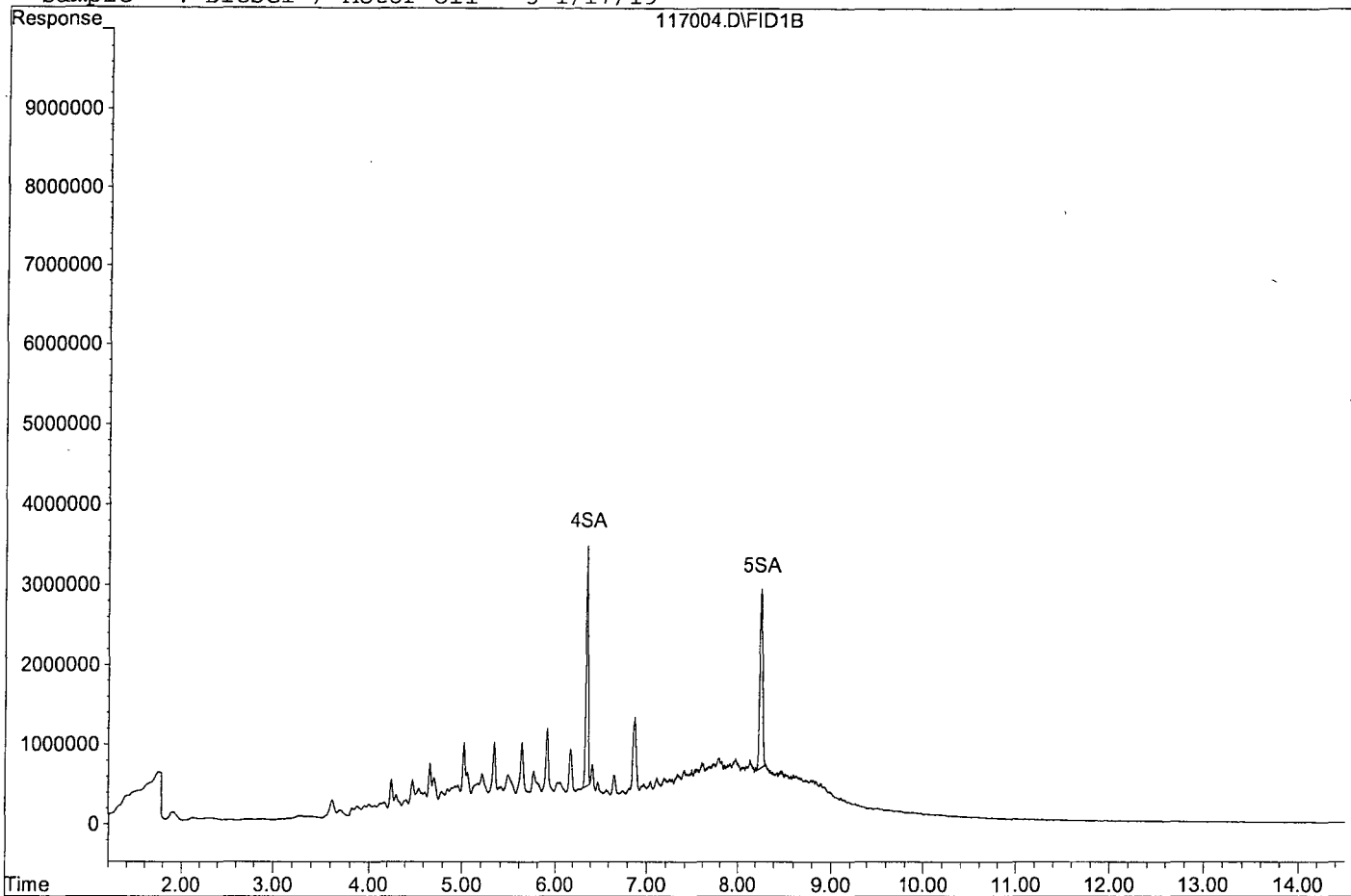
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50981338	12.622 ppb
Surrogate Spike 30.000		Recovery =	42.07%
5) SA Octacosane(S)	8.26	47036708	12.534 ppb
Surrogate Spike 30.000		Recovery =	41.78%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	604956690	254.635 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474221646	255.067 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117004.D

Sample : Diesel / Motor Oil - 3 1/17/19



Data File : G:\APOLLO\DATA\190117\117005.D Vial: 5  
 Acq On : 1-17-19 17:37:44 Operator: DP  
 Sample : Diesel / Motor Oil - 4 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

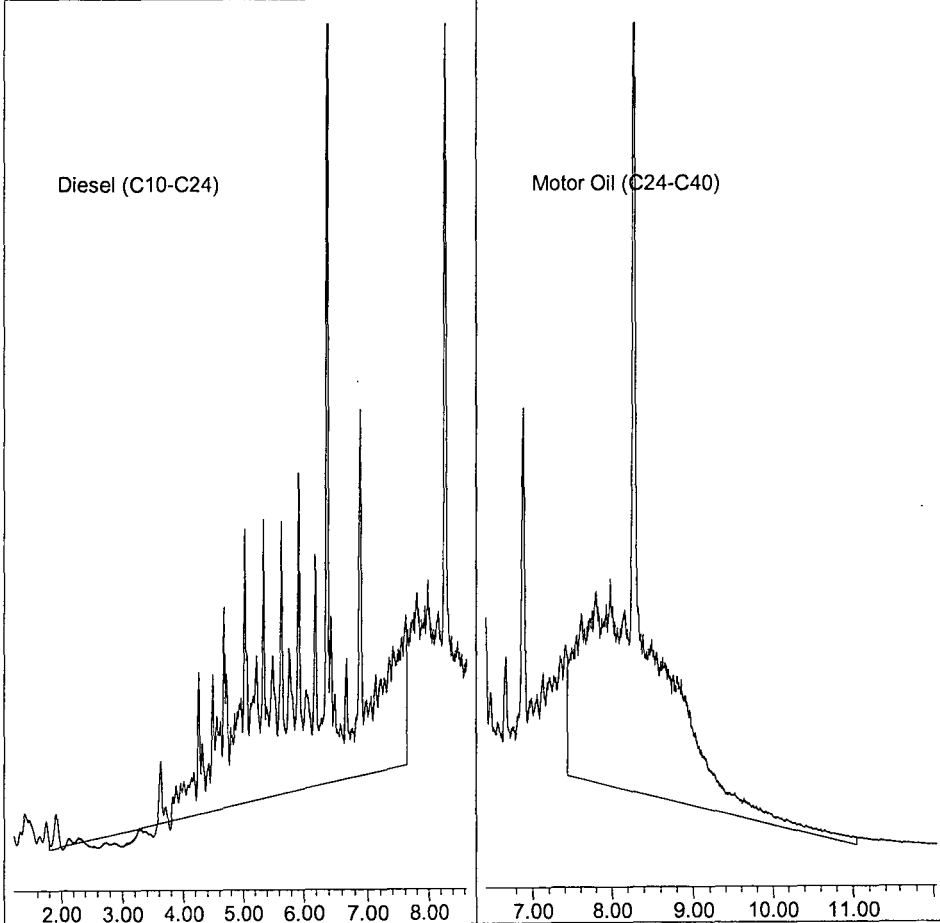
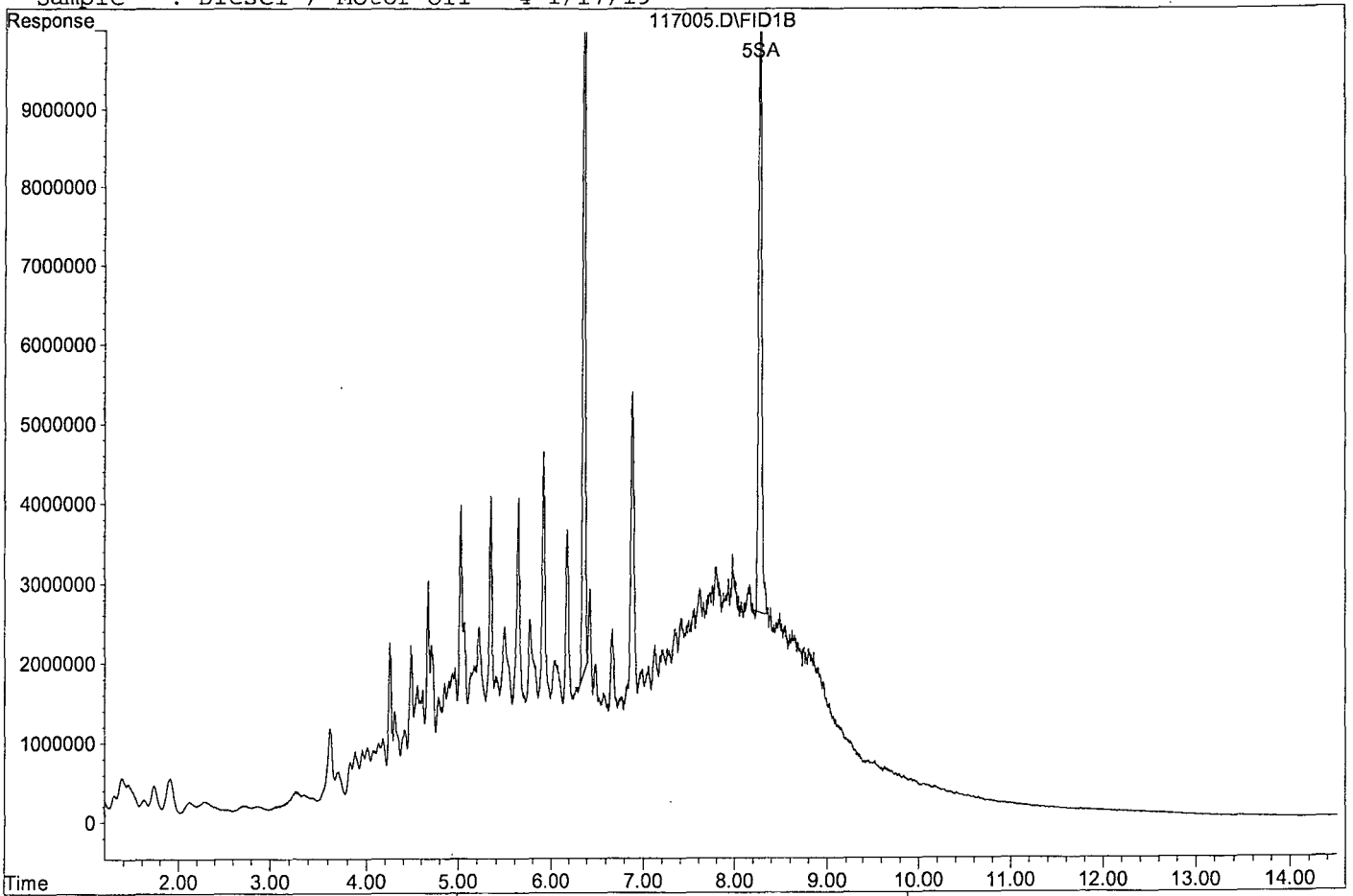
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	200948587	49.753 ppb
Surrogate Spike 30.000		Recovery =	165.84%
5) SA Octacosane(S)	8.27	191291289	50.974 ppb
Surrogate Spike 30.000		Recovery =	169.91%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	2443146618	1028.356 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1840612778	990.001 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190117\117005.D  
Sample : Diesel / Motor Oil - 4 1/17/19



Data File : G:\APOLLO\DATA\190117\117006.D Vial: 6  
 Acq On : 1-17-19 17:57:32 Operator: DP  
 Sample : Diesel / Motor Oil - 5 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

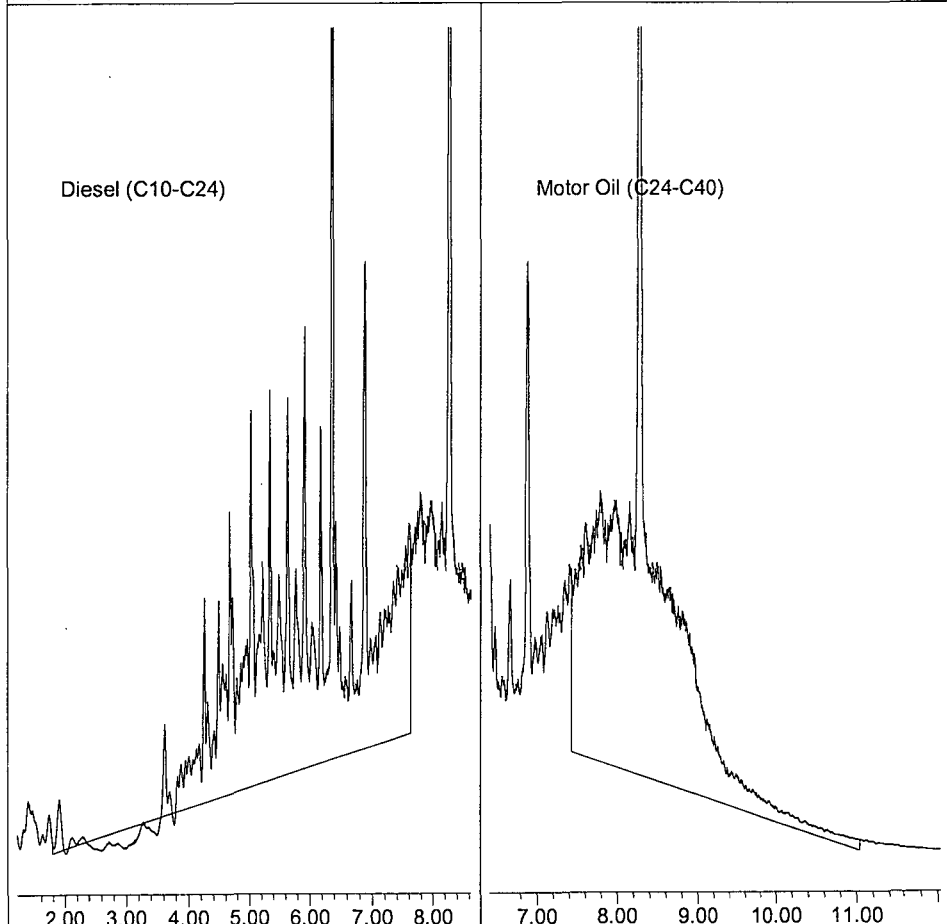
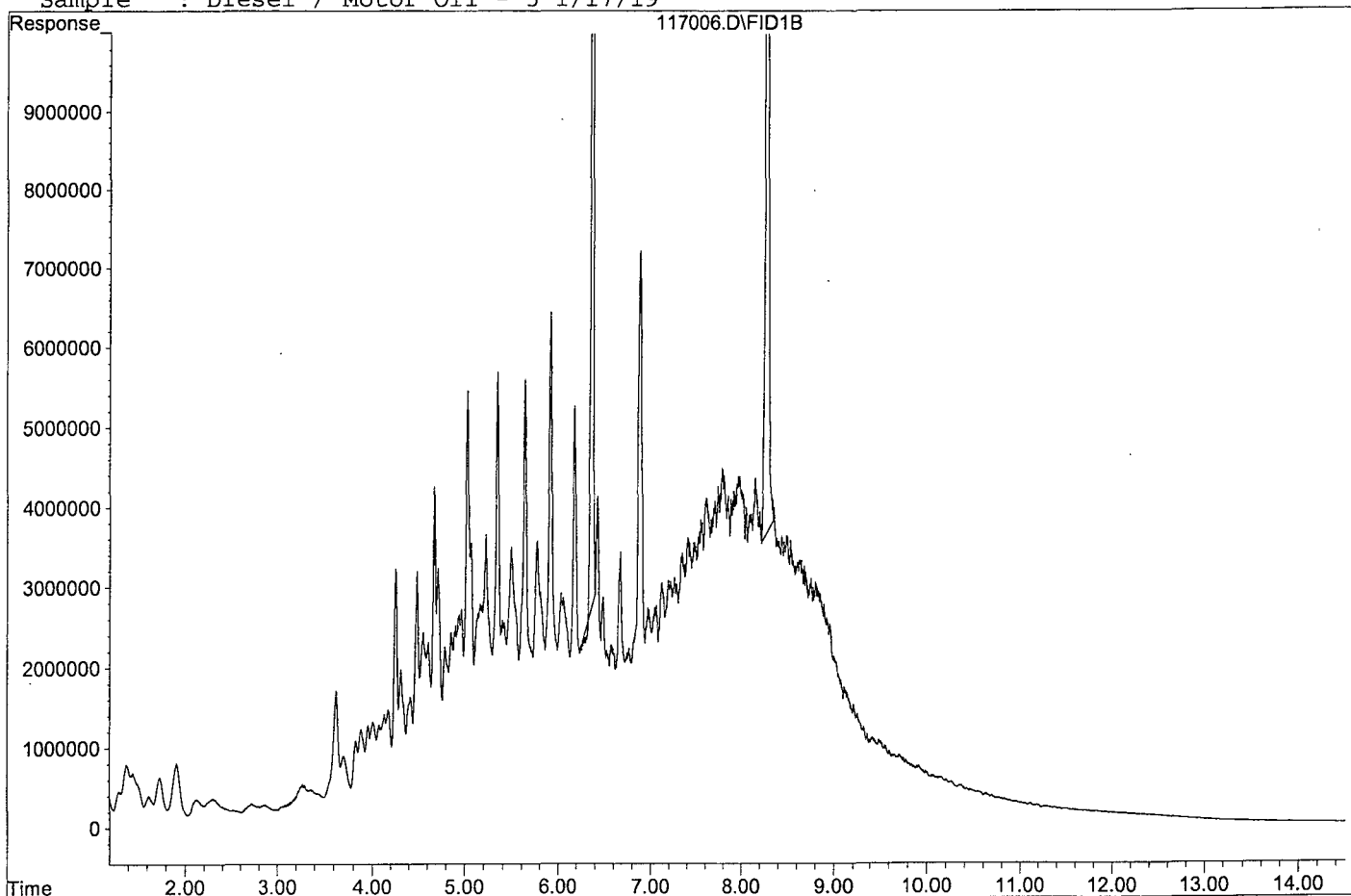
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	279311894	69.155 ppb
Surrogate Spike 30.000		Recovery =	230.52%
5) SA Octacosane(S)	8.28	276106552	73.575 ppb
Surrogate Spike 30.000		Recovery =	245.25%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	3456829820	1455.030 ppb
2) HBTM Motor Oil (C24-C40)	9.23	2647918269	1424.223 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117006.D  
Sample : Diesel / Motor Oil - 5 1/17/19



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117007.D Vial: 7  
 Acq On : 1-17-19 18:17:22 Operator: DP  
 Sample : Diesel / Motor Oil - 6 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

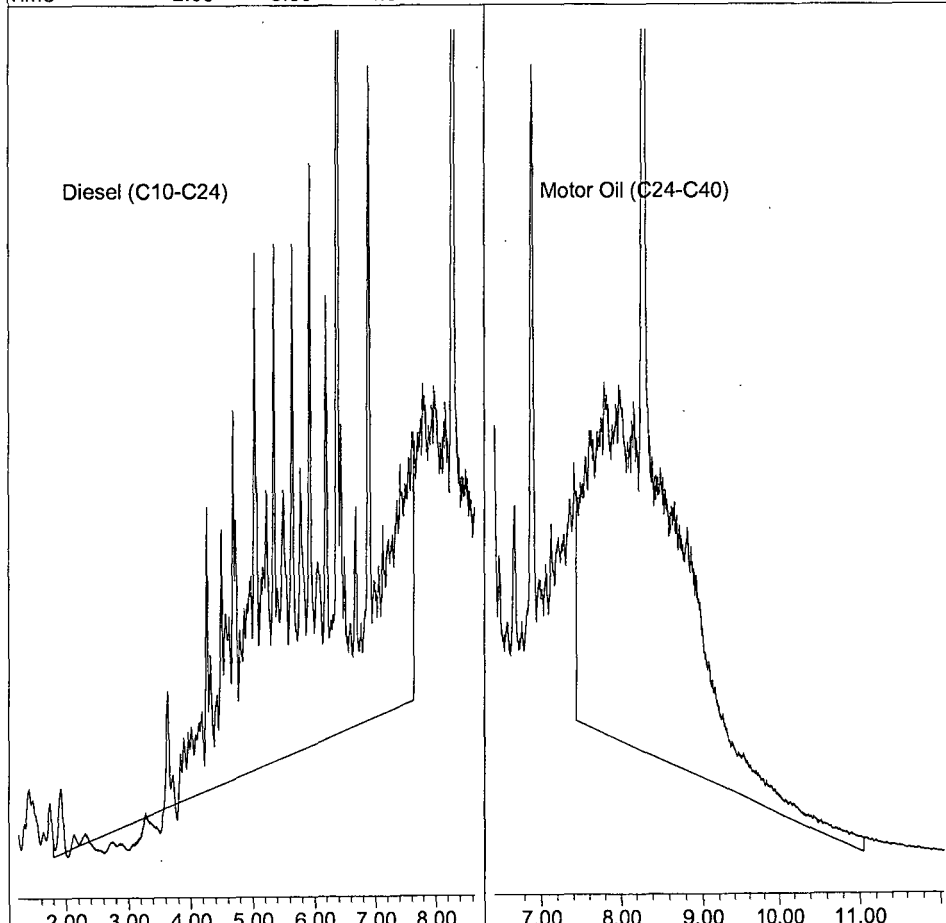
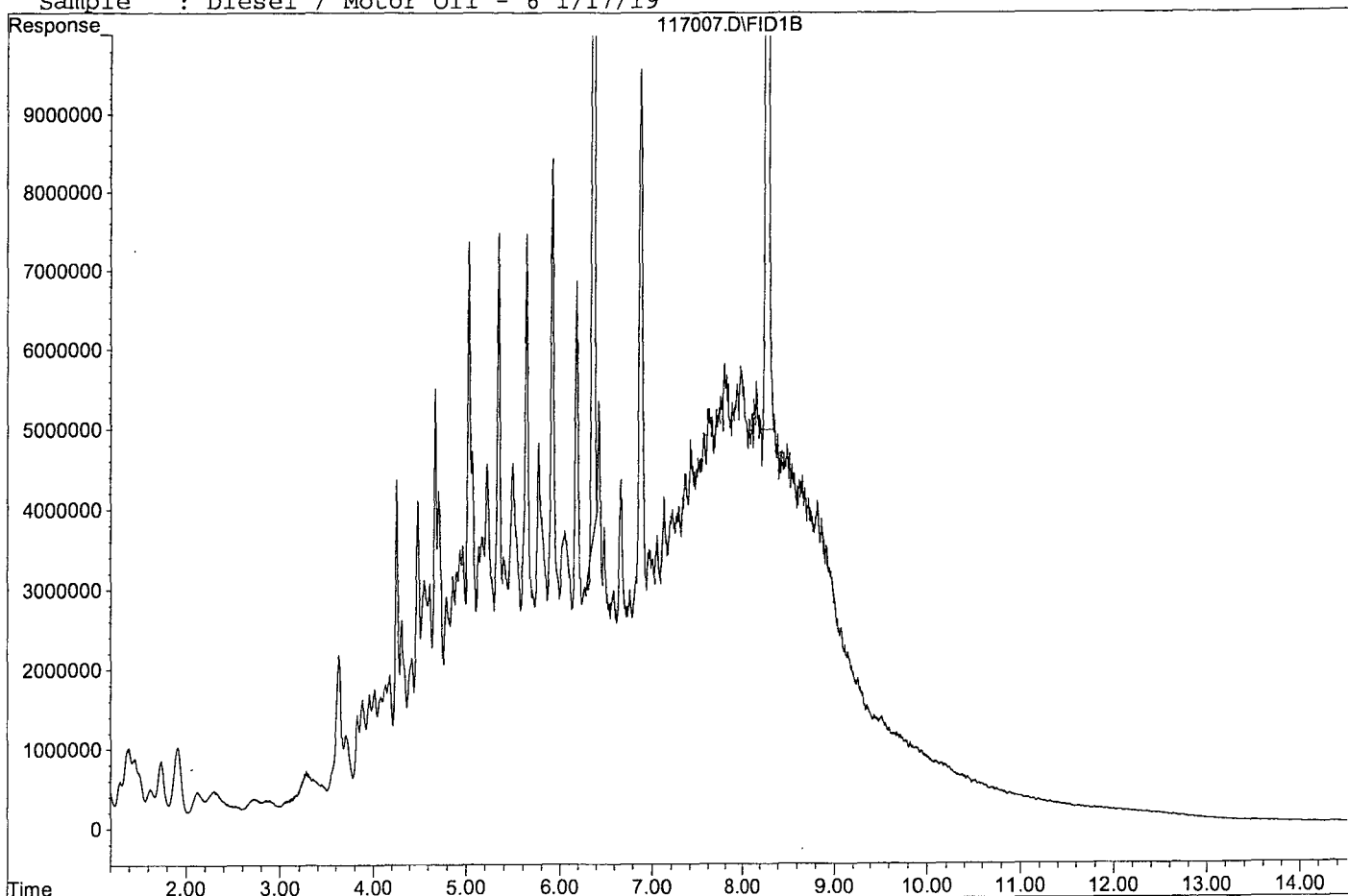
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	362298697	89.701 ppb
Surrogate Spike 30.000		Recovery =	299.00%
5) SA Octacosane(S)	8.29	342245296	91.199 ppb
Surrogate Spike 30.000		Recovery =	304.00%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	4532654243	1907.860 ppb
2) HBTM Motor Oil (C24-C40)	9.23	3446375794	1853.685 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117007.D  
Sample : Diesel / Motor Oil - 6 1/17/19



TPH Extractables  
DOC0117

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/17/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 117008.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1199930	1.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	923236	0.68	HBTM
3					
4					
5					
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37					
38					
39					
40	Average			0.8	

Data File : G:\APOLLO\DATA\190117\117008.D Vial: 8  
 Acq On : 1-17-19 18:37:21 Operator: DP  
 Sample : Diesel / Motor Oil - SS 1/15/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

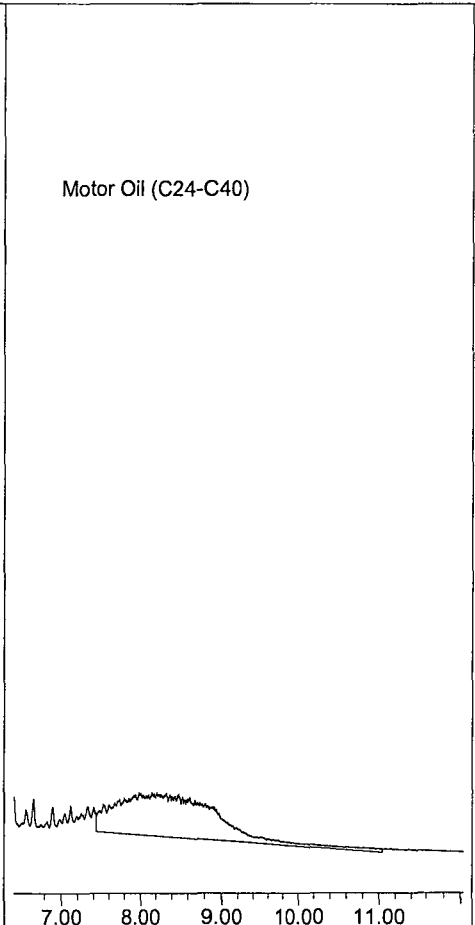
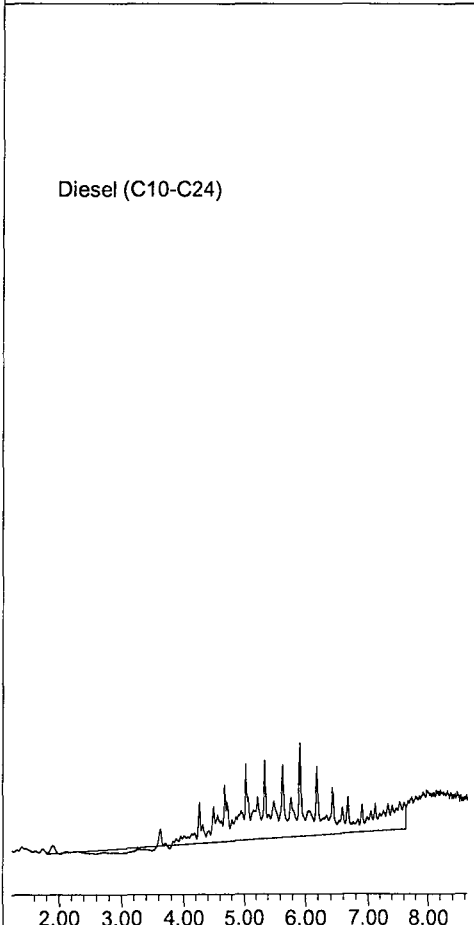
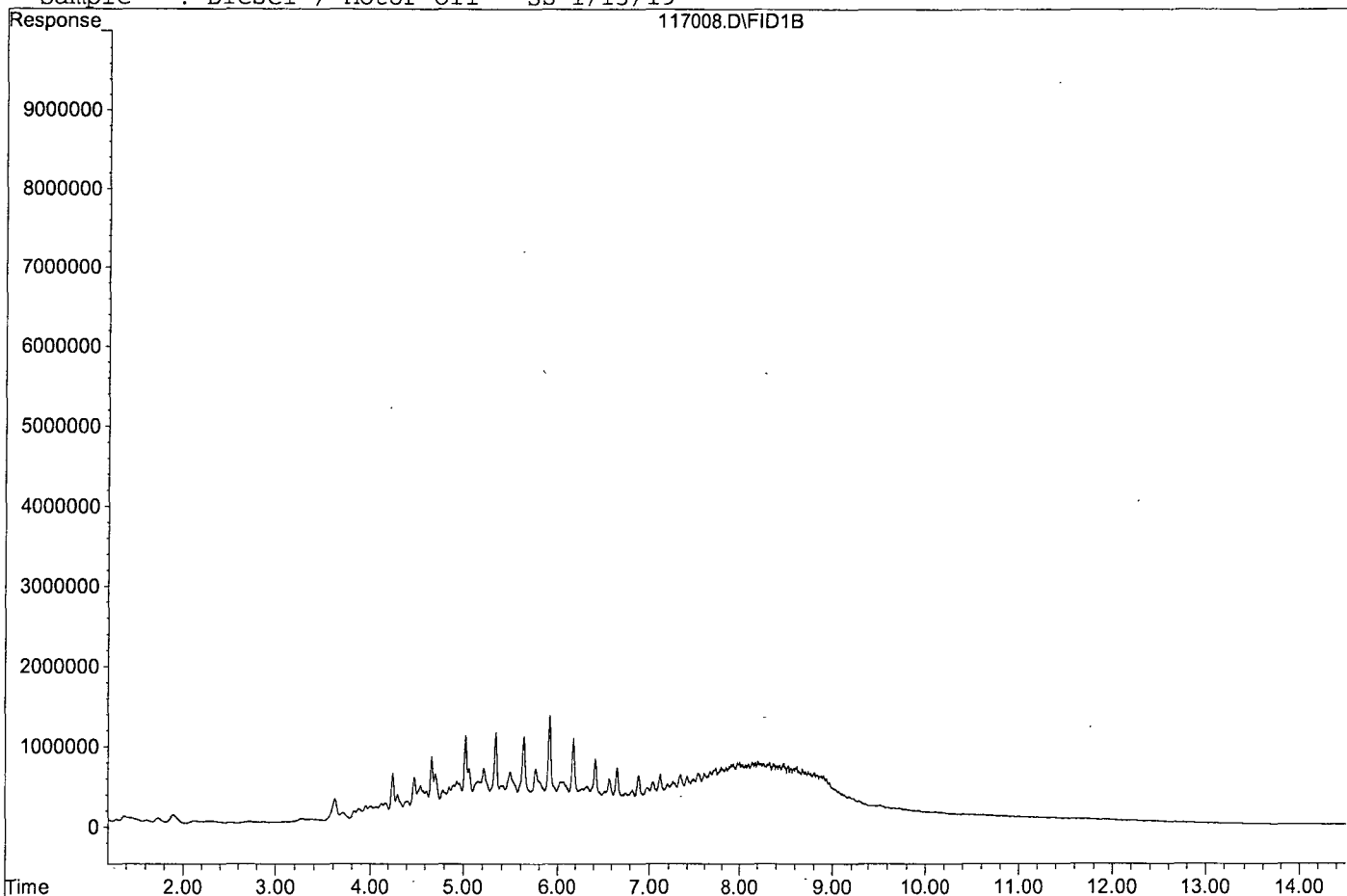
System Monitoring Compounds

Target Compounds

1) HATM Diesel (C10-C24)	4.71	599966004	252.534 ppb
2) HBTM Motor Oil (C24-C40)	9.23	461617841	248.288 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117008.D  
Sample : Diesel / Motor Oil - SS 1/15/19





TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/24/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 124010.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1233310	3.8	HATM
2	HBTM Motor Oil (C24-C40)	929601	944348	1.6	HBTM
3	SA Ortho-Terphenyl(S)	2019470	2028430	0.44	SA
4	SA Octacosane(S)	1876370	1830330	2.5	SA
5					
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36					
37					
38					
39					
40	Average			2.1	

Data File : G:\APOLLO\DATA\190124\124010.D Vial: 10  
 Acq On : 1-24-19 16:40:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 17:14 2019 Quant Results File: DOC0117.RES

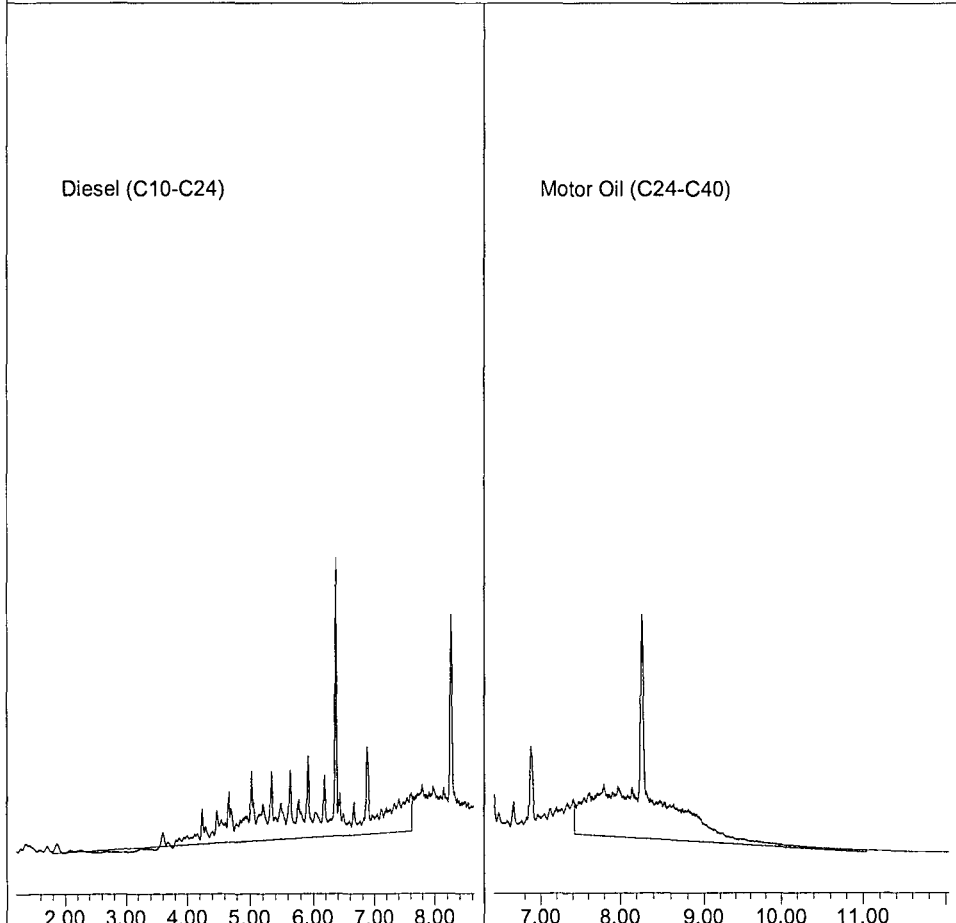
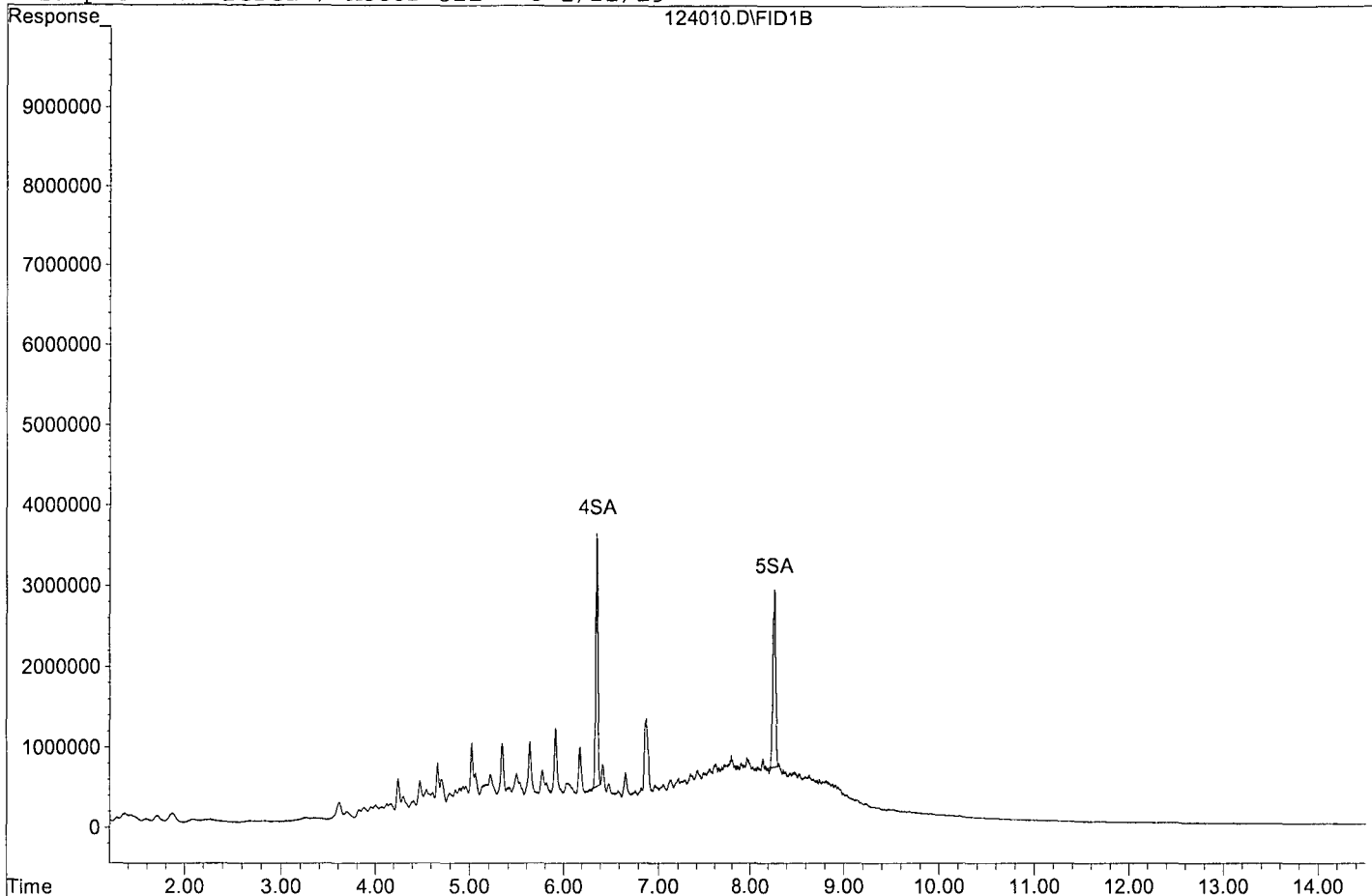
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50710794	12.555 ppb
Surrogate Spike 30.000		Recovery =	41.85%
5) SA Octacosane(S)	8.27	45758137	12.193 ppb
Surrogate Spike 30.000		Recovery =	40.64%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	616655334	259.559 ppb
2) HBTM Motor Oil (C24-C40)	9.23	472174040	253.966 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124010.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/24/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 124021.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1172260	1.3	HATM
2	HBTM Motor Oil (C24-C40)	929601	936482	0.74	HBTM
3	SA Ortho-Terphenyl(S)	2019470	1957400	3.1	SA
4	SA Octacosane(S)	1876370	2034620	8.4	SA
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
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35					
36					
37					
38					
39					
40	Average			3.4	

Data File : G:\APOLLO\DATA\190124\124021.D Vial: 21  
 Acq On : 1-24-19 20:17:26 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 25 9:54 2019 Quant Results File: DOC0117.RES

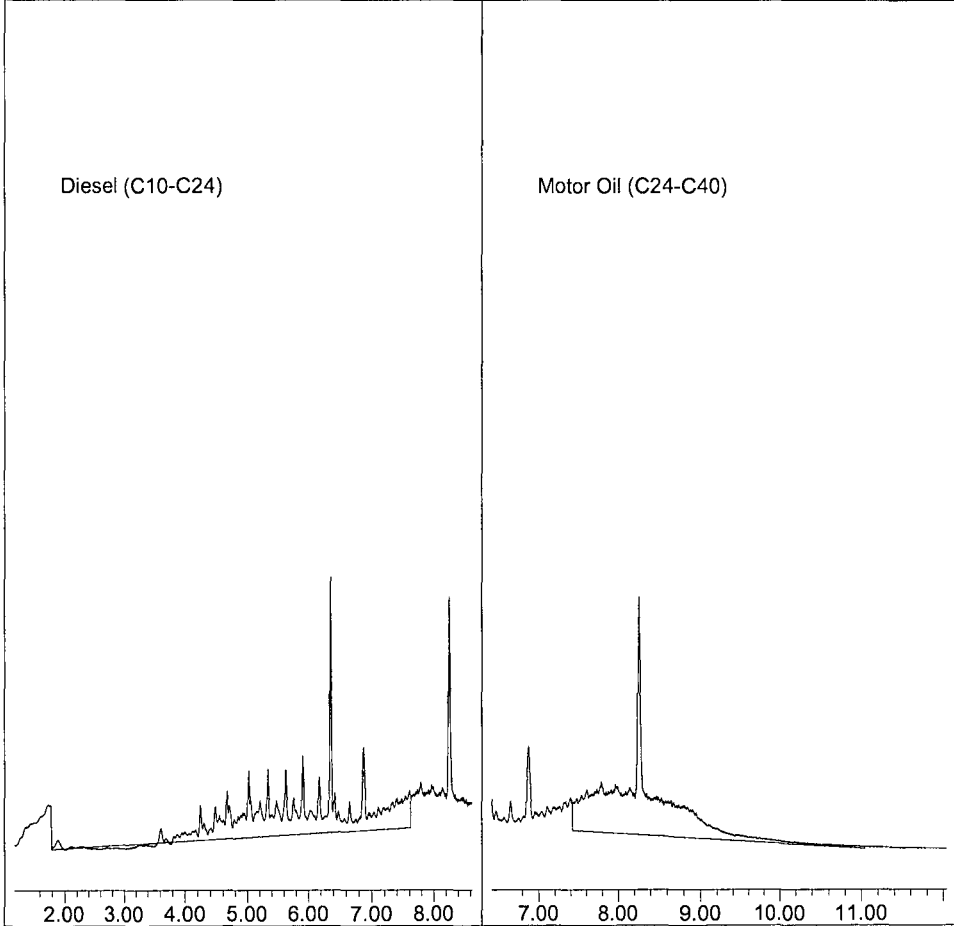
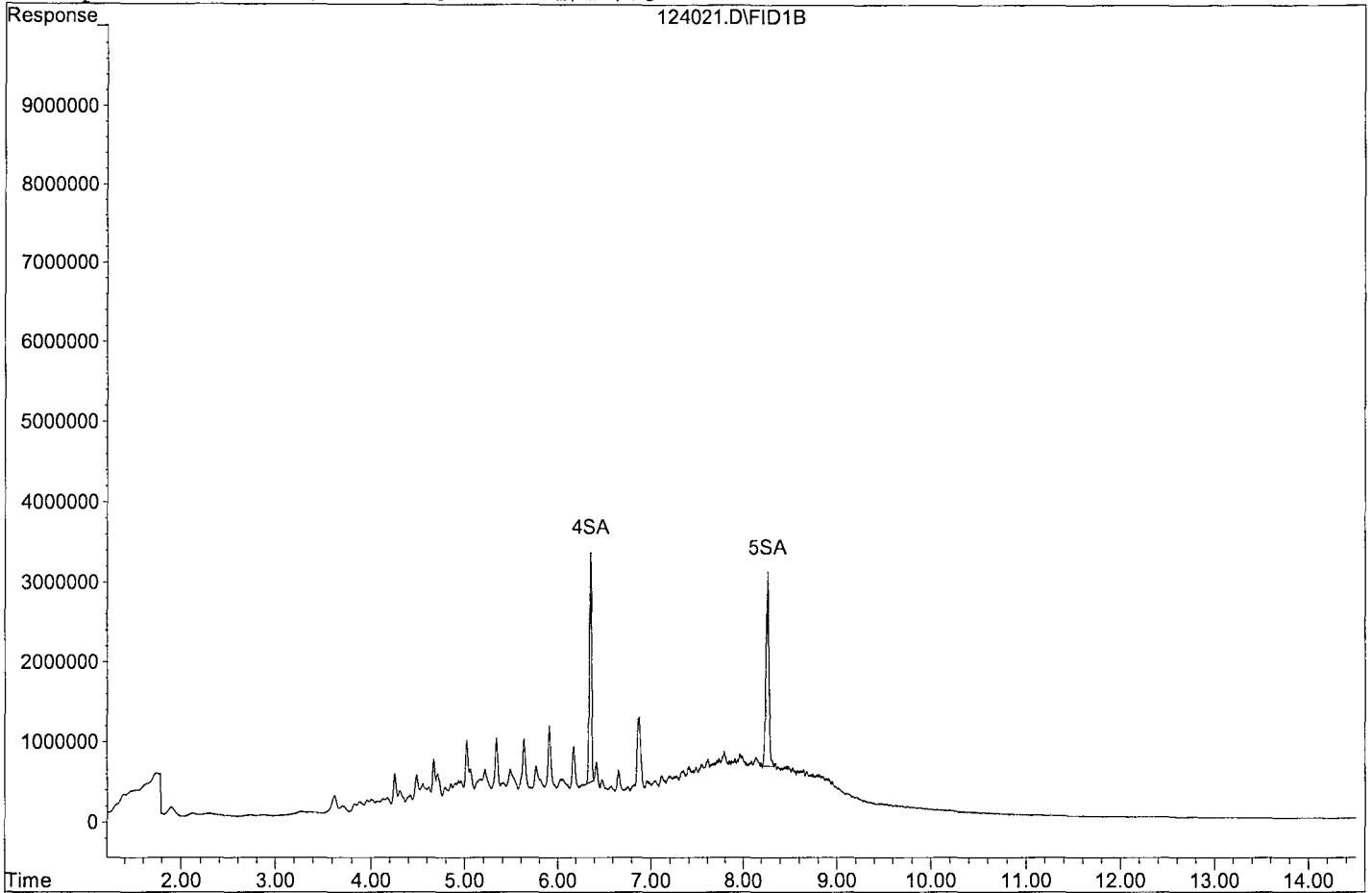
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	48935023	12.116 ppb
Surrogate Spike 30.000		Recovery =	40.39%
5) SA Octacosane(S)	8.26	50865524	13.554 ppb
Surrogate Spike 30.000		Recovery =	45.18%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	586129270	246.710 ppb
2) HBTM Motor Oil (C24-C40)	9.23	468240965	251.850 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124021.D  
Sample : Diesel / Motor Oil - 3 1/21/19



**ORGANICS**  
**Raw Data**

Data File : G:\APOLLO\DATA\190124\124016.D Vial: 16  
 Acq On : 1-24-19 18:38:58 Operator: DP  
 Sample : AZ85418W11 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 25 9:53 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

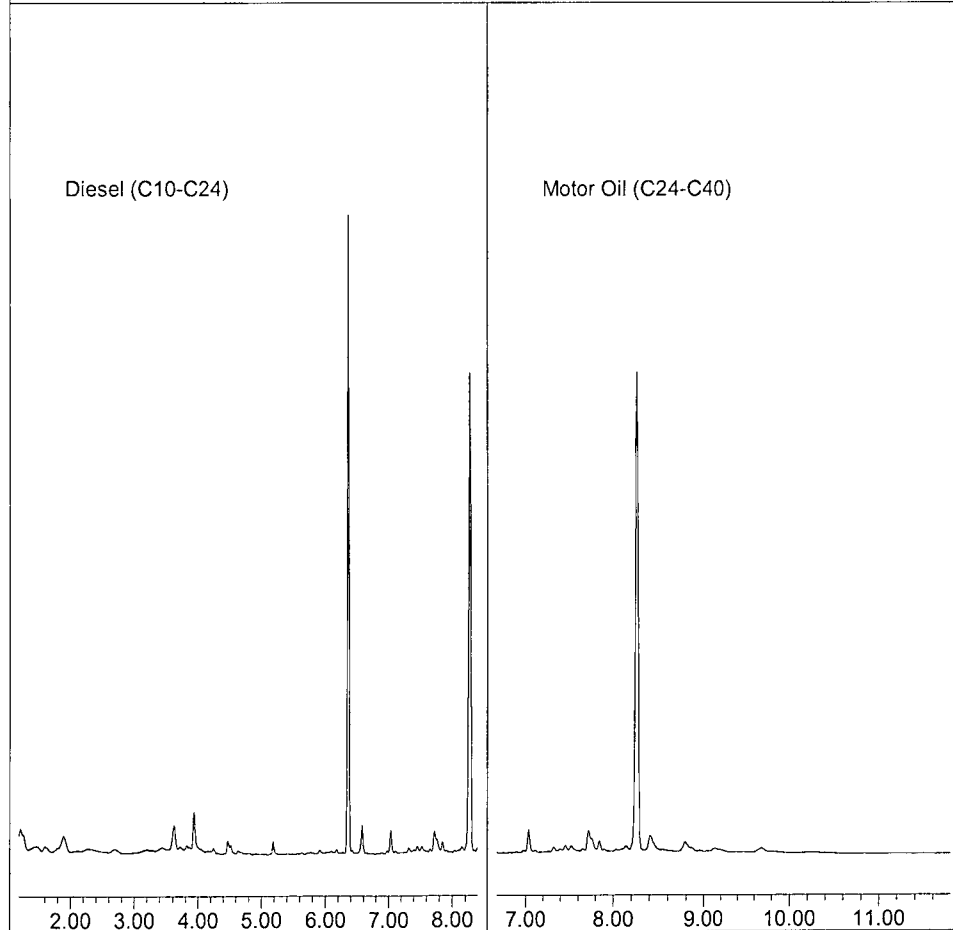
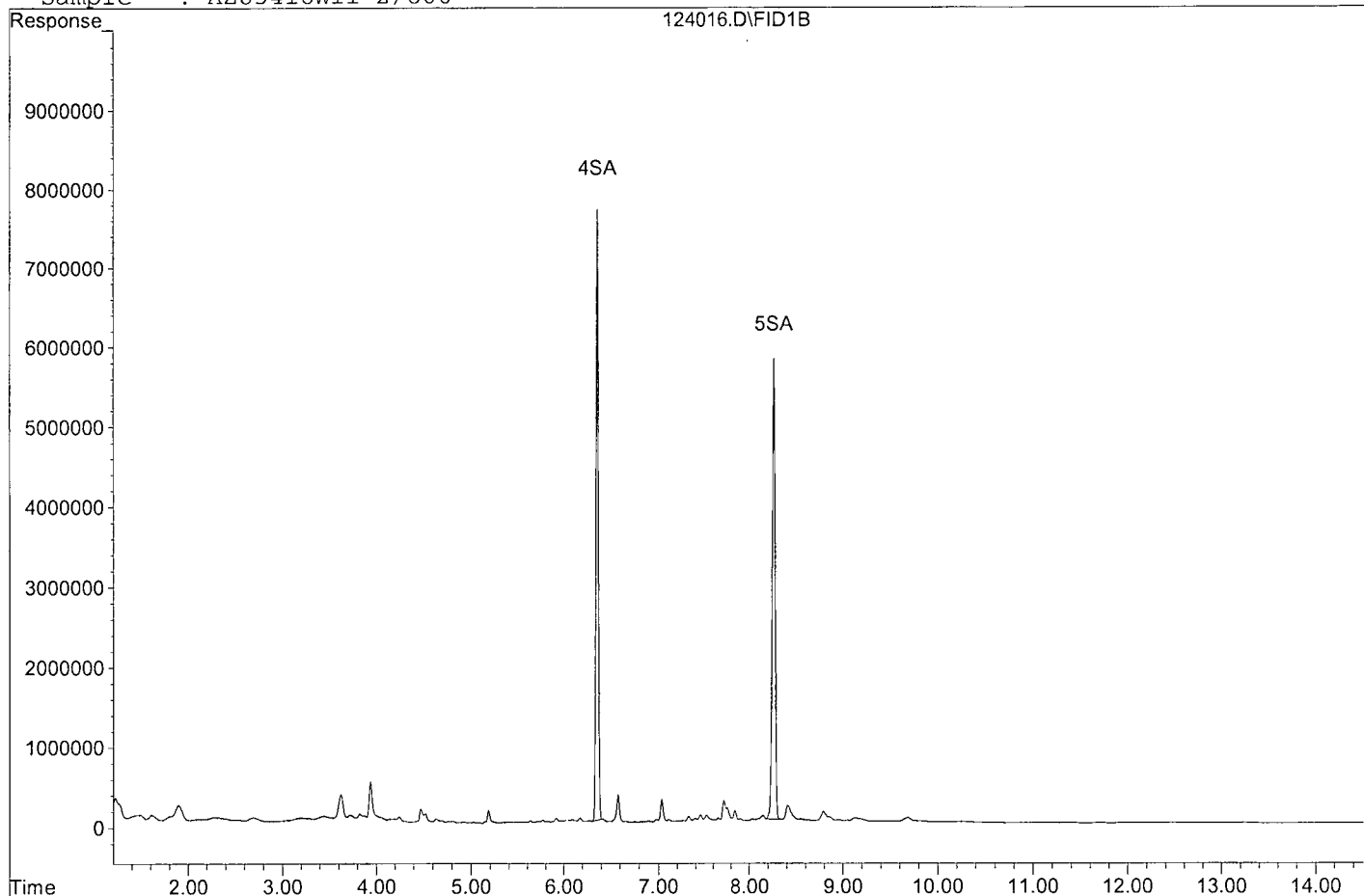
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	126029370	78.009 ppb
Surrogate Spike 75.000		Recovery =	104.01%
5) SA Octacosane(S)	8.26	120964299	80.584 ppb
Surrogate Spike 75.000		Recovery =	107.45%

Target Compounds



Data File: G:\APOLLO\DATA\190124\124016.D  
Sample : AZ85418W11 2/800



Data File : G:\APOLLO\DATA\190124\124017.D Vial: 17  
 Acq On : 1-24-19 18:58:10 Operator: DP  
 Sample : AZ85420W10 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 25 9:54 2019 Quant Results File: DOC0117.RES

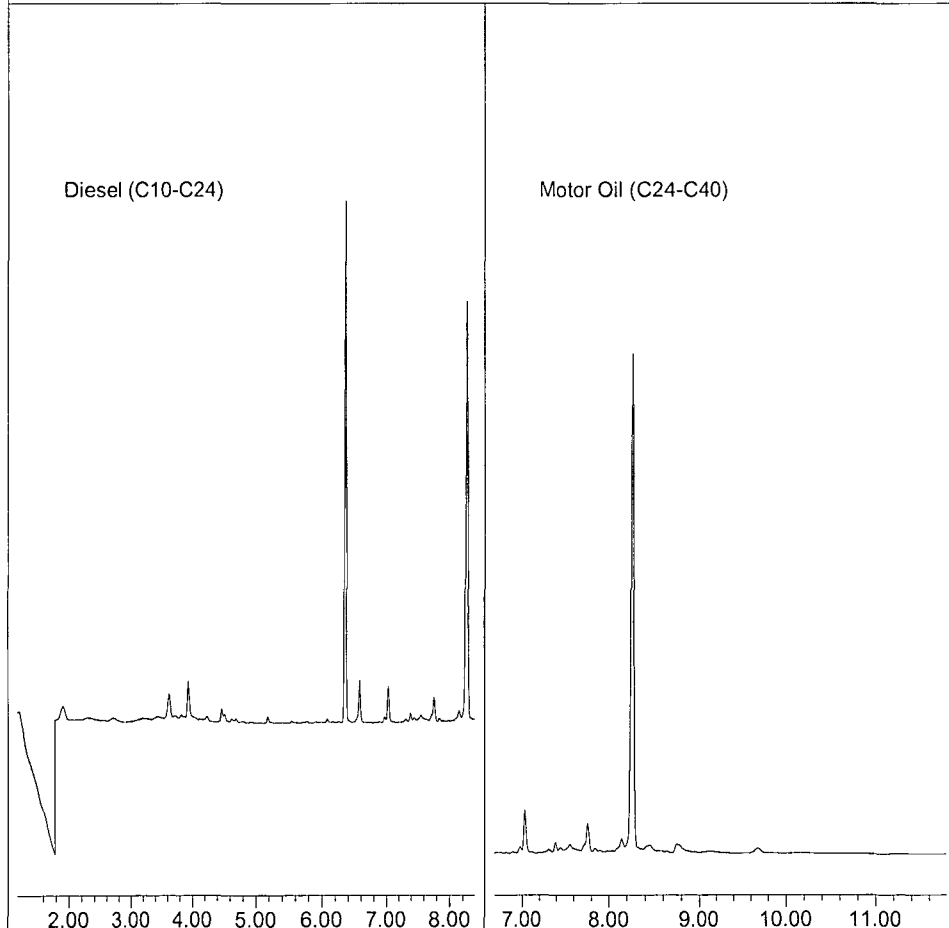
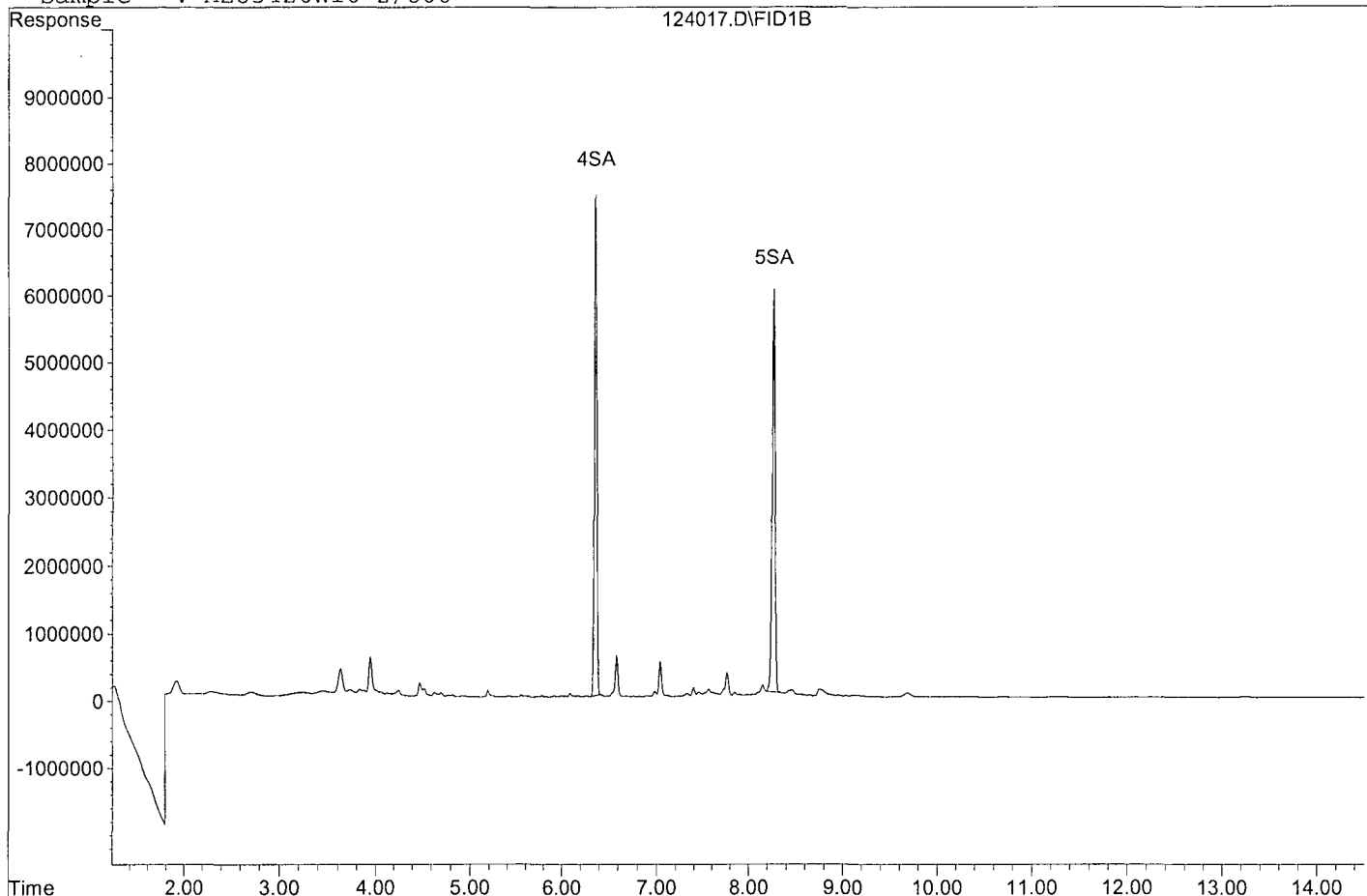
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	129177128	79.957 ppb
Surrogate Spike 75.000		Recovery =	106.61%
5) SA Octacosane(S)	8.26	125587528	83.664 ppb
Surrogate Spike 75.000		Recovery =	111.55%

Target Compounds

Data File: G:\APOLLO\DATA\190124\124017.D  
Sample : AZ85420W10 2/800



Data File : G:\APOLLO\DATA\190124\124012.D Vial: 12  
 Acq On : 1-24-19 17:19:57 Operator: DP  
 Sample : 190123A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 25 9:50 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

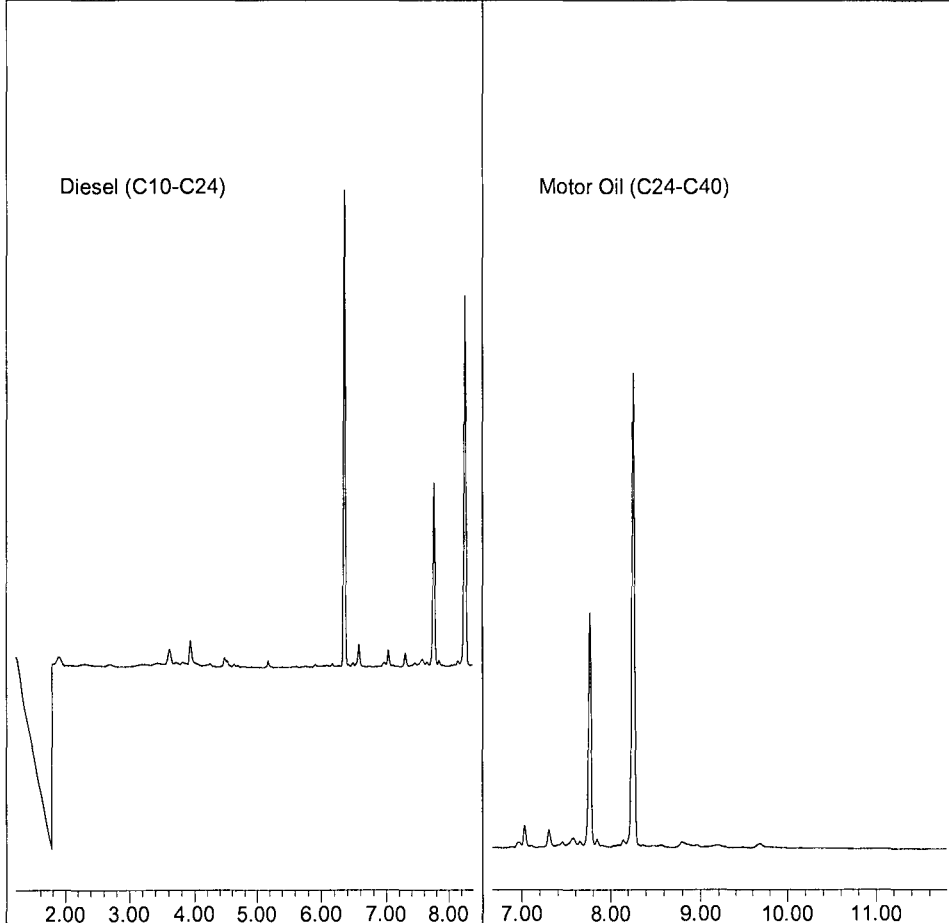
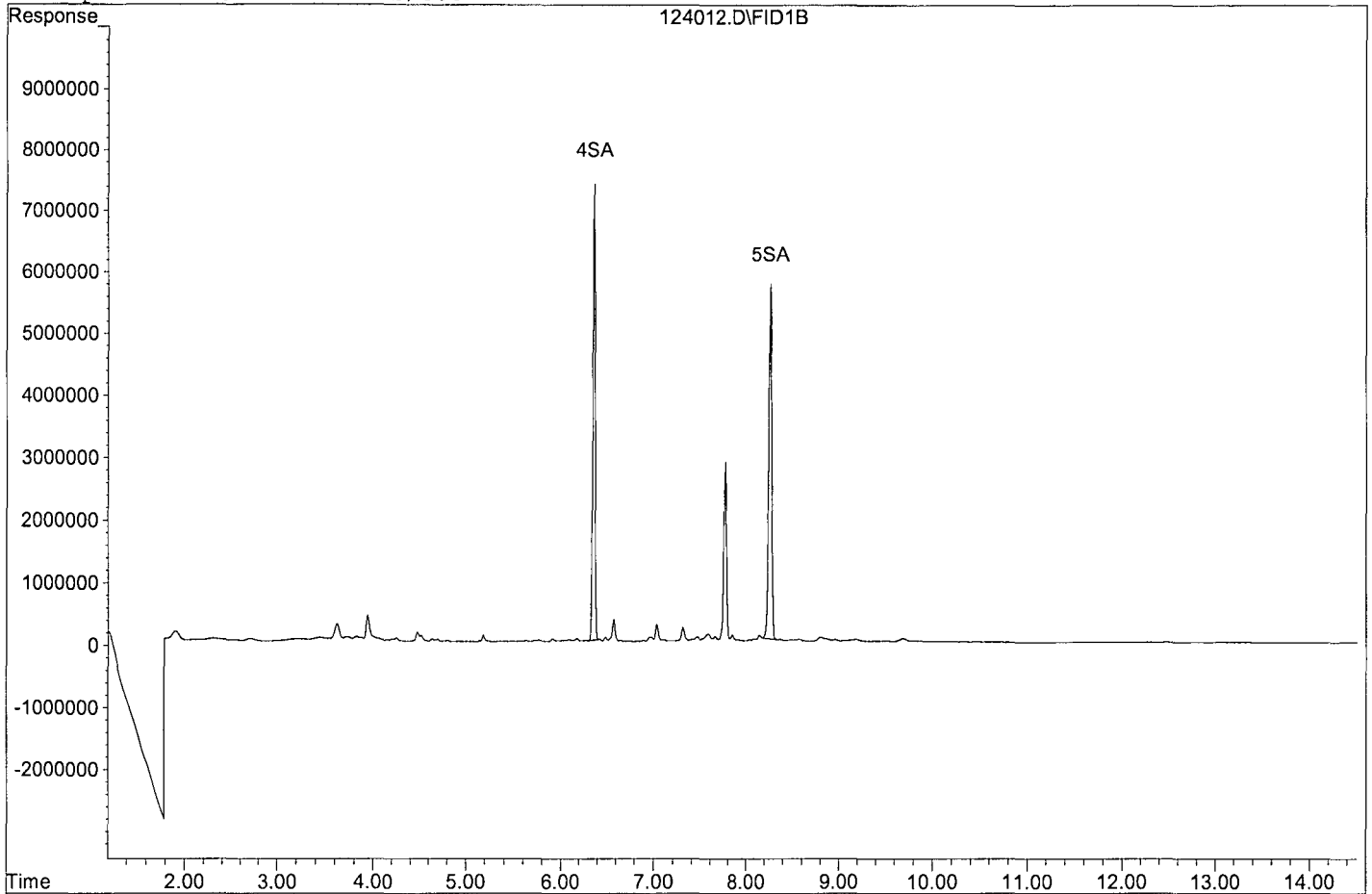
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	128612954	79.608 ppb
Surrogate Spike 75.000		Recovery =	106.14%
5) SA Octacosane(S)	8.26	123046018	81.971 ppb
Surrogate Spike 75.000		Recovery =	109.29%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124012.D

Sample : 190123A BLK 2/800



Data File : G:\APOLLO\DATA\190124\124013.D Vial: 13  
 Acq On : 1-24-19 17:39:55 Operator: DP  
 Sample : 190123A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 25 9:50 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

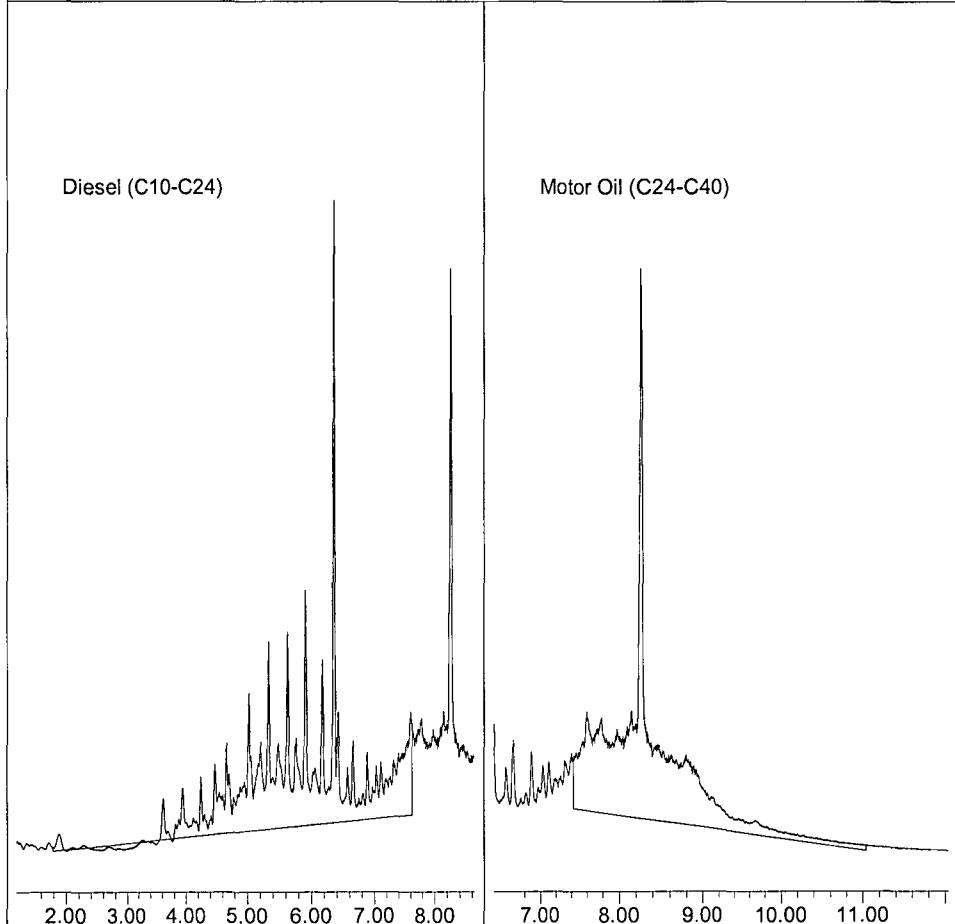
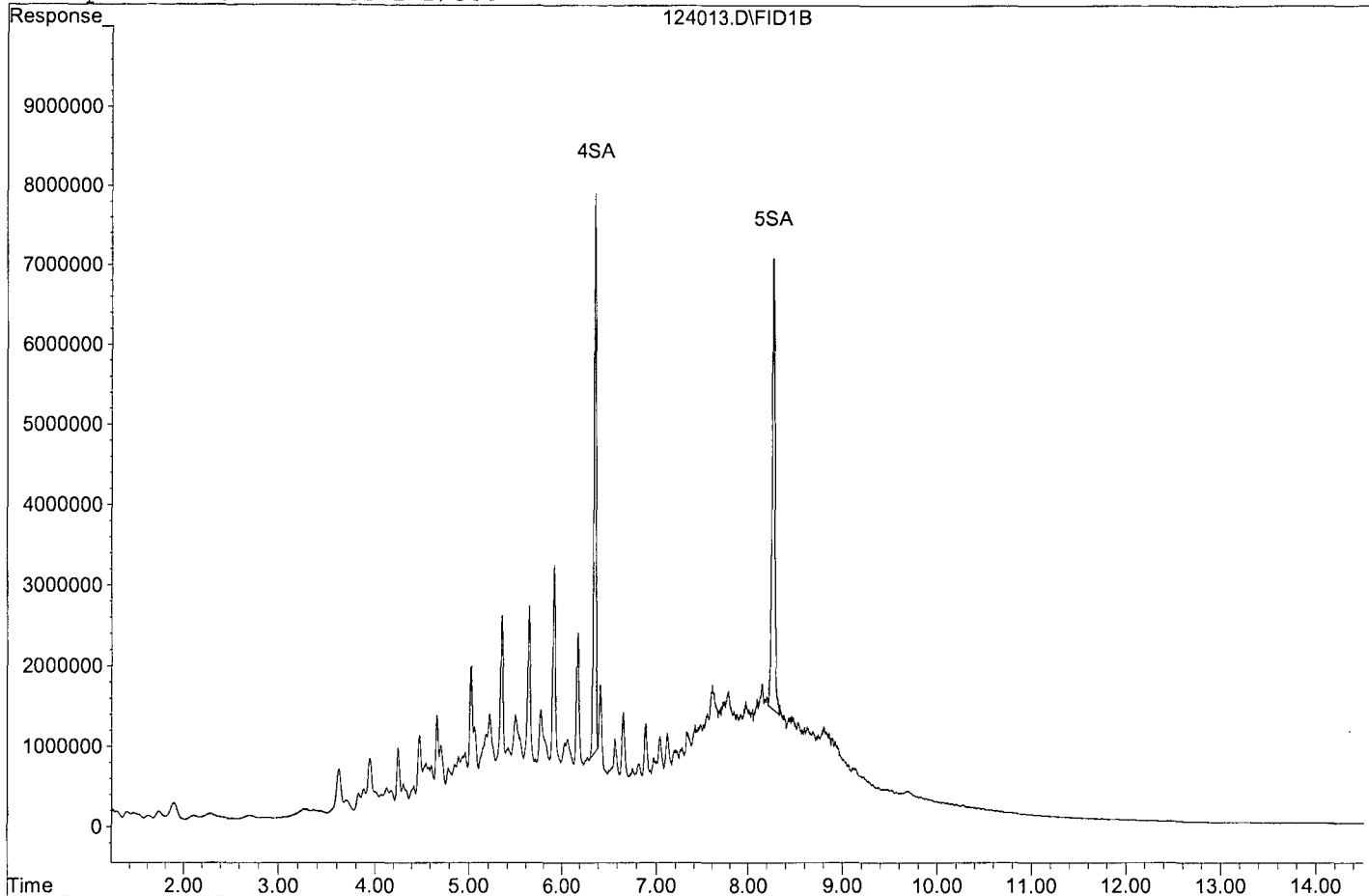
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	116357001	72.022 ppb
Surrogate Spike 75.000		Recovery =	96.03%
5) SA Octacosane(S)	8.27	121497185	80.939 ppb
Surrogate Spike 75.000		Recovery =	107.92%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1258476062	1324.277 ppb
2) HBTM Motor Oil (C24-C40)	9.23	956418827	1286.061 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124013.D

Sample : 190123A LCS-1 2/800



Data File : G:\APOLLO\DATA\190124\124014.D Vial: 14  
 Acq On : 1-24-19 17:59:11 Operator: DP  
 Sample : 190123A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 25 9:50 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

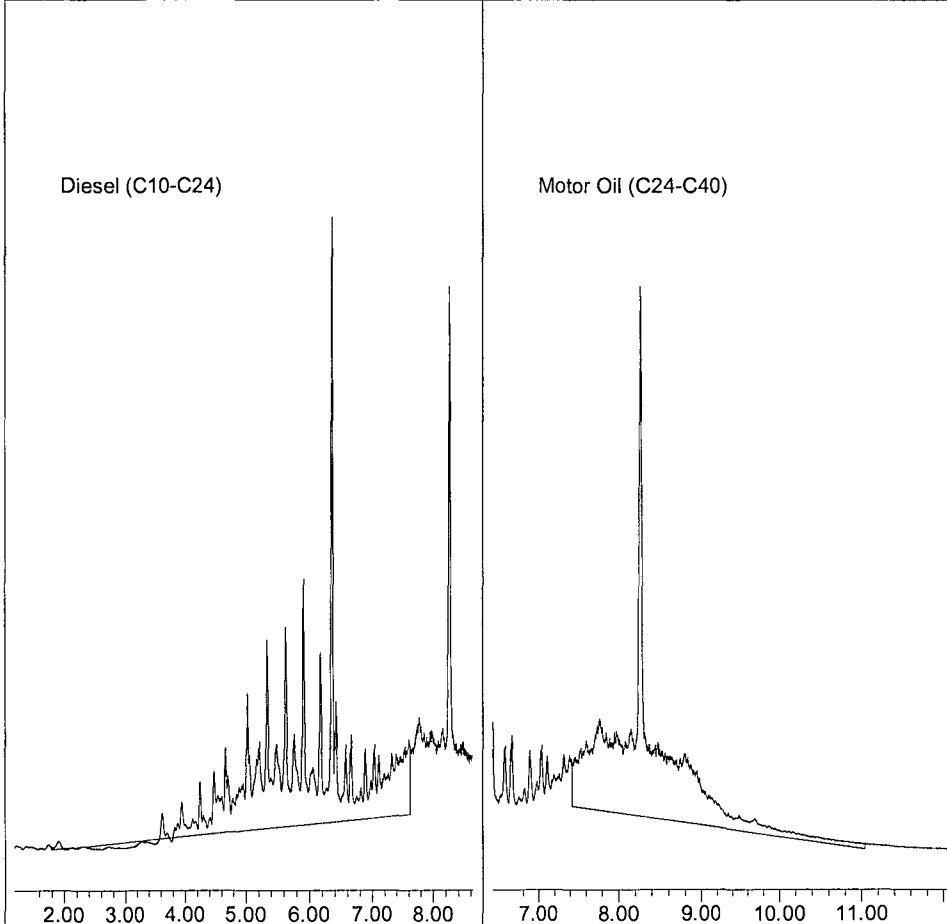
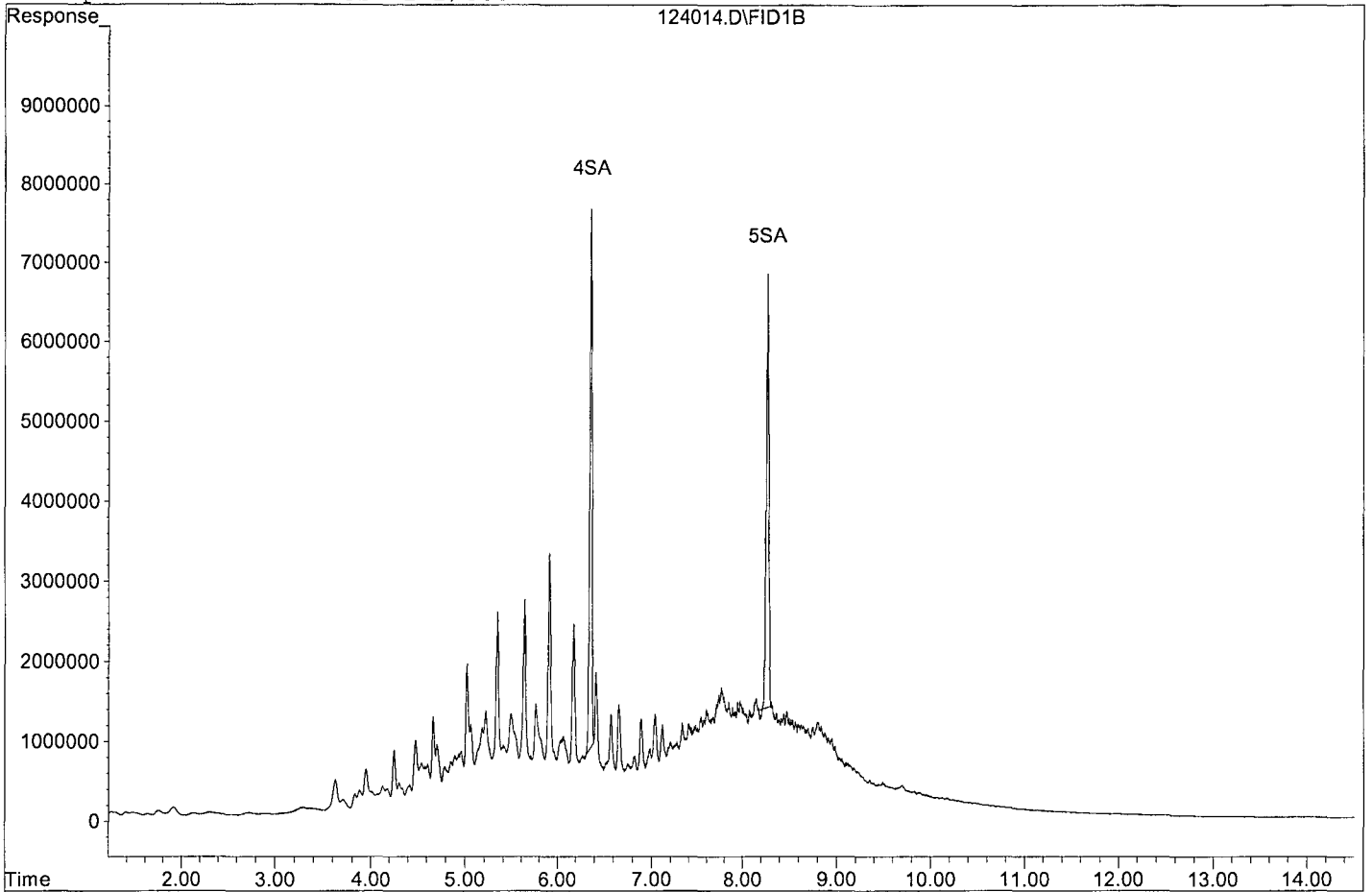
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	116923774	72.373 ppb
Surrogate Spike 75.000		Recovery =	96.50%
5) SA Octacosane(S)	8.27	104986435	69.940 ppb
Surrogate Spike 75.000		Recovery =	93.25%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1238897208	1303.674 ppb
2) HBTM Motor Oil (C24-C40)	9.23	881380127	1185.159 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124014.D  
Sample : 190123A LCSD-1 2/800



Diesel / Motor Oil Calibration Standard										
Prepared: 01/15/19						Prepared By (Initials): DP				
Expires: 01/15/20										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0135614-39409	01/15/20	03/31/25	400uL			2000
Motor Oil	Restek	31464	50,000	A0135245-39351	01/15/20	03/31/25	400uL	10mL	MC	2000
THC Surrogate	Phenova	ALO-130161	600	CL12572-39691	08/13/19	06/30/23	1666uL			100

Diesel / Motor Oil Second Source (SS)										
Prepared: 01/15/19						Prepared By (Initials): DP				
Expires: 01/15/20										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2 Second Source	O2SI	G34-011598-03	50,000	G34-319187-38958	08/02/19	09/29/21	50uL	10mL	MC	250
Motor Oil Second Source	O2SI	116390-02-SS	50,000	301142-37652	07/13/19	03/05/22	50uL			

Diesel / Motor Oil Calibration Curve										
Prepared: 01/17/19						Prepared By (Initials): DP				
Expires: 07/17/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 1	2,000	Prepared 01/17/19	01/15/20	N/A	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 2	2,000	Prepared 01/17/19	01/15/20	N/A	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 3	2,000	Prepared 01/17/19	01/15/20	N/A	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 4	2,000	Prepared 01/17/19	01/15/20	N/A	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 5	2,000	Prepared 01/17/19	01/15/20	N/A	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 6	2,000	Prepared 01/17/19	01/15/20	N/A	100uL	100uL	N/A	2,000

Diesel / Motor Oil CCV										
Prepared: 01/21/19						Prepared By (Initials): DP				
Expires: 07/22/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil STD	APPL	Diesel / Motor Oil CCV	2,000	Prepared 01/15/19	01/15/20	N/A	1250uL	10mL	MC	250

**Motor Oil Spike**

Prepared: 11/15/18

Prepared By (Initials): DP

Expires: 11/15/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Motor Oil Composite	Restek	31464	50,000	A0135245-39352	11/15/19	03/31/25	N/A	N/A	N/A	50,000

**Diesel Spike**

Prepared: 12/11/18

Prepared By (Initials): DP

Expires: 12/11/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Absolute	51046	50,000	111715-39355	12/11/19	11/17/20	N/A	N/A	N/A	50,000

THC Surrogate										
Prepared: 11/21/18					Prepared By (Initials): DP					
Expires: 10/18/19										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc.: (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	CL12572-39687	10/18/19	06/30/23	N/A	N/A	N/A	600

## Injection Log

Directory: G:\APOLLO\DATA\190117\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	117002.D	1	Diesel / Motor Oil - 1 1/17/19	water	1-17-19 16:38:28
3	117003.D	1	Diesel / Motor Oil - 2 1/17/19	water	1-17-19 16:58:29
4	117004.D	1	Diesel / Motor Oil - 3 1/17/19	water	1-17-19 17:17:50
5	117005.D	1	Diesel / Motor Oil - 4 1/17/19	water	1-17-19 17:37:44
6	117006.D	1	Diesel / Motor Oil - 5 1/17/19	water	1-17-19 17:57:32
7	117007.D	1	Diesel / Motor Oil - 6 1/17/19	water	1-17-19 18:17:22
8	117008.D	1	Diesel / Motor Oil - SS 1/15/19	water	1-17-19 18:37:21
10	124010.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-24-19 16:40:50
12	124012.D	2.5	190123A BLK 2/800	water	1-24-19 17:19:57
13	124013.D	2.5	190123A LCS-1 2/800	water	1-24-19 17:39:55
14	124014.D	2.5	190123A LCSD-1 2/800	water	1-24-19 17:59:11
16	124016.D	2.5	AZ85418W11 2/800	water	1-24-19 18:38:58
17	124017.D	2.5	AZ85420W10 2/800	water	1-24-19 18:58:10
21	124021.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-24-19 20:17:26

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190123A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate	12-17-18 EXP	12-17-19		
Spiked ID 2	Motor Oil Spike 12-20-18 EXP 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/23/19 17:55			
Spiked ID 8		Ext. End Time:		01/24/19 12:00 , 15:40			
		GC Requires Extract By:		01/29/19 0:00			
		pH1	2	01/23/19 12:50:00 PM	Water Bath Temp Criteria 35,35,35 °		
		pH2	2	01/23/19 3:28:00 PM			
		pH3	2	01/23/18 5:25:00 PM			

Spiked By: DL

Date 01/23/19

Witnessed By: CFM

Date 01/23/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 190123A Bk				0.100	1	800	2	2	01/23/19 13:00	
					equip	E-HP17 E-WB1				
2 190123A LCS-1		0.020,0.020	1,2	0.100	1	800	2	2	01/23/19 13:00	
					equip	E-HP16 E-WB2				
3 190123A LCSD-1		0.020,0.020	1,2	0.100	1	800	2	2	01/23/19 13:00	
					equip	E-HP15 E-WB3				
4 AZ85404	AZ85404W29			0.100	1	800	2	2	01/23/19 13:00	87916
					equip	E-HP14 E-WB1				
5 AZ85418	AZ85418W11			0.100	1	800	2	2	01/23/19 13:00	87918
					equip	E-HP13 E-WB2				
6 AZ85420	AZ85420W10			0.100	1	800	2	2	01/23/19 13:00	87918
					equip	E-HP12 E-WB3				
7 AZ85493	AZ85493W30			0.100	1	800	2	2	01/23/19 15:30	87929
					equip	E-HP11 E-WB1				
8 AZ85517	AZ85517W04			0.100	1	800	2	2	01/23/19 17:30	87933
					equip	E-HP10 E-WB2				
9 AZ85518	AZ85518W04			0.100	1	800	2	2	01/23/19 17:30	87933
					equip	E-HP9 E-WB3				

Kry 1/24/19

Solvent and Lot#	
1+1 HCL	11-9-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400147
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL,KY
Sample Preparation	DL,KY
Extraction	DL,KY
Concentration	DL,KY
Modified	01/24/19 4:24:00 PM

Reviewed By: *Kry* Date: *1/24/19*  
 Page 150 of 674  
 Ext\_ID: 61581

**ORGANICS**  
**Calibration Data**



PAH by GCMS SIM  
EPA 8270 SIM

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/22/19  
Instrument: Linus

Initials: \_\_\_\_\_

0122L003.D 0122L004.D 0122L005.D 0122L006.D 0122L007.D 0122L008.D 0122L009.D 0122L010.D

		Compound	0.1	0.2	0.5	1	5	10	50	100		Avg	%RSD	Type	r^2	Q	MRF
1	I	Naphthalene-D8(IS)															
2	S	Surrogate Recovery (NBZ)	0.5368	0.4662	0.3581	0.3806	0.4597	0.4513	0.4398	0.4353		0.44	12	S			
3	TM	Naphthalene	1.501	1.326	1.089	1.286	1.383	1.355	1.095	1.039		1.3	13	TM			0.700
4	S	2-Methylnaphthalene-D10 (2M)	1.165	1.119	0.8912	1.140	1.265	1.295	1.170	1.119		1.1	11	S			
5	TM	2-Methylnaphthalene	0.8415	0.7811	0.6384	0.7893	0.8609	0.8572	0.6703	0.6454		0.76	13	TM			0.400
6	TM	1-Methylnaphthalene	0.9488	0.7945	0.6729	0.8072	0.8294	0.8268	0.6596	0.6061		0.77	15	TM			
7	I	Acenaphthene-D10(IS)															
8	S	Surrogate Recovery (FBP)	2.032	1.654	1.457	1.744	1.923	1.928	1.728	1.675		1.8	10	S			
9	TM	Acenaphthylene	6.283	5.718	4.707	5.612	6.305	6.346	5.135	4.672		5.6	12	TM			0.900
10	*TM	Acenaphthene	1.920	1.700	1.428	1.705	1.810	1.782	1.400	1.360		1.6	13	*TM			0.900
11	TM	Fluorene	2.106	1.923	1.607	1.975	2.155	2.142	1.716	1.657		1.9	12	TM			0.900
12	I	Phenanthrene-D10(IS)															
13	TM	Phenanthrene	1.596	1.429	1.206	1.461	1.584	1.571	1.261	1.133		1.4	13	TM			0.700
14	TM	Anthracene	1.546	1.378	1.157	1.401	1.639	1.579	1.259	1.212		1.4	13	TM			0.700
15	S	Fluoranthene-D10 (FRT)	1.960	1.740	1.370	1.644	1.947	1.964	1.702	1.672		1.7	12	S			
16	*TM	Fluoranthene	2.487	2.295	1.834	2.252	2.506	2.476	1.900	1.837		2.2	14	*TM			0.600
17	I	Chrysene-D12(IS)															
18	TM	Pyrene	1.754	1.558	1.296	1.539	1.745	1.699	1.421	1.348		1.5	12	TM			0.600
19	S	Surrogate Recovery (TPH)	0.8778	0.8099	0.6667	0.7580	0.8727	0.8657	0.8359	0.7712		0.81	9.0	S			
20	TM	Benz (a) anthracene	1.671	1.359	1.076	1.304	1.538	1.509	1.341	1.262		1.4	13	TM			0.800
21	TM	Chrysene	1.479	1.472	1.188	1.390	1.453	1.388	1.153	1.067		1.3	12	TM			0.700
22	TM	Indeno (1,2,3-cd) pyrene	1.529	1.415	1.156	1.393	1.490	1.490	1.274	1.181		1.4	11	TM			0.500
23	I	Perylene-D12(IS)															
24	TM	Benzo (b) fluoranthene	1.433	1.243	1.096	1.291	1.531	1.603	1.305	1.301		1.4	12	TM			0.700
25	TM	Benzo (k) fluoranthene	1.579	1.319	1.194	1.327	1.553	1.603	1.299	1.266		1.4	11	TM			0.700
26	*TM	Benzo (a) pyrene	1.308	1.224	1.092	1.285	1.456	1.489	1.256	1.223		1.3	10.0	*TM			0.700
27	TM	Dibenz (a,h) anthracene	1.354	1.225	1.012	1.231	1.275	1.310	1.060	1.044		1.2	11	TM			0.400
28	TM	Benzo (g,h,i) perylene	1.377	1.229	1.021	1.247	1.271	1.322	1.097	1.043		1.2	11	TM			0.500
29																	
30																	
31																	
32																	
33																	
34																	
35																	

Data File : M:\LINUS\DATA\L190122\0122L003.D Vial: 3  
 Acq On : 22 Jan 19 9:37 Operator: MA  
 Sample : 0.1 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 09:56:33 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	15835	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7110	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13830	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20163	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19644	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	170	0.04555	ppb	0.00
Spiked Amount	5.000		Recovery	=	0.920%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	369	0.03991	ppb	-0.01
Spiked Amount	5.000		Recovery	=	0.800%	
8) Surrogate Recovery (FBP)	5.31	172	289	0.04745	ppb	-0.01
Spiked Amount	5.000		Recovery	=	0.940%	
15) Fluoranthene-D10 (FRT)	9.20	212	542	0.04079	ppb	0.00
Spiked Amount	5.000		Recovery	=	0.820%	
19) Surrogate Recovery (TPH)	9.67	244	354	0.04542	ppb	-0.01
Spiked Amount	5.000		Recovery	=	0.900%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	951	0.12746	ppb	99
5) 2-Methylnaphthalene	4.88	142	533	0.11867	ppb	97
6) 1-Methylnaphthalene	4.99	142	601	0.13228	ppb	97
9) Acenaphthylene	5.92	152	1787	0.11640	ppb	98
10) Acenaphthene	6.11	154	546	0.12405	ppb	92
11) Fluorene	6.72	166	599	0.11841	ppb	93
13) Phenanthrene	7.83	178	883	0.11967	ppb	98
14) Anthracene	7.89	178	855	0.11674	ppb	99
16) Fluoranthene	9.22	202	1376	0.11919	ppb	98
18) Pyrene	9.48	202	1415	0.12511	ppb	# 89
20) Benz (a) anthracene	10.89	228	1348	0.13332	ppb	96
21) Chrysene	10.95	228	1193	0.12015	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.83	276	1233	0.11749	ppb	# 82
24) Benzo (b) fluoranthene	12.66	252	1126	0.11931	ppb	98
25) Benzo (k) fluoranthene	12.71	252	1241	0.11008	ppb	96
26) Benzo (a) pyrene	13.22	252	1028	0.11184	ppb	98
27) Dibenz (a,h) anthracene	14.85	278	1064	0.12449	ppb	94
28) Benzo (g,h,i) perylene	15.18	276	1082	0.12500	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

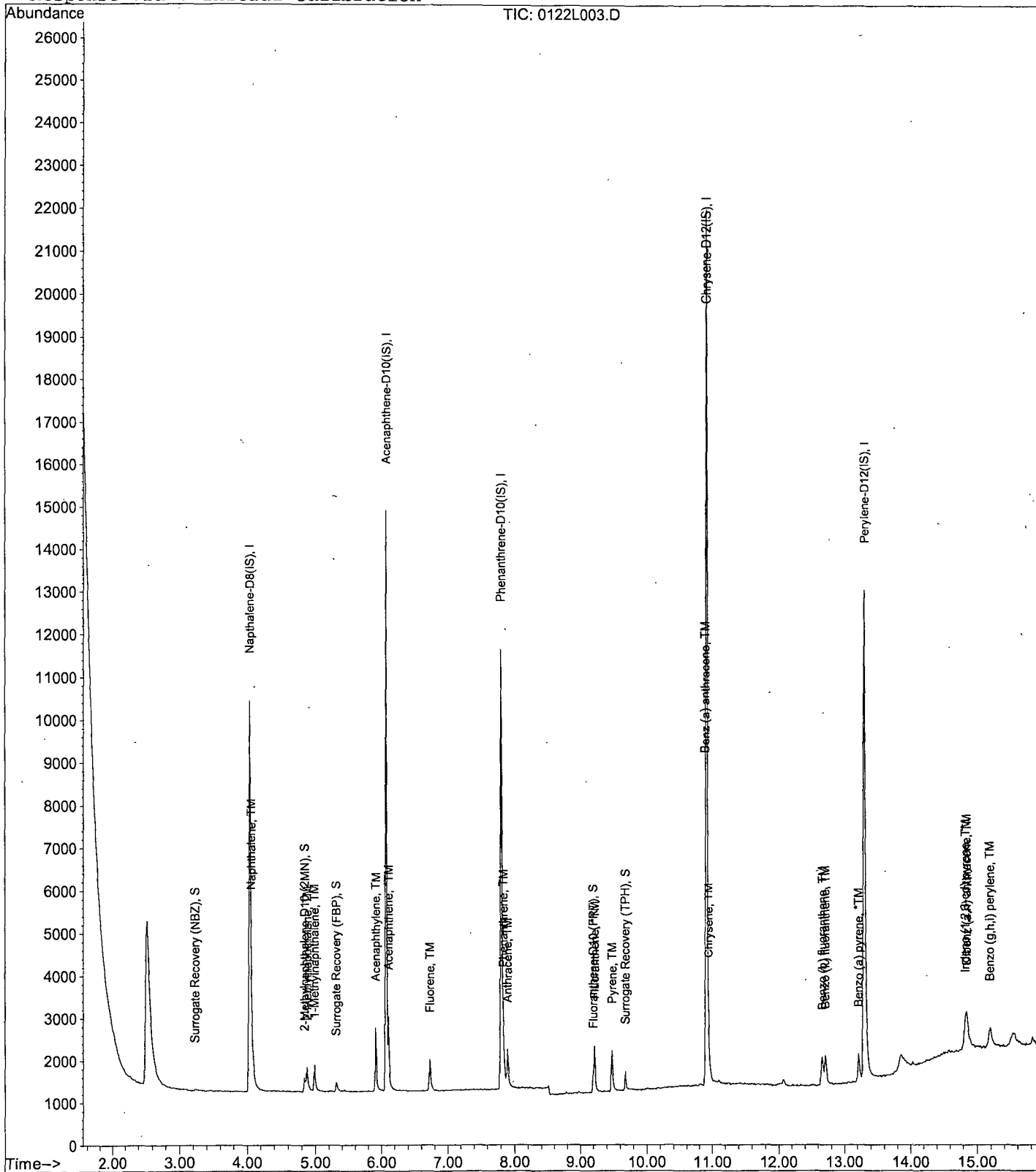
Data File : M:\LINUS\DATA\L190122\0122L003.D  
 Acq On : 22 Jan 19 9:37  
 Sample : 0.1 SIM 01/18/19  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L004.D  
 Acq On : 22 Jan 19 9:59  
 Sample : 0.2 SIM 01/18/19  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	18660	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8631	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	16928	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	24788	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	24016	2.50000	ppb	-0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.24	82	348	0.07912	ppb	0.01
Spiked Amount	5.000		Recovery =	1.580%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	835	0.07663	ppb	-0.01
Spiked Amount	5.000		Recovery =	1.540%		
8) Surrogate Recovery (FBP)	5.31	172	571	0.07723	ppb	-0.01
Spiked Amount	5.000		Recovery =	1.540%		
15) Fluoranthene-D10 (FRT)	9.20	212	1178	0.07243	ppb	0.00
Spiked Amount	5.000		Recovery =	1.440%		
19) Surrogate Recovery (TPH)	9.67	244	803	0.08381	ppb	0.00
Spiked Amount	5.000		Recovery =	1.680%		
Target Compounds						
3) Naphthalene	4.06	128	1979	0.22509	ppb	Qvalue 99
5) 2-Methylnaphthalene	4.88	142	1166	0.22030	ppb	99
6) 1-Methylnaphthalene	4.99	142	1186	0.22151	ppb	97
9) Acenaphthylene	5.92	152	3948	0.21185	ppb	99
10) Acenaphthene	6.11	154	1174	0.21972	ppb	98
11) Fluorene	6.72	166	1328	0.21626	ppb	100
13) Phenanthrene	7.83	178	1935	0.21425	ppb	99
14) Anthracene	7.89	178	1866	0.20815	ppb	99
16) Fluoranthene	9.22	202	3108	0.21994	ppb	97
18) Pyrene	9.47	202	3089	0.22216	ppb	99
20) Benz (a) anthracene	10.89	228	2695	0.21680	ppb	98
21) Chrysene	10.95	228	2920	0.23921	ppb	96
22) Indeno (1,2,3-cd) pyrene	14.82	276	2806	0.21749	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	2388	0.20696	ppb	# 98
25) Benzo (k) fluoranthene	12.71	252	2534	0.18385	ppb	99
26) Benzo (a) pyrene	13.22	252	2352	0.20930	ppb	97
27) Dibenz (a,h) anthracene	14.85	278	2354	0.22529	ppb	94
28) Benzo (g,h,i) perylene	15.19	276	2362	0.22319	ppb	95

Quantitation Report

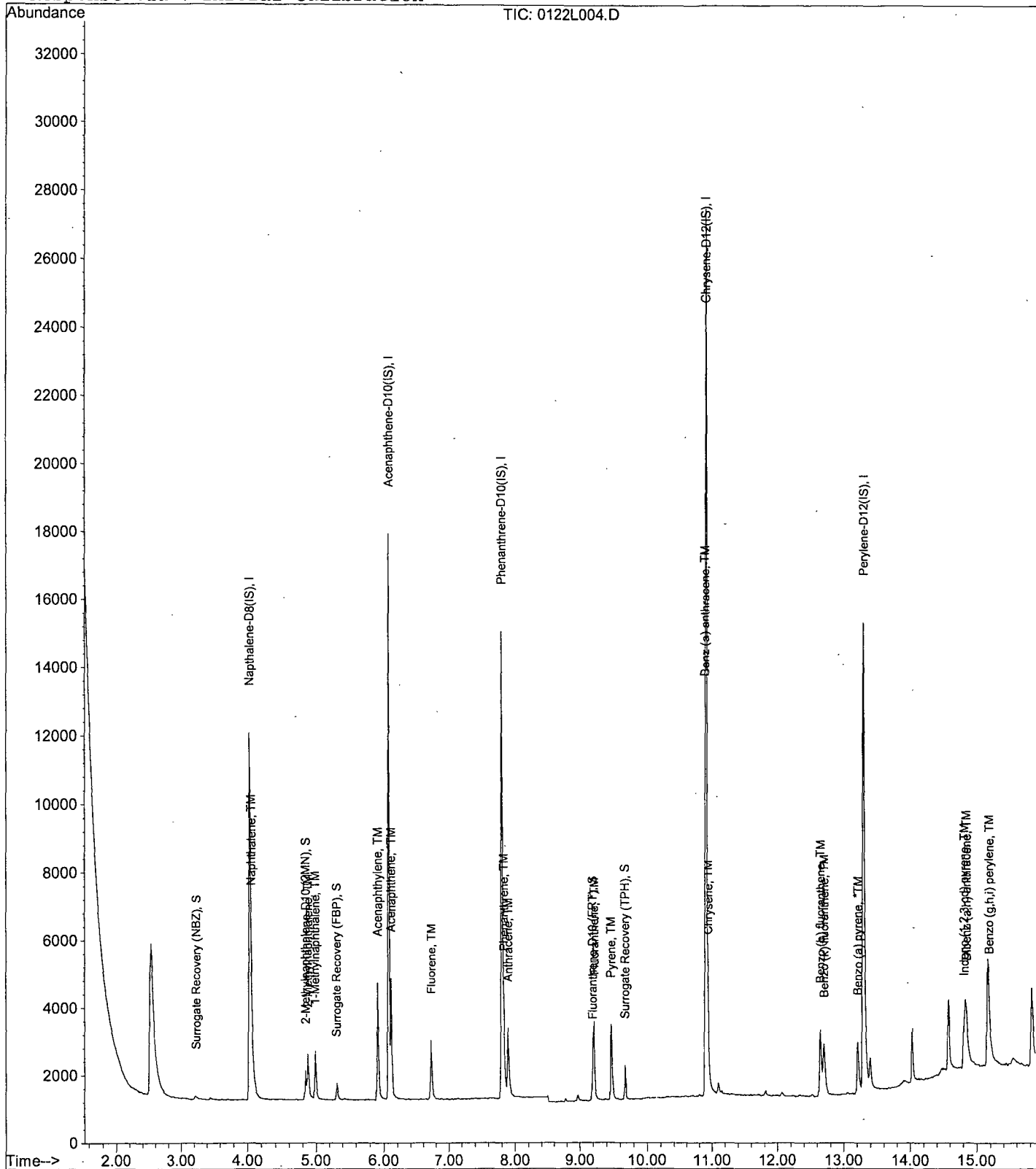
Data File : M:\LINUS\DATA\L190122\0122L004.D  
Acq On : 22 Jan 19 9:59  
Sample : 0.2 SIM 01/18/19  
Misc :

Vial: 4  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L005.D  
 Acq On : 22 Jan 19 10:21  
 Sample : 0.5 SIM 01/18/19  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8(IS)	4.03	136	19378	2.50000	ppb	-0.01
7) Acenaphthene-D10(IS)	6.07	164	8194	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	15631	2.50000	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	22574	2.50000	ppb	-0.02
23) Perylene-D12(IS)	13.29	264	21122	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	694	0.15194	ppb	0.00
Spiked Amount	5.000		Recovery	=	3.040%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	1727	0.15263	ppb	-0.01
Spiked Amount	5.000		Recovery	=	3.060%	
8) Surrogate Recovery (FBP)	5.31	172	1194	0.17011	ppb	-0.01
Spiked Amount	5.000		Recovery	=	3.400%	
15) Fluoranthene-D10 (FRT)	9.18	212	2141	0.14256	ppb	-0.01
Spiked Amount	5.000		Recovery	=	2.860%	
19) Surrogate Recovery (TPH)	9.67	244	1505	0.17248	ppb	0.00
Spiked Amount	5.000		Recovery	=	3.440%	
Target Compounds						
3) Naphthalene	4.06	128	4220	0.46220	ppb	Qvalue 99
5) 2-Methylnaphthalene	4.88	142	2474	0.45012	ppb	100
6) 1-Methylnaphthalene	4.99	142	2608	0.46906	ppb	95
9) Acenaphthylene	5.92	152	7714	0.43600	ppb	98
10) Acenaphthene	6.11	154	2341	0.46149	ppb	95
11) Fluorene	6.72	166	2634	0.45181	ppb	100
13) Phenanthrene	7.83	178	3771	0.45218	ppb	98
14) Anthracene	7.89	178	3618	0.43707	ppb	99
16) Fluoranthene	9.21	202	5733	0.43937	ppb	# 89
18) Pyrene	9.47	202	5849	0.46191	ppb	93
20) Benz (a) anthracene	10.89	228	4857	0.42905	ppb	98
21) Chrysene	10.93	228	5362	0.48235	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.82	276	5219	0.44419	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	4632	0.45644	ppb	98
25) Benzo (k) fluoranthene	12.70	252	5045	0.41618	ppb	98
26) Benzo (a) pyrene	13.22	252	4615	0.46695	ppb	99
27) Dibenz (a,h) anthracene	14.84	278	4275	0.46520	ppb	95
28) Benzo (g,h,i) perylene	15.17	276	4311	0.46317	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

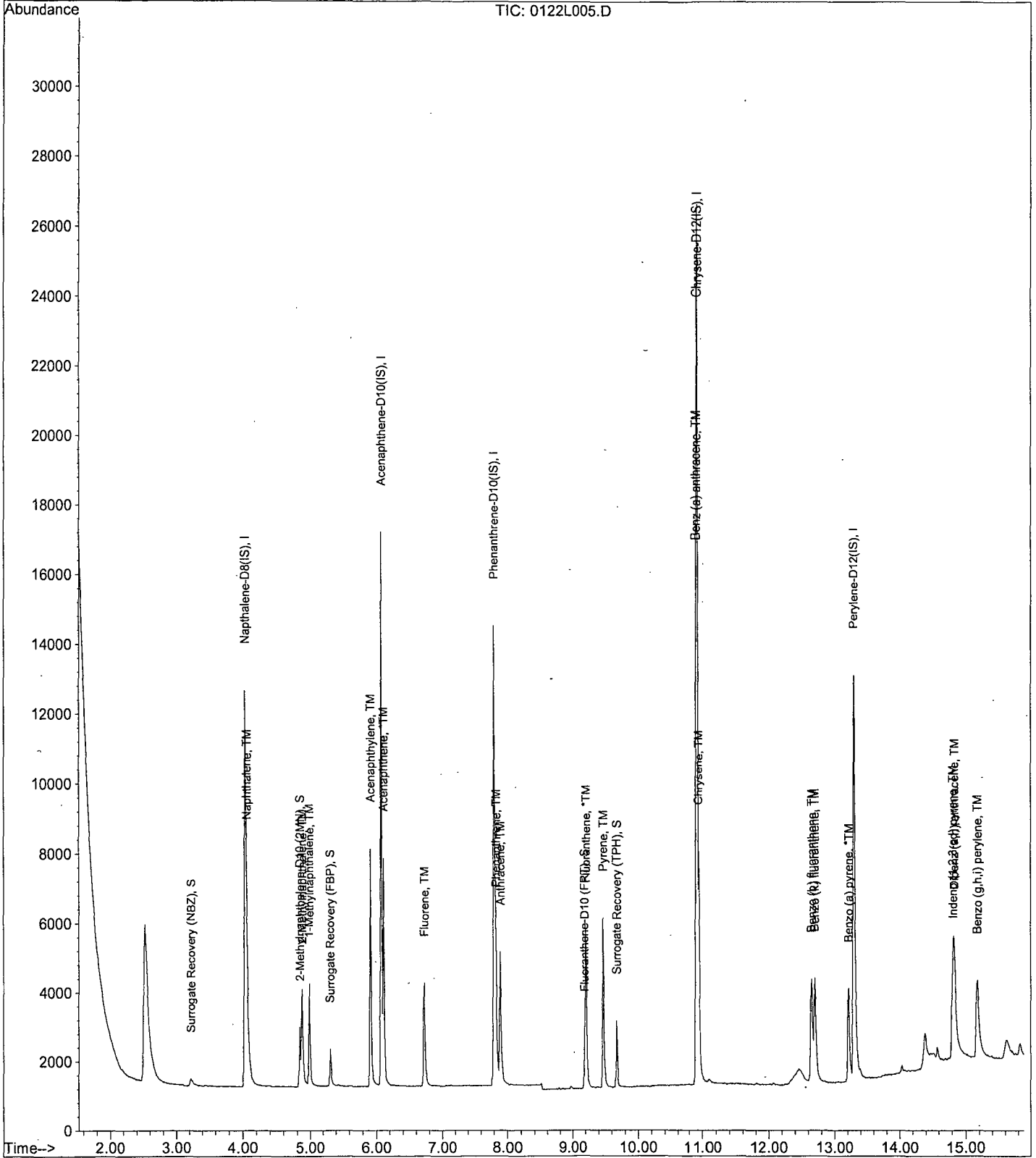
Data File : M:\LINUS\DATA\L190122\0122L005.D  
Acq On : 22 Jan 19 10:21  
Sample : 0.5 SIM 01/18/19  
Misc :

Vial: 5  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L006.D  
 Acq On : 22 Jan 19 10:43  
 Sample : 1 SIM 01/18/19  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	17997	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8238	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	16224	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	23806	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	22387	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	1370	0.32296	ppb	0.00
Spiked Amount	5.000		Recovery	=	6.460%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	4102	0.39034	ppb	-0.01
Spiked Amount	5.000		Recovery	=	7.800%	
8) Surrogate Recovery (FBP)	5.31	172	2874	0.40727	ppb	-0.01
Spiked Amount	5.000		Recovery	=	8.140%	
15) Fluoranthene-D10 (FRT)	9.18	212	5335	0.34225	ppb	-0.01
Spiked Amount	5.000		Recovery	=	6.840%	
19) Surrogate Recovery (TPH)	9.67	244	3609	0.39220	ppb	0.00
Spiked Amount	5.000		Recovery	=	7.840%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	9261	1.09215	ppb	99
5) 2-Methylnaphthalene	4.88	142	5682	1.11310	ppb	97
6) 1-Methylnaphthalene	4.99	142	5811	1.12533	ppb	96
9) Acenaphthylene	5.92	152	18493	1.03965	ppb	99
10) Acenaphthene	6.11	154	5619	1.10178	ppb	98
11) Fluorene	6.71	166	6507	1.11018	ppb	96
13) Phenanthrene	7.83	178	9481	1.09531	ppb	97
14) Anthracene	7.89	178	9094	1.05845	ppb	99
16) Fluoranthene	9.21	202	14616	1.07921	ppb	# 93
18) Pyrene	9.47	202	14652	1.09722	ppb	90
20) Benz (a) anthracene	10.89	228	12417	1.04011	ppb	99
21) Chrysene	10.93	228	13234	1.12887	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.80	276	13263	1.07040	ppb	# 88
24) Benzo (b) fluoranthene	12.64	252	11564	1.07514	ppb	# 98
25) Benzo (k) fluoranthene	12.70	252	11886	0.92512	ppb	98
26) Benzo (a) pyrene	13.21	252	11511	1.09889	ppb	99
27) Dibenz (a,h) anthracene	14.83	278	11022	1.13162	ppb	99
28) Benzo (g,h,i) perylene	15.16	276	11170	1.13229	ppb	95

(#) = qualifier out of range (m) = manual integration



Quantitation Report

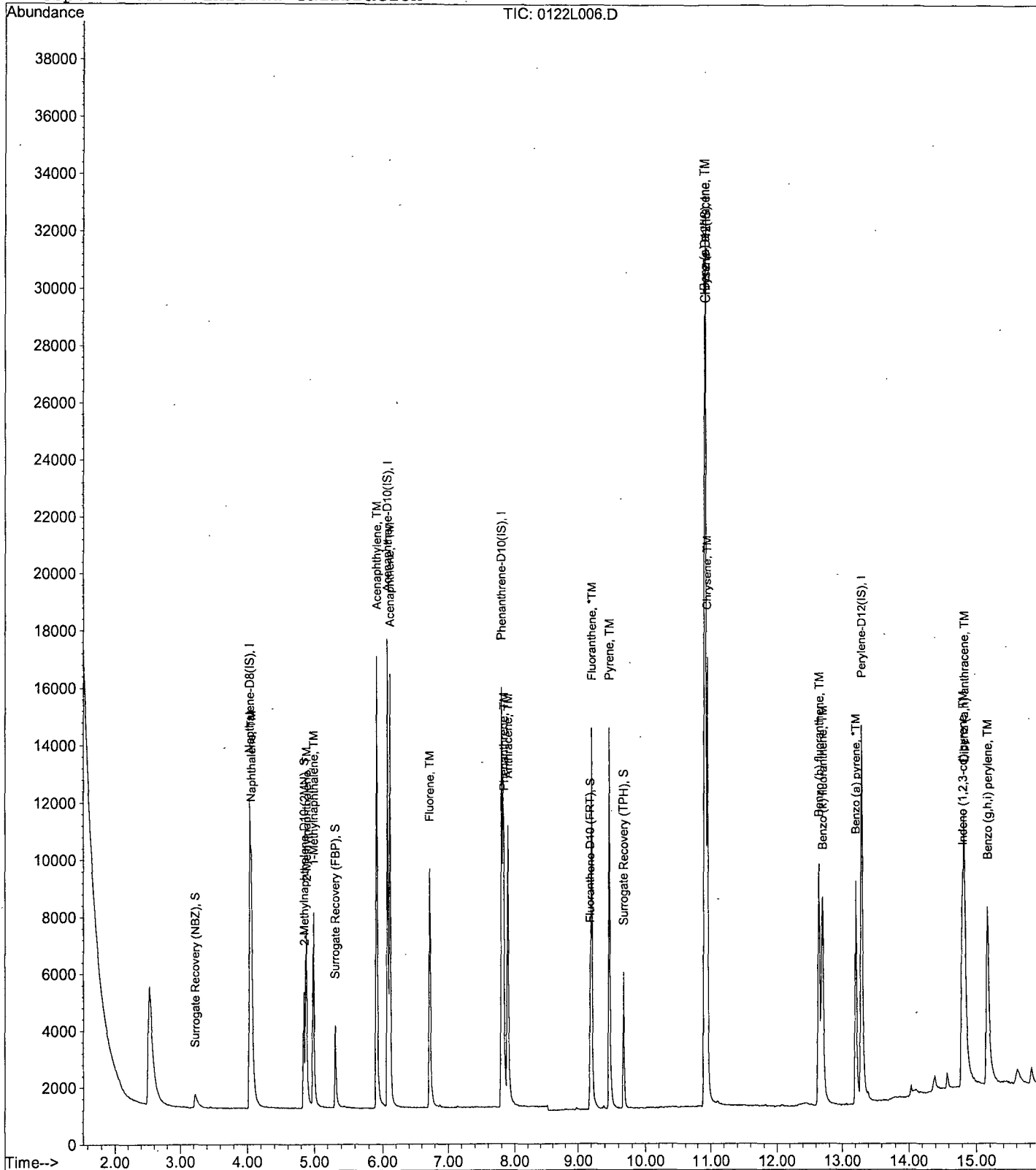
Data File : M:\LINUS\DATA\L190122\0122L006.D  
Acq On : 22 Jan 19 10:43  
Sample : 1 SIM 01/18/19  
Misc :

Vial: 6  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L007.D  
 Acq On : 22 Jan 19 11:30  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:47 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)

Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:16 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16548	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7268	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13995	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19950	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19225	2.50000	ppb	-0.02

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.21	82	7607	2.60121	ppb	-0.01
Spiked Amount	5.000					
			Recovery	=	52.020%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	20941	2.75267	ppb	-0.02
Spiked Amount	5.000					
			Recovery	=	55.060%	
8) Surrogate Recovery (FBP)	5.31	172	13978	2.69964	ppb	-0.01
Spiked Amount	5.000					
			Recovery	=	54.000%	
15) Fluoranthene-D10 (FRT)	9.18	212	27245	2.76398	ppb	-0.01
Spiked Amount	5.000					
			Recovery	=	55.280%	
19) Surrogate Recovery (TPH)	9.67	244	17410	2.68552	ppb	-0.01
Spiked Amount	5.000					
			Recovery	=	53.720%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	45784	5.47796	ppb	100
5) 2-Methylnaphthalene	4.87	142	28493	5.66542	ppb	100
6) 1-Methylnaphthalene	4.97	142	27451	5.39862	ppb	100
9) Acenaphthylene	5.90	152	91655	5.61140	ppb	100
10) Acenaphthene	6.11	154	26309	5.54466	ppb	100
11) Fluorene	6.71	166	31330	5.66322	ppb	100
13) Phenanthrene	7.82	178	44335	5.57391	ppb	100
14) Anthracene	7.88	178	45862	5.88051	ppb	100
16) Fluoranthene	9.21	202	70142	5.71546	ppb	100
18) Pyrene	9.46	202	69644	5.66416	ppb	100
20) Benz (a) anthracene	10.89	228	61372	5.59012	ppb	100
21) Chrysene	10.93	228	57972	5.50231	ppb	100
22) Indeno (1,2,3-cd) pyrene	14.79	276	59462	5.44362	ppb	100
24) Benzo (b) fluoranthene	12.64	252	58876	5.66105	ppb	100
25) Benzo (k) fluoranthene	12.68	252	59717	5.64321	ppb	100
26) Benzo (a) pyrene	13.21	252	55980	5.65364	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	49007	5.37458	ppb	100
28) Benzo (g,h,i) perylene	15.15	276	48865	5.30011	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

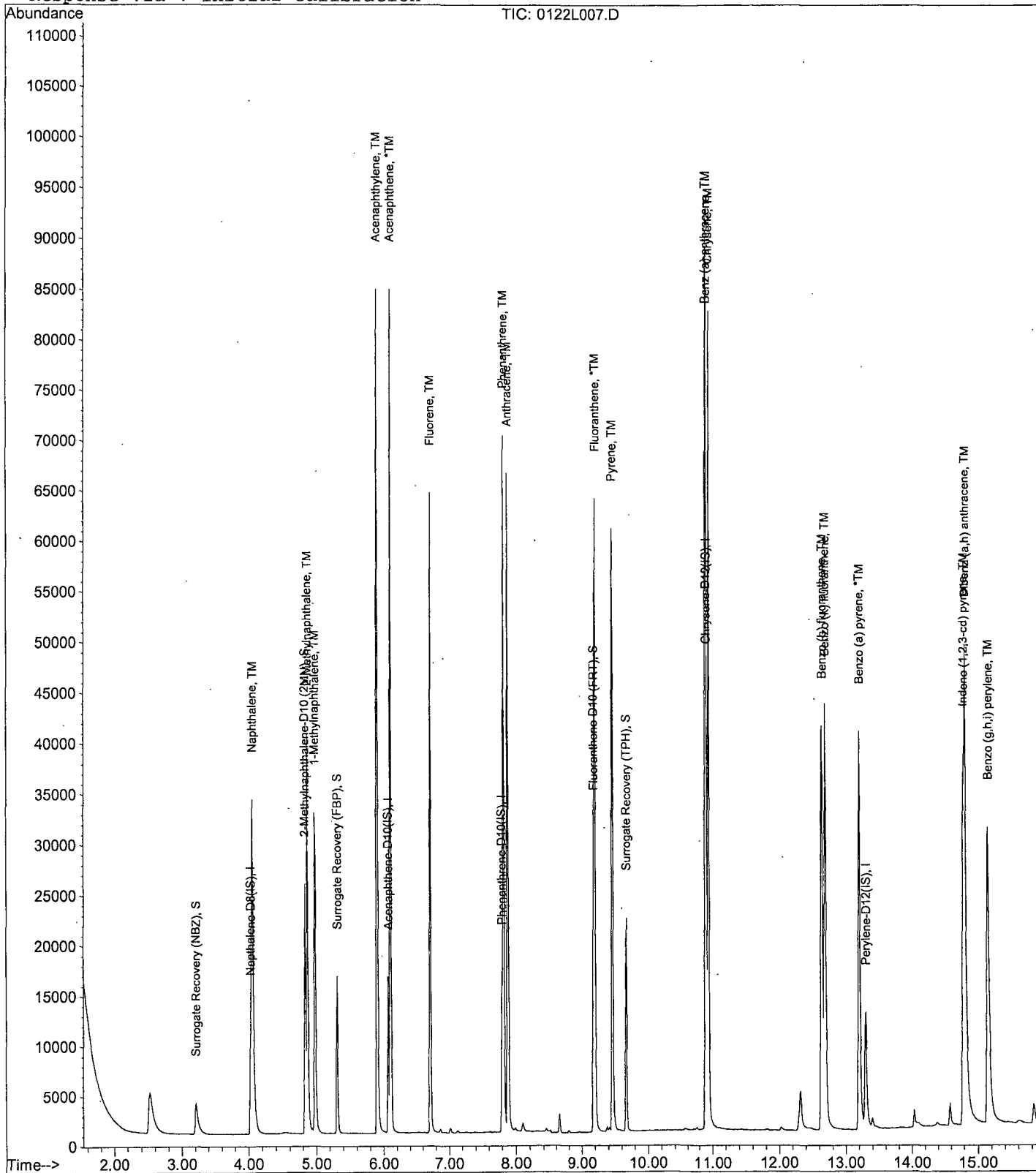
Data File : M:\LINUS\DATA\L190122\0122L007.D  
Acq On : 22 Jan 19 11:30  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 7  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:47 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L008.D Vial: 8  
 Acq On : 22 Jan 19 11:53 Operator: MA  
 Sample : 10 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 12:48 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16401	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7199	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13870	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20037	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18684	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.20	82	14805	5.85339	ppb	-0.02
Spiked Amount	5.000		Recovery	=	117.060%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	42463	6.47148	ppb	-0.02
Spiked Amount	5.000		Recovery	=	129.420%	
8) Surrogate Recovery (FBP)	5.31	172	27763	6.17375	ppb	-0.01
Spiked Amount	5.000		Recovery	=	123.480%	
15) Fluoranthene-D10 (FRT)	9.18	212	54468	6.35262	ppb	-0.01
Spiked Amount	5.000		Recovery	=	127.060%	
19) Surrogate Recovery (TPH)	9.66	244	34694	6.13619	ppb	-0.02
Spiked Amount	5.000		Recovery	=	122.720%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	88896	11.85448	ppb	100
5) 2-Methylnaphthalene	4.87	142	56236	12.48160	ppb	100
6) 1-Methylnaphthalene	4.97	142	54242	11.87753	ppb	100
9) Acenaphthylene	5.90	152	182742	12.55338	ppb	99
10) Acenaphthene	6.11	154	51321	12.04426	ppb	98
11) Fluorene	6.71	166	61684	12.48808	ppb	99
13) Phenanthrene	7.82	178	87145	12.24258	ppb	100
14) Anthracene	7.88	178	87619	12.57174	ppb	100
16) Fluoranthene	9.21	202	137396	12.46906	ppb	97
18) Pyrene	9.46	202	136155	12.26524	ppb	96
20) Benz (a) anthracene	10.89	228	120980	12.29858	ppb	100
21) Chrysene	10.93	228	111248	11.62149	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	119439	12.13320	ppb	# 84
24) Benzo (b) fluoranthene	12.63	252	119776	13.26251	ppb	# 97
25) Benzo (k) fluoranthene	12.63	252	119773	12.99689	ppb	99
26) Benzo (a) pyrene	13.20	252	111267	12.95931	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	97893	12.25147	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	98835	12.27085	ppb	# 94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

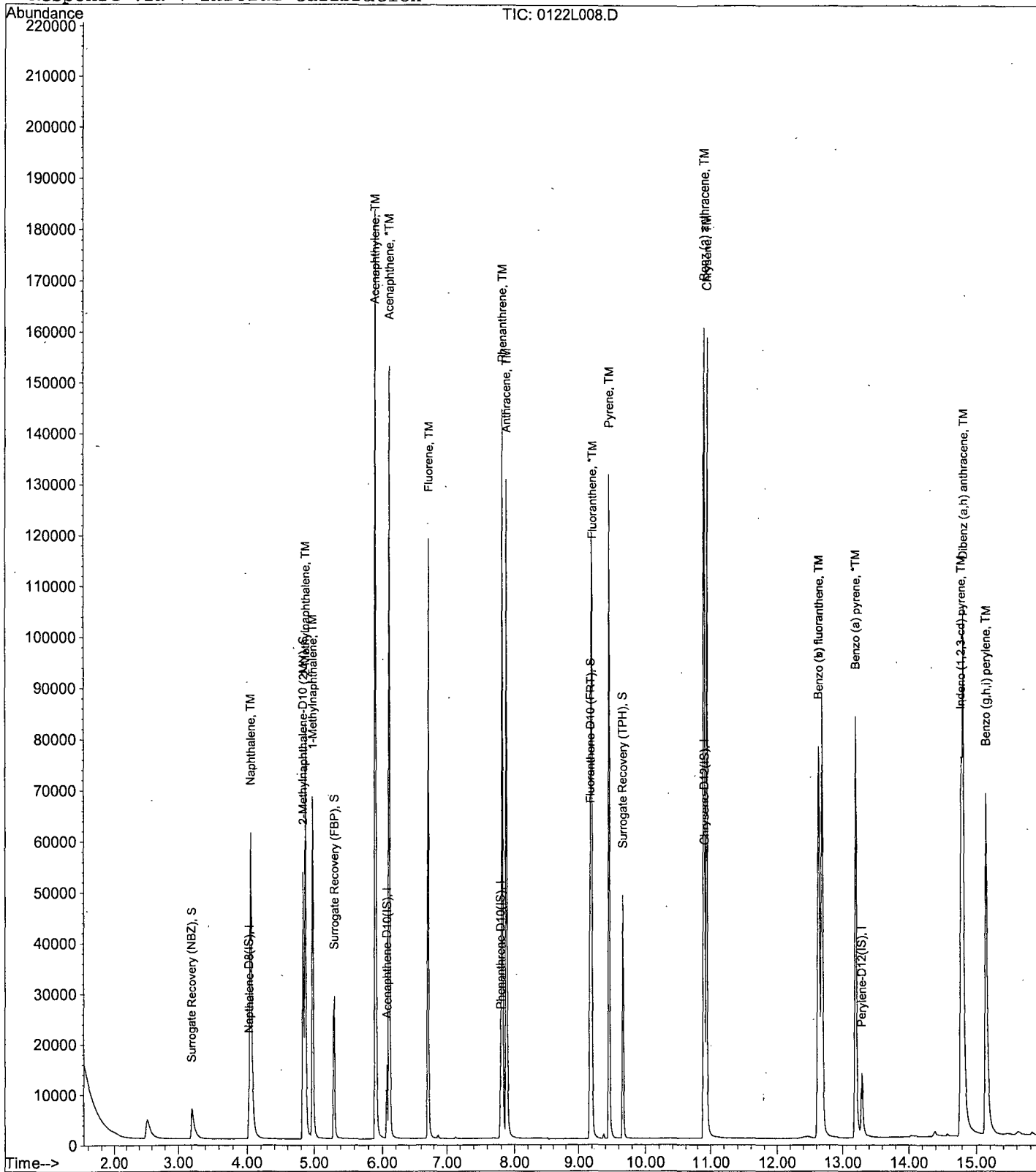
Data File : M:\LINUS\DATA\L190122\L0122L008.D  
Acq On : 22 Jan 19 11:53  
Sample : 10 SIM 01/18/19  
Misc :

Vial: 8  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:48 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L009.D  
 Acq On : 22 Jan 19 12:15  
 Sample : 50 SIM 01/18/19  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:48:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16882	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7435	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14943	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.91	240	19605	2.50000	ppb	-0.01
23) Perylene-D12 (IS)	13.29	264	18780	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.20	82	74252	28.52027	ppb	-0.02
Spiked Amount 5.000			Recovery =	570.400%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	197601	29.25691	ppb	-0.02
Spiked Amount 5.000			Recovery =	585.140%		
8) Surrogate Recovery (FBP)	5.31	172	128459	27.65911	ppb	-0.01
Spiked Amount 5.000			Recovery =	553.180%		
15) Fluoranthene-D10 (FRT)	9.18	212	254396	27.53979	ppb	-0.01
Spiked Amount 5.000			Recovery =	550.800%		
19) Surrogate Recovery (TPH)	9.67	244	163882	29.62386	ppb	-0.01
Spiked Amount 5.000			Recovery =	592.480%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	369785	47.90669	ppb	100
5) 2-Methylnaphthalene	4.87	142	226326	48.80191	ppb	99
6) 1-Methylnaphthalene	4.99	142	222700	47.37585	ppb	94
9) Acenaphthylene	5.92	152	763610	50.79081	ppb	97
10) Acenaphthene	6.11	154	208204	47.31133	ppb	95
11) Fluorene	6.71	166	255227	50.03119	ppb	97
13) Phenanthrene	7.83	178	376921	49.14954	ppb	98
14) Anthracene	7.89	178	376399	50.12843	ppb	99
16) Fluoranthene	9.21	202	567787	47.82815	ppb #	84
18) Pyrene	9.47	202	556994	51.28126	ppb	99
20) Benz (a) anthracene	10.90	228	525902	54.64017	ppb	100
21) Chrysene	10.95	228	451974	48.25575	ppb #	98
22) Indeno (1,2,3-cd) pyrene	14.82	276	499473	51.85698	ppb #	90
24) Benzo (b) fluoranthene	12.65	252	490265	54.00836	ppb	100
25) Benzo (k) fluoranthene	12.72	252	488050	50.37199	ppb	100
26) Benzo (a) pyrene	13.22	252	471645	54.65189	ppb	99
27) Dibenz (a,h) anthracene	14.85	278	398222	49.58336	ppb #	94
28) Benzo (g,h,i) perylene	15.17	276	411886	50.87625	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

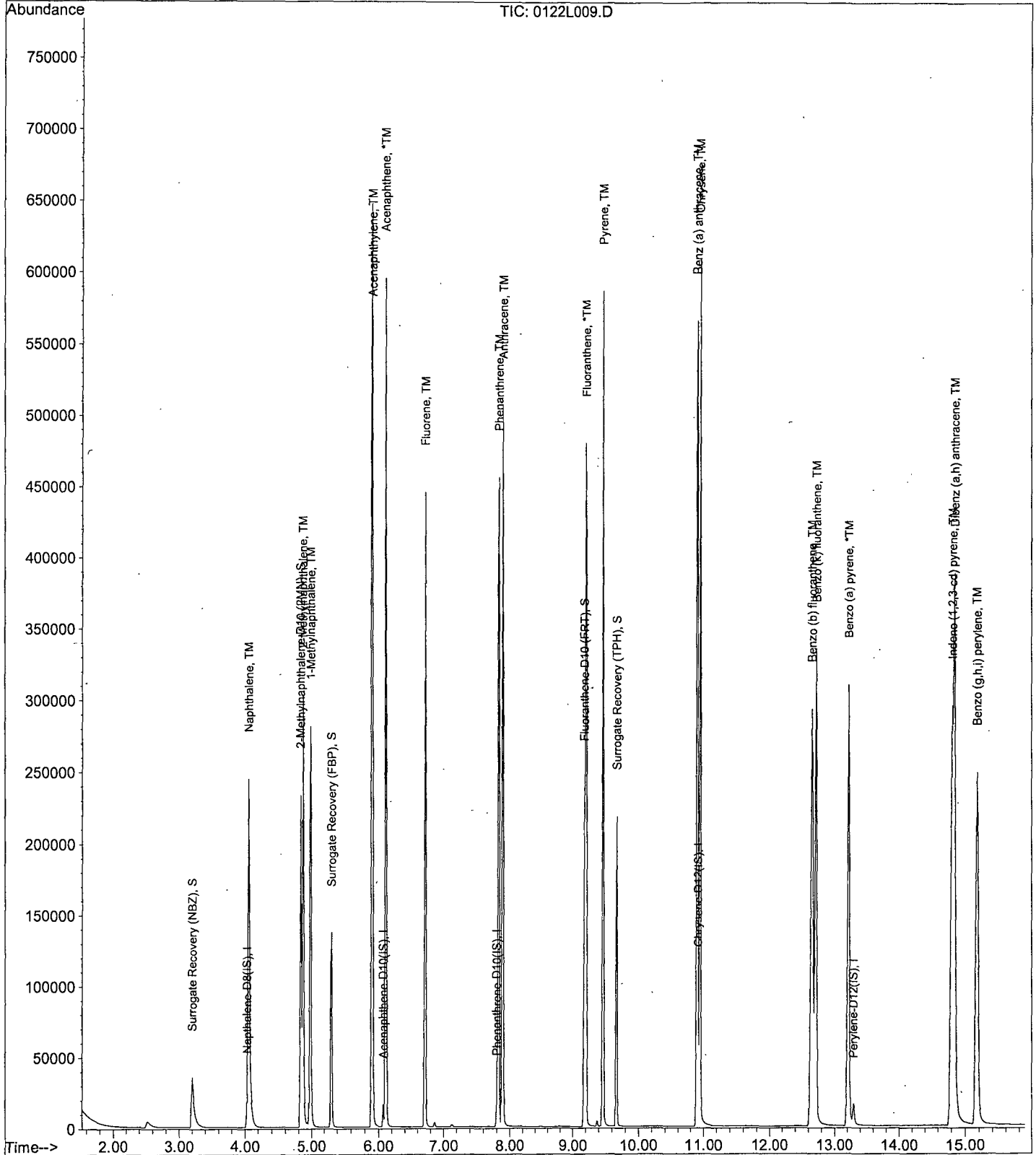
Data File : M:\LINUS\DATA\L190122\0122L009.D  
Acq On : 22 Jan 19 12:15  
Sample : 50 SIM 01/18/19  
Misc :

Vial: 9  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L010.D Vial: 10  
 Acq On : 22 Jan 19 12:37 Operator: MA  
 Sample : 100 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 13:02 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	4.03	136	16509	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7340	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14625	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.92	240	19570	2.50000	ppb	0.00
23) Perylene-D12 (IS)	13.30	264	18015	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
2) Surrogate Recovery (NBZ)	3.20	82	143716	49.35106	ppb	-0.02
Spiked Amount	5.000		Recovery	= 987.020%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	369507	48.84651	ppb	-0.02
Spiked Amount	5.000		Recovery	= 976.940%		
8) Surrogate Recovery (FBP)	5.31	172	245947	47.38619	ppb	-0.01
Spiked Amount	5.000		Recovery	= 947.720%		
15) Fluoranthene-D10 (FRT)	9.20	212	489050	47.77794	ppb	0.00
Spiked Amount	5.000		Recovery	= 955.560%		
19) Surrogate Recovery (TPH)	9.67	244	301836	47.76577	ppb	-0.01
Spiked Amount	5.000		Recovery	= 955.320%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	686154	82.50506	ppb	99
5) 2-Methylnaphthalene	4.88	142	426189	84.86301	ppb	97
6) 1-Methylnaphthalene	4.99	142	400215	78.89615	ppb	96
9) Acenaphthylene	5.92	152	1371750	83.47032	ppb	99
10) Acenaphthene	6.12	154	399394	83.03305	ppb	99
11) Fluorene	6.72	166	486427	86.73013	ppb	99
13) Phenanthrene	7.83	178	662559	80.60560	ppb	99
14) Anthracene	7.91	178	708940	86.78483	ppb	98
16) Fluoranthene	9.23	202	1074355	83.53801	ppb	# 93
18) Pyrene	9.48	202	1055051	87.24305	ppb	94
20) Benz (a) anthracene	10.91	228	987627	91.25364	ppb	99
21) Chrysene	10.97	228	835356	80.61549	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.86	276	924286	86.44058	ppb	# 71
24) Benzo (b) fluoranthene	12.67	252	937424	96.32808	ppb	# 97
25) Benzo (k) fluoranthene	12.74	252	912491	92.99727	ppb	100
26) Benzo (a) pyrene	13.25	252	880967	94.64847	ppb	# 96
27) Dibenz (a,h) anthracene	14.88	278	752245	87.80959	ppb	# 88
28) Benzo (g,h,i) perylene	15.21	276	751231	86.81489	ppb	# 92



Quantitation Report

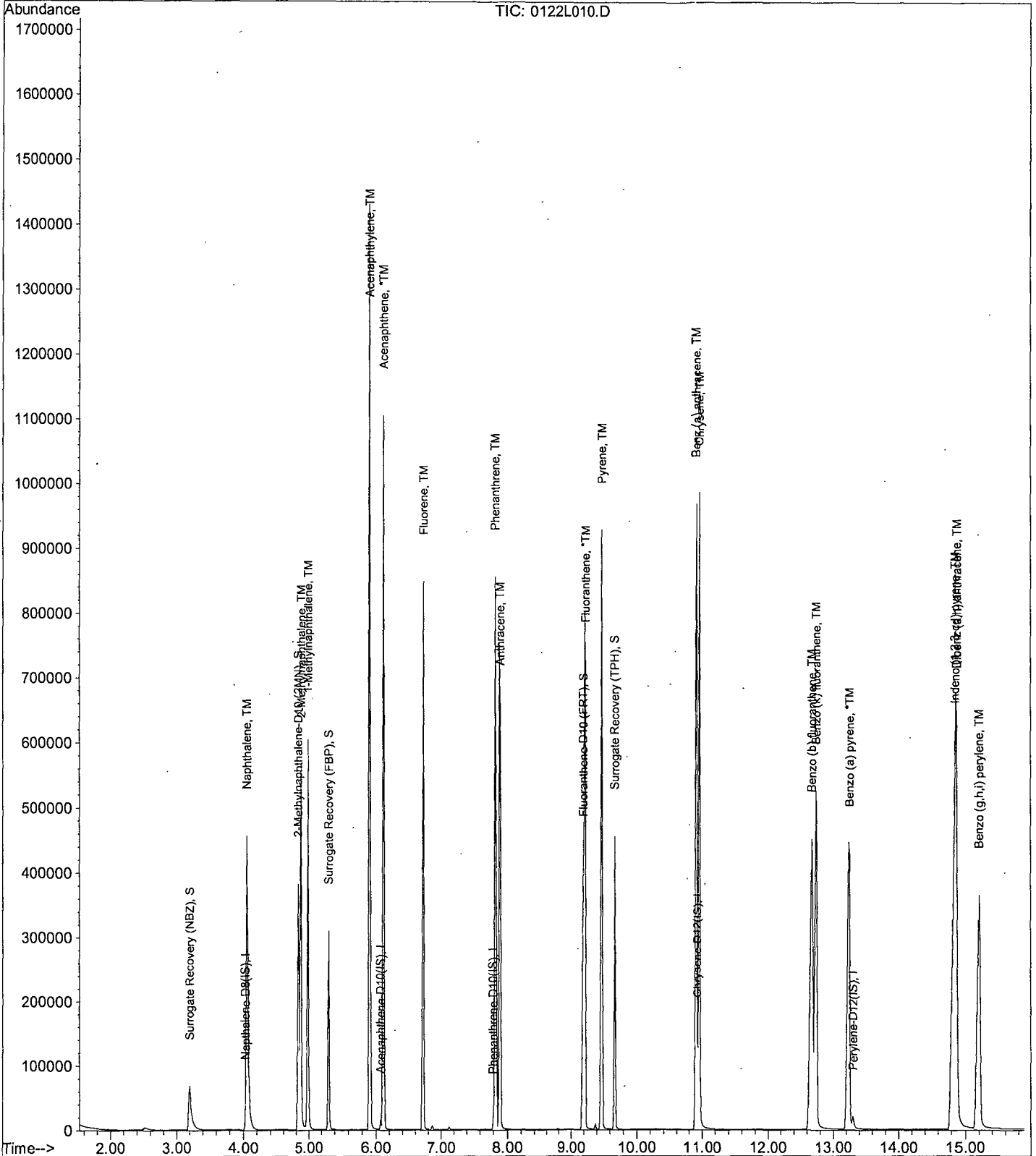
Data File : M:\LINUS\DATA\L190122\0122L010.D  
 Acq On : 22 Jan 19 12:37  
 Sample : 100 SIM 01/18/19  
 Misc :

Vial: 10  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 13:02 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L011.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Naphthalene	1.259	1.319	4.7	TM
2	TM	2-Methylnaphthalene	0.7605	0.8383	10	TM
3	TM	1-Methylnaphthalene	0.7682	0.8611	12	TM
4	TM	Acenaphthylene	5.597	6.034	7.8	TM
5	*TM	Acenaphthene	1.638	1.715	4.7	*TM
6	TM	Fluorene	1.910	2.087	9.2	TM
7	TM	Phenanthrene	1.405	1.525	8.5	TM
8	TM	Anthracene	1.396	1.436	2.8	TM
9	*TM	Fluoranthene	2.198	2.322	5.6	*TM
10	TM	Pyrene	1.545	1.638	6.0	TM
11	TM	Benz (a) anthracene	1.383	1.444	4.5	TM
12	TM	Chrysene	1.324	1.416	6.9	TM
13	TM	Indeno (1,2,3-cd) pyrene	1.366	1.426	4.4	TM
14	TM	Benzo (b) fluoranthene	1.350	1.445	7.0	TM
15	TM	Benzo (k) fluoranthene	1.393	1.606	15	TM
16	*TM	Benzo (a) pyrene	1.292	1.370	6.1	*TM
17	TM	Dibenz (a,h) anthracene	1.189	1.313	10	TM
18	TM	Benzo (g,h,i) perylene	1.201	1.300	8.3	TM
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Average

7.4

Data File : M:\LINUS\DATA\L190122\0122L011.D Vial: 11  
 Acq On : 22 Jan 19 12:59 Operator: MA  
 Sample : SS SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 13:19 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	15442	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	6948	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13744	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19942	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18334	2.50000	ppb	-0.03

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
4) 2-Methylnaphthalene-D10 (2)	0.00	152	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
8) Surrogate Recovery (FBP)	0.00	172	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
15) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
19) Surrogate Recovery (TPH)	0.00	244	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	40738	5.23692	ppb	100
5) 2-Methylnaphthalene	4.87	142	25890	5.51144	ppb	97
6) 1-Methylnaphthalene	4.99	142	26593	5.60463	ppb	94
9) Acenaphthylene	5.90	152	83849	5.39003	ppb	100
10) Acenaphthene	6.11	154	23838	5.23547	ppb	100
11) Fluorene	6.71	166	28998	5.46206	ppb	99
13) Phenanthrene	7.82	178	41914	5.42603	ppb	99
14) Anthracene	7.88	178	39465	5.14078	ppb	99
16) Fluoranthene	9.21	202	63819	5.28043	ppb	100
18) Pyrene	9.46	202	65311	5.29988	ppb	97
20) Benz (a) anthracene	10.88	228	57608	5.22351	ppb	96
21) Chrysene	10.93	228	56462	5.34719	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	56868	5.21917	ppb	# 91
24) Benzo (b) fluoranthene	12.63	252	52976	5.34901	ppb	99
25) Benzo (k) fluoranthene	12.68	252	58877	5.76480	ppb	# 96
26) Benzo (a) pyrene	13.20	252	50232	5.30288	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	48137	5.52127	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	47680	5.41420	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

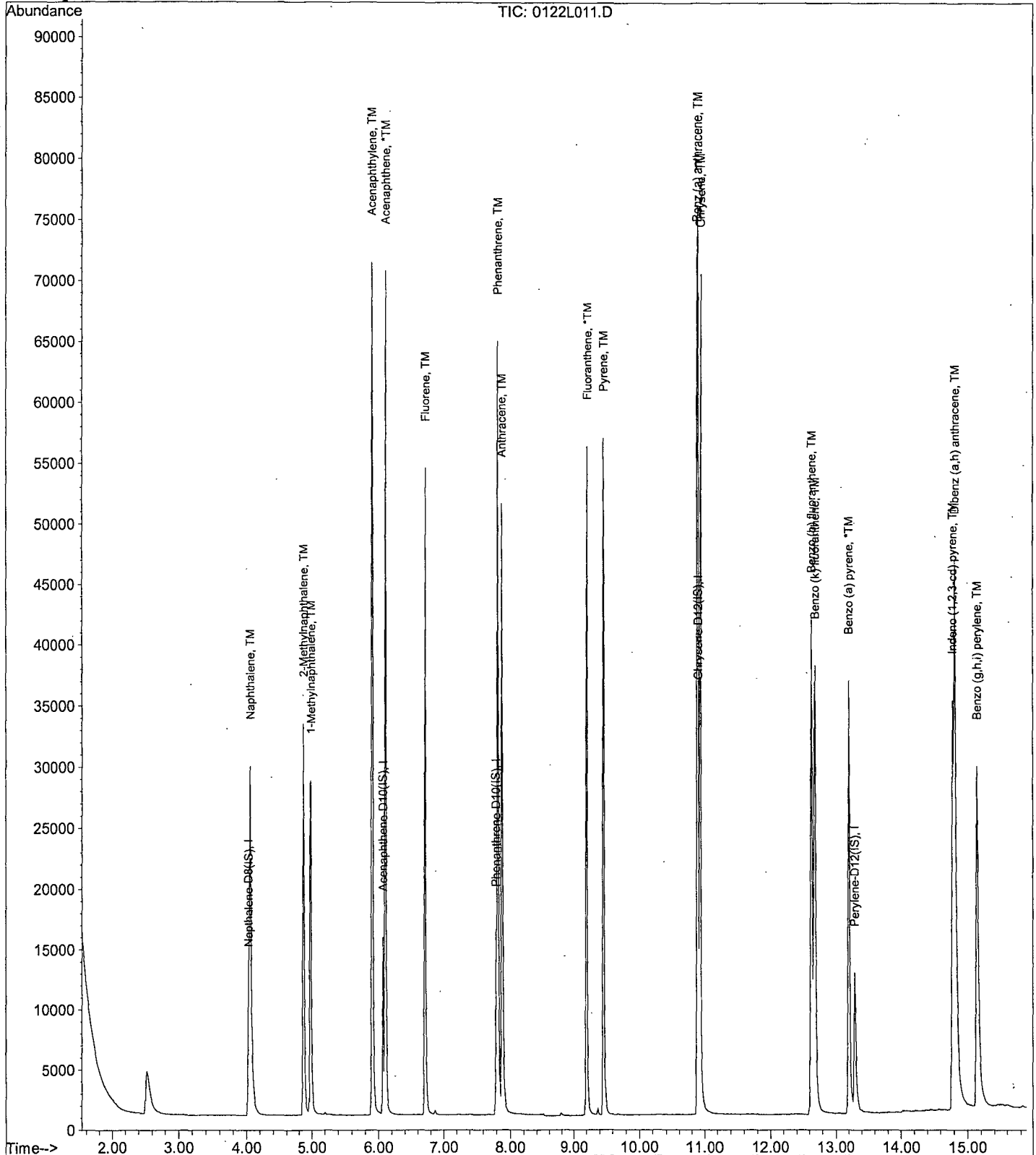
Data File : M:\LINUS\DATA\L190122\0122L011.D  
Acq On : 22 Jan 19 12:59  
Sample : SS SIM 01/18/19  
Misc :

Vial: 11  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 13:19 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L014.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4489	1.8	S
3	TM	Naphthalene	1.259	1.401	11	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.326	16	S
5	TM	2-Methylnaphthalene	0.7605	0.8827	16	TM
6	TM	1-Methylnaphthalene	0.7682	0.8645	13	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.996	13	S
9	TM	Acenaphthylene	5.597	6.556	17	TM
10	*TM	Acenaphthene	1.638	1.868	14	*TM
11	TM	Fluorene	1.910	2.197	15	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.597	14	TM
14	TM	Anthracene	1.396	1.609	15	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.965	12	S
16	*TM	Fluoranthene	2.198	2.486	13	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.800	17	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9243	14	S
20	TM	Benz (a) anthracene	1.383	1.562	13	TM
21	TM	Chrysene	1.324	1.539	16	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.565	15	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.502	11	TM
25	TM	Benzo (k) fluoranthene	1.393	1.635	17	TM
26	*TM	Benzo (a) pyrene	1.292	1.494	16	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.313	10	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.323	10	TM
29						
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39						
40						

Average

13.5

Data File : M:\LINUS\DATA\L190122\0122L014.D Vial: 14  
 Acq On : 25 Jan 19 9:30 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 9:52 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	17325	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7724	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15332	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	21231	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	20918	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	7778	2.54511	ppb	0.00
Spiked Amount	5.000		Recovery	=	50.900%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	22973	2.89385	ppb	-0.01
Spiked Amount	5.000		Recovery	=	57.880%	
8) Surrogate Recovery (FBP)	5.31	172	15419	2.82306	ppb	-0.01
Spiked Amount	5.000		Recovery	=	56.460%	
15) Fluoranthene-D10 (FRT)	9.17	212	30126	2.80745	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.140%	
19) Surrogate Recovery (TPH)	9.66	244	19623	2.86241	ppb	-0.02
Spiked Amount	5.000		Recovery	=	57.240%	
Target Compounds						
3) Naphthalene	4.07	128	48561	5.56409	ppb	100
5) 2-Methylnaphthalene	4.87	142	30584	5.80307	ppb	99
6) 1-Methylnaphthalene	4.99	142	29955	5.62703	ppb	96
9) Acenaphthylene	5.90	152	101272	5.85599	ppb	100
10) Acenaphthene	6.11	154	28851	5.69986	ppb	99
11) Fluorene	6.71	166	33941	5.75083	ppb	100
13) Phenanthrene	7.82	178	48983	5.68438	ppb	99
14) Anthracene	7.88	178	49334	5.76073	ppb	99
16) Fluoranthene	9.20	202	76229	5.65397	ppb	# 91
18) Pyrene	9.46	202	76443	5.82660	ppb	94
20) Benz (a) anthracene	10.88	228	66346	5.65057	ppb	98
21) Chrysene	10.93	228	65358	5.81388	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.78	276	66433	5.72685	ppb	96
24) Benzo (b) fluoranthene	12.63	252	62858	5.56277	ppb	99
25) Benzo (k) fluoranthene	12.67	252	68381	5.86828	ppb	99
26) Benzo (a) pyrene	13.20	252	62487	5.78173	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	54924	5.52152	ppb	96
28) Benzo (g,h,i) perylene	15.14	276	55370	5.51073	ppb	96

Quantitation Report

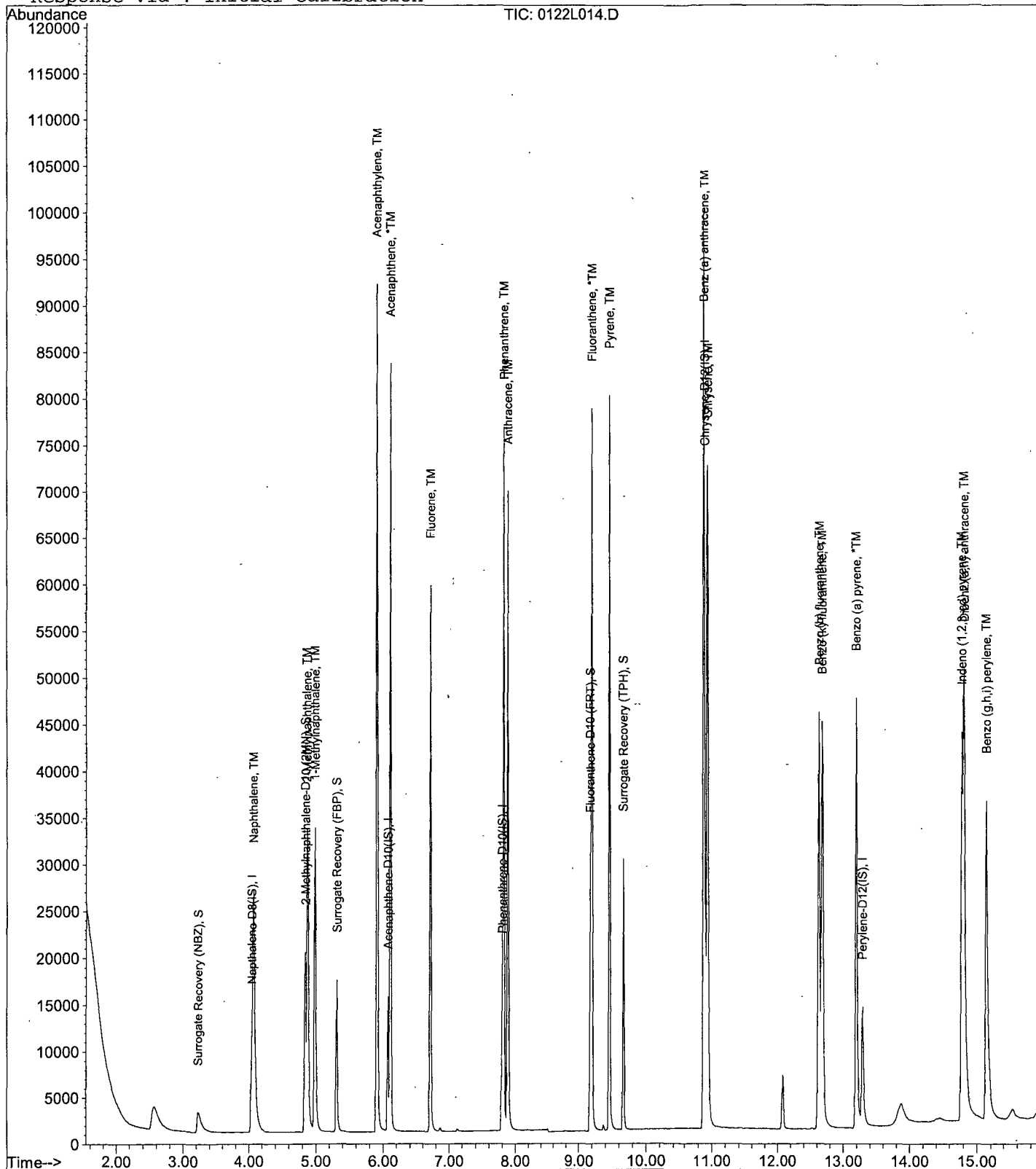
Data File : M:\LINUS\DATA\L190122\0122L014.D  
Acq On : 25 Jan 19 9:30  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 14  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 25 9:52 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. \_\_\_\_\_

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/25/19

Matrix: \_\_\_\_\_

Instrument: Linus

Initial Cal. Date: 01/22/19

Data File: 0122L026.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4769	8.1	S
3	TM	Naphthalene	1.259	1.403	11	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.201	4.8	S
5	TM	2-Methylnaphthalene	0.7605	0.7971	4.8	TM
6	TM	1-Methylnaphthalene	0.7682	0.7907	2.9	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.939	9.7	S
9	TM	Acenaphthylene	5.597	6.405	14	TM
10	*TM	Acenaphthene	1.638	1.817	11	*TM
11	TM	Fluorene	1.910	2.198	15	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.634	16	TM
14	TM	Anthracene	1.396	1.670	20	TM
15	S	Fluoranthene-D10 (FRT)	1.750	2.200	26	S
16	*TM	Fluoranthene	2.198	2.772	26	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.762	14	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9233	14	S
20	TM	Benz (a) anthracene	1.383	1.577	14	TM
21	TM	Chrysene	1.324	1.461	10	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.581	16	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.609	19	TM
25	TM	Benzo (k) fluoranthene	1.393	1.715	23	TM
26	*TM	Benzo (a) pyrene	1.292	1.566	21	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.409	19	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.400	17	TM
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

14.6



Data File : M:\LINUS\DATA\L190122\0122L026.D  
 Acq On : 25 Jan 19 15:48  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 26  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 28 7:54 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	17873	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7449	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14341	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	22597	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	20928	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.24	82	8523	2.70338	ppb	0.01
Spiked Amount	5.000		Recovery	=	54.060%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	21457	2.62001	ppb	-0.01
Spiked Amount	5.000		Recovery	=	52.400%	
8) Surrogate Recovery (FBP)	5.31	172	14444	2.74218	ppb	-0.01
Spiked Amount	5.000		Recovery	=	54.840%	
15) Fluoranthene-D10 (FRT)	9.17	212	31543	3.14263	ppb	-0.02
Spiked Amount	5.000		Recovery	=	62.860%	
19) Surrogate Recovery (TPH)	9.66	244	20863	2.85932	ppb	-0.02
Spiked Amount	5.000		Recovery	=	57.180%	
Target Compounds						
3) Naphthalene	4.07	128	50140	5.56886	ppb	100
5) 2-Methylnaphthalene	4.88	142	28494	5.24074	ppb	99
6) 1-Methylnaphthalene	4.99	142	28264	5.14659	ppb	96
9) Acenaphthylene	5.92	152	95423	5.72148	ppb	97
10) Acenaphthene	6.11	154	27063	5.54400	ppb	99
11) Fluorene	6.71	166	32750	5.75389	ppb	99
13) Phenanthrene	7.82	178	46861	5.81391	ppb	99
14) Anthracene	7.88	178	47899	5.97967	ppb	100
16) Fluoranthene	9.20	202	79509	6.30477	ppb	# 86
18) Pyrene	9.46	202	79611	5.70126	ppb	99
20) Benz (a) anthracene	10.88	228	71266	5.70269	ppb	96
21) Chrysene	10.93	228	66019	5.51767	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.78	276	71459	5.78773	ppb	# 86
24) Benzo (b) fluoranthene	12.63	252	67350	5.95746	ppb	# 98
25) Benzo (k) fluoranthene	12.68	252	71803	6.15900	ppb	98
26) Benzo (a) pyrene	13.20	252	65564	6.06354	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	58981	5.92654	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	58619	5.83130	ppb	# 95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

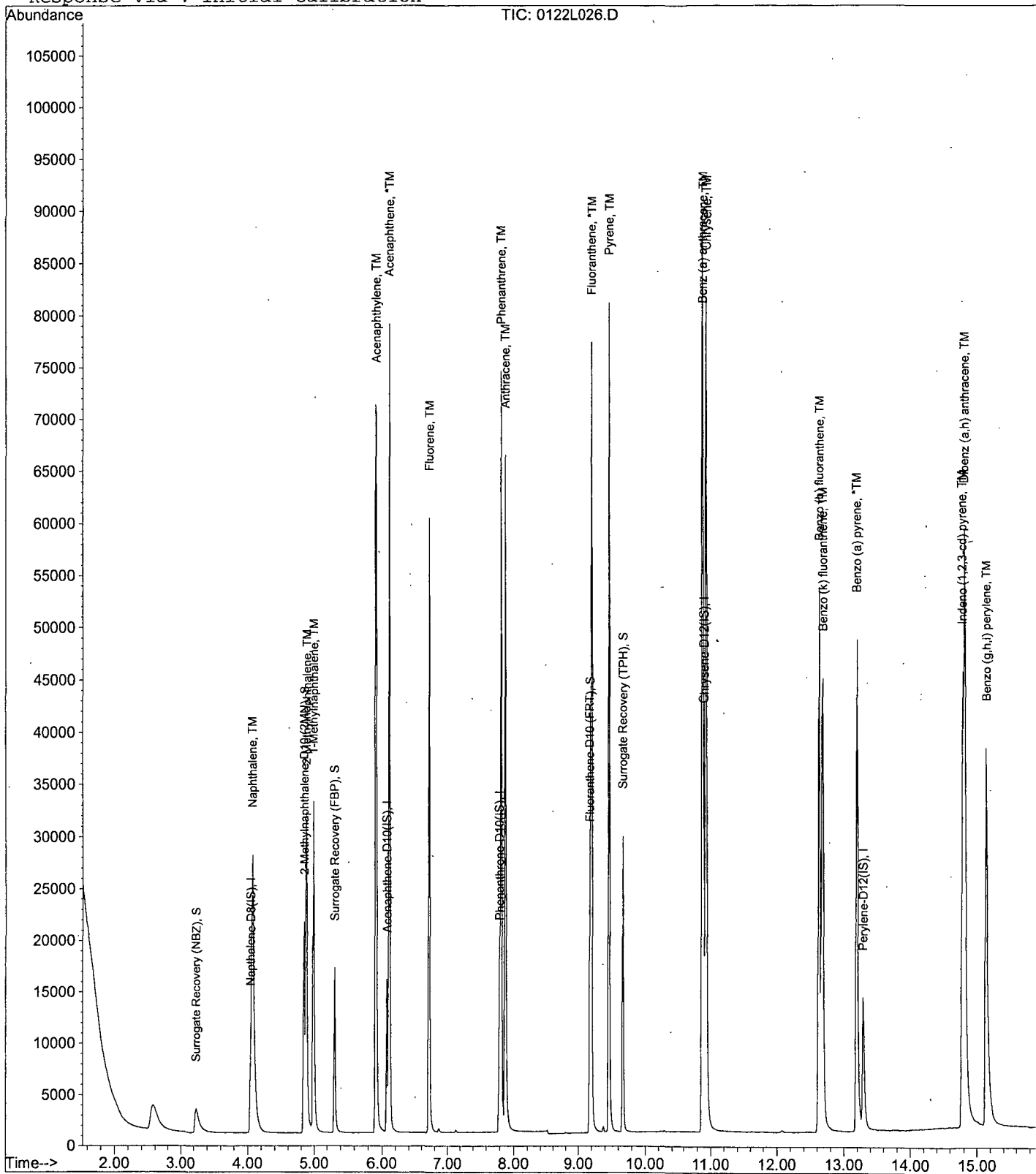
Data File : M:\LINUS\DATA\L190122\0122L026.D  
Acq On : 25 Jan 19 15:48  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 26  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 28 7:54 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\LINUS\DATA\L190122\0122L023.D Vial: 23  
 Acq On : 25 Jan 19 14:41 Operator: MA  
 Sample : AZ85418W12 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 28 8:59 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	14042	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	6746	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15367	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	22336	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	20007	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	291808	147.2619	ppb	0.00
Spiked Amount	6.250					
					Recovery = 2356.192%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	41639	8.0893	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 129.424%	
8) Surrogate Recovery (FBP)	5.31	172	504444	132.1852	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 2114.960%	
15) Fluoranthene-D10 (FRT)	9.17	212	56434	6.5589	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 104.944%	
19) Surrogate Recovery (TPH)	9.67	244	619094	107.2995	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1716.800%	

Target Compounds Qvalue

Quantitation Report

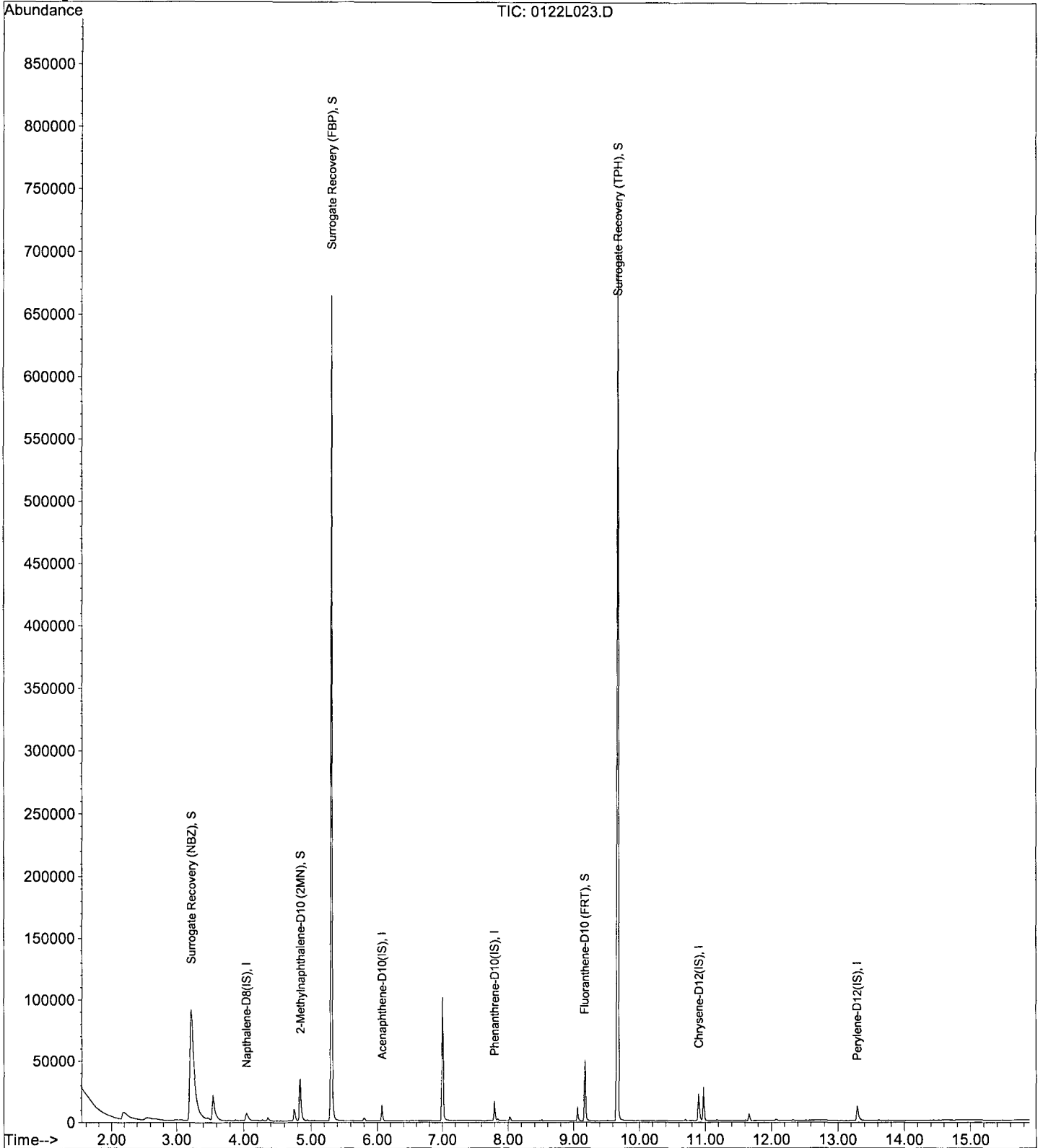
Data File : M:\LINUS\DATA\L190122\0122L023.D  
Acq On : 25 Jan 19 14:41  
Sample : AZ85418W12 1/800  
Misc :

Vial: 23  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 28 8:59 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L024.D Vial: 24  
 Acq On : 25 Jan 19 15:03 Operator: MA  
 Sample : AZ85420W14 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 28 9:01 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	14932	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	6714	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15775	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	21153	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	8362	2.5000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	288115	136.7320	ppb	0.00
Spiked Amount	6.250					
					Recovery = 2187.712%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	40899	7.4720	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 119.552%	
8) Surrogate Recovery (FBP)	5.31	172	498135	131.1542	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 2098.464%	
15) Fluoranthene-D10 (FRT)	9.17	212	54809	6.2053	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 99.280%	
19) Surrogate Recovery (TPH)	9.67	244	643933	117.8461	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1885.536%	

Target Compounds Qvalue

Quantitation Report

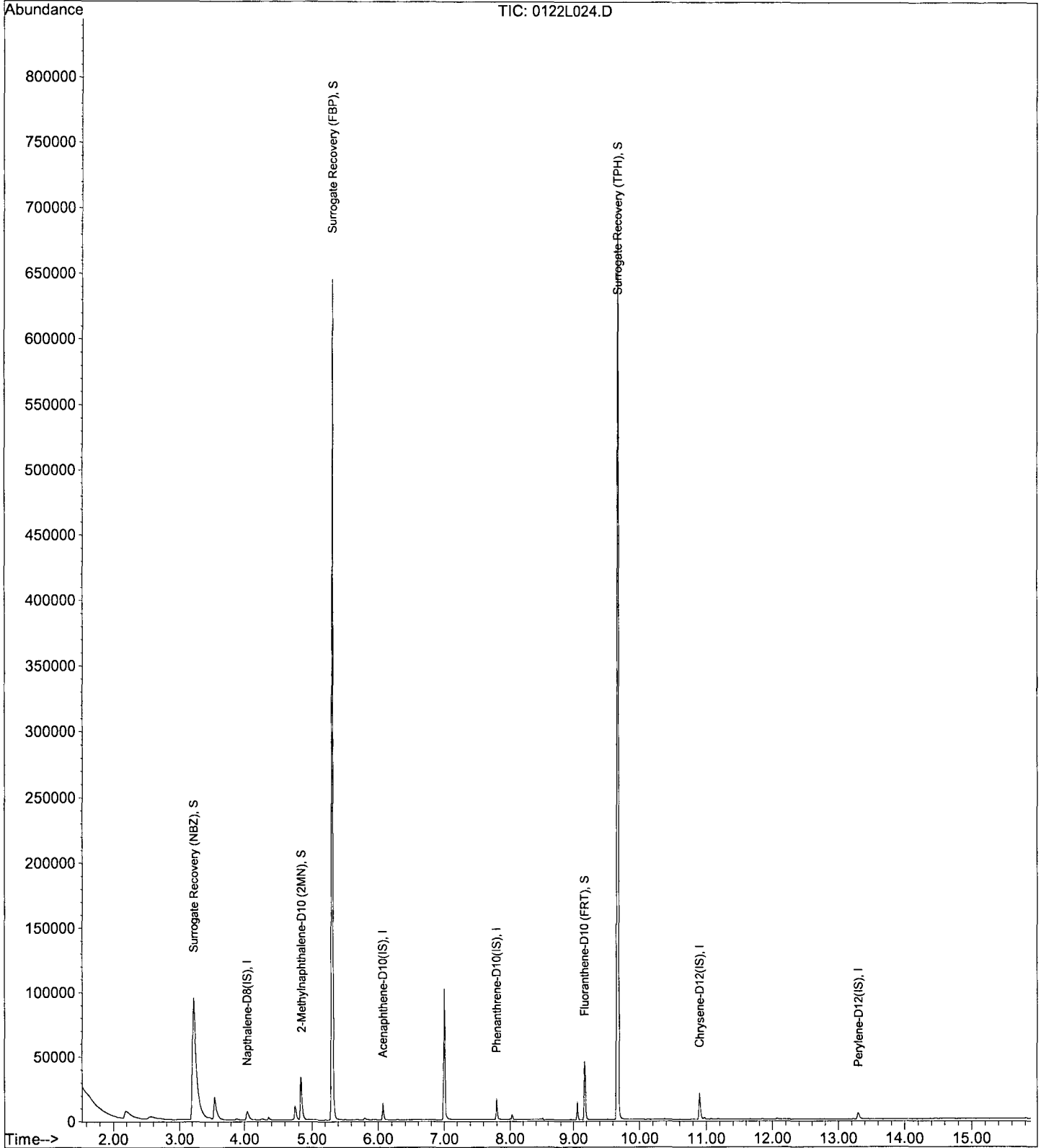
Data File : M:\LINUS\DATA\L190122\0122L024.D  
Acq On : 25 Jan 19 15:03  
Sample : AZ85420W14 1/800  
Misc :

Vial: 24  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 28 9:01 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L020.D Vial: 20  
 Acq On : 25 Jan 19 13:36 Operator: MA  
 Sample : 190123A Blk 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 25 13:53 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	14325	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7100	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13482	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19345	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18118	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	285053	141.0110	ppb	0.00
Spiked Amount	6.250					
					Recovery = 2256.176%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	40810	7.7717	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 124.352%	
8) Surrogate Recovery (FBP)	5.31	172	489792	121.9466	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1951.152%	
15) Fluoranthene-D10 (FRT)	9.17	212	56661	7.5060	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 120.096%	
19) Surrogate Recovery (TPH)	9.67	244	662595	132.5947	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 2121.520%	

Target Compounds Qvalue



Quantitation Report

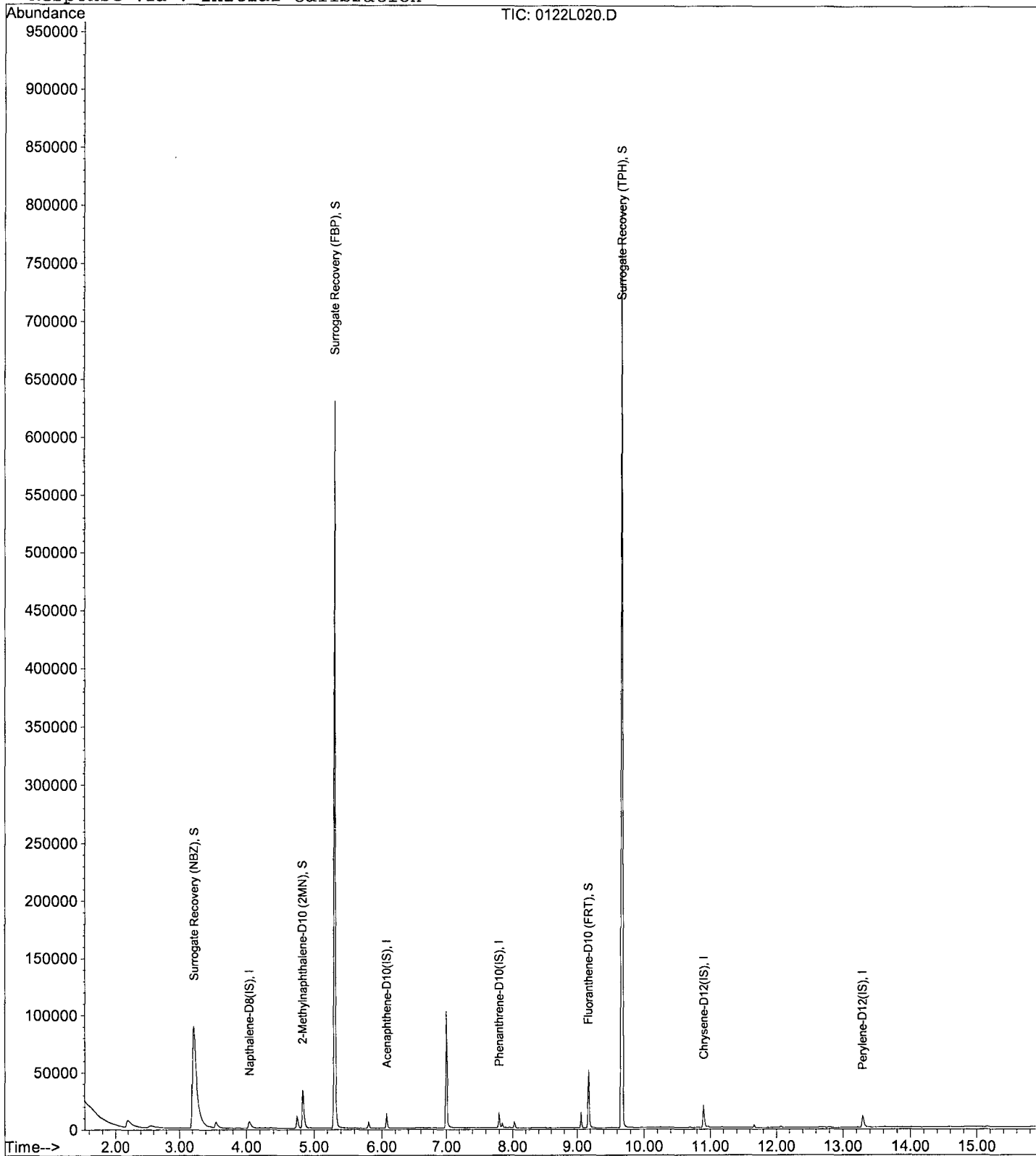
Data File : M:\LINUS\DATA\L190122\0122L020.D  
Acq On : 25 Jan 19 13:36  
Sample : 190123A Blk 1/800  
Misc :

Vial: 20  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 25 13:53 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L021.D Vial: 21  
 Acq On : 25 Jan 19 13:57 Operator: MA  
 Sample : 190123A LCS- 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 25 14:13 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	12737	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	6659	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13499	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	20139	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	19287	2.5000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.27	82	352	0.1958	ppb	0.05
Spiked Amount 6.250			Recovery =	3.136%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	40246	8.6198	ppb	-0.01
Spiked Amount 6.250			Recovery =	137.920%		
8) Surrogate Recovery (FBP)	5.29	172	35	0.0093	ppb	-0.04
Spiked Amount 6.250			Recovery =	0.144%		
15) Fluoranthene-D10 (FRT)	9.17	212	56125	7.4257	ppb	-0.02
Spiked Amount 6.250			Recovery =	118.816%		
19) Surrogate Recovery (TPH)	9.67	244	198	0.0381	ppb	-0.01
Spiked Amount 6.250			Recovery =	0.608%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.07	128	34856	6.7905	ppb	100
5) 2-Methylnaphthalene	4.88	142	23650	7.6298	ppb	97
6) 1-Methylnaphthalene	4.99	142	23159	7.3968	ppb	96
9) Acenaphthylene	5.90	152	74560	6.2512	ppb	100
10) Acenaphthene	6.11	154	21294	6.0996	ppb	98
11) Fluorene	6.71	166	26758	6.5736	ppb	100
13) Phenanthrene	7.82	178	38788	6.3906	ppb	99
14) Anthracene	7.88	178	35821	5.9385	ppb	99
16) Fluoranthene	9.20	202	61093	6.4333	ppb	# 90
18) Pyrene	9.46	202	61452	6.1724	ppb	94
20) Benz (a) anthracene	10.88	228	52707	5.9155	ppb	98
21) Chrysene	10.92	228	55012	6.4486	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.78	276	49081	5.5755	ppb	# 91
24) Benzo (b) fluoranthene	12.63	252	52004	6.2393	ppb	99
25) Benzo (k) fluoranthene	12.67	252	56381	6.5595	ppb	99
26) Benzo (a) pyrene	13.20	252	43036	5.3984	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	40533	5.5242	ppb	97
28) Benzo (g,h,i) perylene	15.14	276	40325	5.4409	ppb	# 94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

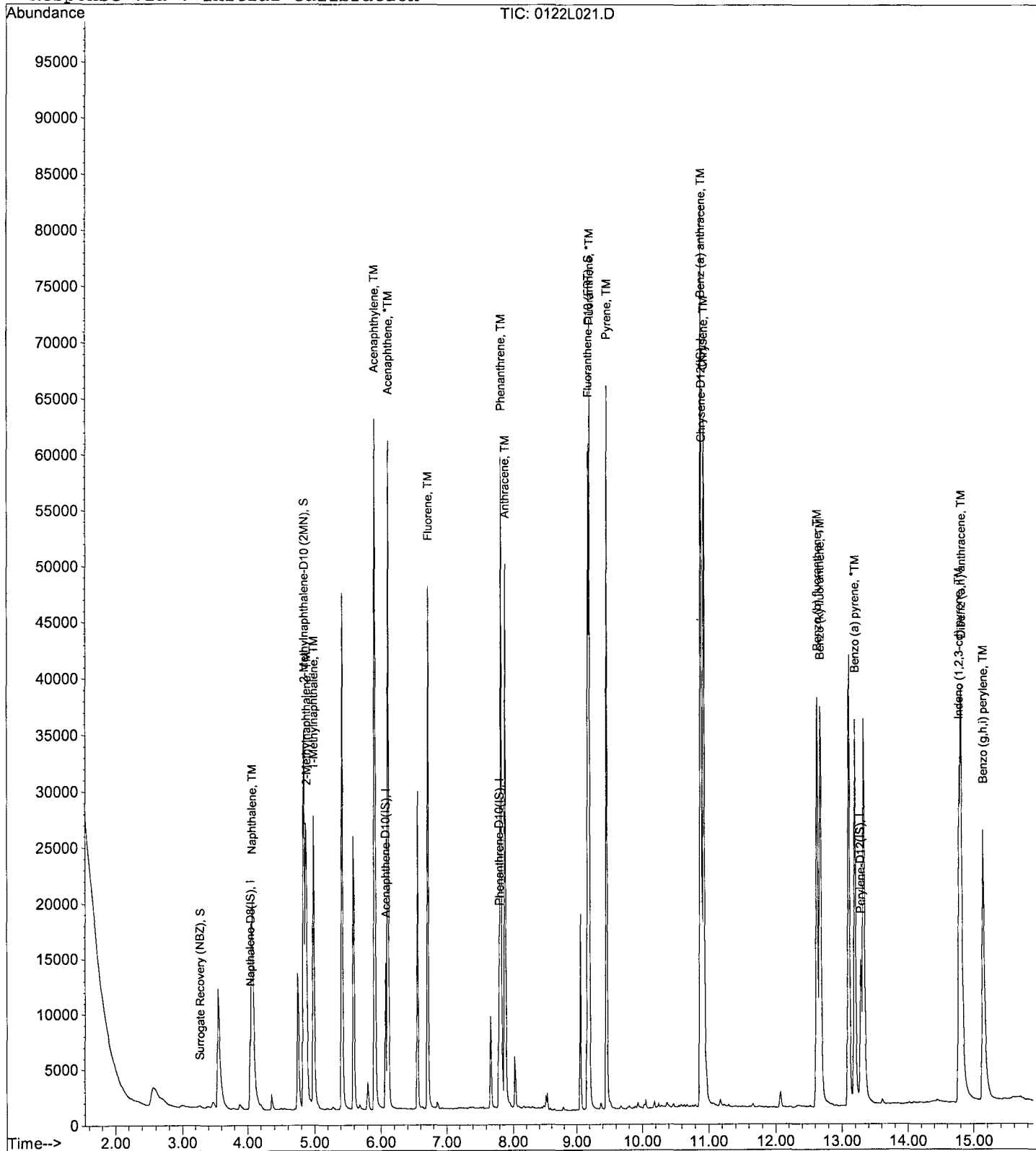
Data File : M:\LINUS\DATA\L190122\0122L021.D  
 Acq On : 25 Jan 19 13:57  
 Sample : 190123A LCS- 1/800  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.25

Quant Time: Jan 25 14:13 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L022.D Vial: 22  
 Acq On : 25 Jan 19 14:19 Operator: MA  
 Sample : 190123A LCSD- 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 28 7:59 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	12397	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	5708	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	11280	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	16343	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	16429	2.5000	ppb	-0.03
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	3.27	82	351	0.2006	ppb	0.05
Spiked Amount 6.250			Recovery =	3.216%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	37845	8.3279	ppb	-0.01
Spiked Amount 6.250			Recovery =	133.248%		
8) Surrogate Recovery (FBP)	5.29	172	30	0.0093	ppb	-0.04
Spiked Amount 6.250			Recovery =	0.144%		
15) Fluoranthene-D10 (FRT)	9.17	212	53159	8.4168	ppb	-0.02
Spiked Amount 6.250			Recovery =	134.672%		
19) Surrogate Recovery (TPH)	9.67	244	180	0.0426	ppb	-0.01
Spiked Amount 6.250			Recovery =	0.688%		
<b>Target Compounds</b>						
3) Naphthalene	4.07	128	35239	7.0534	ppb	100
5) 2-Methylnaphthalene	4.88	142	22679	7.5172	ppb	97
6) 1-Methylnaphthalene	4.99	142	21827	7.1626	ppb	97
9) Acenaphthylene	5.90	152	70125	6.8589	ppb	100
10) Acenaphthene	6.11	154	20955	7.0026	ppb	99
11) Fluorene	6.71	166	25617	7.3418	ppb	98
13) Phenanthrene	7.82	178	36748	7.2455	ppb	99
14) Anthracene	7.88	178	34042	6.7538	ppb	100
16) Fluoranthene	9.20	202	58956	7.4295	ppb	# 90
18) Pyrene	9.46	202	60064	7.4343	ppb	92
20) Benz (a) anthracene	10.88	228	48695	6.7346	ppb	97
21) Chrysene	10.93	228	52522	7.5868	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.78	276	54714	7.6591	ppb	# 87
24) Benzo (b) fluoranthene	12.63	252	47984	6.7584	ppb	98
25) Benzo (k) fluoranthene	12.68	252	53252	7.2733	ppb	96
26) Benzo (a) pyrene	13.20	252	42997	6.3318	ppb	97
27) Dibenz (a,h) anthracene	14.82	278	44944	7.1910	ppb	95
28) Benzo (g,h,i) perylene	15.14	276	43392	6.8733	ppb	# 92

(#) = qualifier out of range (m) = manual integration  
 0122L022.D L0122.M Wed Jan 30 13:29:55 2019

Quantitation Report

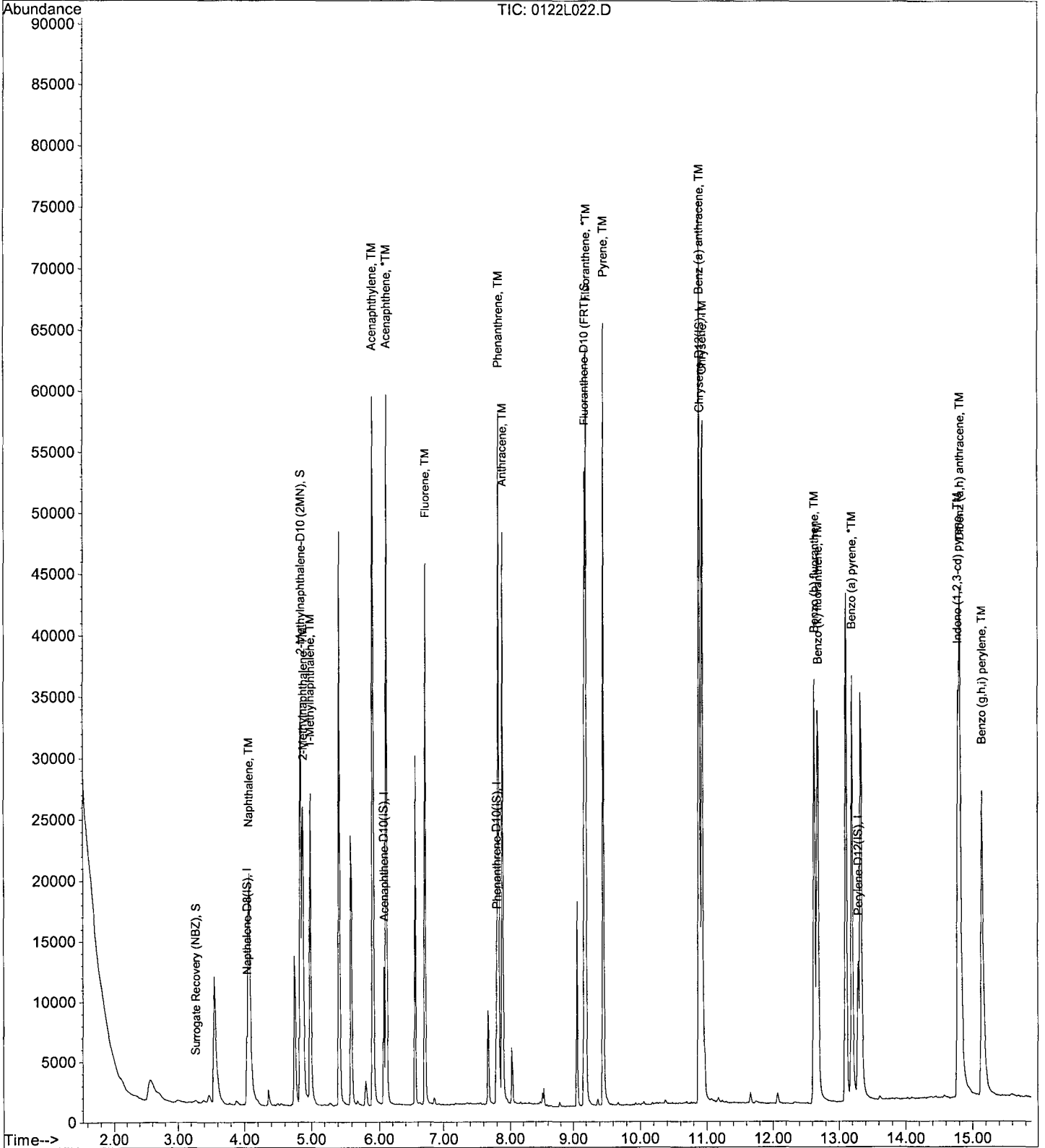
Data File : M:\LINUS\DATA\L190122\0122L022.D  
Acq On : 25 Jan 19 14:19  
Sample : 190123A LCSD- 1/800  
Misc :

Vial: 22  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 28 7:59 2019

Quant Results File: L0122.RES

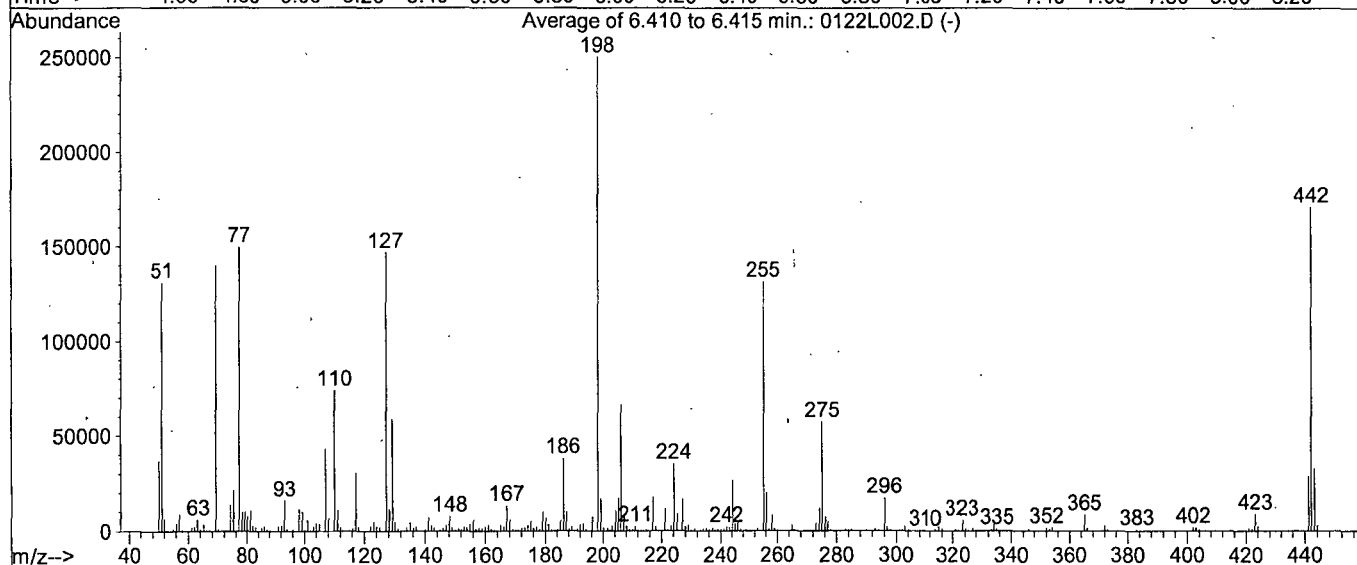
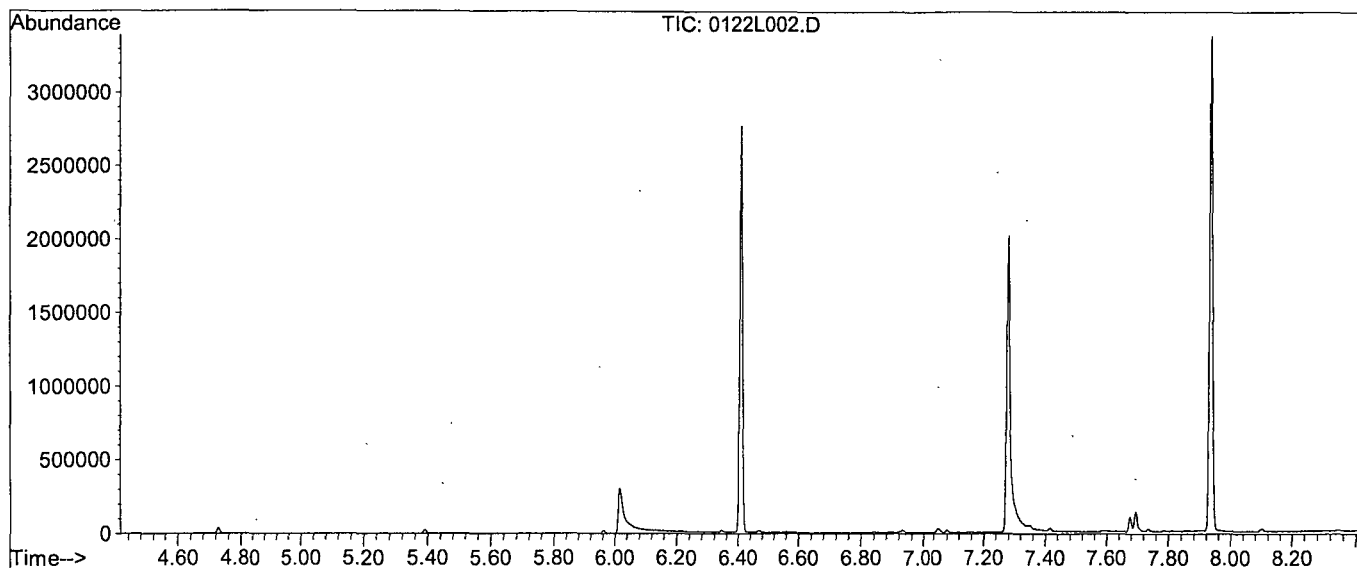
Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L002.D  
 Acq On : 22 Jan 19 9:21  
 Sample : SV Tune 10/11/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0115.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1536, 1537, 1538; Background Corrected with Scan 1526

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	52.3	131012	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.8	1098	PASS
127	198	10	80	58.6	146811	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	250517	PASS
199	198	5	9	6.7	16904	PASS
275	198	10	60	22.8	57021	PASS
365	198	1	100	3.3	8323	PASS
441	442	0.01	24	16.7	28459	PASS
442	198	50	150	68.2	170773	PASS
443	442	15	24	19.2	32747	PASS

Data File Name: 0122L002.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 22 Jan 2019 09:21  
Method File: DFTPP2.M  
Sample Name: SV Tune 10/11/18  
Vial Number: 2  
Instrument Name: Linus

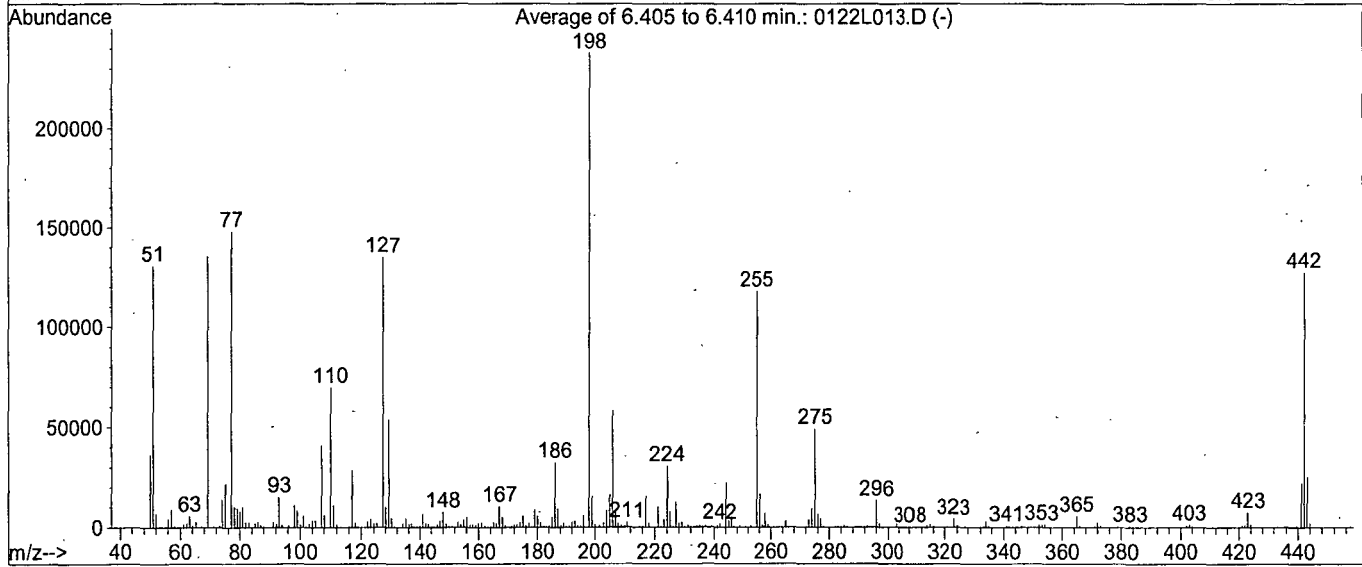
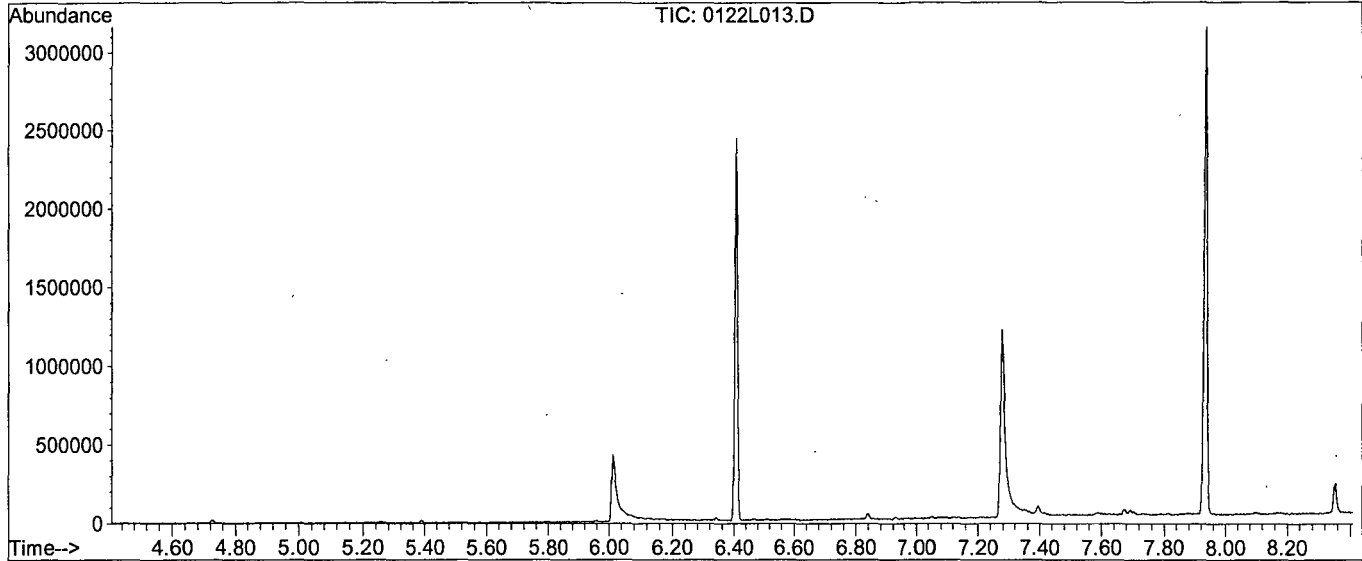
#	Name	Ret Time	Target Response
1)	DDT	7.95	23063100
2)	DDD	7.71	1029070
3)	DDE	7.88	0

Breakdown 4.27

Data File : M:\LINUS\DATA\L190122\0122L013.D  
 Acq On : 25 Jan 19 9:14  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 13  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1526

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	54.9	130629	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	339	PASS
127	198	10	80	56.8	135037	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	237931	PASS
199	198	5	9	6.5	15431	PASS
275	198	10	60	20.6	49115	PASS
365	198	1	100	2.4	5613	PASS
441	442	0.01	24	17.1	21877	PASS
442	198	50	150	53.6	127643	PASS
443	442	15	24	19.9	25341	PASS



Data File Name: 0122L013.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 25 Jan 2019 09:14  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 13  
Instrument Name: Linus

#	Name	Ret Time	Target Response
1)	DDT	7.95	21613900
2)	DDD	7.71	186780
3)	DDE	7.88	0

Breakdown 0.86

Name of Final Standard SIM Curve Prep'd By (Initials) GA  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	200uL	MC 56258 190 uL	5.0 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	100 uL	MC 56258 90 uL	10 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200	CL13117-40078	12/28/19	25uL	100uL	MC 56258 50 uL	50 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	25 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	50 uL	100uL	na	100 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	50 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL

Name of Final Standard 8270 PAH SIM Second Source Prep'd By (Initials) GA  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	CL13121 - 40082	12/28/19	5 uL	200uL	MC 56258 195uL	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL	*	*	2.5ug/mL

Name of  
Final

Standard 8270 SIM PAH Internal Standard

Prep'd By (Initials) GA

Prep Date 11/06/18

Exp Date 11/06/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	A0130603-38560	11/06/19	350 uL	5,600 uL	MC-56258 5,250 uL	125 ug/mL

Name of  
Final

Standard PAH SIM Spike (Ampules)

Prep'd By (Initials) OA

Prep Date 12/17/18

Exp Date 12/17/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01	200 ug/mL	353450-39730	12/17/19	1 mL	1 mL	NA	200ug/mL

Name of  
Final  
Standard

**SIM Surrogate**

Prep'd By (Initials)

**GA**

Prep Date **01/24/19**

Exp Date **06/07/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc. (range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0131716 - 38554 A0137718 - 39318	06/07/19 01/24/20	1250 uL	25 mL	Acetone #1017171	100 ug/mL

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	190123A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 11-20-18 exp 10-20-19	Surrogate ID 1	8270 Surrogate 12-6-18 exp 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 exp 12-17-19	Surrogate ID 2	SIM Surrogate 12-14-19 exp 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 1-23-20	Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: NO					
Spiked ID 7		Ext. Start Time: 01/23/19 17:50, 01/24/19 15:10					
Spiked ID 8		Ext. End Time: 01/24/19 13:00, 01/25/19 9:10, 01/25/19 11:35					
GC Requires Extract By:				01/28/19 0:00			
pH1	2	01/23/19 1:05:00 PM	Water Bath Temp Criteria		78,78 °C		
pH2	2	01/23/19 3:35:00 PM					
pH3	14	01/24/19 3:00:00 PM					

Spiked By: DL

Date 01/23/19

Witnessed By: CFM

Date 01/23/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190123A Btk			1.0.050	1,2	800	1	2/1	01/23/19 13:00	
					equip	E-HP51 E-WB6				
2	190123A LCS-1	0.250	1	1	1	800	1	2/1	01/23/19 13:00	
					equip	E-HP50 E-WB6				
3	190123A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/23/19 13:00	
					equip	E-HP49 E-WB6				
4	190123A LCS-3	0.250	3	1	1	800	1	2/1	01/23/19 15:30	
					equip	E-HP48 E-WB6				
5	190123A LCSD-1	0.250	1	1	1	800	1	2/1	01/23/19 13:00	
					equip	E-HP47 E-WB6				
6	190123A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/23/19 13:00	
					equip	E-HP25 E-WB6				
7	190123A LCSD-3	0.250	3	1	1	800	1	2/1	01/23/19 15:30	
					equip	E-HP26 E-WB6				
8	AZ85308 AZ85308W23			1.0.050	1,2	800	1	2/1	01/23/19 13:00	87899
					equip	E-HP27 E-WB6				
9	AZ85418 AZ85418W12			1.0.050	1,2	800	1	2/1	01/23/19 13:00	87918
					equip	E-HP28 E-WB6				
10	AZ85420 AZ85420W14			1.0.050	1,2	800	1	2/1	01/23/19 13:00	87918
					equip	E-HP29 E-WB6				
11	AZ85493 AZ85493W31			1.0.050	1,2	800	1	2/1	01/23/19 15:30	87929
					equip	E-HP30 E-WB7				
12	AZ85517 AZ85517W05			1.0.050	1,2	800	1	2/1	01/23/19 17:30	87933 pH2:1-23-19 17:35
					equip	E-HP6 E-WB7				
13	AZ85518 AZ85518W05			1.0.050	1,2	800	1	2/1	01/23/19 17:30	87933 pH2:1-23-19 17:35
					equip	E-HP7 E-WB7				

*Kay 1/28/19*

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	DA
Date	01/26/19
Time	11:41
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL, KY
Sample Preparation	DL, KY
Extraction	DL, KY
Concentration	DL
Modified	01/28/19 1:38:32 PM

Reviewed By: *Kay* Date *1/28/19*  
 Page 196 of 674  
 Ext ID 61580

## Injection Log

Directory: M:\LINUS\DATA\190122\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	0122L002.D	1	SV Tune	10/11/18	22 Jan 19 9:21
3	0122L003.D	1	0.1 SIM	01/18/19	22 Jan 19 9:37
4	0122L004.D	1	0.2 SIM	01/18/19	22 Jan 19 9:59
5	0122L005.D	1	0.5 SIM	01/18/19	22 Jan 19 10:21
6	0122L006.D	1	1 SIM	01/18/19	22 Jan 19 10:43
7	0122L007.D	1	5 SIM	01/18/19	22 Jan 19 11:30
8	0122L008.D	1	10 SIM	01/18/19	22 Jan 19 11:53
9	0122L009.D	1	50 SIM	01/18/19	22 Jan 19 12:15
10	0122L010.D	1	100 SIM	01/18/19	22 Jan 19 12:37
11	0122L011.D	1	SS SIM	01/18/19	22 Jan 19 12:59
13	0122L013.D	1	SV TUNE	11/10/18	25 Jan 19 9:14
14	0122L014.D	1	5 SIM	01/18/19	25 Jan 19 9:30
20	0122L020.D	1.25	190123A Blk	1/800	25 Jan 19 13:36
21	0122L021.D	1.25	190123A LCS-	1/800	25 Jan 19 13:57
22	0122L022.D	1.25	190123A LCSD-	1/800	25 Jan 19 14:19
23	0122L023.D	1.25	AZ85418W12	1/800	25 Jan 19 14:41
24	0122L024.D	1.25	AZ85420W14	1/800	25 Jan 19 15:03
26	0122L026.D	1	5 SIM	01/18/19	25 Jan 19 15:48

**ORGANICS**  
**Calibration Data**

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No:

Case No:

Initial Cal. Date: 01/25/19

Matrix:

Instrument: Yoda

Initials:

0124Y016.D

0124Y017.D

0124Y018.D

0124Y033.D

0124Y020.D

0124Y015.D

0124Y021.D

0124Y022.D

0124Y023.D

	Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type	r^2	q	MRF
1	I 1,4-dichlorobenzene-D4(IS)	ISTD														
2	1,4-Dioxane		0.2010	0.2484	0.1994	0.2178	0.2503	0.2439	0.1987	0.2300	0.22	10				
3	TM n-Nitrosodimethylamine		0.3036	0.3464	0.3472	0.3686	0.3760	0.3802	0.3692	0.4098	0.36	8.6	TM			
4	TM Pyridine		0.6226	0.9649	0.9041	0.8601	0.9985	0.9071	0.8936	0.9876	0.89	13	TM			
5	S 2-Fluorophenol (S)		1.464	1.647	1.696	1.931	1.714	1.935	1.978	1.907	1.8	10	S			
6	S Phenol-D6 (S)		1.955	2.290	2.260	2.539	2.267	2.507	2.532	2.442	2.3	8.5	S			
7	*TM Phenol		2.309	3.261	3.084	3.089	3.172	3.085	3.021	3.188	3.0	9.9	*TM			0.800
8	TM Aniline		2.291	3.413	3.293	3.218	3.311	3.249	3.188	3.375	3.2	11	TM			
9	TM Bis (2-chloroethyl) ether		1.107	1.513	1.402	1.404	1.463	1.392	1.379	1.490	1.4	9.0	TM			0.700
10	TM 2-Chlorophenol		1.663	2.317	2.143	2.142	2.214	2.152	2.142	2.311	2.1	9.6	TM			0.800
11	TM 1,3-DCB		1.862	2.463	2.257	2.276	2.341	2.265	2.278	2.432	2.3	8.1	TM			
12	*TM 1,4-DCB		1.940	2.591	2.299	2.299	2.379	2.314	2.289	2.459	2.3	8.0	*TM			
13	TM Benzyl alcohol		0.9641	1.383	1.344	1.346	1.411	1.369	1.373	1.455	1.3	11	TM			
14	TM 1,2-DCB		1.768	2.340	2.165	2.152	2.212	2.150	2.136	2.280	2.2	7.9	TM			
15	TM 2-Methylphenol		1.393	1.915	1.834	1.841	1.908	1.859	1.837	1.986	1.8	9.9	TM			0.700
16	TM Bis (2-chloroisopropyl) ether		1.751	2.355	2.130	2.076	2.164	2.068	2.037	2.161	2.1	8.1	TM			0.010
17	TM Acetophenone		2.287	3.133	2.851	2.790	2.854	2.733	2.701	2.853	2.8	8.5	TM			0.010
18	TM 3&4-Methylphenol		1.687	2.384	2.207	2.169	2.236	2.161	2.120	2.247	2.2	9.5	TM			0.600
19	**TM n-Nitrosodi-n-propylamine		1.290	1.739	1.600	1.552	1.616	1.548	1.528	1.628	1.6	8.2	**TM			0.500
20	TM Hexachloroethane		0.6787	0.9014	0.8397	0.8456	0.8839	0.8545	0.8606	0.9193	0.85	8.7	TM			0.300
21	I Naphthalene-D8(IS)	ISTD														
22	S Nitrobenzene-D5(S)		0.4172	0.4561	0.4585	0.5041	0.4742	0.4998	0.5077	0.4929	0.48	6.5	S			
23	TM Nitrobenzene		0.4469	0.5751	0.5371	0.5310	0.5810	0.5343	0.5232	0.5564	0.54	7.8	TM			0.200
24	TM Isophorone		0.7599	0.9777	0.9504	0.9246	1.023	0.9350	0.9196	0.9841	0.93	8.4	TM			0.400
25	*TM 2-Nitrophenol		0.1948	0.2706	0.2673	0.2678	0.2879	0.2720	0.2649	0.2844	0.26	11	*TM			0.100
26	TM 2,4-Dimethylphenol		0.3309	0.4574	0.4473	0.4439	0.4880	0.4322	0.4209	0.4700	0.44	11	TM			0.200
27	TM Benzoic acid			0.2515	0.3383	0.3387	0.3922	0.3729	0.3299	0.3663	0.34	13	TM			
28	TM Bis (2-chloroethoxy) methane		0.4805	0.6305	0.5898	0.5703	0.6237	0.5769	0.5647	0.5992	0.58	8.0	TM			0.300
29	*TM 2,4-Dichlorophenol		0.2454	0.3924	0.3797	0.3834	0.4214	0.3911	0.3838	0.4066	0.38	14	*TM			0.200
30	TM 1,2,4-Trichlorobenzene		0.3572	0.4552	0.4197	0.4116	0.4453	0.4123	0.4080	0.4301	0.42	7.1	TM			
31	TM 3,4-Dimethylphenol		0.4569	0.6144	0.5866	0.5901	0.6511	0.6054	0.5866	0.6284	0.59	9.9	TM			
32	TM Naphthalene		1.224	1.541	1.429	1.405	1.534	1.409	1.372	1.442	1.4	7.0	TM			0.700
33	TM 4-Chloroaniline		0.4196	0.5900	0.5787	0.5395	0.5729	0.5252	0.4856	0.4901	0.53	11	TM			0.010
34	TM 2,6-Dichlorophenol		0.2964	0.3976	0.3779	0.3724	0.4050	0.3739	0.3662	0.3853	0.37	8.9	TM			
35	TM Hexachloropropene		0.1833	0.2513	0.2596	0.2564	0.2830	0.2654	0.2601	0.2772	0.25	12	TM			



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No:

Case No:

Initial Cal. Date: 01/25/19

Matrix:

Instrument: Yoda

Initials:

		Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type	Q
36	*TM	Hexachlorobutadiene		0.1855	0.2329	0.2183	0.2157	0.2306	0.2159	0.2133	0.2276	0.22	6.9	*TM	0.010
37	TM	Caprolactum			0.1761	0.1918	0.1813	0.2044	0.1887	0.1842	0.1967	0.19	5.1	TM	0.010
38	*TM	4-Chloro-3-methylphenol		0.3189	0.4315	0.4287	0.4246	0.4671	0.4341	0.4259	0.4540	0.42	11	*TM	0.200
39	TM	2-Methylnaphthalene		0.7750	0.9767	0.9344	0.9063	0.9850	0.9230	0.8855	0.9371	0.92	7.2	TM	0.400
40	TM	1-Methylnaphthalene		0.7978	0.9910	0.9253	0.9071	0.9825	0.9103	0.8816	0.9236	0.91	6.6	TM	
41	I	Acenaphthene-D10(IS)	ISTD												
42	**TML	Hexachlorocyclopentadiene		0.0268	0.0999	0.2275	0.2530	0.3014	0.2855	0.2979		0.21	51	**TML	0.996
43	TM	1,2,4,5-Tetrachlorobenzene		0.5955	0.6952	0.6554	0.6773	0.7402	0.6738	0.6303	0.7074	0.67	6.7	TM	0.010
44	*TM	2,4,6-Trichlorophenol		0.3002	0.4102	0.4294	0.4630	0.5087	0.4583	0.4386	0.5003	0.44	15	*TM	0.200
45	TM	2,4,5-Trichlorophenol		0.4330	0.5116	0.4827	0.4976	0.5457	0.4923	0.4709	0.5287	0.50	7.1	TM	0.200
46	S	2-Fluorobiphenyl(S)		1.625	1.611	1.507	1.734	1.604	1.650	1.614	1.613	1.6	3.8	S	
47	TM	1,1'-Biphenyl		1.781	2.065	1.968	2.025	2.175	1.951	1.867	2.049	2.0	6.2	TM	0.010
48	TM	2-Chloronaphthalene		1.378	1.590	1.494	1.548	1.646	1.481	1.423	1.571	1.5	5.9	TM	0.800
49	TM	2-Nitroaniline		0.3769	0.4826	0.4917	0.5116	0.5641	0.4985	0.4806	0.5374	0.49	11	TM	0.010
50	TM	Dimethyl phthalate		1.529	1.833	1.788	1.826	1.980	1.784	1.703	1.879	1.8	7.4	TM	0.010
51	TM	2,6-DNT		0.2877	0.3968	0.4059	0.4128	0.4512	0.4131	0.3984	0.4457	0.40	13	TM	0.200
52	TM	Acenaphthylene		2.072	2.461	2.402	2.474	2.659	2.394	2.275	2.504	2.4	7.2	TM	0.900
53	TM	3-Nitroaniline		0.3376	0.4515	0.4701	0.4800	0.5102	0.4646	0.4380	0.4849	0.45	11	TM	0.010
54	*TM	Acenaphthene		1.424	1.620	1.539	1.584	1.710	1.526	1.442	1.616	1.6	6.1	*TM	0.900
55	**TML	2,4-Dinitrophenol			0.0858	0.1951	0.1966	0.2219	0.2297	0.2173		0.19	28	**TML	0.993
56	**TM	4-Nitrophenol			0.2666	0.2169	0.2453	0.3062	0.2859	0.2836	0.3294	0.28	14	**TM	0.010
57	TM	Dibenzofuran		2.016	2.307	2.196	2.232	2.383	2.132	2.013	2.186	2.2	5.9	TM	0.800
58	TM	2,4-DNT		0.3898	0.5315	0.5442	0.5489	0.5964	0.5400	0.5147	0.5706	0.53	12	TM	0.200
59	TM	2,3,4,6-Tetrachlorophenol		0.2834	0.3521	0.3620	0.3746	0.4076	0.3725	0.3622	0.4018	0.36	10	TM	0.010
60	TM	Diethyl phthalate		1.482	1.741	1.704	1.730	1.874	1.675	1.580	1.784	1.7	7.1	TM	0.010
61	TM	4-Chlorophenyl phenyl ether		0.7891	0.9079	0.8509	0.8738	0.9244	0.8287	0.7845	0.8542	0.85	5.9	TM	0.400
62	TM	Fluorene		1.610	1.844	1.765	1.800	1.920	1.706	1.609	1.746	1.7	6.2	TM	0.900
63	TM	4-Nitroaniline		0.3704	0.4711	0.4796	0.4923	0.5304	0.4469	0.4228	0.4690	0.46	10	TM	0.010
64	S	2,4,6-Tribromophenol(S)		0.1476	0.1571	0.1526	0.1804	0.1668	0.1735	0.1716	0.1759	0.17	7.2	S	
65	I	Phenanthrene-D10(IS)	ISTD												
66	TM	4,6-Dinitro-2-methylphenol			0.1285	0.1724	0.1795	0.1979	0.1866	0.1812	0.2048	0.18	14	TM	0.010
67	TM	Diphenyl amine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161	0.71	6.3	TM	
68	*TM	n-Nitrosodiphenylamine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161	0.71	6.3	*TM	0.010
69	TM	1,2-Diphenylhydrazine		0.8393	0.9626	0.9494	0.9785	1.077	0.9618	1.037	1.152	0.99	9.5	TM	
70	TM	4-Bromophenyl phenyl ether		0.2070	0.2339	0.2359	0.2466	0.2634	0.2451	0.2263	0.2537	0.24	7.3	TM	0.100

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type	Q
71	TM	Hexachlorobenzene		0.1973	0.2291	0.2190	0.2309	0.2483	0.2277	0.2140	0.2412	0.23	7.1	TM	0.100
72	TM	Atrazine		0.1931	0.2446	0.2396	0.2514	0.2738	0.2448	0.2302	0.2596	0.24	9.8	TM	0.010
73	*TM	Pentachlorophenol			0.1082	0.1268	0.1398	0.1629	0.1475	0.1404	0.1642	0.14	14	*TM	0.050
74	TM	Phenanthrene		1.216	1.392	1.334	1.397	1.499	1.346	1.245	1.387	1.4	6.7	TM	0.700
75	TM	Anthracene		1.230	1.425	1.366	1.438	1.535	1.381	1.283	1.421	1.4	6.8	TM	0.700
76	TM	Carbazol		1.112	1.272	1.251	1.292	1.398	1.257	1.168	1.316	1.3	7.0	TM	0.010
77	TM	Di-n-butylphthalate		1.241	1.480	1.498	1.545	1.690	1.484	1.399	1.543	1.5	8.7	TM	0.010
78	*TM	Fluoranthene		1.277	1.487	1.454	1.489	1.613	1.457	1.344	1.491	1.5	7.0	*TM	0.600
79	I	Chrysene-D12(IS)	ISTD												
80	TM	Benzidine		0.3273	0.5090	0.5365	0.5127	0.5486	0.5087	0.4832	0.5314	0.49	14	TM	
81	TM	Pyrene		1.510	1.711	1.686	1.730	1.876	1.674	1.614	1.782	1.7	6.4	TM	0.600
82	S	Terphenyl-D14(S)		0.9724	0.9816	0.9517	1.100	1.010	1.044	1.040	1.063	1.0	4.9	S	
83	TM	Butyl benzylphthalate		0.5931	0.7238	0.7708	0.7869	0.8621	0.7758	0.7515	0.8250	0.76	11	TM	0.010
84	TM	3,3'-Dichlorobenzidine		0.3876	0.5178	0.5500	0.5455	0.5955	0.5299	0.4962	0.5426	0.52	12	TM	0.010
85	TM	Benz (a) anthracene		1.338	1.486	1.435	1.485	1.664	1.484	1.400	1.553	1.5	6.6	TM	0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.9337	1.069	1.068	1.077	1.217	1.043	0.9862	1.080	1.1	7.7	TM	0.010
87	TM	Chryseñe		1.282	1.463	1.453	1.480	1.548	1.436	1.382	1.540	1.4	6.0	TM	0.700
88	*TM	Di-n-octylphthalate		1.339	1.676	1.828	1.873	2.078	1.835	1.774	1.976	1.8	12	*TM	0.010
89	I	Perylene-D12(IS)	ISTD												
90	TM	Benzo (b) fluoranthene		1.259	1.442	1.425	1.498	1.752	1.503	1.399	1.733	1.5	11	TM	0.700
91	TM	Benzo (k) fluoranthene		1.297	1.493	1.470	1.545	1.505	1.401	1.398	1.435	1.4	5.4	TM	0.700
92	*TM	Benzo (a) pyrene	1.270	1.120	1.343	1.345	1.434	1.536	1.372	1.315	1.496	1.4	9.1	*TM	0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.143	1.345	1.386	1.461	1.580	1.400	1.349	1.536	1.4	9.6	TM	0.500
94	TM	Dibenz (a,h) anthracene	1.164	1.060	1.244	1.258	1.335	1.437	1.271	1.222	1.399	1.3	9.2	TM	0.400
95	TM	Benzo (g,h,i) perylene		1.023	1.195	1.224	1.286	1.399	1.232	1.201	1.362	1.2	9.3	TM	0.500
96															
97															
98															
99															
100															
101															
102															
103															
104															
105															

Data File : M:\YODA\DATA\Y190124\0124Y016.D Vial: 16  
 Acq On : 25 Jan 19 9:53 Operator: MA  
 Sample : 4ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 10:15 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	441679	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1882270	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1025541	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1966994	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1763281	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1696541	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	0.00	112	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
6) Phenol-D6 (S)	0.00	99	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5 (S)	0.00	82	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
46) 2-Fluorobiphenyl (S)	0.00	172	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
64) 2,4,6-Tribromophenol (S)	0.00	330	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
82) Terphenyl-D14 (S)	0.00	244	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
92) Benzo (a) pyrene	15.55	252	215402	4.01854	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	197436	3.98872	ppb	99

Quantitation Report

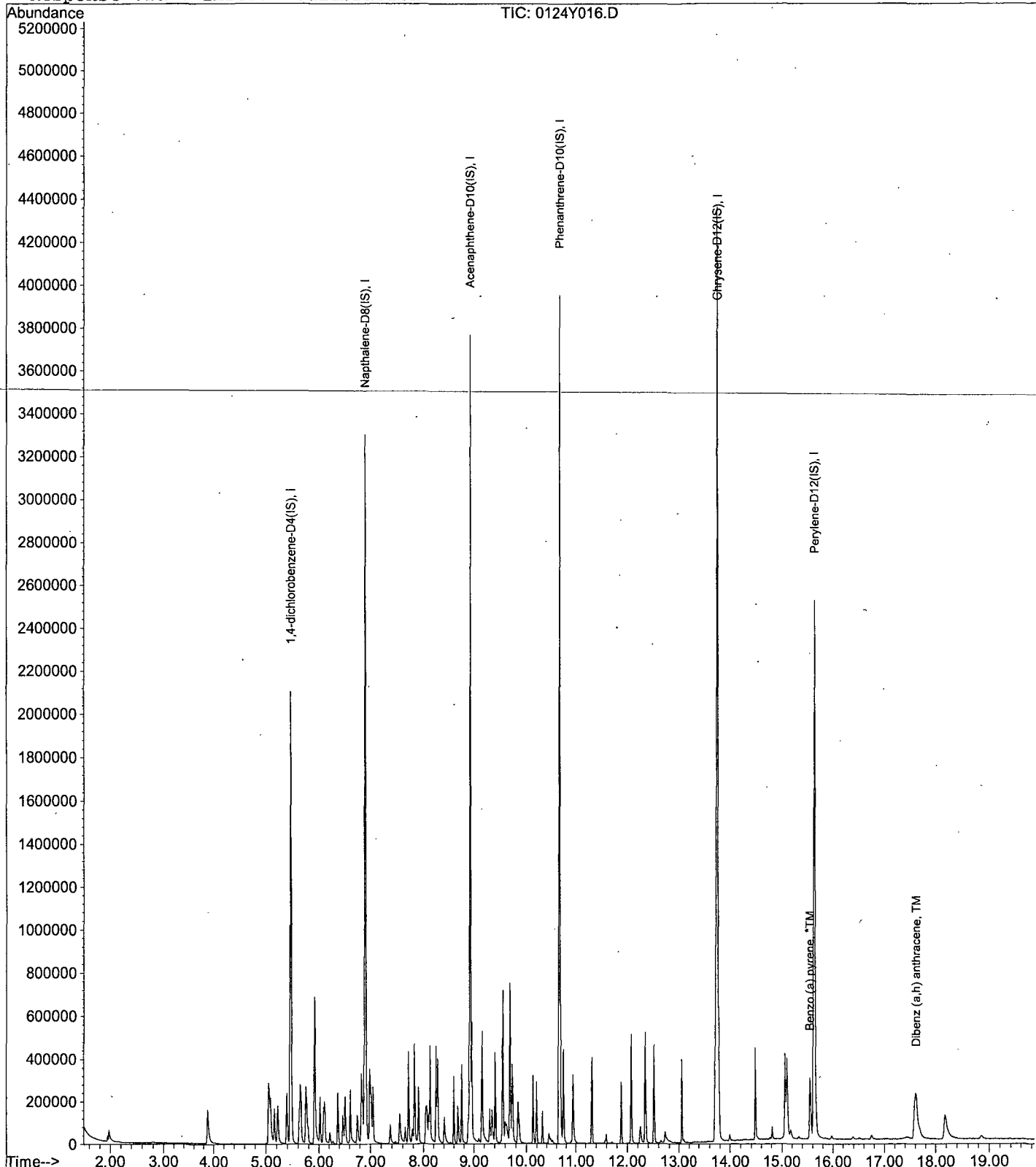
Data File : M:\YODA\DATA\Y190124\0124Y016.D  
Acq On : 25 Jan 19 9:53  
Sample : 4ug/mL 8270 01/24/19  
Misc :

Vial: 16  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:15 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	433806	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1862853	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1024206	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1955322	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1777036	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1697848	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	158780	9.11528	ppb	0.01
Spiked Amount 200.000			Recovery =	4.558%		
6) Phenol-D6 (S)	5.05	99	211993	9.21070	ppb	0.00
Spiked Amount 200.000			Recovery =	4.606%		
22) Nitrobenzene-D5 (S)	6.09	82	97141	4.70950	ppb	0.00
Spiked Amount 100.000			Recovery =	4.710%		
46) 2-Fluorobiphenyl (S)	8.13	172	208026	4.99771	ppb	0.00
Spiked Amount 100.000			Recovery =	4.998%		
64) 2,4,6-Tribromophenol (S)	9.85	330	37804	8.79031	ppb	0.00
Spiked Amount 200.000			Recovery =	4.395%		
82) Terphenyl-D14 (S)	12.52	244	215993	4.65872	ppb	0.00
Spiked Amount 100.000			Recovery =	4.659%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	1090	0.57680		91
3) n-Nitrosodimethylamine	1.95	42	16461	5.13857	ppb	94
4) Pyridine	1.98	79	33762	4.24827	ppb	96
7) Phenol	5.07	94	125184	4.49703	ppb	97
8) Aniline	5.09	93	124237	6.74291	ppb	94
9) Bis (2-chloroethyl) ether	5.16	63	60048	4.34169	ppb	97
10) 2-Chlorophenol	5.23	128	90184	4.67937	ppb	94
11) 1,3-DCB	5.40	146	100957	5.05261	ppb	99
12) 1,4-DCB	5.48	146	105192	5.19009	ppb	99
13) Benzyl alcohol	5.63	108	52278	4.28441	ppb	96
14) 1,2-DCB	5.65	146	95867	5.05812	ppb	99
15) 2-Methylphenol	5.75	107	75528	4.80831	ppb	98
16) Bis (2-chloroisopropyl) et	5.77	45	94938	4.14003	ppb	97
17) Acetophenone	5.91	105	124039	4.96640	ppb	91
18) 3&4-Methylphenol	5.92	107	182967	9.37874	ppb	99
19) n-Nitrosodi-n-propylamine	5.91	70	69974	4.72570	ppb	99
20) Hexachloroethane	6.03	117	36804	4.73413	ppb	96
23) Nitrobenzene	6.11	77	104065	4.95234	ppb	96
24) Isophorone	6.37	82	176946	4.71645	ppb	95
25) 2-Nitrophenol	6.47	139	45356	4.84831	ppb	99
26) 2,4-Dimethylphenol	6.51	122	77050	4.47597	ppb	99
27) Benzoic acid	6.62	105	28927	2.75298	ppb	92
28) Bis (2-chloroethoxy) metha	6.62	93	111881	4.76503	ppb	99
29) 2,4-Dichlorophenol	6.75	162	57137	3.93210	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	83169	5.27706	ppb	96
31) 3,4-Dimethylphenol	6.85	107	106384	4.64367	ppb	97
32) Naphthalene	6.93	128	285107	5.16052	ppb	99
33) 4-Chloroaniline	6.99	127	97717	4.63173	ppb	99
34) 2,6-Dichlorophenol	7.00	162	69020	4.84772	ppb	95
35) Hexachloropropene	7.02	213	42691	4.62772	ppb	97
36) Hexachlorobutadiene	7.05	225	43193	5.21952	ppb	97
37) Caprolactum	7.47	55	1195	0.15005	ppb #	36

Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	74252	4.55952	ppb	97
39) 2-Methylnaphthalene	7.72	142	180460	5.14530	ppb	99
40) 1-Methylnaphthalene	7.83	142	185768	5.28579	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	3428	5.53579	ppb	88
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	76235	4.71955	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	38434	3.61995	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	55433	4.84840	ppb	97
47) 1,1'-Biphenyl	8.25	154	227953	4.84265	ppb	98
48) 2-Chloronaphthalene	8.28	162	176377	4.92611	ppb	94
49) 2-Nitroaniline	8.40	65	48257	4.02083	ppb	95
50) Dimethyl phthalate	8.60	163	195702	4.76078	ppb	100
51) 2,6-DNT	8.68	165	36830	4.30328	ppb	91
52) Acenaphthylene	8.76	152	265238	4.76003	ppb	97
53) 3-Nitroaniline	8.89	138	43223	4.19099	ppb	97
54) Acenaphthene	8.96	154	182254	4.96067	ppb	99
55) 2,4-Dinitrophenol	9.06	184	658	8.05478	ppb #	33
56) 4-Nitrophenol	9.15	65	23069	3.17827	ppb	80
57) Dibenzofuran	9.16	168	258059	5.10906	ppb	97
58) 2,4-DNT	9.15	165	49898	4.40819	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	36282	4.29569	ppb	96
60) Diethyl phthalate	9.41	149	189707	4.80021	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	101023	5.14228	ppb	91
62) Fluorene	9.56	166	206121	5.05430	ppb	100
63) 4-Nitroaniline	9.61	138	47426	4.61367	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	17537	2.42073	ppb	96
67) Diphenyl amine	9.69	169	314635	9.52215	ppb	100
68) n-Nitrosodiphenylamine	9.69	169	314635	9.52215	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	205129	4.13217	ppb	97
70) 4-Bromophenyl phenyl ether	10.13	248	50606	4.40498	ppb	89
71) Hexachlorobenzene	10.19	284	48221	4.39067	ppb	91
72) Atrazine	10.32	200	23603	2.09887	ppb	99
73) Pentachlorophenol	10.45	266	16395	2.42031	ppb	95
74) Phenanthrene	10.69	178	297175	4.81234	ppb	100
75) Anthracene	10.74	178	300675	4.74183	ppb	99
76) Carbazol	10.94	167	271825	4.72407	ppb	98
77) Di-n-butylphthalate	11.32	149	303348	4.49966	ppb	99
78) Fluoranthene	12.08	202	312240	4.72269	ppb	98
80) Benzidine	12.25	184	72705	5.45225	ppb	97
81) Pyrene	12.35	202	335405	4.91780	ppb	98
83) Butyl benzylphthalate	13.07	149	131736	4.51371	ppb	90
84) 3,3'-Dichlorobenzidine	13.71	252	86100	4.42832	ppb	98
85) Benz (a) anthracene	13.74	228	297279	5.01836	ppb	98
86) Bis (2-ethylhexyl) phthala	13.72	149	207396	5.26210	ppb #	95
87) Chrysene	13.78	228	284704	4.80830	ppb	99
88) Di-n-octylphthalate	14.48	149	297371	4.40999	ppb	98
90) Benzo (b) fluoranthene	15.07	252	267244	4.53531	ppb	99
91) Benzo (k) fluoranthene	15.11	252	275294	4.84812	ppb	99
92) Benzo (a) pyrene	15.55	252	237730	4.44308	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.59	276	242506	4.50565	ppb	96
94) Dibenz (a,h) anthracene	17.61	278	224895	4.56524	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	217110	4.50340	ppb	97

Quantitation Report

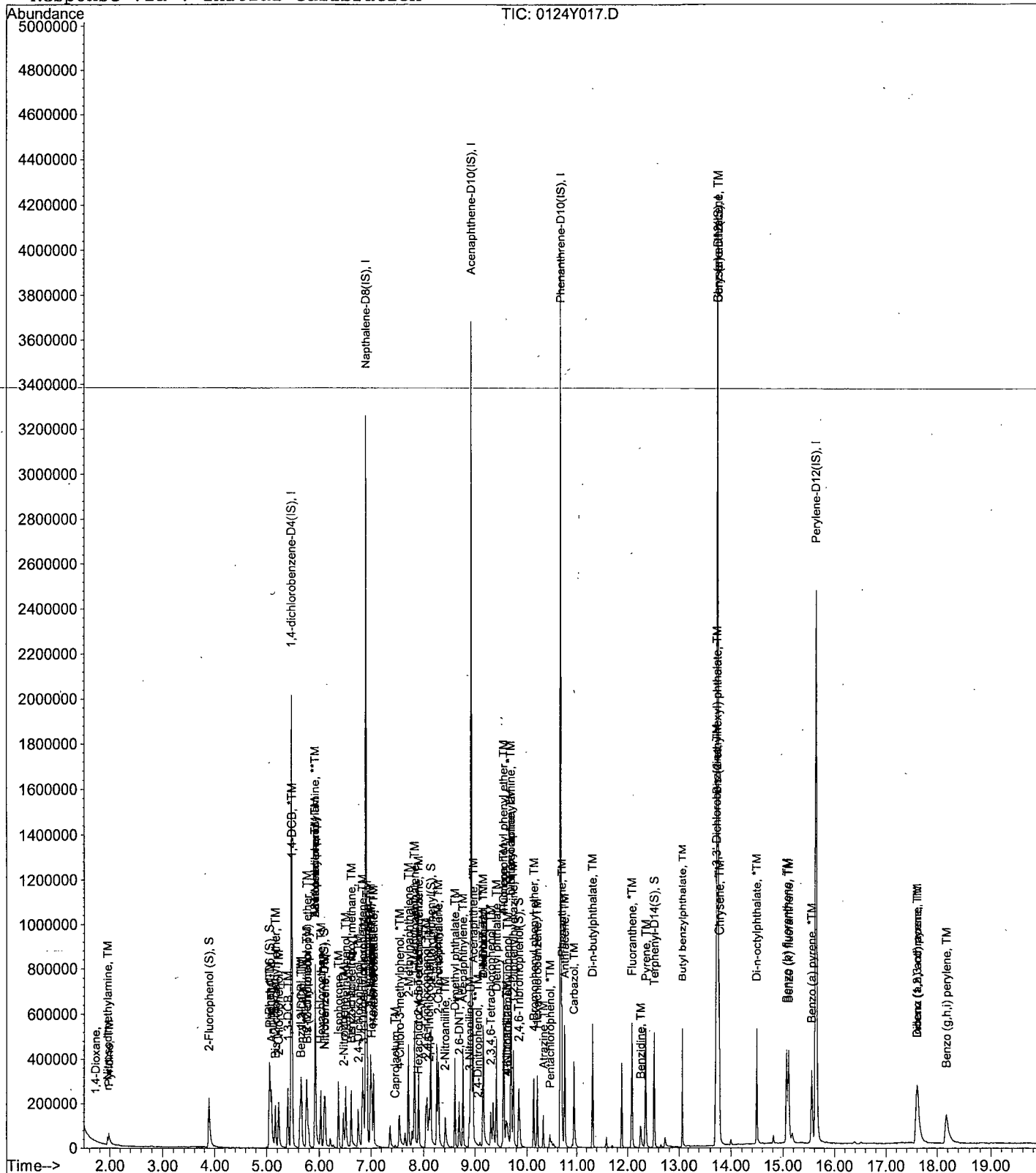
Data File : M:\YODA\DATA\Y190124\0124Y017.D  
Acq On : 25 Jan 19 10:21  
Sample : 5ug/mL 8270 01/24/19  
Misc :

Vial: 17  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	384341	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1739801	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1039183	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2028761	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1850112	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1783876	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	316592	20.53949	ppb	0.00
Spiked Amount 200.000			Recovery =	10.270%		
6) Phenol-D6 (S)	5.05	99	440013	21.66685	ppb	0.00
Spiked Amount 200.000			Recovery =	10.834%		
22) Nitrobenzene-D5 (S)	6.09	82	198391	10.26779	ppb	0.00
Spiked Amount 100.000			Recovery =	10.268%		
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.13</del>	<del>172</del>	<del>418518</del>	<del>9.97848</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount 100.000			Recovery =	9.978%		
64) 2,4,6-Tribromophenol (S)	9.85	330	81639	18.82269	ppb	0.00
Spiked Amount 200.000			Recovery =	9.412%		
82) Terphenyl-D14 (S)	12.51	244	454030	9.47395	ppb	0.00
Spiked Amount 100.000			Recovery =	9.474%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	2387	1.43229		93
3) n-Nitrosodimethylamine	1.95	42	33282	11.82047	ppb	93
4) Pyridine	1.97	79	92711	13.48027	ppb	95
7) Phenol	5.06	94	313314	12.97943	ppb	100
8) Aniline	5.09	93	327926	17.05779	ppb	98
9) Bis (2-chloroethyl) ether	5.16	63	145392	12.15860	ppb	96
10) 2-Chlorophenol	5.22	128	222632	13.20506	ppb	99
11) 1,3-DCB	5.39	146	236649	13.46726	ppb	99
12) 1,4-DCB	5.48	146	248996	13.95093	ppb	98
13) Benzyl alcohol	5.62	108	132840	12.48051	ppb	95
14) 1,2-DCB	5.65	146	224867	13.49664	ppb	96
15) 2-Methylphenol	5.75	107	183959	13.32530	ppb	97
16) Bis (2-chloroisopropyl) et	5.76	45	226279	11.57309	ppb	99
17) Acetophenone	5.92	105	301056	13.80954	ppb	87
18) 3&4-Methylphenol	5.91	107	458174	26.98121	ppb	95
19) n-Nitrosodi-n-propylamine	5.91	70	167080	12.97727	ppb	99
20) Hexachloroethane	6.02	117	86615	12.72916	ppb	96
23) Nitrobenzene	6.11	77	250149	12.87562	ppb	94
24) Isophorone	6.38	82	425236	12.32322	ppb	99
25) 2-Nitrophenol	6.47	139	117688	13.32620	ppb	99
26) 2,4-Dimethylphenol	6.51	122	198936	12.56466	ppb	99
27) Benzoic acid	6.63	105	109400	11.81149	ppb	95
28) Bis (2-chloroethoxy) metha	6.62	93	274235	12.76702	ppb	99
29) 2,4-Dichlorophenol	6.75	162	170664	12.99975	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	197991	13.52465	ppb	100
31) 3,4-Dimethylphenol	6.85	107	267251	12.69235	ppb	98
32) Naphthalene	6.92	128	670423	13.15159	ppb	99
33) 4-Chloroaniline	6.99	127	256609	13.35270	ppb	98
34) 2,6-Dichlorophenol	7.00	162	172928	13.15852	ppb	99
35) Hexachloropropene	7.02	213	109295	12.68217	ppb	99
36) Hexachlorobutadiene	7.05	225	101284	13.21557	ppb	99
37) Caprolactum	7.38	55	76598	11.82877	ppb	96



Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	187678	12.50412	ppb	99
39) 2-Methylnaphthalene	7.71	142	424829	13.07207	ppb	100
40) 1-Methylnaphthalene	7.82	142	431022	13.18742	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	25947	8.64993	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	180614	11.32970	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	106564	10.25727	ppb	98
45) 2,4,5-Trichlorophenol	8.09	196	132923	11.57256	ppb	94
47) 1,1'-Biphenyl	8.25	154	536521	11.49396	ppb	99
48) 2-Chloronaphthalene	8.28	162	413165	11.62515	ppb	98
49) 2-Nitroaniline	8.40	65	125367	10.51312	ppb	96
50) Dimethyl phthalate	8.60	163	476215	11.65010	ppb	99
51) 2,6-DNT	8.68	165	103086	11.85231	ppb	85
52) Acenaphthylene	8.76	152	639384	11.52284	ppb	100
53) 3-Nitroaniline	8.88	138	117306	11.40934	ppb	90
54) Acenaphthene	8.96	154	420910	11.54206	ppb	100
55) 2,4-Dinitrophenol	9.02	184	22288	11.33622	ppb	96
56) 4-Nitrophenol	9.15	65	69255	9.85262	ppb	81
57) Dibenzofuran	9.16	168	599251	11.90622	ppb	99
58) 2,4-DNT	9.15	165	138090	11.98503	ppb	92
59) 2,3,4,6-Tetrachlorophenol	9.31	232	91483	10.74912	ppb	99
60) Diethyl phthalate	9.41	149	452309	11.51698	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	235880	12.01438	ppb	96
62) Fluorene	9.56	166	479043	11.78218	ppb	100
63) 4-Nitroaniline	9.60	138	122396	11.95160	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.63	198	65167	9.35947	ppb	97
67) Diphenyl amine	9.69	169	744703	22.27867	ppb	99
68) n-Nitrosodiphenylamine	9.69	169	744703	22.27867	ppb	99
69) 1,2-Diphenylhydrazine	9.74	77	488203	9.83872	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	118641	10.25921	ppb	97
71) Hexachlorobenzene	10.19	284	116191	10.54252	ppb	# 85
72) Atrazine	10.31	200	62029	5.43603	ppb	98
73) Pentachlorophenol	10.44	266	54861	8.42679	ppb	94
74) Phenanthrene	10.68	178	705975	11.26347	ppb	98
75) Anthracene	10.75	178	722528	11.20099	ppb	99
76) Carbazol	10.93	167	645327	11.02334	ppb	98
77) Di-n-butylphthalate	11.32	149	750554	10.93554	ppb	99
78) Fluoranthene	12.08	202	754194	11.20916	ppb	99
80) Benzidine	12.24	184	235410	13.07671	ppb	99
81) Pyrene	12.35	202	791563	11.29349	ppb	100
83) Butyl benzylphthalate	13.08	149	334771	11.08547	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	239496	12.05618	ppb	99
85) Benz (a) anthracene	13.74	228	687210	11.28964	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	494589	11.99644	ppb	99
87) Chrysene	13.78	228	676758	11.17616	ppb	99
88) Di-n-octylphthalate	14.48	149	775210	11.06033	ppb	95
90) Benzo (b) fluoranthene	15.07	252	643284	10.74979	ppb	100
91) Benzo (k) fluoranthene	15.10	252	665843	11.43139	ppb	98
92) Benzo (a) pyrene	15.55	252	599150	10.90497	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	599788	10.86003	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	554735	10.91790	ppb	97
95) Benzo (g,h,i) perylene	18.16	276	532716	10.75641	ppb	99

Quantitation Report

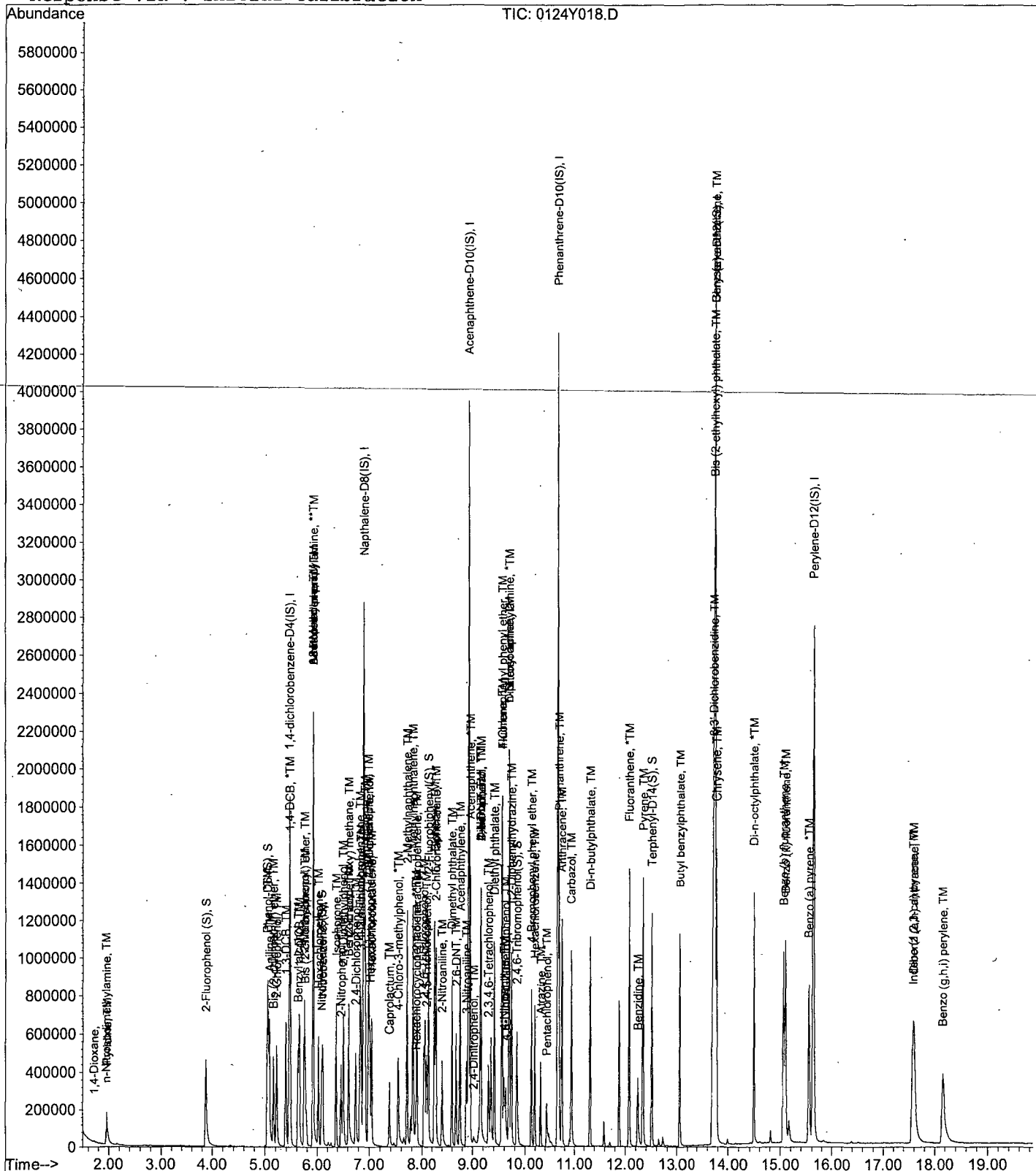
Data File : M:\YODA\DATA\Y190124\0124Y018.D  
Acq On : 25 Jan 19 10:49  
Sample : 10ug/mL 8270 01/24/19  
Misc :

Vial: 18  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	636350	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2822233	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1682401	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	3270571	40.00000	ppb	0.00
79) Chrysenes-D12 (IS)	13.76	240	2912554	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	2895614	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	1079558	38.19181	ppb	0.02
Spiked Amount 200.000			Recovery =	19.096%		
6) Phenol-D6 (S)	5.06	99	1438233	38.70168	ppb	0.00
Spiked Amount 200.000			Recovery =	19.351%		
22) Nitrobenzene-D5 (S)	6.10	82	647018	19.21156	ppb	0.00
Spiked Amount 100.000			Recovery =	19.212%		
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.13</del>	<del>172</del>	<del>1267437</del>	<del>18.31256</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount 100.000			Recovery =	18.313%		
64) 2,4,6-Tribromophenol (S)	9.85	330	256663	36.47674	ppb	0.00
Spiked Amount 200.000			Recovery =	18.239%		
82) Terphenyl-D14 (S)	12.51	244	1385929	18.53138	ppb	0.00
Spiked Amount 100.000			Recovery =	18.531%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	6343	1.78753		# 40
3) n-Nitrosodimethylamine	1.97	42	110467	19.65117	ppb	99
4) Pyridine	1.99	79	287660	20.82293	ppb	98
7) Phenol	5.07	94	981147	21.01690	ppb	96
8) Aniline	5.10	93	1047674	21.82394	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	446038	20.68812	ppb	94
10) 2-Chlorophenol	5.23	128	681991	20.66769	ppb	97
11) 1,3-DCB	5.39	146	718229	20.40878	ppb	98
12) 1,4-DCB	5.49	146	731607	20.35996	ppb	98
13) Benzyl alcohol	5.62	108	427502	20.86251	ppb	100
14) 1,2-DCB	5.65	146	688805	20.68155	ppb	98
15) 2-Methylphenol	5.75	107	583589	20.77993	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	677853	20.93213	ppb	98
17) Acetophenone	5.92	105	907012	21.16813	ppb	96
18) 3&4-Methylphenol	5.92	107	1404575	42.32633	ppb	100
19) n-Nitrosodi-n-propylamine	5.91	70	508956	21.09969	ppb	96
20) Hexachloroethane	6.02	117	267187	20.37551	ppb	91
23) Nitrobenzene	6.12	77	757965	20.48330	ppb	100
24) Isophorone	6.38	82	1341118	20.81504	ppb	96
25) 2-Nitrophenol	6.47	139	377174	20.80099	ppb	97
26) 2,4-Dimethylphenol	6.52	122	631247	21.01422	ppb	97
27) Benzoic acid	6.64	105	477365	20.56102	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	832246	20.80697	ppb	99
29) 2,4-Dichlorophenol	6.75	162	535793	20.69550	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	592289	20.55579	ppb	99
31) 3,4-Dimethylphenol	6.85	107	827785	20.40945	ppb	99
32) Naphthalene	6.92	128	2017143	20.57394	ppb	100
33) 4-Chloroaniline	6.99	127	816613	23.12180	ppb	99
34) 2,6-Dichlorophenol	7.00	162	533260	20.81659	ppb	99
35) Hexachloropropene	7.02	213	366301	20.91040	ppb	100
36) Hexachlorobutadiene	7.05	225	307988	20.51106	ppb	99
37) Caprolactum	7.40	55	270633	20.95717	ppb	97

Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	605008	20.75534	ppb	99
39) 2-Methylnaphthalene	7.71	142	1318606	20.92289	ppb	99
40) 1-Methylnaphthalene	7.83	142	1305773	20.69797	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	191376	21.57080	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	551349	19.64363	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	361209	19.89672	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	406036	19.63299	ppb	96
47) 1,1'-Biphenyl	8.25	154	1655511	19.99468	ppb	99
48) 2-Chloronaphthalene	8.28	162	1256537	19.88748	ppb	98
49) 2-Nitroaniline	8.40	65	413623	20.12430	ppb	94
50) Dimethyl phthalate	8.60	163	1504216	20.21148	ppb	100
51) 2,6-DNT	8.68	165	341441	20.51423	ppb #	80
52) Acenaphthylene	8.76	152	2020333	20.16825	ppb	100
53) 3-Nitroaniline	8.88	138	395406	21.11807	ppb	90
54) Acenaphthene	8.96	154	1294988	19.94266	ppb	99
55) 2,4-Dinitrophenol	9.01	184	164125	22.39567	ppb	93
56) 4-Nitrophenol	9.09	65	182439	16.32491	ppb	99
57) Dibenzofuran	9.16	168	1847609	20.28865	ppb	99
58) 2,4-DNT	9.15	165	457778	20.84223	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.31	232	304485	20.10263	ppb	97
60) Diethyl phthalate	9.42	149	1433219	20.26618	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	715742	20.13953	ppb	98
62) Fluorene	9.56	166	1484736	20.34866	ppb	99
63) 4-Nitroaniline	9.60	138	403406	21.13706	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.63	198	281851	19.79880	ppb	90
67) Diphenyl amine	9.70	169	2288686	39.99363	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2288686	39.99363	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1552599	19.28814	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	385777	20.00697	ppb	96
71) Hexachlorobenzene	10.19	284	358181	19.60977	ppb #	82
72) Atrazine	10.31	200	195866	10.00458	ppb	98
73) Pentachlorophenol	10.43	266	207382	18.32753	ppb	99
74) Phenanthrene	10.68	178	2181956	19.92184	ppb	99
75) Anthracene	10.75	178	2233354	19.89161	ppb	100
76) Carbazol	10.94	167	2046080	20.08647	ppb	97
77) Di-n-butylphthalate	11.32	149	2449042	20.43049	ppb	100
78) Fluoranthene	12.08	202	2378299	20.22733	ppb	99
80) Benzidine	12.23	184	781270	23.13756	ppb	99
81) Pyrene	12.35	202	2455450	20.10623	ppb	100
83) Butyl benzylphthalate	13.07	149	1122474	20.60463	ppb	86
84) 3,3'-Dichlorobenzidine	13.70	252	800909	22.00303	ppb #	96
85) Benz (a) anthracene	13.74	228	2089802	19.61471	ppb	100
86) Bis (2-ethylhexyl) phtala	13.72	149	1554697	20.44048	ppb #	94
87) Chrysene	13.79	228	2116115	20.36358	ppb	99
88) Di-n-octylphthalate	14.48	149	2662183	20.67607	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2063545	19.14984	ppb	99
91) Benzo (k) fluoranthene	15.10	252	2127884	20.66410	ppb	99
92) Benzo (a) pyrene	15.55	252	1946711	20.00326	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	2006323	20.06100	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	1821992	20.10773	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	1772162	20.01866	ppb	100

Quantitation Report

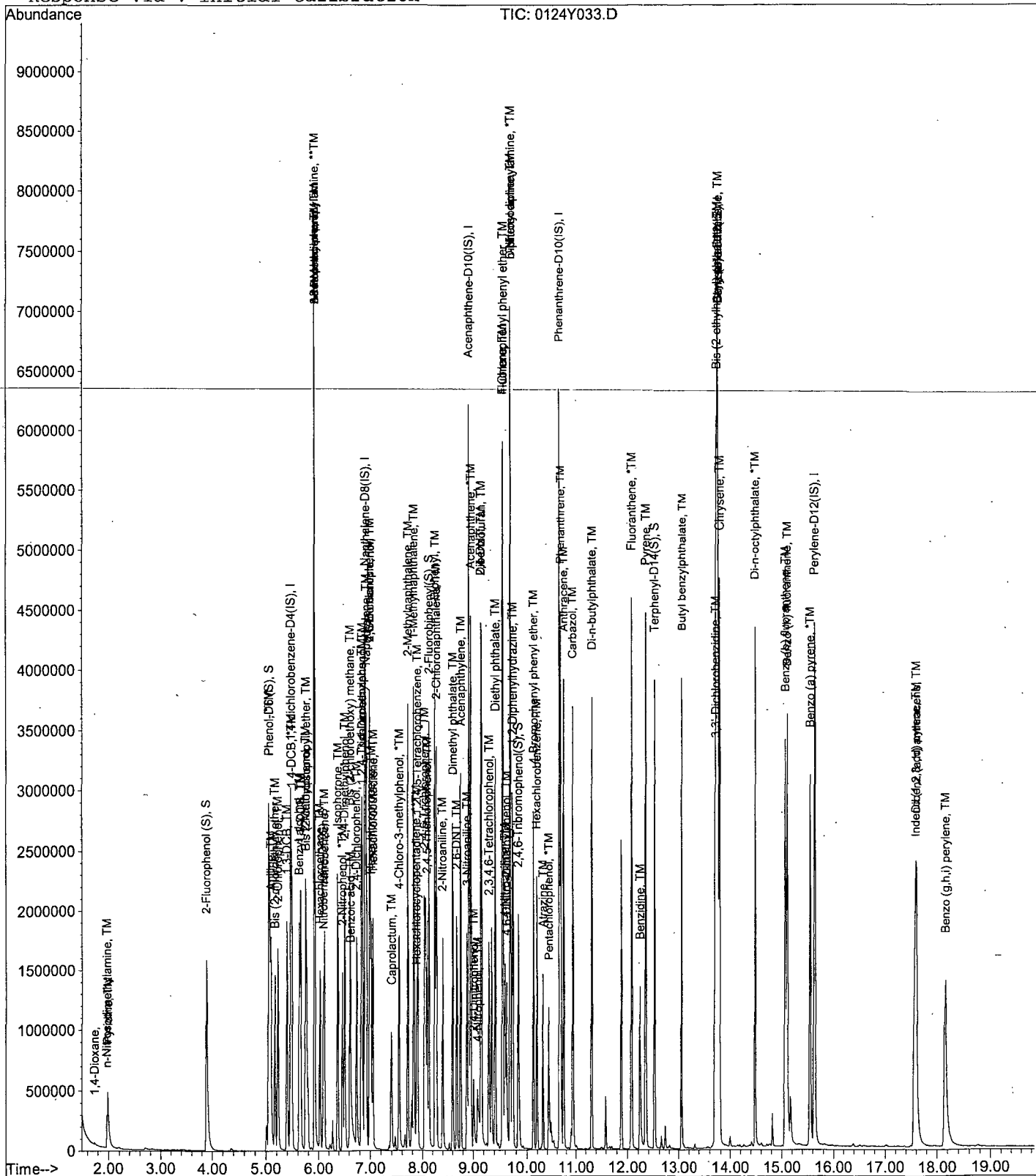
Data File : M:\YODA\DATA\Y190124\0124Y033.D  
Acq On : 28 Jan 19 13:36  
Sample : 20ug/mL 8270 01/24/19  
Misc :

Vial: 33  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y020.D  
 Acq On : 25 Jan 19 11:44  
 Sample : 40ug/mL 8270 01/24/19  
 Misc :

Vial: 20  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	408392	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1826097	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1029111	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1952804	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1752683	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1690710	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.87	112	1576988	96.03480	ppb	0.00
Spiked Amount	200.000		Recovery	=	48.018%	
6) Phenol-D6 (S)	5.05	99	2074169	95.72002	ppb	0.00
Spiked Amount	200.000		Recovery	=	47.860%	
22) Nitrobenzene-D5 (S)	6.09	82	920567	45.10467	ppb	0.00
Spiked Amount	100.000		Recovery	=	45.105%	
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.13</del>	<del>172</del>	<del>1784780</del>	<del>43.52172</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount	100.000		Recovery	=	43.522%	
64) 2,4,6-Tribromophenol (S)	9.85	330	371290	88.61400	ppb	0.00
Spiked Amount	200.000		Recovery	=	44.307%	
82) Terphenyl-D14 (S)	12.51	244	1928566	43.95301	ppb	0.00
Spiked Amount	100.000		Recovery	=	43.953%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	8893	4.60032		85
3) n-Nitrosodimethylamine	1.94	42	150528	46.74232	ppb	96
4) Pyridine	1.96	79	351271	44.18707	ppb	100
7) Phenol	5.07	94	1261343	46.82655	ppb	96
8) Aniline	5.09	93	1314100	62.04190	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	573382	43.98308	ppb	99
10) 2-Chlorophenol	5.22	128	874660	46.11987	ppb	100
11) 1,3-DCB	5.39	146	929323	46.62662	ppb	99
12) 1,4-DCB	5.48	146	938789	46.00154	ppb	99
13) Benzyl alcohol	5.63	108	549797	46.45135	ppb	96
14) 1,2-DCB	5.64	146	878821	46.40937	ppb	99
15) 2-Methylphenol	5.75	107	751943	47.78444	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	847848	41.05298	ppb	100
17) Acetophenone	5.92	105	1139391	46.49578	ppb	97
18) 3&4-Methylphenol	5.92	107	1771636	93.15009	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	633950	44.61799	ppb	99
20) Hexachloroethane	6.03	117	345343	45.34081	ppb	97
23) Nitrobenzene	6.12	77	969667	44.81490	ppb	99
24) Isophorone	6.38	82	1688334	44.66263	ppb	96
25) 2-Nitrophenol	6.47	139	489091	48.03698	ppb	100
26) 2,4-Dimethylphenol	6.52	122	810674	46.22740	ppb	98
27) Benzoic acid	6.65	105	618515	56.35463	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1041352	44.18621	ppb	99
29) 2,4-Dichlorophenol	6.75	162	700142	47.67577	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	751549	45.52085	ppb	98
31) 3,4-Dimethylphenol	6.85	107	1077521	46.09716	ppb	98
32) Napthalene	6.93	128	2565227	45.16039	ppb	100
33) 4-Chloroaniline	6.99	127	985263	45.18327	ppb	99
34) 2,6-Dichlorophenol	7.00	162	680077	46.24222	ppb	99
35) Hexachloropropene	7.02	213	468255	47.83385	ppb	99
36) Hexachlorobutadiene	7.06	225	393866	45.81648	ppb	98
37) Caprolactum	7.42	55	331158	48.21368	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0124Y020.D Y0125NC.M Tue Jan 29 09:21:30 2019 Page 213 of 674

Data File : M:\YODA\DATA\Y190124\0124Y020.D  
 Acq On : 25 Jan 19 11:44  
 Sample : 40ug/mL 8270 01/24/19  
 Misc :

Vial: 20  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	775271	46.64409	ppb	99
39) 2-Methylnaphthalene	7.71	142	1654926	45.58868	ppb	100
40) 1-Methylnaphthalene	7.83	142	1656365	45.28050	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	260385	37.52819	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	697052	43.25958	ppb	99
44) 2,4,6-Trichlorophenol	8.04	196	476510	46.12089	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	512115	43.18820	ppb	98
47) 1,1'-Biphenyl	8.25	154	2083441	44.06097	ppb	99
48) 2-Chloronaphthalene	8.28	162	1593407	44.06701	ppb	98
49) 2-Nitroaniline	8.40	65	526512	44.12615	ppb	97
50) Dimethyl phthalate	8.61	163	1878647	44.85122	ppb	100
51) 2,6-DNT	8.69	165	424850	46.29368	ppb	96
52) Acenaphthylene	8.76	152	2546320	45.04805	ppb	100
53) 3-Nitroaniline	8.88	138	493983	46.59969	ppb	93
54) Acenaphthene	8.96	154	1629656	44.02788	ppb	100
55) 2,4-Dinitrophenol	9.01	184	202328	49.83992	ppb	94
56) 4-Nitrophenol	9.09	65	252473	37.36787	ppb	99
57) Dibenzofuran	9.16	168	2296507	44.72552	ppb	99
58) 2,4-DNT	9.15	165	564838	46.45799	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	385457	44.53544	ppb	97
60) Diethyl phthalate	9.42	149	1780276	44.67228	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	899275	44.93476	ppb	95
62) Fluorene	9.56	166	1851974	44.77181	ppb	100
63) 4-Nitroaniline	9.60	138	506599	47.29416	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	350459	51.16538	ppb	92
67) Diphenyl amine	9.70	169	2815867	86.66649	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2815867	86.66649	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1910724	40.62544	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	481519	43.40023	ppb	96
71) Hexachlorobenzene	10.20	284	450841	42.81056	ppb	97
72) Atrazine	10.31	200	245469	21.89136	ppb	98
73) Pentachlorophenol	10.43	266	273044	44.84102	ppb	99
74) Phenanthrene	10.69	178	2727361	44.43391	ppb	99
75) Anthracene	10.75	178	2807769	44.55359	ppb	100
76) Carbazol	10.94	167	2523384	44.09131	ppb	97
77) Di-n-butylphthalate	11.33	149	3017620	44.85844	ppb	100
78) Fluoranthene	12.08	202	2906835	43.98185	ppb	100
80) Benzidine	12.24	184	898587	45.75595	ppb	99
81) Pyrene	12.35	202	3031839	44.58907	ppb	100
83) Butyl benzylphthalate	13.08	149	1379263	46.39175	ppb	97
84) 3,3'-Dichlorobenzidine	13.70	252	956135	47.45949	ppb #	98
85) Benz (a) anthracene	13.74	228	2602250	44.02477	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	1887612	45.82238	ppb #	95
87) Chrysene	13.79	228	2593818	44.52277	ppb	100
88) Di-n-octylphthalate	14.48	149	3283408	47.07623	ppb #	94
90) Benzo (b) fluoranthene	15.07	252	2532432	43.64482	ppb	98
91) Benzo (k) fluoranthene	15.10	252	2611986	46.58763	ppb	98
92) Benzo (a) pyrene	15.55	252	2424047	45.72107	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2469600	46.03273	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2257333	45.81781	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2175059	45.42992	ppb	99

Quantitation Report

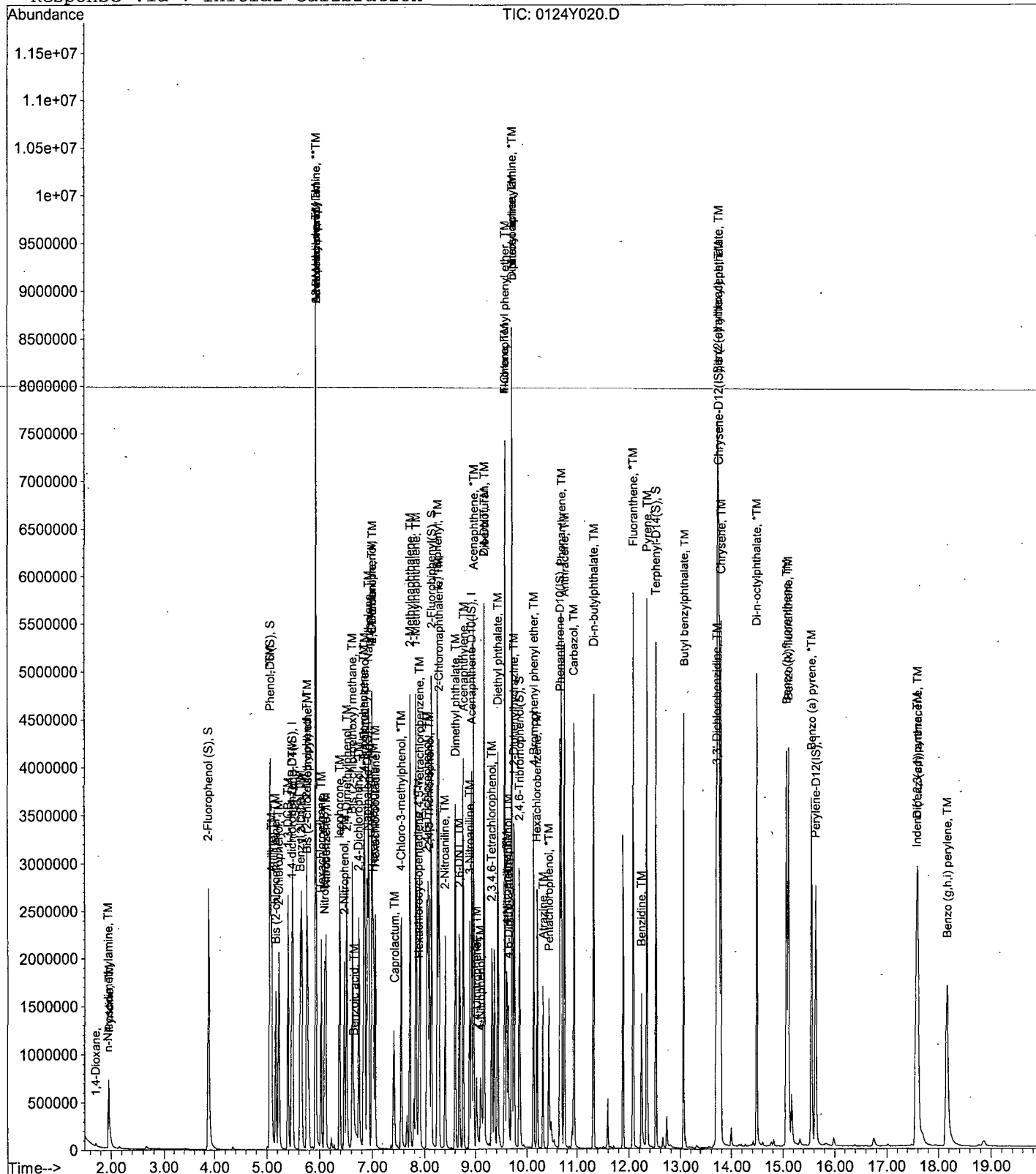
Data File : M:\YODA\DATA\Y190124\0124Y020.D  
Acq On : 25 Jan 19 11:44  
Sample : 40ug/mL 8270 01/24/19  
Misc :

Vial: 20  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y015.D  
 Acq On : 25 Jan 19 7:20  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	414061	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1774388	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1005371	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1908764	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1698051	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1677536	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.87	112	1774474	106.72722	ppb	0.00
Spiked Amount 200.000			Recovery =	53.363%		
6) Phenol-D6 (S)	5.05	99	2346261	106.80179	ppb	0.00
Spiked Amount 200.000			Recovery =	53.401%		
22) Nitrobenzene-D5 (S)	6.09	82	1051841	53.53683	ppb	0.00
Spiked Amount 100.000			Recovery =	53.537%		
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.13</del>	<del>172</del>	<del>2016382</del>	<del>49.35001</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount 100.000			Recovery =	49.350%		
64) 2,4,6-Tribromophenol (S)	9.85	330	419249	99.31143	ppb	0.00
Spiked Amount 200.000			Recovery =	49.656%		
82) Terphenyl-D14 (S)	12.51	244	2143936	48.39314	ppb	0.00
Spiked Amount 100.000			Recovery =	48.393%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	12955	7.18240		100
3) n-Nitrosodimethylamine	1.94	42	194605	63.64599	ppb	100
4) Pyridine	1.96	79	516800	68.12982	ppb	100
7) Phenol	5.07	94	1641696	61.78760	ppb	100
8) Aniline	5.09	93	1713521	82.39935	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	757200	57.35908	ppb	100
10) 2-Chlorophenol	5.22	128	1145751	62.28435	ppb	100
11) 1,3-DCB	5.39	146	1211613	63.52942	ppb	100
12) 1,4-DCB	5.48	146	1231153	63.64076	ppb	100
13) Benzyl alcohol	5.63	108	730277	62.70332	ppb	100
14) 1,2-DCB	5.64	146	1145010	63.29364	ppb	100
15) 2-Methylphenol	5.75	107	987729	65.88002	ppb	100
16) Bis (2-chloroisopropyl) et	5.77	45	1119934	51.16664	ppb	100
17) Acetophenone	5.92	105	1477135	61.96329	ppb	100
18) 3&4-Methylphenol	5.92	107	2314803	124.31319	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	836205	59.16615	ppb	100
20) Hexachloroethane	6.03	117	457500	61.65493	ppb	100
23) Nitrobenzene	6.12	77	1288575	64.37919	ppb	100
24) Isophorone	6.39	82	2269915	63.52050	ppb	100
25) 2-Nitrophenol	6.47	139	638487	71.65350	ppb	100
26) 2,4-Dimethylphenol	6.52	122	1082343	66.00996	ppb	100
27) Benzoic acid	6.66	105	869869	86.91271	ppb	100
28) Bis (2-chloroethoxy) metha	6.62	93	1383448	61.85884	ppb	100
29) 2,4-Dichlorophenol	6.75	162	934592	67.52420	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	987733	65.79606	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1444182	66.18149	ppb	100
32) Napthalene	6.93	128	3403361	64.67306	ppb	100
33) 4-Chloroaniline	6.99	127	1270710	63.23385	ppb	100
34) 2,6-Dichlorophenol	7.00	162	898322	66.24065	ppb	100
35) Hexachloropropene	7.02	213	627626	71.42681	ppb	100
36) Hexachlorobutadiene	7.06	225	511358	64.87426	ppb	100
37) Caprolactum	7.43	55	453404	59.77045	ppb	100

Data File : M:\YODA\DATA\Y190124\0124Y015.D  
 Acq On : 25 Jan 19 7:20  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1035975	66.78669	ppb	100
39) 2-Methylnaphthalene	7.71	142	2184777	65.39842	ppb	100
40) 1-Methylnaphthalene	7.83	142	2179083	65.09430	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	378734	51.68775	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	930158	58.66291	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	639238	61.33524	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	685751	61.10232	ppb	100
47) 1,1'-Biphenyl	8.25	154	2732730	59.14192	ppb	100
48) 2-Chloronaphthalene	8.28	162	2068546	58.85563	ppb	100
49) 2-Nitroaniline	8.40	65	708868	60.17019	ppb	100
50) Dimethyl phthalate	8.61	163	2488618	61.67396	ppb	100
51) 2,6-DNT	8.69	165	567043	67.49549	ppb	100
52) Acenaphthylene	8.76	152	3341916	61.09854	ppb	100
53) 3-Nitroaniline	8.88	138	641142	63.33110	ppb	100
54) Acenaphthene	8.96	154	2149307	59.59678	ppb	100
55) 2,4-Dinitrophenol	9.01	184	278852	68.71932	ppb	100
56) 4-Nitrophenol	9.09	65	384761	54.00246	ppb	100
57) Dibenzofuran	9.16	168	2994672	60.39932	ppb	100
58) 2,4-DNT	9.15	165	749501	67.45448	ppb	100
59) 2,3,4,6-Tetrachlorophenol	9.31	232	512262	61.78663	ppb	100
60) Diethyl phthalate	9.42	149	2355039	60.70661	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1161750	60.24333	ppb	100
62) Fluorene	9.56	166	2412535	60.26614	ppb	100
63) 4-Nitroaniline	9.61	138	666535	66.05633	ppb	100
66) 4,6-Dinitro-2-methylphenol	9.64	198	472238	66.77560	ppb	100
67) Diphenyl amine	9.70	169	3715091	115.17640	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3715091	115.17640	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2569030	53.01351	ppb	100
70) 4-Bromophenyl phenyl ether	10.13	248	628479	56.04009	ppb	100
71) Hexachlorobenzene	10.20	284	592346	55.25050	ppb	100
72) Atrazine	10.32	200	326684	29.75859	ppb	100
73) Pentachlorophenol	10.43	266	388571	58.76203	ppb	100
74) Phenanthrene	10.69	178	3576095	59.32245	ppb	100
75) Anthracene	10.75	178	3661605	59.15429	ppb	100
76) Carbazol	10.95	167	3335622	59.38406	ppb	100
77) Di-n-butylphthalate	11.33	149	4032317	61.27161	ppb	100
78) Fluoranthene	12.08	202	3849484	59.64433	ppb	100
80) Benzidine	12.24	184	1164345	61.38179	ppb	100
81) Pyrene	12.35	202	3982978	61.11597	ppb	100
83) Butyl benzylphthalate	13.08	149	1829888	65.61444	ppb	100
84) 3,3'-Dichlorobenzidine	13.71	252	1264021	68.03546	ppb	100
85) Benz (a) anthracene.	13.74	228	3532562	62.40700	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2582639	68.57527	ppb	100
87) Chrysene	13.79	228	3286756	58.09122	ppb	100
88) Di-n-octylphthalate	14.49	149	4410272	68.44635	ppb	100
90) Benzo (b) fluoranthene	15.08	252	3673387	63.09472	ppb	100
91) Benzo (k) fluoranthene	15.11	252	3156080	56.25376	ppb	100
92) Benzo (a) pyrene	15.55	252	3221278	60.77698	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3312285	62.28582	ppb	100
94) Dibenz (a,h) anthracene	17.61	278	3013495	61.57009	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2934416	61.60401	ppb	100

Quantitation Report

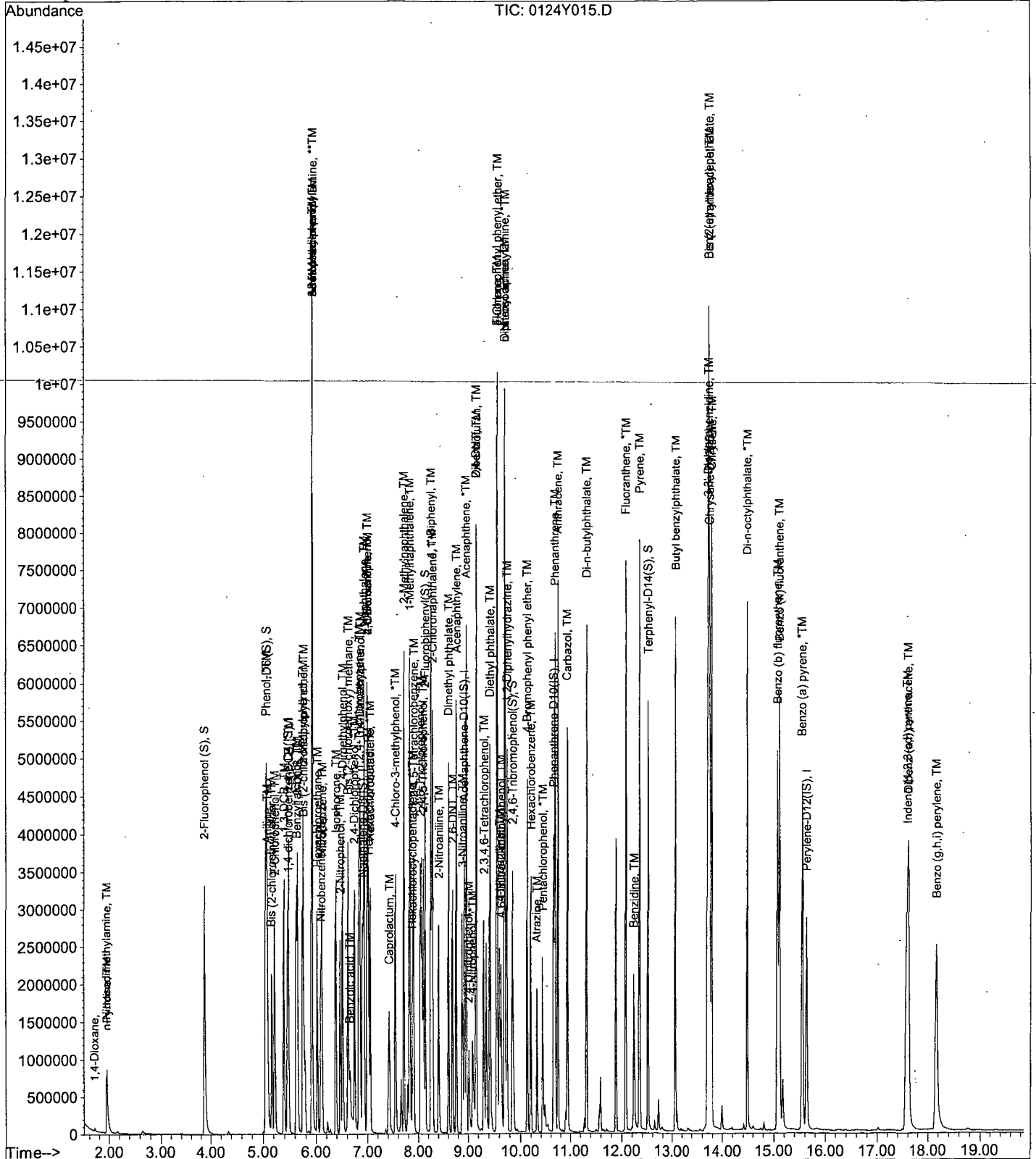
Data File : M:\YODA\DATA\Y190124\0124Y015.D  
Acq On : 25 Jan 19 7:20  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 15  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019.

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	411492	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1847622	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1087788	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2043698	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1825170	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1822854	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	2388786	139.91173	ppb	0.00
Spiked Amount 200.000			Recovery =	69.956%		
6) Phenol-D6 (S)	5.06	99	3094929	137.28392	ppb	0.00
Spiked Amount 200.000			Recovery =	68.642%		
22) Nitrobenzene-D5 (S)	6.10	82	1385267	65.82130	ppb	0.00
Spiked Amount 100.000			Recovery =	65.821%		
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.14</del>	<del>172</del>	<del>2691759</del>	<del>61.53111</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount 100.000			Recovery =	61.531%		
64) 2,4,6-Tribromophenol (S)	9.86	330	566249	127.04869	ppb	0.00
Spiked Amount 200.000			Recovery =	63.525%		
82) Terphenyl-D14 (S)	12.51	244	2859499	61.98232	ppb	0.00
Spiked Amount 100.000			Recovery =	61.982%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15055	7.35395		98
3) n-Nitrosodimethylamine	1.94	42	234687	69.57953	ppb	92
4) Pyridine	1.96	79	559879	67.49718	ppb	99
7) Phenol	5.08	94	1903943	67.69059	ppb	90
8) Aniline	5.09	93	2005258	97.05679	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	859457	63.95748	ppb	96
10) 2-Chlorophenol	5.23	128	1328278	67.03092	ppb	95
11) 1,3-DCB	5.39	146	1398342	66.86645	ppb	99
12) 1,4-DCB	5.48	146	1428123	66.71691	ppb	99
13) Benzyl alcohol	5.62	108	844806	68.44766	ppb	99
14) 1,2-DCB	5.65	146	1327093	66.81074	ppb	97
15) 2-Methylphenol	5.75	107	1147188	69.20556	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1276374	60.79362	ppb	# 93
17) Acetophenone	5.92	105	1686876	65.70510	ppb	96
18) 3&4-Methylphenol	5.93	107	2667787	134.04591	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	955387	64.70552	ppb	97
20) Hexachloroethane	6.02	117	527414	66.49643	ppb	92
23) Nitrobenzene	6.12	77	1480669	65.69034	ppb	96
24) Isophorone	6.39	82	2591162	65.95824	ppb	97
25) 2-Nitrophenol	6.47	139	753885	70.14750	ppb	95
26) 2,4-Dimethylphenol	6.52	122	1197903	65.32117	ppb	99
27) Benzoic acid	6.67	105	1033459	86.56029	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1598772	65.35066	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1084013	70.36616	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	1142665	66.06580	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1677901	68.69908	ppb	97
32) Napthalene	6.92	128	3904346	65.86913	ppb	100
33) 4-Chloroaniline	7.00	127	1455527	64.54043	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1036115	67.19592	ppb	98
35) Hexachloropropene	7.02	213	735631	71.37657	ppb	99
36) Hexachlorobutadiene	7.05	225	598218	66.49856	ppb	99
37) Caprolactum	7.43	55	523076	73.96100	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1202951	69.24052	ppb	95
39) 2-Methylnaphthalene	7.71	142	2558030	67.41383	ppb	99
40) 1-Methylnaphthalene	7.83	142	2522812	65.98369	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	465849	58.92991	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1099351	63.54491	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	747759	67.19329	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	803269	63.02165	ppb	94
47) 1,1'-Biphenyl	8.25	154	3182683	62.55468	ppb	99
48) 2-Chloronaphthalene	8.28	162	2416128	62.03380	ppb	99
49) 2-Nitroaniline	8.41	65	813392	63.67971	ppb	88
50) Dimethyl phthalate	8.60	163	2911438	64.28604	ppb	99
51) 2,6-DNT	8.69	165	674079	67.65007	ppb	89
52) Acenaphthylene	8.76	152	3906723	63.98517	ppb	100
53) 3-Nitroaniline	8.89	138	758104	66.12012	ppb	90
54) Acenaphthene	8.97	154	2490018	62.43796	ppb	100
55) 2,4-Dinitrophenol	9.02	184	374823	82.05906	ppb	89
56) 4-Nitrophenol	9.09	65	466498	66.71350	ppb	98
57) Dibenzofuran	9.16	168	3479456	62.68371	ppb	98
58) 2,4-DNT	9.16	165	881163	66.74748	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	607779	65.40593	ppb	96
60) Diethyl phthalate	9.43	149	2733586	63.51185	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.56	204	1352119	62.49603	ppb	90
62) Fluorene	9.57	166	2782910	62.35255	ppb	100
63) 4-Nitroaniline	9.62	138	729227	62.72259	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.64	198	571889	76.48129	ppb	91
67) Diphenyl amine	9.71	169	4324107	125.43365	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	4324107	125.43365	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2948425	59.57822	ppb	96
70) 4-Bromophenyl phenyl ether	10.13	248	751419	64.07488	ppb	96
71) Hexachlorobenzene	10.20	284	698037	62.77685	ppb	93
72) Atrazine	10.32	200	375225	31.55538	ppb	99
73) Pentachlorophenol	10.43	266	452076	70.41952	ppb	98
74) Phenanthrene	10.69	178	4126819	63.01664	ppb	100
75) Anthracene	10.75	178	4232567	62.94612	ppb	100
76) Carbazol	10.94	167	3854357	63.29312	ppb	98
77) Di-n-butylphthalate	11.32	149	4548380	63.48597	ppb	99
78) Fluoranthene	12.08	202	4467332	63.49679	ppb	98
80) Benzidine	12.24	184	1392654	66.15707	ppb	97
81) Pyrene	12.35	202	4582066	63.30843	ppb	100
83) Butyl benzylphthalate	13.08	149	2123881	66.71496	ppb	97
84) 3,3'-Dichlorobenzidine	13.71	252	1450726	67.29146	ppb	99
85) Benz (a) anthracene	13.74	228	4063341	64.69439	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2855356	64.56887	ppb	98
87) Chrysene	13.78	228	3930215	63.46061	ppb	100
88) Di-n-octylphthalate	14.49	149	5023122	67.13574	ppb	98
90) Benzo (b) fluoranthene	15.08	252	4110006	64.78398	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3831221	62.41409	ppb	98
92) Benzo (a) pyrene	15.56	252	3751562	64.72168	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.58	276	3829234	65.10334	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	3476233	64.50384	ppb	98
95) Benzo (g,h,i) perylene	18.18	276	3368865	64.36887	ppb	99

Quantitation Report

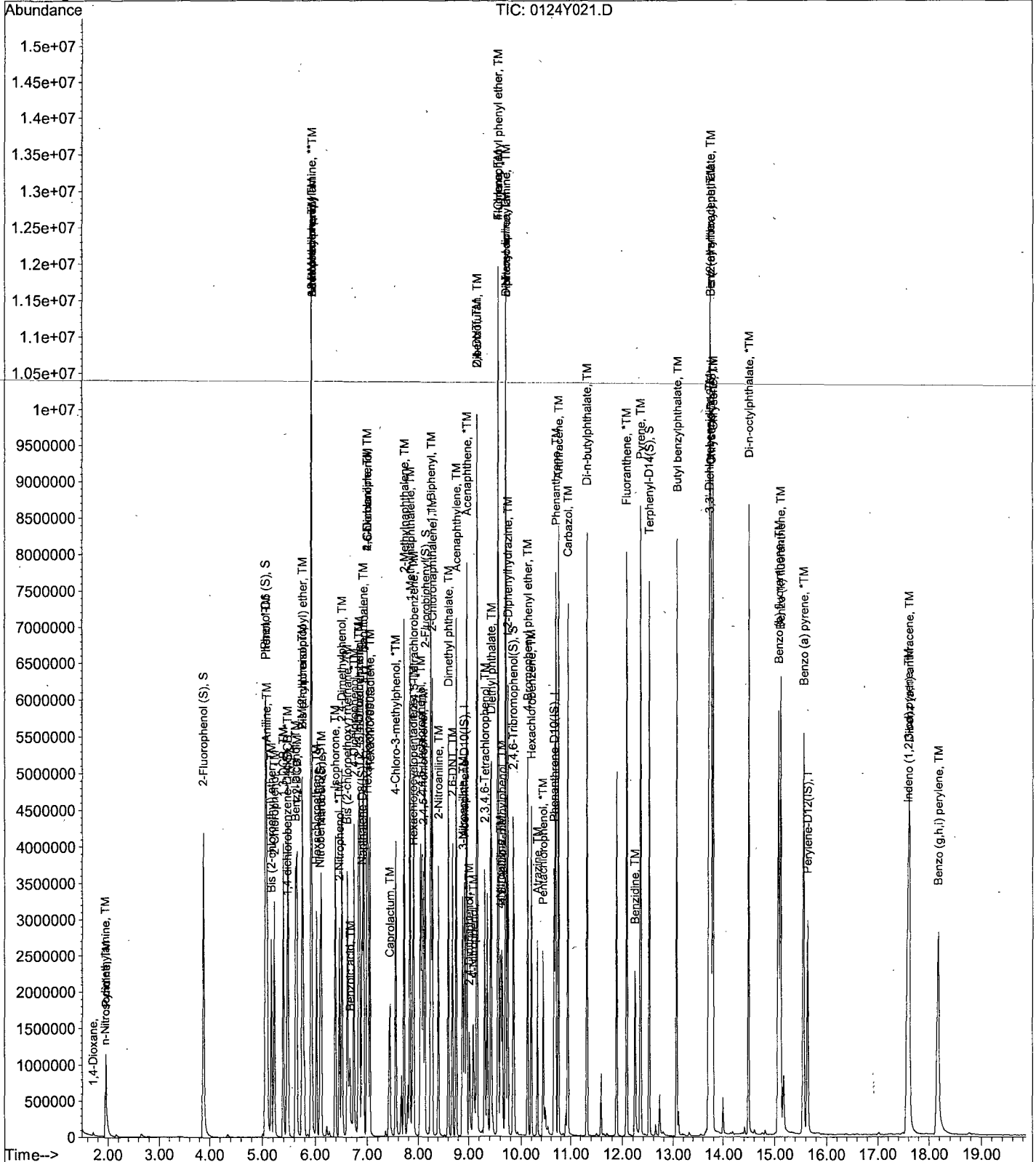
Data File : M:\YODA\DATA\Y190124\0124Y021.D  
Acq On : 25 Jan 19 12:11  
Sample : 60ug/mL 8270 01/24/19  
Misc :

Vial: 21  
Operator: MA  
Inst : Yoda  
Multiplr: 1:00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y022.D  
 Acq On : 25 Jan 19 12:39  
 Sample : 80ug/mL 8270 01/24/19  
 Misc :

Vial: 22  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	390377	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1776812	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1059625	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2046360	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1763849	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1771022	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	3088976	185.47310	ppb	0.00
Spiked Amount 200.000			Recovery =	92.737%		
6) Phenol-D6 (S)	5.06	99	3953802	179.89705	ppb	0.00
Spiked Amount 200.000			Recovery =	89.949%		
22) Nitrobenzene-D5 (S)	6.10	82	1804113	87.68532	ppb	0.00
Spiked Amount 100.000			Recovery =	87.685%		
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.14</del>	<del>172</del>	<del>3420176</del>	<del>79.89967</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount 100.000			Recovery =	79.900%		
64) 2,4,6-Tribromophenol (S)	9.86	330	727255	167.25732	ppb	0.00
Spiked Amount 200.000			Recovery =	83.629%		
82) Terphenyl-D14 (S)	12.52	244	3667120	82.00033	ppb	0.00
Spiked Amount 100.000			Recovery =	82.000%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15511	7.51444		72
3) n-Nitrosodimethylamine	1.94	42	288229	86.04170	ppb	89
4) Pyridine	1.96	79	697679	84.73709	ppb	100
7) Phenol	5.08	94	2358274	85.23173	ppb	91
8) Aniline	5.10	93	2489180	119.40676	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	1076644	82.53804	ppb	95
10) 2-Chlorophenol	5.23	128	1672258	85.80938	ppb	97
11) 1,3-DCB	5.39	146	1778320	86.15822	ppb	98
12) 1,4-DCB	5.49	146	1787289	84.50692	ppb	98
13) Benzyl alcohol	5.63	108	1072292	88.46892	ppb	94
14) 1,2-DCB	5.65	146	1667744	85.09298	ppb	97
15) 2-Methylphenol	5.75	107	1433948	87.27826	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1590546	79.05994	ppb	# 86
17) Acetophenone	5.93	105	2108764	83.42297	ppb	97
18) 3&4-Methylphenol	5.93	107	3310187	168.84789	ppb	100
19) n-Nitrosodi-n-propylamine	5.93	70	1192858	82.57022	ppb	99
20) Hexachloroethane	6.02	117	671891	86.23765	ppb	90
23) Nitrobenzene	6.13	77	1859324	83.03849	ppb	97
24) Isophorone	6.39	82	3268065	83.85452	ppb	99
25) 2-Nitrophenol	6.48	139	941527	87.24439	ppb	94
26) 2,4-Dimethylphenol	6.52	122	1495864	82.27582	ppb	98
27) Benzoic acid	6.69	105	1172491	94.71906	ppb	98
28) Bis (2-chloroethoxy) metha	6.63	93	2006734	82.81745	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1363953	88.32544	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1449991	84.05610	ppb	97
31) 3,4-Dimethylphenol	6.86	107	2084631	85.46152	ppb	98
32) Naphthalene	6.93	128	4875097	82.59448	ppb	100
33) 4-Chloroaniline	7.00	127	1725667	77.69143	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1301355	84.49556	ppb	98
35) Hexachloropropene	7.02	213	924461	89.22651	ppb	99
36) Hexachlorobutadiene	7.05	225	757876	84.43582	ppb	98
37) Caprolactum	7.44	55	654459	93.87552	ppb	100

Data File : M:\YODA\DATA\Y190124\0124Y022.D  
 Acq On : 25 Jan 19 12:39  
 Sample : 80ug/mL 8270 01/24/19  
 Misc :

Vial: 22  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1513654	87.06098	ppb	100
39) 2-Methylnaphthalene	7.71	142	3146756	82.97836	ppb	99
40) 1-Methylnaphthalene	7.83	142	3133044	82.22878	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	631254	78.79714	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1335660	77.68918	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	929432	83.85905	ppb	97
45) 2,4,5-Trichlorophenol	8.10	196	997882	78.83150	ppb	97
47) 1,1'-Biphenyl	8.26	154	3955801	78.21989	ppb	98
48) 2-Chloronaphthalene	8.29	162	3015805	77.95661	ppb	98
49) 2-Nitroaniline	8.41	65	1018616	80.87427	ppb	92
50) Dimethyl phthalate	8.61	163	3609843	79.88493	ppb	99
51) 2,6-DNT	8.70	165	844260	84.43330	ppb	91
52) Acenaphthylene	8.76	152	4822141	79.16164	ppb	100
53) 3-Nitroaniline	8.89	138	928189	81.28531	ppb	94
<del>54) Acenaphthene</del>	<del>8.97</del>	<del>154</del>	<del>3056253</del>	<del>77.17140</del>	<del>ppb</del>	<del>100</del>
55) 2,4-Dinitrophenol	9.02	184	460548	96.14185	ppb	91
56) 4-Nitrophenol	9.10	65	601091	88.48440	ppb	95
57) Dibenzofuran	9.16	168	4265758	77.08443	ppb	97
58) 2,4-DNT	9.16	165	1090701	82.46328	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	767671	83.24367	ppb	95
60) Diethyl phthalate	9.43	149	3348639	78.15623	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.56	204	1662617	77.15444	ppb	93
62) Fluorene	9.57	166	3410866	76.86824	ppb	100
63) 4-Nitroaniline	9.62	138	896039	77.75631	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	741553	95.23484	ppb	99
67) Diphenyl amine	9.71	169	5296492	150.79364	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	5296492	150.79364	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	4242116	84.81525	ppb	94
70) 4-Bromophenyl phenyl ether	10.14	248	926151	77.57348	ppb	88
71) Hexachlorobenzene	10.20	284	875905	77.71894	ppb	91
72) Atrazine	10.32	200	471083	38.93444	ppb	98
73) Pentachlorophenol	10.44	266	574673	88.00062	ppb	97
74) Phenanthrene	10.69	178	5093537	76.13277	ppb	100
75) Anthracene	10.75	178	5251660	76.54085	ppb	100
76) Carbazol	10.94	167	4781015	76.94485	ppb	98
77) Di-n-butylphthalate	11.32	149	5725493	78.34953	ppb	99
78) Fluoranthene	12.09	202	5499034	76.51468	ppb	97
80) Benzidine	12.24	184	1704671	73.49542	ppb	97
81) Pyrene	12.35	202	5693688	79.55389	ppb	99
83) Butyl benzylphthalate	13.08	149	2651101	83.69807	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	1750394	81.51398	ppb	98
85) Benz (a) anthracene	13.75	228	4939935	79.29669	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	3478919	78.91435	ppb	98
87) Chrysene	13.79	228	4874253	79.65689	ppb	99
88) Di-n-octylphthalate	14.49	149	6257268	83.98293	ppb	97
90) Benzo (b) fluoranthene	15.07	252	4954951	78.33436	ppb	99
91) Benzo (k) fluoranthene	15.12	252	4952396	81.94906	ppb	99
92) Benzo (a) pyrene	15.56	252	4659102	81.23823	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.59	276	4779081	81.77579	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	4328036	81.09588	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	4252951	81.97289	ppb	99



Quantitation Report

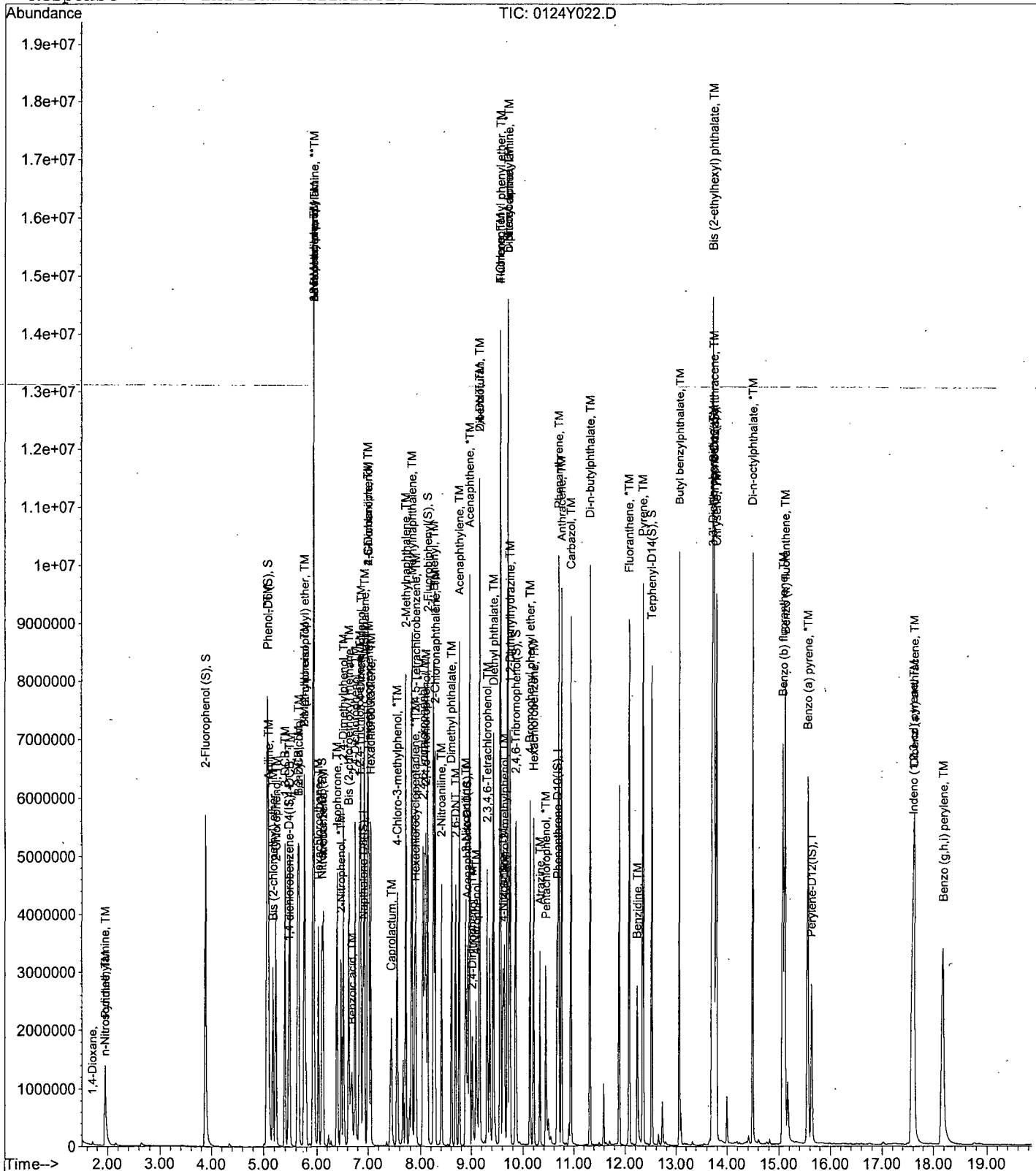
Data File : M:\YODA\DATA\Y190124\0124Y022.D  
Acq On : 25 Jan 19 12:39  
Sample : 80ug/mL 8270 01/24/19  
Misc :

Vial: 22  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	369028	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1684122	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	958383	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	1833191	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1593355	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1574038	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	3517772	218.05743	ppb	0.00
Spiked Amount 200.000			Recovery =	109.029%		
6) Phenol-D6 (S)	5.07	99	4506620	212.13191	ppb	0.02
Spiked Amount 200.000			Recovery =	106.066%		
22) Nitrobenzene-D5 (S)	6.10	82	2075102	104.76853	ppb	0.00
Spiked Amount 100.000			Recovery =	104.769%		
<del>46) 2-Fluorobiphenyl (S)</del>	<del>8.14</del>	<del>172</del>	<del>3864993</del>	<del>99.49368</del>	<del>ppb</del>	<del>0.00</del>
Spiked Amount 100.000			Recovery =	99.494%		
64) 2,4,6-Tribromophenol (S)	9.86	330	843089	213.66568	ppb	0.00
Spiked Amount 200.000			Recovery =	106.833%		
82) Terphenyl-D14 (S)	12.52	244	4235562	104.75775	ppb	0.00
Spiked Amount 100.000			Recovery =	104.758%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	21223	10.61042		85
3) n-Nitrosodimethylamine	1.95	42	378062	115.37176	ppb	78
4) Pyridine	1.96	79	911139	113.60957	ppb	98
7) Phenol	5.09	94	2940939	109.44414	ppb	# 75
8) Aniline	5.10	93	3113942	135.46800	ppb	96
9) Bis (2-chloroethyl) ether	5.17	63	1375041	109.91033	ppb	98
10) 2-Chlorophenol	5.23	128	2131761	112.54263	ppb	98
11) 1,3-DCB	5.39	146	2244057	111.37429	ppb	98
12) 1,4-DCB	5.49	146	2268718	110.04841	ppb	98
13) Benzyl alcohol	5.63	108	1342620	113.91313	ppb	99
14) 1,2-DCB	5.65	146	2103625	110.13676	ppb	98
15) 2-Methylphenol	5.75	107	1832669	113.94939	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1993329	104.61607	ppb	# 76
17) Acetophenone	5.93	105	2632203	106.93049	ppb	90
18) 3&4-Methylphenol	5.94	107	4146604	217.27081	ppb	97
19) n-Nitrosodi-n-propylamine	5.93	70	1501508	107.49302	ppb	98
20) Hexachloroethane	6.02	117	848109	112.09751	ppb	89
23) Nitrobenzene	6.13	77	2342621	107.56140	ppb	100
24) Isophorone	6.40	82	4143509	109.37870	ppb	97
25) 2-Nitrophenol	6.48	139	1197455	113.03844	ppb	96
26) 2,4-Dimethylphenol	6.53	122	1978968	112.13683	ppb	99
27) Benzoic acid	6.70	105	1542045	125.57459	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2522989	107.22198	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1711713	112.94899	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	1811029	107.19704	ppb	98
31) 3,4-Dimethylphenol	6.86	107	2645726	110.94561	ppb	100
32) Napthalene	6.93	128	6069171	105.32980	ppb	100
33) 4-Chloroaniline	7.00	127	2063322	96.10560	ppb	99
34) 2,6-Dichlorophenol	7.01	162	1622155	107.64178	ppb	99
35) Hexachloropropene	7.02	213	1167286	114.53420	ppb	100
36) Hexachlorobutadiene	7.05	225	958401	109.07716	ppb	98
37) Caprolactum	7.45	55	828168	123.09343	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1911489	112.23315	ppb	98
39) 2-Methylnaphthalene	7.72	142	3945297	106.48229	ppb	99
40) 1-Methylnaphthalene	7.83	142	3888604	104.67399	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	861901	114.64271	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1694943	107.65840	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	1198737	117.92398	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	1266846	108.97004	ppb	98
47) 1,1'-Biphenyl	8.26	154	4909140	105.71606	ppb	98
48) 2-Chloronaphthalene	8.29	162	3763364	106.06503	ppb	99
49) 2-Nitroaniline	8.41	65	1287497	111.93280	ppb	96
50) Dimethyl phthalate	8.61	163	4502449	108.28243	ppb	100
51) 2,6-DNT	8.70	165	1067927	115.60401	ppb	100
52) Acenaphthylene	8.76	152	6000220	107.15505	ppb	100
53) 3-Nitroaniline	8.89	138	1161704	110.46197	ppb	96
54) Acenaphthene	8.97	154	3871991	106.71414	ppb	100
55) 2,4-Dinitrophenol	9.02	184	628043	130.63629	ppb	97
56) 4-Nitrophenol	9.10	65	789110	129.35218	ppb	99
57) Dibenzofuran	9.17	168	5237511	103.01684	ppb	99
58) 2,4-DNT	9.17	165	1367064	111.91777	ppb	85
59) 2,3,4,6-Tetrachlorophenol	9.31	232	962675	113.66677	ppb	94
60) Diethyl phthalate	9.43	149	4275410	108.65157	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	2046659	103.16033	ppb	94
62) Fluorene	9.57	166	4183100	102.50265	ppb	100
63) 4-Nitroaniline	9.63	138	1123718	105.55637	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.65	198	938503	131.25620	ppb	94
67) Diphenyl amine	9.72	169	6563877	207.51246	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	6563877	207.51246	ppb	99
69) 1,2-Diphenylhydrazine	9.75	77	5281854	118.32410	ppb	91
70) 4-Bromophenyl phenyl ether	10.14	248	1162593	108.52969	ppb	93
71) Hexachlorobenzene	10.20	284	1105478	109.26263	ppb #	85
72) Atrazine	10.33	200	594812	54.68055	ppb	99
73) Pentachlorophenol	10.44	266	752725	128.44553	ppb	98
74) Phenanthrene	10.69	178	6357117	105.02352	ppb	100
75) Anthracene	10.76	178	6513717	105.00530	ppb	99
76) Carbazol	10.94	167	6031129	107.43352	ppb	97
77) Di-n-butylphthalate	11.32	149	7069564	106.85870	ppb	98
78) Fluoranthene	12.09	202	6831981	105.11853	ppb	99
80) Benzidine	12.24	184	2116848	105.65380	ppb	98
81) Pyrene	12.36	202	7097992	108.08786	ppb	100
83) Butyl benzylphthalate	13.08	149	3286296	112.53736	ppb	91
84) 3,3'-Dichlorobenzidine	13.71	252	2161447	108.82542	ppb #	97
85) Benz (a) anthracene	13.75	228	6187037	108.12217	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	4303302	105.70566	ppb	97
87) Chrysene	13.79	228	6136199	109.64013	ppb	99
88) Di-n-octylphthalate	14.49	149	7872322	114.69387	ppb	96
90) Benzo (b) fluoranthene	15.08	252	6819800	120.21812	ppb	99
91) Benzo (k) fluoranthene	15.12	252	5648056	102.19151	ppb	99
92) Benzo (a) pyrene	15.57	252	5887626	113.66648	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.59	276	6044154	114.14032	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	5506458	114.28713	ppb	100
95) Benzo (g,h,i) perylene	18.19	276	5357774	114.13819	ppb	100

Quantitation Report

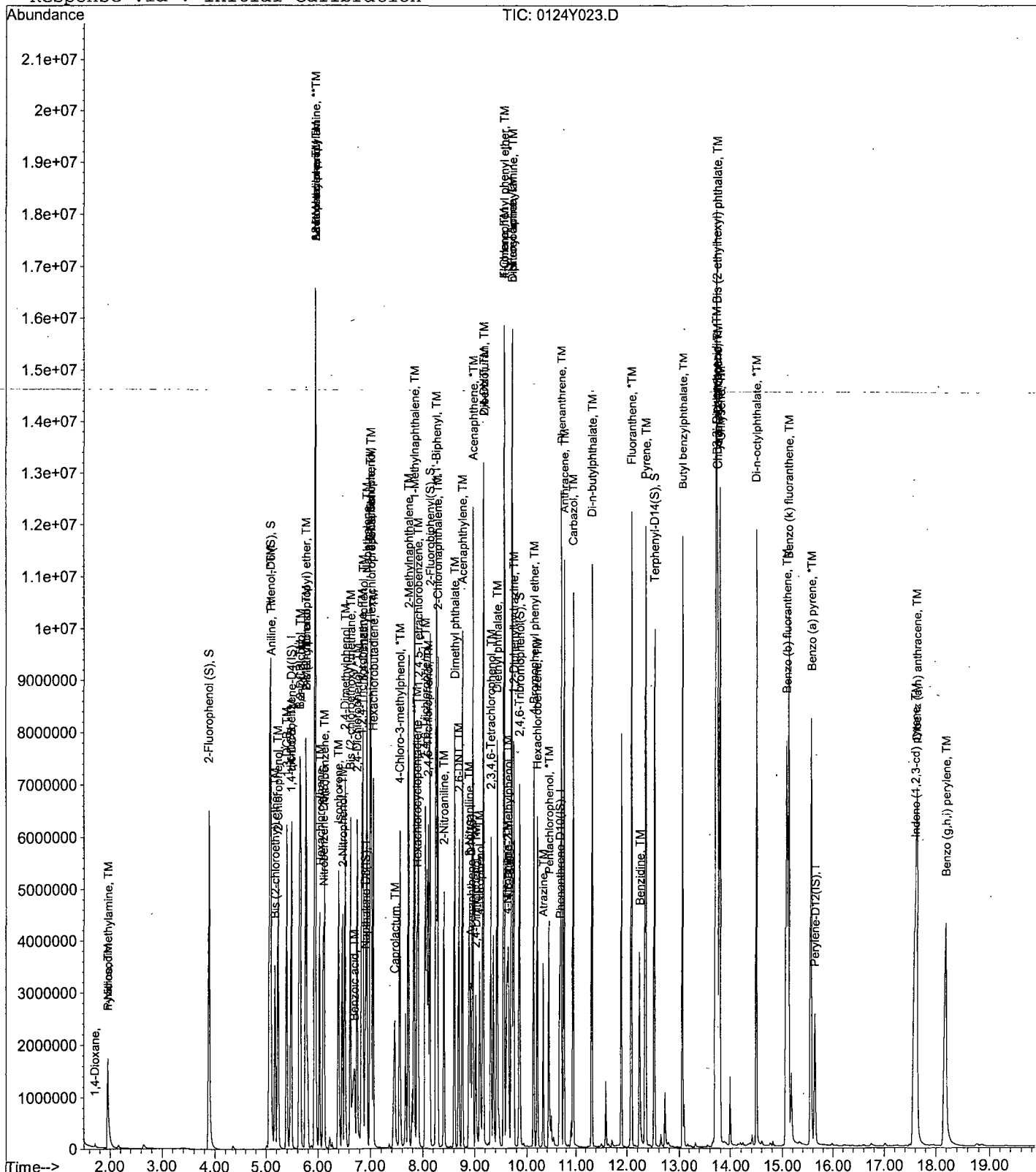
Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
1		1,4-Dioxane	0.2237	0.2222	0.68	
2	TM	n-Nitrosodimethylamine	0.3626	0.3593	0.90	TM
3	TM	Pyridine	0.8923	0.9235	3.5	TM
4	*TM	Phenol	3.026	2.969	1.9	*TM
5	TM	Aniline	3.167	3.000	5.3	TM
6	TM	Bis (2-chloroethyl) ether	1.394	1.327	4.8	TM
7	TM	2-Chlorophenol	2.135	2.080	2.6	TM
8	TM	1,3-DCB	2.272	2.228	1.9	TM
9	*TM	1,4-DCB	2.321	2.241	3.5	*TM
10	TM	Benzyl alcohol	1.331	1.255	5.7	TM
11	TM	1,2-DCB	2.150	2.089	2.9	TM
12	TM	2-Methylphenol	1.822	1.746	4.2	TM
13	TM	Bis (2-chloroisopropyl) ether	2.093	1.968	6.0	TM
14	TM	Acetophenone	2.775	2.579	7.1	TM
15	TM	3&4-Methylphenol	2.152	2.049	4.8	TM
16	**TM	n-Nitrosodi-n-propylamine	1.563	1.452	7.1	**TM
17	TM	Hexachloroethane	0.8480	0.8171	3.6	TM
18	TM	Nitrobenzene	0.5356	0.5518	3.0	TM
19	TM	Isophorone	0.9343	0.9637	3.1	TM
20	*TM	2-Nitrophenol	0.2637	0.2706	2.6	*TM
21	TM	2,4-Dimethylphenol	0.4363	0.4511	3.4	TM
22	TM	Benzoic acid	0.3414	0.3692	8.2	TM
23	TM	Bis (2-chloroethoxy) methane	0.5794	0.5715	1.4	TM
24	*TM	2,4-Dichlorophenol	0.3755	0.3920	4.4	*TM
25	TM	1,2,4-Trichlorobenzene	0.4174	0.4207	0.78	TM
26	TM	3,4-Dimethylphenol	0.5899	0.6009	1.9	TM
27	TM	Naphthalene	1.420	1.398	1.5	TM
28	TM	4-Chloroaniline	0.5252	0.5196	1.1	TM
29	TM	2,6-Dichlorophenol	0.3718	0.3779	1.6	TM
30	TM	Hexachloropropene	0.2546	0.2632	3.4	TM
31	*TM	Hexachlorobutadiene	0.2175	0.2221	2.1	*TM
32	TM	Caprolactum	0.1890	0.1906	0.85	TM
33	*TM	4-Chloro-3-methylphenol	0.4231	0.4348	2.8	*TM
34	TM	2-Methylnaphthalene	0.9154	0.8857	3.2	TM
35	TM	1-Methylnaphthalene	0.9149	0.9061	0.96	TM
36	**TML	Hexachlorocyclopentadiene	0.2131	0.3252	53	**TML 13
37	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.7344	9.3	TM
38	*TM	2,4,6-Trichlorophenol	0.4386	0.5022	15	*TM
39	TM	2,4,5-Trichlorophenol	0.4953	0.5390	8.8	TM
40	TM	1,1'-Biphenyl	1.985	2.208	11	TM

Average

5.2

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2-Chloronaphthalene	1.516	1.702	12	TM
42	TM	2-Nitroaniline	0.4929	0.5434	10	TM
43	TM	Dimethyl phthalate	1.790	1.944	8.6	TM
44	TM	2,6-DNT	0.4015	0.4696	17	TM
45	TM	Acenaphthylene	2.405	2.664	11	TM
46	TM	3-Nitroaniline	0.4546	0.4922	8.3	TM
47	*TM	Acenaphthene	1.558	1.693	8.7	*TM
48	**TML	2,4-Dinitrophenol	0.1911	0.2391	25	**TML 10
49	**TM	4-Nitrophenol	0.2763	0.2845	3.0	**TM
50	TM	Dibenzofuran	2.183	2.306	5.6	TM
51	TM	2,4-DNT	0.5295	0.6234	18	TM
52	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.4330	19	TM
53	TM	Diethyl phthalate	1.696	1.855	9.4	TM
54	TM	4-Chlorophenyl phenyl ether	0.8517	0.9262	8.7	TM
55	TM	Fluorene	1.750	1.915	9.4	TM
56	TM	4-Nitroaniline	0.4603	0.5193	13	TM
57	TM	4,6-Dinitro-2-methylphenol	0.1787	0.2120	19	TM
58	TM	Diphenyl amine	0.7057	0.7914	12	TM
59	*TM	n-Nitrosodiphenylamine	0.7057	0.7914	12	*TM
60	TM	1,2-Diphenylhydrazine	0.9947	1.099	10	TM
61	TM	4-Bromophenyl phenyl ether	0.2390	0.2673	12	TM
62	TM	Hexachlorobenzene	0.2259	0.2560	13	TM
63	TM	Atrazine	0.2421	0.2663	10.0	TM
64	*TM	Pentachlorophenol	0.1414	0.1559	10	*TM
65	TM	Phenanthrene	1.352	1.515	12	TM
66	TM	Anthracene	1.385	1.525	10	TM
67	TM	Carbazol	1.258	1.450	15	TM
68	TM	Di-n-butylphthalate	1.485	1.684	13	TM
69	*TM	Fluoranthene	1.452	1.629	12	*TM
70	TM	Benzidine	0.4947	0.5317	7.5	TM
71	TM	Pyrene	1.698	1.882	11	TM
72	TM	Butyl benzylphthalate	0.7611	0.8756	15	TM
73	TM	3,3'-Dichlorobenzidine	0.5206	0.6069	17	TM
74	TM	Benz (a) anthracene	1.481	1.633	10	TM
75	TM	Bis (2-ethylhexyl) phthalate	1.059	1.175	11	TM
76	TM	Chrysene	1.448	1.604	11	TM
77	*TM	Di-n-octylphthalate	1.797	2.065	15	*TM
78	TM	Benzo (b) fluoranthene	1.501	1.609	7.2	TM
79	TM	Benzo (k) fluoranthene	1.443	1.462	1.3	TM
80	*TM	Benzo (a) pyrene	1.359	1.566	15	*TM

Average

11.7

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: 0

Instrument: Yoda

Cal. Date: 01/25/19

Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Indeno (1,2,3-cd) pyrene	1.400	1.669	19	TM
82	TM	Dibenz (a,h) anthracene	1.266	1.452	15	TM
83	TM	Benzo (g,h,i) perylene	1.240	1.331	7.4	TM
84						
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120						

Average

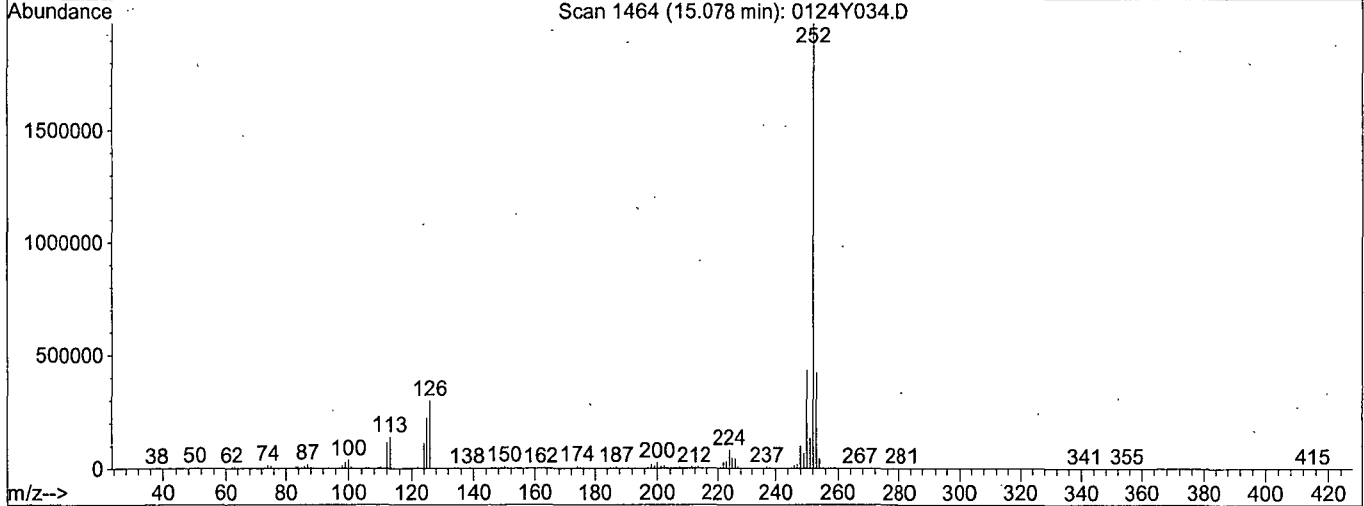
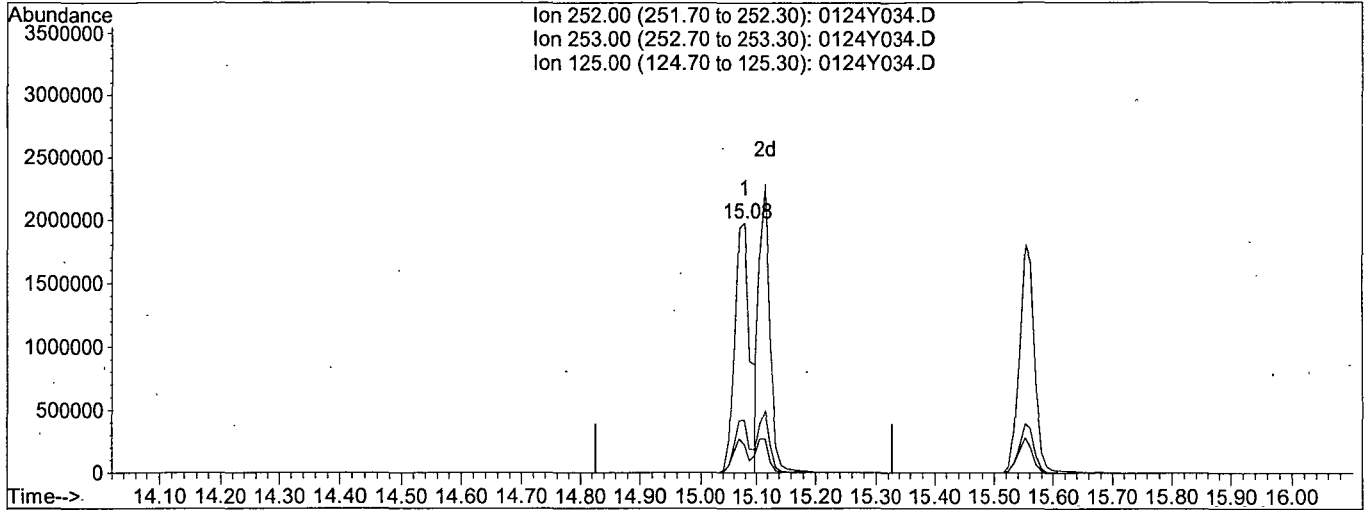
13.8

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :  
 Quant Time: Jan 28 15:00 2019

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 61.5896ppb

response 3871985

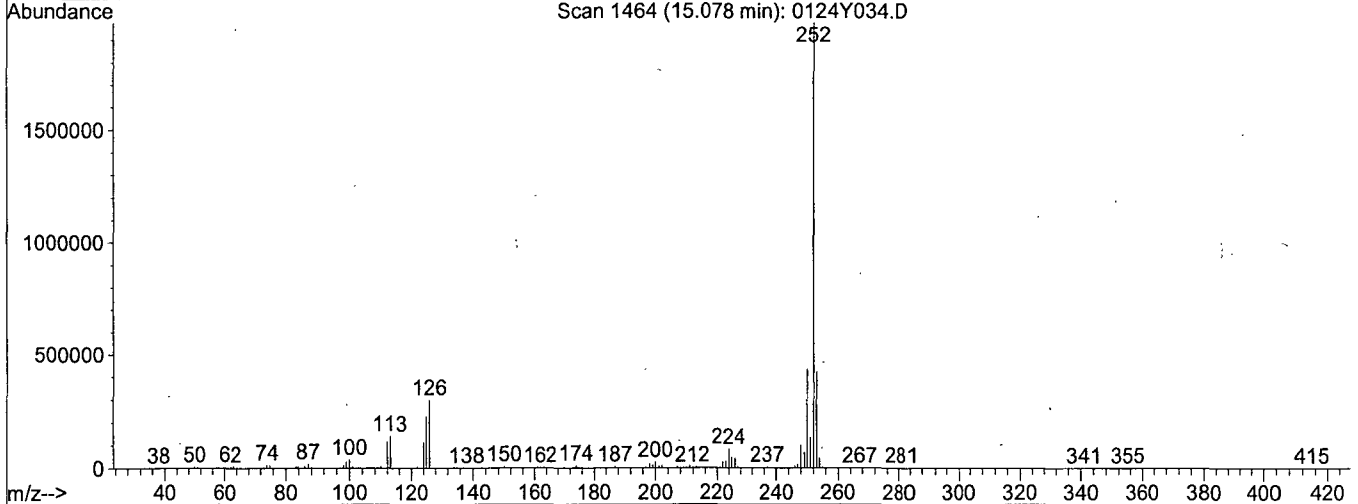
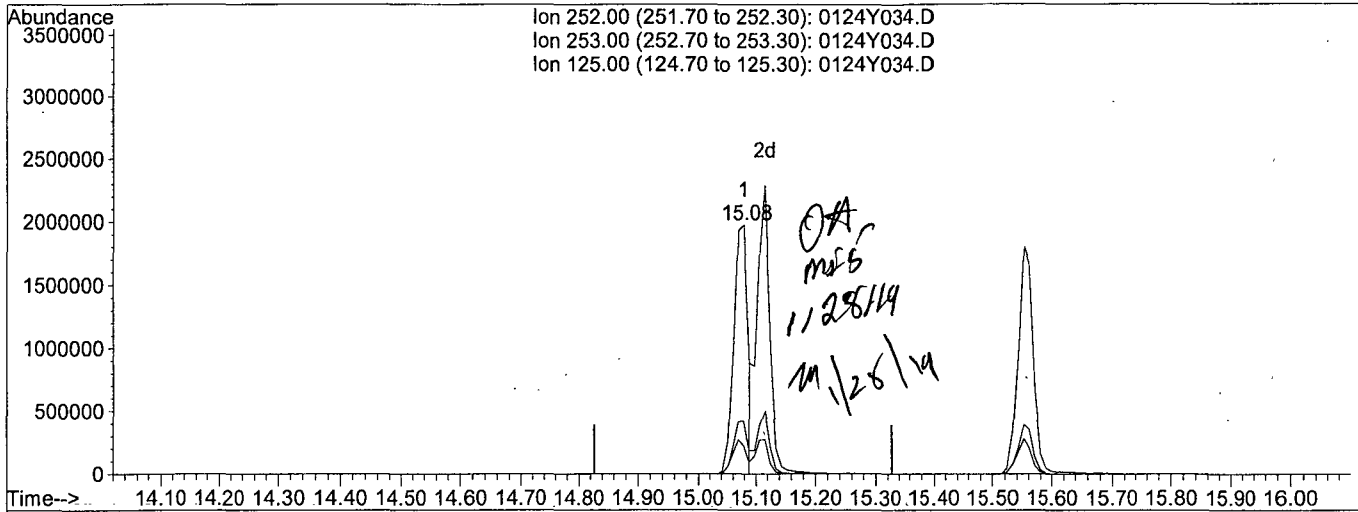
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00



Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D Vial: 34  
 Acq On : 28 Jan 19 14:11 Operator: MA  
 Sample : SS-8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 28 15:00 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 53.5898ppb m

response 3369057

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	458368	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1938809	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1014849	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1912266	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1708227	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1674833	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	0.00	112	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
6) Phenol-D6 (S)	0.00	99	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5 (S)	6.03	82	108224	4.68761	ppb	-0.06
Spiked Amount 100.000			Recovery =	4.688%		
46) 2-Fluorobiphenyl (S)	8.13	172	213	0.00518	ppb	0.00
Spiked Amount 100.000			Recovery =	0.005%		
64) 2,4,6-Tribromophenol (S)	0.00	330	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
82) Terphenyl-D14 (S)	12.52	244	770	0.01767	ppb	0.00
Spiked Amount 100.000			Recovery =	0.018%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.74	58	12729	4.96599		86
3) n-Nitrosodimethylamine	1.96	42	205883	49.54778	ppb	87
4) Pyridine	1.98	79	529141	51.74874	ppb	96
7) Phenol	5.07	94	1701203	49.06389	ppb	94
8) Aniline	5.09	93	1718990	47.36392	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	760366	47.60321	ppb	91
10) 2-Chlorophenol	5.23	128	1191637	48.69709	ppb	96
11) 1,3-DCB	5.40	146	1276386	49.03029	ppb	99
12) 1,4-DCB	5.49	146	1283777	48.26248	ppb	97
13) Benzyl alcohol	5.63	108	718943	47.15114	ppb	97
14) 1,2-DCB	5.66	146	1196773	48.56573	ppb	97
15) 2-Methylphenol	5.75	107	1000280	47.91957	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1127555	47.01882	ppb	100
17) Acetophenone	5.92	105	1477412	46.45588	ppb	99
18) 3&4-Methylphenol	5.92	107	2347562	95.21848	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	832033	46.46922	ppb	99
20) Hexachloroethane	6.03	117	468170	48.18007	ppb	95
23) Nitrobenzene	6.12	77	1337322	51.51079	ppb	100
24) Isophorone	6.39	82	2335484	51.57041	ppb	100
25) 2-Nitrophenol	6.47	139	655816	51.30629	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1093253	51.69152	ppb	97
27) Benzoic acid	6.66	105	894833	54.07578	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1384922	49.31027	ppb	100
29) 2,4-Dichlorophenol	6.74	162	949905	52.19556	ppb	95
30) 1,2,4-Trichlorobenzene	6.83	180	1019586	50.39201	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1456405	50.93263	ppb	100
32) Naphthalene	6.93	128	3388497	49.24639	ppb	100
33) 4-Chloroaniline	6.99	127	1259364	49.47066	ppb	99
34) 2,6-Dichlorophenol	7.00	162	915959	50.82211	ppb	99
35) Hexachloropropene	7.02	213	637825	51.69508	ppb	99
36) Hexachlorobutadiene	7.05	225	538197	51.06295	ppb	97
37) Caprolactum	7.42	55	462035	50.42547	ppb	98

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1053821	51.38731	ppb	99
39) 2-Methylnaphthalene	7.72	142	2146475	48.37837	ppb	99
40) 1-Methylnaphthalene	7.83	142	2195869	49.51781	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	412511	56.53516	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	931572	54.64934	ppb	97
44) 2,4,6-Trichlorophenol	8.04	196	637106	57.25617	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	683790	54.41270	ppb	97
47) 1,1'-Biphenyl	8.25	154	2800863	55.61888	ppb	99
48) 2-Chloronaphthalene	8.28	162	2159211	56.12559	ppb	98
49) 2-Nitroaniline	8.40	65	689275	55.11518	ppb	97
50) Dimethyl phthalate	8.61	163	2465503	54.27961	ppb	100
51) 2,6-DNT	8.69	165	595747	58.49045	ppb	97
52) Acenaphthylene	8.77	152	3379049	55.37197	ppb	99
53) 3-Nitroaniline	8.89	138	624378	54.13436	ppb	95
54) Acenaphthene	8.96	154	2148281	54.35989	ppb	99
55) 2,4-Dinitrophenol	9.02	184	303263	55.09102	ppb	93
56) 4-Nitrophenol	9.09	65	360931	51.49458	ppb	96
57) Dibenzofuran	9.16	168	2924995	52.81029	ppb	100
58) 2,4-DNT	9.16	165	790761	58.86232	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	549310	59.39518	ppb	96
60) Diethyl phthalate	9.42	149	2353679	54.68973	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1174961	54.37478	ppb	96
62) Fluorene	9.56	166	2428778	54.70594	ppb	100
63) 4-Nitroaniline	9.61	138	658803	56.41060	ppb	93
66) 4,6-Dinitro-2-methylphenol	9.64	198	506716	59.32023	ppb	96
67) Diphenyl amine	9.70	169	3783179	112.13803	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3783179	112.13803	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2626496	55.23523	ppb	88
70) 4-Bromophenyl phenyl ether	10.13	248	638862	55.91557	ppb	97
71) Hexachlorobenzene	10.20	284	611901	56.65132	ppb	# 82
72) Atrazine	10.32	200	318295	27.49651	ppb	97
73) Pentachlorophenol	10.44	266	372770	55.14520	ppb	98
74) Phenanthrene	10.69	178	3621712	56.03684	ppb	99
75) Anthracene	10.75	178	3644386	55.05050	ppb	100
76) Carbazol	10.94	167	3465221	57.59909	ppb	97
77) Di-n-butylphthalate	11.33	149	4025120	56.70186	ppb	100
78) Fluoranthene	12.08	202	3892862	56.09809	ppb	100
80) Benzidine	12.24	184	1135359	53.74461	ppb	99
81) Pyrene	12.35	202	4018707	55.42232	ppb	100
83) Butyl benzylphthalate	13.08	149	1869616	57.51923	ppb	95
84) 3,3'-Dichlorobenzidine	13.71	252	1295998	58.28828	ppb	98
85) Benz (a) anthracene	13.74	228	3486147	55.12946	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2508599	55.45746	ppb	# 94
87) Chrysene	13.79	228	3424994	55.38630	ppb	99
88) Di-n-octylphthalate	14.48	149	4408873	57.43934	ppb	# 94
90) Benzo (b) fluoranthene	15.08	252	3369057m	53.58981	ppb	99
91) Benzo (k) fluoranthene	15.12	252	3061298	50.66483	ppb	100
92) Benzo (a) pyrene	15.55	252	3279011	57.62317	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3494580	59.61887	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	3040489	57.37576	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2787424	53.67772	ppb	99

Quantitation Report

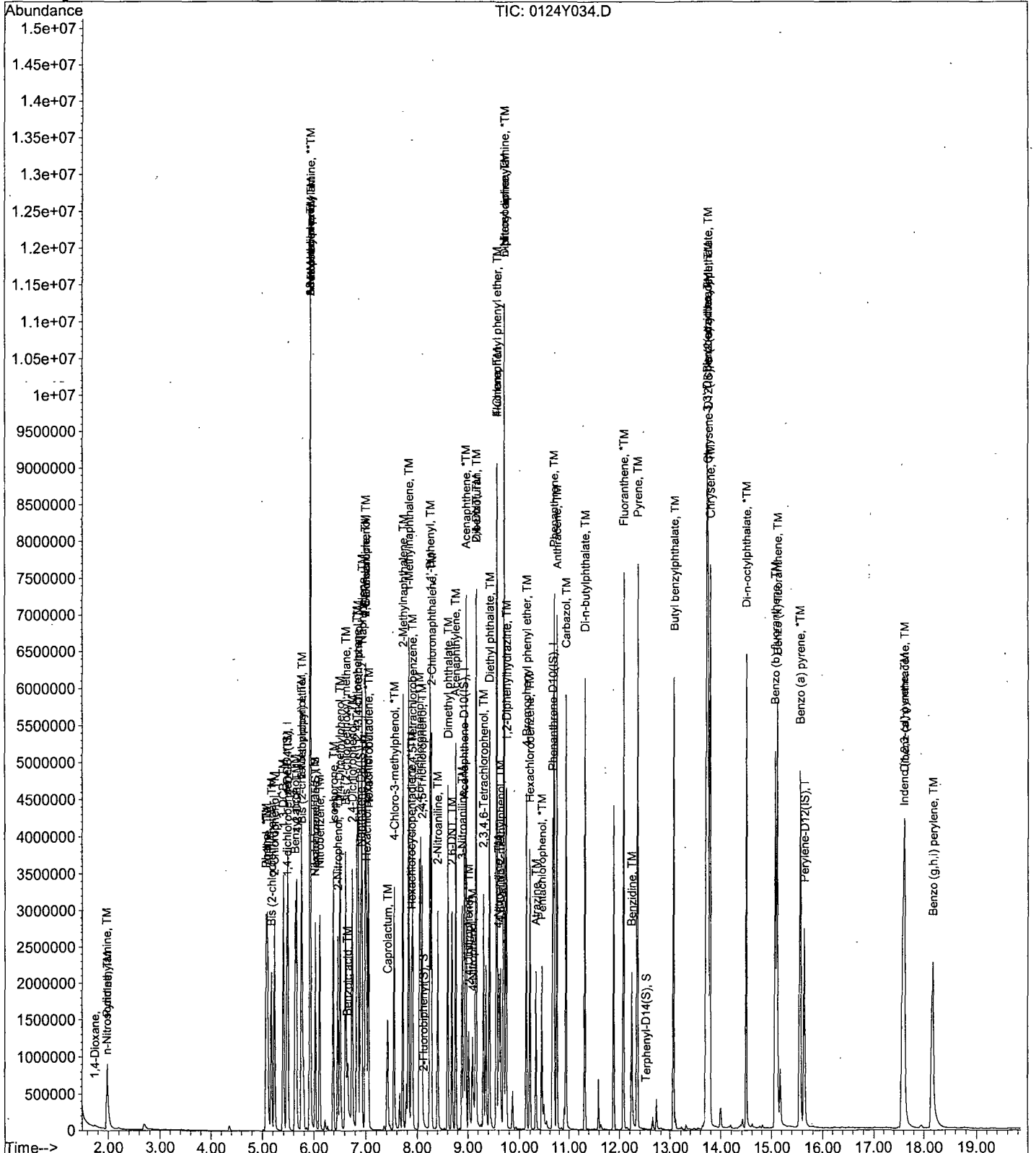
Data File : M:\YODA\DATA\Y190124\0124Y034.D  
Acq On : 28 Jan 19 14:11  
Sample : SS-8270 01/24/19  
Misc :

Vial: 34  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y050.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2446	9.4	
3	TM	n-Nitrosodimethylamine	0.3626	0.3612	0.40	TM
4	TM	Pyridine	0.8923	0.9713	8.9	TM
5	S	2-Fluorophenol (S)	1.784	1.880	5.4	S
6	S	Phenol-D6 (S)	2.349	2.460	4.7	S
7	*TM	Phenol	3.026	2.964	2.0	*TM
8	TM	Aniline	3.167	3.090	2.5	TM
9	TM	Bis (2-chloroethyl) ether	1.394	1.365	2.1	TM
10	TM	2-Chlorophenol	2.135	2.051	3.9	TM
11	TM	1,3-DCB	2.272	2.166	4.7	TM
12	*TM	1,4-DCB	2.321	2.183	6.0	*TM
13	TM	Benzyl alcohol	1.331	1.299	2.4	TM
14	TM	1,2-DCB	2.150	2.066	3.9	TM
15	TM	2-Methylphenol	1.822	1.760	3.4	TM
16	TM	Bis (2-chloroisopropyl) ether	2.093	2.043	2.4	TM
17	TM	Acetophenone	2.775	2.653	4.4	TM
18	TM	3&4-Methylphenol	2.152	2.069	3.8	TM
19	**TM	n-Nitrosodi-n-propylamine	1.563	1.490	4.6	**TM
20	TM	Hexachloroethane	0.8480	0.8146	3.9	TM
21	I	Napthalene-D8(IS)	ISTD			I
22	S	Nitrobenzene-D5(S)	0.4763	0.5071	6.5	S
23	TM	Nitrobenzene	0.5356	0.5259	1.8	TM
24	TM	Isophorone	0.9343	0.9231	1.2	TM
25	*TM	2-Nitrophenol	0.2637	0.2618	0.72	*TM
26	TM	2,4-Dimethylphenol	0.4363	0.4382	0.43	TM
27	TM	Benzoic acid	0.3414	0.3702	8.4	TM
28	TM	Bis (2-chloroethoxy) methane	0.5794	0.5651	2.5	TM
29	*TM	2,4-Dichlorophenol	0.3755	0.3789	0.92	*TM
30	TM	1,2,4-Trichlorobenzene	0.4174	0.4076	2.4	TM
31	TM	3,4-Dimethylphenol	0.5899	0.5842	0.97	TM
32	TM	Napthalene	1.420	1.381	2.7	TM
33	TM	4-Chloroaniline	0.5252	0.5098	2.9	TM
34	TM	2,6-Dichlorophenol	0.3718	0.3667	1.4	TM
35	TM	Hexachloropropene	0.2546	0.2554	0.35	TM
36	*TM	Hexachlorobutadiene	0.2175	0.2087	4.0	*TM
37	TM	Caprolactum	0.1890	0.1856	1.8	TM
38	*TM	4-Chloro-3-methylphenol	0.4231	0.4207	0.56	*TM
39	TM	2-Methylnapthalene	0.9154	0.8949	2.2	TM
40	TM	1-Methylnapthalene	0.9149	0.8850	3.3	TM

Average

3.3

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y050.D

		Compound	MEAN	CCRF	%D	%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I
42	**TML	Hexachlorocyclopentadiene	0.2131	0.2591	22	**TML 7.5
43	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6721	0.04	TM
44	*TM	2,4,6-Trichlorophenol	0.4386	0.4559	4.0	*TM
45	TM	2,4,5-Trichlorophenol	0.4953	0.4946	0.15	TM
46	S	2-Fluorobiphenyl(S)	1.620	1.722	6.3	S
47	TM	1,1'-Biphenyl	1.985	1.988	0.14	TM
48	TM	2-Chloronaphthalene	1.516	1.508	0.54	TM
49	TM	2-Nitroaniline	0.4929	0.5097	3.4	TM
50	TM	Dimethyl phthalate	1.790	1.794	0.22	TM
51	TM	2,6-DNT	0.4015	0.4156	3.5	TM
52	TM	Acenaphthylene	2.405	2.427	0.88	TM
53	TM	3-Nitroaniline	0.4546	0.4727	4.0	TM
54	*TM	Acenaphthene	1.558	1.559	0.09	*TM
55	**TML	2,4-Dinitrophenol	0.1911	0.2365	24	**TML 9.1
56	**TM	4-Nitrophenol	0.2763	0.2681	2.9	**TM
57	TM	Dibenzofuran	2.183	2.173	0.46	TM
58	TM	2,4-DNT	0.5295	0.5520	4.2	TM
59	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3744	2.7	TM
60	TM	Diethyl phthalate	1.696	1.708	0.69	TM
61	TM	4-Chlorophenyl phenyl ether	0.8517	0.8474	0.50	TM
62	TM	Fluorene	1.750	1.744	0.32	TM
63	TM	4-Nitroaniline	0.4603	0.4831	4.9	TM
64	S	2,4,6-Tribromophenol(S)	0.1657	0.1793	8.2	S
65	I	Phenanthrene-D10(IS)	ISTD			I
66	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1861	4.1	TM
67	TM	Diphenyl amine	0.7057	0.7207	2.1	TM
68	*TM	n-Nitrosodiphenylamine	0.7057	0.7207	2.1	*TM
69	TM	1,2-Diphenylhydrazine	0.9947	0.9701	2.5	TM
70	TM	4-Bromophenyl phenyl ether	0.2390	0.2416	1.1	TM
71	TM	Hexachlorobenzene	0.2259	0.2224	1.6	TM
72	TM	Atrazine	0.2421	0.2371	2.1	TM
73	*TM	Pentachlorophenol	0.1414	0.1452	2.7	*TM
74	TM	Phenanthrene	1.352	1.364	0.88	TM
75	TM	Anthracene	1.385	1.395	0.73	TM
76	TM	Carbazol	1.258	1.289	2.5	TM
77	TM	Di-n-butylphthalate	1.485	1.525	2.7	TM
78	*TM	Fluoranthene	1.452	1.475	1.6	*TM
79	I	Chrysene-D12(IS)	ISTD			I
80	TM	Benzidine	0.4947	0.4387	11	TM

Average

3.6

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y050.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.698	1.699	0.04	TM
82	S	Terphenyl-D14(S)	1.020	1.071	5.0	S
83	TM	Butyl benzylphthalate	0.7611	0.7938	4.3	TM
84	TM	3,3'-Dichlorobenzidine	0.5206	0.5290	1.6	TM
85	TM	Benz (a) anthracene	1.481	1.480	0.07	TM
86	TM	Bis (2-ethylhexyl) phthalate	1.059	1.068	0.87	TM
87	TM	Chrysene	1.448	1.404	3.0	TM
88	*TM	Di-n-octylphthalate	1.797	1.873	4.2	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.501	1.650	9.9	TM
91	TM	Benzo (k) fluoranthene	1.443	1.376	4.6	TM
92	*TM	Benzo (a) pyrene	1.359	1.417	4.2	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.400	1.435	2.5	TM
94	TM	Dibenz (a,h) anthracene	1.266	1.309	3.4	TM
95	TM	Benzo (g,h,i) perylene	1.240	1.254	1.1	TM
96						
97						
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114						
115						
116						
117						
118						
119						
120						

Average

3.2

Data File : M:\YODA\DATA\Y190124\0124Y050.D  
 Acq On : 28 Jan 19 21:31  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 50  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 29 6:07 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	418738	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1830212	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1029216	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1958449	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1765484	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1687531	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	1968425	105.39497	ppb	0.03
Spiked Amount 200.000			Recovery =	52.698%		
6) Phenol-D6 (S)	5.06	99	2575386	104.73072	ppb	0.00
Spiked Amount 200.000			Recovery =	52.366%		
22) Nitrobenzene-D5 (S)	6.10	82	1160017	53.22629	ppb	0.00
Spiked Amount 100.000			Recovery =	53.226%		
46) 2-Fluorobiphenyl (S)	8.13	172	2215157	53.15089	ppb	0.00
Spiked Amount 100.000			Recovery =	53.151%		
64) 2,4,6-Tribromophenol (S)	9.85	330	461305	108.20136	ppb	0.00
Spiked Amount 200.000			Recovery =	54.101%		
82) Terphenyl-D14 (S)	12.51	244	2364253	52.49385	ppb	0.00
Spiked Amount 100.000			Recovery =	52.494%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.74	58	12805	5.46844		86
3) n-Nitrosodimethylamine	1.97	42	189044	49.80106	ppb	95
4) Pyridine	1.99	79	508394	54.42529	ppb	97
7) Phenol	5.08	94	1551311	48.97525	ppb	97
8) Aniline	5.10	93	1617134	48.77443	ppb	97
9) Bis (2-chloroethyl) ether	5.17	63	714450	48.96180	ppb	99
10) 2-Chlorophenol	5.24	128	1073696	48.02996	ppb	95
11) 1,3-DCB	5.40	146	1133761	47.67337	ppb	100
12) 1,4-DCB	5.49	146	1142381	47.01137	ppb	99
13) Benzyl alcohol	5.63	108	679820	48.80492	ppb	95
14) 1,2-DCB	5.65	146	1081485	48.04083	ppb	98
15) 2-Methylphenol	5.75	107	921173	48.30637	ppb	100
16) Bis (2-chloroisopropyl) et	5.76	45	1069505	48.81899	ppb	# 86
17) Acetophenone	5.93	105	1388744	47.80058	ppb	97
18) 3&4-Methylphenol	5.93	107	2165834	96.16151	ppb	97
19) n-Nitrosodi-n-propylamine	5.92	70	779967	47.68403	ppb	98
20) Hexachloroethane	6.03	117	426401	48.03458	ppb	95
23) Nitrobenzene	6.12	77	1203162	49.09304	ppb	94
24) Isophorone	6.39	82	2111762	49.39719	ppb	97
25) 2-Nitrophenol	6.48	139	598984	49.64065	ppb	93
26) 2,4-Dimethylphenol	6.52	122	1002540	50.21505	ppb	99
27) Benzoic acid	6.66	105	846951	54.21915	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1292766	48.76022	ppb	99
29) 2,4-Dichlorophenol	6.75	162	866894	50.46067	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	932495	48.82227	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1336546	49.51439	ppb	96
32) Napthalene	6.92	128	3159981	48.65028	ppb	100
33) 4-Chloroaniline	6.99	127	1166208	48.52953	ppb	98
34) 2,6-Dichlorophenol	7.00	162	838872	49.30670	ppb	98
35) Hexachloropropene	7.02	213	584401	50.17556	ppb	99
36) Hexachlorobutadiene	7.05	225	477492	47.99150	ppb	99
37) Caprolactum	7.42	55	424597	49.08917	ppb	97



Data File : M:\YODA\DATA\Y190124\0124Y050.D  
 Acq On : 28 Jan 19 21:31  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 50  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 29 6:07 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	962472	49.71767 ppb	97
39) 2-Methylnaphthalene	7.71	142	2047285	48.88069 ppb	99
40) 1-Methylnaphthalene	7.83	142	2024723	48.36757 ppb	100
42) Hexachlorocyclopentadiene	7.89	237	333274	46.23762 ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	864706	50.01863 ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	586586	51.98011 ppb	97
45) 2,4,5-Trichlorophenol	8.09	196	636306	49.92734 ppb	99
47) 1,1'-Biphenyl	8.25	154	2557208	50.07159 ppb	99
48) 2-Chloronaphthalene	8.28	162	1940326	49.73194 ppb	99
49) 2-Nitroaniline	8.41	65	655776	51.70459 ppb	83
50) Dimethyl phthalate	8.60	163	2308334	50.11003 ppb	100
51) 2,6-DNT	8.69	165	534658	51.75998 ppb	97
52) Acenaphthylene	8.76	152	3121778	50.44201 ppb	100
53) 3-Nitroaniline	8.88	138	608096	51.98673 ppb	98
54) Acenaphthene	8.96	154	2005666	50.04273 ppb	100
55) 2,4-Dinitrophenol	9.01	184	304277	54.55685 ppb	99
56) 4-Nitrophenol	9.10	65	344951	48.52770 ppb	93
57) Dibenzofuran	9.16	168	2795602	49.76955 ppb	100
58) 2,4-DNT	9.16	165	710139	52.12312 ppb	89
59) 2,3,4,6-Tetrachlorophenol	9.31	232	481681	51.35564 ppb	97
60) Diethyl phthalate	9.42	149	2197320	50.34389 ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	1090234	49.74949 ppb	88
62) Fluorene	9.56	166	2244095	49.84055 ppb	100
63) 4-Nitroaniline	9.61	138	621489	52.47271 ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	455508	52.06792 ppb	98
67) Diphenyl amine	9.70	169	3528705	102.12861 ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3528705	102.12861 ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2374790	48.76415 ppb	99
70) 4-Bromophenyl phenyl ether	10.13	248	591336	50.53544 ppb	98
71) Hexachlorobenzene	10.20	284	544345	49.20839 ppb	97
72) Atrazine	10.32	200	290160	24.47492 ppb	98
73) Pentachlorophenol	10.43	266	355349	51.32842 ppb	99
74) Phenanthrene	10.69	178	3338588	50.43808 ppb	99
75) Anthracene	10.75	178	3414715	50.36483 ppb	100
76) Carbazol	10.94	167	3156760	51.23448 ppb	100
77) Di-n-butylphthalate	11.32	149	3732799	51.34393 ppb	100
78) Fluoranthene	12.08	202	3610767	50.80595 ppb	99
80) Benzidine	12.24	184	968210	44.34586 ppb	98
81) Pyrene	12.35	202	3748530	50.01970 ppb	99
83) Butyl benzylphthalate	13.08	149	1751813	52.14710 ppb	99
84) 3,3'-Dichlorobenzidine	13.71	252	1167484	50.80537 ppb	98
85) Benz (a) anthracene	13.74	228	3265448	49.96462 ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2357881	50.43504 ppb	99
87) Chrysene	13.79	228	3098907	48.48784 ppb	99
88) Di-n-octylphthalate	14.49	149	4133213	52.10164 ppb	100
90) Benzo (b) fluoranthene	15.08	252	3480118	54.93987 ppb	99
91) Benzo (k) fluoranthene	15.11	252	2903257	47.68768 ppb	100
92) Benzo (a) pyrene	15.55	252	2988153	52.11669 ppb	100
93) Indeno (1,2,3-cd) pyrene	17.57	276	3027645	51.26411 ppb	99
94) Dibenz (a,h) anthracene	17.61	278	2760575	51.70164 ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2645820	50.56745 ppb	99

Quantitation Report

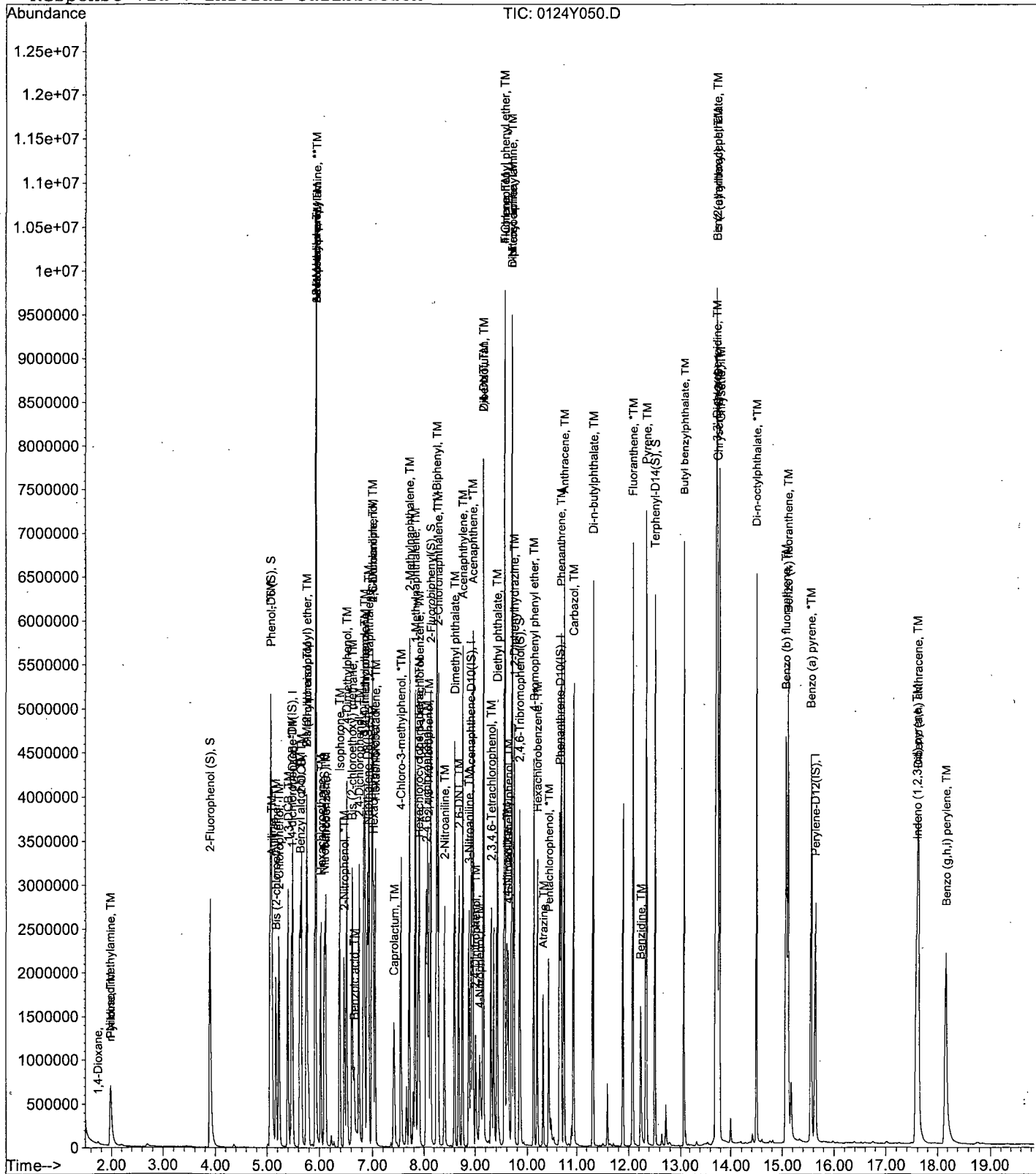
Data File : M:\YODA\DATA\Y190124\0124Y050.D  
Acq On : 28 Jan 19 21:31  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 50  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 6:07 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y190124\0124Y047.D  
 Acq On : 28 Jan 19 20:08  
 Sample : AZ85418W12 1/800  
 Misc :

Vial: 47  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 29 7:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	459838	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1936608	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1088813	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2160907	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1928783	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1815686	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3313802	201.9645	ppb	0.03
Spiked Amount 250.000						
					Recovery = 80.786%	
6) Phenol-D6 (S)	5.06	99	4285720	198.3824	ppb	0.00
Spiked Amount 250.000						
					Recovery = 79.353%	
22) Nitrobenzene-D5 (S)	6.10	82	2003122	108.5773	ppb	0.00
Spiked Amount 125.000						
					Recovery = 86.862%	
46) 2-Fluorobiphenyl (S)	8.13	172	3795856	107.6165	ppb	0.00
Spiked Amount 125.000						
					Recovery = 86.094%	
64) 2,4,6-Tribromophenol (S)	9.85	330	868941	240.8231	ppb	0.00
Spiked Amount 250.000						
					Recovery = 96.329%	
82) Terphenyl-D14 (S)	12.51	244	4132795	104.9902	ppb	0.00
Spiked Amount 125.000						
					Recovery = 83.992%	

Target Compounds

Qvalue

Quantitation Report

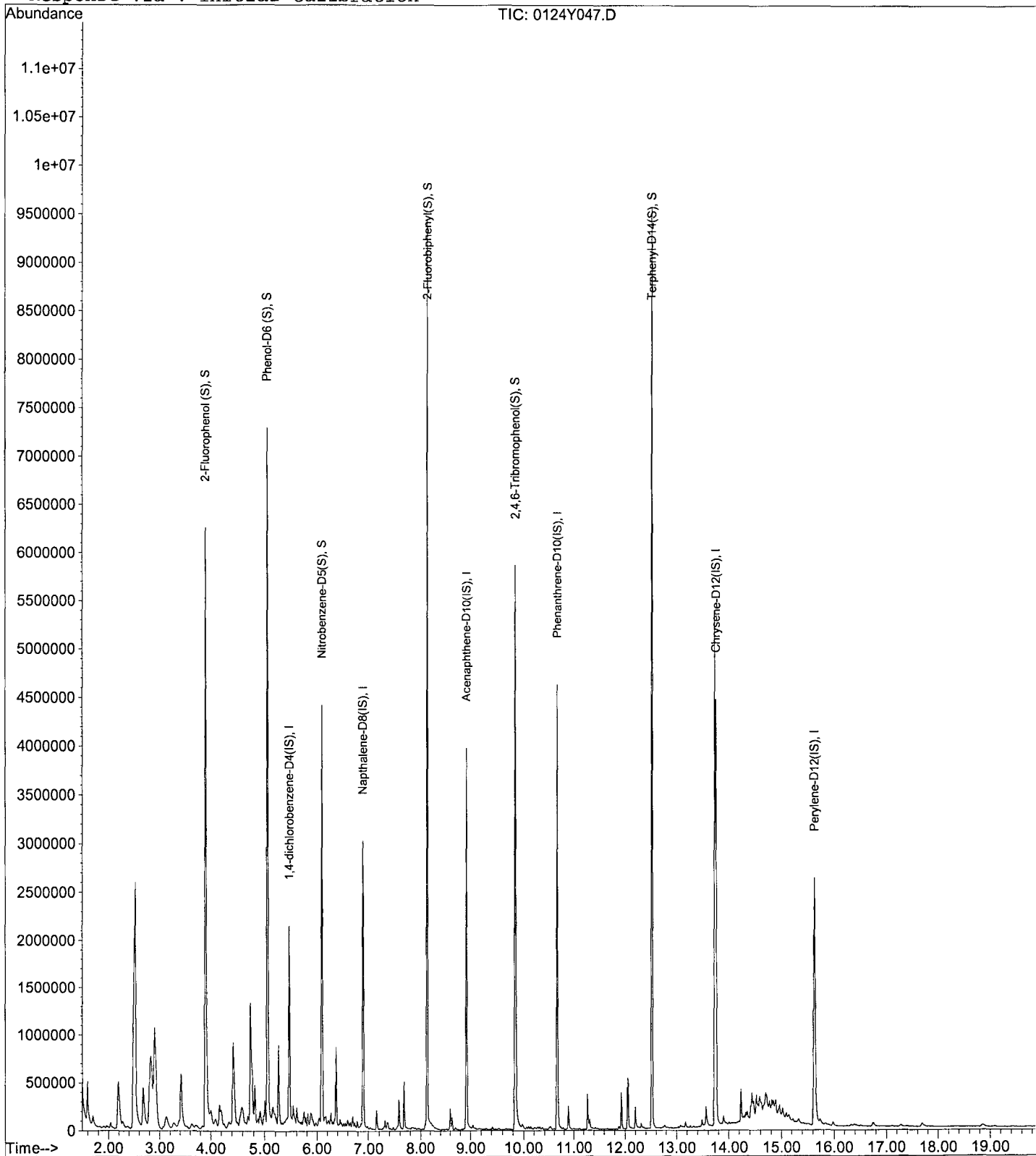
Data File : M:\YODA\DATA\Y190124\0124Y047.D  
Acq On : 28 Jan 19 20:08  
Sample : AZ85418W12 1/800  
Misc :

Vial: 47  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 29 7:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 28 Jan 19 20:08  
Data File: M:\YODA\DATA\Y190124\0124Y047.D  
Name: AZ85418W12 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.68	19.3	ppb	1118980	ISTD01	5.47	2895330	40.0
Pentanedioic acid, d	6.38	11.0	ppb	818845	ISTD02	6.90	3712540	40.0

0124Y047.D Y0125NC.M      Tue Jan 29 12:42:40 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y047.D  
 Acq On : 28 Jan 19 20:08  
 Sample : AZ85418W12 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 47  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

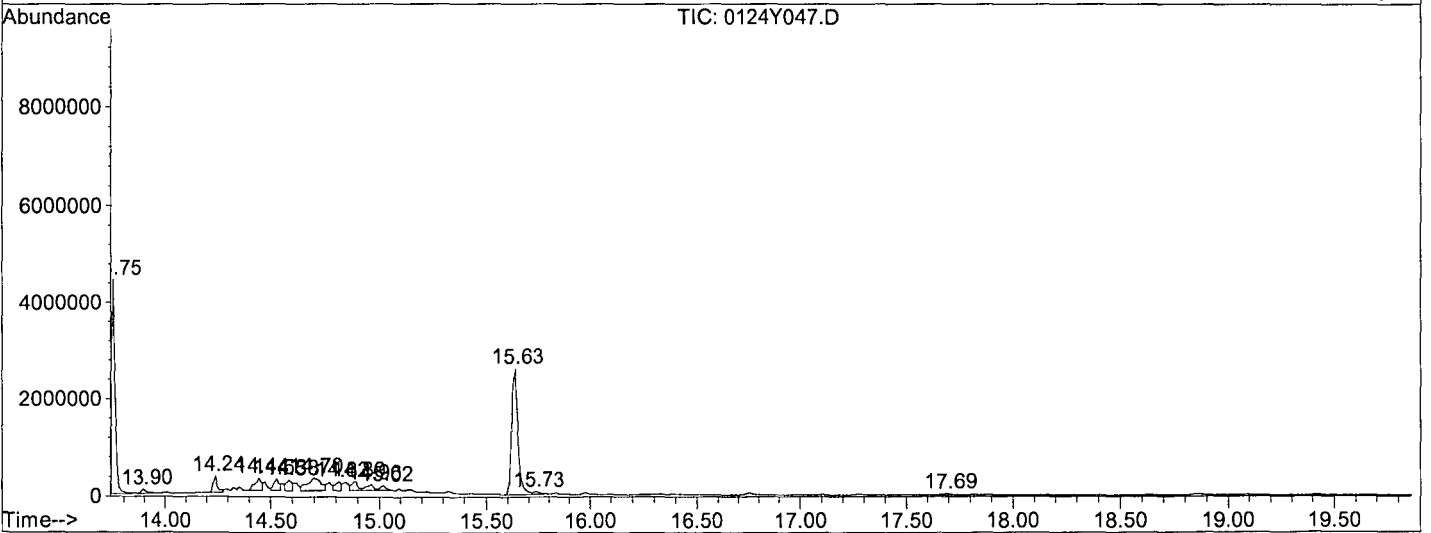
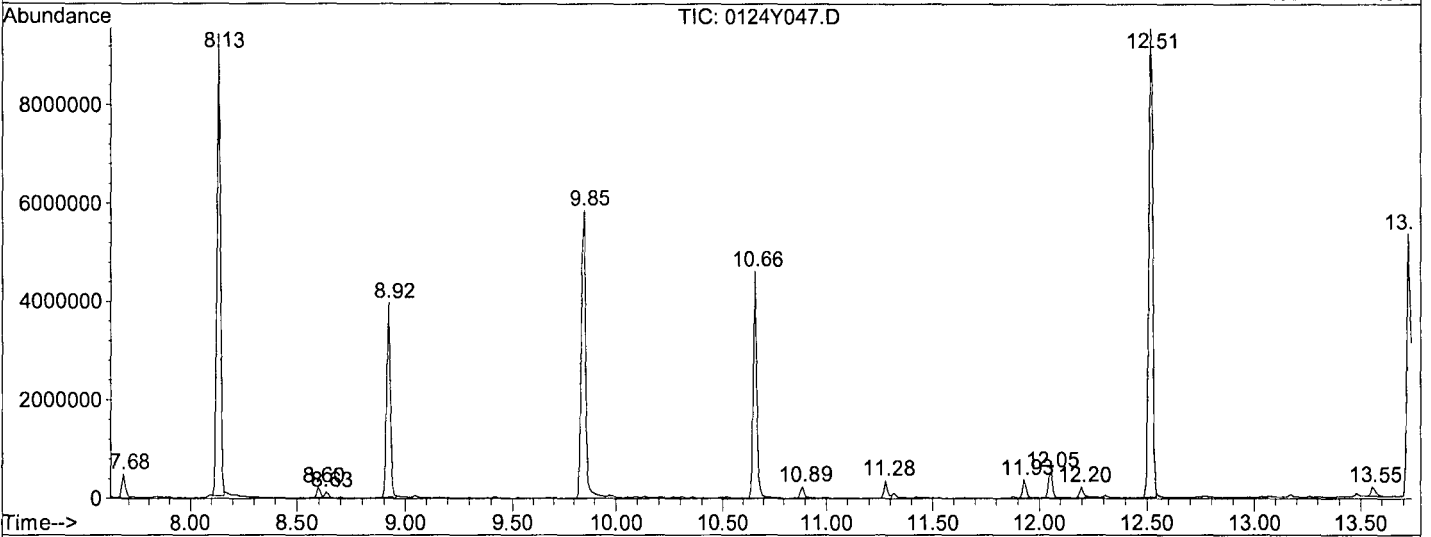
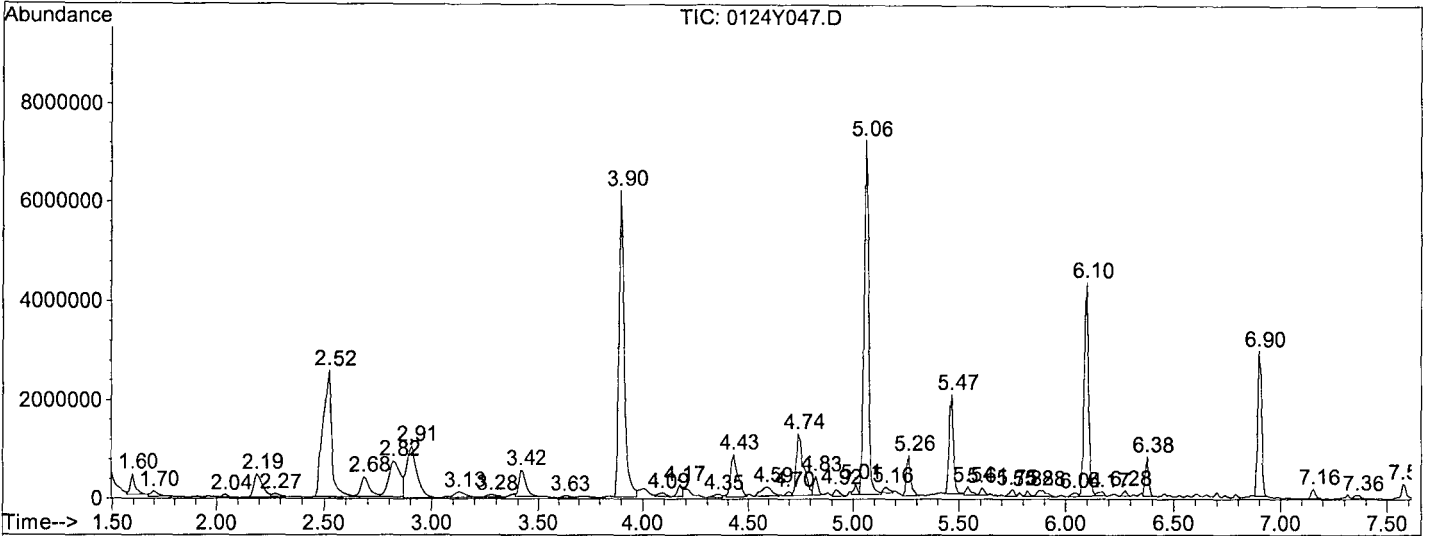
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.596	9	12	20	rVB	429247	2932775	695541	5.67%	0.526%
2	1.698	20	23	34	rVB2	115323	2912068	293289	2.39%	0.222%
3	2.042	56	60	70	rVB	60105	2537008	135544	1.10%	0.102%
4	2.190	71	76	83	rBV	482975	3414594	1361457	11.10%	1.030%
5	2.274	83	85	92	rVB	63168	1819031	142002	1.16%	0.107%
6	2.525	104	112	124	rBV	2558359	10782611	7275522	59.31%	5.502%
7	2.682	124	129	137	rVV	408400	3469968	1118975	9.12%	0.846%
8	2.822	137	144	149	rVV	734119	5053775	2831195	23.08%	2.141%
9	2.905	149	153	168	rVB2	1055696	9323992	3496484	28.50%	2.644%
10	3.128	171	177	187	rVB2	112512	3194662	406025	3.31%	0.307%
11	3.277	187	193	200	rBV4	49029	2436369	193491	1.58%	0.146%
12	3.416	205	208	219	rVB	542257	4003415	1243332	10.14%	0.940%
13	3.629	226	231	237	rBV3	46051	2017788	153210	1.25%	0.116%
14	3.899	256	260	268	rBV	6209378	12988920	10871843	88.62%	8.221%
15	4.093	277	281	285	rVB3	69285	1666170	179345	1.46%	0.136%
16	4.168	285	289	291	rBV	214598	1442744	374433	3.05%	0.283%
17	4.353	303	309	311	rBV2	62106	1563911	176293	1.44%	0.133%
18	4.428	313	317	324	rVV2	871562	4310290	2173676	17.72%	1.644%
19	4.595	328	335	341	rVV6	190226	3173220	734357	5.99%	0.555%
20	4.697	343	346	348	rVV3	83602	1063132	136562	1.11%	0.103%
21	4.743	348	351	358	rVV3	1245314	5145645	2960762	24.14%	2.239%
22	4.827	358	360	363	rVB	384818	1799883	505902	4.12%	0.383%
23	4.920	368	370	375	rVB2	141231	1668430	249785	2.04%	0.189%
24	5.013	378	380	382	rVB	213965	1077523	220974	1.80%	0.167%
25	5.059	382	385	393	rBV	7189184	14808407	10612034	86.51%	8.025%
26	5.161	393	396	399	rBV3	109265	1526610	233335	1.90%	0.176%
27	5.263	404	407	412	rVB	817366	2879682	1201363	9.79%	0.908%
28	5.467	425	429	435	rVV	2017714	4944539	2895330	23.60%	2.189%
29	5.542	435	437	442	rVB2	177866	1778564	287900	2.35%	0.218%
30	5.607	442	444	447	rBV2	155655	1223497	211424	1.72%	0.160%
31	5.746	456	459	462	rBV2	133718	1377339	232520	1.90%	0.176%
32	5.820	465	467	470	rBV	124651	1097400	147367	1.20%	0.111%
33	5.876	470	473	481	rVB3	132390	2467402	414229	3.38%	0.313%
34	6.043	487	491	493	rBV2	82061	1251739	171700	1.40%	0.130%
35	6.099	493	497	501	rVV	4350620	7833829	6256396	51.00%	4.731%
36	6.173	501	505	507	rVB3	81414	1366491	177354	1.45%	0.134%
37	6.275	513	516	519	rBV	115213	1250044	137491	1.12%	0.104%
38	6.377	525	527	531	rVB	806830	2443296	818845	6.67%	0.619%
39	6.897	581	583	587	rVB	2956944	6020112	3712540	30.26%	2.807%
40	7.157	608	611	616	rBV2	196199	1659312	276192	2.25%	0.209%
41	7.361	630	633	636	rVB2	66893	1202026	135218	1.10%	0.102%
42	7.575	647	656	661	rVB	303926	2857982	516028	4.21%	0.390%
43	7.677	664	667	671	rBV	485751	1804595	589860	4.81%	0.446%
44	8.132	713	716	719	rBV	9387826	1804370	84.81%	7.868%	
45	8.596	763	766	768	rBV	210145	1080500	242180	1.97%	0.183%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y047.D  
 Operator : MA  
 Acquired : 28 Jan 19 20:08 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ85418W12 1/800  
 Misc Info :  
 Vial Number: 47  
 Quant File : Y0125NC.RES (RTE Integrator)





Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y047.D  
 Acq On : 28 Jan 19 20:08  
 Sample : AZ85418W12 1/800  
 Misc :

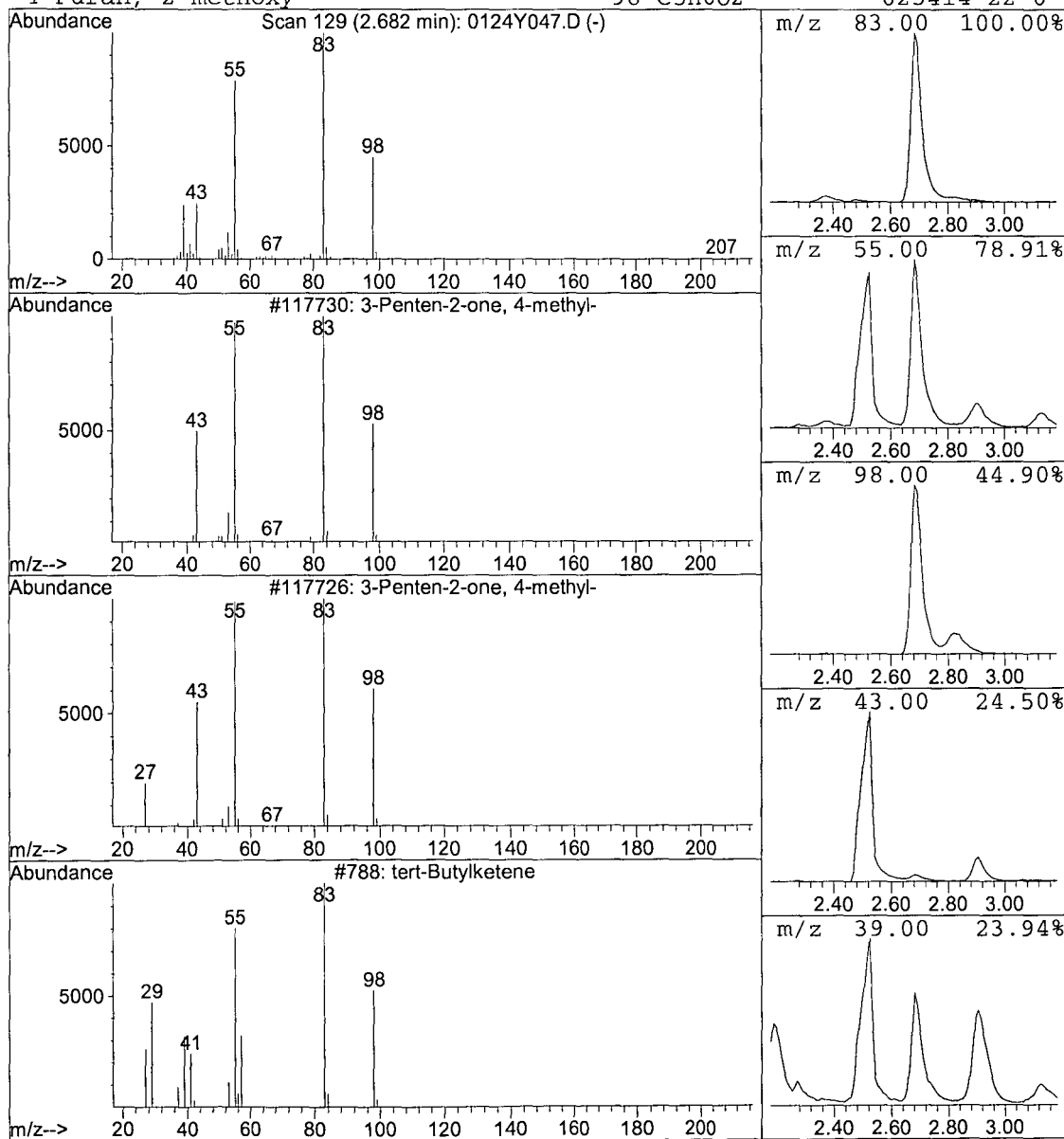
Vial: 47  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	19.32 ppb	1118980	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3		tert-Butylketene	98	C6H10O	059005-31-1	86
4		Furan, 2-methoxy-	98	C5H6O2	025414-22-6	83



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y047.D  
 Acq On : 28 Jan 19 20:08  
 Sample : AZ85418W12 1/800  
 Misc :

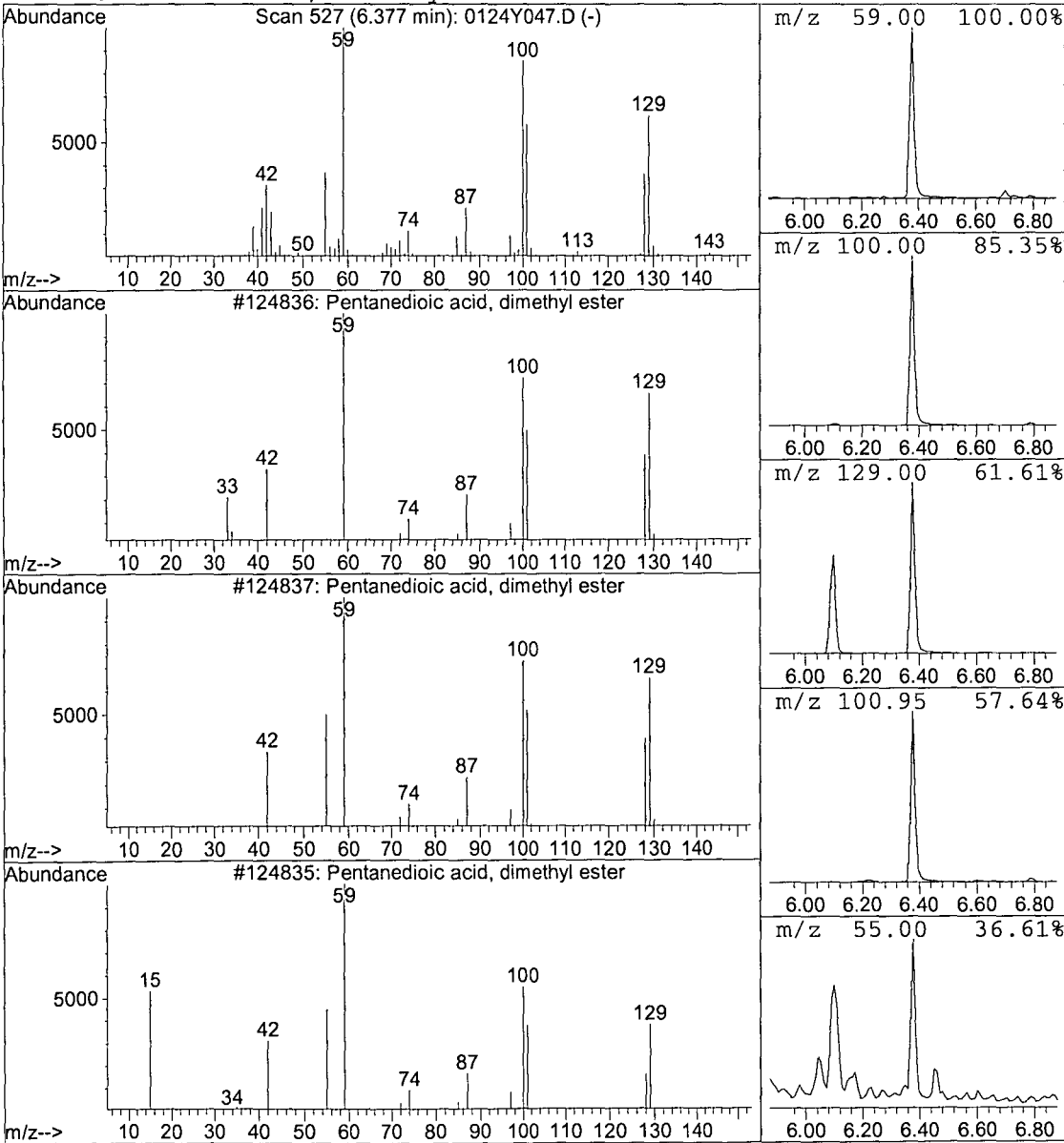
Vial: 47  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Pentanedioic acid, dimethyl es Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.38	11.03 ppb	818845	Napthalene-D8(IS)	6.90

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	90
3		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	83
4		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	83



Data File : M:\YODA\DATA\Y190124\0124Y048.D Vial: 48  
 Acq On : 28 Jan 19 20:35 Operator: MA  
 Sample : AZ85420W14 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Jan 29 7:00 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	468548	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1960353	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1074244	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2228099	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1978531	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	977292	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.90	112	3531398	211.2253	ppb	0.03
Spiked Amount 250.000			Recovery =	84.490%		
6) Phenol-D6 (S)	5.06	99	4347731	197.5117	ppb	0.00
Spiked Amount 250.000			Recovery =	79.005%		
22) Nitrobenzene-D5 (S)	6.09	82	2062733	110.4541	ppb	0.00
Spiked Amount 125.000			Recovery =	88.363%		
46) 2-Fluorobiphenyl (S)	8.13	172	3864879	111.0595	ppb	0.00
Spiked Amount 125.000			Recovery =	88.847%		
64) 2,4,6-Tribromophenol (S)	9.85	330	891594	250.4525	ppb	0.00
Spiked Amount 250.000			Recovery =	100.181%		
82) Terphenyl-D14 (S)	12.51	244	4128307	102.2392	ppb	0.00
Spiked Amount 125.000			Recovery =	81.791%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

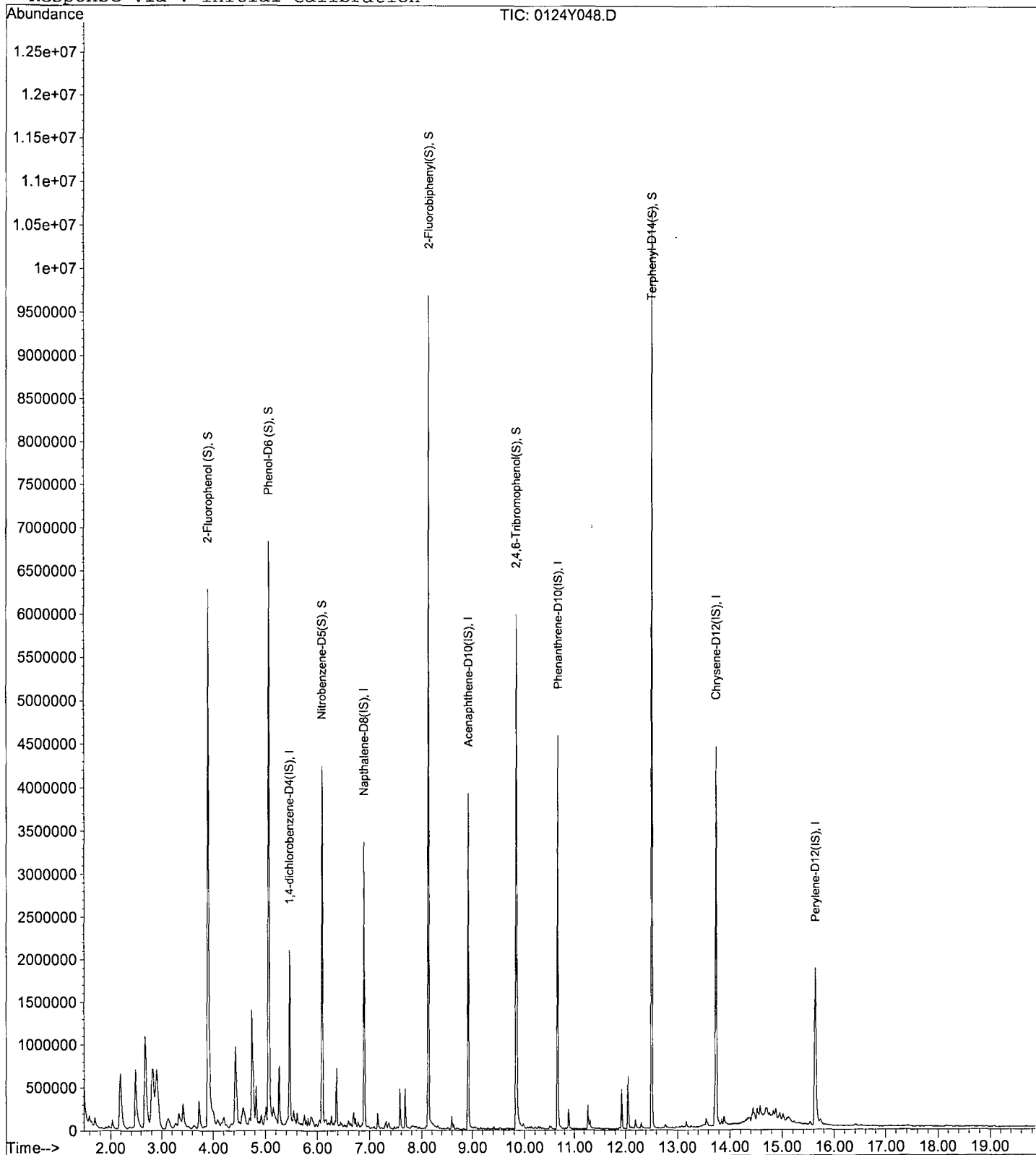
Data File : M:\YODA\DATA\Y190124\0124Y048.D  
Acq On : 28 Jan 19 20:35  
Sample : AZ85420W14 1/800  
Misc :

Vial: 48  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 29 7:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 28 Jan 19 20:35  
 Data File: M:\YODA\DATA\Y190124\0124Y048.D  
 Name: AZ85420W14 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.67	48.3	ppb	2938040	ISTD01	5.47	3040310	40.0
Pentanedioic acid, d	6.38	9.6	ppb	727812	ISTD02	6.90	3803600	40.0

0124Y048.D Y0125NC.M Tue Jan 29 12:48:58 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y048.D  
 Acq On : 28 Jan 19 20:35  
 Sample : AZ85420W14 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 48  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

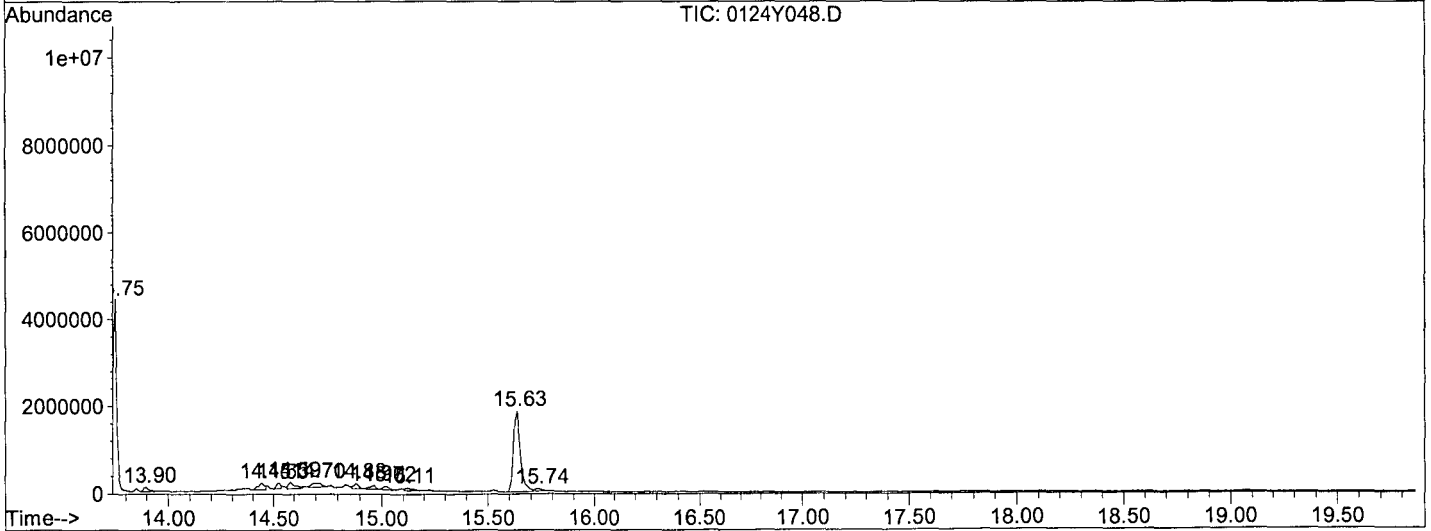
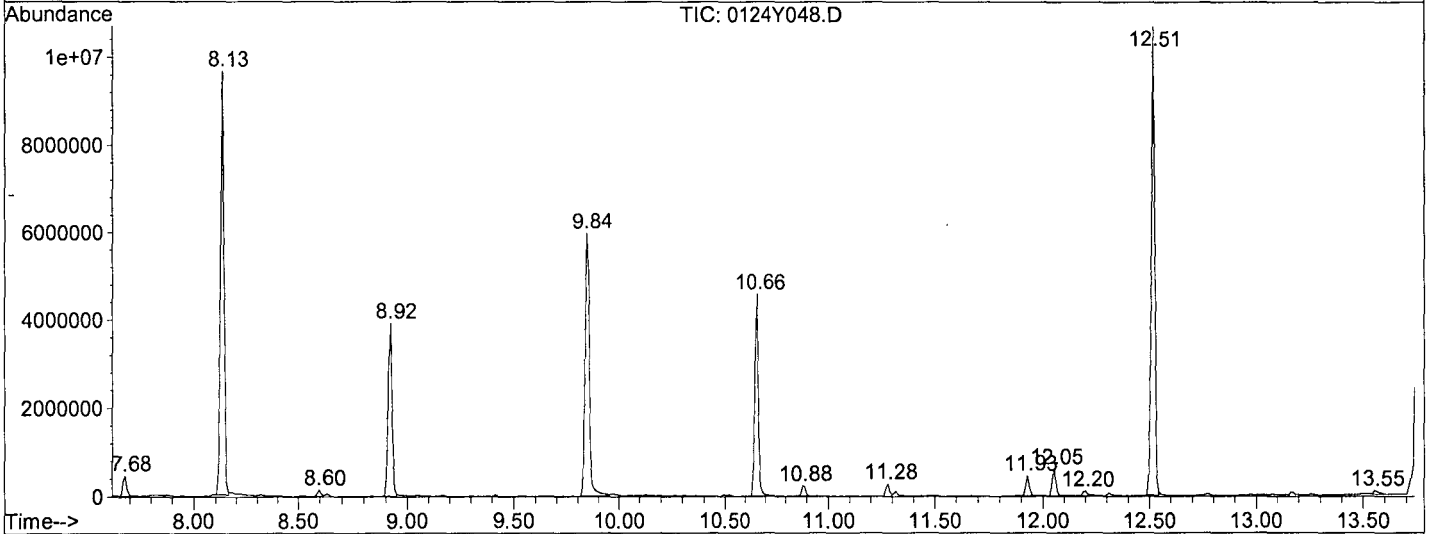
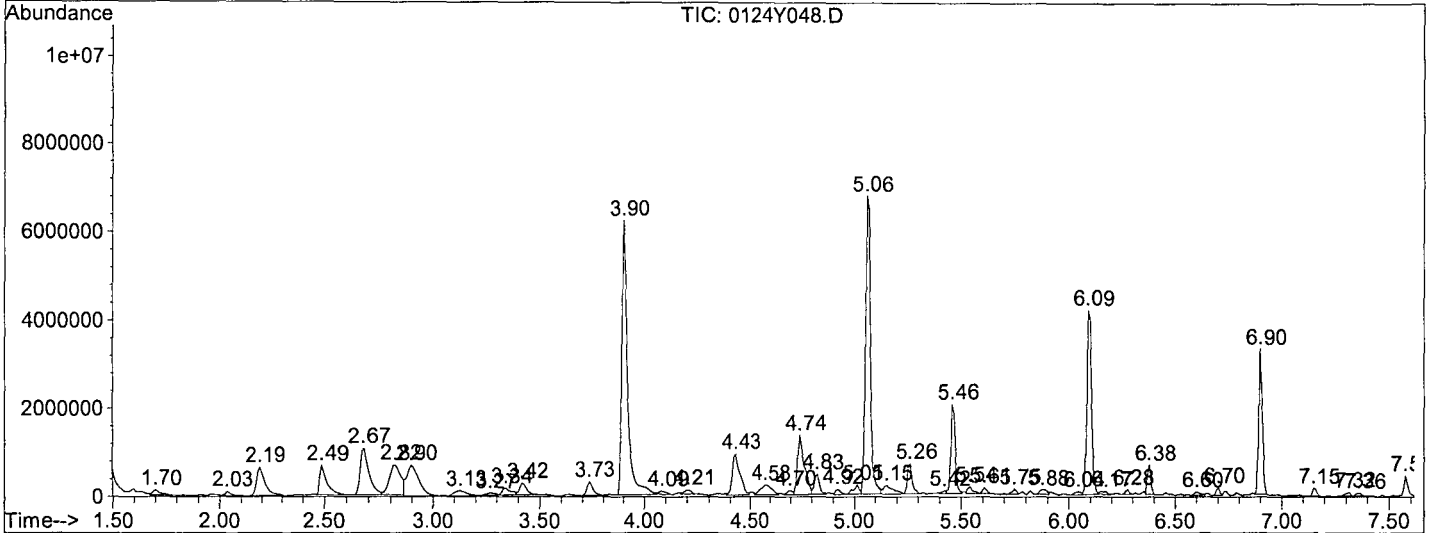
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.700	20	23	34	rVB3	121064	3046652	295946	2.41%	0.242%
2	2.034	56	59	68	rVB	104229	2388999	187595	1.53%	0.154%
3	2.192	70	76	91	rBV	641238	5643580	1837248	14.95%	1.505%
4	2.489	105	108	123	rVB	672876	5051406	1557330	12.67%	1.276%
5	2.674	123	128	137	rBV	1060680	5552326	2938035	23.91%	2.407%
6	2.823	137	144	148	rVV	680629	4738671	2510563	20.43%	2.056%
7	2.897	148	152	168	rVB2	692931	8407033	2703526	22.00%	2.214%
8	3.129	169	177	186	rBV2	121142	3582009	510990	4.16%	0.419%
9	3.268	186	192	196	rBV3	52245	2005264	168152	1.37%	0.138%
10	3.343	196	200	205	rVV2	156036	2199362	463992	3.78%	0.380%
11	3.417	205	208	218	rVB	270846	3284566	621399	5.06%	0.509%
12	3.733	238	242	250	rBV	312766	2865700	648901	5.28%	0.532%
13	3.900	256	260	277	rBV	6232354	16038253	12068402	98.22%	9.885%
14	4.085	277	280	285	rVB3	74602	1803915	187107	1.52%	0.153%
15	4.206	289	293	296	rVB	96510	1617046	208735	1.70%	0.171%
16	4.429	312	317	324	rVV2	935590	4853959	2469276	20.10%	2.023%
17	4.577	327	333	340	rVV8	222317	3443859	877515	7.14%	0.719%
18	4.698	343	346	348	rVV3	96228	1180345	190679	1.55%	0.156%
19	4.745	348	351	357	rVV2	1347840	5304547	3004741	24.45%	2.461%
20	4.828	357	360	364	rVV	459916	2406490	760172	6.19%	0.623%
21	4.921	368	370	375	rVV2	121586	1707106	203583	1.66%	0.167%
22	5.014	375	380	382	rVV3	209550	1862808	420903	3.43%	0.345%
23	5.060	382	385	392	rVV	6768560	14367157	11195772	91.12%	9.170%
24	5.153	392	395	404	rVV4	198193	3318589	654390	5.33%	0.536%
25	5.264	404	407	412	rVB	677038	2998584	1083438	8.82%	0.887%
26	5.422	420	424	425	rBV3	64768	1134369	126799	1.03%	0.104%
27	5.459	425	428	433	rVV	2026172	4837657	3040312	24.74%	2.490%
28	5.543	435	437	442	rVB	155747	1864714	250444	2.04%	0.205%
29	5.608	442	444	447	rBV2	132309	1243394	170836	1.39%	0.140%
30	5.747	455	459	461	rBV3	121174	1349411	182274	1.48%	0.149%
31	5.877	469	473	476	rBV4	100219	1602542	250195	2.04%	0.205%
32	6.044	487	491	493	rBV2	76374	1313614	164337	1.34%	0.135%
33	6.091	493	496	501	rVV	4182004	8067921	6286971	51.17%	5.150%
34	6.174	501	505	507	rVB3	68341	1409571	154321	1.26%	0.126%
35	6.276	513	516	518	rBV	108563	1115799	131533	1.07%	0.108%
36	6.378	525	527	530	rVB	670084	2269787	727812	5.92%	0.596%
37	6.601	548	551	555	rBV2	79526	1495939	166226	1.35%	0.136%
38	6.703	559	562	564	rVV	174763	1208410	239522	1.95%	0.196%
39	6.898	580	583	587	rVB	3300381	5271803	3803598	30.96%	3.116%
40	7.149	608	610	616	rBV2	181980	1784913	270363	2.20%	0.221%
41	7.316	623	628	630	rBV3	84968	1445304	155778	1.27%	0.128%
42	7.363	630	633	637	rVB2	67248	1477899	128471	1.05%	0.105%
43	7.576	653	656	661	rVB	454127	2070259	558782	4.55%	0.458%
44	7.678	664	667	671	rBV	455283	1115799	1115799	4.83%	0.486%
45	8.133	713	716	719	rBV	9637704	12700491	10680157	86.92%	8.748%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y048.D  
Operator : MA  
Acquired : 28 Jan 19 20:35 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85420W14 1/800  
Misc Info :  
Vial Number: 48  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y048.D  
 Acq On : 28 Jan 19 20:35  
 Sample : AZ85420W14 1/800  
 Misc :

Vial: 48  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

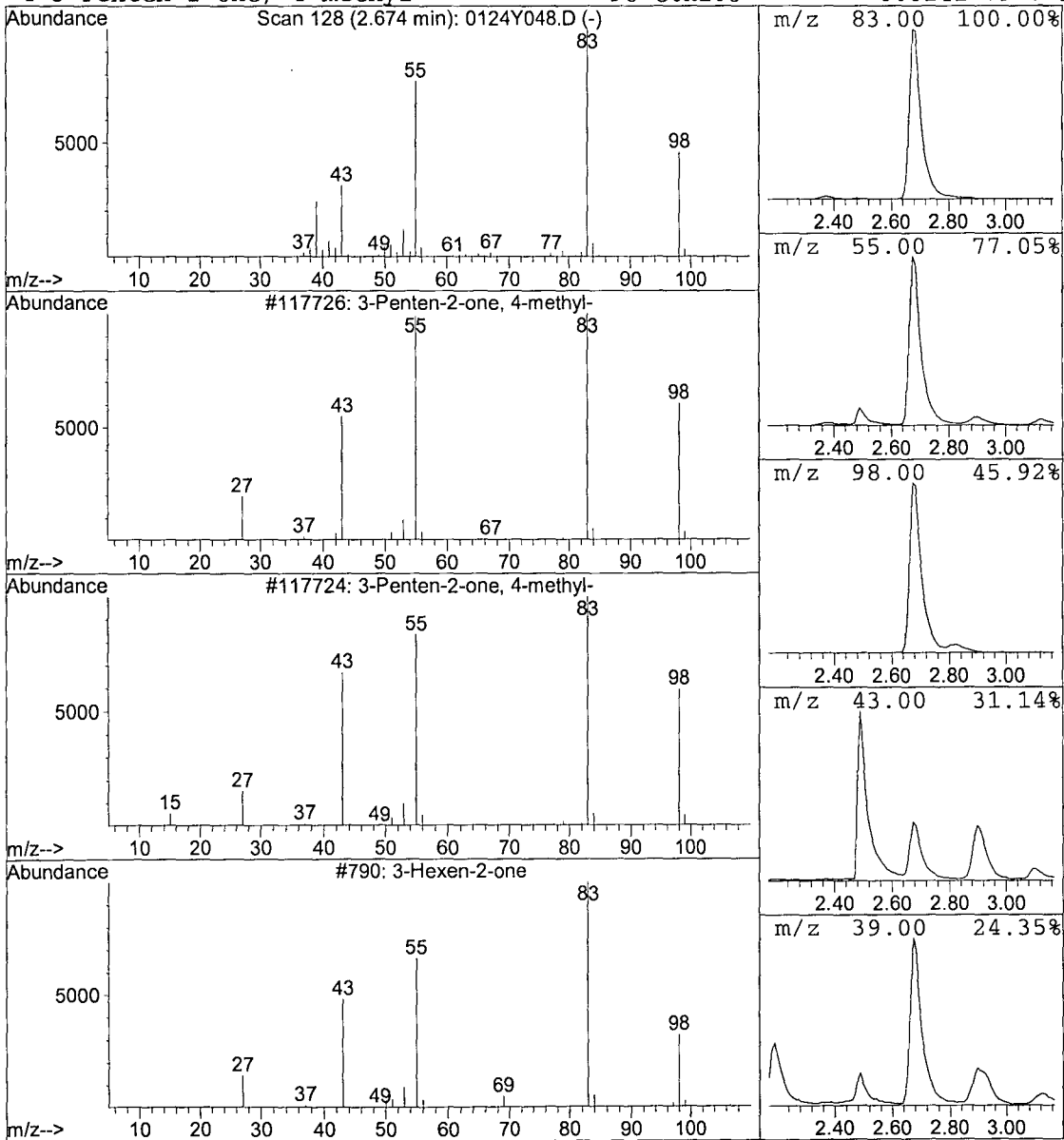
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.67	48.32 ppb	2938040	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3		3-Hexen-2-one	98	C6H10O	000763-93-9	91
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91





Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y048.D  
 Acq On : 28 Jan 19 20:35  
 Sample : AZ85420W14 1/800  
 Misc :

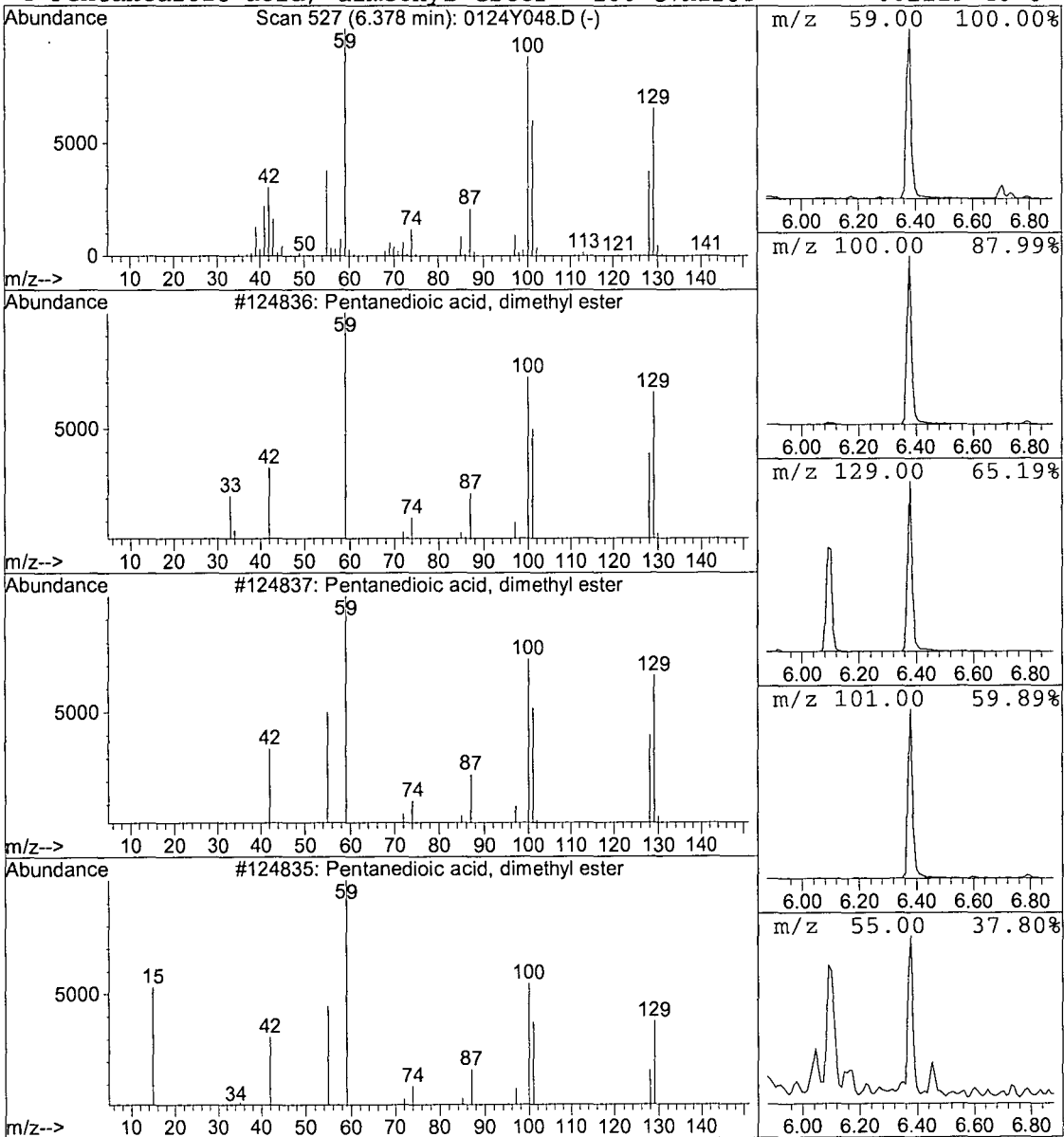
Vial: 48  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Pentanedioic acid, dimethyl es Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.38	9.57 ppb	727812	Napthalene-D8 (IS)	6.90

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
3			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
4			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	72



Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :

Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 29 6:55 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	387629	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1641928	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1053788	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2091342	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1901554	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1773979	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.90	112	3435600	248.3932	ppb	0.03
Spiked Amount 250.000			Recovery =	99.357%		
6) Phenol-D6 (S)	5.06	99	4356244	239.2104	ppb	0.00
Spiked Amount 250.000			Recovery =	95.684%		
22) Nitrobenzene-D5 (S)	6.10	82	2001258	127.9447	ppb	0.00
Spiked Amount 125.000			Recovery =	102.356%		
46) 2-Fluorobiphenyl (S)	8.13	172	3775536	110.5982	ppb	0.00
Spiked Amount 125.000			Recovery =	88.478%		
64) 2,4,6-Tribromophenol (S)	9.85	330	828694	237.3024	ppb	0.00
Spiked Amount 250.000			Recovery =	94.921%		
82) Terphenyl-D14 (S)	12.51	244	4126148	106.3223	ppb	0.00
Spiked Amount 125.000			Recovery =	85.058%		

Target Compounds Qvalue

Quantitation Report

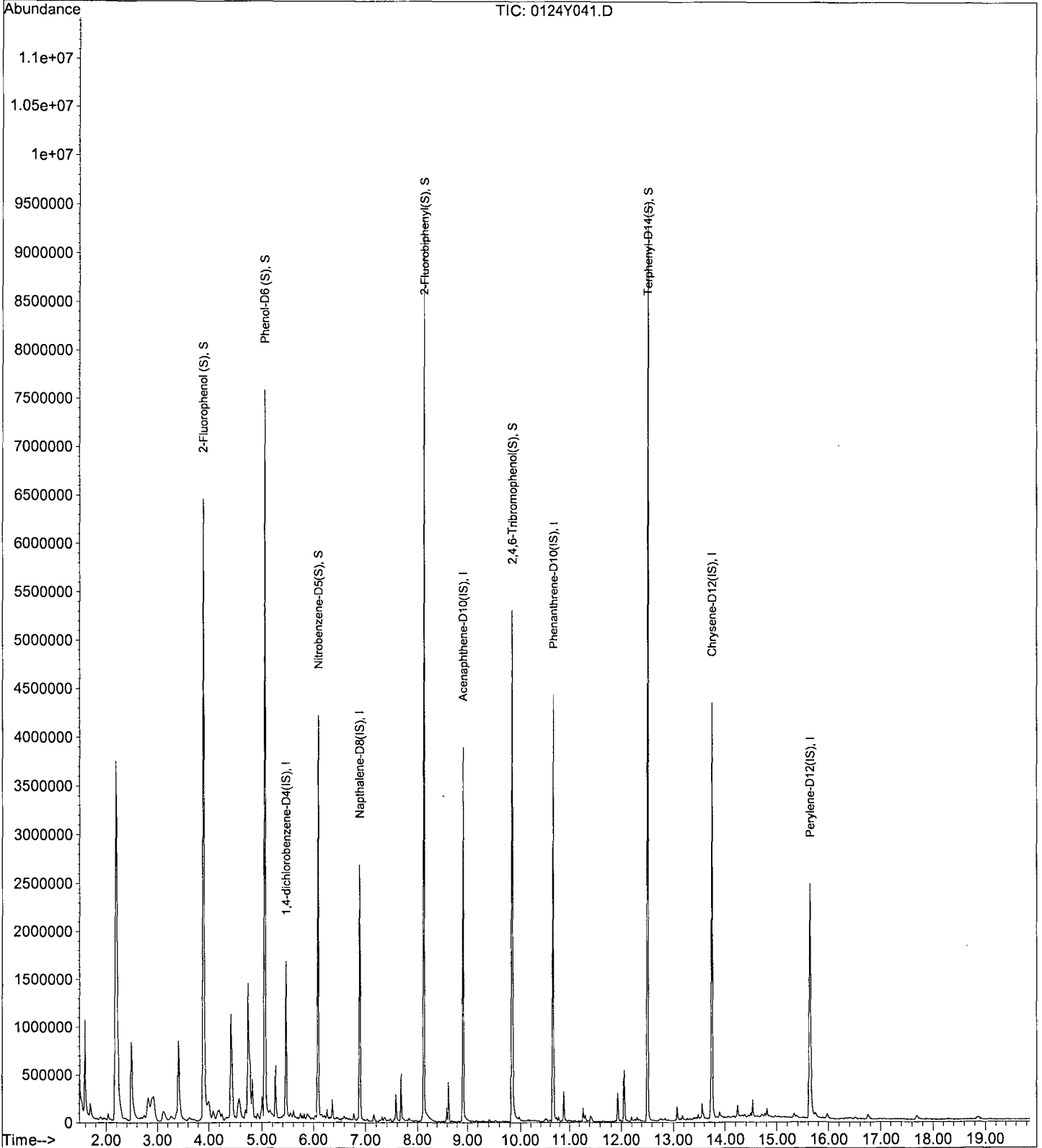
Data File : M:\YODA\DATA\Y190124\0124Y041.D  
Acq On : 28 Jan 19 17:21  
Sample : 190123A BLK 1/800  
Misc :

Vial: 41  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 29 6:55 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 28 Jan 19 17:21  
 Data File: M:\YODA\DATA\Y190124\0124Y041.D  
 Name: 190123A BLK 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-ol	1.60	27.3	ppb	1319670	ISTD01	5.47	2416120	40.0
Benzene, methyl-	2.19	209.1	ppb	10106200	ISTD01	5.47	2416120	40.0
Acetic acid, ethyl e	2.49	42.4	ppb	2047180	ISTD01	5.47	2416120	40.0
Ethene, tetrachloro-	2.82	14.1	ppb	680046	ISTD01	5.47	2416120	40.0
SULFONE, CHLORO PHEN	7.57	6.1	ppb	384616	ISTD02	6.90	3168470	40.0

0124Y041.D Y0125NC.M Tue Jan 29 12:29:17 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

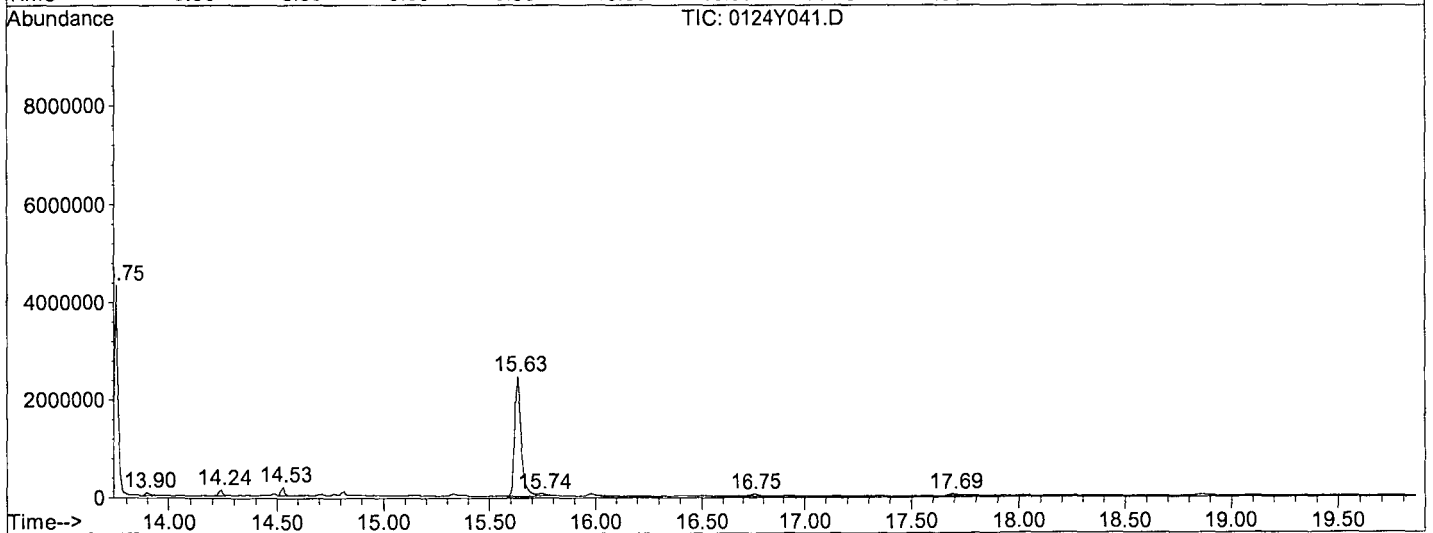
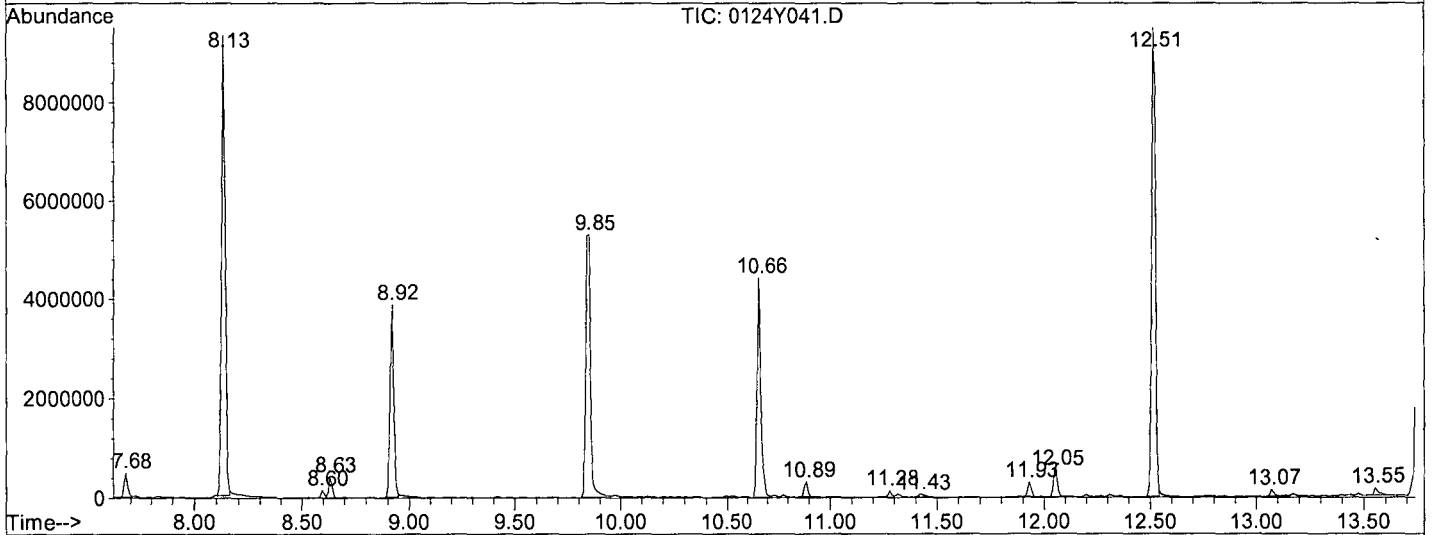
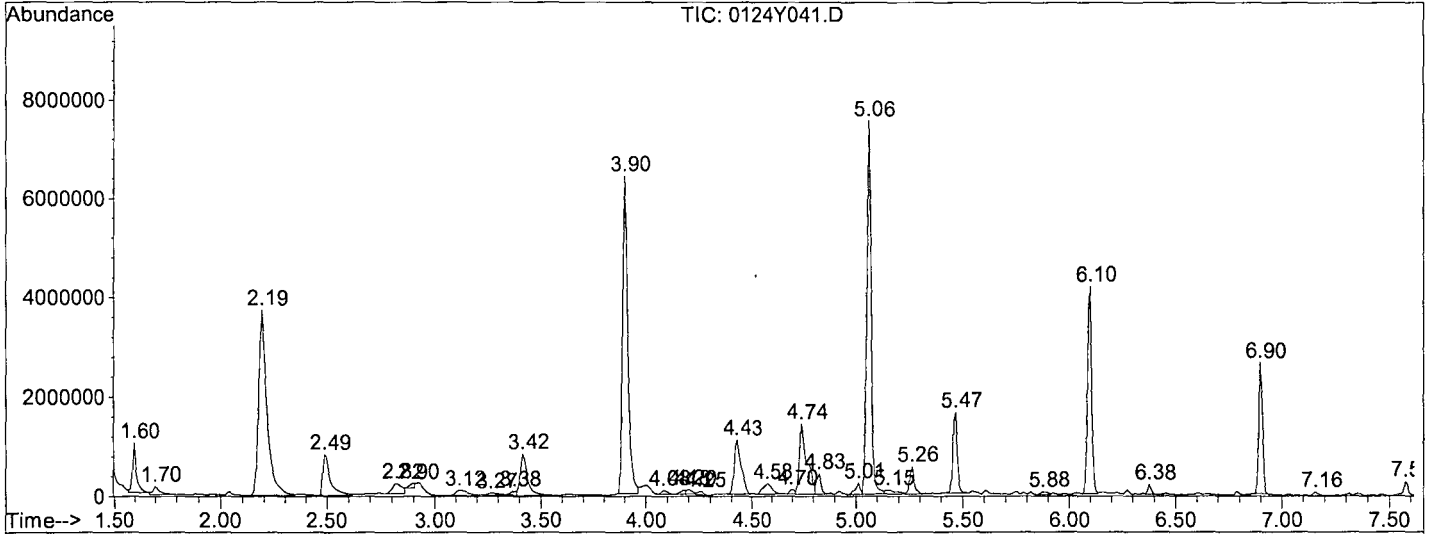
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.596	9	12	20	rVB	994192	3639913	1319673	10.78%	1.126%
2	1.698	20	23	34	rVB2	164009	3059652	371315	3.03%	0.317%
3	2.190	70	76	93	rBV	3724988	14153542	10106197	82.59%	8.624%
4	2.487	105	108	122	rBV	820229	5037714	2047183	16.73%	1.747%
5	2.821	138	144	148	rBV	211185	2526482	680046	5.56%	0.580%
6	2.896	148	152	153	rBV2	93159	1256069	168400	1.38%	0.144%
7	3.118	170	176	186	rBV3	102580	3209760	435169	3.56%	0.371%
8	3.267	188	192	199	rVV5	43428	2138838	175094	1.43%	0.149%
9	3.378	199	204	205	rVV	84691	1248350	176407	1.44%	0.151%
10	3.416	205	208	226	rVB	837109	6660709	1970179	16.10%	1.681%
11	3.898	256	260	267	rBV	6398680	13115630	11060279	90.38%	9.438%
12	4.084	277	280	285	rVB3	81785	1660187	175907	1.44%	0.150%
13	4.177	285	290	291	rBV2	85667	1236087	156382	1.28%	0.133%
14	4.205	291	293	296	rVV	90315	1174720	161671	1.32%	0.138%
15	4.251	296	298	303	rVB	68002	1434792	123666	1.01%	0.106%
16	4.427	312	317	324	rVV2	1093278	4842252	2633655	21.52%	2.247%
17	4.576	327	333	343	rVV6	208497	3626984	722687	5.91%	0.617%
18	4.697	343	346	348	rVV2	90527	1068034	157406	1.29%	0.134%
19	4.743	348	351	358	rVV3	1414974	5781843	3495272	28.56%	2.983%
20	4.827	358	360	364	rVV	409753	2185338	583212	4.77%	0.498%
21	5.012	375	380	382	rBV3	232909	1672517	383632	3.13%	0.327%
22	5.059	382	385	393	rVV	7542460	15106754	10823080	88.44%	9.236%
23	5.152	393	395	404	rVV4	82808	2500368	300499	2.46%	0.256%
24	5.263	404	407	412	rVB	550807	2456515	825314	6.74%	0.704%
25	5.467	425	429	436	rVB	1625761	4570431	2416123	19.74%	2.062%
26	5.876	470	473	477	rBV2	57871	1394127	140577	1.15%	0.120%
27	6.098	493	497	501	rBV	4176096	7375354	5837020	47.70%	4.981%
28	6.377	525	527	531	rVB	203325	1376432	217438	1.78%	0.186%
29	6.897	580	583	587	rBV	2640808	4475201	3168473	25.89%	2.704%
30	7.157	607	611	616	rVB2	74872	1680563	127744	1.04%	0.109%
31	7.575	654	656	664	rVB	280748	2294995	384616	3.14%	0.328%
32	7.677	664	667	670	rBV	490915	1698059	609593	4.98%	0.520%
33	8.132	713	716	719	rBV	9309140	11657421	10245528	83.72%	8.743%
34	8.596	763	766	768	rBV	142968	1019904	161482	1.32%	0.138%
35	8.633	768	770	773	rVB	407697	1460930	443507	3.62%	0.378%
36	8.921	798	801	804	rBV	3868234	5935976	4502569	36.79%	3.842%
37	9.849	897	901	912	rBV	5296573	11081452	8068530	65.93%	6.885%
38	10.657	985	988	995	rBV	4417598	8173112	5744495	46.94%	4.902%
39	10.889	1010	1013	1016	rBV	297650	1424009	347867	2.84%	0.297%
40	11.279	1052	1055	1057	rBV	139564	1014388	158577	1.30%	0.135%
41	11.427	1067	1071	1080	rVB5	55001	2372386	133921	1.09%	0.114%
42	11.928	1122	1125	1129	rBV	294283	1566516	351502	2.87%	0.300%
43	12.049	1135	1138	1143	rBV	536227	2085830	709949	5.80%	0.606%
44	12.513	1185	1188	1191	rBV	9500014	10000000	10000000	100.00%	10.443%
45	13.070	1246	1248	1253	rBV	139414	1460372	176702	1.44%	0.151%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y041.D  
 Operator : MA  
 Acquired : 28 Jan 19 17:21 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: 190123A BLK 1/800  
 Misc Info :  
 Vial Number: 41  
 Quant File : Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :

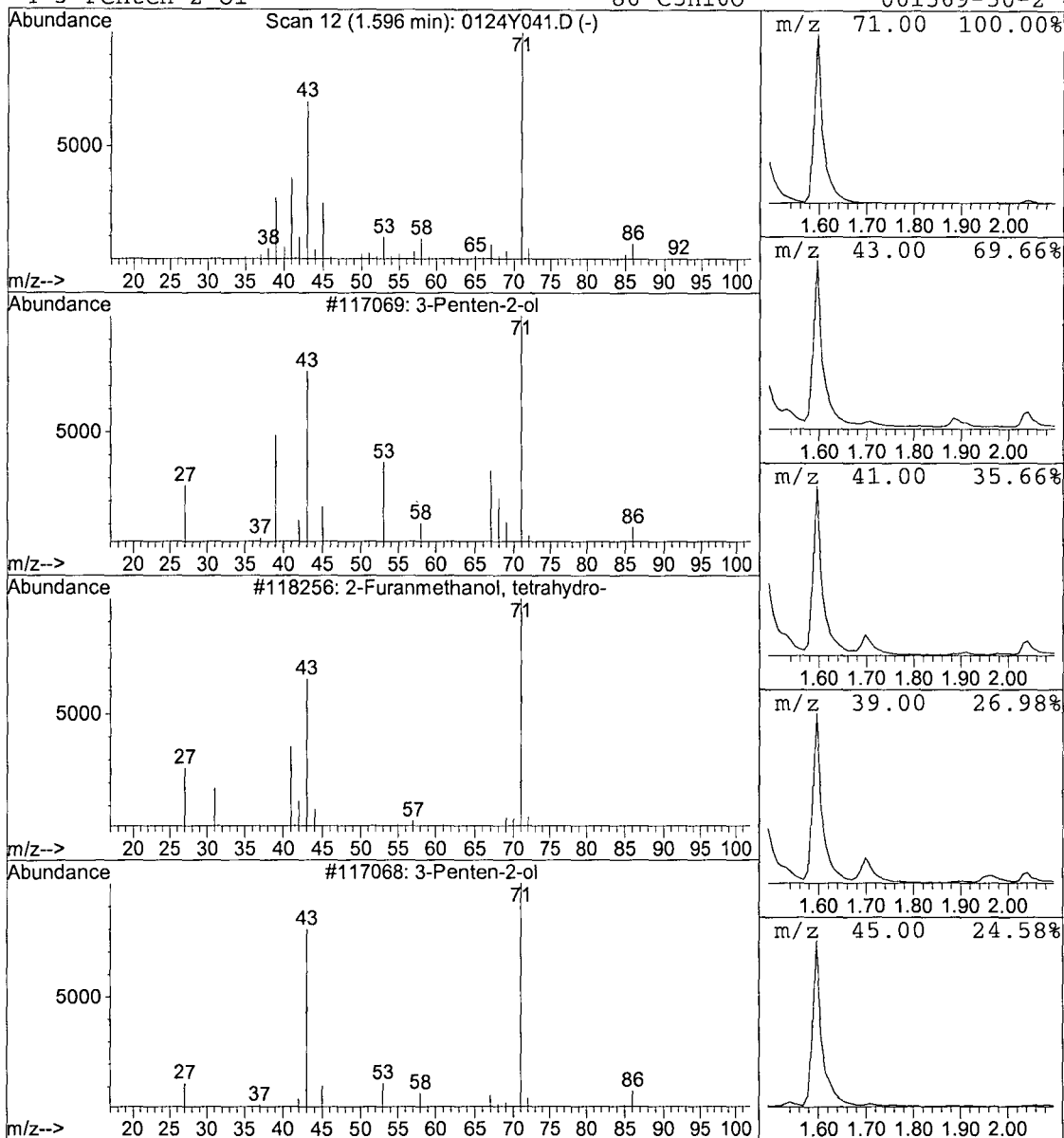
Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-ol Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.60	27.31 ppb	1319670	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		3-Penten-2-ol	86	C5H10O	001569-50-2	64
2		2-Furanmethanol, tetrahydro-	102	C5H10O2	000097-99-4	50
3		3-Penten-2-ol	86	C5H10O	001569-50-2	46
4		3-Penten-2-ol	86	C5H10O	001569-50-2	46



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :

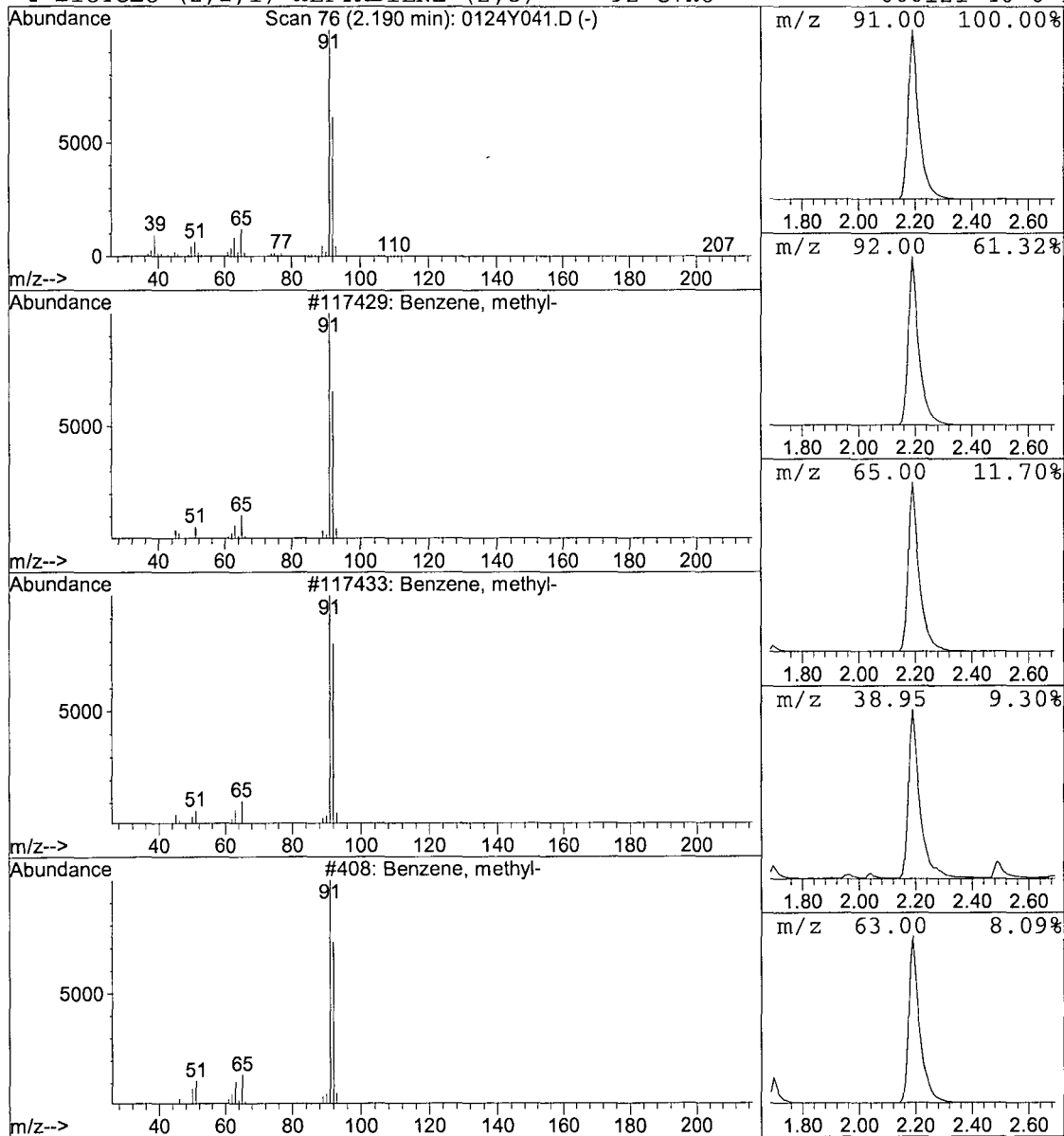
Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.19	209.14 ppb	10106200	1,4-dichlorobenzene-D4 (IS)	5.47

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Benzene, methyl-	92	C7H8	000108-88-3	94
2		Benzene, methyl-	92	C7H8	000108-88-3	91
3		Benzene, methyl-	92	C7H8	000108-88-3	91
4		BICYCLO-(2,2,1)-HEPTADIENE-(2,5)	92	C7H8	000121-46-0	91





Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :

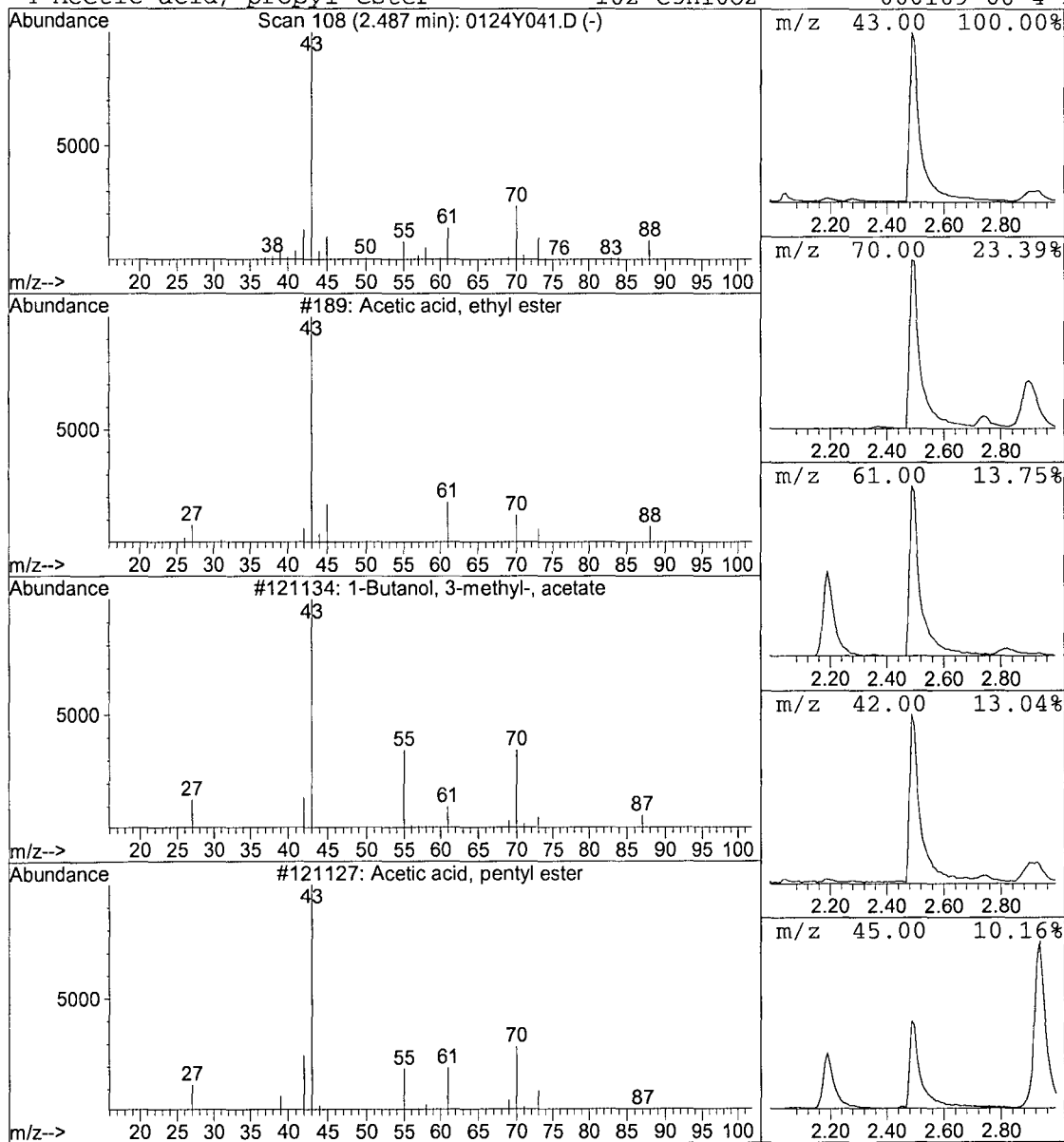
Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Acetic acid, ethyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.49	42.37 ppb	2047180	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Acetic acid, ethyl ester	88	C4H8O2	000141-78-6	35
2		1-Butanol, 3-methyl-, acetate	130	C7H14O2	000123-92-2	33
3		Acetic acid, pentyl ester	130	C7H14O2	000628-63-7	33
4		Acetic acid, propyl ester	102	C5H10O2	000109-60-4	32



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :

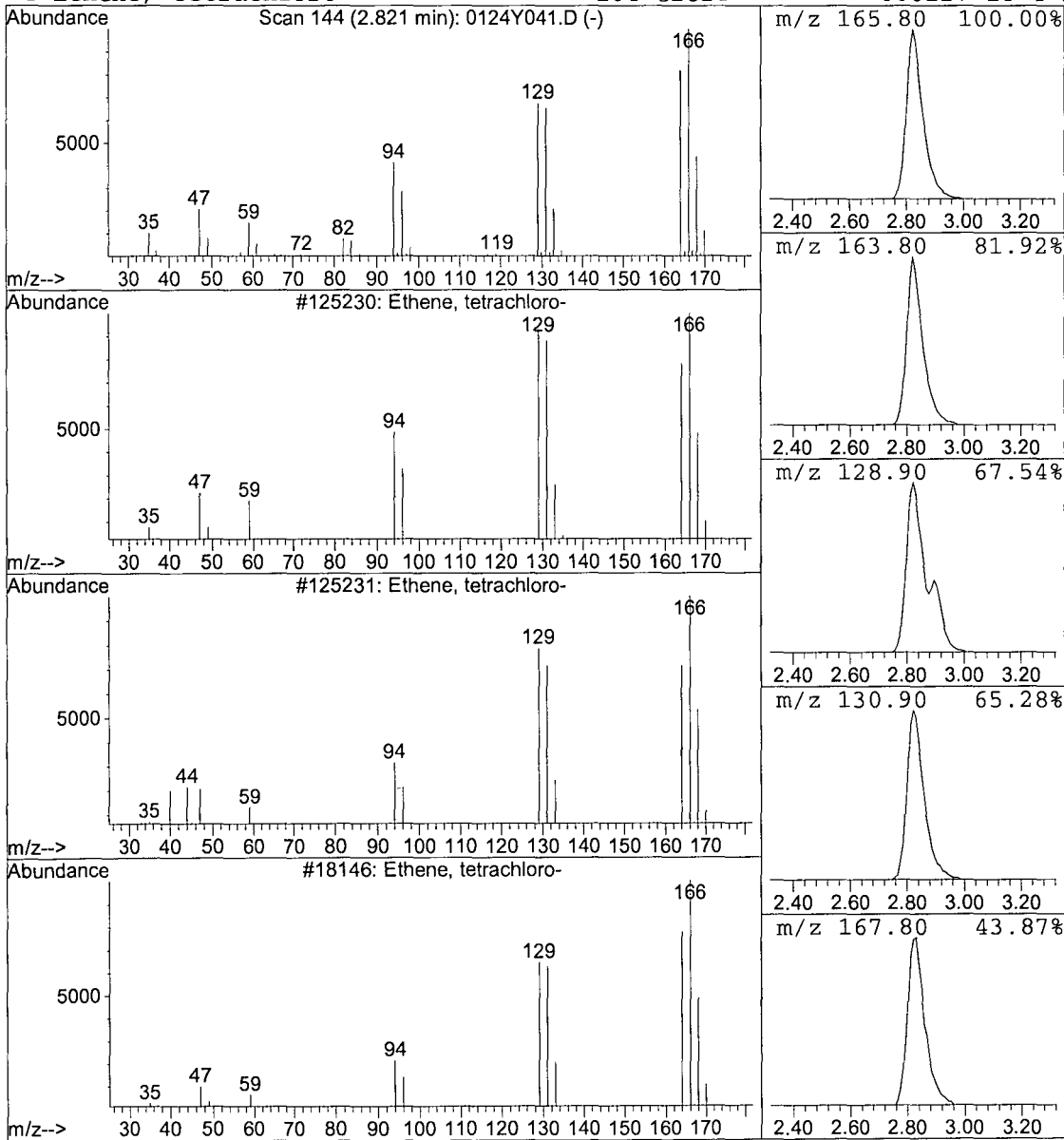
Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Ethene, tetrachloro- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	14.07 ppb	680046	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96
3		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96
4		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y041.D  
 Acq On : 28 Jan 19 17:21  
 Sample : 190123A BLK 1/800  
 Misc :

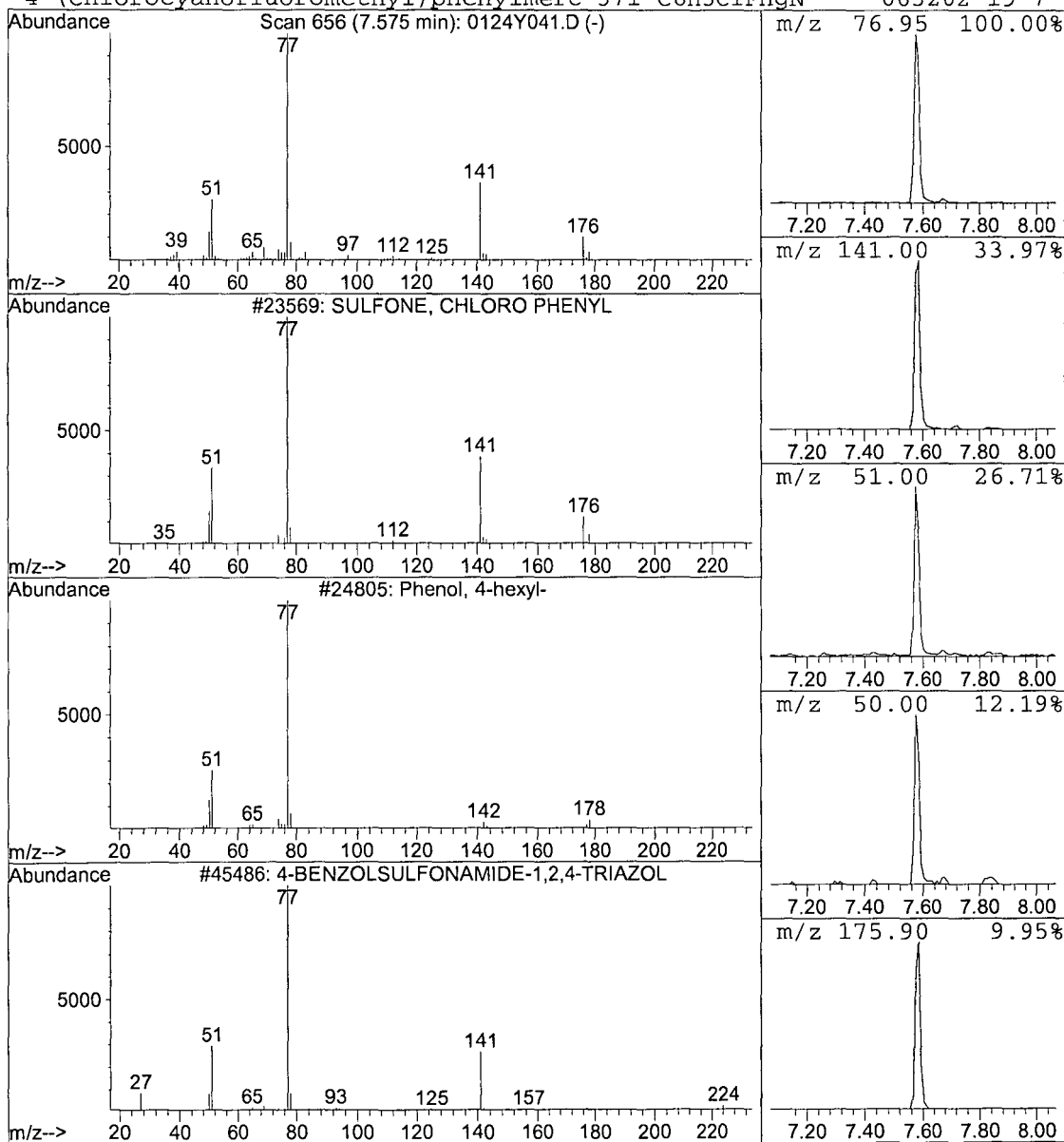
Vial: 41  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 5 SULFONE, CHLORO PHENYL Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.57	6.07 ppb	384616	Napthalene-D8(IS)	6.90

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		SULFONE, CHLORO PHENYL	176	C6H5ClO2S	000000-00-0	96
2		Phenol, 4-hexyl-	178	C12H18O	002446-69-7	81
3		4-BENZOLSULFONAMIDE-1,2,4-TRIAZOL	224	C8H8N4O2S	029982-62-5	56
4		(Chlorocyanofluoromethyl)phenylmerc	371	C8H5ClFHgN	063202-19-7	53



Data File : M:\YODA\DATA\Y190124\0124Y042.D  
 Acq On : 28 Jan 19 17:49  
 Sample : 190123A LCS-1 1/800  
 Misc :

Vial: 42  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 29 6:42 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	468823	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1956705	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1030332	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1951265	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1712294	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1665291	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.91	112	4009896	239.7053	ppb	0.04
Spiked Amount 250.000			Recovery =	95.882%		
6) Phenol-D6 (S)	5.07	99	5181499	235.2506	ppb	0.02
Spiked Amount 250.000			Recovery =	94.100%		
22) Nitrobenzene-D5 (S)	6.10	82	2307922	123.8138	ppb	0.00
Spiked Amount 125.000			Recovery =	99.051%		
46) 2-Fluorobiphenyl (S)	8.14	172	4334218	129.8542	ppb	0.00
Spiked Amount 125.000			Recovery =	103.883%		
64) 2,4,6-Tribromophenol (S)	9.86	330	1034790	303.0652	ppb	0.00
Spiked Amount 250.000			Recovery =	121.226%		
82) Terphenyl-D14 (S)	12.52	244	4775558	136.6577	ppb	0.00
Spiked Amount 125.000			Recovery =	109.326%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	8578	4.0899		# 36
3) n-Nitrosodimethylamine	1.97	42	190420	56.0056	ppb	96
4) Pyridine	1.99	79	394376	47.1362	ppb	95
7) Phenol	5.09	94	1501857	52.9358	ppb	95
8) Aniline	5.11	93	463068	15.5932	ppb	96
9) Bis (2-chloroethyl) ether	5.18	63	739088	56.5490	ppb	92
10) 2-Chlorophenol	5.24	128	1124976	56.1846	ppb	95
11) 1,3-DCB	5.40	146	1028521	48.2849	ppb	99
12) 1,4-DCB	5.49	146	1063850	48.8783	ppb	99
13) Benzyl alcohol	5.63	108	720081	57.7158	ppb	97
14) 1,2-DCB	5.65	146	1022302	50.7006	ppb	98
15) 2-Methylphenol	5.76	107	977994	57.2589	ppb	100
16) Bis (2-chloroisopropyl) et	5.76	45	1086282	55.3595	ppb	# 81
17) Acetophenone	5.93	105	1462774	56.2123	ppb	99
18) 3&4-Methylphenol	5.93	107	2317436	114.8755	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	818278	55.8523	ppb	97
20) Hexachloroethane	6.03	117	346949	43.6360	ppb	92
23) Nitrobenzene	6.13	77	1293785	61.7226	ppb	97
24) Isophorone	6.39	82	2256056	61.7011	ppb	98
25) 2-Nitrophenol	6.48	139	635420	61.5700	ppb	93
26) 2,4-Dimethylphenol	6.52	122	1007625	59.0089	ppb	99
27) Benzoic acid	6.67	105	918476	68.7461	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1351446	59.5978	ppb	99
29) 2,4-Dichlorophenol	6.75	162	933505	63.5316	ppb	98
30) 1,2,4-Trichlorobenzene	6.84	180	885754	54.2214	ppb	98
31) 3,4-Dimethylphenol	6.86	107	1416161	61.3403	ppb	96
32) Napthalene	6.93	128	3243976	58.3935	ppb	100
33) 4-Chloroaniline	7.00	127	78749	3.8314	ppb	# 91
34) 2,6-Dichlorophenol	7.00	162	924158	63.5101	ppb	99
35) Hexachloropropene	7.02	213	443851	44.5558	ppb	99
36) Hexachlorobutadiene	7.06	225	417382	49.0476	ppb	99
37) Caprolactum	7.43	55	433460	58.5927	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0124Y042.D Y0125NC.M Tue Jan 29 10:33:13 2019

Data File : M:\YODA\DATA\Y190124\0124Y042.D  
 Acq On : 28 Jan 19 17:49  
 Sample : 190123A LCS-1 1/800  
 Misc :

Vial: 42  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 29 6:42 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1039272	62.7680	ppb	92
39) 2-Methylnaphthalene	7.71	142	2073141	57.8727	ppb	100
40) 1-Methylnaphthalene	7.83	142	2105928	58.8191	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	86802	20.4922	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	872651	63.0294	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	649010	71.8119	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	696785	68.2670	ppb	94
47) 1,1'-Biphenyl	8.25	154	2662754	65.1022	ppb	98
48) 2-Chloronaphthalene	8.28	162	2059285	65.9047	ppb	98
49) 2-Nitroaniline	8.41	65	673643	66.3197	ppb	83
50) Dimethyl phthalate	8.61	163	2601424	70.5142	ppb	100
51) 2,6-DNT	8.69	165	585667	70.7959	ppb	95
52) Acenaphthylene	8.76	152	3185874	64.2774	ppb	100
53) 3-Nitroaniline	8.89	138	24450	2.6100	ppb	81
54) Acenaphthene	8.96	154	2118634	66.0051	ppb	99
55) 2,4-Dinitrophenol	9.01	184	340724	75.5423	ppb	99
56) 4-Nitrophenol	9.09	65	406643	71.4307	ppb	99
57) Dibenzofuran	9.16	168	3015243	67.0270	ppb	100
58) 2,4-DNT	9.15	165	769370	70.5118	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	528167	70.3136	ppb	98
60) Diethyl phthalate	9.42	149	2413459	69.0451	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	1166365	66.4573	ppb	87
62) Fluorene	9.56	166	2424397	67.2333	ppb	99
63) 4-Nitroaniline	9.61	138	341542	36.0067	ppb	90
66) 4,6-Dinitro-2-methylphenol	9.64	198	501174	71.8735	ppb	97
67) Diphenyl amine	9.70	169	2738180	99.4260	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2738180	99.4260	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2356918	60.7192	ppb	98
70) 4-Bromophenyl phenyl ether	10.13	248	642634	68.9019	ppb	98
71) Hexachlorobenzene	10.20	284	605247	68.6442	ppb	98
72) Atrazine	10.31	200	100723	10.6590	ppb	99
73) Pentachlorophenol	10.43	266	418408	75.8244	ppb	98
74) Phenanthrene	10.68	178	3572517	67.7136	ppb	100
75) Anthracene	10.75	178	3591650	66.4619	ppb	100
76) Carbazol	10.94	167	3325011	67.7049	ppb	100
77) Di-n-butylphthalate	11.33	149	4138453	71.4165	ppb	99
78) Fluoranthene	12.08	202	3888851	68.6503	ppb	99
80) Benzidine	12.25	184	4171	0.2462	ppb	# 19
81) Pyrene	12.35	202	4044885	69.5636	ppb	100
83) Butyl benzylphthalate	13.08	149	1966030	75.4272	ppb	98
84) 3,3'-Dichlorobenzidine	13.71	252	87722	4.9200	ppb	99
85) Benz (a) anthracene	13.74	228	3396532	66.9809	ppb	100
86) Bis (2-ethylhexyl) phthala	13.72	149	2683837	73.9881	ppb	# 93
87) Chrysene	13.79	228	3443530	69.4422	ppb	100
88) Di-n-octylphthalate	14.49	149	4677896	75.9993	ppb	99
90) Benzo (b) fluoranthene	15.08	252	3771497	75.4187	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3029197	63.0260	ppb	99
92) Benzo (a) pyrene	15.55	252	3082868	68.1084	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3274093	70.2217	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	2991006	70.9567	ppb	98
95) Benzo (g,h,i) perylene	18.17	276	2890477	69.9765	ppb	100

(#) = qualifier out of range (m) = manual integration

0124Y042.D Y0125NC.M

Tue Jan 29 10:33:14 2019

Quantitation Report

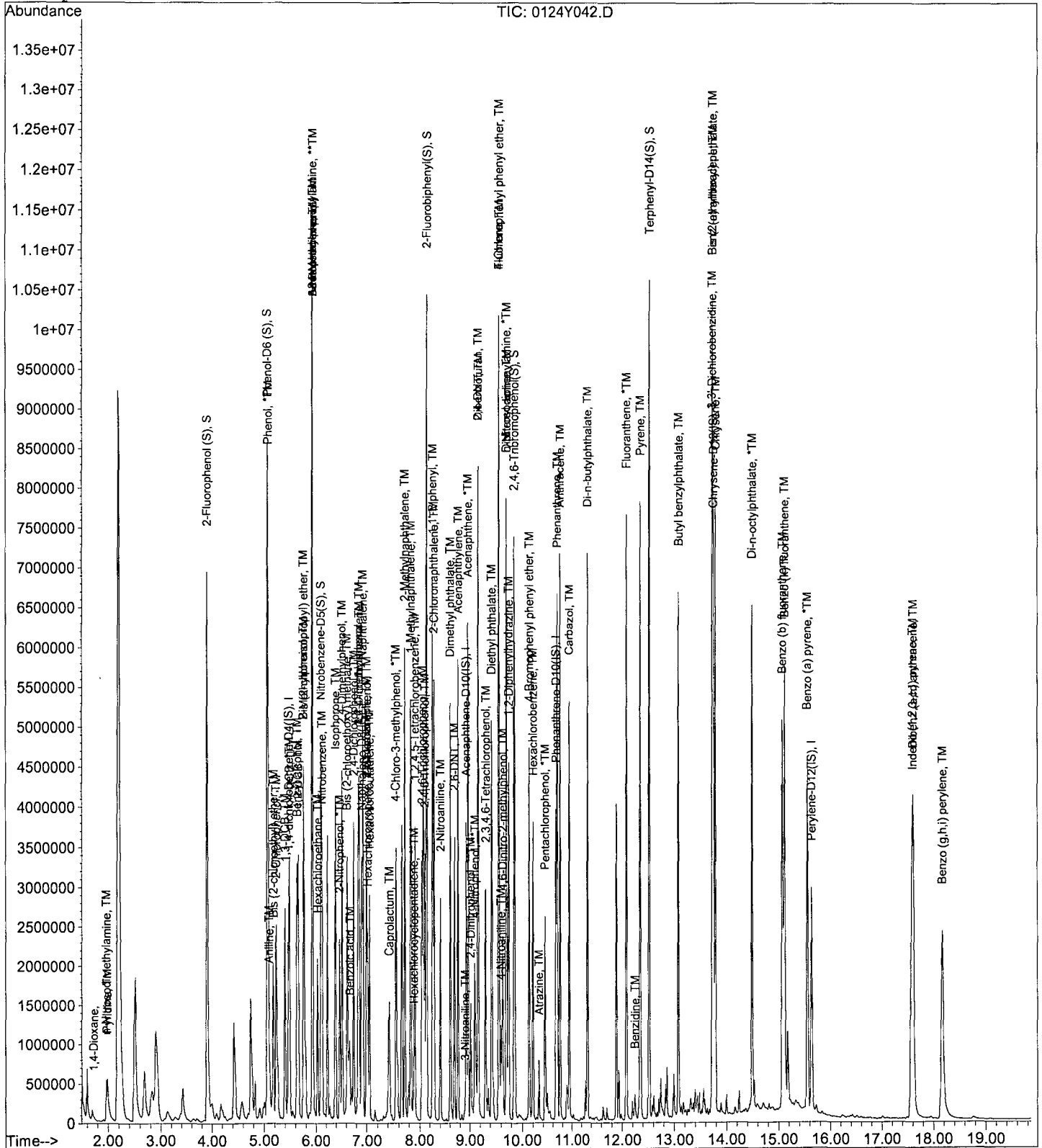
Data File : M:\YODA\DATA\Y190124\0124Y042.D  
Acq On : 28 Jan 19 17:49  
Sample : 190123A LCS-1 1/800  
Misc :

Vial: 42  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 29 6:42 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y043.D  
 Acq On : 28 Jan 19 18:16  
 Sample : 190123A LCSD-1 1/800  
 Misc :

Vial: 43  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 29 6:42 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	395343	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.91	136	1724144	40.0000	ppb	0.01
41) Acenaphthene-D10 (IS)	8.92	164	1018238	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1994222	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1758039	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1714067	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3871938	274.4781	ppb	0.03
Spiked Amount	250.000			Recovery =	109.791%	
6) Phenol-D6 (S)	5.07	99	5126405	276.0089	ppb	0.02
Spiked Amount	250.000			Recovery =	110.404%	
22) Nitrobenzene-D5 (S)	6.10	82	2276921	138.6269	ppb	0.01
Spiked Amount	125.000			Recovery =	110.902%	
46) 2-Fluorobiphenyl (S)	8.13	172	4264694	129.2889	ppb	0.00
Spiked Amount	125.000			Recovery =	103.431%	
64) 2,4,6-Tribromophenol (S)	9.85	330	1015932	301.0762	ppb	0.00
Spiked Amount	250.000			Recovery =	120.430%	
82) Terphenyl-D14 (S)	12.52	244	4632991	129.1282	ppb	0.00
Spiked Amount	125.000			Recovery =	103.302%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.74	58	9252	5.2312		56
3) n-Nitrosodimethylamine	1.97	42	190957	66.6024	ppb	95
4) Pyridine	1.98	79	419829	59.5047	ppb	98
7) Phenol	5.08	94	1517765	63.4396	ppb	90
8) Aniline	5.10	93	1273961	50.8722	ppb	94
9) Bis (2-chloroethyl) ether	5.17	63	715870	64.9528	ppb	98
10) 2-Chlorophenol	5.23	128	1090794	64.6029	ppb	99
11) 1,3-DCB	5.40	146	973051	54.1712	ppb	98
12) 1,4-DCB	5.49	146	1005057	54.7597	ppb	99
13) Benzyl alcohol	5.63	108	706729	67.1740	ppb	96
14) 1,2-DCB	5.66	146	967570	56.9050	ppb	98
15) 2-Methylphenol	5.76	107	937407	65.0833	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1068304	64.5623	ppb	# 90
17) Acetophenone	5.92	105	1435288	65.4076	ppb	99
18) 3&4-Methylphenol	5.93	107	2240960	131.7312	ppb	97
19) n-Nitrosodi-n-propylamine	5.92	70	795561	64.3945	ppb	99
20) Hexachloroethane	6.03	117	335889	50.0968	ppb	91
23) Nitrobenzene	6.12	77	1260612	68.2520	ppb	95
24) Isophorone	6.39	82	2209093	68.5661	ppb	100
25) 2-Nitrophenol	6.47	139	631166	69.4071	ppb	98
26) 2,4-Dimethylphenol	6.52	122	937005	62.2748	ppb	98
27) Benzoic acid	6.67	105	874008	74.2417	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1339912	67.0594	ppb	99
29) 2,4-Dichlorophenol	6.75	162	902583	69.7127	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	852290	59.2102	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1363641	67.0325	ppb	100
32) Napthalene	6.93	128	3107448	63.4808	ppb	100
33) 4-Chloroaniline	6.99	127	693344	38.2839	ppb	99
34) 2,6-Dichlorophenol	7.00	162	882061	68.7934	ppb	100
35) Hexachloropropene	7.02	213	428490	48.8157	ppb	100
36) Hexachlorobutadiene	7.06	225	396849	52.9251	ppb	99
37) Caprolactum	7.42	55	430655	66.0657	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y043.D  
 Acq On : 28 Jan 19 18:16  
 Sample : 190123A LCSD-1 1/800  
 Misc :

Vial: 43  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 29 6:42 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1013111	69.4413	ppb	98
39) 2-Methylnaphthalene	7.72	142	2040173	64.6344	ppb	100
40) 1-Methylnaphthalene	7.83	142	2033561	64.4590	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	103174	23.1517	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	841190	61.4787	ppb	96
44) 2,4,6-Trichlorophenol	8.04	196	634861	71.0806	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	669973	66.4197	ppb	99
47) 1,1'-Biphenyl	8.25	154	2586527	63.9896	ppb	100
48) 2-Chloronaphthalene	8.28	162	2014545	65.2386	ppb	98
49) 2-Nitroaniline	8.40	65	677337	67.4754	ppb	98
50) Dimethyl phthalate	8.61	163	2499457	68.5550	ppb	100
51) 2,6-DNT	8.69	165	569816	69.6979	ppb	95
52) Acenaphthylene	8.77	152	3154190	64.3940	ppb	99
53) 3-Nitroaniline	8.89	138	561712	60.6738	ppb	92
54) Acenaphthene	8.96	154	2074185	65.3879	ppb	99
55) 2,4-Dinitrophenol	9.02	184	329072	73.9673	ppb	93
56) 4-Nitrophenol	9.09	65	395869	70.3641	ppb	99
57) Dibenzofuran	9.16	168	2921909	65.7237	ppb	98
58) 2,4-DNT	9.15	165	763598	70.8140	ppb	95
59) 2,3,4,6-Tetrachlorophenol	9.30	232	512222	69.0008	ppb	93
60) Diethyl phthalate	9.42	149	2329898	67.4462	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1140852	65.7757	ppb	94
62) Fluorene	9.56	166	2339057	65.6371	ppb	100
63) 4-Nitroaniline	9.61	138	637856	68.0440	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.64	198	482648	67.7257	ppb	98
67) Diphenyl amine	9.70	169	3444181	122.3677	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3444181	122.3677	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2505898	63.1666	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	624360	65.5006	ppb	95
71) Hexachlorobenzene	10.19	284	592287	65.7273	ppb #	82
72) Atrazine	10.32	200	288499	29.8729	ppb	97
73) Pentachlorophenol	10.44	266	395302	70.0940	ppb	99
74) Phenanthrene	10.69	178	3433083	63.6691	ppb	99
75) Anthracene	10.75	178	3479488	62.9995	ppb	100
76) Carbazol	10.94	167	3243395	64.6204	ppb	98
77) Di-n-butylphthalate	11.33	149	4014588	67.7867	ppb	99
78) Fluoranthene	12.08	202	3750587	64.7833	ppb	99
80) Benzidine	12.25	184	45374	2.6088	ppb	98
81) Pyrene	12.35	202	3904489	65.4018	ppb	99
83) Butyl benzylphthalate	13.07	149	1943764	72.6325	ppb	88
84) 3,3'-Dichlorobenzidine	13.70	252	752853	41.1258	ppb #	98
85) Benz (a) anthracene	13.74	228	3275387	62.9112	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2797255	75.1083	ppb #	94
87) Chrysene	13.79	228	3341028	65.6220	ppb	99
88) Di-n-octylphthalate	14.48	149	4508651	71.3437	ppb	95
90) Benzo (b) fluoranthene	15.07	252	3294175	63.9992	ppb	98
91) Benzo (k) fluoranthene	15.11	252	3329262	67.2981	ppb	99
92) Benzo (a) pyrene	15.55	252	3007635	64.5555	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3171555	66.0868	ppb	98
94) Dibenz (a,h) anthracene	17.60	278	2897908	66.7918	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2777736	65.3335	ppb	99

(#) = qualifier out of range (m) = manual integration



Quantitation Report

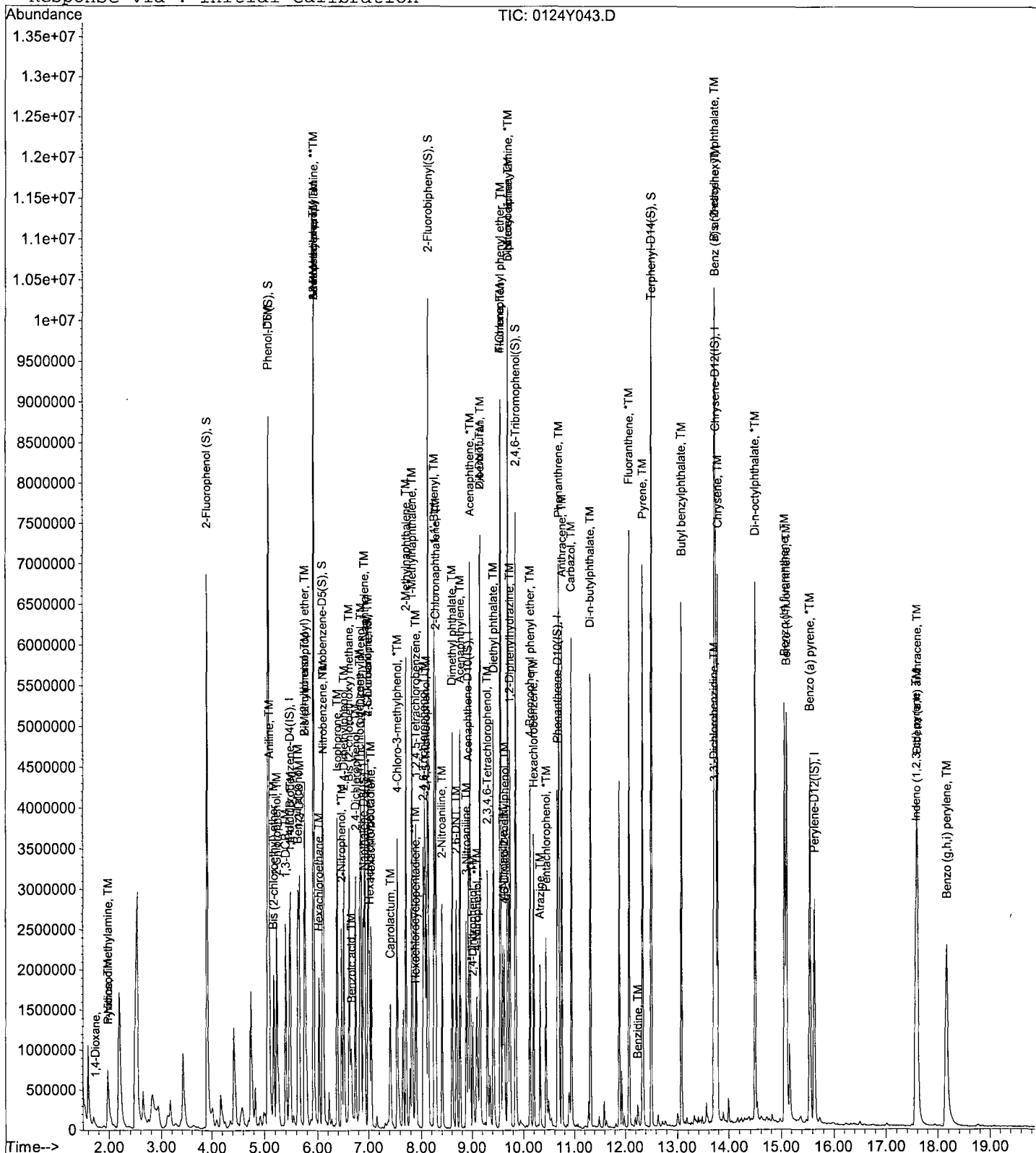
Data File : M:\YODA\DATA\Y190124\0124Y043.D  
Acq On : 28 Jan 19 18:16  
Sample : 190123A LCSD-1 1/800  
Misc :

Vial: 43  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 29 6:42 2019

Quant Results File: Y0125NC.RES

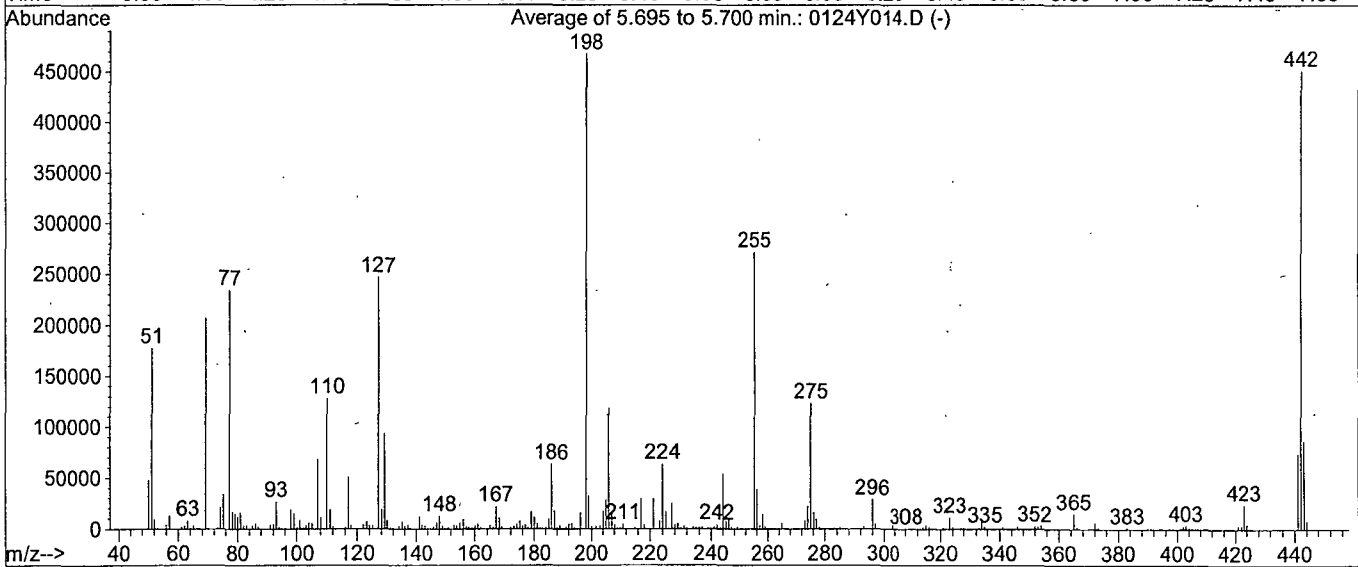
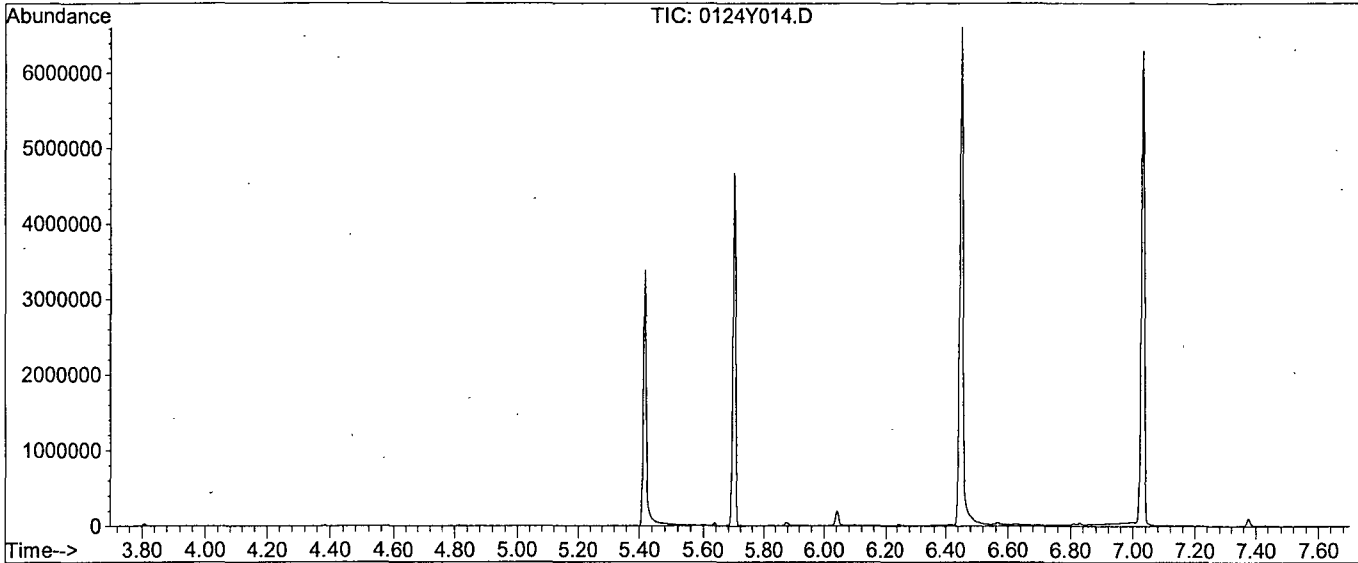
Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 844, 845, 846; Background Corrected with Scan 836

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result
51	198	10	80	38.0	177707	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	324	PASS
127	198	10	80	52.7	246677	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	467755	PASS
199	198	5	9	6.9	32176	PASS
275	198	10	60	26.4	123307	PASS
365	198	1	100	3.2	14799	PASS
441	442	0.01	24	16.3	73683	PASS
442	198	50	150	96.4	451136	PASS
443	442	15	24	19.1	86139	PASS

Data File Name: 0124Y014.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 25 Jan 2019 07:05  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 14  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	45543100
2)	DDD	6.83	289306
3)	DDE	6.98	50792

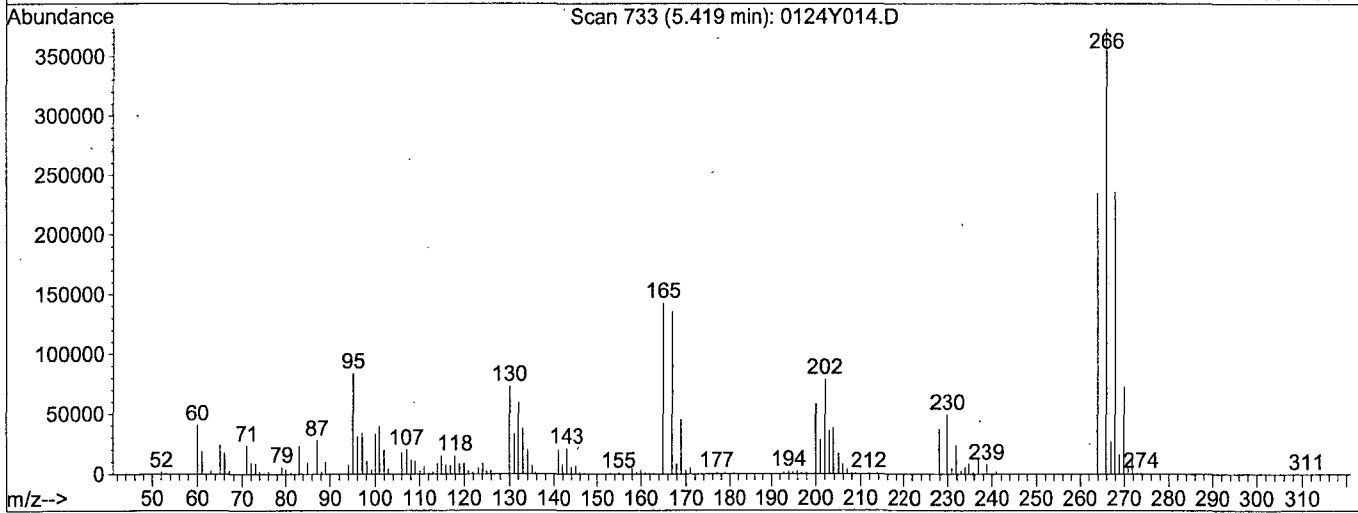
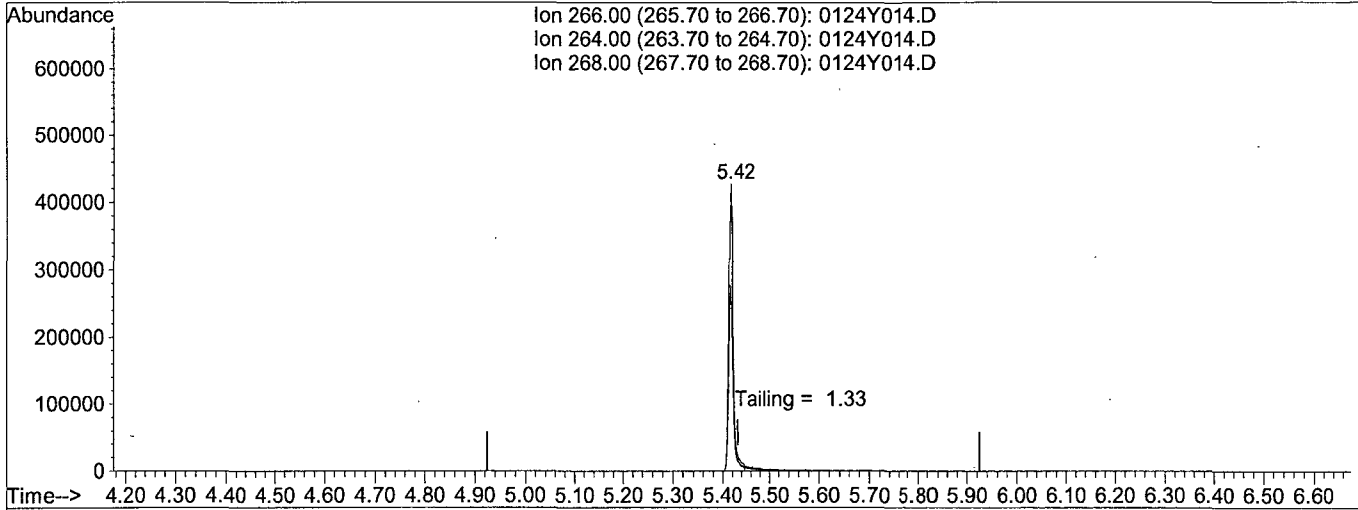
Breakdown 0.74

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 25 7:20 2019

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y014.D

(5) Pentachlorophenol

5.42min 0.0000

response 2758498

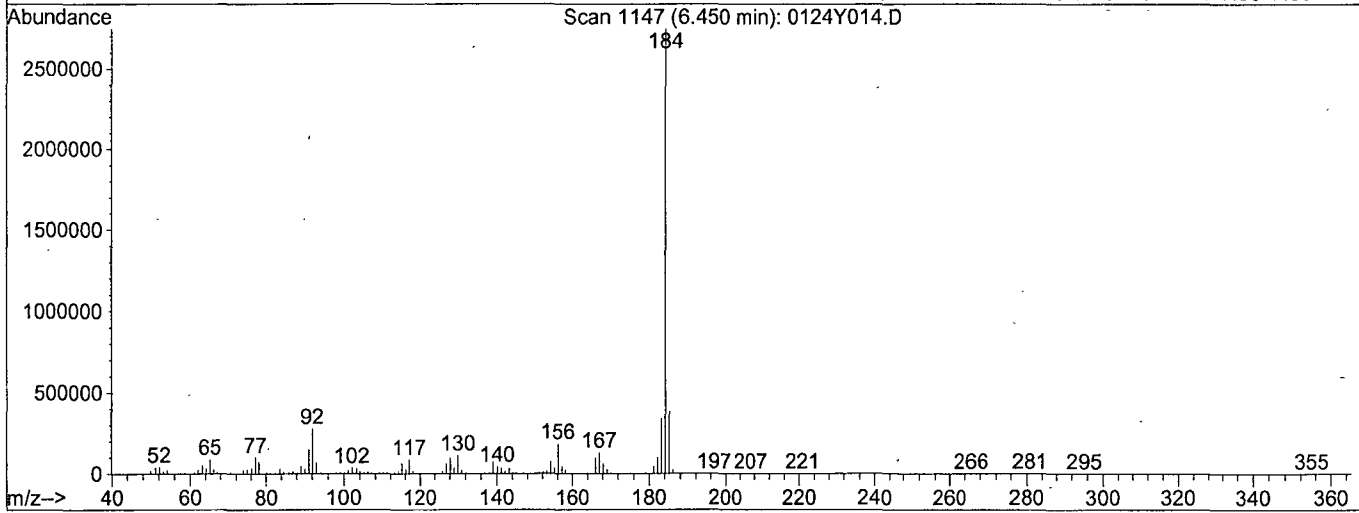
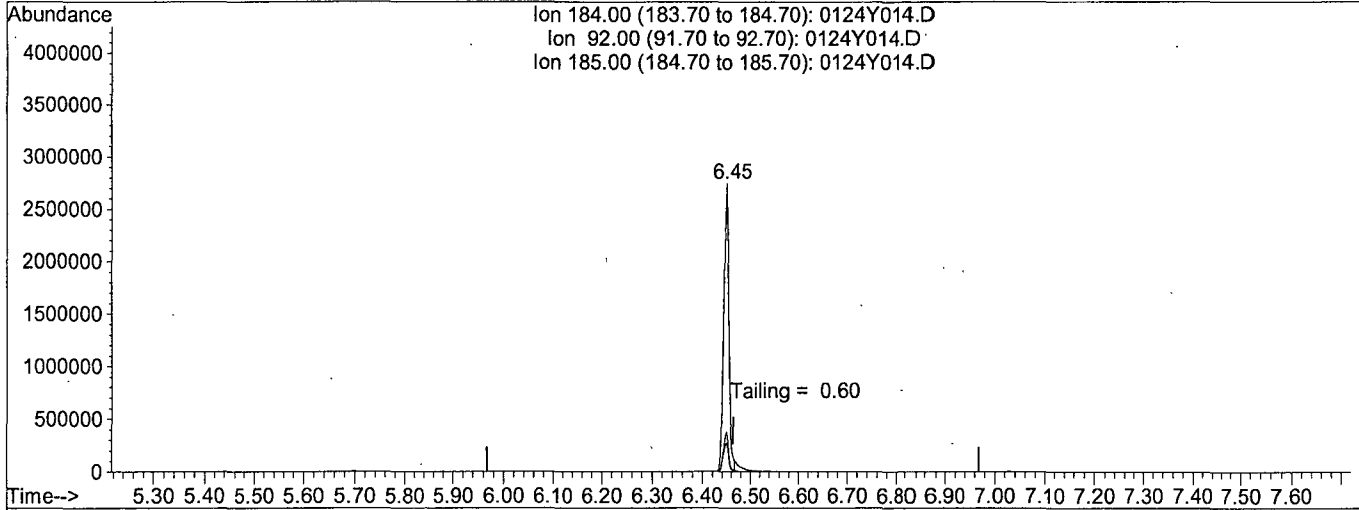
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	64.93
268.00	62.10	64.03
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 25 7:20 2019

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



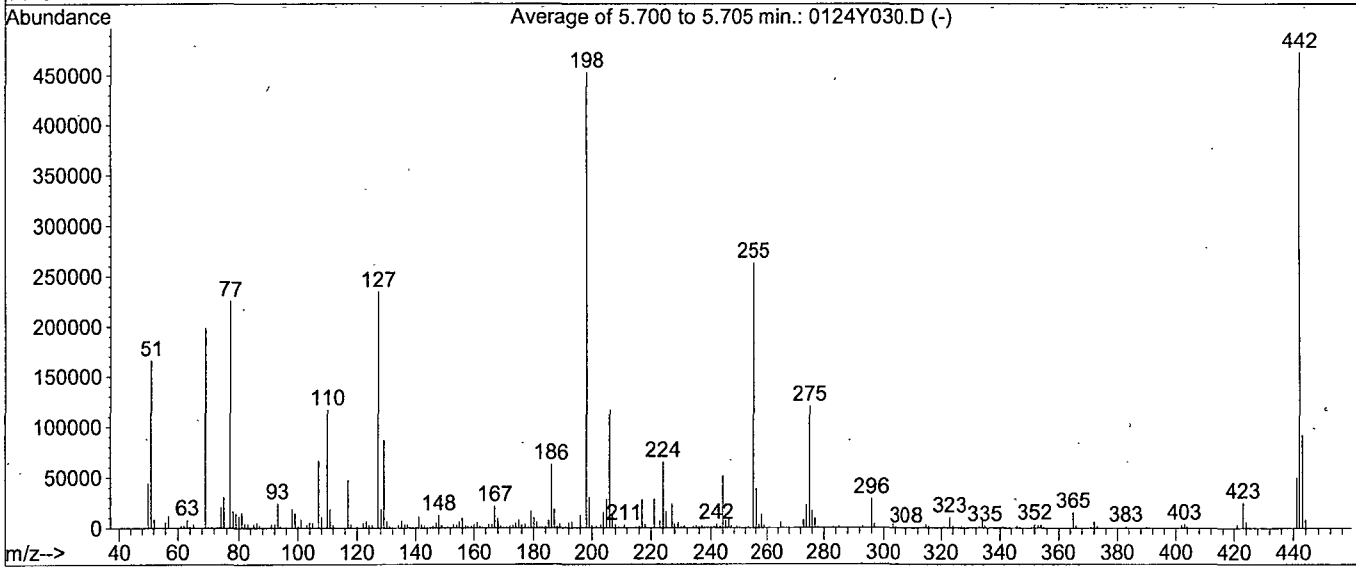
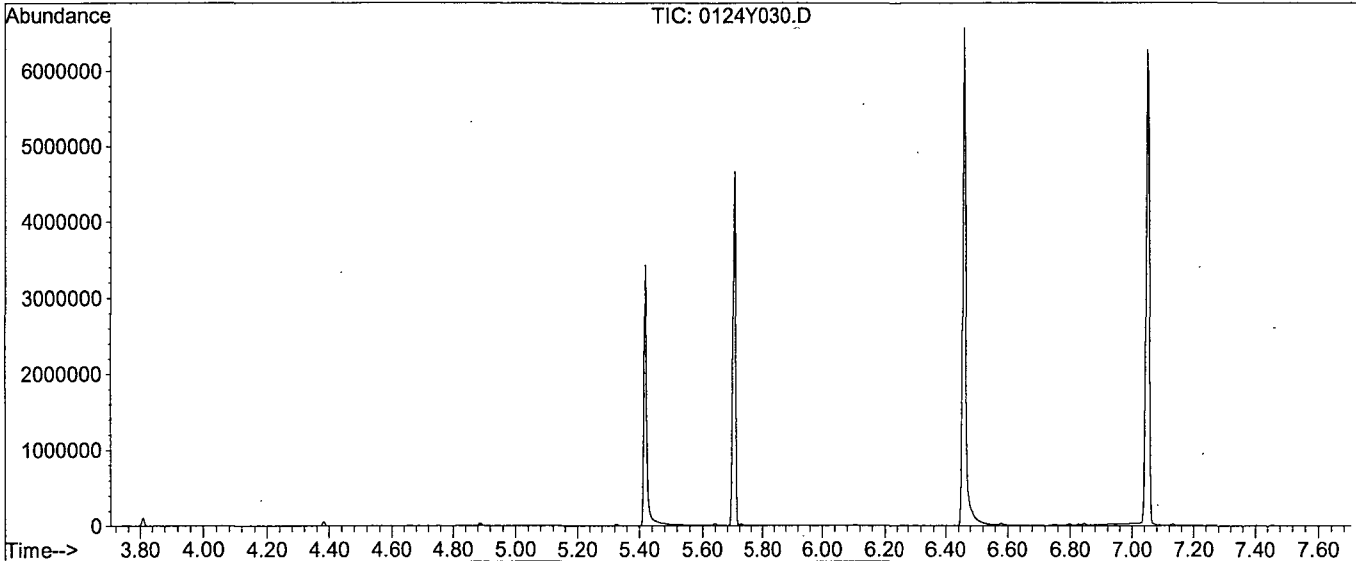
TIC: 0124Y014.D

(6) Benzidine		
6.45min	0.0000	
response	21096537	
Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.55
185.00	13.80	14.00
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 847, 848, 849; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.7	166219	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	962	PASS
127	198	10	80	51.8	234731	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	453312	PASS
199	198	5	9	6.7	30395	PASS
275	198	10	60	26.6	120363	PASS
365	198	1	100	3.4	15570	PASS
441	442	0.01	24	10.6	50421	PASS
442	198	50	150	104.5	473707	PASS
443	442	15	24	19.5	92189	PASS

M:\YODA\DATA\Y190124\0124Y030.D

Data File Name: 0124Y030.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 28 Jan 2019 11:49  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 30  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	45582200
2)	DDD	6.83	168406
3)	DDE	6.98	0

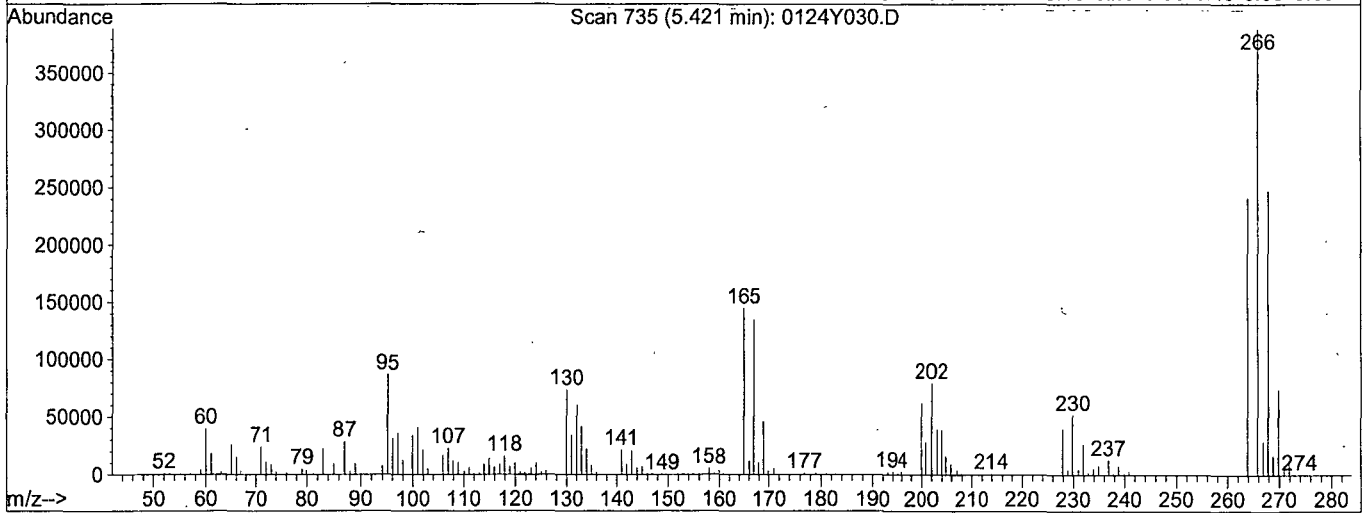
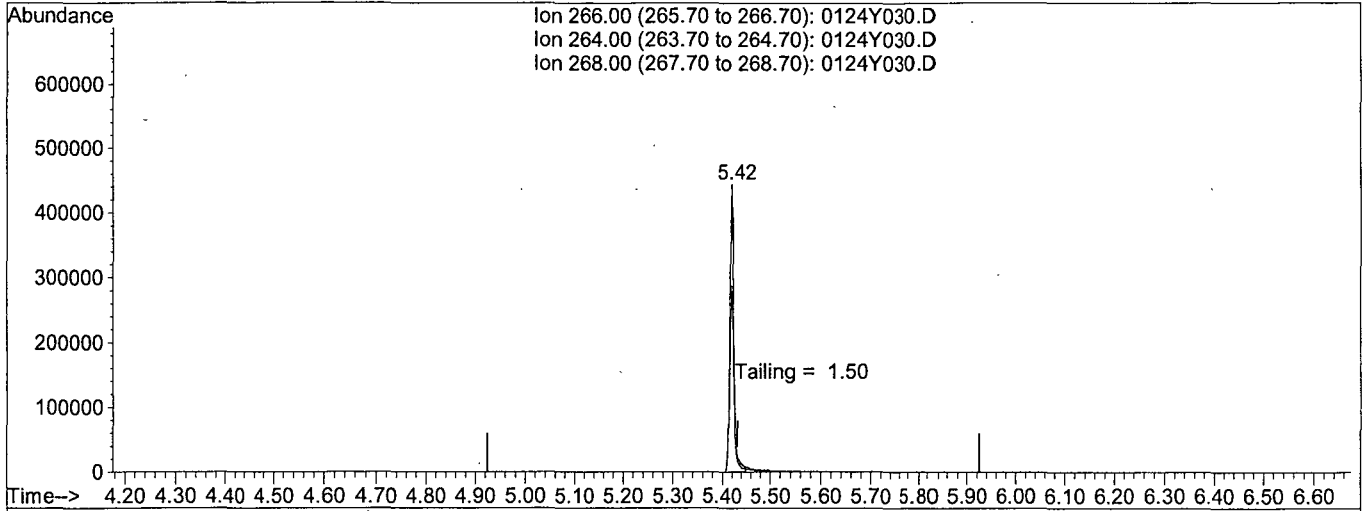
Breakdown 0.37

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 12:04 2019

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y030.D

(5) Pentachlorophenol

5.42min 0.0000

response 2670044

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	60.30
268.00	62.10	65.12
0.00	0.00	0.00

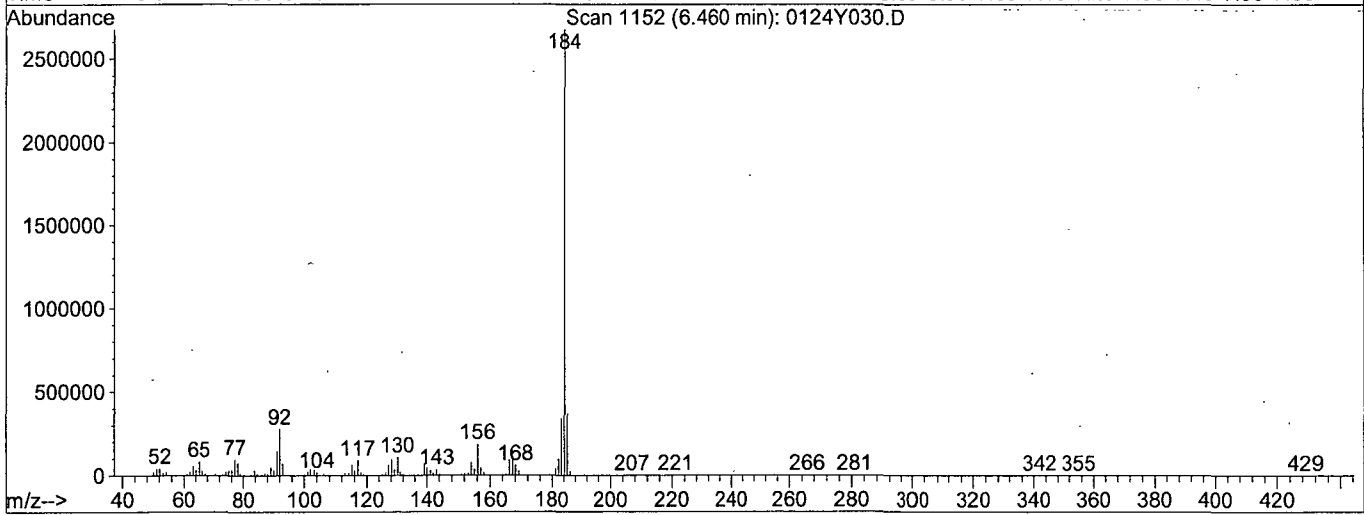
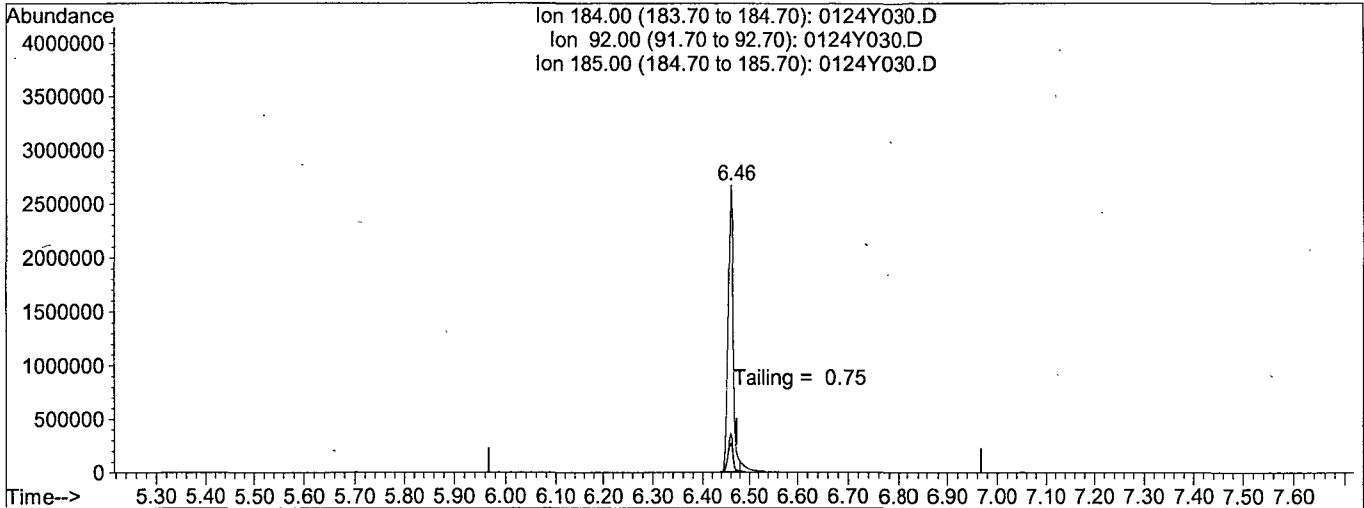


Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 12:04 2019

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y030.D

(6) Benzidine

6.46min 0.0000

response 21118726

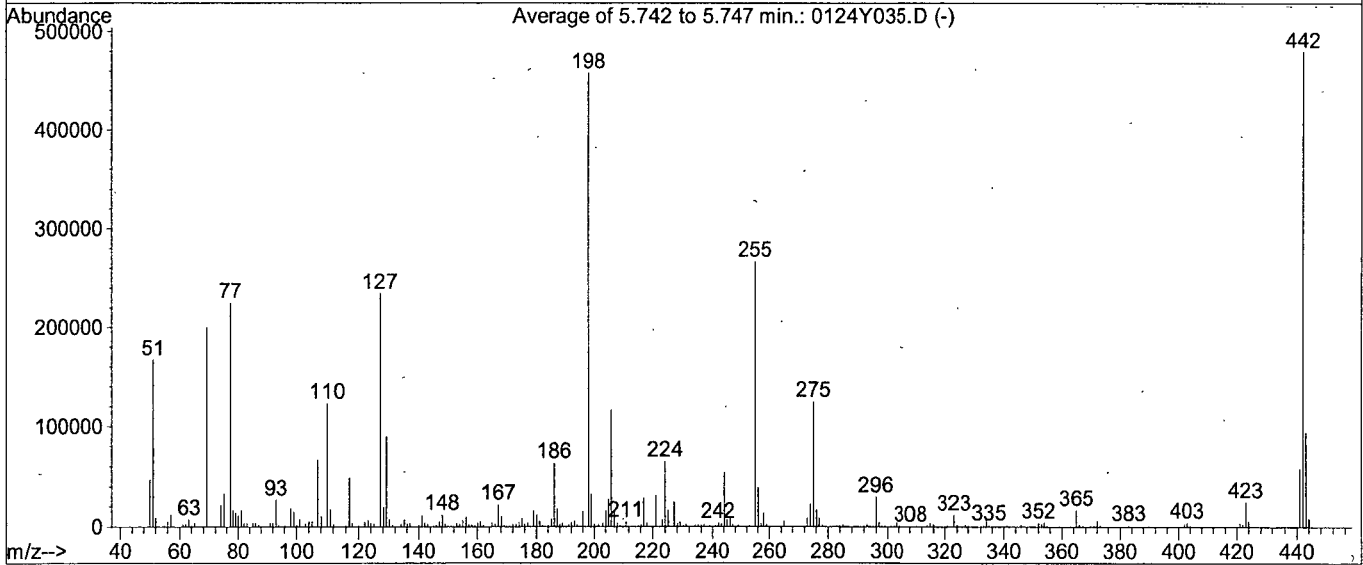
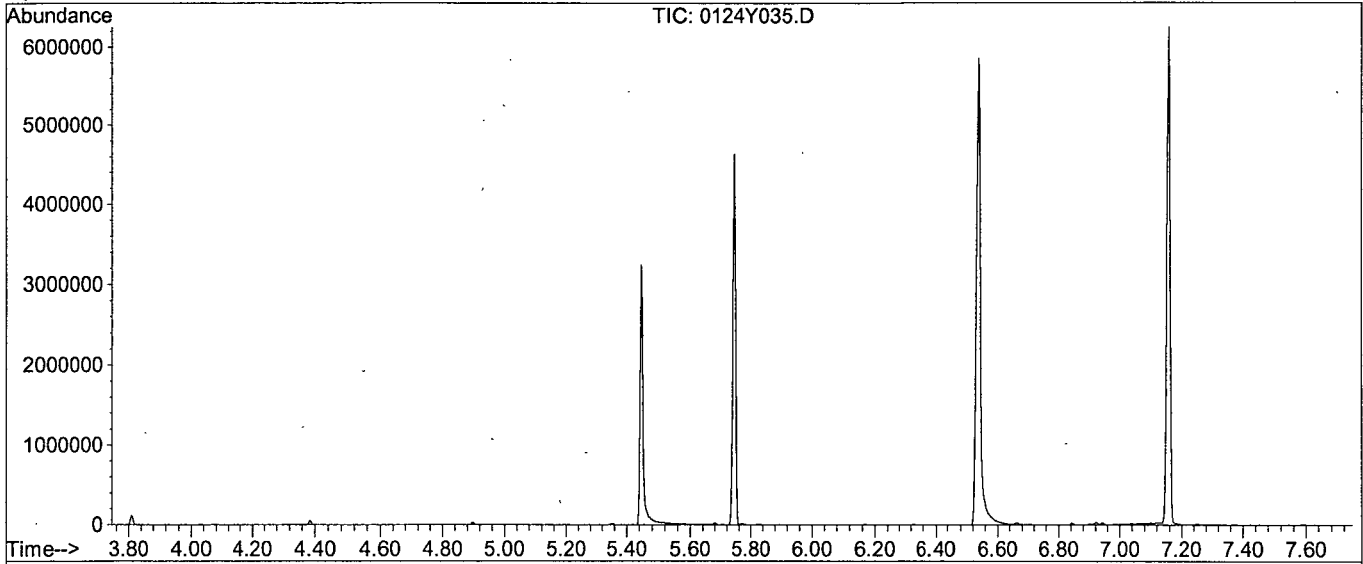
Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.26
185.00	13.80	13.74
0.00	0.00	0.00

DFTPP

Data File : M:\YODA\DATA\Y190124\0124Y035.D  
 Acq On : 28 Jan 19 14:47  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 35  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 863, 864, 865; Background Corrected with Scan 854

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.5	166933	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	488	PASS
127	198	10	80	51.1	234048	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	457899	PASS
199	198	5	9	7.0	31992	PASS
275	198	10	60	27.2	124696	PASS
365	198	1	100	3.5	16252	PASS
441	442	0.01	24	12.1	57944	PASS
442	198	50	150	104.8	479680	PASS
443	442	15	24	19.6	94008	PASS

Data File Name: 0124Y035.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 28 Jan 2019 14:47  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 35  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	46413500
2)	DDD	6.83	252107
3)	DDE	6.98	0

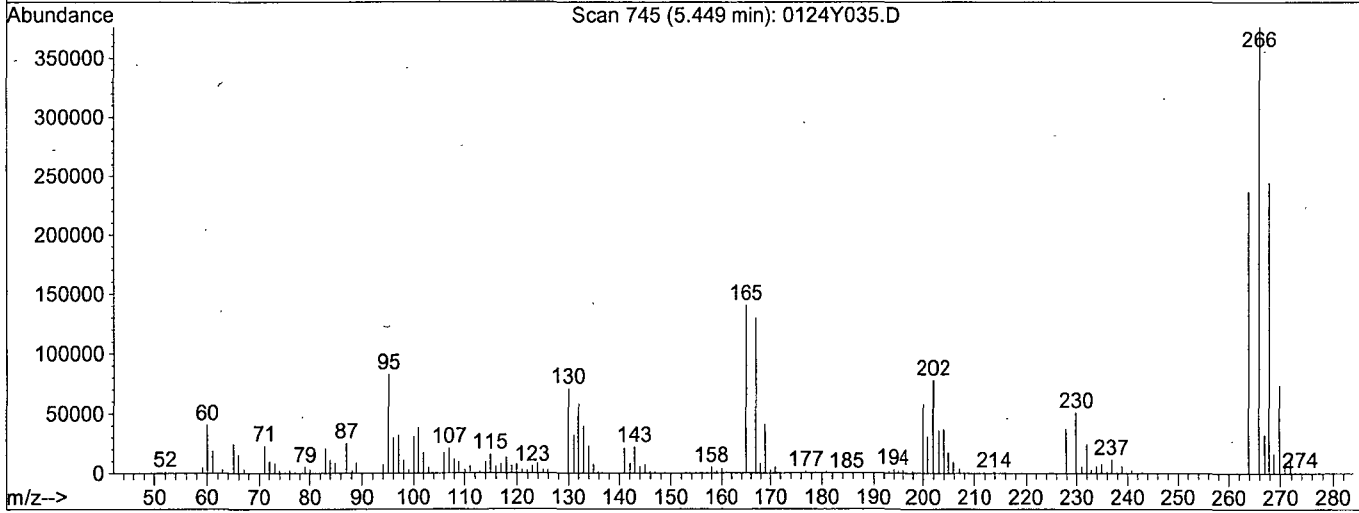
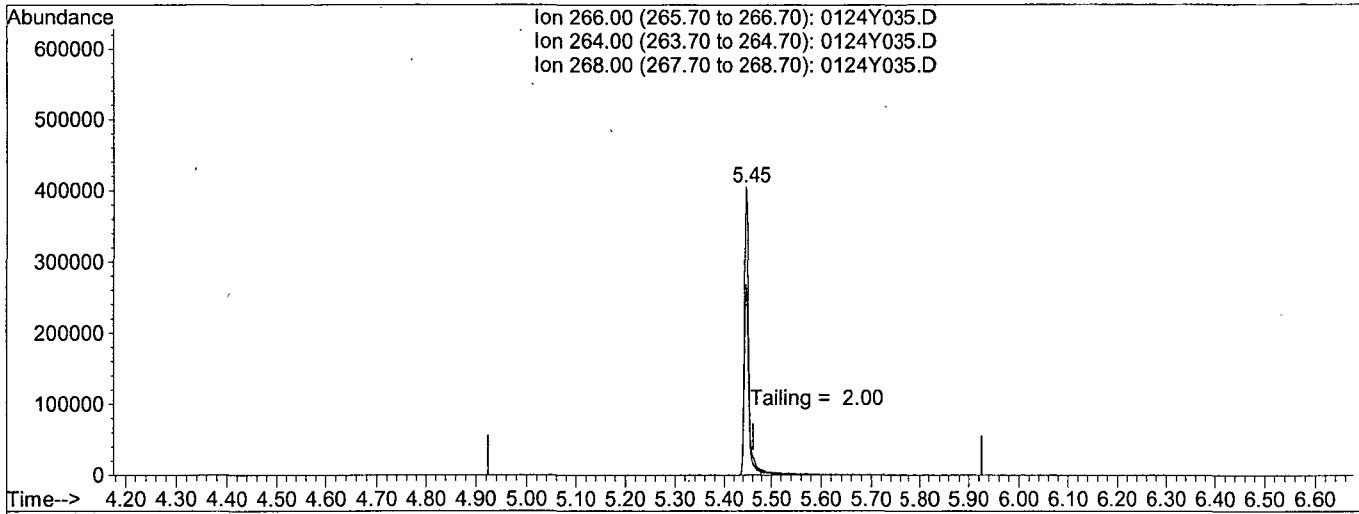
Breakdown 0.54

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y035.D  
 Acq On : 28 Jan 19 14:47  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 14:43 2019

Vial: 35  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y035.D

(5) Pentachlorophenol

5.45min 0.0000

response 2711560

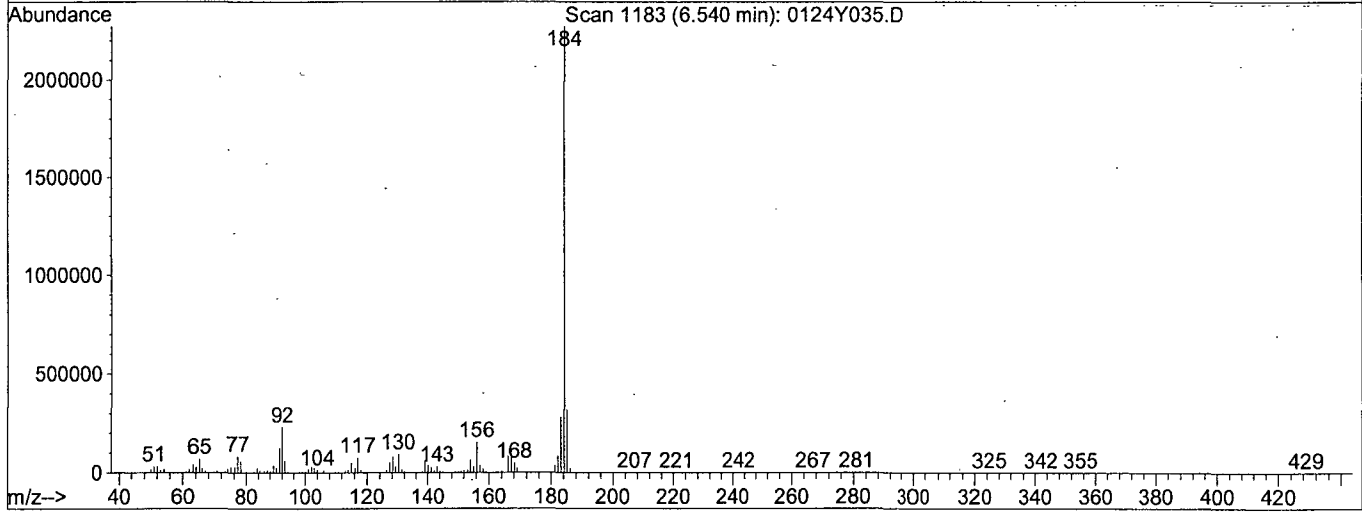
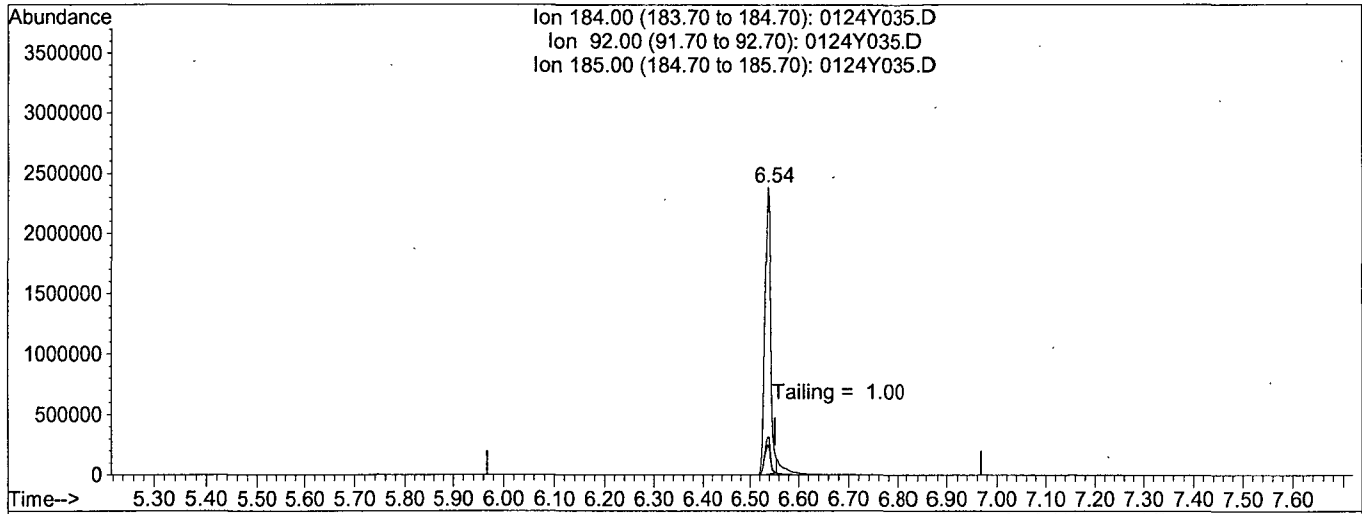
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	61.03
268.00	62.10	63.61
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y035.D  
 Acq On : 28 Jan 19 14:47  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 14:43 2019

Vial: 35  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y035.D

(6) Benzidine

6.54min 0.0000

response 21431650

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.47
185.00	13.80	13.90
0.00	0.00	0.00

Name of Final  
Standard  
Prep Date  
Exp Date

8270 Full Scan Standard Curve

01/23/19

09/17/19

Prep'd By (Initials)

OA

Initial Standard Information	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Final Standard Information	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		4 uL	200uL	MC 56258 192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		4 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		10 uL	100uL	MC 56258 80 uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		10 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		20 uL	100uL	MC 56258 60 uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		20 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		50 uL	200 uL	MC 56258 100 uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		30 uL	100uL	MC 56258 40 uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		30 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20		2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19		40 uL	100uL	MC 56258 20 uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19		40 uL			

SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			

**Name of Final Standard**      8270 Full Scan Second Source      **Prep'd By (Initials)**      OA  
**Prep Date**      11/15/18  
**Exp Date**      04/19/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	04/19/18	04/19/19	50 uL	200uL	MC 56258 150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			

Name of Final Standard 8270 Full Scan Spike  
 Prep Date 11/09/18  
 Exp Date 10/20/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
10001	Absolute	10001	2000	051018-39433	11/09/19	1.0 mL	20 mL	NA	2000 ug/mL
10002	Absolute	10002	2000	051018-39437	11/09/19	1.0 mL			2000 ug/mL
10004	Absolute	10004	2000	071618-39441	11/09/19	1.0 mL			2000 ug/mL
10005	Absolute	10005	2000	032018-39609	11/09/19	1.0 mL			2000 ug/mL
10006	Absolute	10006	2000	071318-39447	11/09/19	1.0 mL			2000 ug/mL
10007	Absolute	10007	2000	080116-39614	11/09/19	1.0 mL			2000 ug/mL
10018	Absolute	10018	2000	062718-39452	11/09/19	1.0 mL			2000 ug/mL
70023	Absolute	70023	1000	020818-39457	11/09/19	1.0 mL			1000 ug/mL
82705	Absolute	82705	2000	081418-39618	11/09/19	1.0 mL	*	*	2000 ug/mL
94552	Absolute	94552	various	102017-39621	10/20/19	1.0 mL			various



Name of Final Standard 8270 Surrogate 200/400 ppm  
 Prep Date 10/17/18  
 Exp Date 09/27/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352-39395	10/17/19	200 uL	5 mL	MC 56258	400 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243-39166	09/27/19	200 uL	*	*	200 ug/mL

Name of Final Standard 8270 Internal Standard (Ampule)

Prep'd By (Initials)

OA

Prep Date 01/16/19

Exp Date 01/16/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc. (range)
Semivolatil e Internal Standard	Restek	31206	2mg/mL	A0138585-39544	01/16/20	1 mL	1 mL	NA	2mg/mL

Name of  
Final  
Standard

**8270 SS STOCK**

Prep'd By (Initials)

**OA**

Prep Date **04/19/18**

Exp Date **04/19/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA# (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
	Absolute	10001	2000	G34-081717-38180	04/19/19	1.0 mL	10 mL	NA	2000 ug/mL
	Absolute	10002	2000	G34-020217-38183	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10004	2000	010815-38624	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10005	2000	041317-37803	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10006	2000	011718-38826	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10007	2000	020515-38628	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10018	2000	G34-030216-38198	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	70023	1000	013118-38829	04/19/19	1.0 mL	*	*	1000 ug/mL
	Absolute	82705	2000	090617-38831	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	94552	various	013118-38824	04/19/19	1.0 mL	*	*	various

Name of  
 Final **8270 Surrogate 100/200**  
 Standard ppm \_\_\_\_\_

Prep'd By (Initials) **GA**

Prep Date **11/06/18**  
 Exp Date **09/27/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Allquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352 - 39395	10/17/19	5.0 mL	250 mL	Acetone #030817A	200 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243 - 39166 & A0140132 - 39545	09/27/19 11/06/19	5.0 mL	250 mL	*	100 ug/mL

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C		Extraction Set	190123A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 11-20-18 exp 10-20-19		Surrogate ID 1	8270 Surrogate 12-6-18 exp 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 exp 12-17-19		Surrogate ID 2	SIM Surrogate 12-14-19 exp 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 1-23-20		Surrogate ID 3					
Spiked ID 4			Surrogate ID 4					
Spiked ID 5			Surrogate ID 5					
Spiked ID 6			Sufficient Vol for Matrix QC:		NO			
Spiked ID 7			Ext. Start Time:		01/23/19 17:50, 01/24/19 15:10			
Spiked ID 8			Ext. End Time:		01/24/19 13:00, 01/25/19 9:10, 01/25/19 11:35			
			GC Requires Extract By:		01/28/19 0:00			
			pH1	2	01/23/19 1:05:00 PM	Water Bath Temp Criteria		78,78 °C
			pH2	2	01/23/19 3:35:00 PM			
			pH3	14	01/24/19 3:00:00 PM			

Spiked By: DL

Date 01/23/19

Witnessed By: CFM

Date 01/23/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190123A Bk			1,0.050	1,2	800	1	2/1	01/23/19 13:00	
						equip				
						E-HP51 E-WB6				
2	190123A LCS-1	0.250	1	1	1	800	1	2/1	01/23/19 13:00	
						equip				
						E-HP50 E-WB6				
3	190123A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/23/19 13:00	
						equip				
						E-HP49 E-WB6				
4	190123A LCS-3	0.250	3	1	1	800	1	2/1	01/23/19 15:30	
						equip				
						E-HP48 E-WB6				
5	190123A LCS-1	0.250	1	1	1	800	1	2/1	01/23/19 13:00	
						equip				
						E-HP47 E-WB6				
6	190123A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/23/19 13:00	
						equip				
						E-HP25 E-WB6				
7	190123A LCS-3	0.250	3	1	1	800	1	2/1	01/23/19 15:30	
						equip				
						E-HP26 E-WB6				
8	AZ85308 AZ85308W23			1,0.050	1,2	800	1	2/1	01/23/19 13:00	87899
						equip				
						E-HP27 E-WB6				
9	AZ85418 AZ85418W12			1,0.050	1,2	800	1	2/1	01/23/19 13:00	87918
						equip				
						E-HP28 E-WB6				
10	AZ85420 AZ85420W14			1,0.050	1,2	800	1	2/1	01/23/19 13:00	87918
						equip				
						E-HP29 E-WB6				
11	AZ85493 AZ85493W31			1,0.050	1,2	800	1	2/1	01/23/19 15:30	87929
						equip				
						E-HP30 E-WB7				
12	AZ85517 AZ85517W05			1,0.050	1,2	800	1	2/1	01/23/19 17:30	87933 pH2:1-23-19 17:35
						equip				
						E-HP6 E-WB7				
13	AZ85518 AZ85518W05			1,0.050	1,2	800	1	2/1	01/23/19 17:30	87933 pH2:1-23-19 17:35
						equip				
						E-HP7 E-WB7				

*Ky 1/28/19*

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	01/26/19
Time	11:41
Refrigerator	66-C

Technician's Initials	
Scanned By	DL,KY
Sample Preparation	DL,KY
Extraction	DL,KY
Concentration	DL
Modified	01/28/19 1:38:32 PM

Reviewed By: *Ky* Date *1/28/19*

## Injection Log

Directory: M:\YODA\DATA\Y190124\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
14	0124Y014.D	1	SV TUNE	11/10/18	25 Jan 19 7:05
15	0124Y015.D	1	50ug/mL 8270	01/24/19	25 Jan 19 7:20
16	0124Y016.D	1	4ug/mL 8270	01/24/19	25 Jan 19 9:53
17	0124Y017.D	1	5ug/mL 8270	01/24/19	25 Jan 19 10:21
18	0124Y018.D	1	10ug/mL 8270	01/24/19	25 Jan 19 10:49
20	0124Y020.D	1	40ug/mL 8270	01/24/19	25 Jan 19 11:44
21	0124Y021.D	1	60ug/mL 8270	01/24/19	25 Jan 19 12:11
22	0124Y022.D	1	80ug/mL 8270	01/24/19	25 Jan 19 12:39
23	0124Y023.D	1	100ug/mL 8270	01/24/19	25 Jan 19 13:07
30	0124Y030.D	1	SV TUNE	11/10/18	28 Jan 19 11:49
33	0124Y033.D	1	20ug/mL 8270	01/24/19	28 Jan 19 13:36
34	0124Y034.D	1	SS-8270	01/24/19	28 Jan 19 14:11
35	0124Y035.D	1	SV TUNE	11/10/18	28 Jan 19 14:47
41	0124Y041.D	1.25	190123A BLK	1/800	28 Jan 19 17:21
42	0124Y042.D	1.25	190123A LCS-1	1/800	28 Jan 19 17:49
43	0124Y043.D	1.25	190123A LCSD-1	1/800	28 Jan 19 18:16
47	0124Y047.D	1.25	AZ85418W12	1/800	28 Jan 19 20:08
48	0124Y048.D	1.25	AZ85420W14	1/800	28 Jan 19 20:35
50	0124Y050.D	1	50ug/mL 8270	01/24/19	28 Jan 19 21:31

**ORGANICS**  
**Calibration Data**

2MEE  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 11/28/18  
Instrument: Yoda

Initials: \_\_\_\_\_

1128Y004.D 1128Y005.D 1128Y006.D 1128Y007.D 1128Y012.D 1128Y008.D 1128Y009.D 1128Y010.D

	Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I 1,4-dichlorobenzene-D4(IS)																
2	TM 2-(2-Methoxyethoxy)ethanol	0.2305	0.2453	0.2498	0.2070	0.2284	0.2415	0.2719	0.2475			0.24	7.9	TM			
3	I Napthalene-D8(IS)																
4	I Acenaphthene-D10(IS)																
5	I Phenanthrene-D10(IS)																
6	I Chrysene-D12(IS)																
7	I Perylene-D12(IS)																
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
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31																	
32																	
33																	
34																	
35																	



Data File : M:\YODA\DATA\Y181128M\1128Y004.D Vial: 4  
 Acq On : 28 Nov 18 8:08 Operator: MA  
 Sample : 50ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	846679	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3808187	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1917814	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3593004	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3055748	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3109829	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	243946	76.98478	ppb	99

Quantitation Report

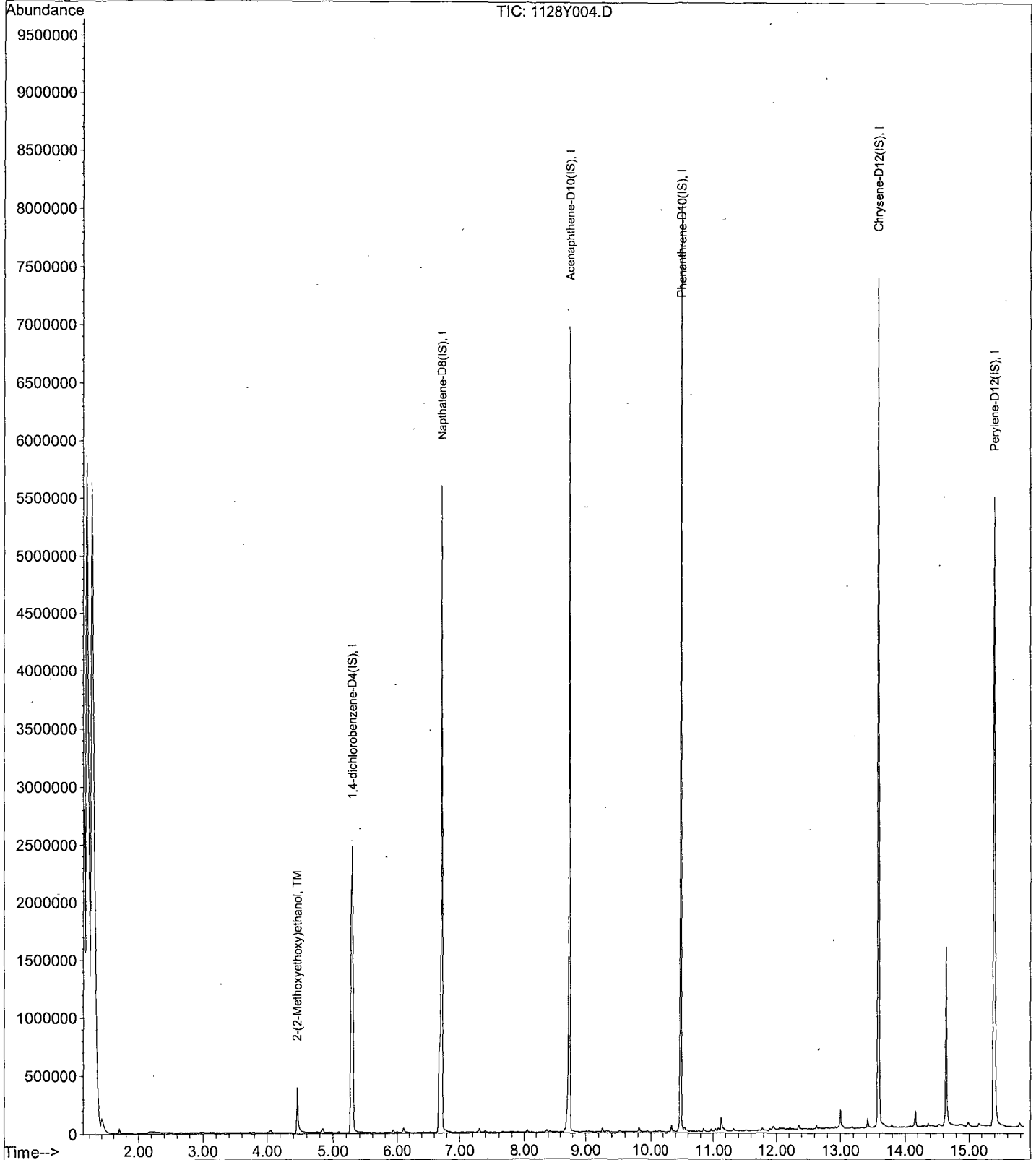
Data File : M:\YODA\DATA\Y181128M\1128Y004.D  
Acq On : 28 Nov 18 8:08  
Sample : 50ug/ml MEE 08/01/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y005.D Vial: 5  
 Acq On : 28 Nov 18 8:32 Operator: MA  
 Sample : 100ug/ml\_MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	833525	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3655933	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1870603	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3472767	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	2784977	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2713194	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.47	45	511054	121.26713	ppb	99

Quantitation Report

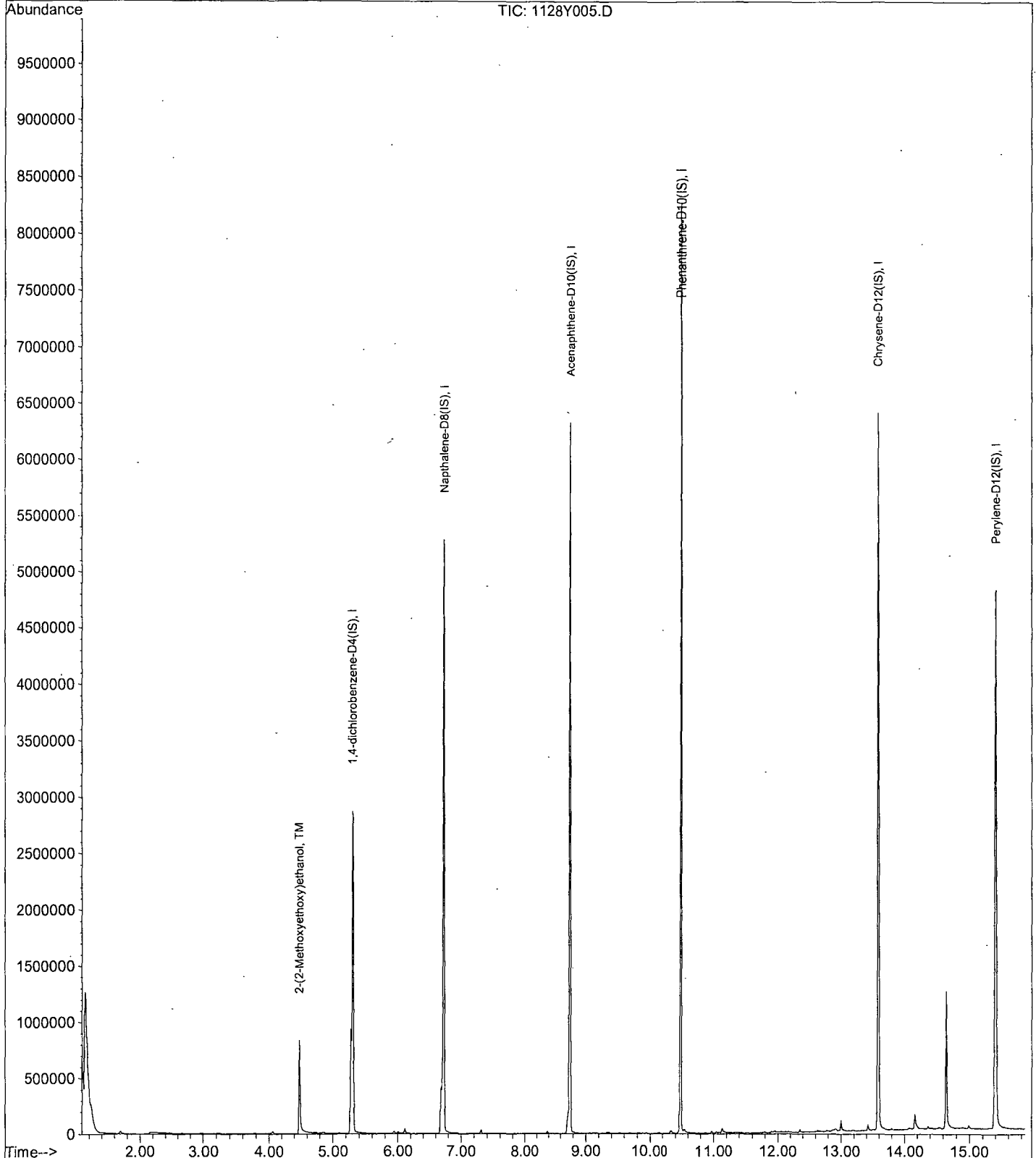
Data File : M:\YODA\DATA\Y181128M\1128Y005.D  
Acq On : 28 Nov 18 8:32  
Sample : 100ug/ml MEE 08/01/18  
Misc : soil

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y006.D Vial: 6  
 Acq On : 28 Nov 18 8:55 Operator: MA  
 Sample : 200ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	906220	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4175598	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2128971	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3974569	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3488549	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3293123	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1131710	207.88279	ppb	99

Quantitation Report

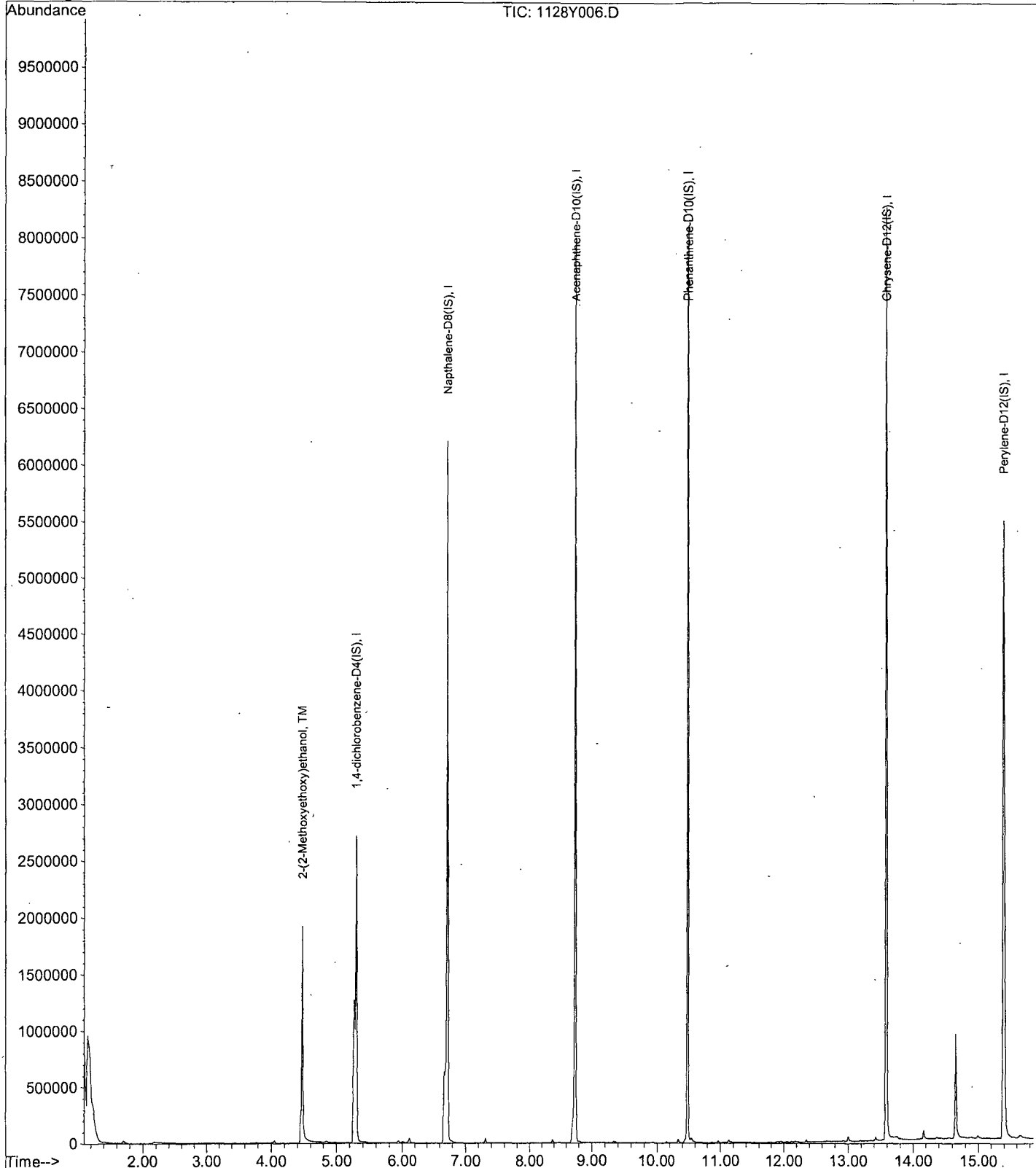
Data File : M:\YODA\DATA\Y181128M\1128Y006.D  
Acq On : 28 Nov 18 8:55  
Sample : 200ug/ml MEE 08/01/18  
Misc : soil

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y007.D Vial: 7  
 Acq On : 28 Nov 18 9:19 Operator: MA  
 Sample : 400ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:31 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	948008	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4475913	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2298421	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	4282330	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3776629	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3748965	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1962520	319.79035	ppb	100

Quantitation Report

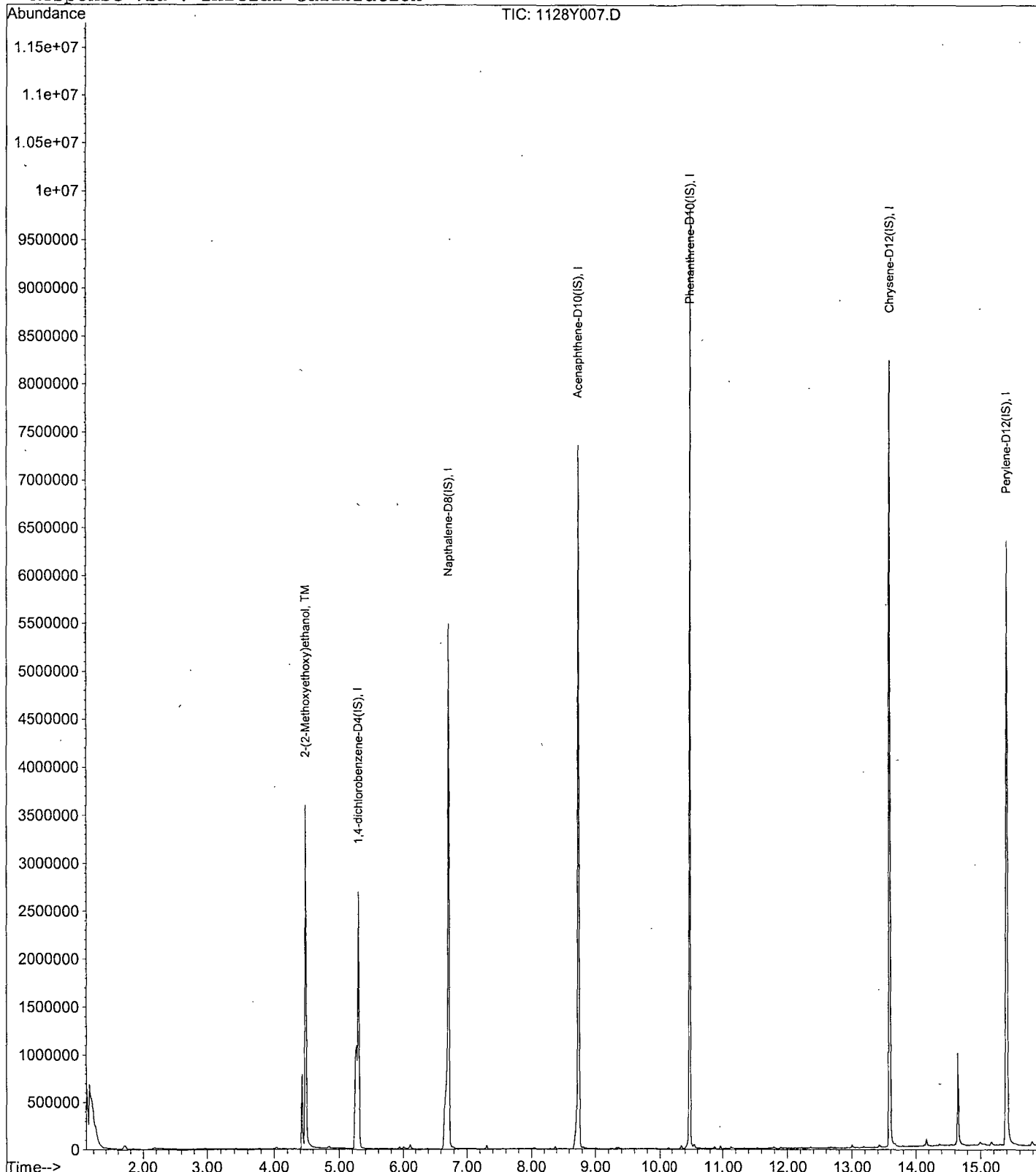
Data File : M:\YODA\DATA\Y181128M\1128Y007.D  
Acq On : 28 Nov 18 9:19  
Sample : 400ug/ml MEE 08/01/18  
Misc : soil

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:31 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y012.D Vial: 12  
 Acq On : 28 Nov 18 11:17 Operator: MA  
 Sample : 500ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:25 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 09:56:17 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	830482	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3639618	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1806558	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3340149	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	2995047	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2844171	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2370937	400.21340	ppb	100

Quantitation Report

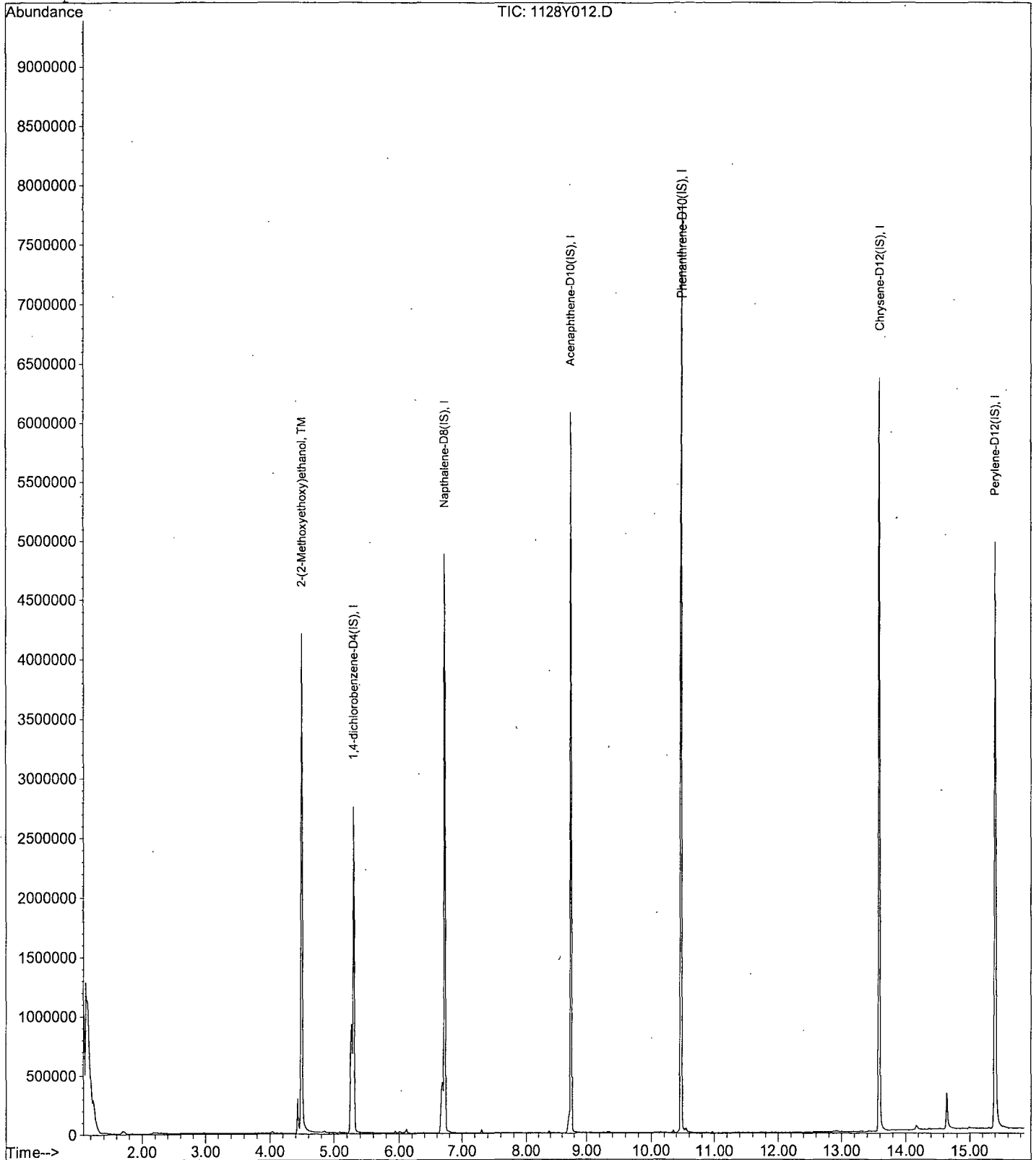
Data File : M:\YODA\DATA\Y181128M\1128Y012.D  
Acq On : 28 Nov 18 11:17  
Sample : 500ug/ml MEE 08/01/18  
Misc : soil

Vial: 12  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:25 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y008.D Vial: 8  
 Acq On : 28 Nov 18 9:43 Operator: MA  
 Sample : 600ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	856651m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3531920	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2073085	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3859845	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3489580	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3140389	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.50	45	3103564	483.70926	ppb	100

Quantitation Report

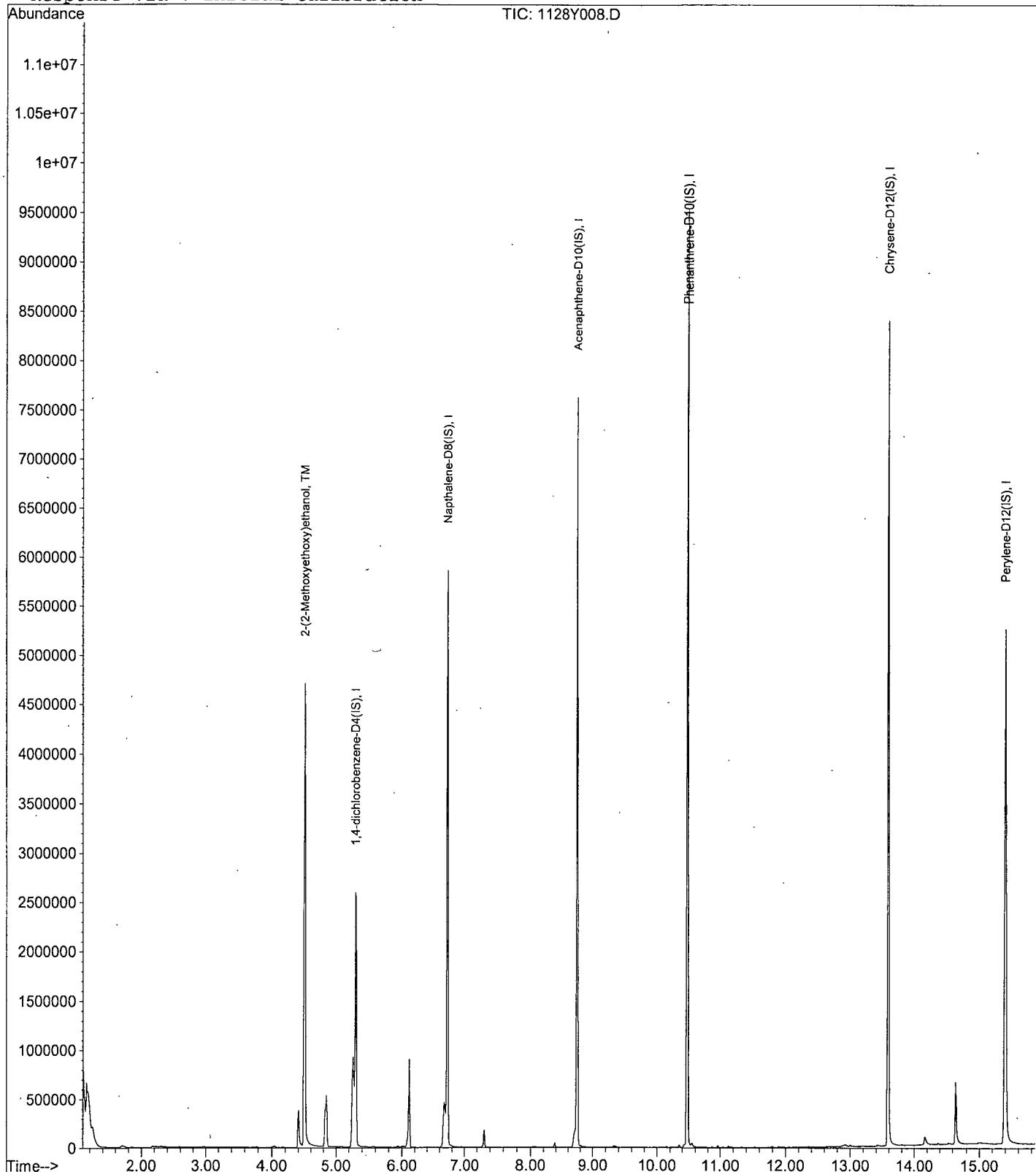
Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
Acq On : 28 Nov 18 9:43  
Sample : 600ug/ml MEE 08/01/18  
Misc : soil

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

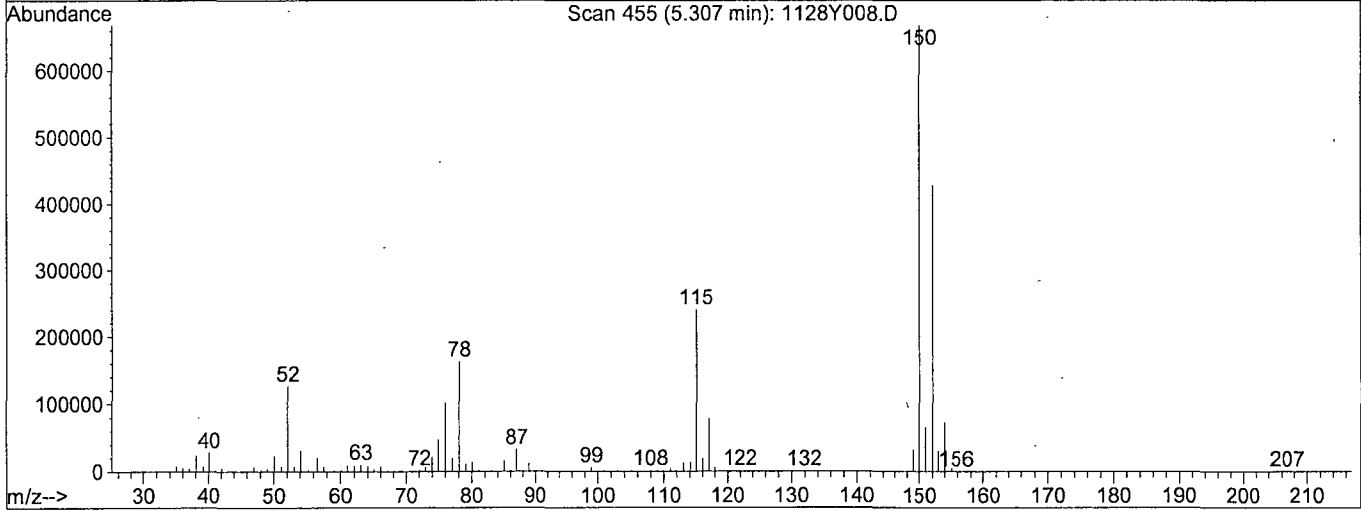
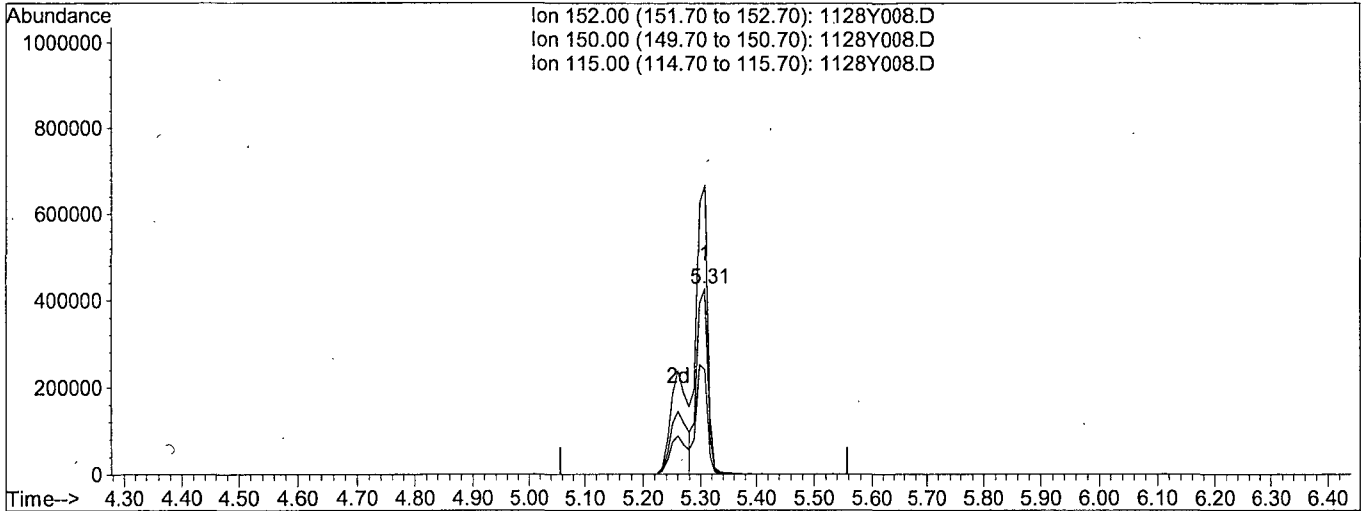


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.31min 40.0000ppb

response 580797

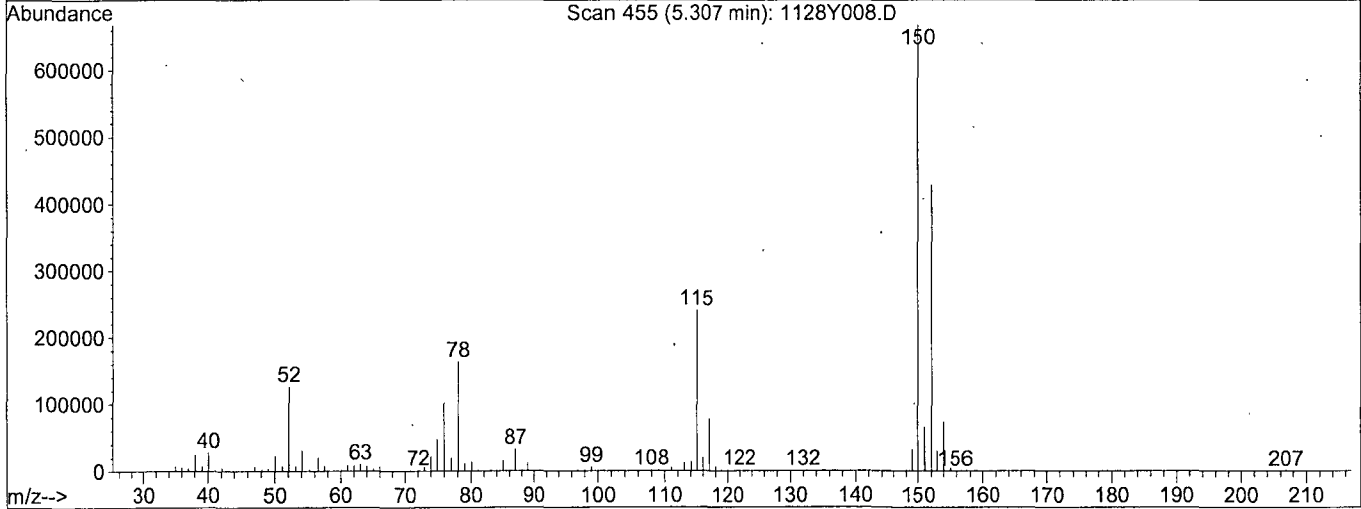
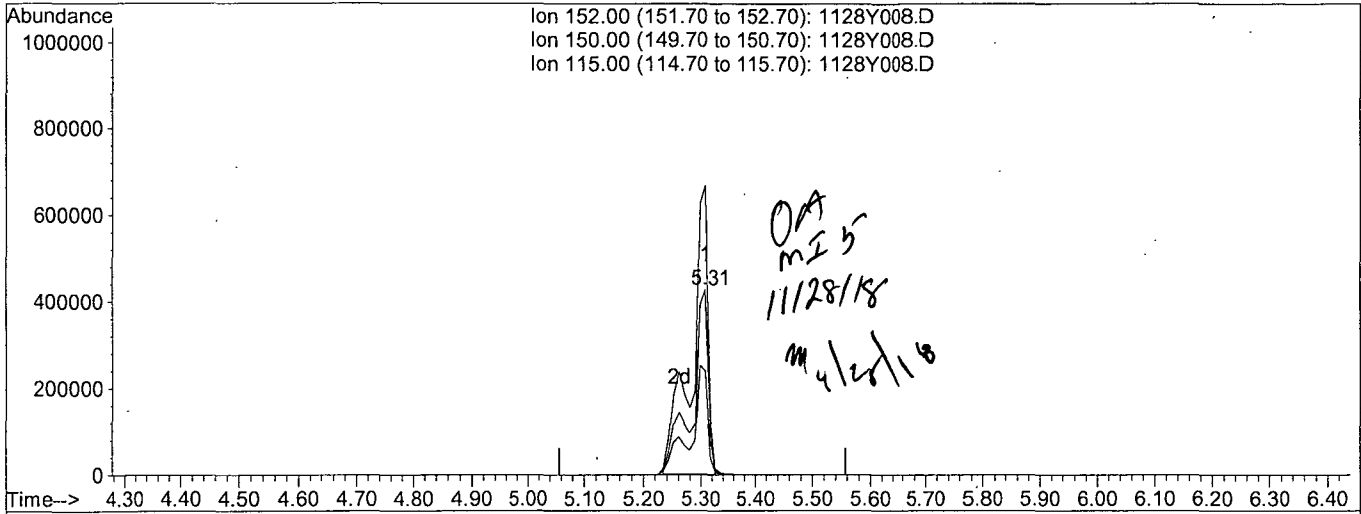
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.26
115.00	56.30	56.24
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.31min 40.0000ppb m

response 856651

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.25
115.00	56.30	56.26
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y009.D Vial: 9  
 Acq On : 28 Nov 18 10:06 Operator: MA  
 Sample : 800ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	785528m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3646286	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2099263	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3938984	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3411642	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2743638	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.52	45	4272210	778.75542	ppb	98

Quantitation Report

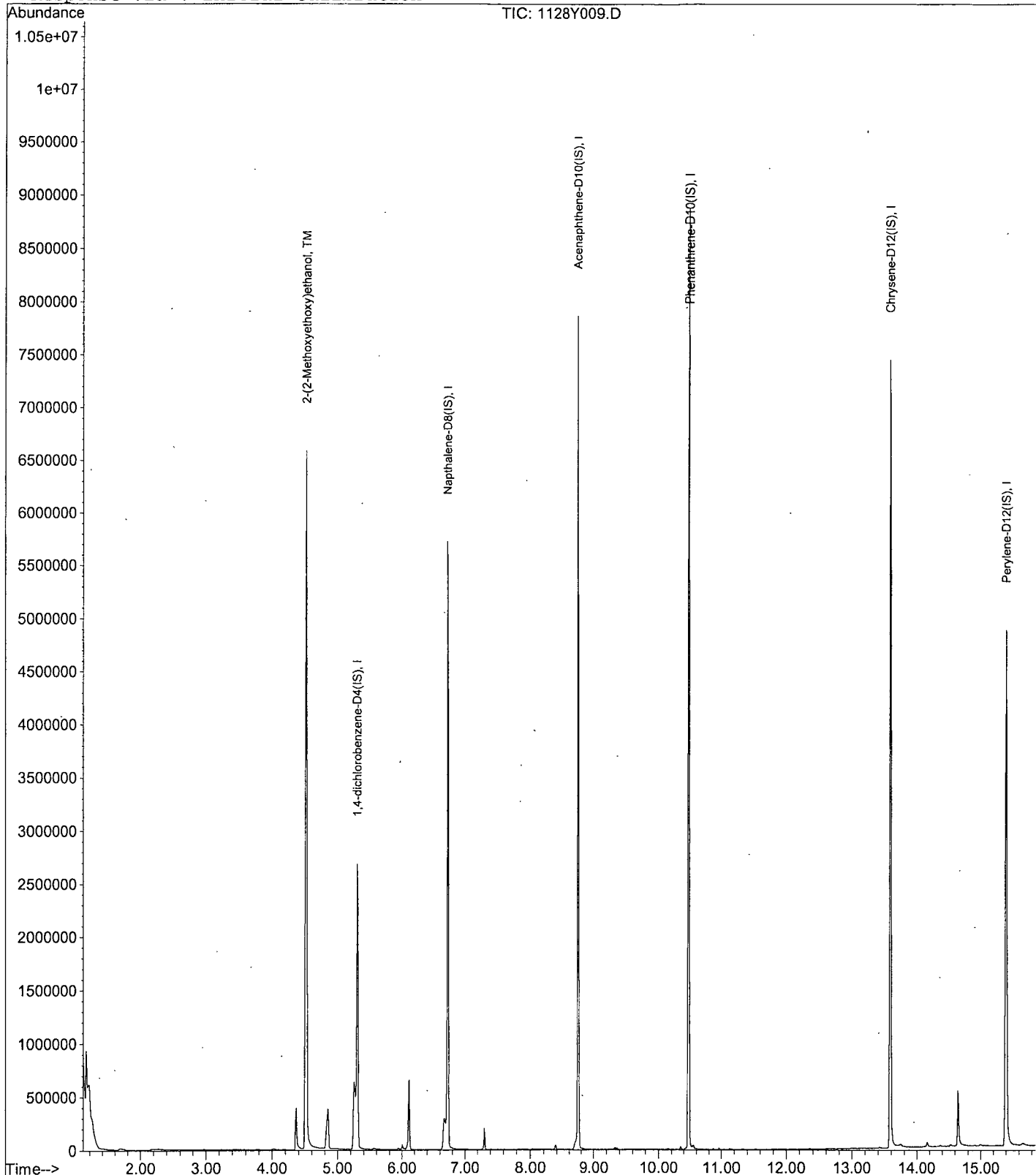
Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
Acq On : 28 Nov 18 10:06  
Sample : 800ug/ml MEE 08/01/18  
Misc : soil

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



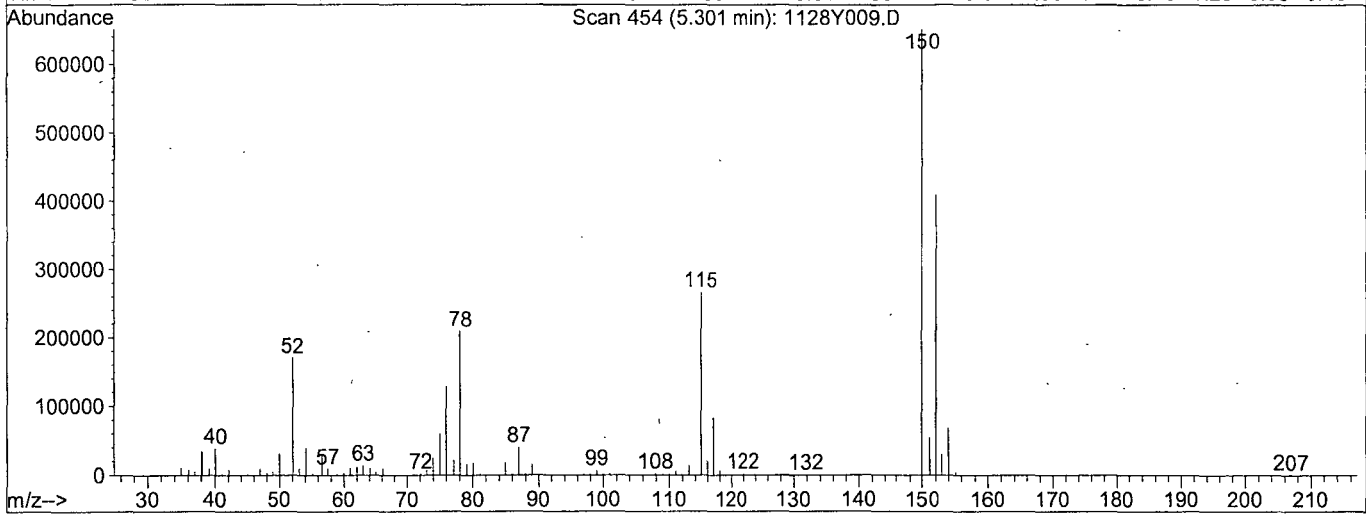
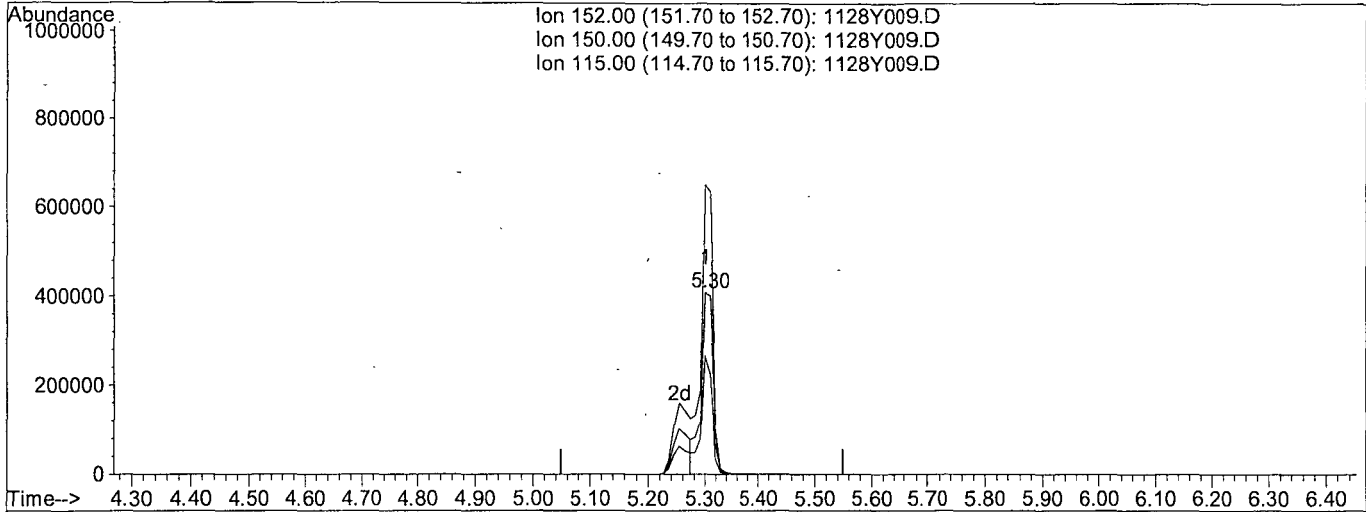


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:31 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.30min 40.0000ppb

response 614492

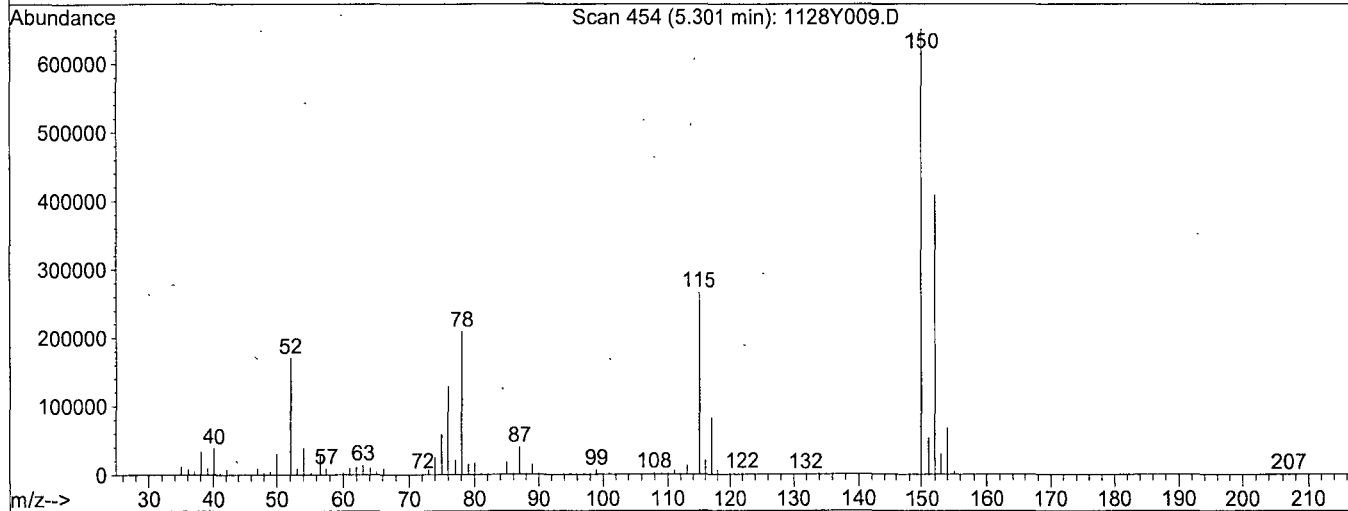
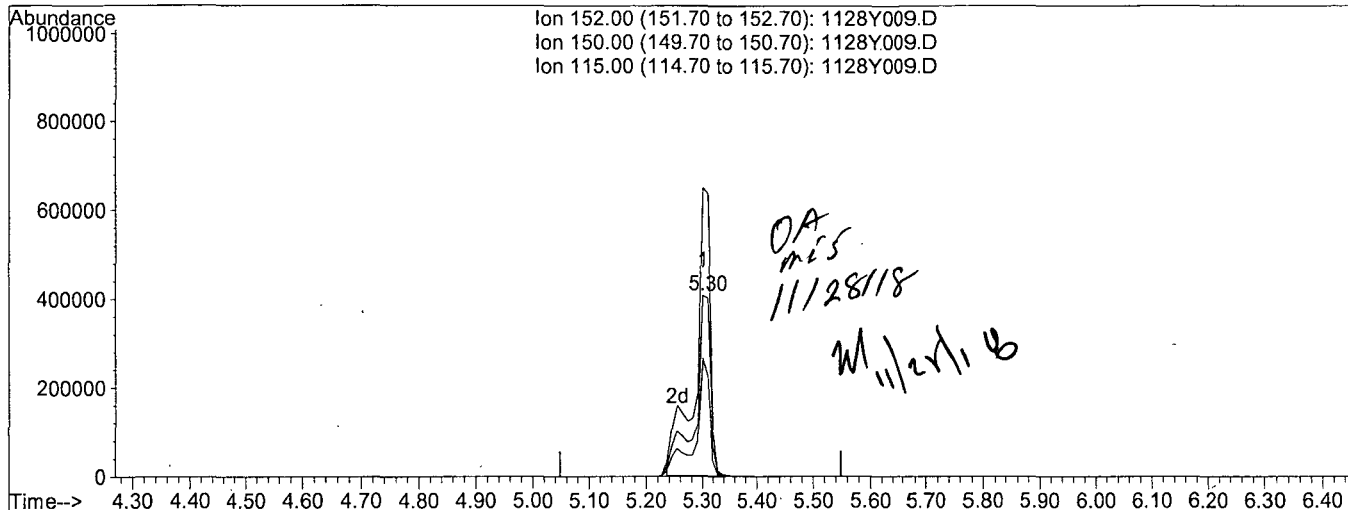
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.30
115.00	63.20	65.14
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 785528

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.35
115.00	63.20	65.18
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y010.D Vial: 10  
 Acq On : 28 Nov 18 10:30 Operator: MA  
 Sample : 1000ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:41 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	817975m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3554268	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2016499	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3774107	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3353765	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3559145	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.53	45	5060771	787.46043	ppb	98

Quantitation Report

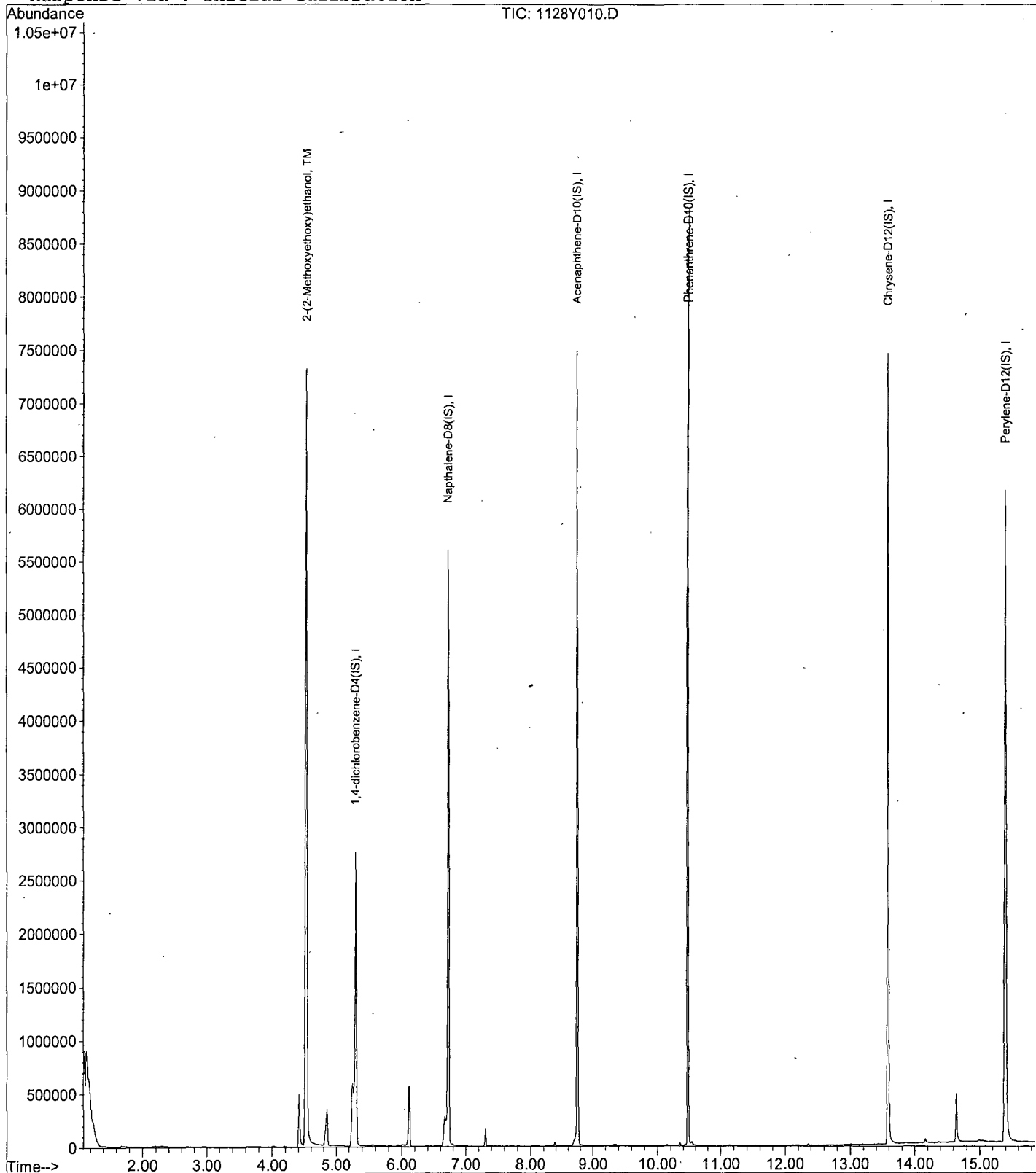
Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
Acq On : 28 Nov 18 10:30  
Sample : 1000ug/ml MEE 08/01/18  
Misc : soil

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:41 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

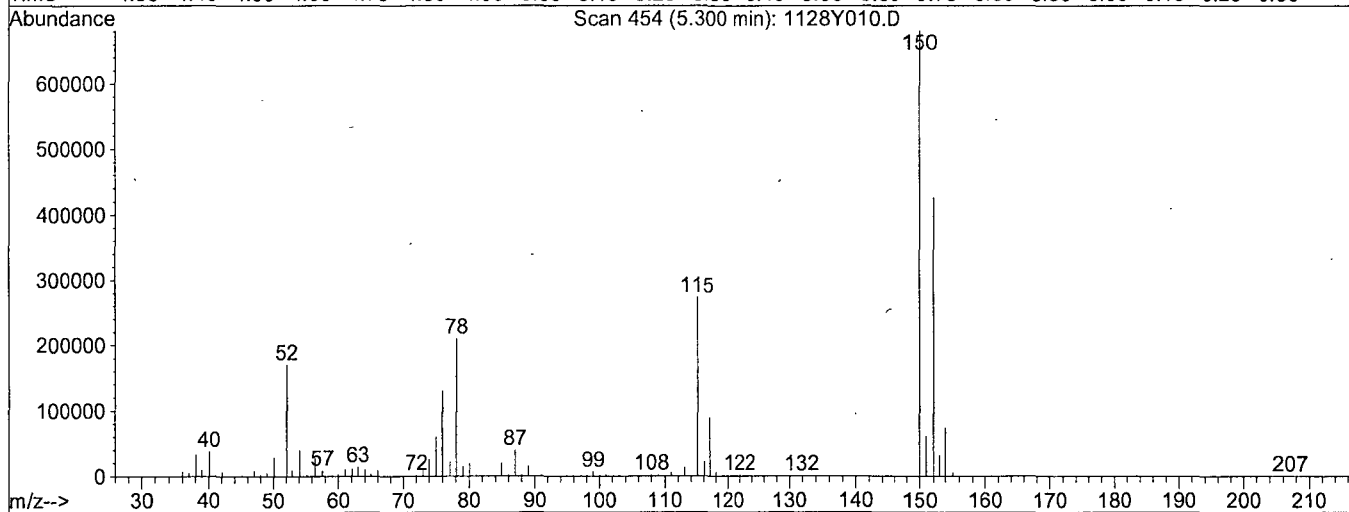
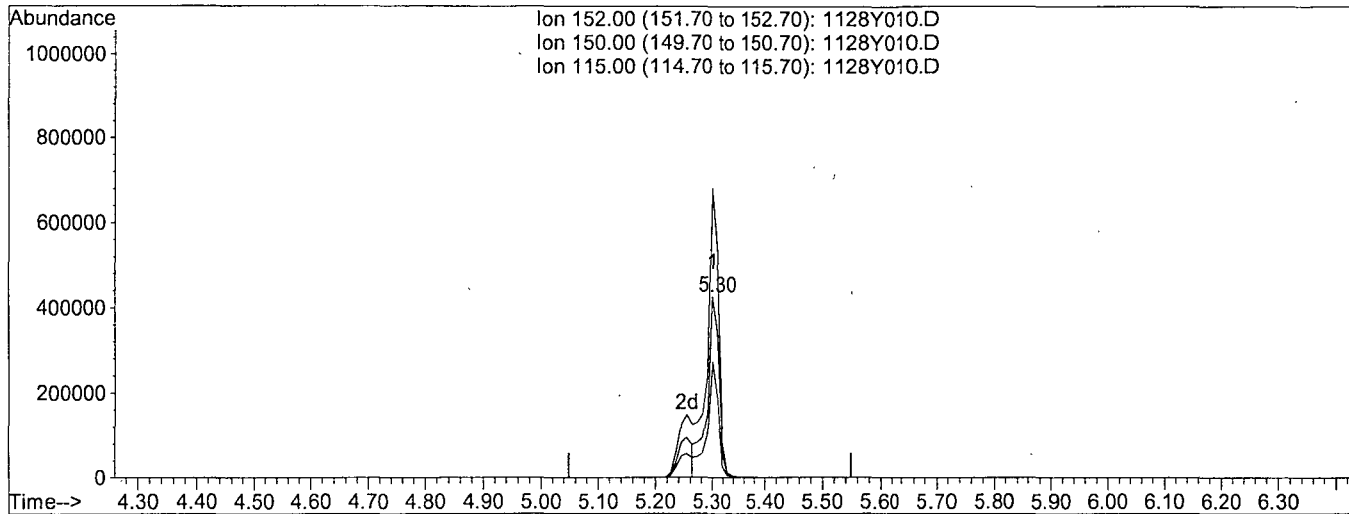


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:32 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

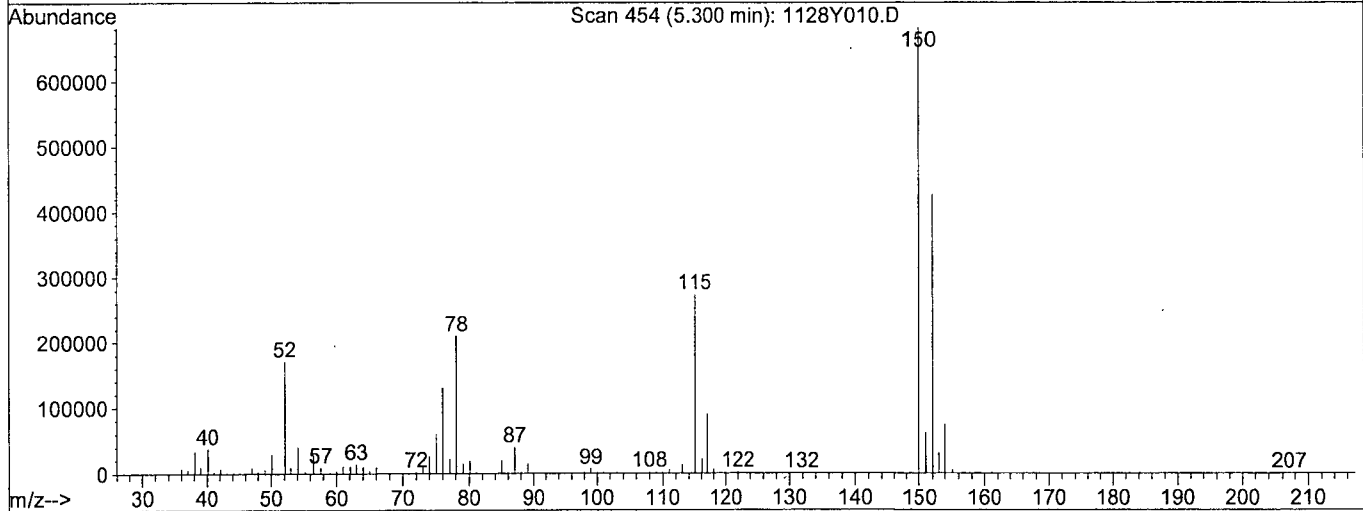
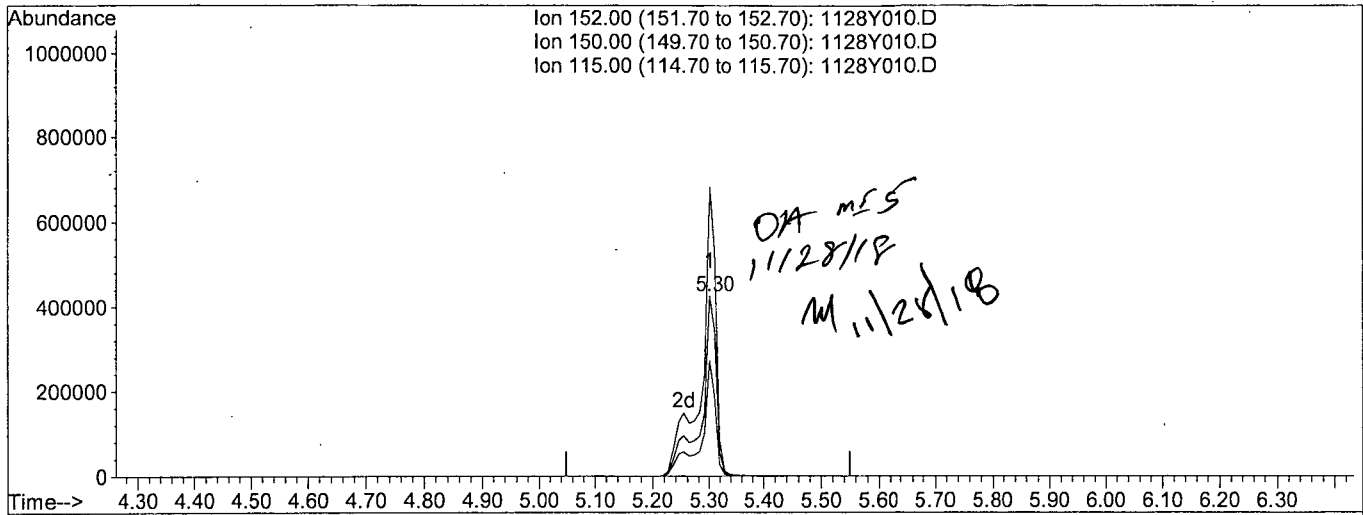
response 652352

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.08
115.00	63.20	64.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D Vial: 10  
 Acq On : 28 Nov 18 10:30 Operator: MA  
 Sample : 1000ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Nov 28 11:41 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 817975

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.10
115.00	63.20	64.11
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 11/28/18

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y014.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2671	11	TM
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
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14						
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33						
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35						
36						
37						
38						
39						
40						

Average

11.0

Data File : M:\YODA\DATA\Y181128M\1128Y014.D Vial: 14  
 Acq On : 28 Nov 18 12:26 Operator: MA  
 Sample : SS ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 12:58 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	835108m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3156594	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1957153	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3684850	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3336185	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3221218	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2787828	555.84367	ppb	100



Quantitation Report

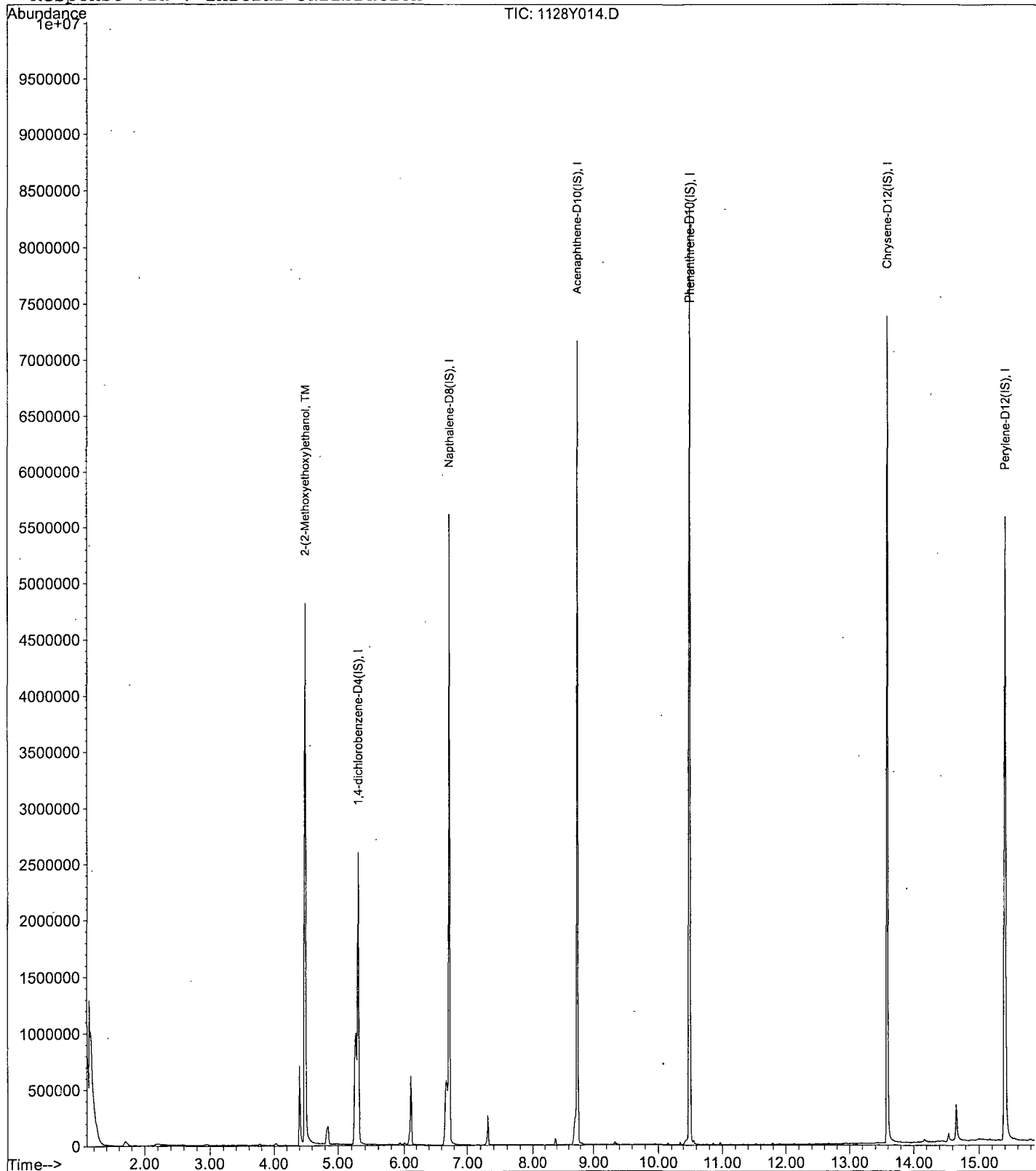
Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
Acq On : 28 Nov 18 12:26  
Sample : SS ug/ml MEE 08/01/18  
Misc : soil

Vial: 14  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 12:58 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

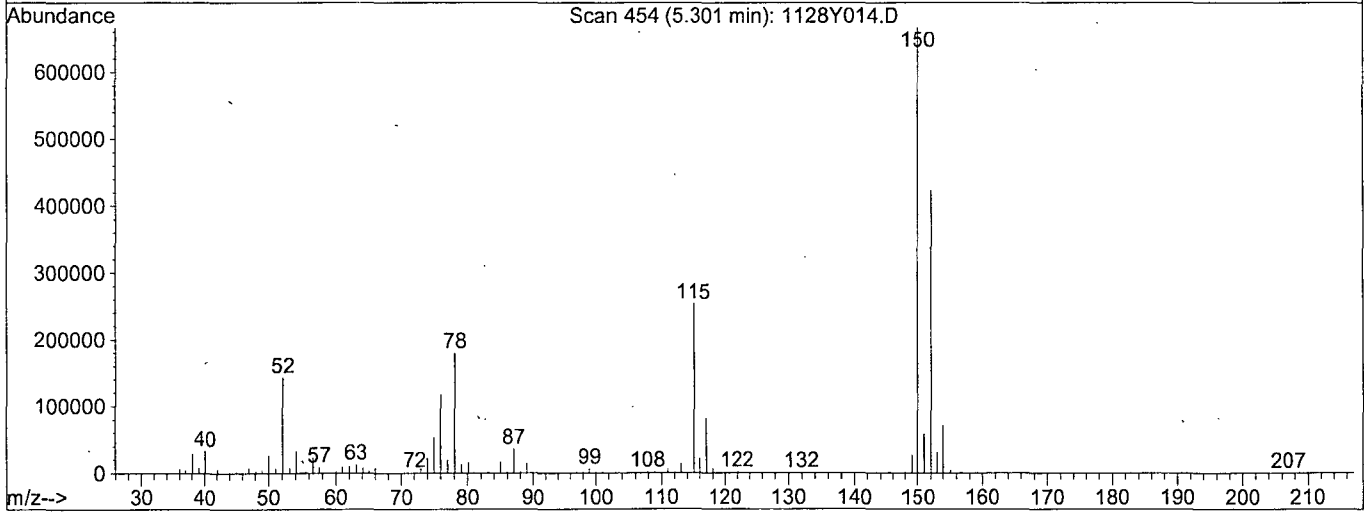
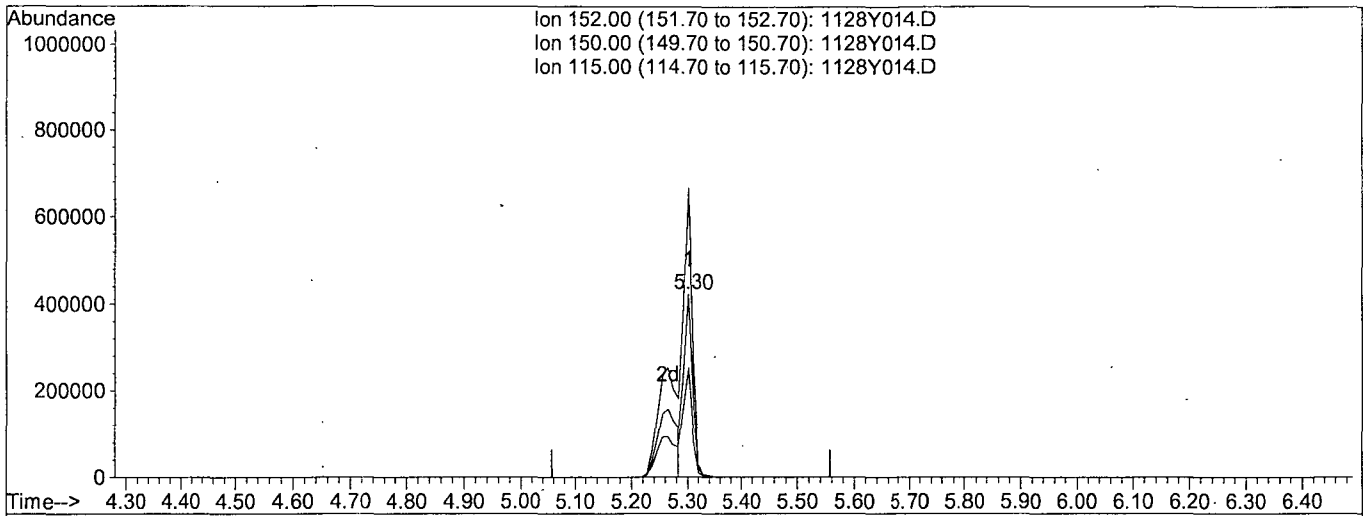


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 473674

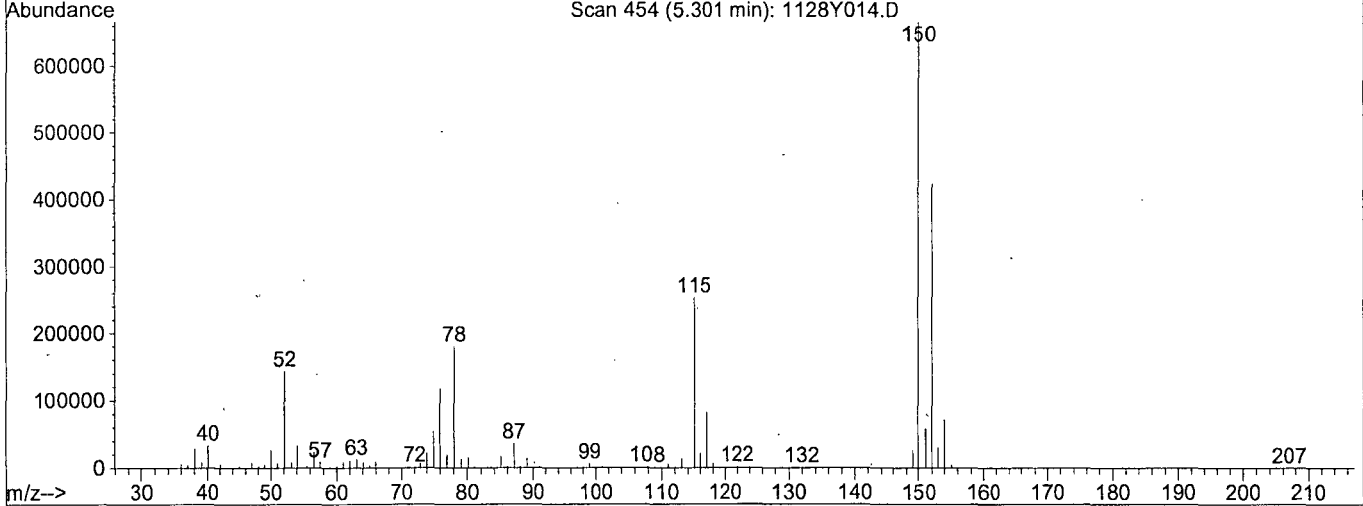
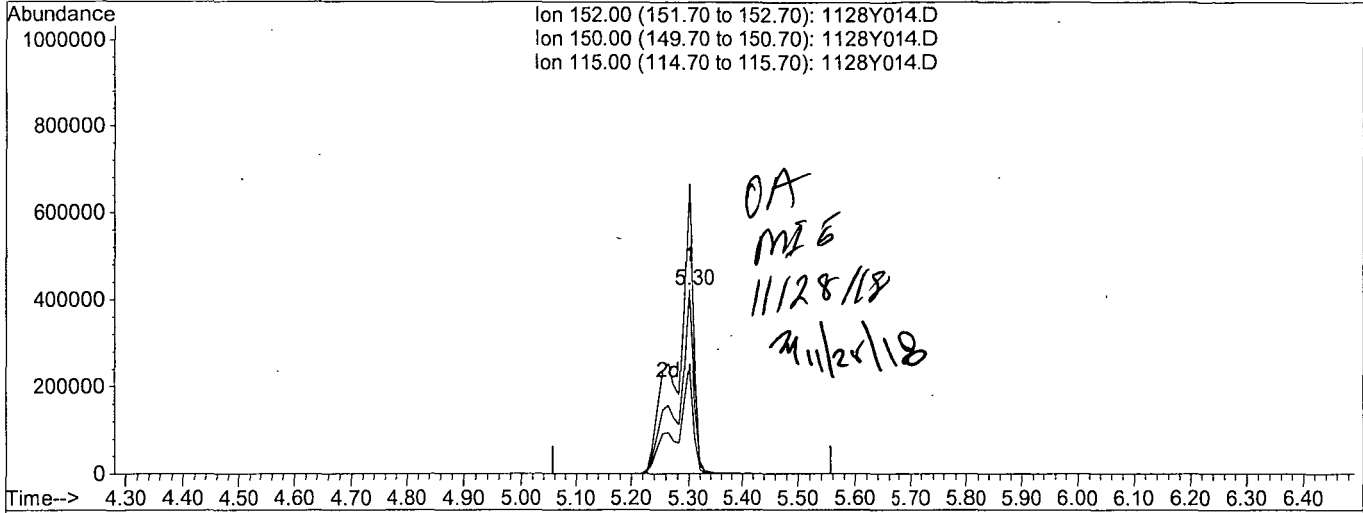
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.54
115.00	56.30	59.84
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
Acq On : 28 Nov 18 12:26  
Sample : SS ug/ml MEE 08/01/18  
Misc : soil  
Quant Time: Nov 28 12:58 2018

Vial: 14  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 835108

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.52
115.00	56.30	59.85
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y057.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2337	2.7	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
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36						
37						
38						
39						
40		Average			2.7	

Data File : M:\YODA\DATA\Y181128M\1128Y057.D Vial: 57  
 Acq On : 29 Jan 19 8:51 Operator: MA  
 Sample : 500ug/mL mee 12/12/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 8:56 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.22	152	614573	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.65	136	2630250	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1440513	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2797253	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2568643	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2576041	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.41	45	1795438	486.43662	ppb	96

Quantitation Report

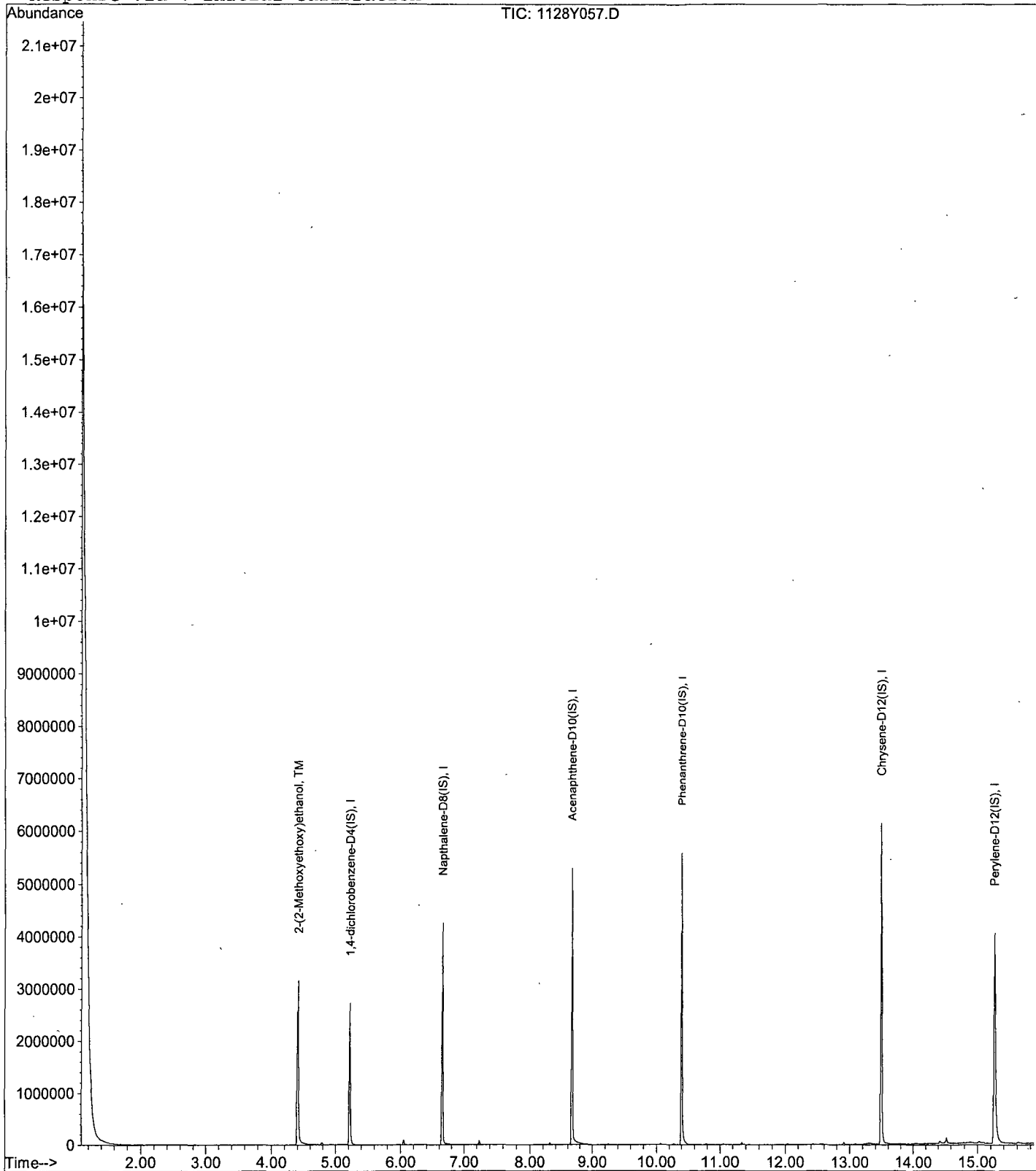
Data File : M:\YODA\DATA\Y181128M\1128Y057.D  
Acq On : 29 Jan 19 8:51  
Sample : 500ug/mL mee 12/12/18  
Misc : soil

Vial: 57  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 8:56 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y088.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
9						
10						
11						
12						
13						
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20						
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30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

8.2

2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y088.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
9						
10						
11						
12						
13						
14						
15						
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39						
40						

Average

8.2



Data File : M:\YODA\DATA\Y181128M\1128Y088.D Vial: 88  
 Acq On : 29 Jan 19 21:24 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 5:55 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	611145	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.66	136	2644721	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1462932	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2896073	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2668383	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2642413	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.41	45	1684434	458.92220	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

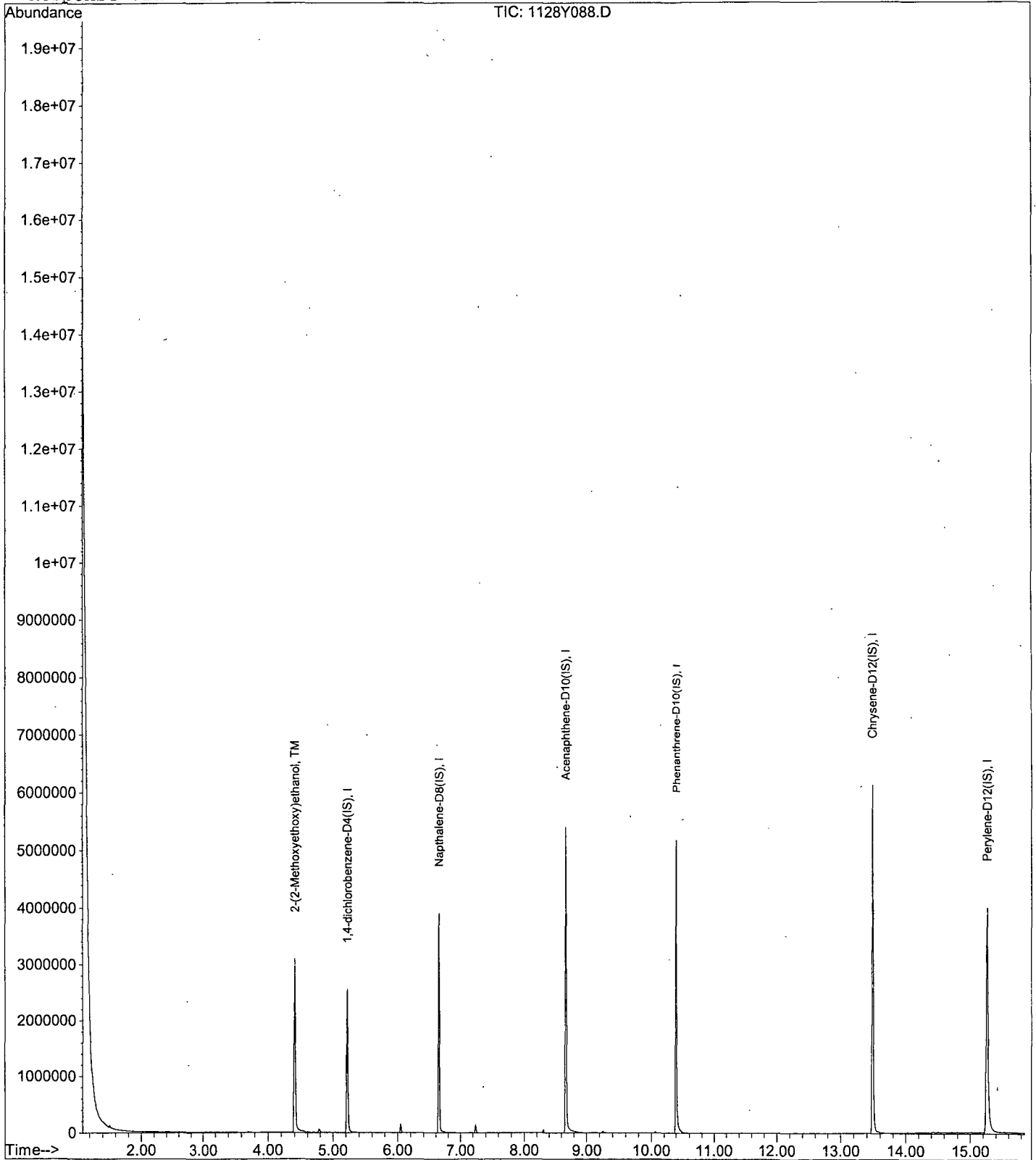
Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
Acq On : 29 Jan 19 21:24  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 88  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y181128M\1128Y061.D Vial: 61  
 Acq On : 29 Jan 19 10:25 Operator: MA  
 Sample : AZ85418W08 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 11:10 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	381064	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1574762	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	847693	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1645713	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1419258	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1394569	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

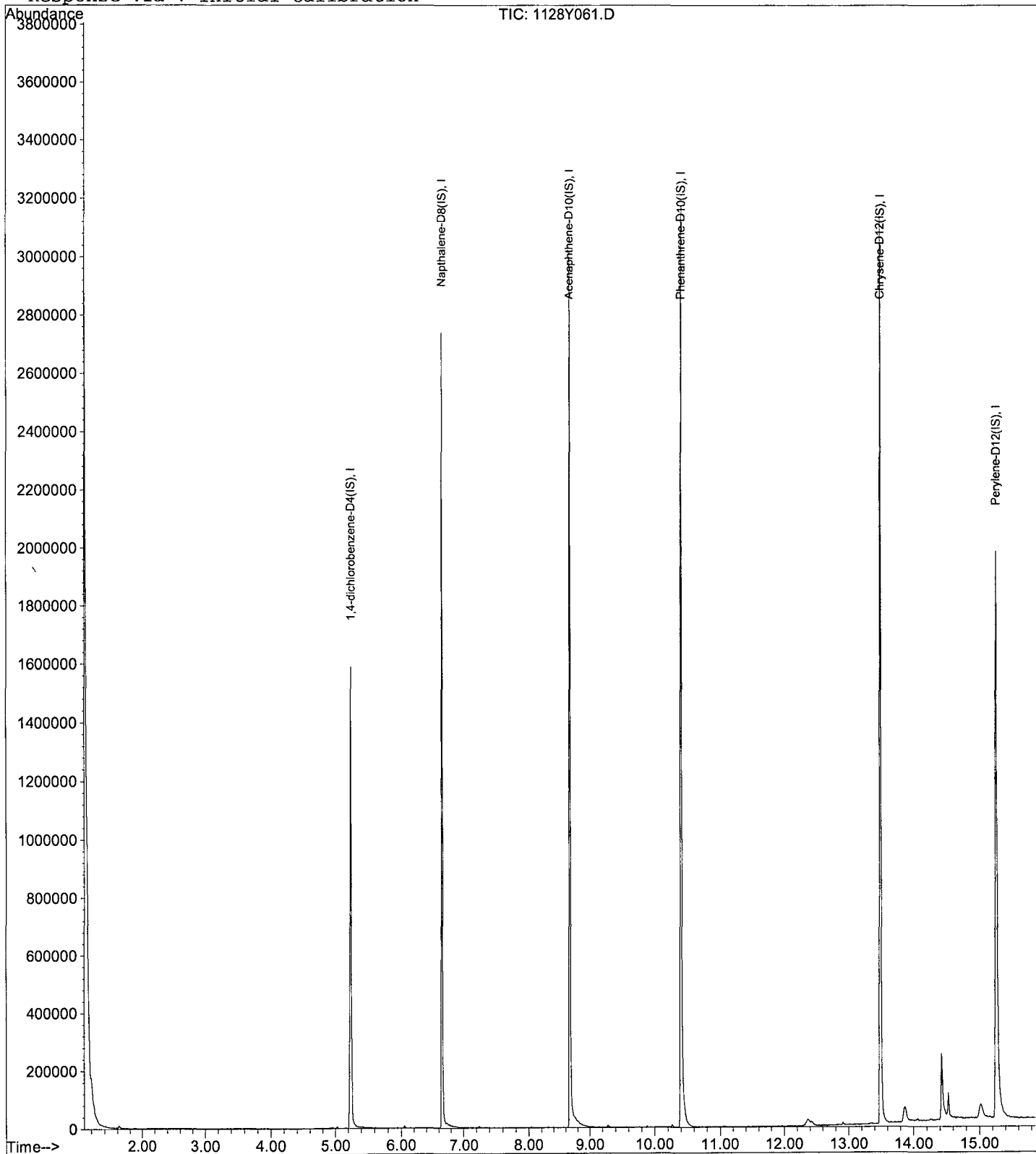
Data File : M:\YODA\DATA\Y181128M\1128Y061.D  
Acq On : 29 Jan 19 10:25  
Sample : AZ85418W08 2/500  
Misc : soil

Vial: 61  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 11:10 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y062.D Vial: 62  
 Acq On : 29 Jan 19 10:49 Operator: MA  
 Sample : AZ85420W09 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 11:10 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	375476	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1520484	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	802252	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1562911	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1359510	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.25	264	1260019	40.0000	ppb	-0.15

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

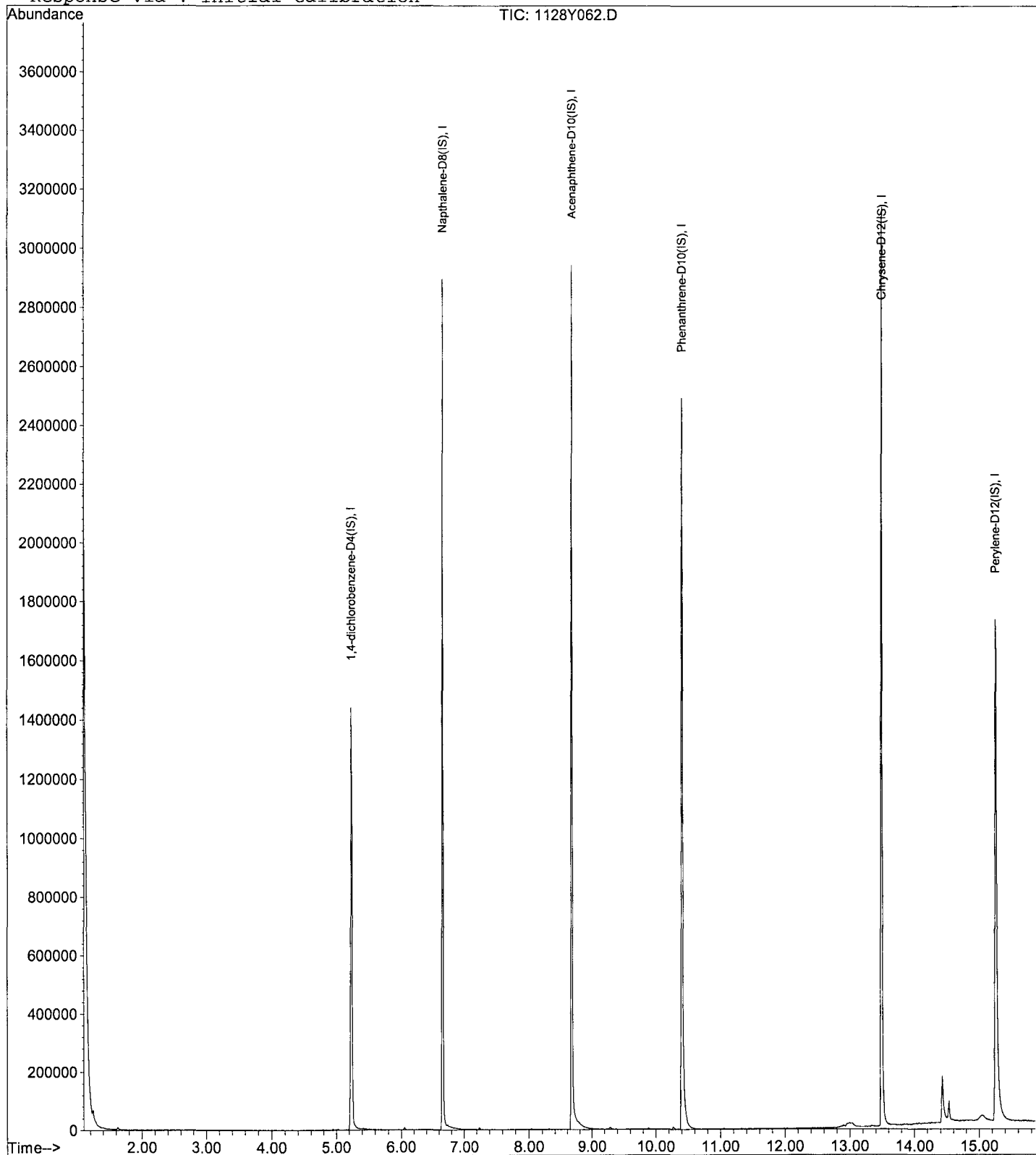
Data File : M:\YODA\DATA\Y181128M\1128Y062.D  
Acq On : 29 Jan 19 10:49  
Sample : AZ85420W09 2/500  
Misc : soil

Vial: 62  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 11:10 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y058.D Vial: 58  
 Acq On : 29 Jan 19 9:14 Operator: MA  
 Sample : 190124A Blk 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 11:10 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	455707	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1896669	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	977692	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	1875049	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1651264	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1552672	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report

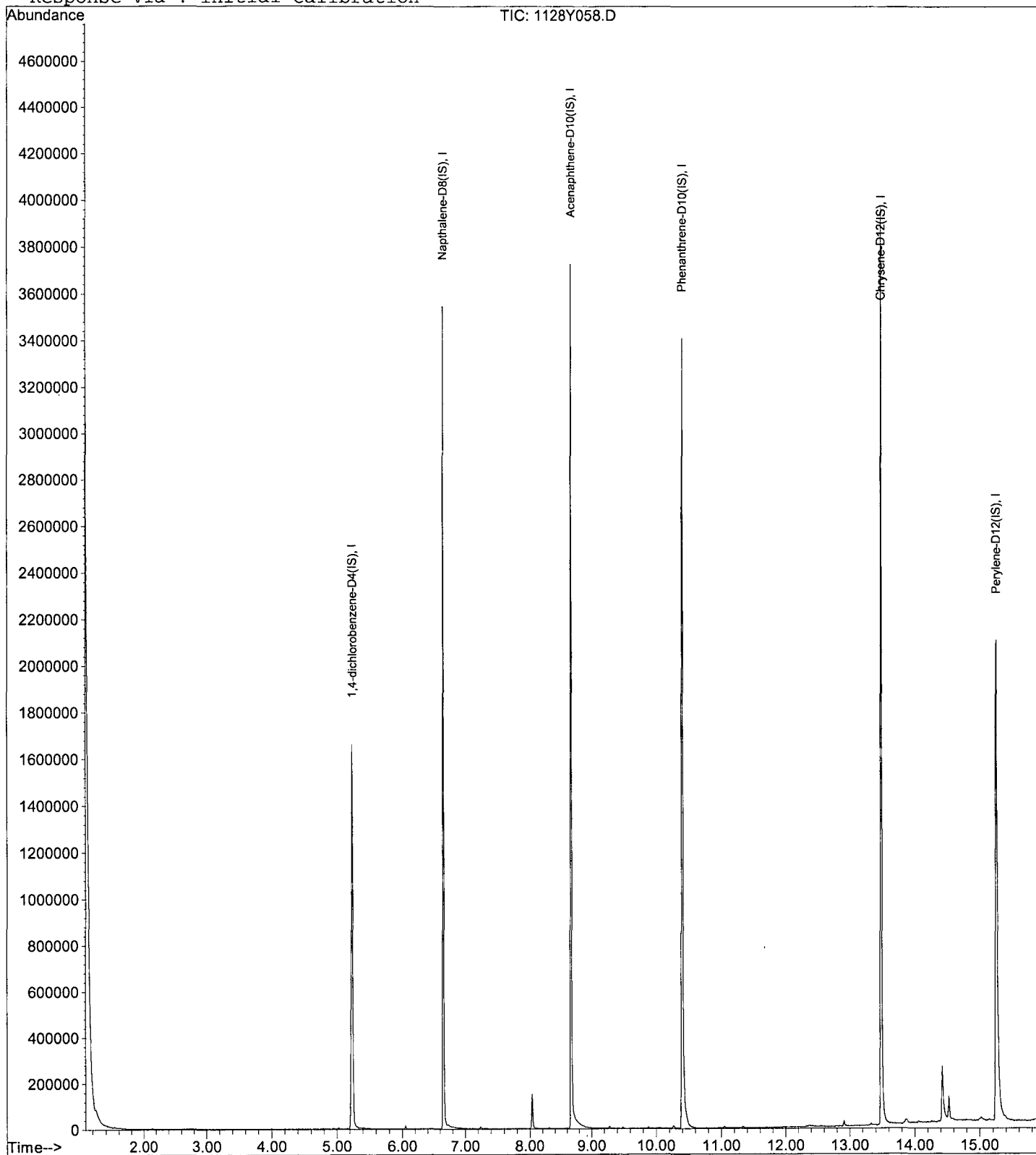
Data File : M:\YODA\DATA\Y181128M\1128Y058.D  
Acq On : 29 Jan 19 9:14  
Sample : 190124A Blk 2/500  
Misc : soil

Vial: 58  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 11:10 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y063.D Vial: 63  
 Acq On : 29 Jan 19 11:33 Operator: MA  
 Sample : 190124A LCS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 12:33 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	434011	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.65	136	1783068	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	962007	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1867204	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1651106	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1559985	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.48	45	187203	71.8193	ppb	95

Quantitation Report

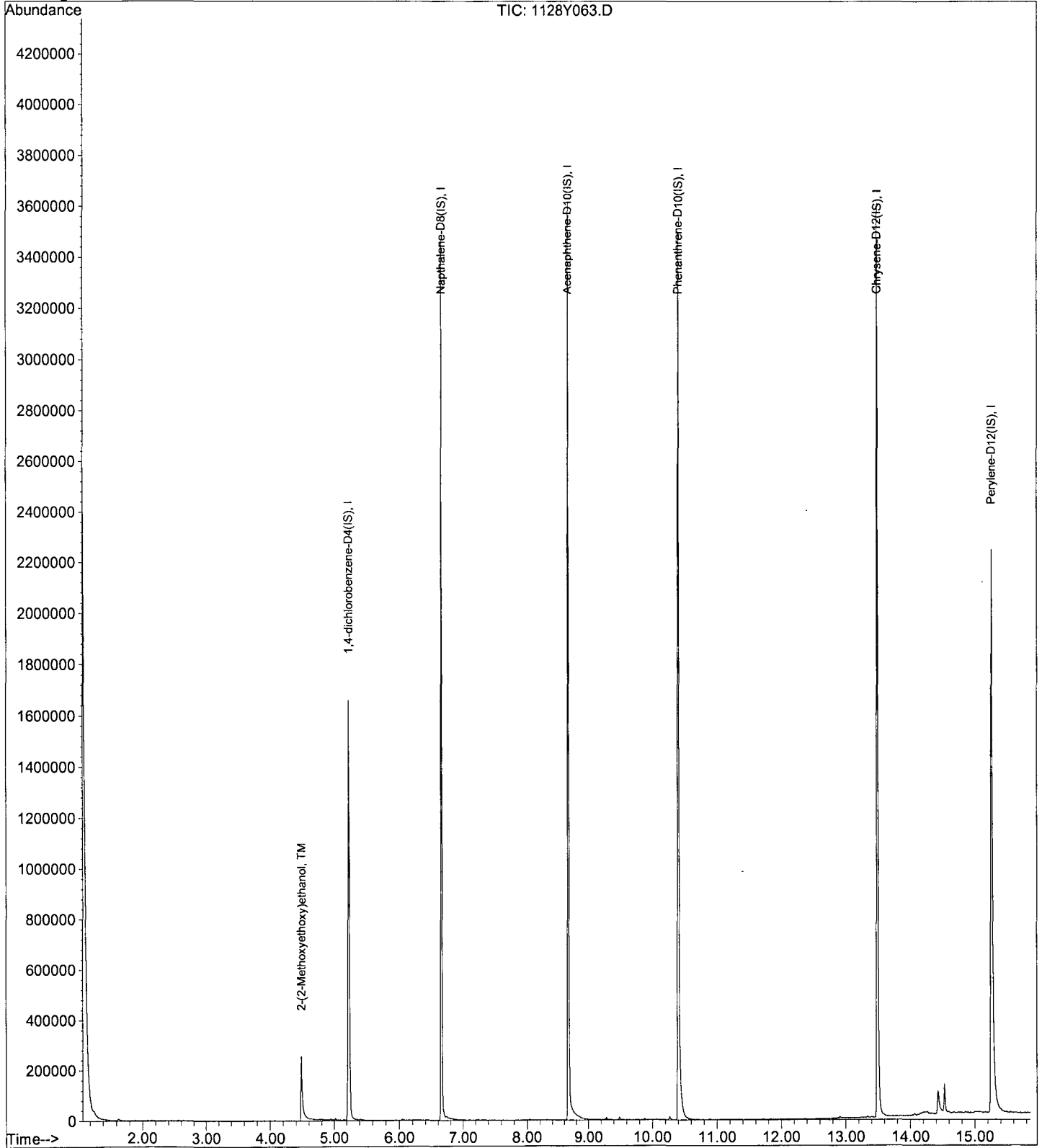
Data File : M:\YODA\DATA\Y181128M\1128Y063.D  
Acq On : 29 Jan 19 11:33  
Sample : 190124A LCS-1 2/500  
Misc : soil

Vial: 63  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 12:33 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y064.D Vial: 64  
 Acq On : 29 Jan 19 11:56 Operator: MA  
 Sample : 190124A LCSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 12:33 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	375812	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1552490	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	735699	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1377656	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	907378	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	802759	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	168050	74.4556	ppb	94

Quantitation Report

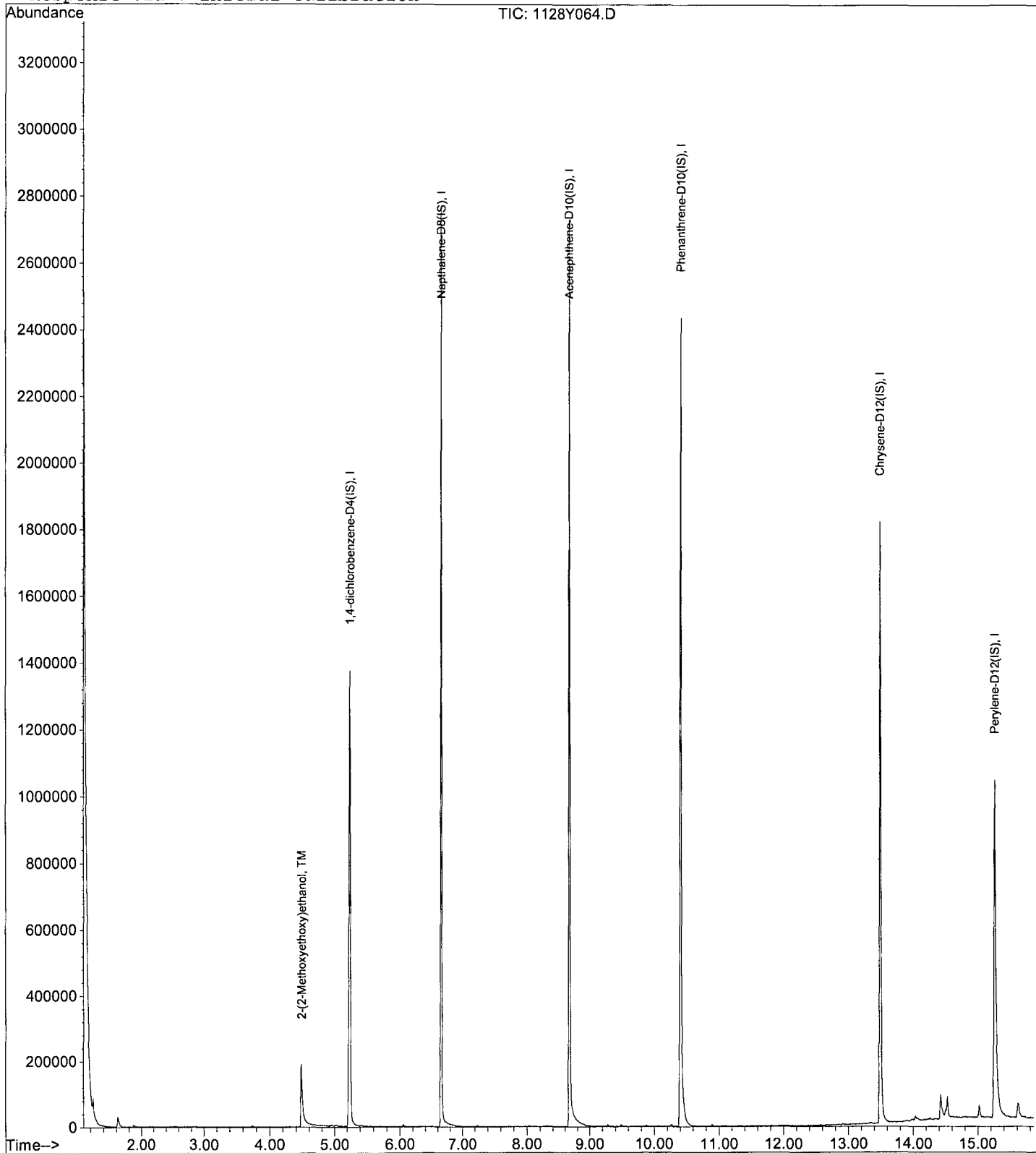
Data File : M:\YODA\DATA\Y181128M\1128Y064.D  
Acq On : 29 Jan 19 11:56  
Sample : 190124A LCSD-1 2/500  
Misc : soil

Vial: 64  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 12:33 2019

Quant Results File: YMEE1128.RES

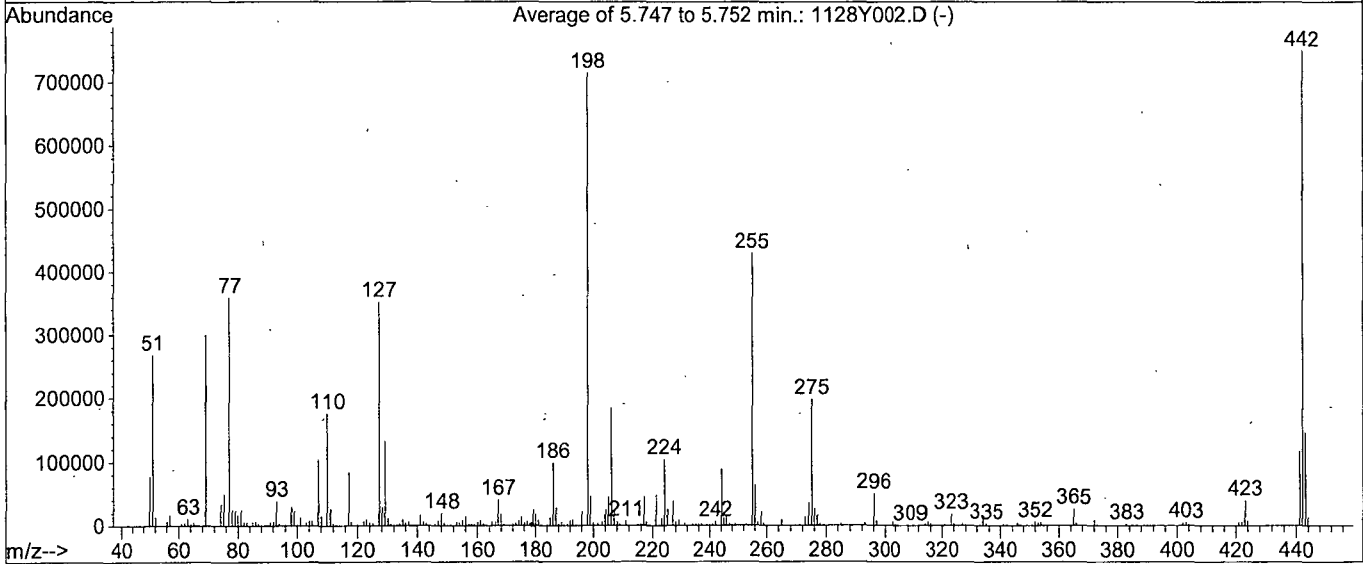
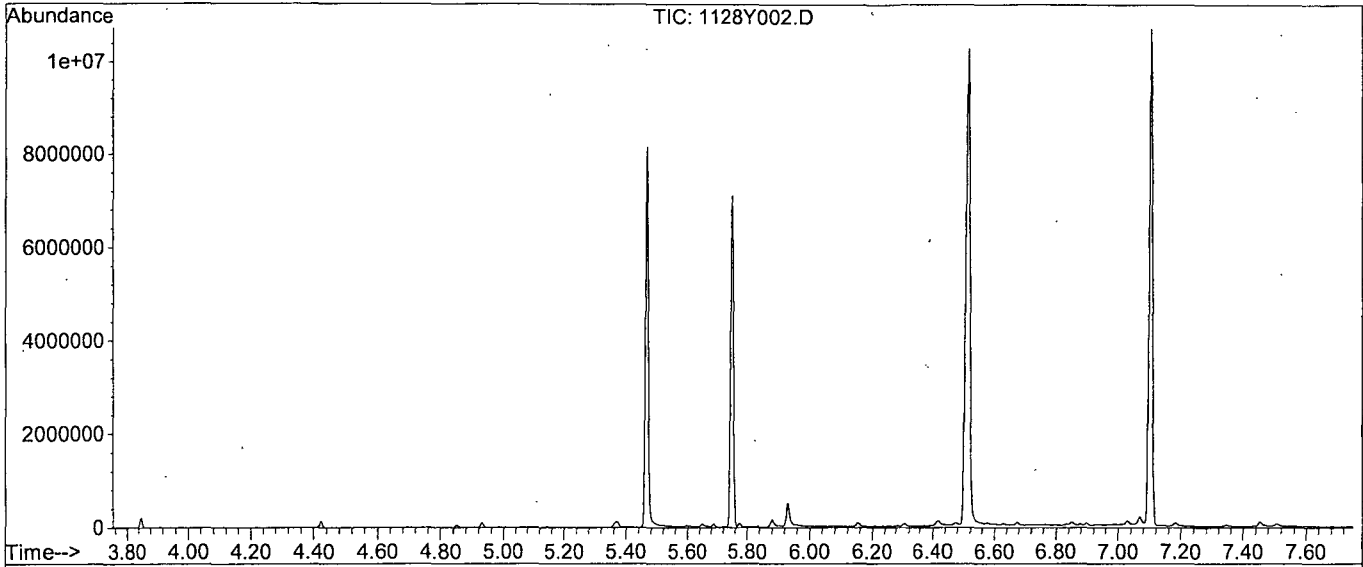
Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 865, 866, 867; Background Corrected with Scan 856

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	37.6	268391	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	1292	PASS
127	198	10	80	49.3	352384	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	714581	PASS
199	198	5	9	6.6	46827	PASS
275	198	10	60	27.6	197547	PASS
365	198	1	100	3.7	26576	PASS
441	442	0.01	24	15.6	116851	PASS
442	198	50	150	104.9	749675	PASS
443	442	15	24	19.5	145880	PASS

M:\YODA\DATA\Y181128M\1128Y002.D

Data File Name: 1128Y002.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 28 Nov 2018 07:30  
Method File: DFTPP2.M  
Sample Name: SV Tune 03/07/18  
Vial Number: 2  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	75896800
2)	DDD	6.90	747340
3)	DDE	7.03	414795

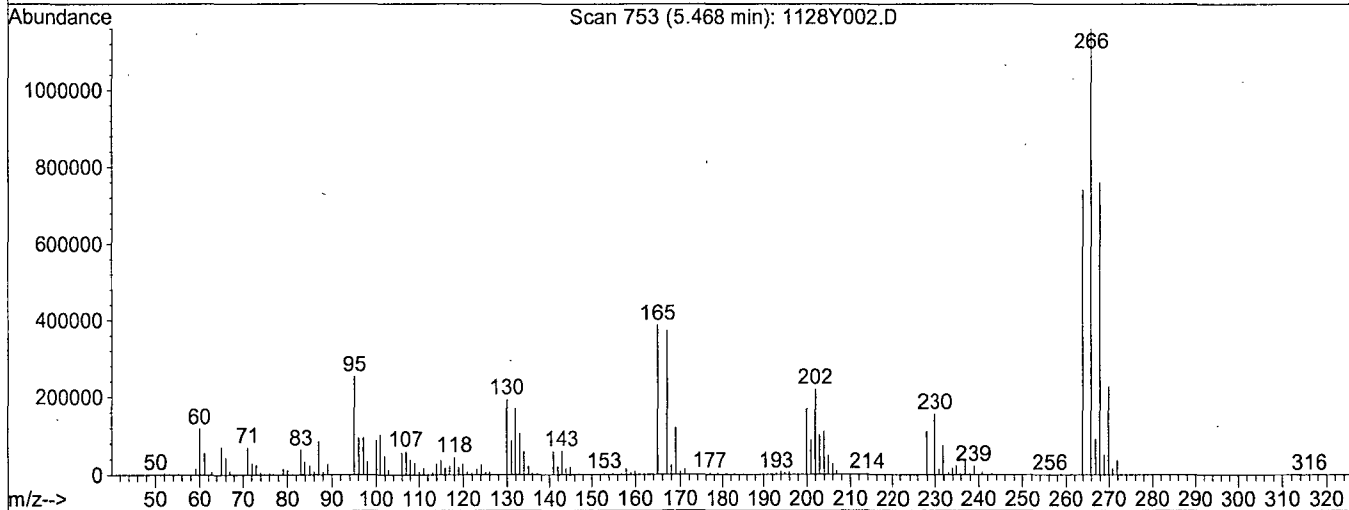
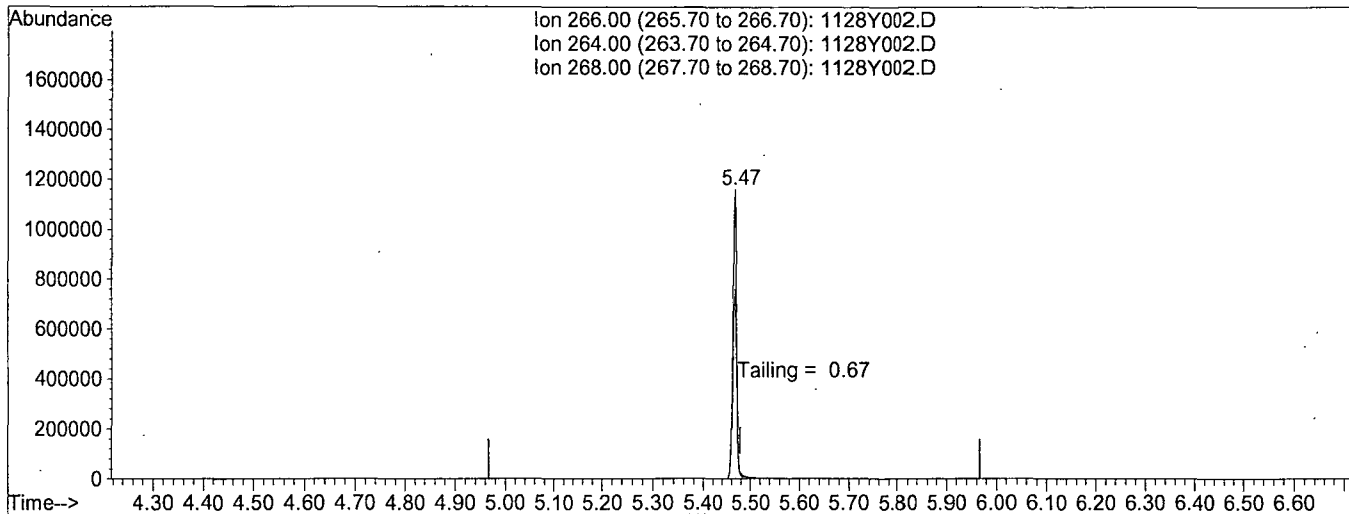
Breakdown 1.51

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Nov 28 10:24 2018

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

(5) Pentachlorophenol

5.47min 0.0000

response 7009891

Ion	Exp%	Act%
266.00	100	100
264.00	63.80	61.59
268.00	65.50	63.39
0.00	0.00	0.00

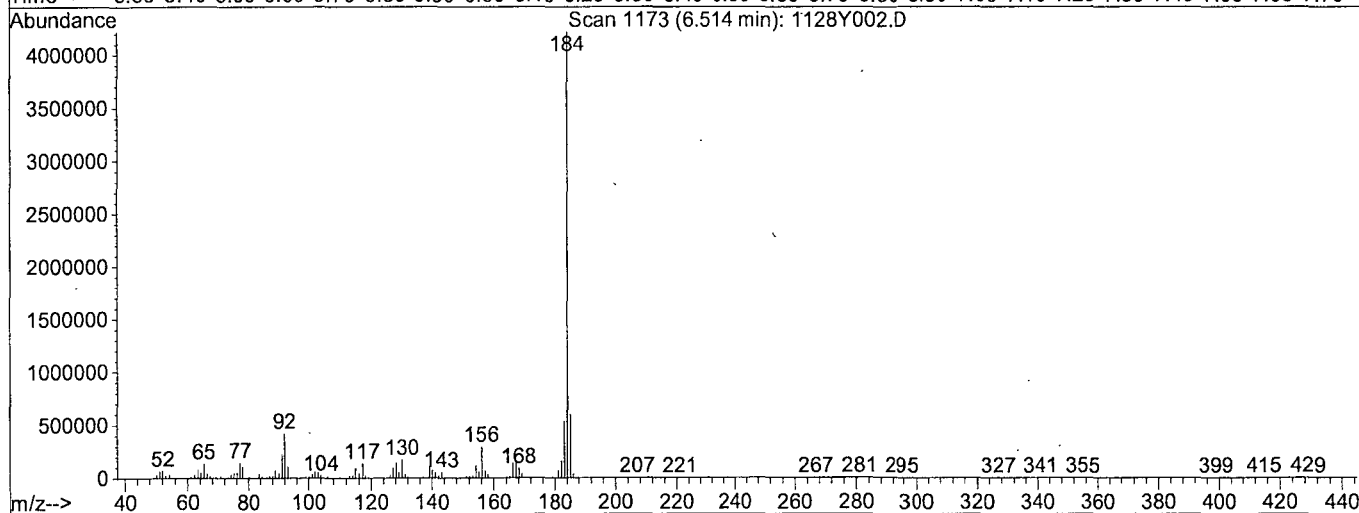
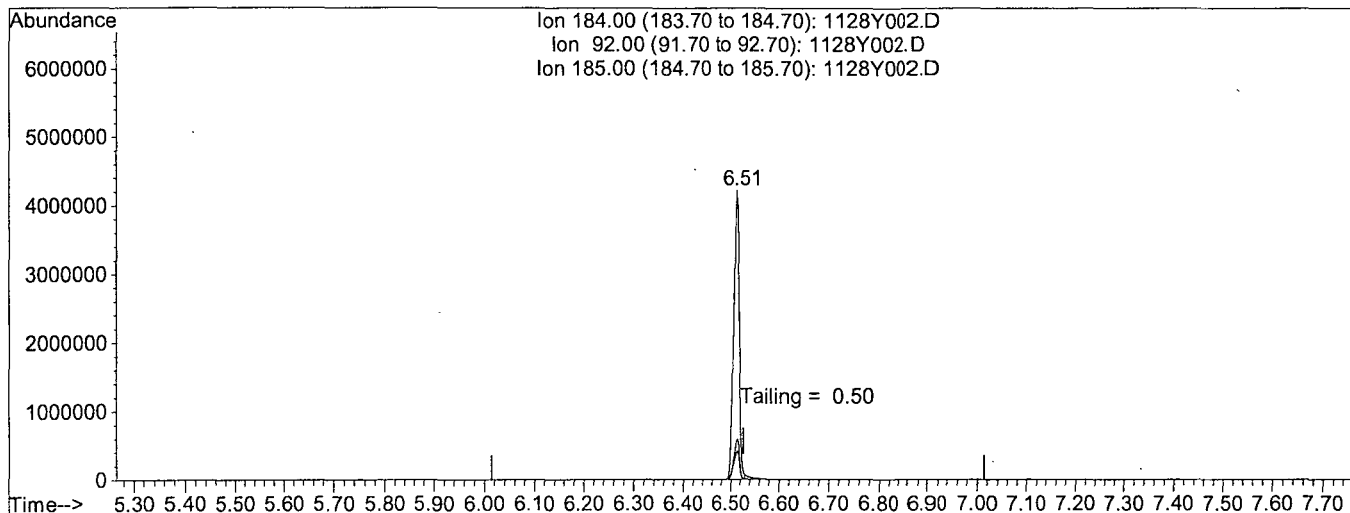


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Nov 28 10:24 2018

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

(6) Benzidine

6.52min 0.0000

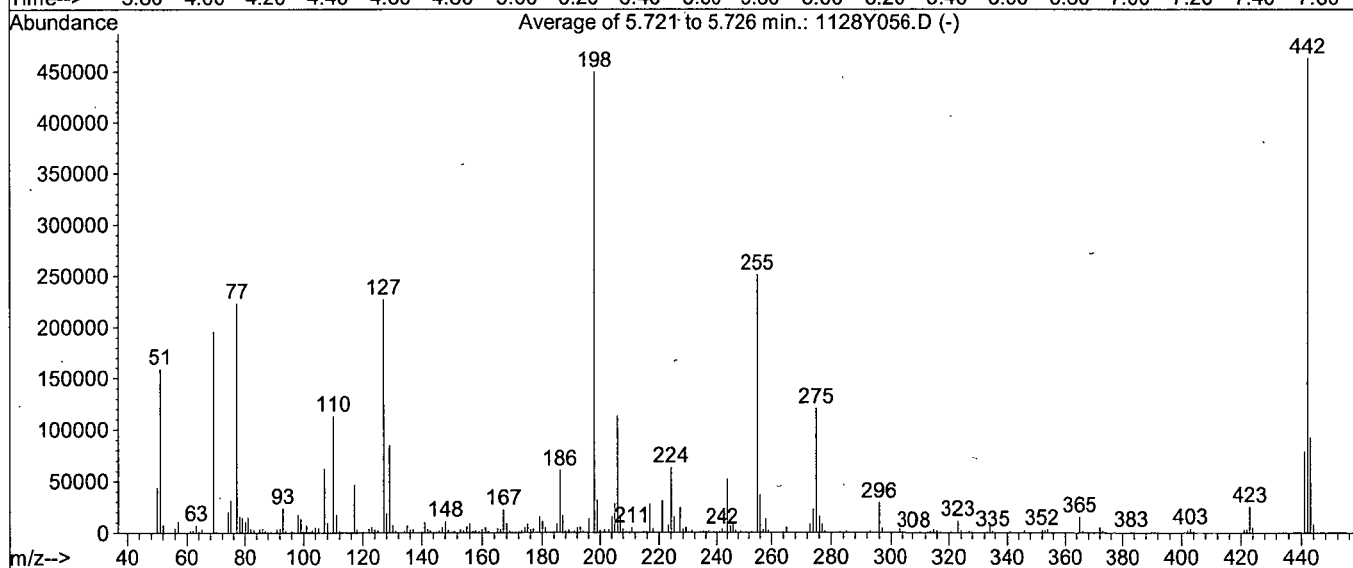
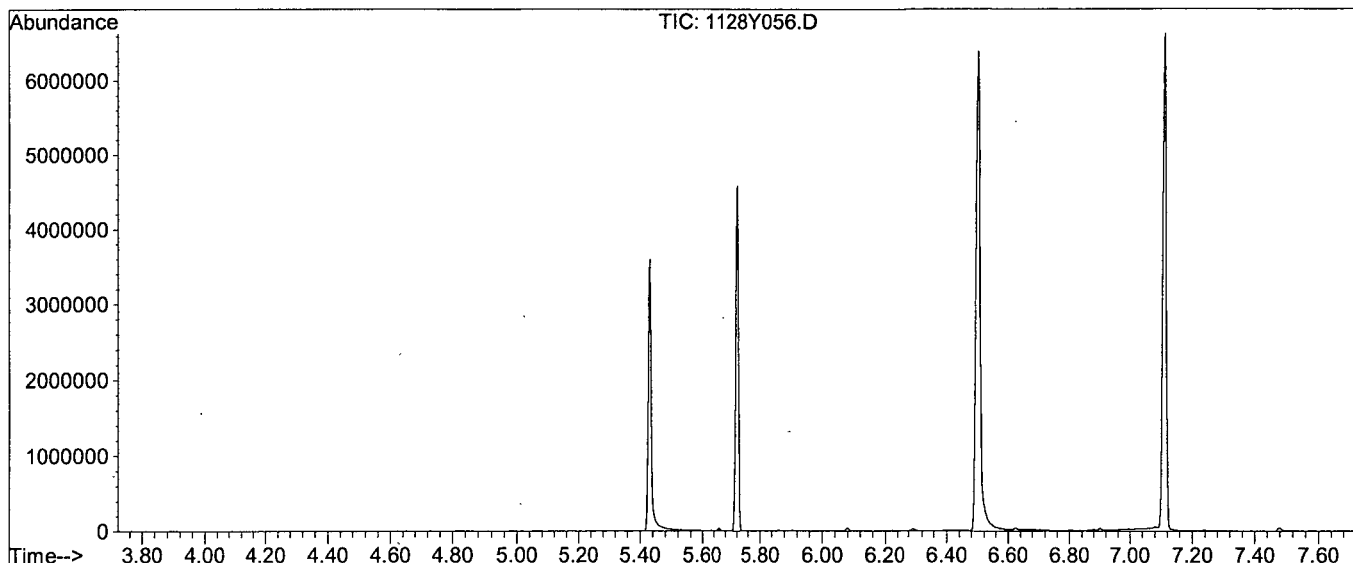
response 35701269

Ion	Exp%	Act%
184.00	100	100
92.00	9.90	10.15
185.00	14.00	14.16
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
 Acq On : 29 Jan 19 8:36  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 855, 856, 857; Background Corrected with Scan 846

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.4	158979	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1146	PASS
127	198	10	80	50.5	226944	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	449557	PASS
199	198	5	9	6.9	31235	PASS
275	198	10	60	26.7	120224	PASS
365	198	1	100	3.4	15263	PASS
441	442	0.01	24	16.9	78525	PASS
442	198	50	150	103.1	463467	PASS
443	442	15	24	19.9	92080	PASS

Data File Name: 1128Y056.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 29 Jan 2019 08:36  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 56  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.11	48684800
2)	DDD	6.90	257255
3)	DDE	7.18	0

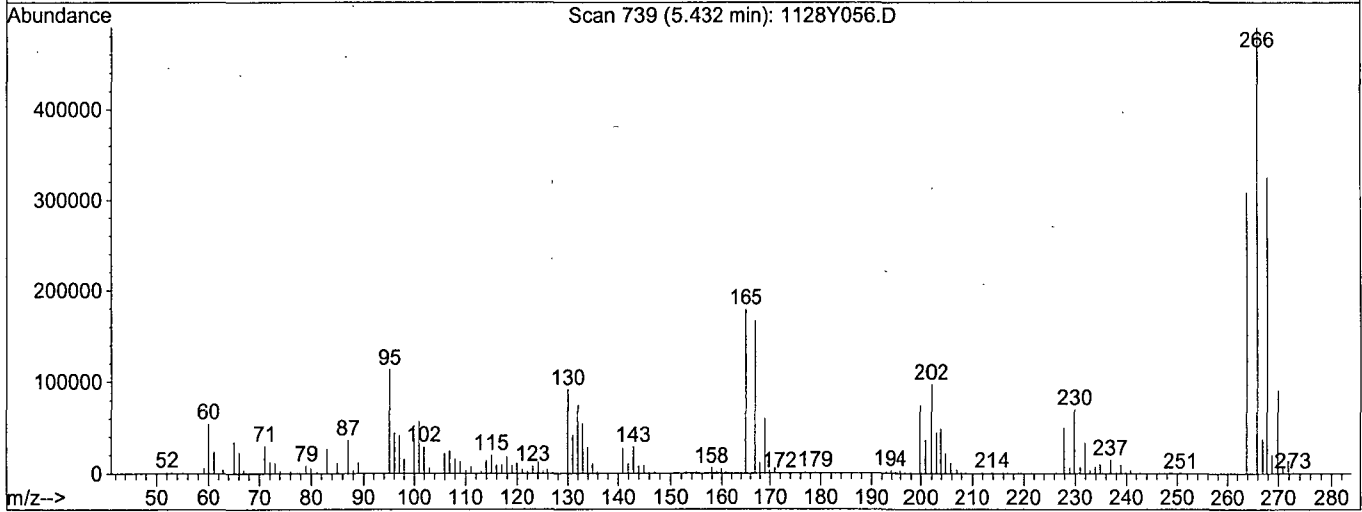
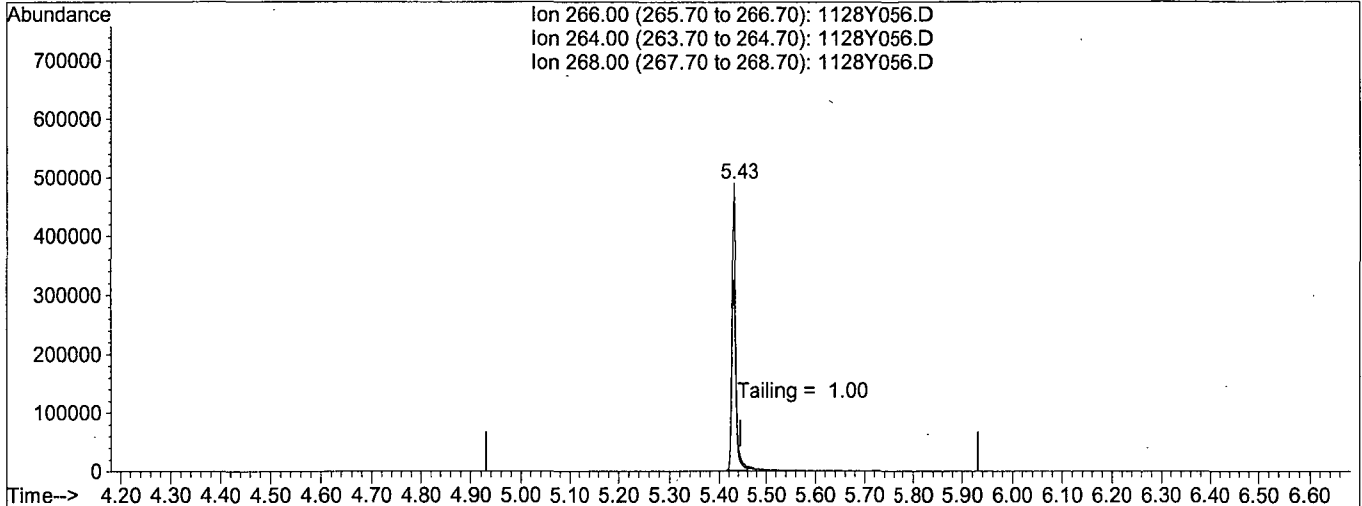
Breakdown 0.53

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
 Acq On : 29 Jan 19 8:36  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 29 8:37 2019

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 29 08:36:56 2019  
 Response via : Single Level Calibration



TIC: 1128Y056.D

(5) Pentachlorophenol

5.43min 0.0000

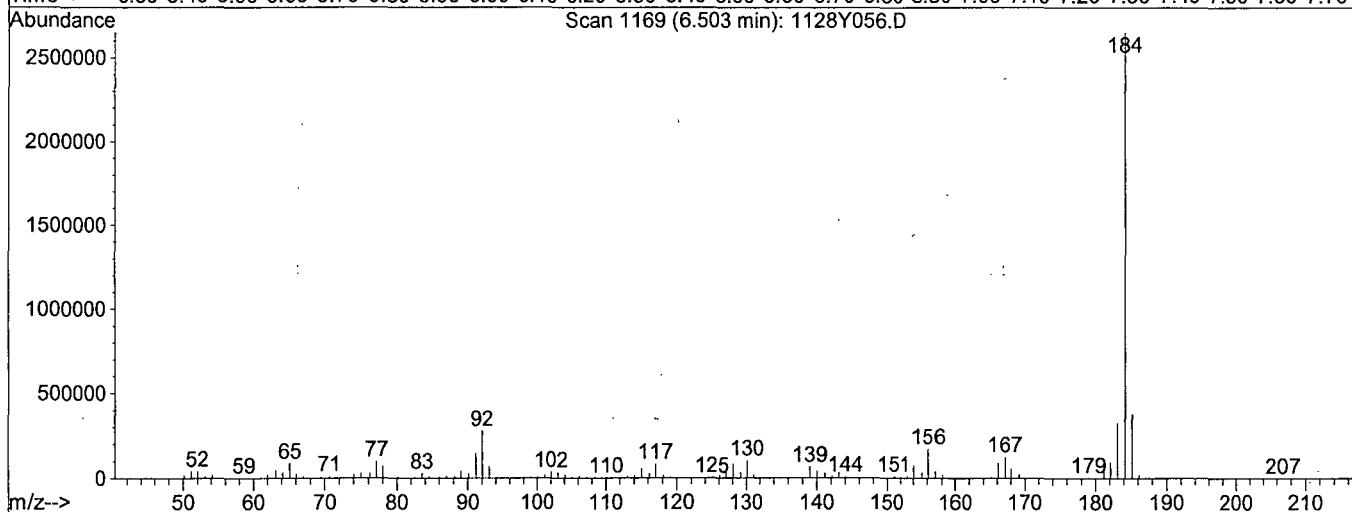
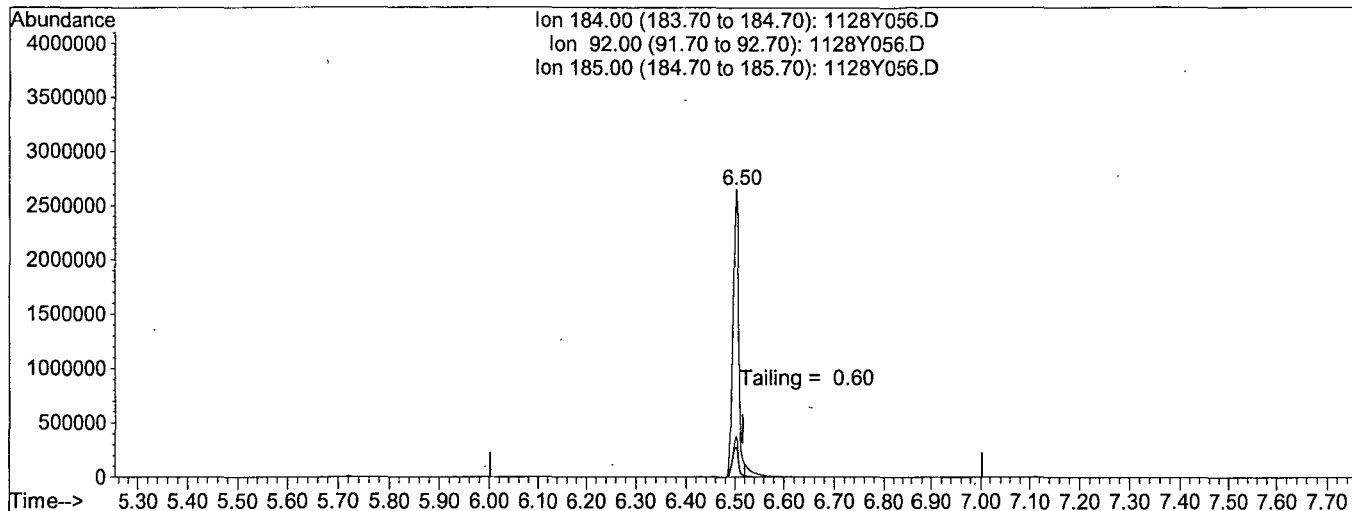
response 3073868

Ion	Exp%	Act%
266.00	100	100
264.00	63.10	62.99
268.00	66.50	63.06
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y056.D Vial: 56  
 Acq On : 29 Jan 19 8:36 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Jan 29 8:37 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 29 08:36:56 2019  
 Response via : Single Level Calibration



TIC: 1128Y056.D

(6) Benzidine

6.50min 0.0000

response 22876598

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.94
185.00	14.30	14.29
0.00	0.00	0.00

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/19						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MEE	Neat 99.5%	HEM SERVIC	0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 7/31/22				

0.097ml were spiked in 500ml of water and extracted on 07/27/18. Final concentration is 2000ug/L  
 QC on 05/04/18

Name of  
 Final  
 Standard Diethylene Glycol

Prep'd By (Initials) GA

Prep Date 07/25/18

Exp Date 11/10/18

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	21610100 7-37330 and 37331	10/03/18	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 11/10/18 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 0801Y064

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/18							
STANDARD	INITIAL CONC.	SOURCE		ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
		DATE					
MEE	Neat 99.5%	HEM SERVICE		0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G					#56258
		Lot: 5259000-37082					
		OP: 09/27/16					
		EXP: 08/04/18					

0.097ml were spiked in 500ml of water and extracted on 06/07/17. Final concentration is 2000ug

APPL re-certified MEE SS stock Lot 5259000-37082 and extended the expiration date to 8/04/18 per verification with a different source Accu Standards Lot # 216101007-37334,5 injected on 05/04/18



Name of Final Standard **8270 Internal Standard (Ampule)**  
 Prep Date **06/22/18**  
 Exp Date **06/22/19**

Prep'd By (Initials) OA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent Lot# (or APPL Prep Date)	Final Standard Conc (range)
EPA 8270 Semivolatile Internal Standard	RESTEK	CRM48902	2000 ug/mL	A0130603-38562	06/22/19	1000 uL	1 mL	NA	100ug/mL

Name of  
Final  
Standard

MEE CCV

Prep'd By (Initials)

OA

Prep Date 12/19/18

Exp Date 11/06/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD	APPL		2000 ug/mL	12/17/18	12/17/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	11/29/18	11/06/19	4 uL	*	*	*

Name of  
Final  
Standard Diethylene Glycol

Prep'd By (Initials) OA

Prep Date 12/17/18

Exp Date 02/28/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	21610100 7-37332 and 37333	02/28/19	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 02/28/19 per verification with a second source from ChemService lot 7079100-39417  
 Inj on Yoda 1128Y014

Name of  
Final

Standard MEE Curve

Prep'd By (Initials)

GA

Prep Date 08/01/18

Exp Date 02/28/19

Initial Standard Information						Final Standard Information			
MEE M STD Stock	APPL		200 ug/mL	07/27/18	02/28/19	5 uL	200uL	Methanol 195uL	50 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	5 uL	100uL	Methanol 95uL	100 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	10 uL	100uL	Methanol 90 uL	200 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	20 uL	100uL	Methanol 80 uL	400 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	200 uL	Methanol 150 uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	30 uL	100uL	Methanol 70 uL	600 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	40 uL	100uL	Methanol 60 uL	800 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	100uL	Methanol 50uL	1000 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*

Name of  
Final

Standard MEE Second Source

Prep'd By (Initials)

GA

Prep Date 08/01/18

Exp Date 06/22/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	07/27/18	07/27/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*

# Organic Extraction Worksheet

<b>Method</b>	Solid Phase Extraction of 2MEE in Water	<b>Extraction Set</b>	190124A	<b>Extraction Method</b>	MWE2MEE	<b>Units</b>	mL
Spiked ID 1	Diethylene Glycol 12-17-18 EXP 2-28-19	Surrogate ID 1					
Spiked ID 2	2MEE SS 10320ug/mL 8-3-18 exp 8-3-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/24/19 7:30			
Spiked ID 8		Ext. End Time:		01/24/19 12:45			
		GC Requires Extract By:		01/29/19 0:00			
		pH1		Water Bath Temp Criteria			
		pH2					
		pH3					

Spiked By: DL

Date 01/24/19

Witnessed By: CFM

Date 01/24/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190124A Blk			NA	NA	500	2	7	01/24/19 7:30	
2	190124A LCS-1	0.040	1	NA	NA	500	2	7	01/24/19 7:30	
3	190124A LCSD-1	0.040	1	NA	NA	500	2	7	01/24/19 7:30	
4	AZ85418 AZ85418W08			NA	NA	500	2	7	01/24/19 7:30	87918
5	AZ85420 AZ85420W09			NA	NA	500	2	7	01/24/19 7:30	87918
6	AZ85463 AZ85463W01	0.040	1	NA	NA	500	2	7	01/24/19 7:30	87923 LOD/LOQ
7	SS	0.097	2	NA	NA	500	2	7	01/24/19 7:30	

*IKW 1/24/19*

<b>Solvent and Lot#</b>	
ENVI-Carb Plus 400MG/1ML	
Reverible Tube Lot:	11225702
PH Strip	HC 849161
Di Water	1-24-19
Dichloromethane	18G194011
Methanol	58179

<b>Extraction COC Transfer</b>	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	1/27/19
Time	12:55
Refrigerator	Hobart

	<b>Technician's Initials</b>
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/24/19 4:11:06 PM

Reviewed By: *KY* Date: *1/24/19*

## Injection Log

Directory: M:\YODA\DATA\Y181128M\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1128Y002.D	1	SV Tune 03/07/18		28 Nov 18 7:30
4	1128Y004.D	1	50ug/ml MEE 08/01/18		28 Nov 18 8:08
5	1128Y005.D	1	100ug/ml MEE 08/01/18		28 Nov 18 8:32
6	1128Y006.D	1	200ug/ml MEE 08/01/18		28 Nov 18 8:55
7	1128Y007.D	1	400ug/ml MEE 08/01/18		28 Nov 18 9:19
8	1128Y008.D	1	600ug/ml MEE 08/01/18		28 Nov 18 9:43
9	1128Y009.D	1	800ug/ml MEE 08/01/18		28 Nov 18 10:06
10	1128Y010.D	1	1000ug/ml MEE 08/01/18		28 Nov 18 10:30
12	1128Y012.D	1	500ug/ml MEE 08/01/18		28 Nov 18 11:17
14	1128Y014.D	1	SS ug/ml MEE 08/01/18		28 Nov 18 12:26
56	1128Y056.D	1	SV TUNE 11/10/18		29 Jan 19 8:36
57	1128Y057.D	1	500ug/mL mee 12/12/18		29 Jan 19 8:51
58	1128Y058.D	1	190124A Blk 2/500		29 Jan 19 9:14
61	1128Y061.D	1	AZ85418W08 2/500		29 Jan 19 10:25
62	1128Y062.D	1	AZ85420W09 2/500		29 Jan 19 10:49
63	1128Y063.D	1	190124A LCS-1 2/500		29 Jan 19 11:33
64	1128Y064.D	1	190124A LCSD-1 2/500		29 Jan 19 11:56
88	1128Y088.D	1	500ug/ml MEE 12/19/18		29 Jan 19 21:24

**ORGANICS**  
**Calibration Data**



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/21/19

Matrix: \_\_\_\_\_

Instrument: Loki

Initials: \_\_\_\_\_

0121L07.D 0121L08.D 0121L09.D 0121L10.D 0121L11.D 0121L12.D 0121L13.D 0121L14.D 0121L16.D 0121L15.D

	Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TM Freon 1113		0.1273	0.1476	0.1258	0.1347	0.1347	0.1402	0.1340	0.1327	0.1520	0.14	6.4	TM			
3	TMQ Dichlorodifluoromethane	0.2136	0.1923	0.2587	0.2239	0.2229	0.2085	0.2395	0.2198	0.2093	0.2382	0.22	8.5	TMQ	0.999		
4	TM Freon 114		0.2088	0.1965	0.1399	0.1643	0.1705	0.1812	0.1477		0.1534	0.17	14	TM			
5	TM** Chloromethane		0.4171	0.3811	0.3338	0.3561	0.3255	0.3425	0.3374	0.3171	0.3229	0.35	9.3	TM**			
6	TM* Vinyl chloride		0.2733	0.2880	0.3300	0.3261	0.3183	0.3404	0.3199	0.3004	0.3281	0.31	7.0	TM*			
7	TM 2-Chloro-1,1,1-trifluoroethane		0.2772	0.2859	0.2620	0.2673	0.2635	0.2774	0.2547	0.2314	0.2703	0.27	6.0	TM			
8	TML Bromomethane		0.3067	0.2320	0.2576	0.2402	0.2148	0.2151	0.1928	0.1760	0.1931	0.23	18	TML	0.997		
9	TML Chloroethane		0.2778	0.2171	0.1560	0.1915	0.1552	0.1670	0.1509		0.1534	0.18	24	TML	0.999		
10	TM Dichlorofluoromethane		0.7752	0.6136	0.5163	0.5437	0.5334	0.5489	0.5421	0.5193	0.5446	0.57	14	TM			
11	TM Trichlorofluoromethane		0.4457	0.4375	0.4003	0.4463	0.4257	0.4727	0.4321	0.4276	0.4557	0.44	4.7	TM			
12	TML Acrolein	0.0785	0.0700	0.0692	0.0631	0.0661	0.0619	0.0645	0.0635	0.0615	0.0654	0.07	7.7	TML	0.998		
13	TML Acetone			0.1275	0.1063	0.0901	0.0735	0.0672	0.0673	0.0572	0.0648	0.08	30	TML	0.995		
14	TM Freon-113		0.2243	0.2886	0.2392	0.2404	0.2359	0.2554	0.2237	0.2256	0.2533	0.24	8.5	TM			
15	TM* 1,1-DCE		0.0897	0.1084	0.0839	0.0722	0.0713	0.0778	0.0772	0.0732	0.0780	0.08	14	TM*			
16	TM t-Butanol	0.0341	0.0357	0.0285	0.0261	0.0259	0.0302	0.0240	0.0267	0.0329	0.0328	0.03	14	TM			
17	TM 2-Propanol			0.0259	0.0196	0.0219	0.0200	0.0194	0.0214	0.0219	0.0223	0.02	9.6	TM			
18	TM Acetonitrile		0.0606	0.0540	0.0484	0.0486	0.0487	0.0494	0.0493	0.0485	0.0500	0.05	8.0	TM			
19	TM Methyl Acetate		0.4174	0.5846	0.2828	0.2810	0.2735	0.2777	0.2727	0.2796	0.2849	0.33	32	TML	1.000		
20	TML Iodomethane		0.0264	0.0221	0.0272	0.0412	0.0578	0.0899	0.1133	0.1353	0.1279	0.07	64	TML	0.994		
21	TML Acrylonitrile		0.1594	0.1426	0.1074	0.0970	0.0993	0.1026	0.0940	0.0966	0.1066	0.11	21	TML	0.997		
22	TML Methylene chloride		0.5512	0.4334	0.3596	0.3299	0.3144	0.3140	0.3116	0.3044	0.3201	0.36	23	TML	1.000		
23	TM Carbon disulfide		0.9082	0.9658	0.8714	0.8112	0.8005	0.8318	0.8116	0.7911	0.8271	0.85	6.8	TM			
24	TM Methyl t-butyl ether (MtBE)		0.8313	0.7357	0.7762	0.7617	0.7621	0.7871	0.7657	0.7814	0.7850	0.78	3.4	TM			
25	TM Trans-1,2-DCE		0.1536	0.1567	0.1488	0.1488	0.1425	0.1463	0.1428	0.1405	0.1442	0.15	3.7	TM			
26	TM Diisopropyl Ether		0.8396	0.8255	0.8115	0.8421	0.8105	0.8573	0.8321	0.8594	0.8764	0.84	2.6	TM			
27	TM**L 2,2-Dichloro-1,1,1-trifluoroethane													TM**L			
28	TM** 1,1-DCA		0.4969	0.4796	0.4753	0.4742	0.4676	0.4884	0.4777	0.4835	0.4930	0.48	2.0	TM**			
29	TM Vinyl Acetate		0.1835	0.1735	0.1692	0.1706	0.1578	0.1880	0.1769	0.1779	0.1851	0.18	5.3	TM			
30	TM Ethyl tert Butyl Ether		0.6997	0.7075	0.6853	0.7027	0.7102	0.7491	0.7335	0.8023	0.7787	0.73	5.4	TM			
31	TML MEK (2-Butanone)			0.2325	0.1649	0.1605	0.1247	0.1261	0.1286	0.1353	0.1320	0.15	24	TML	0.999		
32	TM Cis-1,2-DCE		0.3262	0.2780	0.2757	0.2662	0.2520	0.2655	0.2579	0.2733	0.2734	0.27	7.8	TM			
33	TM 2,2-Dichloropropane		0.5130	0.4058	0.3827	0.3351	0.3475	0.3526	0.3537	0.3651	0.3666	0.38	14	TM			
34	TM 2-Methylpentane													TM			
35	TML 3-Methylpentane													TML			

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/21/19  
Instrument: Loki

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	Q	MRF
36	TM*	Chloroform		0.3936	0.4649	0.3878	0.4007	0.4194	0.4398	0.4187	0.4279	0.4381	0.42	5.9	TM*		
37	TM	Bromochloromethane		0.0746	0.0778	0.0634	0.0691	0.0621	0.0619	0.0621	0.0639	0.0673	0.07	8.8	TM		
38	S	Dibromofluoromethane(S)	0.5221	0.4890	0.4448	0.4243	0.4769	0.4660	0.4873	0.4754	0.4586	0.4666	0.47	5.6	S		
39	TM	1,1,1-TCA		0.1373	0.1686	0.1449	0.1557	0.1503	0.1546	0.1526	0.1553	0.1588	0.15	5.7	TM		
40	TML	Cyclohexane		0.4299	0.2455	0.2292	0.1914	0.1776	0.1894	0.1750	0.1867	0.1944	0.22	36	TML	0.999	
41	TM	1,1-Dichloropropene		0.3288	0.3278	0.2920	0.2908	0.2886	0.2876	0.2808	0.2859	0.2959	0.30	6.0	TM		
42	TM	2,2,4-Trimethylpentane		0.5376	0.5953	0.5442	0.5395	0.5226	0.5544	0.5116	0.5296	0.5660	0.54	4.6	TM		
43	S	1,2-DCA-D4(S)	0.6057	0.5772	0.5141	0.4993	0.5602	0.5360	0.5677	0.5517	0.5377	0.5437	0.55	5.6	S		
44	TM	Carbon Tetrachloride		0.2737	0.3556	0.2871	0.3196	0.3024	0.3263	0.3158	0.3171	0.3279	0.31	7.6	TM		
45	TM	Tert Amyl Methyl Ether		0.7082	0.6756	0.6341	0.6611	0.6390	0.6519	0.6446	0.6532	0.6662	0.66	3.4	TM		
46	TML	Methylcyclopentane													TML		
47	TM	1,2-DCA		0.3742	0.3272	0.3564	0.3317	0.3351	0.3389	0.3320	0.3403	0.3462	0.34	4.3	TM		
48	TM	Benzene		0.9781	0.9159	0.8505	0.8882	0.8484	0.8811	0.8653	0.8757	0.8898	0.89	4.5	TM		
49	TM	TCE		0.1844	0.1574	0.1258	0.1572	0.1470	0.1378	0.1433	0.1371	0.1470	0.15	11	TM		
50	TM	2-Pentanone		0.1709	0.1776	0.1645	0.1724	0.1680	0.1670	0.1712	0.1706	0.1736	0.17	2.2	TM		
51	TM*	1,2-Dichloropropane		0.2446	0.2720	0.2309	0.2298	0.2189	0.2304	0.2252	0.2259	0.2355	0.23	6.7	TM*		
52	TM	Bromodichloromethane		0.1697	0.1838	0.1695	0.1864	0.1757	0.1806	0.1770	0.1795	0.1837	0.18	3.4	TM		
53	TM	Methyl Cyclohexane		0.3570	0.3419	0.3078	0.3126	0.3073	0.3136	0.3005	0.2991	0.3207	0.32	6.1	TM		
54	TM	Dibromomethane		0.1398	0.1698	0.1670	0.1729	0.1632	0.1656	0.1659	0.1643	0.1680	0.16	5.8	TM		
55	TM	2-Chloroethyl vinyl ether						0.0056	0.0055	0.0069	0.0066	0.0066	0.01	10	TM		
56	TM	MIBK (methyl isobutyl ketone)		0.2214	0.2343	0.2554	0.2746	0.2302	0.2265	0.2281	0.2270	0.2231	0.24	7.5	TM		
57	TM	1-Bromo-2-chloroethane		0.1690	0.1999	0.1877	0.1754	0.1693	0.1792	0.1754	0.1810	0.1757	0.18	5.4	TM		
58	TM	Cis-1,3-Dichloropropene		0.3654	0.4018	0.3965	0.3874	0.3795	0.3941	0.3860	0.3904	0.4011	0.39	2.9	TM		
59	TM*	Toluene		0.5252	0.5226	0.4964	0.5482	0.5399	0.5389	0.5455	0.5295	0.5570	0.53	3.4	TM*		
60	TM	Trans-1,3-Dichloropropene		0.3973	0.3996	0.3642	0.3668	0.3665	0.3684	0.3676	0.3641	0.3741	0.37	3.7	TM		
61	TM	1,1,2-TCA		0.2099	0.1885	0.1807	0.1867	0.1876	0.1922	0.1895	0.1832	0.1918	0.19	4.4	TM		
62	TM	2-Hexanone			0.1753	0.1679	0.1574	0.1624	0.1494	0.1509	0.1542	0.1570	0.16	5.5	TM		
63	I	Chlorobenzene-D5 (IS)															
64	S	Toluene-D8(S)	2.277	2.221	1.853	1.876	2.026	2.061	2.066	2.029	1.932	2.087	2.0	6.7	S		
65	TM	1,2-EDB		0.1689	0.1769	0.1497	0.1574	0.1609	0.1543	0.1539	0.1547	0.1680	0.16	5.6	TM		
66	TM	Tetrachloroethene		0.1995	0.2291	0.2029	0.1964	0.1938	0.1907	0.1864	0.1858	0.1985	0.20	6.6	TM		
67	TML	1-Chlorohexane		0.5182	0.4962	0.3660	0.3477	0.3314	0.3273	0.3204	0.3184	0.3520	0.38	20	TML	0.998	
68	TM	1,1,1,2-Tetrachloroethane		0.3445	0.3223	0.3142	0.3070	0.3228	0.3230	0.3221	0.3178	0.3465	0.32	4.0	TM		
69	TM	m&p-Xylene		0.9334	0.9505	0.9034	0.9756	0.9704	0.9923	0.9961	0.9859	1.079	0.98	5.0	TM		
70	TM	o-Xylene		0.2800	0.3057	0.2647	0.2759	0.2886	0.2772	0.2859	0.2913	0.3072	0.29	4.9	TM		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/21/19 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	Q	MRF
71	TM	Styrene		0.8547	0.8649	0.8093	0.9094	0.8681	0.8703	0.8843	0.8764	0.9699	0.88	4.9	TM		
72	S	4-Bromofluorobenzene(S)	0.9406	0.9063	0.8074	0.8093	0.8633	0.8665	0.8665	0.8544	0.7873	0.8671	0.86	5.4	S		
73	TM	1,3-Dichloropropane		0.4680	0.5094	0.4528	0.4518	0.4463	0.4421	0.4417	0.4346	0.4737	0.46	5.0	TM		
74	TM	Dibromochloromethane		0.3588	0.3512	0.3347	0.3421	0.3463	0.3374	0.3378	0.3375	0.3652	0.35	3.1	TM		
75	TM**	Chlorobenzene		0.6971	0.8420	0.7551	0.8091	0.8274	0.8203	0.8042	0.7940	0.8687	0.80	6.3	TM**		
76	TM*	Ethylbenzene		0.7068	0.7742	0.6758	0.7119	0.7374	0.7022	0.7224	0.7177	0.7958	0.73	5.1	TM*		
77	TM**	Bromoform		0.2482	0.3469	0.2915	0.2909	0.2846	0.2690	0.2689	0.2729	0.2958	0.29	9.6	TM**		
78	I	1,4-Dichlorobenzene-D (IS)															
79	TM	Isopropylbenzene		2.190	2.366	2.335	2.338	2.409	2.493	2.325	2.261	2.343	2.3	3.6	TM		
80	TM**	1,1,2,2-Tetrachloroethane		0.7680	0.7120	0.6909	0.6574	0.6453	0.6615	0.6395	0.6433	0.6726	0.68	6.2	TM**		
81	TM	1,2,3-Trichloropropane		0.1092	0.1338	0.1072	0.1167	0.1240	0.1208	0.1188	0.1156	0.1153	0.12	6.7	TM		
82	TM	t-1,4-Dichloro-2-Butene		0.1629	0.2104	0.1443	0.1515	0.1446	0.1521	0.1384	0.1379	0.1457	0.15	15	TM		
83	TM	Bromobenzene		0.3220	0.4319	0.3804	0.3839	0.3837	0.3977	0.3619	0.3775	0.3788	0.38	7.6	TM		
84	TM	n-Propylbenzene		1.199	1.399	1.339	1.434	1.428	1.589	1.476	1.460	1.493	1.4	7.6	TM		
85	TM	4-Ethyltoluene		1.871	2.216	2.023	2.030	2.180	2.347	2.262	2.210	2.320	2.2	7.2	TM		
86	TM	2-Chlorotoluene		0.8399	0.9704	0.9418	0.9113	0.9032	0.9405	0.8957	0.8334	0.8960	0.90	5.0	TM		
87	TM	1,3,5-Trimethylbenzene		1.733	1.854	1.760	1.820	1.917	1.994	1.929	1.909	1.952	1.9	4.7	TM		
88	TM	4-Chlorotoluene		0.9116	1.108	1.019	1.031	1.056	1.081	1.027	0.9767	1.013	1.0	5.6	TM		
89	TM	Tert-Butylbenzene		1.825	1.839	2.015	1.967	2.023	2.182	2.026	1.960	2.039	2.0	5.4	TM		
90	TM	1,2,4-Trimethylbenzene		1.710	1.608	1.702	1.791	1.915	1.993	1.967	1.925	2.015	1.8	8.0	TM		
91	TM	Sec-Butylbenzene		2.184	2.410	2.370	2.391	2.462	2.580	2.461	2.379	2.511	2.4	4.6	TM		
92	TM	p-Isopropyltoluene		1.061	1.110	1.073	1.028	1.078	1.187	1.165	1.172	1.221	1.1	5.9	TM		
93	TM	Benzyl Chloride		0.8570	0.7787	0.7335	0.7729	0.7625	0.7823	0.8457	0.8342	0.8499	0.80	5.6	TM		
94	TM	1,3-DCB		0.6231	0.7035	0.6395	0.6861	0.6844	0.6866	0.6680	0.6769	0.6899	0.67	3.8	TM		
95	TM	1,4-DCB		1.258	1.445	1.369	1.275	1.375	1.362	1.302	1.274	1.339	1.3	4.6	TM		
96	TM	n-Butylbenzene		0.8570	0.7787	0.7335	0.7729	0.7625	0.7823	0.8457	0.8342	0.8499	0.80	5.6	TM		
97	TM	1,2-DCB		1.242	1.276	1.269	1.286	1.284	1.323	1.317	1.296	1.365	1.3	2.8	TM		
98	TM	Hexachloroethane		0.3531	0.3877	0.3416	0.4124	0.4274	0.4437	0.4253	0.4284	0.4399	0.41	9.2	TM		
99	TML	1,2-Dibromo-3-chloropropane		0.1629	0.2258	0.1568	0.1624	0.1430	0.1513	0.1498	0.1418	0.1460	0.16	16	TML	1.000	
100	TM	1,2,4-Trichlorobenzene		0.7205	0.7469	0.7167	0.7311	0.7829	0.8745	0.8966	0.9589	0.9259	0.82	12	TM		
101	TM	Hexachlorobutadiene		0.3290	0.3416	0.4300	0.4062	0.4037	0.4263	0.4351	0.4375	0.4456	0.41	10	TM		
102	TM	Naphthalene		1.576	1.413	1.483	1.571	1.628	1.797	1.847	2.037	1.944	1.7	13	TM		
103	TM	1,2,3-Trichlorobenzene		0.3217	0.3215	0.3578	0.3251	0.3216	0.3908	0.3950	0.4219	0.4144	0.36	12	TM		
104																	
105																	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	353856	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	302144	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	163584	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	36949	5.5411	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.164%	
43) 1,2-DCA-D4(S)	6.07	65	42868	5.5133	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.052%	
64) Toluene-D8(S)	8.37	98	137589	5.5734	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.292%	
72) 4-Bromofluorobenzene(S)	11.26	95	56841	5.4887	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.956%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	5062	2.6187	ppb	95
3) Dichlorodifluoromethane	1.15	85	907	0.6037	ppb	94
4) Freon 114	1.25	85	1017	0.4220	ppb #	73
5) Chloromethane	1.29	50	2048	0.4156	ppb	98
6) Vinyl chloride	1.38	62	1630	0.3669	ppb	91
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	12056	3.2078	ppb	95
8) Bromomethane	1.66	94	1310	-1.4293	ppb	87
9) Chloroethane	1.76	64	1106	-0.1356	ppb #	77
10) Dichlorofluoromethane	1.92	67	572	0.0708	ppb	94
11) Trichlorofluoromethane	2.00	101	1790	0.2886	ppb	94
12) Acrolein	2.43	56	11107	11.8244	ppb #	93
13) Acetone	2.61	43	1333	-1.6102	ppb #	83
14) Freon-113	2.54	101	1273	0.3702	ppb #	81
15) 1,1-DCE	2.52	63	545	0.4736	ppb #	48
16) t-Butanol	3.38	59	4823	11.4819	ppb #	82
17) 2-Propanol	2.84	45	1588	5.0053	ppb #	1
18) Acetonitrile	2.92	41	8234	11.4489	ppb #	66
19) Methyl Acetate	3.01	43	2506	0.4630	ppb	100
20) Iodomethane	2.66	142	136	3.4318	ppb #	42
21) Acrylonitrile	3.47	52	1164	0.3224	ppb #	27
23) Carbon disulfide	2.73	76	4272	0.3565	ppb #	91
24) Methyl t-butyl ether (MtBE)	3.53	73	4470	0.4068	ppb #	85
25) Trans-1,2-DCE	2.51	96	929	0.4460	ppb #	29
26) Diisopropyl Ether	4.33	45	5310	0.4469	ppb	98
28) 1,1-DCA	4.09	63	2324	0.3408	ppb #	87
29) Vinyl Acetate	4.28	43	1096	0.4404	ppb #	78
30) Ethyl tert Butyl Ether	4.87	59	3018	0.2921	ppb #	71
31) MEK (2-Butanone)	5.06	43	384	0.3451	ppb #	44
32) Cis-1,2-DCE	4.97	96	1461	0.3764	ppb	77
33) 2,2-Dichloropropane	4.97	77	2653	0.4929	ppb #	87
36) Chloroform	5.44	83	2030	0.3405	ppb	76
37) Bromochloromethane	5.30	128	396	0.4182	ppb #	64
39) 1,1,1-TCA	5.65	97	775	0.3576	ppb	83
40) Cyclohexane	5.72	41	1216	0.3119	ppb #	47
41) 1,1-Dichloropropene	5.88	75	1235	0.2932	ppb #	69
42) 2,2,4-Trimethylpentane	6.27	57	3159	0.4099	ppb #	74
44) Carbon Tetrachloride	5.87	117	1412	0.3178	ppb	91
45) Tert Amyl Methyl Ether	6.36	73	3763	0.4032	ppb #	94
47) 1,2-DCA	6.17	62	1335	0.2754	ppb #	82

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	6.13	78	3977	0.3164	ppb	# 91
49) TCE	6.95	130	583	0.2773	ppb	# 83
50) 2-Pentanone	7.23	43	26915	11.1427	ppb	95
51) 1,2-Dichloropropane	7.21	63	1054	0.3171	ppb	# 86
52) Bromodichloromethane	7.54	83	950	0.3761	ppb	# 88
53) Methyl Cyclohexane	7.17	83	1304	0.2899	ppb	87
54) Dibromomethane	7.34	93	936	0.4031	ppb	73
55) 2-Chloroethyl vinyl ether	8.06	43	561	0.1327	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	1056	0.3166	ppb	# 59
57) 1-Bromo-2-chloroethane	7.89	63	1009	0.3978	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	1981	0.3597	ppb	# 33
59) Toluene	8.44	91	2264	0.2997	ppb	91
60) Trans-1,3-Dichloropropene	8.71	75	1802	0.3402	ppb	93
61) 1,1,2-TCA	8.90	83	948	0.3525	ppb	88
62) 2-Hexanone	9.39	43	1165	0.5167	ppb	# 36
65) 1,2-EDB	9.44	107	587	0.3026	ppb	84
66) Tetrachloroethene	9.06	166	1090	0.4552	ppb	# 66
68) 1,1,1,2-Tetrachloroethane	10.09	131	1465	0.3736	ppb	# 59
69) m&p-Xylene	10.27	91	7735	0.6556	ppb	93
70) o-Xylene	10.70	106	1265	0.3656	ppb	64
71) Styrene	10.71	104	3372	0.3176	ppb	# 79
73) 1,3-Dichloropropane	9.09	76	1757	0.3175	ppb	97
74) Dibromochloromethane	9.33	129	1527	0.3655	ppb	92
75) Chlorobenzene	10.00	112	3342	0.3448	ppb	92
76) Ethylbenzene	10.13	91	2494	0.2838	ppb	95
77) Bromoform	10.90	173	1263	0.3662	ppb	# 56
79) Isopropylbenzene	11.11	105	4366	0.2851	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	1899	0.4289	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	365	0.4730	ppb	# 70
82) t-1,4-Dichloro-2-Butene	11.50	53	290	0.2874	ppb	# 20
83) Bromobenzene	11.42	156	935	0.3763	ppb	87
84) n-Propylbenzene	11.56	91	2679	0.2875	ppb	# 79
85) 4-Ethyltoluene	11.69	105	4086	0.2888	ppb	98
86) 2-Chlorotoluene	11.65	91	2426	0.4103	ppb	86
87) 1,3,5-Trimethylbenzene	11.76	105	3515	0.2866	ppb	98
88) 4-Chlorotoluene	11.77	91	2028	0.3025	ppb	85
89) Tert-Butylbenzene	12.12	119	3713	0.2857	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	3808	0.3150	ppb	83
91) Sec-Butylbenzene	12.36	105	5100	0.3225	ppb	89
92) p-Isopropyltoluene	12.52	119	2805	0.3822	ppb	88
93) Benzyl Chloride	12.72	91	1923	0.3665	ppb	97
94) 1,3-DCB	12.46	146	1553	0.3526	ppb	# 82
95) 1,4-DCB	12.56	146	2832	0.3246	ppb	# 19
96) n-Butylbenzene	12.72	91	1923	0.3665	ppb	# 90
97) 1,2-DCB	12.97	146	2647	0.3123	ppb	89
98) Hexachloroethane	13.26	117	717	0.2695	ppb	77
100) 1,2,4-Trichlorobenzene	14.74	180	1528	0.2858	ppb	83
101) Hexachlorobutadiene	14.94	225	630	0.2371	ppb	# 62
102) Naphthalene	15.01	128	3003	0.2700	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	845	0.3555	ppb	# 72

Quantitation Report

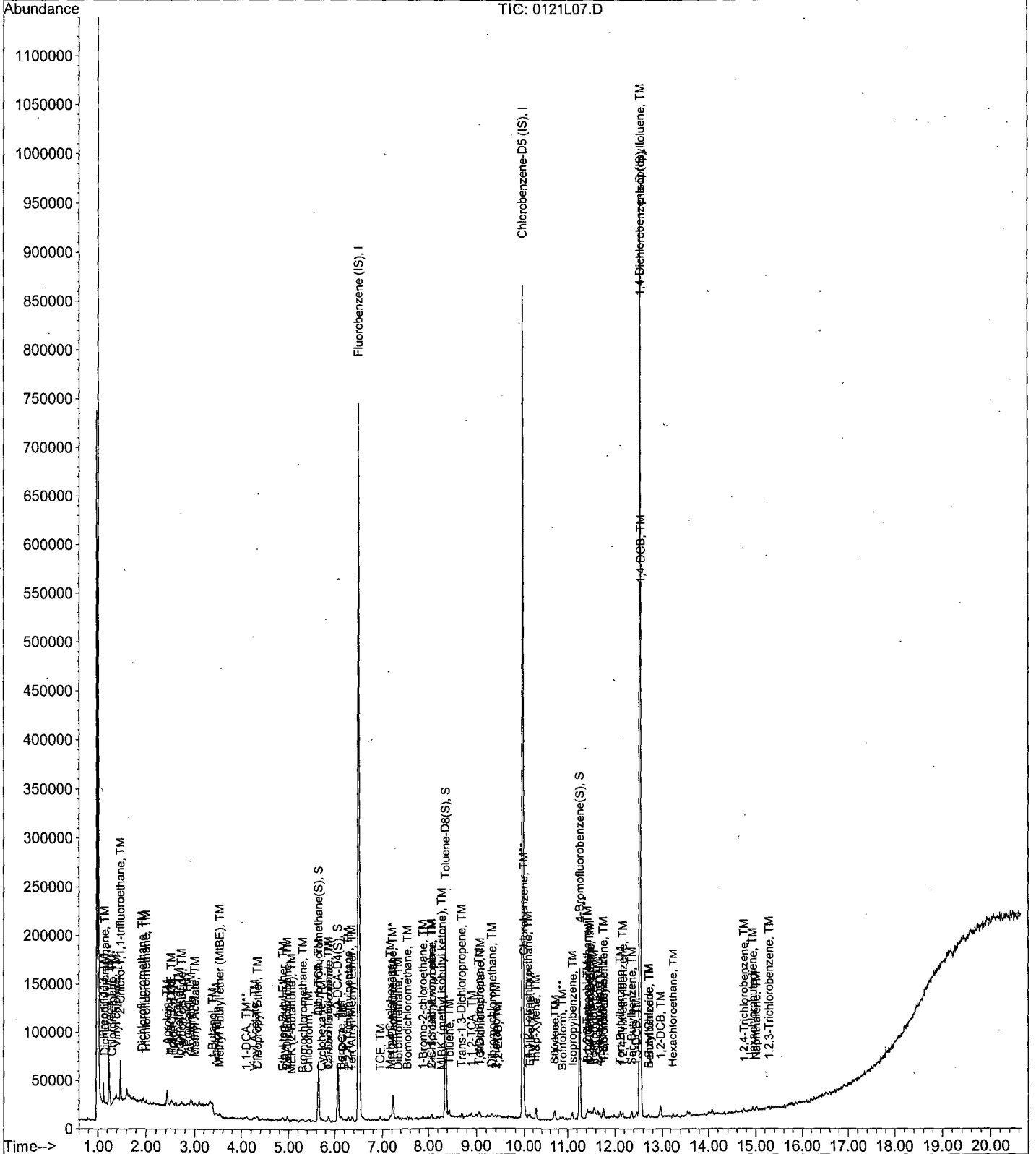
Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	357312	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	300736	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170368	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	34947	5.1902	ppb	0.00
Spiked Amount	25.000		Recovery	=	20.760%	
43) 1,2-DCA-D4(S)	6.07	65	41245	5.2533	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.012%	
64) Toluene-D8(S)	8.37	98	133613	5.4376	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.752%	
72) 4-Bromofluorobenzene(S)	11.27	95	54511	5.2884	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.152%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	9096	4.6601	ppb	93
3) Dichlorodifluoromethane	1.15	85	1374	0.4440	ppb	91
4) Freon 114	1.25	85	1492	0.6131	ppb	95
5) Chloromethane	1.29	50	2981	0.5991	ppb #	84
6) Vinyl chloride	1.38	62	1953	0.4354	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	19808	5.2194	ppb	96
8) Bromomethane	1.67	94	2192	-1.0854	ppb #	70
9) Chloroethane	1.76	64	1985	0.2660	ppb	88
10) Dichlorofluoromethane	1.95	67	5540	0.6791	ppb #	83
11) Trichlorofluoromethane	2.00	101	3185	0.5086	ppb #	67
12) Acrolein	2.43	56	25004	26.3615	ppb #	88
13) Acetone	2.61	43	1558	-1.3508	ppb #	86
14) Freon-113	2.54	101	1603	0.4617	ppb #	89
15) 1,1-DCE	2.52	63	641	0.5516	ppb #	49
16) t-Butanol	3.39	59	12761	30.0857	ppb	98
18) Acetonitrile	2.92	41	21649	29.8106	ppb	97
19) Methyl Acetate	3.01	43	2983	0.5765	ppb #	78
20) Iodomethane	2.67	142	189	3.4582	ppb #	42
21) Acrylonitrile	3.45	52	1139	0.2963	ppb #	48
22) Methylene chloride	3.09	84	3939	0.3188	ppb	91
23) Carbon disulfide	2.73	76	6490	0.5364	ppb	93
24) Methyl t-butyl ether (MtBE)	3.53	73	5941	0.5355	ppb #	94
25) Trans-1,2-DCE	2.53	96	1098	0.5221	ppb	95
26) Diisopropyl Ether	4.34	45	6000	0.5001	ppb	97
28) 1,1-DCA	4.11	63	3551	0.5157	ppb #	83
29) Vinyl Acetate	4.32	43	1311	0.5217	ppb #	98
30) Ethyl tert Butyl Ether	4.88	59	5000	0.4793	ppb #	88
32) Cis-1,2-DCE	4.97	96	2331	0.5947	ppb #	69
33) 2,2-Dichloropropane	4.97	77	3666	0.6746	ppb #	85
36) Chloroform	5.45	83	2813	0.4673	ppb	93
37) Bromochloromethane	5.31	128	533	0.5574	ppb #	56
39) 1,1,1-TCA	5.64	97	981	0.4483	ppb	92
40) Cyclohexane	5.73	41	3072	1.0042	ppb #	34
41) 1,1-Dichloropropene	5.88	75	2350	0.5525	ppb #	78
42) 2,2,4-Trimethylpentane	6.29	57	3842	0.4937	ppb #	64
44) Carbon Tetrachloride	5.87	117	1956	0.4359	ppb	96
45) Tert Amyl Methyl Ether	6.36	73	5061	0.5371	ppb #	78
47) 1,2-DCA	6.16	62	2674	0.5463	ppb #	73
48) Benzene	6.13	78	6990	0.5507	ppb	96

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	1318	0.6208	ppb	# 79
50) 2-Pentanone	7.23	43	61080	25.0422	ppb	98
51) 1,2-Dichloropropane	7.21	63	1748	0.5209	ppb	# 86
52) Bromodichloromethane	7.55	83	1213	0.4756	ppb	# 81
53) Methyl Cyclohexane	7.17	83	2551	0.5616	ppb	84
54) Dibromomethane	7.33	93	999	0.4261	ppb	87
56) MIBK (methyl isobutyl ket	8.29	43	1582	0.4698	ppb	93
57) 1-Bromo-2-chloroethane	7.89	63	1208	0.4717	ppb	# 79
58) Cis-1,3-Dichloropropene	8.07	75	2611	0.4695	ppb	# 69
59) Toluene	8.44	91	3753	0.4920	ppb	92
60) Trans-1,3-Dichloropropene	8.71	75	2839	0.5307	ppb	90
61) 1,1,2-TCA	8.90	83	1500	0.5523	ppb	83
65) 1,2-EDB	9.44	107	1016	0.5261	ppb	96
66) Tetrachloroethene	9.05	166	1200	0.5035	ppb	# 85
67) 1-Chlorohexane	10.00	91	3117	0.1588	ppb	# 86
68) 1,1,1,2-Tetrachloroethane	10.09	131	2072	0.5308	ppb	86
69) m&p-Xylene	10.27	91	11228	0.9560	ppb	85
70) o-Xylene	10.70	106	1684	0.4890	ppb	90
71) Styrene	10.71	104	5141	0.4864	ppb	96
73) 1,3-Dichloropropane	9.08	76	2815	0.5111	ppb	# 82
74) Dibromochloromethane	9.33	129	2158	0.5190	ppb	85
75) Chlorobenzene	10.00	112	4193	0.4346	ppb	# 79
76) Ethylbenzene	10.13	91	4251	0.4860	ppb	94
77) Bromoform	10.90	173	1493	0.4349	ppb	83
79) Isopropylbenzene	11.11	105	7463	0.4680	ppb	94
80) 1,1,2,2-Tetrachloroethane	11.42	83	2617	0.5675	ppb	# 90
81) 1,2,3-Trichloropropane	11.47	110	372	0.4628	ppb	83
82) t-1,4-Dichloro-2-Butene	11.50	53	555	0.5282	ppb	90
83) Bromobenzene	11.42	156	1097	0.4239	ppb	72
84) n-Propylbenzene	11.56	91	4087	0.4211	ppb	96
85) 4-Ethyltoluene	11.69	105	6374	0.4326	ppb	97
86) 2-Chlorotoluene	11.65	91	2862	0.4648	ppb	87
87) 1,3,5-Trimethylbenzene	11.76	105	5904	0.4622	ppb	99
88) 4-Chlorotoluene	11.76	91	3106	0.4448	ppb	100
89) Tert-Butylbenzene	12.11	119	6220	0.4595	ppb	85
90) 1,2,4-Trimethylbenzene	12.17	105	5826	0.4628	ppb	86
91) Sec-Butylbenzene	12.36	105	7440	0.4518	ppb	97
92) p-Isopropyltoluene	12.52	119	3615	0.4729	ppb	# 89
93) Benzyl Chloride	12.72	91	2920	0.5344	ppb	93
94) 1,3-DCB	12.46	146	2123	0.4628	ppb	88
95) 1,4-DCB	12.57	146	4286	0.4717	ppb	89
96) n-Butylbenzene	12.72	91	2920	0.5344	ppb	# 75
97) 1,2-DCB	12.98	146	4231	0.4793	ppb	94
98) Hexachloroethane	13.26	117	1203	0.4342	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.80	75	555	-0.1026	ppb	# 39
100) 1,2,4-Trichlorobenzene	14.75	180	2455	0.4409	ppb	# 65
101) Hexachlorobutadiene	14.94	225	1121	0.4051	ppb	80
102) Naphthalene	15.01	128	5369	0.4636	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	1096	0.4427	ppb	# 74



Quantitation Report

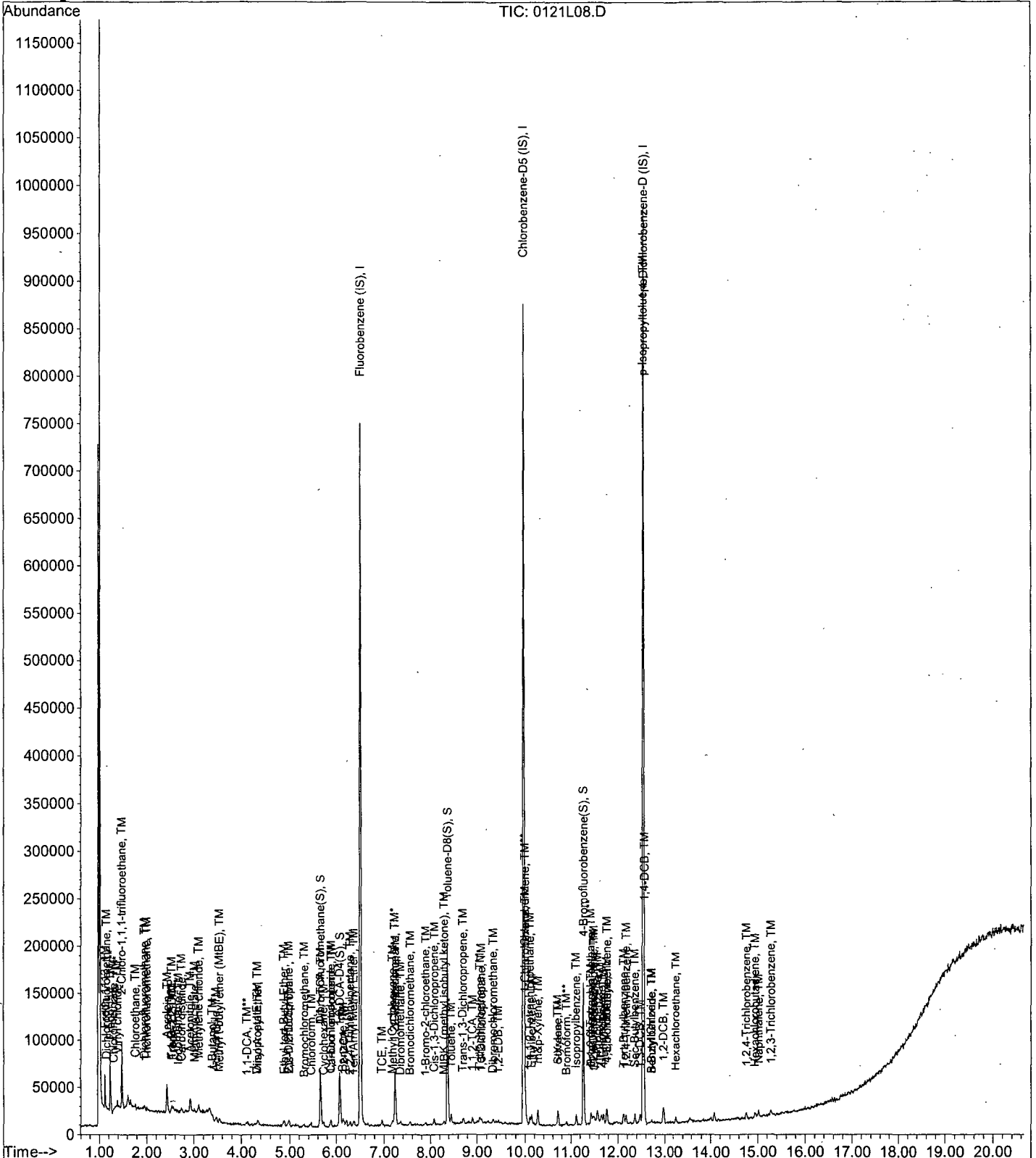
Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	348544	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305600	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	164672	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	62019	9.4425	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.768%	
43) 1,2-DCA-D4(S)	6.07	65	71668	9.3578	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.432%	
64) Toluene-D8(S)	8.37	98	226450	9.0692	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.276%	
72) 4-Bromofluorobenzene(S)	11.27	95	98697	9.4226	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.692%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	20572	10.8046	ppb	99
3) Dichlorodifluoromethane	1.15	85	3607	1.1950	ppb	98
4) Freon 114	1.25	85	2739	1.1538	ppb	100
5) Chloromethane	1.29	50	5313	1.0945	ppb	96
6) Vinyl chloride	1.38	62	4015	0.9176	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	39864	10.7683	ppb	96
8) Bromomethane	1.67	94	3234	-0.6410	ppb	99
9) Chloroethane	1.76	64	3027	0.7833	ppb	# 79
10) Dichlorofluoromethane	1.95	67	8554	1.0750	ppb	100
11) Trichlorofluoromethane	2.00	101	6100	0.9985	ppb	90
12) Acrolein	2.43	56	48212	52.1082	ppb	# 87
13) Acetone	2.62	43	1777	-1.0282	ppb	# 62
14) Freon-113	2.54	101	4023	1.1879	ppb	93
15) 1,1-DCE	2.52	63	1511	1.3331	ppb	# 58
16) t-Butanol	3.38	59	19859	47.9979	ppb	98
17) 2-Propanol	2.84	45	3605	11.5360	ppb	# 51
18) Acetonitrile	2.92	41	37610	53.0917	ppb	91
19) Methyl Acetate	3.02	43	8151	1.9244	ppb	# 73
20) Iodomethane	2.66	142	308	3.5230	ppb	# 67
21) Acrylonitrile	3.45	52	1988	0.9420	ppb	# 55
22) Methylene chloride	3.10	84	6042	0.8352	ppb	94
23) Carbon disulfide	2.73	76	13465	1.1409	ppb	# 90
24) Methyl t-butyl ether (MtBE)	3.54	73	10257	0.9478	ppb	# 86
25) Trans-1,2-DCE	2.52	96	2185	1.0650	ppb	96
26) Diisopropyl Ether	4.33	45	11509	0.9835	ppb	94
28) 1,1-DCA	4.10	63	6686	0.9954	ppb	95
29) Vinyl Acetate	4.28	43	2419	0.9868	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	9864	0.9694	ppb	95
31) MEK (2-Butanone)	5.07	43	3241	1.8771	ppb	# 76
32) Cis-1,2-DCE	4.99	96	3876	1.0138	ppb	# 68
33) 2,2-Dichloropropane	4.97	77	5657	1.0671	ppb	96
36) Chloroform	5.45	83	6481	1.1036	ppb	83
37) Bromochloromethane	5.30	128	1084	1.1621	ppb	77
39) 1,1,1-TCA	5.65	97	2350	1.1009	ppb	97
40) Cyclohexane	5.72	41	3422	1.1680	ppb	81
41) 1,1-Dichloropropene	5.88	75	4570	1.1015	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	8300	1.0933	ppb	96
44) Carbon Tetrachloride	5.87	117	4958	1.1328	ppb	75
45) Tert Amyl Methyl Ether	6.36	73	9419	1.0247	ppb	# 96

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM;DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	4562	0.9555	ppb	# 91
48) Benzene	6.14	78	12769	1.0313	ppb	90
49) TCE	6.95	130	2195	1.0599	ppb	# 84
50) 2-Pentanone	7.23	43	123775	52.0231	ppb	97
51) 1,2-Dichloropropane	7.21	63	3792	1.1584	ppb	# 81
52) Bromodichloromethane	7.54	83	2563	1.0303	ppb	# 97
53) Methyl Cyclohexane	7.17	83	4766	1.0756	ppb	92
54) Dibromomethane	7.34	93	2368	1.0354	ppb	93
55) 2-Chloroethyl vinyl ether	7.94	43	474	899.6219	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	3267	0.9945	ppb	# 79
57) 1-Bromo-2-chloroethane	7.88	63	2787	1.1156	ppb	90
58) Cis-1,3-Dichloropropene	8.07	75	5602	1.0326	ppb	95
59) Toluene	8.44	91	7286	0.9792	ppb	97
60) Trans-1,3-Dichloropropene	8.70	75	5571	1.0676	ppb	95
61) 1,1,2-TCA	8.90	83	2628	0.9920	ppb	85
62) 2-Hexanone	9.22	43	2444	1.1004	ppb	# 78
65) 1,2-EDB	9.44	107	2163	1.1023	ppb	94
66) Tetrachloroethene	9.05	166	2801	1.1565	ppb	85
67) 1-Chlorohexane	10.00	91	6065	0.8960	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	3940	0.9934	ppb	90
69) m&p-Xylene	10.26	91	23239	1.9473	ppb	94
70) o-Xylene	10.70	106	3737	1.0680	ppb	85
71) Styrene	10.71	104	10573	0.9845	ppb	98
73) 1,3-Dichloropropane	9.08	76	6227	1.1127	ppb	100
74) Dibromochloromethane	9.33	129	4293	1.0160	ppb	85
75) Chlorobenzene	9.99	112	10293	1.0499	ppb	97
76) Ethylbenzene	10.13	91	9464	1.0647	ppb	97
77) Bromoform	10.90	173	4240	1.2153	ppb	95
79) Isopropylbenzene	11.11	105	15582	1.0109	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	4690	1.0522	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	881	1.1341	ppb	81
82) t-1,4-Dichloro-2-Butene	11.49	53	1386	1.3646	ppb	# 66
83) Bromobenzene	11.42	156	2845	1.1374	ppb	93
84) n-Propylbenzene	11.56	91	9217	0.9825	ppb	98
85) 4-Ethyltoluene	11.69	105	14594	1.0248	ppb	95
86) 2-Chlorotoluene	11.64	91	6392	1.0740	ppb	94
87) 1,3,5-Trimethylbenzene	11.76	105	12213	0.9893	ppb	88
88) 4-Chlorotoluene	11.76	91	7297	1.0811	ppb	99
89) Tert-Butylbenzene	12.11	119	12116	0.9261	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	10589	0.8702	ppb	88
91) Sec-Butylbenzene	12.36	105	15873	0.9972	ppb	99
92) p-Isopropyltoluene	12.52	119	7311	0.9895	ppb	97
93) Benzyl Chloride	12.72	91	5129	0.9711	ppb	88
94) 1,3-DCB	12.46	146	4634	1.0452	ppb	98
95) 1,4-DCB	12.56	146	9518	1.0839	ppb	92
96) n-Butylbenzene	12.72	91	5129	0.9711	ppb	# 87
97) 1,2-DCB	12.97	146	8402	0.9847	ppb	97
98) Hexachloroethane	13.26	117	2554	0.9536	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.81	75	1487	0.9120	ppb	# 50
100) 1,2,4-Trichlorobenzene	14.74	180	4920	0.9141	ppb	85
101) Hexachlorobutadiene	14.94	225	2250	0.8411	ppb	93
102) Naphthalene	15.01	128	9306	0.8313	ppb	93
103) 1,2,3-Trichlorobenzene	15.27	180	2118	0.8851	ppb	93

Quantitation Report

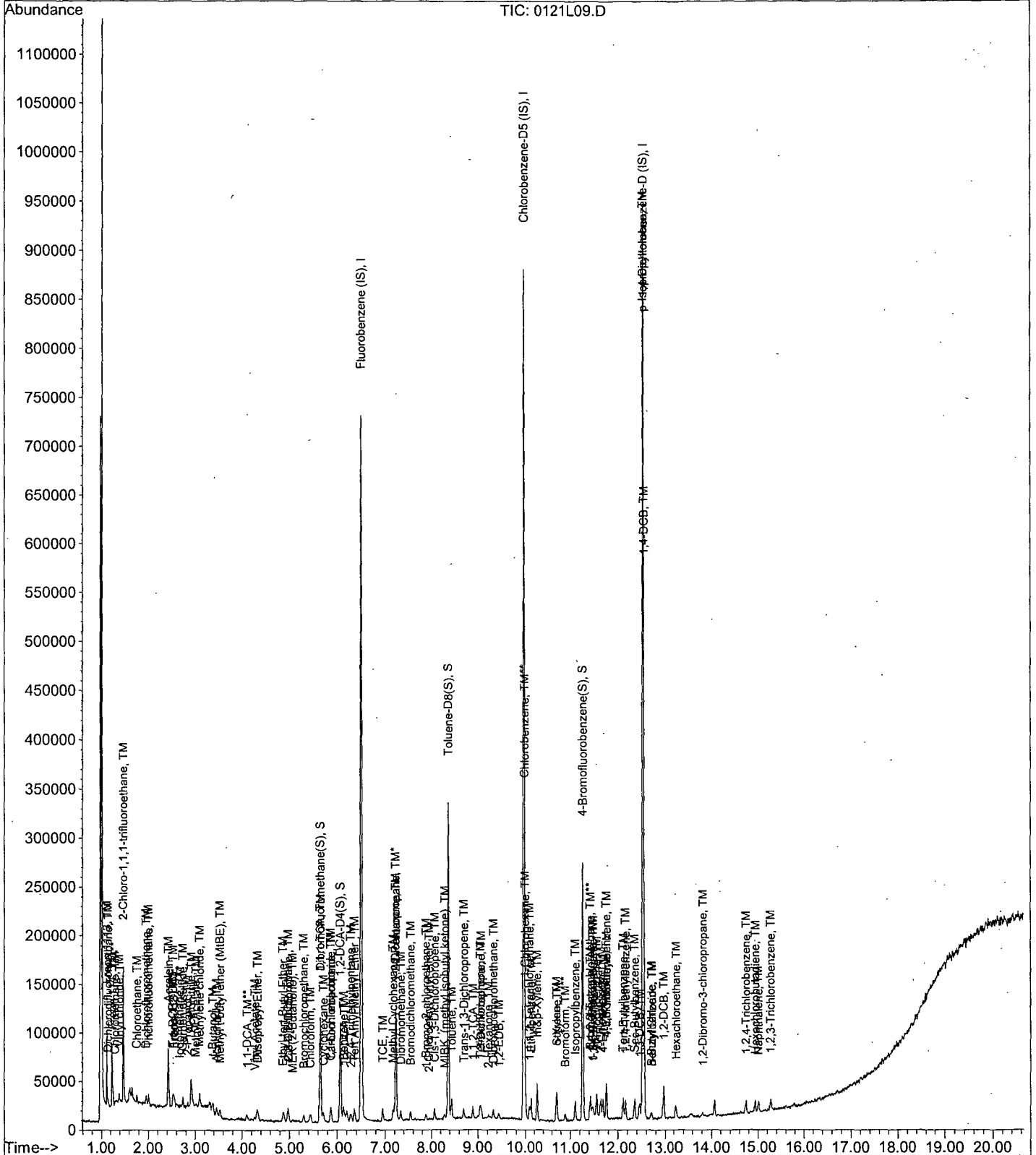
Data File : M:\LOKI\DATA\190121\0121L09.D  
Acq On : 21 Jan 19 18:47  
Sample : 1.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	369600	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	318272	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170944	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	62734	9.0072	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	36.028%	
43) 1,2-DCA-D4(S)	6.07	65	73820	9.0896	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	36.360%	
64) Toluene-D8(S)	8.37	98	238805	9.1832	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	36.732%	
72) 4-Bromofluorobenzene(S)	11.26	95	103026	9.4443	ppb	0.00
Spiked Amount				25.000		
			Recovery	=	37.776%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	37205	18.4273	ppb	96
3) Dichlorodifluoromethane	1.14	85	6620	2.0683	ppb	97
4) Freon 114	1.25	85	4136	1.6430	ppb #	74
5) Chloromethane	1.29	50	9871	1.9177	ppb	96
6) Vinyl chloride	1.38	62	9757	2.1029	ppb	89
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	77480	19.7371	ppb	98
8) Bromomethane	1.66	94	7618	0.9610	ppb	86
9) Chloroethane	1.76	64	4613	1.4108	ppb	89
10) Dichlorofluoromethane	1.95	67	15265	1.8090	ppb	94
11) Trichlorofluoromethane	2.00	101	11836	1.8271	ppb	96
12) Acrolein	2.43	56	70018	71.3652	ppb #	94
13) Acetone	2.61	43	3142	0.4593	ppb	94
14) Freon-113	2.55	101	7072	1.9692	ppb	87
15) 1,1-DCE	2.52	63	2480	2.0633	ppb	87
16) t-Butanol	3.39	59	28922	65.9203	ppb #	92
17) 2-Propanol	2.85	45	5791	17.4755	ppb #	53
18) Acetonitrile	2.92	41	53663	71.4371	ppb	99
19) Methyl Acetate	3.02	43	8362	1.8561	ppb	97
20) Iodomethane	2.67	142	805	3.7594	ppb #	77
21) Acrylonitrile	3.45	52	3175	1.6828	ppb #	60
22) Methylene chloride	3.10	84	10633	1.7709	ppb	93
23) Carbon disulfide	2.73	76	25765	2.0587	ppb	97
24) Methyl t-butyl ether (MtBE)	3.54	73	22952	2.0000	ppb	99
25) Trans-1,2-DCE	2.52	96	4399	2.0221	ppb	91
26) Diisopropyl Ether	4.33	45	23994	1.9336	ppb #	90
28) 1,1-DCA	4.11	63	14054	1.9731	ppb	93
29) Vinyl Acetate	4.27	43	5002	1.9243	ppb #	85
30) Ethyl tert Butyl Ether	4.87	59	20262	1.8777	ppb	100
31) MEK (2-Butanone)	5.08	43	4876	2.6034	ppb	92
32) Cis-1,2-DCE	4.98	96	8153	2.0110	ppb	97
33) 2,2-Dichloropropane	4.96	77	11317	2.0131	ppb #	86
36) Chloroform	5.45	83	11467	1.8414	ppb	90
37) Bromochloromethane	5.30	128	1875	1.8956	ppb	95
39) 1,1,1-TCA	5.65	97	4285	1.8931	ppb	91
40) Cyclohexane	5.72	41	6776	2.3103	ppb	81
41) 1,1-Dichloropropene	5.88	75	8633	1.9623	ppb #	88
42) 2,2,4-Trimethylpentane	6.29	57	16090	1.9987	ppb #	75
44) Carbon Tetrachloride	5.86	117	8488	1.8288	ppb	89
45) Tert Amyl Methyl Ether	6.36	73	18748	1.9234	ppb #	95

(#) = qualifier out of range (m) = manual integration  
 0121L10.D L0121W.M Tue Jan 22 13:43:44 2019 page 372 of 674

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	10539	2.0817	ppb	# 89
48) Benzene	6.14	78	25147	1.9153	ppb	98
49) TCE	6.95	130	3719	1.6935	ppb	87
50) 2-Pentanone	7.23	43	182419	72.3035	ppb	98
51) 1,2-Dichloropropane	7.21	63	6826	1.9664	ppb	100
52) Bromodichloromethane	7.54	83	5013	1.9003	ppb	# 95
53) Methyl Cyclohexane	7.18	83	9102	1.9371	ppb	90
54) Dibromomethane	7.34	93	4937	2.0356	ppb	97
55) 2-Chloroethyl vinyl ether	7.90	43	932	1.8970	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	7552	2.1680	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	5549	2.0946	ppb	94
58) Cis-1,3-Dichloropropene	8.07	75	11723	2.0378	ppb	91
59) Toluene	8.45	91	14678	1.8603	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	10769	1.9462	ppb	98
61) 1,1,2-TCA	8.90	83	5344	1.9022	ppb	95
62) 2-Hexanone	9.22	43	4965	2.1081	ppb	# 86
65) 1,2-EDB	9.44	107	3811	1.8648	ppb	90
66) Tetrachloroethene	9.06	166	5167	2.0484	ppb	90
67) 1-Chlorohexane	10.00	91	9318	1.6292	ppb	91
68) 1,1,1,2-Tetrachloroethane	10.09	131	8000	1.9367	ppb	82
69) m&p-Xylene	10.27	91	46006	3.7015	ppb	95
70) o-Xylene	10.70	106	6739	1.8492	ppb	91
71) Styrene	10.71	104	20607	1.8423	ppb	100
73) 1,3-Dichloropropane	9.08	76	11529	1.9780	ppb	94
74) Dibromochloromethane	9.33	129	8523	1.9368	ppb	88
75) Chlorobenzene	10.00	112	19225	1.8830	ppb	93
76) Ethylbenzene	10.14	91	17208	1.8589	ppb	88
77) Bromoform	10.90	173	7421	2.0424	ppb	96
79) Isopropylbenzene	11.11	105	31938	1.9961	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	9448	2.0418	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	1466	1.8179	ppb	# 67
82) t-1,4-Dichloro-2-Butene	11.49	53	1974	1.8722	ppb	# 76
83) Bromobenzene	11.42	156	5202	2.0033	ppb	92
84) n-Propylbenzene	11.56	91	18318	1.8810	ppb	99
85) 4-Ethyltoluene	11.69	105	27662	1.8712	ppb	99
86) 2-Chlorotoluene	11.64	91	12879	2.0845	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	24068	1.8780	ppb	86
88) 4-Chlorotoluene	11.77	91	13939	1.9894	ppb	97
89) Tert-Butylbenzene	12.11	119	27552	2.0286	ppb	90
90) 1,2,4-Trimethylbenzene	12.17	105	23275	1.8426	ppb	92
91) Sec-Butylbenzene	12.36	105	32415	1.9618	ppb	96
92) p-Isopropyltoluene	12.52	119	14671	1.9127	ppb	98
93) Benzyl Chloride	12.71	91	10031	1.8295	ppb	# 89
94) 1,3-DCB	12.46	146	8745	1.9001	ppb	98
95) 1,4-DCB	12.57	146	18721	2.0536	ppb	98
96) n-Butylbenzene	12.71	91	10031	1.8295	ppb	97
97) 1,2-DCB	12.97	146	17360	1.9600	ppb	96
98) Hexachloroethane	13.26	117	4671	1.6801	ppb	# 80
99) 1,2-Dibromo-3-chloropropan	13.82	75	2144	1.5293	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	9801	1.7542	ppb	89
101) Hexachlorobutadiene	14.94	225	5881	2.1178	ppb	92
102) Naphthalene	15.01	128	20275	1.7447	ppb	95
103) 1,2,3-Trichlorobenzene	15.27	180	4893	1.9697	ppb	90

Quantitation Report

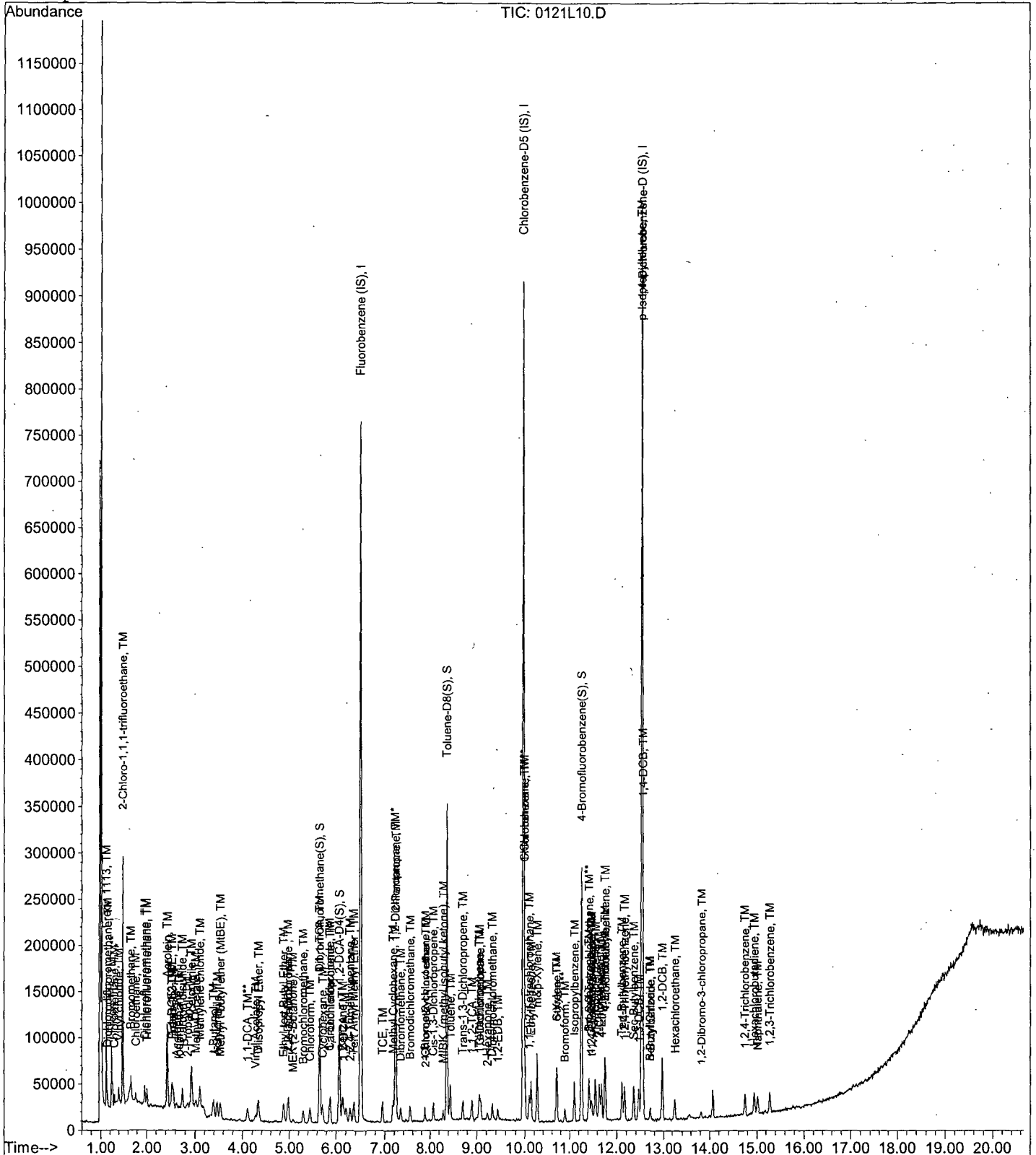
Data File : M:\LOKI\DATA\190121\0121L10.D  
Acq On : 21 Jan 19 19:16  
Sample : 2.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	353344	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	308864	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174208	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	168508	25.3070	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.228%	
43) 1,2-DCA-D4(S)	6.07	65	197954	25.4960	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.984%	
64) Toluene-D8(S)	8.37	98	625618	24.7908	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.164%	
72) 4-Bromofluorobenzene(S)	11.26	95	266638	25.1870	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.748%	
Target Compounds						Qvalue
2) Freon 1113	1.12	116	76167	39.4603	ppb	98
3) Dichlorodifluoromethane	1.15	85	15755	5.1488	ppb	92
4) Freon 114	1.25	85	11613	4.8254	ppb	87
5) Chloromethane	1.29	50	25162	5.1133	ppb	91
6) Vinyl chloride	1.38	62	23045	5.1953	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	151104	40.2627	ppb	97
8) Bromomethane	1.66	94	16973	4.8374	ppb	93
9) Chloroethane	1.76	64	13536	5.6799	ppb	91
10) Dichlorofluoromethane	1.95	67	38421	4.7627	ppb	92
11) Trichlorofluoromethane	2.00	101	31539	5.0927	ppb	99
12) Acrolein	2.43	56	93376	99.5512	ppb	# 93
13) Acetone	2.61	43	6369	4.6227	ppb	94
14) Freon-113	2.55	101	16990	4.9485	ppb	95
15) 1,1-DCE	2.52	63	5104	4.4418	ppb	93
16) t-Butanol	3.38	59	36595	87.2463	ppb	97
17) 2-Propanol	2.84	45	12356	39.0021	ppb	# 77
18) Acetonitrile	2.92	41	68662	95.6091	ppb	96
19) Methyl Acetate	3.02	43	19861	4.8663	ppb	98
20) Iodomethane	2.67	142	2911	4.8665	ppb	99
21) Acrylonitrile	3.44	52	6854	4.4564	ppb	99
22) Methylene chloride	3.10	84	23312	4.8156	ppb	96
23) Carbon disulfide	2.73	76	57330	4.7917	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	53831	4.9065	ppb	97
25) Trans-1,2-DCE	2.52	96	10519	5.0577	ppb	98
26) Diisopropyl Ether	4.33	45	59512	5.0164	ppb	98
28) 1,1-DCA	4.10	63	33514	4.9216	ppb	97
29) Vinyl Acetate	4.33	43	12055	4.8511	ppb	# 98
30) Ethyl tert Butyl Ether	4.87	59	49662	4.8141	ppb	98
31) MEK (2-Butanone)	5.07	43	11339	6.1283	ppb	96
32) Cis-1,2-DCE	4.98	96	18809	4.8528	ppb	93
33) 2,2-Dichloropropane	4.97	77	23684	4.4069	ppb	95
36) Chloroform	5.45	83	28317	4.7565	ppb	99
37) Bromochloromethane	5.30	128	4883	5.1639	ppb	100
39) 1,1,1-TCA	5.65	97	11000	5.0834	ppb	95
40) Cyclohexane	5.72	41	13524	4.9854	ppb	96
41) 1,1-Dichloropropene	5.88	75	20553	4.8866	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	38125	4.9538	ppb	98
44) Carbon Tetrachloride	5.87	117	22586	5.0901	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	46716	5.0132	ppb	96



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	23438	4.8425	ppb	99
48) Benzene	6.13	78	62771	5.0008	ppb	97
49) TCE	6.95	130	11108	5.2907	ppb	93
50) 2-Pentanone	7.23	43	243642	101.0126	ppb	98
51) 1,2-Dichloropropane	7.20	63	16239	4.8934	ppb	100
52) Bromodichloromethane	7.55	83	13170	5.2222	ppb	94
53) Methyl Cyclohexane	7.17	83	22090	4.9175	ppb	97
54) Dibromomethane	7.34	93	12218	5.2695	ppb	92
55) 2-Chloroethyl vinyl ether	7.94	43	1355	4.3832	ppb	97
56) MIBK (methyl isobutyl ket	8.28	43	19404	5.8267	ppb #	88
57) 1-Bromo-2-chloroethane	7.89	63	12398	4.8951	ppb	91
58) Cis-1,3-Dichloropropene	8.07	75	27380	4.9783	ppb	95
59) Toluene	8.44	91	38744	5.1364	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	25924	4.9006	ppb	99
61) 1,1,2-TCA	8.90	83	13197	4.9136	ppb	88
62) 2-Hexanone	9.22	43	11122	4.9396	ppb	92
65) 1,2-EDB	9.44	107	9722	4.9020	ppb	83
66) Tetrachloroethene	9.05	166	12132	4.9562	ppb	98
67) 1-Chlorohexane	10.00	91	21480	4.7600	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	18966	4.7312	ppb	97
69) m&p-Xylene	10.26	91	120535	9.9933	ppb	95
70) o-Xylene	10.70	106	17040	4.8182	ppb	97
71) Styrene	10.71	104	56179	5.1756	ppb	92
73) 1,3-Dichloropropane	9.08	76	27907	4.9339	ppb	92
74) Dibromochloromethane	9.33	129	21132	4.9484	ppb	90
75) Chlorobenzene	10.00	112	49981	5.0444	ppb	96
76) Ethylbenzene	10.13	91	43976	4.8951	ppb	98
77) Bromoform	10.90	173	17972	5.0970	ppb	96
79) Isopropylbenzene	11.11	105	81475	4.9966	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	22906	4.8574	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	4067	4.9487	ppb #	76
82) t-1,4-Dichloro-2-Butene	11.49	53	5279	4.9131	ppb	86
83) Bromobenzene	11.43	156	13375	5.0543	ppb	95
84) n-Propylbenzene	11.56	91	49969	5.0351	ppb	97
85) 4-Ethyltoluene	11.69	105	70713	4.6939	ppb	97
86) 2-Chlorotoluene	11.64	91	31752	5.0428	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	63419	4.8559	ppb	94
88) 4-Chlorotoluene	11.76	91	35912	5.0293	ppb	100
89) Tert-Butylbenzene	12.12	119	68550	4.9526	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	62396	4.8472	ppb	99
91) Sec-Butylbenzene	12.35	105	83294	4.9465	ppb	99
92) p-Isopropyltoluene	12.52	119	35808	4.5810	ppb	99
93) Benzyl Chloride	12.72	91	26928	4.8193	ppb	95
94) 1,3-DCB	12.46	146	23904	5.0965	ppb	98
95) 1,4-DCB	12.56	146	44420	4.7814	ppb	91
96) n-Butylbenzene	12.72	91	26928	4.8193	ppb #	90
97) 1,2-DCB	12.97	146	44805	4.9638	ppb	94
98) Hexachloroethane	13.26	117	14368	5.0712	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.82	75	5658	5.0335	ppb	97
100) 1,2,4-Trichlorobenzene	14.74	180	25473	4.4737	ppb	89
101) Hexachlorobutadiene	14.93	225	14153	5.0012	ppb	97
102) Naphthalene	15.01	128	54729	4.6213	ppb	94
103) 1,2,3-Trichlorobenzene	15.27	180	11326	4.4740	ppb	96

Quantitation Report

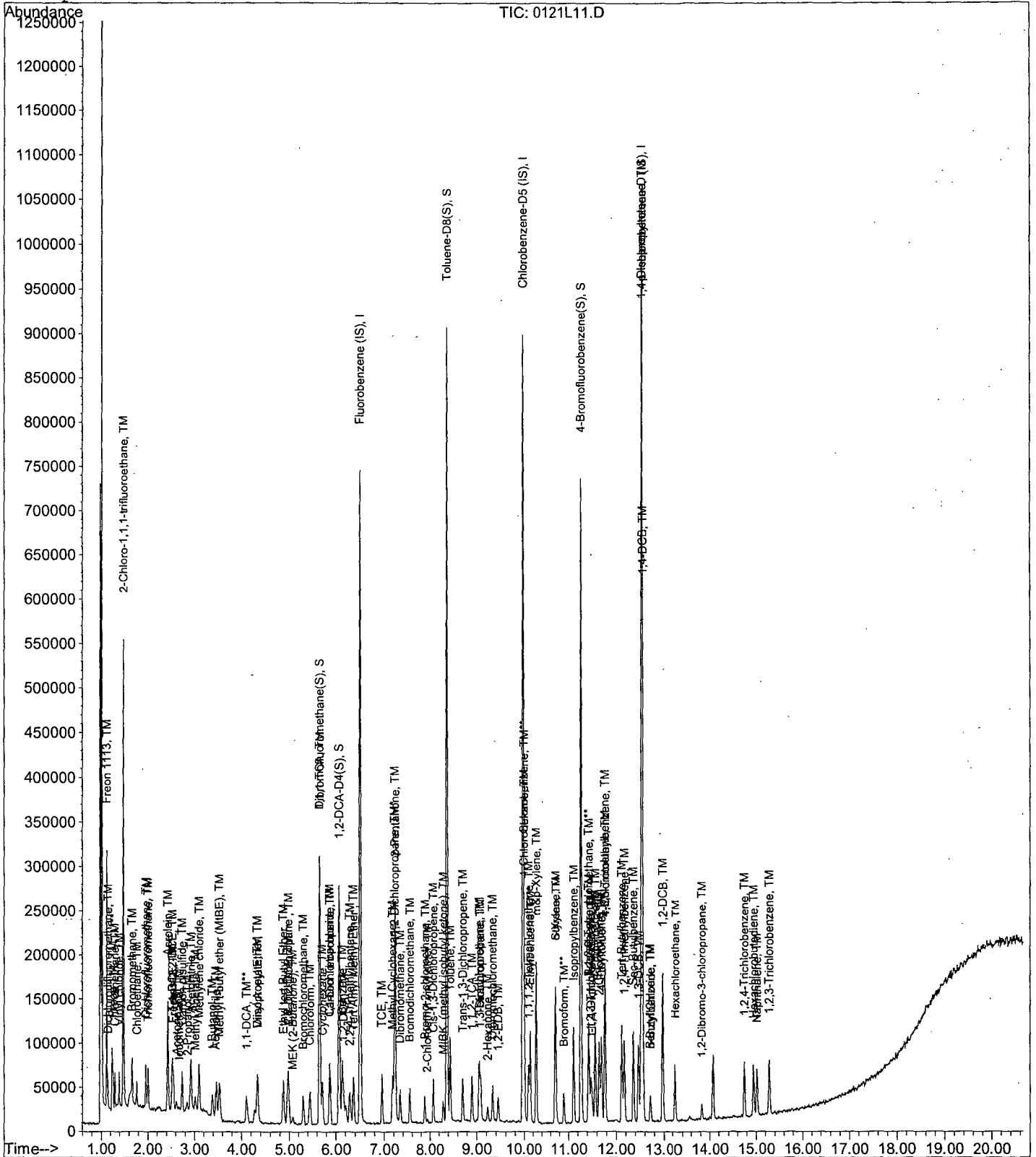
Data File : M:\LOKI\DATA\190121\0121L11.D  
Acq On : 21 Jan 19 19:44  
Sample : 5.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV; CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	368896	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	312384	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	171968	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	171899	24.7279	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.912%	
43) 1,2-DCA-D4(S)	6.07	65	197736	24.3942	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.576%	
64) Toluene-D8(S)	8.37	98	643709	25.2202	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.880%	
72) 4-Bromofluorobenzene(S)	11.26	95	270690	25.2817	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.128%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 113	1.12	116	198769	98.6361	ppb	100
3) Dichlorodifluoromethane	1.15	85	30773	8.8455	ppb	100
4) Freon 114	1.25	85	25160	10.0137	ppb	100
5) Chloromethane	1.29	50	48026	9.3482	ppb	100
6) Vinyl chloride	1.38	62	46975	10.1436	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	388800	99.2310	ppb	100
8) Bromomethane	1.65	94	31694	10.1920	ppb	100
9) Chloroethane	1.75	64	22898	9.6079	ppb	100
10) Dichlorofluoromethane	1.95	67	78702	9.3447	ppb	100
11) Trichlorofluoromethane	2.00	101	62822	9.7164	ppb	100
12) Acrolein	2.43	56	114170	120.8852	ppb	100
13) Acetone	2.62	43	10852	9.6031	ppb	100
14) Freon-113	2.54	101	34802	9.7090	ppb	100
15) 1,1-DCE	2.52	63	10525	8.7733	ppb	100
16) t-Butanol	3.38	59	55623	127.0204	ppb	100
17) 2-Propanol	2.84	45	29552	92.9936	ppb	# 100
18) Acetonitrile	2.92	41	89807	119.7807	ppb	100
19) Methyl Acetate	3.02	43	40350	9.6323	ppb	100
20) Iodomethane	2.67	142	8529	7.5851	ppb	100
21) Acrylonitrile	3.45	52	14652	9.6716	ppb	100
22) Methylene chloride	3.10	84	46385	9.7064	ppb	100
23) Carbon disulfide	2.73	76	118117	9.4561	ppb	100
24) Methyl t-butyl ether (MtBE)	3.54	73	112450	9.8173	ppb	100
25) Trans-1,2-DCE	2.52	96	21024	9.6824	ppb	100
26) Diisopropyl Ether	4.33	45	119590	9.6556	ppb	100
28) 1,1-DCA	4.10	63	68991	9.7043	ppb	100
29) Vinyl Acetate	4.33	43	23279	8.9728	ppb	100
30) Ethyl tert Butyl Ether	4.87	59	104802	9.7309	ppb	100
31) MEK (2-Butanone)	5.07	43	18395	9.4436	ppb	100
32) Cis-1,2-DCE	4.98	96	37183	9.1889	ppb	100
33) 2,2-Dichloropropane	4.97	77	51272	9.1379	ppb	100
36) Chloroform	5.45	83	61890	9.9576	ppb	100
37) Bromochloromethane	5.30	128	9165	9.2836	ppb	100
39) 1,1,1-TCA	5.65	97	22176	9.8160	ppb	100
40) Cyclohexane	5.71	41	26205	9.3805	ppb	100
41) 1,1-Dichloropropene	5.88	75	42586	9.6982	ppb	100
42) 2,2,4-Trimethylpentane	6.28	57	77117	9.5977	ppb	100
44) Carbon Tetrachloride	5.87	117	44622	9.6323	ppb	100
45) Tert Amyl Methyl Ether	6.36	73	94295	9.6924	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	49446	9.7852	ppb	100
48) Benzene	6.13	78	125189	9.5529	ppb	100
49) TCE	6.95	130	21696	9.8982	ppb	100
50) 2-Pentanone	7.23	43	309909	123.0698	ppb	100
51) 1,2-Dichloropropane	7.21	63	32295	9.3213	ppb	100
52) Bromodichloromethane	7.55	83	25920	9.8445	ppb	100
53) Methyl Cyclohexane	7.17	83	45341	9.6679	ppb	100
54) Dibromomethane	7.34	93	24082	9.9485	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	824	4.0693	ppb	100
56) MIBK (methyl isobutyl ket	8.29	43	33964	9.7689	ppb	100
57) 1-Bromo-2-chloroethane	7.89	63	24984	9.4486	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	55998	9.7524	ppb	100
59) Toluene	8.44	91	79664	10.1160	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	54074	9.7911	ppb	100
61) 1,1,2-TCA	8.90	83	27689	9.8748	ppb	100
62) 2-Hexanone	9.22	43	23961	10.1932	ppb	100
65) 1,2-EDB	9.44	107	20104	10.0225	ppb	100
66) Tetrachloroethene	9.05	166	24216	9.7813	ppb	100
67) 1-Chlorohexane	10.00	91	41411	9.6597	ppb	100
68) 1,1,1,2-Tetrachloroethane	10.09	131	40335	9.9484	ppb	100
69) m&p-Xylene	10.26	91	242518	19.8801	ppb	100
70) o-Xylene	10.70	106	36056	10.0803	ppb	100
71) Styrene	10.71	104	108468	9.8801	ppb	100
73) 1,3-Dichloropropane	9.08	76	55762	9.7475	ppb	100
74) Dibromochloromethane	9.33	129	43274	10.0191	ppb	100
75) Chlorobenzene	10.00	112	103383	10.3165	ppb	100
76) Ethylbenzene	10.13	91	92144	10.1413	ppb	100
77) Bromoform	10.90	173	35559	9.9712	ppb	100
79) Isopropylbenzene	11.11	105	165721	10.2956	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	44387	9.5353	ppb	100
81) 1,2,3-Trichloropropane	11.47	110	8530	10.5144	ppb	100
82) t-1,4-Dichloro-2-Butene	11.50	53	9944	9.3753	ppb	100
83) Bromobenzene	11.42	156	26392	10.1033	ppb	100
84) n-Propylbenzene	11.56	91	98217	10.0256	ppb	100
85) 4-Ethyltoluene	11.69	105	149952	10.0834	ppb	100
86) 2-Chlorotoluene	11.64	91	62128	9.9956	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	131873	10.2288	ppb	100
88) 4-Chlorotoluene	11.76	91	72632	10.3043	ppb	100
89) Tert-Butylbenzene	12.11	119	139174	10.1860	ppb	100
90) 1,2,4-Trimethylbenzene	12.17	105	131745	10.3678	ppb	100
91) Sec-Butylbenzene	12.35	105	169371	10.1893	ppb	100
92) p-Isopropyltoluene	12.52	119	74168	9.6121	ppb	100
93) Benzyl Chloride	12.71	91	52447	9.5088	ppb	100
94) 1,3-DCB	12.46	146	47080	10.1684	ppb	100
95) 1,4-DCB	12.56	146	94601	10.3156	ppb	100
96) n-Butylbenzene	12.71	91	52447	9.5088	ppb	100
97) 1,2-DCB	12.97	146	88322	9.9123	ppb	100
98) Hexachloroethane	13.26	117	29398	10.5111	ppb	100
99) 1,2-Dibromo-3-chloropropan	13.82	75	9836	9.3781	ppb	100
100) 1,2,4-Trichlorobenzene	14.74	180	53855	9.5816	ppb	100
101) Hexachlorobutadiene	14.94	225	27768	9.9401	ppb	100
102) Naphthalene	15.01	128	112019	9.5820	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	22120	8.8516	ppb	100

Quantitation Report

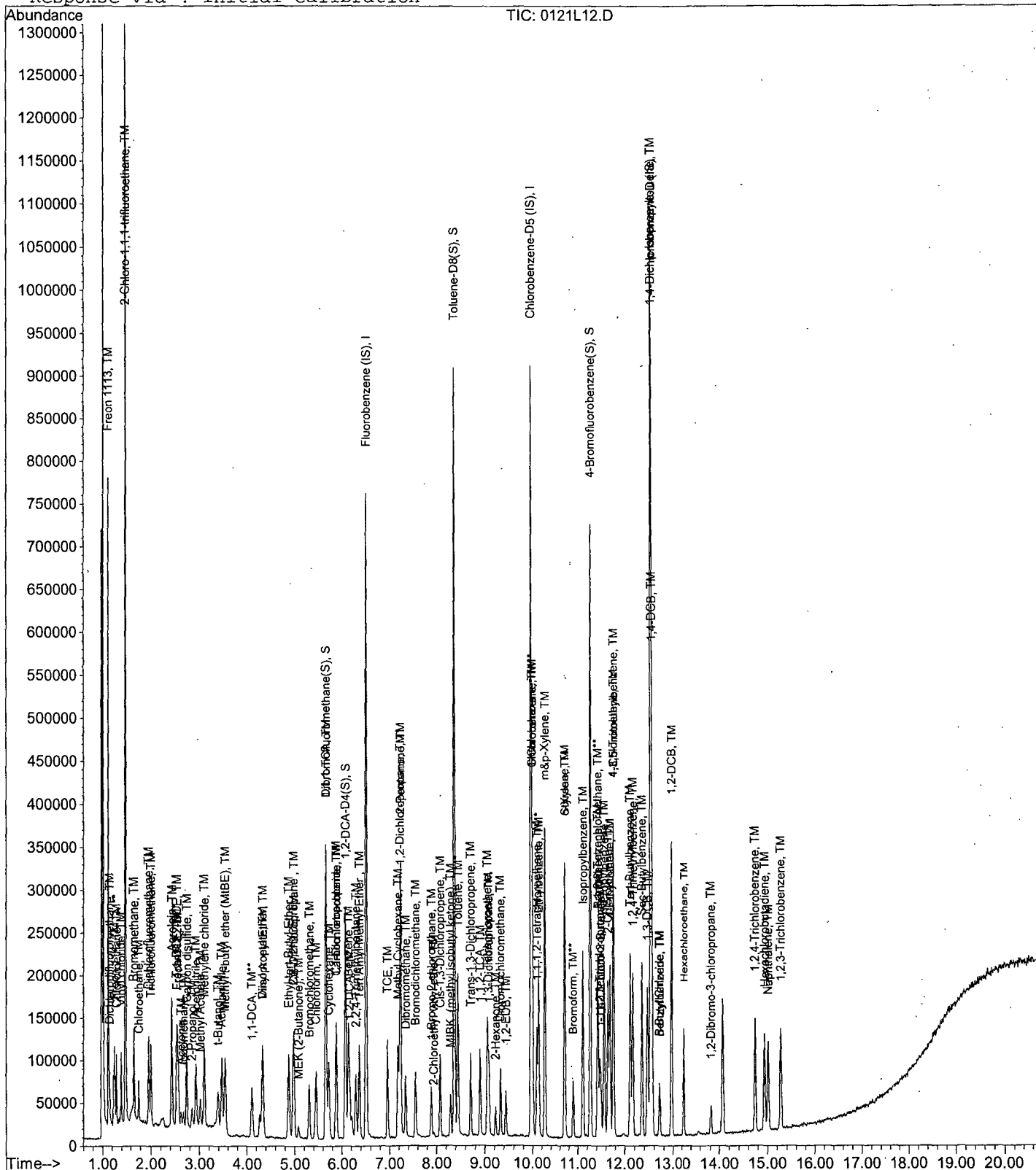
Data File : M:\LOKI\DATA\190121\0121L12.D  
Acq On : 21 Jan 19 20:13  
Sample : 10ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	345152	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307136	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	162624	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	336404	51.7212	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	206.884%
43) 1,2-DCA-D4(S)	6.07	65	391899	51.6736	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	206.696%
64) Toluene-D8(S)	8.37	98	1268942	50.5660	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	202.264%
72) 4-Bromofluorobenzene(S)	11.26	95	532258	50.5608	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	202.244%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	232336	123.2246	ppb	99
3) Dichlorodifluoromethane	1.15	85	66144	20.2243	ppb	98
4) Freon 114	1.25	85	50024	21.2793	ppb	91
5) Chloromethane	1.29	50	94570	19.6742	ppb	97
6) Vinyl chloride	1.38	62	94000	21.6944	ppb	94
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	459520	125.3485	ppb	99
8) Bromomethane	1.65	94	59405	22.3763	ppb	94
9) Chloroethane	1.75	64	46120	21.4348	ppb	97
10) Dichlorofluoromethane	1.95	67	151557	19.2331	ppb	100
11) Trichlorofluoromethane	2.00	101	130510	21.5740	ppb	94
12) Acrolein	2.43	56	133567	152.0316	ppb	# 93
13) Acetone	2.61	43	18565	20.2568	ppb	98
14) Freon-113	2.54	101	70521	21.0273	ppb	94
15) 1,1-DCE	2.52	63	21488	19.1438	ppb	92
16) t-Butanol	3.39	59	49603	121.0655	ppb	98
17) 2-Propanol	2.85	45	32138	108.0883	ppb	# 99
18) Acetonitrile	2.92	41	102232	145.7327	ppb	98
19) Methyl Acetate	3.02	43	76670	19.7386	ppb	92
20) Iodomethane	2.67	142	24832	16.5042	ppb	98
21) Acrylonitrile	3.45	52	28326	20.5403	ppb	85
22) Methylene chloride	3.10	84	86698	19.9723	ppb	98
23) Carbon disulfide	2.73	76	229675	19.6521	ppb	98
24) Methyl t-butyl ether (MtBE)	3.54	73	217341	20.2800	ppb	97
25) Trans-1,2-DCE	2.52	96	40392	19.8819	ppb	96
26) Diisopropyl Ether	4.33	45	236728	20.4281	ppb	99
28) 1,1-DCA	4.10	63	134845	20.2722	ppb	99
29) Vinyl Acetate	4.27	43	51916	21.3874	ppb	# 79
30) Ethyl tert Butyl Ether	4.88	59	206845	20.5268	ppb	97
31) MEK (2-Butanone)	5.08	43	34819	18.9590	ppb	# 81
32) Cis-1,2-DCE	4.98	96	73308	19.3626	ppb	95
33) 2,2-Dichloropropane	4.97	77	97363	18.5462	ppb	96
36) Chloroform	5.45	83	121450	20.8846	ppb	94
37) Bromochloromethane	5.30	128	17088	18.4998	ppb	85
39) 1,1,1-TCA	5.65	97	42680	20.1915	ppb	99
40) Cyclohexane	5.72	41	52310	20.1824	ppb	93
41) 1,1-Dichloropropene	5.88	75	79419	19.3305	ppb	96
42) 2,2,4-Trimethylpentane	6.29	57	153073	20.3615	ppb	98
44) Carbon Tetrachloride	5.87	117	90088	20.7847	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	180001	19.7748	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	93572	19.7915	ppb	99
48) Benzene	6.13	78	243279	19.8412	ppb	97
49) TCE	6.95	130	38040	18.5485	ppb	96
50) 2-Pentanone	7.23	43	345887	146.8064	ppb	99
51) 1,2-Dichloropropane	7.20	63	63630	19.6290	ppb	98
52) Bromodichloromethane	7.54	83	49856	20.2382	ppb	93
53) Methyl Cyclohexane	7.17	83	86600	19.7356	ppb	99
54) Dibromomethane	7.34	93	45714	20.1839	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	1514	7.9911	ppb #	83
56) MIBK (methyl isobutyl ket	8.29	43	62554	19.2298	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	49488	20.0032	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	108818	20.2551	ppb	95
59) Toluene	8.44	91	148800	20.1950	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	101719	19.6851	ppb	97
61) 1,1,2-TCA	8.90	83	53082	20.2331	ppb	98
62) 2-Hexanone	9.22	43	41255	18.7576	ppb #	90
65) 1,2-EDB	9.44	107	37912	19.2233	ppb	93
66) Tetrachloroethene	9.05	166	46856	19.2494	ppb	96
67) 1-Chlorohexane	10.00	91	80410	19.7081	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	79373	19.9115	ppb	96
69) m&p-Xylene	10.26	91	487656	40.6580	ppb	95
70) o-Xylene	10.70	106	68104	19.3654	ppb	98
71) Styrene	10.71	104	213830	19.8102	ppb	97
73) 1,3-Dichloropropane	9.08	76	108622	19.3121	ppb	98
74) Dibromochloromethane	9.33	129	82904	19.5225	ppb	98
75) Chlorobenzene	10.00	112	201545	20.4556	ppb	95
76) Ethylbenzene	10.13	91	172544	19.3145	ppb	99
77) Bromoform	10.89	173	66087	18.8483	ppb	89
79) Isopropylbenzene	11.11	105	324331	21.3071	ppb	98
80) 1,1,1,2-Tetrachloroethane	11.43	83	86065	19.5510	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	15713	20.4813	ppb	86
82) t-1,4-Dichloro-2-Butene	11.50	53	19789	19.7292	ppb	92
83) Bromobenzene	11.43	156	51744	20.9467	ppb	97
84) n-Propylbenzene	11.56	91	206667	22.3079	ppb	100
85) 4-Ethyltoluene	11.69	105	305303	21.7094	ppb	100
86) 2-Chlorotoluene	11.64	91	122354	20.8163	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	259367	21.2739	ppb	97
88) 4-Chlorotoluene	11.77	91	140608	21.0942	ppb	100
89) Tert-Butylbenzene	12.11	119	283848	21.9683	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	259256	21.5748	ppb	99
91) Sec-Butylbenzene	12.36	105	335718	21.3572	ppb	98
92) p-Isopropyltoluene	12.52	119	154432	21.1641	ppb	99
93) Benzyl Chloride	12.71	91	101776	19.5124	ppb	92
94) 1,3-DCB	12.46	146	89320	20.4000	ppb	98
95) 1,4-DCB	12.56	146	177170	20.4292	ppb	96
96) n-Butylbenzene	12.71	91	101776	19.5124	ppb	95
97) 1,2-DCB	12.97	146	172125	20.4273	ppb	99
98) Hexachloroethane	13.26	117	57725	21.8252	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.82	75	19685	20.6008	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	113768	21.4040	ppb	94
101) Hexachlorotadiene	14.94	225	55456	20.9923	ppb	94
102) Naphthalene	15.01	128	233837	21.1514	ppb	99
103) 1,2,3-Trichlorobenzene	15.28	180	50840	21.5131	ppb	93

Quantitation Report

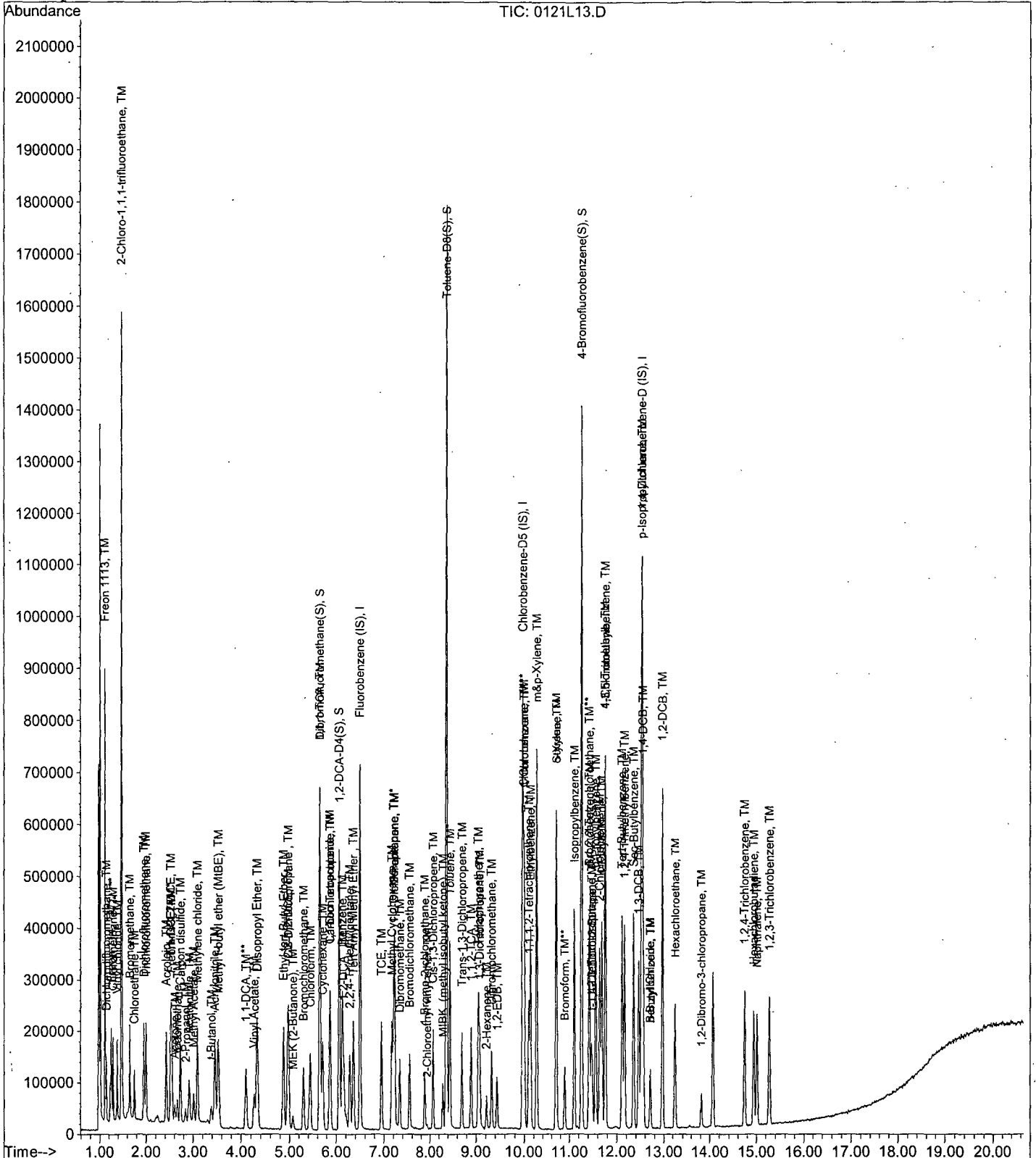
Data File : M:\LOKI\DATA\190121\0121L13.D  
Acq On : 21 Jan 19 20:41  
Sample : 20ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	341760	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305408	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174144	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	324971	50.4593	ppb	0.00
Spiked Amount	25.000		Recovery	=	201.836%	
43) 1,2-DCA-D4(S)	6.07	65	377103	50.2162	ppb	0.00
Spiked Amount	25.000		Recovery	=	200.864%	
64) Toluene-D8(S)	8.37	98	1239269	49.6630	ppb	0.00
Spiked Amount	25.000		Recovery	=	198.652%	
72) 4-Bromofluorobenzene(S)	11.26	95	521895	49.8568	ppb	0.00
Spiked Amount	25.000		Recovery	=	199.428%	
Target Compounds						Qvalue
2) Freon 1113	1.11	116	256540	137.4121	ppb	98
3) Dichlorodifluoromethane	1.14	85	120217	37.8848	ppb	96
4) Freon 114	1.25	85	80768	34.6983	ppb	97
5) Chloromethane	1.29	50	184500	38.7640	ppb	91
6) Vinyl chloride	1.38	62	174924	40.7716	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.47	118	487552	134.3151	ppb	98
8) Bromomethane	1.65	94	105409	41.6454	ppb	92
9) Chloroethane	1.75	64	82507	39.2528	ppb	99
10) Dichlorofluoromethane	1.95	67	296411	37.9889	ppb	96
11) Trichlorofluoromethane	2.00	101	236279	39.4458	ppb	98
12) Acrolein	2.43	56	151996	175.2499	ppb	# 94
13) Acetone	2.61	43	36824	43.8459	ppb	99
14) Freon-113	2.54	101	122325	36.8357	ppb	96
15) 1,1-DCE	2.52	63	42192	37.9622	ppb	89
16) t-Butanol	3.39	59	63856	157.3995	ppb	94
17) 2-Propanol	2.85	45	40966	139.1465	ppb	# 97
18) Acetonitrile	2.92	41	117922	169.7673	ppb	98
19) Methyl Acetate	3.01	43	149118	38.9370	ppb	97
20) Iodomethane	2.66	142	61952	36.4760	ppb	97
21) Acrylonitrile	3.45	52	51422	38.0931	ppb	92
22) Methylene chloride	3.09	84	170373	40.2121	ppb	95
23) Carbon disulfide	2.73	76	443795	38.3501	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	418688	39.4554	ppb	97
25) Trans-1,2-DCE	2.52	96	78108	38.8283	ppb	98
26) Diisopropyl Ether	4.33	45	454998	39.6530	ppb	96
28) 1,1-DCA	4.10	63	261232	39.6627	ppb	98
29) Vinyl Acetate	4.27	43	96718	40.2395	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	401062	40.1954	ppb	98
31) MEK (2-Butanone)	5.07	43	70323	38.5225	ppb	91
32) Cis-1,2-DCE	4.98	96	141010	37.6141	ppb	96
33) 2,2-Dichloropropane	4.96	77	193427	37.2107	ppb	95
36) Chloroform	5.45	83	228931	39.7579	ppb	99
37) Bromochloromethane	5.30	128	33952	37.1220	ppb	93
39) 1,1,1-TCA	5.65	97	83464	39.8780	ppb	99
40) Cyclohexane	5.71	41	95716	37.4225	ppb	97
41) 1,1-Dichloropropene	5.88	75	153573	37.7504	ppb	95
42) 2,2,4-Trimethylpentane	6.28	57	279729	37.5784	ppb	99
44) Carbon Tetrachloride	5.87	117	172684	40.2362	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	352491	39.1089	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	181549	38.7807	ppb	98
48) Benzene	6.13	78	473155	38.9723	ppb	98
49) TCE	6.95	130	78336	38.5761	ppb	97
50) 2-Pentanone	7.23	43	409603	175.5751	ppb	100
51) 1,2-Dichloropropane	7.20	63	123123	38.3587	ppb	98
52) Bromodichloromethane	7.55	83	96800	39.6842	ppb	97
53) Methyl Cyclohexane	7.17	83	164336	37.8229	ppb	96
54) Dibromomethane	7.34	93	90696	40.4421	ppb	100
55) 2-Chloroethyl vinyl ether	7.93	43	3750	19.9895	ppb	95
56) MIBK (methyl isobutyl ket	8.29	43	124704	38.7159	ppb	92
57) 1-Bromo-2-chloroethane	7.88	63	95936	39.1625	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	211060	39.6761	ppb	93
59) Toluene	8.44	91	298304	40.8873	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	201022	39.2887	ppb	98
61) 1,1,2-TCA	8.90	83	103628	39.8915	ppb	99
62) 2-Hexanone	9.22	43	82498	37.8820	ppb	91
65) 1,2-EDB	9.44	107	75224	38.3582	ppb	92
66) Tetrachloroethene	9.05	166	91104	37.6391	ppb	96
67) 1-Chlorohexane	10.00	91	156566	39.2106	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.09	131	157417	39.7130	ppb	95
69) m&p-Xylene	10.27	91	973464	81.6210	ppb	96
70) o-Xylene	10.70	106	139712	39.9519	ppb	99
71) Styrene	10.71	104	432133	40.2612	ppb	99
73) 1,3-Dichloropropane	9.08	76	215855	38.5945	ppb	99
74) Dibromochloromethane	9.33	129	165046	39.0854	ppb	98
75) Chlorobenzene	10.00	112	392997	40.1126	ppb	98
76) Ethylbenzene	10.13	91	353024	39.7409	ppb	98
77) Bromoform	10.90	173	131386	37.6839	ppb	92
79) Isopropylbenzene	11.11	105	647727	39.7378	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	178172	37.7970	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	33112	40.3051	ppb	100
82) t-1,4-Dichloro-2-Butene	11.49	53	38560	35.9004	ppb	98
83) Bromobenzene	11.42	156	100840	38.1209	ppb	97
84) n-Propylbenzene	11.56	91	411134	41.4427	ppb	99
85) 4-Ethyltoluene	11.69	105	630395	41.8606	ppb	100
86) 2-Chlorotoluene	11.64	91	249582	39.6530	ppb	96
87) 1,3,5-Trimethylbenzene	11.76	105	537564	41.1754	ppb	97
88) 4-Chlorotoluene	11.76	91	286018	40.0704	ppb	99
89) Tert-Butylbenzene	12.12	119	564404	40.7922	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	548158	42.5990	ppb	98
91) Sec-Butylbenzene	12.36	105	685840	40.7444	ppb	99
92) p-Isopropyltoluene	12.52	119	324736	41.5594	ppb	97
93) Benzyl Chloride	12.71	91	235642	42.1886	ppb	96
94) 1,3-DCB	12.46	146	186112	39.6946	ppb	98
95) 1,4-DCB	12.56	146	362736	39.0597	ppb	97
96) n-Butylbenzene	12.71	91	235642	42.1886	ppb	95
97) 1,2-DCB	12.97	146	367093	40.6837	ppb	97
98) Hexachloroethane	13.26	117	118495	41.8380	ppb	94
99) 1,2-Dibromo-3-chloropropan	13.82	75	41738	41.4520	ppb	93
100) 1,2,4-Trichlorobenzene	14.74	180	249819	43.8911	ppb	95
101) Hexachlorobutadiene	14.94	225	121241	42.8584	ppb	93
102) Naphthalene	15.01	128	514760	43.4817	ppb	98
103) 1,2,3-Trichlorobenzene	15.27	180	110048	43.4867	ppb	96

Quantitation Report

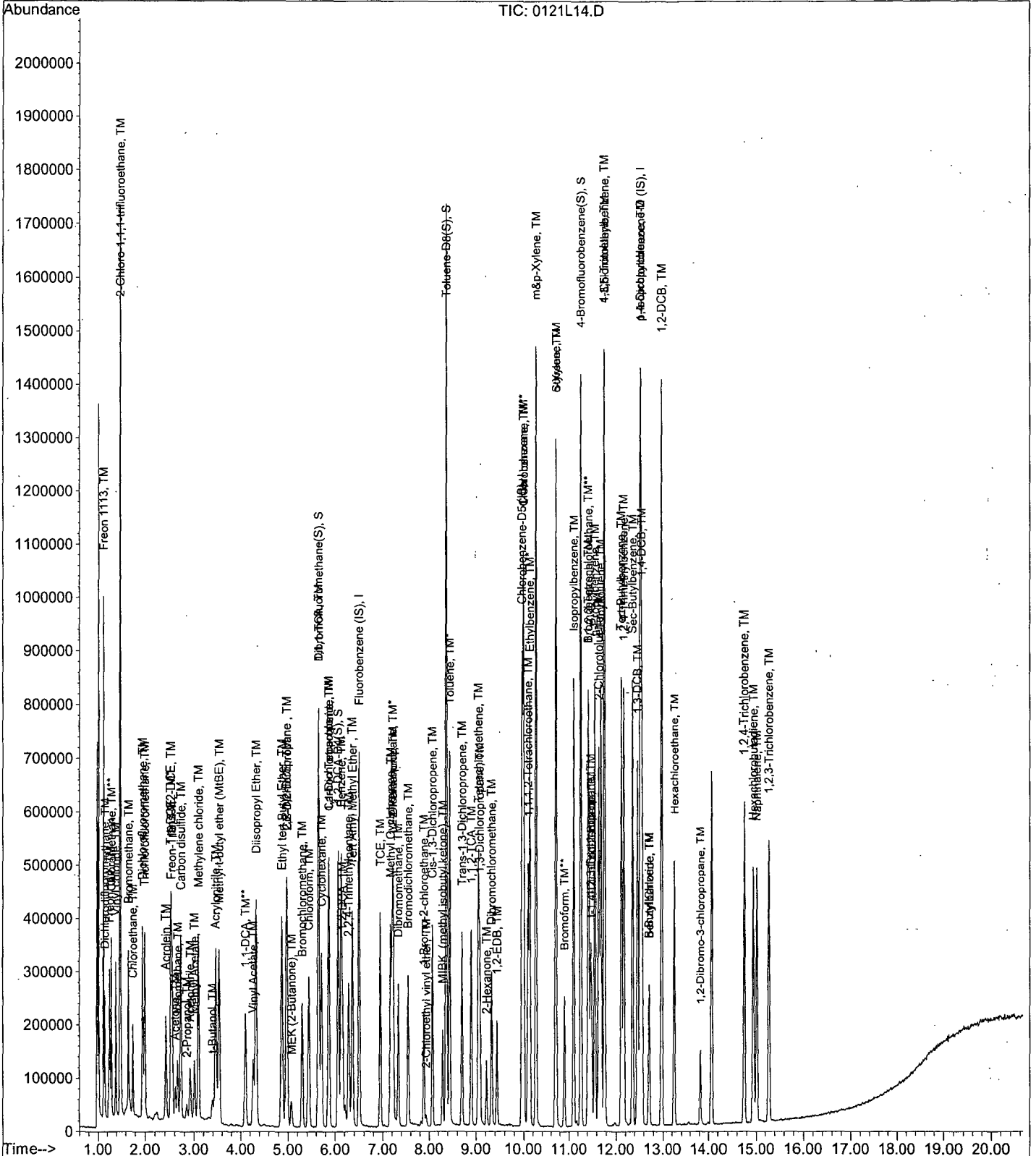
Data File : M:\LOKI\DATA\190121\0121L14.D  
Acq On : 21 Jan 19 21:10  
Sample : 40ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 13  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	340224	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	284800	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174592	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	634983	99.0411	ppb	0.00
Spiked Amount				25.000		
				Recovery = 396.164%		
43) 1,2-DCA-D4(S)	6.07	65	739931	98.9762	ppb	0.00
Spiked Amount				25.000		
				Recovery = 395.904%		
64) Toluene-D8(S)	8.37	98	2377544	102.1730	ppb	0.00
Spiked Amount				25.000		
				Recovery = 408.692%		
72) 4-Bromofluorobenzene(S)	11.26	95	987834	101.1966	ppb	0.00
Spiked Amount				25.000		
				Recovery = 404.788%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	310348	166.9841	ppb	98
3) Dichlorodifluoromethane	1.14	85	162106	52.4293	ppb	100
4) Freon 114	1.25	85	104356	45.0342	ppb	91
5) Chloromethane	1.29	50	219700	46.3680	ppb	94
6) Vinyl chloride	1.38	62	223274	52.2761	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	551872	152.7209	ppb	100
8) Bromomethane	1.65	94	131367	52.6272	ppb	97
9) Chloroethane	1.74	64	104390	50.0646	ppb	99
10) Dichlorofluoromethane	1.95	67	370548	47.7049	ppb	97
11) Trichlorofluoromethane	1.99	101	310052	51.9956	ppb	98
12) Acrolein	2.43	56	177970	206.7430	ppb	# 92
13) Acetone	2.62	43	44126	53.4409	ppb	99
14) Freon-113	2.54	101	172365	52.1386	ppb	93
15) 1,1-DCE	2.52	63	53104	47.9960	ppb	90
16) t-Butanol	3.40	59	89197	220.8555	ppb	95
17) 2-Propanol	2.86	45	45461	155.1115	ppb	# 100
18) Acetonitrile	2.92	41	135953	196.6094	ppb	94
19) Methyl Acetate	3.02	43	193892	50.9093	ppb	96
20) Iodomethane	2.67	142	87032	50.0917	ppb	97
21) Acrylonitrile	3.45	52	72530	54.1899	ppb	86
22) Methylene chloride	3.09	84	217803	51.8045	ppb	100
23) Carbon disulfide	2.73	76	562775	48.8512	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	534157	50.5640	ppb	97
25) Trans-1,2-DCE	2.52	96	98143	49.0081	ppb	96
26) Diisopropyl Ether	4.33	45	596314	52.2033	ppb	98
28) 1,1-DCA	4.10	63	335492	51.1675	ppb	96
29) Vinyl Acetate	4.27	43	125953	52.6393	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	529857	53.3433	ppb	97
31) MEK (2-Butanone)	5.07	43	89806	49.3770	ppb	87
32) Cis-1,2-DCE	4.98	96	186012	49.8424	ppb	97
33) 2,2-Dichloropropane	4.96	77	249483	48.2111	ppb	95
36) Chloroform	5.44	83	298096	52.0033	ppb	98
37) Bromochloromethane	5.30	128	45824	50.3286	ppb	100
39) 1,1,1-TCA	5.65	97	108032	51.8493	ppb	97
40) Cyclohexane	5.72	41	132255	51.9996	ppb	97
41) 1,1-Dichloropropene	5.88	75	201320	49.7107	ppb	96
42) 2,2,4-Trimethylpentane	6.28	57	385125	51.9708	ppb	98
44) Carbon Tetrachloride	5.87	117	223148	52.2294	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	453291	50.5197	ppb	96

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	235593	50.5523	ppb	100
48) Benzene	6.13	78	605445	50.0938	ppb	97
49) TCE	6.95	130	99992	49.4628	ppb	98
50) 2-Pentanone	7.23	43	472572	203.4811	ppb	100
51) 1,2-Dichloropropane	7.20	63	160267	50.1563	ppb	98
52) Bromodichloromethane	7.54	83	124984	51.4699	ppb	95
53) Methyl Cyclohexane	7.17	83	218224	50.4523	ppb	93
54) Dibromomethane	7.34	93	114312	51.2029	ppb	97
55) 2-Chloroethyl vinyl ether	7.94	43	4515	24.1761	ppb	94
56) MIBK (methyl isobutyl ket	8.29	43	151841	47.3537	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	119584	49.0364	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	272909	51.5344	ppb	96
59) Toluene	8.44	91	379008	52.1836	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	254532	49.9716	ppb	97
61) 1,1,2-TCA	8.90	83	130483	50.4561	ppb	100
62) 2-Hexanone	9.22	43	106841	49.2815	ppb	94
65) 1,2-EDB	9.44	107	95688	52.3238	ppb	93
66) Tetrachloroethene	9.05	166	113080	50.0989	ppb	97
67) 1-Chlorohexane	10.00	91	200521	54.0942	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.10	131	197359	53.3923	ppb	99
69) m&p-Xylene	10.26	91	1228980	110.5013	ppb	97
70) o-Xylene	10.70	106	174976	53.6565	ppb	94
71) Styrene	10.71	104	552454	55.1958	ppb	97
73) 1,3-Dichloropropane	9.08	76	269847	51.7394	ppb	100
74) Dibromochloromethane	9.33	129	207996	52.8209	ppb	99
75) Chlorobenzene	10.00	112	494814	54.1594	ppb	99
76) Ethylbenzene	10.13	91	453315	54.7235	ppb	99
77) Bromoform	10.90	173	168485	51.8213	ppb	90
79) Isopropylbenzene	11.11	105	818115	50.0622	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	234875	49.6979	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	40272	48.8947	ppb	88
82) t-1,4-Dichloro-2-Butene	11.50	53	50870	47.2398	ppb	98
83) Bromobenzene	11.43	156	132288	49.8810	ppb	98
84) n-Propylbenzene	11.56	91	521325	52.4152	ppb	100
85) 4-Ethyltoluene	11.69	105	809987	53.6481	ppb	99
86) 2-Chlorotoluene	11.64	91	312872	49.5808	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	681769	52.0870	ppb	98
88) 4-Chlorotoluene	11.76	91	353792	49.4382	ppb	99
89) Tert-Butylbenzene	12.12	119	711985	51.3265	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	703507	54.5313	ppb	98
91) Sec-Butylbenzene	12.36	105	876766	51.9533	ppb	99
92) p-Isopropyltoluene	12.52	119	426368	54.4262	ppb	98
93) Benzyl Chloride	12.71	91	296774	52.9972	ppb	96
94) 1,3-DCB	12.46	146	240896	51.2473	ppb	99
95) 1,4-DCB	12.56	146	467536	50.2155	ppb	98
96) n-Butylbenzene	12.71	91	296774	52.9972	ppb	96
97) 1,2-DCB	12.97	146	476543	52.6781	ppb	98
98) Hexachloroethane	13.26	117	153592	54.0908	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	50980	50.6482	ppb	# 84
100) 1,2,4-Trichlorobenzene	14.74	180	323298	56.6550	ppb	97
101) Hexachlorobutadiene	14.94	225	155604	54.8646	ppb	93
102) Naphthalene	15.01	128	678795	57.1906	ppb	99
103) 1,2,3-Trichlorobenzene	15.27	180	144704	57.0347	ppb	96

(#) = qualifier out of range (m) = manual integration  
 0121L15.D L0121W.M Tue Jan 22 13:44:00 2019 Page 388 of 674

Quantitation Report

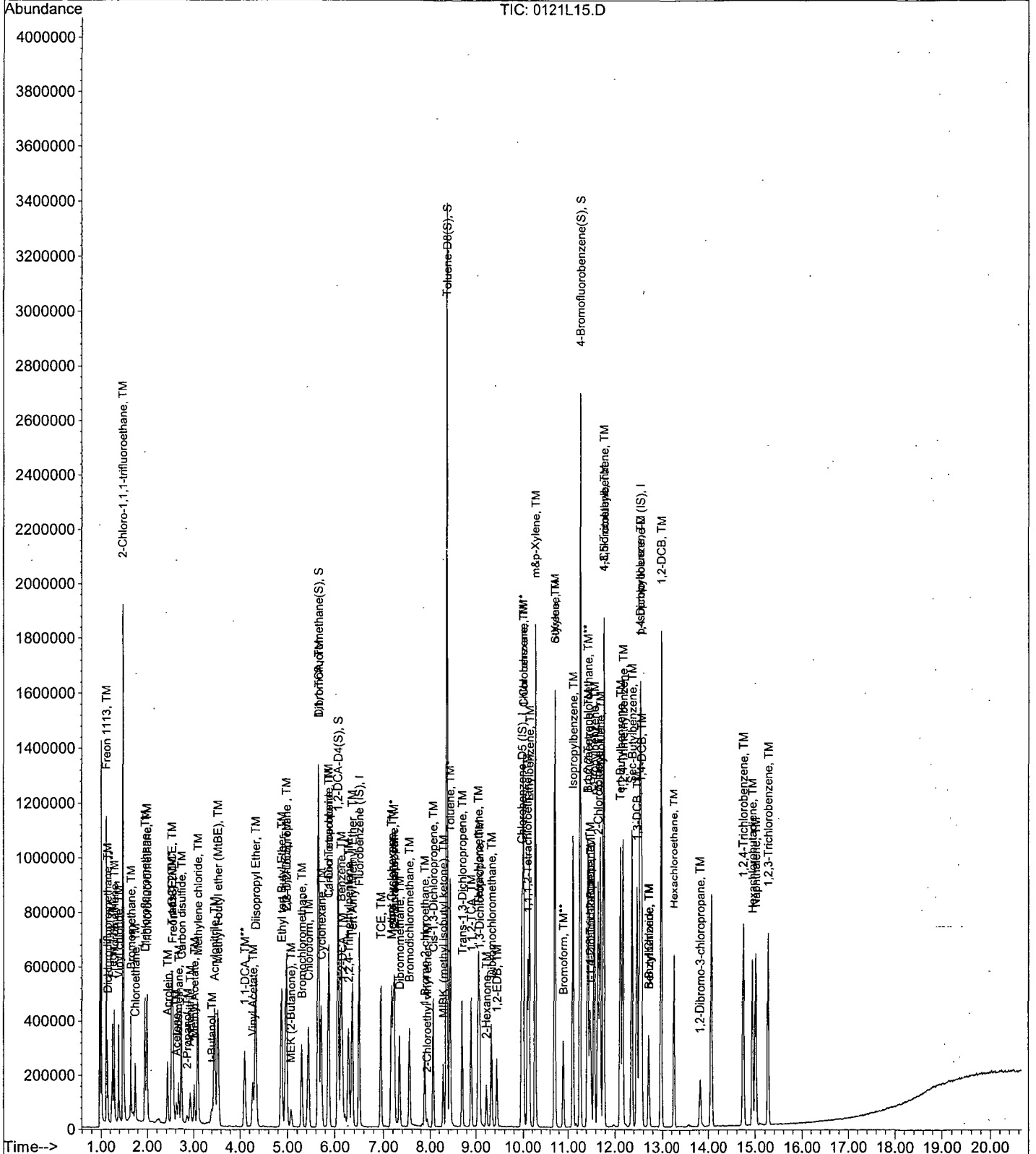
Data File : M:\LOKI\DATA\190121\0121L15.D  
Acq On : 21 Jan 19 21:38  
Sample : 50ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	354496	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307840	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174848	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	650234	97.3367	ppb	0.00
Spiked Amount	25.000		Recovery	= 389.348%		
43) 1,2-DCA-D4(S)	6.07	65	762420	97.8786	ppb	0.00
Spiked Amount	25.000		Recovery	= 391.516%		
64) Toluene-D8(S)	8.37	98	2378941	94.5815	ppb	0.00
Spiked Amount	25.000		Recovery	= 378.328%		
72) 4-Bromofluorobenzene(S)	11.27	95	969475	91.8827	ppb	0.00
Spiked Amount	25.000		Recovery	= 367.532%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	301065	155.4677	ppb	100
3) Dichlorodifluoromethane	1.14	85	296745	99.6959	ppb	98
4) Freon 114	1.25	85	168196	69.6617	ppb	93
5) Chloromethane	1.29	50	449678	91.0843	ppb	92
6) Vinyl chloride	1.39	62	425978	95.7207	ppb	95
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	524992	139.4333	ppb	99
8) Bromomethane	1.65	94	249630	97.5870	ppb	95
9) Chloroethane	1.74	64	164190	75.9062	ppb	97
10) Dichlorofluoromethane	1.95	67	736318	90.9783	ppb	95
11) Trichlorofluoromethane	1.99	101	606278	97.5793	ppb	97
12) Acrolein	2.43	56	196201	218.9493	ppb	96
13) Acetone	2.62	43	81137	96.7995	ppb	98
14) Freon-113	2.54	101	319836	92.8519	ppb	96
15) 1,1-DCE	2.52	63	103776	90.0177	ppb	93
16) t-Butanol	3.42	59	105103	249.7622	ppb	99
17) 2-Propanol	2.87	45	49665	162.6332	ppb	# 93
18) Acetonitrile	2.93	41	154689	214.6983	ppb	97
19) Methyl Acetate	3.02	43	396415	100.0596	ppb	95
20) Iodomethane	2.66	142	191872	102.2359	ppb	96
21) Acrylonitrile	3.45	52	136954	98.6277	ppb	90
22) Methylene chloride	3.09	84	431664	99.0642	ppb	95
23) Carbon disulfide	2.73	76	1121770	93.4540	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	1107947	100.6572	ppb	97
25) Trans-1,2-DCE	2.52	96	199277	95.5036	ppb	98
26) Diisopropyl Ether	4.34	45	1218553	102.3814	ppb	99
28) 1,1-DCA	4.10	63	685531	100.3444	ppb	99
29) Vinyl Acetate	4.27	43	252296	101.1966	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	1137608	109.9177	ppb	97
31) MEK (2-Butanone)	5.07	43	191856	101.0891	ppb	92
32) Cis-1,2-DCE	4.98	96	387491	99.6490	ppb	97
33) 2,2-Dichloropropane	4.96	77	517771	96.0280	ppb	94
36) Chloroform	5.45	83	606711	101.5805	ppb	100
37) Bromochloromethane	5.30	128	90552	95.4495	ppb	97
39) 1,1,1-TCA	5.65	97	220160	101.4104	ppb	98
40) Cyclohexane	5.72	41	264768	100.0470	ppb	91
41) 1,1-Dichloropropene	5.88	75	405383	96.0688	ppb	97
42) 2,2,4-Trimethylpentane	6.29	57	750921	97.2535	ppb	98
44) Carbon Tetrachloride	5.87	117	449635	101.0033	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	926198	99.0697	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	482592	99.3830	ppb	100
48) Benzene	6.13	78	1241738	98.6036	ppb	96
49) TCE	6.95	130	194368	92.2767	ppb	100
50) 2-Pentanone	7.23	43	544315	224.9366	ppb	98
51) 1,2-Dichloropropane	7.21	63	320379	96.2274	ppb	98
52) Bromodichloromethane	7.55	83	254528	100.5977	ppb	95
53) Methyl Cyclohexane	7.17	83	424113	94.1053	ppb	94
54) Dibromomethane	7.34	93	232996	100.1623	ppb	95
55) 2-Chloroethyl vinyl ether	7.93	43	9316	47.8752	ppb	91
56) MIBK (methyl isobutyl ket	8.29	43	321814	96.3216	ppb	96
57) 1-Bromo-2-chloroethane	7.89	63	256640	101.0005	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	553627	100.3346	ppb	95
59) Toluene	8.44	91	750784	99.2098	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	516228	97.2694	ppb	94
61) 1,1,2-TCA	8.90	83	259777	96.4083	ppb	98
62) 2-Hexanone	9.22	43	218599	96.7715	ppb	94
65) 1,2-EDB	9.44	107	190528	96.3864	ppb	95
66) Tetrachloroethene	9.05	166	228736	93.7545	ppb	97
67) 1-Chlorohexane	10.00	91	392101	98.3832	ppb	98
68) 1,1,1,2-Tetrachloroethane	10.09	131	391276	97.9308	ppb	97
69) m&p-Xylene	10.26	91	2428079	201.9763	ppb	97
70) o-Xylene	10.70	106	358656	101.7507	ppb	99
71) Styrene	10.71	104	1079123	99.7461	ppb	99
73) 1,3-Dichloropropane	9.08	76	535131	94.9245	ppb	99
74) Dibromochloromethane	9.33	129	415567	97.6352	ppb	97
75) Chlorobenzene	10.00	112	977697	99.0036	ppb	99
76) Ethylbenzene	10.13	91	883776	98.7031	ppb	98
77) Bromoform	10.90	173	336048	95.6231	ppb	88
79) Isopropylbenzene	11.11	105	1581123	96.6107	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	449901	95.0566	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	80880	98.0536	ppb	93
82) t-1,4-Dichloro-2-Butene	11.50	53	96411	89.3997	ppb	95
83) Bromobenzene	11.43	156	264000	99.3991	ppb	98
84) n-Propylbenzene	11.56	91	1021366	102.5401	ppb	98
85) 4-Ethyltoluene	11.69	105	1545604	102.2206	ppb	99
86) 2-Chlorotoluene	11.64	91	582884	92.2343	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	1334860	101.8337	ppb	98
88) 4-Chlorotoluene	11.77	91	683072	95.3113	ppb	98
89) Tert-Butylbenzene	12.12	119	1370798	98.6752	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	1346645	104.2304	ppb	98
91) Sec-Butylbenzene	12.36	105	1663958	98.4544	ppb	99
92) p-Isopropyltoluene	12.52	119	820032	104.5244	ppb	96
93) Benzyl Chloride	12.71	91	583435	104.0358	ppb	97
94) 1,3-DCB	12.46	146	473408	100.5636	ppb	98
95) 1,4-DCB	12.56	146	891137	95.5720	ppb	97
96) n-Butylbenzene	12.71	91	583435	104.0358	ppb	96
97) 1,2-DCB	12.97	146	906581	100.0688	ppb	97
98) Hexachloroethane	13.26	117	299614	105.3612	ppb	92
99) 1,2-Dibromo-3-chloropropan	13.82	75	99202	99.0488	ppb	86
100) 1,2,4-Trichlorobenzene	14.74	180	670652	117.3534	ppb	93
101) Hexachlorobutadiene	14.94	225	305966	107.7229	ppb	89
102) Naphthalene	15.01	128	1424406	119.8350	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	295040	116.1190	ppb	95



Quantitation Report

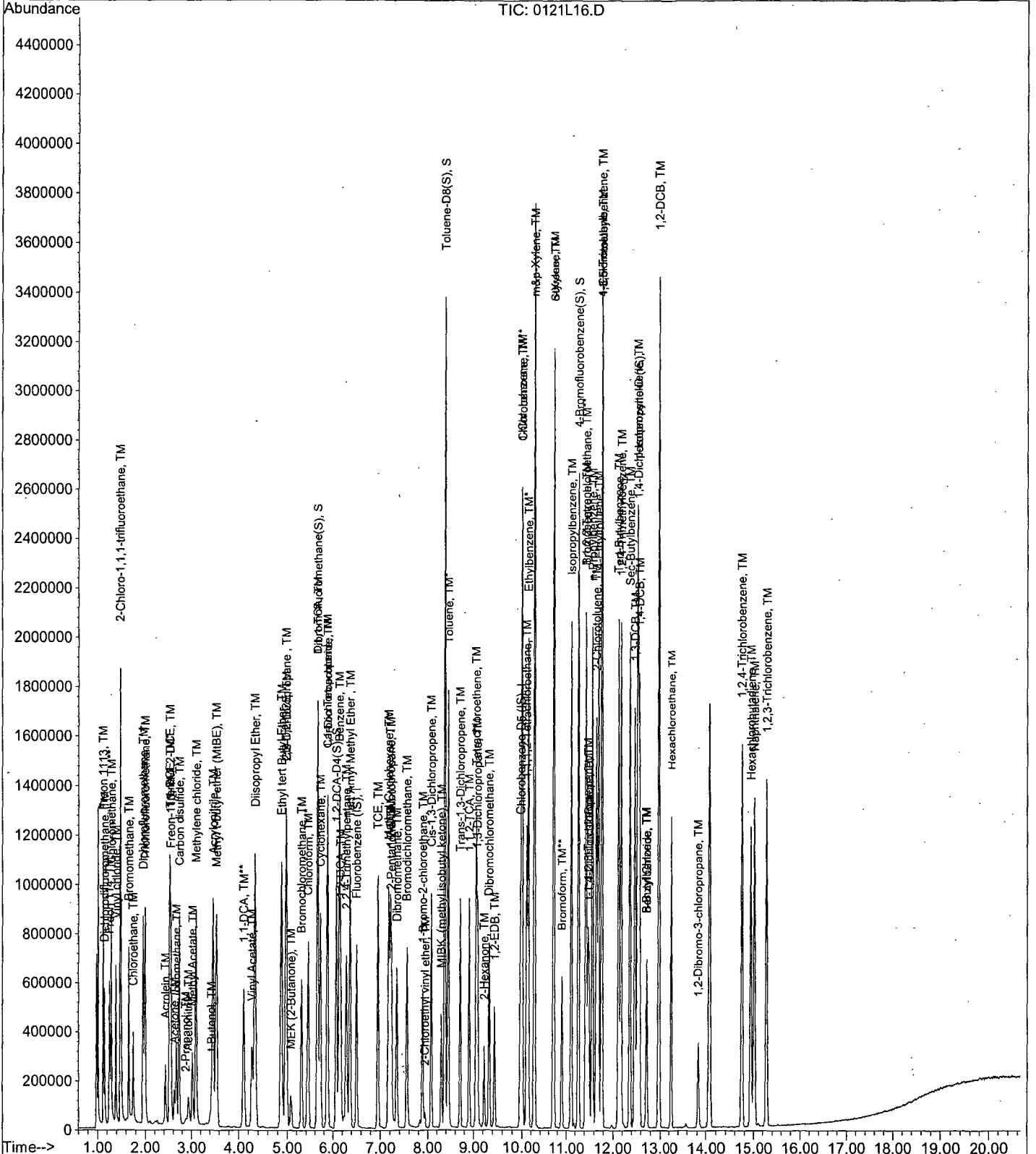
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Acq On : 21 Jan 19 22:07  
Sample : 100ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

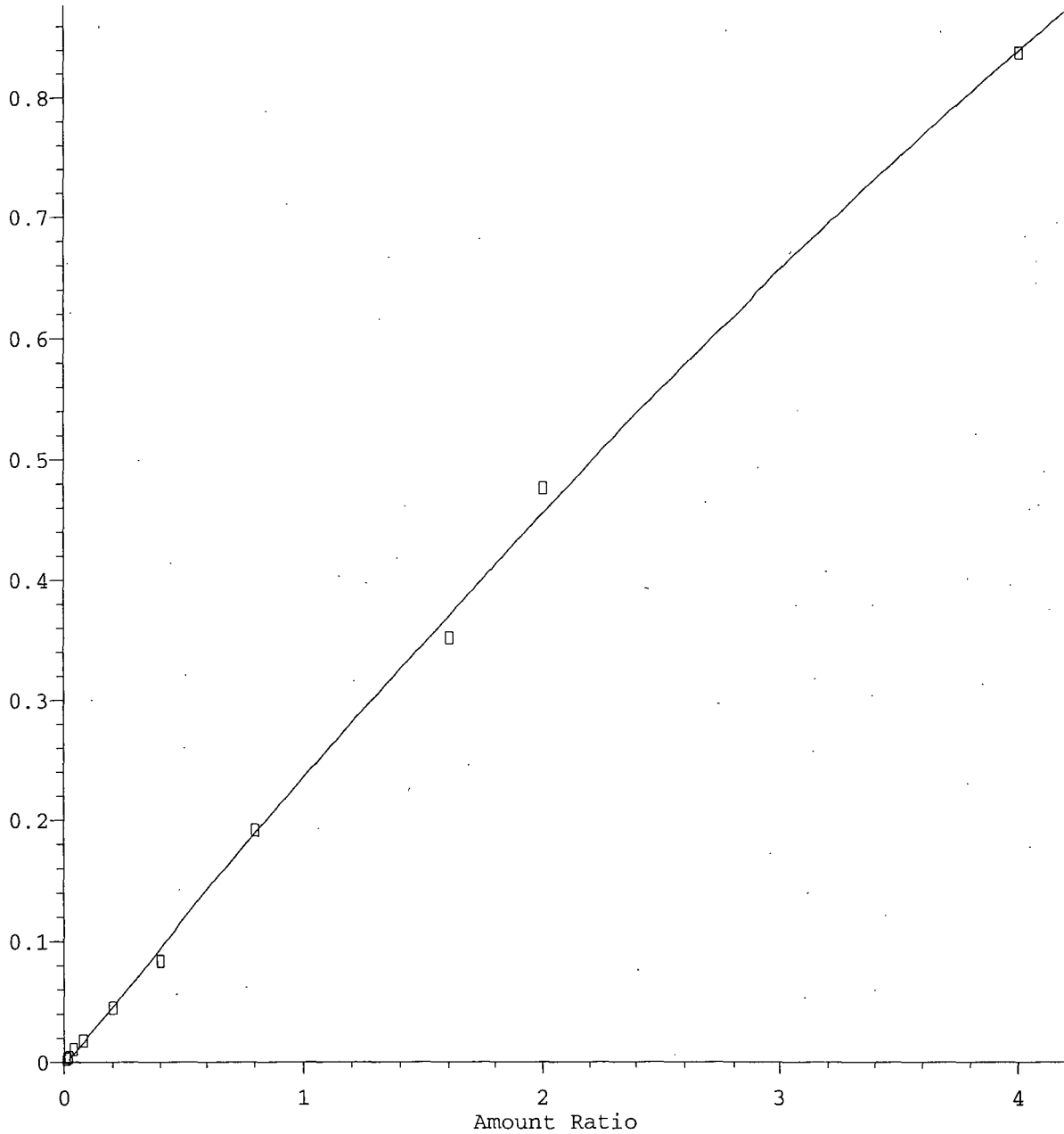
Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



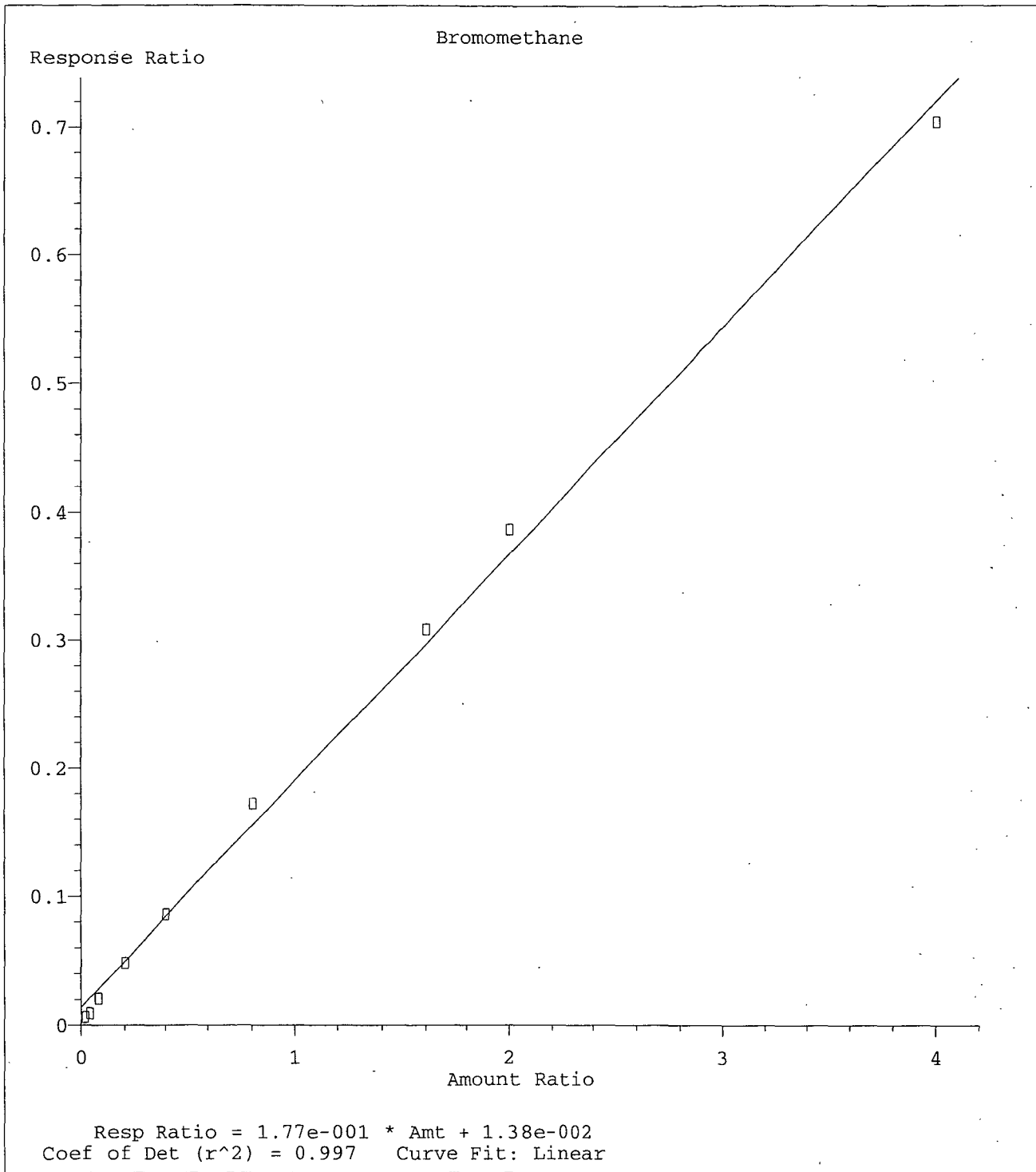
Dichlorodifluoromethane

Response Ratio

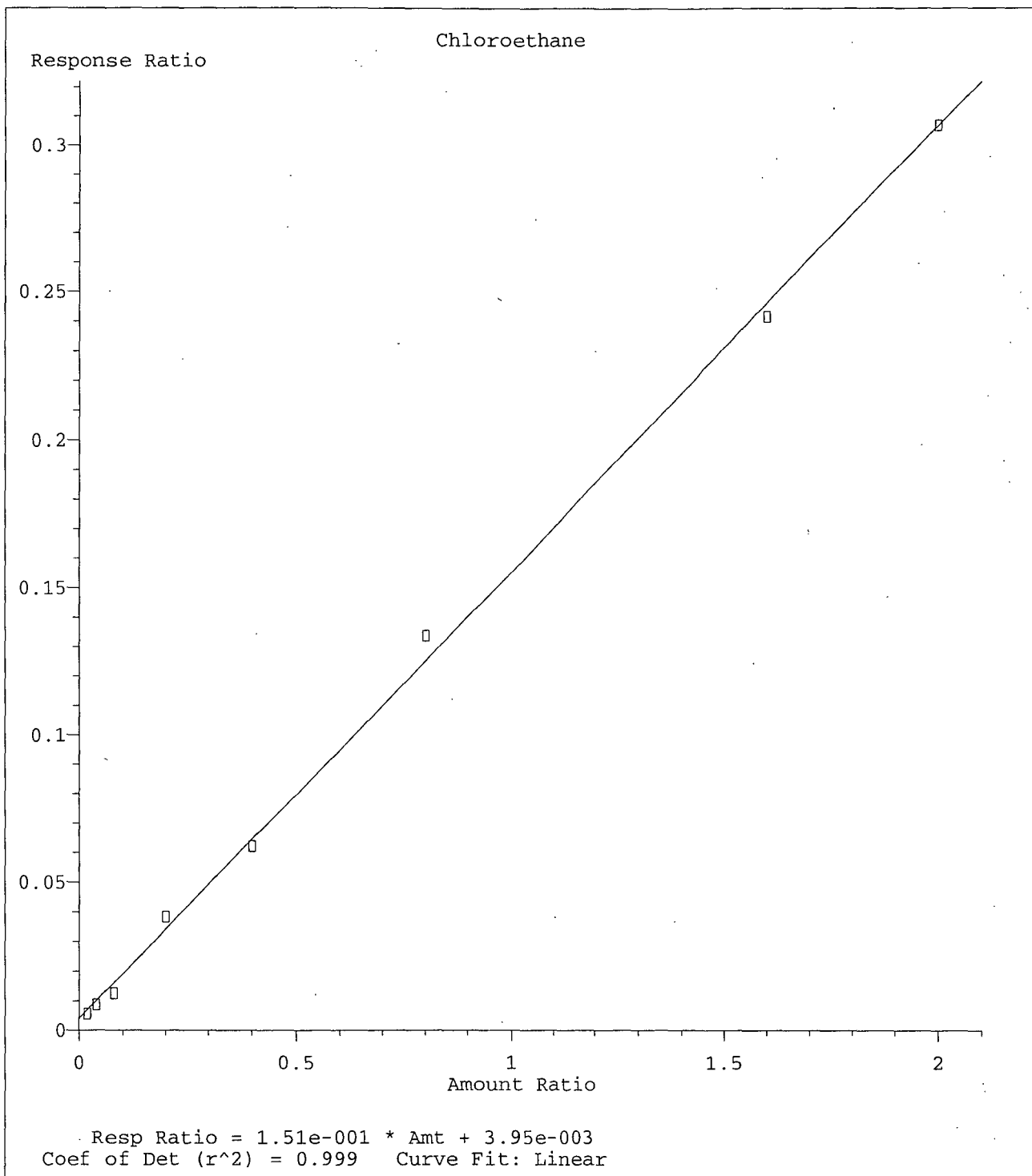


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Curve Fit: Quadratic

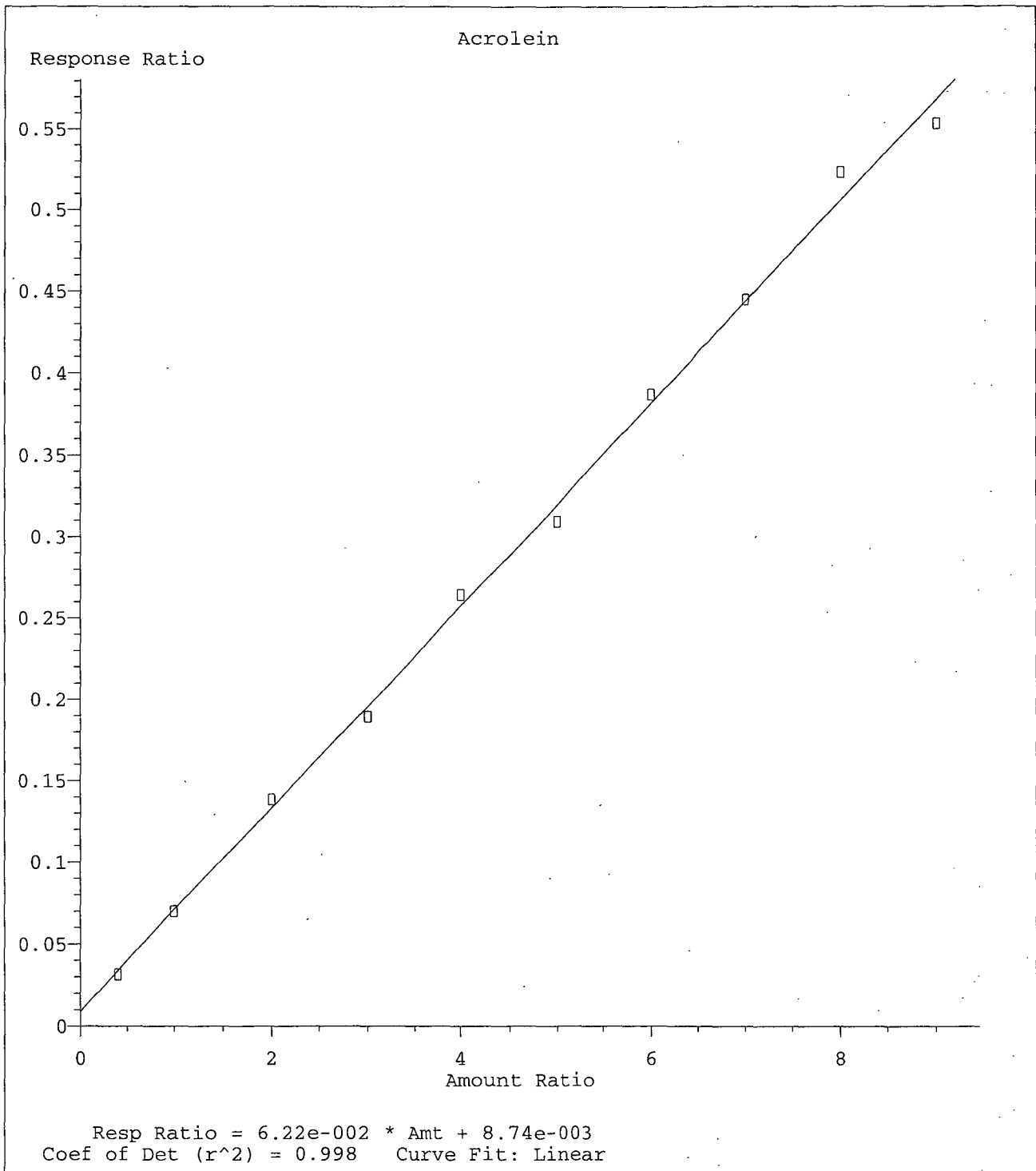
Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



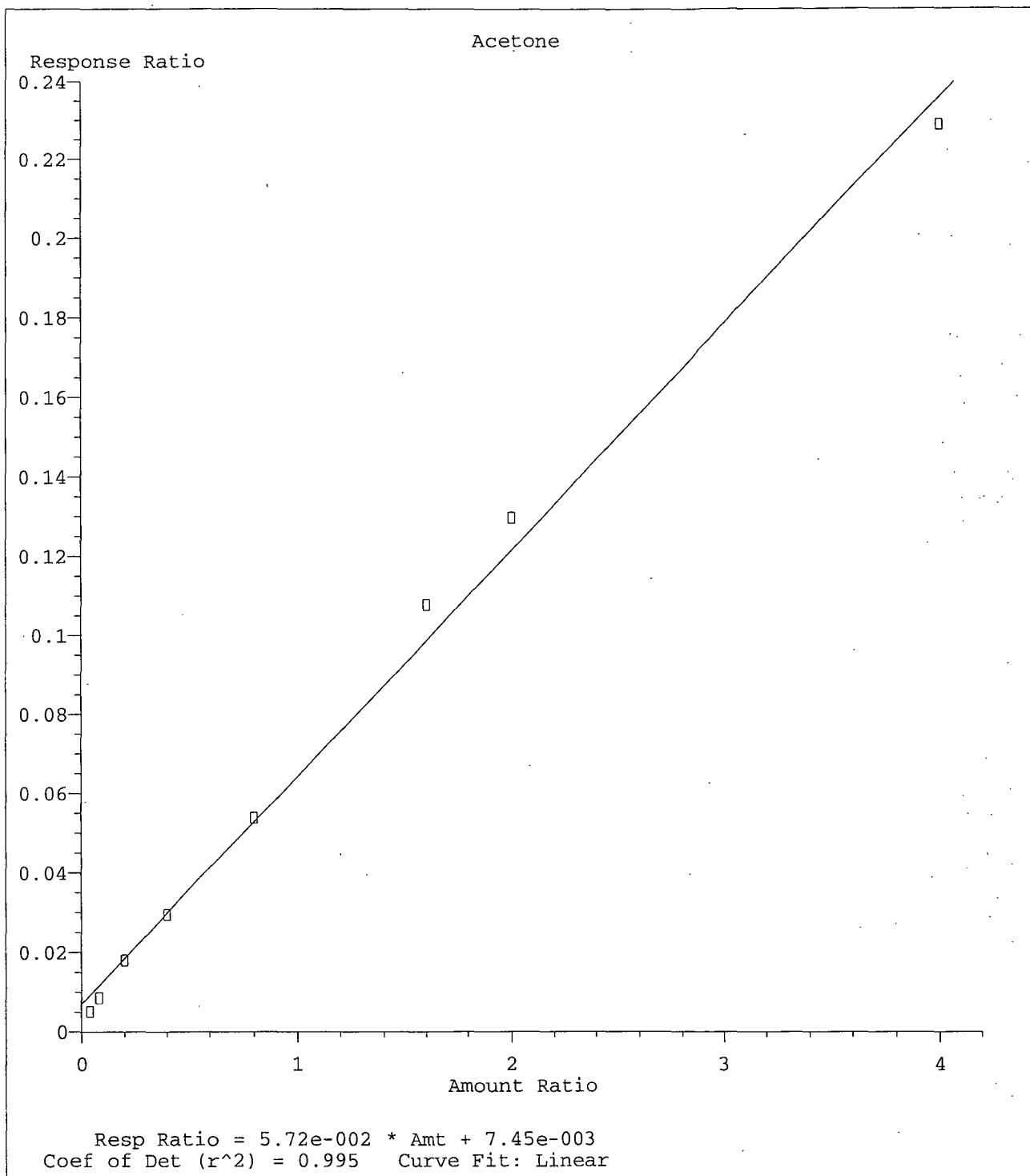
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



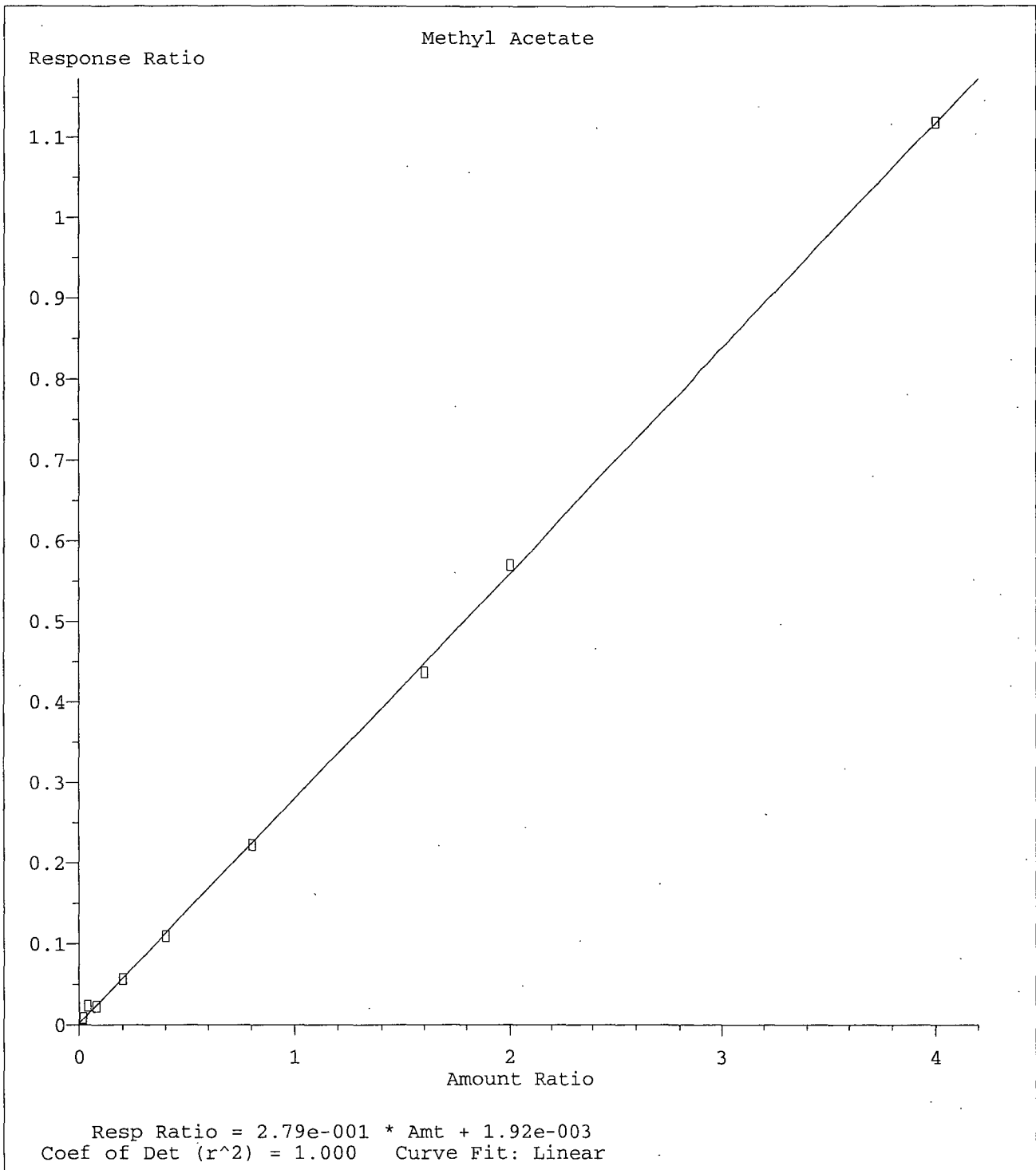
Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



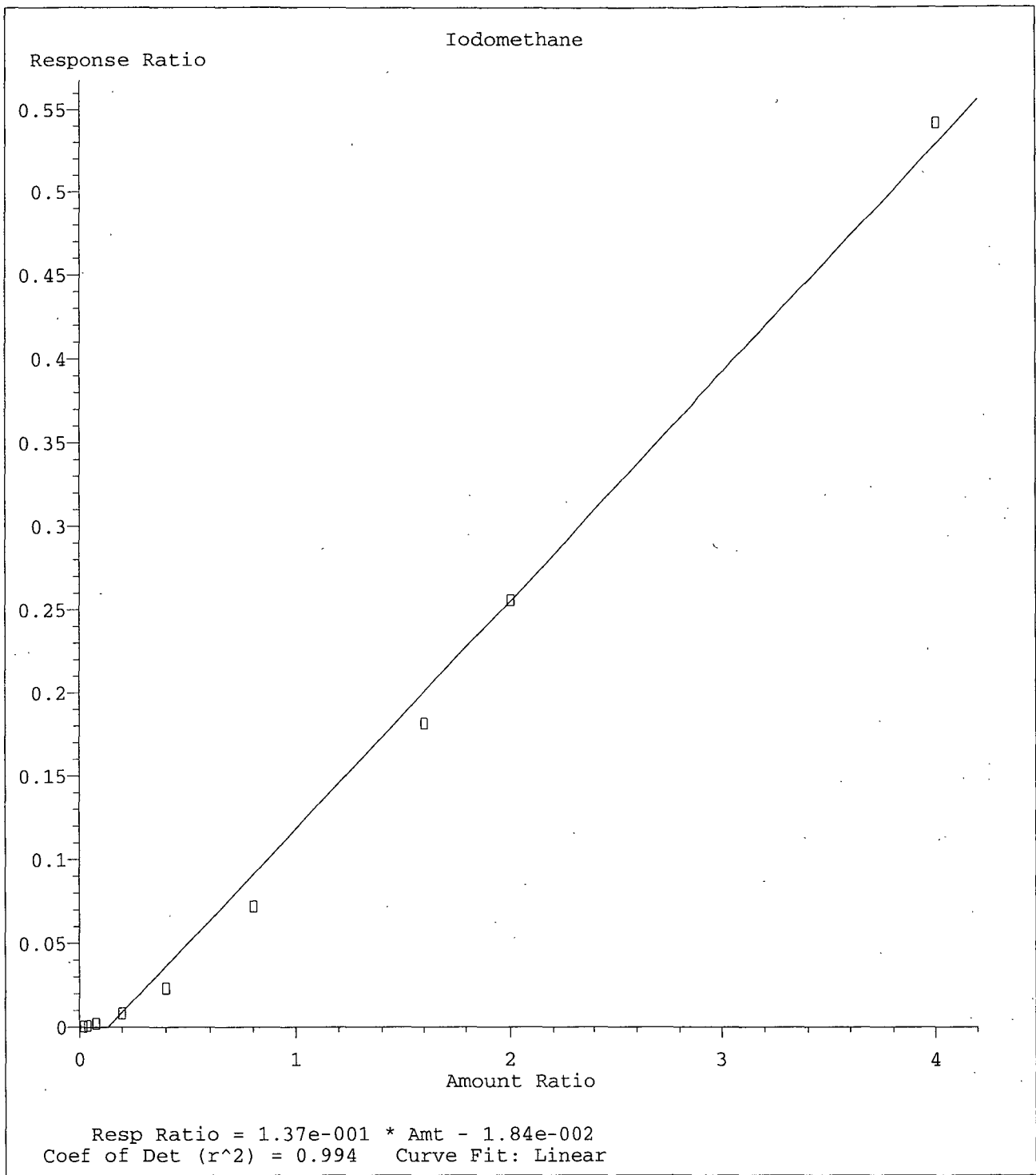
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019

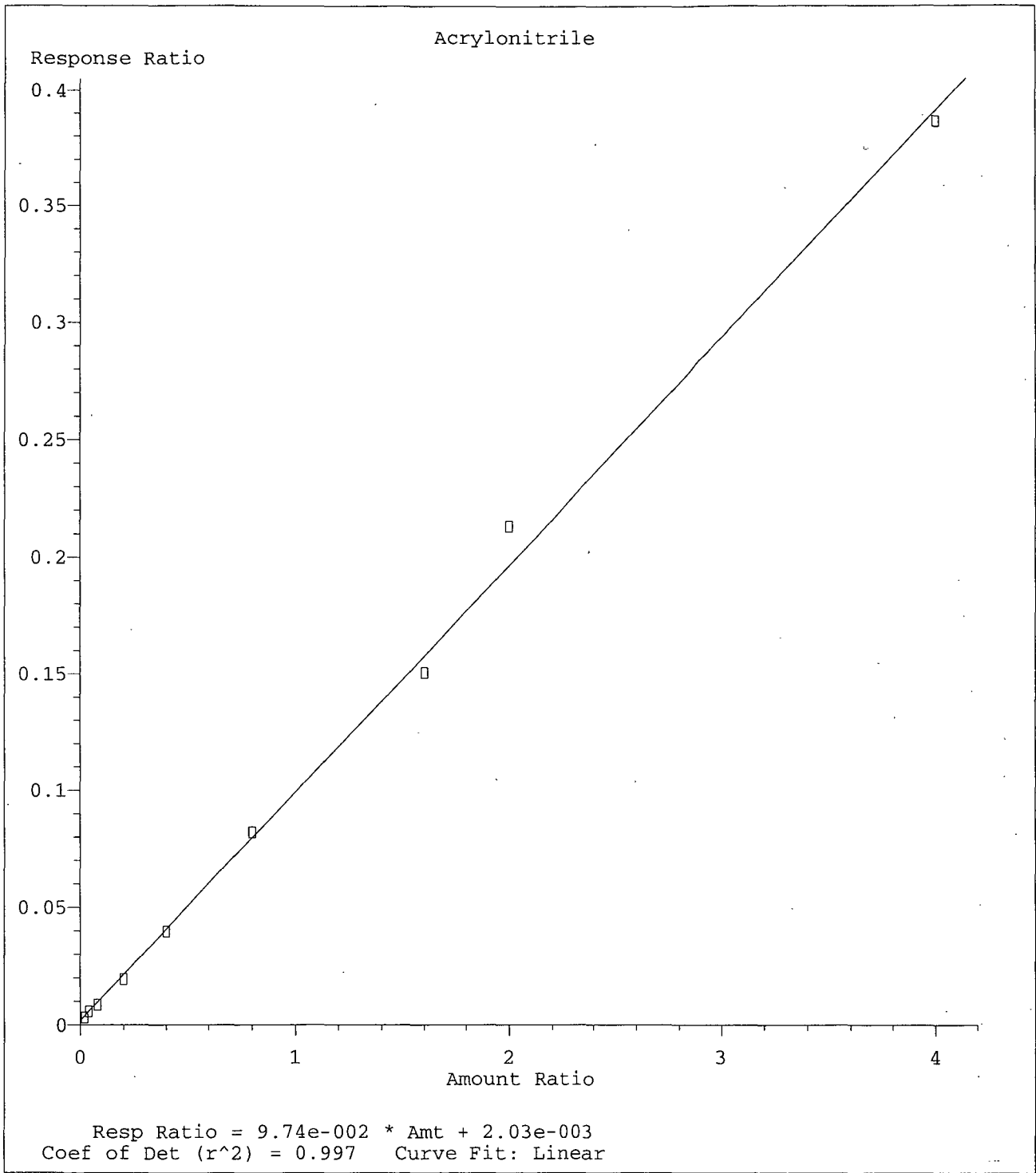


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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019

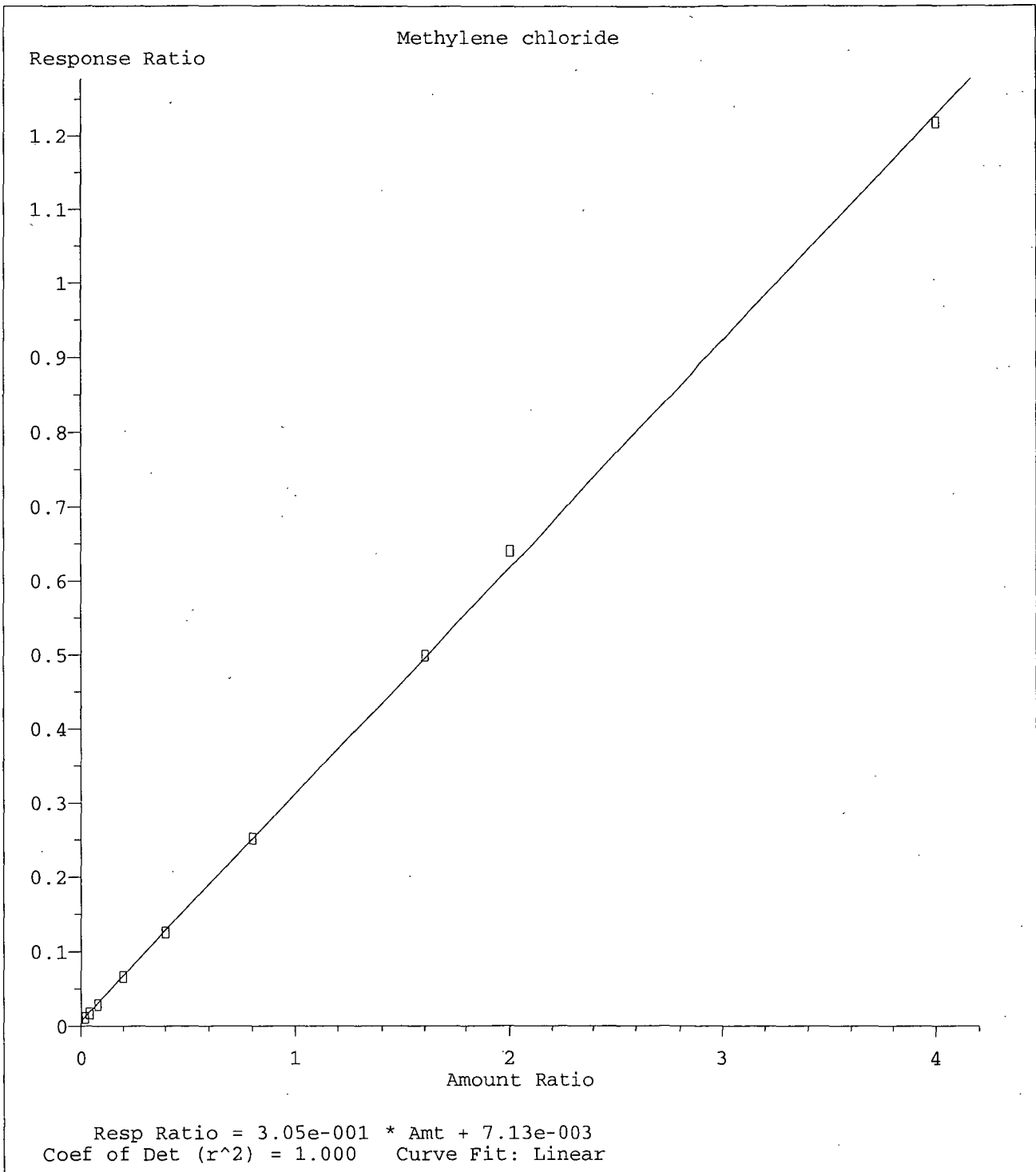


Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019

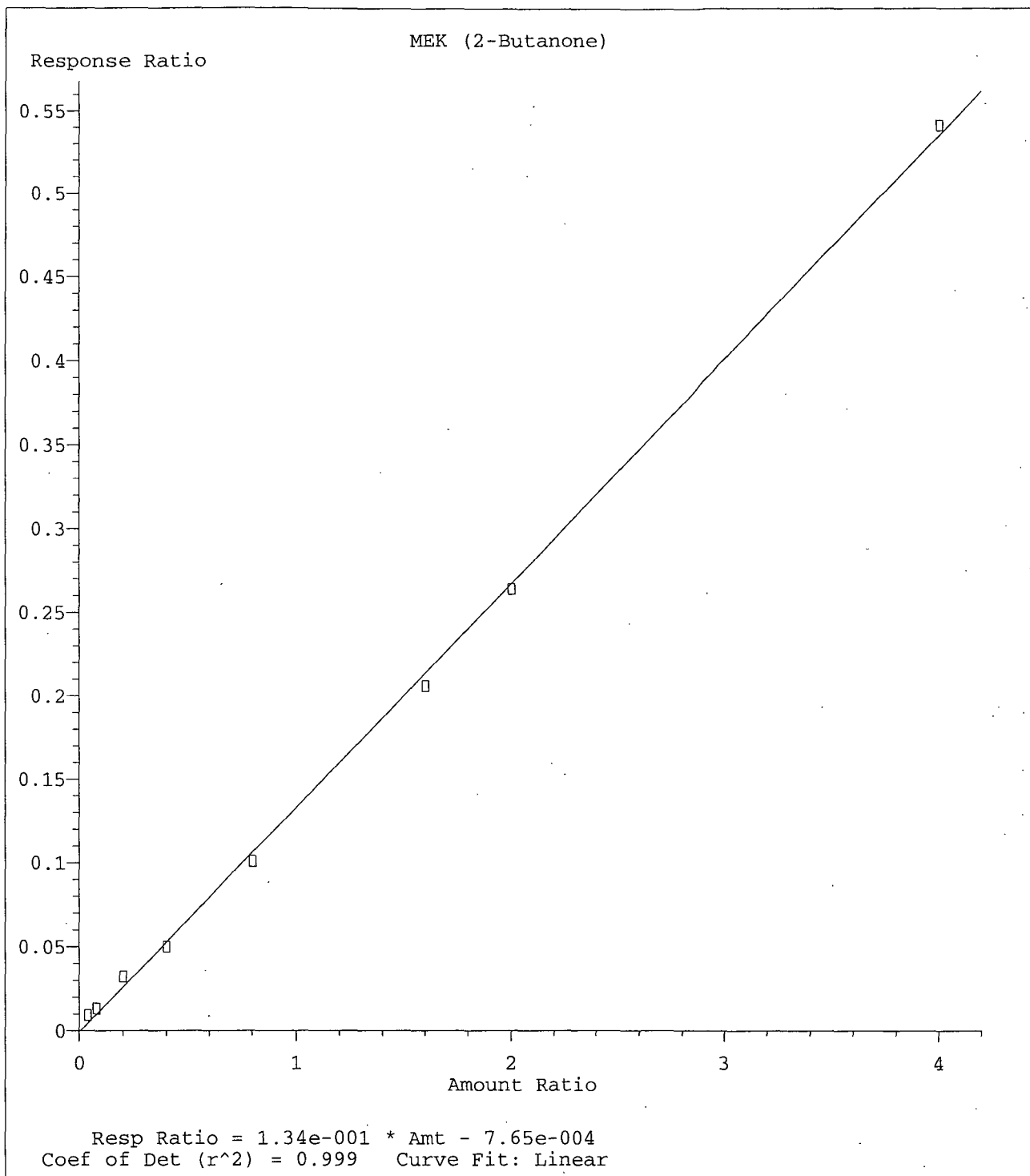




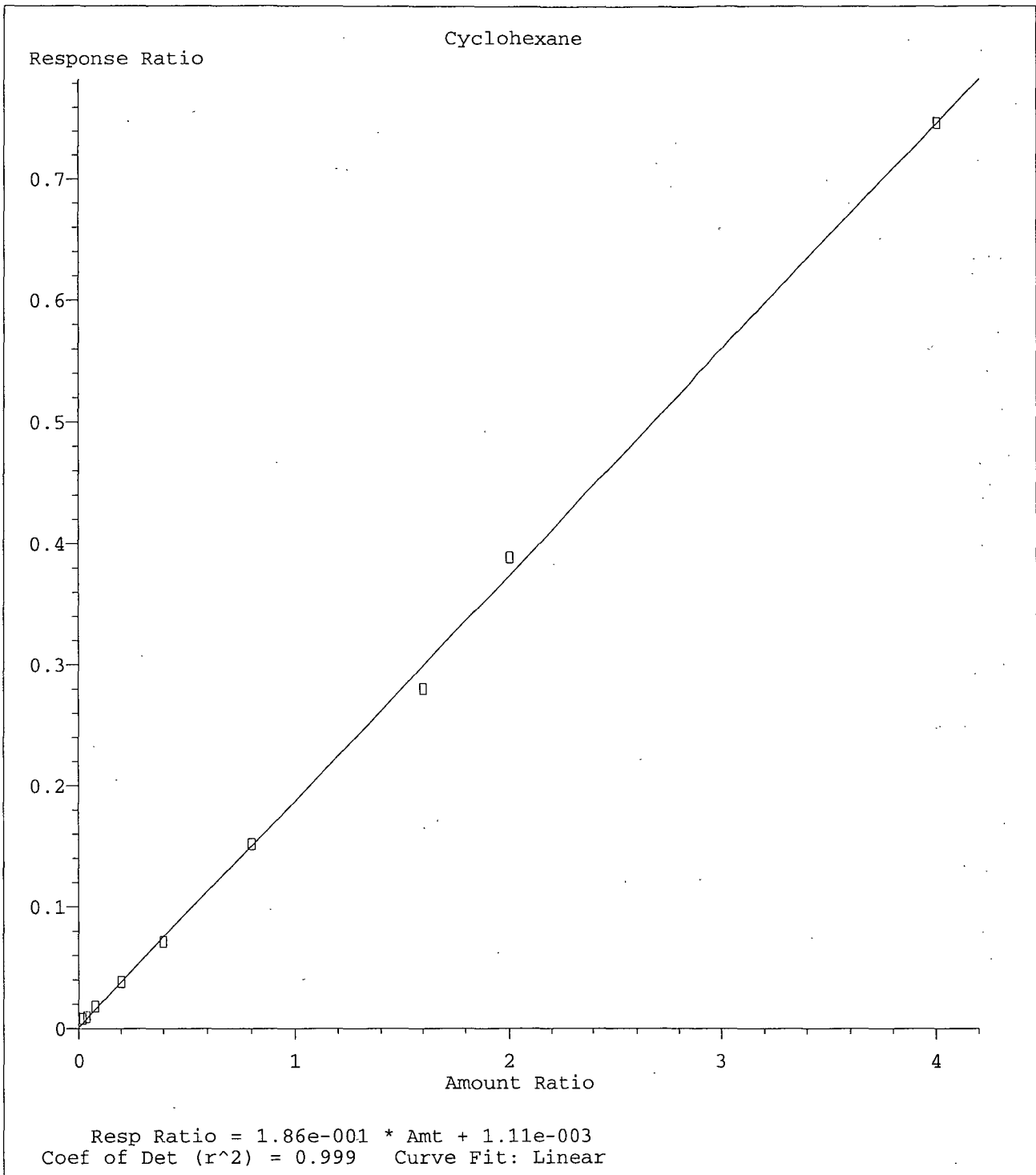
Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



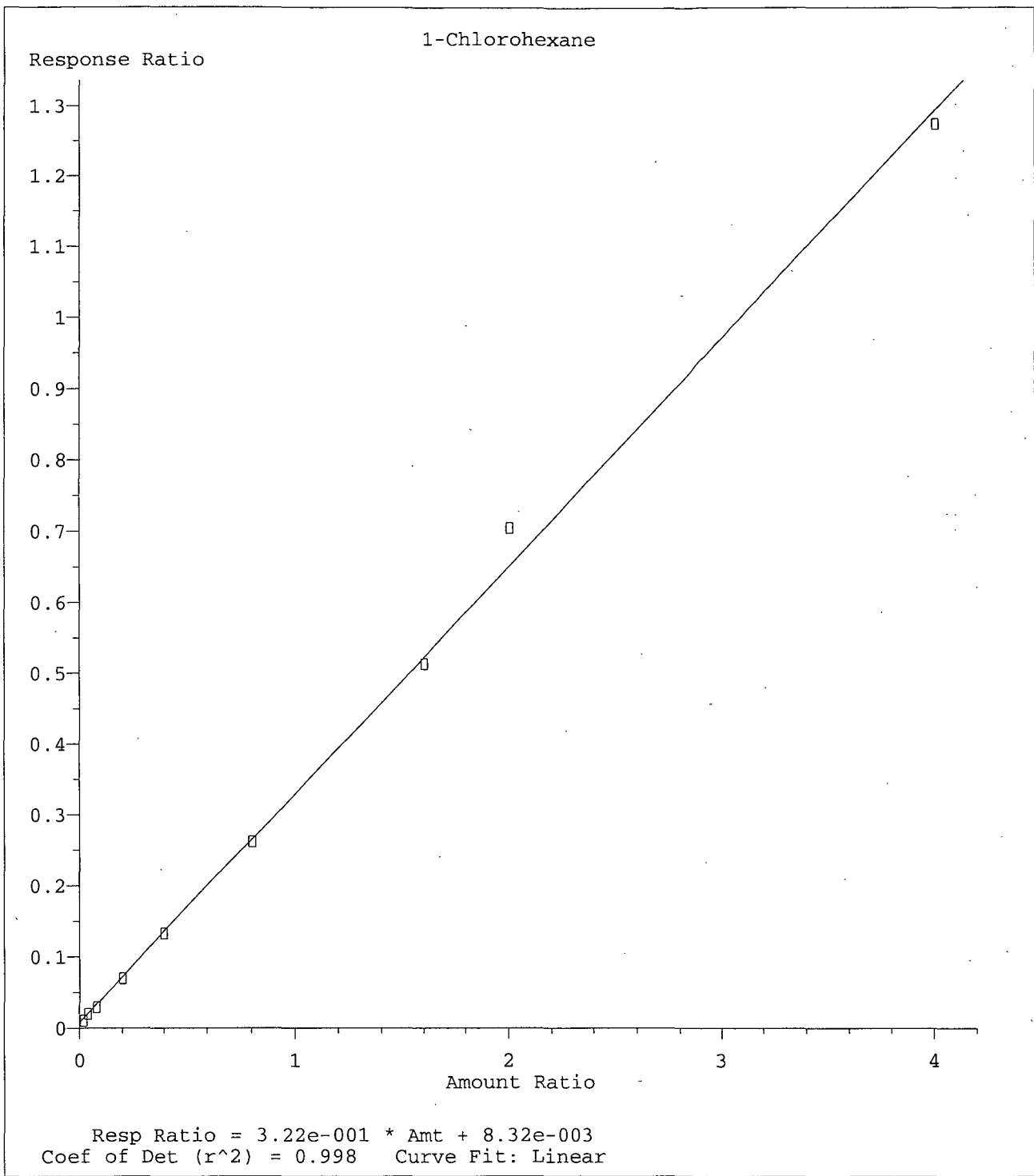
Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



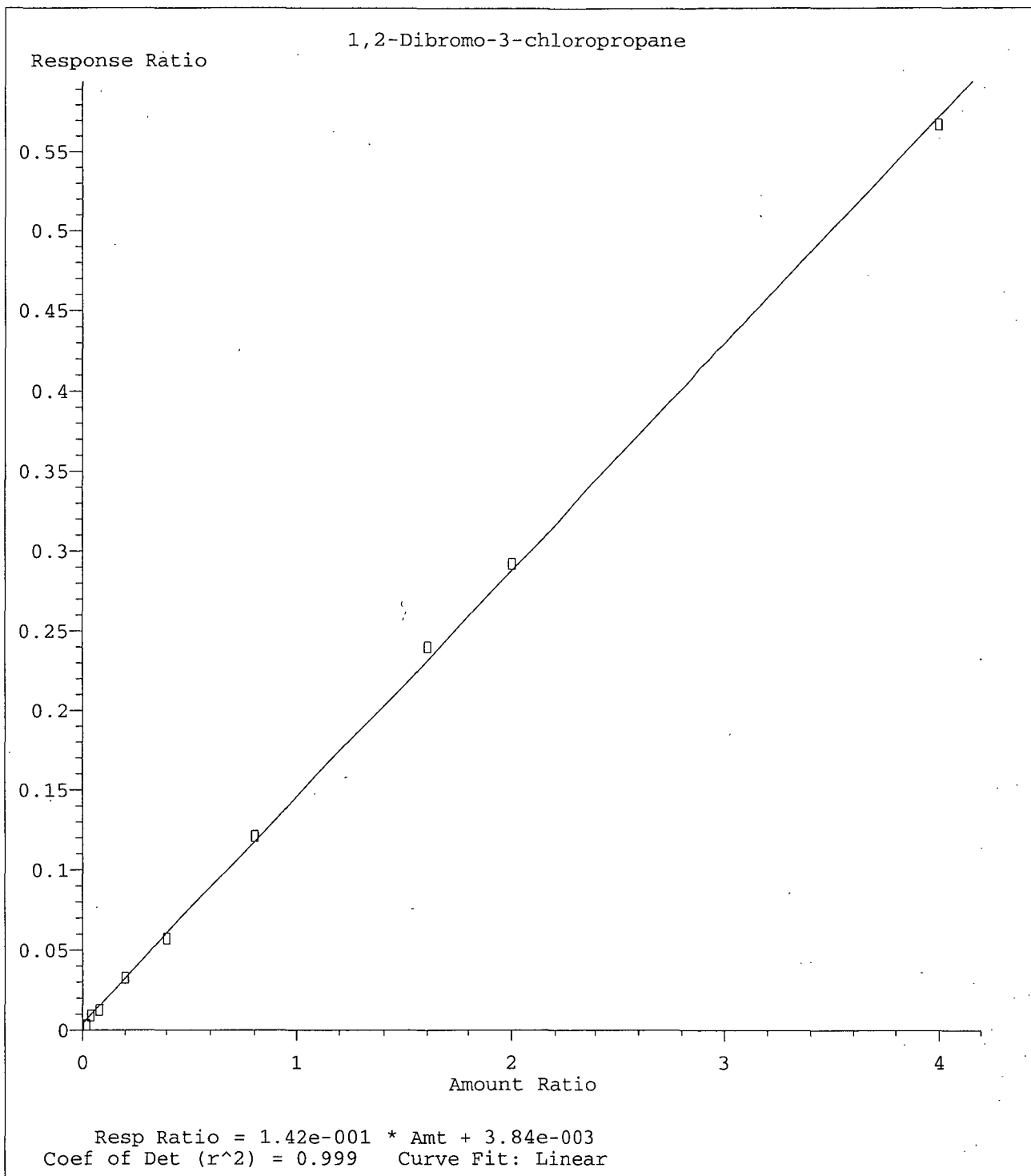
Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Initial Cal. Date: 01/21/19  
Data File: 0121L19.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Freon 1113	0.1366	0.1413	3.4	TM
2	TMQ	Dichlorodifluoromethane	0.2227	0.2856	28	TMQ 20
3	TM	Freon 114	0.1703	0.1655	2.8	TM
4	TM**	Chloromethane	0.3482	0.3701	6.3	TM**
5	TM*	Vinyl chloride	0.3138	0.3603	15	TM*
6	TM	2-Chloro-1,1,1-trifluoroethane	0.2655	0.2878	8.4	TM
7	TML	Bromomethane	0.2254	0.2373	5.3	TML 15
8	TML	Chloroethane	0.1836	0.1641	11	TML 2.0
9	TM	Dichlorofluoromethane	0.5708	0.5285	7.4	TM
10	TM	Trichlorofluoromethane	0.4382	0.4547	3.8	TM
11	TML	Acrolein	0.0664	0.0514	23	TML 20
12	TML	Acetone	0.0818	0.0700	14	TML 10
13	TM	Freon-113	0.2429	0.2229	8.2	TM
14	TM*	1,1-DCE	0.0813	0.0722	11	TM*
15	TM	t-Butanol	0.0297	0.0263	11	TM
16	TM	2-Propanol	0.0215	0.0195	9.4	TM
17	TM	Acetonitrile	0.0508	0.0510	0.44	TM
18	TML	Methyl Acetate	0.3282	0.2564	22	TML 9.8
19	TML	Iodomethane	0.0712	0.0744	4.4	TML 12
20	TML	Acrylonitrile	0.1117	0.0888	21	TML 14
21	TML	Methylene chloride	0.3598	0.3267	9.2	TML 1.1
22	TM	Carbon disulfide	0.8465	0.8003	5.5	TM
23	TM	Methyl t-butyl ether (MtBE)	0.7763	0.7528	3.0	TM
24	TM	Trans-1,2-DCE	0.1472	0.1427	3.0	TM
25	TM	Diisopropyl Ether	0.8394	0.8095	3.6	TM
26	TM**L	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0222	0.00	TM**L
27	TM**	1,1-DCA	0.4818	0.4640	3.7	TM**
28	TM	Vinyl Acetate	0.1758	0.2333	33	TM
29	TM	Ethyl tert Butyl Ether	0.7299	0.7184	1.6	TM
30	TML	MEK (2-Butanone)	0.1506	0.1379	8.4	TML 4.3
31	TM	Cis-1,2-DCE	0.2742	0.2629	4.1	TM
32	TM	2,2-Dichloropropane	0.3802	0.3404	10	TM
33	TM	2-Methylpentane	0.0000	0.0017	0.00	TM
34	TML	3-Methylpentane	0.0000	0.0017	0.00	TML
35	TM*	Chloroform	0.4212	0.4234	0.53	TM*
36	TM	Bromochloromethane	0.0669	0.0641	4.2	TM
37	TM	1,1,1-TCA	0.1531	0.1561	2.0	TM
38	TML	Cyclohexane	0.2243	0.1761	22	TML 7.0
39	TM	1,1-Dichloropropene	0.2976	0.2855	4.0	TM
40	TM	2,2,4-Trimethylpentane	0.5445	0.4724	13	TM

Average

8.7

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0121L19.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.3139	0.3120	0.63	TM
42	TM	Tert Amyl Methyl Ether	0.6593	0.6330	4.0	TM
43	TML	Methylcyclopentane	0.0000	0.0003	0.00	TML
44	TM	1,2-DCA	0.3424	0.3381	1.3	TM
45	TM	Benzene	0.8881	0.8973	1.0	TM
46	TM	TCE	0.1485	0.1362	8.3	TM
47	TM	2-Pentanone	0.1707	0.1674	1.9	TM
48	TM*	1,2-Dichloropropane	0.2348	0.2327	0.89	TM*
49	TM	Bromodichloromethane	0.1784	0.1740	2.5	TM
50	TM	Methyl Cyclohexane	0.3178	0.3003	5.5	TM
51	TM	Dibromomethane	0.1640	0.1563	4.7	TM
52	TM	2-Chloroethyl vinyl ether	0.0062	0.0058	6.4	TM
53	TM	MIBK (methyl isobutyl ketone)	0.2356	0.2108	11	TM
54	TM	1-Bromo-2-chloroethane	0.1792	0.1885	5.2	TM
55	TM	Cis-1,3-Dichloropropene	0.3891	0.3930	1.0	TM
56	TM*	Toluene	0.5337	0.5496	3.0	TM*
57	TM	Trans-1,3-Dichloropropene	0.3743	0.3581	4.3	TM
58	TM	1,1,2-TCA	0.1900	0.1811	4.7	TM
59	TM	2-Hexanone	0.1593	0.1427	10	TM
60	TM	1,2-EDB	0.1605	0.1542	3.9	TM
61	TM	Tetrachloroethene	0.1981	0.1872	5.5	TM
62	TML	1-Chlorohexane	0.3753	0.3166	16	TML 8.0
63	TM	1,1,1,2-Tetrachloroethane	0.3245	0.3121	3.8	TM
64	TM	m&p-Xylene	0.9763	0.9675	0.90	TM
65	TM	o-Xylene	0.2863	0.2625	8.3	TM
66	TM	Styrene	0.8786	0.8954	1.9	TM
67	TM	1,3-Dichloropropane	0.4578	0.4386	4.2	TM
68	TM	Dibromochloromethane	0.3457	0.3202	7.4	TM
69	TM**	Chlorobenzene	0.8020	0.8180	2.0	TM**
70	TM*	Ethylbenzene	0.7272	0.7049	3.1	TM*
71	TM**	Bromoform	0.2854	0.2690	5.8	TM**
72	TM	Isopropylbenzene	2.340	2.239	4.3	TM
73	TM**	1,1,2,2-Tetrachloroethane	0.6767	0.6490	4.1	TM**
74	TM	1,2,3-Trichloropropane	0.1179	0.1177	0.17	TM
75	TM	t-1,4-Dichloro-2-Butene	0.1542	0.1348	13	TM
76	TM	Bromobenzene	0.3798	0.3824	0.70	TM
77	TM	n-Propylbenzene	1.424	1.345	5.5	TM
78	TM	4-Ethyltoluene	2.162	2.138	1.1	TM
79	TM	2-Chlorotoluene	0.9036	0.8686	3.9	TM
80	TM	1,3,5-Trimethylbenzene	1.874	1.811	3.4	TM
Average					4.4	



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0121L19.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	4-Chlorotoluene	1.025	0.9751	4.8	TM
82	TM	Tert-Butylbenzene	1.986	2.020	1.7	TM
83	TM	1,2,4-Trimethylbenzene	1.847	1.835	0.67	TM
84	TM	Sec-Butylbenzene	2.417	2.346	2.9	TM
85	TM	p-Isopropyltoluene	1.122	1.088	3.0	TM
86	TM	Benzyl Chloride	0.8018	0.6922	14	TM
87	TM	1,3-DCB	0.6731	0.6511	3.3	TM
88	TM	1,4-DCB	1.333	1.287	3.5	TM
89	TM	n-Butylbenzene	0.8018	0.6922	14	TM
90	TM	1,2-DCB	1.295	1.257	2.9	TM
91	TM	Hexachloroethane	0.4066	0.3982	2.1	TM
92	TML	1,2-Dibromo-3-chloropropane	0.1600	0.1373	14	TML 10
93	TM	1,2,4-Trichlorobenzene	0.8171	0.7797	4.6	TM
94	TM	Hexachlorobutadiene	0.4061	0.3901	3.9	TM
95	TM	Naphthalene	1.700	1.614	5.1	TM
96	TM	1,2,3-Trichlorobenzene	0.3633	0.3495	3.8	TM
97						
98						
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118						
119						
120						

Average

5.3

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L19.D  
 Acq On : 21 Jan 19 23:32  
 Sample : (SS)10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:46 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	352704	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	315584	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	177920	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
38) Dibromofluoromethane(S)	5.65	111	167482	25.1986	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.796%	
43) 1,2-DCA-D4(S)	6.07	65	197373	25.4673	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.868%	
64) Toluene-D8(S)	8.37	98	621534	24.1045	ppb	0.00
Spiked Amount	25.000		Recovery	=	96.416%	
72) 4-Bromofluorobenzene(S)	11.26	95	262142	24.2350	ppb	0.00
Spiked Amount	25.000		Recovery	=	96.940%	
<b>Target Compounds</b>						
2) Freon 1113	1.12	116	199306	103.4430	ppb	99
3) Dichlorodifluoromethane	1.15	85	40292	12.0439	ppb	93
4) Freon 114	1.25	85	23344	9.7175	ppb	96
5) Chloromethane	1.29	50	52221	10.6313	ppb	91
6) Vinyl chloride	1.38	62	50825	11.4788	ppb	95
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	406080	108.3992	ppb	99
8) Bromomethane	1.65	94	33480	11.4653	ppb	95
9) Chloroethane	1.76	64	23154	10.1989	ppb	100
10) Dichlorofluoromethane	1.95	67	74555	9.2587	ppb	99
11) Trichlorofluoromethane	2.00	101	64155	10.3781	ppb	95
12) Acrolein	2.43	56	90574	99.7058	ppb	# 94
13) Acetone	2.61	43	9878	8.9862	ppb	96
14) Freon-113	2.54	101	31450	9.1767	ppb	95
15) 1,1-DCE	2.52	63	10180	8.8752	ppb	95
16) t-Butanol	3.38	59	46408	110.8423	ppb	99
17) 2-Propanol	2.84	45	27542	90.6474	ppb	# 99
18) Acetonitrile	2.92	41	90003	125.5530	ppb	95
19) Methyl Acetate	3.01	43	36175	9.0213	ppb	89
20) Iodomethane	2.67	142	10498	8.7988	ppb	96
21) Acrylonitrile	3.44	52	12525	8.5919	ppb	94
22) Methylene chloride	3.10	84	46087	10.1097	ppb	95
23) Carbon disulfide	2.73	76	112905	9.4538	ppb	98
24) Methyl t-butyl ether (MtBE)	3.54	73	106210	9.6982	ppb	96
25) Trans-1,2-DCE	2.52	96	20136	9.6992	ppb	88
26) Diisopropyl Ether	4.33	45	114199	9.6436	ppb	98
28) 1,1-DCA	4.10	63	65460	9.6304	ppb	99
29) Vinyl Acetate	4.27	43	32915	13.2694	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	101346	9.8420	ppb	92
31) MEK (2-Butanone)	5.07	43	19449	10.4280	ppb	93
32) Cis-1,2-DCE	4.98	96	37088	9.5862	ppb	95
33) 2,2-Dichloropropane	4.97	77	48031	8.9533	ppb	# 90
36) Chloroform	5.45	83	59740	10.0530	ppb	95
37) Bromochloromethane	5.30	128	9043	9.5805	ppb	94
39) 1,1,1-TCA	5.65	97	22024	10.1963	ppb	95
40) Cyclohexane	5.72	41	24838	9.2981	ppb	86
41) 1,1-Dichloropropene	5.88	75	40284	9.5951	ppb	91
42) 2,2,4-Trimethylpentane	6.28	57	66646	8.6753	ppb	98
44) Carbon Tetrachloride	5.87	117	44013	9.9370	ppb	93
45) Tert Amyl Methyl Ether	6.36	73	89305	9.6009	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0121L19.D L0121W.M Tue Jan 22 13:41:05 2019 Page 499 of 674

Data File : M:\LOKI\DATA\190121\0121L19.D  
 Acq On : 21 Jan 19 23:32  
 Sample : (SS)10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:46 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	47696	9.8722	ppb	96
48) Benzene	6.13	78	126596	10.1038	ppb	97
49) TCE	6.95	130	19216	9.1692	ppb	95
50) 2-Pentanone	7.23	43	295226	122.6211	ppb	98
51) 1,2-Dichloropropane	7.20	63	32830	9.9108	ppb	100
52) Bromodichloromethane	7.55	83	24544	9.7499	ppb	96
53) Methyl Cyclohexane	7.17	83	42362	9.4473	ppb	86
54) Dibromomethane	7.34	93	22047	9.5259	ppb	94
55) 2-Chloroethyl vinyl ether	7.93	43	822	9.3581	ppb	# 53
56) MIBK (methyl isobutyl ket	8.29	43	29745	8.9482	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	26592	10.5184	ppb	94
58) Cis-1,3-Dichloropropene	8.07	75	55452	10.1007	ppb	97
59) Toluene	8.44	91	77544	10.2988	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	50516	9.5667	ppb	96
61) 1,1,2-TCA	8.90	83	25543	9.5277	ppb	89
62) 2-Hexanone	9.22	43	20137	8.9597	ppb	93
65) 1,2-EDB	9.44	107	19464	9.6050	ppb	95
66) Tetrachloroethene	9.05	166	23632	9.4486	ppb	95
67) 1-Chlorohexane	10.00	91	39960	9.1977	ppb	97
68) 1,1,1,2-Tetrachloroethane	10.09	131	39400	9.6193	ppb	94
69) m&p-Xylene	10.26	91	244270	19.8206	ppb	98
70) o-Xylene	10.70	106	33136	9.1700	ppb	94
71) Styrene	10.71	104	113030	10.1913	ppb	94
73) 1,3-Dichloropropane	9.08	76	55370	9.5808	ppb	100
74) Dibromochloromethane	9.33	129	40416	9.2625	ppb	97
75) Chlorobenzene	10.00	112	103257	10.1994	ppb	96
76) Ethylbenzene	10.13	91	88984	9.6942	ppb	98
77) Bromoform	10.90	173	33955	9.4249	ppb	89
79) Isopropylbenzene	11.11	105	159352	9.5687	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	46191	9.5909	ppb	98
81) 1,2,3-Trichloropropane	11.47	110	8379	9.9828	ppb	95
82) t-1,4-Dichloro-2-Butene	11.50	53	9593	8.7418	ppb	99
83) Bromobenzene	11.42	156	27216	10.0702	ppb	97
84) n-Propylbenzene	11.56	91	95751	9.4470	ppb	99
85) 4-Ethyltoluene	11.69	105	152146	9.8886	ppb	97
86) 2-Chlorotoluene	11.64	91	61818	9.6130	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	128905	9.6641	ppb	95
88) 4-Chlorotoluene	11.76	91	69396	9.5159	ppb	98
89) Tert-Butylbenzene	12.11	119	143789	10.1718	ppb	93
90) 1,2,4-Trimethylbenzene	12.17	105	130586	9.9329	ppb	100
91) Sec-Butylbenzene	12.36	105	166952	9.7078	ppb	99
92) p-Isopropyltoluene	12.52	119	77440	9.7004	ppb	97
93) Benzyl Chloride	12.71	91	49259	8.6320	ppb	97
94) 1,3-DCB	12.47	146	46336	9.6730	ppb	98
95) 1,4-DCB	12.56	146	91599	9.6541	ppb	95
96) n-Butylbenzene	12.71	91	49259	8.6320	ppb	95
97) 1,2-DCB	12.97	146	89474	9.7057	ppb	95
98) Hexachloroethane	13.26	117	28338	9.7932	ppb	92
99) 1,2-Dibromo-3-chloropropan	13.82	75	9769	8.9756	ppb	92
100) 1,2,4-Trichlorobenzene	14.74	180	55490	9.5422	ppb	95
101) Hexachlorobutadiene	14.94	225	27766	9.6069	ppb	91
102) Naphthalene	15.01	128	114836	9.4943	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	24872	9.6199	ppb	93

(#) = qualifier out of range (m) = manual integration  
 0121L19.D L0121W.M Tue Jan 22 13:41 Page 410 of 674

Quantitation Report

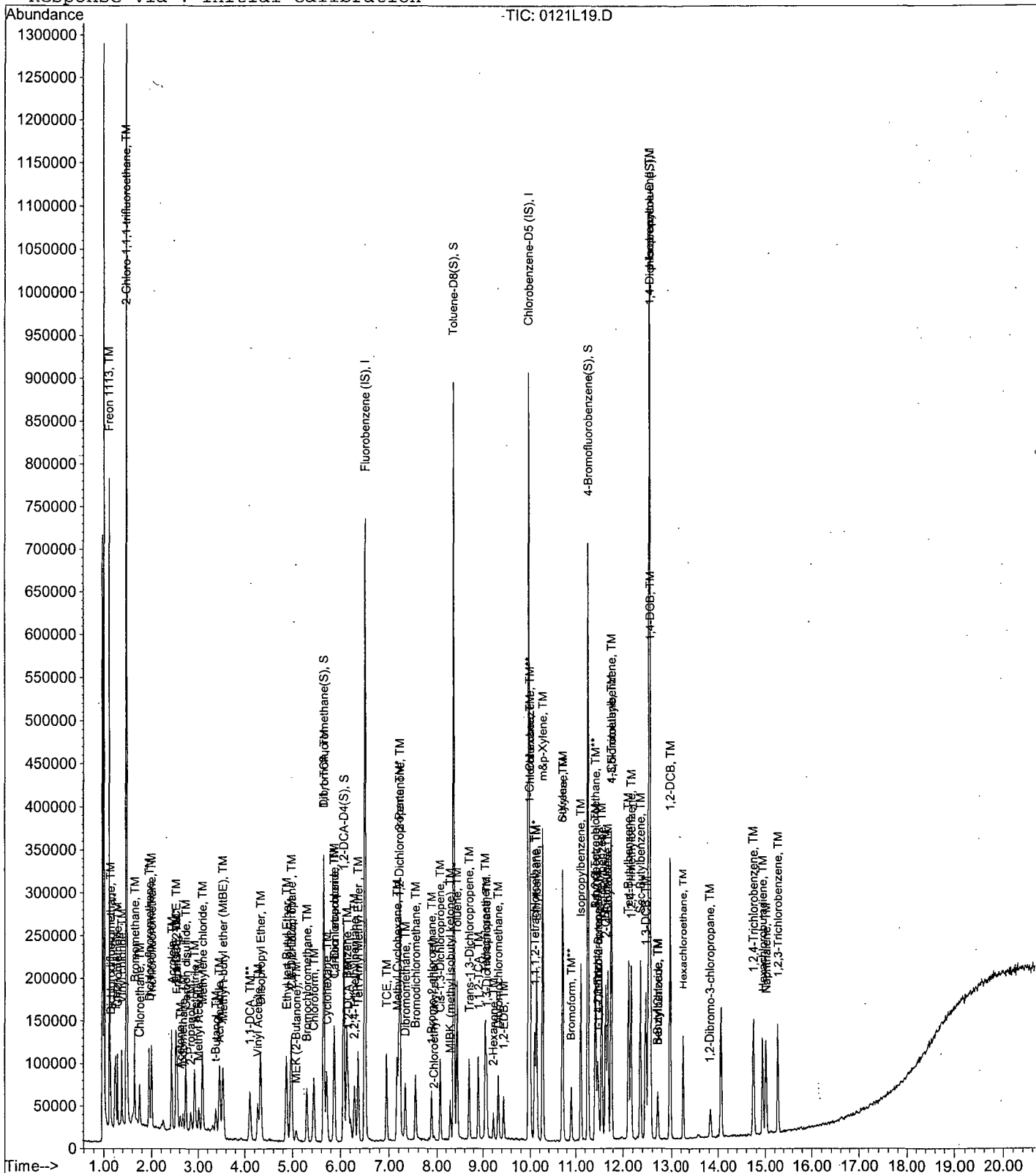
Data File : M:\LOKI\DATA\190121\0121L19.D  
Acq On : 21 Jan 19 23:32  
Sample : (SS)10ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 18  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:46 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Initial Cal. Date: 01/21/19  
Data File: 0123L03.D

	Compound	MEAN	CCRF	%D	%Drift	
1	I Fluorobenzene (IS)	ISTD			I	
2	TMQ Dichlorodifluoromethane	0.2227	0.2463	11	TMQ	4.1
3	TM Freon 114	0.1703	0.2160	27	TM	
4	TM** Chloromethane	0.3482	0.3351	3.7	TM**	
5	TM* Vinyl chloride	0.3138	0.3324	5.9	TM*	
6	TM 2-Chloro-1,1,1-trifluoroethane	0.2655	0.0001	100	TM	
7	TML Bromomethane	0.2254	0.2322	3.0	TML	12
8	TML Chloroethane	0.1836	0.1693	7.8	TML	5.4
9	TM Dichlorofluoromethane	0.5708	0.5422	5.0	TM	
10	TM Trichlorofluoromethane	0.4382	0.4281	2.3	TM	
11	TML Acrolein	0.0664	0.0646	2.7	TML	1.0
12	TML Acetone	0.0818	0.0572	30	TML	33
13	TM Freon-113	0.2429	0.2506	3.2	TM	
14	TM* 1,1-DCE	0.0813	0.0817	0.54	TM*	
15	TM t-Butanol	0.0297	0.0239	20	TM	
16	TM 2-Propanol	0.0215	0.0006	97	TM	
17	TM Acetonitrile	0.0508	0.0475	6.5	TM	
18	TML Methyl Acetate	0.3282	0.2602	21	TML	8.4
19	TML Iodomethane	0.0712	0.0462	35	TML	33
20	TML Acrylonitrile	0.1117	0.1078	3.5	TML	5.5
21	TML Methylene chloride	0.3598	0.3078	14	TML	5.1
22	TM Carbon disulfide	0.8465	0.7815	7.7	TM	
23	TM Methyl t-butyl ether (MtBE)	0.7763	0.7880	1.5	TM	
24	TM Trans-1,2-DCE	0.1472	0.1428	2.9	TM	
25	TM Diisopropyl Ether	0.8394	0.8233	1.9	TM	
26	TM**L 2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0241	0.00	TM**L	
27	TM** 1,1-DCA	0.4818	0.5123	6.3	TM**	
28	TM Vinyl Acetate	0.1758	0.2333	33	TM	
29	TM Ethyl tert Butyl Ether	0.7299	0.7359	0.83	TM	
30	TML MEK (2-Butanone)	0.1506	0.1313	13	TML	0.63
31	TM Cis-1,2-DCE	0.2742	0.2791	1.8	TM	
32	TM 2,2-Dichloropropane	0.3802	0.4206	11	TM	
33	TM 2-Methylpentane	0.0000	0.0005	0.00	TM	
34	TML 3-Methylpentane	0.0000	0.0026	0.00	TML	
35	TM* Chloroform	0.4212	0.4292	1.9	TM*	
36	TM Bromochloromethane	0.0669	0.0687	2.7	TM	
37	S Dibromofluoromethane(S)	0.4711	0.4915	4.3	S	
38	TM 1,1,1-TCA	0.1531	0.1595	4.2	TM	
39	TML Cyclohexane	0.2243	0.1994	11	TML	5.5
40	TM 1,1-Dichloropropene	0.2976	0.2826	5.0	TM	

Average

13.0

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0123L03.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2,2,4-Trimethylpentane	0.5445	0.5638	3.5	TM
42	S	1,2-DCA-D4(S)	0.5493	0.5807	5.7	S
43	TM	Carbon Tetrachloride	0.3139	0.3192	1.7	TM
44	TM	Tert Amyl Methyl Ether	0.6593	0.6320	4.1	TM
45	TML	Methylcyclopentane	0.0000	0.0013	0.00	TML
46	TM	1,2-DCA	0.3424	0.3382	1.2	TM
47	TM	Benzene	0.8881	0.8620	2.9	TM
48	TM	TCE	0.1485	0.1330	10	TM
49	TM	2-Pentanone	0.1707	0.1628	4.6	TM
50	TM*	1,2-Dichloropropane	0.2348	0.2298	2.1	TM*
51	TM	Bromodichloromethane	0.1784	0.1823	2.2	TM
52	TM	Methyl Cyclohexane	0.3178	0.2876	9.5	TM
53	TM	Dibromomethane	0.1640	0.1596	2.7	TM
54	TM	2-Chloroethyl vinyl ether	0.0062	0.0051	17	TM
55	TM	MIBK (methyl isobutyl ketone)	0.2356	0.2381	1.1	TM
56	TM	1-Bromo-2-chloroethane	0.1792	0.1666	7.0	TM
57	TM	Cis-1,3-Dichloropropene	0.3891	0.3716	4.5	TM
58	TM*	Toluene	0.5337	0.5083	4.8	TM*
59	TM	Trans-1,3-Dichloropropene	0.3743	0.3655	2.3	TM
60	TM	1,1,2-TCA	0.1900	0.1803	5.1	TM
61	TM	2-Hexanone	0.1593	0.1432	10	TM
62	I	Chlorobenzene-D5 (IS)	ISTD			I
63	S	Toluene-D8(S)	2.043	2.044	0.05	S
64	TM	1,2-EDB	0.1605	0.1600	0.36	TM
65	TM	Tetrachloroethene	0.1981	0.1857	6.3	TM
66	TML	1-Chlorohexane	0.3753	0.3167	16	TML 8.0
67	TM	1,1,1,2-Tetrachloroethane	0.3245	0.3275	0.95	TM
68	TM	m&p-Xylene	0.9763	0.9493	2.8	TM
69	TM	o-Xylene	0.2863	0.2628	8.2	TM
70	TM	Styrene	0.8786	0.8415	4.2	TM
71	S	4-Bromofluorobenzene(S)	0.8569	0.8517	0.60	S
72	TM	1,3-Dichloropropane	0.4578	0.4441	3.0	TM
73	TM	Dibromochloromethane	0.3457	0.3486	0.84	TM
74	TM**	Chlorobenzene	0.8020	0.8363	4.3	TM**
75	TM*	Ethylbenzene	0.7272	0.6964	4.2	TM*
76	TM**	Bromoform	0.2854	0.2992	4.8	TM**
77	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
78	TM	Isopropylbenzene	2.340	2.136	8.7	TM
79	TM**	1,1,2,2-Tetrachloroethane	0.6767	0.6465	4.5	TM**
80	TM	1,2,3-Trichloropropane	0.1179	0.1138	3.5	TM

Average

4.6

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0123L03.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	t-1,4-Dichloro-2-Butene	0.1542	0.1194	23	TM	*
82	TM	Bromobenzene	0.3798	0.3635	4.3	TM	
83	TM	n-Propylbenzene	1.424	1.330	6.6	TM	
84	TM	4-Ethyltoluene	2.162	1.989	8.0	TM	
85	TM	2-Chlorotoluene	0.9036	0.8234	8.9	TM	
86	TM	1,3,5-Trimethylbenzene	1.874	1.700	9.3	TM	
87	TM	4-Chlorotoluene	1.025	0.9566	6.6	TM	
88	TM	Tert-Butylbenzene	1.986	1.892	4.8	TM	
89	TM	1,2,4-Trimethylbenzene	1.847	1.666	9.8	TM	
90	TM	Sec-Butylbenzene	2.417	2.228	7.8	TM	
91	TM	p-Isopropyltoluene	1.122	1.012	9.8	TM	
92	TM	Benzyl Chloride	0.8018	0.8290	3.4	TM	
93	TM	1,3-DCB	0.6731	0.6469	3.9	TM	
94	TM	1,4-DCB	1.333	1.233	7.5	TM	
95	TM	n-Butylbenzene	0.8018	0.8290	3.4	TM	
96	TM	1,2-DCB	1.295	1.279	1.3	TM	
97	TM	Hexachloroethane	0.4066	0.4249	4.5	TM	
98	TML	1,2-Dibromo-3-chloropropane	0.1600	0.1382	14	TML	9.6
99	TM	1,2,4-Trichlorobenzene	0.8171	0.7060	14	TM	
100	TM	Hexachlorobutadiene	0.4061	0.3752	7.6	TM	
101	TM	Naphthalene	1.700	1.312	23	TM	* NT
102	TM	1,2,3-Trichlorobenzene	0.3633	0.3144	13	TM	
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							

Average

8.8

Data File : M:\LOKI\DATA\190121\0123L03.D  
 Acq On : 23 Jan 19 8:23  
 Sample : 190123A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 23 9:13 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	311680	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	262080	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	154432	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane (S)	5.65	111	153179	26.0801	ppb	0.00
Spiked Amount				25.000		
				Recovery =	104.320%	
43) 1,2-DCA-D4 (S)	6.07	65	180983	26.4261	ppb	0.00
Spiked Amount				25.000		
				Recovery =	105.704%	
64) Toluene-D8 (S)	8.37	98	535579	25.0114	ppb	0.00
Spiked Amount				25.000		
				Recovery =	100.044%	
72) 4-Bromofluorobenzene (S)	11.27	95	223218	24.8495	ppb	0.00
Spiked Amount				25.000		
				Recovery =	99.396%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.14	85	30704	10.4078	ppb	93
4) Freon 114	1.25	85	26928	12.6848	ppb	99
5) Chloromethane	1.29	50	41783	9.6260	ppb	93
6) Vinyl chloride	1.38	62	41447	10.5929	ppb	92
8) Bromomethane	1.66	94	28948	11.1761	ppb	97
9) Chloroethane	1.76	64	21105	10.5404	ppb	95
10) Dichlorofluoromethane	1.95	67	67600	9.5000	ppb	94
11) Trichlorofluoromethane	2.00	101	53368	9.7694	ppb	92
12) Acrolein	2.42	56	100633	126.2639	ppb	# 94
13) Acetone	2.61	43	7126	6.7378	ppb	93
14) Freon-113	2.55	101	31246	10.3172	ppb	94
15) 1,1-DCE	2.52	63	10191	10.0543	ppb	# 70
16) t-Butanol	3.38	59	37169	100.4604	ppb	95
17) 2-Propanol	2.83	45	792	2.9498	ppb	# 1
18) Acetonitrile	2.92	41	74000	116.8163	ppb	97
19) Methyl Acetate	3.01	43	32440	9.1573	ppb	99
20) Iodomethane	2.67	142	5759	6.7369	ppb	96
21) Acrylonitrile	3.44	52	13441	10.5457	ppb	88
22) Methylene chloride	3.10	84	38380	9.4936	ppb	100
23) Carbon disulfide	2.73	76	97434	9.2322	ppb	98
24) Methyl t-butyl ether (MtBE)	3.53	73	98236	10.1508	ppb	96
25) Trans-1,2-DCE	2.52	96	17808	9.7069	ppb	90
26) Diisopropyl Ether	4.33	45	102642	9.8085	ppb	93
28) 1,1-DCA	4.10	63	63866	10.6326	ppb	95
29) Vinyl Acetate	4.27	43	29090	13.2709	ppb	# 79
30) Ethyl tert Butyl Ether	4.87	59	91749	10.0827	ppb	99
31) MEK (2-Butanone)	5.07	43	16367	9.9373	ppb	90
32) Cis-1,2-DCE	4.98	96	34797	10.1778	ppb	88
33) 2,2-Dichloropropane	4.96	77	52441	11.0620	ppb	90
36) Chloroform	5.45	83	53508	10.1894	ppb	98
37) Bromochloromethane	5.30	128	8563	10.2661	ppb	88
39) 1,1,1-TCA	5.65	97	19888	10.4193	ppb	99
40) Cyclohexane	5.71	41	24860	10.5510	ppb	78
41) 1,1-Dichloropropene	5.88	75	35230	9.4958	ppb	# 89
42) 2,2,4-Trimethylpentane	6.29	57	70294	10.3546	ppb	100
44) Carbon Tetrachloride	5.87	117	39799	10.1683	ppb	90
45) Tert Amyl Methyl Ether	6.36	73	78793	9.5858	ppb	97
47) 1,2-DCA	6.16	62	42170	9.8773	ppb	98
48) Benzene	6.13	78	107471	9.7064	ppb	98

(#) = qualifier out of range (m) = manual integration



Data File : M:\LOKI\DATA\190121\0123L03.D  
 Acq On : 23 Jan 19 8:23  
 Sample : 190123A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 23 9:13 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	16584	8.9549	ppb	95
50) 2-Pentanone	7.23	43	253632	119.2110	ppb	98
51) 1,2-Dichloropropane	7.20	63	28653	9.7883	ppb	97
52) Bromodichloromethane	7.54	83	22728	10.2168	ppb	93
53) Methyl Cyclohexane	7.17	83	35851	9.0477	ppb	92
54) Dibromomethane	7.33	93	19898	9.7290	ppb	93
55) 2-Chloroethyl vinyl ether	7.94	43	642	8.2709	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	29690	10.1072	ppb	97
57) 1-Bromo-2-chloroethane	7.88	63	20768	9.2960	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	46328	9.5495	ppb	93
59) Toluene	8.44	91	63368	9.5238	ppb	96
60) Trans-1,3-Dichloropropene	8.71	75	45570	9.7660	ppb	95
61) 1,1,2-TCA	8.90	83	22481	9.4892	ppb	94
62) 2-Hexanone	9.22	43	17858	8.9915	ppb	# 86
65) 1,2-EDB	9.44	107	16768	9.9639	ppb	91
66) Tetrachloroethene	9.06	166	19472	9.3747	ppb	96
67) 1-Chlorohexane	10.00	91	33199	9.2018	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	34337	10.0946	ppb	100
69) m&p-Xylene	10.27	91	199041	19.4478	ppb	98
70) o-Xylene	10.70	106	27552	9.1813	ppb	93
71) Styrene	10.71	104	88212	9.5773	ppb	99
73) 1,3-Dichloropropane	9.08	76	46558	9.7007	ppb	97
74) Dibromochloromethane	9.33	129	36540	10.0838	ppb	95
75) Chlorobenzene	10.00	112	87673	10.4281	ppb	98
76) Ethylbenzene	10.13	91	73000	9.5764	ppb	97
77) Bromoform	10.90	173	31366	10.4836	ppb	# 75
79) Isopropylbenzene	11.11	105	131927	9.1268	ppb	98
80) 1,1,2,2-Tetrachloroethane	11.43	83	39937	9.5535	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	7031	9.6508	ppb	88
82) t-1,4-Dichloro-2-Butene	11.49	53	7378	7.7459	ppb	99
83) Bromobenzene	11.43	156	22456	9.5727	ppb	94
84) n-Propylbenzene	11.56	91	82137	9.3363	ppb	98
85) 4-Ethyltoluene	11.69	105	122893	9.2022	ppb	97
86) 2-Chlorotoluene	11.64	91	50866	9.1130	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	104987	9.0681	ppb	96
88) 4-Chlorotoluene	11.77	91	59094	9.3357	ppb	97
89) Tert-Butylbenzene	12.12	119	116860	9.5241	ppb	93
90) 1,2,4-Trimethylbenzene	12.17	105	102927	9.0197	ppb	95
91) Sec-Butylbenzene	12.36	105	137657	9.2218	ppb	98
92) p-Isopropyltoluene	12.52	119	62520	9.0225	ppb	98
93) Benzyl Chloride	12.71	91	51212	10.3392	ppb	94
94) 1,3-DCB	12.46	146	39960	9.6107	ppb	99
95) 1,4-DCB	12.56	146	76187	9.2510	ppb	95
96) n-Butylbenzene	12.71	91	51212	10.3392	ppb	95
97) 1,2-DCB	12.97	146	79008	9.8738	ppb	96
98) Hexachloroethane	13.26	117	26246	10.4497	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	8536	9.0401	ppb	88
100) 1,2,4-Trichlorobenzene	14.74	180	43613	8.6405	ppb	88
101) Hexachlorobutadiene	14.94	225	23175	9.2380	ppb	93
102) Naphthalene	15.01	128	81021	7.7174	ppb	100
103) 1,2,3-Trichlorobenzene	15.28	180	19424	8.6553	ppb	98

(#) = qualifier out of range (m) = manual integration

0123L03.D L0121W.M Mon Jan 28 14:09:08 2019

Quantitation Report

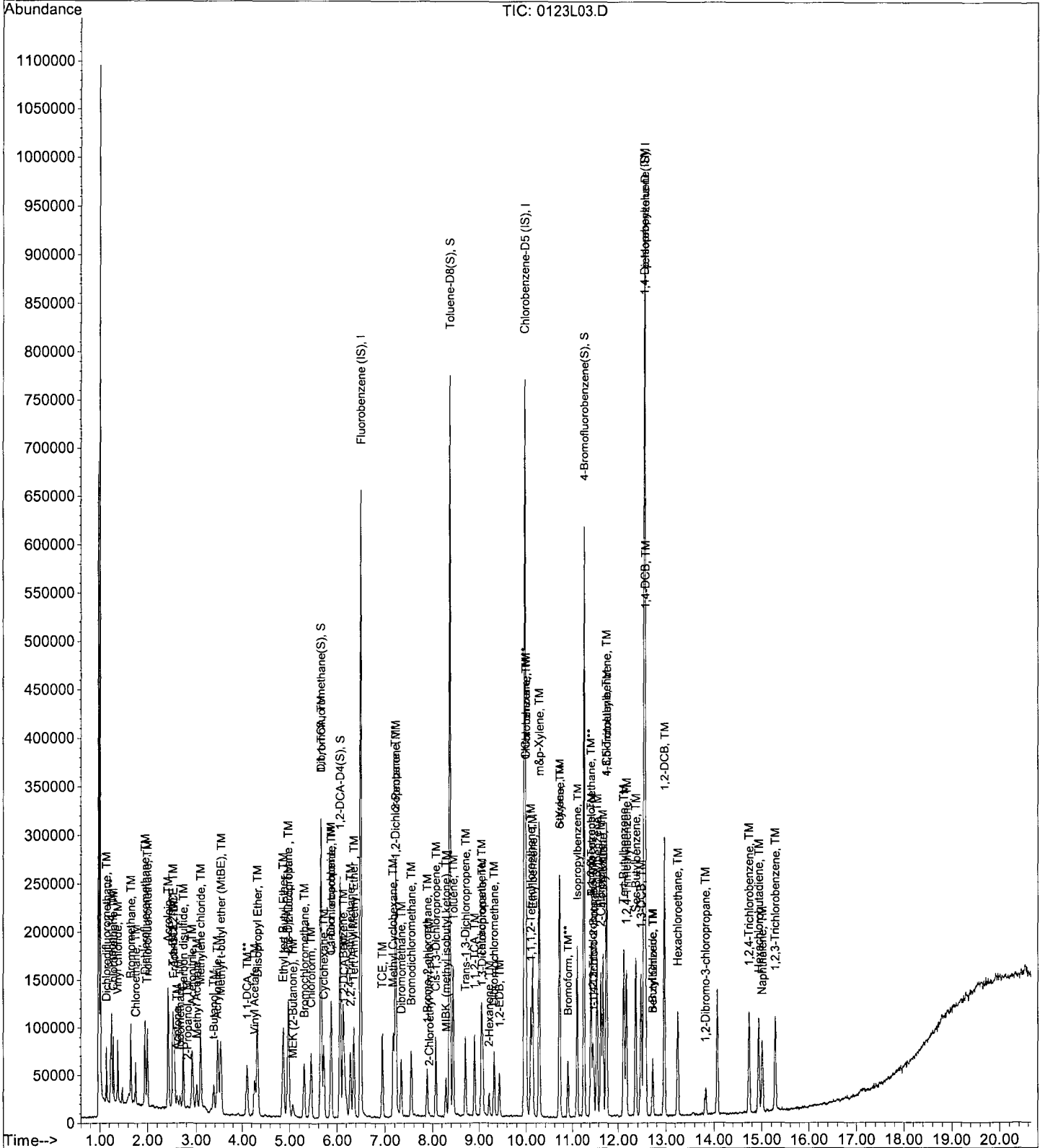
Data File : M:\LOKI\DATA\190121\0123L03.D  
Acq On : 23 Jan 19 8:23  
Sample : 190123A CCV 10ug/L  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 23 9:13 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Initial Cal. Date: 01/21/19  
Data File: 0123L26.D

	Compound	MEAN	CCRF	%D	%Drift	
1	I Fluorobenzene (IS)	ISTD			I	
2	TM Freon 1113	0.1366	0.0018	99	TM	
3	TMQ Dichlorodifluoromethane	0.2227	0.2690	21	TMQ	14
4	TM Freon 114	0.1703	0.2206	30	TM	
5	TM** Chloromethane	0.3482	0.3925	13	TM**	
6	TM* Vinyl chloride	0.3138	0.3425	9.1	TM*	
7	TM 2-Chloro-1,1,1-trifluoroethane	0.2655	0.0001	100	TM	
8	TML Bromomethane	0.2254	0.2418	7.3	TML	17
9	TML Chloroethane	0.1836	0.1782	2.9	TML	11
10	TM Dichlorofluoromethane	0.5708	0.5800	1.6	TM	
11	TM Trichlorofluoromethane	0.4382	0.4657	6.3	TM	
12	TML Acrolein	0.0664	0.0602	9.2	TML	5.9
13	TML Acetone	0.0818	0.0702	14	TML	9.8
14	TM Freon-113	0.2429	0.3532	45	TM	
15	TM* 1,1-DCE	0.0813	0.0760	6.6	TM*	
16	TM t-Butanol	0.0297	0.0383	29	TM	
17	TM 2-Propanol	0.0215	0.0027	87	TM	
18	TM Acetonitrile	0.0508	0.0548	7.9	TM	
19	TML Methyl Acetate	0.3282	0.2811	14	TML	0.95
20	TML Iodomethane	0.0712	0.0417	41	TML	36
21	TML Acrylonitrile	0.1117	0.1275	14	TML	26
22	TML Methylene chloride	0.3598	0.3442	4.3	TML	6.8
23	TM Carbon disulfide	0.8465	0.8353	1.3	TM	
24	TM Methyl t-butyl ether (MtBE)	0.7763	0.8854	14	TM	
25	TM Trans-1,2-DCE	0.1472	0.1405	4.5	TM	
26	TM Diisopropyl Ether	0.8394	0.9374	12	TM	
27	TM**L 2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0214	0.00	TM**L	
28	TM** 1,1-DCA	0.4818	0.5574	16	TM**	
29	TM Vinyl Acetate	0.1758	0.2324	32	TM	
30	TM Ethyl tert Butyl Ether	0.7299	0.8552	17	TM	
31	TML MEK (2-Butanone)	0.1506	0.1487	1.2	TML	12
32	TM Cis-1,2-DCE	0.2742	0.3130	14	TM	
33	TM 2,2-Dichloropropane	0.3802	0.4077	7.2	TM	
34	TM 2-Methylpentane	0.0000	0.0017	0.00	TM	
35	TML 3-Methylpentane	0.0000	0.0030	0.00	TML	
36	TM* Chloroform	0.4212	0.4948	17	TM*	
37	TM Bromochloromethane	0.0669	0.0790	18	TM	
38	S Dibromofluoromethane(S)	0.4711	0.5341	13	S	
39	TM 1,1,1-TCA	0.1531	0.1917	25	TM	
40	TML Cyclohexane	0.2243	0.2071	7.7	TML	9.7
Average				19.5		

\* NT  
\* NT  
\* NT

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0123L26.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	1,1-Dichloropropene	0.2976	0.3014	1.3	TM
42	TM	2,2,4-Trimethylpentane	0.5445	0.5399	0.84	TM
43	S	1,2-DCA-D4(S)	0.5493	0.6201	13	S
44	TM	Carbon Tetrachloride	0.3139	0.3398	8.2	TM
45	TM	Tert Amyl Methyl Ether	0.6593	0.6520	1.1	TM
46	TML	Methylcyclopentane	0.0000	0.0002	0.00	TML
47	TM	1,2-DCA	0.3424	0.3759	9.8	TM
48	TM	Benzene	0.8881	0.9202	3.6	TM
49	TM	TCE	0.1485	0.1513	1.9	TM
50	TM	2-Pentanone	0.1707	0.1817	6.5	TM
51	TM*	1,2-Dichloropropane	0.2348	0.2412	2.7	TM*
52	TM	Bromodichloromethane	0.1784	0.1832	2.7	TM
53	TM	Methyl Cyclohexane	0.3178	0.2994	5.8	TM
54	TM	Dibromomethane	0.1640	0.1787	8.9	TM
55	TM	2-Chloroethyl vinyl ether	0.0062	0.0062	0.57	TM
56	TM	MIBK (methyl isobutyl ketone)	0.2356	0.2304	2.2	TM
57	TM	1-Bromo-2-chloroethane	0.1792	0.1783	0.49	TM
58	TM	Cis-1,3-Dichloropropene	0.3891	0.3830	1.6	TM
59	TM*	Toluene	0.5337	0.5490	2.9	TM*
60	TM	Trans-1,3-Dichloropropene	0.3743	0.3634	2.9	TM
61	TM	1,1,2-TCA	0.1900	0.2006	5.6	TM
62	TM	2-Hexanone	0.1593	0.1513	5.0	TM
63	I	Chlorobenzene-D5 (IS)	ISTD			I
64	S	Toluene-D8(S)	2.043	2.101	2.8	S
65	TM	1,2-EDB	0.1605	0.1593	0.77	TM
66	TM	Tetrachloroethene	0.1981	0.1871	5.6	TM
67	TML	1-Chlorohexane	0.3753	0.3176	15	TML 7.7
68	TM	1,1,1,2-Tetrachloroethane	0.3245	0.3545	9.2	TM
69	TM	m&p-Xylene	0.9763	0.9467	3.0	TM
70	TM	o-Xylene	0.2863	0.2622	8.4	TM
71	TM	Styrene	0.8786	0.8503	3.2	TM
72	S	4-Bromofluorobenzene(S)	0.8569	0.8729	1.9	S
73	TM	1,3-Dichloropropane	0.4578	0.4661	1.8	TM
74	TM	Dibromochloromethane	0.3457	0.3596	4.0	TM
75	TM**	Chlorobenzene	0.8020	0.8403	4.8	TM**
76	TM*	Ethylbenzene	0.7272	0.7053	3.0	TM*
77	TM**	Bromoform	0.2854	0.2884	1.1	TM**
78	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
79	TM	Isopropylbenzene	2.340	2.180	6.9	TM
80	TM**	1,1,2,2-Tetrachloroethane	0.6767	0.6771	0.06	TM**

Average

4.2

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0123L26.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	1,2,3-Trichloropropane	0.1179	0.1163	1.4	TM
82	TM	t-1,4-Dichloro-2-Butene	0.1542	0.1275	17	TM
83	TM	Bromobenzene	0.3798	0.3530	7.0	TM
84	TM	n-Propylbenzene	1.424	1.308	8.2	TM
85	TM	4-Ethyltoluene	2.162	1.947	10.0	TM
86	TM	2-Chlorotoluene	0.9036	0.8428	6.7	TM
87	TM	1,3,5-Trimethylbenzene	1.874	1.726	7.9	TM
88	TM	4-Chlorotoluene	1.025	0.9763	4.7	TM
89	TM	Tert-Butylbenzene	1.986	1.875	5.6	TM
90	TM	1,2,4-Trimethylbenzene	1.847	1.646	11	TM
91	TM	Sec-Butylbenzene	2.417	2.233	7.6	TM
92	TM	p-Isopropyltoluene	1.122	0.9950	11	TM
93	TM	Benzyl Chloride	0.8018	0.5944	26	TM
94	TM	1,3-DCB	0.6731	0.6459	4.0	TM
95	TM	1,4-DCB	1.333	1.311	1.7	TM
96	TM	n-Butylbenzene	0.8018	0.5944	26	TM
97	TM	1,2-DCB	1.295	1.257	3.0	TM
98	TM	Hexachloroethane	0.4066	0.4289	5.5	TM
99	TML	1,2-Dibromo-3-chloropropane	0.1600	0.1340	16	TML 13
100	TM	1,2,4-Trichlorobenzene	0.8171	0.7402	9.4	TM
101	TM	Hexachlorobutadiene	0.4061	0.3807	6.3	TM
102	TM	Naphthalene	1.700	1.415	17	TM
103	TM	1,2,3-Trichlorobenzene	0.3633	0.3300	9.2	TM
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						

Average

9.7

Data File : M:\LOKI\DATA\190121\0123L26.D  
 Acq On : 23 Jan 19 19:20  
 Sample : Ending CCV 10ug/L 1/23/19  
 Misc : IS&S 11/8/18

Vial: 25  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:08 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	285120	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	246720	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	146496	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	152294	28.3448	ppb	0.00
Spiked Amount	25.000		Recovery	=	113.380%	
43) 1,2-DCA-D4(S)	6.07	65	176806	28.2211	ppb	0.00
Spiked Amount	25.000		Recovery	=	112.884%	
64) Toluene-D8(S)	8.37	98	518262	25.7095	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.836%	
72) 4-Bromofluorobenzene(S)	11.27	95	215351	25.4662	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.864%	
Target Compounds						Qvalue
2) Freon 1113	1.12	116	2056	1.3200	ppb	90
3) Dichlorodifluoromethane	1.14	85	30681	11.3531	ppb	94
4) Freon 114	1.25	85	25160	12.9561	ppb	89
5) Chloromethane	1.29	50	44762	11.2729	ppb	# 87
6) Vinyl chloride	1.38	62	39065	10.9142	ppb	94
8) Bromomethane	1.66	94	27580	11.7208	ppb	96
9) Chloroethane	1.76	64	20326	11.1315	ppb	93
10) Dichlorofluoromethane	1.95	67	66150	10.1622	ppb	94
11) Trichlorofluoromethane	2.00	101	53110	10.6279	ppb	96
12) Acrolein	2.42	56	85886	117.5637	ppb	# 94
13) Acetone	2.61	43	8005	9.0166	ppb	93
14) Freon-113	2.54	101	40280	14.5391	ppb	98
15) 1,1-DCE	2.52	63	8662	9.3419	ppb	92
16) t-Butanol	3.37	59	54553	161.1810	ppb	97
17) 2-Propanol	2.84	45	3109	12.6579	ppb	# 74
18) Acetonitrile	2.92	41	78130	134.8251	ppb	96
19) Methyl Acetate	3.01	43	32055	9.9053	ppb	90
20) Iodomethane	2.67	142	4756	6.4087	ppb	94
21) Acrylonitrile	3.45	52	14543	12.5686	ppb	93
22) Methylene chloride	3.10	84	39258	10.6843	ppb	99
23) Carbon disulfide	2.73	76	95265	9.8676	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	100979	11.4062	ppb	96
25) Trans-1,2-DCE	2.52	96	16025	9.5487	ppb	94
26) Diisopropyl Ether	4.33	45	106905	11.1676	ppb	99
28) 1,1-DCA	4.10	63	63566	11.5684	ppb	98
29) Vinyl Acetate	4.27	43	26507	13.2190	ppb	# 80
30) Ethyl tert Butyl Ether	4.87	59	97536	11.7172	ppb	97
31) MEK (2-Butanone)	5.07	43	16958	11.2364	ppb	96
32) Cis-1,2-DCE	4.98	96	35698	11.4140	ppb	97
33) 2,2-Dichloropropane	4.97	77	46497	10.7218	ppb	93
36) Chloroform	5.45	83	56430	11.7469	ppb	97
37) Bromochloromethane	5.30	128	9009	11.8069	ppb	93
39) 1,1,1-TCA	5.65	97	21864	12.5215	ppb	98
40) Cyclohexane	5.72	41	23624	10.9662	ppb	86
41) 1,1-Dichloropropene	5.88	75	34372	10.1276	ppb	98
42) 2,2,4-Trimethylpentane	6.29	57	61580	9.9160	ppb	97
44) Carbon Tetrachloride	5.87	117	38754	10.8237	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	74360	9.8892	ppb	# 94
47) 1,2-DCA	6.17	62	42868	10.9761	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0123L26.D  
 Acq On : 23 Jan 19 19:20  
 Sample : Ending CCV 10ug/L 1/23/19  
 Misc : IS&S 11/8/18

Vial: 25  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:08 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	6.13	78	104948	10.3615	ppb	95
49) TCE	6.95	130	17256	10.1857	ppb	90
50) 2-Pentanone	7.23	43	259078	133.1141	ppb	99
51) 1,2-Dichloropropane	7.21	63	27514	10.2748	ppb	98
52) Bromodichloromethane	7.55	83	20896	10.2683	ppb	97
53) Methyl Cyclohexane	7.17	83	34141	9.4187	ppb	95
54) Dibromomethane	7.34	93	20378	10.8918	ppb	93
55) 2-Chloroethyl vinyl ether	7.94	43	706	9.9426	ppb	# 70
56) MIBK (methyl isobutyl ket	8.28	43	26275	9.7779	ppb	94
57) 1-Bromo-2-chloroethane	7.89	63	20336	9.9506	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	43680	9.8424	ppb	98
59) Toluene	8.44	91	62616	10.2875	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	41444	9.7091	ppb	97
61) 1,1,2-TCA	8.90	83	22876	10.5555	ppb	95
62) 2-Hexanone	9.22	43	17251	9.4950	ppb	92
65) 1,2-EDB	9.44	107	15721	9.9233	ppb	89
66) Tetrachloroethene	9.05	166	18464	9.4429	ppb	91
67) 1-Chlorohexane	10.00	91	31341	9.2295	ppb	98
68) 1,1,1,2-Tetrachloroethane	10.10	131	34983	10.9248	ppb	95
69) m&p-Xylene	10.27	91	186853	19.3936	ppb	96
70) o-Xylene	10.70	106	25880	9.1610	ppb	94
71) Styrene	10.71	104	83910	9.6774	ppb	99
73) 1,3-Dichloropropane	9.08	76	46001	10.1814	ppb	98
74) Dibromochloromethane	9.33	129	35489	10.4035	ppb	98
75) Chlorobenzene	10.00	112	82925	10.4774	ppb	98
76) Ethylbenzene	10.13	91	69608	9.6999	ppb	99
77) Bromoform	10.90	173	28462	10.1053	ppb	82
79) Isopropylbenzene	11.11	105	127725	9.3147	ppb	96
80) 1,1,2,2-Tetrachloroethane	11.43	83	39679	10.0060	ppb	92
81) 1,2,3-Trichloropropane	11.47	110	6817	9.8639	ppb	78
82) t-1,4-Dichloro-2-Butene	11.50	53	7471	8.2684	ppb	89
83) Bromobenzene	11.42	156	20688	9.2968	ppb	100
84) n-Propylbenzene	11.56	91	76641	9.1835	ppb	97
85) 4-Ethyltoluene	11.69	105	114068	9.0041	ppb	99
86) 2-Chlorotoluene	11.65	91	49384	9.3268	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	101142	9.2092	ppb	97
88) 4-Chlorotoluene	11.77	91	57208	9.5273	ppb	96
89) Tert-Butylbenzene	12.12	119	109854	9.4381	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	96469	8.9118	ppb	96
91) Sec-Butylbenzene	12.36	105	130842	9.2401	ppb	97
92) p-Isopropyltoluene	12.52	119	58304	8.8699	ppb	98
93) Benzyl Chloride	12.71	91	34831	7.4130	ppb	97
94) 1,3-DCB	12.46	146	37848	9.5958	ppb	97
95) 1,4-DCB	12.56	146	76800	9.8306	ppb	99
96) n-Butylbenzene	12.71	91	34831	7.4130	ppb	99
97) 1,2-DCB	12.98	146	73648	9.7026	ppb	95
98) Hexachloroethane	13.26	117	25130	10.5474	ppb	91
99) 1,2-Dibromo-3-chloropropan	13.82	75	7850	8.7433	ppb	90
100) 1,2,4-Trichlorobenzene	14.74	180	43375	9.0588	ppb	94
101) Hexachlorobutadiene	14.94	225	22308	9.3741	ppb	94
102) Naphthalene	15.01	128	82913	8.3254	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	19336	9.0829	ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

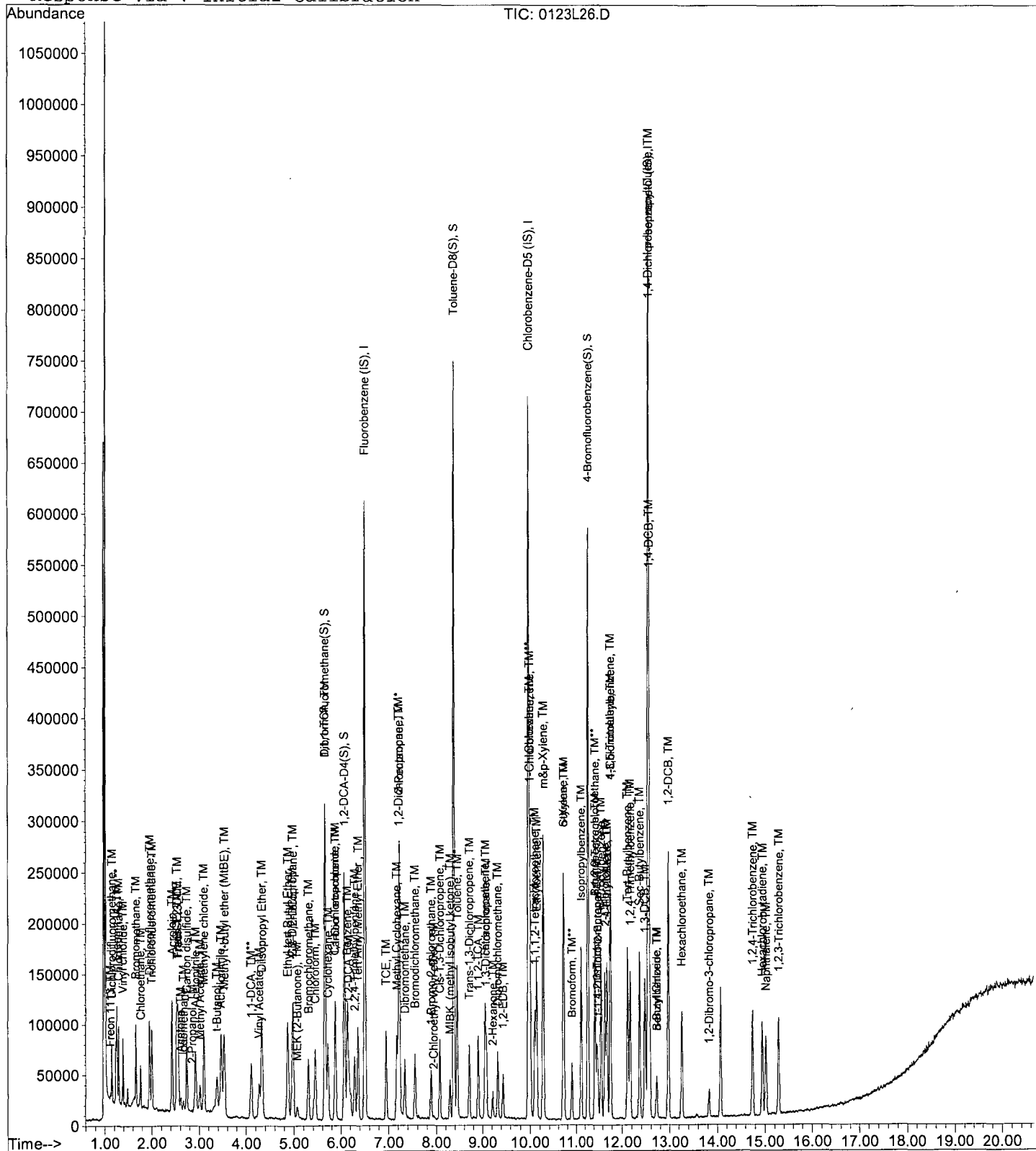
Data File : M:\LOKI\DATA\190121\0123L26.D  
Acq On : 23 Jan 19 19:20  
Sample : Ending CCV 10ug/L 1/23/19  
Misc : IS&S 11/8/18

Vial: 25  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:08 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration





**ORGANICS**  
**Raw Data**

Data File : M:\LOKI\DATA\190121\0123L21.D Vial: 20  
 Acq On : 23 Jan 19 16:57 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85417W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:12 2019 Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	285440	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	234624	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	132032	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	157357	29.2543	ppb	0.00
Spiked Amount				25.000		
					Recovery =	117.016%
43) 1,2-DCA-D4(S)	6.07	65	175189	27.9317	ppb	0.00
Spiked Amount				25.000		
					Recovery =	111.728%
64) Toluene-D8(S)	8.37	98	512643	26.7418	ppb	0.00
Spiked Amount				25.000		
					Recovery =	106.968%
72) 4-Bromofluorobenzene(S)	11.27	95	206087	25.6271	ppb	0.00
Spiked Amount				25.000		
					Recovery =	102.508%

Target Compounds Qvalue

Quantitation Report

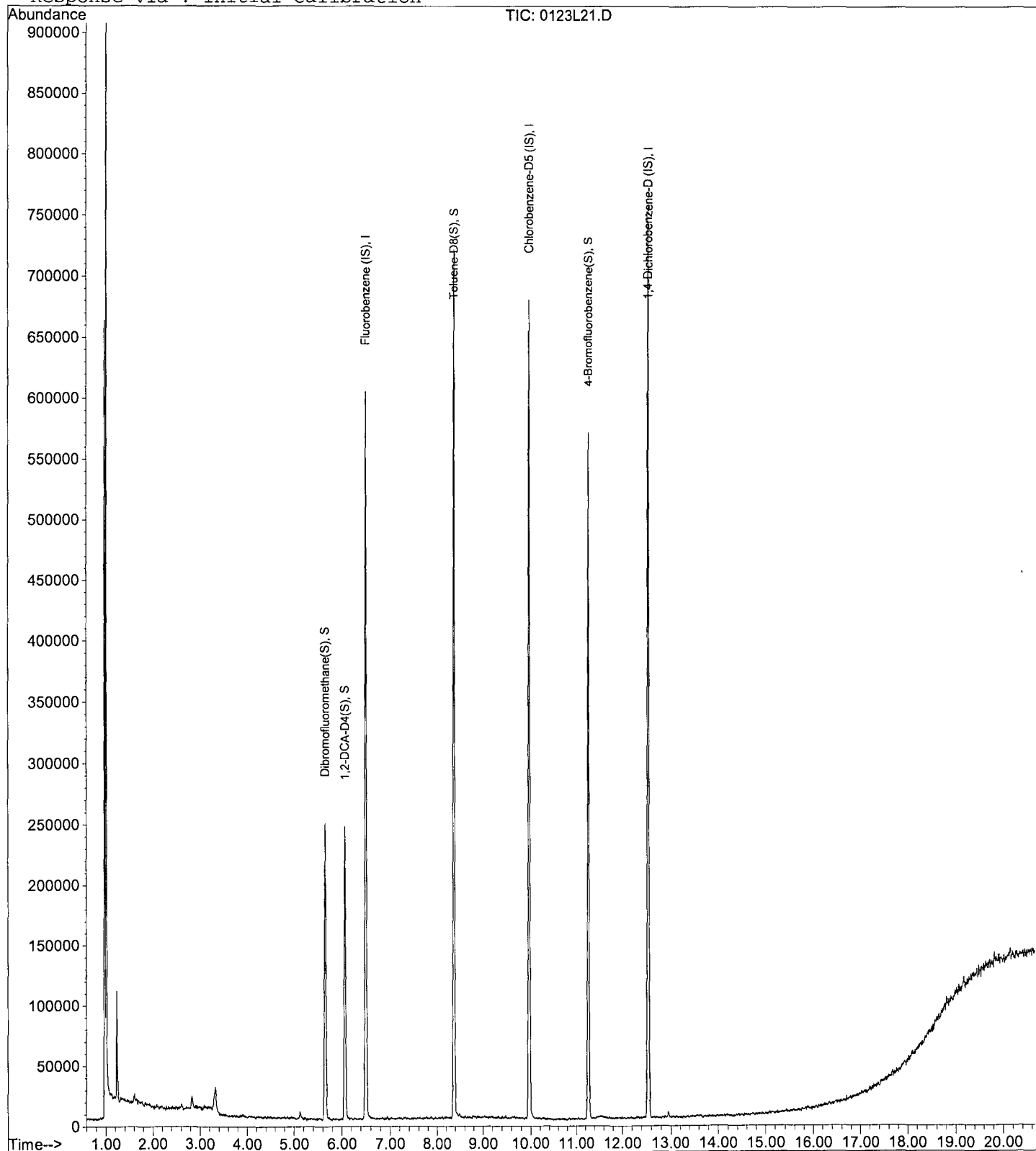
Data File : M:\LOKI\DATA\190121\0123L21.D  
Acq On : 23 Jan 19 16:57  
Sample : AZ85417W01  
Misc : IS&S 11/8/18

Vial: 20  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:12 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L22.D  
 Acq On : 23 Jan 19 17:26  
 Sample : AZ85418W01  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:26 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	282368	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	233856	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	129128	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	157099	29.5241	ppb	0.00
Spiked Amount				25.000		
					Recovery = 118.096%	
43) 1,2-DCA-D4(S)	6.07	65	173870	28.0230	ppb	0.00
Spiked Amount				25.000		
					Recovery = 112.092%	
64) Toluene-D8(S)	8.37	98	508716	26.6241	ppb	0.00
Spiked Amount				25.000		
					Recovery = 106.496%	
72) 4-Bromofluorobenzene(S)	11.27	95	205330	25.6169	ppb	0.00
Spiked Amount				25.000		
					Recovery = 102.468%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

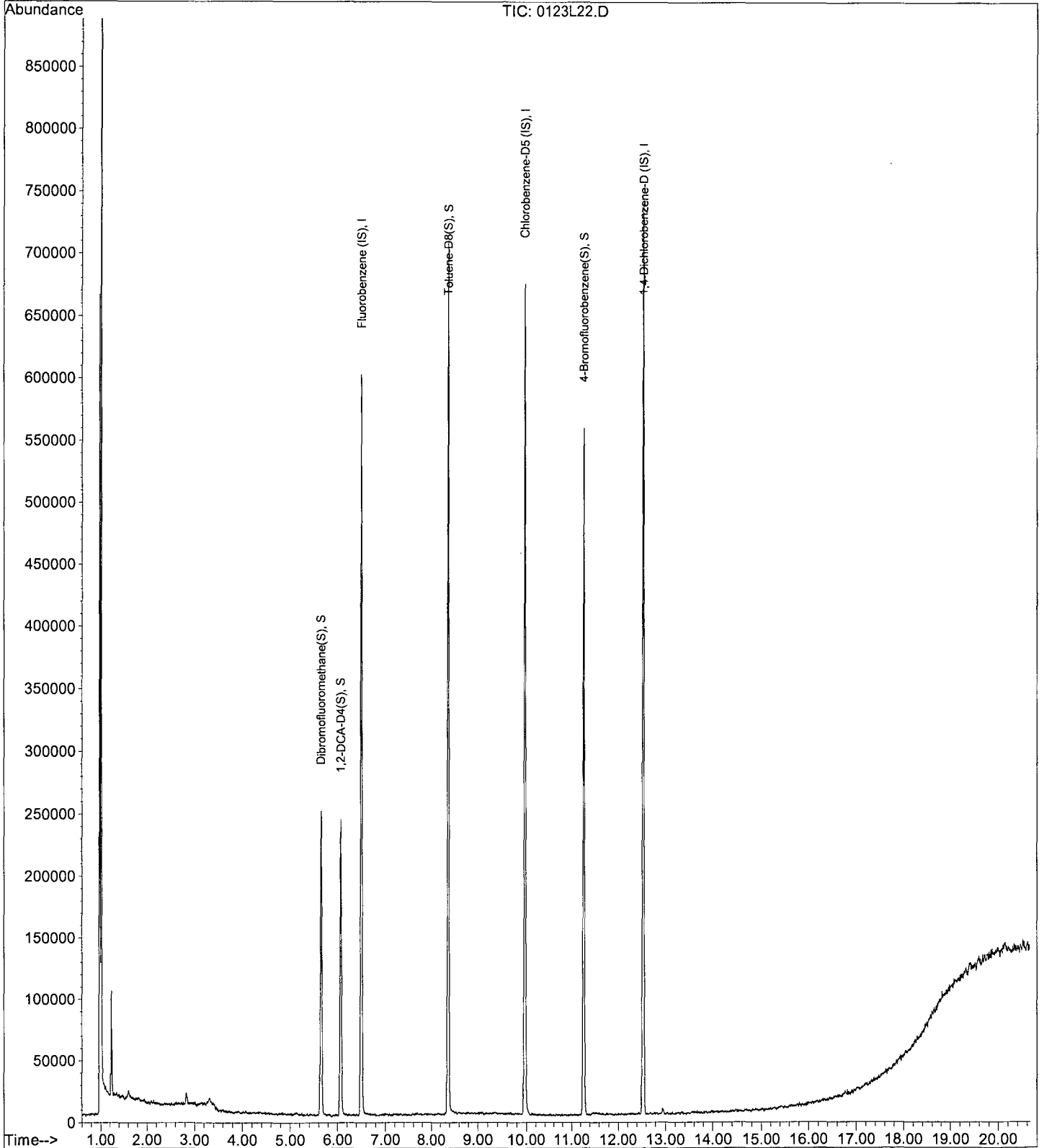
Data File : M:\LOKI\DATA\190121\0123L22.D  
Acq On : 23 Jan 19 17:26  
Sample : AZ85418W01  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:26 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L23.D  
 Acq On : 23 Jan 19 17:55  
 Sample : AZ85419W01  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:30 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	289408	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	241152	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	131392	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	156728	28.7379	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	114.952%
43) 1,2-DCA-D4(S)	6.07	65	180113	28.3230	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	113.292%
64) Toluene-D8(S)	8.37	98	519794	26.3808	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	105.524%
72) 4-Bromofluorobenzene(S)	11.27	95	204953	24.7962	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	99.184%

Target Compounds Qvalue

Quantitation Report

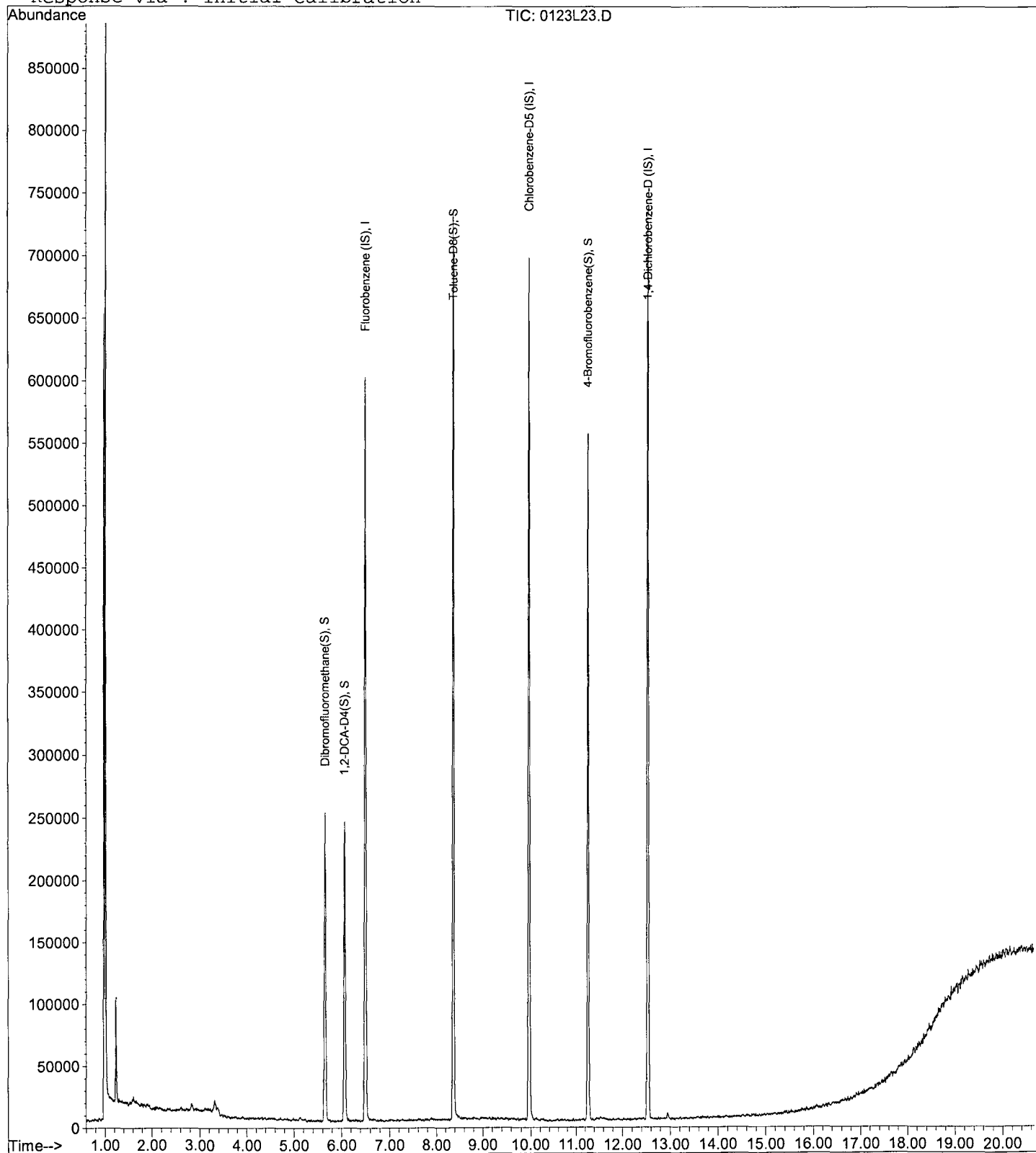
Data File : M:\LOKI\DATA\190121\0123L23.D  
Acq On : 23 Jan 19 17:55  
Sample : AZ85419W01  
Misc : IS&S 11/8/18

Vial: 22  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:30 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L24.D Vial: 23  
 Acq On : 23 Jan 19 18:23 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85420W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:31 2019 Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	282496	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	247808	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	130520	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	155395	29.1906	ppb	0.00
Spiked Amount				25.000		
					Recovery = 116.764%	
43) 1,2-DCA-D4(S)	6.07	65	175385	28.2543	ppb	0.00
Spiked Amount				25.000		
					Recovery = 113.016%	
64) Toluene-D8(S)	8.37	98	512242	25.2992	ppb	0.00
Spiked Amount				25.000		
					Recovery = 101.196%	
72) 4-Bromofluorobenzene(S)	11.26	95	204019	24.0202	ppb	0.00
Spiked Amount				25.000		
					Recovery = 96.080%	

Target Compounds Qvalue



Quantitation Report

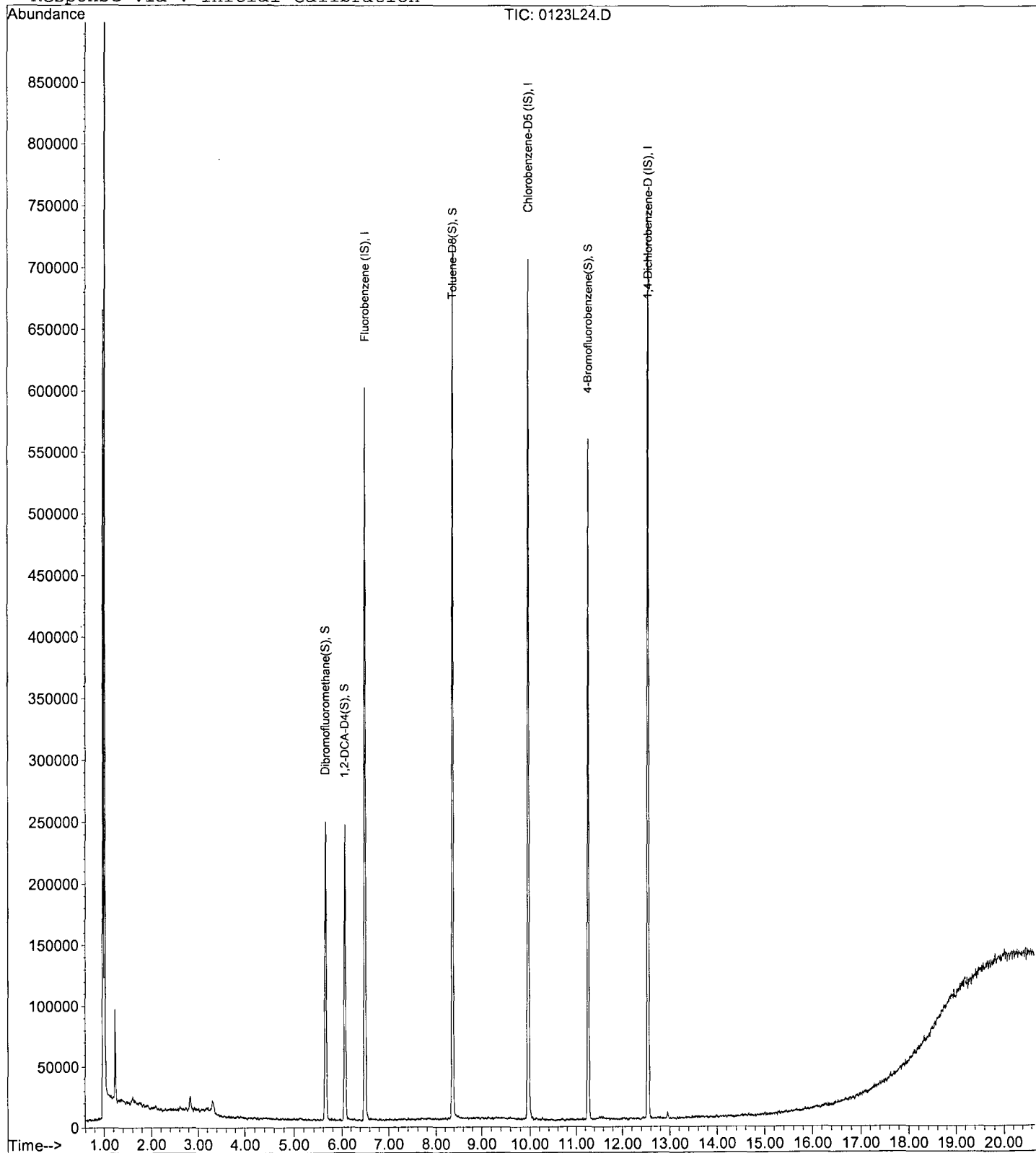
Data File : M:\LOKI\DATA\190121\0123L24.D  
Acq On : 23 Jan 19 18:23  
Sample : AZ85420W01  
Misc : IS&S 11/8/18

Vial: 23  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:31 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L12.D  
 Acq On : 23 Jan 19 12:40  
 Sample : 190123A BLK  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:34 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	327360	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	280640	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	149440	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	159200	25.8069	ppb	0.00
Spiked Amount				25.000		
					Recovery = 103.228%	
43) 1,2-DCA-D4(S)	6.07	65	184418	25.6379	ppb	0.00
Spiked Amount				25.000		
					Recovery = 102.552%	
64) Toluene-D8(S)	8.37	98	534266	23.3000	ppb	0.00
Spiked Amount				25.000		
					Recovery = 93.200%	
72) 4-Bromofluorobenzene(S)	11.26	95	216073	22.4633	ppb	0.00
Spiked Amount				25.000		
					Recovery = 89.852%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

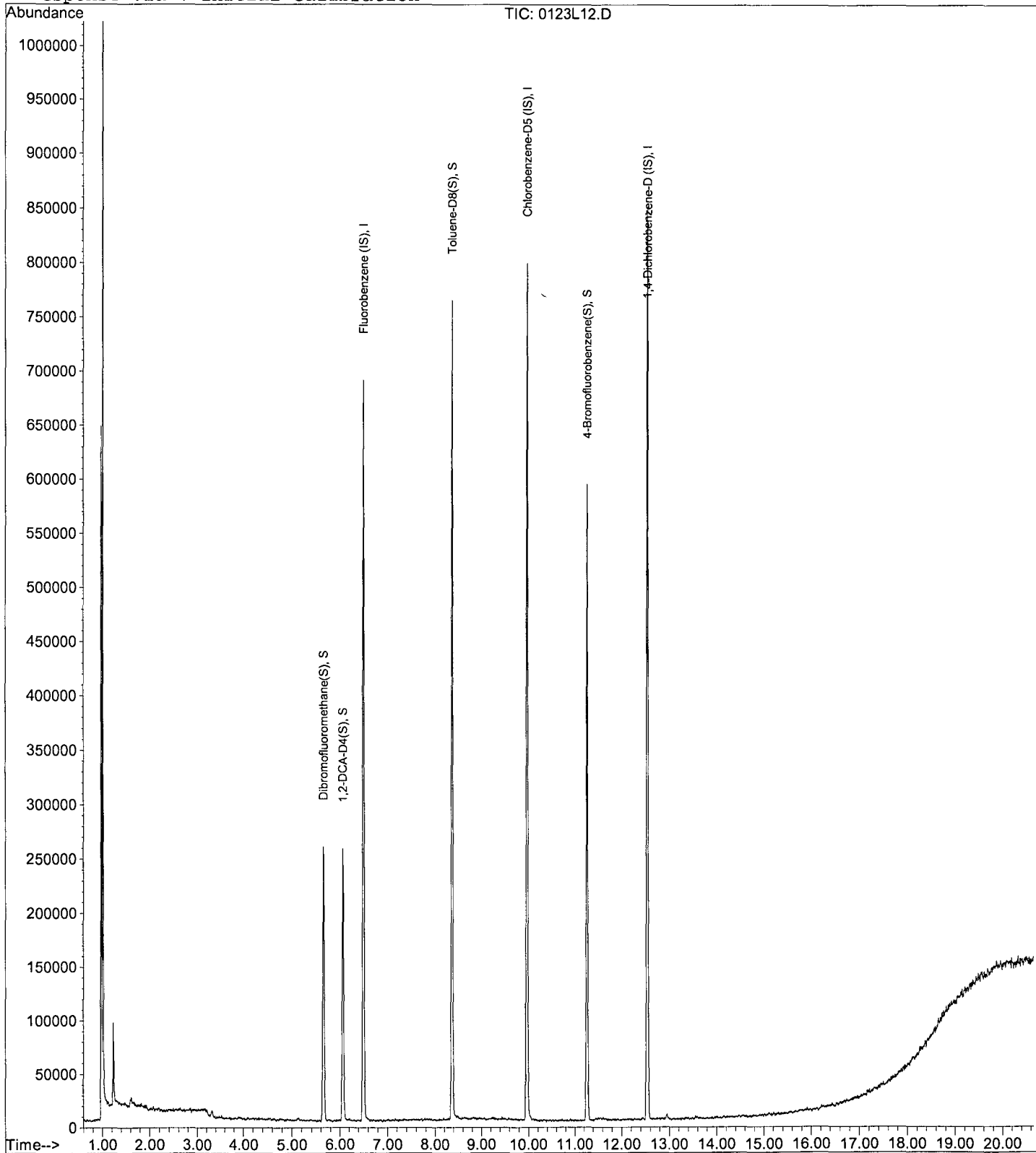
Data File : M:\LOKI\DATA\190121\0123L12.D  
Acq On : 23 Jan 19 12:40  
Sample : 190123A BLK  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:34 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L04.D  
 Acq On : 23 Jan 19 8:52  
 Sample : 190123A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:07 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	291648	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	248192	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	143744	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	146551	26.6654	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	106.660%
43) 1,2-DCA-D4(S)	6.07	65	168712	26.3264	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	105.304%
64) Toluene-D8(S)	8.37	98	512093	25.2528	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	101.012%
72) 4-Bromofluorobenzene(S)	11.26	95	210684	24.7666	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	99.068%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.14	85	30456	11.0223	ppb	98
4) Freon 114	1.25	85	24968	12.5694	ppb	94
5) Chloromethane	1.29	50	44086	10.8541	ppb	91
6) Vinyl chloride	1.38	62	40628	11.0968	ppb	94
8) Bromomethane	1.66	94	27184	11.2228	ppb	97
9) Chloroethane	1.76	64	19543	10.4239	ppb	99
10) Dichlorofluoromethane	1.95	67	68641	10.3088	ppb	99
11) Trichlorofluoromethane	2.00	101	56333	11.0205	ppb	97
12) Acrolein	2.42	56	96700	129.7574	ppb	# 89
13) Acetone	2.61	43	7650	8.2098	ppb	# 88
14) Freon-113	2.55	101	30952	10.9221	ppb	94
15) 1,1-DCE	2.52	63	8763	9.2392	ppb	95
16) t-Butanol	3.37	59	44383	128.1978	ppb	99
17) 2-Propanol	2.85	45	3737	14.8742	ppb	# 76
18) Acetonitrile	2.91	41	71589	120.7724	ppb	93
19) Methyl Acetate	3.01	43	30136	9.0899	ppb	91
20) Iodomethane	2.67	142	7330	7.9528	ppb	99
21) Acrylonitrile	3.44	52	11778	9.8425	ppb	75
22) Methylene chloride	3.09	84	37850	10.0370	ppb	95
23) Carbon disulfide	2.73	76	97465	9.8695	ppb	97
24) Methyl t-butyl ether (MtBE)	3.53	73	97078	10.7201	ppb	94
25) Trans-1,2-DCE	2.52	96	17872	10.4109	ppb	96
26) Diisopropyl Ether	4.33	45	102631	10.4811	ppb	99
28) 1,1-DCA	4.10	63	64107	11.4057	ppb	99
29) Vinyl Acetate	4.27	43	28520	13.9046	ppb	# 78
30) Ethyl tert Butyl Ether	4.87	59	93160	10.9410	ppb	97
31) MEK (2-Butanone)	5.07	43	16743	10.8506	ppb	93
32) Cis-1,2-DCE	4.98	96	32929	10.2930	ppb	93
33) 2,2-Dichloropropane	4.96	77	52104	11.7458	ppb	95
36) Chloroform	5.45	83	54321	11.0547	ppb	95
37) Bromochloromethane	5.30	128	7870	10.0833	ppb	99
39) 1,1,1-TCA	5.65	97	19584	10.9647	ppb	100
40) Cyclohexane	5.72	41	24875	11.2928	ppb	76
41) 1,1-Dichloropropene	5.88	75	34740	10.0069	ppb	97
42) 2,2,4-Trimethylpentane	6.28	57	68047	10.7120	ppb	96
44) Carbon Tetrachloride	5.87	117	39945	10.9066	ppb	89
45) Tert Amyl Methyl Ether	6.36	73	75614	9.8309	ppb	94
47) 1,2-DCA	6.16	62	41600	10.4130	ppb	97
48) Benzene	6.13	78	106795	10.3078	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0123L04.D  
 Acq On : 23 Jan 19 8:52  
 Sample : 190123A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:07 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	16752	9.6669	ppb	97
50) 2-Pentanone	7.23	43	248696	124.9197	ppb	98
51) 1,2-Dichloropropane	7.21	63	26198	9.5643	ppb	99
52) Bromodichloromethane	7.54	83	20144	9.6772	ppb	99
53) Methyl Cyclohexane	7.17	83	36567	9.8622	ppb	99
54) Dibromomethane	7.34	93	20388	10.6533	ppb	92
55) 2-Chloroethyl vinyl ether	7.93	43	777	10.6976	ppb	# 55
56) MIBK (methyl isobutyl ket	8.29	43	24782	9.0159	ppb	# 90
57) 1-Bromo-2-chloroethane	7.88	63	20296	9.7087	ppb	95
58) Cis-1,3-Dichloropropene	8.07	75	44033	9.6998	ppb	97
59) Toluene	8.44	91	62168	9.9852	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	42279	9.6830	ppb	94
61) 1,1,2-TCA	8.90	83	21729	9.8018	ppb	93
62) 2-Hexanone	9.22	43	18276	9.8341	ppb	88
65) 1,2-EDB	9.44	107	15995	10.0364	ppb	100
66) Tetrachloroethene	9.05	166	19104	9.7122	ppb	94
67) 1-Chlorohexane	10.00	91	33106	9.7238	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	35491	11.0177	ppb	96
69) m&p-Xylene	10.26	91	196890	20.3141	ppb	97
70) o-Xylene	10.70	106	27568	9.7007	ppb	99
71) Styrene	10.71	104	83492	9.5721	ppb	96
73) 1,3-Dichloropropane	9.08	76	44698	9.8343	ppb	100
74) Dibromochloromethane	9.33	129	34627	10.0906	ppb	97
75) Chlorobenzene	10.00	112	83225	10.4529	ppb	98
76) Ethylbenzene	10.14	91	69600	9.6413	ppb	99
77) Bromoform	10.90	173	29035	10.2476	ppb	86
79) Isopropylbenzene	11.11	105	131208	9.7519	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	38631	9.9282	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	6714	9.9009	ppb	88
82) t-1,4-Dichloro-2-Butene	11.50	53	7761	8.7538	ppb	92
83) Bromobenzene	11.42	156	21600	9.8924	ppb	96
84) n-Propylbenzene	11.56	91	82884	10.1217	ppb	97
85) 4-Ethyltoluene	11.69	105	126864	10.2059	ppb	95
86) 2-Chlorotoluene	11.64	91	49696	9.5654	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	101697	9.4370	ppb	100
88) 4-Chlorotoluene	11.76	91	59128	10.0356	ppb	99
89) Tert-Butylbenzene	12.12	119	115043	10.0732	ppb	95
90) 1,2,4-Trimethylbenzene	12.17	105	102860	9.6841	ppb	96
91) Sec-Butylbenzene	12.36	105	138148	9.9428	ppb	99
92) p-Isopropyltoluene	12.52	119	64304	9.9700	ppb	96
93) Benzyl Chloride	12.72	91	47007	10.1959	ppb	96
94) 1,3-DCB	12.46	146	41632	10.7573	ppb	97
95) 1,4-DCB	12.56	146	76892	10.0309	ppb	98
96) n-Butylbenzene	12.72	91	47007	10.1959	ppb	99
97) 1,2-DCB	12.97	146	74557	10.0104	ppb	95
98) Hexachloroethane	13.26	117	25785	11.0295	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	7947	9.0423	ppb	# 81
100) 1,2,4-Trichlorobenzene	14.74	180	44466	9.4645	ppb	96
101) Hexachlorobutadiene	14.94	225	22376	9.5827	ppb	93
102) Naphthalene	15.01	128	89203	9.1285	ppb	96
103) 1,2,3-Trichlorobenzene	15.28	180	20120	9.6321	ppb	94

(#) = qualifier out of range (m) = manual integration

0123L04.D L0121W.M Mon Jan 28 14:09:12 2019

Quantitation Report

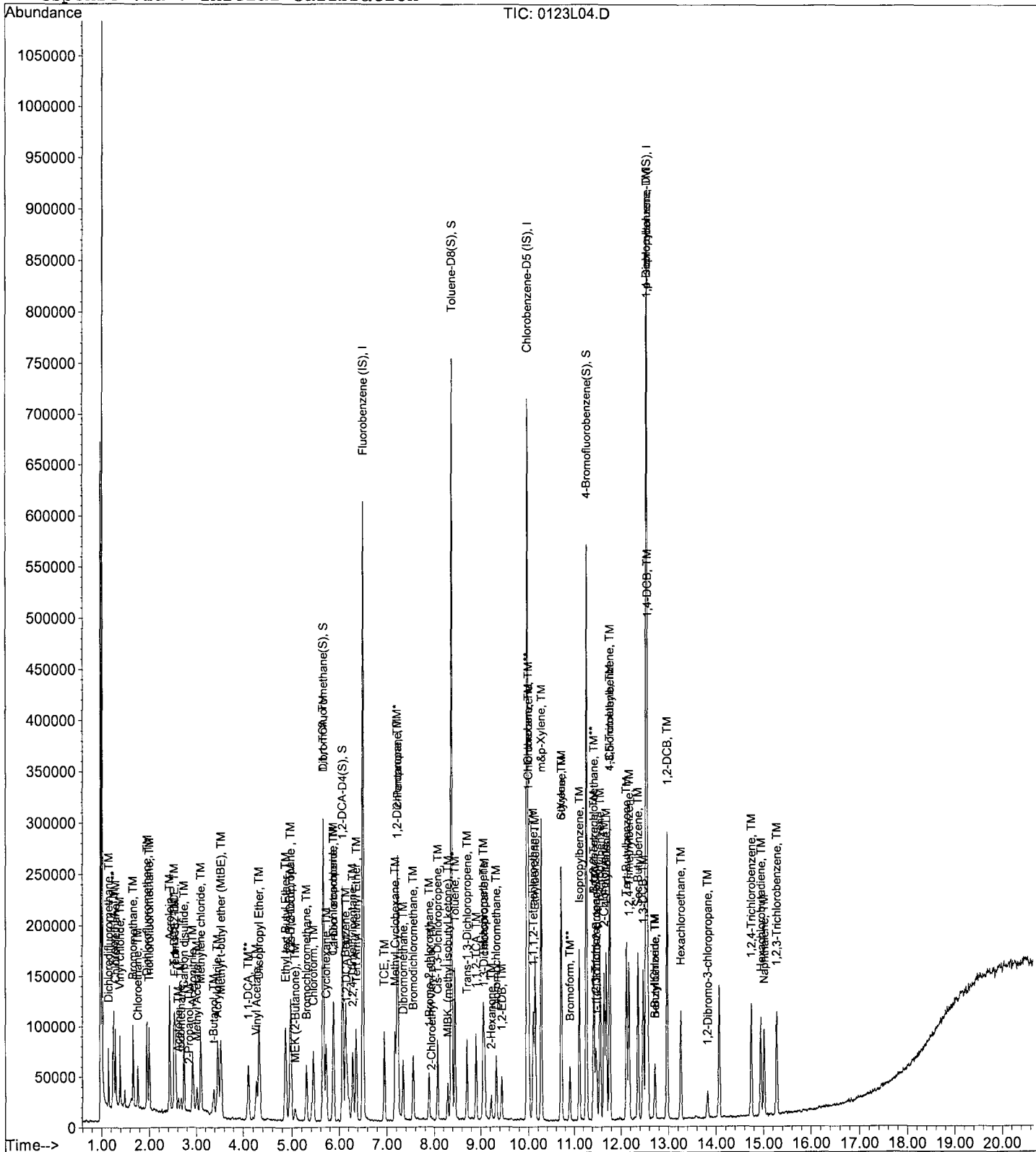
Data File : M:\LOKI\DATA\190121\0123L04.D  
 Acq On : 23 Jan 19 8:52  
 Sample : 190123A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:07 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L05.D  
 Acq On : 23 Jan 19 9:20  
 Sample : 190123A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:07 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	307520	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	261248	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	145664	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	155957	26.9122	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 107.648%	
43) 1,2-DCA-D4(S)	6.07	65	179221	26.5229	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 106.092%	
64) Toluene-D8(S)	8.37	98	538144	25.2112	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 100.844%	
72) 4-Bromofluorobenzene(S)	11.26	95	219647	24.5298	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 98.120%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.15	85	32208	11.0542	ppb	94
4) Freon 114	1.25	85	27400	13.0818	ppb	94
5) Chloromethane	1.29	50	45429	10.6075	ppb #	83
6) Vinyl chloride	1.38	62	42596	11.0338	ppb	92
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	419	0.1283	ppb #	28
8) Bromomethane	1.66	94	29408	11.5651	ppb	96
9) Chloroethane	1.76	64	20841	10.5500	ppb	97
10) Dichlorofluoromethane	1.95	67	70543	10.0476	ppb	94
11) Trichlorofluoromethane	2.00	101	58107	10.7808	ppb	98
12) Acrolein	2.43	56	103290	131.4924	ppb #	95
13) Acetone	2.61	43	9229	9.8626	ppb	96
14) Freon-113	2.55	101	31867	10.6646	ppb	98
15) 1,1-DCE	2.52	63	8930	8.9294	ppb	92
16) t-Butanol	3.37	59	38206	104.6601	ppb	94
17) 2-Propanol	2.80	45	1881	7.1004	ppb #	95
18) Acetonitrile	2.92	41	80365	128.5802	ppb	97
19) Methyl Acetate	3.01	43	33987	9.7344	ppb	87
20) Iodomethane	2.67	142	9160	8.8029	ppb	96
21) Acrylonitrile	3.44	52	14582	11.6476	ppb	88
22) Methylene chloride	3.10	84	42209	10.6488	ppb	99
23) Carbon disulfide	2.73	76	104810	10.0655	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	103482	10.8375	ppb	97
25) Trans-1,2-DCE	2.52	96	20016	11.0580	ppb	93
26) Diisopropyl Ether	4.33	45	111992	10.8468	ppb	98
28) 1,1-DCA	4.10	63	66254	11.1793	ppb	99
29) Vinyl Acetate	4.27	43	30075	13.9059	ppb #	82
30) Ethyl tert Butyl Ether	4.87	59	100538	11.1981	ppb	99
31) MEK (2-Butanone)	5.07	43	16312	10.0365	ppb	98
32) Cis-1,2-DCE	4.98	96	37642	11.1589	ppb	88
33) 2,2-Dichloropropane	4.96	77	55201	11.8017	ppb	93
36) Chloroform	5.45	83	58627	11.3153	ppb	92
37) Bromochloromethane	5.30	128	9463	11.4985	ppb	98
39) 1,1,1-TCA	5.65	97	21376	11.3503	ppb	99
40) Cyclohexane	5.71	41	25733	11.0766	ppb	90
41) 1,1-Dichloropropene	5.88	75	36797	10.0523	ppb	98
42) 2,2,4-Trimethylpentane	6.28	57	73354	10.9515	ppb	98
44) Carbon Tetrachloride	5.87	117	43956	11.3823	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	79951	9.8582	ppb	94
47) 1,2-DCA	6.17	62	45212	10.7331	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0123L05.D  
 Acq On : 23 Jan 19 9:20  
 Sample : 190123A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:07 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	6.13	78	112097	10.2611	ppb	98
49) TCE	6.95	130	19152	10.4814	ppb	92
50) 2-Pentanone	7.22	43	268847	128.0716	ppb	99
51) 1,2-Dichloropropane	7.20	63	28705	9.9387	ppb	96
52) Bromodichloromethane	7.55	83	23488	10.7013	ppb	91
53) Methyl Cyclohexane	7.17	83	38818	9.9290	ppb	95
54) Dibromomethane	7.34	93	20287	10.0534	ppb	91
55) 2-Chloroethyl vinyl ether	7.93	43	712	9.2968	ppb	# 80
56) MIBK (methyl isobutyl ket	8.28	43	33288	11.4854	ppb	93
57) 1-Bromo-2-chloroethane	7.88	63	21872	9.9226	ppb	97
58) Cis-1,3-Dichloropropene	8.07	75	48271	10.0846	ppb	96
59) Toluene	8.44	91	68264	10.3985	ppb	98
60) Trans-1,3-Dichloropropene	8.70	75	46953	10.1985	ppb	97
61) 1,1,2-TCA	8.90	83	23790	10.1776	ppb	99
62) 2-Hexanone	9.22	43	18462	9.4214	ppb	92
65) 1,2-EDB	9.44	107	16057	9.5718	ppb	# 80
66) Tetrachloroethene	9.05	166	21376	10.3242	ppb	95
67) 1-Chlorohexane	10.00	91	35611	9.9510	ppb	93
68) 1,1,1,2-Tetrachloroethane	10.09	131	37363	11.0192	ppb	90
69) m&p-Xylene	10.26	91	206918	20.2819	ppb	99
70) o-Xylene	10.70	106	30552	10.2134	ppb	94
71) Styrene	10.71	104	90483	9.8552	ppb	93
73) 1,3-Dichloropropane	9.08	76	47890	10.0100	ppb	97
74) Dibromochloromethane	9.33	129	38286	10.5993	ppb	99
75) Chlorobenzene	10.00	112	89959	10.7340	ppb	96
76) Ethylbenzene	10.13	91	77016	10.1354	ppb	99
77) Bromoform	10.90	173	31773	10.6535	ppb	95
79) Isopropylbenzene	11.11	105	140976	10.3398	ppb	91
80) 1,1,2,2-Tetrachloroethane	11.43	83	42929	10.8874	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	7396	10.7629	ppb	85
82) t-1,4-Dichloro-2-Butene	11.50	53	8806	9.8016	ppb	86
83) Bromobenzene	11.43	156	23192	10.4815	ppb	99
84) n-Propylbenzene	11.56	91	83594	10.0739	ppb	96
85) 4-Ethyltoluene	11.69	105	131767	10.4606	ppb	96
86) 2-Chlorotoluene	11.64	91	54216	10.2978	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	109430	10.0208	ppb	94
88) 4-Chlorotoluene	11.77	91	62912	10.5371	ppb	100
89) Tert-Butylbenzene	12.12	119	121171	10.4699	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	109305	10.1552	ppb	96
91) Sec-Butylbenzene	12.36	105	144816	10.2853	ppb	98
92) p-Isopropyltoluene	12.52	119	67416	10.3147	ppb	97
93) Benzyl Chloride	12.71	91	51220	10.9632	ppb	98
94) 1,3-DCB	12.46	146	42248	10.7726	ppb	98
95) 1,4-DCB	12.56	146	82287	10.5932	ppb	96
96) n-Butylbenzene	12.71	91	51220	10.9632	ppb	93
97) 1,2-DCB	12.97	146	77704	10.2954	ppb	96
98) Hexachloroethane	13.26	117	26701	11.2708	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	9175	10.3960	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	47837	10.0478	ppb	98
101) Hexachlorobutadiene	14.94	225	25173	10.6384	ppb	89
102) Naphthalene	15.01	128	97056	9.8012	ppb	95
103) 1,2,3-Trichlorobenzene	15.28	180	20640	9.7508	ppb	95

(#) = qualifier out of range (m) = manual integration

0123L05.D L0121W.M Mon Jan 28 14:09:16 2019



Quantitation Report

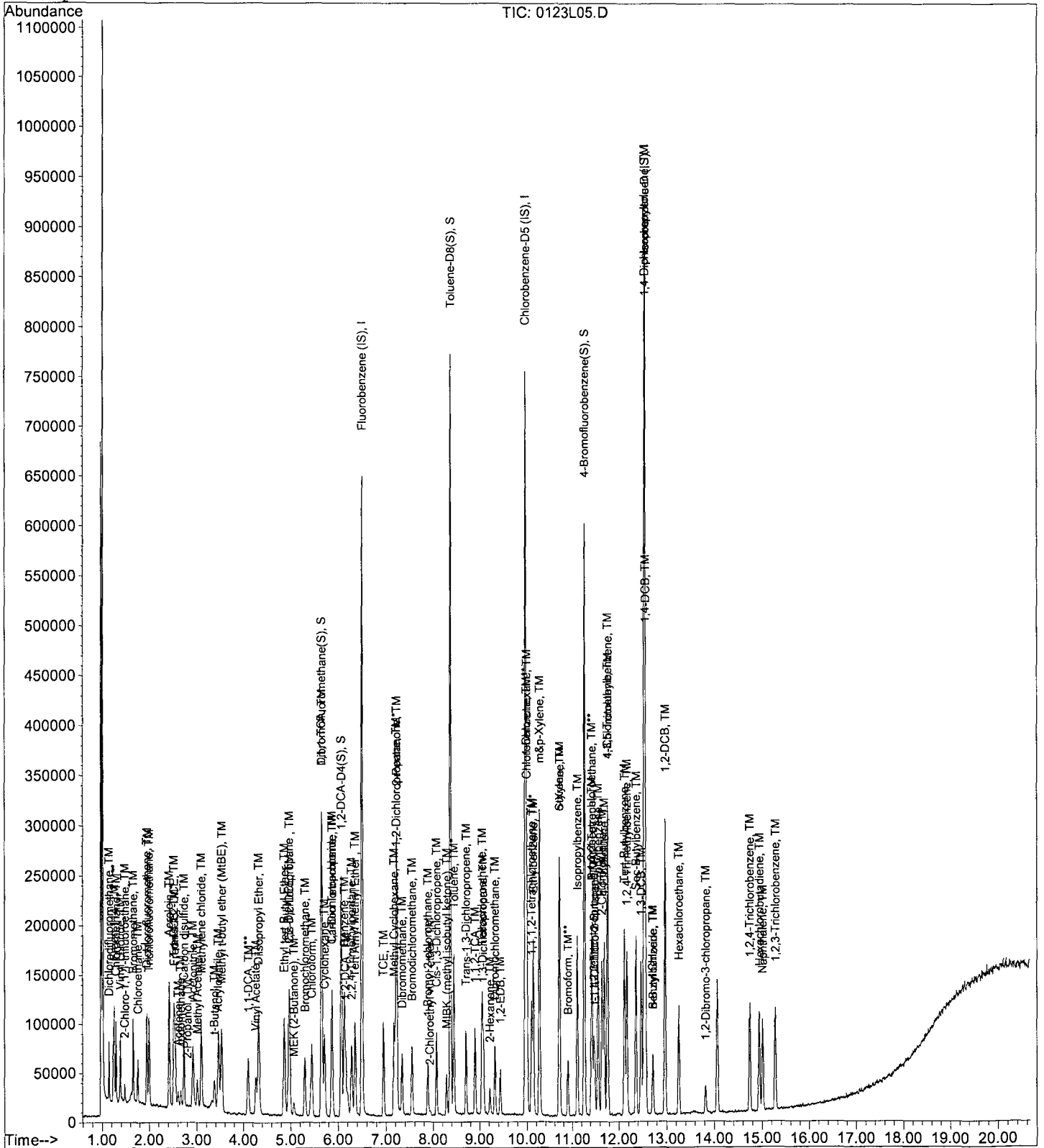
Data File : M:\LOKI\DATA\190121\0123L05.D  
Acq On : 23 Jan 19 9:20  
Sample : 190123A LCSD 10ug/L  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:07 2019

Quant Results File: L0121W.RES

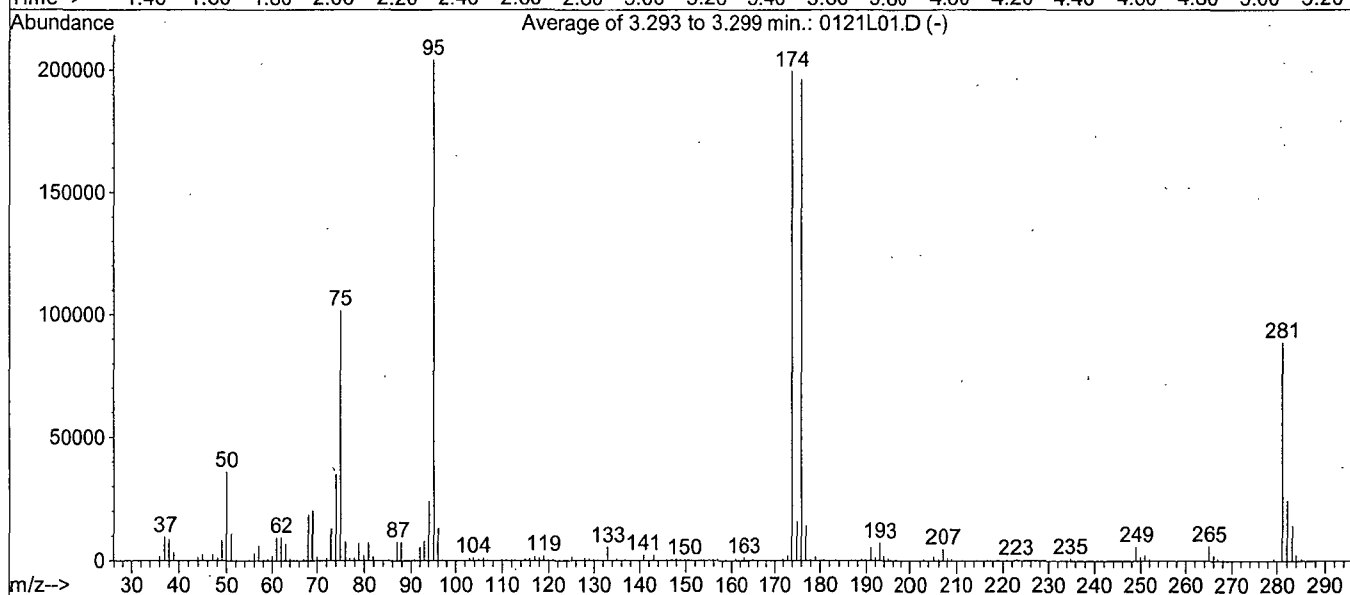
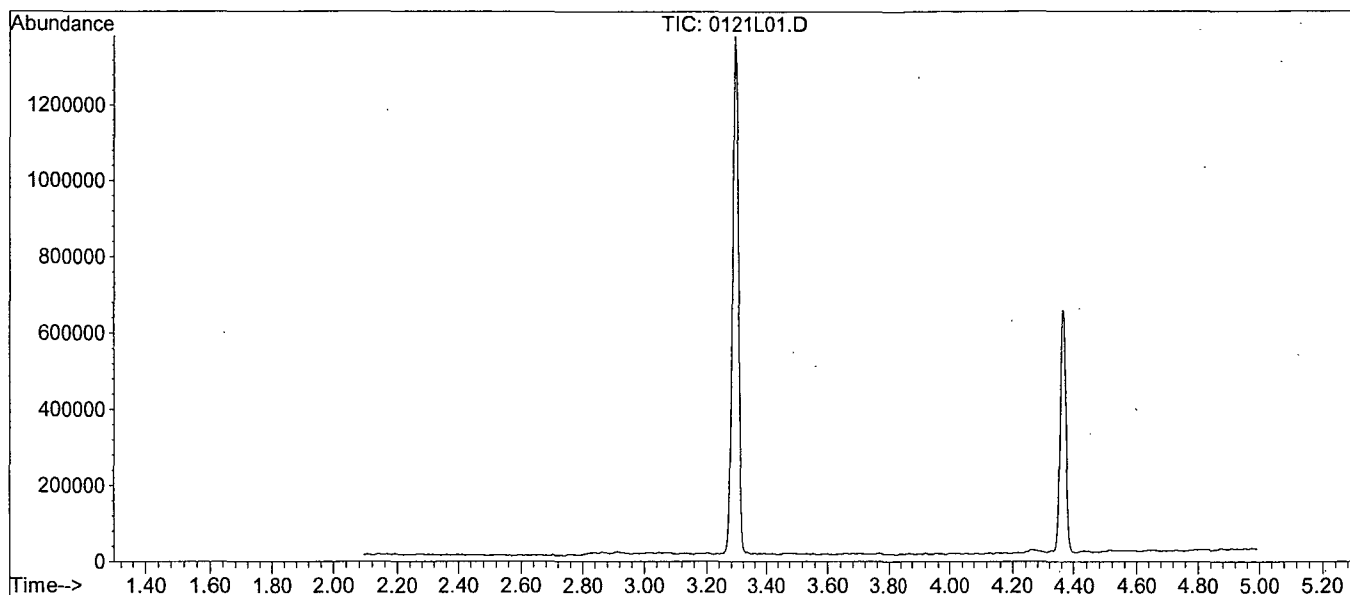
Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L01.D  
 Acq On : 21 Jan 19 15:04  
 Sample : 25ug/L BFB STD 1/18/19  
 Misc : 2ul

Vial: 1  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B



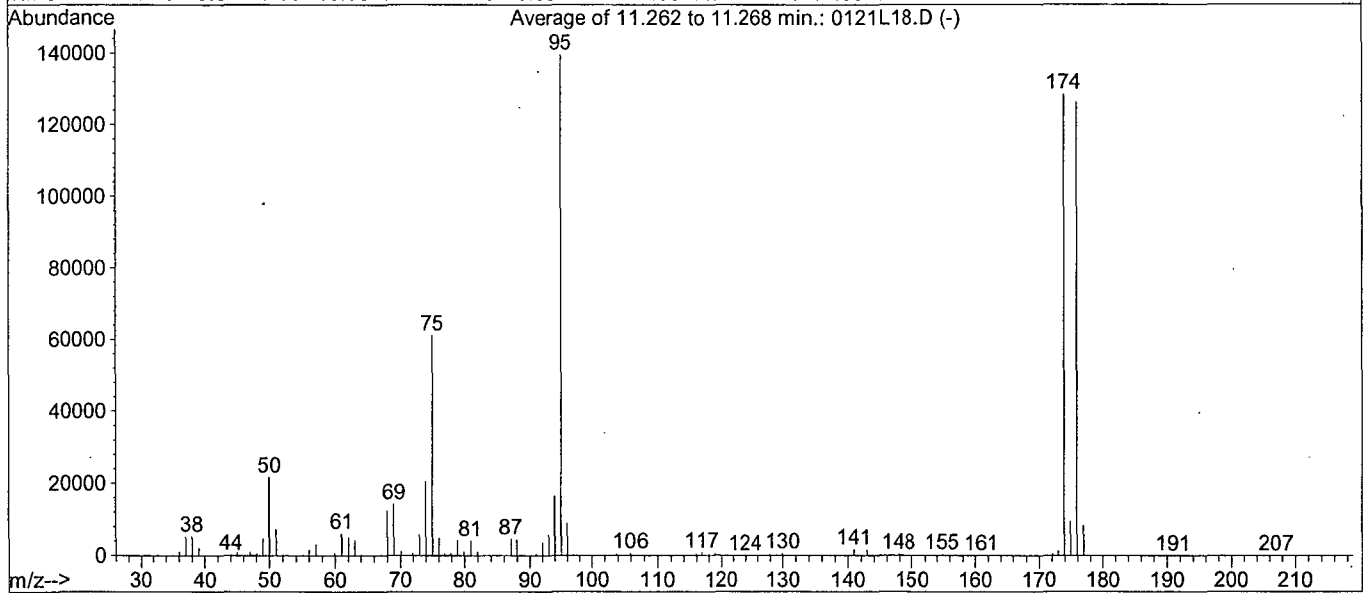
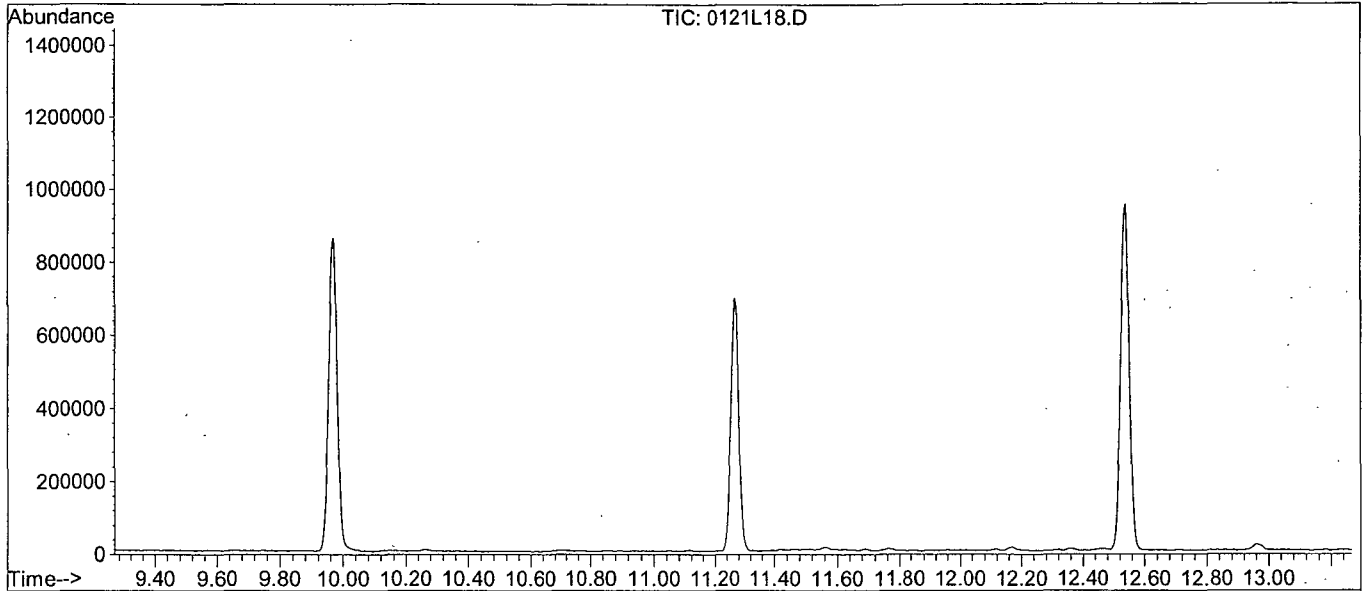
Spectrum Information: Average of 3.293 to 3.299 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	35937	PASS
75	95	30	60	49.8	101729	PASS
95	95	100	100	100.0	204224	PASS
96	95	5	9	6.5	13309	PASS
173	174	0.0	2	1.0	2007	PASS
174	95	50	100	97.7	199616	PASS
175	174	5	9	8.0	15907	PASS
176	174	95	101	98.3	196267	PASS
177	176	5	9	7.2	14213	PASS

Data File : M:\LOKI\DATA\190121\0121L18.D  
 Acq On : 21 Jan 19 23:04  
 Sample : 25ug/L BFB STD 1/18/19  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B



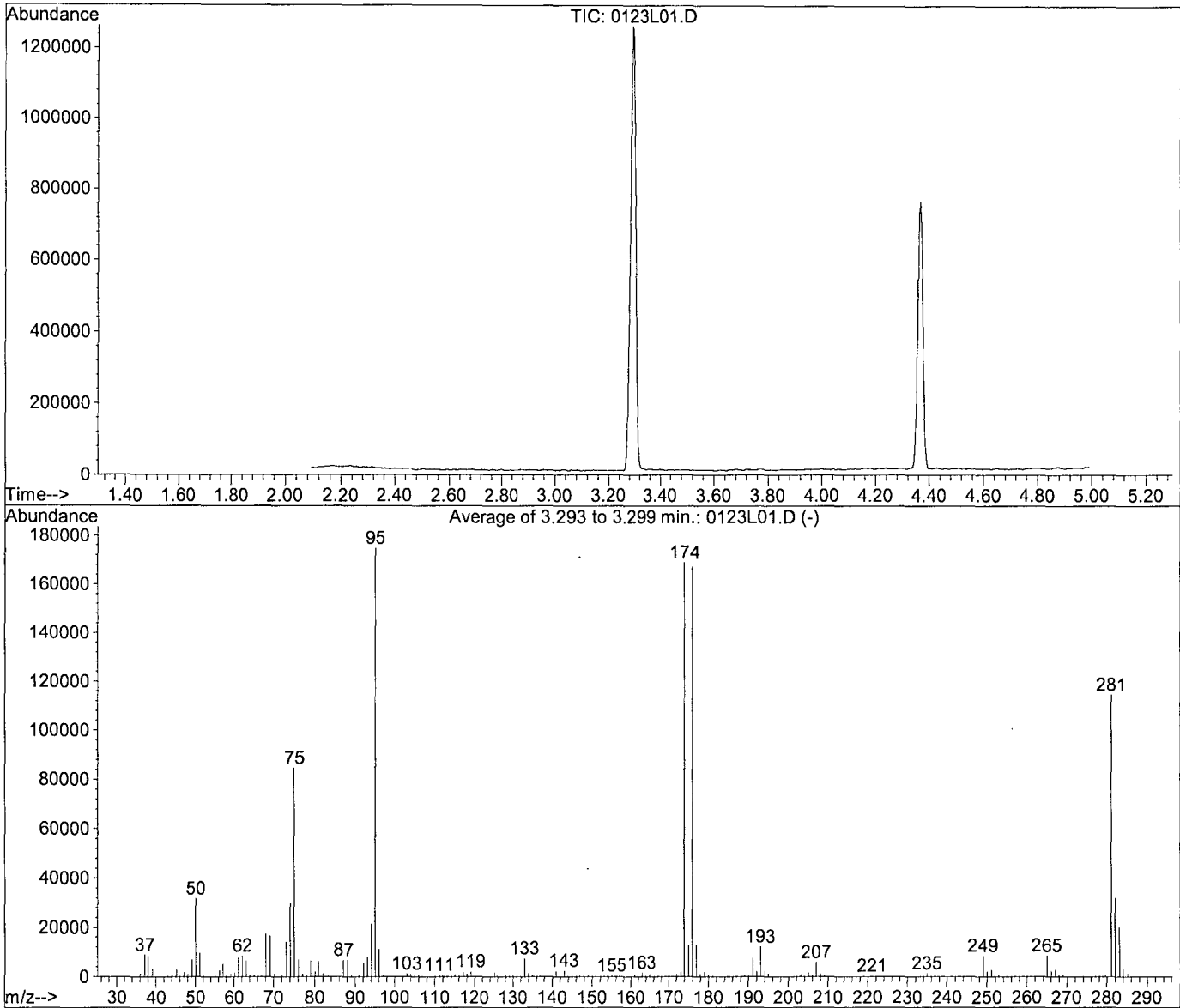
Spectrum Information: Average of 11.262 to 11.268 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	21632	PASS
75	95	30	60	43.8	61165	PASS
95	95	100	100	100.0	139541	PASS
96	95	5	9	6.3	8843	PASS
173	174	0.00	2	1.0	1295	PASS
174	95	50	100	92.1	128448	PASS
175	174	5	9	7.4	9539	PASS
176	174	95	101	98.3	126320	PASS
177	176	5	9	6.6	8351	PASS

Data File : M:\LOKI\DATA\190121\0123L01.D  
 Acq On : 23 Jan 19 7:33  
 Sample : 25ug/L BFB STD 1/18/19  
 Misc : 2ul

Vial: 1  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B



Spectrum Information: Average of 3.293 to 3.299 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	31571	PASS
75	95	30	60	48.4	84584	PASS
95	95	100	100	100.0	174699	PASS
96	95	5	9	6.3	11067	PASS
173	174	0.00	2	1.1	1820	PASS
174	95	50	100	96.7	168960	PASS
175	174	5	9	7.5	12598	PASS
176	174	95	101	98.9	167019	PASS
177	176	5	9	7.7	12858	PASS

## Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
0.3ug/L						Prepared By (Initials): <u>DG</u>				
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 01/17/19	02/01/19	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	2uL			10
0.5ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 01/17/19	02/01/19	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	5uL			25
1.0ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 01/17/19	02/01/19	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	10uL			50
2.0ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 01/17/19	02/01/19	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	15uL			75
5ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 01/17/19	03/18/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	20uL			100
10ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	25uL			125

20ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 01/17/19	03/18/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	30uL			150
40ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 01/17/19	03/18/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	35uL			175
100ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 01/17/19	03/18/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 01/21/19										
Expires: 02/20/19										
						Prepared By (Initials): DG				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI	8260 Water SS	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 6	Various	8260 Water SS	50	Prepared 01/17/19	02/13/19	N/A	10uL			10
VOA STD. TBA	Various	8260 Water SS	250	Prepared 01/17/19	02/13/19	N/A	25uL			250
8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)										
Prepared: 01/21/19										
Expires: 01/22/19										
						Prepared By (Initials): DG				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 01/17/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI	CCV/ LCS	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 2	O2SI	CCV/ LCS	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 01/17/19	02/01/19	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 01/21/19										
Expires: 01/22/19										
						Prepared By (Initials): DG				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	LCS X4 Ketones	50	Prepared 01/17/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI	LCS X4 Ketones	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 2	O2SI	LCS X4 Ketones	50	Prepared 01/17/19	03/18/19	N/A	40uL			40
VOA STD. TBA	Various	LCS X4 Ketones	250	Prepared 01/17/19	02/01/19	N/A	25uL			125

<b>Loki 8260 Water Surrogate</b>											
Prepared: 12/13/18						Prepared By (Initials): <u>DG</u>					
Expires: 04/02/19											
Methanol Lot No: 202404-9077											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36335	07/28/19	04/02/19	375uL	15mL	Methanol	50	
<b>Loki 8260 Water Internal Standard</b>											
Prepared: 11/08/18						Prepared By (Initials): <u>DG</u>					
Expires: 10/05/19											
Methanol Lot No: 202404-9077											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
Internal Standard Solution	O2SI	120004-02	2,000	326533-38441	10/05/19	04/27/21	375uL	15mL	Methanol	50	

## Primary and Secondary Working Standards

Primary Standards										
VOA STD 7										
Prepared: 01/17/19 T										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	C12965-39996	01/17/20	10/31/23	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-40038	01/17/20	09/18/23	200uL			50
Benzyl Chloride	O2SI	020228-02	1,000	082218-39817	01/17/20	12/04/19	200uL			50
VOA STD 8										
Prepared: 01/17/19 U										
Expires: 02/01/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL39322-39479	01/17/20	06/30/20	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL12490-39491	01/17/20	05/31/23	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13125-40120	02/01/19	02/01/19	100uL			50
VOA STD TBA										
Prepared: 01/17/19 V										
Expires: 02/01/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL12542-39530	01/17/20	05/31/20	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL13149-40121	02/01/19	02/01/19	100uL			250
VOA STD 1										
Prepared: 01/17/19 W										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	O2SI	020145-02	2,000	292247-38461	01/17/20	11/12/19	50	2mL	Methanol	50
VOA STD 2										
Prepared: 01/17/19 X										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	CL10956-39506	01/17/20	08/30/23	100	4mL	Methanol	50
VOA STD 9										
Prepared: 01/17/19 Y										
Expires: 02/01/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 01/17/19	12/04/19	N/A	200uL	2mL	Methanol	5
VOA STD. 8		VOA STD. 9	50	Prepared 01/17/19	02/01/19	N/A	200uL			5
VOA STD. 10										
Prepared: 01/17/19 Z										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 01/17/19	01/17/20	N/A	200uL	2mL	Methanol	5
VOA STD. 12										
Prepared: 01/17/19 AA										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 01/17/19	01/17/20	N/A	200uL	2mL	Methanol	5



Second Source (SS) Standards											
VOA STD. 3											
Prepared: 01/17/19 AB											
Expires: 03/18/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): KV											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
Ketones Standard	Phenova	ALO-101211	2,000	CL12730-39671	01/17/20	08/31/28	50uL	2mL	Methanol	50	
VOA STD. 5											
Prepared: 01/17/19 AC											
Expires: 03/18/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): KV											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL12966-39985	01/17/20	10/31/23	50uL	2mL	Methanol	50	
2-CEVE (SS)	Absolute	82408	2,000	071018-39537	01/17/20	07/10/21	50uL			50	
VOA STD. 6											
Prepared: 01/17/19 AD											
Expires: 02/13/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): KV											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL12489-39970	01/17/20	05/31/23	50uL	2mL	Methanol	50	
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13145-40120	01/17/20	02/13/19	50uL			50	
Hexachloroethane	Accustan	AS-E0011	1,000	218051281-39858	01/02/20	05/14/28	100uL			50	
Benzyl Chloride	Accustan	M-8010-01	200	214101335-04-39960	01/17/20	10/18/20	500uL			50	
VOA STD. TBA											
Prepared: 01/17/19 AF											
Expires: 02/13/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): KV											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12542-39679	01/17/20	05/31/20	250uL	2mL	Methanol	250	
Acrolein	Phenova	ALO-101224	10,000	CL13181-40203	02/13/19	02/13/19	50uL			250	
VOA STD. 0											
Prepared: 01/17/19 AG											
Expires: 03/18/19											
Methanol Lot No. 907702-202404											
Prepared By (Initials): KV											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
VOA Addition STD.	Phenova	ALO-130175	2,000	CL12744-40002	01/17/20	08/30/20	50uL	2mL	Methanol	50	
BFB Tune											
Prepared: 01/18/19											
Expires: 12/12/19											
Methanol Lot No. 202404-00945											
Prepared By (Initials): DG											
Initial Standard Information						Final Standard Information					
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)	
4-Bromofluorobenzene	O2SI	020135-03	2,500	342387-39075	12/12/19	01/19/21	20uL	2mL	Methanol	25	

## Injection Log

Directory: M:\LOKI\DATA\190121\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0121L01.D	1	25ug/L BFB STD 1/18/19	2ul	21 Jan 19 15:04
2	6	0121L07.D	1	0.3ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 17:50
3	7	0121L08.D	1	0.5ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:18
4	8	0121L09.D	1	1.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:47
5	9	0121L10.D	1	2.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:16
6	10	0121L11.D	1	5.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:44
7	11	0121L12.D	1	10ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:13
8	12	0121L13.D	1	20ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:41
9	13	0121L14.D	1	40ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:10
10	14	0121L15.D	1	50ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:38
11	15	0121L16.D	1	100ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 22:07
12	17	0121L18.D	1	25ug/L BFB STD 1/18/19	IS&S 11/8/18	21 Jan 19 23:04
13	18	0121L19.D	1	(SS)10ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 23:32
14	1	0123L01.D	1	25ug/L BFB STD 1/18/19	2ul	23 Jan 19 7:33
15	2	0123L03.D	1	190123A CCV 10ug/L	IS&S 11/8/18	23 Jan 19 8:23
16	3	0123L04.D	1	190123A LCS 10ug/L	IS&S 11/8/18	23 Jan 19 8:52
17	4	0123L05.D	1	190123A LCSD 10ug/L	IS&S 11/8/18	23 Jan 19 9:20
18	11	0123L12.D	1	190123A BLK	IS&S 11/8/18	23 Jan 19 12:40
19	20	0123L21.D	1	AZ85417W01	IS&S 11/8/18	23 Jan 19 16:57
20	21	0123L22.D	1	AZ85418W01	IS&S 11/8/18	23 Jan 19 17:26
21	22	0123L23.D	1	AZ85419W01	IS&S 11/8/18	23 Jan 19 17:55
22	23	0123L24.D	1	AZ85420W01	IS&S 11/8/18	23 Jan 19 18:23
23	25	0123L26.D	1	Ending CCV 10ug/L 1/23/19	IS&S 11/8/18	23 Jan 19 19:20

**ORGANICS  
Calibration Data**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/21/19  
Instrument: Loki

Initials: \_\_\_\_\_

0121L07.D 0121L08.D 0121L09.D 0121L10.D 0121L11.D 0121L12.D 0121L13.D 0121L14.D 0121L16.D 0121L15.D

	Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	r^2	q	MRF
1	I Fluorobenzene (IS)																
2	S Dibromofluoromethane(S)	0.5221	0.4890	0.4448	0.4243	0.4769	0.4660	0.4873	0.4754	0.4586	0.4666	0.47	5.6	S			
3	S 1,2-DCA-D4(S)	0.6057	0.5772	0.5141	0.4993	0.5602	0.5360	0.5677	0.5517	0.5377	0.5437	0.55	5.6	S			
4	I Chlorobenzene-D5 (IS)																
5	S Toluene-D8(S)	2.277	2.221	1.853	1.876	2.026	2.061	2.066	2.029	1.932	2.087	2.0	6.7	S			
6	S 4-Bromofluorobenzene(S)	0.9406	0.9063	0.8074	0.8093	0.8633	0.8665	0.8665	0.8544	0.7873	0.8671	0.86	5.4	S			
7	I 1,4-Dichlorobenzene-D (IS)																
8																	
9																	
10																	
11																	
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35																	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	353856	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	302144	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	163584	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	36949	5.5411	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.164%	
43) 1,2-DCA-D4(S)	6.07	65	42868	5.5133	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.052%	
64) Toluene-D8(S)	8.37	98	137589	5.5734	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.292%	
72) 4-Bromofluorobenzene(S)	11.26	95	56841	5.4887	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.956%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	5062	2.6187	ppb	95
3) Dichlorodifluoromethane	1.15	85	907	0.6037	ppb	94
4) Freon 114	1.25	85	1017	0.4220	ppb	# 73
5) Chloromethane	1.29	50	2048	0.4156	ppb	98
6) Vinyl chloride	1.38	62	1630	0.3669	ppb	91
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	12056	3.2078	ppb	95
8) Bromomethane	1.66	94	1310	-1.4293	ppb	87
9) Chloroethane	1.76	64	1106	-0.1356	ppb	# 77
10) Dichlorofluoromethane	1.92	67	572	0.0708	ppb	94
11) Trichlorofluoromethane	2.00	101	1790	0.2886	ppb	94
12) Acrolein	2.43	56	11107	11.8244	ppb	# 93
13) Acetone	2.61	43	1333	-1.6102	ppb	# 83
14) Freon-113	2.54	101	1273	0.3702	ppb	# 81
15) 1,1-DCE	2.52	63	545	0.4736	ppb	# 48
16) t-Butanol	3.38	59	4823	11.4819	ppb	# 82
17) 2-Propanol	2.84	45	1588	5.0053	ppb	# 1
18) Acetonitrile	2.92	41	8234	11.4489	ppb	# 66
19) Methyl Acetate	3.01	43	2506	0.4630	ppb	100
20) Iodomethane	2.66	142	136	3.4318	ppb	# 42
21) Acrylonitrile	3.47	52	1164	0.3224	ppb	# 27
23) Carbon disulfide	2.73	76	4272	0.3565	ppb	# 91
24) Methyl t-butyl ether (MtBE)	3.53	73	4470	0.4068	ppb	# 85
25) Trans-1,2-DCE	2.51	96	929	0.4460	ppb	# 29
26) Diisopropyl Ether	4.33	45	5310	0.4469	ppb	98
28) 1,1-DCA	4.09	63	2324	0.3408	ppb	# 87
29) Vinyl Acetate	4.28	43	1096	0.4404	ppb	# 78
30) Ethyl tert Butyl Ether	4.87	59	3018	0.2921	ppb	# 71
31) MEK (2-Butanone)	5.06	43	384	0.3451	ppb	# 44
32) Cis-1,2-DCE	4.97	96	1461	0.3764	ppb	77
33) 2,2-Dichloropropane	4.97	77	2653	0.4929	ppb	# 87
36) Chloroform	5.44	83	2030	0.3405	ppb	76
37) Bromochloromethane	5.30	128	396	0.4182	ppb	# 64
39) 1,1,1-TCA	5.65	97	775	0.3576	ppb	83
40) Cyclohexane	5.72	41	1216	0.3119	ppb	# 47
41) 1,1-Dichloropropene	5.88	75	1235	0.2932	ppb	# 69
42) 2,2,4-Trimethylpentane	6.27	57	3159	0.4099	ppb	# 74
44) Carbon Tetrachloride	5.87	117	1412	0.3178	ppb	91
45) Tert Amyl Methyl Ether	6.36	73	3763	0.4032	ppb	# 94
47) 1,2-DCA	6.17	62	1335	0.2754	ppb	# 82

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	6.13	78	3977	0.3164	ppb #	91
49) TCE	6.95	130	583	0.2773	ppb #	83
50) 2-Pentanone	7.23	43	26915	11.1427	ppb	95
51) 1,2-Dichloropropane	7.21	63	1054	0.3171	ppb #	86
52) Bromodichloromethane	7.54	83	950	0.3761	ppb #	88
53) Methyl Cyclohexane	7.17	83	1304	0.2899	ppb	87
54) Dibromomethane	7.34	93	936	0.4031	ppb	73
55) 2-Chloroethyl vinyl ether	8.06	43	561	0.1327	ppb #	24
56) MIBK (methyl isobutyl ket	8.29	43	1056	0.3166	ppb #	59
57) 1-Bromo-2-chloroethane	7.89	63	1009	0.3978	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	1981	0.3597	ppb #	33
59) Toluene	8.44	91	2264	0.2997	ppb	91
60) Trans-1,3-Dichloropropene	8.71	75	1802	0.3402	ppb	93
61) 1,1,2-TCA	8.90	83	948	0.3525	ppb	88
62) 2-Hexanone	9.39	43	1165	0.5167	ppb #	36
65) 1,2-EDB	9.44	107	587	0.3026	ppb	84
66) Tetrachloroethene	9.06	166	1090	0.4552	ppb #	66
68) 1,1,1,2-Tetrachloroethane	10.09	131	1465	0.3736	ppb #	59
69) m&p-Xylene	10.27	91	7735	0.6556	ppb	93
70) o-Xylene	10.70	106	1265	0.3656	ppb	64
71) Styrene	10.71	104	3372	0.3176	ppb #	79
73) 1,3-Dichloropropane	9.09	76	1757	0.3175	ppb	97
74) Dibromochloromethane	9.33	129	1527	0.3655	ppb	92
75) Chlorobenzene	10.00	112	3342	0.3448	ppb	92
76) Ethylbenzene	10.13	91	2494	0.2838	ppb	95
77) Bromoform	10.90	173	1263	0.3662	ppb #	56
79) Isopropylbenzene	11.11	105	4366	0.2851	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	1899	0.4289	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	365	0.4730	ppb #	70
82) t-1,4-Dichloro-2-Butene	11.50	53	290	0.2874	ppb #	20
83) Bromobenzene	11.42	156	935	0.3763	ppb	87
84) n-Propylbenzene	11.56	91	2679	0.2875	ppb #	79
85) 4-Ethyltoluene	11.69	105	4086	0.2888	ppb	98
86) 2-Chlorotoluene	11.65	91	2426	0.4103	ppb	86
87) 1,3,5-Trimethylbenzene	11.76	105	3515	0.2866	ppb	98
88) 4-Chlorotoluene	11.77	91	2028	0.3025	ppb	85
89) Tert-Butylbenzene	12.12	119	3713	0.2857	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	3808	0.3150	ppb	83
91) Sec-Butylbenzene	12.36	105	5100	0.3225	ppb	89
92) p-Isopropyltoluene	12.52	119	2805	0.3822	ppb	88
93) Benzyl Chloride	12.72	91	1923	0.3665	ppb	97
94) 1,3-DCB	12.46	146	1553	0.3526	ppb #	82
95) 1,4-DCB	12.56	146	2832	0.3246	ppb #	19
96) n-Butylbenzene	12.72	91	1923	0.3665	ppb #	90
97) 1,2-DCB	12.97	146	2647	0.3123	ppb	89
98) Hexachloroethane	13.26	117	717	0.2695	ppb	77
100) 1,2,4-Trichlorobenzene	14.74	180	1528	0.2858	ppb	83
101) Hexachlorobutadiene	14.94	225	630	0.2371	ppb #	62
102) Naphthalene	15.01	128	3003	0.2700	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	845	0.3555	ppb #	72

Quantitation Report

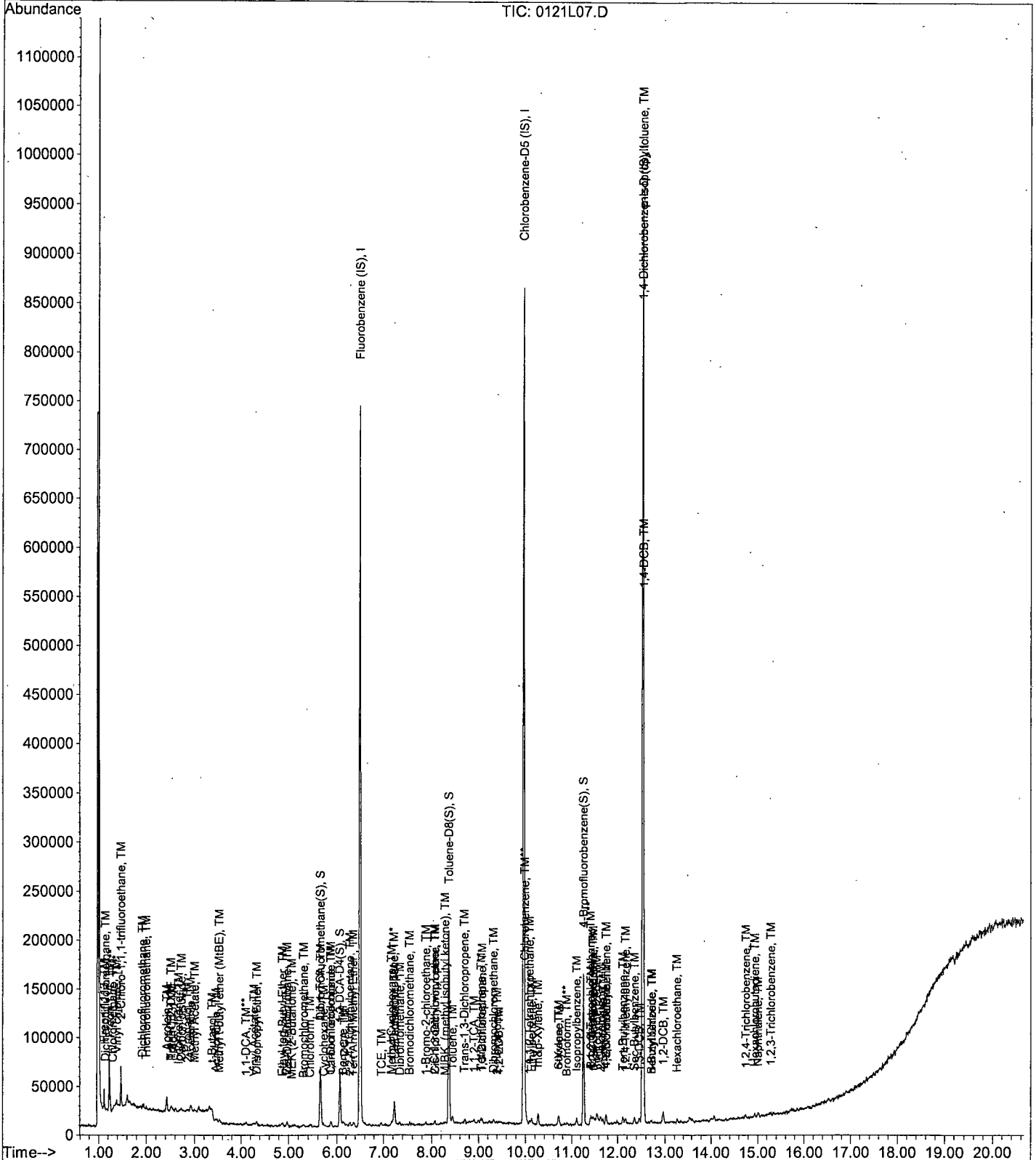
Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	357312	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	300736	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170368	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Dibromofluoromethane(S)	5.65	111	34947	5.1902	ppb	0.00
Spiked Amount 25.000			Recovery =	20.760%		
43) 1,2-DCA-D4(S)	6.07	65	41245	5.2533	ppb	0.00
Spiked Amount 25.000			Recovery =	21.012%		
64) Toluene-D8(S)	8.37	98	133613	5.4376	ppb	0.00
Spiked Amount 25.000			Recovery =	21.752%		
72) 4-Bromofluorobenzene(S)	11.27	95	54511	5.2884	ppb	0.00
Spiked Amount 25.000			Recovery =	21.152%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	9096	4.6601	ppb	93
3) Dichlorodifluoromethane	1.15	85	1374	0.4440	ppb	91
4) Freon 114	1.25	85	1492	0.6131	ppb	95
5) Chloromethane	1.29	50	2981	0.5991	ppb #	84
6) Vinyl chloride	1.38	62	1953	0.4354	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	19808	5.2194	ppb	96
8) Bromomethane	1.67	94	2192	-1.0854	ppb #	70
9) Chloroethane	1.76	64	1985	0.2660	ppb	88
10) Dichlorofluoromethane	1.95	67	5540	0.6791	ppb #	83
11) Trichlorofluoromethane	2.00	101	3185	0.5086	ppb #	67
12) Acrolein	2.43	56	25004	26.3615	ppb #	88
13) Acetone	2.61	43	1558	-1.3508	ppb #	86
14) Freon-113	2.54	101	1603	0.4617	ppb #	89
15) 1,1-DCE	2.52	63	641	0.5516	ppb #	49
16) t-Butanol	3.39	59	12761	30.0857	ppb	98
18) Acetonitrile	2.92	41	21649	29.8106	ppb	97
19) Methyl Acetate	3.01	43	2983	0.5765	ppb #	78
20) Iodomethane	2.67	142	189	3.4582	ppb #	42
21) Acrylonitrile	3.45	52	1139	0.2963	ppb #	48
22) Methylene chloride	3.09	84	3939	0.3188	ppb	91
23) Carbon disulfide	2.73	76	6490	0.5364	ppb	93
24) Methyl t-butyl ether (MtBE)	3.53	73	5941	0.5355	ppb #	94
25) Trans-1,2-DCE	2.53	96	1098	0.5221	ppb	95
26) Diisopropyl Ether	4.34	45	6000	0.5001	ppb	97
28) 1,1-DCA	4.11	63	3551	0.5157	ppb #	83
29) Vinyl Acetate	4.32	43	1311	0.5217	ppb #	98
30) Ethyl tert Butyl Ether	4.88	59	5000	0.4793	ppb #	88
32) Cis-1,2-DCE	4.97	96	2331	0.5947	ppb #	69
33) 2,2-Dichloropropane	4.97	77	3666	0.6746	ppb #	85
36) Chloroform	5.45	83	2813	0.4673	ppb	93
37) Bromochloromethane	5.31	128	533	0.5574	ppb #	56
39) 1,1,1-TCA	5.64	97	981	0.4483	ppb	92
40) Cyclohexane	5.73	41	3072	1.0042	ppb #	34
41) 1,1-Dichloropropene	5.88	75	2350	0.5525	ppb #	78
42) 2,2,4-Trimethylpentane	6.29	57	3842	0.4937	ppb #	64
44) Carbon Tetrachloride	5.87	117	1956	0.4359	ppb	96
45) Tert Amyl Methyl Ether	6.36	73	5061	0.5371	ppb #	78
47) 1,2-DCA	6.16	62	2674	0.5463	ppb #	73
48) Benzene	6.13	78	6990	0.5507	ppb	96



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	1318	0.6208	ppb	# 79
50) 2-Pentanone	7.23	43	61080	25.0422	ppb	98
51) 1,2-Dichloropropane	7.21	63	1748	0.5209	ppb	# 86
52) Bromodichloromethane	7.55	83	1213	0.4756	ppb	# 81
53) Methyl Cyclohexane	7.17	83	2551	0.5616	ppb	84
54) Dibromomethane	7.33	93	999	0.4261	ppb	87
56) MIBK (methyl isobutyl ket	8.29	43	1582	0.4698	ppb	93
57) 1-Bromo-2-chloroethane	7.89	63	1208	0.4717	ppb	# 79
58) Cis-1,3-Dichloropropene	8.07	75	2611	0.4695	ppb	# 69
59) Toluene	8.44	91	3753	0.4920	ppb	92
60) Trans-1,3-Dichloropropene	8.71	75	2839	0.5307	ppb	90
61) 1,1,2-TCA	8.90	83	1500	0.5523	ppb	83
65) 1,2-EDB	9.44	107	1016	0.5261	ppb	96
66) Tetrachloroethene	9.05	166	1200	0.5035	ppb	# 85
67) 1-Chlorohexane	10.00	91	3117	0.1588	ppb	# 86
68) 1,1,1,2-Tetrachloroethane	10.09	131	2072	0.5308	ppb	86
69) m&p-Xylene	10.27	91	11228	0.9560	ppb	85
70) o-Xylene	10.70	106	1684	0.4890	ppb	90
71) Styrene	10.71	104	5141	0.4864	ppb	96
73) 1,3-Dichloropropane	9.08	76	2815	0.5111	ppb	# 82
74) Dibromochloromethane	9.33	129	2158	0.5190	ppb	85
75) Chlorobenzene	10.00	112	4193	0.4346	ppb	# 79
76) Ethylbenzene	10.13	91	4251	0.4860	ppb	94
77) Bromoform	10.90	173	1493	0.4349	ppb	83
79) Isopropylbenzene	11.11	105	7463	0.4680	ppb	94
80) 1,1,2,2-Tetrachloroethane	11.42	83	2617	0.5675	ppb	# 90
81) 1,2,3-Trichloropropane	11.47	110	372	0.4628	ppb	83
82) t-1,4-Dichloro-2-Butene	11.50	53	555	0.5282	ppb	90
83) Bromobenzene	11.42	156	1097	0.4239	ppb	72
84) n-Propylbenzene	11.56	91	4087	0.4211	ppb	96
85) 4-Ethyltoluene	11.69	105	6374	0.4326	ppb	97
86) 2-Chlorotoluene	11.65	91	2862	0.4648	ppb	87
87) 1,3,5-Trimethylbenzene	11.76	105	5904	0.4622	ppb	99
88) 4-Chlorotoluene	11.76	91	3106	0.4448	ppb	100
89) Tert-Butylbenzene	12.11	119	6220	0.4595	ppb	85
90) 1,2,4-Trimethylbenzene	12.17	105	5826	0.4628	ppb	86
91) Sec-Butylbenzene	12.36	105	7440	0.4518	ppb	97
92) p-Isopropyltoluene	12.52	119	3615	0.4729	ppb	# 89
93) Benzyl Chloride	12.72	91	2920	0.5344	ppb	93
94) 1,3-DCB	12.46	146	2123	0.4628	ppb	88
95) 1,4-DCB	12.57	146	4286	0.4717	ppb	89
96) n-Butylbenzene	12.72	91	2920	0.5344	ppb	# 75
97) 1,2-DCB	12.98	146	4231	0.4793	ppb	94
98) Hexachloroethane	13.26	117	1203	0.4342	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.80	75	555	-0.1026	ppb	# 39
100) 1,2,4-Trichlorobenzene	14.75	180	2455	0.4409	ppb	# 65
101) Hexachlorobutadiene	14.94	225	1121	0.4051	ppb	80
102) Naphthalene	15.01	128	5369	0.4636	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	1096	0.4427	ppb	# 74

Quantitation Report

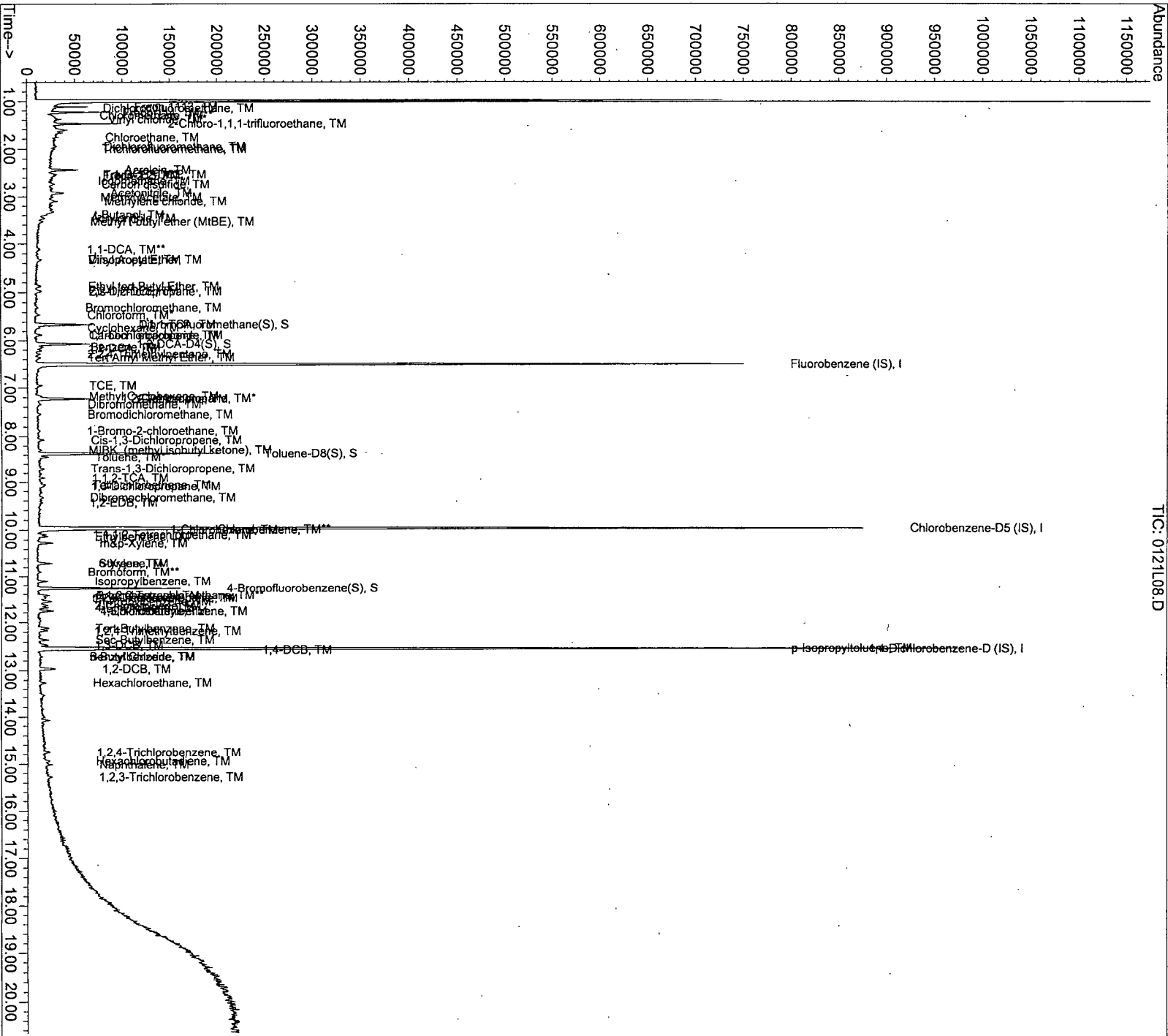
Data File : M:\LOKI\DATA\190121\0121L08.D  
Acq On : 21 Jan 19 18:18  
Sample : 0.5ug/L VOC STD 1/21/19  
Misc : ISSS 11/8/18

Vial: 7  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	348544	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305600	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	164672	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	62019	9.4425	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.768%	
43) 1,2-DCA-D4(S)	6.07	65	71668	9.3578	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.432%	
64) Toluene-D8(S)	8.37	98	226450	9.0692	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.276%	
72) 4-Bromofluorobenzene(S)	11.27	95	98697	9.4226	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.692%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	20572	10.8046	ppb	99
3) Dichlorodifluoromethane	1.15	85	3607	1.1950	ppb	98
4) Freon 114	1.25	85	2739	1.1538	ppb	100
5) Chloromethane	1.29	50	5313	1.0945	ppb	96
6) Vinyl chloride	1.38	62	4015	0.9176	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	39864	10.7683	ppb	96
8) Bromomethane	1.67	94	3234	-0.6410	ppb	99
9) Chloroethane	1.76	64	3027	0.7833	ppb	# 79
10) Dichlorofluoromethane	1.95	67	8554	1.0750	ppb	100
11) Trichlorofluoromethane	2.00	101	6100	0.9985	ppb	90
12) Acrolein	2.43	56	48212	52.1082	ppb	# 87
13) Acetone	2.62	43	1777	-1.0282	ppb	# 62
14) Freon-113	2.54	101	4023	1.1879	ppb	93
15) 1,1-DCE	2.52	63	1511	1.3331	ppb	# 58
16) t-Butanol	3.38	59	19859	47.9979	ppb	98
17) 2-Propanol	2.84	45	3605	11.5360	ppb	# 51
18) Acetonitrile	2.92	41	37610	53.0917	ppb	91
19) Methyl Acetate	3.02	43	8151	1.9244	ppb	# 73
20) Iodomethane	2.66	142	308	3.5230	ppb	# 67
21) Acrylonitrile	3.45	52	1988	0.9420	ppb	# 55
22) Methylene chloride	3.10	84	6042	0.8352	ppb	94
23) Carbon disulfide	2.73	76	13465	1.1409	ppb	# 90
24) Methyl t-butyl ether (MtBE)	3.54	73	10257	0.9478	ppb	# 86
25) Trans-1,2-DCE	2.52	96	2185	1.0650	ppb	96
26) Diisopropyl Ether	4.33	45	11509	0.9835	ppb	94
28) 1,1-DCA	4.10	63	6686	0.9954	ppb	95
29) Vinyl Acetate	4.28	43	2419	0.9868	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	9864	0.9694	ppb	95
31) MEK (2-Butanone)	5.07	43	3241	1.8771	ppb	# 76
32) Cis-1,2-DCE	4.99	96	3876	1.0138	ppb	# 68
33) 2,2-Dichloropropane	4.97	77	5657	1.0671	ppb	96
36) Chloroform	5.45	83	6481	1.1036	ppb	83
37) Bromochloromethane	5.30	128	1084	1.1621	ppb	77
39) 1,1,1-TCA	5.65	97	2350	1.1009	ppb	97
40) Cyclohexane	5.72	41	3422	1.1680	ppb	81
41) 1,1-Dichloropropene	5.88	75	4570	1.1015	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	8300	1.0933	ppb	96
44) Carbon Tetrachloride	5.87	117	4958	1.1328	ppb	75
45) Tert Amyl Methyl Ether	6.36	73	9419	1.0247	ppb	# 96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	4562	0.9555	ppb	# 91
48) Benzene	6.14	78	12769	1.0313	ppb	90
49) TCE	6.95	130	2195	1.0599	ppb	# 84
50) 2-Pentanone	7.23	43	123775	52.0231	ppb	97
51) 1,2-Dichloropropane	7.21	63	3792	1.1584	ppb	# 81
52) Bromodichloromethane	7.54	83	2563	1.0303	ppb	# 97
53) Methyl Cyclohexane	7.17	83	4766	1.0756	ppb	92
54) Dibromomethane	7.34	93	2368	1.0354	ppb	93
55) 2-Chloroethyl vinyl ether	7.94	43	474	899.6219	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	3267	0.9945	ppb	# 79
57) 1-Bromo-2-chloroethane	7.88	63	2787	1.1156	ppb	90
58) Cis-1,3-Dichloropropene	8.07	75	5602	1.0326	ppb	95
59) Toluene	8.44	91	7286	0.9792	ppb	97
60) Trans-1,3-Dichloropropene	8.70	75	5571	1.0676	ppb	95
61) 1,1,2-TCA	8.90	83	2628	0.9920	ppb	85
62) 2-Hexanone	9.22	43	2444	1.1004	ppb	# 78
65) 1,2-EDB	9.44	107	2163	1.1023	ppb	94
66) Tetrachloroethene	9.05	166	2801	1.1565	ppb	85
67) 1-Chlorohexane	10.00	91	6065	0.8960	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	3940	0.9934	ppb	90
69) m&p-Xylene	10.26	91	23239	1.9473	ppb	94
70) o-Xylene	10.70	106	3737	1.0680	ppb	85
71) Styrene	10.71	104	10573	0.9845	ppb	98
73) 1,3-Dichloropropane	9.08	76	6227	1.1127	ppb	100
74) Dibromochloromethane	9.33	129	4293	1.0160	ppb	85
75) Chlorobenzene	9.99	112	10293	1.0499	ppb	97
76) Ethylbenzene	10.13	91	9464	1.0647	ppb	97
77) Bromoform	10.90	173	4240	1.2153	ppb	95
79) Isopropylbenzene	11.11	105	15582	1.0109	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	4690	1.0522	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	881	1.1341	ppb	81
82) t-1,4-Dichloro-2-Butene	11.49	53	1386	1.3646	ppb	# 66
83) Bromobenzene	11.42	156	2845	1.1374	ppb	93
84) n-Propylbenzene	11.56	91	9217	0.9825	ppb	98
85) 4-Ethyltoluene	11.69	105	14594	1.0248	ppb	95
86) 2-Chlorotoluene	11.64	91	6392	1.0740	ppb	94
87) 1,3,5-Trimethylbenzene	11.76	105	12213	0.9893	ppb	88
88) 4-Chlorotoluene	11.76	91	7297	1.0811	ppb	99
89) Tert-Butylbenzene	12.11	119	12116	0.9261	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	10589	0.8702	ppb	88
91) Sec-Butylbenzene	12.36	105	15873	0.9972	ppb	99
92) p-Isopropyltoluene	12.52	119	7311	0.9895	ppb	97
93) Benzyl Chloride	12.72	91	5129	0.9711	ppb	88
94) 1,3-DCB	12.46	146	4634	1.0452	ppb	98
95) 1,4-DCB	12.56	146	9518	1.0839	ppb	92
96) n-Butylbenzene	12.72	91	5129	0.9711	ppb	# 87
97) 1,2-DCB	12.97	146	8402	0.9847	ppb	97
98) Hexachloroethane	13.26	117	2554	0.9536	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.81	75	1487	0.9120	ppb	# 50
100) 1,2,4-Trichlorobenzene	14.74	180	4920	0.9141	ppb	85
101) Hexachlorobutadiene	14.94	225	2250	0.8411	ppb	93
102) Naphthalene	15.01	128	9306	0.8313	ppb	93
103) 1,2,3-Trichlorobenzene	15.27	180	2118	0.8851	ppb	93

Quantitation Report

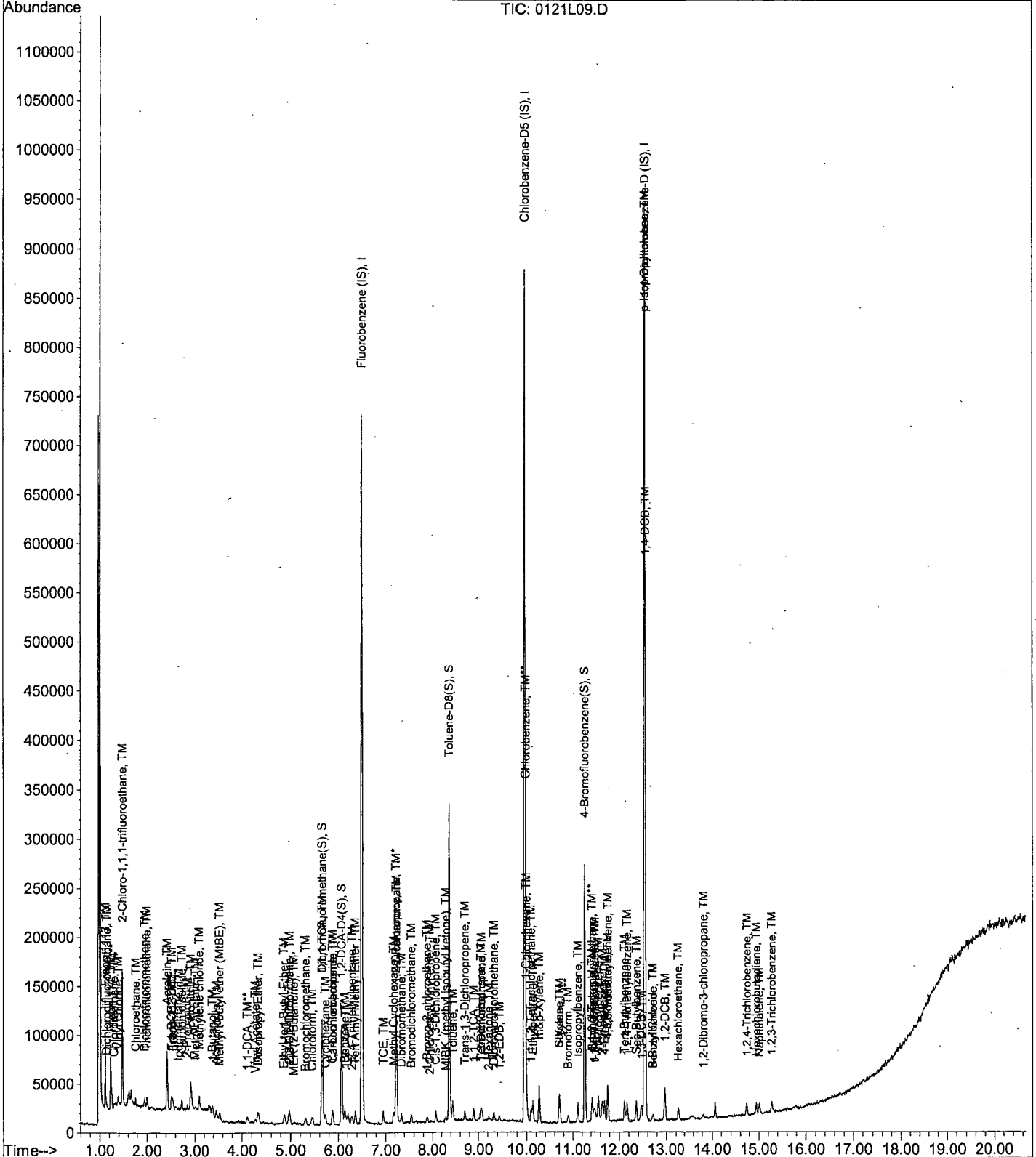
Data File : M:\LOKI\DATA\190121\0121L09.D  
Acq On : 21 Jan 19 18:47  
Sample : 1.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	369600	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	318272	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170944	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	62734	9.0072	ppb	0.00
Spiked Amount 25.000			Recovery =	36.028%		
43) 1,2-DCA-D4(S)	6.07	65	73820	9.0896	ppb	0.00
Spiked Amount 25.000			Recovery =	36.360%		
64) Toluene-D8(S)	8.37	98	238805	9.1832	ppb	0.00
Spiked Amount 25.000			Recovery =	36.732%		
72) 4-Bromofluorobenzene(S)	11.26	95	103026	9.4443	ppb	0.00
Spiked Amount 25.000			Recovery =	37.776%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	37205	18.4273	ppb	96
3) Dichlorodifluoromethane	1.14	85	6620	2.0683	ppb	97
4) Freon 114	1.25	85	4136	1.6430	ppb #	74
5) Chloromethane	1.29	50	9871	1.9177	ppb	96
6) Vinyl chloride	1.38	62	9757	2.1029	ppb	89
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	77480	19.7371	ppb	98
8) Bromomethane	1.66	94	7618	0.9610	ppb	86
9) Chloroethane	1.76	64	4613	1.4108	ppb	89
10) Dichlorofluoromethane	1.95	67	15265	1.8090	ppb	94
11) Trichlorofluoromethane	2.00	101	11836	1.8271	ppb	96
12) Acrolein	2.43	56	70018	71.3652	ppb #	94
13) Acetone	2.61	43	3142	0.4593	ppb	94
14) Freon-113	2.55	101	7072	1.9692	ppb	87
15) 1,1-DCE	2.52	63	2480	2.0633	ppb	87
16) t-Butanol	3.39	59	28922	65.9203	ppb #	92
17) 2-Propanol	2.85	45	5791	17.4755	ppb #	53
18) Acetonitrile	2.92	41	53663	71.4371	ppb	99
19) Methyl Acetate	3.02	43	8362	1.8561	ppb	97
20) Iodomethane	2.67	142	805	3.7594	ppb #	77
21) Acrylonitrile	3.45	52	3175	1.6828	ppb #	60
22) Methylene chloride	3.10	84	10633	1.7709	ppb	93
23) Carbon disulfide	2.73	76	25765	2.0587	ppb	97
24) Methyl t-butyl ether (MtBE)	3.54	73	22952	2.0000	ppb	99
25) Trans-1,2-DCE	2.52	96	4399	2.0221	ppb	91
26) Diisopropyl Ether	4.33	45	23994	1.9336	ppb #	90
28) 1,1-DCA	4.11	63	14054	1.9731	ppb	93
29) Vinyl Acetate	4.27	43	5002	1.9243	ppb #	85
30) Ethyl tert Butyl Ether	4.87	59	20262	1.8777	ppb	100
31) MEK (2-Butanone)	5.08	43	4876	2.6034	ppb	92
32) Cis-1,2-DCE	4.98	96	8153	2.0110	ppb	97
33) 2,2-Dichloropropane	4.96	77	11317	2.0131	ppb #	86
36) Chloroform	5.45	83	11467	1.8414	ppb	90
37) Bromochloromethane	5.30	128	1875	1.8956	ppb	95
39) 1,1,1-TCA	5.65	97	4285	1.8931	ppb	91
40) Cyclohexane	5.72	41	6776	2.3103	ppb	81
41) 1,1-Dichloropropene	5.88	75	8633	1.9623	ppb #	88
42) 2,2,4-Trimethylpentane	6.29	57	16090	1.9987	ppb #	75
44) Carbon Tetrachloride	5.86	117	8488	1.8288	ppb	89
45) Tert Amyl Methyl Ether	6.36	73	18748	1.9234	ppb #	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	10539	2.0817	ppb	# 89
48) Benzene	6.14	78	25147	1.9153	ppb	98
49) TCE	6.95	130	3719	1.6935	ppb	87
50) 2-Pentanone	7.23	43	182419	72.3035	ppb	98
51) 1,2-Dichloropropane	7.21	63	6826	1.9664	ppb	100
52) Bromodichloromethane	7.54	83	5013	1.9003	ppb	# 95
53) Methyl Cyclohexane	7.18	83	9102	1.9371	ppb	90
54) Dibromomethane	7.34	93	4937	2.0356	ppb	97
55) 2-Chloroethyl vinyl ether	7.90	43	932	1.8970	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	7552	2.1680	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	5549	2.0946	ppb	94
58) Cis-1,3-Dichloropropene	8.07	75	11723	2.0378	ppb	91
59) Toluene	8.45	91	14678	1.8603	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	10769	1.9462	ppb	98
61) 1,1,2-TCA	8.90	83	5344	1.9022	ppb	95
62) 2-Hexanone	9.22	43	4965	2.1081	ppb	# 86
65) 1,2-EDB	9.44	107	3811	1.8648	ppb	90
66) Tetrachloroethene	9.06	166	5167	2.0484	ppb	90
67) 1-Chlorohexane	10.00	91	9318	1.6292	ppb	91
68) 1,1,1,2-Tetrachloroethane	10.09	131	8000	1.9367	ppb	82
69) m&p-Xylene	10.27	91	46006	3.7015	ppb	95
70) o-Xylene	10.70	106	6739	1.8492	ppb	91
71) Styrene	10.71	104	20607	1.8423	ppb	100
73) 1,3-Dichloropropane	9.08	76	11529	1.9780	ppb	94
74) Dibromochloromethane	9.33	129	8523	1.9368	ppb	88
75) Chlorobenzene	10.00	112	19225	1.8830	ppb	93
76) Ethylbenzene	10.14	91	17208	1.8589	ppb	88
77) Bromoform	10.90	173	7421	2.0424	ppb	96
79) Isopropylbenzene	11.11	105	31938	1.9961	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	9448	2.0418	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	1466	1.8179	ppb	# 67
82) t-1,4-Dichloro-2-Butene	11.49	53	1974	1.8722	ppb	# 76
83) Bromobenzene	11.42	156	5202	2.0033	ppb	92
84) n-Propylbenzene	11.56	91	18318	1.8810	ppb	99
85) 4-Ethyltoluene	11.69	105	27662	1.8712	ppb	99
86) 2-Chlorotoluene	11.64	91	12879	2.0845	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	24068	1.8780	ppb	86
88) 4-Chlorotoluene	11.77	91	13939	1.9894	ppb	97
89) Tert-Butylbenzene	12.11	119	27552	2.0286	ppb	90
90) 1,2,4-Trimethylbenzene	12.17	105	23275	1.8426	ppb	92
91) Sec-Butylbenzene	12.36	105	32415	1.9618	ppb	96
92) p-Isopropyltoluene	12.52	119	14671	1.9127	ppb	98
93) Benzyl Chloride	12.71	91	10031	1.8295	ppb	# 89
94) 1,3-DCB	12.46	146	8745	1.9001	ppb	98
95) 1,4-DCB	12.57	146	18721	2.0536	ppb	98
96) n-Butylbenzene	12.71	91	10031	1.8295	ppb	97
97) 1,2-DCB	12.97	146	17360	1.9600	ppb	96
98) Hexachloroethane	13.26	117	4671	1.6801	ppb	# 80
99) 1,2-Dibromo-3-chloropropan	13.82	75	2144	1.5293	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	9801	1.7542	ppb	89
101) Hexachlorobutadiene	14.94	225	5881	2.1178	ppb	92
102) Naphthalene	15.01	128	20275	1.7447	ppb	95
103) 1,2,3-Trichlorobenzene	15.27	180	4893	1.9697	ppb	90

Quantitation Report

Data File : M:\LOKI\DATA\190121\0121L10.D

Vial: 9

Acq On : 21 Jan 19 19:16

Operator : PM, DG, SV, CMM, KV

Sample : 2.0ug/L VOC STD 1/21/19

Inst : LOKI

Misc : IS&S 11/8/18

Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

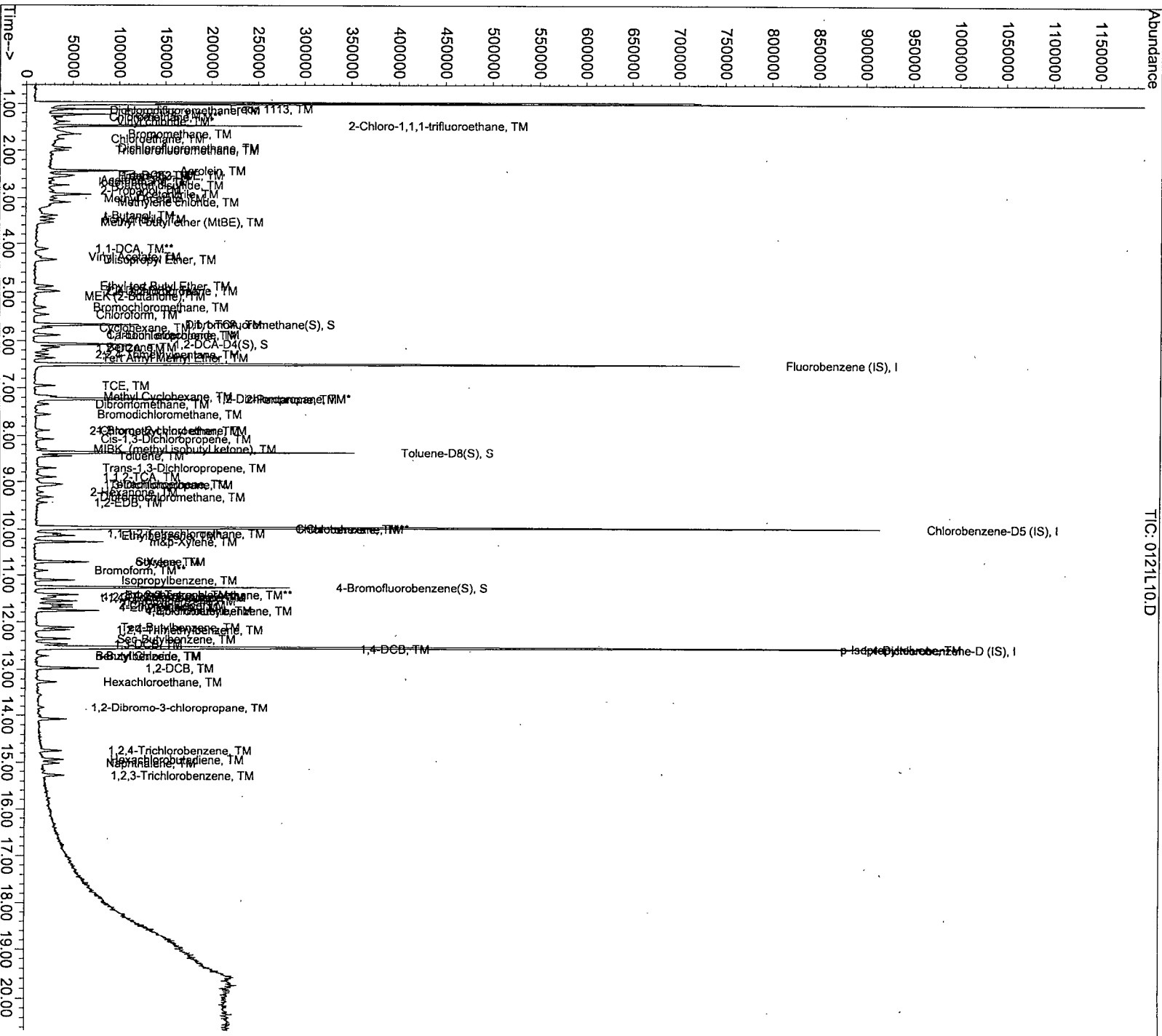
Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)

Title : METHOD 8260B

Last Update : Tue Jan 22 12:46:40 2019

Response via : Initial Calibration





Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	353344	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	308864	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174208	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	168508	25.3070	ppb	0.00
Spiked Amount 25.000			Recovery = 101.228%			
43) 1,2-DCA-D4(S)	6.07	65	197954	25.4960	ppb	0.00
Spiked Amount 25.000			Recovery = 101.984%			
64) Toluene-D8(S)	8.37	98	625618	24.7908	ppb	0.00
Spiked Amount 25.000			Recovery = 99.164%			
72) 4-Bromofluorobenzene(S)	11.26	95	266638	25.1870	ppb	0.00
Spiked Amount 25.000			Recovery = 100.748%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	76167	39.4603	ppb	98
3) Dichlorodifluoromethane	1.15	85	15755	5.1488	ppb	92
4) Freon 114	1.25	85	11613	4.8254	ppb	87
5) Chloromethane	1.29	50	25162	5.1133	ppb	91
6) Vinyl chloride	1.38	62	23045	5.1953	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	151104	40.2627	ppb	97
8) Bromomethane	1.66	94	16973	4.8374	ppb	93
9) Chloroethane	1.76	64	13536	5.6799	ppb	91
10) Dichlorofluoromethane	1.95	67	38421	4.7627	ppb	92
11) Trichlorofluoromethane	2.00	101	31539	5.0927	ppb	99
12) Acrolein	2.43	56	93376	99.5512	ppb	# 93
13) Acetone	2.61	43	6369	4.6227	ppb	94
14) Freon-113	2.55	101	16990	4.9485	ppb	95
15) 1,1-DCE	2.52	63	5104	4.4418	ppb	93
16) t-Butanol	3.38	59	36595	87.2463	ppb	97
17) 2-Propanol	2.84	45	12356	39.0021	ppb	# 77
18) Acetonitrile	2.92	41	68662	95.6091	ppb	96
19) Methyl Acetate	3.02	43	19861	4.8663	ppb	98
20) Iodomethane	2.67	142	2911	4.8665	ppb	99
21) Acrylonitrile	3.44	52	6854	4.4564	ppb	99
22) Methylene chloride	3.10	84	23312	4.8156	ppb	96
23) Carbon disulfide	2.73	76	57330	4.7917	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	53831	4.9065	ppb	97
25) Trans-1,2-DCE	2.52	96	10519	5.0577	ppb	98
26) Diisopropyl Ether	4.33	45	59512	5.0164	ppb	98
28) 1,1-DCA	4.10	63	33514	4.9216	ppb	97
29) Vinyl Acetate	4.33	43	12055	4.8511	ppb	# 98
30) Ethyl tert Butyl Ether	4.87	59	49662	4.8141	ppb	98
31) MEK (2-Butanone)	5.07	43	11339	6.1283	ppb	96
32) Cis-1,2-DCE	4.98	96	18809	4.8528	ppb	93
33) 2,2-Dichloropropane	4.97	77	23684	4.4069	ppb	95
36) Chloroform	5.45	83	28317	4.7565	ppb	99
37) Bromochloromethane	5.30	128	4883	5.1639	ppb	100
39) 1,1,1-TCA	5.65	97	11000	5.0834	ppb	95
40) Cyclohexane	5.72	41	13524	4.9854	ppb	96
41) 1,1-Dichloropropene	5.88	75	20553	4.8866	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	38125	4.9538	ppb	98
44) Carbon Tetrachloride	5.87	117	22586	5.0901	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	46716	5.0132	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	23438	4.8425	ppb	99
48) Benzene	6.13	78	62771	5.0008	ppb	97
49) TCE	6.95	130	11108	5.2907	ppb	93
50) 2-Pentanone	7.23	43	243642	101.0126	ppb	98
51) 1,2-Dichloropropane	7.20	63	16239	4.8934	ppb	100
52) Bromodichloromethane	7.55	83	13170	5.2222	ppb	94
53) Methyl Cyclohexane	7.17	83	22090	4.9175	ppb	97
54) Dibromomethane	7.34	93	12218	5.2695	ppb	92
55) 2-Chloroethyl vinyl ether	7.94	43	1355	4.3832	ppb	97
56) MIBK (methyl isobutyl ket	8.28	43	19404	5.8267	ppb #	88
57) 1-Bromo-2-chloroethane	7.89	63	12398	4.8951	ppb	91
58) Cis-1,3-Dichloropropene	8.07	75	27380	4.9783	ppb	95
59) Toluene	8.44	91	38744	5.1364	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	25924	4.9006	ppb	99
61) 1,1,2-TCA	8.90	83	13197	4.9136	ppb	88
62) 2-Hexanone	9.22	43	11122	4.9396	ppb	92
65) 1,2-EDB	9.44	107	9722	4.9020	ppb	83
66) Tetrachloroethene	9.05	166	12132	4.9562	ppb	98
67) 1-Chlorohexane	10.00	91	21480	4.7600	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	18966	4.7312	ppb	97
69) m&p-Xylene	10.26	91	120535	9.9933	ppb	95
70) o-Xylene	10.70	106	17040	4.8182	ppb	97
71) Styrene	10.71	104	56179	5.1756	ppb	92
73) 1,3-Dichloropropane	9.08	76	27907	4.9339	ppb	92
74) Dibromochloromethane	9.33	129	21132	4.9484	ppb	90
75) Chlorobenzene	10.00	112	49981	5.0444	ppb	96
76) Ethylbenzene	10.13	91	43976	4.8951	ppb	98
77) Bromoform	10.90	173	17972	5.0970	ppb	96
79) Isopropylbenzene	11.11	105	81475	4.9966	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	22906	4.8574	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	4067	4.9487	ppb #	76
82) t-1,4-Dichloro-2-Butene	11.49	53	5279	4.9131	ppb	86
83) Bromobenzene	11.43	156	13375	5.0543	ppb	95
84) n-Propylbenzene	11.56	91	49969	5.0351	ppb	97
85) 4-Ethyltoluene	11.69	105	70713	4.6939	ppb	97
86) 2-Chlorotoluene	11.64	91	31752	5.0428	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	63419	4.8559	ppb	94
88) 4-Chlorotoluene	11.76	91	35912	5.0293	ppb	100
89) Tert-Butylbenzene	12.12	119	68550	4.9526	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	62396	4.8472	ppb	99
91) Sec-Butylbenzene	12.35	105	83294	4.9465	ppb	99
92) p-Isopropyltoluene	12.52	119	35808	4.5810	ppb	99
93) Benzyl Chloride	12.72	91	26928	4.8193	ppb	95
94) 1,3-DCB	12.46	146	23904	5.0965	ppb	98
95) 1,4-DCB	12.56	146	44420	4.7814	ppb	91
96) n-Butylbenzene	12.72	91	26928	4.8193	ppb #	90
97) 1,2-DCB	12.97	146	44805	4.9638	ppb	94
98) Hexachloroethane	13.26	117	14368	5.0712	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.82	75	5658	5.0335	ppb	97
100) 1,2,4-Trichlorobenzene	14.74	180	25473	4.4737	ppb	89
101) Hexachlorobutadiene	14.93	225	14153	5.0012	ppb	97
102) Naphthalene	15.01	128	54729	4.6213	ppb	94
103) 1,2,3-Trichlorobenzene	15.27	180	11326	4.4740	ppb	96

Quantitation Report

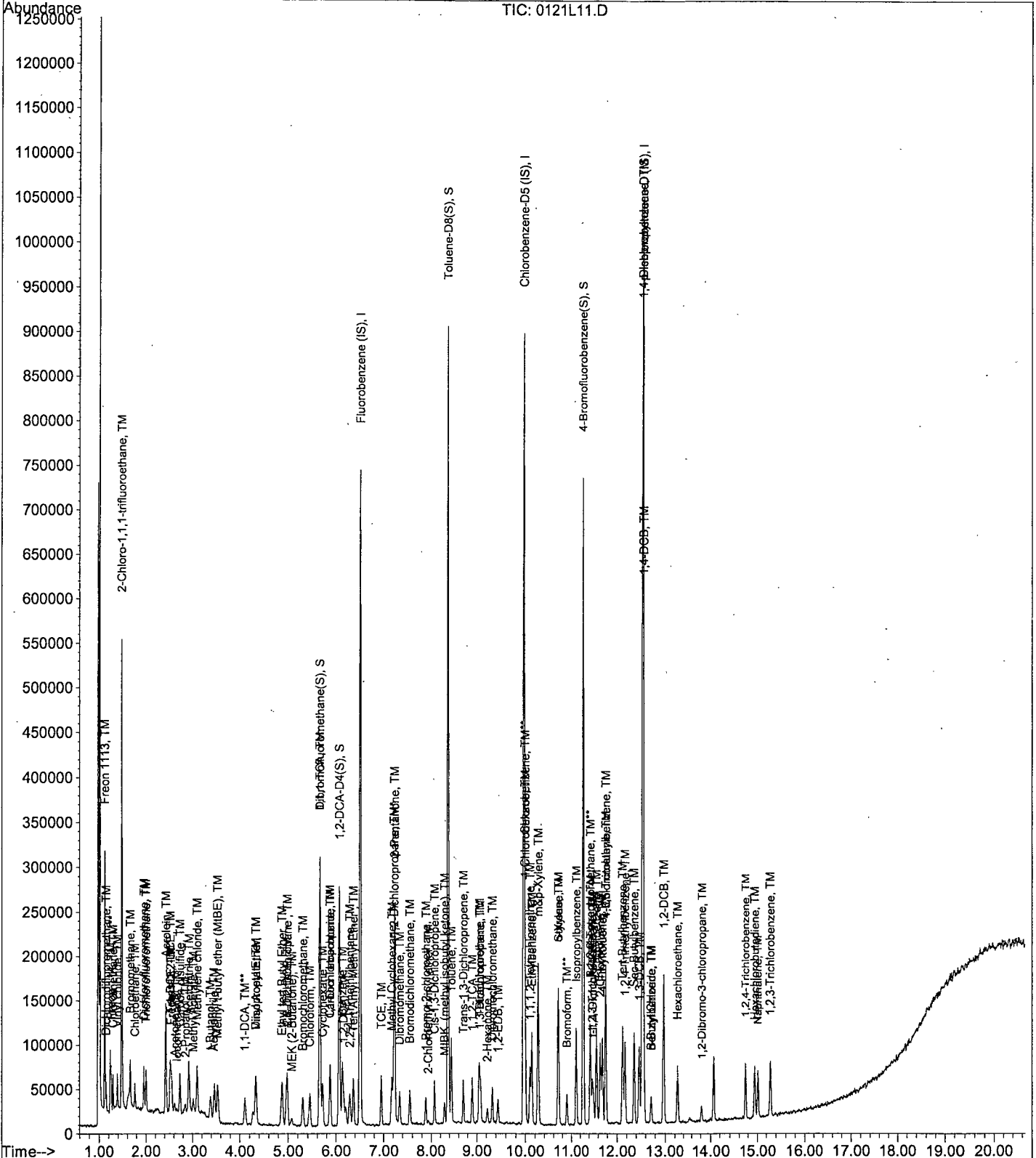
Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	368896	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	312384	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	171968	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	171899	24.7279	ppb	0.00
Spiked Amount 25.000			Recovery =	98.912%		
43) 1,2-DCA-D4(S)	6.07	65	197736	24.3942	ppb	0.00
Spiked Amount 25.000			Recovery =	97.576%		
64) Toluene-D8(S)	8.37	98	643709	25.2202	ppb	0.00
Spiked Amount 25.000			Recovery =	100.880%		
72) 4-Bromofluorobenzene(S)	11.26	95	270690	25.2817	ppb	0.00
Spiked Amount 25.000			Recovery =	101.128%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	198769	98.6361	ppb	100
3) Dichlorodifluoromethane	1.15	85	30773	8.8455	ppb	100
4) Freon 114	1.25	85	25160	10.0137	ppb	100
5) Chloromethane	1.29	50	48026	9.3482	ppb	100
6) Vinyl chloride	1.38	62	46975	10.1436	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	388800	99.2310	ppb	100
8) Bromomethane	1.65	94	31694	10.1920	ppb	100
9) Chloroethane	1.75	64	22898	9.6079	ppb	100
10) Dichlorofluoromethane	1.95	67	78702	9.3447	ppb	100
11) Trichlorofluoromethane	2.00	101	62822	9.7164	ppb	100
12) Acrolein	2.43	56	114170	120.8852	ppb	100
13) Acetone	2.62	43	10852	9.6031	ppb	100
14) Freon-113	2.54	101	34802	9.7090	ppb	100
15) 1,1-DCE	2.52	63	10525	8.7733	ppb	100
16) t-Butanol	3.38	59	55623	127.0204	ppb	100
17) 2-Propanol	2.84	45	29552	92.9936	ppb	# 100
18) Acetonitrile	2.92	41	89807	119.7807	ppb	100
19) Methyl Acetate	3.02	43	40350	9.6323	ppb	100
20) Iodomethane	2.67	142	8529	7.5851	ppb	100
21) Acrylonitrile	3.45	52	14652	9.6716	ppb	100
22) Methylene chloride	3.10	84	46385	9.7064	ppb	100
23) Carbon disulfide	2.73	76	118117	9.4561	ppb	100
24) Methyl t-butyl ether (MtBE)	3.54	73	112450	9.8173	ppb	100
25) Trans-1,2-DCE	2.52	96	21024	9.6824	ppb	100
26) Diisopropyl Ether	4.33	45	119590	9.6556	ppb	100
28) 1,1-DCA	4.10	63	68991	9.7043	ppb	100
29) Vinyl Acetate	4.33	43	23279	8.9728	ppb	100
30) Ethyl tert Butyl Ether	4.87	59	104802	9.7309	ppb	100
31) MEK (2-Butanone)	5.07	43	18395	9.4436	ppb	100
32) Cis-1,2-DCE	4.98	96	37183	9.1889	ppb	100
33) 2,2-Dichloropropane	4.97	77	51272	9.1379	ppb	100
36) Chloroform	5.45	83	61890	9.9576	ppb	100
37) Bromochloromethane	5.30	128	9165	9.2836	ppb	100
39) 1,1,1-TCA	5.65	97	22176	9.8160	ppb	100
40) Cyclohexane	5.71	41	26205	9.3805	ppb	100
41) 1,1-Dichloropropene	5.88	75	42586	9.6982	ppb	100
42) 2,2,4-Trimethylpentane	6.28	57	77117	9.5977	ppb	100
44) Carbon Tetrachloride	5.87	117	44622	9.6323	ppb	100
45) Tert Amyl Methyl Ether	6.36	73	94295	9.6924	ppb	100

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	49446	9.7852	ppb	100
48) Benzene	6.13	78	125189	9.5529	ppb	100
49) TCE	6.95	130	21696	9.8982	ppb	100
50) 2-Pentanone	7.23	43	309909	123.0698	ppb	100
51) 1,2-Dichloropropane	7.21	63	32295	9.3213	ppb	100
52) Bromodichloromethane	7.55	83	25920	9.8445	ppb	100
53) Methyl Cyclohexane	7.17	83	45341	9.6679	ppb	100
54) Dibromomethane	7.34	93	24082	9.9485	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	824	4.0693	ppb	100
56) MIBK (methyl isobutyl ket	8.29	43	33964	9.7689	ppb	100
57) 1-Bromo-2-chloroethane	7.89	63	24984	9.4486	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	55998	9.7524	ppb	100
59) Toluene	8.44	91	79664	10.1160	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	54074	9.7911	ppb	100
61) 1,1,2-TCA	8.90	83	27689	9.8748	ppb	100
62) 2-Hexanone	9.22	43	23961	10.1932	ppb	100
65) 1,2-EDB	9.44	107	20104	10.0225	ppb	100
66) Tetrachloroethene	9.05	166	24216	9.7813	ppb	100
67) 1-Chlorohexane	10.00	91	41411	9.6597	ppb	100
68) 1,1,1,2-Tetrachloroethane	10.09	131	40335	9.9484	ppb	100
69) m&p-Xylene	10.26	91	242518	19.8801	ppb	100
70) o-Xylene	10.70	106	36056	10.0803	ppb	100
71) Styrene	10.71	104	108468	9.8801	ppb	100
73) 1,3-Dichloropropane	9.08	76	55762	9.7475	ppb	100
74) Dibromochloromethane	9.33	129	43274	10.0191	ppb	100
75) Chlorobenzene	10.00	112	103383	10.3165	ppb	100
76) Ethylbenzene	10.13	91	92144	10.1413	ppb	100
77) Bromoform	10.90	173	35559	9.9712	ppb	100
79) Isopropylbenzene	11.11	105	165721	10.2956	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	44387	9.5353	ppb	100
81) 1,2,3-Trichloropropane	11.47	110	8530	10.5144	ppb	100
82) t-1,4-Dichloro-2-Butene	11.50	53	9944	9.3753	ppb	100
83) Bromobenzene	11.42	156	26392	10.1033	ppb	100
84) n-Propylbenzene	11.56	91	98217	10.0256	ppb	100
85) 4-Ethyltoluene	11.69	105	149952	10.0834	ppb	100
86) 2-Chlorotoluene	11.64	91	62128	9.9956	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	131873	10.2288	ppb	100
88) 4-Chlorotoluene	11.76	91	72632	10.3043	ppb	100
89) Tert-Butylbenzene	12.11	119	139174	10.1860	ppb	100
90) 1,2,4-Trimethylbenzene	12.17	105	131745	10.3678	ppb	100
91) Sec-Butylbenzene	12.35	105	169371	10.1893	ppb	100
92) p-Isopropyltoluene	12.52	119	74168	9.6121	ppb	100
93) Benzyl Chloride	12.71	91	52447	9.5088	ppb	100
94) 1,3-DCB	12.46	146	47080	10.1684	ppb	100
95) 1,4-DCB	12.56	146	94601	10.3156	ppb	100
96) n-Butylbenzene	12.71	91	52447	9.5088	ppb	100
97) 1,2-DCB	12.97	146	88322	9.9123	ppb	100
98) Hexachloroethane	13.26	117	29398	10.5111	ppb	100
99) 1,2-Dibromo-3-chloropropan	13.82	75	9836	9.3781	ppb	100
100) 1,2,4-Trichlorobenzene	14.74	180	53855	9.5816	ppb	100
101) Hexachlorobutadiene	14.94	225	27768	9.9401	ppb	100
102) Naphthalene	15.01	128	112019	9.5820	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	22120	8.8516	ppb	100

Quantitation Report

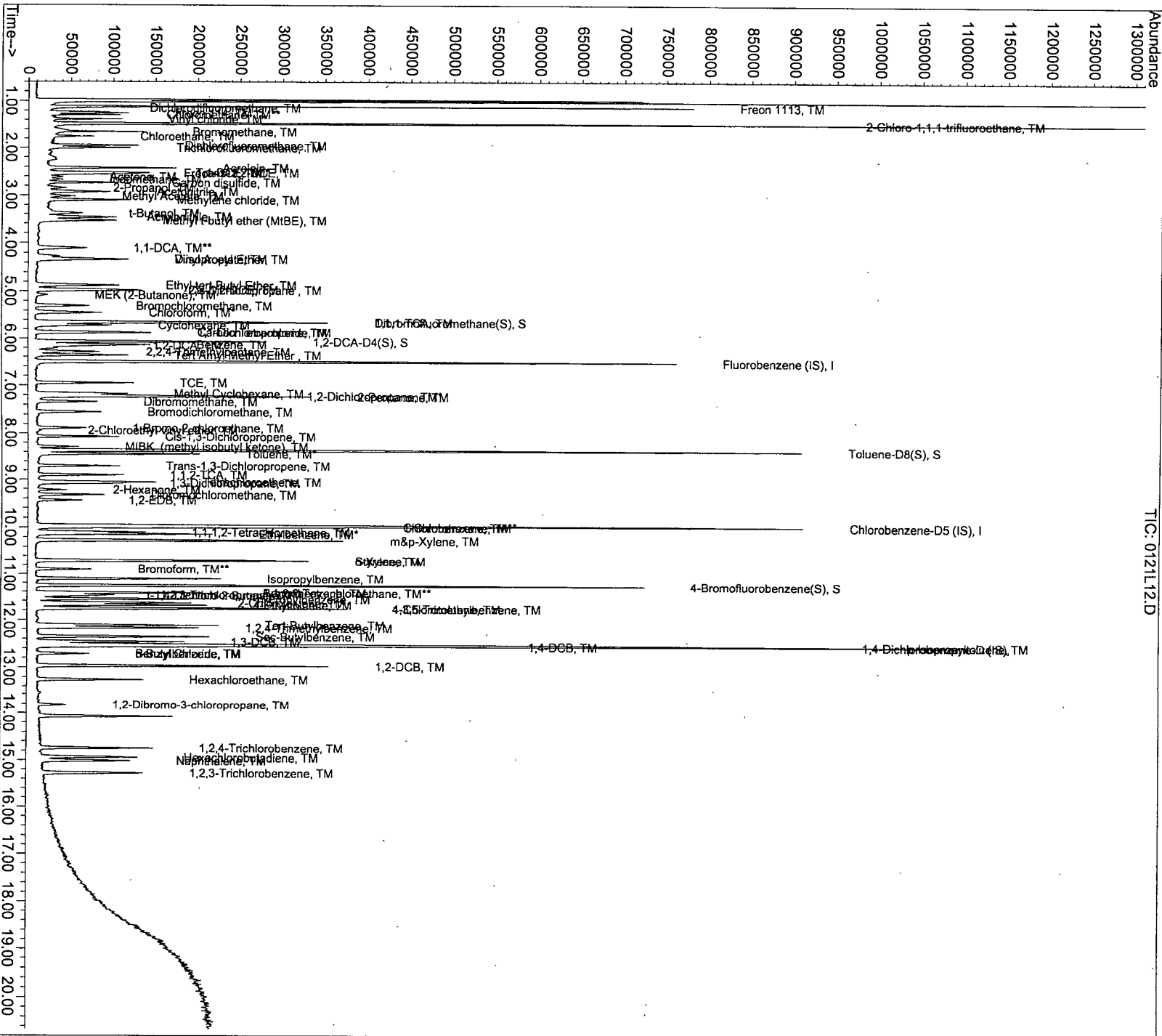
Data File : M:\LOKI\DATA\190121\0121I12.D  
Acq On : 21 Jan 19 20:13  
Sample : 10ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial : 11  
Operator : PM, DG, SV, CMM, KV  
Inst : LOKI  
Multiplr : 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	345152	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307136	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	162624	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	336404	51.7212	ppb	0.00
Spiked Amount 25.000			Recovery =	206.884%		
43) 1,2-DCA-D4(S)	6.07	65	391899	51.6736	ppb	0.00
Spiked Amount 25.000			Recovery =	206.696%		
64) Toluene-D8(S)	8.37	98	1268942	50.5660	ppb	0.00
Spiked Amount 25.000			Recovery =	202.264%		
72) 4-Bromofluorobenzene(S)	11.26	95	532258	50.5608	ppb	0.00
Spiked Amount 25.000			Recovery =	202.244%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	232336	123.2246	ppb	99
3) Dichlorodifluoromethane	1.15	85	66144	20.2243	ppb	98
4) Freon 114	1.25	85	50024	21.2793	ppb	91
5) Chloromethane	1.29	50	94570	19.6742	ppb	97
6) Vinyl chloride	1.38	62	94000	21.6944	ppb	94
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	459520	125.3485	ppb	99
8) Bromomethane	1.65	94	59405	22.3763	ppb	94
9) Chloroethane	1.75	64	46120	21.4348	ppb	97
10) Dichlorofluoromethane	1.95	67	151557	19.2331	ppb	100
11) Trichlorofluoromethane	2.00	101	130510	21.5740	ppb	94
12) Acrolein	2.43	56	133567	152.0316	ppb	# 93
13) Acetone	2.61	43	18565	20.2568	ppb	98
14) Freon-113	2.54	101	70521	21.0273	ppb	94
15) 1,1-DCE	2.52	63	21488	19.1438	ppb	92
16) t-Butanol	3.39	59	49603	121.0655	ppb	98
17) 2-Propanol	2.85	45	32138	108.0883	ppb	# 99
18) Acetonitrile	2.92	41	102232	145.7327	ppb	98
19) Methyl Acetate	3.02	43	76670	19.7386	ppb	92
20) Iodomethane	2.67	142	24832	16.5042	ppb	98
21) Acrylonitrile	3.45	52	28326	20.5403	ppb	85
22) Methylene chloride	3.10	84	86698	19.9723	ppb	98
23) Carbon disulfide	2.73	76	229675	19.6521	ppb	98
24) Methyl t-butyl ether (MtBE)	3.54	73	217341	20.2800	ppb	97
25) Trans-1,2-DCE	2.52	96	40392	19.8819	ppb	96
26) Diisopropyl Ether	4.33	45	236728	20.4281	ppb	99
28) 1,1-DCA	4.10	63	134845	20.2722	ppb	99
29) Vinyl Acetate	4.27	43	51916	21.3874	ppb	# 79
30) Ethyl tert Butyl Ether	4.88	59	206845	20.5268	ppb	97
31) MEK (2-Butanone)	5.08	43	34819	18.9590	ppb	# 81
32) Cis-1,2-DCE	4.98	96	73308	19.3626	ppb	95
33) 2,2-Dichloropropane	4.97	77	97363	18.5462	ppb	96
36) Chloroform	5.45	83	121450	20.8846	ppb	94
37) Bromochloromethane	5.30	128	17088	18.4998	ppb	85
39) 1,1,1-TCA	5.65	97	42680	20.1915	ppb	99
40) Cyclohexane	5.72	41	52310	20.1824	ppb	93
41) 1,1-Dichloropropene	5.88	75	79419	19.3305	ppb	96
42) 2,2,4-Trimethylpentane	6.29	57	153073	20.3615	ppb	98
44) Carbon Tetrachloride	5.87	117	90088	20.7847	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	180001	19.7748	ppb	96

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	93572	19.7915	ppb	99
48) Benzene	6.13	78	243279	19.8412	ppb	97
49) TCE	6.95	130	38040	18.5485	ppb	96
50) 2-Pentanone	7.23	43	345887	146.8064	ppb	99
51) 1,2-Dichloropropane	7.20	63	63630	19.6290	ppb	98
52) Bromodichloromethane	7.54	83	49856	20.2382	ppb	93
53) Methyl Cyclohexane	7.17	83	86600	19.7356	ppb	99
54) Dibromomethane	7.34	93	45714	20.1839	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	1514	7.9911	ppb	# 83
56) MIBK (methyl isobutyl ket	8.29	43	62554	19.2298	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	49488	20.0032	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	108818	20.2551	ppb	95
59) Toluene	8.44	91	148800	20.1950	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	101719	19.6851	ppb	97
61) 1,1,2-TCA	8.90	83	53082	20.2331	ppb	98
62) 2-Hexanone	9.22	43	41255	18.7576	ppb	# 90
65) 1,2-EDB	9.44	107	37912	19.2233	ppb	93
66) Tetrachloroethene	9.05	166	46856	19.2494	ppb	96
67) 1-Chlorohexane	10.00	91	80410	19.7081	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	79373	19.9115	ppb	96
69) m&p-Xylene	10.26	91	487656	40.6580	ppb	95
70) o-Xylene	10.70	106	68104	19.3654	ppb	98
71) Styrene	10.71	104	213830	19.8102	ppb	97
73) 1,3-Dichloropropane	9.08	76	108622	19.3121	ppb	98
74) Dibromochloromethane	9.33	129	82904	19.5225	ppb	98
75) Chlorobenzene	10.00	112	201545	20.4556	ppb	95
76) Ethylbenzene	10.13	91	172544	19.3145	ppb	99
77) Bromoform	10.89	173	66087	18.8483	ppb	89
79) Isopropylbenzene	11.11	105	324331	21.3071	ppb	98
80) 1,1,2,2-Tetrachloroethane	11.43	83	86065	19.5510	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	15713	20.4813	ppb	86
82) t-1,4-Dichloro-2-Butene	11.50	53	19789	19.7292	ppb	92
83) Bromobenzene	11.43	156	51744	20.9467	ppb	97
84) n-Propylbenzene	11.56	91	206667	22.3079	ppb	100
85) 4-Ethyltoluene	11.69	105	305303	21.7094	ppb	100
86) 2-Chlorotoluene	11.64	91	122354	20.8163	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	259367	21.2739	ppb	97
88) 4-Chlorotoluene	11.77	91	140608	21.0942	ppb	100
89) Tert-Butylbenzene	12.11	119	283848	21.9683	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	259256	21.5748	ppb	99
91) Sec-Butylbenzene	12.36	105	335718	21.3572	ppb	98
92) p-Isopropyltoluene	12.52	119	154432	21.1641	ppb	99
93) Benzyl Chloride	12.71	91	101776	19.5124	ppb	92
94) 1,3-DCB	12.46	146	89320	20.4000	ppb	98
95) 1,4-DCB	12.56	146	177170	20.4292	ppb	96
96) n-Butylbenzene	12.71	91	101776	19.5124	ppb	95
97) 1,2-DCB	12.97	146	172125	20.4273	ppb	99
98) Hexachloroethane	13.26	117	57725	21.8252	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.82	75	19685	20.6008	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	113768	21.4040	ppb	94
101) Hexachlorobutadiene	14.94	225	55456	20.9923	ppb	94
102) Naphthalene	15.01	128	233837	21.1514	ppb	99
103) 1,2,3-Trichlorobenzene	15.28	180	50840	21.5131	ppb	93



Quantitation Report

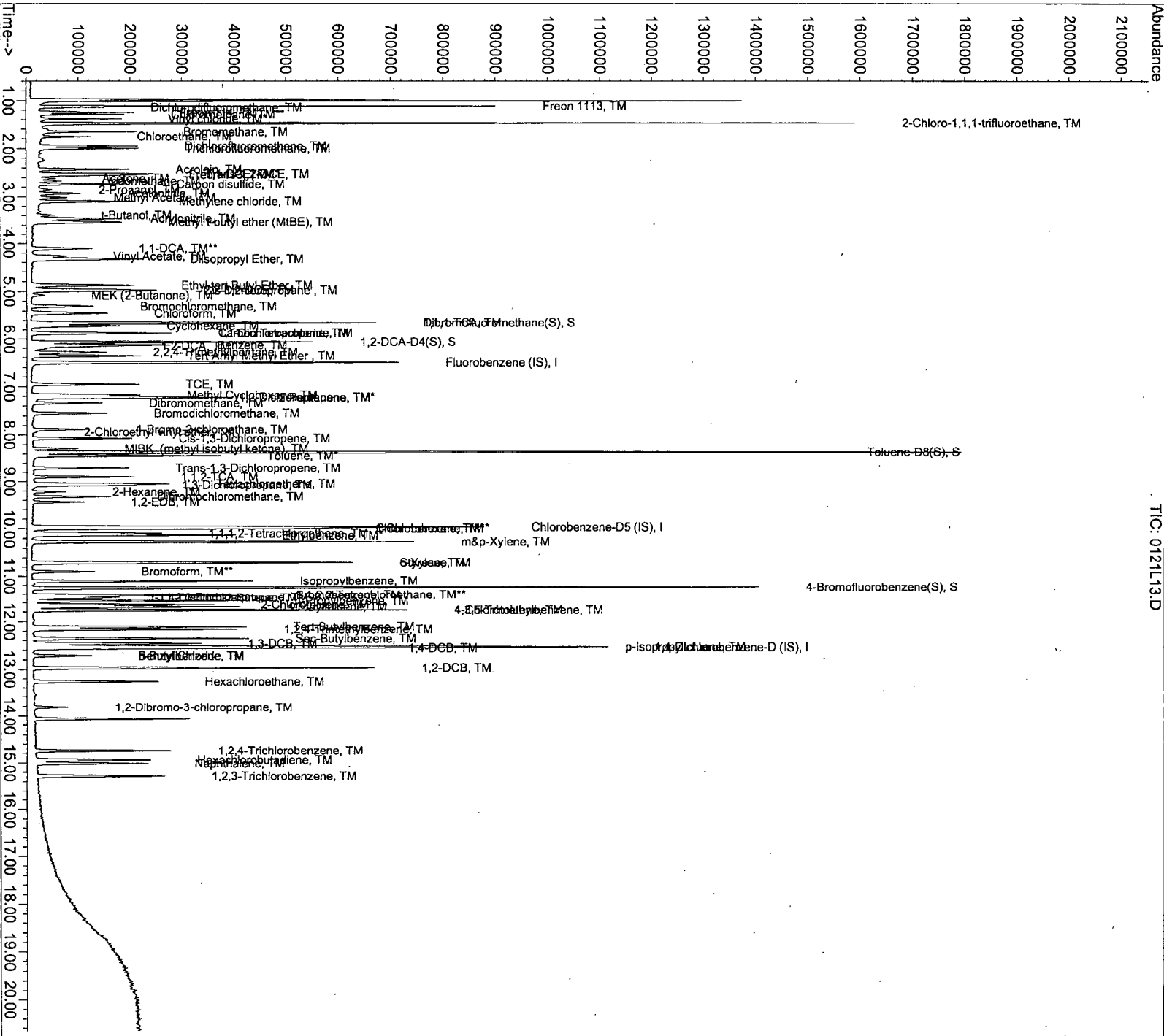
Data File : M:\LOKI\DATA\190121\0121L13.D  
Acq On : 21 Jan 19 20:41  
Sample : 20ug/L VOC STD 1/21/19  
Misc : ISSS 11/8/18

Vial: 12  
Operator: PM, DG, SV, CMM, KV  
Inst: LOKI  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	341760	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305408	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174144	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	324971	50.4593	ppb	0.00
Spiked Amount 25.000			Recovery =	201.836%		
43) 1,2-DCA-D4(S)	6.07	65	377103	50.2162	ppb	0.00
Spiked Amount 25.000			Recovery =	200.864%		
64) Toluene-D8(S)	8.37	98	1239269	49.6630	ppb	0.00
Spiked Amount 25.000			Recovery =	198.652%		
72) 4-Bromofluorobenzene(S)	11.26	95	521895	49.8568	ppb	0.00
Spiked Amount 25.000			Recovery =	199.428%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.11	116	256540	137.4121	ppb	98
3) Dichlorodifluoromethane	1.14	85	120217	37.8848	ppb	96
4) Freon 114	1.25	85	80768	34.6983	ppb	97
5) Chloromethane	1.29	50	184500	38.7640	ppb	91
6) Vinyl chloride	1.38	62	174924	40.7716	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.47	118	487552	134.3151	ppb	98
8) Bromomethane	1.65	94	105409	41.6454	ppb	92
9) Chloroethane	1.75	64	82507	39.2528	ppb	99
10) Dichlorofluoromethane	1.95	67	296411	37.9889	ppb	96
11) Trichlorofluoromethane	2.00	101	236279	39.4458	ppb	98
12) Acrolein	2.43	56	151996	175.2499	ppb #	94
13) Acetone	2.61	43	36824	43.8459	ppb	99
14) Freon-113	2.54	101	122325	36.8357	ppb	96
15) 1,1-DCE	2.52	63	42192	37.9622	ppb	89
16) t-Butanol	3.39	59	63856	157.3995	ppb	94
17) 2-Propanol	2.85	45	40966	139.1465	ppb #	97
18) Acetonitrile	2.92	41	117922	169.7673	ppb	98
19) Methyl Acetate	3.01	43	149118	38.9370	ppb	97
20) Iodomethane	2.66	142	61952	36.4760	ppb	97
21) Acrylonitrile	3.45	52	51422	38.0931	ppb	92
22) Methylene chloride	3.09	84	170373	40.2121	ppb	95
23) Carbon disulfide	2.73	76	443795	38.3501	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	418688	39.4554	ppb	97
25) Trans-1,2-DCE	2.52	96	78108	38.8283	ppb	98
26) Diisopropyl Ether	4.33	45	454998	39.6530	ppb	96
28) 1,1-DCA	4.10	63	261232	39.6627	ppb	98
29) Vinyl Acetate	4.27	43	96718	40.2395	ppb #	82
30) Ethyl tert Butyl Ether	4.87	59	401062	40.1954	ppb	98
31) MEK (2-Butanone)	5.07	43	70323	38.5225	ppb	91
32) Cis-1,2-DCE	4.98	96	141010	37.6141	ppb	96
33) 2,2-Dichloropropane	4.96	77	193427	37.2107	ppb	95
36) Chloroform	5.45	83	228931	39.7579	ppb	99
37) Bromochloromethane	5.30	128	33952	37.1220	ppb	93
39) 1,1,1-TCA	5.65	97	83464	39.8780	ppb	99
40) Cyclohexane	5.71	41	95716	37.4225	ppb	97
41) 1,1-Dichloropropene	5.88	75	153573	37.7504	ppb	95
42) 2,2,4-Trimethylpentane	6.28	57	279729	37.5784	ppb	99
44) Carbon Tetrachloride	5.87	117	172684	40.2362	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	352491	39.1089	ppb	96

(#) = qualifier out of range (m) = manual integration  
 0121L14.D L0121SUR.M Mon Jan 28 12:04:30 2019 Page 473 of 674

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	181549	38.7807	ppb	98
48) Benzene	6.13	78	473155	38.9723	ppb	98
49) TCE	6.95	130	78336	38.5761	ppb	97
50) 2-Pentanone	7.23	43	409603	175.5751	ppb	100
51) 1,2-Dichloropropane	7.20	63	123123	38.3587	ppb	98
52) Bromodichloromethane	7.55	83	96800	39.6842	ppb	97
53) Methyl Cyclohexane	7.17	83	164336	37.8229	ppb	96
54) Dibromomethane	7.34	93	90696	40.4421	ppb	100
55) 2-Chloroethyl vinyl ether	7.93	43	3750	19.9895	ppb	95
56) MIBK (methyl isobutyl ket	8.29	43	124704	38.7159	ppb	92
57) 1-Bromo-2-chloroethane	7.88	63	95936	39.1625	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	211060	39.6761	ppb	93
59) Toluene	8.44	91	298304	40.8873	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	201022	39.2887	ppb	98
61) 1,1,2-TCA	8.90	83	103628	39.8915	ppb	99
62) 2-Hexanone	9.22	43	82498	37.8820	ppb	91
65) 1,2-EDB	9.44	107	75224	38.3582	ppb	92
66) Tetrachloroethene	9.05	166	91104	37.6391	ppb	96
67) 1-Chlorohexane	10.00	91	156566	39.2106	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.09	131	157417	39.7130	ppb	95
69) m&p-Xylene	10.27	91	973464	81.6210	ppb	96
70) o-Xylene	10.70	106	139712	39.9519	ppb	99
71) Styrene	10.71	104	432133	40.2612	ppb	99
73) 1,3-Dichloropropane	9.08	76	215855	38.5945	ppb	99
74) Dibromochloromethane	9.33	129	165046	39.0854	ppb	98
75) Chlorobenzene	10.00	112	392997	40.1126	ppb	98
76) Ethylbenzene	10.13	91	353024	39.7409	ppb	98
77) Bromoform	10.90	173	131386	37.6839	ppb	92
79) Isopropylbenzene	11.11	105	647727	39.7378	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	178172	37.7970	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	33112	40.3051	ppb	100
82) t-1,4-Dichloro-2-Butene	11.49	53	38560	35.9004	ppb	98
83) Bromobenzene	11.42	156	100840	38.1209	ppb	97
84) n-Propylbenzene	11.56	91	411134	41.4427	ppb	99
85) 4-Ethyltoluene	11.69	105	630395	41.8606	ppb	100
86) 2-Chlorotoluene	11.64	91	249582	39.6530	ppb	96
87) 1,3,5-Trimethylbenzene	11.76	105	537564	41.1754	ppb	97
88) 4-Chlorotoluene	11.76	91	286018	40.0704	ppb	99
89) Tert-Butylbenzene	12.12	119	564404	40.7922	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	548158	42.5990	ppb	98
91) Sec-Butylbenzene	12.36	105	685840	40.7444	ppb	99
92) p-Isopropyltoluene	12.52	119	324736	41.5594	ppb	97
93) Benzyl Chloride	12.71	91	235642	42.1886	ppb	96
94) 1,3-DCB	12.46	146	186112	39.6946	ppb	98
95) 1,4-DCB	12.56	146	362736	39.0597	ppb	97
96) n-Butylbenzene	12.71	91	235642	42.1886	ppb	95
97) 1,2-DCB	12.97	146	367093	40.6837	ppb	97
98) Hexachloroethane	13.26	117	118495	41.8380	ppb	94
99) 1,2-Dibromo-3-chloropropan	13.82	75	41738	41.4520	ppb	93
100) 1,2,4-Trichlorobenzene	14.74	180	249819	43.8911	ppb	95
101) Hexachlorobutadiene	14.94	225	121241	42.8584	ppb	93
102) Naphthalene	15.01	128	514760	43.4817	ppb	98
103) 1,2,3-Trichlorobenzene	15.27	180	110048	43.4867	ppb	96

Quantitation Report

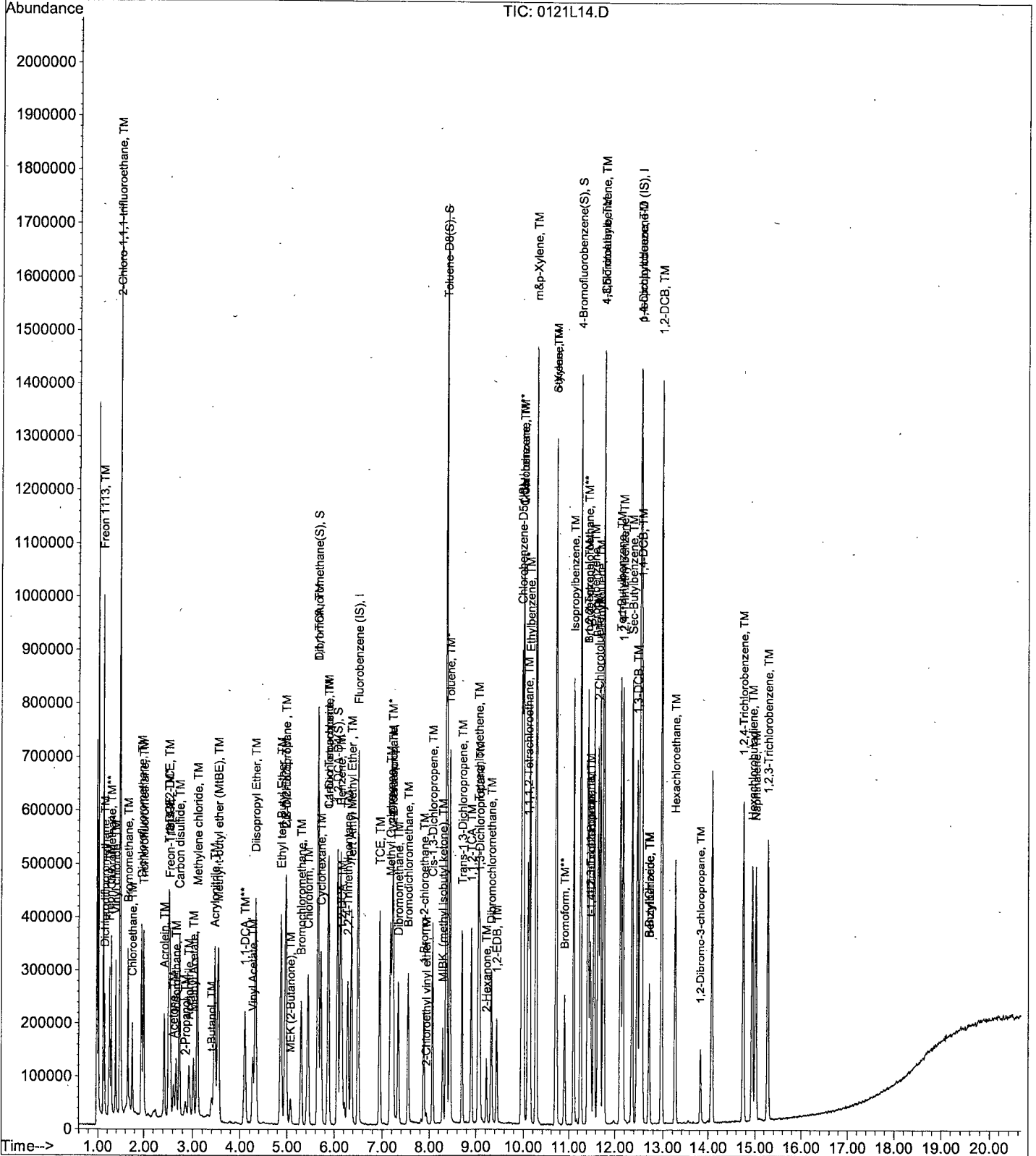
Data File : M:\LOKI\DATA\190121\0121L14.D  
Acq On : 21 Jan 19 21:10  
Sample : 40ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 13  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	340224	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	284800	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174592	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	634983	99.0411	ppb	0.00
Spiked Amount	25.000		Recovery	=	396.164%	
43) 1,2-DCA-D4(S)	6.07	65	739931	98.9762	ppb	0.00
Spiked Amount	25.000		Recovery	=	395.904%	
64) Toluene-D8(S)	8.37	98	2377544	102.1730	ppb	0.00
Spiked Amount	25.000		Recovery	=	408.692%	
72) 4-Bromofluorobenzene(S)	11.26	95	987834	101.1966	ppb	0.00
Spiked Amount	25.000		Recovery	=	404.788%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	310348	166.9841	ppb	98
3) Dichlorodifluoromethane	1.14	85	162106	52.4293	ppb	100
4) Freon 114	1.25	85	104356	45.0342	ppb	91
5) Chloromethane	1.29	50	219700	46.3680	ppb	94
6) Vinyl chloride	1.38	62	223274	52.2761	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	551872	152.7209	ppb	100
8) Bromomethane	1.65	94	131367	52.6272	ppb	97
9) Chloroethane	1.74	64	104390	50.0646	ppb	99
10) Dichlorofluoromethane	1.95	67	370548	47.7049	ppb	97
11) Trichlorofluoromethane	1.99	101	310052	51.9956	ppb	98
12) Acrolein	2.43	56	177970	206.7430	ppb	# 92
13) Acetone	2.62	43	44126	53.4409	ppb	99
14) Freon-113	2.54	101	172365	52.1386	ppb	93
15) 1,1-DCE	2.52	63	53104	47.9960	ppb	90
16) t-Butanol	3.40	59	89197	220.8555	ppb	95
17) 2-Propanol	2.86	45	45461	155.1115	ppb	# 100
18) Acetonitrile	2.92	41	135953	196.6094	ppb	94
19) Methyl Acetate	3.02	43	193892	50.9093	ppb	96
20) Iodomethane	2.67	142	87032	50.0917	ppb	97
21) Acrylonitrile	3.45	52	72530	54.1899	ppb	86
22) Methylene chloride	3.09	84	217803	51.8045	ppb	100
23) Carbon disulfide	2.73	76	562775	48.8512	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	534157	50.5640	ppb	97
25) Trans-1,2-DCE	2.52	96	98143	49.0081	ppb	96
26) Diisopropyl Ether	4.33	45	596314	52.2033	ppb	98
28) 1,1-DCA	4.10	63	335492	51.1675	ppb	96
29) Vinyl Acetate	4.27	43	125953	52.6393	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	529857	53.3433	ppb	97
31) MEK (2-Butanone)	5.07	43	89806	49.3770	ppb	87
32) Cis-1,2-DCE	4.98	96	186012	49.8424	ppb	97
33) 2,2-Dichloropropane	4.96	77	249483	48.2111	ppb	95
36) Chloroform	5.44	83	298096	52.0033	ppb	98
37) Bromochloromethane	5.30	128	45824	50.3286	ppb	100
39) 1,1,1-TCA	5.65	97	108032	51.8493	ppb	97
40) Cyclohexane	5.72	41	132255	51.9996	ppb	97
41) 1,1-Dichloropropene	5.88	75	201320	49.7107	ppb	96
42) 2,2,4-Trimethylpentane	6.28	57	385125	51.9708	ppb	98
44) Carbon Tetrachloride	5.87	117	223148	52.2294	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	453291	50.5197	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	235593	50.5523	ppb	100
48) Benzene	6.13	78	605445	50.0938	ppb	97
49) TCE	6.95	130	99992	49.4628	ppb	98
50) 2-Pentanone	7.23	43	472572	203.4811	ppb	100
51) 1,2-Dichloropropane	7.20	63	160267	50.1563	ppb	98
52) Bromodichloromethane	7.54	83	124984	51.4699	ppb	95
53) Methyl Cyclohexane	7.17	83	218224	50.4523	ppb	93
54) Dibromomethane	7.34	93	114312	51.2029	ppb	97
55) 2-Chloroethyl vinyl ether	7.94	43	4515	24.1761	ppb	94
56) MIBK (methyl isobutyl ket	8.29	43	151841	47.3537	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	119584	49.0364	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	272909	51.5344	ppb	96
59) Toluene	8.44	91	379008	52.1836	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	254532	49.9716	ppb	97
61) 1,1,2-TCA	8.90	83	130483	50.4561	ppb	100
62) 2-Hexanone	9.22	43	106841	49.2815	ppb	94
65) 1,2-EDB	9.44	107	95688	52.3238	ppb	93
66) Tetrachloroethene	9.05	166	113080	50.0989	ppb	97
67) 1-Chlorohexane	10.00	91	200521	54.0942	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.10	131	197359	53.3923	ppb	99
69) m&p-Xylene	10.26	91	1228980	110.5013	ppb	97
70) o-Xylene	10.70	106	174976	53.6565	ppb	94
71) Styrene	10.71	104	552454	55.1958	ppb	97
73) 1,3-Dichloropropane	9.08	76	269847	51.7394	ppb	100
74) Dibromochloromethane	9.33	129	207996	52.8209	ppb	99
75) Chlorobenzene	10.00	112	494814	54.1594	ppb	99
76) Ethylbenzene	10.13	91	453315	54.7235	ppb	99
77) Bromoform	10.90	173	168485	51.8213	ppb	90
79) Isopropylbenzene	11.11	105	818115	50.0622	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	234875	49.6979	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	40272	48.8947	ppb	88
82) t-1,4-Dichloro-2-Butene	11.50	53	50870	47.2398	ppb	98
83) Bromobenzene	11.43	156	132288	49.8810	ppb	98
84) n-Propylbenzene	11.56	91	521325	52.4152	ppb	100
85) 4-Ethyltoluene	11.69	105	809987	53.6481	ppb	99
86) 2-Chlorotoluene	11.64	91	312872	49.5808	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	681769	52.0870	ppb	98
88) 4-Chlorotoluene	11.76	91	353792	49.4382	ppb	99
89) Tert-Butylbenzene	12.12	119	711985	51.3265	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	703507	54.5313	ppb	98
91) Sec-Butylbenzene	12.36	105	876766	51.9533	ppb	99
92) p-Isopropyltoluene	12.52	119	426368	54.4262	ppb	98
93) Benzyl Chloride	12.71	91	296774	52.9972	ppb	96
94) 1,3-DCB	12.46	146	240896	51.2473	ppb	99
95) 1,4-DCB	12.56	146	467536	50.2155	ppb	98
96) n-Butylbenzene	12.71	91	296774	52.9972	ppb	96
97) 1,2-DCB	12.97	146	476543	52.6781	ppb	98
98) Hexachloroethane	13.26	117	153592	54.0908	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	50980	50.6482	ppb #	84
100) 1,2,4-Trichlorobenzene	14.74	180	323298	56.6550	ppb	97
101) Hexachlorobutadiene	14.94	225	155604	54.8646	ppb	93
102) Naphthalene	15.01	128	678795	57.1906	ppb	99
103) 1,2,3-Trichlorobenzene	15.27	180	144704	57.0347	ppb	96

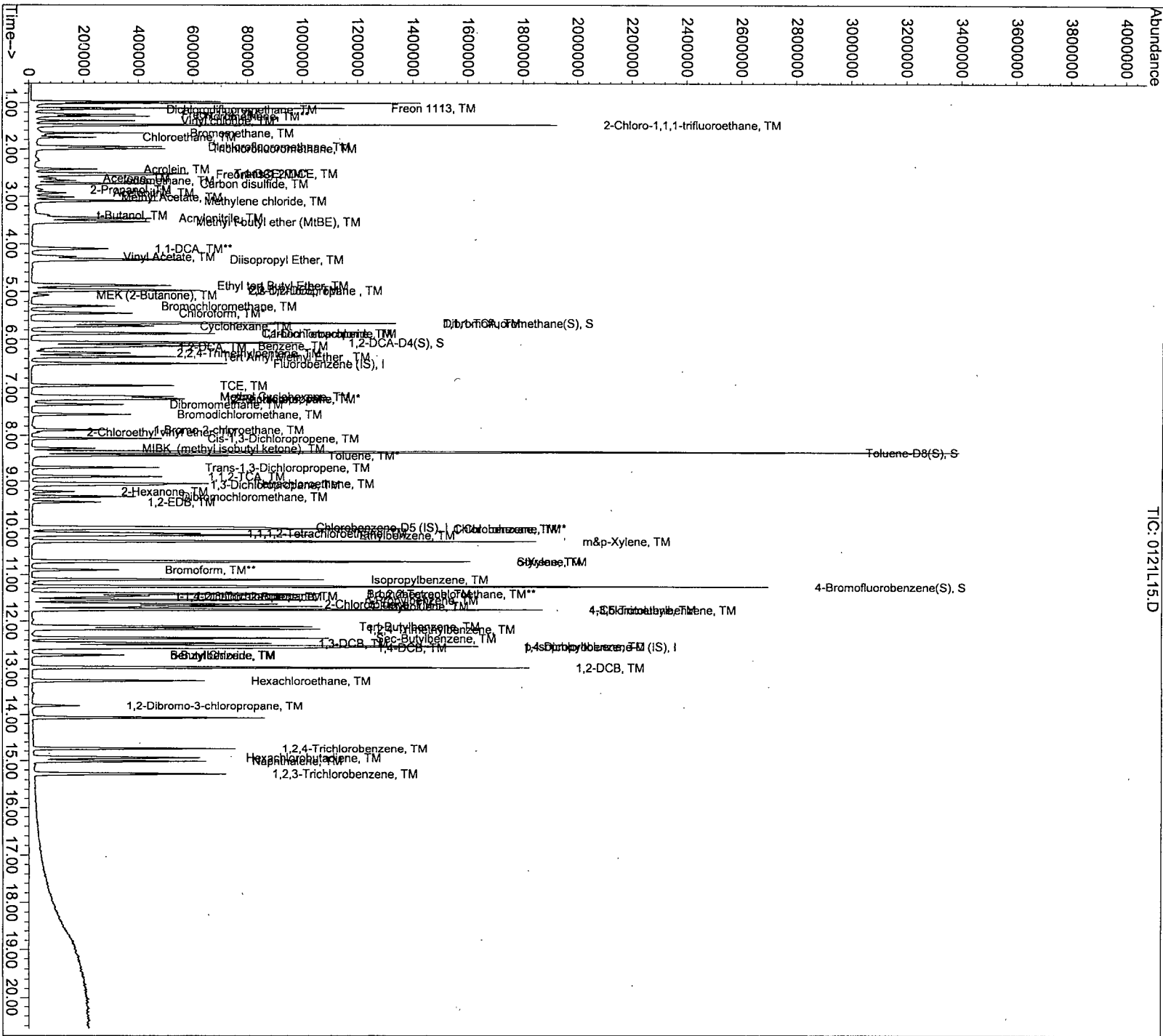
Data File : M:\LOKI\DATA\190121\0121L15.D  
Acq On : 21 Jan 19 21:38  
Sample : 50ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM, DG, SV, CMM, KV  
Inst : LOKI  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	354496	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307840	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174848	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	650234	97.3367	ppb	0.00
Spiked Amount	25.000		Recovery	=	389.348%	
43) 1,2-DCA-D4(S)	6.07	65	762420	97.8786	ppb	0.00
Spiked Amount	25.000		Recovery	=	391.516%	
64) Toluene-D8(S)	8.37	98	2378941	94.5815	ppb	0.00
Spiked Amount	25.000		Recovery	=	378.328%	
72) 4-Bromofluorobenzene(S)	11.27	95	969475	91.8827	ppb	0.00
Spiked Amount	25.000		Recovery	=	367.532%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	301065	155.4677	ppb	100
3) Dichlorodifluoromethane	1.14	85	296745	99.6959	ppb	98
4) Freon 114	1.25	85	168196	69.6617	ppb	93
5) Chloromethane	1.29	50	449678	91.0843	ppb	92
6) Vinyl chloride	1.39	62	425978	95.7207	ppb	95
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	524992	139.4333	ppb	99
8) Bromomethane	1.65	94	249630	97.5870	ppb	95
9) Chloroethane	1.74	64	164190	75.9062	ppb	97
10) Dichlorofluoromethane	1.95	67	736318	90.9783	ppb	95
11) Trichlorofluoromethane	1.99	101	606278	97.5793	ppb	97
12) Acrolein	2.43	56	196201	218.9493	ppb	96
13) Acetone	2.62	43	81137	96.7995	ppb	98
14) Freon-113	2.54	101	319836	92.8519	ppb	96
15) 1,1-DCE	2.52	63	103776	90.0177	ppb	93
16) t-Butanol	3.42	59	105103	249.7622	ppb	99
17) 2-Propanol	2.87	45	49665	162.6332	ppb	# 93
18) Acetonitrile	2.93	41	154689	214.6983	ppb	97
19) Methyl Acetate	3.02	43	396415	100.0596	ppb	95
20) Iodomethane	2.66	142	191872	102.2359	ppb	96
21) Acrylonitrile	3.45	52	136954	98.6277	ppb	90
22) Methylene chloride	3.09	84	431664	99.0642	ppb	95
23) Carbon disulfide	2.73	76	1121770	93.4540	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	1107947	100.6572	ppb	97
25) Trans-1,2-DCE	2.52	96	199277	95.5036	ppb	98
26) Diisopropyl Ether	4.34	45	1218553	102.3814	ppb	99
28) 1,1-DCA	4.10	63	685531	100.3444	ppb	99
29) Vinyl Acetate	4.27	43	252296	101.1966	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	1137608	109.9177	ppb	97
31) MEK (2-Butanone)	5.07	43	191856	101.0891	ppb	92
32) Cis-1,2-DCE	4.98	96	387491	99.6490	ppb	97
33) 2,2-Dichloropropane	4.96	77	517771	96.0280	ppb	94
36) Chloroform	5.45	83	606711	101.5805	ppb	100
37) Bromochloromethane	5.30	128	90552	95.4495	ppb	97
39) 1,1,1-TCA	5.65	97	220160	101.4104	ppb	98
40) Cyclohexane	5.72	41	264768	100.0470	ppb	91
41) 1,1-Dichloropropene	5.88	75	405383	96.0688	ppb	97
42) 2,2,4-Trimethylpentane	6.29	57	750921	97.2535	ppb	98
44) Carbon Tetrachloride	5.87	117	449635	101.0033	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	926198	99.0697	ppb	98

(#) = qualifier out of range (m) = manual integration



Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	482592	99.3830	ppb	100
48) Benzene	6.13	78	1241738	98.6036	ppb	96
49) TCE	6.95	130	194368	92.2767	ppb	100
50) 2-Pentanone	7.23	43	544315	224.9366	ppb	98
51) 1,2-Dichloropropane	7.21	63	320379	96.2274	ppb	98
52) Bromodichloromethane	7.55	83	254528	100.5977	ppb	95
53) Methyl Cyclohexane	7.17	83	424113	94.1053	ppb	94
54) Dibromomethane	7.34	93	232996	100.1623	ppb	95
55) 2-Chloroethyl vinyl ether	7.93	43	9316	47.8752	ppb	91
56) MIBK (methyl isobutyl ket	8.29	43	321814	96.3216	ppb	96
57) 1-Bromo-2-chloroethane	7.89	63	256640	101.0005	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	553627	100.3346	ppb	95
59) Toluene	8.44	91	750784	99.2098	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	516228	97.2694	ppb	94
61) 1,1,2-TCA	8.90	83	259777	96.4083	ppb	98
62) 2-Hexanone	9.22	43	218599	96.7715	ppb	94
65) 1,2-EDB	9.44	107	190528	96.3864	ppb	95
66) Tetrachloroethene	9.05	166	228736	93.7545	ppb	97
67) 1-Chlorohexane	10.00	91	392101	98.3832	ppb	98
68) 1,1,1,2-Tetrachloroethane	10.09	131	391276	97.9308	ppb	97
69) m&p-Xylene	10.26	91	2428079	201.9763	ppb	97
70) o-Xylene	10.70	106	358656	101.7507	ppb	99
71) Styrene	10.71	104	1079123	99.7461	ppb	99
73) 1,3-Dichloropropane	9.08	76	535131	94.9245	ppb	99
74) Dibromochloromethane	9.33	129	415567	97.6352	ppb	97
75) Chlorobenzene	10.00	112	977697	99.0036	ppb	99
76) Ethylbenzene	10.13	91	883776	98.7031	ppb	98
77) Bromoform	10.90	173	336048	95.6231	ppb	88
79) Isopropylbenzene	11.11	105	1581123	96.6107	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	449901	95.0566	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	80880	98.0536	ppb	93
82) t-1,4-Dichloro-2-Butene	11.50	53	96411	89.3997	ppb	95
83) Bromobenzene	11.43	156	264000	99.3991	ppb	98
84) n-Propylbenzene	11.56	91	1021366	102.5401	ppb	98
85) 4-Ethyltoluene	11.69	105	1545604	102.2206	ppb	99
86) 2-Chlorotoluene	11.64	91	582884	92.2343	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	1334860	101.8337	ppb	98
88) 4-Chlorotoluene	11.77	91	683072	95.3113	ppb	98
89) Tert-Butylbenzene	12.12	119	1370798	98.6752	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	1346645	104.2304	ppb	98
91) Sec-Butylbenzene	12.36	105	1663958	98.4544	ppb	99
92) p-Isopropyltoluene	12.52	119	820032	104.5244	ppb	96
93) Benzyl Chloride	12.71	91	583435	104.0358	ppb	97
94) 1,3-DCB	12.46	146	473408	100.5636	ppb	98
95) 1,4-DCB	12.56	146	891137	95.5720	ppb	97
96) n-Butylbenzene	12.71	91	583435	104.0358	ppb	96
97) 1,2-DCB	12.97	146	906581	100.0688	ppb	97
98) Hexachloroethane	13.26	117	299614	105.3612	ppb	92
99) 1,2-Dibromo-3-chloropropan	13.82	75	99202	99.0488	ppb	86
100) 1,2,4-Trichlorobenzene	14.74	180	670652	117.3534	ppb	93
101) Hexachlorobutadiene	14.94	225	305966	107.7229	ppb	89
102) Naphthalene	15.01	128	1424406	119.8350	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	295040	116.1190	ppb	95

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\012116.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : LOKI  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

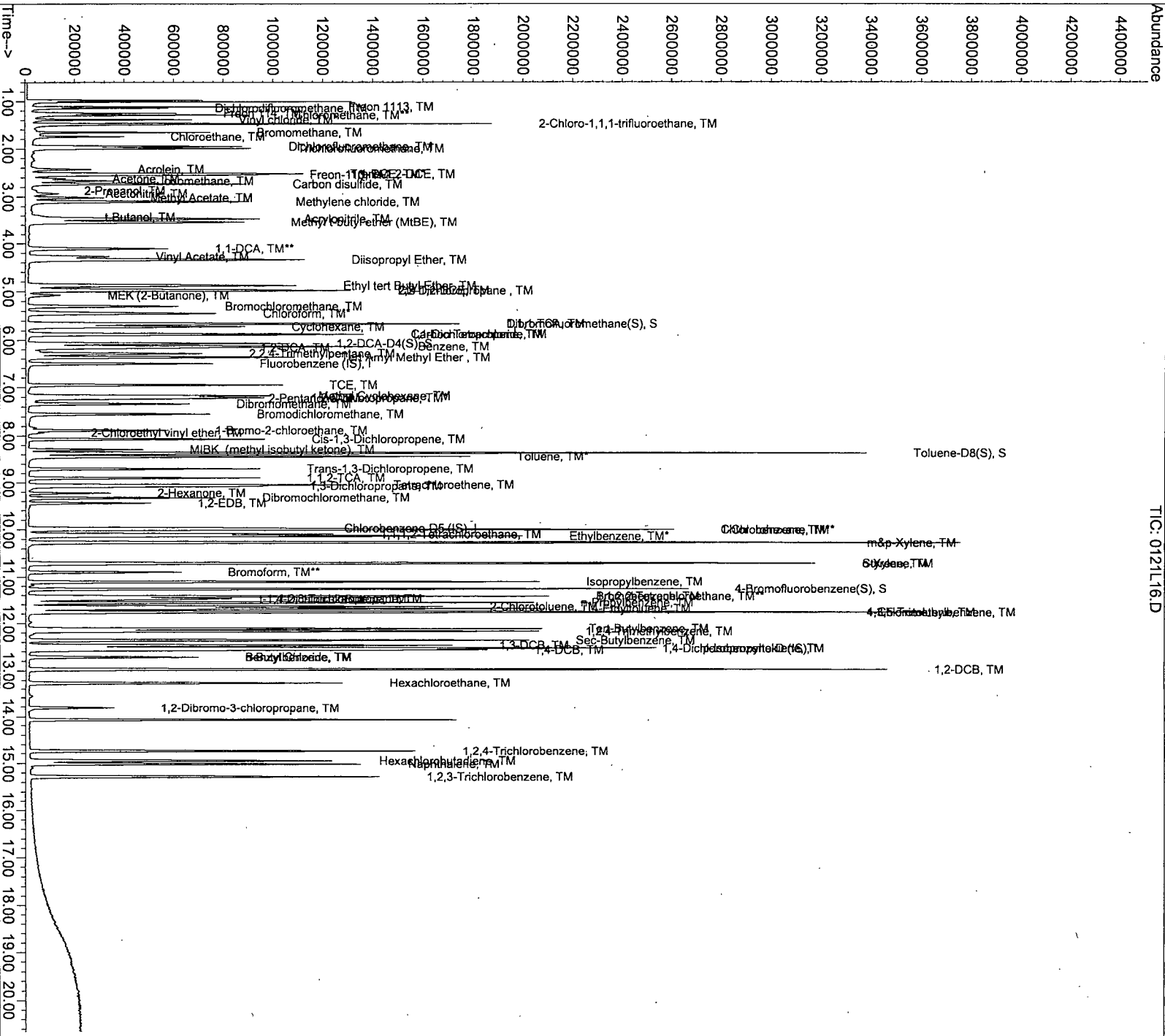
Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)

Title : METHOD 8260B

Last Update : Tue Jan 22 12:46:40 2019

Response via : Initial Calibration

TIC: 012116.D



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: water \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/22/19 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

0122L03.D    0122L04.D    0122L05.D    0122L06.D    0122L07.D    0122L08.D    0122L09.D

	Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TMHBL Gasoline C6-C10	14.2	5.991	3.156	1.510	0.9912	0.8940	0.8282				3.9	124	TMHBL	0.998		
3	I Chlorobenzene-D5 (IS)																
4	I 1,4-Dichlorobenzene-D (IS)																
5																	
6																	
7																	
8																	
9																	
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Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L03.D  
 Acq On : 22 Jan 19 14:10  
 Sample : 20ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:19 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	657725	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	773287	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	888330	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	7468095m	27.796	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L03.D  
 Acq On : 22 Jan 19 14:10  
 Sample : 20ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315648	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	269696	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	161216	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157557	26.4882	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.952%	
3) 1,2-DCA-D4(S)	6.07	65	182006	26.2414	ppb	0.00
Spiked Amount	25.000		Recovery	=	104.964%	
5) Toluene-D8(S)	8.37	98	583651	26.4866	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.948%	
6) 4-Bromofluorobenzene(S)	11.27	95	236797	25.6167	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.468%	

Target Compounds

Qvalue

Quantitation Report

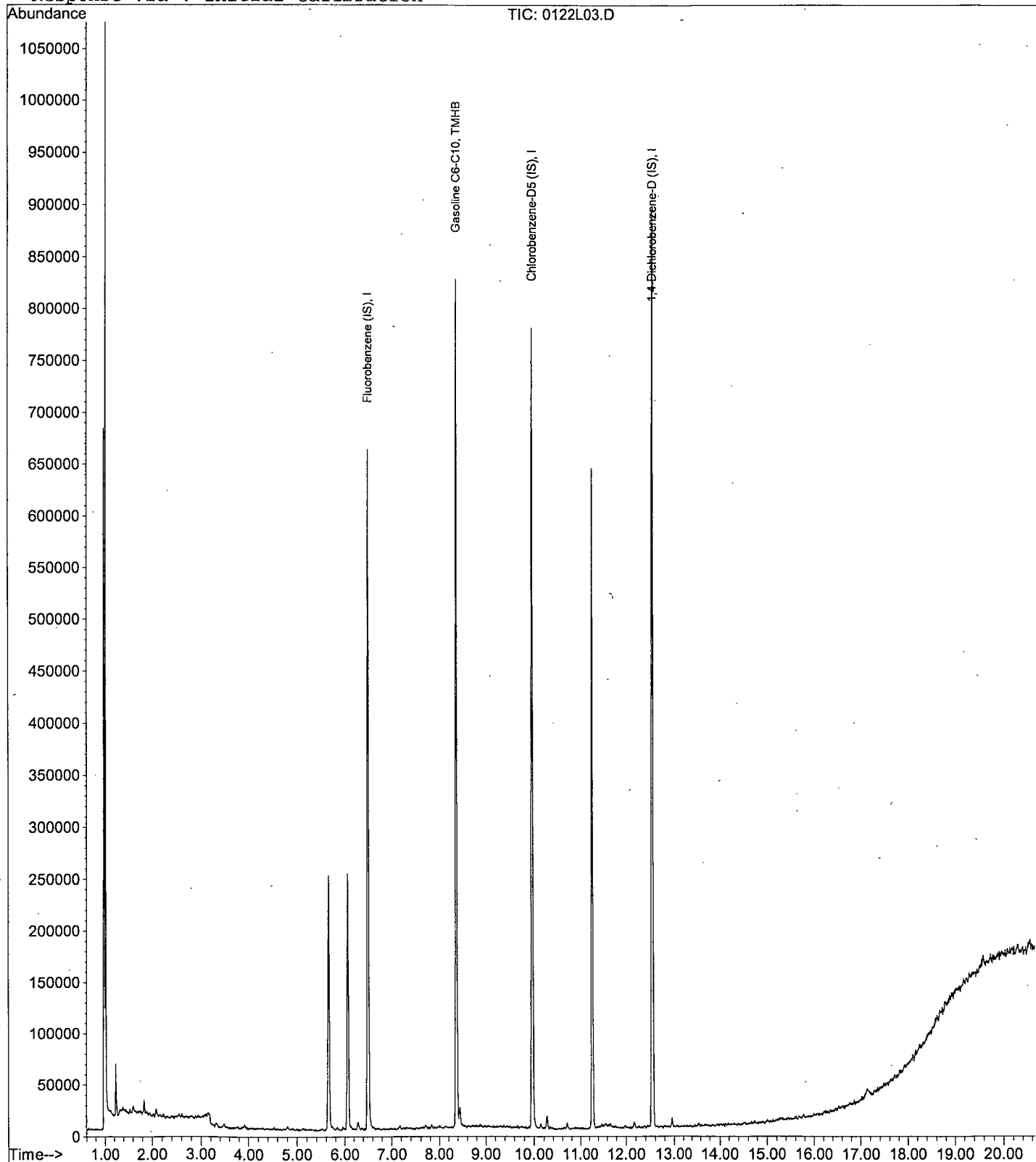
Data File : M:\LOKI\DATA\190121\0122L03.D  
Acq On : 22 Jan 19 14:10  
Sample : 20ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:19 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L04.D Vial: 3  
 Acq On : 22 Jan 19 14:39 Operator: PM, DG, SV, CMM, KV  
 Sample : 50ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:21 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	691706	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	846157	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	858020	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	9.97	TIC	8287767m	56.195	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L04.D  
 Acq On : 22 Jan 19 14:39  
 Sample : 50ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan. 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	335552	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	300864	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	155712	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	156820	24.8005	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.200%	
3) 1,2-DCA-D4(S)	6.07	65	181620	24.6325	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.532%	
5) Toluene-D8(S)	8.37	98	586804	23.8710	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.484%	
6) 4-Bromofluorobenzene(S)	11.26	95	234045	22.6961	ppb	0.00
Spiked Amount	25.000		Recovery	=	90.784%	
Target Compounds						Qvalue



Quantitation Report

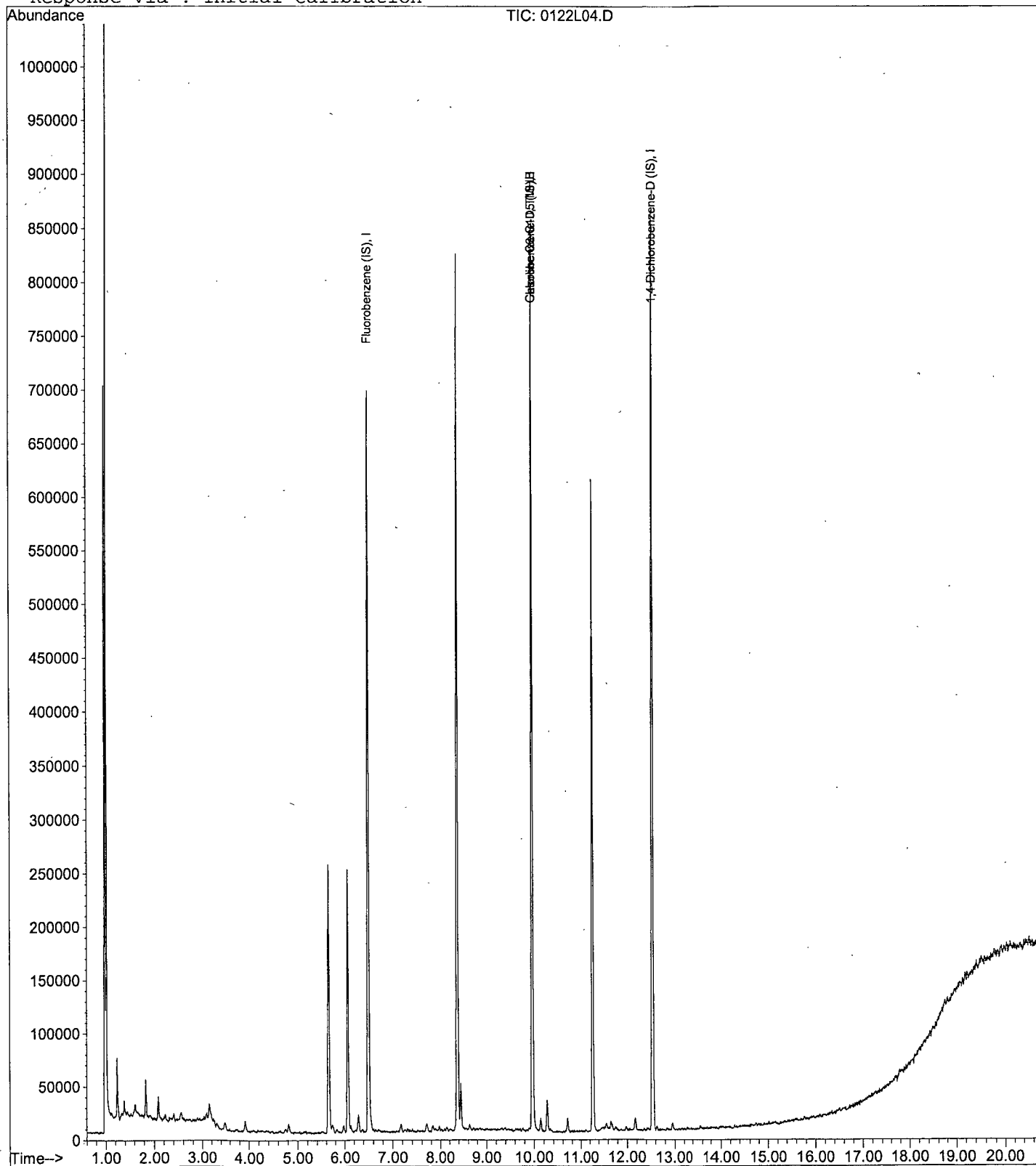
Data File : M:\LOKI\DATA\190121\0122L04.D  
Acq On : 22 Jan 19 14:39  
Sample : 50ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L05.D  
Acq On : 22 Jan 19 15:07  
Sample : 100ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:17:29 2019  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	795029	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	937148	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	1003701	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	9.97	TIC	10034916m	85.194	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L05.D Vial: 4  
 Acq On : 22 Jan 19 15:07 Operator: PM,DG,SV,CMM,KV  
 Sample : 100ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards'	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	387456	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	333184	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	174272	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	156930	21.4932	ppb	0.00
Spiked Amount	25.000		Recovery	=	85.972%	
3) 1,2-DCA-D4(S)	6.07	65	181170	21.2799	ppb	0.00
Spiked Amount	25.000		Recovery	=	85.120%	
5) Toluene-D8(S)	8.37	98	575279	21.1321	ppb	0.00
Spiked Amount	25.000		Recovery	=	84.528%	
6) 4-Bromofluorobenzene(S)	11.26	95	227110	19.8872	ppb	0.00
Spiked Amount	25.000		Recovery	=	79.548%	

Target Compounds Qvalue

Quantitation Report

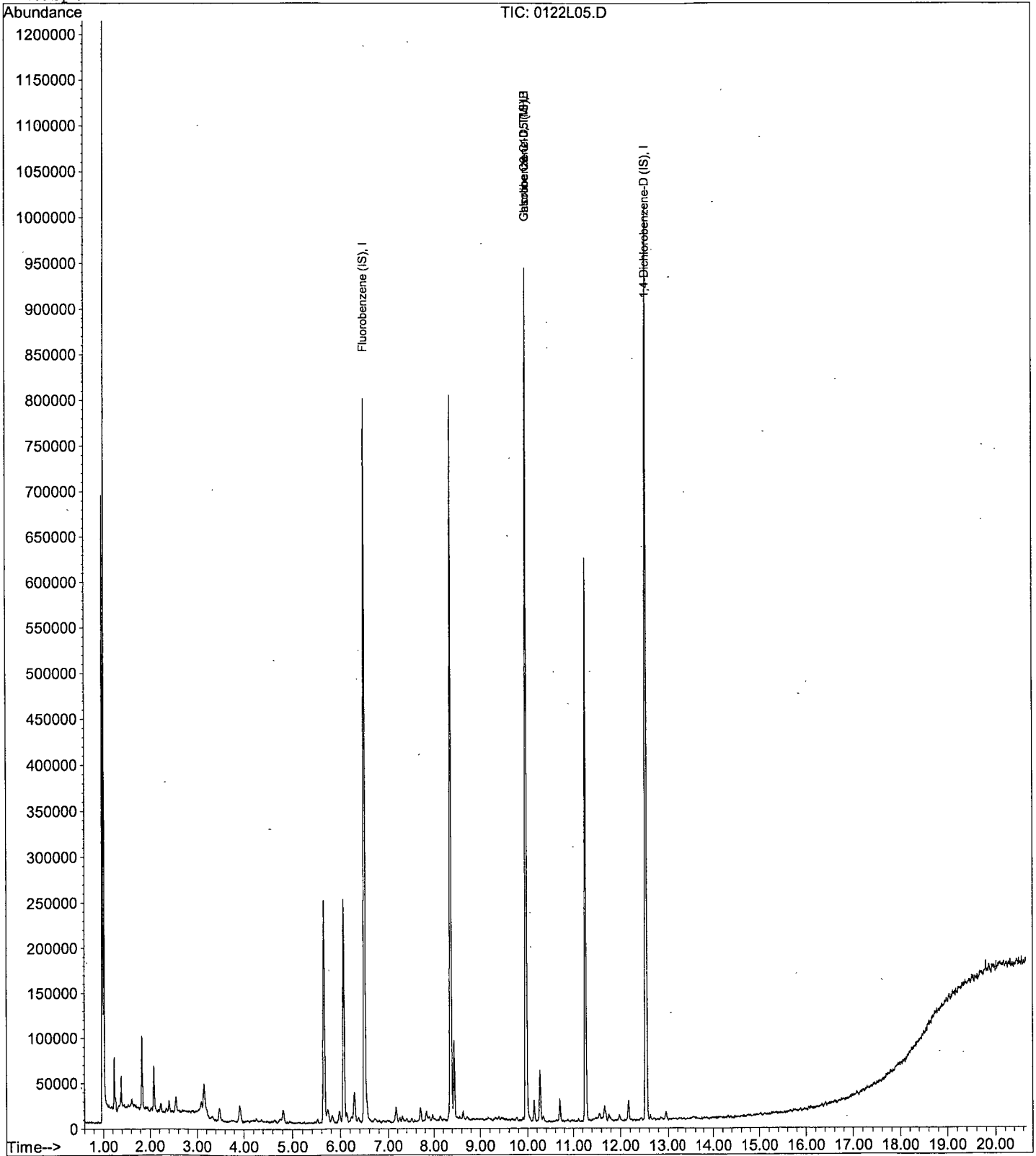
Data File : M:\LOKI\DATA\190121\0122L05.D  
Acq On : 22 Jan 19 15:07  
Sample : 100ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L06.D Vial: 5  
 Acq On : 22 Jan 19 15:36 Operator: PM,DG,SV,CMM,KV  
 Sample : 300ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	658006	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	790181	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	849355	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11919364m	333.880	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L06.D Vial: 5  
 Acq On : 22 Jan 19 15:36 Operator: PM, DG, SV, CMM, KV  
 Sample : 300ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315520	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	280000	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	151296	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	160111	26.9285	ppb	0.00
Spiked Amount	25.000			Recovery	= 107.716%	
3) 1,2-DCA-D4(S)	6.07	65	184739	26.6463	ppb	0.00
Spiked Amount	25.000			Recovery	= 106.584%	
5) Toluene-D8(S)	8.37	98	591987	25.8763	ppb	0.00
Spiked Amount	25.000			Recovery	= 103.504%	
6) 4-Bromofluorobenzene(S)	11.26	95	238857	24.8887	ppb	0.00
Spiked Amount	25.000			Recovery	= 99.556%	

Target Compounds Qvalue

Quantitation Report

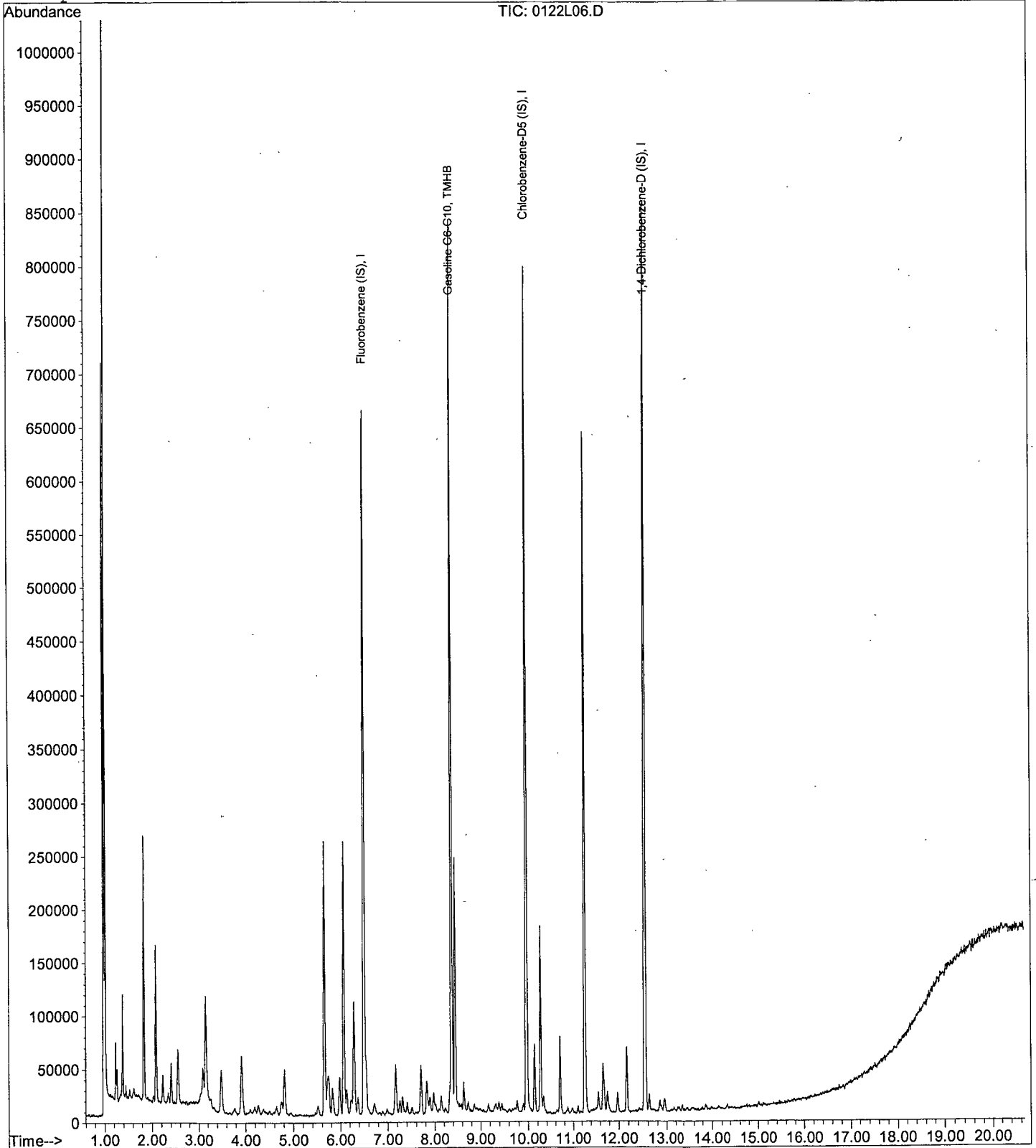
Data File : M:\LOKI\DATA\190121\0122L06.D  
Acq On : 22 Jan 19 15:36  
Sample : 300ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L07.D  
 Acq On : 22 Jan 19 16:04  
 Sample : 600ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	655093	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	794318	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	859138	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	15583633m	590.796	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L07.D Vial: 6  
 Acq On : 22 Jan 19 16:04 Operator: PM, DG, SV, CMM, KV  
 Sample : 600ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	321536	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	283584	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	151424	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	153983	25.4133	ppb	0.00
Spiked Amount 25.000			Recovery =	101.652%		
3) 1,2-DCA-D4(S)	6.07	65	182681	25.8564	ppb	0.00
Spiked Amount 25.000			Recovery =	103.424%		
5) Toluene-D8(S)	8.37	98	569135	24.5630	ppb	0.00
Spiked Amount 25.000			Recovery =	98.252%		
6) 4-Bromofluorobenzene(S)	11.26	95	230967	23.7624	ppb	0.00
Spiked Amount 25.000			Recovery =	95.048%		

Target Compounds Qvalue

Quantitation Report

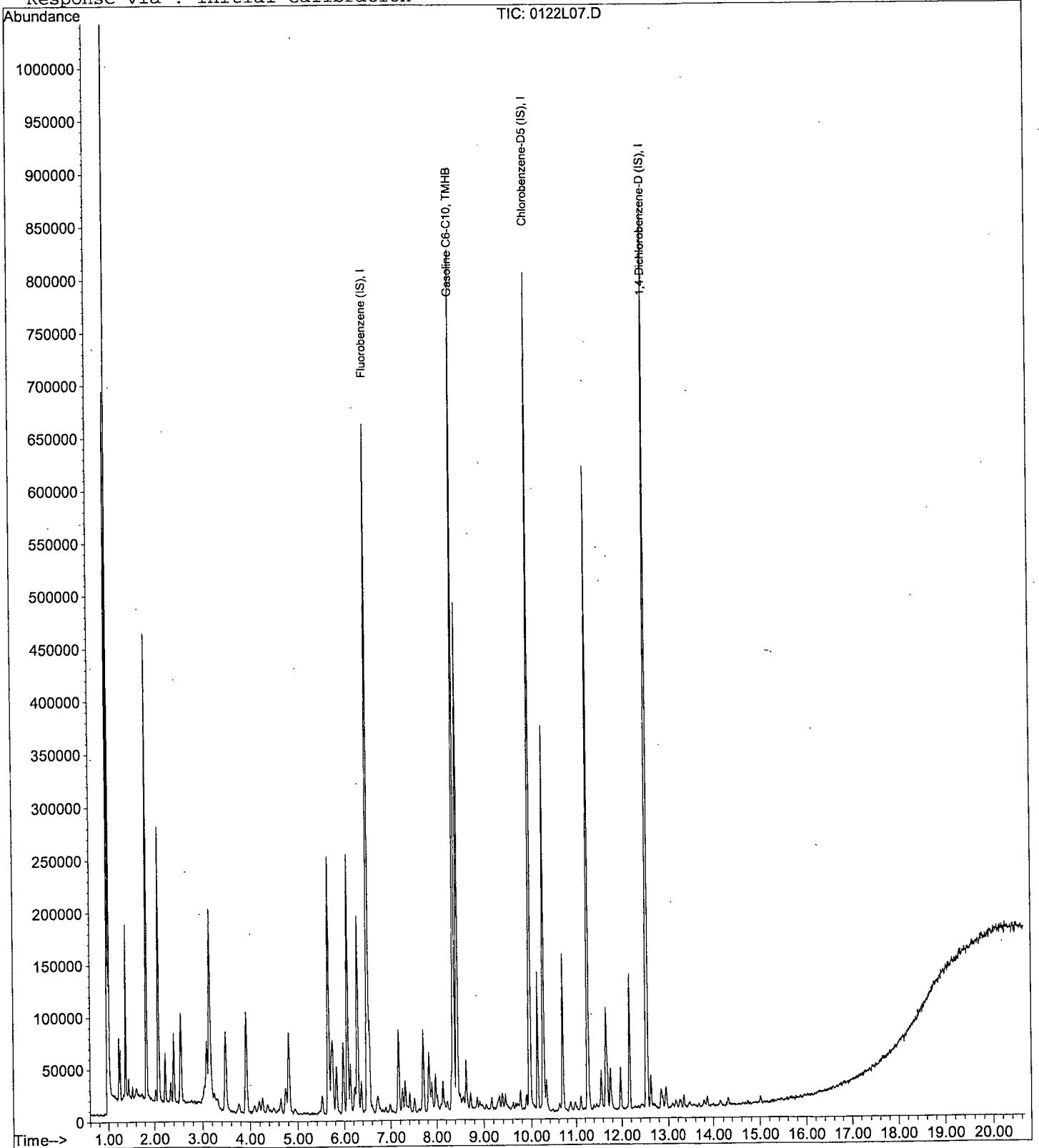
Data File : M:\LOKI\DATA\190121\0122L07.D  
Acq On : 22 Jan 19 16:04  
Sample : 600ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L08.D  
 Acq On : 22 Jan 19 16:33  
 Sample : 800ug/L GAS STD 1/21/19  
 Misc : IS&S\_11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	650619	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	767904	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	822805	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	18612406m	808.987	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L08.D  
 Acq On : 22 Jan 19 16:33  
 Sample : 800ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	313920	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	275584	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	147456	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157489	26.6225	ppb	0.00
Spiked Amount	25.000					
					Recovery = 106.492%	
3) 1,2-DCA-D4(S)	6.07	65	179529	26.0268	ppb	0.00
Spiked Amount	25.000					
					Recovery = 104.108%	
5) Toluene-D8(S)	8.37	98	580104	25.7632	ppb	0.00
Spiked Amount	25.000					
					Recovery = 103.052%	
6) 4-Bromofluorobenzene(S)	11.27	95	236208	25.0071	ppb	0.00
Spiked Amount	25.000					
					Recovery = 100.028%	

Target Compounds

Qvalue

Quantitation Report

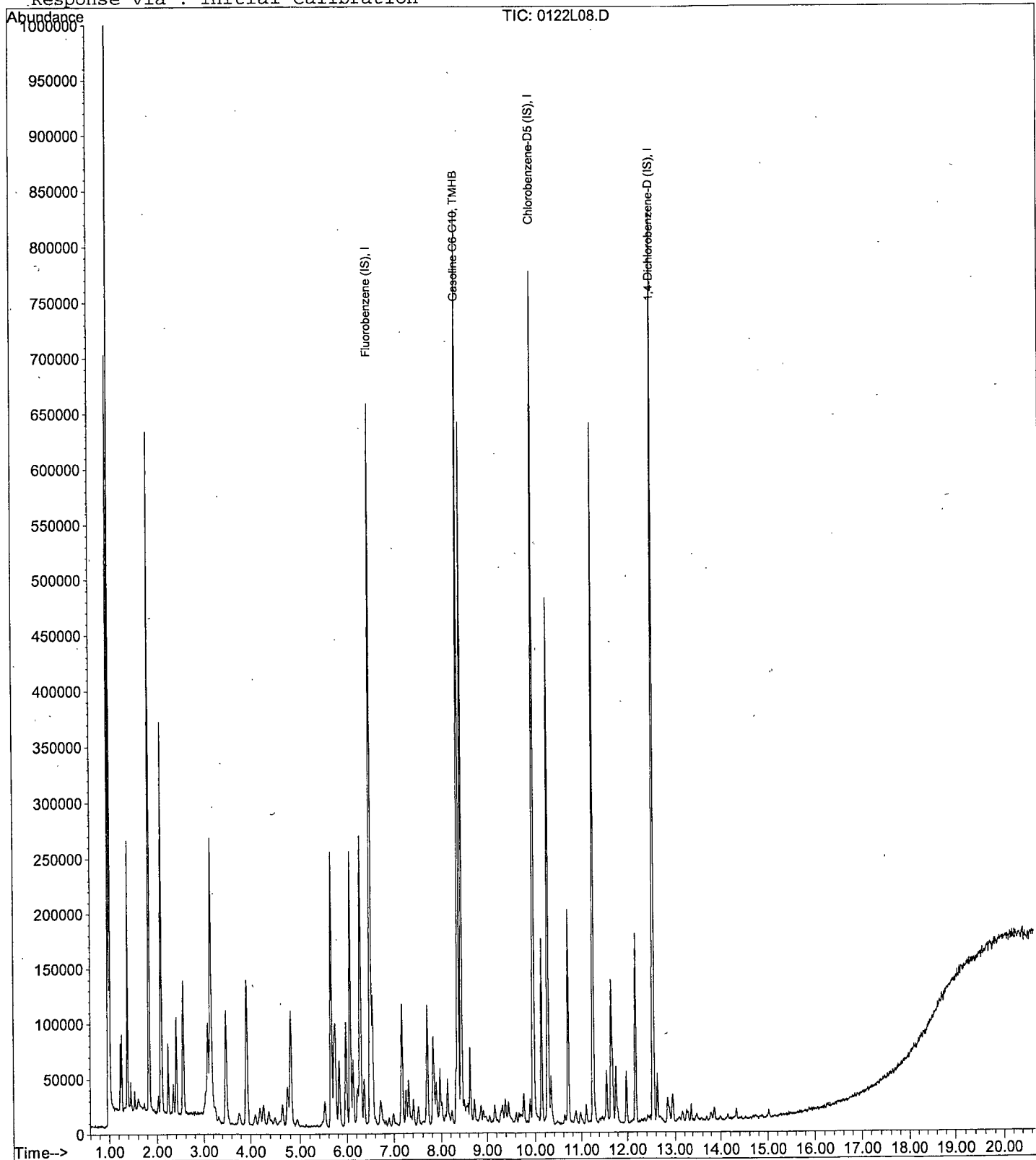
Data File : M:\LOKI\DATA\190121\0122L08.D.  
Acq On : 22 Jan 19 16:33  
Sample : 800ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L09.D  
 Acq On : 22 Jan 19 17:01  
 Sample : 1000ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:23 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	644633	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	773447	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	813437	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	21356569m	1013.765	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L09.D  
 Acq On : 22 Jan 19 17:01  
 Sample : 1000ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315584	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	274176	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	146048	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	153101	25.7443	ppb	0.00
Spiked Amount	25.000			Recovery	= 102.976%	
3) 1,2-DCA-D4(S)	6.07	65	179163	25.8368	ppb	0.00
Spiked Amount	25.000			Recovery	= 103.348%	
5) Toluene-D8(S)	8.37	98	581229	25.9457	ppb	0.00
Spiked Amount	25.000			Recovery	= 103.784%	
6) 4-Bromofluorobenzene(S)	11.26	95	233744	24.8733	ppb	0.00
Spiked Amount	25.000			Recovery	= 99.492%	

Target Compounds

Qvalue

Quantitation Report

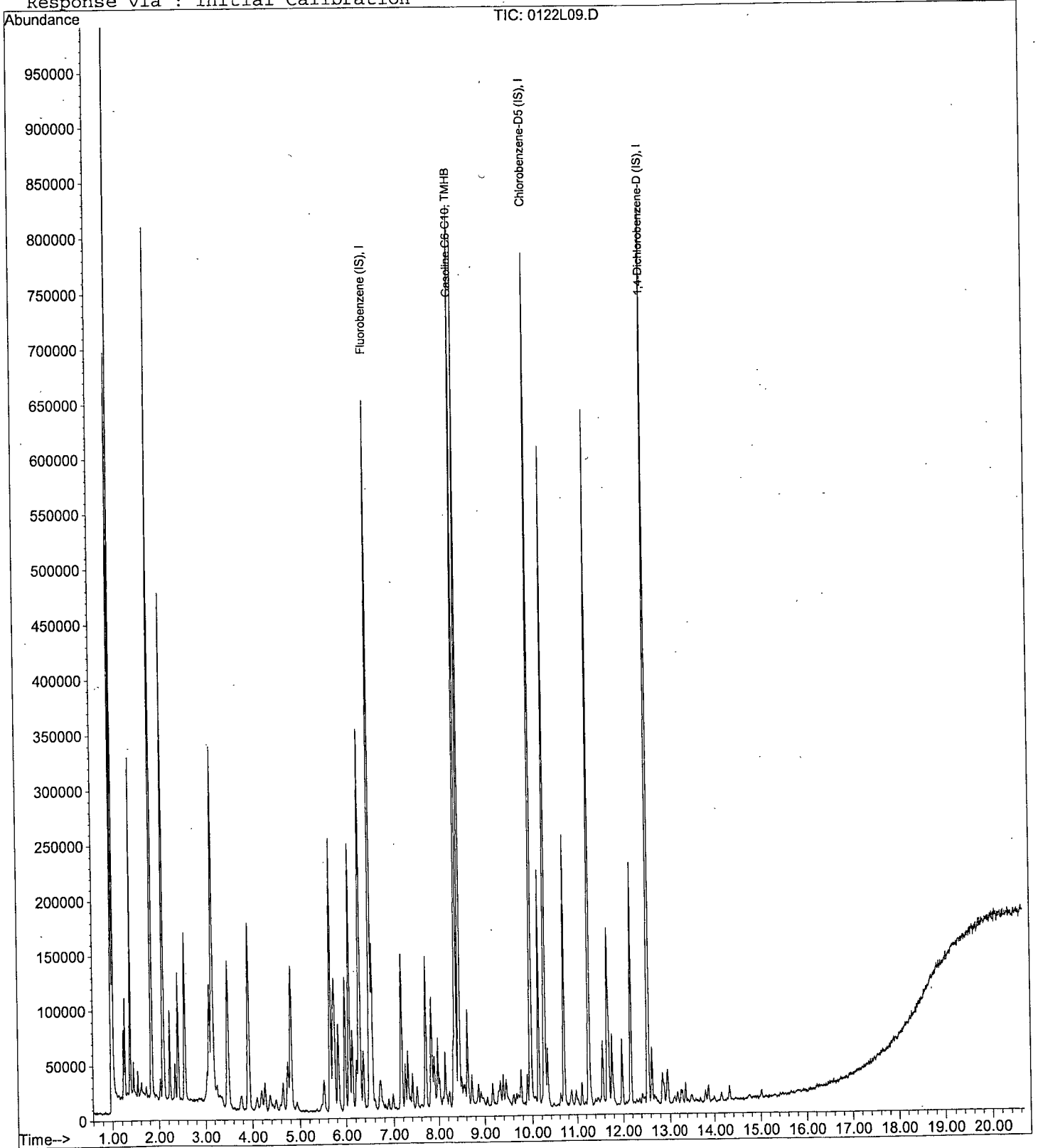
Data File : M:\LOKI\DATA\190121\0122L09.D  
Acq On : 22 Jan 19 17:01  
Sample : 1000ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:23 2019

Quant Results File: LGAS0122.RES

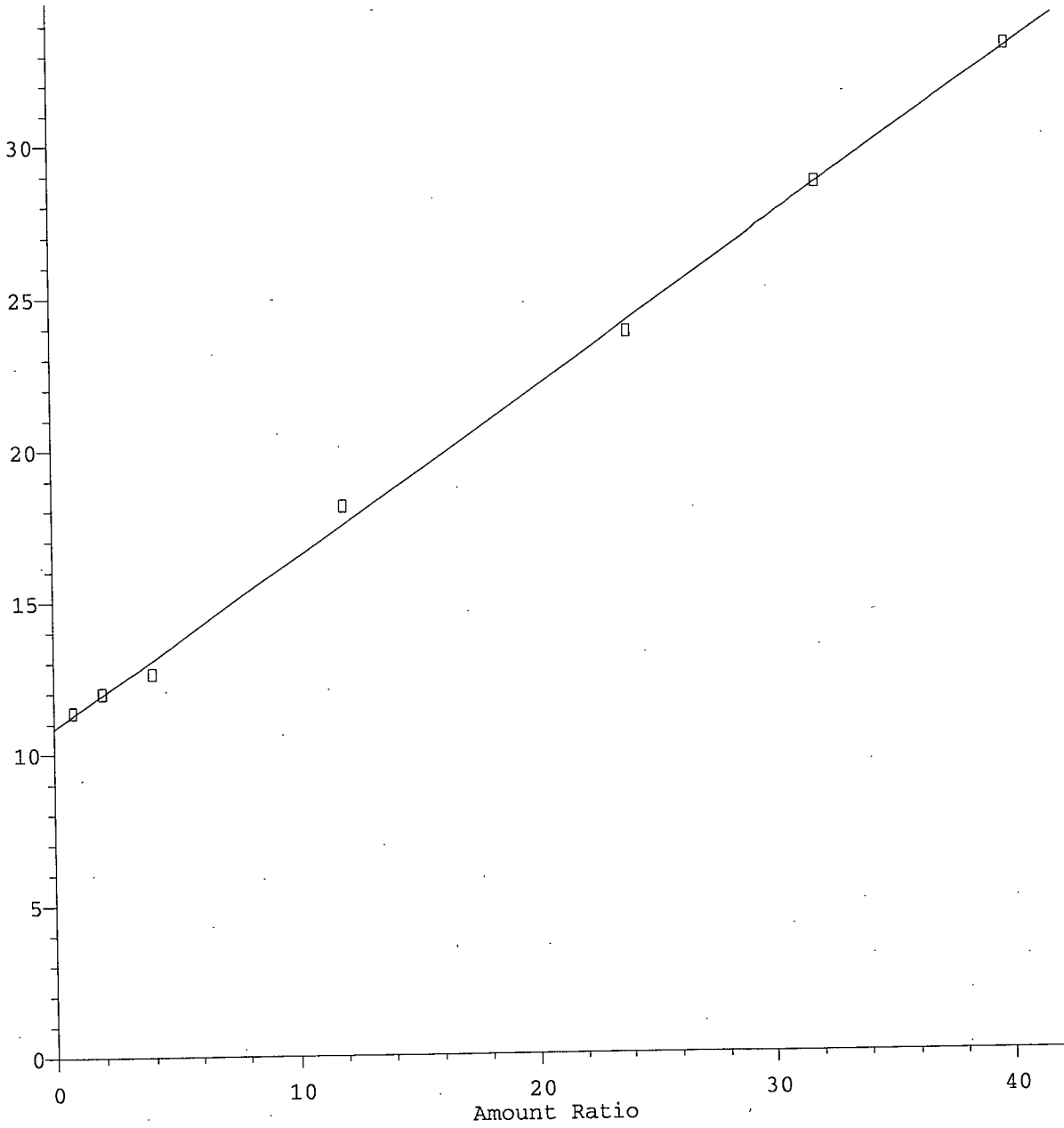
Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Gasoline C6-C10

Response Ratio



Resp Ratio = 5.55e-001 \* Amt + 1.08e+001  
Coef of Det (r^2) = 0.998 Curve Fit: Linear

Method Name: M:\LOKI\DATA\190121\LGAS0122.M  
Calibration Table Last Updated: Thu Jan 24 09:25:37 2019

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/22/19

Matrix: water

Instrument: Loki

Initial Cal. Date: 01/22/19

Data File: 0122L12.D

	Compound	MEAN	CCRF	%D	%Drift
1	TMHB Gasoline C6-C10	3.937	1.468	63	TMHBL 1.7
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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26					
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28					
29					
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31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			63.0	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L12.D  
 Acq On : 22 Jan 19 18:27  
 Sample : (SS)300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:30 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	661911	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	791838	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	820940	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11658465m	305.154	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L12.D  
 Acq On : 22 Jan 19 18:27  
 Sample : (SS)300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 10:26 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	322112	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	279488	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	144704	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	152512	25.1255	ppb	0.00
Spiked Amount						
						Recovery = 100.504%
3) 1,2-DCA-D4(S)	6.07	65	178958	25.2842	ppb	0.00
Spiked Amount						
						Recovery = 101.136%
5) Toluene-D8(S)	8.37	98	563836	24.6909	ppb	0.00
Spiked Amount						
						Recovery = 98.764%
6) 4-Bromofluorobenzene(S)	11.27	95	231410	24.1569	ppb	0.00
Spiked Amount						
						Recovery = 96.628%

Target Compounds

Qvalue

Quantitation Report

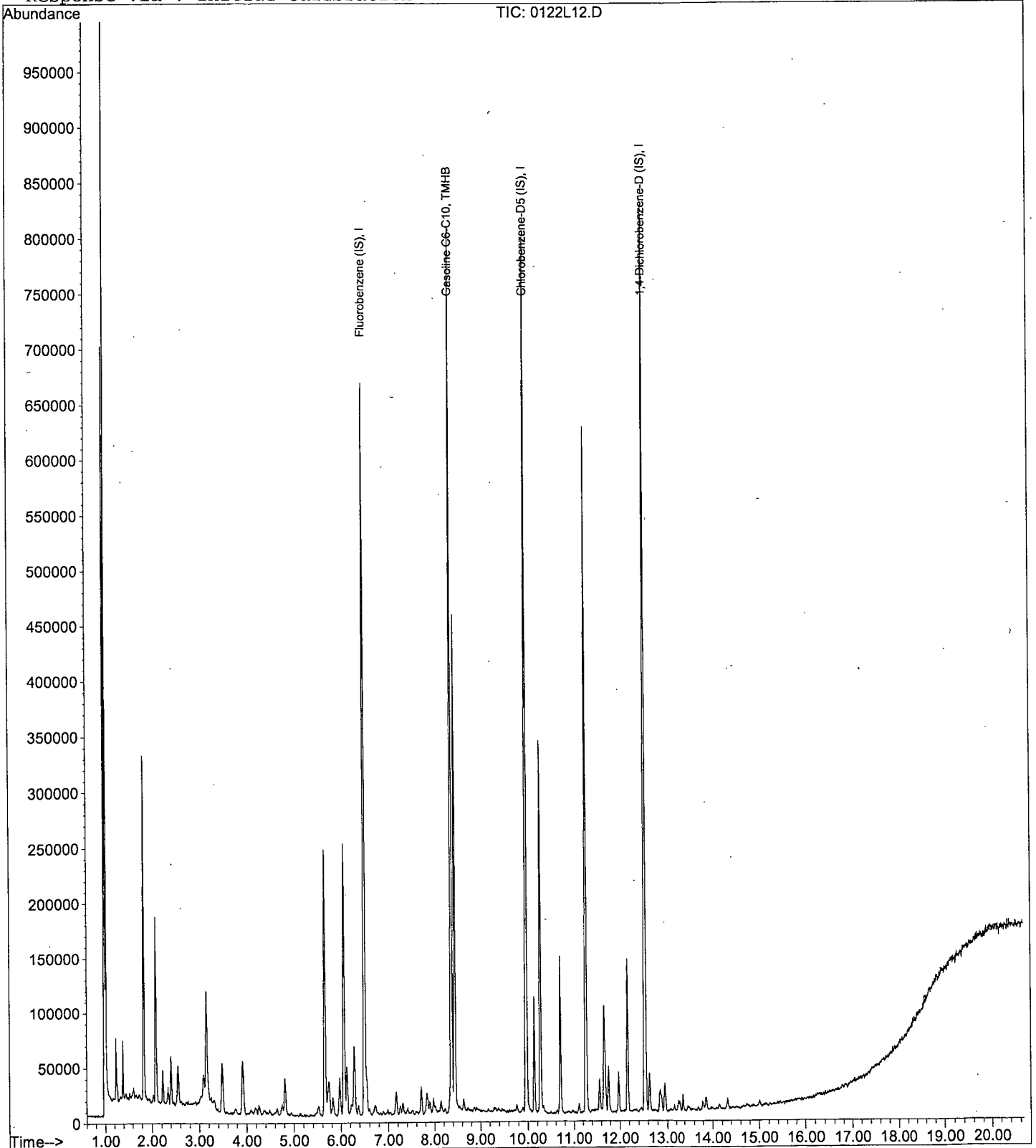
Data File : M:\LOKI\DATA\190121\0122L12.D  
Acq On : 22 Jan 19 18:27  
Sample : (SS)300ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:30 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0123L06.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TMHB Gasoline C6-C10	3.937	1.447	63	TMHBL 2.0
3	I Chlorobenzene-D5 (IS)	ISTD			I
4	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
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24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			63.0	

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0123L06.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	S Dibromofluoromethane(S)	0.4711	0.4992	6.0	S
3	S 1,2-DCA-D4(S)	0.5493	0.5770	5.0	S
4	I Chlorobenzene-D5 (IS)	ISTD			I
5	S Toluene-D8(S)	2.043	2.052	0.47	S
6	S 4-Bromofluorobenzene(S)	0.8569	0.8265	3.5	S
7	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
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32					
33					
34					
35					
36					
37					
38					
39					
40	Average			3.7	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0123L06.D  
 Acq On : 23 Jan 19 9:49  
 Sample : 190123A CCV 300ug/L  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:54 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	634003	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	731375	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	780523	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11009505m	293.9783	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0123L06.D Vial: 5  
 Acq On : 23 Jan 19 9:49 Operator: PM,DG,SV,CMM,KV  
 Sample : 190123A CCV 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	308032	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	261696	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	137216	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	153778	26.4921	ppb	0.00
Spiked Amount	25.000					
					Recovery = 105.968%	
3) 1,2-DCA-D4(S)	6.07	65	177749	26.2613	ppb	0.00
Spiked Amount	25.000					
					Recovery = 105.044%	
5) Toluene-D8(S)	8.37	98	537054	25.1171	ppb	0.00
Spiked Amount	25.000					
					Recovery = 100.468%	
6) 4-Bromofluorobenzene(S)	11.26	95	216290	24.1136	ppb	0.00
Spiked Amount	25.000					
					Recovery = 96.456%	

Target Compounds Qvalue

Quantitation Report

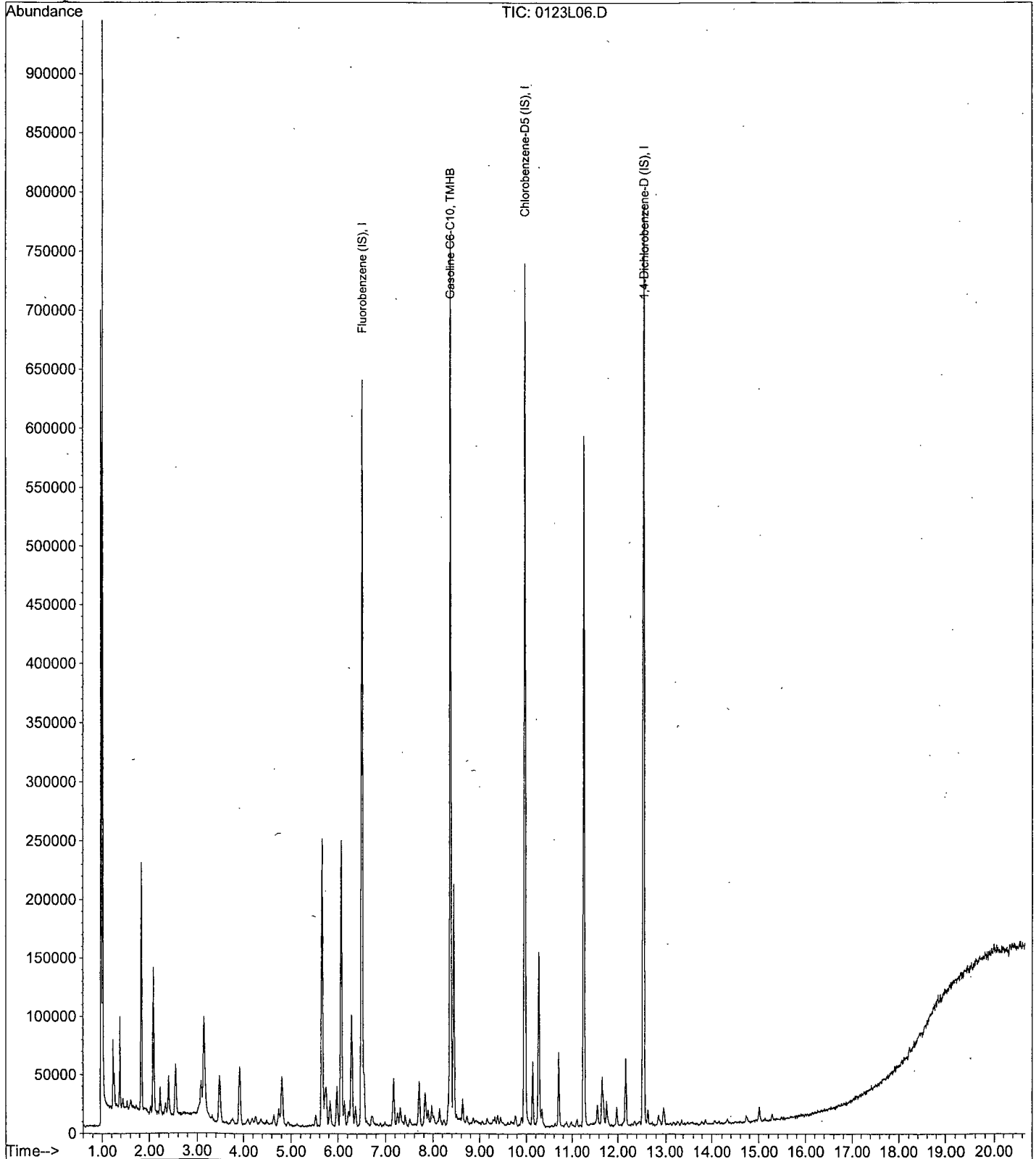
Data File : M:\LOKI\DATA\190121\0123L06.D  
Acq On : 23 Jan 19 9:49  
Sample : 190123A CCV 300ug/L  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:54 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0123L27.D

	Compound	MEAN	CCRF	%D	%Drift
1	Fluorobenzene (IS)	ISTD			
2	TMHB Gasoline C6-C10	3.937	1.399	64	TMHBL 11
3	Chlorobenzene-D5 (IS)	ISTD			
4	1,4-Dichlorobenzene-D (IS)	ISTD			
5					
6					
7					
8					
9					
10					
11					
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32					
33					
34					
35					
36					
37					
38					
39					
40	Average			64.0	

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/23/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0123L27.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	S	Dibromofluoromethane(S)	0.4711	0.5591	19	S
3	S	1,2-DCA-D4(S)	0.5493	0.6334	15	S
4	I	Chlorobenzene-D5 (IS)	ISTD			I
5	S	Toluene-D8(S)	2.043	2.164	5.9	S
6	S	4-Bromofluorobenzene(S)	0.8569	0.8564	0.05	S
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
8						
9						
10						
11						
12						
13						
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Average

10.0

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0123L27.D Vial: 26  
 Acq On : 23 Jan 19 19:49 Operator: PM, DG, SV, CMM, KV  
 Sample : Ending CCV 300ug/L 1/23/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 11:00 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	598993	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	671764	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	752636	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	10053641m	267.8333	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0123L27.D  
 Acq On : 23 Jan 19 19:49  
 Sample : Ending CCV 300ug/L 1/23/19  
 Misc : IS&S 11/8/18

Vial: 26  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	282048	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	235264	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	130816	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157684	29.6676	ppb	0.00
Spiked Amount	25.000		Recovery	=	118.672%	
3) 1,2-DCA-D4(S)	6.07	65	178640	28.8244	ppb	0.00
Spiked Amount	25.000		Recovery	=	115.296%	
5) Toluene-D8(S)	8.37	98	509054	26.4823	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.928%	
6) 4-Bromofluorobenzene(S)	11.26	95	201487	24.9870	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.948%	

Target Compounds

Qvalue

Quantitation Report

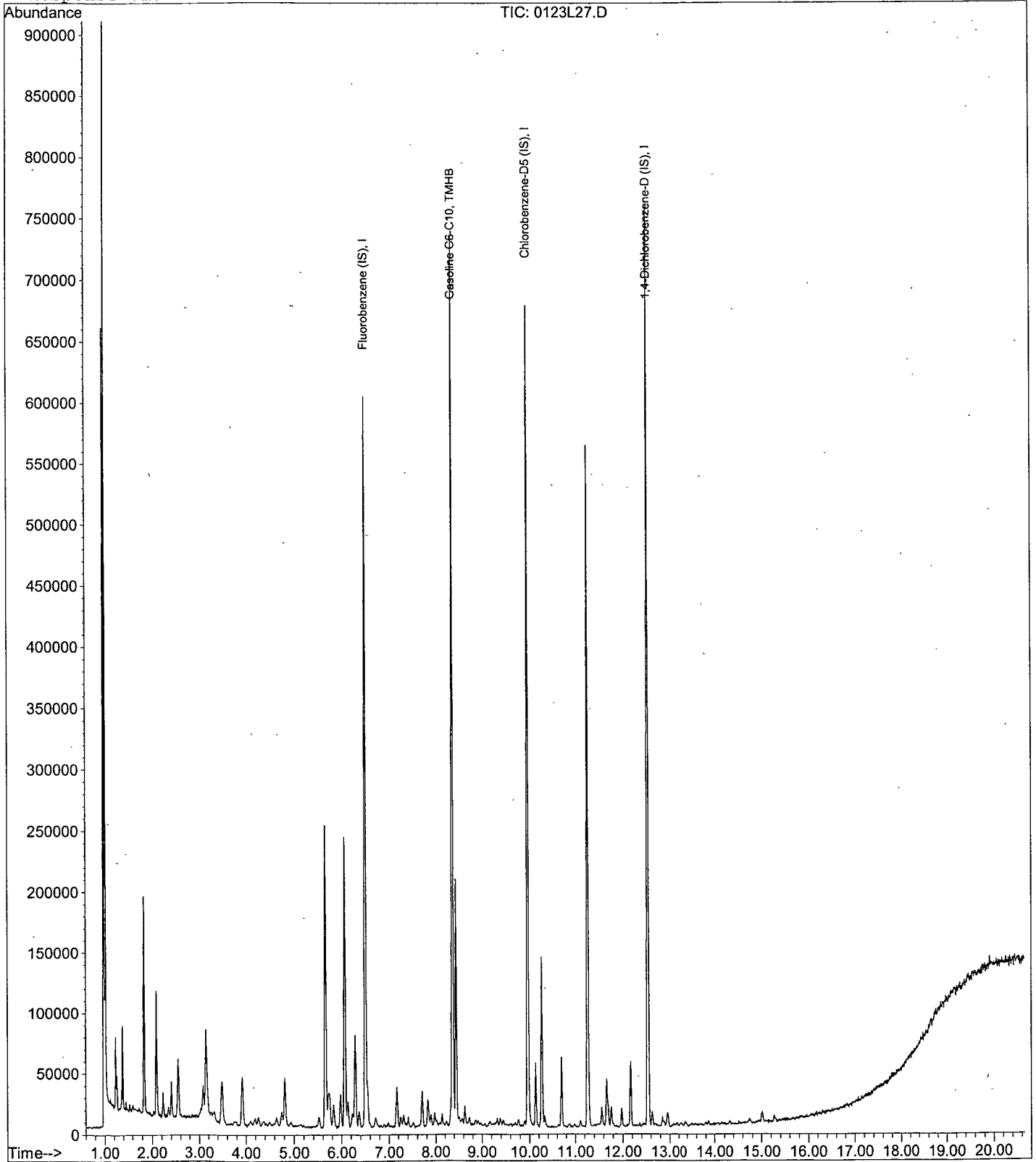
Data File : M:\LOKI\DATA\190121\0123L27.D  
Acq On : 23 Jan 19 19:49  
Sample : Ending CCV 300ug/L 1/23/19  
Misc : IS&S 11/8/18

Vial: 26  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 11:00 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**



Data File : M:\LOKI\DATA\190121\0123L21.D  
 Acq On : 23 Jan 19 16:57  
 Sample : AZ85417W01  
 Misc : IS&S 11/8/18

Vial: 20  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	285440	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	234624	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	132032	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157357	29.2543	ppb	0.00
Spiked Amount				25.000		
					Recovery = 117.016%	
3) 1,2-DCA-D4(S)	6.07	65	175189	27.9317	ppb	0.00
Spiked Amount				25.000		
					Recovery = 111.728%	
5) Toluene-D8(S)	8.37	98	512643	26.7418	ppb	0.00
Spiked Amount				25.000		
					Recovery = 106.968%	
6) 4-Bromofluorobenzene(S)	11.27	95	206087	25.6271	ppb	0.00
Spiked Amount				25.000		
					Recovery = 102.508%	

Target Compounds

Qvalue

Quantitation Report

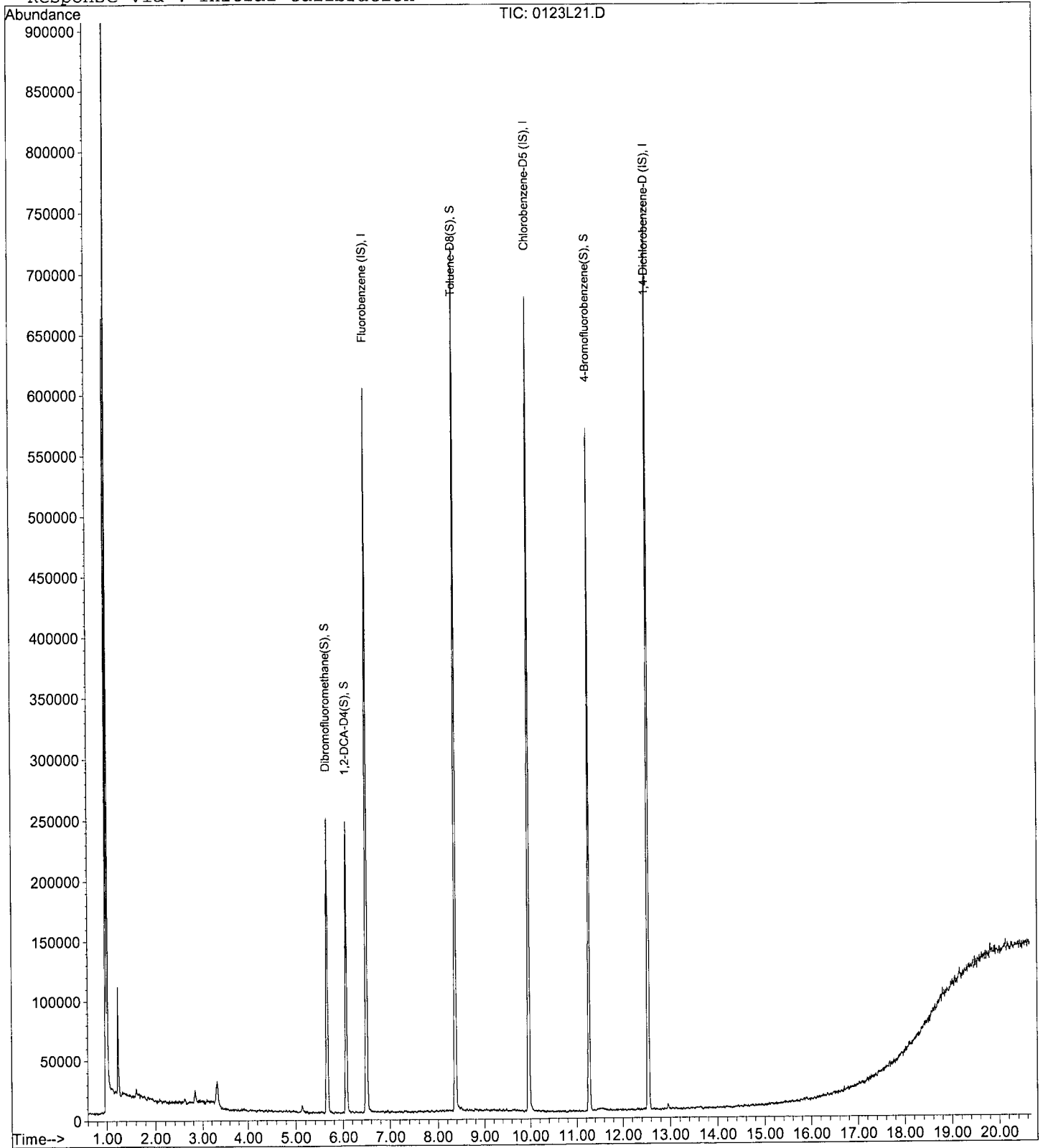
Data File : M:\LOKI\DATA\190121\0123L21.D  
Acq On : 23 Jan 19 16:57  
Sample : AZ85417W01  
Misc : IS&S 11/8/18

Vial: 20  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L21.D Vial: 20  
 Acq On : 23 Jan 19 16:57 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85417W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:58 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	599125	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	674256	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	749679	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

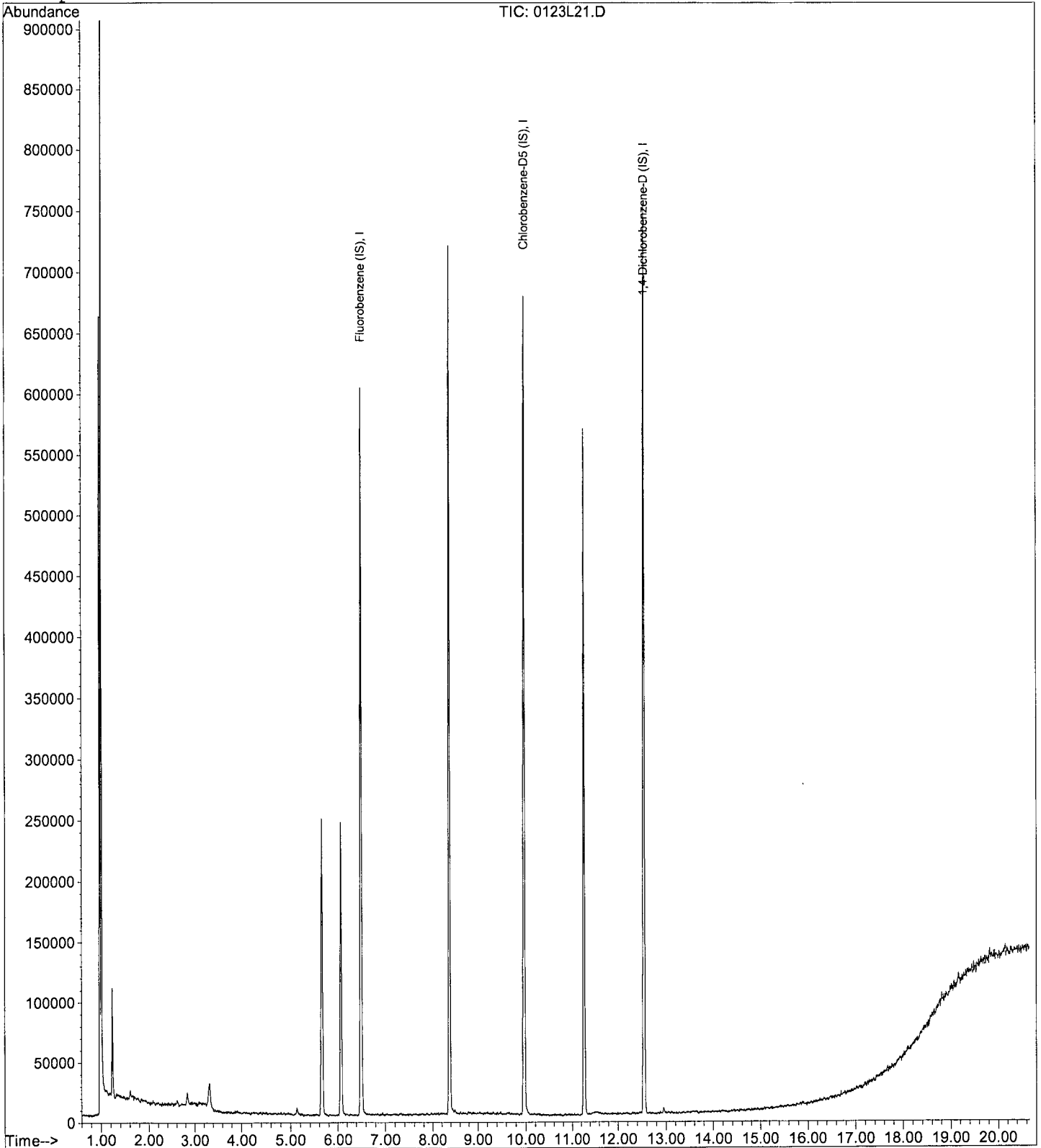
Data File : M:\LOKI\DATA\190121\0123L21.D  
Acq On : 23 Jan 19 16:57  
Sample : AZ85417W01  
Misc : IS&S 11/8/18

Vial: 20  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:58 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L22.D  
 Acq On : 23 Jan 19 17:26  
 Sample : AZ85418W01  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	282368	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	233856	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	129128	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157099	29.5241	ppb	0.00
Spiked Amount						
					Recovery = 118.096%	
3) 1,2-DCA-D4(S)	6.07	65	173870	28.0230	ppb	0.00
Spiked Amount						
					Recovery = 112.092%	
5) Toluene-D8(S)	8.37	98	508716	26.6241	ppb	0.00
Spiked Amount						
					Recovery = 106.496%	
6) 4-Bromofluorobenzene(S)	11.27	95	205330	25.6169	ppb	0.00
Spiked Amount						
					Recovery = 102.468%	

Target Compounds Qvalue

Quantitation Report

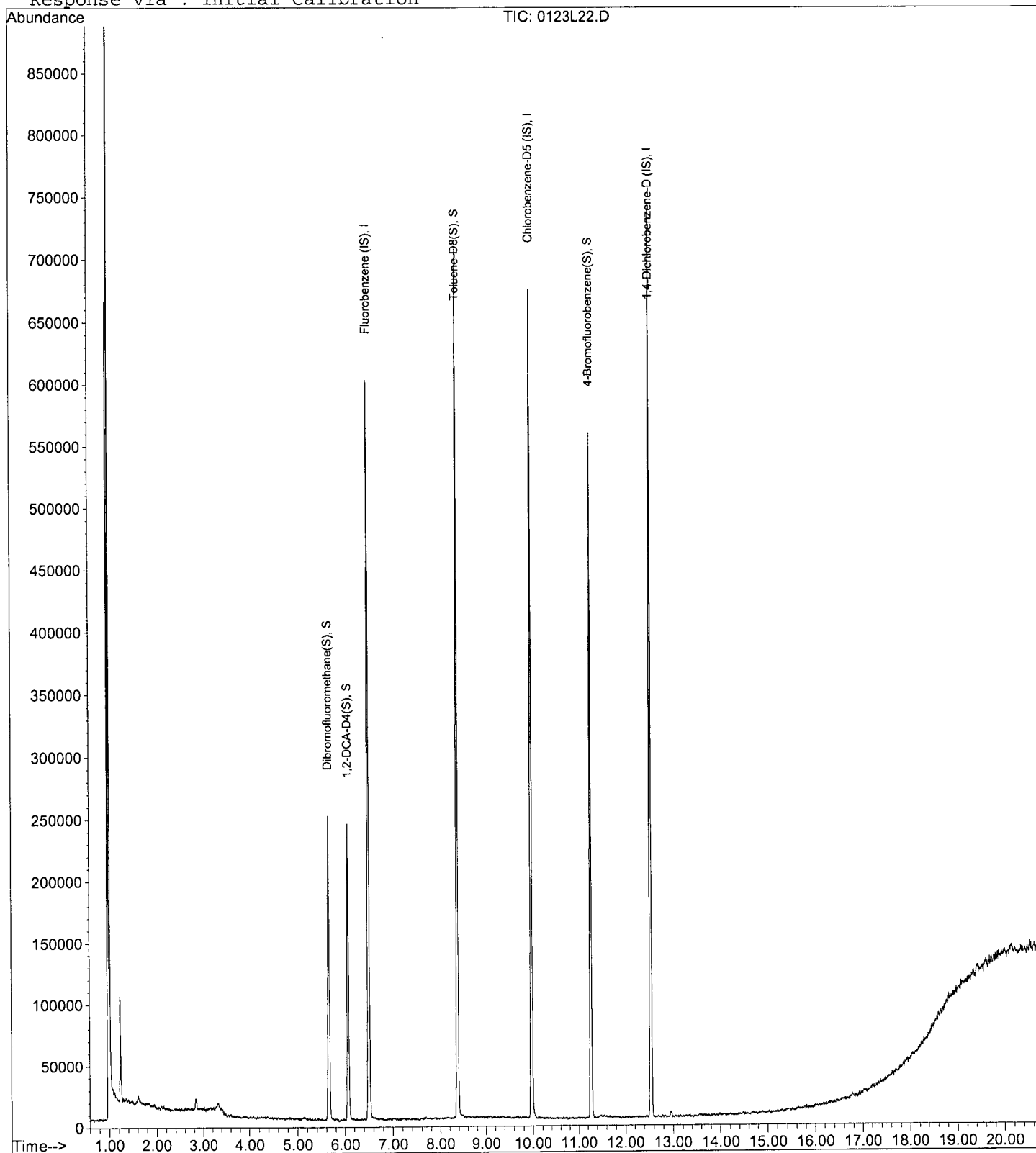
Data File : M:\LOKI\DATA\190121\0123L22.D  
Acq On : 23 Jan 19 17:26  
Sample : AZ85418W01  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L22.D Vial: 21  
 Acq On : 23 Jan 19 17:26 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85418W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:58 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	597483	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	669506	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	734061	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

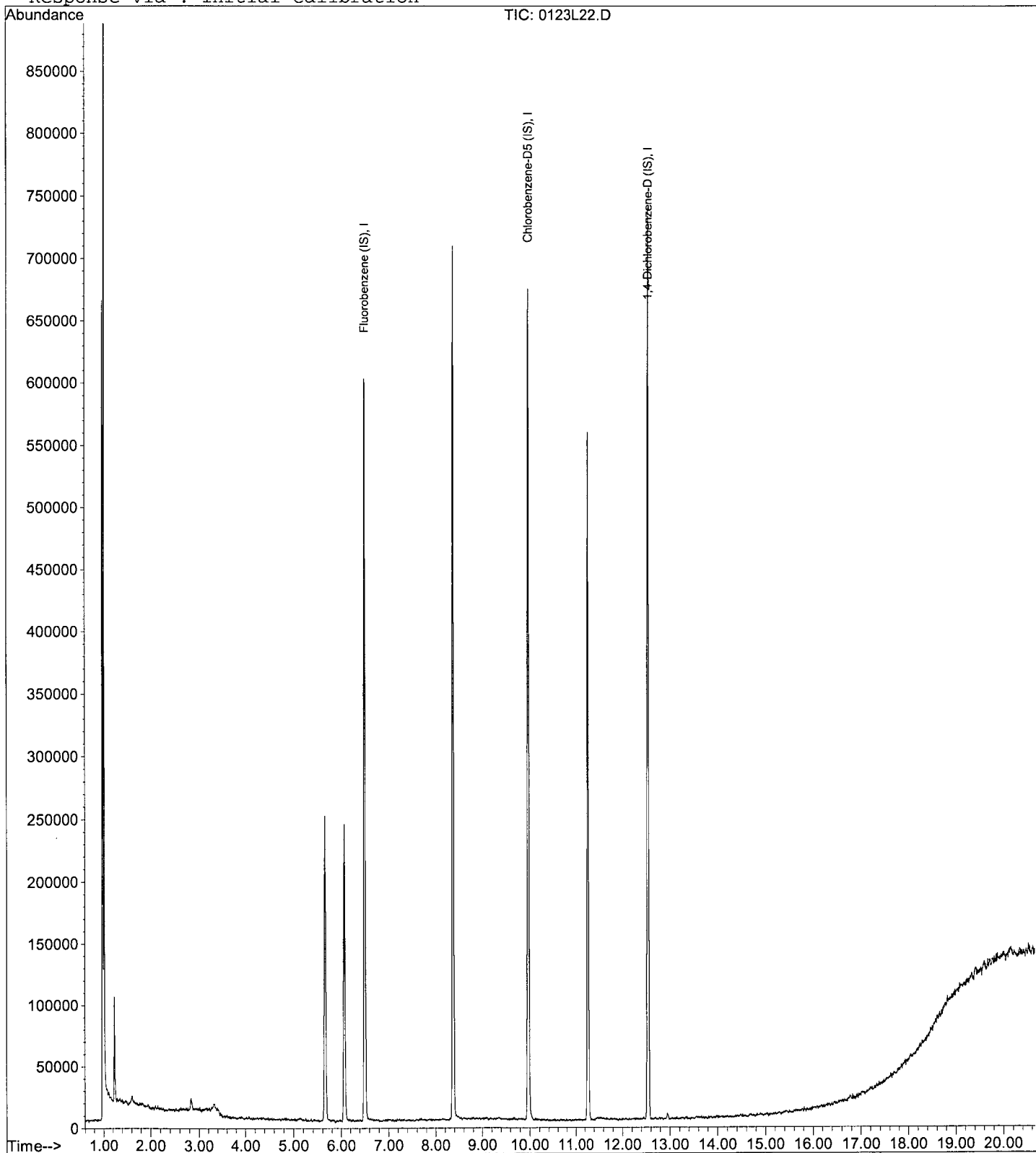
Data File : M:\LOKI\DATA\190121\0123L22.D  
Acq On : 23 Jan 19 17:26  
Sample : AZ85418W01  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:58 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190121\0123L23.D  
 Acq On : 23 Jan 19 17:55  
 Sample : AZ85419W01  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	289408	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	241152	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	131392	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	5.65	111	156728	28.7379	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	114.952%
3) 1,2-DCA-D4(S)	6.07	65	180113	28.3230	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	113.292%
5) Toluene-D8(S)	8.37	98	519794	26.3808	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	105.524%
6) 4-Bromofluorobenzene(S)	11.27	95	204953	24.7962	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	99.184%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

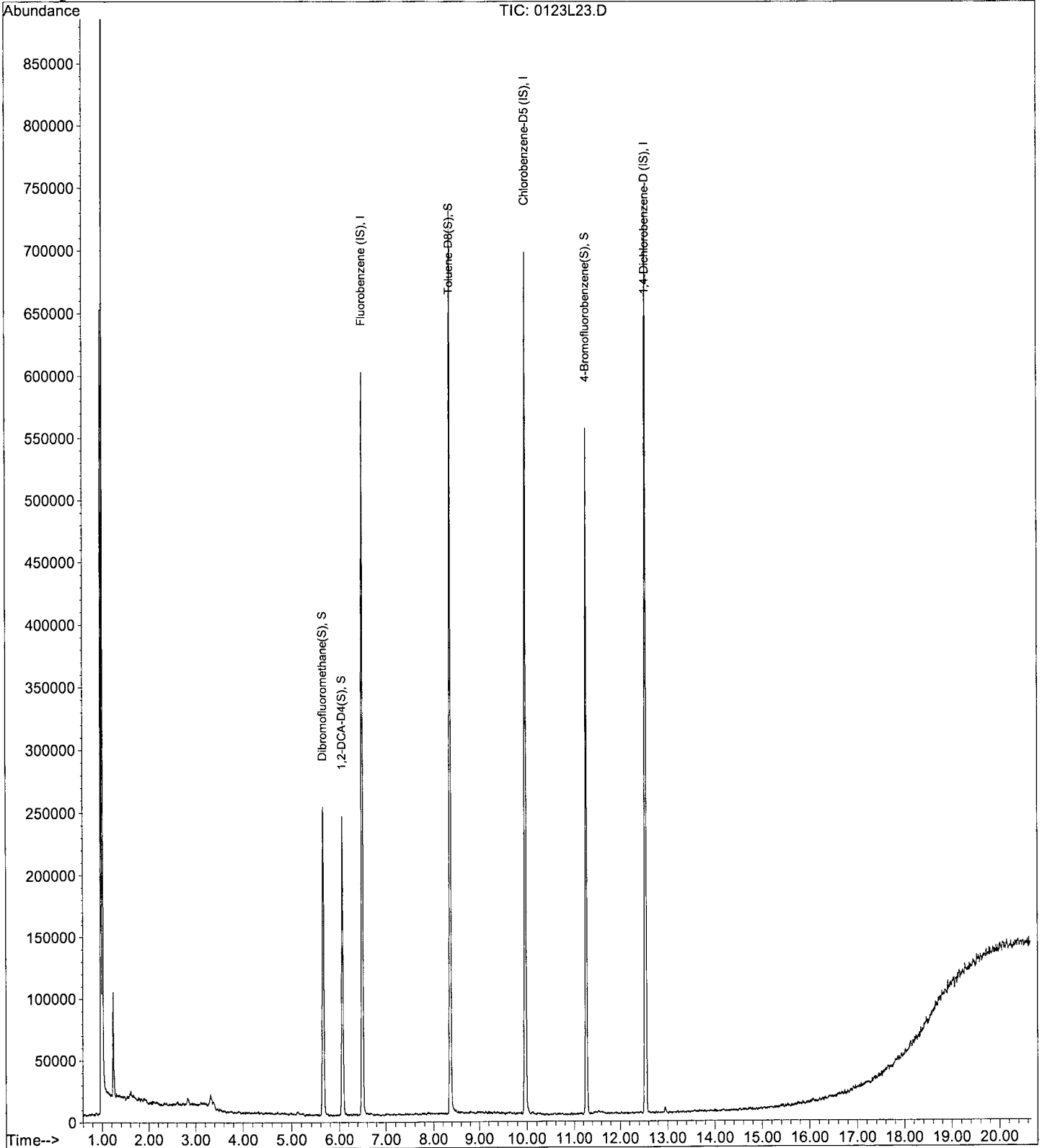
Data File : M:\LOKI\DATA\190121\0123L23.D  
Acq On : 23 Jan 19 17:55  
Sample : AZ85419W01  
Misc : IS&S 11/8/18

Vial: 22  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L23.D Vial: 22  
 Acq On : 23 Jan 19 17:55 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85419W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:58 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	597143	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	692841	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	732607	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

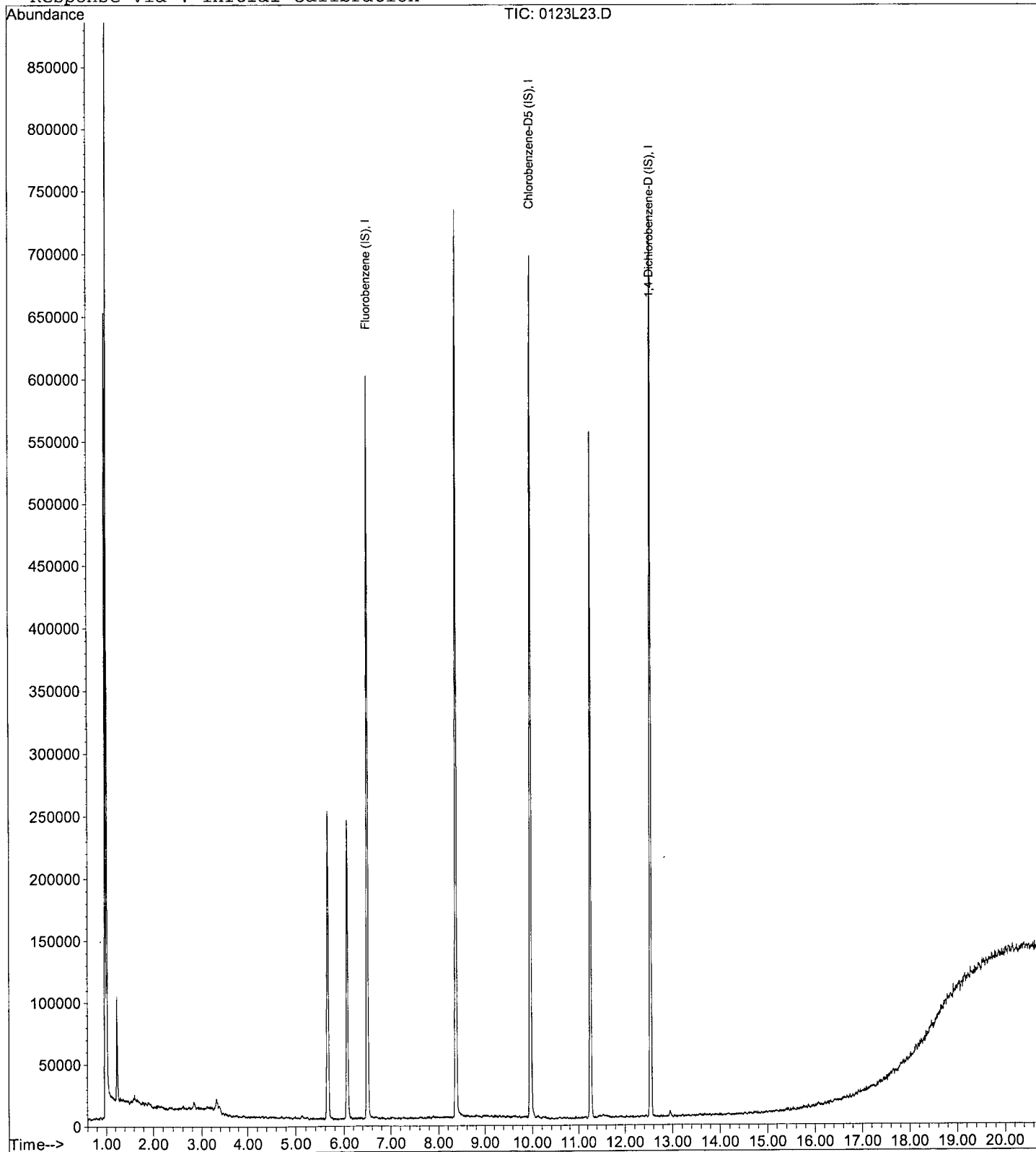
Data File : M:\LOKI\DATA\190121\0123L23.D  
Acq On : 23 Jan 19 17:55  
Sample : AZ85419W01  
Misc : IS&S 11/8/18

Vial: 22  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:58 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L24.D Vial: 23  
 Acq On : 23 Jan 19 18:23 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85420W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	282496	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	247808	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	130520	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	5.65	111	155395	29.1906	ppb	0.00
Spiked Amount				25.000		
					Recovery = 116.764%	
3) 1,2-DCA-D4(S)	6.07	65	175385	28.2543	ppb	0.00
Spiked Amount				25.000		
					Recovery = 113.016%	
5) Toluene-D8(S)	8.37	98	512242	25.2992	ppb	0.00
Spiked Amount				25.000		
					Recovery = 101.196%	
6) 4-Bromofluorobenzene(S)	11.26	95	204019	24.0202	ppb	0.00
Spiked Amount				25.000		
					Recovery = 96.080%	

Target Compounds Qvalue

Quantitation Report

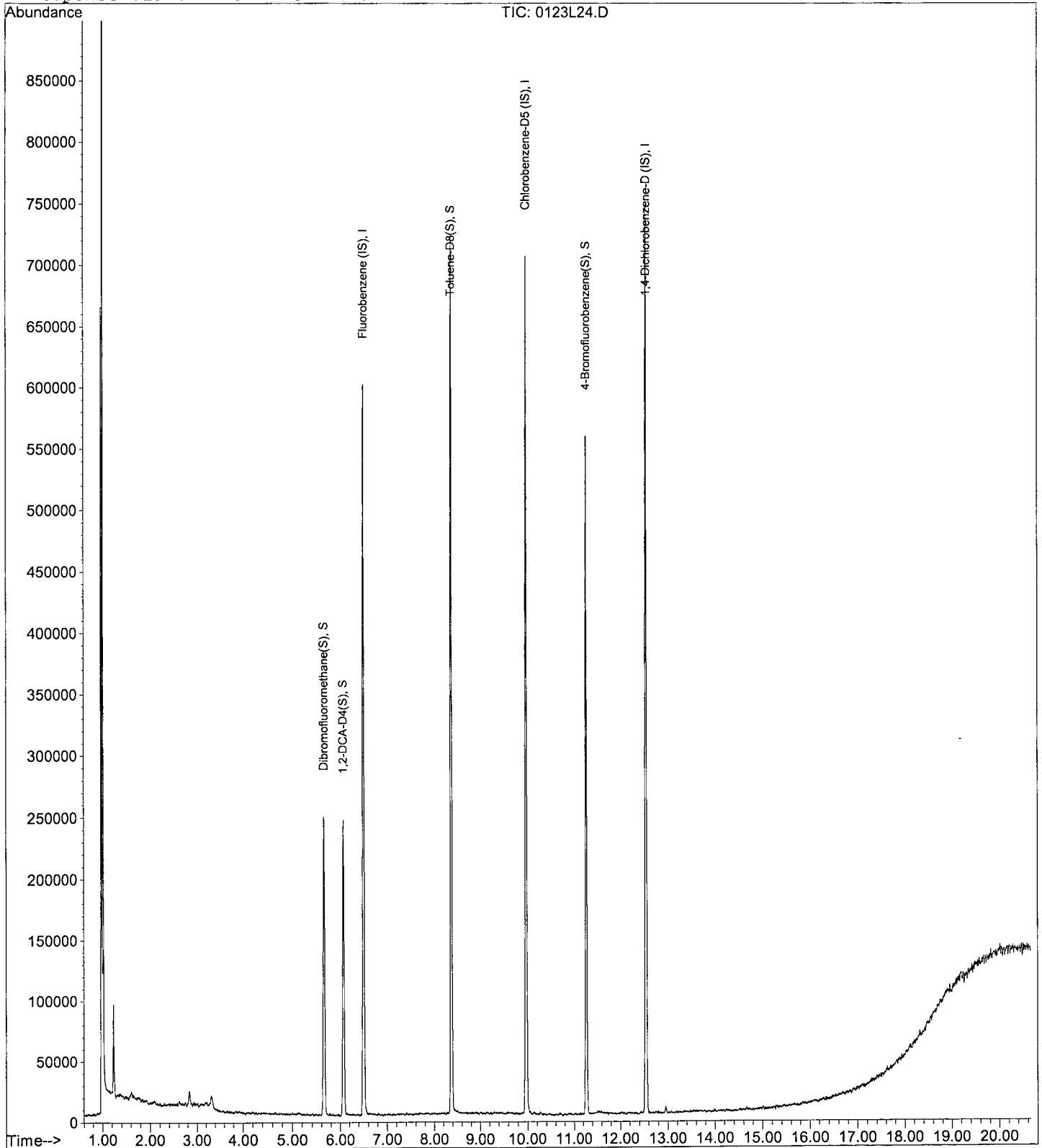
Data File : M:\LOKI\DATA\190121\0123L24.D  
Acq On : 23 Jan 19 18:23  
Sample : AZ85420W01  
Misc : IS&S 11/8/18

Vial: 23  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L24.D Vial: 23  
 Acq On : 23 Jan 19 18:23 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85420W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:58 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	597302	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	700178	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	742848	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

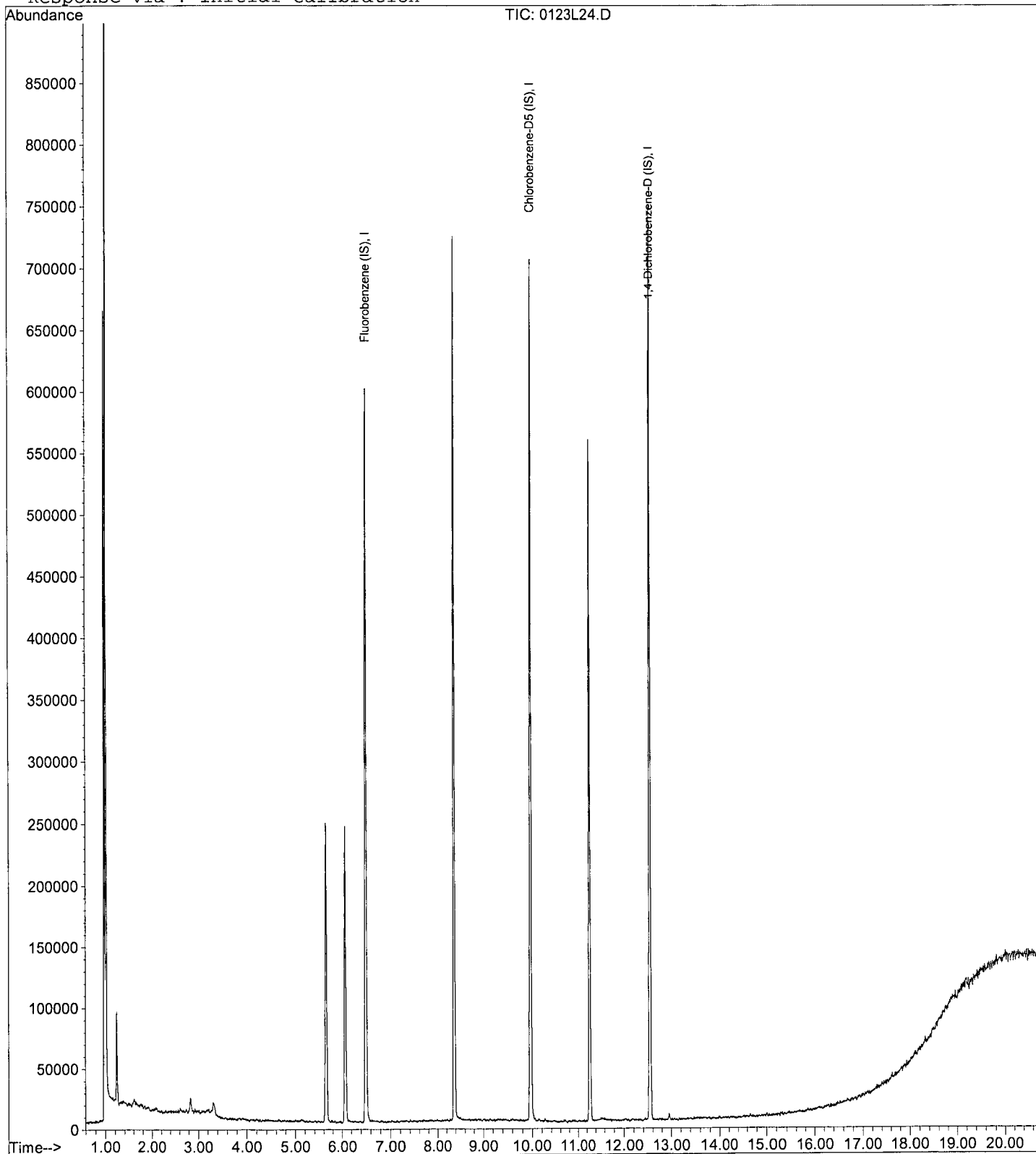
Data File : M:\LOKI\DATA\190121\0123L24.D  
Acq On : 23 Jan 19 18:23  
Sample : AZ85420W01  
Misc : IS&S 11/8/18

Vial: 23  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:58 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190121\0123L12.D  
 Acq On : 23 Jan 19 12:40  
 Sample : 190123A BLK  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	327360	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	280640	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	149440	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	159200	25.8069	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	103.228%
3) 1,2-DCA-D4(S)	6.07	65	184418	25.6379	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	102.552%
5) Toluene-D8(S)	8.37	98	534266	23.3000	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	93.200%
6) 4-Bromofluorobenzene(S)	11.26	95	216073	22.4633	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	89.852%

Target Compounds

Qvalue

Quantitation Report

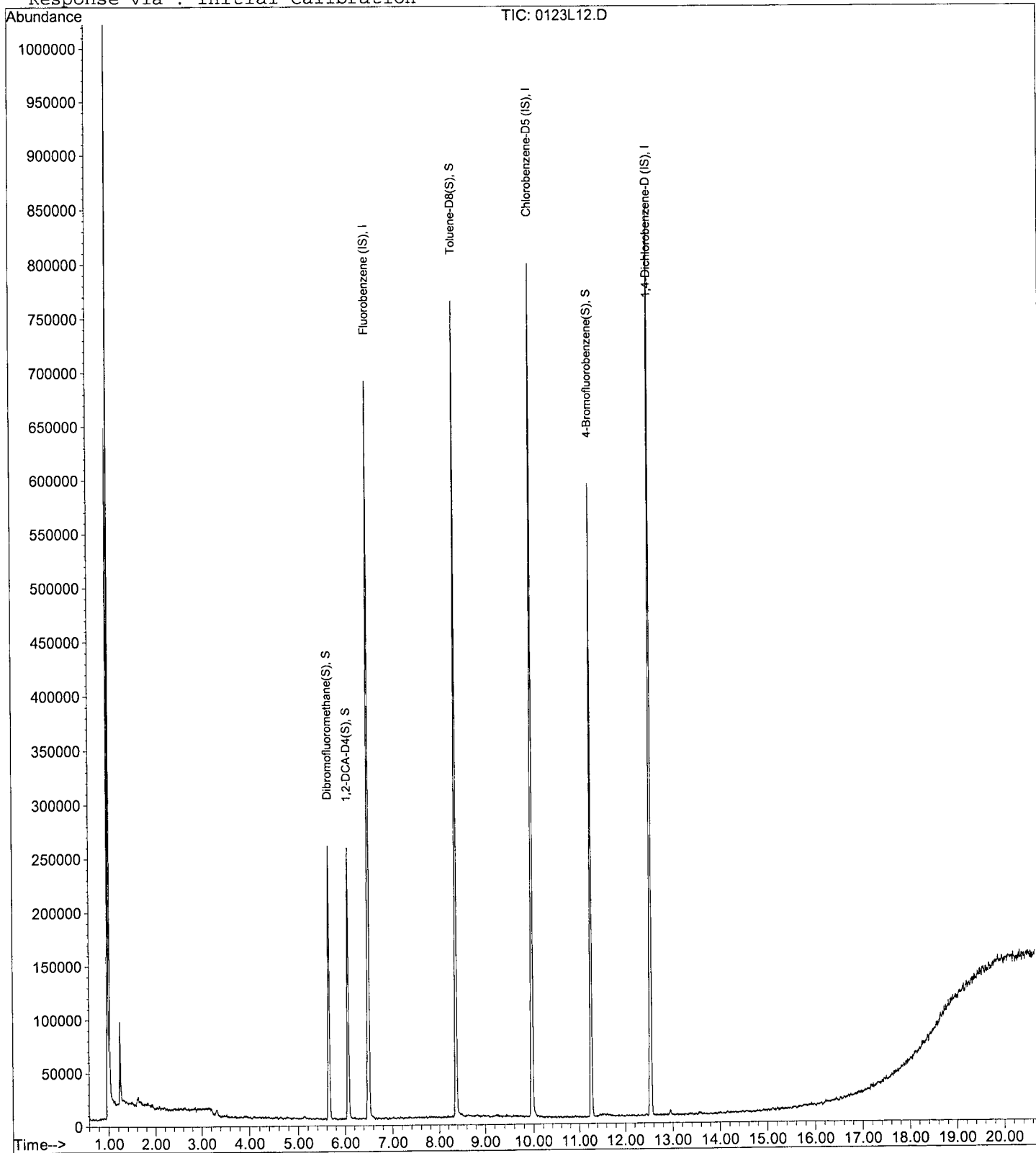
Data File : M:\LOKI\DATA\190121\0123L12.D  
Acq On : 23 Jan 19 12:40  
Sample : 190123A BLK  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L12.D Vial: 11  
 Acq On : 23 Jan 19 12:40 Operator: PM,DG,SV,CMM,KV  
 Sample : 190123A BLK Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:46 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	686178	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	792877	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	845572	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	5022309m	-158.2164	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

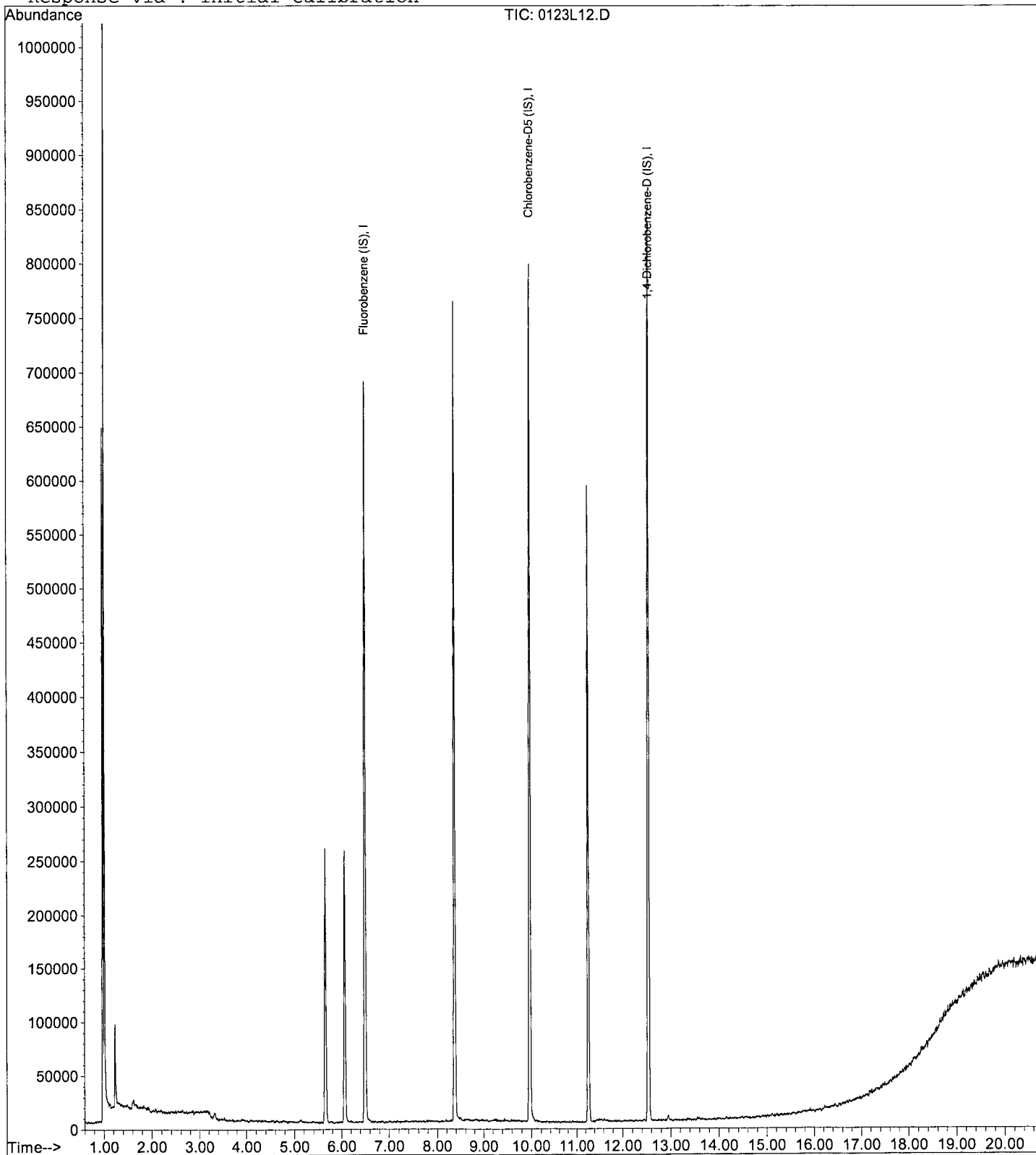
Data File : M:\LOKI\DATA\190121\0123L12.D  
Acq On : 23 Jan 19 12:40  
Sample : 190123A BLK  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:46 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L07.D Vial: 6  
 Acq On : 23 Jan 19 10:17 Operator: PM, DG, SV, CMM, KV  
 Sample : 190123A LCS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	306816	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	261568	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	139968	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	5.65	111	155945	26.9719	ppb	0.00
Spiked Amount				25.000		
				Recovery =	107.888%	
3) 1,2-DCA-D4(S)	6.07	65	181793	26.9652	ppb	0.00
Spiked Amount				25.000		
				Recovery =	107.860%	
5) Toluene-D8(S)	8.37	98	544705	25.4873	ppb	0.00
Spiked Amount				25.000		
				Recovery =	101.948%	
6) 4-Bromofluorobenzene(S)	11.26	95	219552	24.4892	ppb	0.00
Spiked Amount				25.000		
				Recovery =	97.956%	

Target Compounds Qvalue

Quantitation Report

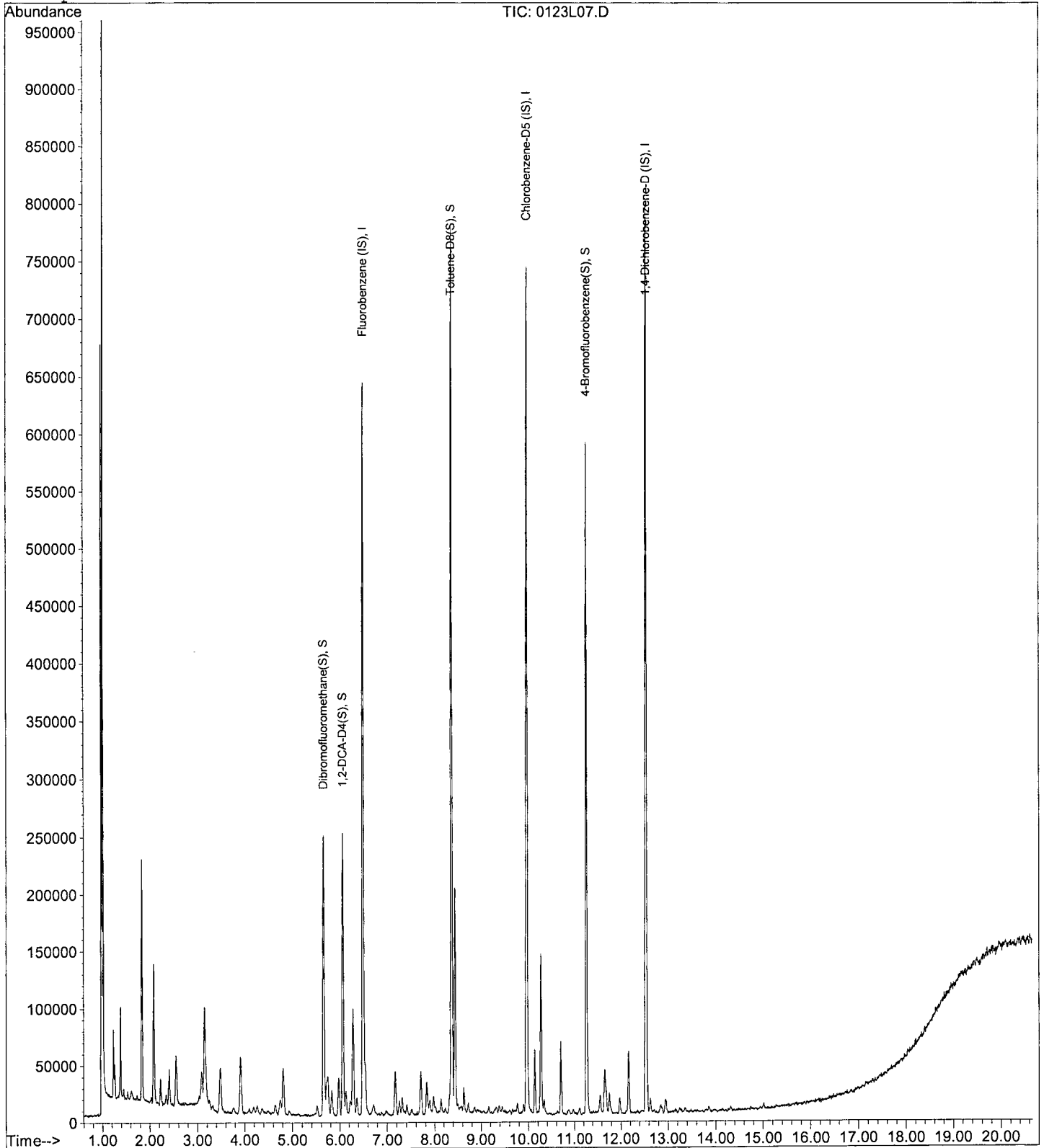
Data File : M:\LOKI\DATA\190121\0123L07.D  
Acq On : 23 Jan 19 10:17  
Sample : 190123A LCS 300ug/L  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0123L07.D  
 Acq On : 23 Jan 19 10:17  
 Sample : 190123A LCS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 10:56 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	638116	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	736700	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	792327	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	10735303m	269.5977	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0123L07.D  
 Acq On : 23 Jan 19 10:17  
 Sample : 190123A LCS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	306816	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	261568	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	139968	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	155945	26.9719	ppb	0.00
Spiked Amount	25.000		Recovery	=	107.888%	
3) 1,2-DCA-D4(S)	6.07	65	181793	26.9652	ppb	0.00
Spiked Amount	25.000		Recovery	=	107.860%	
5) Toluene-D8(S)	8.37	98	544705	25.4873	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.948%	
6) 4-Bromofluorobenzene(S)	11.26	95	219552	24.4892	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.956%	

Target Compounds

Qvalue



Quantitation Report

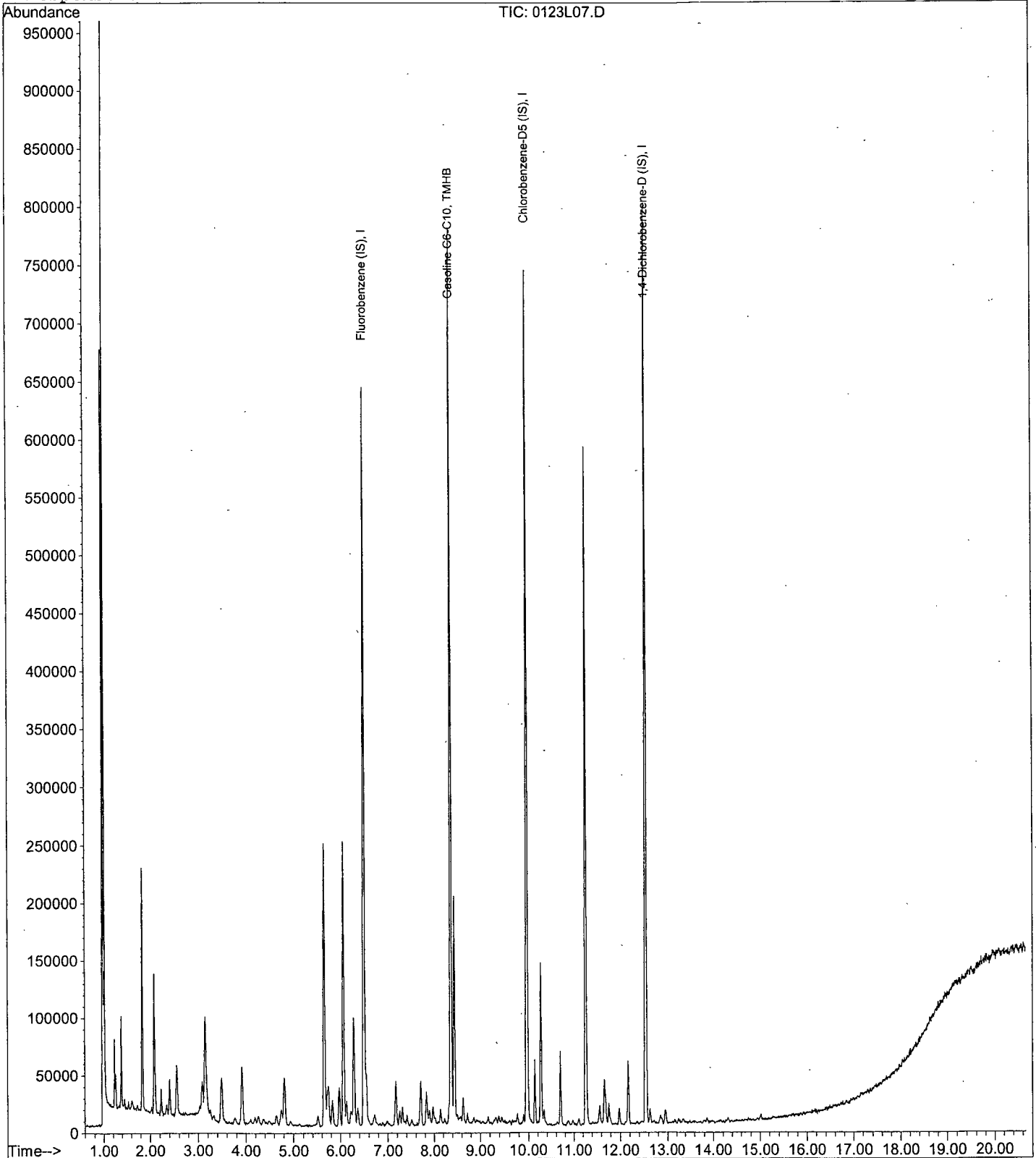
Data File : M:\LOKI\DATA\190121\0123L07.D  
Acq On : 23 Jan 19 10:17  
Sample : 190123A LCS 300ug/L  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:56 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0123L08.D  
 Acq On : 23 Jan 19 10:46  
 Sample : 190123A LCSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	312640	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	268096	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	140608	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	154217	26.1762	ppb	0.00
Spiked Amount				25.000		
					Recovery = 104.704%	
3) 1,2-DCA-D4(S)	6.07	65	185751	27.0390	ppb	0.00
Spiked Amount				25.000		
					Recovery = 108.156%	
5) Toluene-D8(S)	8.37	98	565205	25.8026	ppb	0.00
Spiked Amount				25.000		
					Recovery = 103.212%	
6) 4-Bromofluorobenzene(S)	11.27	95	225440	24.5337	ppb	0.00
Spiked Amount				25.000		
					Recovery = 98.136%	

Target Compounds

Qvalue

Quantitation Report

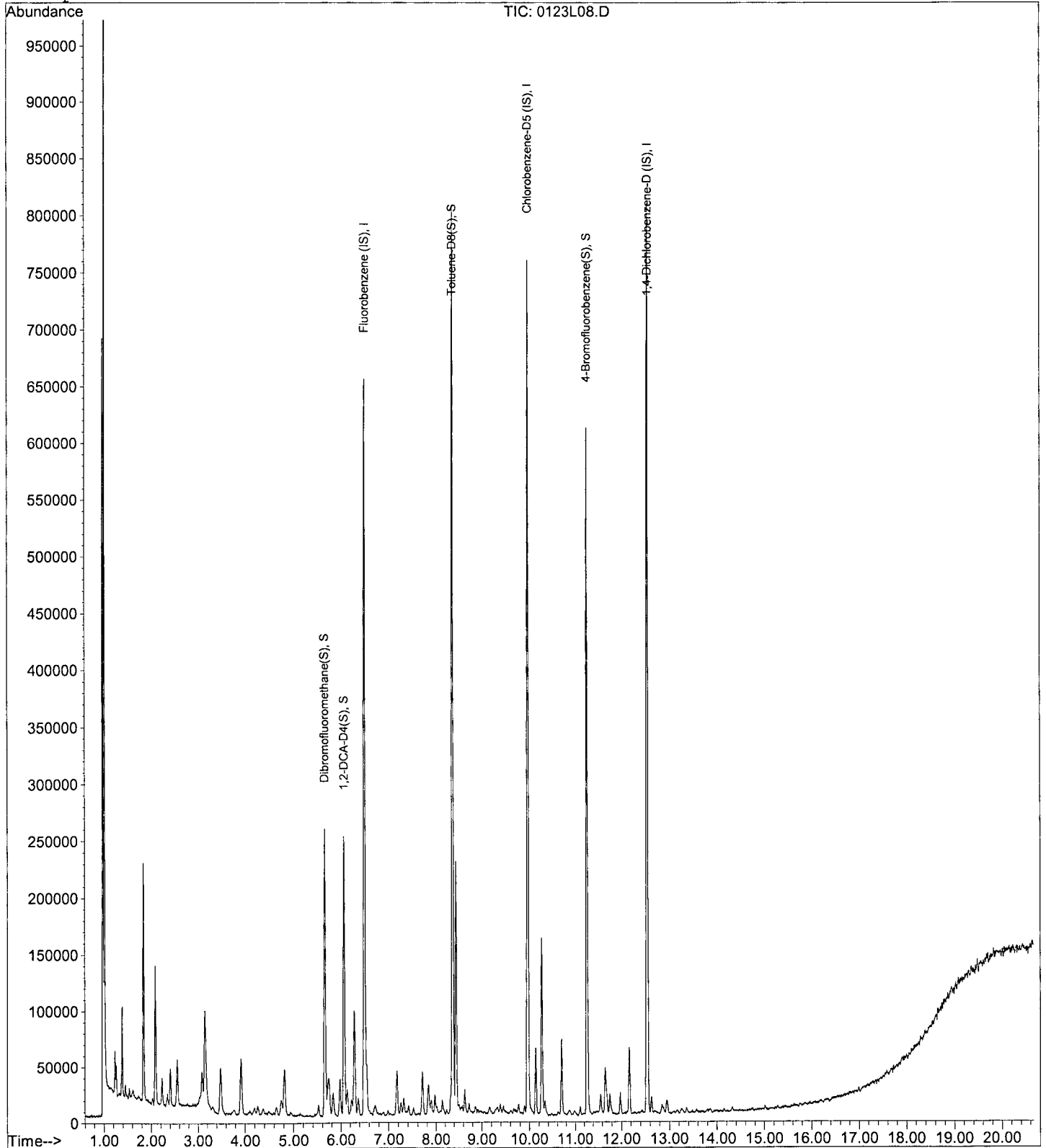
Data File : M:\LOKI\DATA\190121\0123L08.D  
Acq On : 23 Jan 19 10:46  
Sample : 190123A LCSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0123L08.D Vial: 7  
 Acq On : 23 Jan 19 10:46 Operator: PM,DG,SV,CMM,KV  
 Sample : 190123A LCSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 28 10:57 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	650544	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	754079	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	802705	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11238764m	289.9668	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0123L08.D  
 Acq On : 23 Jan 19 10:46  
 Sample : 190123A LCSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	312640	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	268096	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	140608	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	154217	26.1762	ppb	0.00
Spiked Amount	25.000		Recovery	=	104.704%	
3) 1,2-DCA-D4(S)	6.07	65	185751	27.0390	ppb	0.00
Spiked Amount	25.000		Recovery	=	108.156%	
5) Toluene-D8(S)	8.37	98	565205	25.8026	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.212%	
6) 4-Bromofluorobenzene(S)	11.27	95	225440	24.5337	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.136%	

Target Compounds Qvalue

Quantitation Report

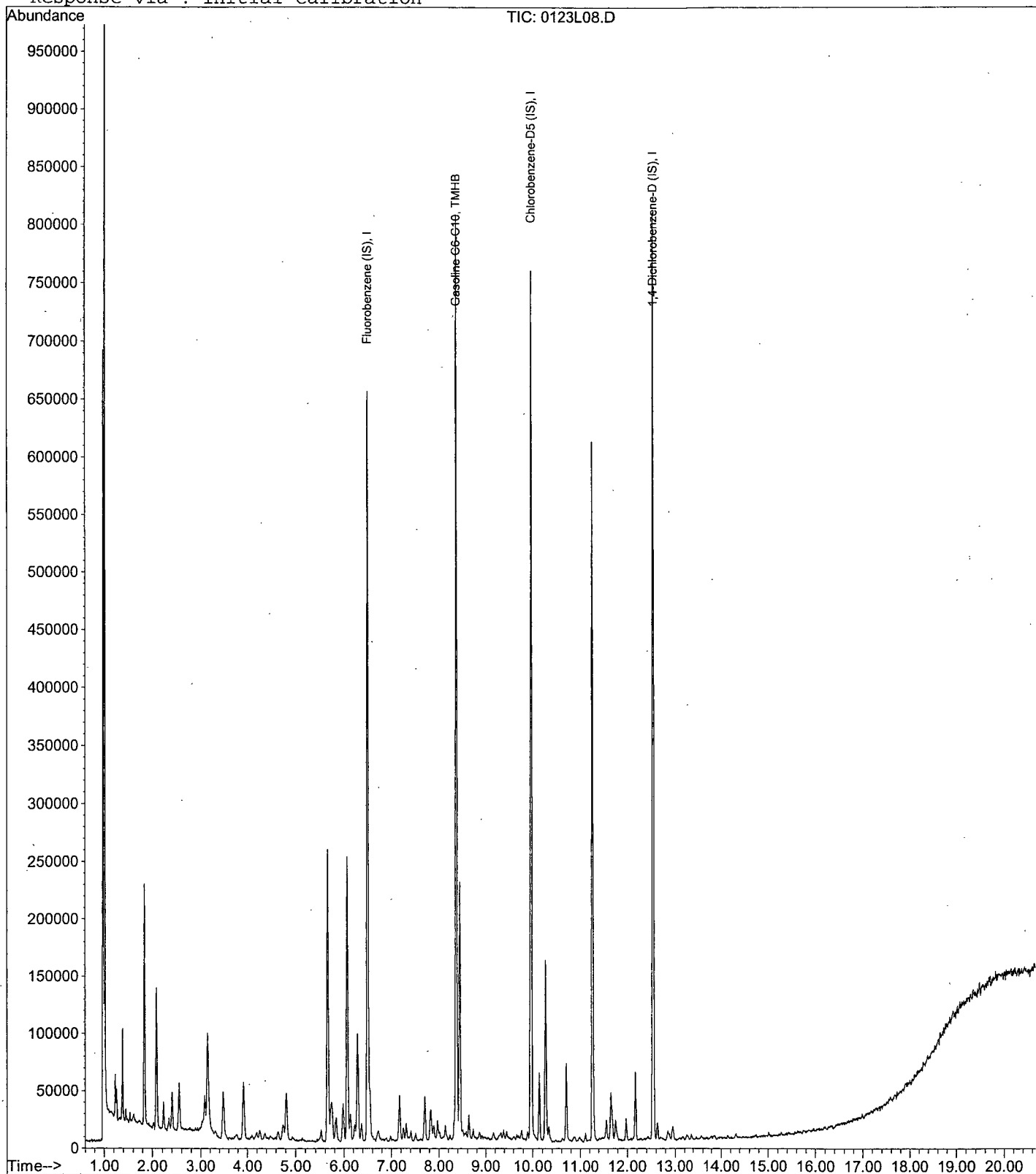
Data File : M:\LOKI\DATA\190121\0123L08.D  
Acq On : 23 Jan 19 10:46  
Sample : 190123A LCSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 10:57 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



<b>Gas Primary Working Standard</b>										
Prepared: 01/14/19						Prepared By (Initials): <u>CMM</u>				
Expires: 12/31/24										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39861	11/01/19	12/31/24	80uL	2mL	Methanol	2,000
<b>Gas Second Source (SS) Working Standard</b>										
Prepared: 01/14/19						Prepared By (Initials): <u>CMM</u>				
Expires: 10/31/20										
Methanol Lot No. 946										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (5,000ppm)	O2SI	020246-06	5,000	G34-326538-39193	01/14/20	10/31/20	800uL	2mL	Methanol	2,000

## Injection Log

Directory: M:\LOK\DATA\190121\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	6	0121L07.D	1	0.3ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 17:50
2	7	0121L08.D	1	0.5ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:18
3	8	0121L09.D	1	1.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:47
4	9	0121L10.D	1	2.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:16
5	10	0121L11.D	1	5.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:44
6	11	0121L12.D	1	10ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:13
7	12	0121L13.D	1	20ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:41
8	13	0121L14.D	1	40ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:10
9	14	0121L15.D	1	50ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:38
10	15	0121L16.D	1	100ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 22:07
11	2	0122L03.D	1	20ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 14:10
12	3	0122L04.D	1	50ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 14:39
13	4	0122L05.D	1	100ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 15:07
14	5	0122L06.D	1	300ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 15:36
15	6	0122L07.D	1	600ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 16:04
16	7	0122L08.D	1	800ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 16:33
17	8	0122L09.D	1	1000ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 17:01
18	11	0122L12.D	1	(SS)300ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 18:27
19	5	0123L06.D	1	190123A CCV 300ug/L	IS&S 11/8/18	23 Jan 19 9:49
20	6	0123L07.D	1	190123A LCS 300ug/L	IS&S 11/8/18	23 Jan 19 10:17
21	7	0123L08.D	1	190123A LCSD 300ug/L	IS&S 11/8/18	23 Jan 19 10:46
22	11	0123L12.D	1	190123A BLK	IS&S 11/8/18	23 Jan 19 12:40
23	20	0123L21.D	1	AZ85417W01	IS&S 11/8/18	23 Jan 19 16:57
24	21	0123L22.D	1	AZ85418W01	IS&S 11/8/18	23 Jan 19 17:26
25	22	0123L23.D	1	AZ85419W01	IS&S 11/8/18	23 Jan 19 17:55
26	23	0123L24.D	1	AZ85420W01	IS&S 11/8/18	23 Jan 19 18:23
27	26	0123L27.D	1	Ending CCV 300ug/L 1/23/19	IS&S 11/8/18	23 Jan 19 19:49



**ORGANICS**  
**Calibration Data**

RSK 175

RSK 175

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/20/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initials: \_\_\_\_\_

19012000.D    19012001.D    19012002.D    19012003.D    19012005.D    19012007.D    19012008.D

		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q
1	ATML	Methane	31727	15184	9929	15034	12111	11418	8746				14878	52	ATM	0.994	
2	ATML	Ethane	25078	13064	8590	12630	9815	9659	7285				12303	49	ATM	0.994	
3	ATML	Ethene	22488	11903	7914	11685	9157	8919	6685				11250	47	ATM	0.993	
4																	
5																	
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35																	

4.239405

Data File : G:\ROCKY\DATA\190120RS\19012000.D Vial: 1  
 Acq On : 20 Jan 19 11:58 Operator: cmm  
 Sample : RSK Std 1 01/20/19 Inst : 7890  
 Misc : 125uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:35 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:34:55 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

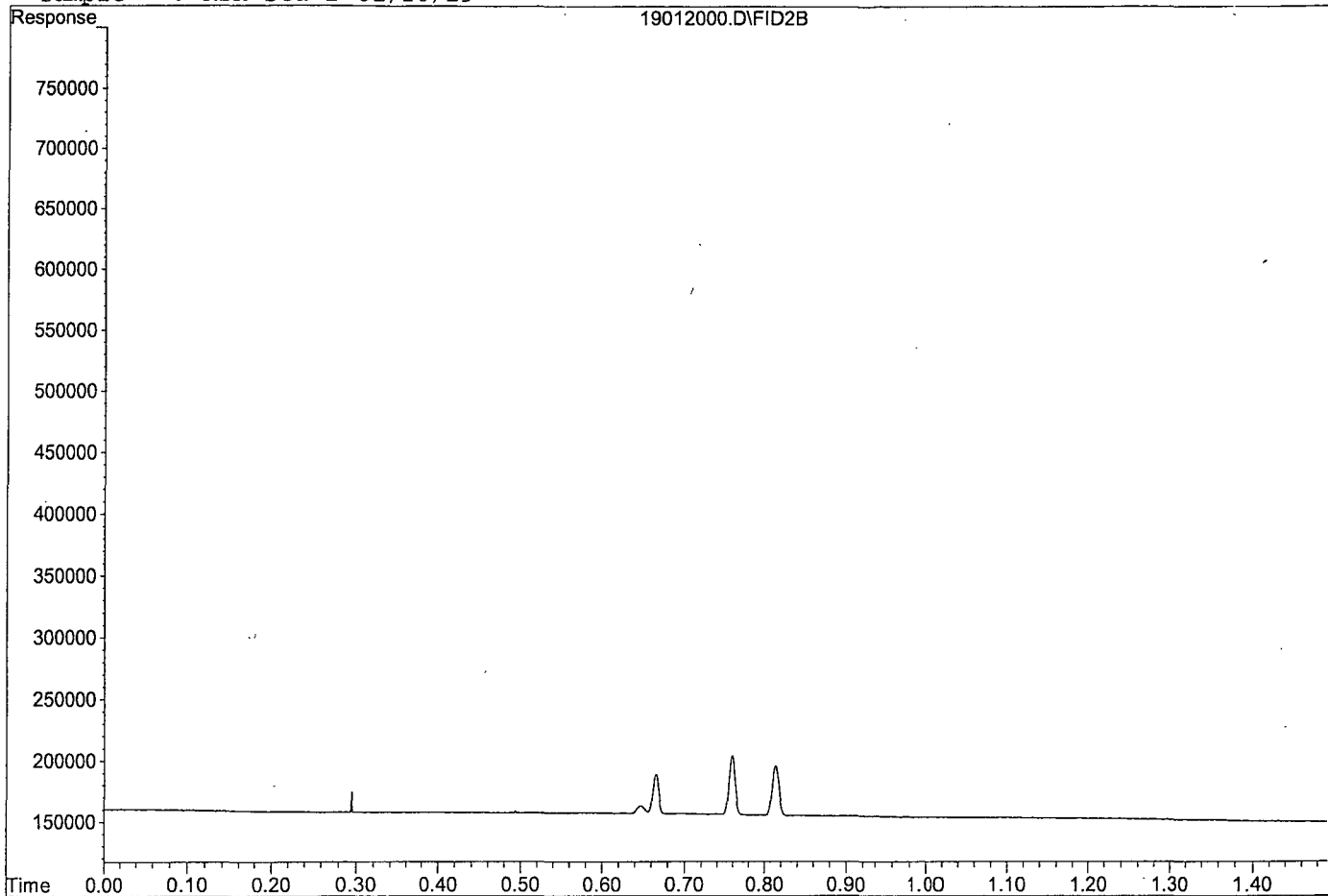
Compound	R.T.	Response	Conc	Units
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Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.67	32996	N.D.	ppb
2) ATM Ethane	0.76	49028	N.D.	ppb
3) ATM Ethene	0.81	41040	N.D.	ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012000.D  
Sample : RSK Std 1 01/20/19



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012001.D Vial: 2  
 Acq On : 20 Jan 19 12:02 Operator: cmm  
 Sample : RSK Std 2 01/20/19 Inst : 7890  
 Misc : 250uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:35 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:35:30 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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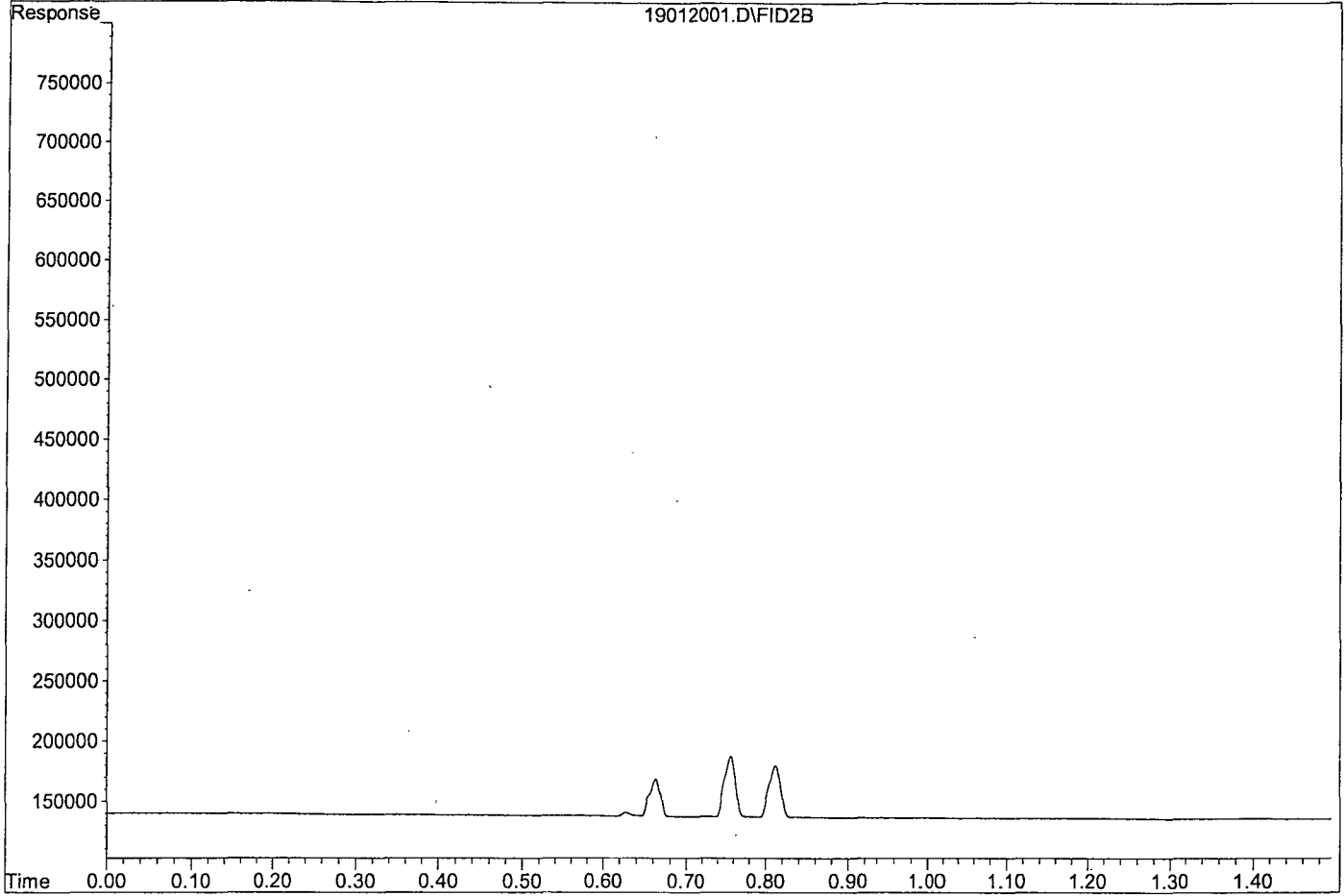
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.66	31584	N.D.	ppb
2) ATM Ethane	0.76	51016	N.D.	ppb
3) ATM Ethene	0.81	43446	N.D.	ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012001.D

Sample : RSK Std 2 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012002.D Vial: 3  
 Acq On : 20 Jan 19 12:04 Operator: cmm  
 Sample : RSK Std 3 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:36 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:01 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
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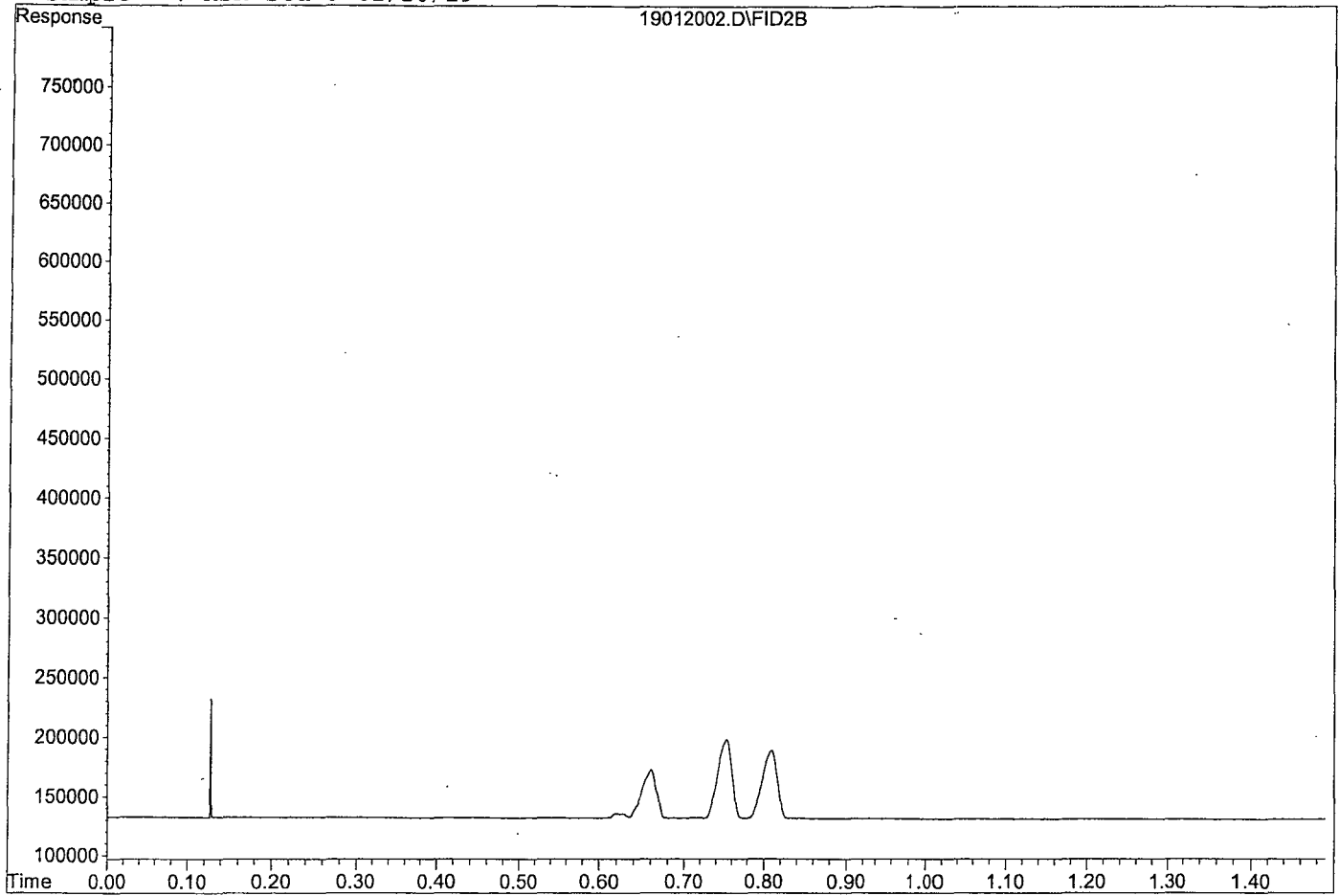
Target Compounds

Target Compounds	R.T.	Response	Conc Units
1) ATM Methane	0.66	41402	N.D. ppb
2) ATM Ethane	0.75	66998	N.D. ppb
3) ATM Ethene	0.81	57770	N.D. ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012002.D

Sample : RSK Std 3 01/20/19





Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012003.D Vial: 4  
Acq On : 20 Jan 19 12:07 Operator: cmm  
Sample : RSK Std 4 01/20/19 Inst : 7890  
Misc : Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Jan 20 12:36 2019 Quant Results File: RSK0120.RES

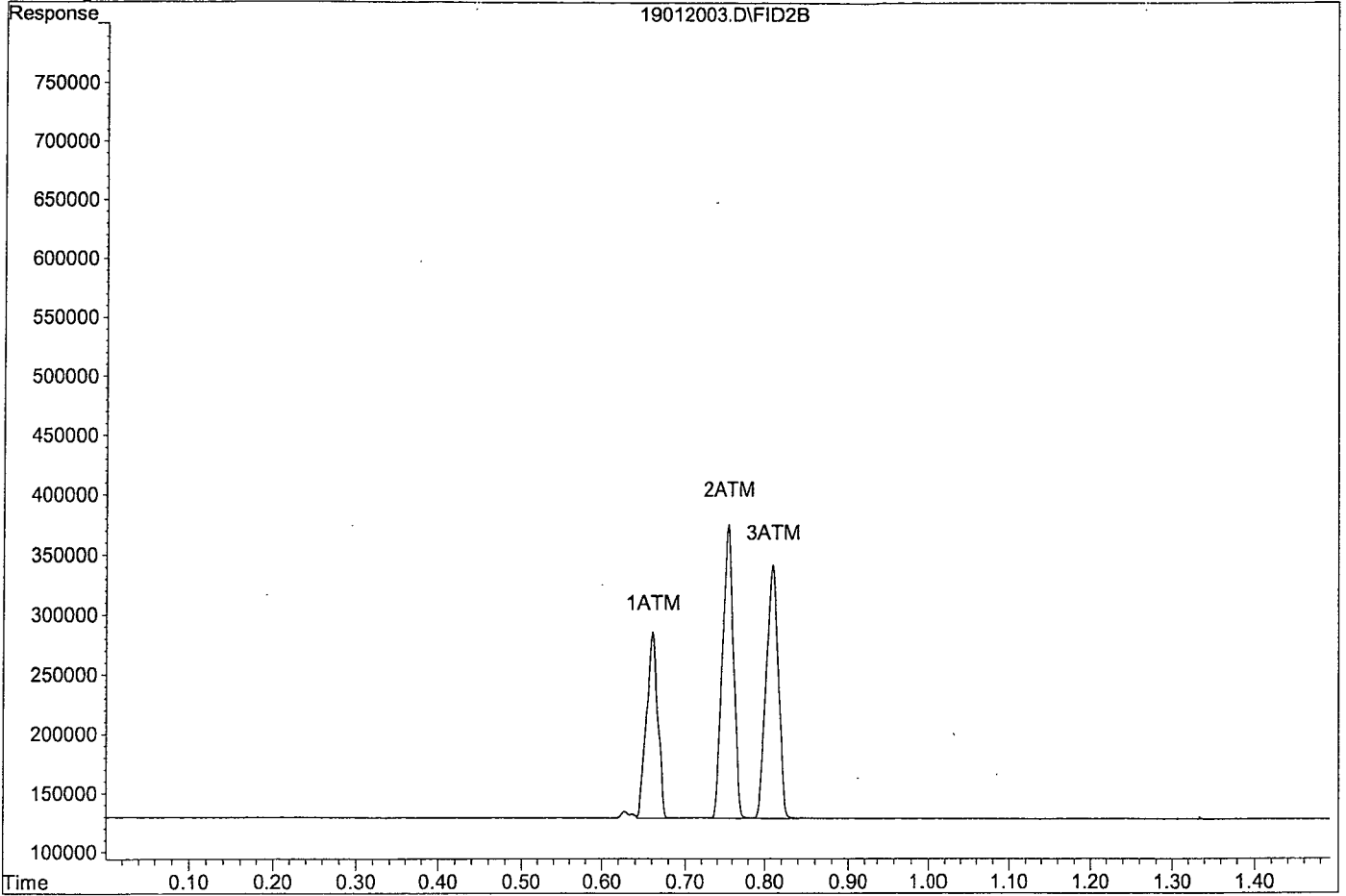
Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
Title : RSK 175  
Last Update : Sun Jan 20 12:36:29 2019  
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
Signal Phase : CARBOPACK  
Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.66	156731	17.650 ppb
2) ATM Ethane	0.75	246852	33.403 ppb
3) ATM Ethene	0.81	213014	30.693 ppb
Target Compounds			

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012003.D  
Sample : RSK Std 4 01/20/19



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012005.D Vial: 6  
 Acq On : 20 Jan 19 12:12 Operator: cmm  
 Sample : RSK Std 5 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:58 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

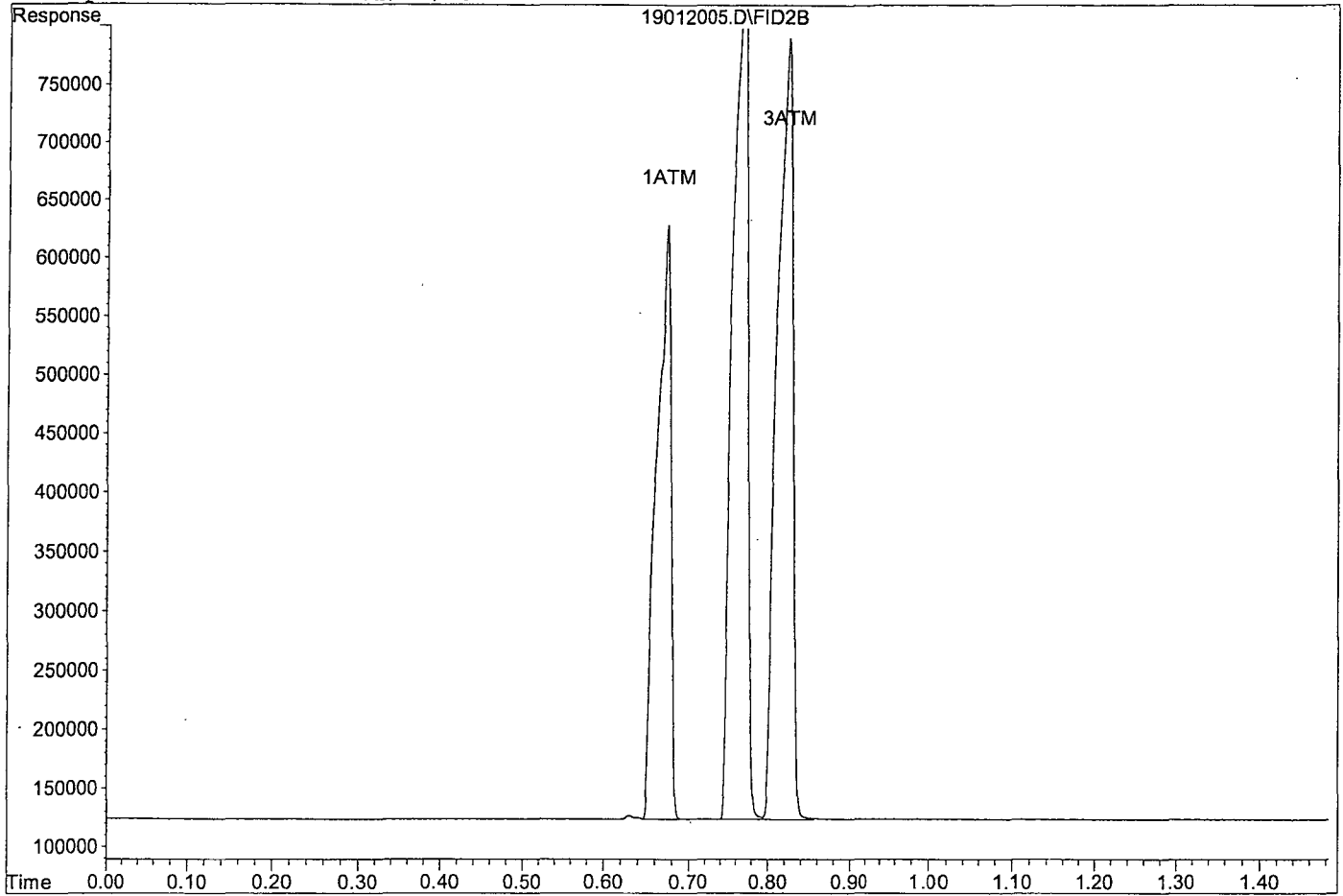
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	505025	97.832 ppb
2) ATM Ethane	0.77	767300	177.156 ppb
3) ATM Ethene	0.82	667740	167.580 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012005.D

Sample : RSK Std 5 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012007.D Vial: 8  
Acq On : 20 Jan 19 12:17 Operator: cmm  
Sample : RSK Std 6 01/20/19 Inst : 7890  
Misc : Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Jan 20 12:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
Title : RSK 175  
Last Update : Sun Jan 20 12:37:36 2019  
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
Signal Phase : CARBOPACK  
Signal Info :

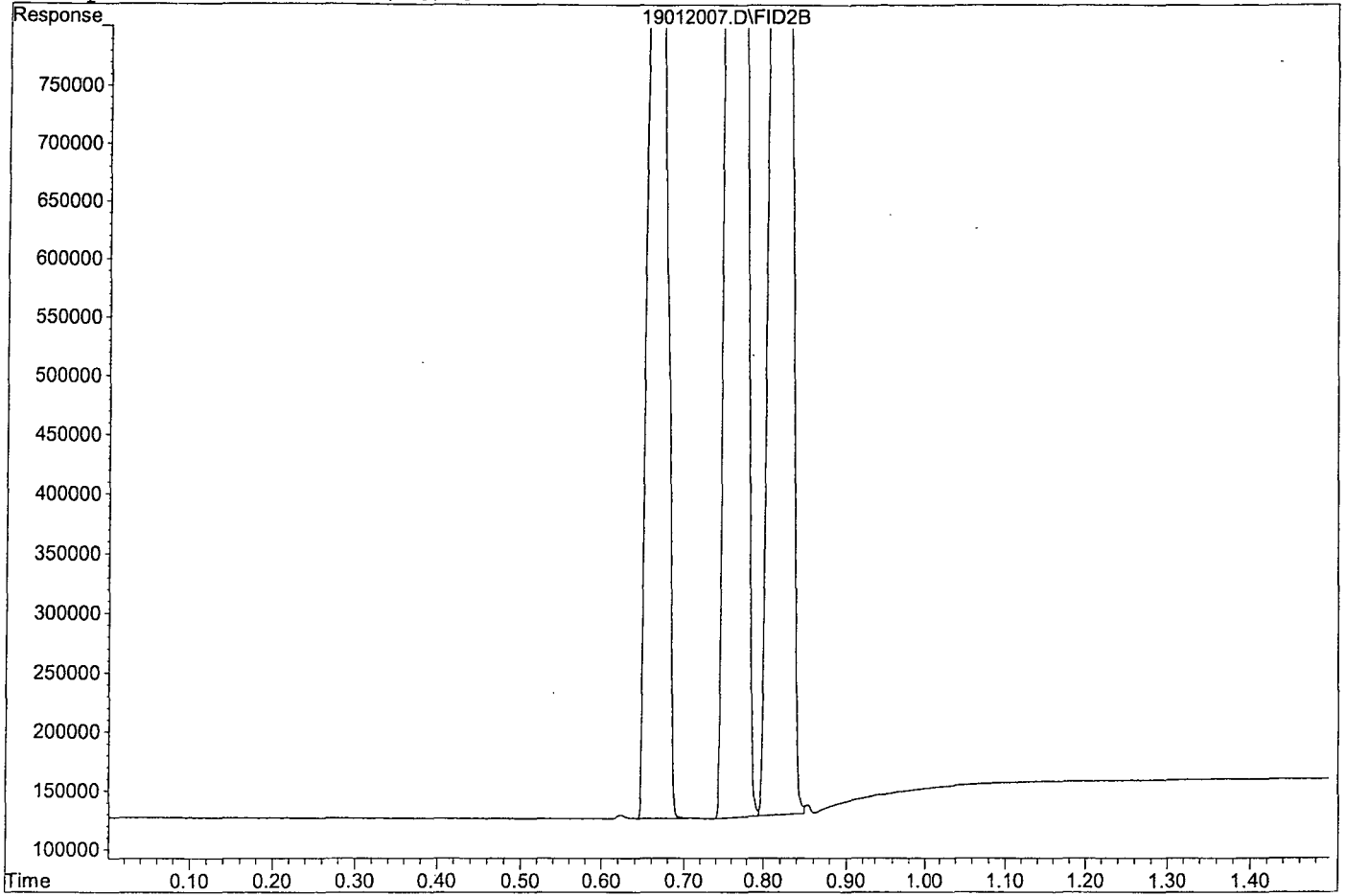
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	1190356	255.605 ppb
2) ATM Ethane	0.77	1887834	486.657 ppb
3) ATM Ethene	0.82	1625935	456.029 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012007.D

Sample : RSK Std 6 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012008.D Vial: 9  
 Acq On : 20 Jan 19 12:20 Operator: cmm  
 Sample : RSK Std 7 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:38 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:38:08 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

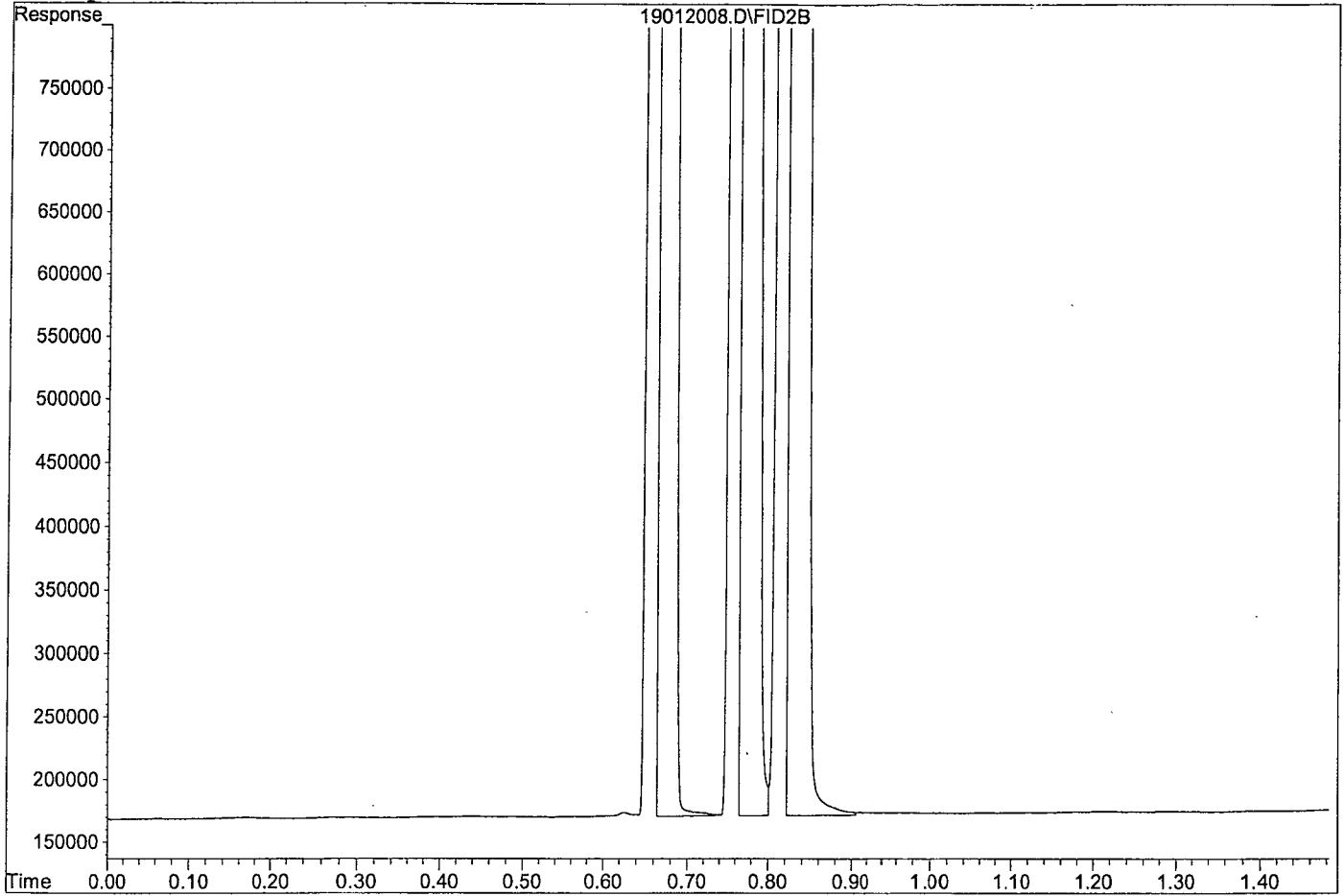
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	3646926	821.142 ppb
2) ATM Ethane	0.77	5694692	1538.144 ppb
3) ATM Ethene	0.83	4874710	1434.020 ppb

Target Compounds

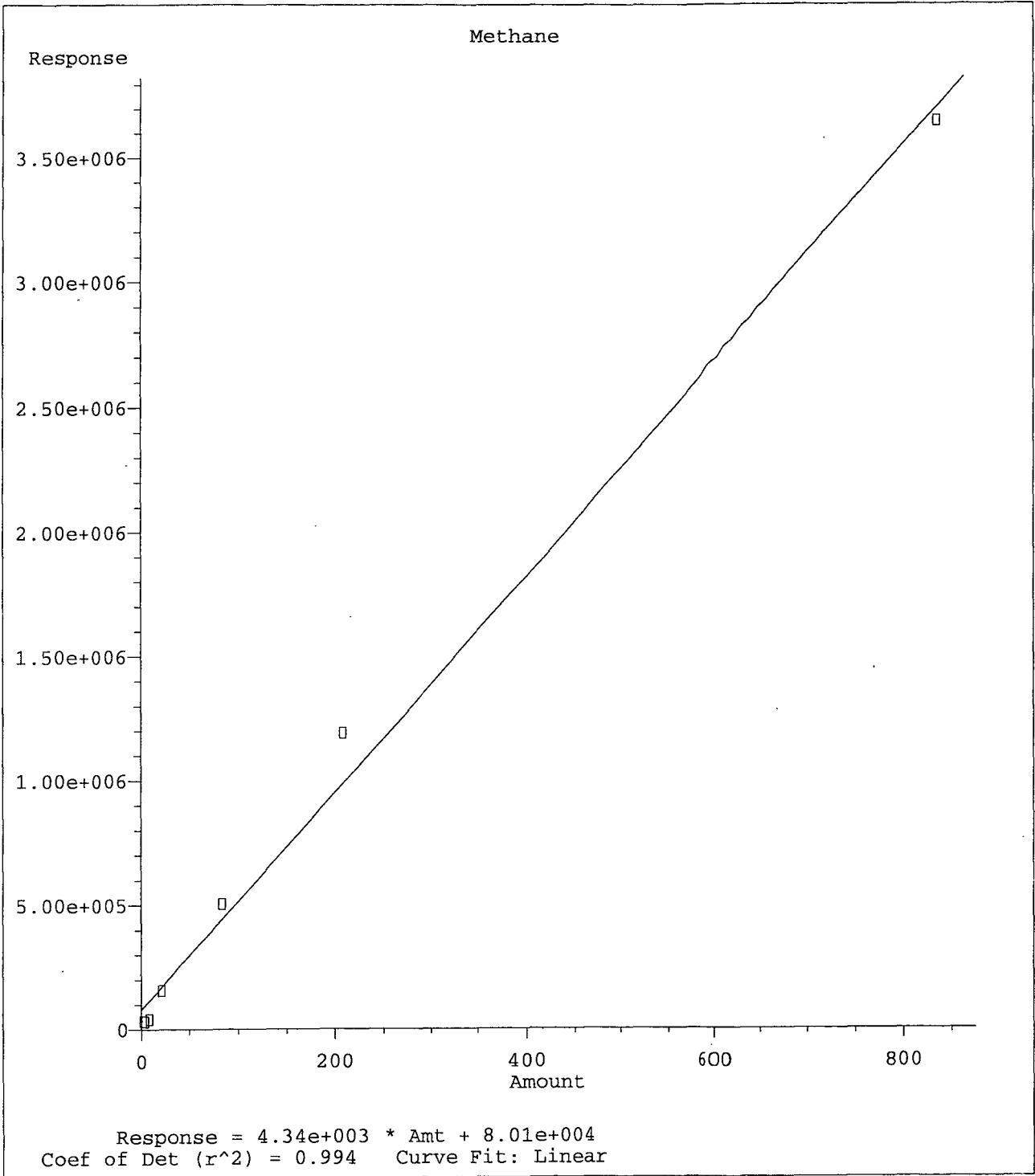
Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012008.D

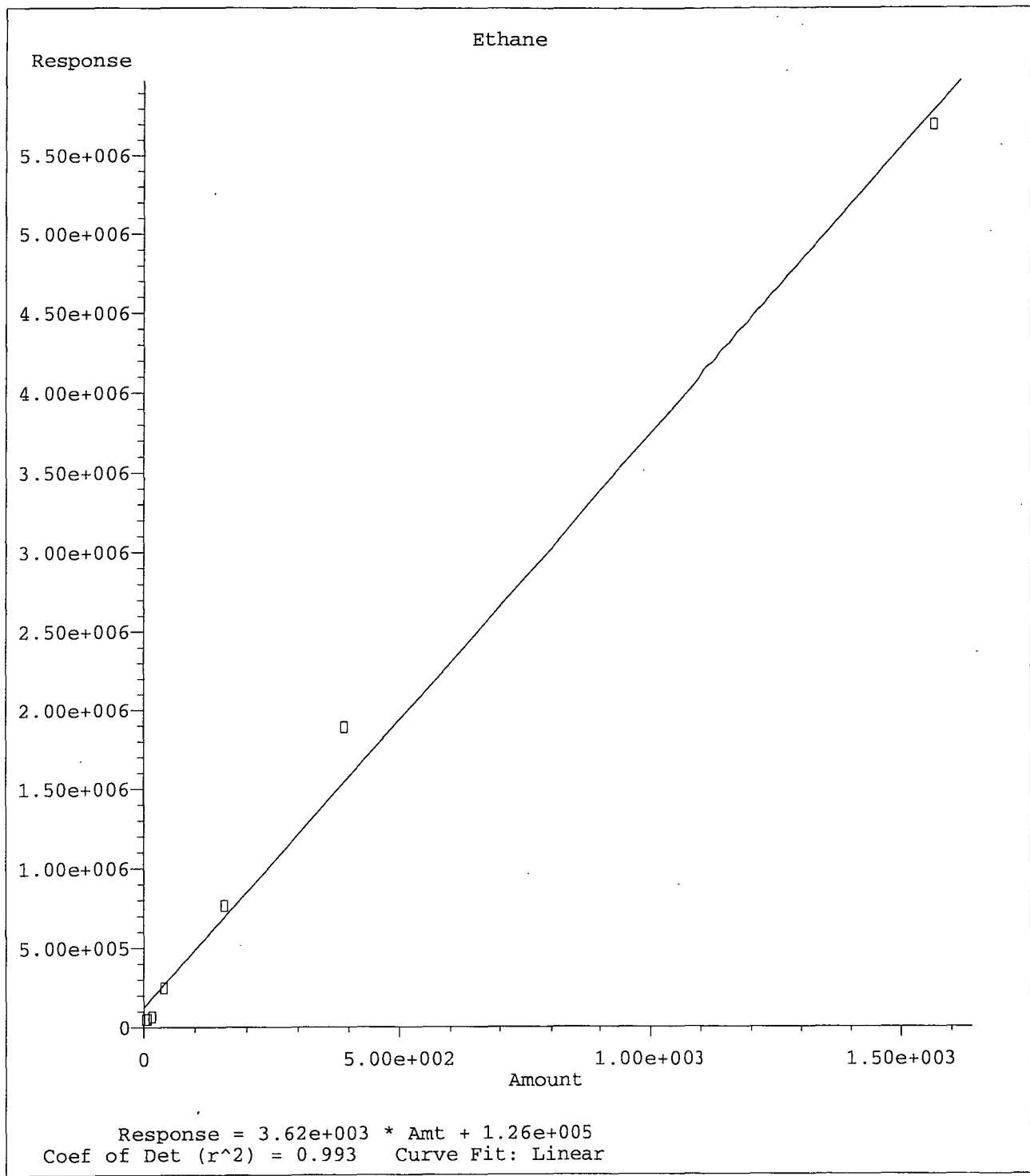
Sample : RSK Std 7 01/20/19



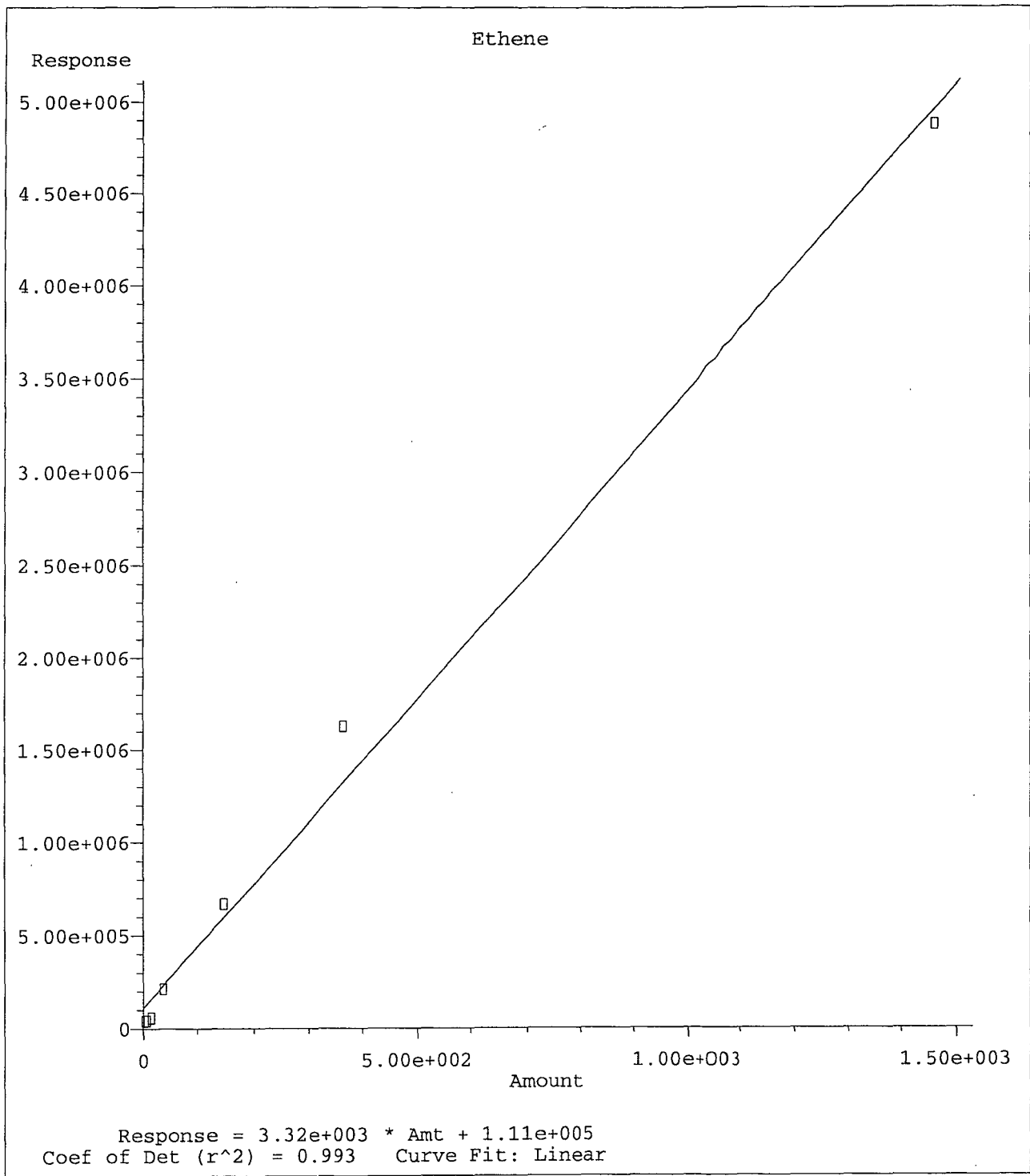




Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:32:56 2019



Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
 Calibration Table Last Updated: Sun Jan 20 12:32:56 2019



Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:33:08 2019

RSK 175  
RSK 175

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/20/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initial Cal. Date: 01/20/19

Data File: 19012010.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	14878	10667	28	ATML	0.69
2	ATML	Ethane	12303	9330	24	ATML	6.6
3	ATML	Ethene	11250	8592	24	ATML	6.4
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Average

25.3

Data File : G:\ROCKY\DATA\190120RS\19012010.D Vial: 11  
 Acq On : 20 Jan 19 12:39 Operator: cmm  
 Sample : SS RSK Std 5 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:42 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:42:01 2019  
 Response via : Multiple Level Calibration

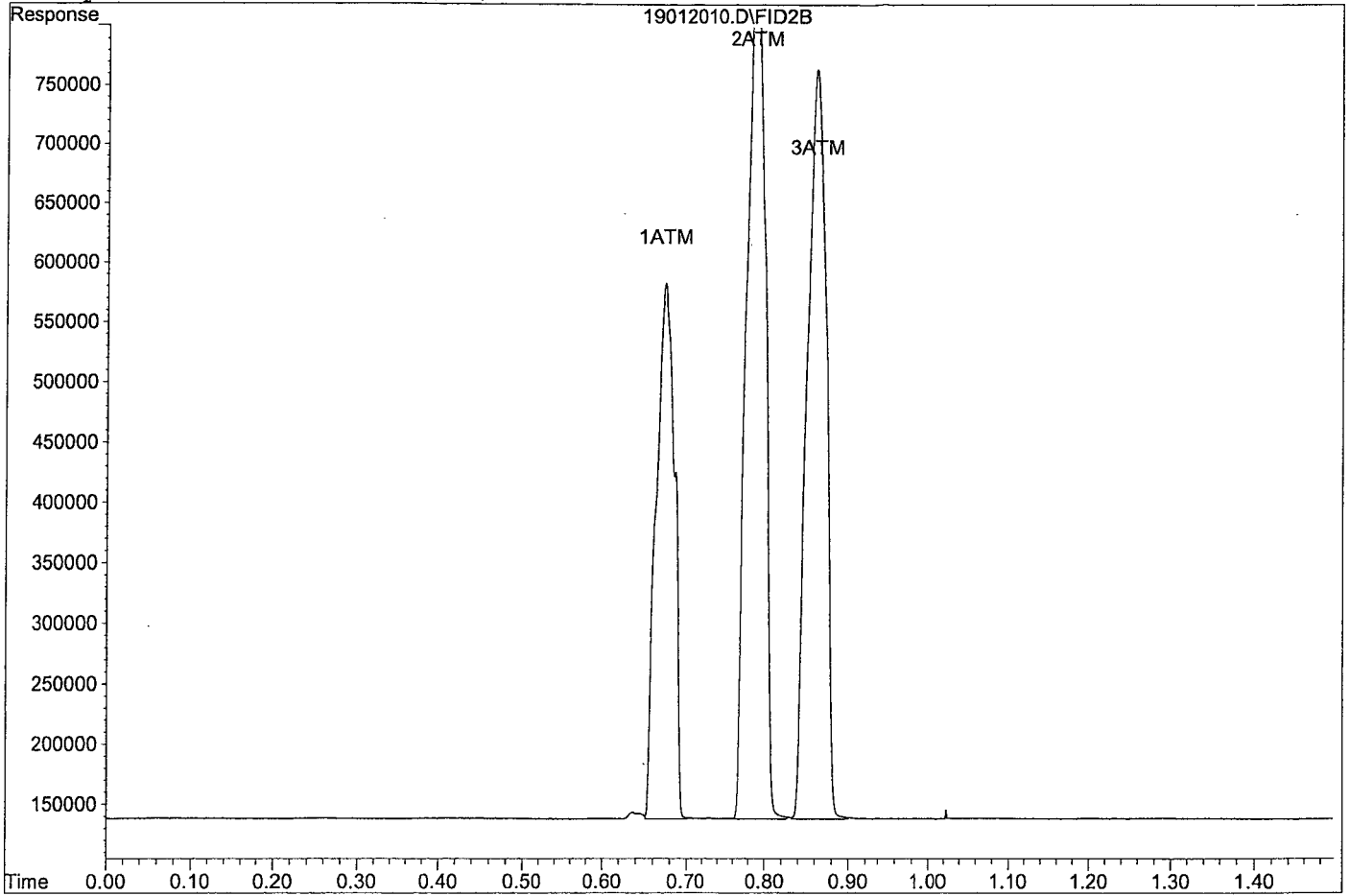
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	444826	83.973 ppb
2) ATM Ethane	0.79	729370	166.679 ppb
3) ATM Ethene	0.86	626499	155.165 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012010.D  
Sample : SS RSK Std 5 01/20/19



RSK 175  
RSK 175

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: 7890  
Initial Cal. Date: 01/20/19  
Data File: 19012535.D

	Compound	MEAN	CCRF	%D		%Drift
1	ATML Methane	14878	9838	34	ATML	8.9
2	ATML Ethane	12303	8508	31	ATML	4.7
3	ATML Ethene	11250	7538	33	ATML	9.5
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

32.7

Data File : G:\ROCKY\DATA\190120RS\19012535.D Vial: 30  
 Acq On : 25 Jan 19 11:41 Operator: cmm  
 Sample : 190125B LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 11:43 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.68	410235	76.010 ppb
2) ATM Ethane	0.79	665115	148.931 ppb
3) ATM Ethene	0.87	549670	132.037 ppb

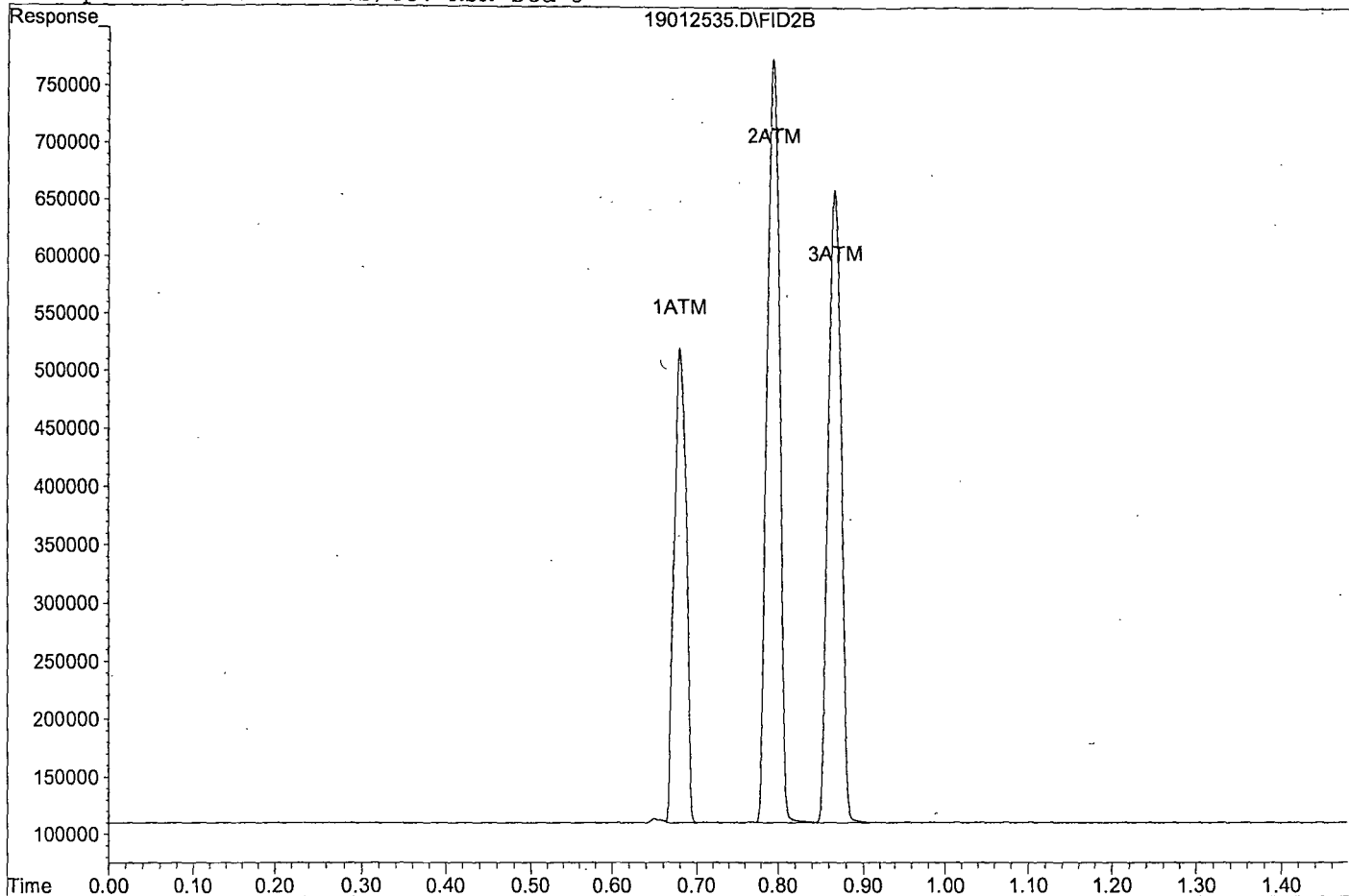
Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012535.D

Sample : 190125B LCS/CCV RSK Std 5



RSK 175  
RSK 175

Form 7

Ending Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: 7890  
Initial Cal. Date: 01/20/19  
Data File: 19012544.D

	Compound	MEAN	CCRF	%D	%Drift
1	ATML Methane	14878	9436	37	ATML 13
2	ATML Ethane	12303	7983	35	ATML 12
3	ATML Ethene	11250	6960	38	ATML 18
4					
5					
6					
7					
8					
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10					
11					
12					
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32					
33					
34					
35					
36					
37					
38					
39					
40					

Average

36.7

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012544.D Vial: 39  
Acq On : 25 Jan 19 12:03 Operator: cmm  
Sample : Ending CCV RSK Std 5 01/25/19 Inst : 7890  
Misc : Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Jan 25 12:12 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
Title : RSK 175  
Last Update : Fri Jan 25 11:43:39 2019  
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
Signal Phase : CARBOPACK  
Signal Info :

Compound	R.T.	Response	Conc Units
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Target Compounds

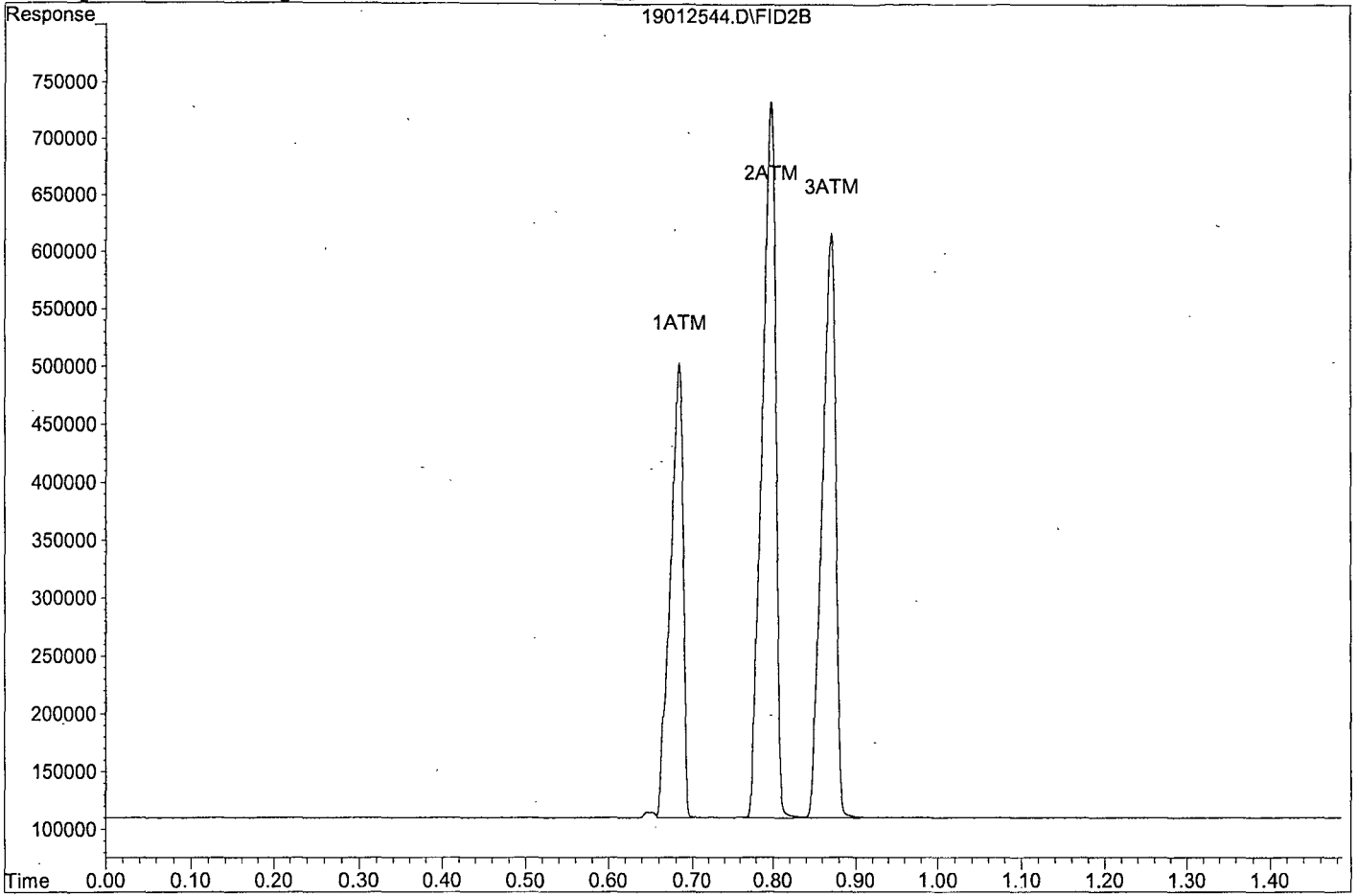
1) ATM Methane	0.68	393479	72.152 ppb
2) ATM Ethane	0.80	624104	137.603 ppb
3) ATM Ethene	0.87	507552	119.358 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012544.D

Sample : Ending CCV RSK Std 5 01/25/19



**ORGANICS**  
**Raw Data**

Quantitation Report (QT Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012540.D Vial: 35  
 Acq On : 25 Jan 19 11:54 Operator: cmm  
 Sample : AZ85417W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 11:58 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

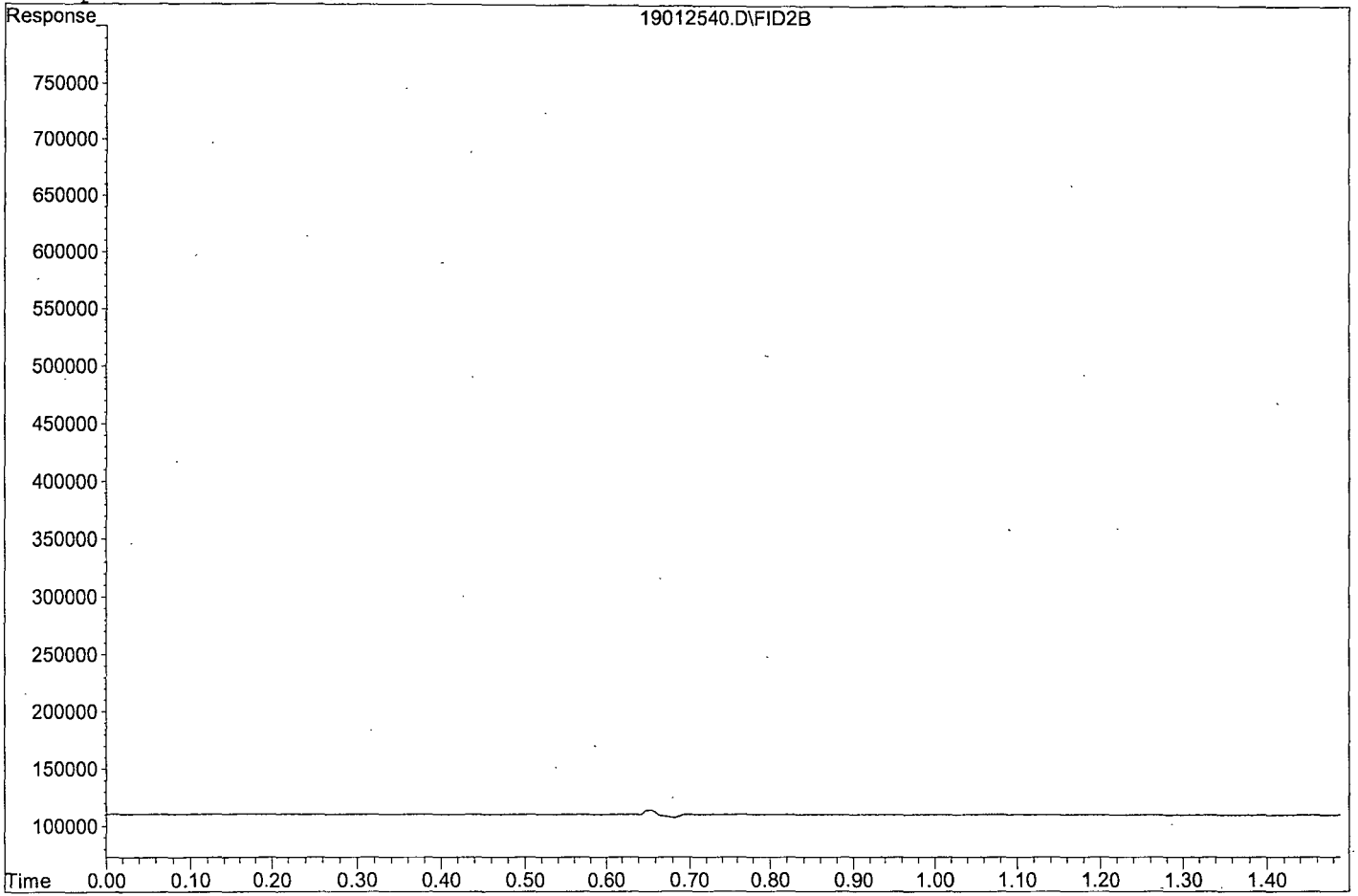
Target Compounds

1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012540.D

Sample : AZ85417W04



Data File : G:\ROCKY\DATA\190120RS\19012541.D Vial: 36  
 Acq On : 25 Jan 19 11:56 Operator: cmm  
 Sample : AZ85418W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 11:59 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
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Target Compounds

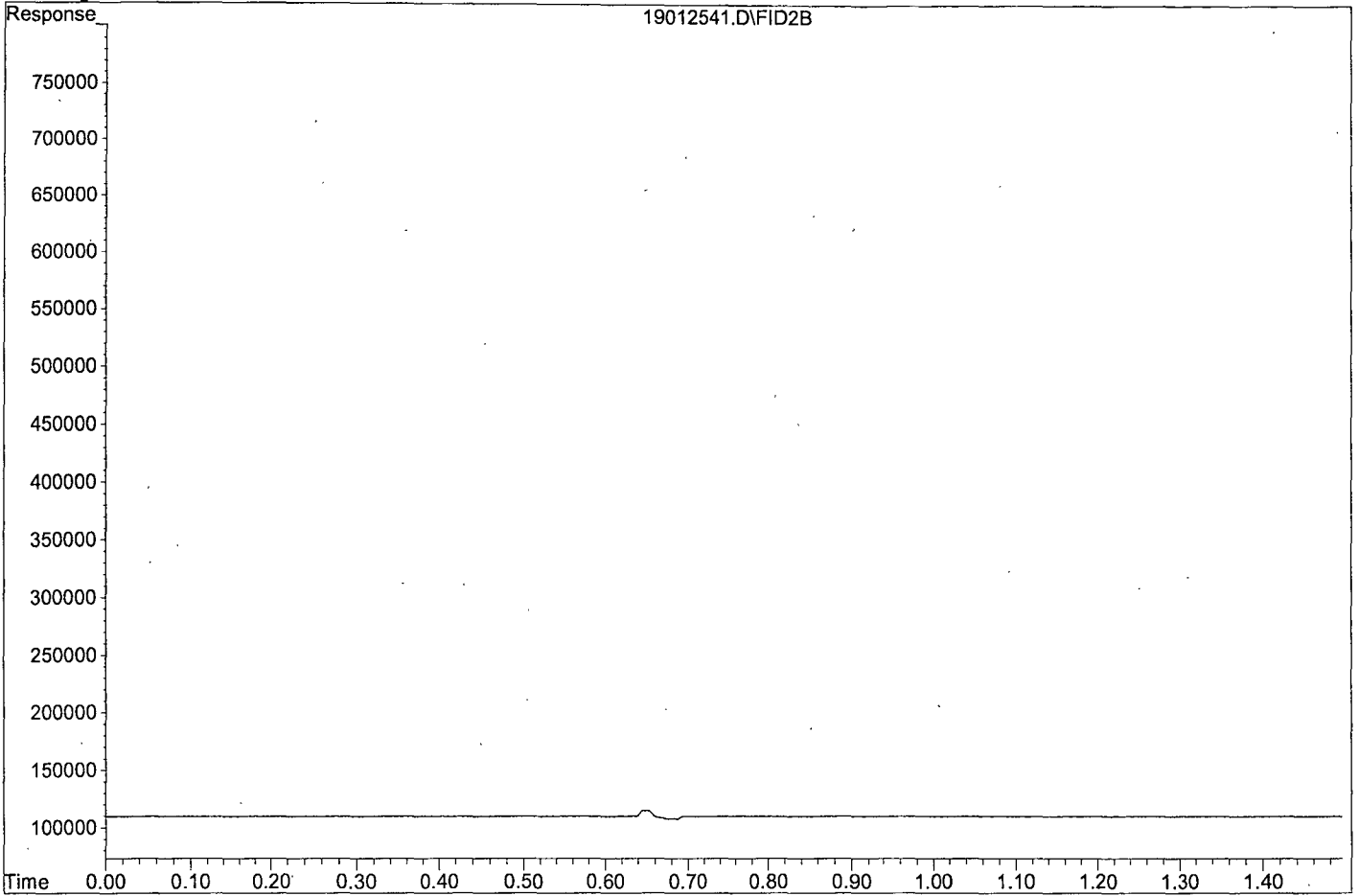
Target Compounds	R.T.	Response	Conc Units
1) ATM Methane	0.00	0	N.D. ppb d
2) ATM Ethane	0.00	0	N.D. ppb d
3) ATM Ethene	0.00	0	N.D. ppb d



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012541.D

Sample : AZ85418W04



Data File : G:\ROCKY\DATA\190120RS\19012542.D Vial: 37  
 Acq On : 25 Jan 19 11:59 Operator: cmm  
 Sample : AZ85419W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 12:02 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

Target Compounds

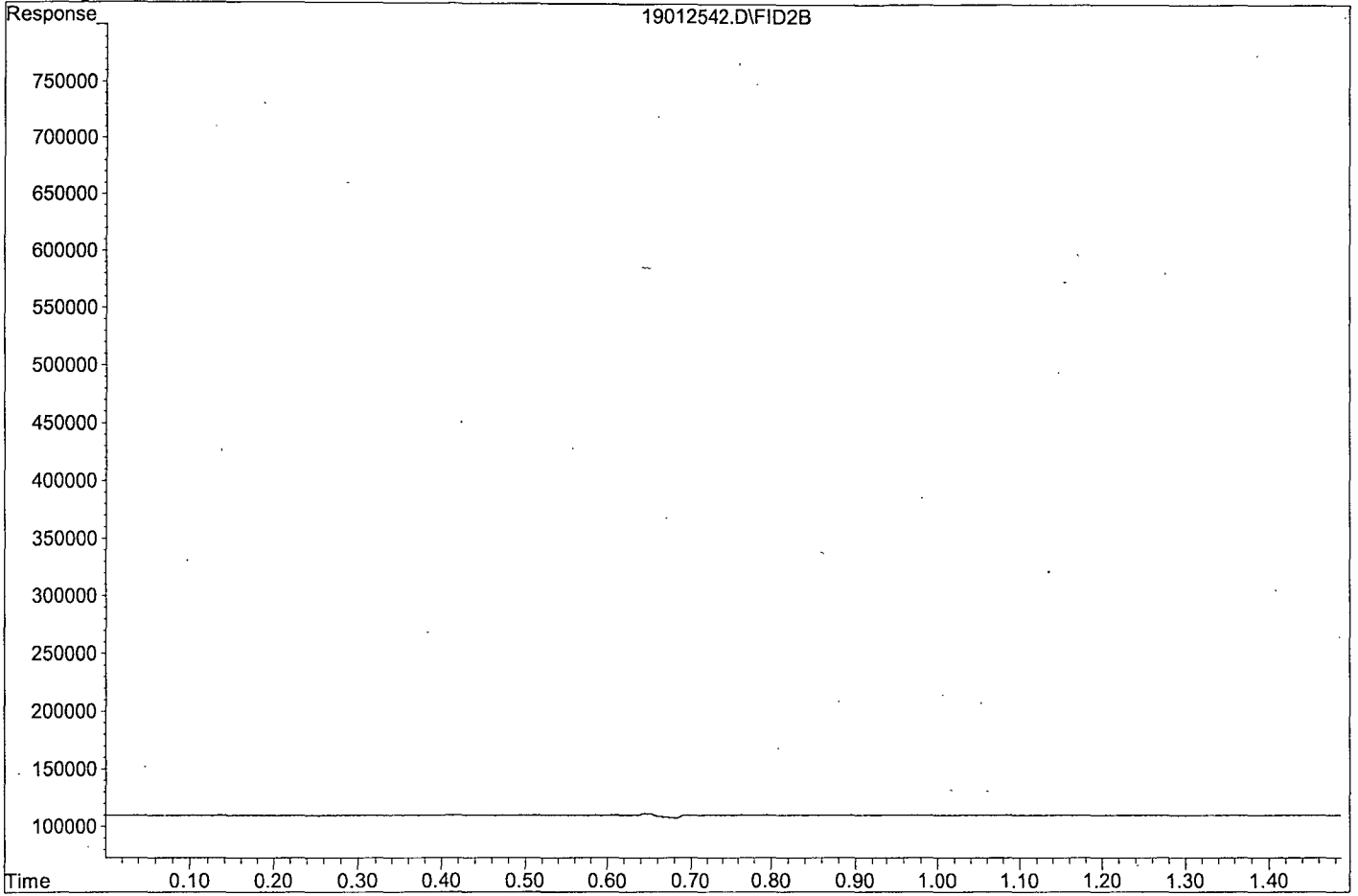
Target Compounds

1) ATM Methane	0.00	0	N.D. ppb d
2) ATM Ethane	0.00	0	N.D. ppb d
3) ATM Ethene	0.00	0	N.D. ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012542.D

Sample : AZ85419W04



Quantitation Report (QT Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012543.D Vial: 38  
 Acq On : 25 Jan 19 12:01 Operator: cmm  
 Sample : AZ85420W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 12:04 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

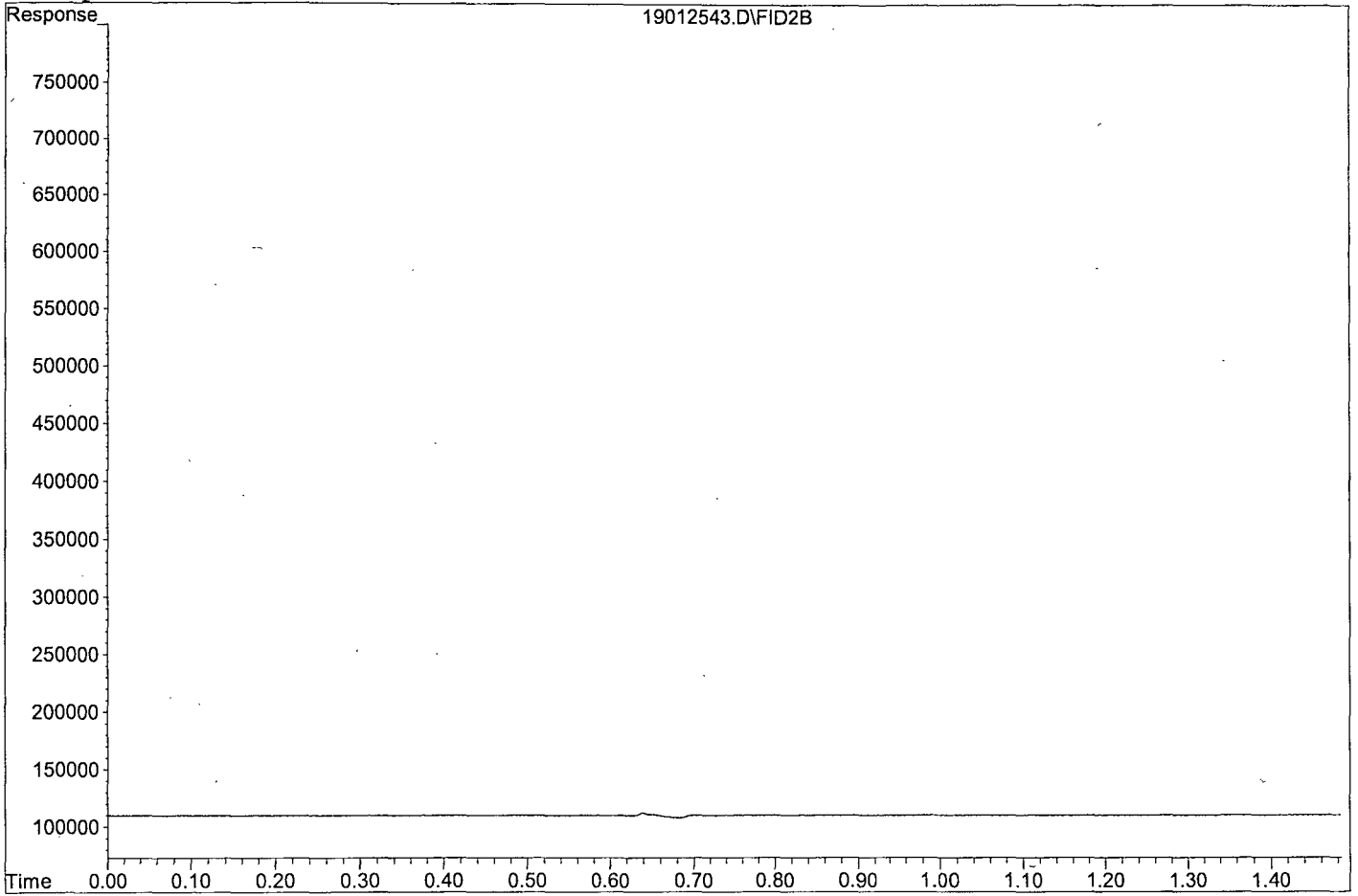
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012543.D

Sample : AZ85420W04



Data File : G:\ROCKY\DATA\190120RS\19012539.D Vial: 34  
 Acq On : 25 Jan 19 11:52 Operator: cmm  
 Sample : 190125B Blk Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 11:55 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

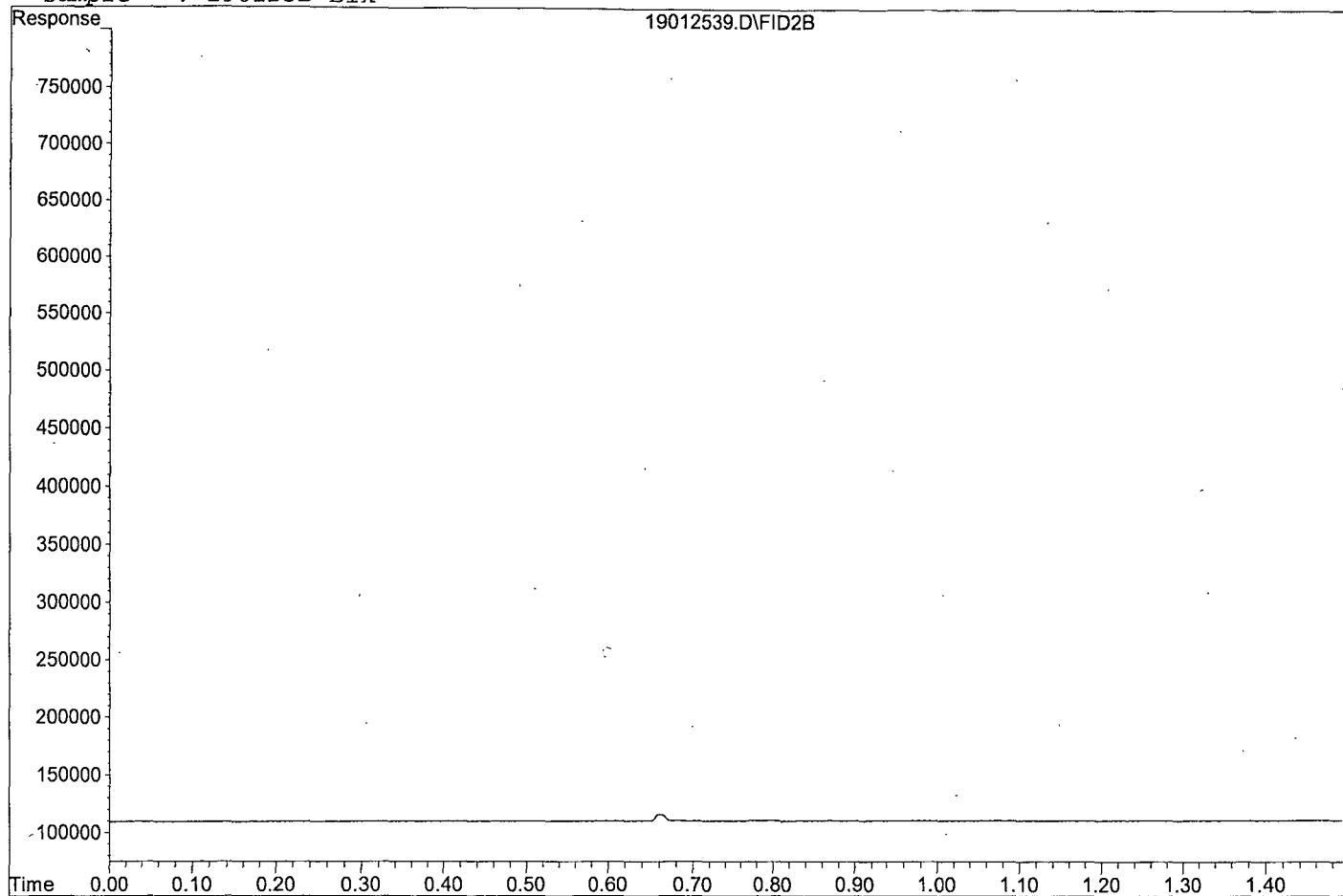
Target Compounds

1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012539.D

Sample : 190125B Blk



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012535.D Vial: 30  
Acq On : 25 Jan 19 11:41 Operator: cmm  
Sample : 190125B LCS/CCV RSK Std 5 Inst : 7890  
Misc : Multiplr: 1.00  
IntFile : autoint1.e  
Quant Time: Jan 25 11:43 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
Title : RSK 175  
Last Update : Fri Jan 25 11:43:39 2019  
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
Signal Phase : CARBOPACK  
Signal Info :

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

-----  
Target Compounds

1) ATM Methane	0.68	410235	76.010 ppb
2) ATM Ethane	0.79	665115	148.931 ppb
3) ATM Ethene	0.87	549670	132.037 ppb

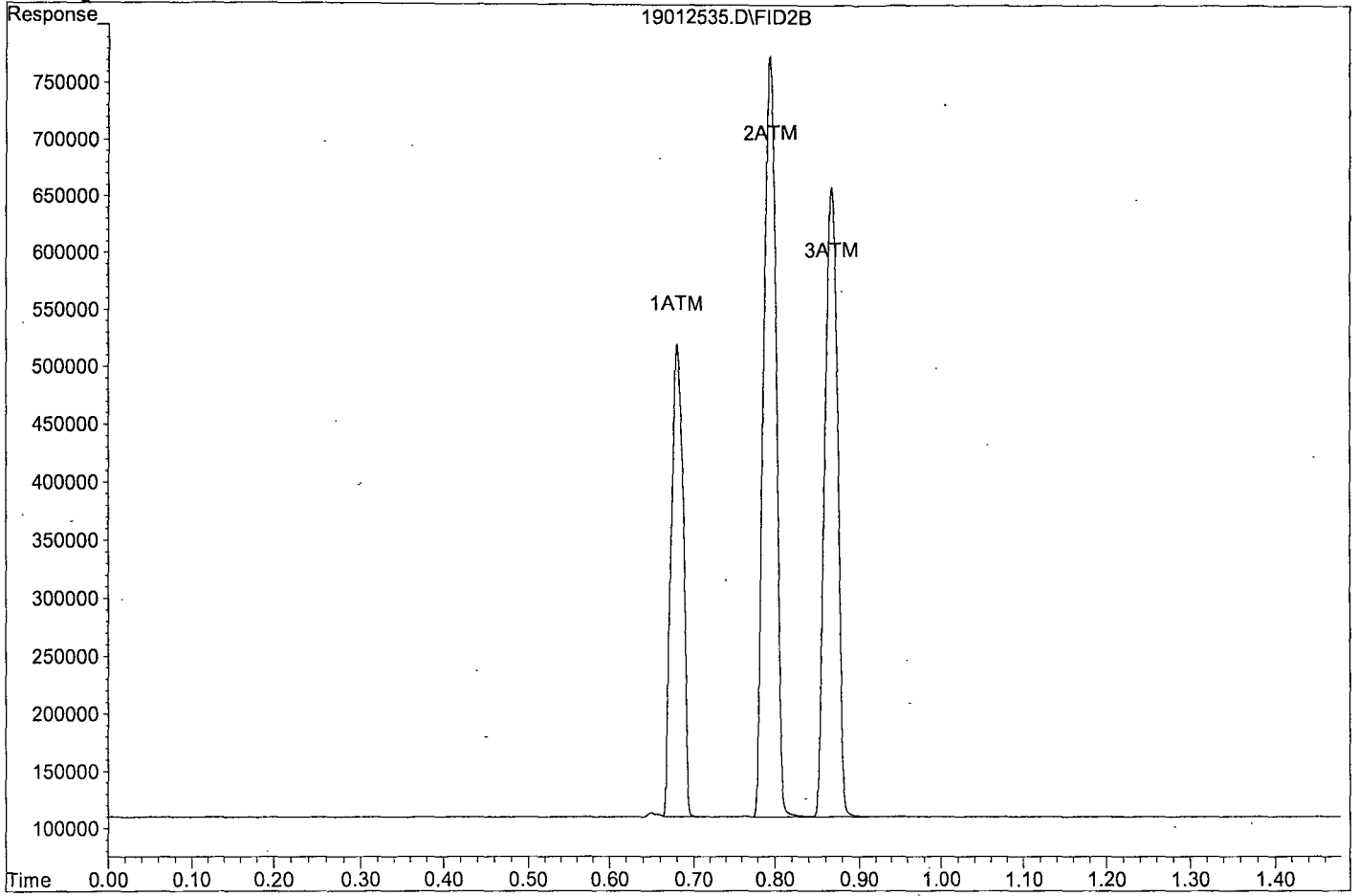
Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012535.D

Sample : 190125B LCS/CCV RSK Std 5



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012538.D Vial: 33  
 Acq On : 25 Jan 19 11:50 Operator: cmm  
 Sample : 190125B LCSD RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 25 11:52 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Fri Jan 25 11:43:39 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

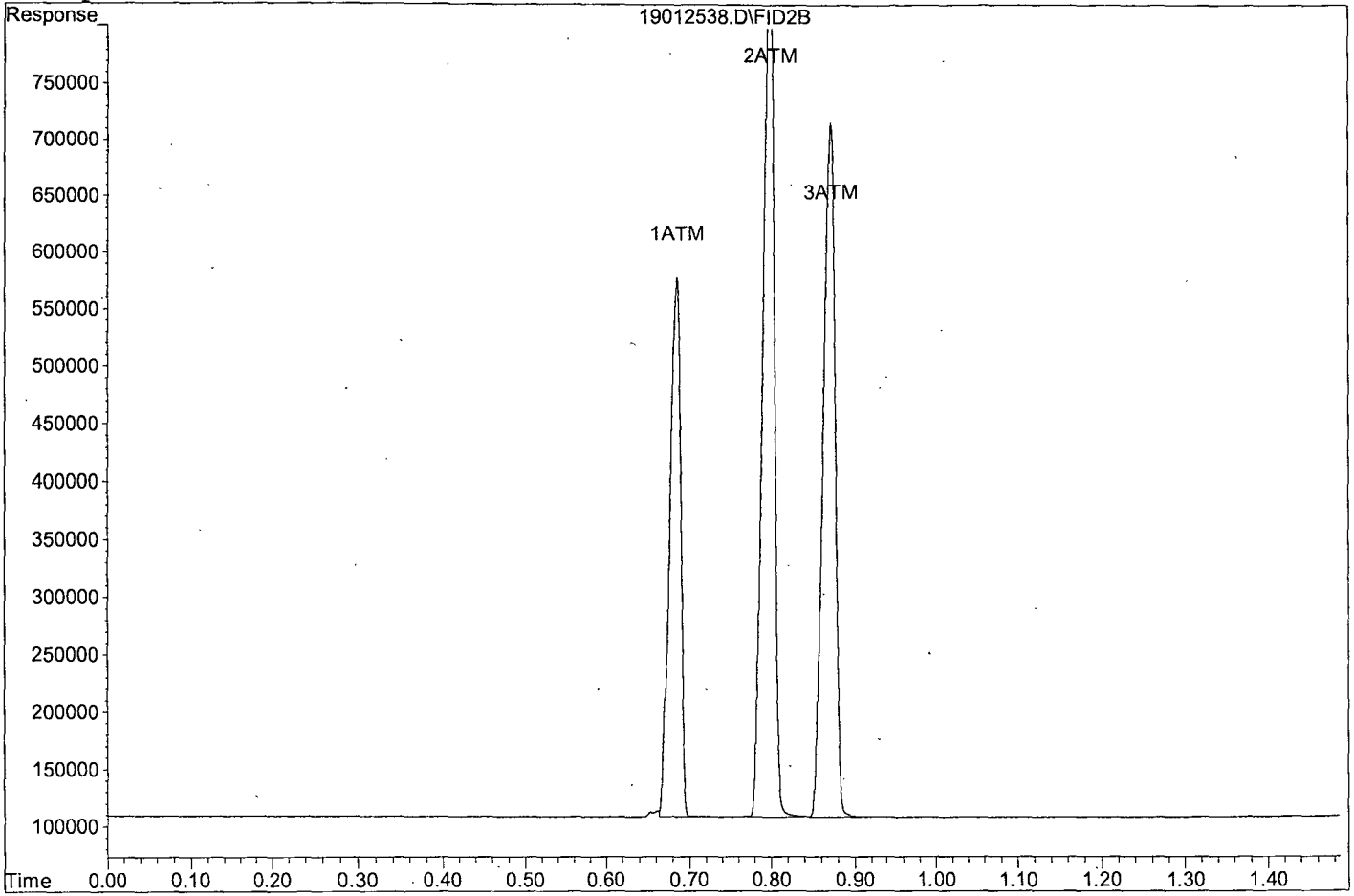
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.69	469746	89.710 ppb
2) ATM Ethane	0.80	742603	170.334 ppb
3) ATM Ethene	0.87	607744	149.519 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012538.D

Sample : 190125B LCSD RSK Std 5



**Primary Source Stock Standard 10,000ppmV**

Manufacturer Exp Date 6-19-18

RSK Gas Mix (Scott Specialty Gas) Cat.# 0104E40028'4, Lot # 170PLU5SPC06L-35410

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

**RSK Calibration Curve (prepared in 1.0 L Tedlar Bags at room temp)****Expires 02/24/18****CMM 01/23/18**

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC 06L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL

**Second Source Stock Standard 10,000ppmV**

Manufacturer Exp date 7-8-2017 (lot exp extension to 1/8/18)\*

RSK Gas Mix (Scott Specialty Gas) Cat.# 23452, Lot # 164PLU4SPC05L-34436

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

\*(verified with acceptable second source exp 6/19/18. OK per APPL QAU - sd)

**Second Source****Expires 02/23/18****CMM 01/23/18**

2.0mL of SS from tank into 980 mL Nitrogen

final conc: 13.3ug/L Methane, 25.0 ug/L Ethane, and 23.3 ug/L Ethene

**CCV/LCS/LCSD****CMM 01/23/18**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

**AZ66793 MS/MSD****CMM 01/23/18**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

## Injection Log

Directory: G:\ROCKY\DATA\190120RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	19012000.D	1	RSK Std 1 01/20/19	125uL from RSK Std 3	20 Jan 19 11:58
2	2	19012001.D	1	RSK Std 2 01/20/19	250uL from RSK Std 3	20 Jan 19 12:02
3	3	19012002.D	1	RSK Std 3 01/20/19		20 Jan 19 12:04
4	4	19012003.D	1	RSK Std 4 01/20/19		20 Jan 19 12:07
5	6	19012005.D	1	RSK Std 5 01/20/19		20 Jan 19 12:12
6	8	19012007.D	1	RSK Std 6 01/20/19		20 Jan 19 12:17
7	9	19012008.D	1	RSK Std 7 01/20/19		20 Jan 19 12:20
8	11	19012010.D	1	SS RSK Std 5 01/20/19		20 Jan 19 12:39
9	30	19012535.D	1	190125B LCS/CCV RSK Std 5		25 Jan 19 11:41
10	33	19012538.D	1	190125B LCSD RSK Std 5		25 Jan 19 11:50
11	34	19012539.D	1	190125B Blk		25 Jan 19 11:52
12	35	19012540.D	1	AZ85417W04		25 Jan 19 11:54
13	36	19012541.D	1	AZ85418W04		25 Jan 19 11:56
14	37	19012542.D	1	AZ85419W04		25 Jan 19 11:59
15	38	19012543.D	1	AZ85420W04		25 Jan 19 12:01
16	39	19012544.D	1	Ending CCV RSK Std 5 01/25/19		25 Jan 19 12:03

**INORGANIC ANALYSIS**  
**Calibration Data**

**APPL, INC.**

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87918 SDG: 87918

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/15/18

Analyte	Calibration Verification									M
	True ICV	Found 12:31	%R(1)	True CCV1	Found 8:28	%R(1)	True CCV1	Found 8:44	%R(1)	
Ferrous Iron	3	3.15693	105	4	3.94680	98.7	4	3.94680	98.7	

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOMARF No: 87918 SDG: 87918Initial Calibration Source: CPIContinuing Calibration Source: Environmental ExpressAnalysis Date: 01/22/19

Analyte	Calibration Verification									M
	True CCV1	Found 12:34	%R(1)	True CCV1	Found 12:36	%R(1)	True	Found	%R(1)	
Ferrous Iron	4	3.96680	99.2	4	3.95680	98.9				



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87918

SDG: 87918

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB	C	CCB	C	CCB	C	CCB	C	CCB	C	
	06/15/18 12:32		01/22/19 08:28		01/22/19 08:44		01/22/19 12:34		01/22/19 12:37		
Ferrous Iron	1.000	U	1.000	U	1.000	U	1.000	U	1.0000	U	

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: \_\_\_\_\_

ARF No: \_\_\_\_\_ SDG: \_\_\_\_\_

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/09/19

Analyte	Calibration Verification									M
	True ICV	Found 11:36	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
bromide	12.5	12.9616	104							
chloride	25	25.0432	100							
fluoride	5	4.8938	97.9							
Nitrate(NO3)	22.1	22.7510	103							
Nitrate(NO3)-N	5	5.1373	103							
Nitrite(NO2)	9.98	10.4092	104							
Nitrite(NO2)-N	3.04	3.1691	104							
phosphate	30.7	29.8203	97.1							
phosphate-p	10	9.7309	97.3							
sulfate	25	26.3264	105							

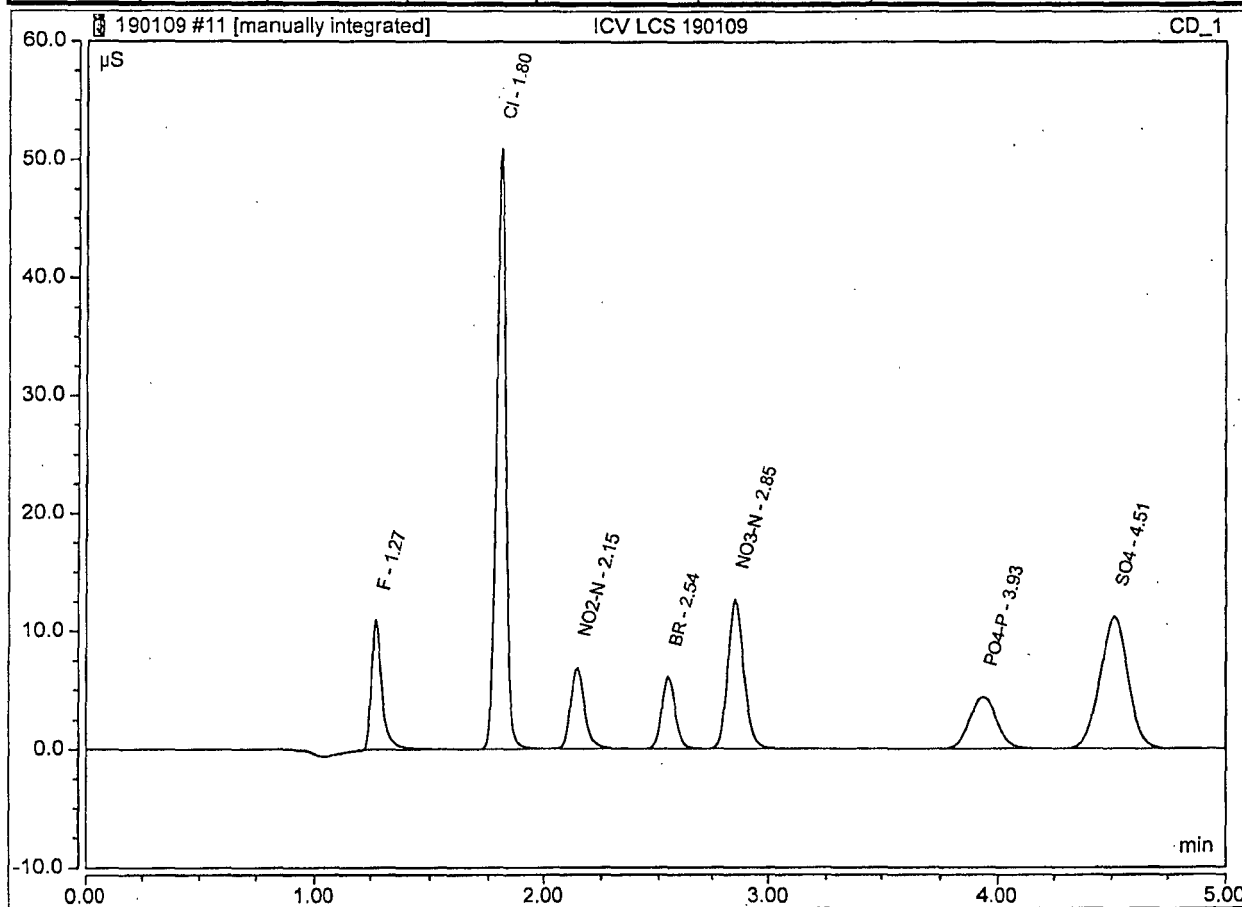
(1) Control Limits: 90-110

ILM02.0

### Peak Integration Report

Sample Name:	ICV LCS 190109	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:36	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.575	10.921	4.8938
2	1.80	Cl	BMB	2.480	50.880	25.0432
3	2.15	NO2-N	BMB	0.483	6.857	3.1690
4	2.54	BR	BMB	0.439	6.091	12.9616
5	2.85	NO3-N	BMB	1.040	12.608	5.1373
6	3.93	PO4-P	BMB	0.591	4.327	9.7309
7	4.51	SO4	BMB	1.602	11.157	26.3264



F mi1 HH 190109, MM

Algorithm Check:

y = Peak Area

x = mg/L S04

$$y = 0.0609 \quad x + \quad 0.0000$$

$$y = 1.6023 \quad \text{therefor } x = 26.305 \text{ HH 190109}$$

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: \_\_\_\_\_

ARF No.: \_\_\_\_\_

SDG: \_\_\_\_\_

Preparation Blank Matrix (soil/water): water

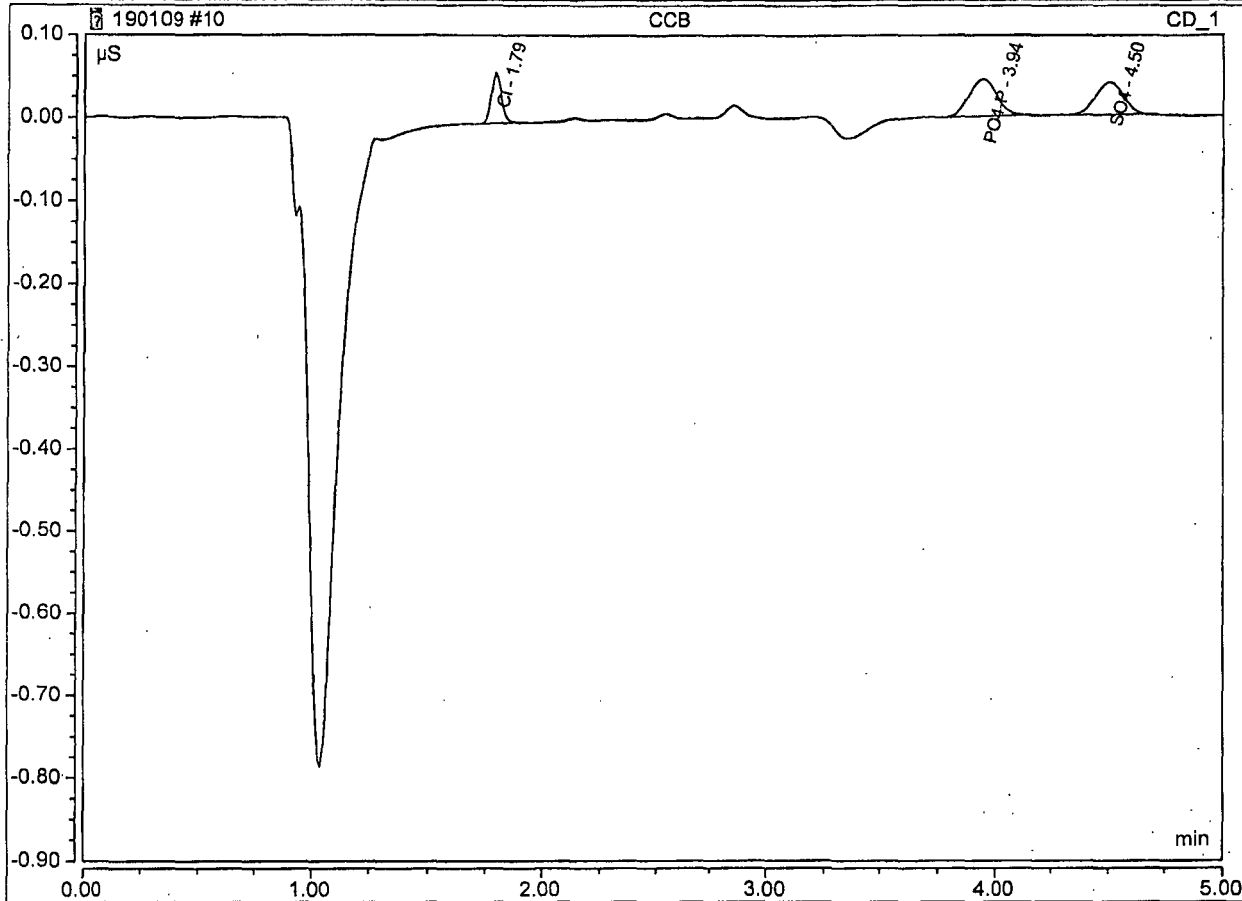
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks								M
	CCB 01/09/19 10:22	C	CCB 01/09/19 11:29	C		C		C	
bromide	.500	U	.500	U					
chloride	1.000	U	1.000	U					
fluoride	.100	U	.100	U					
Nitrate(NO3)	.500	U	.500	U					
Nitrate(NO3)-N	.200	U	.200	U					
Nitrite(NO2)	.300	U	.300	U					
Nitrite(NO2)-N	.100	U	.100	U					
phosphate	.600	U	2.400	*					*
phosphate-p	.200	U	.784	*					*
sulfate	1.000	U	.090	J					

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:29	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.003	0.060	0.0311
2	3.94	PO4-P	BMB	0.006	0.045	0.7836
3	4.50	SO4	BMB	0.006	0.039	0.0904



INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87918 SDG: 87918

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/22/19

Analyte	Calibration Verification									M
	True CCV1	Found 9:02	%R(1)	True CCV1	Found 10:08	%R(1)	True CCV1	Found 15:10	%R(1)	
chloride	25	25.0732	100	25	25.2792	101	25	25.5818	102	
Nitrate(NO3)	22.1	22.6026	102	22.1	22.7182	103	22.1	22.9374	104	
sulfate	25	25.4035	102	25	25.6278	103	25	25.9263	104	

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87918 SDG: 87918

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

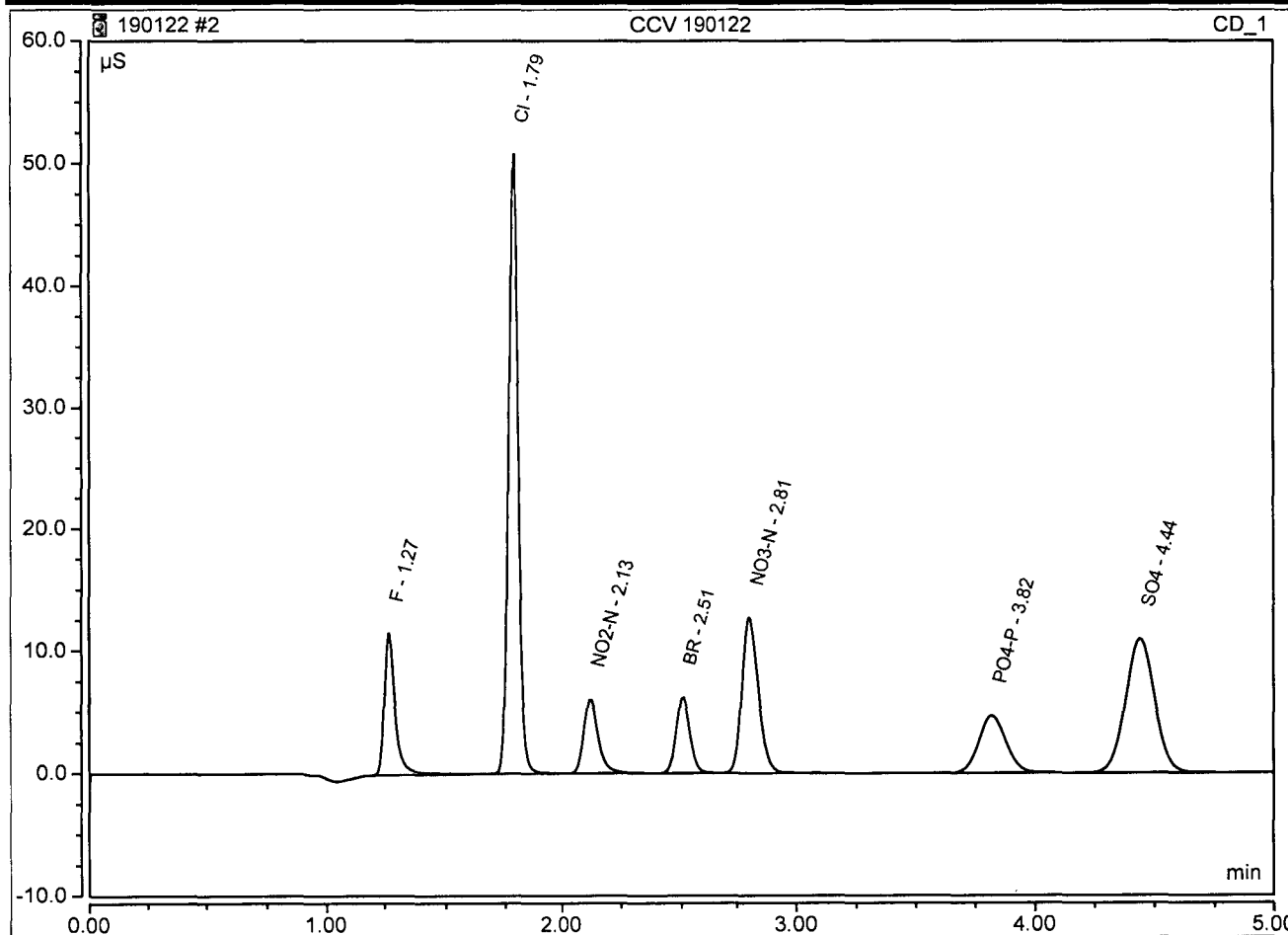
Analysis Date: 01/22/19

Analyte	Calibration Verification									M
	True CCV1	Found 15:50	%R(1)	True CCV1	Found 17:12	%R(1)	True	Found	%R(1)	
chloride	25	25.5674	102	25	25.6177	102				
Nitrate(NO3)	22.1	22.9525	104	22.1	22.9972	104				
sulfate	25	25.8742	103	25	25.9175	104				

### Peak Integration Report

Sample Name:	CCV 190122	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 09:02	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.622	11.566	5.2941
2	1.79	Cl	BMB	2.483	50.789	25.0732
3	2.13	NO2-N	BMB	0.431	6.050	2.8294
4	2.51	BR	BMB	0.442	6.220	13.0499
5	2.81	NO3-N	BMB	1.033	12.695	5.1037
6	3.82	PO4-P	BMB	0.623	4.683	10.2196
7	4.44	SO4	BMB	1.546	10.932	25.4035

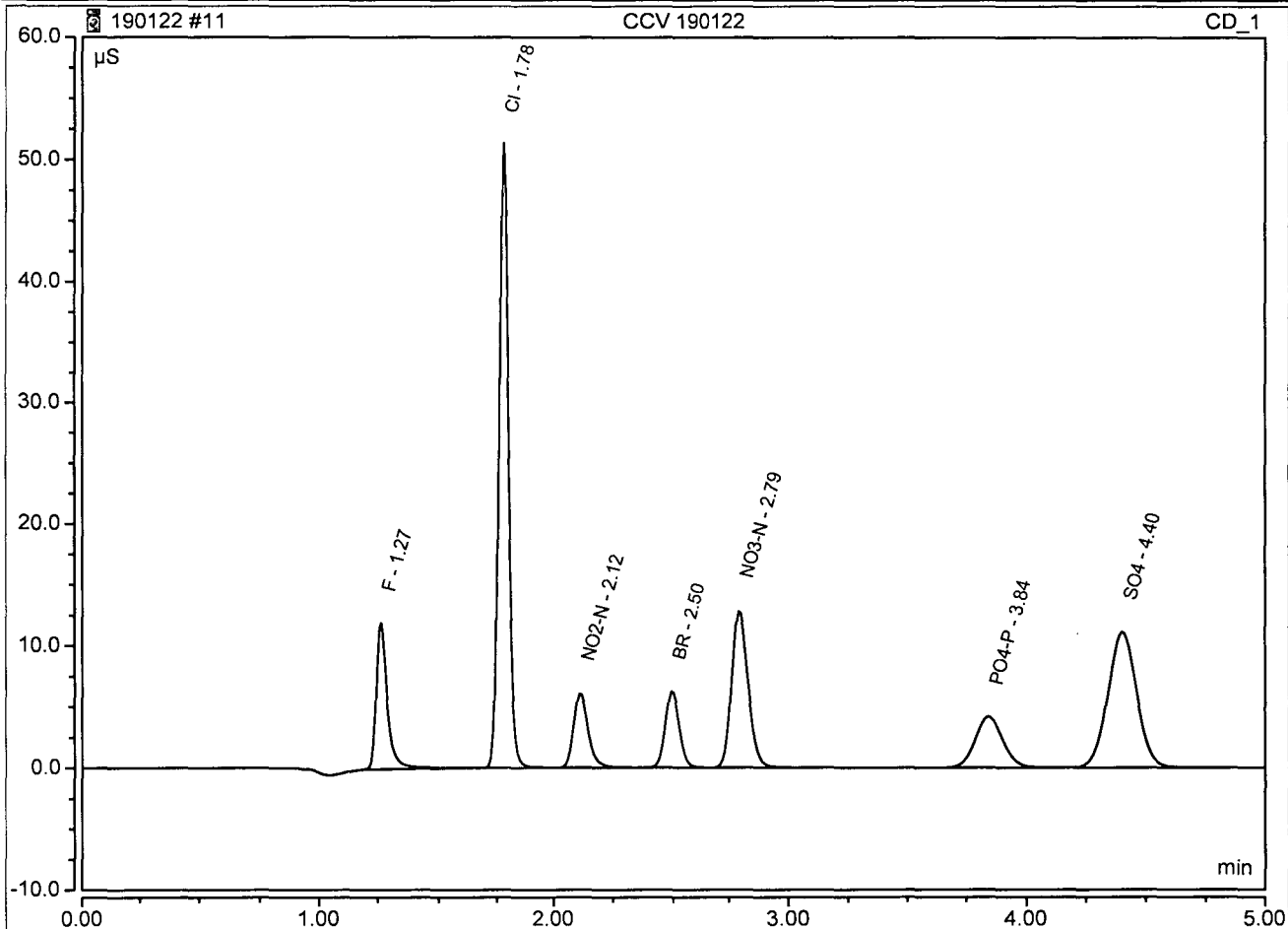




### Peak Integration Report

Sample Name:	CCV 190122	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 10:08	Run Time:	5.00

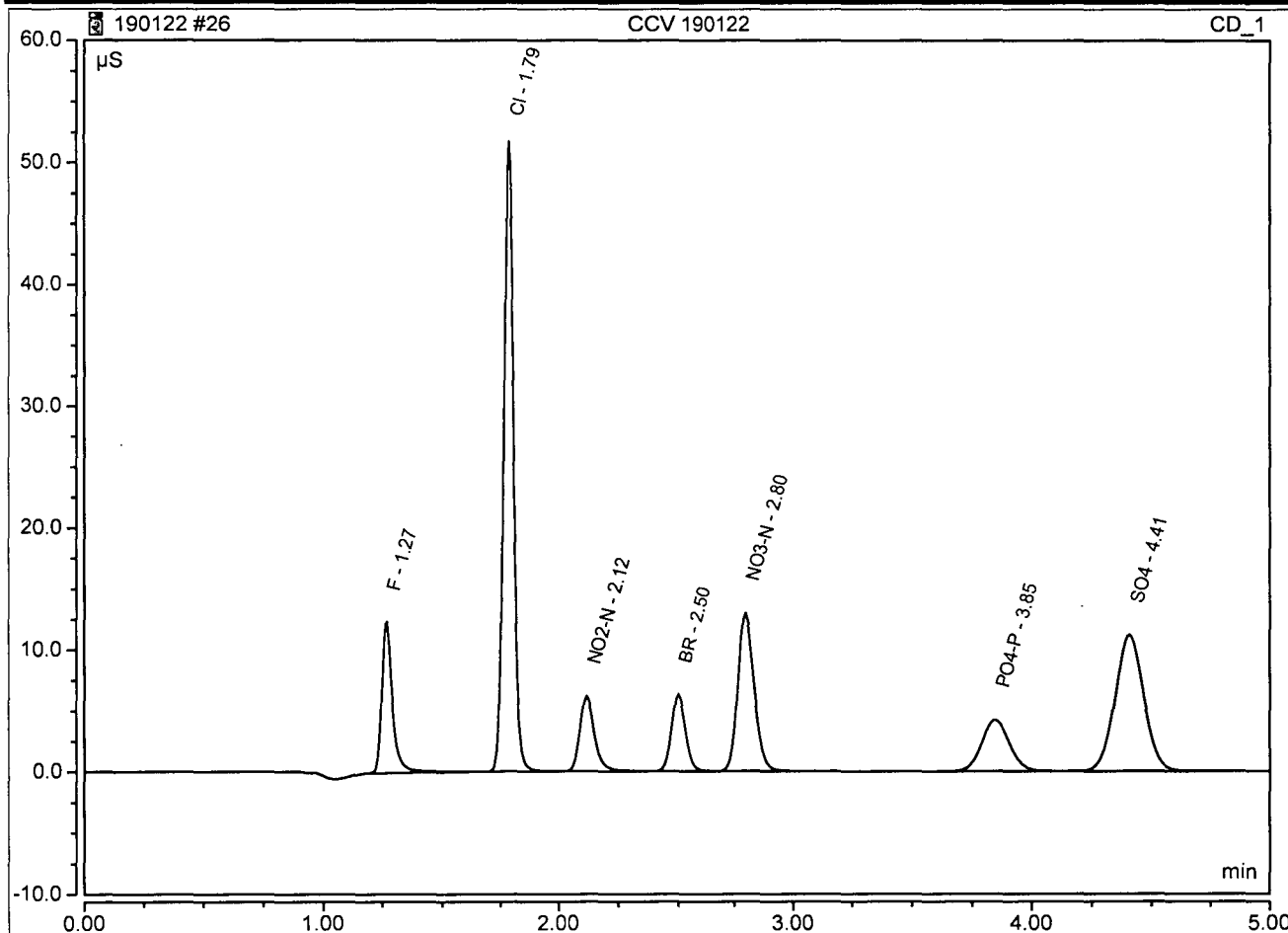
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.27	F	BMB	0.643	11.960	5.4769
2	1.78	Cl	BMB	2.504	51.325	25.2792
3	2.12	NO <sub>2</sub> -N	BMB	0.435	6.117	2.8530
4	2.50	BR	BMB	0.444	6.270	13.1017
5	2.79	NO <sub>3</sub> -N	BMB	1.039	12.882	5.1299
6	3.84	PO <sub>4</sub> -P	BMB	0.561	4.179	9.2750
7	4.40	SO <sub>4</sub>	BMB	1.560	11.123	25.6278



### Peak Integration Report

Sample Name:	CCV 190122	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 12:16	Run Time:	5.00

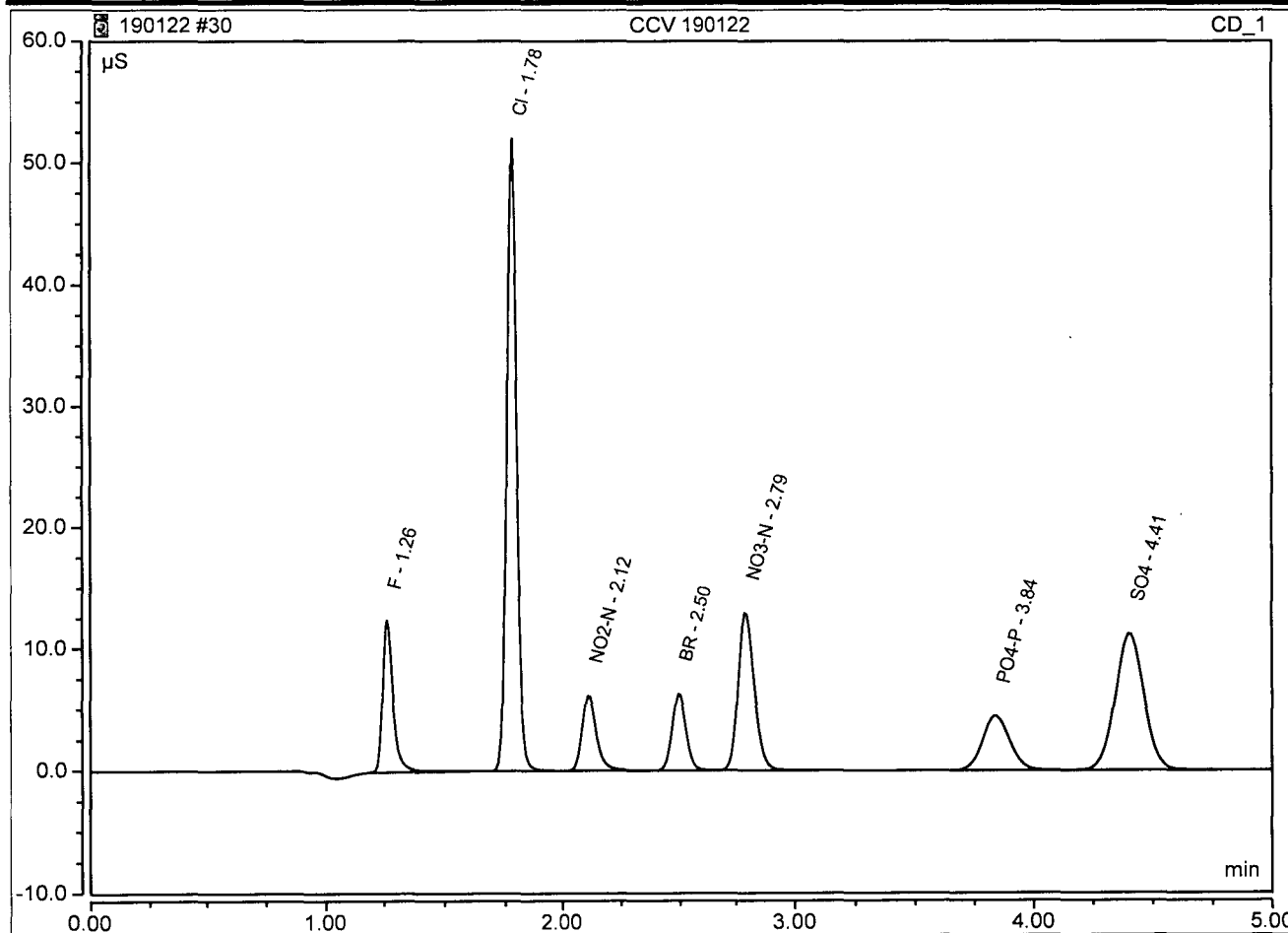
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.651	12.370	5.5445
2	1.79	Cl	BMB	2.519	51.683	25.4362
3	2.12	NO2-N	BMB	0.438	6.158	2.8743
4	2.50	BR	BMB	0.446	6.306	13.1739
5	2.80	NO3-N	BMB	1.044	12.964	5.1561
6	3.85	PO4-P	BMB	0.565	4.212	9.3344
7	4.41	SO4	BMB	1.566	11.159	25.7267



### Peak Integration Report

Sample Name:	CCV 190122	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 12:59	Run Time:	5.00

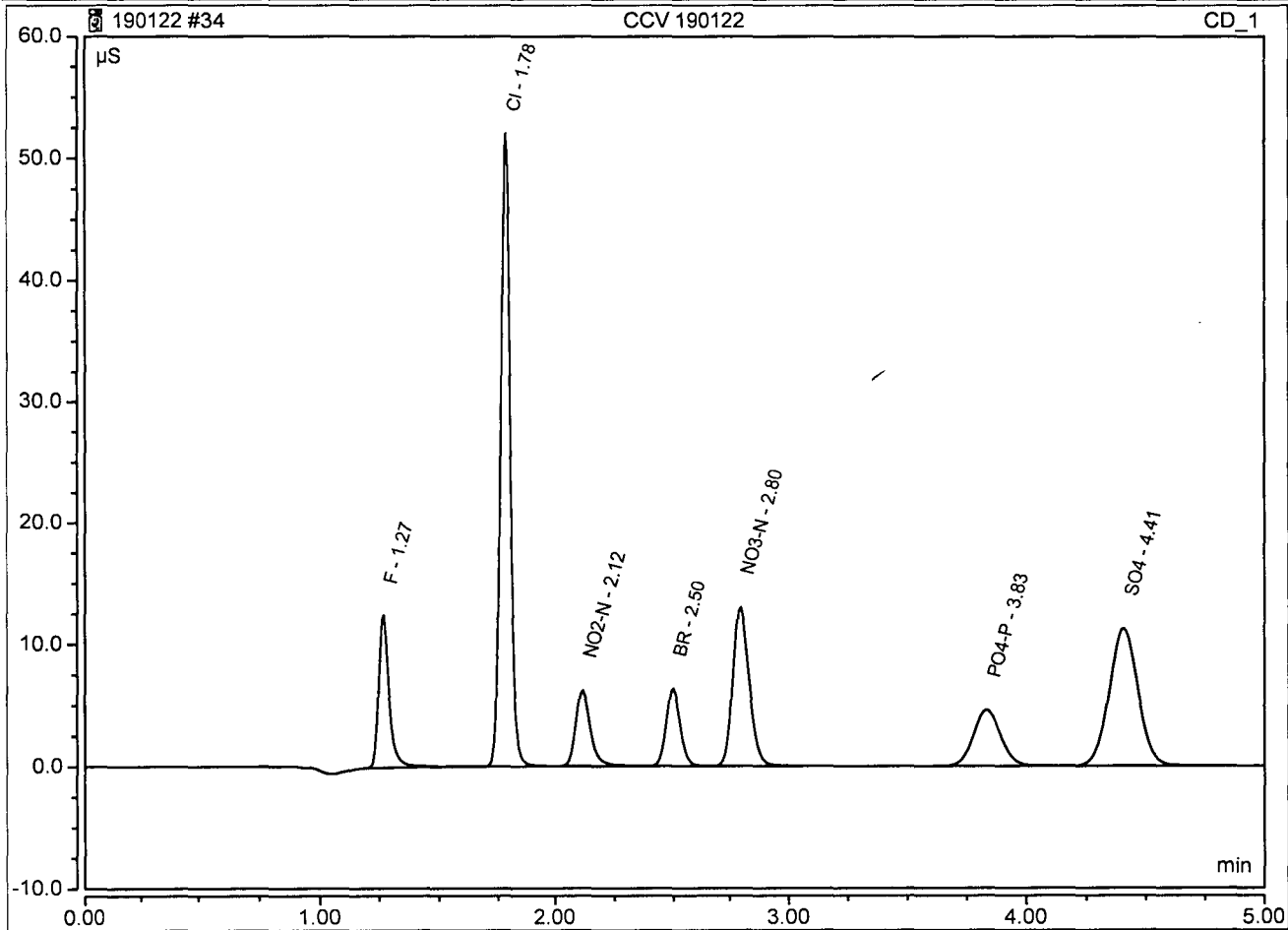
No.	Time (min)	Peak Name	Peak Type	Area (μS*min)	Height (μS)	Amount (mg/L)
1	1.26	F	BMB	0.653	12.439	5.5577
2	1.78	Cl	BMB	2.534	51.973	25.5886
3	2.12	NO2-N	BMB	0.439	6.169	2.8801
4	2.50	BR	BMB	0.447	6.315	13.1974
5	2.79	NO3-N	BMB	1.045	12.974	5.1633
6	3.84	PO4-P	BMB	0.598	4.468	9.8415
7	4.41	SO4	BMB	1.568	11.194	25.7630



**Peak Integration Report**

Sample Name:	CCV 190122	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 15:10	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.649	12.458	5.5240
2	1.78	Cl	BMB	2.534	52.006	25.5818
3	2.12	NO2-N	BMB	0.440	6.191	2.8898
4	2.50	BR	BMB	0.448	6.340	13.2404
5	2.80	NO3-N	BMB	1.049	13.012	5.1794
6	3.83	PO4-P	BMB	0.609	4.568	10.0073
7	4.41	SO4	BMB	1.578	11.233	25.9263



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87918

SDG: 87918

Preparation Blank Matrix (soil/water): water

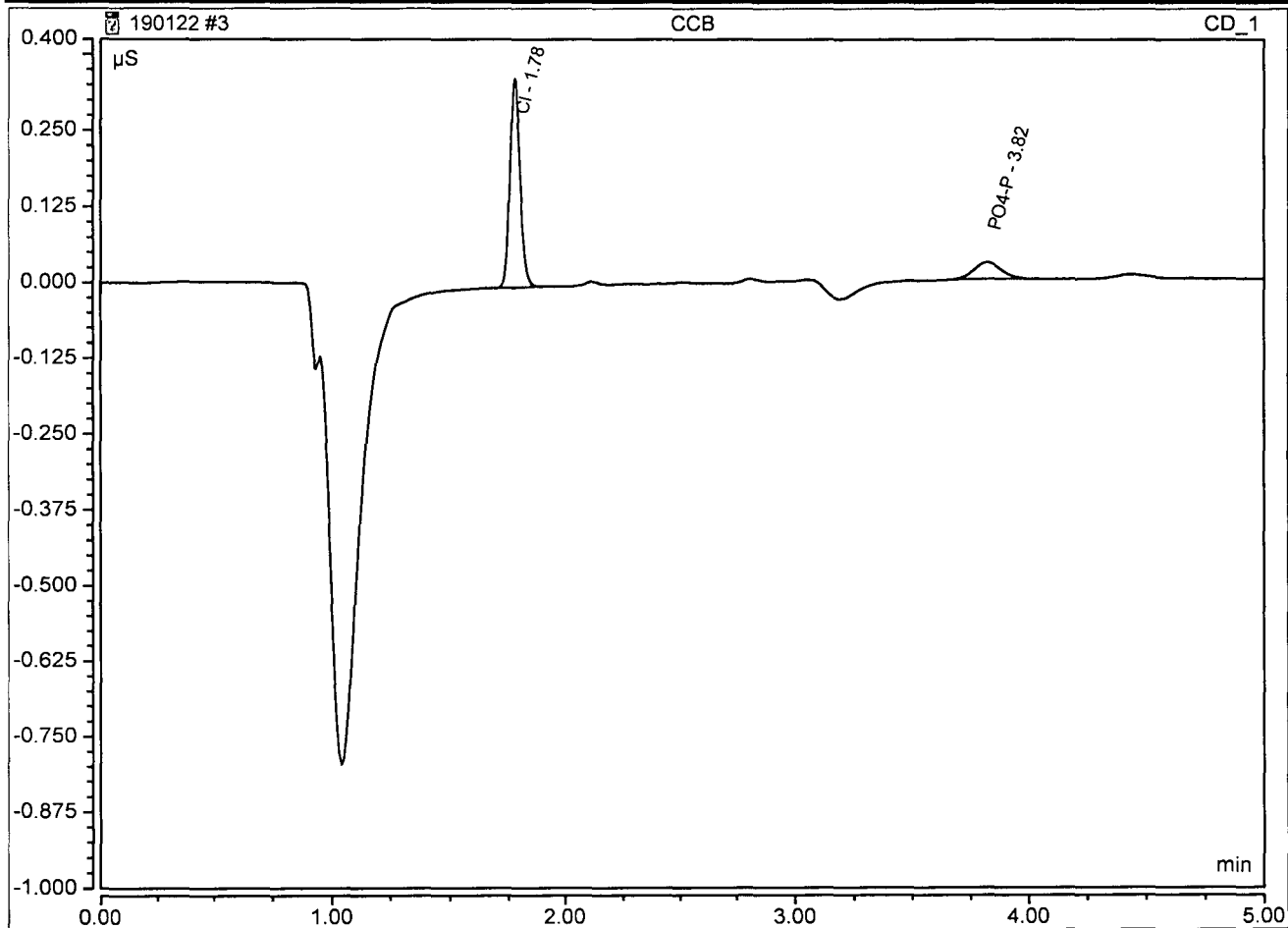
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB	C	CCB	C	CCB	C	CCB	C	CCB	C	
	01/22/19 09:09		01/22/19 10:16		01/22/19 12:23		01/22/19 13:07		01/22/19 15:17		
chloride	.180	J	.179	J	.190	J	.227	J	.2110	J	
Nitrate(NO3)	.500	U	.500	U	.500	U	.500	U	.5000	U	
sulfate	1.000	U	1.000	U	1.000	U	1.000	U	1.0000	U	

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 09:09	Run Time:	5.00

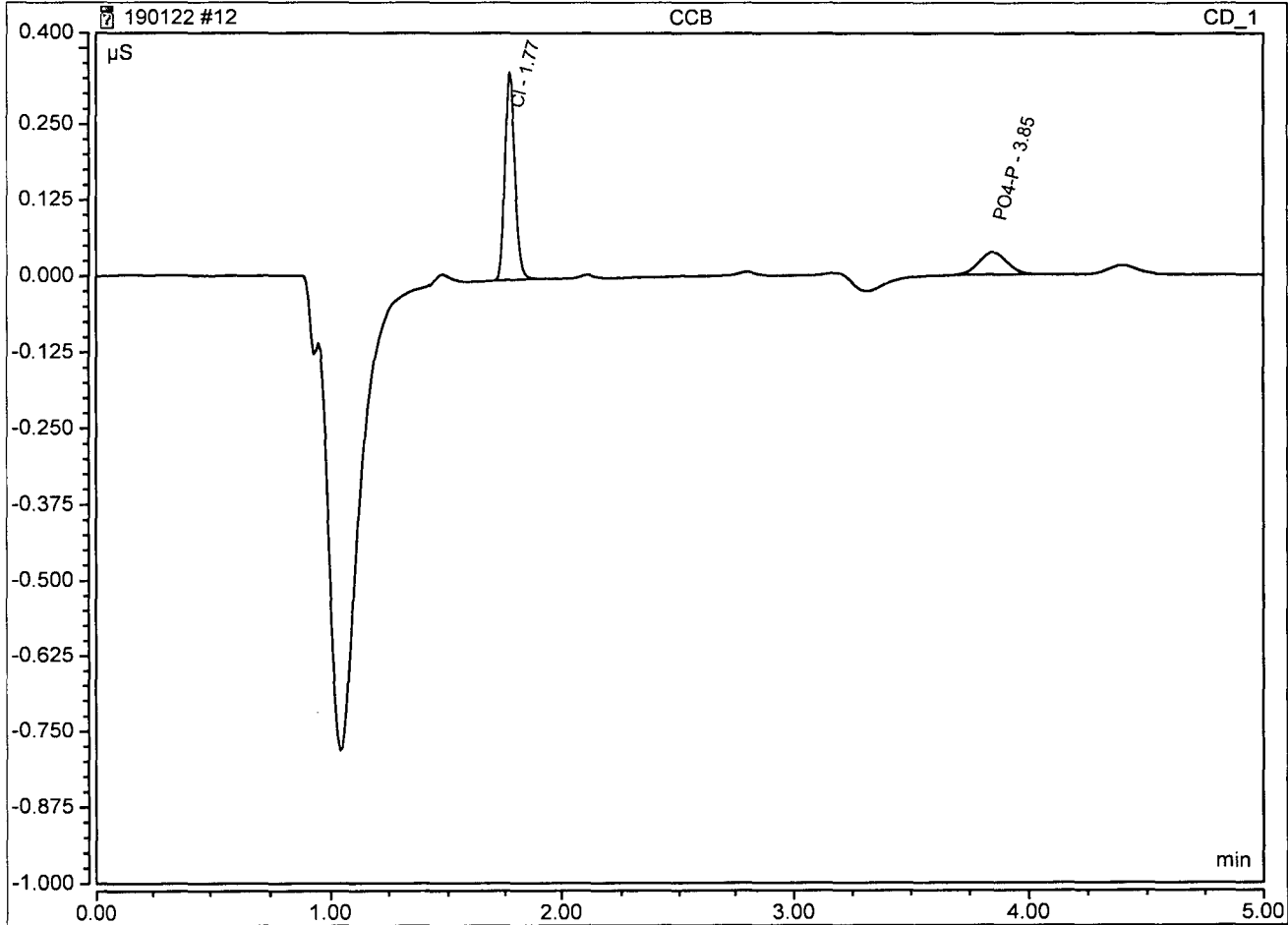
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.018	0.343	0.1798
2	3.82	PO4-P	BMB	0.004	0.027	0.7436



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 10:16	Run Time:	5.00

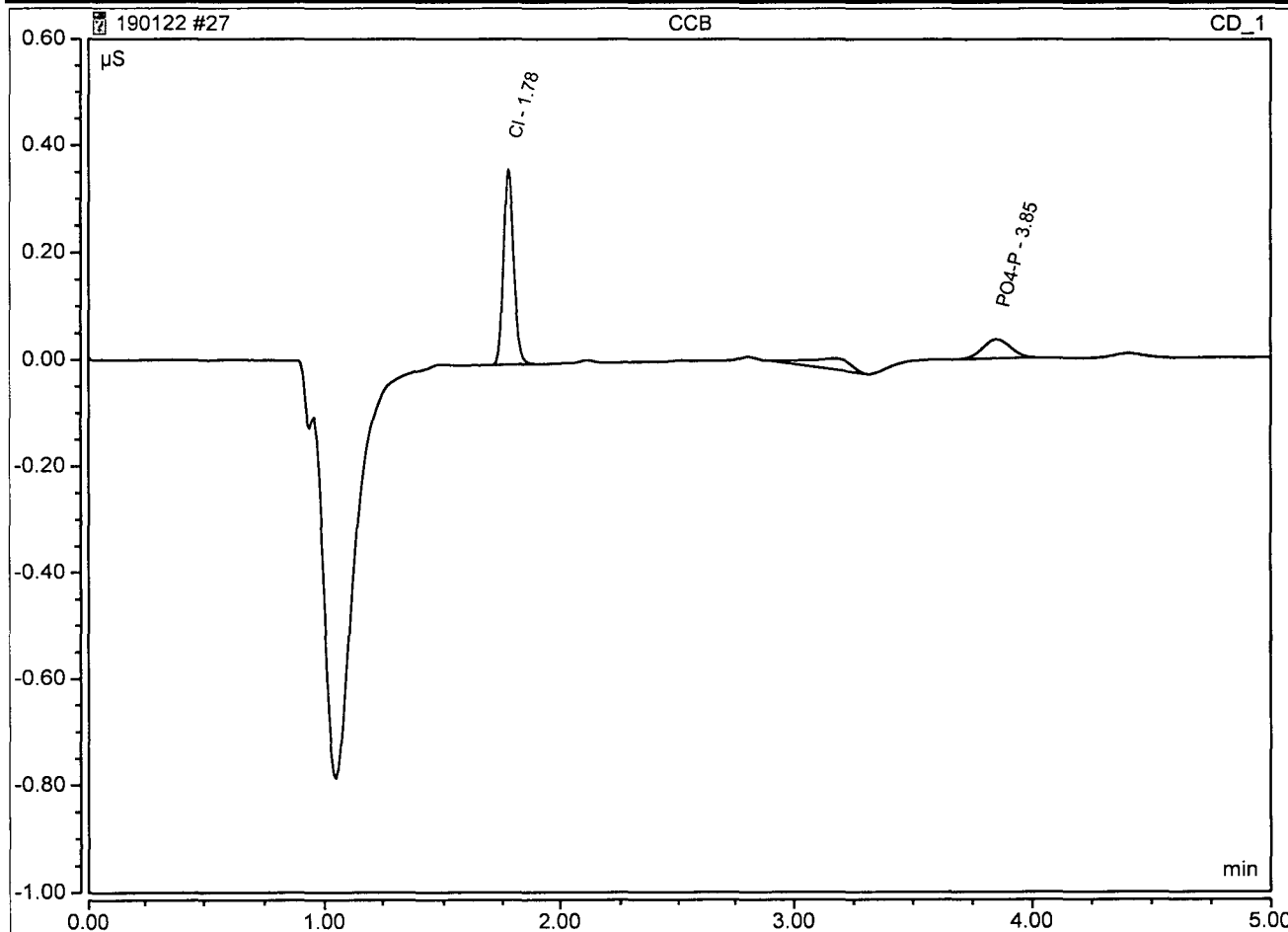
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.77	Cl	BMB	0.018	0.341	0.1787
2	3.85	PO4-P	BMB	0.005	0.037	0.7650



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 12:23	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.019	0.363	0.1898
3	3.85	PO4-P	BMB	0.005	0.036	0.7615

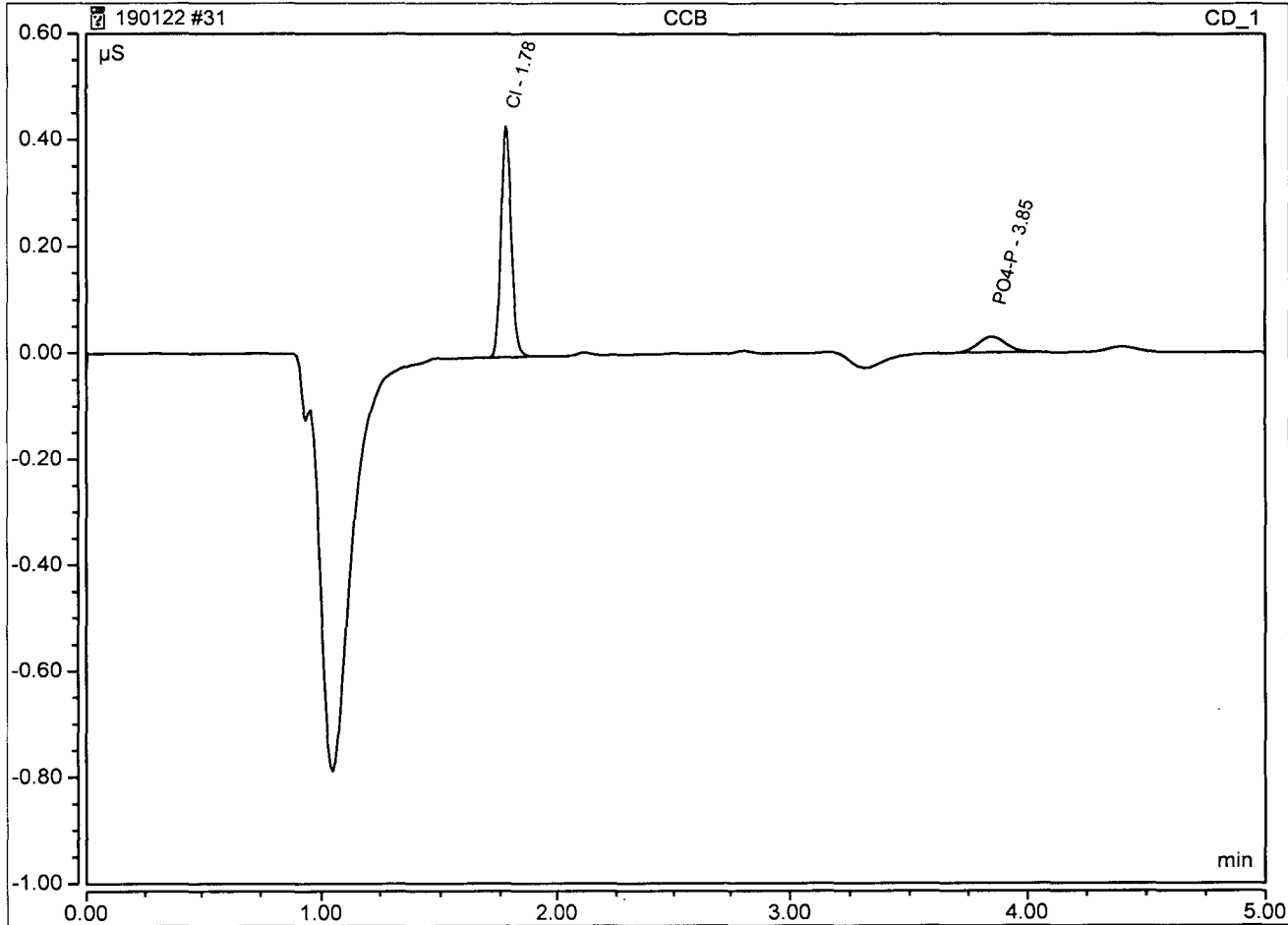




### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 13:07	Run Time:	5.00

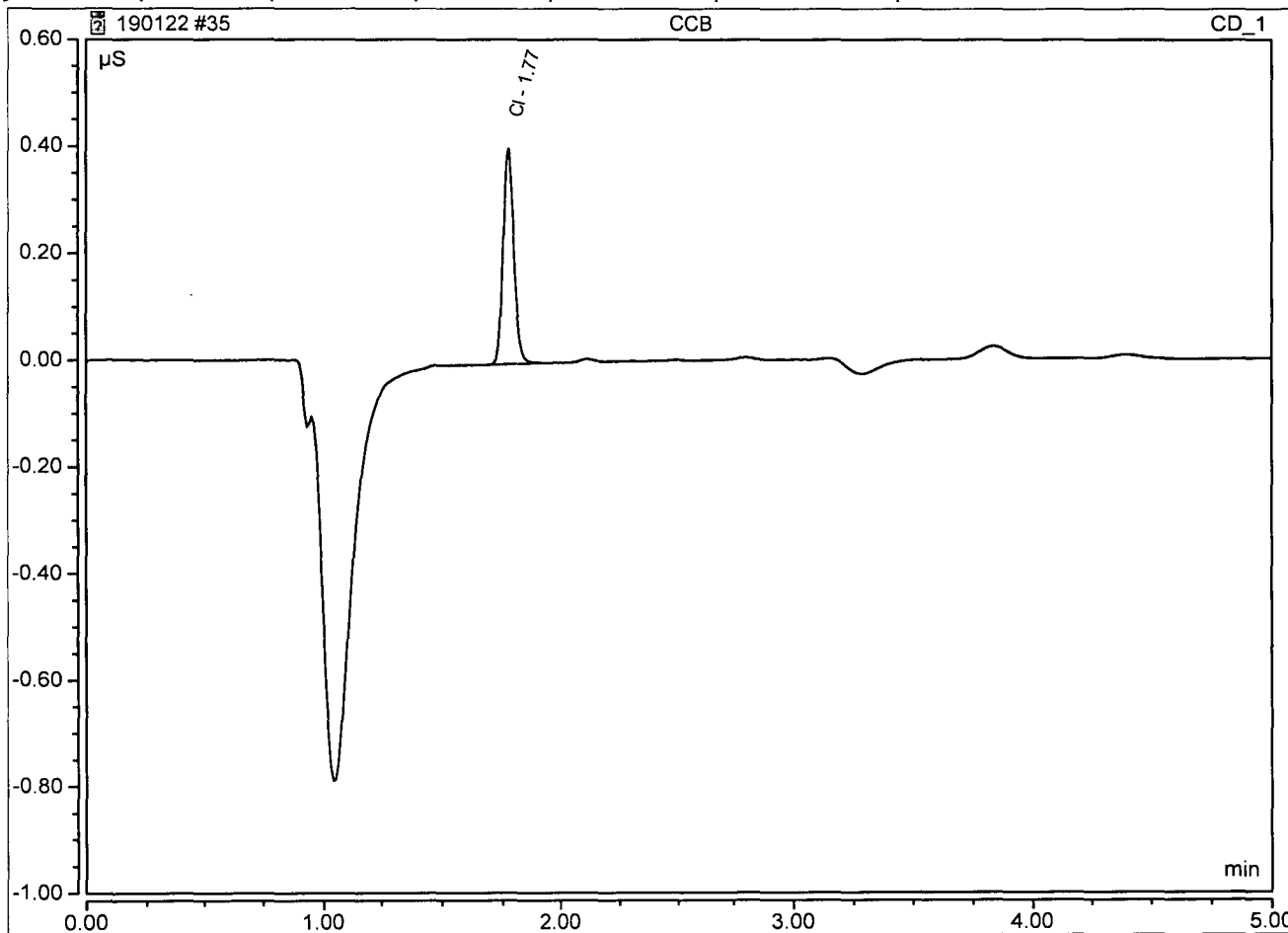
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.022	0.433	0.2268
2	3.85	PO4-P	BMB	0.004	0.030	0.7490



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 15:17	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.77	Cl	BMB	0.021	0.402	0.2109



INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87918 SDG: 87918

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: O2si

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 16:33	%R(1)	True ICV	Found 16:37	%R(1)	True CCV1	Found 16:59	%R(1)	
TOXN	3	3.0152	101	3	3.0099	100	3	3.0892	103	

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87918

SDG: 87918

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/28/19 16:35	C	ICB 01/28/19 16:40	C	CCB 01/28/19 17:02	C		C		C	
TOXN	.100	U	.100	U	.100	U					

**APPL Inc**  
**2A**  
**Initial and Continuing Calibration Verification**

**Lab Name:** APPL Inc  
**ARF No:**  
**ICAL Source:**  
**CCV Source:**  
**Analysis Date:** 02/11/19

**Contract:**  
**SDG:**

Analyte	Calibration Verification									M
	True ICV	Found 20:02	%R (1)	True CCV	Found	%R (2)	True CCV	Found	%R (3)	
TOC	2.50	2.696	107.8							

APPL Inc  
3  
Blanks

Lab Name: APPL Inc  
 ARF No:  
 Prep Blank Matrix: water  
 Prep BlankUnits: mg/L

Contract:  
 SDG:

	Calibration Blanks											M	
	Analyte	ICB 2/11/19 19:31	C										
TOC	0.16	J											

**APPL Inc**  
**2A**  
**Initial and Continuing Calibration Verification**

**Lab Name:** APPL Inc  
**ARF No:** 87918  
**ICAL Source:**  
**CCV Source:**  
**Analysis Date:** 02/12/19

**Contract:** AECOM  
**SDG:** 87918

Analyte	Calibration Verification									M
	True CCV	Found 14:39	%R (1)	True CCV	Found 00:41	%R (2)	True CCV	Found 08:48	%R (3)	
TOC	2.50	2.731	109.2	2.50	2.718	108.7	2.50	2.658	106.3	

**APPL Inc**  
**2A**  
**Initial and Continuing Calibration Verification**

**Lab Name:** APPL Inc  
**ARF No:** 87918  
**ICAL Source:**  
**CCV Source:**  
**Analysis Date:** 02/13/19

**Contract:** AECOM  
**SDG:** 87918

Analyte	Calibration Verification									M
	True CCV	Found	%R (1)	True CCV	Found	%R (2)	True CCV	Found	%R (3)	
TOC	2.50	2.704	108.2							



**APPL Inc**  
**3**  
**Blanks**

**Lab Name:** APPL Inc  
**ARF No:** 87918  
**Prep Blank Matrix:** water  
**Prep BlankUnits:** mg/L

**Contract:** AECOM  
**SDG:** 87918

	Calibration Blanks											M
	CCB 2/12/19 15:13		CCB 2/13/19 01:16		CCB 2/13/19 09:23		CCB 2/13/19 21:58					
Analyte	C	C	C	C	C	C						
TOC	J	J	J	J	J	J	J					

### Calibration Batch Report

Sequence:	190109	Injection Volume:	25.00
Instrument Method:	Anions IM	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:22	Run Time:	5

Calibration Summary							
Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin	8.000	0.000	0.117	0.000	99.8298
Cl	Area	Lin	8.000	0.000	0.099	0.000	99.6172
NO2-N	Area	Lin	8.000	0.000	0.152	0.000	99.9520
BR	Area	Lin	8.000	0.000	0.034	0.000	99.9132
NO3-N	Area	Lin	8.000	0.000	0.202	0.000	99.7529
PO4-P	Area	Lin, WithOffset	8.000	-0.045	0.065	0.000	99.1021
SO4	Area	Lin	8.000	0.000	0.061	0.000	99.8200

Injection Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	F	F	F	F
ical 1	1.270	0.0070	0.156	0.059
ical 2	1.268	0.0206	0.436	0.176
ical 3	1.267	0.0577	1.167	0.491
ical 4	1.265	0.1226	2.440	1.044
ical 5	1.268	0.2596	5.137	2.211
ical 6	1.272	0.7066	13.612	6.018
ical 7	1.277	1.0208	19.102	8.694
ical 8	1.280	1.4961	26.961	12.742

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	Cl	Cl	Cl	Cl
i cal 1	1.795	0.0320	0.615	0.323
i cal 2	1.795	0.0731	1.404	0.738
i cal 3	1.793	0.1854	3.595	1.872
i cal 4	1.792	0.3834	7.546	3.871
i cal 5	1.795	0.8185	16.468	8.264
i cal 6	1.800	2.3268	47.668	23.493
i cal 7	1.807	3.4196	69.566	34.526
i cal 8	1.812	5.1089	102.000	51.583

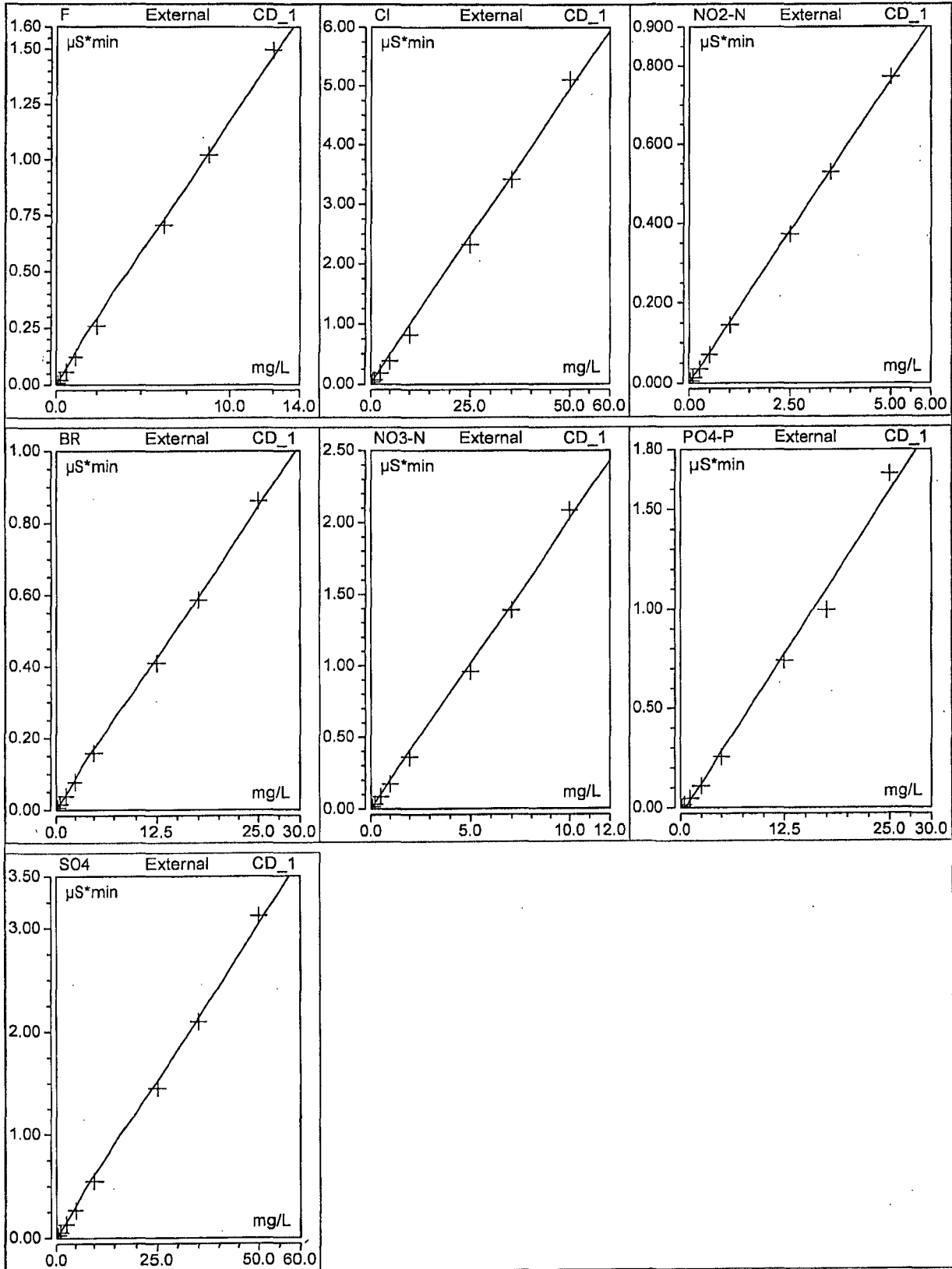
Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO2-N	NO2-N	NO2-N	NO2-N
i cal 1	2.143	0.0056	0.083	0.037
i cal 2	2.143	0.0139	0.204	0.091
i cal 3	2.140	0.0352	0.511	0.231
i cal 4	2.140	0.0709	1.030	0.465
i cal 5	2.142	0.1446	2.087	0.949
i cal 6	2.143	0.3727	5.334	2.445
i cal 7	2.148	0.5294	7.525	3.473
i cal 8	2.150	0.7714	10.836	5.061

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	BR	BR	BR	BR
i cal 1	2.542	0.0061	0.084	0.180
i cal 2	2.542	0.0154	0.210	0.454
i cal 3	2.538	0.0387	0.526	1.143
i cal 4	2.537	0.0779	1.060	2.301
i cal 5	2.538	0.1581	2.165	4.669
i cal 6	2.538	0.4099	5.692	12.109
i cal 7	2.542	0.5859	8.190	17.306
i cal 8	2.542	0.8607	12.140	25.424

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO3-N	NO3-N	NO3-N	NO3-N
i cal 1	2.858	0.0155	0.182	0.077
i cal 2	2.858	0.0343	0.404	0.170
i cal 3	2.855	0.0864	1.015	0.427
i cal 4	2.853	0.1752	2.065	0.865
i cal 5	2.853	0.3591	4.277	1.774
i cal 6	2.850	0.9601	11.656	4.742
i cal 7	2.850	1.3886	17.009	6.858
i cal 8	2.848	2.0838	25.490	10.291

Injection Name	Ret.Time min	Area $\mu\text{S}^*\text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	PO4-P	PO4-P	PO4-P	PO4-P
i cal 1	3.940	0.0061	0.044	0.781
i cal 2	3.940	0.0157	0.112	0.929
i cal 3	3.938	0.0477	0.338	1.419
i cal 4	3.935	0.1106	0.791	2.381
i cal 5	3.935	0.2541	1.829	4.578
i cal 6	3.930	0.7401	5.452	12.020
i cal 7	3.930	0.9954	7.895	15.928
i cal 8	3.927	1.6804	12.720	26.415

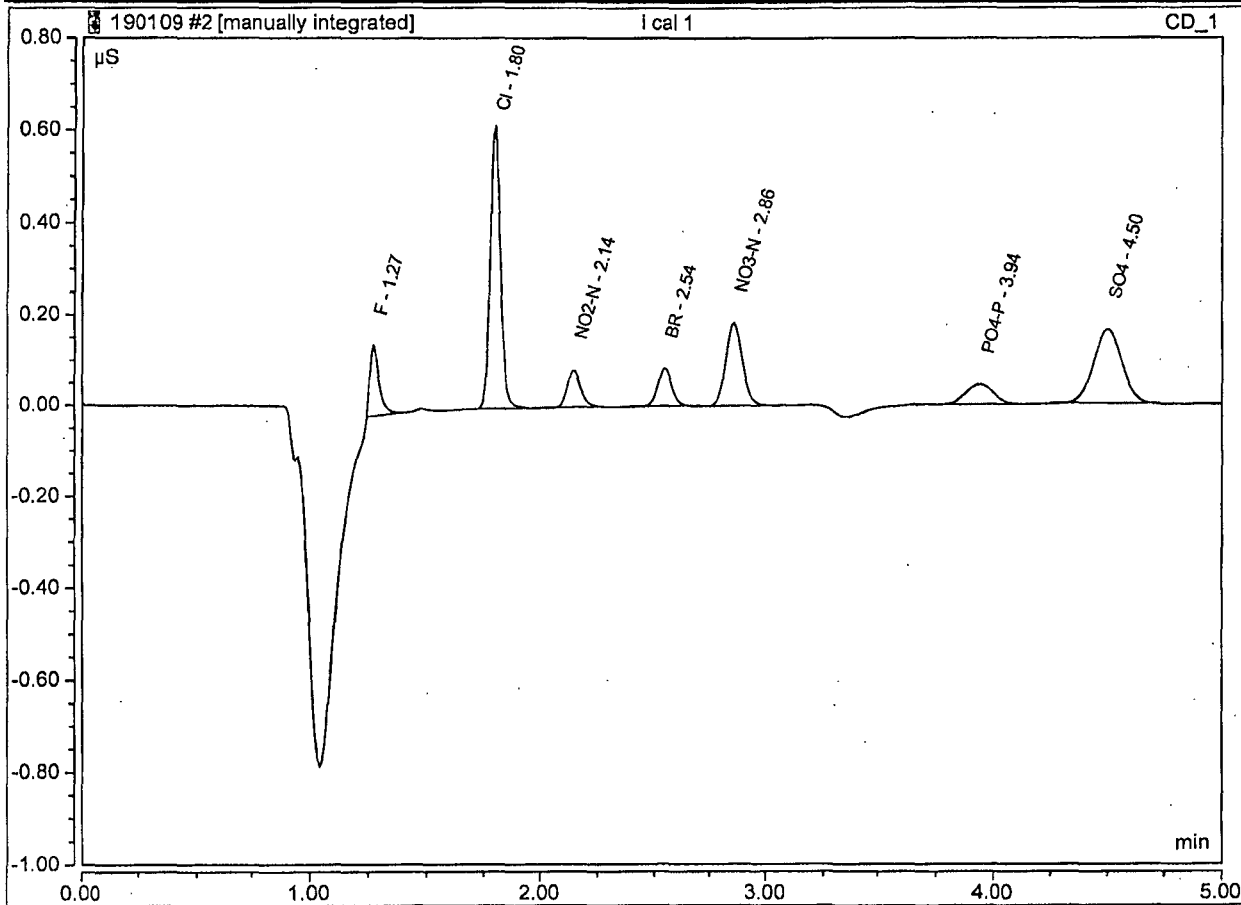
Injection Name	Ret.Time min	Area $\mu\text{S}^*\text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	SO4	SO4	SO4	SO4
i cal 1	4.500	0.0237	0.163	0.390
i cal 2	4.500	0.0532	0.360	0.875
i cal 3	4.498	0.1322	0.894	2.172
i cal 4	4.498	0.2678	1.815	4.399
i cal 5	4.503	0.5488	3.740	9.017
i cal 6	4.507	1.4533	10.090	23.877
i cal 7	4.515	2.0973	14.700	34.459
i cal 8	4.518	3.1172	22.054	51.216



### Peak Integration Report

Sample Name:	i cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:30	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.007	0.156	0.0595
2	1.80	Cl	BMB	0.032	0.615	0.3227
3	2.14	NO2-N	BMB	0.006	0.083	0.0365
4	2.54	BR	BMB	0.006	0.084	0.1796
5	2.86	NO3-N	BMB	0.015	0.182	0.0765
6	3.94	PO4-P	BMB*	0.006	0.044	0.7812
7	4.50	SO4	BMB	0.024	0.163	0.3901

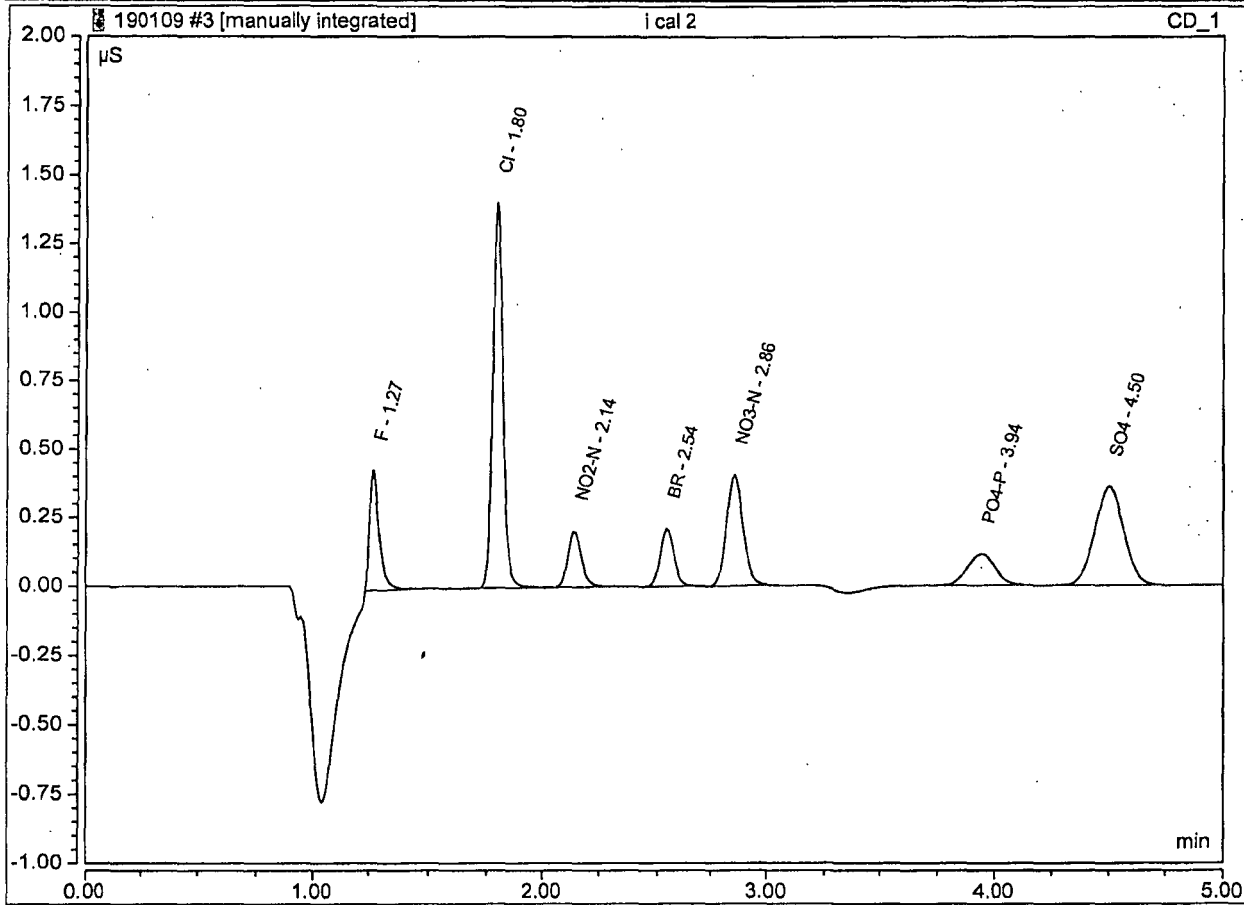


F mi1 PO4 mi5 HH 190109, MM

Peak Integration Report

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:37	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.021	0.436	0.1757
2	1.80	Cl	BMB	0.073	1.404	0.7378
3	2.14	NO2-N	BMB	0.014	0.204	0.0915
4	2.54	BR	BMB	0.015	0.210	0.4542
5	2.86	NO3-N	BMB	0.034	0.404	0.1696
6	3.94	PO4-P	BMB	0.016	0.112	0.9287
7	4.50	SO4	BMB	0.053	0.360	0.8747

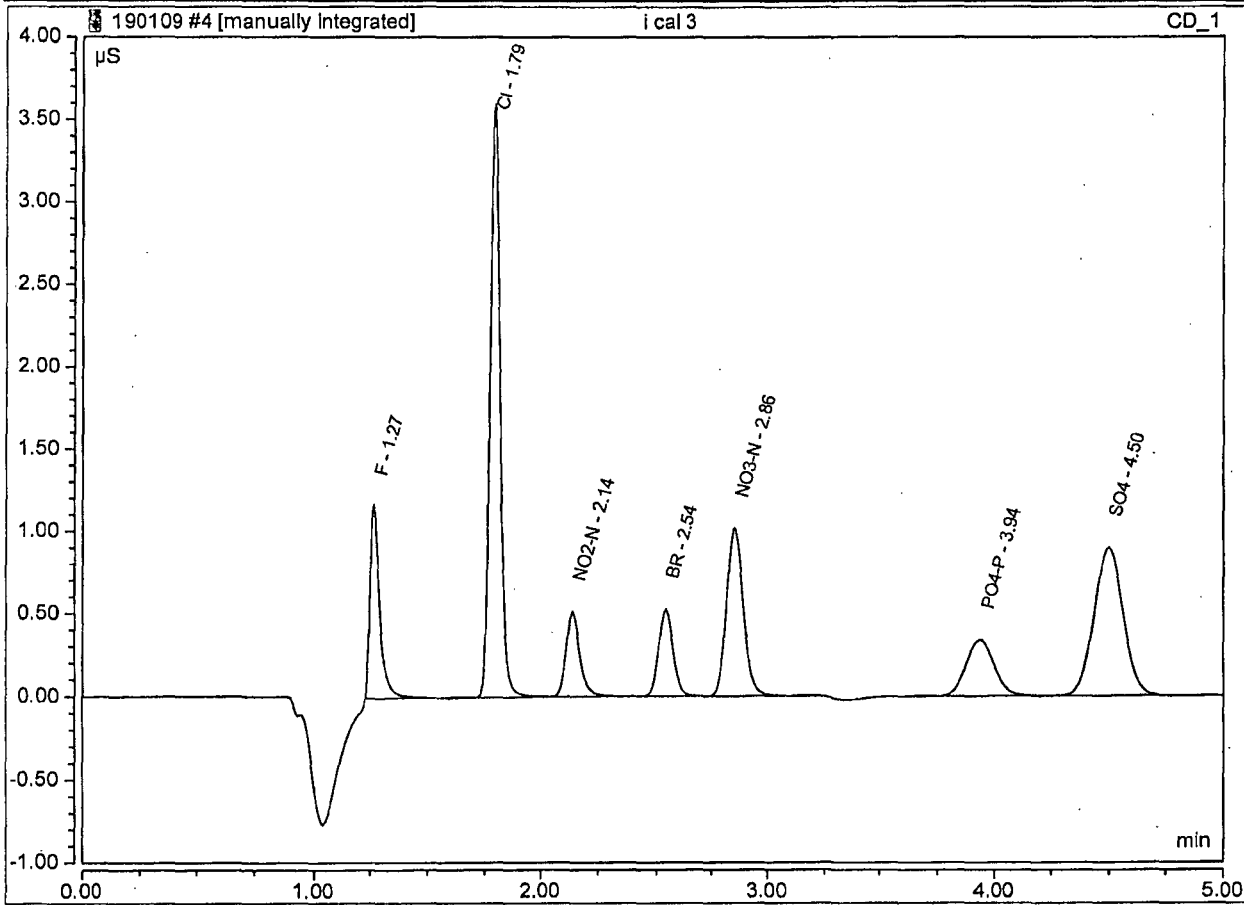


F mi1 HH 190109, MM

Peak Integration Report

Sample Name:	i cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:45	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.058	1.167	0.4910
2	1.79	Cl	BMB	0.185	3.595	1.8721
3	2.14	NO2-N	BMB	0.035	0.511	0.2307
4	2.54	BR	BMB	0.039	0.526	1.1431
5	2.86	NO3-N	BMB	0.086	1.015	0.4269
6	3.94	PO4-P	BMB	0.048	0.338	1.4187
7	4.50	SO4	BMB	0.132	0.894	2.1720



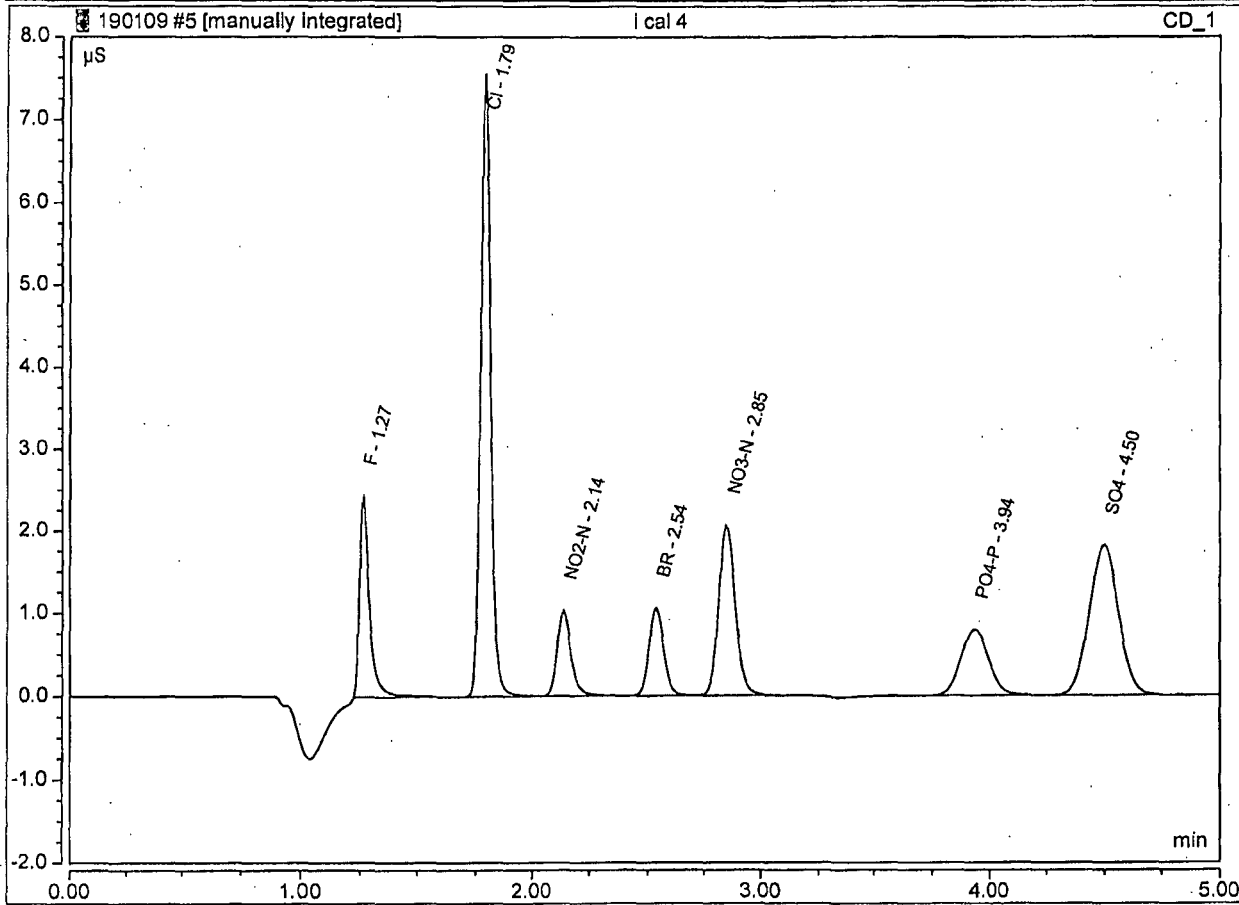
F mi1 HH 190109, MM



**Peak Integration Report**

Sample Name:	I cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:52	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.123	2.440	1.0438
2	1.79	Cl	BMB	0.383	7.546	3.8706
3	2.14	NO2-N	BMB	0.071	1.030	0.4654
4	2.54	BR	BMB	0.078	1.060	2.3006
5	2.85	NO3-N	BMB	0.175	2.065	0.8653
6	3.94	PO4-P	BMB	0.111	0.791	2.3810
7	4.50	SO4	BMB	0.268	1.815	4.3995

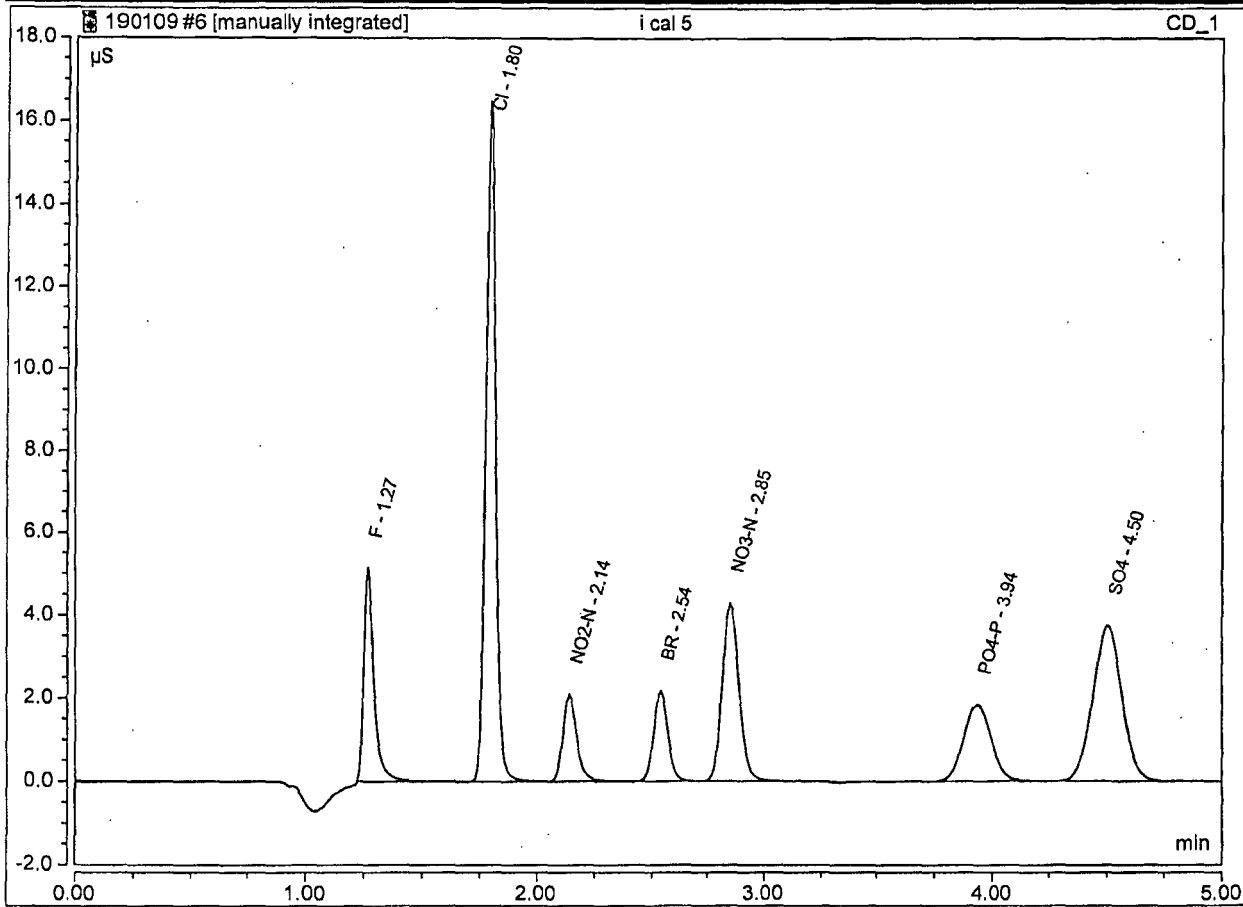


F mi1 HH 190109, MM

### Peak Integration Report

Sample Name:	i cal 5	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:59	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.260	5.137	2.2109
2	1.80	Cl	BMB	0.818	16.468	8.2637
3	2.14	NO2-N	BMB	0.145	2.087	0.9486
4	2.54	BR	BMB	0.158	2.165	4.6686
5	2.85	NO3-N	BMB	0.359	4.277	1.7736
6	3.94	PO4-P	BMB	0.254	1.829	4.5775
7	4.50	SO4	BMB	0.549	3.740	9.0170

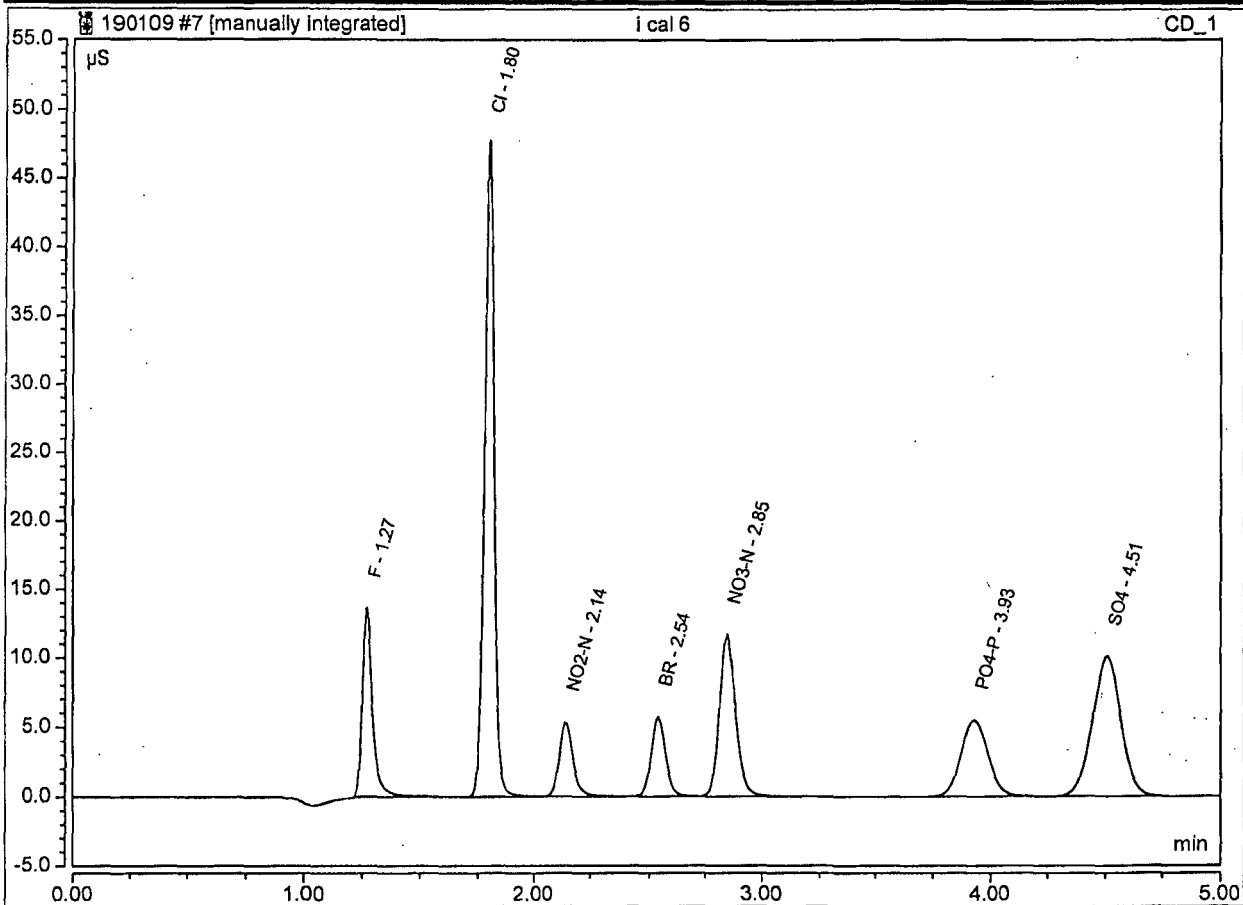


F mi1 HH 190109, MM

**Peak Integration Report**

Sample Name:	I cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:07	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.707	13.612	6.0178
2	1.80	Cl	BMB	2.327	47.668	23.4932
3	2.14	NO2-N	BMB	0.373	5.334	2.4450
4	2.54	BR	BMB	0.410	5.692	12.1088
5	2.85	NO3-N	BMB	0.960	11.656	4.7417
6	3.93	PO4-P	BMB	0.740	5.452	12.0195
7	4.51	SO4	BMB	1.453	10.090	23.8773

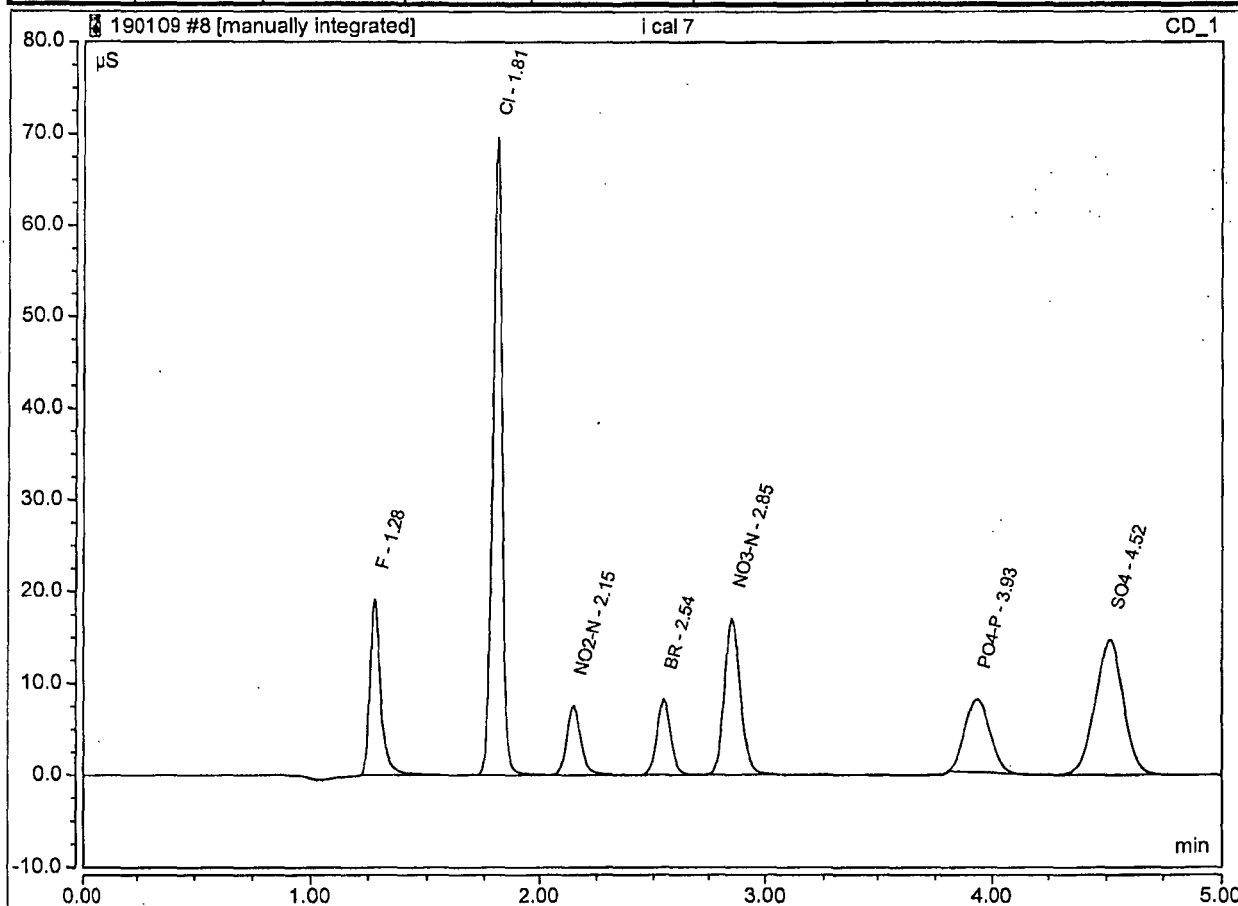


F mi1 HH 190109, MM

Peak Integration Report

Sample Name:	i cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:14	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.28	F	BMB*	1.021	19.102	8.6939
2	1.81	Cl	BMB	3.420	69.566	34.5262
3	2.15	NO2-N	BMB	0.529	7.525	3.4733
4	2.54	BR	BMB	0.586	8.190	17.3057
5	2.85	NO3-N	BMB	1.389	17.009	6.8583
6	3.93	PO4-P	BMB	0.995	7.895	15.9278
7	4.52	SO4	BMB	2.097	14.700	34.4589

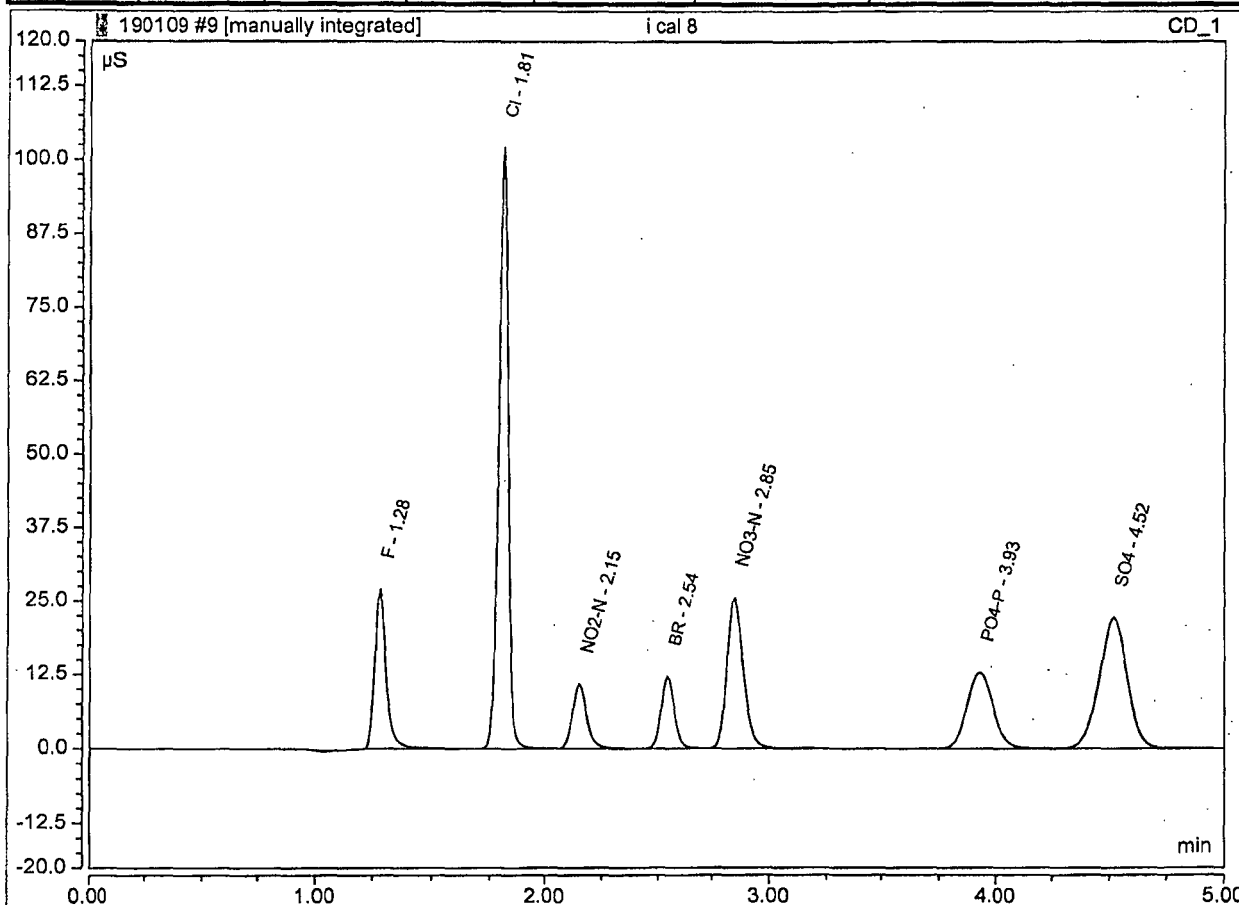


F mi1 HH 190109, MM

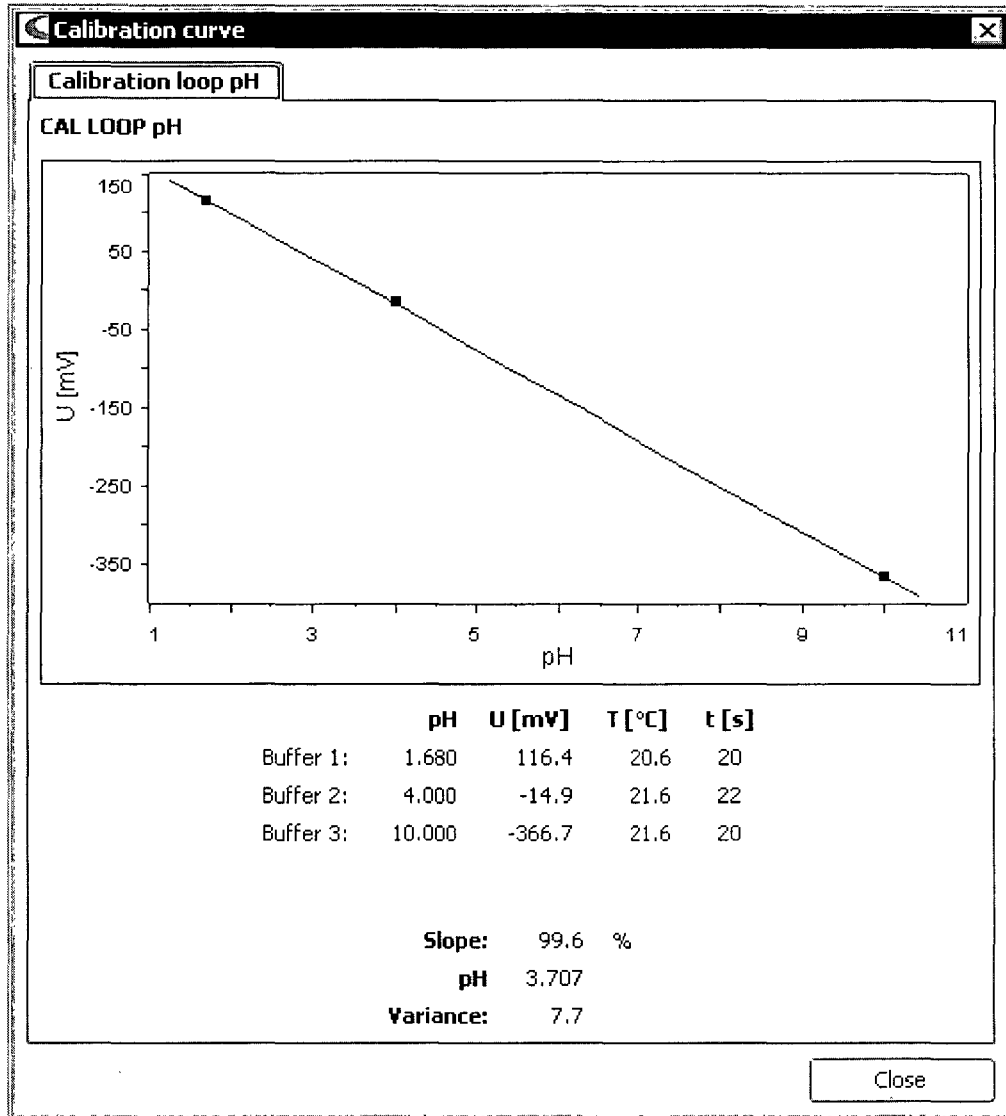
### Peak Integration Report

Sample Name:	i cal 8	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:22	Run Time:	5.00

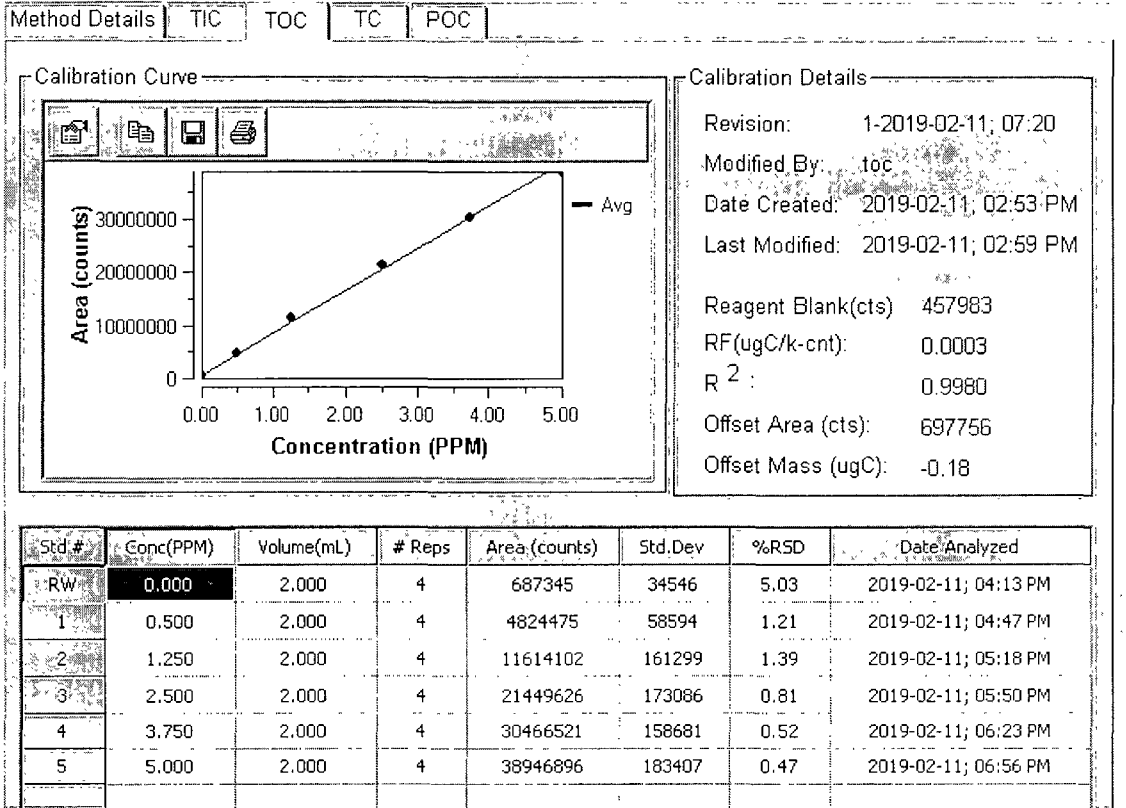
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.28	F	BMB*	1.496	26.961	12.7423
2	1.81	Cl	BMB	5.109	102.000	51.5826
3	2.15	NO2-N	BMB	0.771	10.836	5.0611
4	2.54	BR	BMB	0.861	12.140	25.4243
5	2.85	NO3-N	BMB	2.084	25.490	10.2914
6	3.93	PO4-P	BMB	1.680	12.720	26.4155
7	4.52	SO4	BMB	3.117	22.054	51.2158



F mi1 HH 190109, MM



TicToc Calibration Curve 190211A





Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
2	1	TOC-RW	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	687,345	0.000	0.000	34,546	5.03	
3	2	TOC-Std#1-0.500 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	4,824,475	1.000	0.500	58,594	1.21	
4	3	TOC-Std#2-1.250 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	11,614,102	2.500	1.250	161,299	1.39	
5	4	TOC-Std#3-2.500 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	21,449,626	5.000	2.500	173,086	0.81	
6	5	TOC-Std#4-3.750 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	30,466,521	7.500	3.750	158,681	0.52	
7	6	TOC-Std#5-5.000 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	38,946,896	10.000	5.000	183,407	0.47	
8	7	ICB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1 : 1	00000000	TOC	1,717,970	0.316	0.158	31,138	1.81	Pass
9	8	ICV Sugar	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Check_Stan	1 : 1	00000000	TOC	22,163,151	5.392	2.696	109,699	0.49	







Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Sample Results

Spl #: 2 Sample ID: TOC-RW Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 1 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:13 pm	-	-	-	668,867	0.000	0.000
2	4:21 pm	-	-	-	739,036	0.000	0.000
3	4:28 pm	-	-	-	667,973	0.000	0.000
4	4:36 pm	-	-	-	673,502	0.000	0.000
Avg.		-	-	-	687,345	0.000	0.000
Std.Dev.							
% RSD.					5.03		

Spl #: 3 Sample ID: TOC-Std#1-0.500 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 2 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:47 pm	-	-	-	4,799,949	1.000	0.500
2	4:54 pm	-	-	-	4,769,063	1.000	0.500
3	5:02 pm	-	-	-	4,823,015	1.000	0.500
4	5:10 pm	-	-	-	4,905,872	1.000	0.500
Avg.		-	-	-	4,824,475	1.000	0.500
Std.Dev.							
% RSD.					1.21		





Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Spl #: 4 Sample ID: TOC-Std#2-1.250 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 3 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:18 pm	-	-	-	11,514,099	2.500	1.250
2	5:26 pm	-	-	-	11,788,000	2.500	1.250
3	5:34 pm	-	-	-	11,444,716	2.500	1.250
4	5:42 pm	-	-	-	11,709,594	2.500	1.250
Avg.		-	-	-	11,614,102	2.500	1.250
Std.Dev.							
% RSD.					1.39		

Spl #: 5 Sample ID: TOC-Std#3-2.500 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 4 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:50 pm	-	-	-	21,654,245	5.000	2.500
2	5:58 pm	-	-	-	21,360,038	5.000	2.500
3	6:06 pm	-	-	-	21,521,272	5.000	2.500
4	6:15 pm	-	-	-	21,262,949	5.000	2.500
Avg.		-	-	-	21,449,626	5.000	2.500
Std.Dev.							
% RSD.					0.81		





Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: **TOC**

Date Approved: By:

Spl #: 6 Sample ID: TOC-Std#4-3.750 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 5 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:23 pm	-	-	-	30,612,289	7.500	3.750
2	6:31 pm	-	-	-	30,309,053	7.500	3.750
3	6:39 pm	-	-	-	30,351,074	7.500	3.750
4	6:47 pm	-	-	-	30,593,670	7.500	3.750
Avg.		-	-	-	30,466,521	7.500	3.750
Std.Dev.					0.52		
% RSD.							

Spl #: 7 Sample ID: TOC-Std#5-5.000 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 6 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:56 pm	-	-	-	38,971,032	10.000	5.000
2	7:04 pm	-	-	-	38,706,906	10.000	5.000
3	7:12 pm	-	-	-	38,956,234	10.000	5.000
4	7:20 pm	-	-	-	39,153,413	10.000	5.000
Avg.		-	-	-	38,946,896	10.000	5.000
Std.Dev.					0.47		
% RSD.							





Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: *TOC*  
 Date Approved: By:

Spl #: 8 Sample ID: ICB Type: Sample Date: 02/11/2019 Status: Passed  
 Vial #: 7 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:31 pm	-	-	-	1,702,854	0.313	0.156
2	7:39 pm	-	-	-	1,725,871	0.318	0.159
3	7:46 pm	-	-	-	1,685,579	0.308	0.154
4	7:54 pm	-	-	-	1,757,576	0.326	0.163
Avg.		-	-	-	1,717,970	0.316	0.158
Std.Dev.							
% RSD.					1.81		

Spl #: 9 Sample ID: ICV Sugar Type: Check\_Stan Date: 02/11/2019 Status: Passed  
 Vial #: 8 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:02 pm	-	-	-	22,271,756	5.419	2.710
2	8:10 pm	-	-	-	22,113,536	5.379	2.690
3	8:18 pm	-	-	-	22,033,394	5.359	2.680
4	8:26 pm	-	-	-	22,233,919	5.409	2.705
Avg.		-	-	-	22,163,151	5.392	2.696
Std.Dev.							
% RSD.					0.49		



**INORGANIC ANALYSIS**  
**Raw Data**

**APPL, INC.**

Method SM3500Fe	Units mg/L	Ferrous Iron	Instrument: Genesis Spectrometer
Analyte Fe2+	QCG: 190122A		Wavelength: 510 nm
Analyst HH	Final Volume: 50mL		

Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/15/18	12:27	ICB	0.00	0.000	
06/15/18	12:27	Ical 1	1.00	0.099	98.7%
06/15/18	12:28	Ical 2	2.00	0.201	100.4%
06/15/18	12:28	Ical 3	4.00	0.396	98.9%
06/15/18	12:29	Ical 4	5.00	0.501	100.1%
06/15/18	12:30	Ical 5	10.00	1.000	100.0%
06/15/18	12:31	ICV	3.00	0.316	105.2%
06/15/18	12:32	ICB	0.00	0.000	

Slope	0.100015306	Algorithm Check:	Appl ID	Absorbance	Result
Intercept	0.000258661		190122A lcs	0.308	3.08
Coefficient of Determination	0.999973247		Result = (Absorbance-Raw Blk-Intercept)/ Slope		
Test:	HH		190129	3.08	

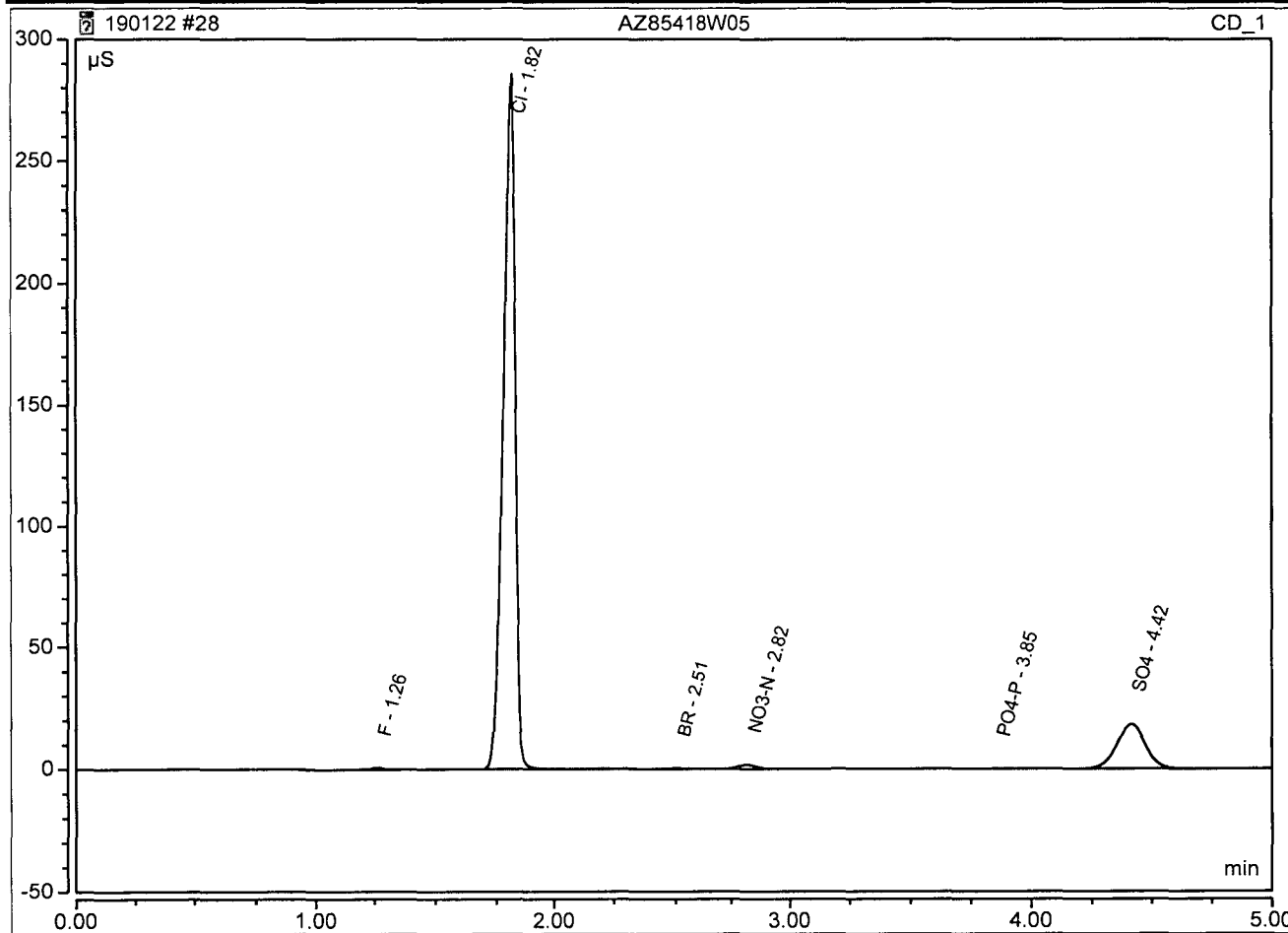
  

Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
01/22/19	8:28	CCV 4.0 190122	1	0.395	25mL		3.95	3.95	4.00	98.7%
01/22/19	8:28	CCB 190122	1	0.000	25mL		0.00	0.00		
01/22/19	8:29	AZ85404W22	1	0.012	25mL		0.12	0.12		
01/22/19	8:39	190122A lcs	1	0.308	25mL		3.08	3.08	3.00	102.6%
01/22/19	8:40	190122A lcsd	1	0.311	25mL		3.11	3.11		
01/22/19	8:41	AZ85405W13	1	0.010	25mL		0.10	0.10		
01/22/19	8:41	AZ85406W13	1	0.079	25mL		0.79	0.79		
01/22/19	8:42	AZ85408W13	1	0.081	25mL		0.81	0.81		
01/22/19	8:42	AZ85407W13	1	0.068	25mL		0.68	0.68		
01/22/19	8:43	AZ85408W13 MS	1	0.387	25mL		3.87	3.87		
01/22/19	8:44	AZ85408W13 MSD	1	0.376	25mL		3.76	3.76		
01/22/19	8:44	CCV 4.0 190122	1	0.395	25mL		3.95	3.95	4.00	98.7%
01/22/19	8:44	CCB 190122	1	0.000	25mL		0.00	0.00		
01/22/19	12:34	CCV 4.0 190122	1	0.397	25mL		3.97	3.97	4.00	99.2%
01/22/19	12:34	CCB 190122	1	0.001	25mL		0.01	0.01		
01/22/19	12:35	AZ85420W06	1	0.007	25mL		0.07	0.07		
01/22/19	12:35	AZ85418W06	1	0.009	25mL		0.09	0.09		
01/22/19	12:36	CCV 4.0 190122	1	0.396	25mL		3.96	3.96	4.00	98.9%
01/22/19	12:37	CCB 190122	1	0.001	25mL		0.01	0.01		

### Peak Integration Report

Sample Name:	AZ85418W05	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 12:44	Run Time:	5.00

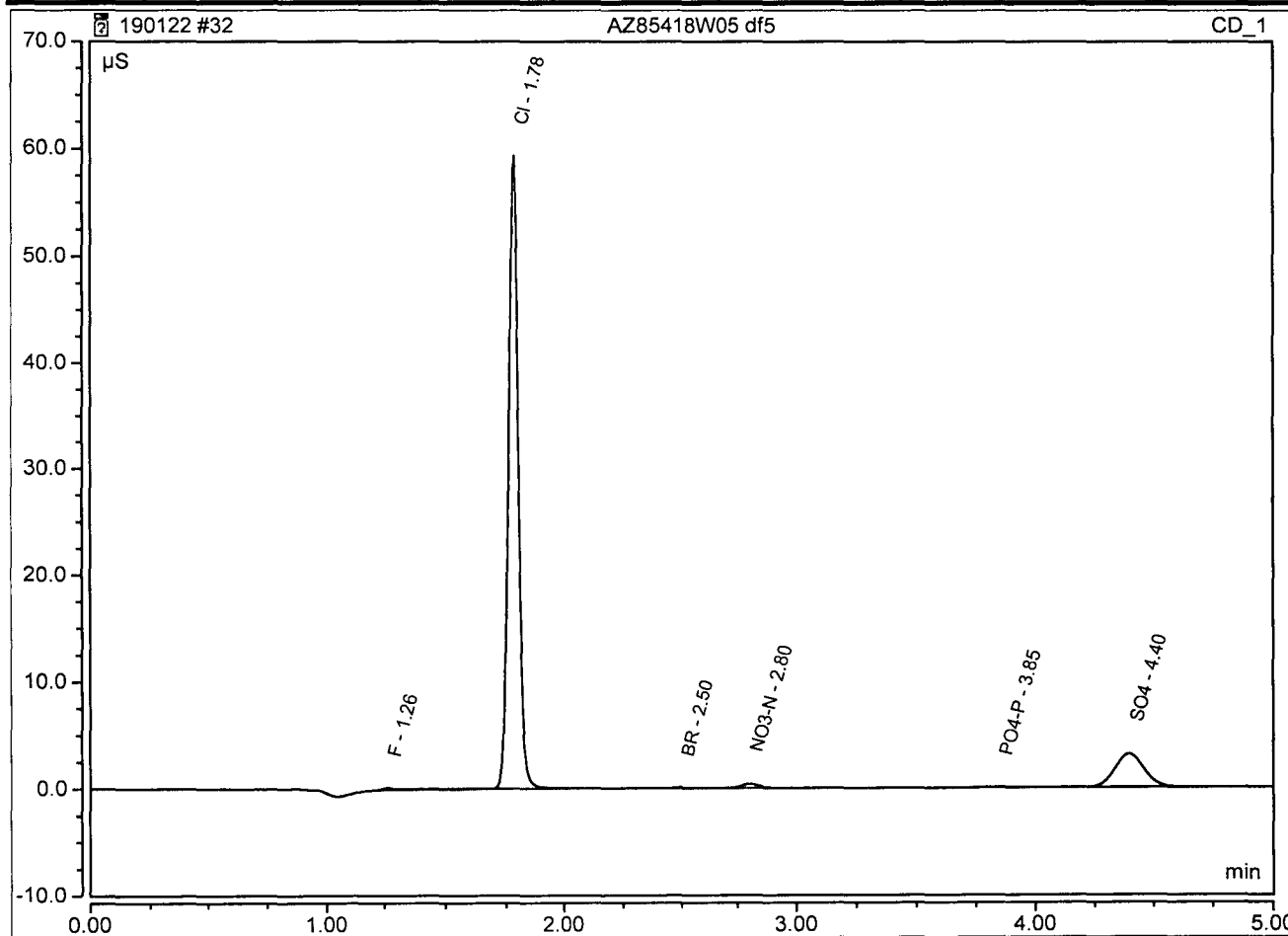
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.26	F	BMB	0.038	0.806	0.3245
2	1.82	Cl	BMB	17.025	285.549	171.8984
3	2.51	BR	BMB	0.016	0.213	0.4633
4	2.82	NO3-N	BMB	0.150	1.730	0.7422
5	3.85	PO4-P	BMB	0.009	0.078	0.8301
6	4.42	SO4	BMB	2.520	18.273	41.3975



### Peak Integration Report

Sample Name:	AZ85418W05 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 14:55	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.021	0.196	0.8898
2	1.78	Cl	BMB	2.877	59.286	145.2538
3	2.50	BR	BMB	0.003	0.044	0.4605
4	2.80	NO3-N	BMB	0.031	0.364	0.7543
5	3.85	PO4-P	BMB	0.003	0.026	3.7034
6	4.40	SO4	BMB	0.451	3.132	37.0631

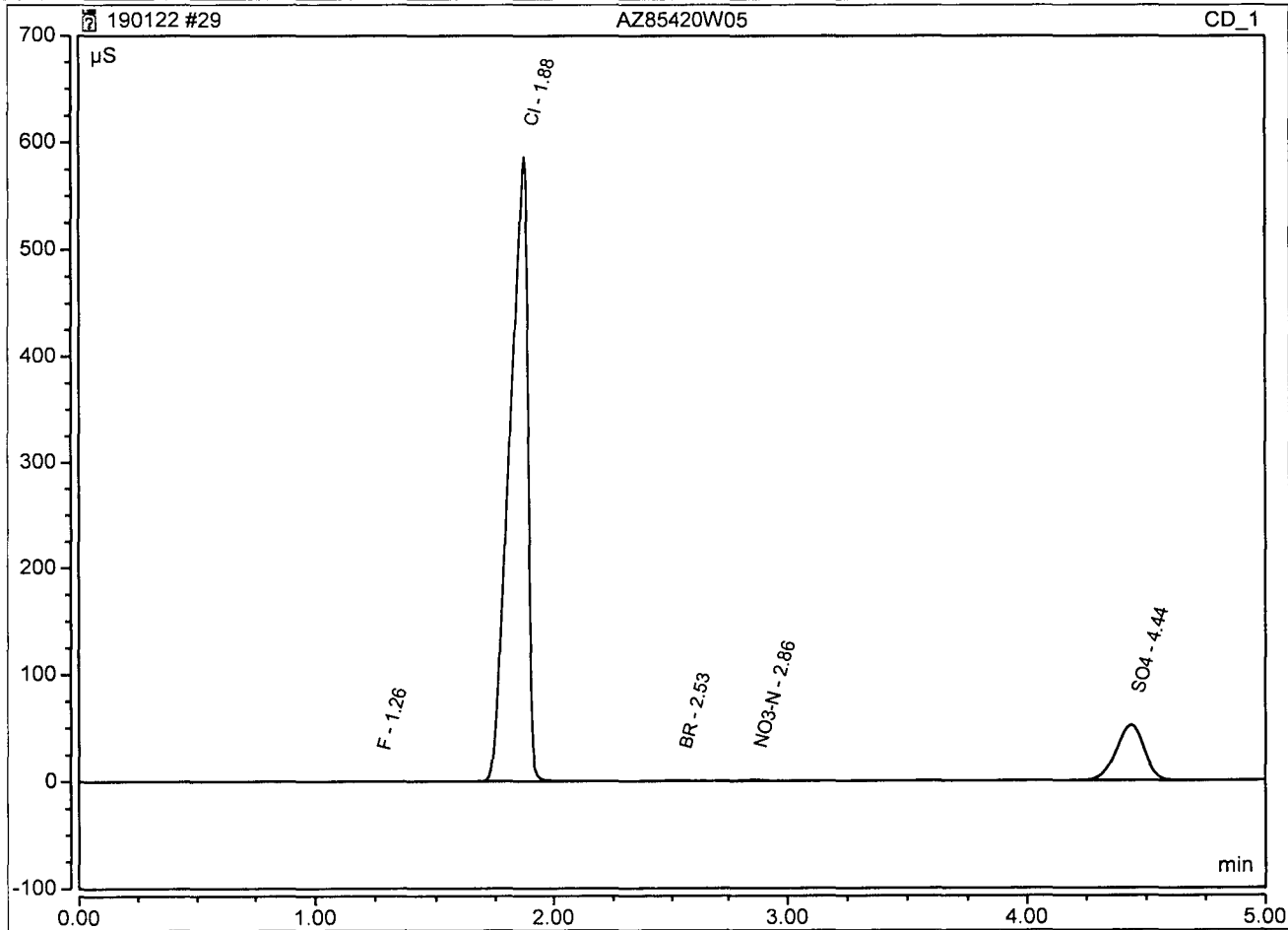




### Peak Integration Report

Sample Name:	AZ85420W05	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 12:52	Run Time:	5.00

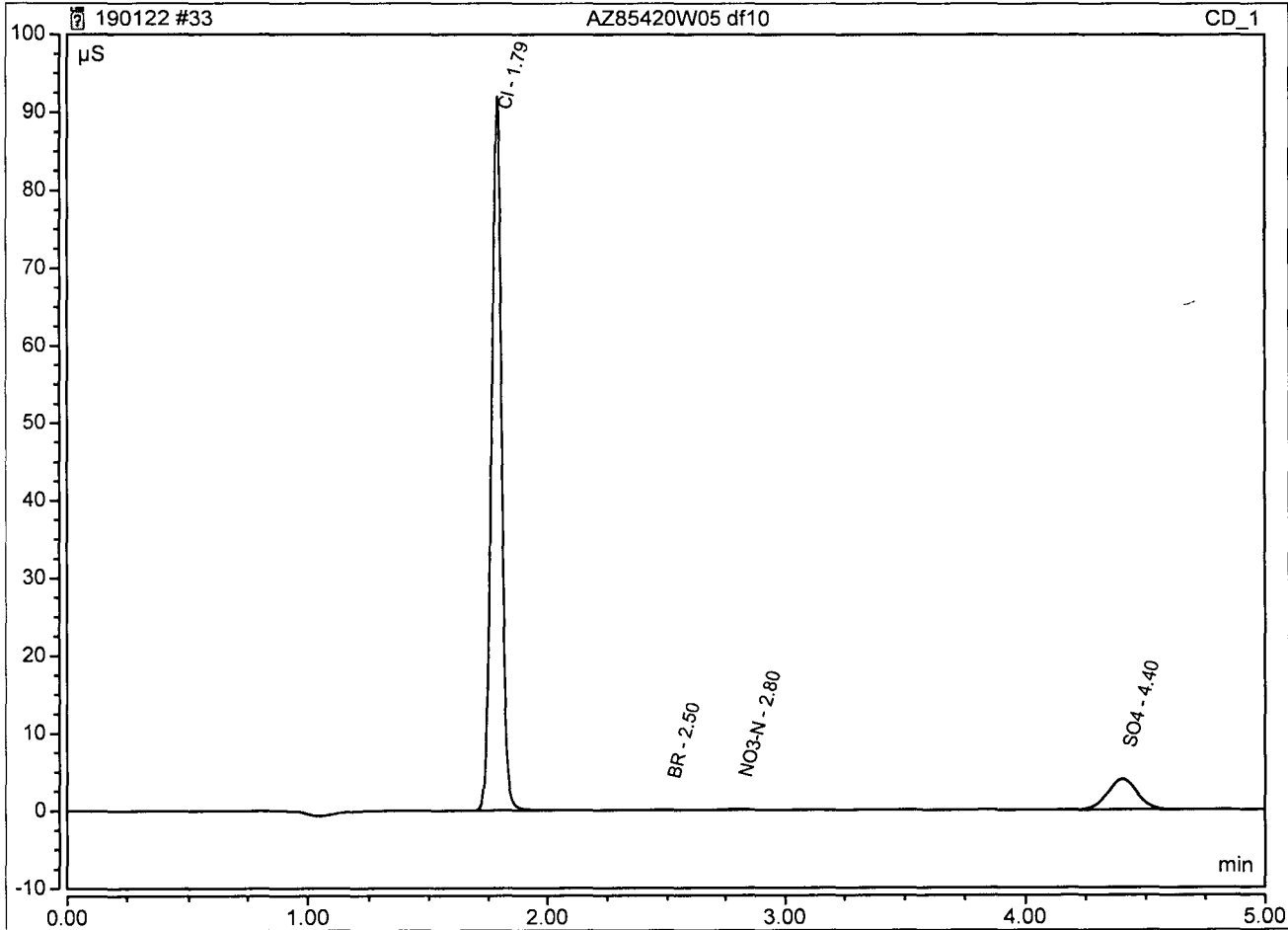
No.	Time (min)	Peak Name	Peak Type	Area (μS*min)	Height (μS)	Amount (mg/L)
1	1.26	F	BMB	0.008	0.158	0.0643
2	1.88	Cl	BMB	53.054	585.659	535.6609
3	2.53	BR	BMB	0.045	0.567	1.3235
4	2.86	NO3-N	BMB	0.113	1.197	0.5599
6	4.44	SO4	BMB	7.061	51.612	116.0053



### Peak Integration Report

Sample Name:	AZ85420W05 df10	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	10.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 15:02	Run Time:	5.00

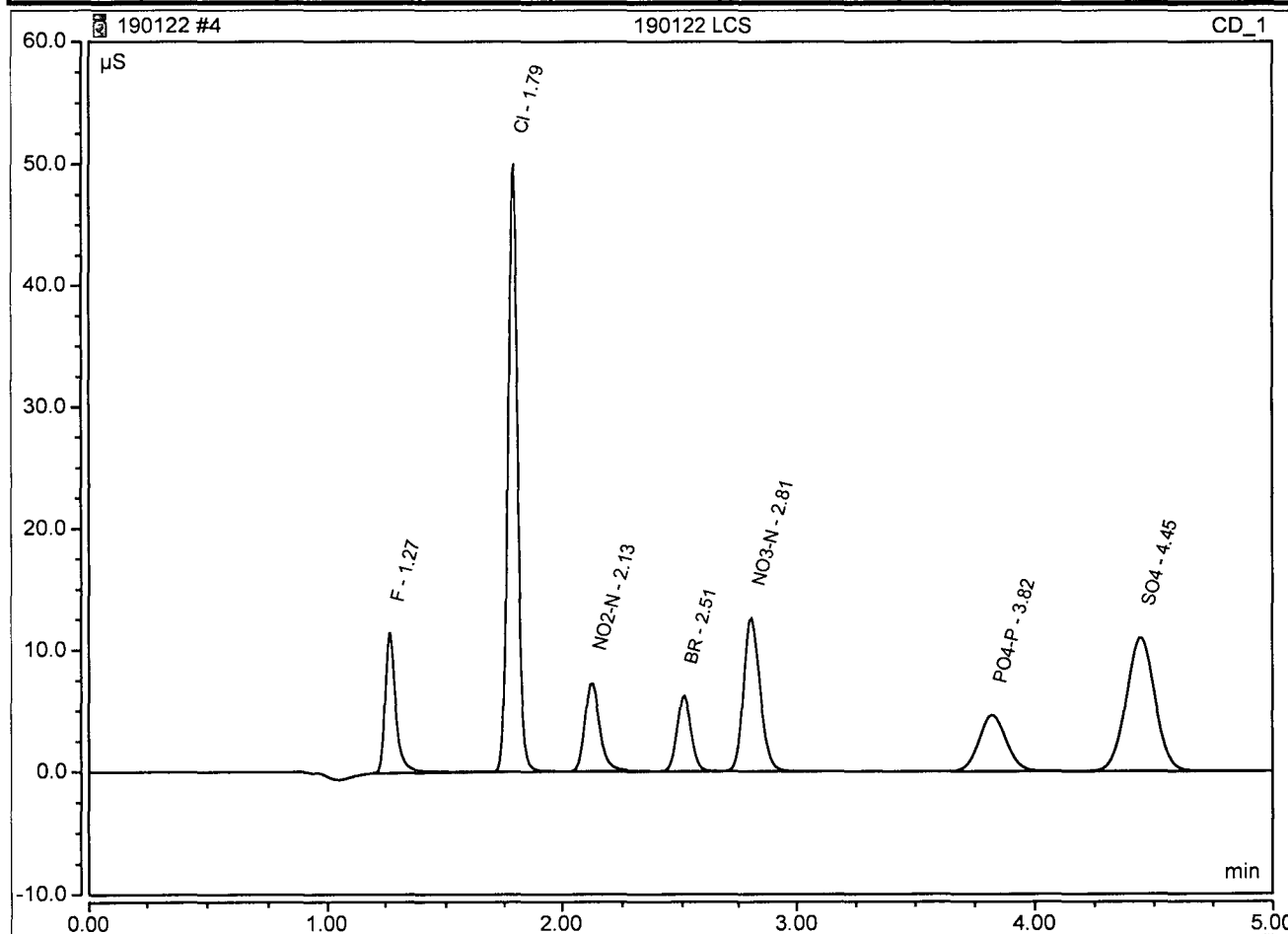
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S} \cdot \text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	4.523	91.983	456.6366
2	2.50	BR	BMB	0.004	0.063	1.3198
3	2.80	NO3-N	BMB	0.011	0.134	0.5537
4	4.40	SO4	BMB	0.561	3.919	92.1252



### Peak Integration Report

Sample Name:	190122 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 09:16	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.612	11.498	5.2095
2	1.79	Cl	BMB	2.442	49.959	24.6583
3	2.13	NO2-N	BMB	0.524	7.318	3.4362
4	2.51	BR	BMB	0.443	6.217	13.0800
5	2.81	NO3-N	BMB	1.032	12.633	5.0980
6	3.82	PO4-P	BMB	0.613	4.629	10.0805
7	4.45	SO4	BMB	1.550	10.966	25.4601



Algorithm Check:

y = Peak Area

x = mg/L S04

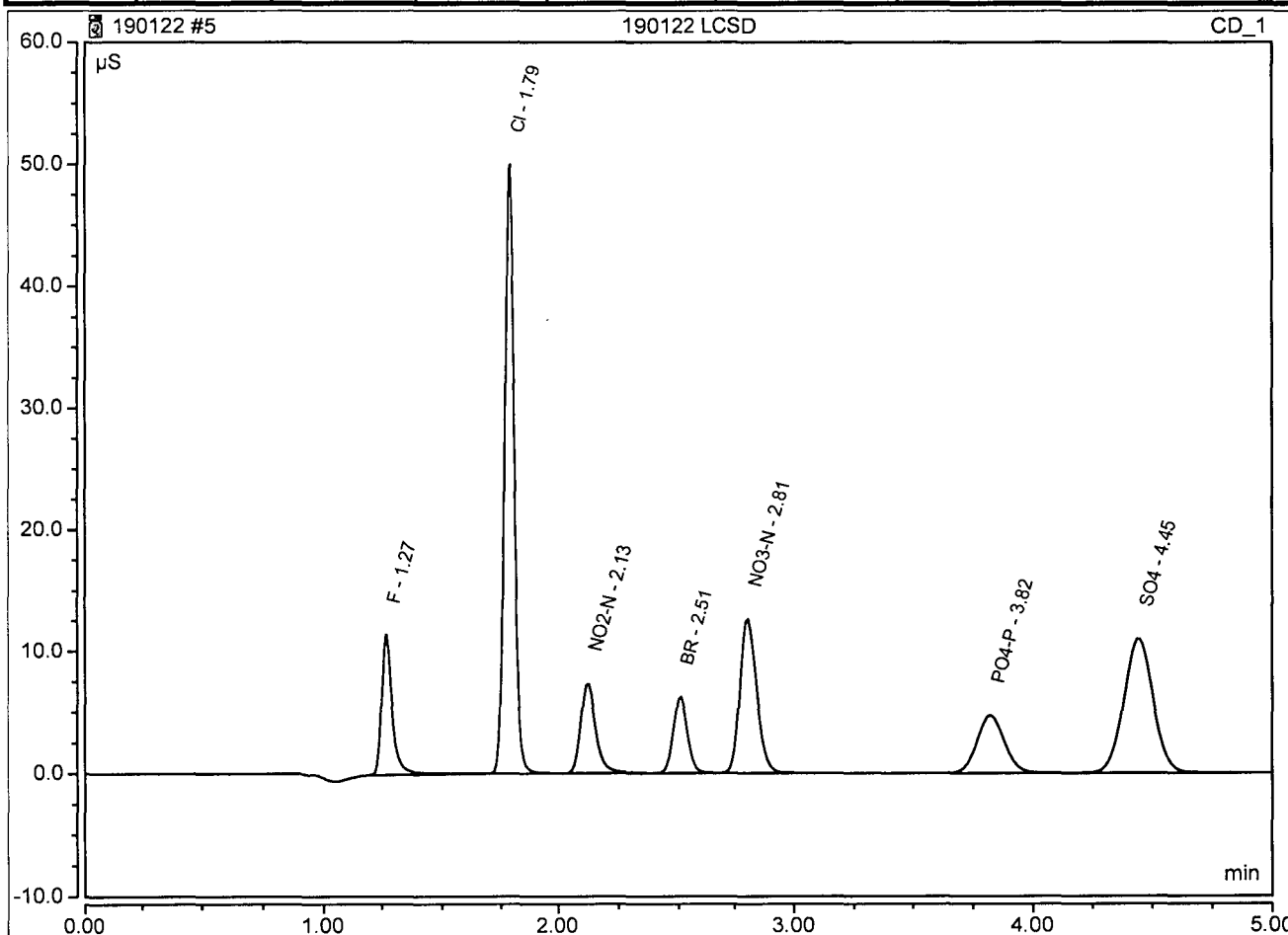
$$y = 0.0609 \quad x + \quad 0.0000$$

$$y = 1.5496 \quad \text{therefor } x = 25.45 \text{ HH } 190129$$

### Peak Integration Report

Sample Name:	190122 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	22-Jan-2019 / 09:24	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.610	11.453	5.1912
2	1.79	Cl	BMB	2.445	49.976	24.6843
3	2.13	NO2-N	BMB	0.525	7.323	3.4416
4	2.51	BR	BMB	0.443	6.216	13.0937
5	2.81	NO3-N	BMB	1.034	12.636	5.1043
6	3.82	PO4-P	BMB	0.622	4.690	10.2065
7	4.45	SO4	BMB	1.550	10.972	25.4625



12	U10	1 PPM NO3 TOXN	-0.0004	mg/L	0.006601	Ev	2019-01-28 15:36:50
	CCV	CCV .75	0.7939	mg/L	0.669575	Ev	2019-01-28 15:38:04
	CCB	CCB	-0.0021	mg/L	0.005204	Ev	2019-01-28 15:39:19
13	U11	AZ85418W07	-0.0059	mg/L	0.002034	Ev	2019-01-28 15:40:33
14	U12	AZ85420W07	-0.0051	mg/L	0.002676	Ev	2019-01-28 15:41:48
15	U13	AZ85520W06	-0.0051	mg/L	0.002701	Ev	2019-01-28 15:43:02
16	U14	AZ85523W06	-0.0053	mg/L	0.002525	Ev	2019-01-28 15:44:17
17	U15	AZ85525W06	-0.0055	mg/L	0.002361	Ev	2019-01-28 15:45:31
18	U16	AZ85527W06	-0.0059	mg/L	0.002084	Ev	2019-01-28 15:46:46
19	U17	AZ85562W20	-0.0050	mg/L	0.002790	Ev	2019-01-28 15:48:00
20	U18	AZ85562W20 MS	0.7589	mg/L	0.640323	Ev	2019-01-28 15:49:14
21	U19	AZ85562W20 MSD	0.7671	mg/L	0.647217	Ev	2019-01-28 15:50:27
22	U20	AZ85565W16	-0.0017	mg/L	0.005559	Ev	2019-01-28 15:51:42
	CCV	CCV .75	0.7851	mg/L	0.662205	Ev	2019-01-28 15:52:57
	CCB	CCB	-0.0012	mg/L	0.005991	Ev	2019-01-28 15:53:35
23	U21	AZ85567W16	-0.0041	mg/L	0.003534	Ev	2019-01-28 15:55:44
24	U22	AZ85569W16	-0.0036	mg/L	0.004002	Ev	2019-01-28 15:57:58
25	U23	AZ85643W20	-0.0050	mg/L	0.002777	Ev	2019-01-28 16:00:17
26	U24	AZ85646W16	-0.0022	mg/L	0.005115	Ev	2019-01-28 16:02:35
27	U25	AZ85653W16	-0.0057	mg/L	0.002235	Ev	2019-01-28 16:04:53
	CCV	CCV .75	0.7063	mg/L	0.596435	Ev	2019-01-28 16:07:12
	CCB	CCB	-0.0028	mg/L	0.004672	Ev	2019-01-28 16:09:25

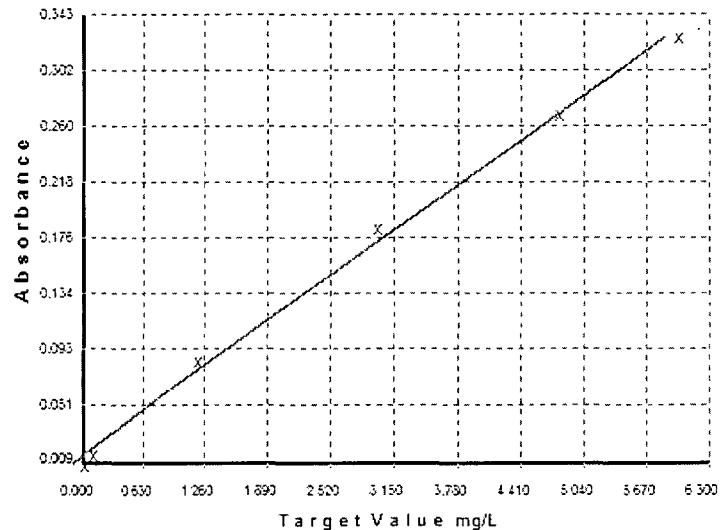
**TOXN**

**Calibration Chart**

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0089	-0.1257	0.0000	
S90	0.0168	0.0232	0.1000	-76.85
S91	0.0861	1.3311	1.2000	10.92
S92	0.1847	3.1931	3.0000	6.44
S93	0.2698	4.7990	4.8000	-0.02
S94	0.3270	5.8793	6.0000	-2.01
S0	0.0197	0.0772	0.0000	

Polynomial Order: 1  
 Correlation Coefficient: 0.9986  
 Carryover(%): 3.4  
 Calibration equation:  $y = bx + a$   
 y =: Concentration mg/L  
 x =: Measured absorbance  
 a =: -2.940597E-001  
 b =: 1.887621E+001  
 Date & Time: 2019-01-28 16:31:22

**Calibration Graph**



**Reagents**

Name	Batch	Prepared By	Expiry Date
NO3 W Buffer	Algorithm Check	Joel	
Sulfa-NEDD		Joel	
	$y = 18.87621x - 0.175034$	-0.2940597	EV 1/29/19
	$y = 3.01$		

Cup Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
S1	Standard 1	0.0089			0.008922			Ev	2019-01-28 16:18:12
S90	Standard 90	0.0168			0.016805			Ev	2019-01-28 16:20:24
S91	Standard 91	0.0861			0.086095			Ev	2019-01-28 16:22:36
S92	Standard 92	0.1847			0.184738			Ev	2019-01-28 16:24:47
S93	Standard 93	0.2698			0.269813			Ev	2019-01-28 16:26:59
S94	Standard 94	0.3270			0.327046			Ev	2019-01-28 16:29:10
S0	Standard 0	0.0197			0.019666			Ev	2019-01-28 16:31:22
CCV	CCV	3.0152	mg/L		0.175315			Ev	2019-01-28 16:33:33
CCB	CCB	-0.1244	mg/L		0.008986			Ev	2019-01-28 16:35:45
4	U2 ✓	CV NO3 TOXN	3.0099	mg/L	0.175034			Ev	2019-01-28 16:37:56
5	U3	ICB NO2 NO3 TOXN	-0.0978	mg/L	0.010395			Ev	2019-01-28 16:40:08
6	U4	190128A BLK NO2 NO3 TOXN	-0.1119	mg/L	0.009651			Ev	2019-01-28 16:42:21
9	U7	190128A LCS NO3 TOXN	2.9894	mg/L	0.173948			Ev	2019-01-28 16:44:32
10	U8	190128A LCSD NO3 TOXN	3.0721	mg/L	0.178327			Ev	2019-01-28 16:46:43

12	U10	1 PPM NO3 TOXN	0.9478	mg/L	0.065792	Ev	2019-01-28 16:48:55
13	U11	AZ85418W07	0.7704	mg/L	0.056392	Ev	2019-01-28 16:51:06
14	U12	AZ85420W07	0.5308	mg/L	0.043700	Ev	2019-01-28 16:53:18
15	U13	AZ85520W06	-0.1087	mg/L	0.009818	Ev	2019-01-28 16:55:29
16	U14	AZ85523W06	0.4787	mg/L	0.040938	Ev	2019-01-28 16:57:40
	CCV	CCV	3.0892	mg/L	0.179234	Ev	2019-01-28 16:59:54
	CCB	CCB	-0.0918	mg/L	0.010715	Ev	2019-01-28 17:02:08
17	U15	AZ85525W06	1.1453	mg/L	0.076250	Ev	2019-01-28 17:04:22
18	U16	AZ85527W06	0.3767	mg/L	0.035535	Ev	2019-01-28 17:06:35
19	U17	AZ85562W20	0.5125	mg/L	0.042731	Ev	2019-01-28 17:08:49
20	U18	AZ85562W20 MS	4.1373	mg/L	0.234757	Ev	2019-01-28 17:11:02
21	U19	AZ85562W20 MSD	4.1137	mg/L	0.233511	Ev	2019-01-28 17:13:13
22	U20	AZ85565W16	-0.0707	mg/L	0.011834	Ev	2019-01-28 17:15:26
23	U21	AZ85567W16	1.6987	mg/L	0.105570	Ev	2019-01-28 17:16:04
24	U22	AZ85569W16	0.8856	mg/L	0.062496	Ev	2019-01-28 17:17:08
25	U23	AZ85643W20	0.5180	mg/L	0.043022	Ev	2019-01-28 17:18:05
26	U24	AZ85646W16	1.8067	mg/L	0.111293	Ev	2019-01-28 17:19:01
	CCV	CCV	3.0464	mg/L	0.176969	Ev	2019-01-28 17:19:57
	CCB	CCB	-0.0913	mg/L	0.010741	Ev	2019-01-28 17:20:54
27	U25	AZ85653W16	0.3759	mg/L	0.035494	Ev	2019-01-28 17:21:51
	CCV	CCV	2.9233	mg/L	0.170448	Ev	2019-01-28 17:22:47
	CCB	CCB	-0.1177	mg/L	0.009344	Ev	2019-01-28 17:23:44

## Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume		OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
			(to 8.3)	(total)									
AZ85420W05	2019-01-22 17:11:15 UTC-8	Alkalinity	0.000	2.646	0.00	0.00	107.96	107.96	mg/L	25 mL	0.0204	190122A	AR
AZ85418W05	2019-01-22 17:05:48 UTC-8	Alkalinity	0.000	2.250	0.00	0.00	91.80	91.80	mg/L	25 mL	0.0204	190122A	AR
190122A LCSD	2019-01-22 12:13:07 UTC-8	Alkalinity	0.000	5.904	0.00	0.00	240.88	240.88	mg/L	25 mL	0.0204	190122A	AR
190122A LCS	2019-01-22 12:03:20 UTC-8	Alkalinity	0.000	5.990	0.00	0.00	244.39	244.39	mg/L	25 mL	0.0204	190122A	AR
190122A BLK	2019-01-22 11:59:27 UTC-8	Alkalinity	0.000	0.012	0.00	0.00	0.49	0.49	mg/L	25 mL	0.0204	190122A	AR



Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	21,752,251	5.461	2.731	910,696	4.19	
2	2	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	1,822,626	0.458	0.229	35,797	1.96	
9	9	AZ85418W15	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1 : 1	00000000	TOC	6,090,919	1.414	0.707	88,913	1.46	Pass
11	11	AZ85420W15	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1 : 1	00000000	TOC	6,487,554	1.514	0.757	92,351	1.42	Pass
19	19	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	21,652,866	5.436	2.718	190,255	0.88	
20	20	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	2,250,407	0.565	0.283	32,805	1.46	
34	34	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	21,173,836	5.316	2.658	461,598	2.18	
35	35	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	2,431,812	0.611	0.306	63,952	2.63	
	2	4 190212A LCSD	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	17,255,653	4.332	2.166	175,980	1.02	
	5	3 190212A LCS	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	17,306,132	4.345	2.172	159,928	0.92	
	11	10 CCV 190212	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	21,546,495	5.409	2.704	129,277	0.60	
	12	11 CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1 : 1	00000000	TOC	2,243,558	0.563	0.282	64,732	2.89	







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Date Prepared: 02/18/2019 By: *TOC*  
 Date Approved: By:

**Sample Results**

Spl #: 1 Sample ID : CCV Type : QC #1 Date: 02/12/2019 Status: Passed  
 Vial #: 1 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:39 pm	-	-	-	23,068,505	5.792	2.896
2	2:47 pm	-	-	-	21,654,646	5.437	2.718
3	2:55 pm	-	-	-	21,184,749	5.319	2.659
4	3:03 pm	-	-	-	21,101,104	5.298	2.649
<b>Avg.</b>		-	-	-	21,752,251	5.461	2.731
<b>Std.Dev.</b>							
<b>% RSD.</b>					4.19		

Spl #: 2 Sample ID : CCB Type : QC #1 Date: 02/12/2019 Status: Passed  
 Vial #: 2 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:13 pm	-	-	-	1,875,174	0.471	0.235
2	3:21 pm	-	-	-	1,815,522	0.456	0.228
3	3:29 pm	-	-	-	1,799,861	0.452	0.226
4	3:36 pm	-	-	-	1,799,947	0.452	0.226
<b>Avg.</b>		-	-	-	1,822,626	0.458	0.229
<b>Std.Dev.</b>							
<b>% RSD.</b>					1.96		



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Date Prepared: 02/18/2019 By: *TOC*

Date Approved: By:

Spl #: 9 Sample ID: AZ85418W15 Type: Sample Date: 02/12/2019 Status: Passed  
 Vial #: 9 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:18 pm	-	-	-	6,153,770	1.430	0.714
2	7:26 pm	-	-	-	5,968,682	1.384	0.692
3	7:34 pm	-	-	-	6,159,734	1.431	0.716
4	7:42 pm	-	-	-	6,081,490	1.412	0.706
Avg.		-	-	-	6,090,919	1.414	0.707
Std.Dev.							
% RSD.					1.46		

Spl #: 11 Sample ID: AZ85420W15 Type: Sample Date: 02/12/2019 Status: Passed  
 Vial #: 11 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:22 pm	-	-	-	6,619,601	1.547	0.774
2	8:30 pm	-	-	-	6,480,143	1.512	0.755
3	8:38 pm	-	-	-	6,412,428	1.495	0.748
4	8:46 pm	-	-	-	6,438,046	1.501	0.751
Avg.		-	-	-	6,487,554	1.514	0.757
Std.Dev.							
% RSD.					1.42		



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Date Prepared: 02/18/2019 By: *TOC*

Date Approved: By:

Spl #: 19 Sample ID : CCV Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 19 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:41 am	-	-	-	21,692,556	5.446	2.723
2	12:49 am	-	-	-	21,873,624	5.492	2.746
3	12:57 am	-	-	-	21,633,019	5.431	2.716
4	1:05 am	-	-	-	21,412,267	5.376	2.688
Avg.		-	-	-	21,652,866	5.436	2.718
Std.Dev.							
% RSD.					0.88		

Spl #: 20 Sample ID : CCB Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 20 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:16 am	-	-	-	2,285,555	0.574	0.287
2	1:23 am	-	-	-	2,261,842	0.568	0.284
3	1:31 am	-	-	-	2,207,401	0.554	0.277
4	1:39 am	-	-	-	2,246,830	0.564	0.282
Avg.		-	-	-	2,250,407	0.565	0.283
Std.Dev.							
% RSD.					1.46		



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Date Prepared: 02/18/2019 By: **TOC**  
 Date Approved: By:

Spl #: 34 Sample ID : CCV Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 34 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:48 am	-	-	-	21,613,624	5.426	2.713
2	8:56 am	-	-	-	21,531,430	5.406	2.703
3	9:04 am	-	-	-	20,771,851	5.215	2.608
4	9:12 am	-	-	-	20,778,437	5.217	2.608
Avg.		-	-	-	21,173,836	5.316	2.658
Std.Dev.							
% RSD.					2.18		

Spl #: 35 Sample ID : CCB Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 35 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 am	-	-	-	2,426,350	0.609	0.305
2	9:31 am	-	-	-	2,523,661	0.634	0.317
3	9:39 am	-	-	-	2,394,622	0.601	0.301
4	9:46 am	-	-	-	2,382,614	0.598	0.299
Avg.		-	-	-	2,431,812	0.611	0.306
Std.Dev.							
% RSD.					2.63		



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Date Prepared: 02/18/2019 By: *TOC*  
 Date Approved: By:

Spl #: 11 Sample ID: CCV 190212 Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 10 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 pm	-	-	-	21,570,741	5.415	2.708
2	9:31 pm	-	-	-	21,668,118	5.440	2.719
3	9:39 pm	-	-	-	21,583,376	5.419	2.709
4	9:47 pm	-	-	-	21,363,745	5.364	2.682
Avg.		-	-	-	21,546,495	5.409	2.704
Std.Dev.							
% RSD.					0.60		

Spl #: 12 Sample ID: CCB Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 11 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:58 pm	-	-	-	2,334,995	0.586	0.293
2	10:05 pm	-	-	-	2,221,045	0.558	0.279
3	10:13 pm	-	-	-	2,234,864	0.561	0.281
4	10:21 pm	-	-	-	2,183,327	0.548	0.274
Avg.		-	-	-	2,243,558	0.563	0.282
Std.Dev.							
% RSD.					2.89		





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Date Prepared: 02/18/2019

By: *TOC*

Date Approved:

By:

Spl #: 2 Sample ID: 190212A LCSD Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 4 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:13 am	-	-	-	17,222,002	4.324	2.162
2	11:21 am	-	-	-	17,414,910	4.372	2.186
3	11:29 am	-	-	-	17,363,909	4.359	2.180
4	11:37 am	-	-	-	17,021,790	4.273	2.137
Avg.		-	-	-	17,255,653	4.332	2.166
Std.Dev.							
% RSD.					1.02		

Spl #: 5 Sample ID: 190212A LCS Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 3 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:58 pm	-	-	-	17,229,597	4.326	2.163
2	1:06 pm	-	-	-	17,167,125	4.310	2.154
3	1:14 pm	-	-	-	17,532,901	4.402	2.201
4	1:22 pm	-	-	-	17,294,906	4.342	2.171
Avg.		-	-	-	17,306,132	4.345	2.172
Std.Dev.							
% RSD.					0.92		



Standard Prep							
Prep Date	Ferrous Iron Standards		Prep'd By (Initials)		HH		
Exp Date	06/15/18						
	06/15/19						
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.249	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV			Prep'd By (Initials)		HH		
Prep Date	See Injection Log						
Exp Date	24 Hours						
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	06/14/19	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	06/14/19	375uL	25mL	Deionized water	3mg/L
Ferrous Iron Calibration Curve			Prep'd By (Initials)		HH		
Prep Date	06/15/18						
Exp Date	06/16/18						
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T.Baker	0000184592	06/14/19	0	25mL	Deionized water	0mg/L
Ical 1	J.T.Baker	0000184592	06/14/19	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T.Baker	0000184592	06/14/19	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T.Baker	0000184592	06/14/19	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T.Baker	0000184592	06/14/19	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T.Baker	0000184592	06/14/19	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/14/19	0.375	25mL	Deionized water	3mg/L
Reagent Prep							
Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep		
Colorizer	0747C107	1,10-phenanthroline	na	0.210g	01/19/19		
		HCL conc	na	8drops			
Buffer	Z28B018	Ammonia Acetate	na	249.3g	01/15/19		
	2018071399	Glacial Acetic Acid	06/27/20	700mL			

Anion Chromatography Working Standard									
Prep Date: 01/09/19									
Exp Date: 01/10/19									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H2O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H2O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H2O	o2si	062001-08-03	5000	10084781-1-39578	02/21/20	250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H2O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	250 µL	25 mL	Millipore Water	10
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-5372-39521	12/31/21	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve									
Prep Date: 01/09/19									
Exp Date: 01/10/19									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPI, Mix Name	Conc. Range (ug/mL)	Reference To APPI, Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Conc. Range (ug/mL)
Ical2	Varries	ICal1	5.0-50.0	Prepared 01/09/19	01/10/19	400 µL	1000 µL	Millipore Water	0.08-0.40
Anion Chromatography Working Standard	Varries	ICal2	5.0-50.0	Prepared 01/09/19	01/10/19	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varries	ICal3	5.0-50.0	Prepared 01/09/19	01/10/19	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varries	ICal4	5.0-50.0	Prepared 01/09/19	01/10/19	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varries	ICal5	5.0-50.0	Prepared 01/09/19	01/10/19	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varries	ICal6	5.0-50.0	Prepared 01/09/19	01/10/19	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varries	ICal7	5.0-50.0	Prepared 01/09/19	01/10/19	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varries	ICal8	5.0-50.0	Prepared 01/09/19	01/10/19	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography LCS/ICV									
Prep Date: See Injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Fluoride	Inorganic Ventures	ICF1	993-999	K-F652018-39801	10/23/19	62.5 µL	25 mL	Millipore Water	5
Nitrite	Inorganic Ventures	ICNO21	993-1001	M2-NOX660562-39802	10/23/19	250 µL	25 mL	Millipore Water	3.04
Chloride	Inorganic Ventures	ICCL1	995-1001	N2CL664868-39904	11/26/19	500 µL	25 mL	Millipore Water	20
O-Phosphate as P	Inorganic Ventures	IPPO41	1001-1009	M2-POX655826-39803	10/23/19	125 µL	25 mL	Millipore Water	10
Nitrate as N	Inorganic Ventures	ICNNO31	994-1002	N2-NOX667147-39510	10/23/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Bromide Standard	CPI International	4400-IC8M	1000	161681-8-39539	02/06/20	312.5 µL	25 mL	Millipore Water	12.5
Sulfate	Inorganic Ventures	ICSO41	998-1006	K2-SOX01111-38875	08/13/19	500 µL	25 mL	Millipore Water	20

Anion Chromatography CCV									
Prep Date: See Injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H2O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H2O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	62.5 µL	25 mL	Millipore Water	2.5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H2O	o2si	062001-08-03	5000	10084781-1-39578	02/21/20	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H2O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	125 µL	25 mL	Millipore Water	5
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-5372-39521	12/31/21	312.5 µL	25 mL	Millipore Water	12.5
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	625 µL	25 mL	Millipore Water	25



## Nitrite

### High Point @ 1.5 mg/L

0.075 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24 - 38408 exp: 4/20/19  
50 mL DI Water

### CCV @ 0.75 mg/L

0.0375 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24-38408 exp: 4/20/19  
50 mL DI Water

### ICV/LCS @ 0.73 mg/L

0.12mL NO<sub>2</sub> Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>2</sub>

400 uL of High point and 200 uL of DI made directly into a sample cup

Prep 12/20/18  
Exp 12/27/18  
Initials BP

## Nitrate/TOXN

### High Point @ 6 mg/L

0.30 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### CCV @ 3.0 mg/L

0.15 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### ICV/LCS @ 3.0 mg/L

0.150 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>3</sub>

100 uL of High point and 500 uL of DI made directly into a sample cup

### MS @ 2.5 mg/L NO<sub>3</sub> and 0.73 mg/L NO<sub>2</sub>

0.125 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
and 0.12mL Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
Final volume 50 mL of sample

Prep 01/28/19  
Exp 2/4/19  
EV

Titrimetric Alkalinity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	J.T.Baker	NA	NA	167828	NA	NA	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	J.T.Baker	Normality	0.1N	167828	09/05/18	09/05/19	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	J.T.Baker	Normality	0.02N	167828	10/24/18	10/24/19	200mL	1L	DI	0.02N
Inorganic Spike (NaHCO <sub>3</sub> )	BDH	NA	NA	1575C510	10/18/18	08/14/20	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	1575C510	10/18/18	10/18/19	3.5g	500mL	DI	250mg/L
Standardizing Solution (NaCO <sub>3</sub> )	J.T.Baker	Normality	1N	178494	07/25/17	07/25/19	PURCHASED	NA	NA	NA

Name of Final Standard TOC Calibration Curve  
 Prep Date 02/11/19  
 Exp Date 03/11/19

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	20 uL	40 mL	DI Water	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	50 uL	40 mL	DI Water	1.25 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	100 uL	40 mL	DI Water	2.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	150 uL	40 mL	DI Water	3.75 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	200 uL	40 mL	DI Water	5 ppm

Name of Final Standard 1000 PPM ICV TOC Intermediate  
 Prep Date 02/11/19  
 Exp Date 02/11/20

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sugar	Millenia	814-293	42% Carbon	V298J-NA	NA	2.3831 g	1 L	DI Water	1003.45 ppm

Name of Final Standard ICV (TOC)  
 Prep Date 02/11/19  
 Exp Date 03/11/19

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	Prep: 2/11/19	03/11/19	100 uL	40mL	DI Water	2.5 ppm

Name of Final Standard CCV (TOC)  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	100 uL	40 mL	DI Water	2.5 ppm

Name of Final Standard TOC LCS/LCSD  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	CR-0328-37639	02/28/19	80 uL	40 mL	DI Water	2.0 ppm

Name of Final Standard TOC MS/MSD  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	CR-0328-37639	02/28/19	100 uL	40 mL	sample	2.5 ppm

# SM3500FeB Injection Log

Directory: I:\Spec Sheets\Ferrous Iron (Fe2)\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
15	22 Jan 2019	08:28	CCV 4.0 190122		190122A	1.
14	22 Jan 2019	08:28	CCB 190122		190122A	1.
17	22 Jan 2019	08:39	190122A lcs		190122A	1.
18	22 Jan 2019	08:40	190122A lcsd		190122A	1.
24	22 Jan 2019	08:44	CCV 4.0 190122		190122A	1.
26	22 Jan 2019	08:44	CCB 190122		190122A	1.
27	22 Jan 2019	12:34	CCV 4.0 190122		190122A	1.
28	22 Jan 2019	12:34	CCB 190122		190122A	1.
30	22 Jan 2019	12:35	AZ85418W06		190122A	1.
29	22 Jan 2019	12:35	AZ85420W06		190122A	1.
31	22 Jan 2019	12:36	CCV 4.0 190122		190122A	1.
32	22 Jan 2019	12:37	CCB 190122		190122A	1.
33	15 Jun 2018	12:27	lcal 1		190122A	1.
34	15 Jun 2018	12:27	ICB		190122A	1.
35	15 Jun 2018	12:28	lcal 2		190122A	1.
36	15 Jun 2018	12:28	lcal 3		190122A	1.
37	15 Jun 2018	12:29	lcal 4		190122A	1.
38	15 Jun 2018	12:30	lcal 5		190122A	1.
39	15 Jun 2018	12:31	ICV		190122A	1.
40	15 Jun 2018	12:32	ICB		190122A	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\Anions\

RunID	Injected	Sample Name	Misc Info	FileName	Multiplier
1	09 Jan 2019 10:22	CCB		2019	1.
2	09 Jan 2019 10:30	i cal 1		2019	1.
3	09 Jan 2019 10:37	i cal 2		2019	1.
4	09 Jan 2019 10:45	i cal 3		2019	1.
5	09 Jan 2019 10:52	i cal 4		2019	1.
6	09 Jan 2019 10:59	i cal 5		2019	1.
7	09 Jan 2019 11:07	i cal 6		2019	1.
8	09 Jan 2019 11:14	i cal 7		2019	1.
9	09 Jan 2019 11:22	i cal 8		2019	1.
10	09 Jan 2019 11:29	CCB		2019	1.
11	09 Jan 2019 11:36	ICV LCS 190103		2019	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected	Sample Name	Misc Info	FileName	Multiplier
2	22 Jan 2019 09:02	CCV 190122		Anions	1.
3	22 Jan 2019 09:09	CCB		Anions	1.
4	22 Jan 2019 09:16	190122 LCS		Anions	1.
5	22 Jan 2019 09:24	190122 LCSD		Anions	1.
11	22 Jan 2019 10:08	CCV 190122		Anions	1.
12	22 Jan 2019 10:16	CCB		Anions	1.
26	22 Jan 2019 12:16	CCV 190122		Anions	1.
27	22 Jan 2019 12:23	CCB		Anions	1.
28	22 Jan 2019 12:44	AZ85418W05		Anions	1.
29	22 Jan 2019 12:52	AZ85420W05		Anions	1.
30	22 Jan 2019 12:59	CCV 190122		Anions	1.
31	22 Jan 2019 13:07	CCB		Anions	1.
32	22 Jan 2019 14:55	AZ85418W05 df5		Anions	5.
33	22 Jan 2019 15:02	AZ85420W05 df10		Anions	10.
34	22 Jan 2019 15:10	CCV 190122		Anions	1.
35	22 Jan 2019 15:17	CCB		Anions	1.

# EPA 353.2 Injection Log

Directory: I:\EVE\Export\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	28 Jan 2019	16:18	Standard 1 TOXN/NO3		190128A TO	1.
2	28 Jan 2019	16:20	Standard 90 TOXN/NO3		190128A TO	1.
3	28 Jan 2019	16:22	Standard 91 TOXN/NO3		190128A TO	1.
4	28 Jan 2019	16:24	Standard 92 TOXN/NO3		190128A TO	1.
5	28 Jan 2019	16:26	Standard 93 TOXN/NO3		190128A TO	1.
6	28 Jan 2019	16:29	Standard 94 TOXN/NO3		190128A TO	1.
7	28 Jan 2019	16:31	Standard 0 TOXN/NO3		190128A TO	1.
8	28 Jan 2019	16:33	CCV TOXN/NO3		190128A TO	1.
9	28 Jan 2019	16:35	CCB TOXN/NO3		190128A TO	1.
10	28 Jan 2019	16:37	ICV NO3 TOXN		190128A TO	1.
11	28 Jan 2019	16:40	ICB NO2 NO3 TOXN		190128A TO	1.
12	28 Jan 2019	16:42	190128A BLK NO2 NO3 TOXN		190128A TO	1.
13	28 Jan 2019	16:44	190128A LCS NO3 TOXN		190128A TO	1.
14	28 Jan 2019	16:46	190128A LCSD NO3 TOXN		190128A TO	1.
16	28 Jan 2019	16:51	AZ85418W07 TOXN/NO3		190128A TO	1.
17	28 Jan 2019	16:53	AZ85420W07 TOXN/NO3		190128A TO	1.
20	28 Jan 2019	16:59	CCV TOXN/NO3		190128A TO	1.
21	28 Jan 2019	17:02	CCB TOXN/NO3		190128A TO	1.



# SM 2320B Injection Log

Directory: I:\Tiamo\EXPORT\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	22 Jan 2019	11:59	190122A BLK		190122A_AL	1.
2	22 Jan 2019	12:03	190122A LCS		190122A_AL	1.
3	22 Jan 2019	12:13	190122A LCSD		190122A_AL	1.
25	22 Jan 2019	17:05	AZ85418W05		190122A_AL	1.
26	22 Jan 2019	17:11	AZ85420W05		190122A_AL	1.

## 9060A Injection Log

Directory: OI Analytical - TOC Reporter - G949730077 - Wet Chemistry

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	11 Feb 2019	16:13	TOC-RW		190211A	1.
2	11 Feb 2019	16:47	TOC-Std#1-0.500 PPM		190211A	1.
3	11 Feb 2019	17:18	TOC-Std#2-1.250 PPM		190211A	1.
4	11 Feb 2019	17:50	TOC-Std#3-2.500 PPM		190211A	1.
5	11 Feb 2019	18:23	TOC-Std#4-3.750 PPM		190211A	1.
6	11 Feb 2019	18:56	TOC-Std#5-5.000 PPM		190211A	1.
7	11 Feb 2019	19:31	ICB		190211A	1.
8	11 Feb 2019	20:02	ICV Sugar		190211A	1.

## 9060A Injection Log

Directory: OI Analytical - TOC Reporter - G949730077 - Wet Chemistry

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	12 Feb 2019	14:39	CCV		190212A	1.
2	12 Feb 2019	15:13	CCB		190212A	1.
9	12 Feb 2019	19:18	AZ85418W15		190212A	1.
11	12 Feb 2019	20:22	AZ85420W15		190212A	1.
19	13 Feb 2019	0:41	CCV		190212A	1.
20	13 Feb 2019	1:16	CCB		190212A	1.
34	13 Feb 2019	8:48	CCV		190212A	1.
35	13 Feb 2019	9:23	CCB		190212A	1.
37	13 Feb 2019	11:13	190212A LCSD		190212A	1.
40	13 Feb 2019	12:58	190212A LCS		190212A	1.
52	13 Feb 2019	21:23	CCV		190213A	1.
53	13 Feb 2019	21:58	CCB		190213A	1.



908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

Certification Number: CA1312  
NELAP Certification number: CA00046  
DoD-ELAP Certificate number: 4064.01

## Data Validatable Report

February 18, 2019

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, Hawaii 96813

Attn: Margie Pascua

Title: Report of Data: Case 87932

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126  
Subcontract: 18S-22209-HI27

Dear Ms. Pascua:

Nine water samples were received January 23, 2019. Written results for the requested analyses are being provided on this February 18, 2019.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Paula McCartney, Laboratory Director  
APPL, Inc.

PM/lac  
Enclosure  
cc: File

Number of pages in this report: \_\_\_\_\_

Data Validation Package  
for  
60481245 CIV 0053 Red Hill Fuel Storage  
APPL SDG 87932

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# CASE NARRATIVE

# Case Narrative

ARF: 87932

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

## Sample Receipt Information:

Nine water samples were received January 30, 2019, at 2.0°C, 2.0°C, 2.0°C, 2.5°C, 2.5°C and 3.0°C. The sample group was assigned Analytical Request Form (ARF) number 87932.

## Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D SIM analysis, the samples were extracted according to EPA method 3520C.

For the EPA 8270D Phenol analysis, the samples were extracted according to EPA method 3520C. The samples were screened for Tentatively Identified Compounds (TICs).

For the APPL SOP ANA2MEE analysis, the samples were extracted according to EPA method 3535.

For the EPA 8260B VOC and Gasoline analyses, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the samples were allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 300.0, 353.2, 9060A, SM 2320B, and SM 3500FeB analyses, the sample was prepared according to the methods.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

## Analytical Exceptions, Deviations and Abnormalities.

**EPA 8015B:** Manual integrations were performed in accordance with APPL's SOP. Chromatograms of before and after manual integration are enclosed.

**EPA 8270D SIM:** Both surrogates recovered above the control limit in sample ERH753 and in the LCS. There were no target compounds detected in this sample.

**EPA 8260B:** The surrogate Toluene-d8 for samples ERH738, ERH739, and ERH753 was outside the lower control limit of 89%. Corrective action: The samples were reanalyzed with surrogate being outside the lower control limit. The raw data for the reinjection has been included in the data package.

**Inorganics:** The samples were analyzed as soon as possible for ferrous iron.

In the method blank, alkalinity and bicarbonate were detected above one-half the LOQ. Corrective action: None, the concentration of alkalinity and bicarbonate in the samples exceeds the blank concentration by ten-fold or more.

**APPL Inc.**  
**Abbreviations and Flags**

<b>FLAG</b>	<b>DESCRIPTION</b>
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%



SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
87932	01/23/19	ERH737	AZ85519	01/21/19 10:25:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH737	AZ85519	01/21/19 10:25:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH737	AZ85519	01/21/19 10:25:00 AM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	SM3500FeB	Ferrous Iron
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH WATER L-L SGC
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87932	01/23/19	ERH738	AZ85520	01/21/19 10:45:00 AM	WATER	SW846 9060A	9060A TOC & DOC
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH WATER L-L SGC
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH739	AZ85521	01/21/19 10:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87932	01/23/19	ERH742	AZ85522	01/21/19 11:35:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH742	AZ85522	01/21/19 11:35:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH742	AZ85522	01/21/19 11:35:00 AM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	SM3500FeB	Ferrous Iron
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 353.2	EPA 353.2 - WATER
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 8270D	EPA 8270D WATER
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87932	01/23/19	ERH743	AZ85523	01/21/19 1:20:00 PM	WATER	SW846 9060A	9060A TOC & DOC
87932	01/23/19	ERH750	AZ85524	01/21/19 3:30:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH750	AZ85524	01/21/19 3:30:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH750	AZ85524	01/21/19 3:30:00 PM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	SM3500FeB	Ferrous Iron
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 353.2	EPA 353.2 - WATER
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 8270D	EPA 8270D WATER
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	RSK 175	METHANE BY RSK 175

## tblCOC\_APPLCaseNarrative


87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87932	01/23/19	ERH751	AZ85525	01/21/19 3:45:00 PM	WATER	SW846 9060A	9060A TOC & DOC
87932	01/23/19	ERH752	AZ85526	01/22/19 7:40:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH752	AZ85526	01/22/19 7:40:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH752	AZ85526	01/22/19 7:40:00 AM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	SM3500FeB	Ferrous Iron
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87932	01/23/19	ERH753	AZ85527	01/22/19 9:45:00 AM	WATER	SW846 9060A	9060A TOC & DOC

**SAMPLE RECORDS MANAGEMENT  
CHAIN OF CUSTODY,  
ARF, CRF, AND  
CLIENT COMMUNICATION**

# APPL - Analysis Request Form

87932

Client: AECOM  
 Address: 1001 Bishop Street, Suite 1600  
Honolulu, HI 96813  
 Attn: Margie Pascua  
 Phone: 808-356-5373 Fax: 808-523-8950  
 Job: 60571032 CV18F0126 Red Hill Fuel Storage  
 PO #: 18S-22209-HI27 PO# 102604  
 Chain of Custody (Y/N): Y # 002-003,005,009-010  
 RAD Screen (Y/N): Y pH (Y/N): N  
 Turn Around Type: 1 WEEK

Received by: AAR   
 Date Received: 01/23/19 Time: 10:20  
 Delivered by: FEDEX  
 Shuttle Custody Seals (Y/N): Y Time Zone: -10  
 Chest Temp(s): 2.0X3,2.5X2,3.0°C  
 Color: VOA/F-Pink  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Libby Cheesebor  
 QC Report Type: DVP4DOD/EQUIS/HI  
 Due Date: 01/30/19

**Comments:**

PM: login and F1s to Margie.Pascua@aecom.com  
 AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms (LOQ/LOD database/DL)  
 8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.  
 TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections  
 RSK: Methane only; \$87DC53W5: report phenol + TICs; \$87DMEEW5: 2-MEE (LCS Spk 80ppb).  
 TOC subbed out to ARI.

FR: HC to LDC, 2 labeled CDs to Margie Pascua.  
 EDD: AECOM EQUIS EDD 2.5.3 Red Hill 87DMEE->3535A to Margie.Pascua@aecom.com & jecklund@



**Sample Distribution:**

GC: 5-\$87DC53W5, 5-\$87DMEEW5, 5-\$DOC53W5LIQ, 5-\$SIM53LIQ51  
 Extractions: 5- LIQ003, 5- LIQ005SGC, 5- MWE2MEE  
 VOA: 9-\$86BTOTXDOD5W, 9-\$GASBL, 9-\$GRO86BW, 8-\$RSKMETH  
 Wetlab: 4-\$232W(HCO3,CO3,ALK), 4-\$300W(NO3,CL,SO4), 4-\$35FE, 4-\$35OF, 4-\$TOCDOCW,3-\$300WD(CL,SO4)

**Charges:**

**Invoice To:**








ACCOUNTS PAYABLE  
 1001 Bishop Street, Ste 1600  
 USAPImaging@aecom.com  
 mary.basano@aecom.com

Client ID	APPL ID	Sampled	Analyses Requested
1. ERH737	AZ85519W LCSD 	01/21/19 10:25	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
2. ERH738	AZ85520W LCSD 	01/21/19 10:45	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O: SGC analysis if detections

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

APPL - Analysis Request Form

87932

3. ERH739	LCS D	AZ85521W 	01/21/19 10:45	\$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$SIM53LIQ51
4. ERH742	LCS D	AZ85522W 	01/21/19 11:35	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
5. ERH743	LCS D	AZ85523W 	01/21/19 13:20	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$300WD(CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O: SGC analysis if detections
6. ERH750	LCS D	AZ85524W 	01/21/19 15:30	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
7. ERH751	LCS D	AZ85525W 	01/21/19 15:45	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$300WD(CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O: SGC analysis if detections
8. ERH752	LCS D	AZ85526W 	01/22/19 07:40	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
9. ERH753	LCS D	AZ85527W 	01/22/19 09:45	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$300WD(CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O: SGC analysis if detections

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

# APPL Sample Receipt Form

ARF# 87932

Sample	Container Type	Count	p
AZ85519	<sup>13</sup> VOAs - HCL	4	NA
AZ85520	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85521	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85522	<sup>13</sup> VOAs - HCL	4	NA
AZ85523	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85524	<sup>13</sup> VOAs - HCL	4	NA
AZ85525	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85526	<sup>13</sup> VOAs - HCL	4	NA
AZ85527	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA

Sample    Container Type    Count    p



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 www.applinc.com

CHAIN OF CUSTODY RECORD

Phone: (559) 275-2175  
 Fax: (559) 275-4422  
 coc@applinc.com

C.O.C. 005

Report to: PLEASE PRINT  
 Company Name: AECOM Phone: 808-356-5373  
 Address: 1001 Bishop St, Suite 1600  
Honolulu, HI 96813 Fax: 808-523-8950  
 Attn: Margie Pascua  
 Email: margie.pascua@aecom.com

Invoice to: PLEASE PRINT  
 Company Name: AECOM Phone: 808-529-7249  
 Address: 1001 Bishop St, Suite 1600  
Honolulu, HI 96813 Fax: 808-523-8950  
 Attn: Mary Basano  
 Email: mary.basano@aecom.com; usapimaging@aecom.com

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number														Date Shipped: <u>1/22/19</u>											
		No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	FSK175M Methane	SM3500-Fe Ferrous Iron		353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, K, Na	SM5500 Total & Dissolved Silica	9060A TOC	Carrier: <u>FedEx</u>			
Purchase Order Number	Sampler (Signature)		Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	FSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, K, Na	SM5500 Total & Dissolved Silica	9060A TOC	Waybill No.:				
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	FSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, K, Na	SM5500 Total & Dissolved Silica	9060A TOC	Comments:	
ERH742	RHMW04 - Trip Blank	1/21/19	11:35	HST	4	X			X								X										
ERH743	RHMW04	1/21/19	13:20	HST	24	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

*[Handwritten signature]* 1/22/19

\*Analyze TPH w/SGT only if TPH-d/o detected.  
 TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____						Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)					
Relinquished by sampler: <u>AECOM</u> <u>Morgan Donohue</u>	Date <u>1/22/19</u>	Time <u>11:25</u>	Received by:	Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:	
Relinquished by: <u>Morgan Donohue</u>	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:		<u>1-23-19</u>	<u>1020</u>	<i>[Signature]</i>	



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**CHAIN OF CUSTODY RECORD**

Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com

C.O.C. 010

Report to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number CV18F0126 / 60571032		Sampler (Print)			No. of Containers	Matrix			Analysis Requested/Method Number													Date Shipped: <u>1/22/19</u>						
Purchase Order Number 102604		Sampler (Signature)				Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	9060A TOC/TC	9060B	Carrier: FedEx	
Sample Identification	Location	Date Collected	Time Collected	Time Zone														Comments:										
ERH752	RHMW09 - Trip Blank	1/22/19	07:40	HST	4	X			X							X												
ERH753	RHMW09	1/22/19	09:45	HST	24	X			X		X*	X	X	X	X	X	X	X	X	X					X			
*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.																												

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: AECOM <i>Morgan Donohue</i>	Date: <u>1/22/19</u> Time: <u>13:30</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by: <i>Morgan Donohue</i>	Date:	Time:	Received by:	Relinquished by:	Date: <u>1-23-19</u> Time: <u>1020</u>	Received at lab by: <i>[Signature]</i>



87932



APPL, Inc.  
908 N Temperance Ave  
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CHAIN OF CUSTODY RECORD

Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com C.O.C. 003

Report to: PLEASE PRINT Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: PLEASE PRINT Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number CV18F0126 / 60571032		Sampler (Print)			Analysis Requested/Method Number															Date Shipped: <u>1/22/19</u>						
Purchase Order Number 102604		Sampler (Signature)			No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	9060A TOC	Carrier: FedEx
Sample Identification	Location	Date Collected	Time Collected	Time Zone		Aq	Sed.	Soil																		Waybill No.:
ERH739	RHMW02	1/21/19	1045	HST	7	X					X	X	X	X	X											Comments: see other cooler for VOA's
*Analyze TPH w/SGT only if TPH-d/o detected.																										
TPH-d/o & PAHs need liquid-liquid extraction.																										

Shuttle Temperature: <u>2.5, 2.0, 2.0, 3.0, 2.5, 2.0</u>		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____					Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)					
Relinquished by sampler: AECOM <u>Morgen Donohue</u>	Date <u>1/22/19</u>	Time <u>11:55</u>	Received by:	Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:	
Relinquished by: <u>Morgen Donohue</u>	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:	<u>[Signature]</u>				



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**CHAIN OF CUSTODY RECORD**

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 coc@applinc.com

C.O.C. 009

Report to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number CV18F0126 / 60571032	Sampler (Print)	Analysis Requested/Method Number													Date Shipped: <u>1/22/19</u>														
		Purchase Order Number 102604	Sampler (Signature)	No. of Containers	Matrix			8280C BTEX, TPH-g	8280C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSM PAHs short list	8270D Phenol, TICs		8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2370B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	5010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Solids	8090A TOC	390	Carrier: <u>FedEx</u>	Waybill No.:	Comments:
Sample Identification	Location				Date Collected	Time Collected	Time Zone	Aq	Sed.	Soil																			
ERH750	RHMW08 - Trip Blank	1/21/19	15:30	HST	4	X									X														
ERH751	RHMW08	1/21/19	15:45	HST	24	X				X*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: AECOM <u>Margen Donohue</u>	Date: <u>1/22/19</u> Time: <u>11:30</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by: <u>Margen Donohue</u>	Date:	Time:	Received by:	Relinquished by:	Date: <u>1-23-19</u> Time: <u>1020</u>	Received at lab by:



APPL, Inc.  
908 N Temperance Ave  
Clovis, CA 93611  
www.applinc.com

**CHAIN OF CUSTODY RECORD**

Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com

C.O.C. 002

Report to: PLEASE PRINT  
Company Name: AECOM Phone: 808-356-5373  
Address: 1001 Bishop St, Suite 1600  
Honolulu, HI 96813 Fax: 808-523-8950  
Attn: Margie Pascua  
Email: margie.pascua@aecom.com

Invoice to: PLEASE PRINT  
Company Name: AECOM Phone: 808-529-7249  
Address: 1001 Bishop St, Suite 1600  
Honolulu, HI 96813 Fax: 808-523-8950  
Attn: Mary Basano  
Email: mary.basano@aecom.com; usapimaging@aecom.com

Project Name/Number CV18F0126 / 60571032	Sampler (Print)					No. of Containers	Matrix			Analysis Requested/Method Number													Date Shipped: <u>1/22/19</u>				
	Purchase Order Number 102604	Sampler (Signature)					Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate Sulfate Chloride	300.0 Bromide/Fluoride	300.0 Total Ca, Mg, Mn, K, Na	300.0 Total & Dissolved Silica	3060A TOC	Carrier: FedEx
Sample Identification	Location	Date Collected	Time Collected	Time Zone																						Waybill No.:	Comments:
ERH 737	RHMW02 - Trip Blank	1/21/19	10:25	HST	4	X			X							X											
ERH 738	RHMW02	1/21/19	10:45	HST	24	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ERH 739	RHMW02	1/21/19	10:45	HST	4	X			X																		see other folder for non-VDA's

Shuttle Temperature: \_\_\_\_\_ Turnaround Requested: Check one  
 Standard 2-3 wk  One week  3 days  24/48 Hrs.  Other: \_\_\_\_\_ Sample Disposal:  
 Return to client  Disposal by Lab (30-day retention)

Relinquished by sampler: AECOM <u>Morgen Donohue</u>	Date <u>1/22/19</u>	Time <u>11:55</u>	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by: <u>Morgen Donohue</u>	Date	Time	Received by:	Relinquished by:	Date <u>1-23-19</u>	Time <u>10:20</u>	Received at lab by: <u>[Signature]</u>

COOLER RECEIPT FORM

ARF: 87932

- 1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 01/23/19
- 2) Coolers: Number of Coolers: 6
- 3) YES Were custody seals present and intact?  
How many? 12 Name/Date on seal? see below
- 4) YES Was there a shipping slip? Carrier name: FEDEX
- 5) Type of packing in cooler:  bubble wrap  popcorn  foam  plastic bags  other  
 wet ice  dry ice  no ice  gel ice
- 6) YES Were cooler temperatures acceptable?
- 7) Serial number of certified NIST thermometer use R1
- 8) Cooler temp(s): In °C  
1: 2.0°C x3 2: 2.5°C x2 3: 3.0°C 4: 5: 6:  
7: 8: 9: 10: 11: 12:

Chain of custody:

- 9) YES Was a chain of custody received?
- 10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

- 11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?
- 12) YES Did all container labels agree with custody papers?

Sample Containers:

- 13) YES Were all containers sealed in separate bags?
- 14) YES Did all containers arrive in good condition: (unbroken, no leakage, no cracked/broken lids)?
- 15) YES Were correct containers and preservatives used for the tests indicated?
- 16) YES Was a sufficient amount of sample sent for tests indicated?
- 17) Yes Were bubbles present in volatile samples?

If yes, the following were received with air bubbles:

Larger than a pea:

Smaller than a pea: AZ85519W01-4, AZ85522W01-4, AZ85524W01-4, AZ85526W01-4

Preservation Hold time:

- 18) Yes Was a sufficient amount of holding time remaining to analyze the samples?
- 19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?
- 20) Yes Was the pH of acid preserved non-VOA samples < 2?
- 21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide >9?
- 22) NO Were unpreserved VOA Vials received?
- 23) NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?  
pH strip lot number: 90B2031  
Lab notified if pH was not adequate:

Notes/Deficiencies:

Personnel receiving samples: ZG Second reviewer: AA  
 Personnel labeling samples: ZG  
 Project manager notified: AA Date/Time of notification 01/24/19  
 Name of client notified: Date/Time of notification

## **SAMPLE RESULTS**

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH738**

**APPL ID: AZ85520**

Sample Collection Date: 01/21/19

QCG: #DOC53-190124A-236903

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	2400 ++	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	103	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	100	56-125			%	01/24/19	01/25/19

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method: DOC0117.M
Run #: 124031
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 9:49:35 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8015B TPH WATER L-L SGC

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH738**

**APPL ID: AZ85520**

Sample Collection Date: 01/21/19

QCG: #DOC53-190124A2-237117

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	420 ++	40.0	25.00	13.07	ug/L	01/24/19	02/01/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	02/01/19
EPA 8015B-eL	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	01/24/19	02/01/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	104	60-142			%	01/24/19	02/01/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	96.6	56-125			%	01/24/19	02/01/19

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method: DOC0117.M
Run #: 201012
Instrument: Apollo
Sequence: 190201
Dilution Factor: 1
Initials: DPO

Printed: 02/01/19 1:57:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH739**

**APPL ID: AZ85521**

Sample Collection Date: 01/21/19

QCG: #DOC53-190128A-237007

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	2700 ++	40.0	25.00	13.07	ug/L	01/28/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	99.2	60-142			%	01/28/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	95.8	56-125			%	01/28/19	01/29/19

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method: DOC0117.M
Run #: 124069
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 10:05:35 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD



## EPA 8015B TPH WATER L-L SGC

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH739**

**APPL ID: AZ85521**

Sample Collection Date: 01/21/19

QCG: #DOC53-190128A1-237114

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	430 ++	40.0	25.00	13.07	ug/L	01/28/19	02/01/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	02/01/19
EPA 8015B-eL	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	01/28/19	02/01/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	98.3	60-142			%	01/28/19	02/01/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	97.4	56-125			%	01/28/19	02/01/19

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method: DOC0117.M
Run #: 201007
Instrument: Apollo
Sequence: 190201
Dilution Factor: 1
Initials: DPO

Printed: 02/01/19 1:57:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**

Sample Collection Date: 01/21/19

ARF: 87932

**APPL ID: AZ85523**

QCG: #DOC53-190124A-236903

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	113	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	110	56-125			%	01/24/19	01/25/19

Quant Method: DOC0117.M
Run #: 124032
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 9:49:35 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85525**

QCG: #DOC53-190124A-236903

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	113	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	106	56-125			%	01/24/19	01/25/19

Quant Method: DOC0117.M
Run #: 124033
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 9:49:35 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

ARF: 87932

**APPL ID: AZ85527**

QCG: #DOC53-190124A-236903

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	110	60-142			%	01/24/19	01/25/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	101	56-125			%	01/24/19	01/25/19

Quant Method: DOC0117.M
Run #: 124034
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/28/19 9:49:35 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85520**  
QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	11	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	8.8	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	32	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	113	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	100	58-120			%	01/28/19	01/30/19

Quant Method: L0122.M  
Run #: 0122L051  
Instrument: Linus  
Sequence: L190122  
Dilution Factor: 1  
Initials: AAB

Printed: 01/31/19 7:08:33 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH739**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85521**

QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	9.6	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	7.2	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	26	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	95.2	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	103	58-120			%	01/28/19	01/30/19

Quant Method: L0122.M  
Run #: 0122L052  
Instrument: Linus  
Sequence: L190122  
Dilution Factor: 1  
Initials: AAB

Printed: 01/31/19 7:08:34 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**

Sample Collection Date: 01/21/19

ARF: 87932

**APPL ID: AZ85523**

QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	101	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	93.9	58-120			%	01/28/19	01/30/19

Quant Method: L0122.M  
Run #: 0122L053  
Instrument: Linus  
Sequence: L190122  
Dilution Factor: 1  
Initials: AAB

Printed: 01/31/19 7:08:34 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85525**  
QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	103	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	112	58-120			%	01/28/19	01/30/19

Quant Method: L0122.M  
Run #: 0122L054  
Instrument: Linus  
Sequence: L190122  
Dilution Factor: 1  
Initials: AAB

Printed: 01/31/19 7:08:34 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85527**

QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	130 #	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	122 #	58-120			%	01/28/19	01/30/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L055
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 01/31/19 7:08:34 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85520**  
QCG: #87DC5-190128A-237041

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date	
EPA 8270D	2-PENTANONE, 4-HYDROXY-4-METHY	43 T		TIC		TIC	ug/L	01/28/19	01/30/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19	
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	91.6	43-140			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	76.9	44-119			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	82.3	19-119			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	87.1	44-120			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: PHENOL-D6 (S)	81.1	10-115			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	59.9	50-134			%	01/28/19	01/30/19	

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y058  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 02/11/19 10:17:59 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH739**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85521**  
QCG: #87DC5-190128A-237041

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	102	43-140			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	86.4	44-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	96.4	19-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	102	44-120			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	95.0	10-115			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	66.5	50-134			%	01/28/19	01/30/19

Quant Method: Y0125NC.M  
Run #: 0124Y059  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 02/11/19 10:17:59 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH743**

**APPL ID: AZ85523**

Sample Collection Date: 01/21/19

QCG: #87DC5-190128A-237041

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-PENTANONE, 4-HYDROXY-4-METHY	12 T				ug/L	01/28/19	01/30/19
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	84 T				ug/L	01/28/19	01/30/19
EPA 8270D	CYCLOTETRASILOXANE, OCTAMETHY	12 T				ug/L	01/28/19	01/30/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	93.6	43-140			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	81.4	44-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	71.0	19-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	74.2	44-120			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	64.9	10-115			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	78.2	50-134			%	01/28/19	01/30/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M
Run #: 0124Y060
Instrument: Yoda
Sequence: Y190124
Dilution Factor: 1
Initials: AAB

Printed: 02/11/19 10:17:59 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85525**  
QCG: #87DC5-190128A-237041

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	4H-PYRAN-4-ONE, TETRAHYDRO-	32 T		TIC		TIC ug/L	01/28/19	01/30/19
EPA 8270D	CYCLOTETRASILOXANE, OCTAMETHY	22 T		TIC		TIC ug/L	01/28/19	01/30/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	94.3	43-140			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	82.2	44-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	75.9	19-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	77.8	44-120			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	75.2	10-115			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	82.1	50-134			%	01/28/19	01/30/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y061  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 02/11/19 10:17:59 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932  
APPL ID: **AZ85527**  
QCG: #87DC5-190128A-237041

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	68 T	TIC			ug/L	01/28/19	01/30/19
EPA 8270D	CYCLOTETRASIOXANE, OCTAMETHY	12 T	TIC			ug/L	01/28/19	01/30/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	105	43-140			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	93.4	44-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	77.4	19-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	80.4	44-120			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	68.7	10-115			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	86.0	50-134			%	01/28/19	01/30/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M
Run #: 0124Y062
Instrument: Yoda
Sequence: Y190124
Dilution Factor: 1
Initials: AAB

Printed: 02/11/19 10:17:59 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85520**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y068  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 1:14:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932  
APPL ID: **AZ85521**  
QCG: #87DME-190128A-237008

**Sample ID: ERH739**

Sample Collection Date: 01/21/19

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

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Quant Method: YMEE1128.M  
Run #: 1128Y069  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 1:14:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85523**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y070  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 1:14:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85525**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y071  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 1:14:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932  
APPL ID: **AZ85527**  
QCG: #87DME-190128A-237008

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/30/19

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Quant Method: YMEE1128.M Run #: 1128Y095 Instrument: Yoda Sequence: Y181128M Dilution Factor: 1 Initials: AAB
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Printed: 01/30/19 1:14:55 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH737**

**APPL ID: AZ85519**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	96.9	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	97.4	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	100	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	91.2	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M  
Run #: 0128L25  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:29:10 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85520**  
QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	95.5	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	95.7	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	98.8	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	87.8 #	89-112			%	01/29/19	01/29/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0128W.M
Run #: 0128L28
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 01/30/19 1:29:10 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH739**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85521**

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	90.6	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	95.4	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	95.3	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	83.4 #	89-112			%	01/29/19	01/29/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0128W.M  
Run #: 0128L29  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:29:10 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH742**

**APPL ID: AZ85522**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	98.8	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	101	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	101	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.5	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M  
Run #: 0128L26  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:29:10 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85523**

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.18 J	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	99.9	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	102	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	91.2	89-112			%	01/29/19	01/29/19

J = Estimated value.

Quant Method: L0128W.M
Run #: 0128L30
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 01/30/19 1:29:10 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH750**

**APPL ID: AZ85524**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	100	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	101	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.1	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M
Run #: 0128L31
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 01/30/19 1:29:11 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH751**

**APPL ID: AZ85525**

Sample Collection Date: 01/21/19

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	99.4	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	104	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	103	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	91.3	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M
Run #: 0128L32
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 01/30/19 1:29:11 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932  
APPL ID: **AZ85526**  
QCG: #86BTO-AL190128-237015

**Sample ID: ERH752**

Sample Collection Date: 01/22/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	99.0	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	100	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	101	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	91.8	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M  
Run #: 0128L27  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:29:11 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85527**

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	95.4	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	96.7	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	97.7	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	85.7 #	89-112			%	01/29/19	01/29/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0128W.M
Run #: 0128L33
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 01/30/19 1:29:11 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH737**

**APPL ID: AZ85519**

Sample Collection Date: 01/21/19

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	97.4	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L25  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85520**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	48 ++	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	95.7	85-114			%	01/29/19	01/29/19

++(G1) The analyst has noted that the chromatogram of this sample includes a wide range of hydrocarbons which does not match our gasoline standard.

Quant Method: L0128SUR.M  
Run #: 0128L28  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:59:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH739**

**APPL ID: AZ85521**

Sample Collection Date: 01/21/19

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	22 ++	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	95.4	85-114			%	01/29/19	01/29/19

++(G1) The analyst has noted that the chromatogram of this sample includes a wide range of hydrocarbons which does not match our gasoline standard.

Quant Method: L0128SUR.M
Run #: 0128L29
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 01/30/19 1:59:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932

**Sample ID: ERH742**

**APPL ID: AZ85522**

Sample Collection Date: 01/21/19

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	101	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L26  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85523**  
QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L30  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH750**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85524**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L31  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85525**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	104	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L32  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH752**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85526**  
QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	100	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L27  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85527**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	96.7	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L33  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 01/30/19 1:27:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH737**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85519**  
QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012803  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85520**  
QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1600 E	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

E = The reported value exceeds linear range.

Quant Method: RSK0120.M  
Run #: 19012804  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE - Dilution

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85520**  
QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	5000	50.0	10.00	2.50	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012806  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 10  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH742**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85522**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012807  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

**METHANE**

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**  
Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85523**  
QCG: #RSKME-190128A-236920

---

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

---

Quant Method: RSK0120.M  
Run #: 19012808  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

**METHANE**

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87932  
APPL ID: **AZ85524**  
QCG: #RSKME-190128A-236920

**Sample ID: ERH750**  
Sample Collection Date: 01/21/19

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

---

Quant Method: RSK0120.M  
Run #: 19012809  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**

Sample Collection Date: 01/21/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85525**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012810  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH752**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932  
**APPL ID: AZ85526**  
QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012811  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87932

**APPL ID: AZ85527**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012812  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:02:46 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH738**

Sample Collection Date: 01/21/19

**APPL ID: AZ85520**

ARF: 87932

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	42.0	1.0	0.20	0.08	mg/L	1	01/23/19	01/23/19
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	1	01/23/19	01/23/19
EPA 300.0	SULFATE	0.38 J	1.0	0.20	0.09	mg/L	1	01/23/19	01/23/19
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	190	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	190	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	2.2	1.0	0.32	0.16	mg/L	1	01/23/19	01/23/19
SW846 9060A	TOTAL ORGANIC CARBON	3.9	0.93	0.350	0.130	mg/L	1	02/12/19	02/12/19

J = Estimated value.

Printed: 02/17/19 9:34:38 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH743**

Sample Collection Date: 01/21/19

**APPL ID: AZ85523**

ARF: 87932

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	68.7	5.0	1.00	0.40	mg/L	5	01/28/19	01/28/19
EPA 300.0	NITRATE	2.3	0.5	0.18	0.04	mg/L	1	01/23/19	01/23/19
EPA 300.0	SULFATE	10.6	1.0	0.20	0.09	mg/L	1	01/23/19	01/23/19
EPA 353.2	NITRATE-NITRITE-N	0.48	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	75.0	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	75.0	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/23/19	01/23/19
SW846 9060A	TOTAL ORGANIC CARBON	0.67 J	0.93	0.350	0.130	mg/L	1	02/12/19	02/12/19

J = Estimated value.

Printed: 02/17/19 9:34:38 AM

APPL-F1-SC-NoMC-REG MDLs



## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH751**

Sample Collection Date: 01/21/19

**APPL ID: AZ85525**

ARF: 87932

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	143	5.0	1.00	0.40	mg/L	5	01/28/19	01/28/19
EPA 300.0	SULFATE	45.7	5.0	1.00	0.45	mg/L	5	01/28/19	01/28/19
EPA 300.0	NITRATE	4.7	0.5	0.18	0.04	mg/L	1	01/23/19	01/23/19
EPA 353.2	NITRATE-NITRITE-N	1.1	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO3	91.2	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO3	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO3	91.2	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/23/19	01/23/19
SW846 9060A	TOTAL ORGANIC CARBON	0.92 J	0.93	0.350	0.130	mg/L	1	02/12/19	02/12/19

J = Estimated value.

Printed: 02/17/19 9:34:38 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH753**

Sample Collection Date: 01/22/19

**APPL ID: AZ85527**

ARF: 87932

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	45.4	5.0	1.00	0.40	mg/L	5	01/28/19	01/28/19
EPA 300.0	NITRATE	2.0	0.5	0.18	0.04	mg/L	1	01/23/19	01/23/19
EPA 300.0	SULFATE	9.5	1.0	0.20	0.09	mg/L	1	01/23/19	01/23/19
EPA 353.2	NITRATE-NITRITE-N	0.38	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	62.9	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	62.9	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/23/19	01/23/19
SW846 9060A	TOTAL ORGANIC CARBON	0.55 J	0.93	0.350	0.130	mg/L	1	02/13/19	02/13/19

J = Estimated value.

Printed: 02/17/19 9:34:38 AM

APPL-F1-SC-NoMC-REG MDLs

# QC FORMS

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190124A-BLK	Blank	60-142	112		56-125	103	
190124A-LCS	Lab Control Spike	60-142	114		56-125	99.6	
190124A-LCSD	Lab Control SpikeD	60-142	111		56-125	98.0	
AZ85520	ERH738	60-142	103		56-125	100	
AZ85523	ERH743	60-142	113		56-125	110	
AZ85525	ERH751	60-142	113		56-125	106	
AZ85527	ERH753	60-142	110		56-125	101	

Comments: Batch: #DOC53-190124A

Printed: 01/28/19 9:49:43 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190124A2-BLK	Blank	0-1	0.0		60-142	112	
190124A2-LCS	Lab Control Spike	0-1	0.0		60-142	114	
190124A2-LCSD	Lab Control SpikeD	0-1	0.0		60-142	113	
AZ85520	ERH738	0-1	0.0		60-142	104	

Comments: Batch: #DOC53-190124A2

Printed: 02/01/19 2:01:35 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
190124A2-BLK	Blank	56-125	105				
190124A2-LCS	Lab Control Spike	56-125	112				
190124A2-LCSD	Lab Control Spiked	56-125	105				
AZ85520	ERH738	56-125	96.6				

Comments: Batch: #DOC53-190124A2

Printed: 02/01/19 2:01:35 PM  
Form 2 & 8, Surrogate Recovery Summary

**EPA 8015B-eLL**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87932  
Matrix: WATER

SDG No: 87932  
Date Analyzed: 01/29/19  
Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	60-142	107		56-125	92.1	
190128A-LCS	Lab Control Spike	60-142	97.5		56-125	95.7	
190128A-LCSD	Lab Control SpikeD	60-142	93.9		56-125	95.3	
AZ85521	ERH739	60-142	99.2		56-125	95.8	

Comments: Batch: #DOC53-190128A

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A1-BLK	Blank	0-1	0.0		60-142	99.6	
190128A1-LCS	Lab Control Spike	0-1	0.0		60-142	98.1	
190128A1-LCSD	Lab Control Spiked	0-1	0.0		60-142	97.5	
AZ85521	ERH739	0-1	0.0		60-142	98.3	

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:01:36 PM  
Form 2 & 8, Surrogate Recovery Summary



**EPA 8015B-eLL**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87932  
Matrix: WATER

SDG No: 87932  
Date Analyzed: 02/01/19  
Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A1-BLK	Blank	56-125	98.6				
190128A1-LCS	Lab Control Spike	56-125	98.7				
190128A1-LCSD	Lab Control Spiked	56-125	97.3				
AZ85521	ERH739	56-125	97.4				

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:01:36 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190124A-BLK

Time Analyzed: 1625

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190124A-BLK	Blank	124024	01/25/19 1625
190124A-LCS	Lab Control Spike	124025	01/25/19 1644
190124A-LCSD	Lab Control SpikeD	124026	01/25/19 1704
AZ85520	ERH738	124031	01/25/19 1843
AZ85523	ERH743	124032	01/25/19 1903
AZ85525	ERH751	124033	01/25/19 1923
AZ85527	ERH753	124034	01/25/19 1942

Comments: Batch: #DOC53-190124A

Printed: 01/28/19 9:49:40 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **190124W-85520 - 236903**  
Batch ID: #DOC53-190124A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	01/25/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	01/25/19
BLANK	SURROGATE: OCTACOSANE (S)	112	60-142			%	01/24/19	01/25/19
BLANK	SURROGATE: ORTHO-TERPHEN	103	56-125			%	01/24/19	01/25/19

Quant Method: DOC0117.M  
Run #: 124024  
Instrument: Apollo  
Sequence: 190124  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 9:49:45 AM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190124A2-BLK

Time Analyzed: 1228

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190124A2-BLK	Blank	201009	02/01/19 1228
190124A2-LCS	Lab Control Spike	201010	02/01/19 1248
190124A2-LCSD	Lab Control SpikeD	201011	02/01/19 1308
AZ85520	ERH738	201012	02/01/19 1328

Comments: Batch: #DOC53-190124A2

Printed: 02/01/19 2:01:30 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH WATER L-L SGC**

Blank Name/QCG: **190124W-85520 - 237117**  
Batch ID: #DOC53-190124A2

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/24/19	02/01/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/24/19	02/01/19
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	01/24/19	02/01/19
BLANK	SURROGATE: OCTACOSANE (S)	112	60-142			%	01/24/19	02/01/19
BLANK	SURROGATE: ORTHO-TERPHEN	105	56-125			%	01/24/19	02/01/19

Quant Method: DOC0117.M  
Run #: 201009  
Instrument: Apollo  
Sequence: 190201  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 02/01/19 2:01:38 PM

**EPA 8015B-eL**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.  
Case No: 87932  
Matrix: WATER  
Blank ID: 190128A-BLK

SDG No: 87932  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Time Analyzed: 1820

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-BLK	Blank	124066	01/29/19 1820
190128A-LCS	Lab Control Spike	124067	01/29/19 1840
190128A-LCSD	Lab Control SpikeD	124068	01/29/19 1900
AZ85521	ERH739	124069	01/29/19 1920

Comments: Batch: #DOC53-190128A

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **190128W-85521 - 237007**

Batch ID: #DOC53-190128A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/28/19	01/29/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	01/29/19
BLANK	SURROGATE: OCTACOSANE (S)	107	60-142			%	01/28/19	01/29/19
BLANK	SURROGATE: ORTHO-TERPHEN	92.1	56-125			%	01/28/19	01/29/19

Quant Method: DOC0117.M  
Run #: 124066  
Instrument: Apollo  
Sequence: 190124  
Initials: DPO

GC SC-Blank-REG MDLs-DOD

Printed: 01/30/19 10:06:07 AM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190128A1-BLK

Time Analyzed: 1048

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A1-BLK	Blank	201004	02/01/19 1048
190128A1-LCS	Lab Control Spike	201005	02/01/19 1108
190128A1-LCSD	Lab Control SpikeD	201006	02/01/19 1128
AZ85521	ERH739	201007	02/01/19 1148

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:01:30 PM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8015B TPH WATER L-L SGC**

Blank Name/QCG: **190128W-85521 - 237114**  
Batch ID: #DOC53-190128A1

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/28/19	02/01/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	02/01/19
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	01/28/19	02/01/19
BLANK	SURROGATE: OCTACOSANE (S)	99.6	60-142			%	01/28/19	02/01/19
BLANK	SURROGATE: ORTHO-TERPHEN	98.6	56-125			%	01/28/19	02/01/19

Quant Method: DOC0117.M  
Run #: 201004  
Instrument: Apollo  
Sequence: 190201  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 02/01/19 2:01:38 PM

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190124A-LCS

Time Analyzed: 1644

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190124A-BLK	Blank	124024	01/25/19 1625
190124A-LCS	Lab Control Spike	124025	01/25/19 1644
190124A-LCSD	Lab Control SpikeD	124026	01/25/19 1704
AZ85520	ERH738	124031	01/25/19 1843
AZ85523	ERH743	124032	01/25/19 1903
AZ85525	ERH751	124033	01/25/19 1923
AZ85527	ERH753	124034	01/25/19 1942

Comments: Batch: #DOC53-190124A

Printed: 01/28/19 9:49:38 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8015B TPH LIQ-LIQ

APPL ID: 190124W-85520 LCS - 236903  
 Batch ID: #DOC53-190124A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1330	1310	106	105	36-132	1.5	30
OIL (C24-C40)	1250	1230	1220	98.4	97.6	41-113	0.82	30
SURROGATE: OCTACOSANE (S)	75.0	85.5	83.6	114	111	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	74.7	73.5	99.6	98.0	56-125		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/24/19	01/24/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Apollo	Apollo
Run :	124025	124026
Initials :	DPO	

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190124A2-LCS

Time Analyzed: 1248

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190124A2-BLK	Blank	201009	02/01/19 1228
190124A2-LCS	Lab Control Spike	201010	02/01/19 1248
190124A2-LCSD	Lab Control SpikeD	201011	02/01/19 1308
AZ85520	ERH738	201012	02/01/19 1328

Comments: Batch: #DOC53-190124A2

Printed: 02/01/19 2:01:29 PM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8015B TPH WATER L-L SGC

APPL ID: **190124W-85520 LCS - 237117**  
 Batch ID: #DOC53-190124A2

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1380	1330	110	106	36-132	3.7	30
OIL (C24-C40)	1250	1270	1260	102	101	41-113	0.79	30
-----								
SURROGATE: (R) DECANOIC ACID (S)	10.00	0	0	0.0	0.0	0-1		
SURROGATE: OCTACOSANE (S)	75.0	85.2	85.1	114	113	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	83.7	78.5	112	105	56-125		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/24/19	01/24/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Apollo	Apollo
Run :	201010	201011
Initials :	DPO	

**EPA 8015B-eL**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190128A-LCS

Time Analyzed: 1840

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-BLK	Blank	124066	01/29/19 1820
190128A-LCS	Lab Control Spike	124067	01/29/19 1840
190128A-LCSD	Lab Control SpikeD	124068	01/29/19 1900
AZ85521	ERH739	124069	01/29/19 1920

Comments: Batch: #DOC53-190128A

Printed: 01/30/19 10:05:42 AM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8015B TPH LIQ-LIQ**

APPL ID: 190128W-85521 LCS - 237007  
 Batch ID: #DOC53-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1450	1510	116	121	36-132	4.1	30
OIL (C24-C40)	1250	1260	1280	101	102	41-113	1.6	30
-----								
SURROGATE: OCTACOSANE (S)	75.0	73.1	70.4	97.5	93.9	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	71.8	71.5	95.7	95.3	56-125		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Apollo	Apollo
Run :	124067	124068
Initials :	DPO	

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190128A1-LCS

Time Analyzed: 1108

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A1-BLK	Blank	201004	02/01/19 1048
190128A1-LCS	Lab Control Spike	201005	02/01/19 1108
190128A1-LCSD	Lab Control SpikeD	201006	02/01/19 1128
AZ85521	ERH739	201007	02/01/19 1148

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:01:29 PM  
Form 4, LCS Summary



## Laboratory Control Spike Recoveries

### EPA 8015B TPH WATER L-L SGC

APPL ID: 190128W-85521 LCS - 237114  
 Batch ID: #DOC53-190128A1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1440	1390	115	111	36-132	3.5	30
OIL (C24-C40)	1250	1230	1260	98.4	101	41-113	2.4	30
-----								
SURROGATE: (R) DECANOIC ACID (S)	10.00	0	0	0.0	0.0	0-1		
SURROGATE: OCTACOSANE (S)	75.0	73.6	73.1	98.1	97.5	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	74.0	73.0	98.7	97.3	56-125		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Apollo	Apollo
Run :	201005	201006
Initials :	DPO	

# 8270D-SIM

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AZ85520	ERH738	39-114	113		58-120	100	
AZ85521	ERH739	39-114	95.2		58-120	103	
AZ85523	ERH743	39-114	101		58-120	93.9	
AZ85525	ERH751	39-114	103		58-120	112	
AZ85527	ERH753	39-114	130	#	58-120	122	#
190128A-BLK	Blank	39-114	94.6		58-120	94.5	
190128A-LCS	Lab Control Spike	39-114	116	*	58-120	134	*
190128A-LCSD	Lab Control Spiked	39-114	107		58-120	112	

Comments: Batch: #SIM53-190128A

\* = Recovery outside of Control Limits on QC Sample.

# = Recovery outside of Control Limits on Sample.

Printed: 01/31/19 7:08:24 AM  
Form 2 & 8, Surrogate Recovery Summary

# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Linus

Blank ID: 190128A-BLK

Time Analyzed: 1346

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85520	ERH738	0122L051	01/30/19 1156
AZ85521	ERH739	0122L052	01/30/19 1218
AZ85523	ERH743	0122L053	01/30/19 1241
AZ85525	ERH751	0122L054	01/30/19 1303
AZ85527	ERH753	0122L055	01/30/19 1325
190128A-BLK	Blank	0122L056	01/30/19 1346
190128A-LCS	Lab Control Spike	0122L057	01/30/19 1407
190128A-LCSD	Lab Control SpikeD	0122L058	01/30/19 1429

Comments: Batch: #SIM53-190128A

Printed: 01/31/19 7:08:20 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D SIM LIQ-LIQ**

Blank Name/QCG: **190128W-85520 - 237026**  
Batch ID: #SIM53-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
BLANK	SURROGATE: 2-METHYLNAPHT	94.6	39-114			%	01/28/19	01/30/19
BLANK	SURROGATE: FLUORANTHENE-	94.5	58-120			%	01/28/19	01/30/19

Quant Method:L0122.M  
Run #:0122L056  
Instrument:Linus  
Sequence:L190122  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/31/19 7:08:37 AM

# 8270D-SIM

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Linus

LCS ID: 190128A-LCS

Time Analyzed: 1407

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85520	ERH738	0122L051	01/30/19 1156
AZ85521	ERH739	0122L052	01/30/19 1218
AZ85523	ERH743	0122L053	01/30/19 1241
AZ85525	ERH751	0122L054	01/30/19 1303
AZ85527	ERH753	0122L055	01/30/19 1325
190128A-BLK	Blank	0122L056	01/30/19 1346
190128A-LCS	Lab Control Spike	0122L057	01/30/19 1407
190128A-LCSD	Lab Control Spiked	0122L058	01/30/19 1429

Comments: Batch: #SIM53-190128A

Printed: 01/31/19 7:08:16 AM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8270D SIM LIQ-LIQ**

APPL ID: 190128W-85520 LCS - 237026  
 Batch ID: #SIM53-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	6.15	5.53	98.4	88.5	41-115	10.6	20
2-METHYLNAPHTHALENE	6.25	6.21	5.67	99.4	90.7	39-114	9.1	20
NAPHTHALENE	6.25	6.12	5.39	97.9	86.2	43-114	12.7	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	7.25	6.68	116 #	107	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	8.35	7.01	134 #	112	58-120		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0122.M	L0122.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Linus	Linus
Run :	0122L057	0122L058
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0122L002.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/22/19  
 Instrument: Linus  
 Time Analyzed: 9:21

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.1 SIM 01/18/19	0122L003.D	01/22/19 9:37
2	0.2 SIM 01/18/19	0122L004.D	01/22/19 9:59
3	0.5 SIM 01/18/19	0122L005.D	01/22/19 10:21
4	1 SIM 01/18/19	0122L006.D	01/22/19 10:43
5	5 SIM 01/18/19	0122L007.D	01/22/19 11:30
6	10 SIM 01/18/19	0122L008.D	01/22/19 11:53
7	50 SIM 01/18/19	0122L009.D	01/22/19 12:15
8	100 SIM 01/18/19	0122L010.D	01/22/19 12:37
9	SS SIM 01/18/19	0122L011.D	01/22/19 12:59
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80% of mass 198	<u>52.3</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.8</u>
127 10 - 80% of mass 198	<u>58.6</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>22.8</u>
365 1 - 100% of mass 198	<u>3.3</u>
441 0.01 - 24% of mass 442	<u>16.7</u>
442 50 - 150% of mass 198	<u>68.2</u>
443 15 - 24% of mass 442	<u>19.2</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87932  
Matrix: Water  
ID: 0122L036.D

SDG No: 87932  
Date Analyzed: 01/30/19  
Instrument: Linus  
Time Analyzed: 6:19

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 01/18/19	0122L037.D	01/30/19 6:36
2	ERH738	AZ85520W11 1/800	0122L051.D	01/30/19 11:56
3	ERH739	AZ85521W10 1/800	0122L052.D	01/30/19 12:18
4	ERH743	AZ85523W10 1/800	0122L053.D	01/30/19 12:41
5	ERH751	AZ85525W11 1/800	0122L054.D	01/30/19 13:03
6	ERH753	AZ85527W10 1/800	0122L055.D	01/30/19 13:25
7	Blank	190128A BLK 1/800	0122L056.D	01/30/19 13:46
8	Lab Control Spike	190128A LCS-2 1/800	0122L057.D	01/30/19 14:07
9	Lab Control SpikeD	190128A LCSD-2 1/800	0122L058.D	01/30/19 14:29
10		5 SIM 01/18/19	0122L062.D	01/30/19 15:59
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80% of mass 198	<u>52.9</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>56.0</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.6</u>
275 10 - 60% of mass 198	<u>21.3</u>
365 1 - 100% of mass 198	<u>2.9</u>
441 0.01 - 24% of mass 442	<u>17.5</u>
442 50 - 150% of mass 198	<u>66.5</u>
443 15 - 24% of mass 442	<u>18.4</u>



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87932  
 Lab File ID (Standard): 0122L037.D Date Analyzed: 01/30/19  
 Instrument ID: Linus Time Analyzed: 6:36  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	19859	4.05	8550	6.07	17827	7.80
UPPER LIMIT	39718	4.22	17100	6.24	35654	7.97
LOWER LIMIT	9930	3.88	4275	5.90	8914	7.63
SAMPLE NO.						
01 AZ85520W11 1/800	15217	4.05	7538	6.07	15280	7.80
02 AZ85521W10 1/800	18033	4.05	8180	6.07	15337	7.80
03 AZ85523W10 1/800	17870	4.05	7858	6.07	15667	7.80
04 AZ85525W11 1/800	17692	4.05	7842	6.07	16037	7.80
05 AZ85527W10 1/800	15400	4.05	6524	6.07	14087	7.80
06 190128A BLK 1/800	19493	4.05	9066	6.07	17925	7.80
07 190128A LCS-2 1/800	13343	4.05	5524	6.07	10530	7.80
08 190128A LCSD-2 1/800	17209	4.05	7101	6.07	15358	7.80
09 5 SIM 01/18/19	28957	4.05	12989	6.07	24307	7.80
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87932  
 Lab File ID (Standard): 0122L037.D Date Analyzed: 01/30/19  
 Instrument ID: Linus Time Analyzed: 6:36  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Chrysene-D12(IS)		Perylene-D12(IS)					
		AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD		24656		10.89		25628		13.29	
UPPER LIMIT		49312		11.06		51256		13.46	
LOWER LIMIT		12328		10.72		12814		13.12	
SAMPLE NO.									
01	AZ85520W11 1/800	23769		10.90		22907		13.29	
02	AZ85521W10 1/800	24914		10.90		24873		13.29	
03	AZ85523W10 1/800	21711		10.90		15267		13.29	
04	AZ85525W11 1/800	22684		10.90		20180		13.29	
05	AZ85527W10 1/800	18817		10.90		7287 *		13.29	
06	190128A BLK 1/800	24268		10.90		24267		13.29	
07	190128A LCS-2 1/800	16261		10.89		8611 *		13.29	
08	190128A LCSD-2 1/800	20683		10.89		8214 *		13.29	
09	5 SIM 01/18/19	32029		10.89		32359		13.29	
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

*not used  
DA 2/7/19*

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	43-140	110		44-119	96.9	
190128A-LCS	Lab Control Spike	43-140	106		44-119	92.0	
190128A-LCSD	Lab Control SpikeD	43-140	102		44-119	88.0	
AZ85520	ERH738	43-140	91.6		44-119	76.9	
AZ85521	ERH739	43-140	102		44-119	86.4	
AZ85523	ERH743	43-140	93.6		44-119	81.4	
AZ85525	ERH751	43-140	94.3		44-119	82.2	
AZ85527	ERH753	43-140	105		44-119	93.4	

Comments: Batch: #87DC5-190128A

Printed: 01/31/19 7:18:50 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	19-119	102		44-120	106	
190128A-LCS	Lab Control Spike	19-119	94.0		44-120	96.8	
190128A-LCSD	Lab Control SpikeD	19-119	94.0		44-120	92.0	
AZ85520	ERH738	19-119	82.3		44-120	87.1	
AZ85521	ERH739	19-119	96.4		44-120	102	
AZ85523	ERH743	19-119	71.0		44-120	74.2	
AZ85525	ERH751	19-119	75.9		44-120	77.8	
AZ85527	ERH753	19-119	77.4		44-120	80.4	

Comments: Batch: #87DC5-190128A

Printed: 01/31/19 7:18:50 AM  
Form 2 & 8, Surrogate Recovery Summary

**EPA 8270D**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	10-115	99.2		50-134	94.0	
190128A-LCS	Lab Control Spike	10-115	94.4		50-134	90.4	
190128A-LCSD	Lab Control SpikeD	10-115	93.6		50-134	89.6	
AZ85520	ERH738	10-115	81.1		50-134	59.9	
AZ85521	ERH739	10-115	95.0		50-134	66.5	
AZ85523	ERH743	10-115	64.9		50-134	78.2	
AZ85525	ERH751	10-115	75.2		50-134	82.1	
AZ85527	ERH753	10-115	68.7		50-134	86.0	

Comments: Batch: #87DC5-190128A

Printed: 01/31/19 7:18:50 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190128A-BLK

Time Analyzed: 1456

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	0124Y055	01/30/19 1456
190128A-LCS	Lab Control Spike	0124Y056	01/30/19 1524
190128A-LCSD	Lab Control SpikeD	0124Y057	01/30/19 1552
AZ85520	ERH738	0124Y058	01/30/19 1620
AZ85521	ERH739	0124Y059	01/30/19 1648
AZ85523	ERH743	0124Y060	01/30/19 1716
AZ85525	ERH751	0124Y061	01/30/19 1744
AZ85527	ERH753	0124Y062	01/30/19 1811

Comments: Batch: #87DC5-190128A

Printed: 01/31/19 7:18:51 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D WATER**

Blank Name/QCG: **190128W-85520 - 237041**  
Batch ID: #87DC5-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
BLANK	SURROGATE: 2,4,6-TRIBROMOP	110	43-140			%	01/28/19	01/30/19
BLANK	SURROGATE: 2-FLUORBIPHENY	96.9	44-119			%	01/28/19	01/30/19
BLANK	SURROGATE: 2-FLUOROPHENO	102	19-119			%	01/28/19	01/30/19
BLANK	SURROGATE: NITROBENZENE-	106	44-120			%	01/28/19	01/30/19
BLANK	SURROGATE: PHENOL-D6 (S)	99.2	10-115			%	01/28/19	01/30/19
BLANK	SURROGATE: TERPHENYL-D14 (	94.0	50-134			%	01/28/19	01/30/19

Quant Method: Y0125NC.M  
Run #: 0124Y055  
Instrument: Yoda  
Sequence: Y190124  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/31/19 7:18:29 AM

**EPA 8270D**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87932  
Matrix: WATER  
LCS ID: 190128A-LCS

SDG No: 87932  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Time Analyzed: 1524

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-BLK	Blank	0124Y055	01/30/19 1456
190128A-LCS	Lab Control Spike	0124Y056	01/30/19 1524
190128A-LCSD	Lab Control SpikeD	0124Y057	01/30/19 1552
AZ85520	ERH738	0124Y058	01/30/19 1620
AZ85521	ERH739	0124Y059	01/30/19 1648
AZ85523	ERH743	0124Y060	01/30/19 1716
AZ85525	ERH751	0124Y061	01/30/19 1744
AZ85527	ERH753	0124Y062	01/30/19 1811

Comments: Batch: #87DC5-190128A



## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: 190128W-85520 LCS - 237041  
 Batch ID: #87DC5-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	55.8	55.8	89.3	89.3	10-115	0.0	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	266	256	106	102	43-140		
SURROGATE: 2-FLUOROBIPHENYL (S)	125	115	110	92.0	88.0	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	235	235	94.0	94.0	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	121	115	96.8	92.0	44-120		
SURROGATE: PHENOL-D6 (S)	250	236	234	94.4	93.6	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	113	112	90.4	89.6	50-134		

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Yoda	Yoda
Run :	0124Y056	0124Y057
Initials :	AAB	

## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: 190128W-85520 LCS - 237041  
 Batch ID: #87DC5-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	55.8	55.8	89.3	89.3	10-115	0.0	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	266	256	106	102	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	115	110	92.0	88.0	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	235	235	94.0	94.0	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	121	115	96.8	92.0	44-120		
SURROGATE: PHENOL-D6 (S)	250	236	234	94.4	93.6	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	113	112	90.4	89.6	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Yoda	Yoda
Run :	0124Y056	0124Y057
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0124Y014.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/25/19  
 Instrument: Yoda  
 Time Analyzed: 7:05

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/mL 8270 01/24/	0124Y015.D	01/25/19 7:20
2	4ug/mL 8270 01/24/1	0124Y016.D	01/25/19 9:53
3	5ug/mL 8270 01/24/1	0124Y017.D	01/25/19 10:21
4	10ug/mL 8270 01/24/	0124Y018.D	01/25/19 10:49
5	40ug/mL 8270 01/24/	0124Y020.D	01/25/19 11:44
6	60ug/mL 8270 01/24/	0124Y021.D	01/25/19 12:11
7	80ug/mL 8270 01/24/	0124Y022.D	01/25/19 12:39
8	100ug/mL 8270 01/24	0124Y023.D	01/25/19 13:07
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>38.0</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.2</u>
127 10 - 80% of mass 198	<u>52.7</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198.05	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>26.4</u>
365 1 - 100% of mass 198	<u>3.2</u>
441 0.01 - 24% of mass 442	<u>16.3</u>
442 50 - 150% of mass 198.05	<u>96.4</u>
443 15 - 24% of mass 442	<u>19.1</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0124Y030.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/28/19  
 Instrument: Yoda  
 Time Analyzed: 11:49

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	20ug/mL 8270 01/24/	0124Y033.D	01/28/19 13:36
2	SS-8270 01/24/19	0124Y034.D	01/28/19 14:11
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>36.7</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.5</u>
127 10 - 80% of mass 198	<u>51.8</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>26.6</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>10.6</u>
442 50 - 150% of mass 198	<u>104.5</u>
443 15 - 24% of mass 442	<u>19.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87932  
Matrix: Water  
ID: 0124Y053.D

SDG No: 87932  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Time Analyzed: 7:56

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/mL 8270 01/24/	0124Y054.D	01/30/19 14:28
2	Blank	190128A BLK 1/800	0124Y055.D	01/30/19 14:56
3	Lab Control Spike	190128A LCS-1 1/800	0124Y056.D	01/30/19 15:24
4	Lab Control SpikeD	190128A LCSD-1 1/800	0124Y057.D	01/30/19 15:52
5	ERH738	AZ85520W11 1/800	0124Y058.D	01/30/19 16:20
6	ERH739	AZ85521W10 1/800	0124Y059.D	01/30/19 16:48
7	ERH743	AZ85523W10 1/800	0124Y060.D	01/30/19 17:16
8	ERH751	AZ85525W11 1/800	0124Y061.D	01/30/19 17:44
9	ERH753	AZ85527W10 1/800	0124Y062.D	01/30/19 18:11
10		50ug/mL 8270 01/24/	0124Y065.D	01/30/19 19:35
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	38.3
68 0 - 2% of mass 69	0.0
70 0 - 2% of mass 69	0.4
127 10 - 80% of mass 198	52.6
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 197.95	100.0
199 5 - 9% of mass 198	7.0
275 10 - 60% of mass 198	25.0
365 1 - 100% of mass 198	2.9
441 0.01 - 24% of mass 442	12.7
442 50 - 150% of mass 197.95	91.4
443 15 - 24% of mass 442	18.4

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87932  
 Lab File ID (Standard): 0124Y054.D Date Analyzed: 01/30/19  
 Instrument ID: Yoda Time Analyzed: 14:28  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		482742	5.46	2108170	6.90	1179920	8.92
UPPER LIMIT		965484	5.63	4216340	7.07	2359840	9.09
LOWER LIMIT		241371	5.29	1054085	6.73	589960	8.75
SAMPLE							
NO.							
01	190128A BLK 1/800	397504	5.47	1702990	6.90	1043240	8.92
02	190128A LCS-1 1/800	457917	5.47	1909310	6.91	1115990	8.92
03	190128A LCSD-1 1/800	451272	5.47	1964860	6.90	1129760	8.92
04	AZ85520W11 1/800	477493	5.47	2017730	6.90	1223660	8.92
05	AZ85521W10 1/800	420853	5.47	1784270	6.90	1124050	8.92
06	AZ85523W10 1/800	575603	5.47	2385780	6.90	1200430	8.92
07	AZ85525W11 1/800	547633	5.47	2316420	6.90	1211650	8.92
08	AZ85527W10 1/800	519645	5.47	2163810	6.91	1038280	8.92
09	50ug/mL 8270 01/24/19	457117	5.47	1949790	6.90	1099020	8.92
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190128A-BLK

Time Analyzed: 2036

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85520	ERH738	1128Y068	01/29/19 1331
AZ85521	ERH739	1128Y069	01/29/19 1354
AZ85523	ERH743	1128Y070	01/29/19 1418
AZ85525	ERH751	1128Y071	01/29/19 1441
AZ85527	ERH753	1128Y095	01/30/19 0917

Comments: Batch: #87DME-190128A

Printed: 02/04/19 11:54:25 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D MODIFIED WATER**

Blank Name/QCG: **190128W-85562 - 237008**  
Batch ID: #87DME-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method:YMEE1128.M  
Run #: 1128Y086  
Instrument:Yoda  
Sequence:Y181128M  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 1:14:54 PM



# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190128A-LCS

Time Analyzed: 0956

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85520	ERH738	1128Y068	01/29/19 1331
AZ85521	ERH739	1128Y069	01/29/19 1354
AZ85523	ERH743	1128Y070	01/29/19 1418
AZ85525	ERH751	1128Y071	01/29/19 1441
AZ85527	ERH753	1128Y095	01/30/19 0917

Comments: Batch: #87DME-190128A

Printed: 02/04/19 11:54:09 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8270D MODIFIED WATER

APPL ID: 190128W-85562 LCS - 237008  
 Batch ID: #87DME-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	88.7	58.5	111	73.1	30-130	41.0 #	20

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	1128Y102	1128Y103
Initials :	AAB	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1128Y002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 11/28/18  
Instrument: Yoda  
Time Analyzed: 7:30

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/ml MEE 08/01/18	1128Y004.D	11/28/18 8:08
2	100ug/ml MEE 08/01/1	1128Y005.D	11/28/18 8:32
3	200ug/ml MEE 08/01/1	1128Y006.D	11/28/18 8:55
4	400ug/ml MEE 08/01/1	1128Y007.D	11/28/18 9:19
5	600ug/ml MEE 08/01/1	1128Y008.D	11/28/18 9:43
6	800ug/ml MEE 08/01/1	1128Y009.D	11/28/18 10:06
7	1000ug/ml MEE 08/01/	1128Y010.D	11/28/18 10:30
8	SS ug/ml MEE 08/01/1	1128Y014.D	11/28/18 12:26
9			
10			
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12			
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14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	37.6
68 0 - 2.04% of mass 69	0.0
70 0 - 2.04% of mass 69	0.4
127 10 - 80% of mass 198	49.3
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.6
275 10 - 60% of mass 198	27.6
365 1 - 100% of mass 198	3.7
441 0.01 - 24% of mass 442	15.6
442 50 - 150% of mass 198	104.9
443 15 - 24% of mass 442	19.5

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87932  
 Matrix: Water  
 ID: 1128Y056.D

SDG No: 87932  
 Date Analyzed: 01/29/19  
 Instrument: Yoda  
 Time Analyzed: 8:36

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/mL mee 12/12/1	1128Y057.D	01/29/19 8:51
2	ERH738	AZ85520W09 2/500	1128Y068.D	01/29/19 13:31
3	ERH739	AZ85521W05 2/500	1128Y069.D	01/29/19 13:54
4	ERH743	AZ85523W08 2/500	1128Y070.D	01/29/19 14:18
5	ERH751	AZ85525W08 2/500	1128Y071.D	01/29/19 14:41
6	Blank	190128A BLK 2/500	1128Y086.D	01/29/19 20:36
7		500ug/ml MEE 12/19/1	1128Y088.D	01/29/19 21:24
8				
9				
10				
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12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>35.4</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.6</u>
127 10 - 80% of mass 198	<u>50.5</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>26.7</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>16.9</u>
442 50 - 150% of mass 198	<u>103.1</u>
443 15 - 24% of mass 442	<u>19.9</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87932  
 Matrix: Water  
 ID: 1128Y093.D

SDG No: 87932  
 Date Analyzed: 01/30/19  
 Instrument: Yoda  
 Time Analyzed: 7:56

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/ml MEE 12/19/1	1128Y094.D	01/30/19 8:52
2	ERH753	AZ85527W08 2/500	1128Y095.D	01/30/19 9:17
3		500ug/ml MEE 12/19/1	1128Y098.D	01/30/19 11:16
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>38.3</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.4</u>
127 10 - 80% of mass 198	<u>52.6</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 197.95	<u>100.0</u>
199 5 - 9% of mass 198	<u>7.0</u>
275 10 - 60% of mass 198	<u>25.0</u>
365 1 - 100% of mass 198	<u>2.9</u>
441 0.01 - 24% of mass 442	<u>12.7</u>
442 50 - 150% of mass 197.95	<u>91.4</u>
443 15 - 24% of mass 442	<u>18.4</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1128Y100.D

SDG No: \_\_\_\_\_  
Date Analyzed: 02/01/19  
Instrument: Yoda  
Time Analyzed: 9:17

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	500ug/ml MEE 12/19/1	1128Y101.D	02/01/19 9:32
2	Lab Control Spike	190128A LCS-1 2/500	02/01/19 9:56
3	Lab Control SpikeD	190128A LCSD-1 2/500	02/01/19 10:19
4	500ug/ml MEE 12/19/1	1128Y104.D	02/01/19 10:44
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>34.6</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>49.0</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>27.4</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>10.5</u>
442 50 - 150% of mass 198	<u>105.3</u>
443 15 - 24% of mass 442	<u>18.8</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87932  
 Lab File ID (Standard): 1128Y057.D Date Analyzed: 01/29/19  
 Instrument ID: Yoda Time Analyzed: 8:51  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		614573	5.22	2630250	6.65	1440510	8.67
UPPER LIMIT		1229146	5.39	5260500	6.82	2881020	8.84
LOWER LIMIT		307287	5.05	1315125	6.48	720255	8.50
SAMPLE NO.							
01	AZ85520W09 2/500	339005	5.24	1373140	6.65	779647	8.67
02	AZ85521W05 2/500	322417	5.24	1331410	6.65	850232	8.67
03	AZ85523W08 2/500	379120	5.24	1516590	6.65	889621	8.67
04	AZ85525W08 2/500	366513	5.24	1520720	6.66	859162	8.67
05	190128A BLK 2/500	429029	5.25	1804760	6.66	894647	8.67
06	500ug/ml MEE 12/19/18	611145	5.23	2644720	6.66	1462930	8.67
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87932  
 Lab File ID (Standard): 1128Y094.D Date Analyzed: 01/30/19  
 Instrument ID: Yoda Time Analyzed: 8:52  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	518699	5.23	2104680	6.65	1087740	8.67
	UPPER LIMIT	1037398	5.40	4209360	6.82	2175480	8.84
	LOWER LIMIT	259350	5.06	1052340	6.48	543870	8.50
	SAMPLE NO.						
01	AZ85527W08 2/500	396481	5.25	1650520	6.66	859055	8.67
02	500ug/ml MEE 12/19/18	504597	5.24	2027190	6.66	1053000	8.67
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 1128Y101.D Date Analyzed: 1 Feb 19 9:32  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 9:32  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		468889	5.24	1873590	6.65	981470	8.67
UPPER LIMIT		937778	5.41	3747180	6.82	1962940	8.84
LOWER LIMIT		234445	5.07	936795	6.48	490735	8.50
SAMPLE NO.							
01	190128A LCS-1 2/500	307091	5.24	1402120	6.66	792591	8.67
02	190128A LCSD-1 2/500	403357	5.23	1743270	6.66	949174	8.67
03	500ug/ml MEE 12/19/18	464116	5.25	1879800	6.65	985125	8.67
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190128-LCS	Lab Control Spike	81-118	98.8		85-114	98.0	
AL190128-LCSD	Lab Control Spiked	81-118	98.0		85-114	102	
AL190128-BLK	Blank	81-118	98.9		85-114	98.8	
AZ85519	ERH737	81-118	96.9		85-114	97.4	
AZ85522	ERH742	81-118	98.8		85-114	101	
AZ85526	ERH752	81-118	99.0		85-114	100	
AZ85520	ERH738	81-118	95.5		85-114	95.7	
AZ85521	ERH739	81-118	90.6		85-114	95.4	
AZ85523	ERH743	81-118	99.9		85-114	102	
AZ85524	ERH750	81-118	100		85-114	102	
AZ85525	ERH751	81-118	99.4		85-114	104	
AZ85527	ERH753	81-118	95.4		85-114	96.7	

Comments: Batch: #86BTO-AL190128

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87932  
Matrix: WATER

SDG No: 87932  
Date Analyzed: 01/28/19  
Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190128-LCS	Lab Control Spike	80-119	98.8		89-112	91.6	
AL190128-LCSD	Lab Control Spiked	80-119	103		89-112	94.0	
AL190128-BLK	Blank	80-119	100		89-112	94.1	
AZ85519	ERH737	80-119	100		89-112	91.2	
AZ85522	ERH742	80-119	101		89-112	94.5	
AZ85526	ERH752	80-119	101		89-112	91.8	
AZ85520	ERH738	80-119	98.8		89-112	87.8	#
AZ85521	ERH739	80-119	95.3		89-112	83.4	#
AZ85523	ERH743	80-119	102		89-112	91.2	
AZ85524	ERH750	80-119	101		89-112	94.1	
AZ85525	ERH751	80-119	103		89-112	91.3	
AZ85527	ERH753	80-119	97.7		89-112	85.7	#

Comments: Batch: #86BTO-AL190128  
# = Recovery outside of Control Limits on Sample.

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Loki

Blank ID: AL190128-BLK

Time Analyzed: 0006

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L16	01/28/19 2115
AL190128-LCSD	Lab Control SpikeD	0128L17	01/28/19 2144
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85519	ERH737	0128L25	01/29/19 0132
AZ85522	ERH742	0128L26	01/29/19 0201
AZ85526	ERH752	0128L27	01/29/19 0229
AZ85520	ERH738	0128L28	01/29/19 0258
AZ85521	ERH739	0128L29	01/29/19 0327
AZ85523	ERH743	0128L30	01/29/19 0355
AZ85524	ERH750	0128L31	01/29/19 0424
AZ85525	ERH751	0128L32	01/29/19 0452
AZ85527	ERH753	0128L33	01/29/19 0521

Comments: Batch: #86BTO-AL190128

Printed: 01/30/19 1:29:27 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **AL1901W-85519 - 237015**  
Batch ID: #86BTO-AL190128

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
BLANK	SURROGATE: 1,2-DICHLOROET	98.9	81-118			%	01/29/19	01/29/19
BLANK	SURROGATE: 4-BROMOFLUORO	98.8	85-114			%	01/29/19	01/29/19
BLANK	SURROGATE: DIBROMOFLUOR	100	80-119			%	01/29/19	01/29/19
BLANK	SURROGATE: TOLUENE-D8 (S)	94.1	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M  
Run #: 0128L22  
Instrument: Loki  
Sequence: 190128  
Initials: KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 1:29:32 PM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

LCS ID: AL190128-LCS

Time Analyzed: 2115

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L16	01/28/19 2115
AL190128-LCSD	Lab Control SpikeD	0128L17	01/28/19 2144
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85519	ERH737	0128L25	01/29/19 0132
AZ85522	ERH742	0128L26	01/29/19 0201
AZ85526	ERH752	0128L27	01/29/19 0229
AZ85520	ERH738	0128L28	01/29/19 0258
AZ85521	ERH739	0128L29	01/29/19 0327
AZ85523	ERH743	0128L30	01/29/19 0355
AZ85524	ERH750	0128L31	01/29/19 0424
AZ85525	ERH751	0128L32	01/29/19 0452
AZ85527	ERH753	0128L33	01/29/19 0521

Comments: Batch: #86BTO-AL190128

Printed: 01/30/19 1:29:39 PM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8260B BTEX WATER

APPL ID: 190128W-85519 LCS - 237015

Batch ID: #86BTO-AL190128

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.8	10.3	108	103	79-120	4.7	20
ETHYLBENZENE	10.00	10.6	10.6	106	106	79-121	0.0	20
TOLUENE	10.00	11.3	10.8	113	108	80-121	4.5	20
XYLENES (TOTAL)	30.0	33.0	32.6	110	109	79-121	1.2	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	24.7	24.5	98.8	98.0	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.5	25.4	98.0	102	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	24.7	25.7	98.8	103	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	22.9	23.5	91.6	94.0	89-112		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128W.M	L0128W.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Loki	Loki
Run :	0128L16	0128L17
Initials :	KVA	

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0128L01.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Loki  
Time Analyzed: 14:12

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 01/2	0128L03.D	01/28/19 15:03
2	0.5ug/L VOC STD 01/2	0128L04.D	01/28/19 15:31
3	1.0ug/L VOC STD 01/2	0128L05.D	01/28/19 16:00
4	2.0ug/L VOC STD 01/2	0128L06.D	01/28/19 16:29
5	5.0ug/L VOC STD 01/2	0128L07.D	01/28/19 16:57
6	10ug/L VOC STD 01/28	0128L08.D	01/28/19 17:26
7	20ug/L VOC STD 01/28	0128L09.D	01/28/19 17:55
8	40ug/L VOC STD 01/28	0128L10.D	01/28/19 18:23
9	50ug/L VOC STD 01/28	0128L11.D	01/28/19 18:52
10	100ug/L VOC STD 01/2	0128L12.D	01/28/19 19:21
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>18.9</u>
75 30 - 60% of mass 95	<u>51.4</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>7.7</u>
173 0 - 2% of mass 174	<u>1.2</u>
174 50 - 100% of mass 95	<u>90.0</u>
175 5 - 9% of mass 174	<u>8.0</u>
176 94.95 - 101% of mass 174	<u>97.5</u>
177 5 - 9% of mass 176	<u>8.4</u>



Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87932  
Matrix: Water  
ID: 0128L13.D

SDG No: 87932  
Date Analyzed: 01/28/19  
Instrument: Loki  
Time Analyzed: 19:49

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	(SS)10ug/L VOC STD 0	0128L14.D	01/28/19 20:18
2	Lab Control Spike	190128A LCS 10ug/L	01/28/19 21:15
3	Lab Control SpikeD	190128A LCSD 10ug/L	01/28/19 21:44
4	Blank	190128A blk	01/29/19 0:06
5	ERH737	AZ85519W01	01/29/19 1:32
6	ERH742	AZ85522W01	01/29/19 2:01
7	ERH752	AZ85526W01	01/29/19 2:29
8	ERH738	AZ85520W01	01/29/19 2:58
9	ERH739	AZ85521W01	01/29/19 3:27
10	ERH743	AZ85523W01	01/29/19 3:55
11	ERH750	AZ85524W01	01/29/19 4:24
12	ERH751	AZ85525W01	01/29/19 4:52
13	ERH753	AZ85527W01	01/29/19 5:21
14	Ending CCV 10ug/L 01	0128L38.D	01/29/19 7:43
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>20.6</u>
75 30 - 60% of mass 95	<u>50.7</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.4</u>
173 0 - 2% of mass 174	<u>0.0</u>
174 50 - 100% of mass 95	<u>83.9</u>
175 5 - 9% of mass 174	<u>8.5</u>
176 94.95 - 101% of mass 174	<u>100.0</u>
177 5 - 9% of mass 176	<u>8.1</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87932  
 Lab File ID (Standard): 0128L08.D Date Analyzed: 01/28/19  
 Instrument ID: Loki Time Analyzed: 17:26  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	408128	6.50	289088	9.97	128392	12.53
UPPER LIMIT	816256	6.67	578176	10.14	256784	12.70
LOWER LIMIT	204064	6.33	144544	9.80	64196	12.36
SAMPLE NO.						
01 (SS)10ug/L VOC STD 0	431360	6.50	334592	9.97	134464	12.54
02 190128A LCS 10ug/L	418368	6.50	328000	9.97	133440	12.54
03 190128A LCSD 10ug/L	401792	6.50	308096	9.97	128800	12.53
04 190128A blk	381568	6.50	292096	9.97	111128	12.53
05 AZ85519W01	391104	6.50	306432	9.97	120232	12.54
06 AZ85522W01	392320	6.50	301056	9.97	116720	12.54
07 AZ85526W01	385856	6.50	307456	9.97	126240	12.54
08 AZ85520W01	395200	6.50	314944	9.97	128624	12.53
09 AZ85521W01	413248	6.50	333952	9.97	140608	12.54
10 AZ85523W01	372608	6.50	302592	9.97	133504	12.53
11 AZ85524W01	389824	6.50	306880	9.97	126088	12.53
12 AZ85525W01	364736	6.50	292928	9.97	130736	12.54
13 AZ85527W01	408192	6.50	325632	9.97	136512	12.54
14 Ending CCV 10ug/L 01/2	381632	6.50	307200	9.97	145920	12.54
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87932  
Matrix: WATER

SDG No: 87932  
Date Analyzed: 01/28/19  
Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190128-LCS	Lab Control Spike	85-114	90.8				
AL190128-LCSD	Lab Control SpikeD	85-114	100				
AL190128-BLK	Blank	85-114	98.8				
AZ85519	ERH737	85-114	97.4				
AZ85522	ERH742	85-114	101				
AZ85526	ERH752	85-114	100				
AZ85520	ERH738	85-114	95.7				
AZ85521	ERH739	85-114	95.4				
AZ85523	ERH743	85-114	102				
AZ85524	ERH750	85-114	102				
AZ85525	ERH751	85-114	104				
AZ85527	ERH753	85-114	96.7				

Comments: Batch: #GRO86-AL190128

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Loki

Blank ID: AL190128-BLK

Time Analyzed: 0006

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L19	01/28/19 2241
AL190128-LCSD	Lab Control Spiked	0128L20	01/28/19 2309
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85519	ERH737	0128L25	01/29/19 0132
AZ85522	ERH742	0128L26	01/29/19 0201
AZ85526	ERH752	0128L27	01/29/19 0229
AZ85520	ERH738	0128L28	01/29/19 0258
AZ85521	ERH739	0128L29	01/29/19 0327
AZ85523	ERH743	0128L30	01/29/19 0355
AZ85524	ERH750	0128L31	01/29/19 0424
AZ85525	ERH751	0128L32	01/29/19 0452
AZ85527	ERH753	0128L33	01/29/19 0521

Comments: Batch: #GRO86-AL190128

**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **AL1901W-85519 - 237022**  
Batch ID: #GRO86-AL190128

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
BLANK	SURROGATE: 4-BROMOFLUORO	98.8	85-114			%	01/29/19	01/29/19

Quant Method:L0128SUR.M  
Run #:0128L22  
Instrument:Loki  
Sequence:190128  
Initials:KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 1:27:38 PM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

LCS ID: AL190128-LCS

Time Analyzed: 2241

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L19	01/28/19 2241
AL190128-LCSD	Lab Control SpikeD	0128L20	01/28/19 2309
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85519	ERH737	0128L25	01/29/19 0132
AZ85522	ERH742	0128L26	01/29/19 0201
AZ85526	ERH752	0128L27	01/29/19 0229
AZ85520	ERH738	0128L28	01/29/19 0258
AZ85521	ERH739	0128L29	01/29/19 0327
AZ85523	ERH743	0128L30	01/29/19 0355
AZ85524	ERH750	0128L31	01/29/19 0424
AZ85525	ERH751	0128L32	01/29/19 0452
AZ85527	ERH753	0128L33	01/29/19 0521

Comments: Batch: #GRO86-AL190128

Printed: 01/30/19 1:27:42 PM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## EPA 8260B GRO WATER

APPL ID: 190128W-85519 LCS - 237022

Batch ID: #GRO86-AL190128

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	261	291	87.0	97.0	78-122	10.9	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	22.7	25.1	90.8	100	85-114		

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128SUR.M	L0128SUR.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Loki	Loki
Run :	0128L19	0128L20
Initials :	KVA	

# RSK 175

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Rocky

Blank ID: 190128A-BLK

Time Analyzed: 1028

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-LCS	Lab Control Spike	19012800	01/28/19 1022
190128A-LCSD	Lab Control SpikeD	19012801	01/28/19 1025
190128A-BLK	Blank	19012802	01/28/19 1028
AZ85519	ERH737	19012803	01/28/19 1031
AZ85520	ERH738	19012804	01/28/19 1033
AZ85520	ERH738	19012806	01/28/19 1039
AZ85522	ERH742	19012807	01/28/19 1041
AZ85523	ERH743	19012808	01/28/19 1044
AZ85524	ERH750	19012809	01/28/19 1047
AZ85525	ERH751	19012810	01/28/19 1049
AZ85526	ERH752	19012811	01/28/19 1052
AZ85527	ERH753	19012812	01/28/19 1054

Comments: Batch: #RSKME-190128A

Printed: 01/28/19 12:02:40 PM  
Form 4, Blank Summary



Method Blank  
METHANE

Blank Name/QCG: 190128W-85519 - 236920  
Batch ID: #RSKME-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method:RSK0120.M  
Run #:19012802  
Instrument:Rocky  
Sequence:190120  
Initials:CMO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 12:02:50 PM

# RSK 175

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Rocky

LCS ID: 190128A-LCS

Time Analyzed: 1022

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-LCS	Lab Control Spike	19012800	01/28/19 1022
190128A-LCSD	Lab Control SpikeD	19012801	01/28/19 1025
190128A-BLK	Blank	19012802	01/28/19 1028
AZ85519	ERH737	19012803	01/28/19 1031
AZ85520	ERH738	19012804	01/28/19 1033
AZ85520	ERH738	19012806	01/28/19 1039
AZ85522	ERH742	19012807	01/28/19 1041
AZ85523	ERH743	19012808	01/28/19 1044
AZ85524	ERH750	19012809	01/28/19 1047
AZ85525	ERH751	19012810	01/28/19 1049
AZ85526	ERH752	19012811	01/28/19 1052
AZ85527	ERH753	19012812	01/28/19 1054

Comments: Batch: #RSKME-190128A

Printed: 01/28/19 12:02:37 PM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## METHANE

APPL ID: 190128W-85519 LCS - 236920  
 Batch ID: #RSKME-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	97.5	98.5	117	118	72-125	1.0	30

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	RSK0120.M	RSK0120.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Rocky	Rocky
Run :	19012800	19012801
Initials :	CMO	

# SM3500FeB

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Manual Spec

Blank ID: 190123A-BLK

Time Analyzed: 0919

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190123A-LCS	Lab Control Spike	12	01/23/19 0919
190123A-BLK	Blank	13	01/23/19 0919
190123A-LCSD	Lab Control SpikeD	15	01/23/19 0920
AZ85523	ERH743	27	01/23/19 1647
AZ85520	ERH738	28	01/23/19 1648
AZ85527	ERH753	29	01/23/19 1649
AZ85525	ERH751	30	01/23/19 1650

Comments: Batch: #35FE-190123A

Printed: 02/17/19 9:34:40 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	01/23/19	01/23/19	#35FE-190123A-AZ85494

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:34:43 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190123A3-BLK

Time Analyzed: 0945

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190123A3-BLK	Blank	3	01/23/19 0945
AZ85527	ERH753	31	01/23/19 1728
AZ85520	ERH738	32	01/23/19 1735
AZ85523	ERH743	33	01/23/19 1743
AZ85525	ERH751	34	01/23/19 1750
190123A3-LCS	Lab Control Spike	4	01/23/19 0952
190123A3-LCSD	Lab Control SpikeD	5	01/23/19 1000

Comments: Batch: #300W-190123A3

Printed: 02/17/19 9:34:40 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.26 J	1.0	0.20	0.08	mg/L	01/23/19	01/23/19	#300W-190123A3-AZ85520
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	01/23/19	01/23/19	#300W-190123A3-AZ85520
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/23/19	01/23/19	#300W-190123A3-AZ85520

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:34:43 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190128A1-BLK

Time Analyzed: 1002

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
AZ85523	ERH743	15	01/28/19 1441
AZ85525	ERH751	16	01/28/19 1448
AZ85527	ERH753	17	01/28/19 1455
190128A1-BLK	Blank	2	01/28/19 1002
190128A1-LCS	Lab Control Spike	3	01/28/19 1009
190128A1-LCSD	Lab Control SpikeD	4	01/28/19 1017

Comments: Batch: #300WD-190128A1

Printed: 02/17/19 9:34:40 AM  
Form 4, Blank Summary



# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.13 J	1.0	0.20	0.08	mg/L	01/28/19	01/28/19	#300WD-190128A1-AZ85523
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/28/19	01/28/19	#300WD-190128A1-AZ85523

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:34:43 AM

# EPA 353.2

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

Blank ID: 190128A-BLK

Time Analyzed: 1642

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85520	ERH738	18	01/28/19 1655
AZ85523	ERH743	19	01/28/19 1657
AZ85525	ERH751	22	01/28/19 1704
AZ85527	ERH753	23	01/28/19 1706

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:34:40 AM

Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	01/28/19	01/28/19	#35OF-190128A-AZ85562

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:34:43 AM

# SM 2320B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Tiamo

Blank ID: 190130A-BLK

Time Analyzed: 1332

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	1	01/30/19 1332
190130A-LCS	Lab Control Spike	2	01/30/19 1335
190130A-LCSD	Lab Control SpikeD	3	01/30/19 1345
AZ85520	ERH738	4	01/30/19 1355
AZ85523	ERH743	5	01/30/19 1404
AZ85525	ERH751	6	01/30/19 1410
AZ85527	ERH753	7	01/30/19 1415

Comments: Batch: #232W-190130A

Printed: 02/17/19 9:34:40 AM

Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS CA	1.5 J	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	CARBONATE AS CACO	1.70 U	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	TOTAL ALKALINITY AS	1.5 J	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:34:43 AM

# SW846 9060A

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/12/19

Matrix: WATER

Instrument: Manual

Blank ID: 190212A-BLK

Time Analyzed: 1513

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85527	ERH753		02/13/19 0150
190212A-BLK	Blank		02/12/19 1513
190212A-LCS	Lab Control Spike		02/13/19 1258
190212A-LCSD	Lab Control SpikeD		02/13/19 1113
AZ85520	ERH738		02/12/19 2127
AZ85523	ERH743		02/12/19 2232
AZ85525	ERH751		02/12/19 2336

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:34:40 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SW846.90	TOTAL ORGANIC CAR	0.23 J	0.93	0.350	0.130	mg/L	02/12/19	02/12/19	DOCW-190212A-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:34:43 AM

# SM3500FeB

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Manual Spec

LCS ID: 190123A-LCS

Time Analyzed: 0919

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190123A-LCS	Lab Control Spike	12	01/23/19 0919
190123A-BLK	Blank	13	01/23/19 0919
190123A-LCSD	Lab Control SpikeD	15	01/23/19 0920
AZ85523	ERH743	27	01/23/19 1647
AZ85520	ERH738	28	01/23/19 1648
AZ85527	ERH753	29	01/23/19 1649
AZ85525	ERH751	30	01/23/19 1650

Comments: Batch: #35FE-190123A

Printed: 02/17/19 9:34:45 AM  
Form 4, LCS Summary



# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.07	3.05	102	102	0.65	20	80-120	01/23/19	01/23/19	01/23/19	01/23/19	#35FE-190123A-AZ85494

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/23/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190123A3-LCS

Time Analyzed: 0952

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190123A3-BLK	Blank	3	01/23/19 0945
AZ85527	ERH753	31	01/23/19 1728
AZ85520	ERH738	32	01/23/19 1735
AZ85523	ERH743	33	01/23/19 1743
AZ85525	ERH751	34	01/23/19 1750
190123A3-LCS	Lab Control Spike	4	01/23/19 0952
190123A3-LCSD	Lab Control SpikeD	5	01/23/19 1000

Comments: Batch: #300W-190123A3

Printed: 02/17/19 9:34:45 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	25.1	25.1	100	100	0.0	20	90-110	01/23/19	01/23/19	01/23/19	01/23/19	#300W-190123A3-AZ8552
EPA 300.0	NITRATE	22.1	22.9	23.0	104	104	0.44	20	90-110	01/23/19	01/23/19	01/23/19	01/23/19	#300W-190123A3-AZ8552
EPA 300.0	SULFATE	25.0	25.8	25.8	103	103	0.0	20	90-110	01/23/19	01/23/19	01/23/19	01/23/19	#300W-190123A3-AZ8552

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190128A1-LCS

Time Analyzed: 1009

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85523	ERH743	15	01/28/19 1441
AZ85525	ERH751	16	01/28/19 1448
AZ85527	ERH753	17	01/28/19 1455
190128A1-BLK	Blank	2	01/28/19 1002
190128A1-LCS	Lab Control Spike	3	01/28/19 1009
190128A1-LCSD	Lab Control SpikeD	4	01/28/19 1017

Comments: Batch: #300WD-190128A1

Printed: 02/17/19 9:34:45 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25	25.3	24.1	101	96.4	4.9	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#300WD-190128A1-AZ855
EPA 300.0	SULFATE	25	25.1	25.1	100	100	0.0	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#300WD-190128A1-AZ855

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# EPA 353.2

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

LCS ID: 190128A-LCS

Time Analyzed: 1644

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85520	ERH738	18	01/28/19 1655
AZ85523	ERH743	19	01/28/19 1657
AZ85525	ERH751	22	01/28/19 1704
AZ85527	ERH753	23	01/28/19 1706

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:34:45 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE-N	3.00	2.99	3.07	99.7	102	2.6	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#35OF-190128A-AZ85562

Comments: \_\_\_\_\_

# SM 2320B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Tiamo

LCS ID: 190130A-LCS

Time Analyzed: 1335

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	1	01/30/19 1332
190130A-LCS	Lab Control Spike	2	01/30/19 1335
190130A-LCSD	Lab Control SpikeD	3	01/30/19 1345
AZ85520	ERH738	4	01/30/19 1355
AZ85523	ERH743	5	01/30/19 1404
AZ85525	ERH751	6	01/30/19 1410
AZ85527	ERH753	7	01/30/19 1415

Comments: Batch: #232W-190130A

Printed: 02/17/19 9:34:45 AM  
Form 4, LCS Summary



# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM 2320B	BICARBONATE AS CaCO3	250	228	241	91.2	96.4	5.5	20	90-110	01/30/19	01/30/19	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	TOTAL ALKALINITY AS CA	250	228	241	91.2	96.4	5.5	20	90-110	01/30/19	01/30/19	01/30/19	01/30/19	#232W-190130A-AZ85562

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# SW846 9060A

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87932

Case No: 87932

Date Analyzed: 02/13/19

Matrix: WATER

Instrument: Manual

LCS ID: 190212A-LCS

Time Analyzed: 1258

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85527	ERH753		02/13/19 0150
190212A-BLK	Blank		02/12/19 1513
190212A-LCS	Lab Control Spike		02/13/19 1258
190212A-LCSD	Lab Control SpikeD		02/13/19 1113
AZ85520	ERH738		02/12/19 2127
AZ85523	ERH743		02/12/19 2232
AZ85525	ERH751		02/12/19 2336

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:34:45 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SW846 90	TOTAL ORGANIC CARBO	2.00	2.17	2.17	109	109	0.0	20	90-110	02/13/19	02/13/19	02/13/19	02/13/19	#TOCDOCW-190212A-AZ8

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**ORGANICS**  
**Calibration Data**

TPH Extractables  
DOC0117

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/17/19  
Instrument: Apollo

Initials: \_\_\_\_\_

117002.D    117003.D    117004.D    117005.D    117006.D    117007.D

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATM	Diesel (C10-C24)	1247225	1163187	1209913	1221573	1152277	1133164					1187890	3.8	HATM		
2	HBTM	Motor Oil (C24-C40)	1046830	917795	948443	920306	882639	861594					929601	7.0	HBTM		
3	SC	Decanoic Acid(S)	648675	1095549	1090928	1053315	1004335	1065935					993123	17	SC		
4	SA	Ortho-Terphenyl(S)	2315091	2079412	2039254	2009486	1862079	1811493					2019469	8.8	SA		
5	SA	Octacosane(S)	2056338	1855545	1881468	1912913	1840710	1711226					1876367	6.0	SA		
6																	
7																	
8																	
9																	
10																	
11																	
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35																	

1.225349

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814017.D Vial: 17  
 Acq On : 8-14-18 16:56:27 Operator: DP  
 Sample : Decanoic Acid - 1 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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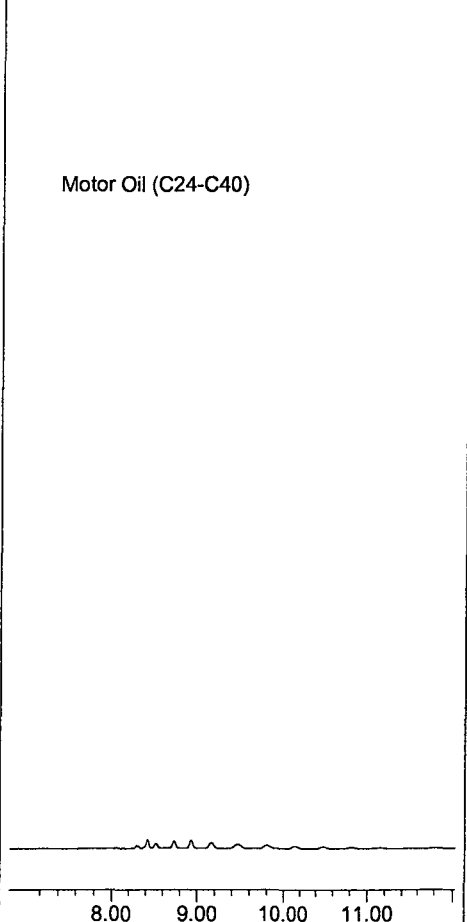
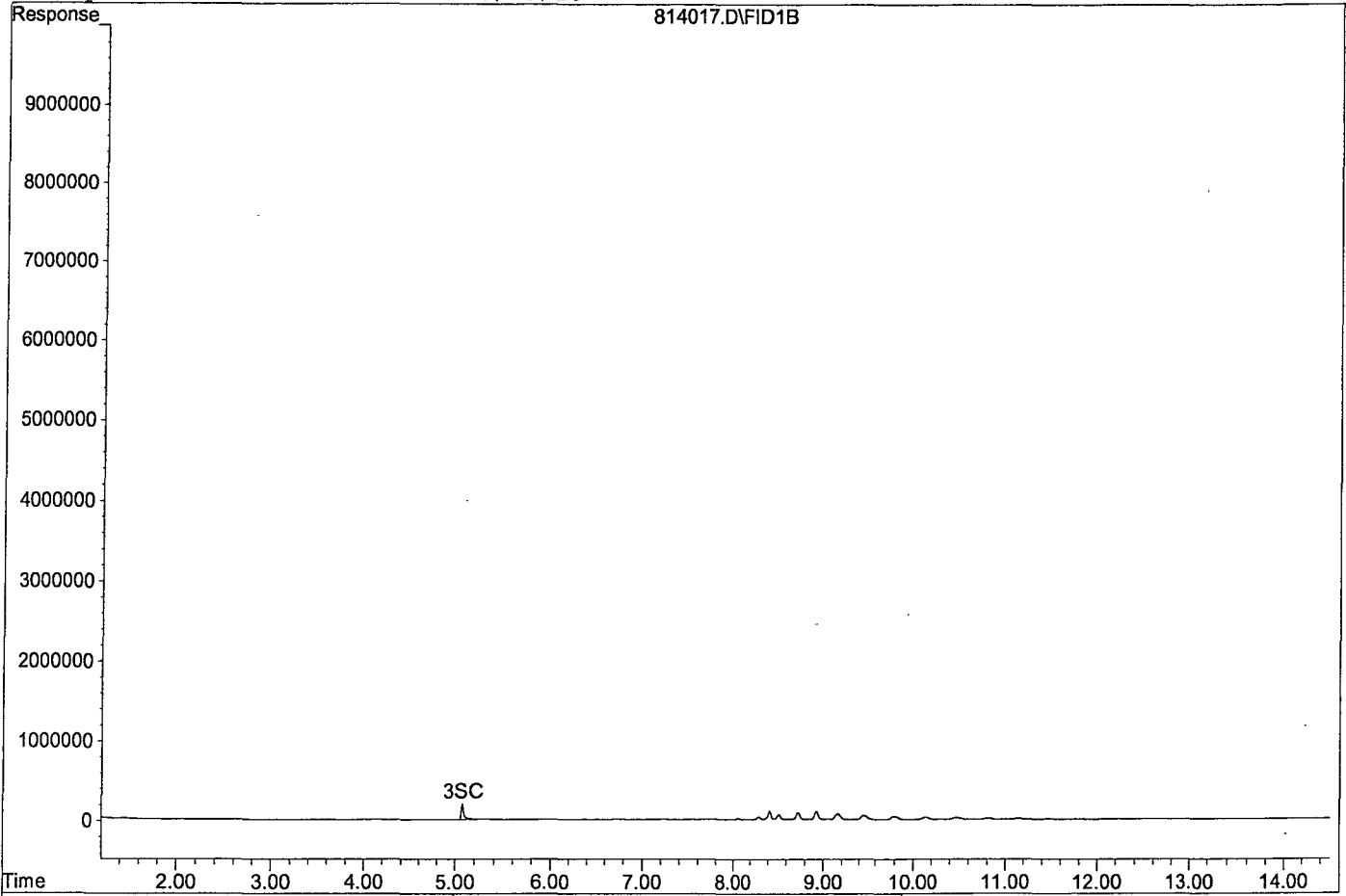
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.08f	3892047	1.959 ppb
Surrogate Spike 24.000	Recovery	=	8.16%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814017.D

Sample : Decanoic Acid - 1 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814018.D Vial: 18  
 Acq On : 8-14-18 17:15:48 Operator: DP  
 Sample : Decanoic Acid - 2 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.10	13146585	6.619 ppb
Surrogate Spike 24.000	Recovery	=	27.58%

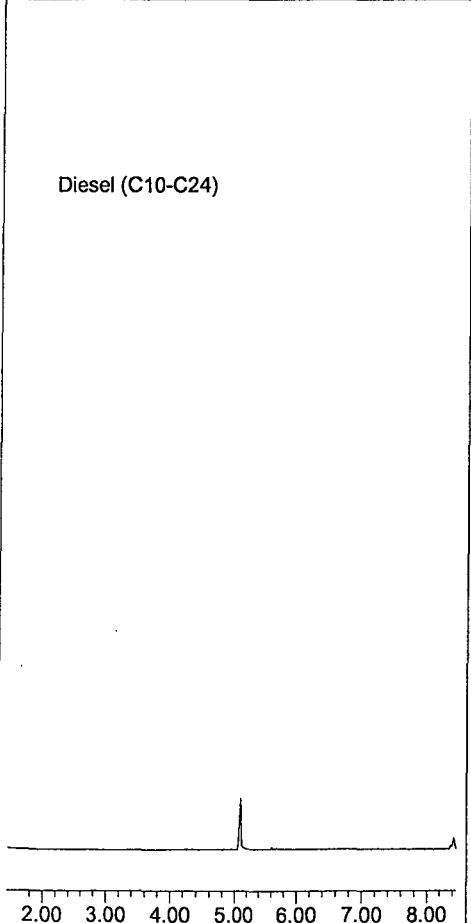
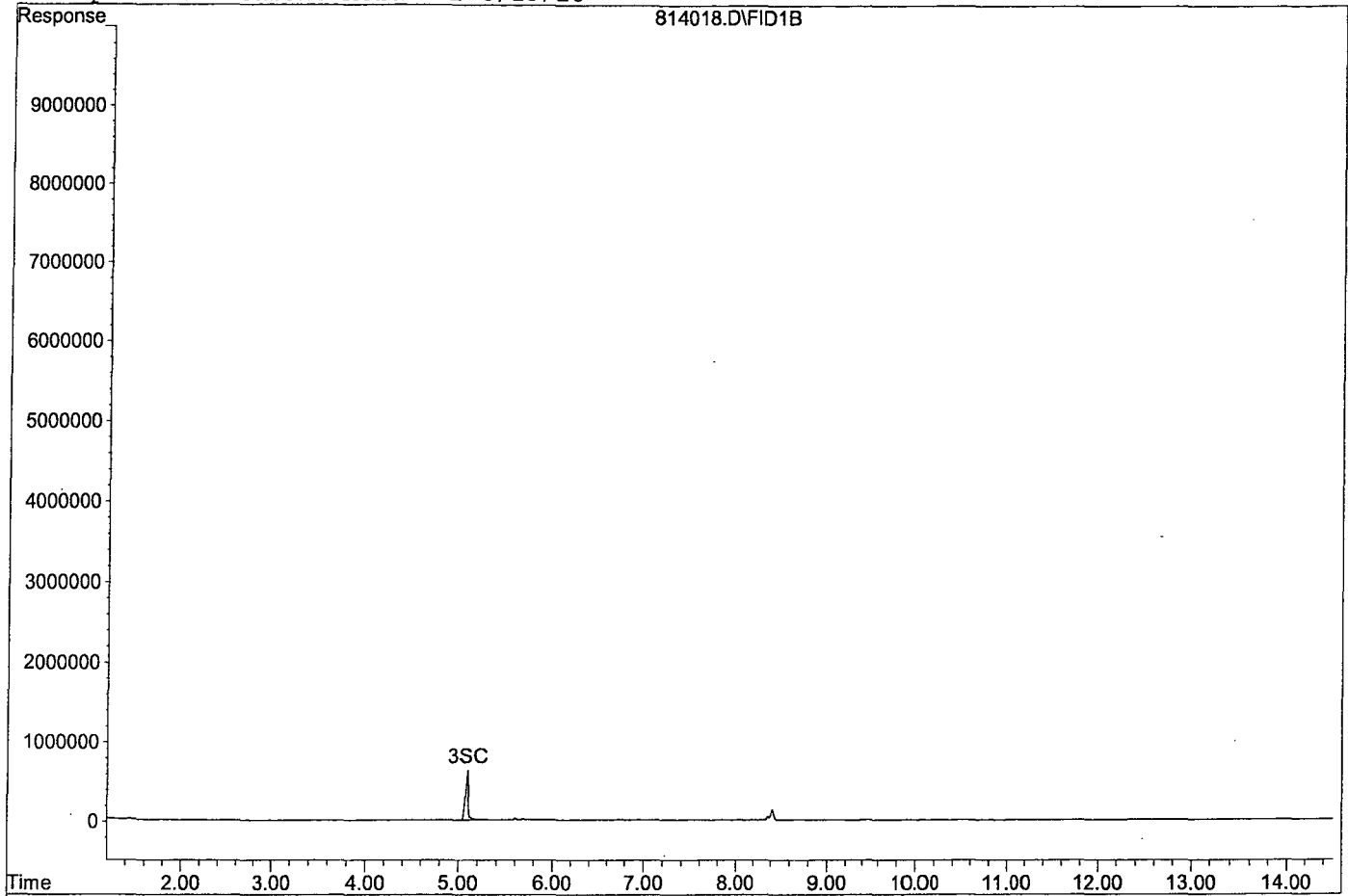
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\180814\814018.D

Sample : Decanoic Acid - 2 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814019.D Vial: 19  
 Acq On : 8-14-18 17:35:59 Operator: DP  
 Sample : Decanoic Acid - 3 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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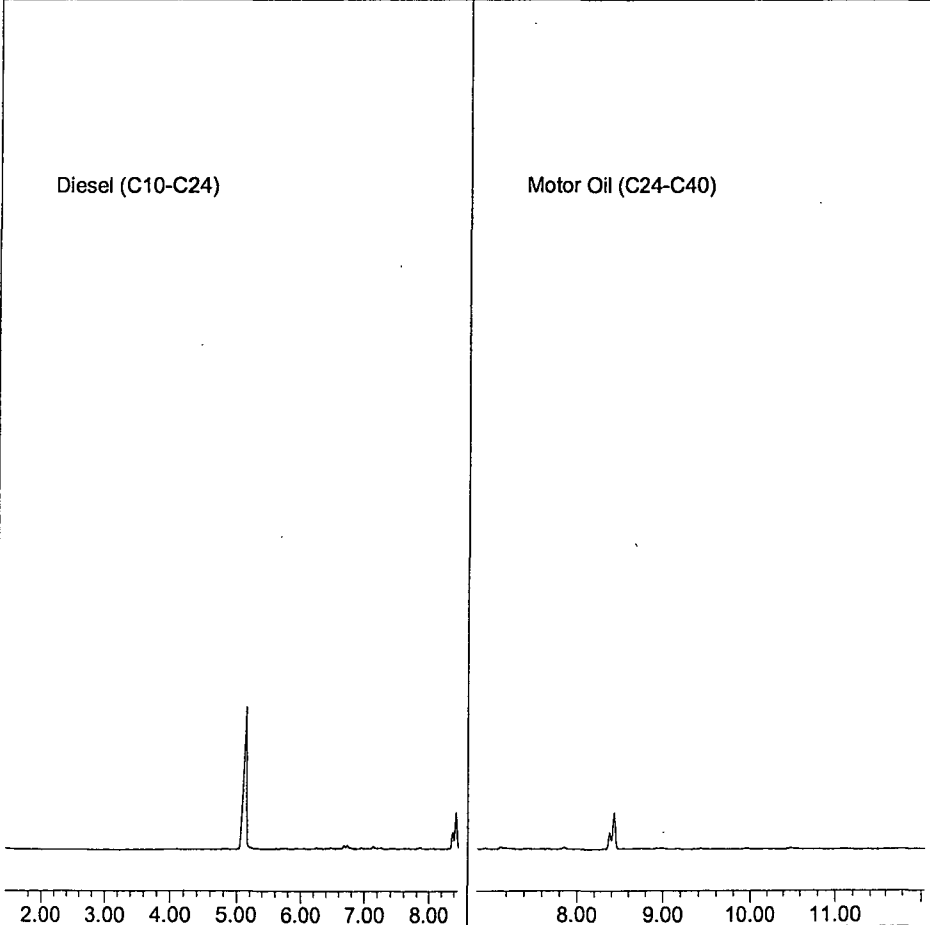
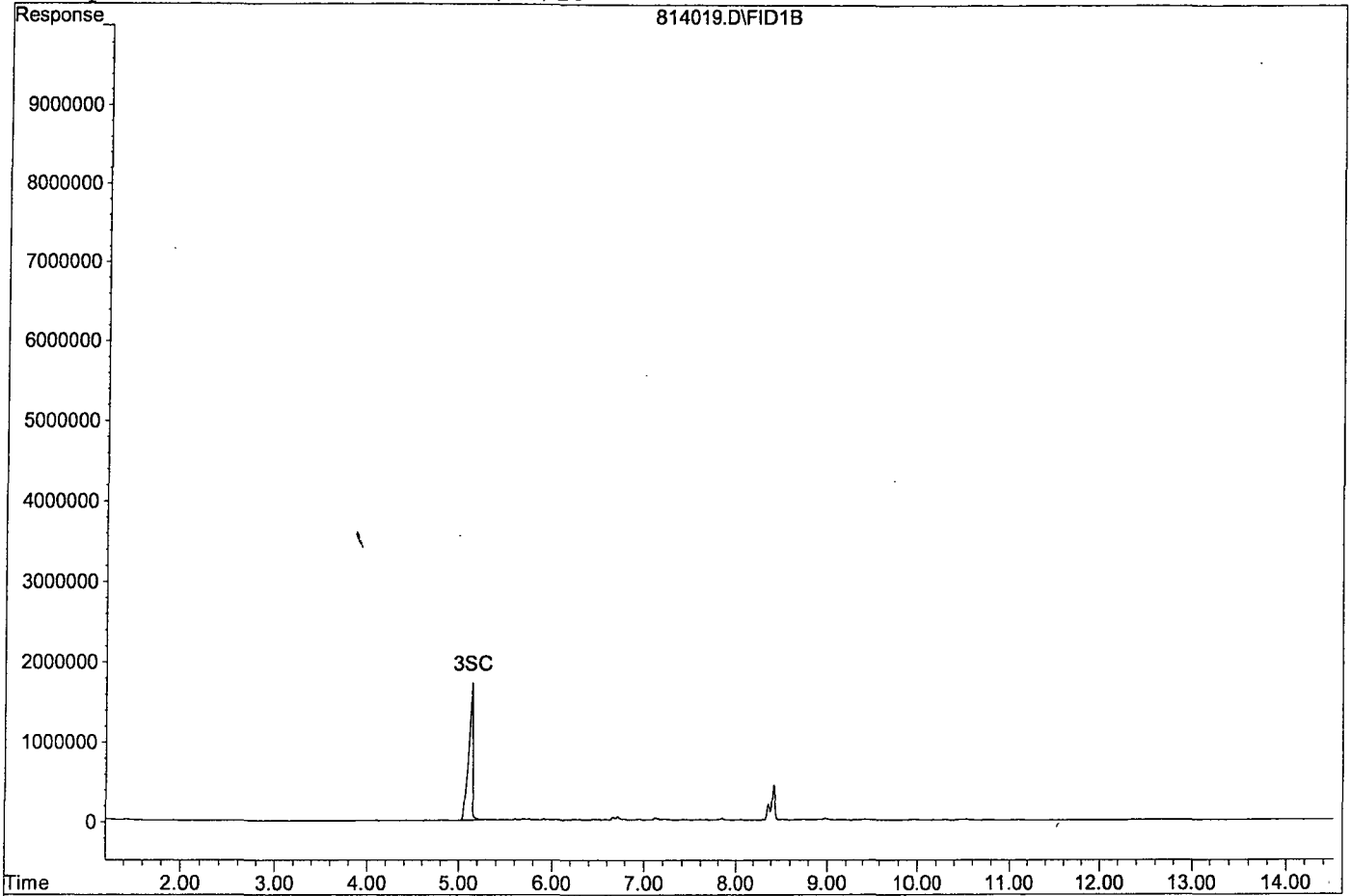
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.14	52364534	26.364 ppb
Surrogate Spike 24.000	Recovery	=	109.85%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814019.D

Sample : Decanoic Acid - 3 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814020.D Vial: 20  
 Acq On : 8-14-18 17:56:16 Operator: DP  
 Sample : Decanoic Acid - 4 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

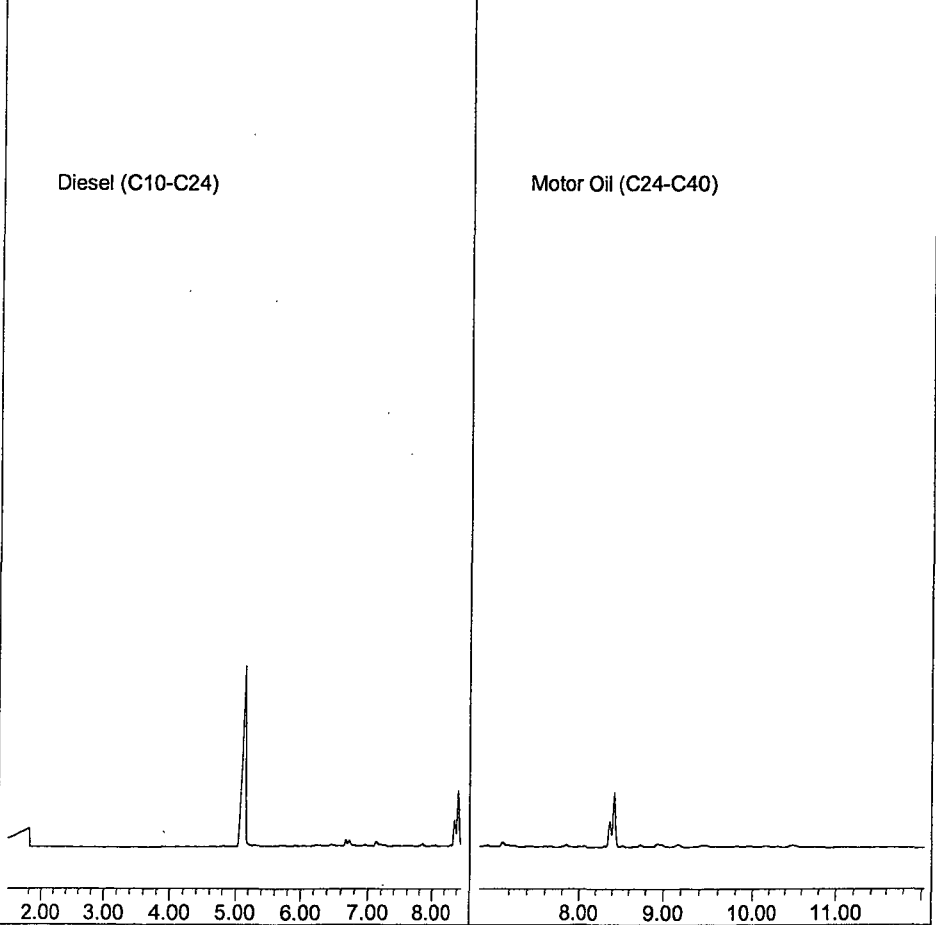
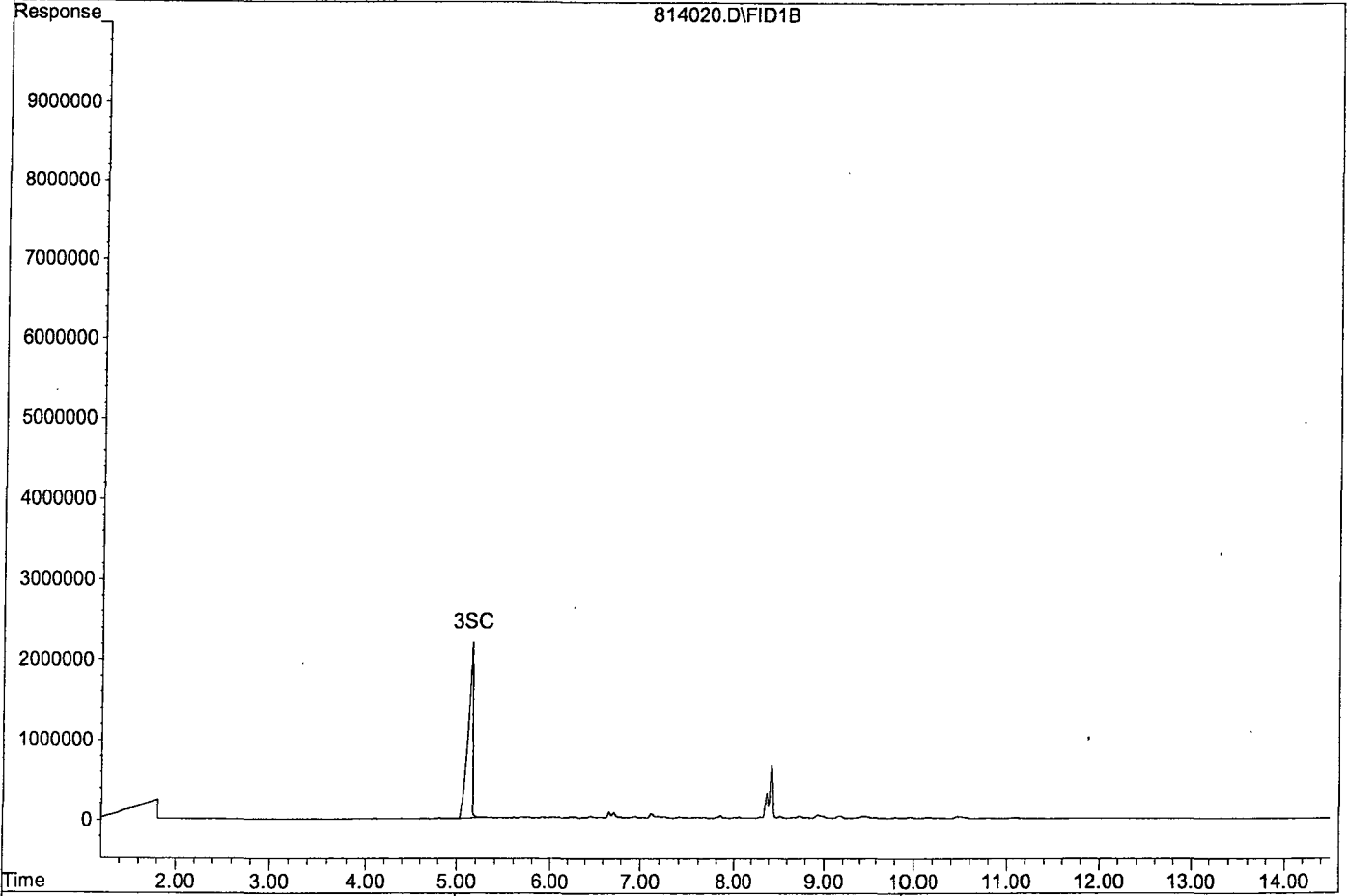
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.15	75838654	38.182 ppb
Surrogate Spike 24.000		Recovery =	159.09%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814020.D

Sample : Decanoic Acid - 4 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814021.D Vial: 21  
Acq On : 8-14-18 18:16:22 Operator: DP  
Sample : Decanoic Acid - 5 8/13/18 Inst : Apollo  
Misc : Mix(C) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Fri Aug 17 13:46:05 2018  
Response via : Multiple Level Calibration

Volume Inj. : 2UL  
Signal Phase : DB-5  
Signal Info : FID02A

Compound R.T. Response Conc Units

System Monitoring Compounds

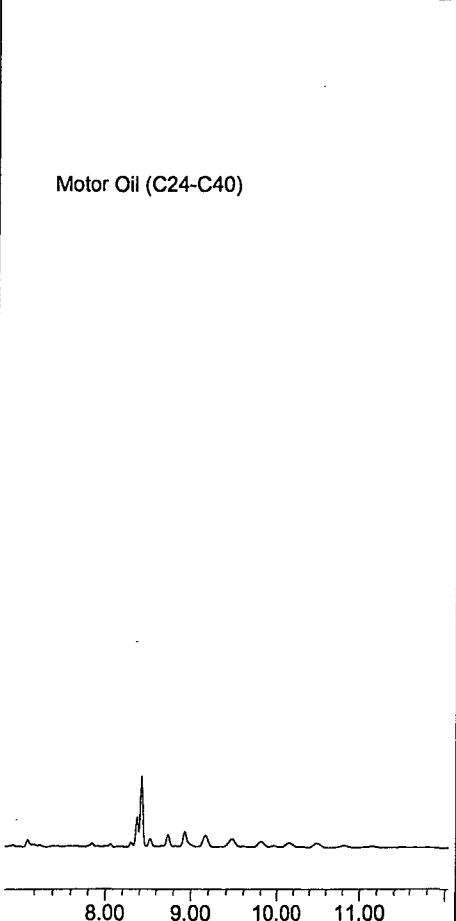
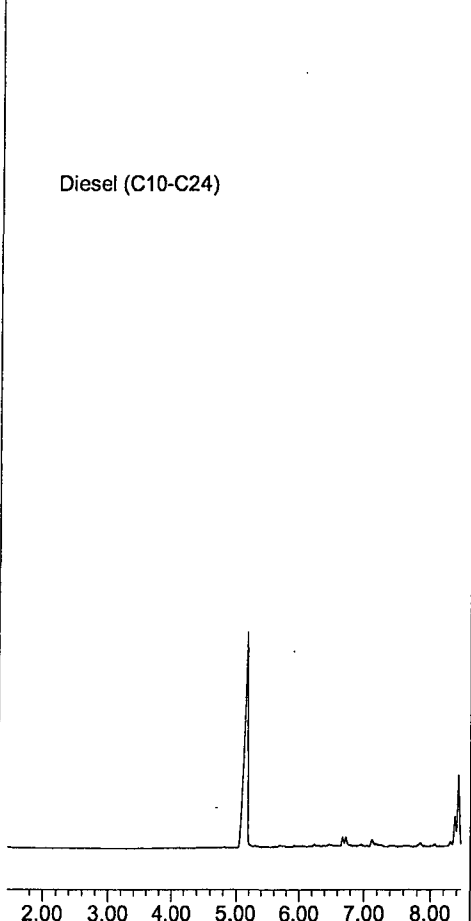
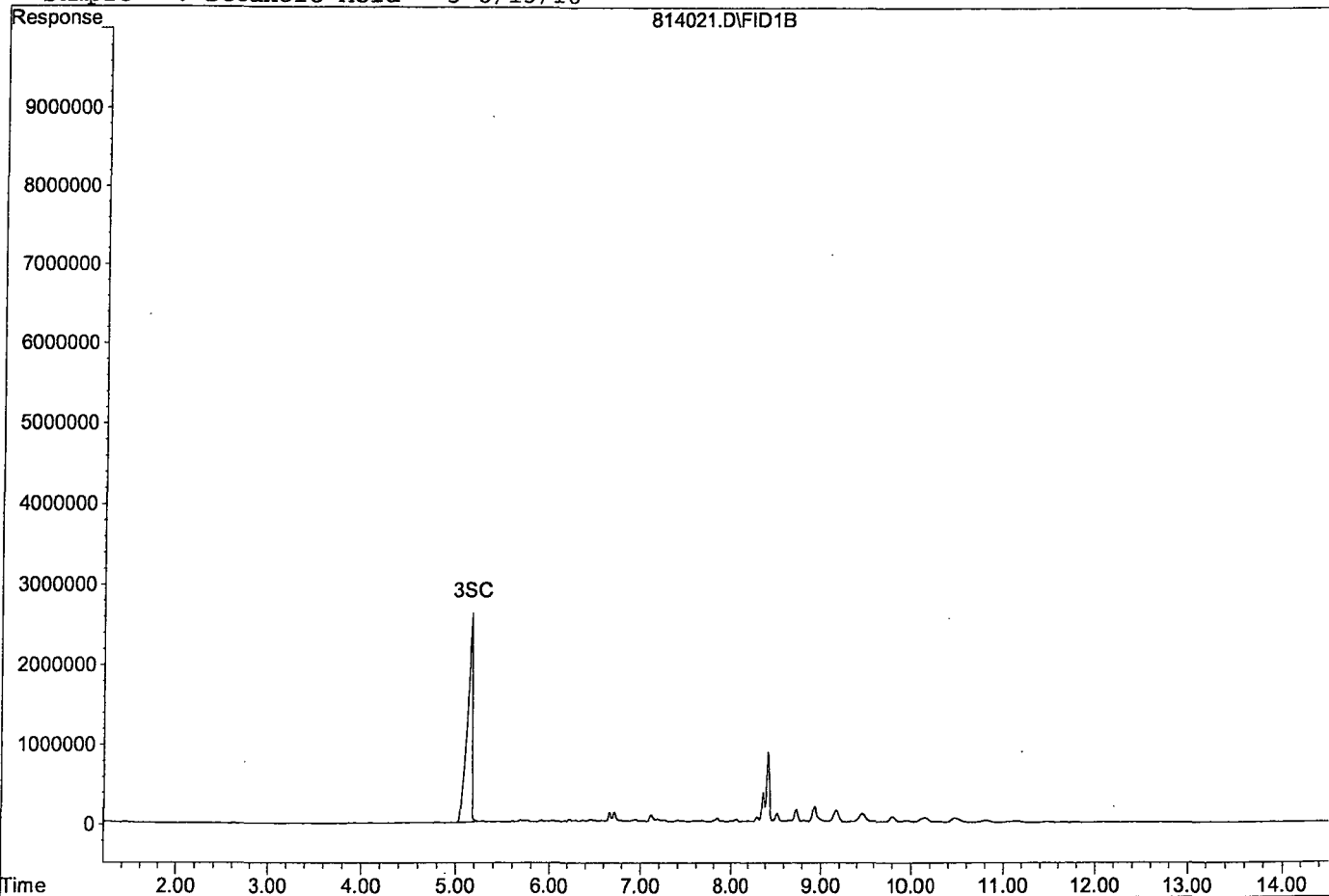
3) SC Decanoic Acid(S) 5.17 96416189 48.542 ppb  
Surrogate Spike 24.000 Recovery = 202.26%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814021.D

Sample : Decanoic Acid - 5 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814022.D Vial: 22  
 Acq On : 8-14-18 18:36:30 Operator: DP  
 Sample : Decanoic Acid - 6 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.18	127912154	64.399 ppb
Surrogate Spike 24.000	Recovery	=	268.33%

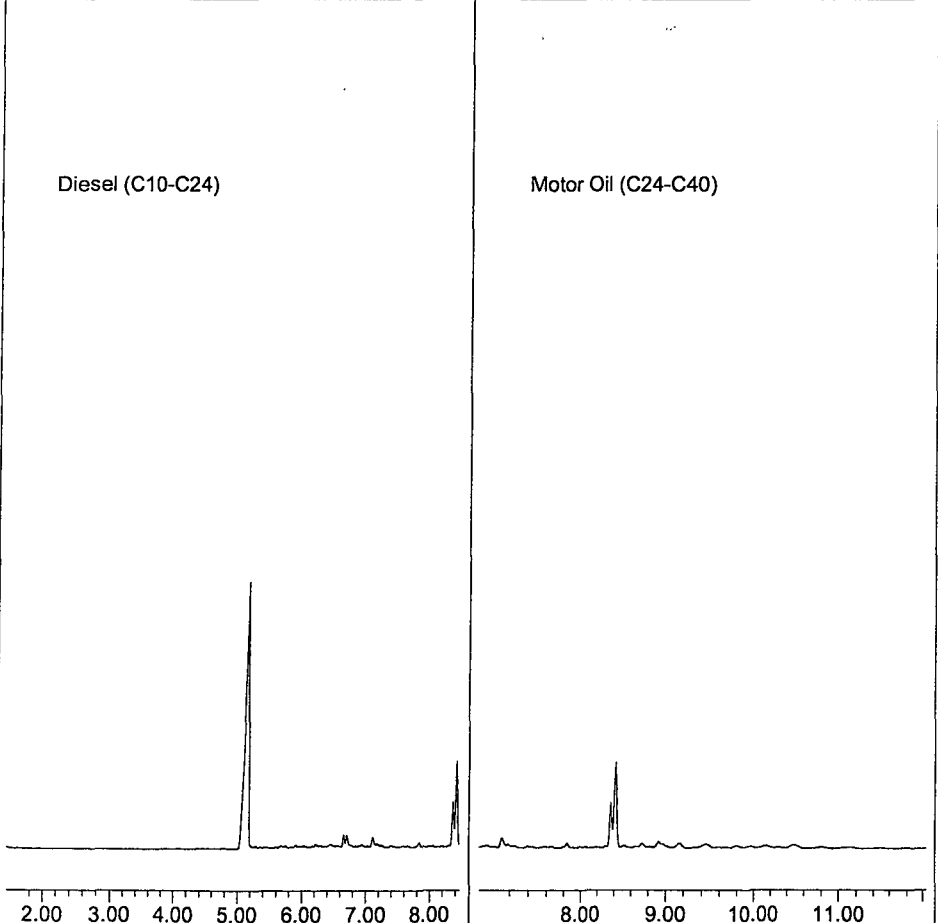
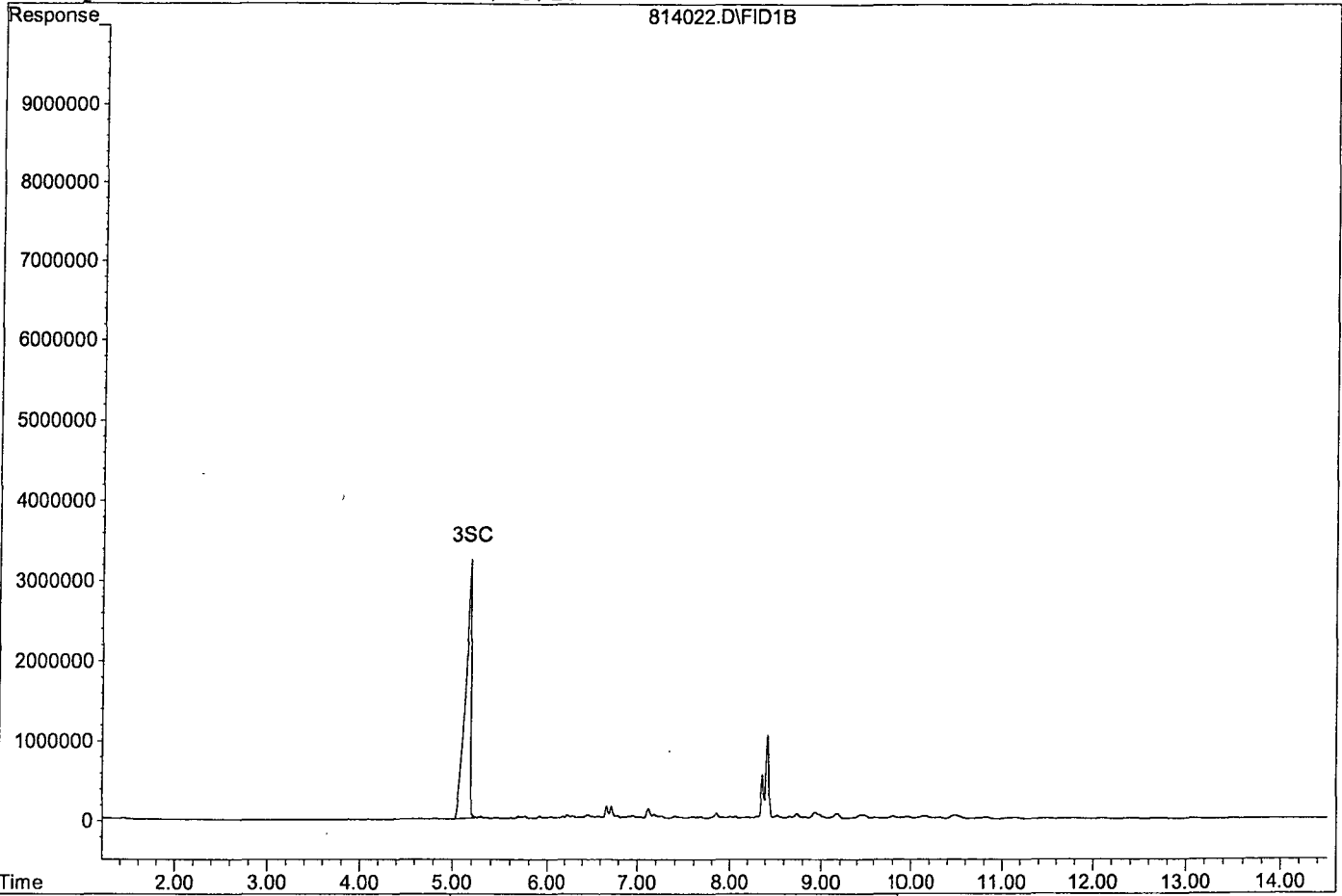
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\180814\814022.D

Sample : Decanoic Acid - 6 8/13/18



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117002.D Vial: 2  
 Acq On : 1-17-19 16:38:28 Operator: DP  
 Sample : Diesel / Motor Oil - 1 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

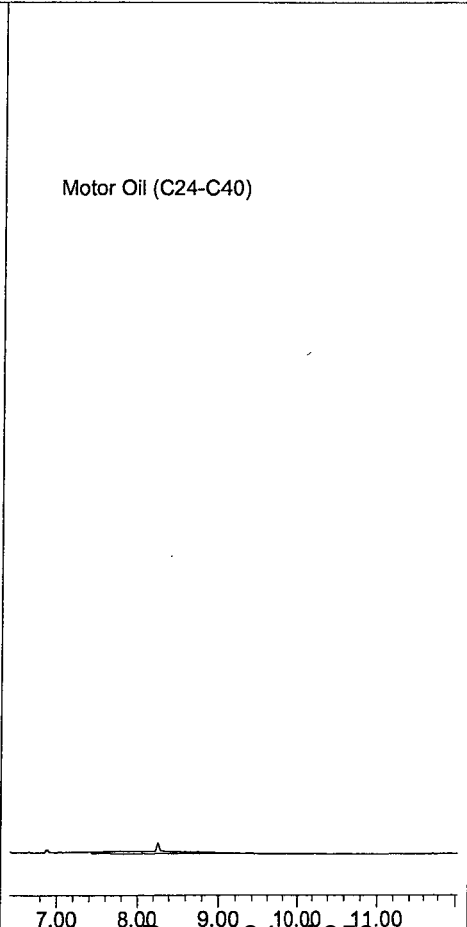
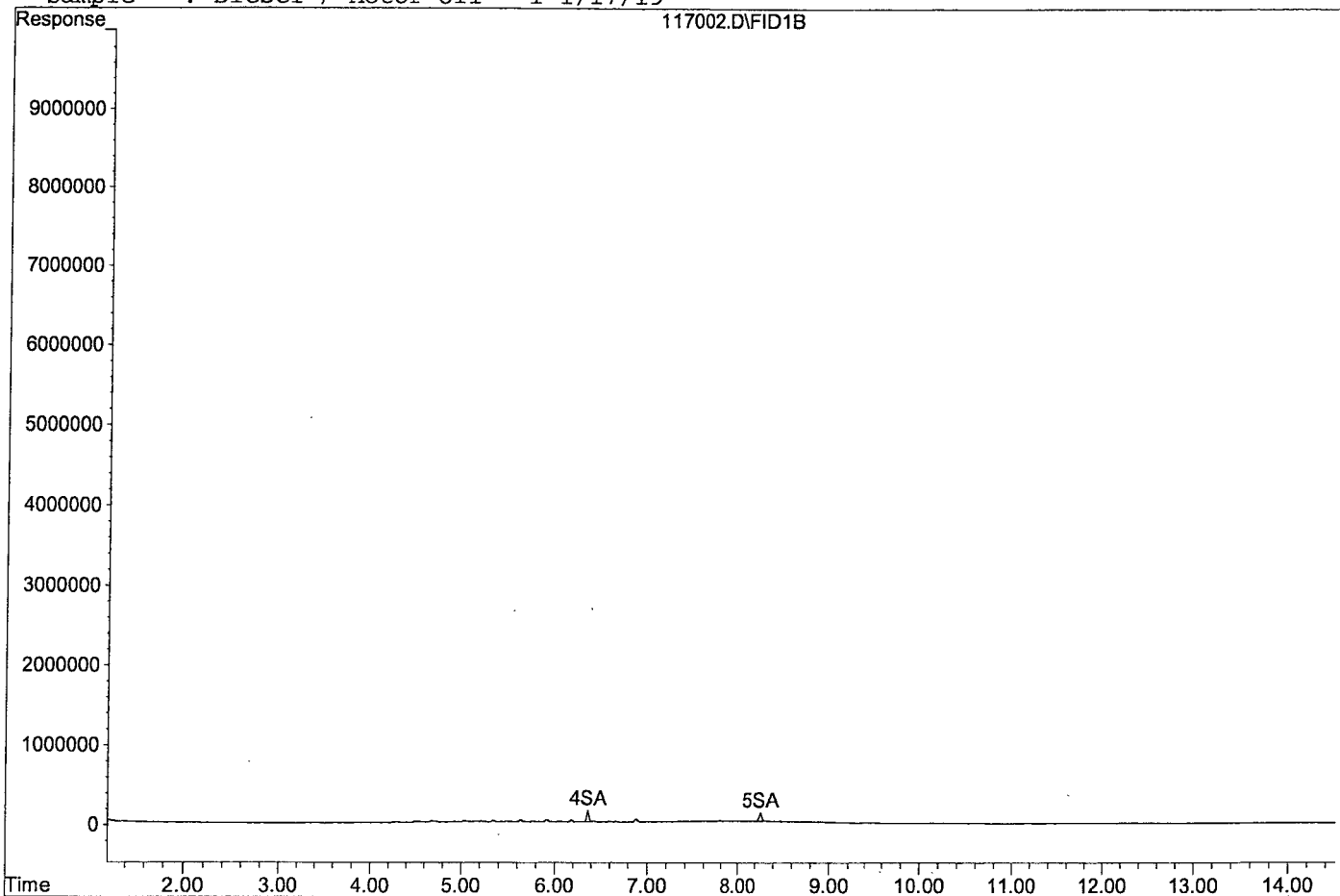
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	2315091	0.573 ppb
Surrogate Spike 30.000		Recovery =	1.91%
5) SA Octacosane(S)	8.26	2056338	0.548 ppb
Surrogate Spike 30.000		Recovery =	1.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	24944497	10.500 ppb
2) HBTM Motor Oil (C24-C40)	9.23	20936598	11.261 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117002.D

Sample : Diesel / Motor Oil - 1 1/17/19



Data File : G:\APOLLO\DATA\190117\117003.D Vial: 3  
 Acq On : 1-17-19 16:58:29 Operator: DP  
 Sample : Diesel / Motor Oil - 2 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

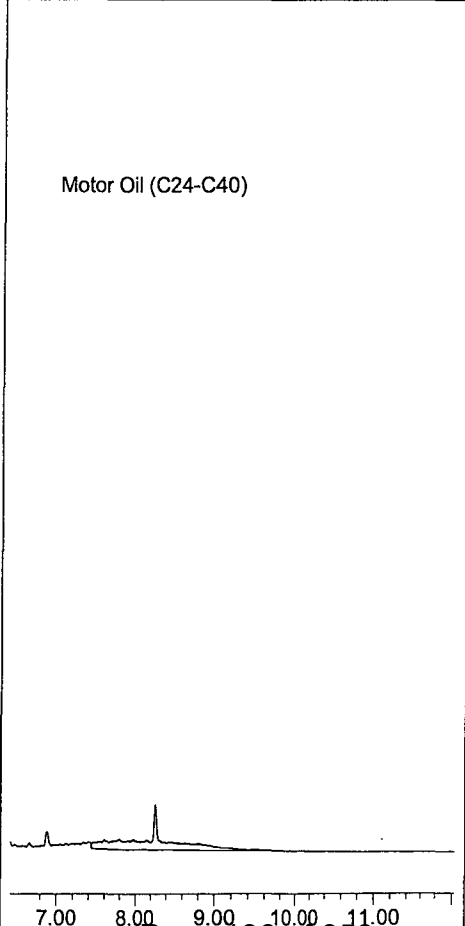
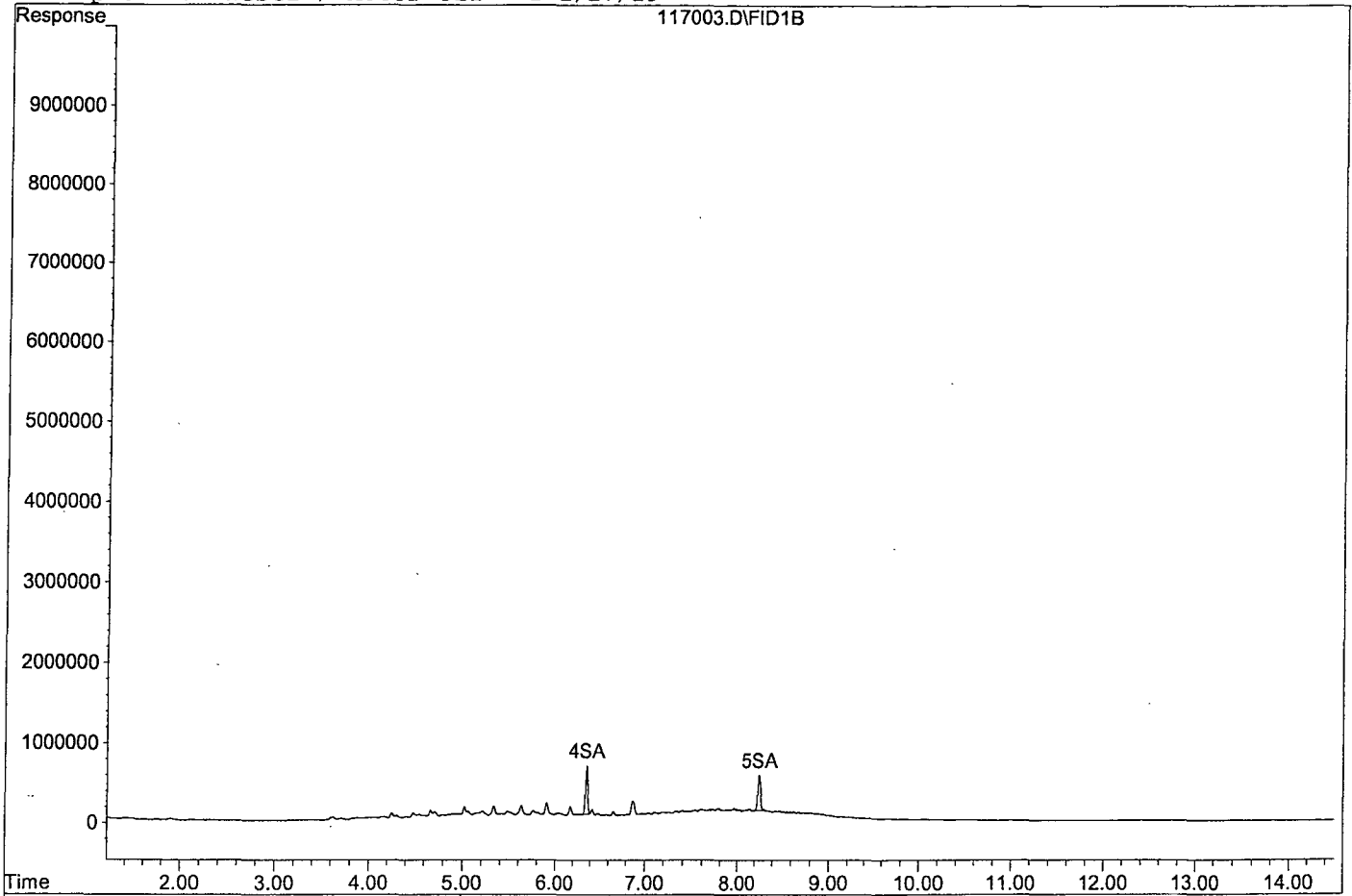
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	10397059	2.574 ppb
Surrogate Spike 30.000		Recovery =	8.58%
5) SA Octacosane(S)	8.26	9277725	2.472 ppb
Surrogate Spike 30.000		Recovery =	8.24%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	116318686	48.960 ppb
2) HBTM Motor Oil (C24-C40)	9.23	91779450	49.365 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117003.D

Sample : Diesel / Motor Oil - 2 1/17/19



Data File : G:\APOLLO\DATA\190117\117004.D Vial: 4  
 Acq On : 1-17-19 17:17:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

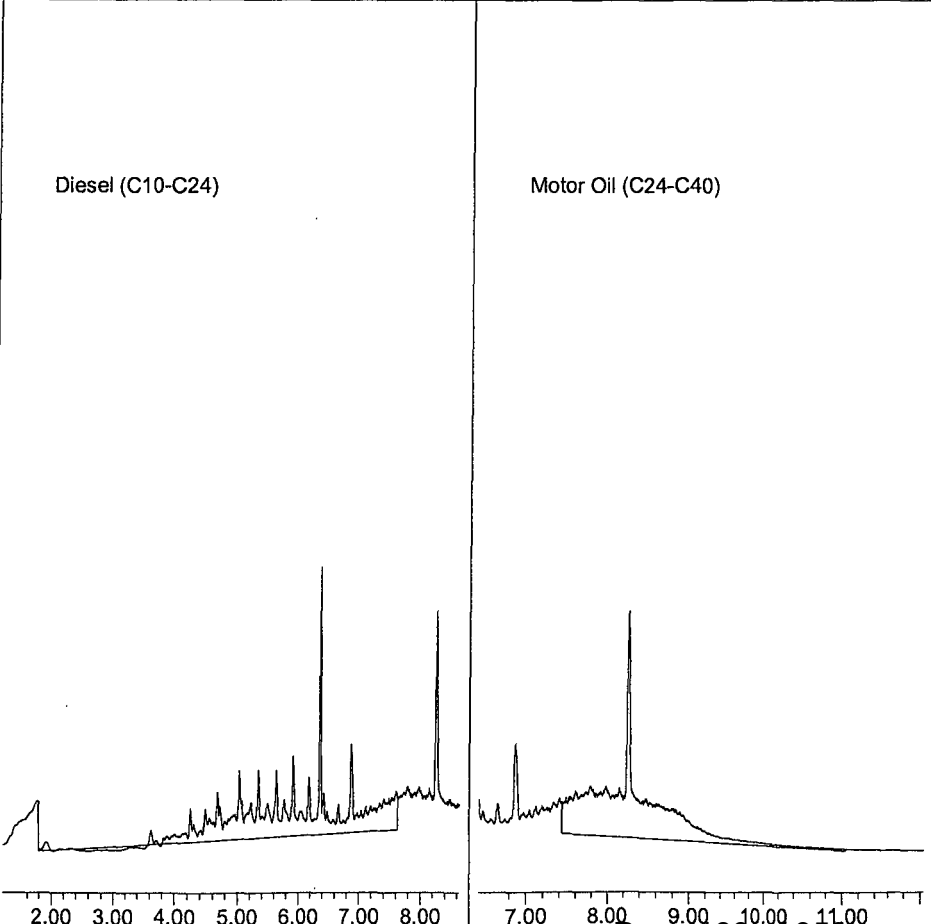
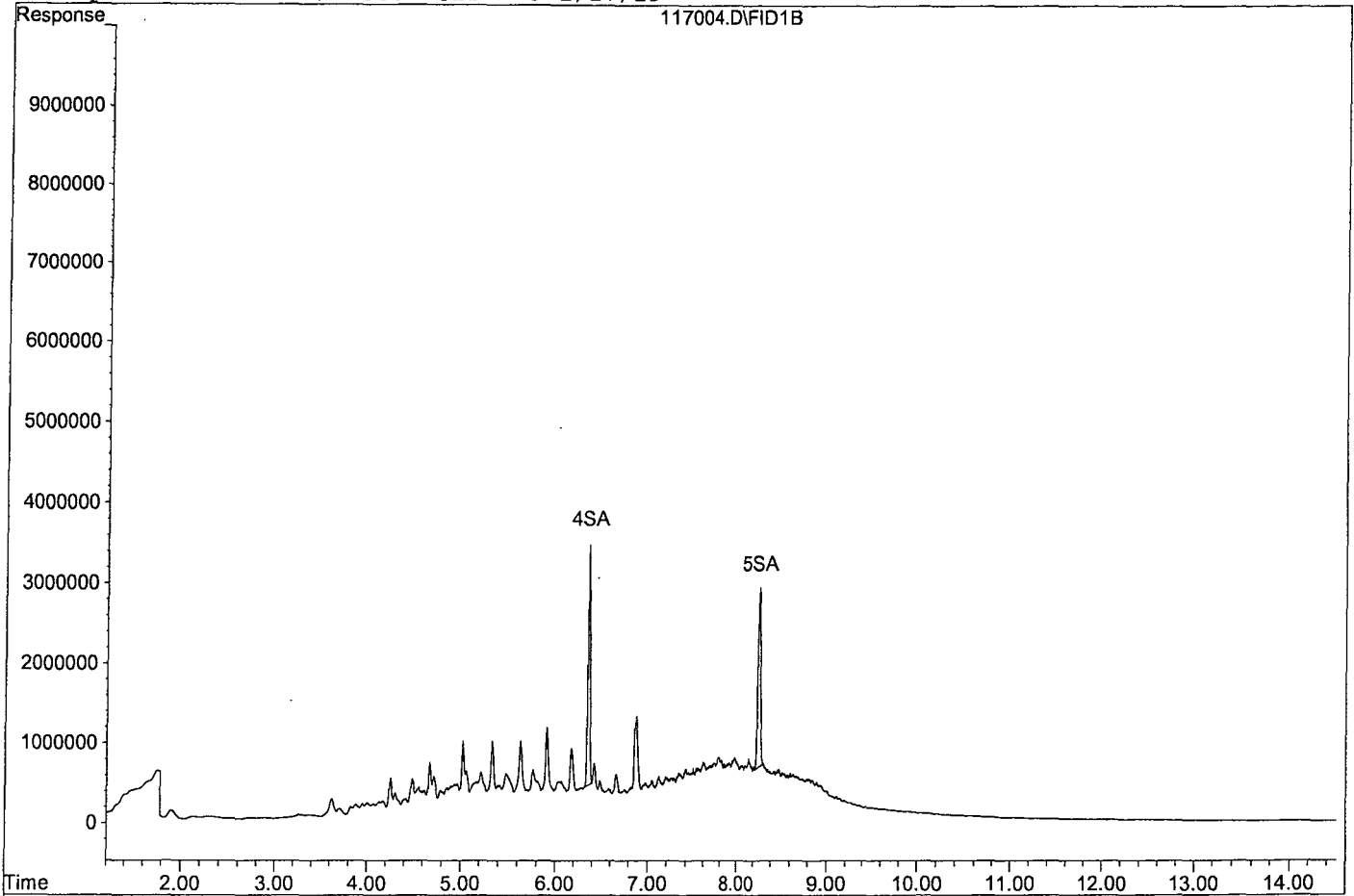
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50981338	12.622 ppb
Surrogate Spike 30.000		Recovery =	42.07%
5) SA Octacosane(S)	8.26	47036708	12.534 ppb
Surrogate Spike 30.000		Recovery =	41.78%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	604956690	254.635 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474221646	255.067 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117004.D

Sample : Diesel / Motor Oil - 3 1/17/19



Data File : G:\APOLLO\DATA\190117\117005.D Vial: 5  
 Acq On : 1-17-19 17:37:44 Operator: DP  
 Sample : Diesel / Motor Oil - 4 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.37	200948587	49.753 ppb
Surrogate Spike 30.000		Recovery =	165.84%
5) SA Octacosane(S)	8.27	191291289	50.974 ppb
Surrogate Spike 30.000		Recovery =	169.91%

Target Compounds

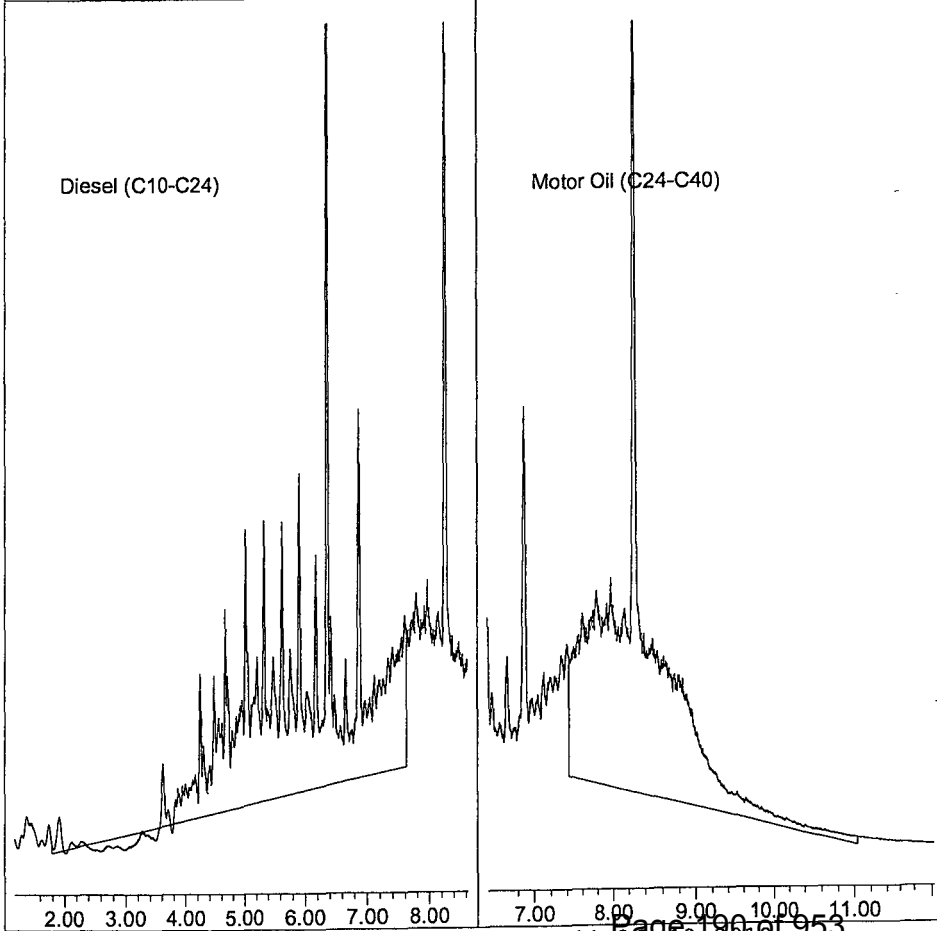
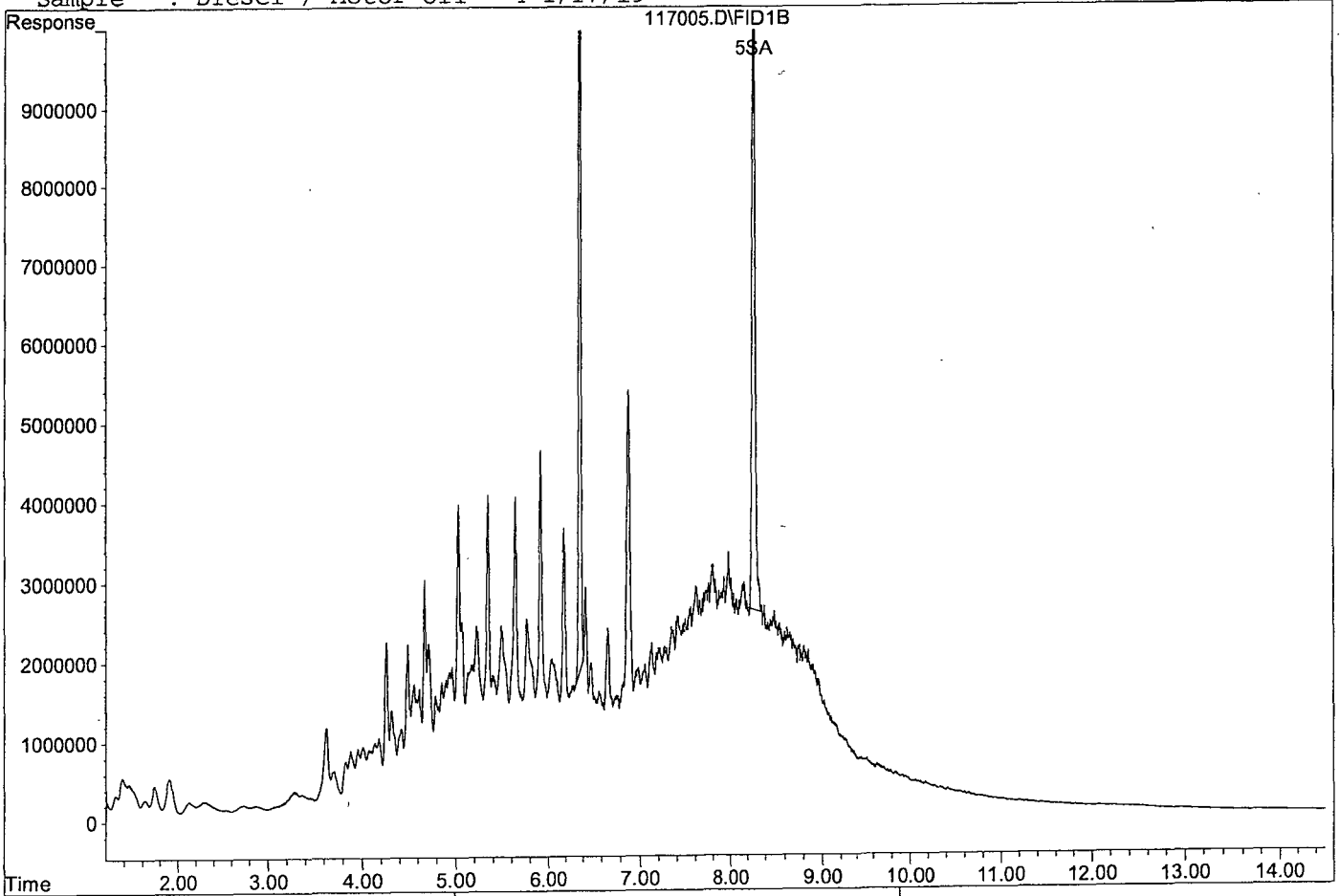
1) HATM Diesel (C10-C24)	4.71	2443146618	1028.356 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1840612778	990.001 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190117\117005.D

Sample : Diesel / Motor Oil - 4 1/17/19



Data File : G:\APOLLO\DATA\190117\117006.D Vial: 6  
 Acq On : 1-17-19 17:57:32 Operator: DP  
 Sample : Diesel / Motor Oil - 5 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

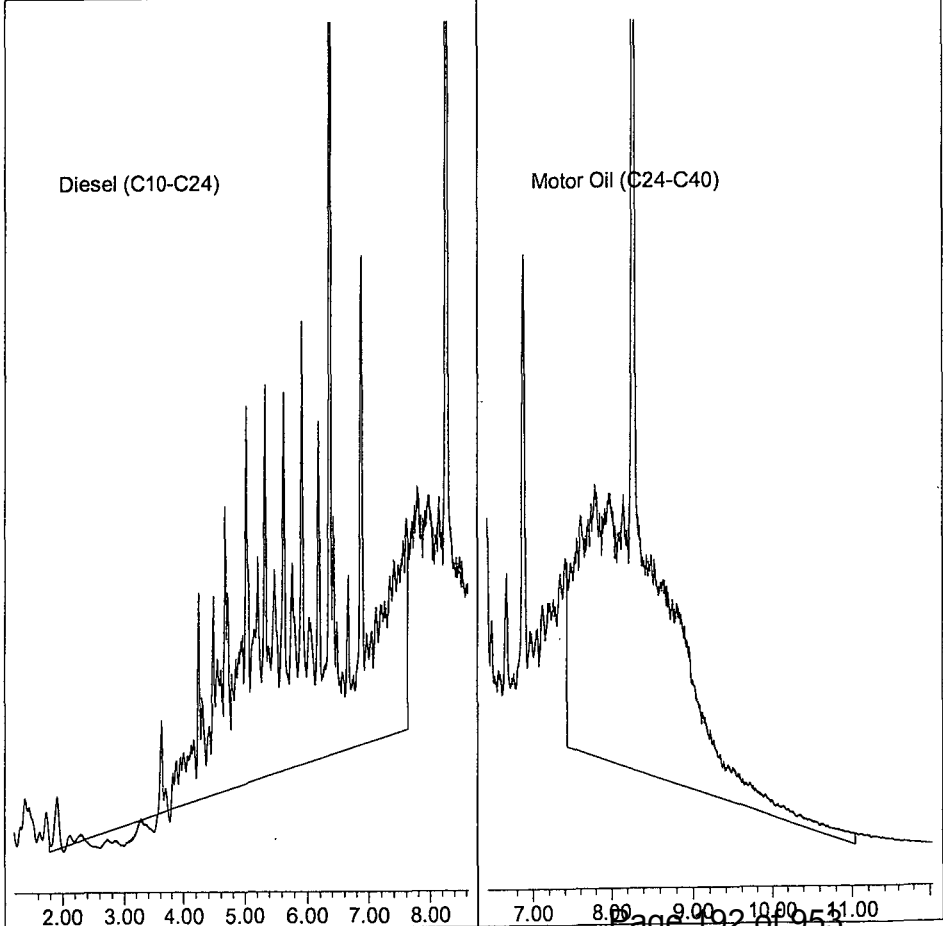
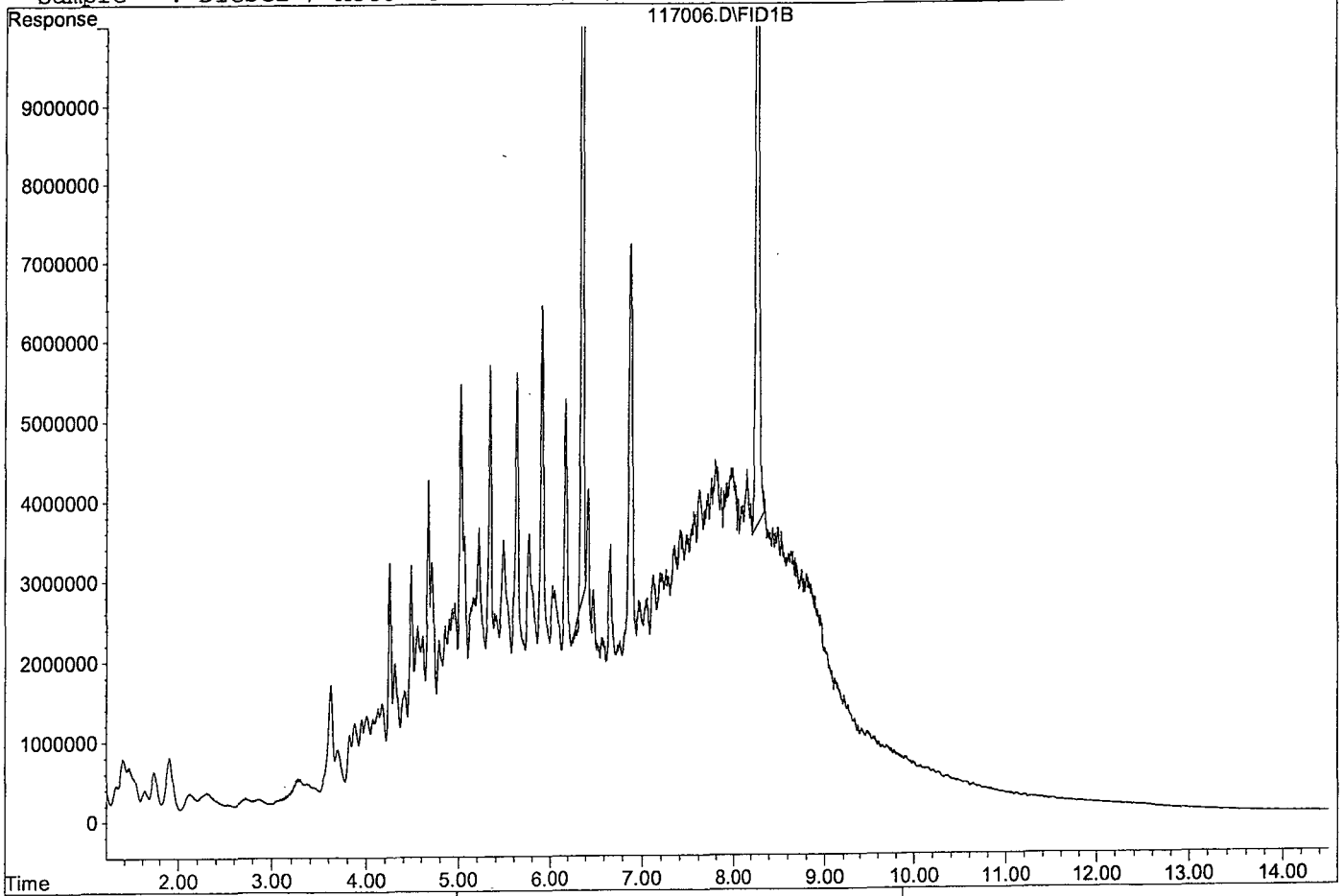
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	279311894	69.155 ppb
Surrogate Spike 30.000		Recovery =	230.52%
5) SA Octacosane(S)	8.28	276106552	73.575 ppb
Surrogate Spike 30.000		Recovery =	245.25%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	3456829820	1455.030 ppb
2) HBTM Motor Oil (C24-C40)	9.23	2647918269	1424.223 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117006.D

Sample : Diesel / Motor Oil - 5 1/17/19



Data File : G:\APOLLO\DATA\190117\117007.D Vial: 7  
 Acq On : 1-17-19 18:17:22 Operator: DP  
 Sample : Diesel / Motor Oil - 6 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

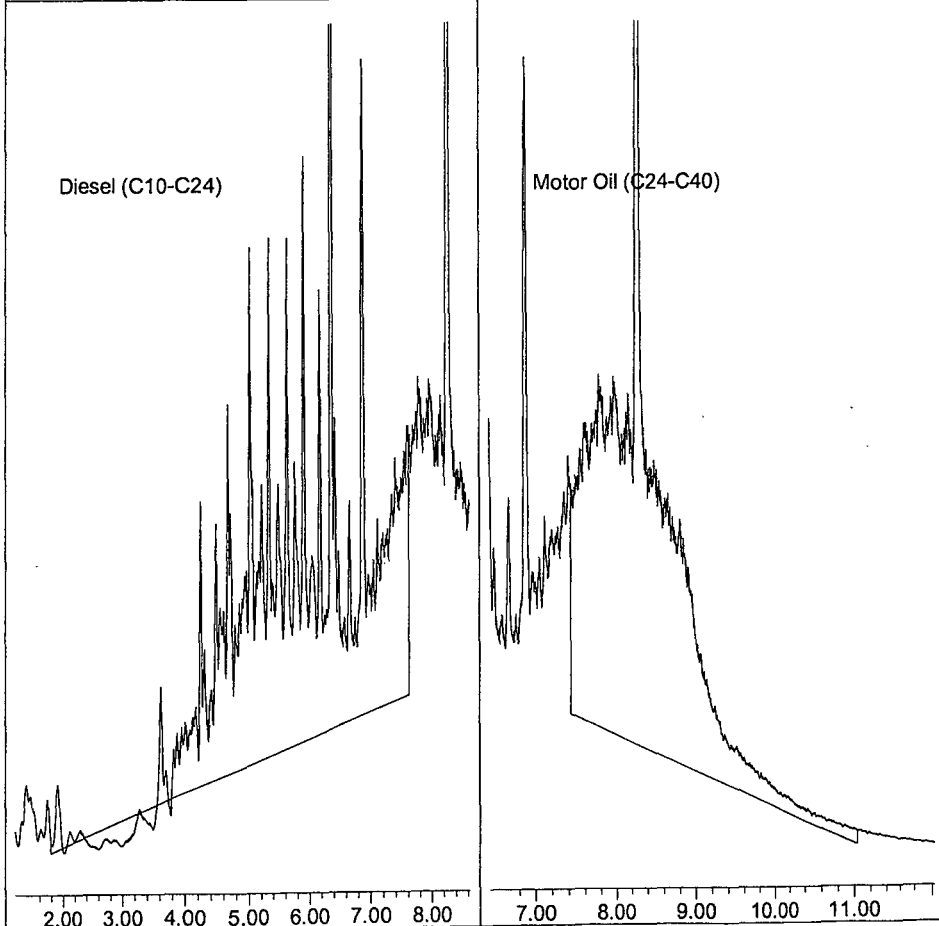
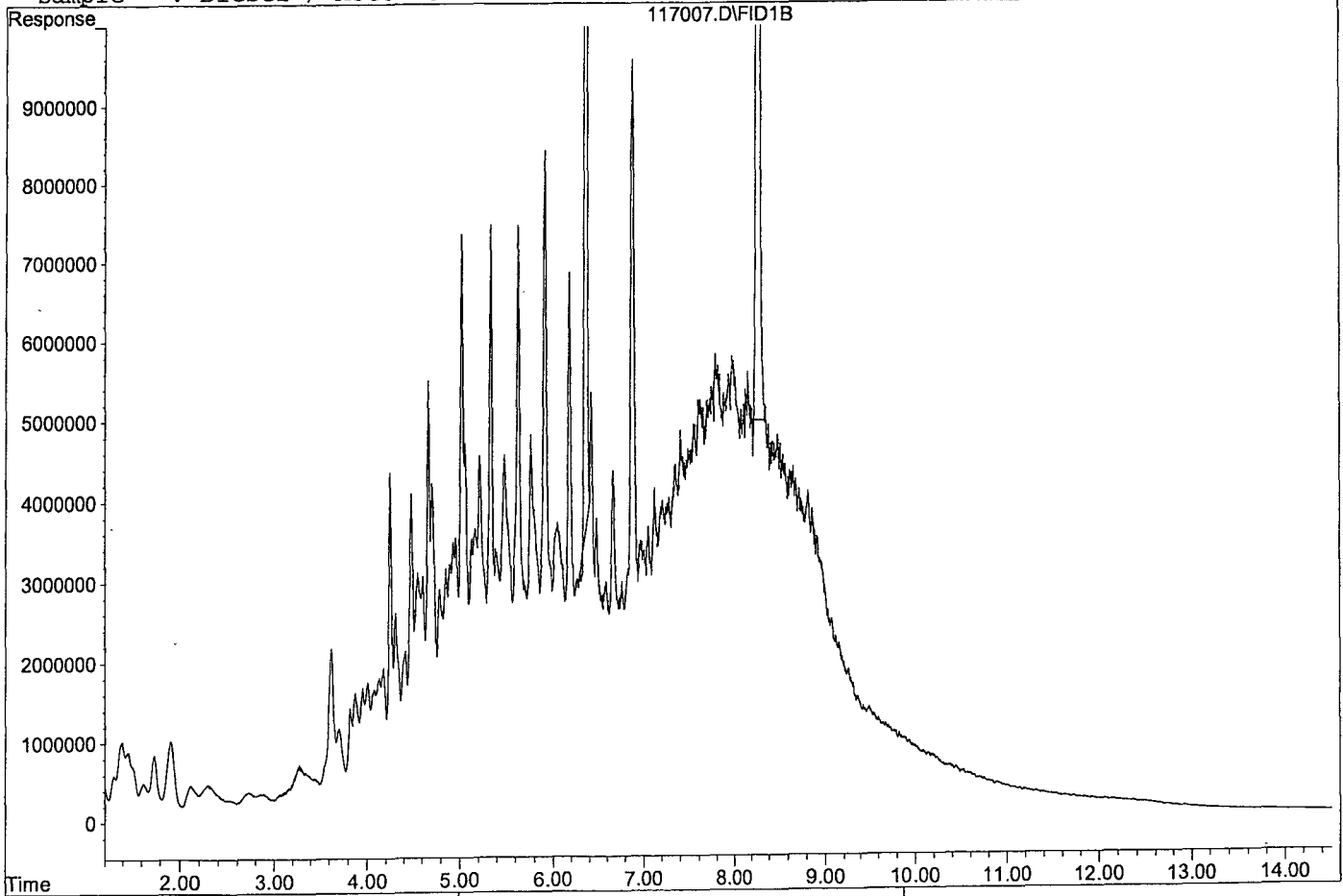
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	362298697	89.701 ppb
Surrogate Spike 30.000		Recovery =	299.00%
5) SA Octacosane(S)	8.29	342245296	91.199 ppb
Surrogate Spike 30.000		Recovery =	304.00%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	4532654243	1907.860 ppb
2) HBTM Motor Oil (C24-C40)	9.23	3446375794	1853.685 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117007.D

Sample : Diesel / Motor Oil - 6 1/17/19



TPH Extractables  
DOC0117

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/17/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 117008.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1199930	1.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	923236	0.68	HBTM
3					
4					
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37					
38					
39					
40	Average			0.8	

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117008.D Vial: 8  
Acq On : 1-17-19 18:37:21 Operator: DP  
Sample : Diesel / Motor Oil - SS 1/15/19 Inst : Apollo  
Misc : water Multiplr: 1.00  
IntFile : events.e  
Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 13:38:12 2019  
Response via : Multiple Level Calibration

Volume Inj. : 2UL  
Signal Phase : DB-5  
Signal Info : FID02A

-----  
Compound R.T. Response Conc Units  
-----

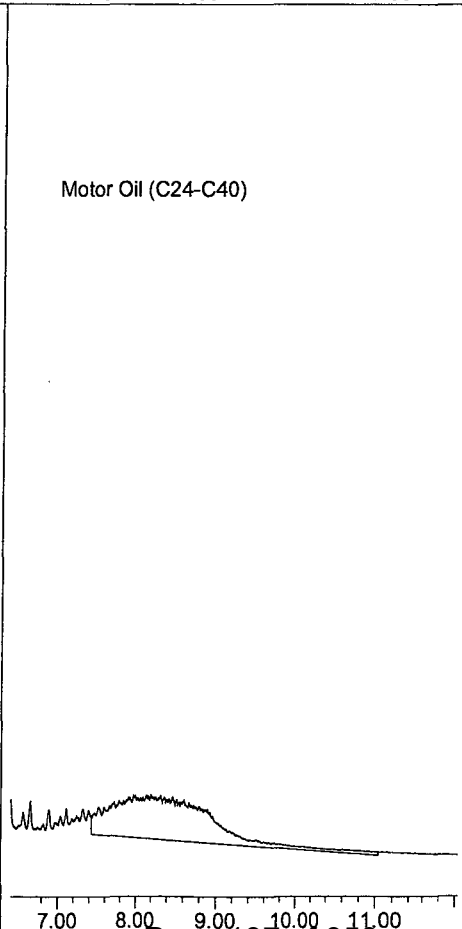
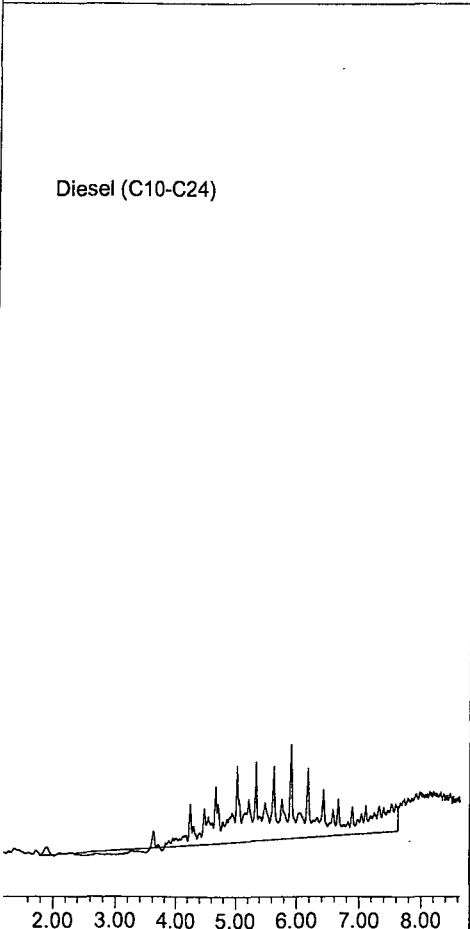
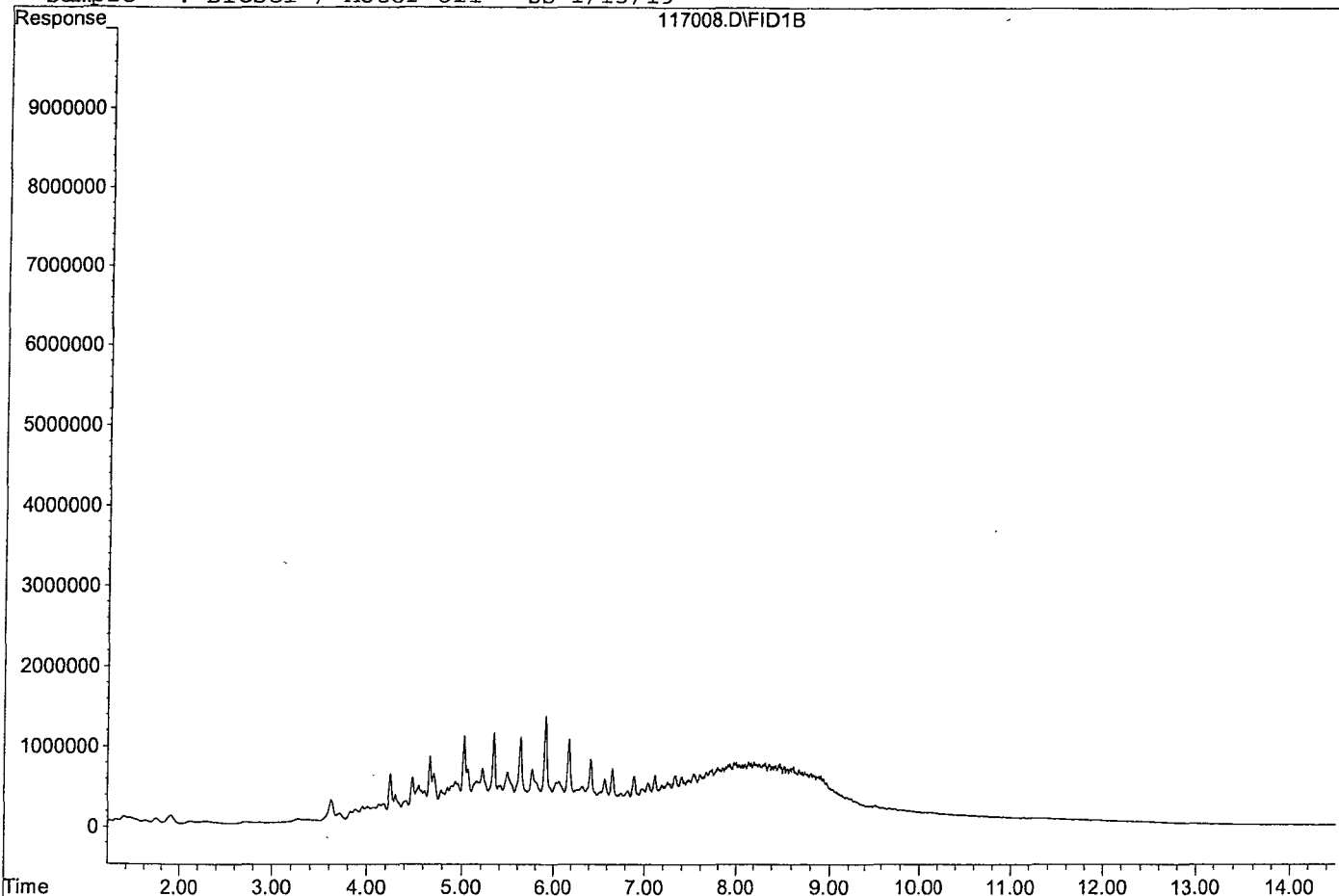
System Monitoring Compounds

Target Compounds

1) HATM Diesel (C10-C24)	4.71	599966004	252.534 ppb
2) HBTM Motor Oil (C24-C40)	9.23	461617841	248.288 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117008.D  
Sample : Diesel / Motor Oil - SS 1/15/19





TPH Extractables  
DOC0117

Form 7  
Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124022.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1105330	7.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	876430	5.7	HBTM
3	SA Ortho-Terphenyl(S)	2019470	1855650	8.1	SA
4	SA Octacosane(S)	1876370	1795160	4.3	SA
5					
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7					
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39					
40	Average			6.3	

Data File : G:\APOLLO\DATA\190124\124022.D Vial: 22  
 Acq On : 1-25-19 15:45:29 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 29 9:50 2019 Quant Results File: DOC0117.RES

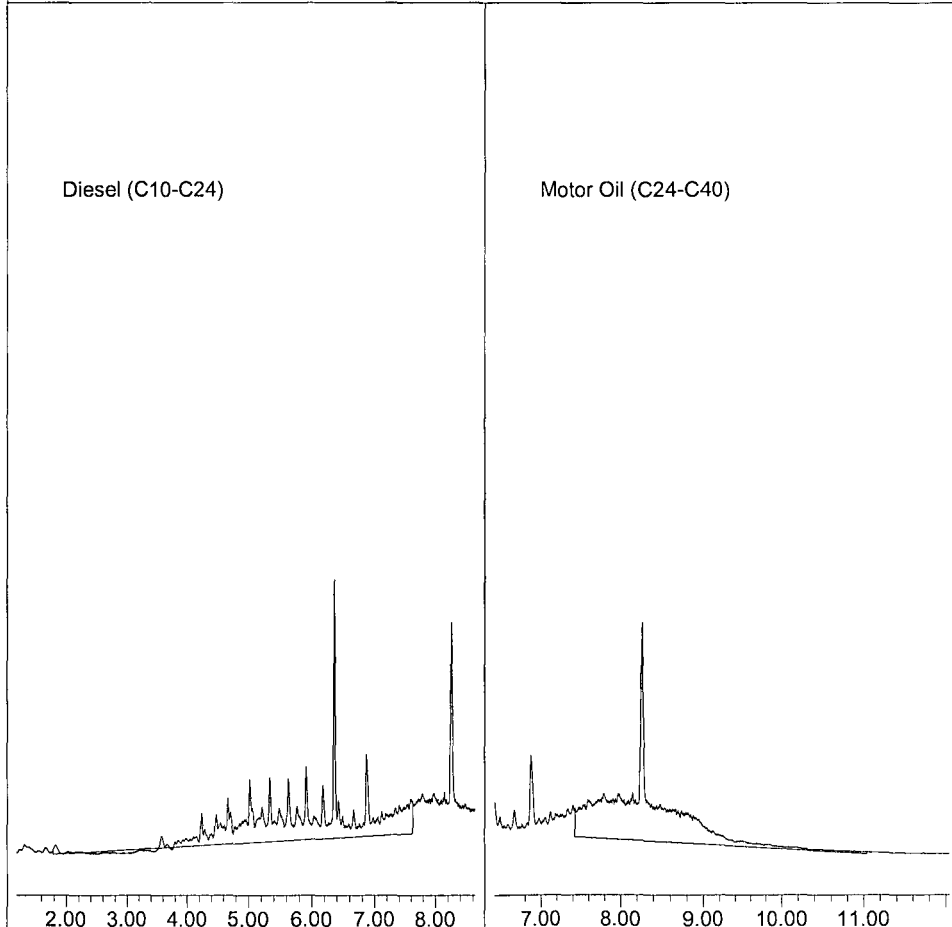
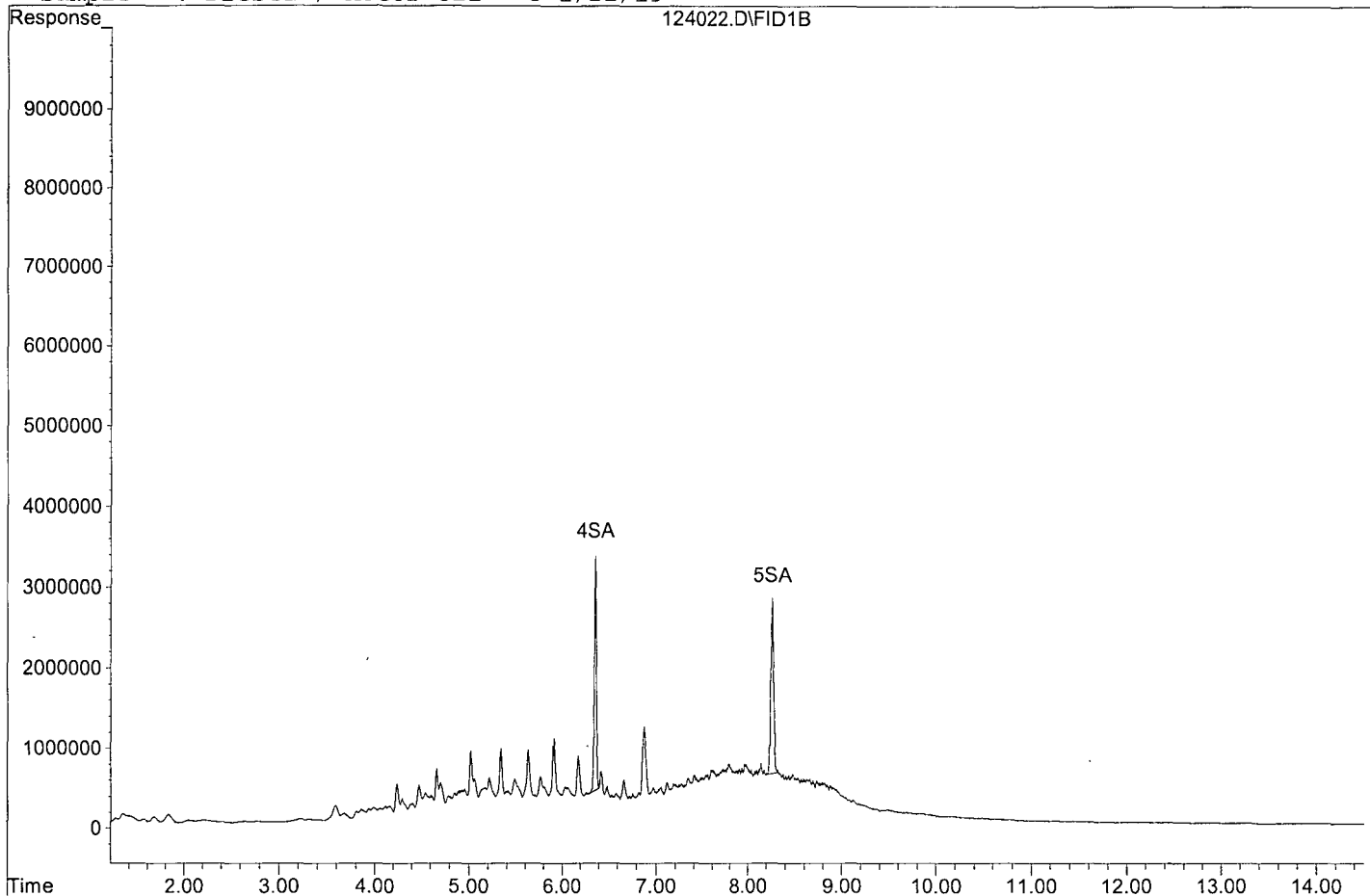
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	46391220	11.486 ppb
Surrogate Spike 30.000		Recovery =	38.29%
5) SA Octacosane(S)	8.26	44879116	11.959 ppb
Surrogate Spike 30.000		Recovery =	39.86%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	552664050	232.624 ppb
2) HBTM Motor Oil (C24-C40)	9.23	438214825	235.700 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124022.D  
Sample : Diesel / Motor Oil - 3 1/21/19



Data File : G:\APOLLO\DATA\190124\124023.D Vial: 23  
 Acq On : 1-25-19 16:05:15 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 25 16:36 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

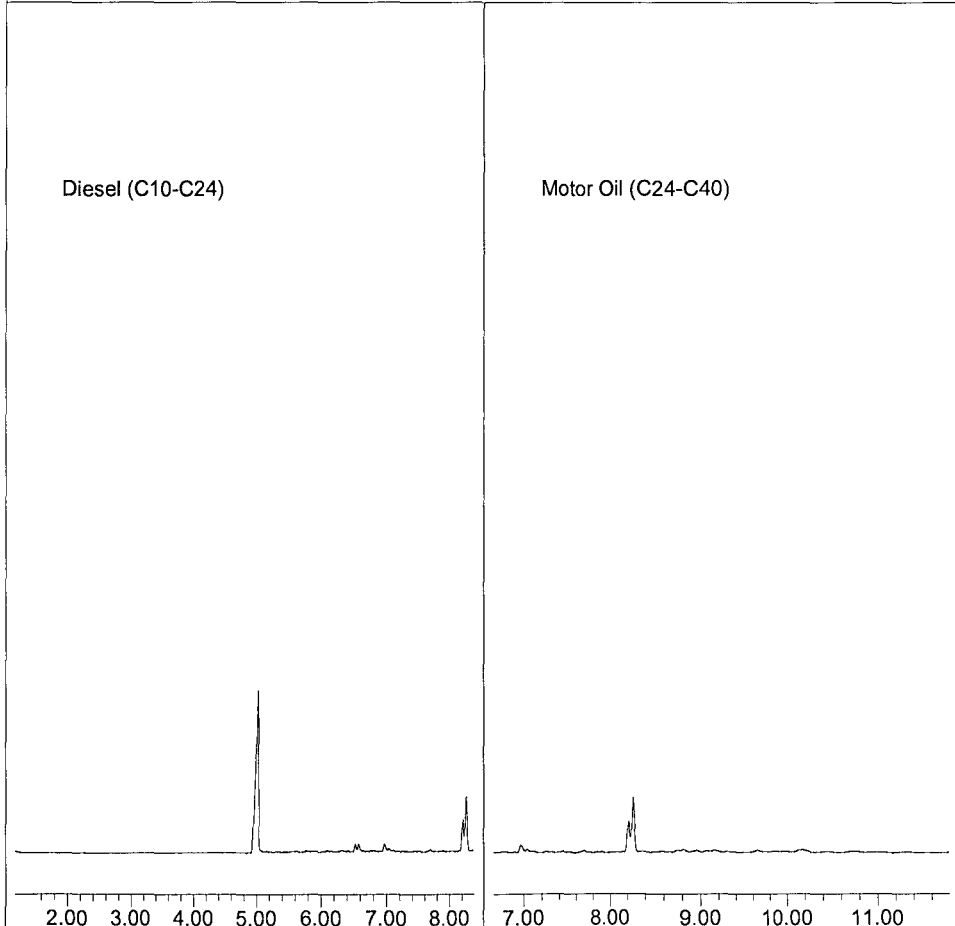
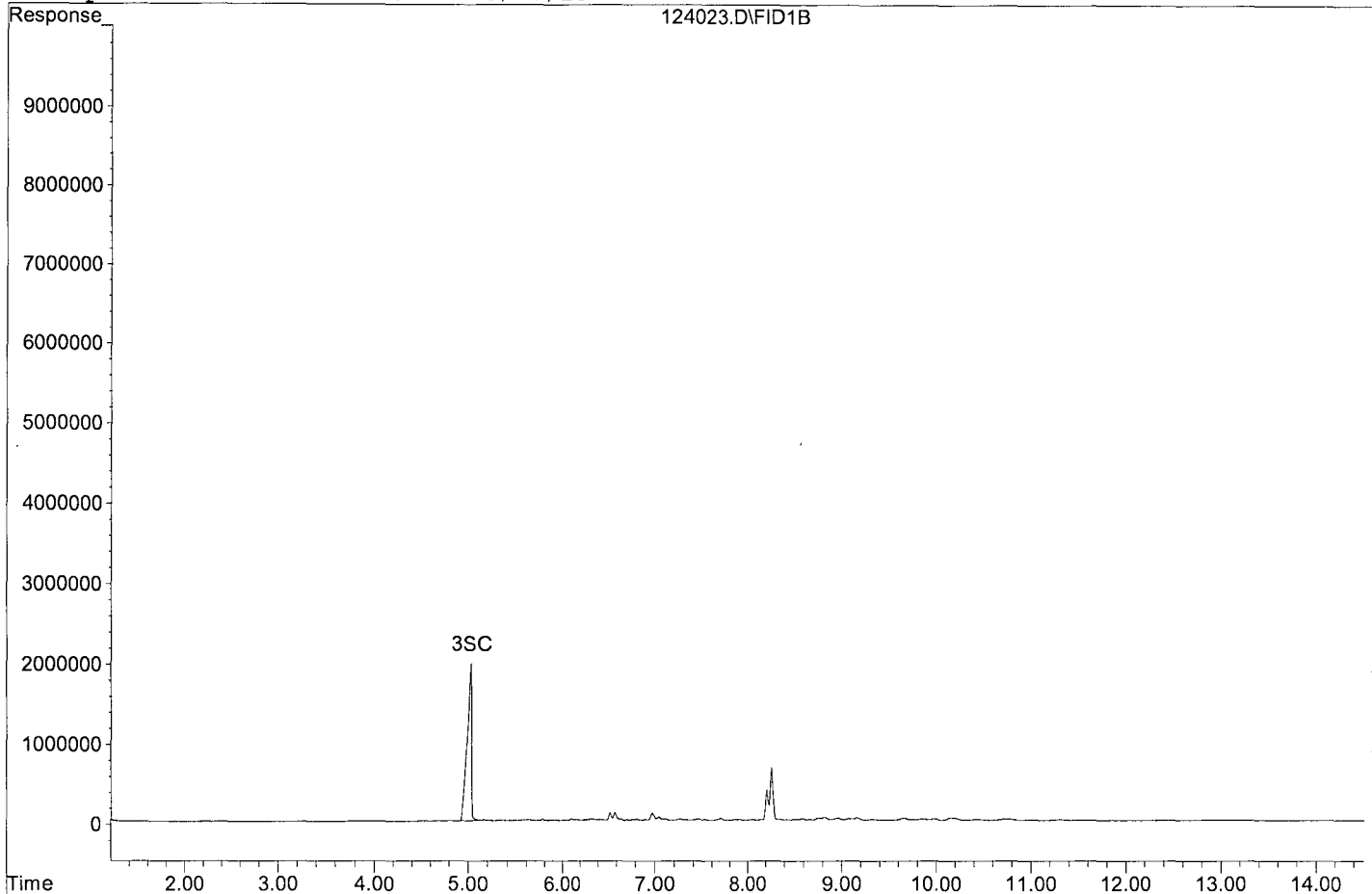
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.03	61682312	31.055 ppb
Surrogate Spike 24.000		Recovery =	129.40%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124023.D  
Sample : Decanoic Acid - 3 8/23/18



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/25/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 124044.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1217020	2.5	HATM
2	HBTM	Motor Oil (C24-C40)	929601	953163	2.5	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	2083160	3.2	SA
4	SA	Octacosane(S)	1876370	1871340	0.27	SA
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39						
40		Average			2.1	

Data File : G:\APOLLO\DATA\190124\124044.D Vial: 44  
 Acq On : 1-25-19 22:58:02 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 29 9:50 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

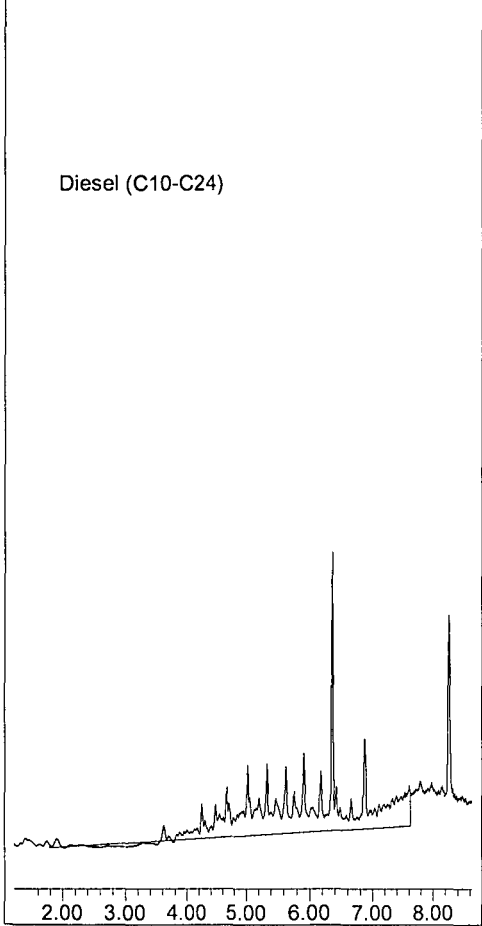
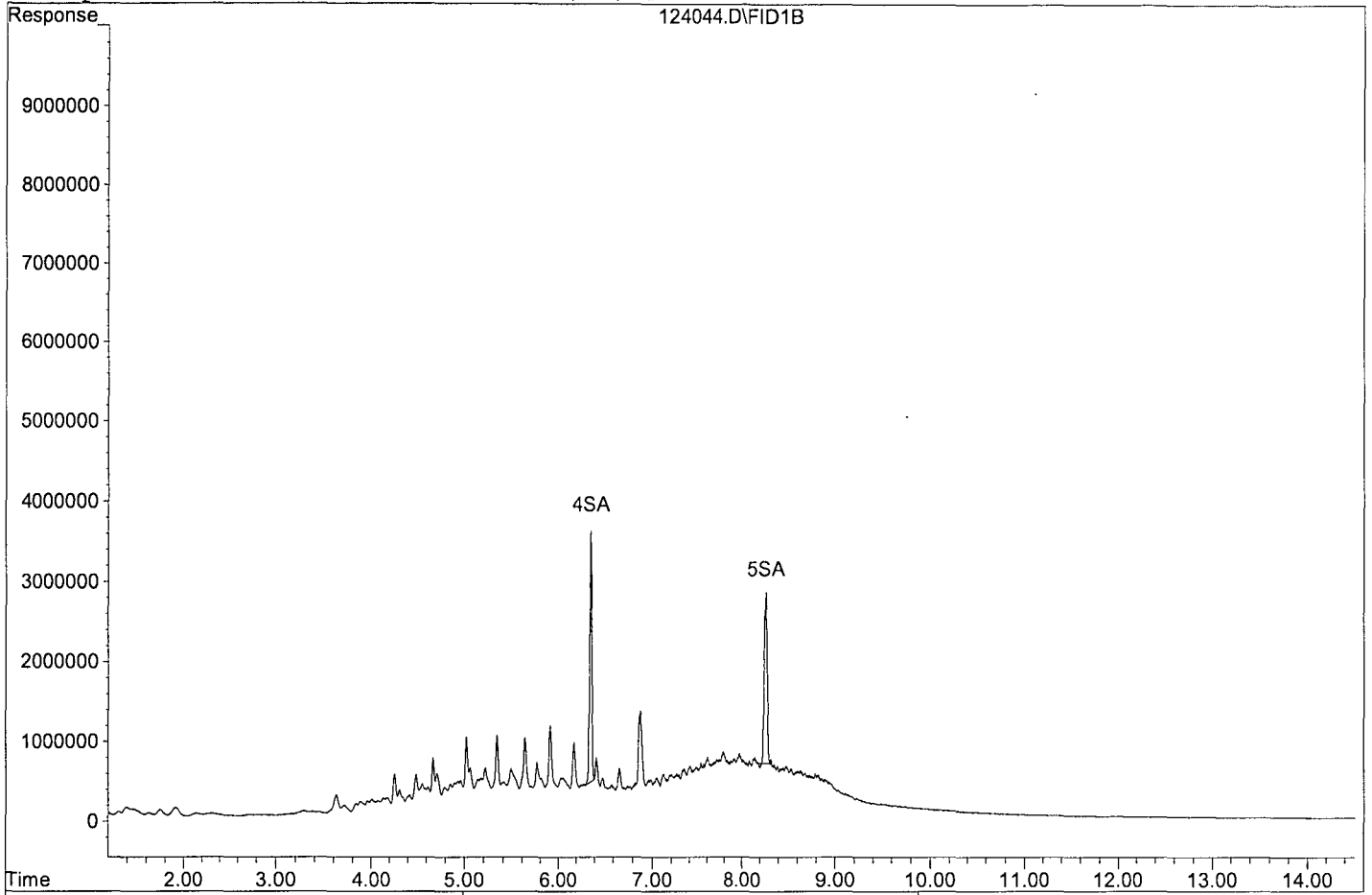
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	52078887	12.894 ppb
Surrogate Spike 30.000		Recovery =	42.98%
5) SA Octacosane(S)	8.26	46783566	12.467 ppb
Surrogate Spike 30.000		Recovery =	41.56%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	608507761	256.130 ppb
2) HBTM Motor Oil (C24-C40)	9.23	476581378	256.336 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124044.D

Sample : Diesel / Motor Oil - 3 1/21/19





TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/29/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 124061.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1163780	2.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	949337	2.1	HBTM
3	SA Ortho-Terphenyl(S)	2019470	2002670	0.83	SA
4	SA Octacosane(S)	1876370	1970950	5.0	SA
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39					
40	Average			2.5	

Data File : G:\APOLLO\DATA\190124\124061.D Vial: 61  
 Acq On : 1-29-19 16:41:00 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

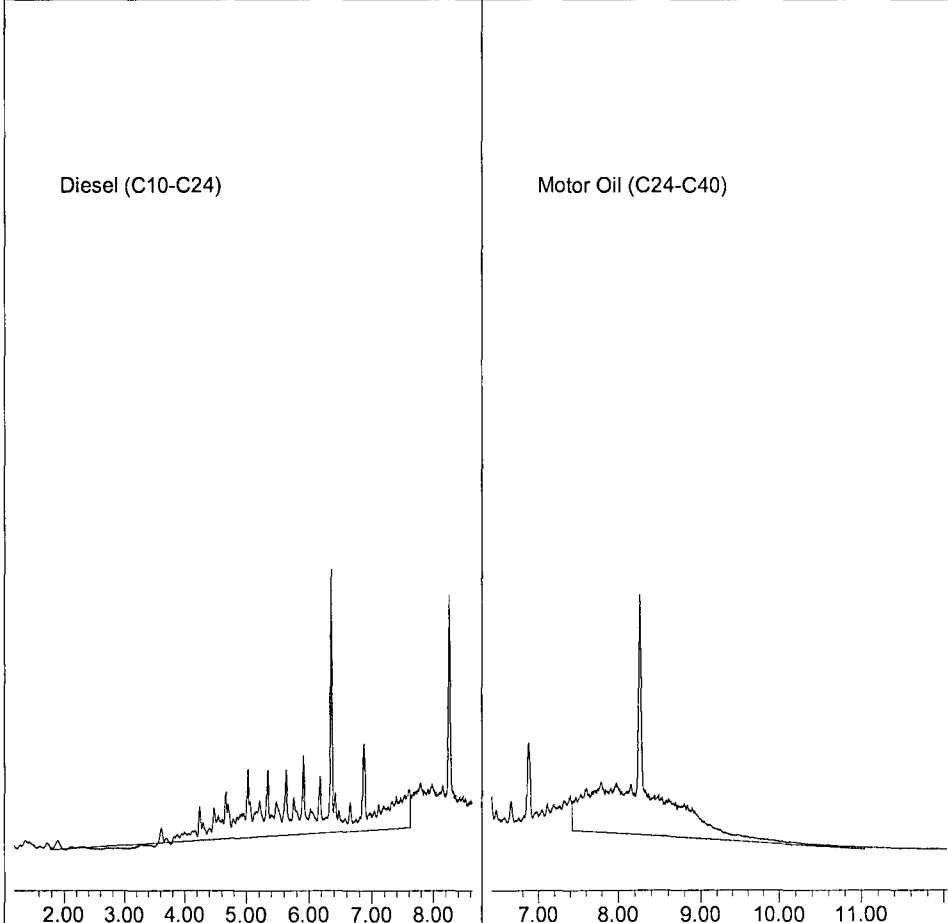
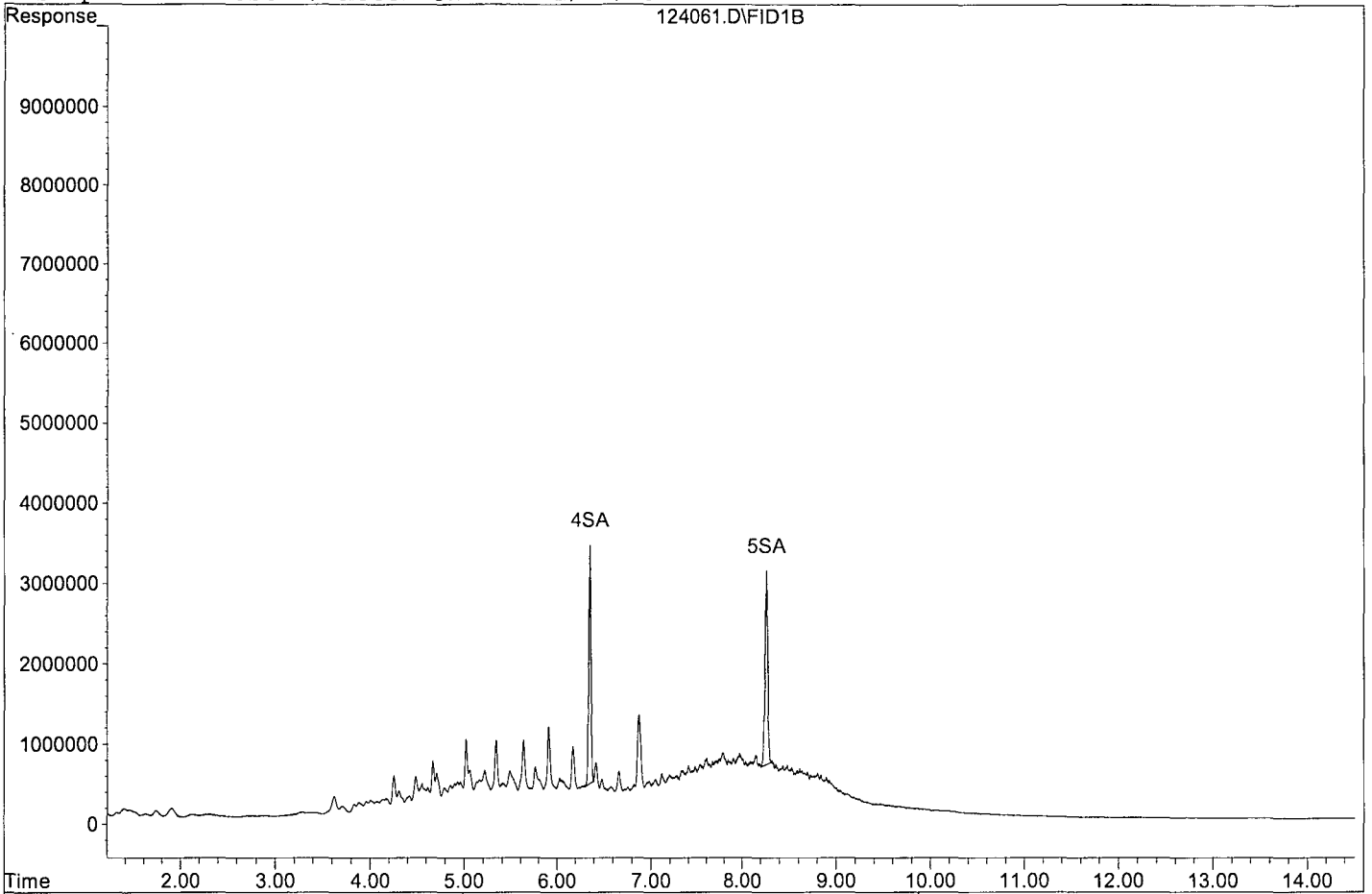
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50066851	12.396 ppb
Surrogate Spike 30.000		Recovery =	41.32%
5) SA Octacosane(S)	8.26	49273687	13.130 ppb
Surrogate Spike 30.000		Recovery =	43.77%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	581891783	244.927 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474668635	255.308 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124061.D

Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/29/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 124072.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1217280	2.5	HATM
2	HBTM Motor Oil (C24-C40)	929601	967645	4.1	HBTM
3	SA Ortho-Terphenyl(S)	2019470	2082790	3.1	SA
4	SA Octacosane(S)	1876370	1842740	1.8	SA
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39					
40	Average			2.9	

Data File : G:\APOLLO\DATA\190124\124072.D Vial: 72  
 Acq On : 1-29-19 20:19:55 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 30 9:58 2019 Quant Results File: DOC0117.RES

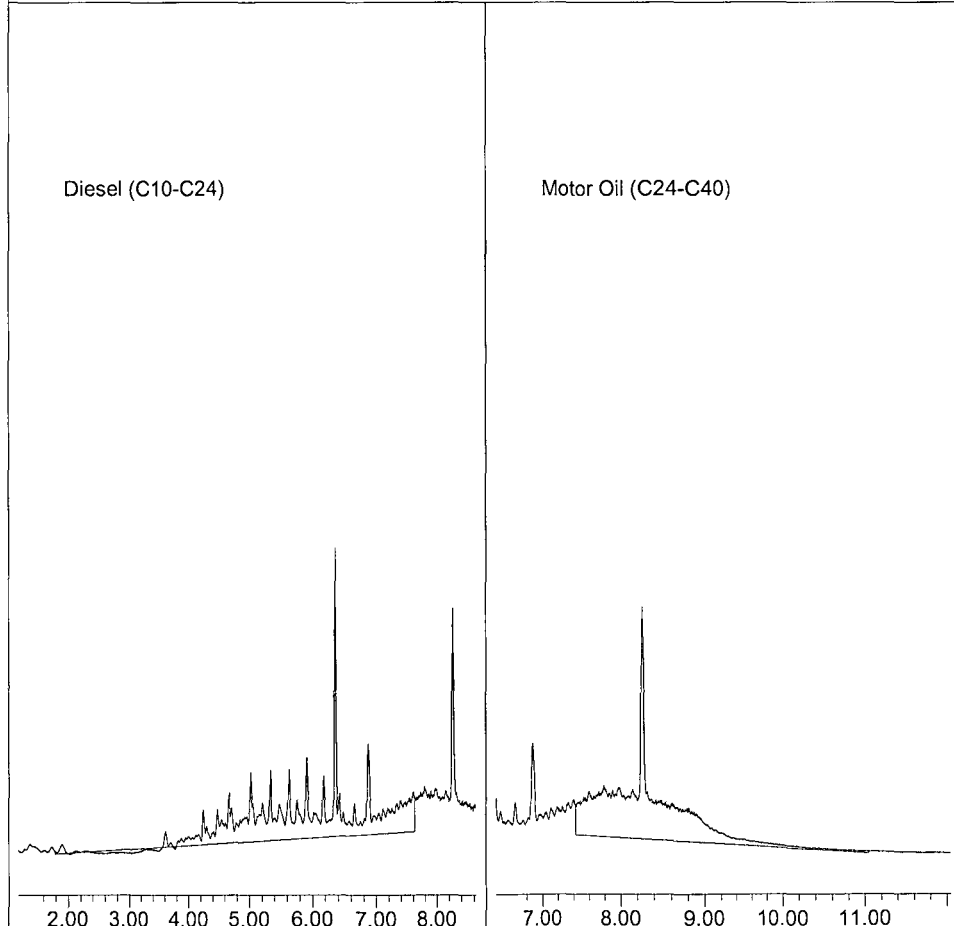
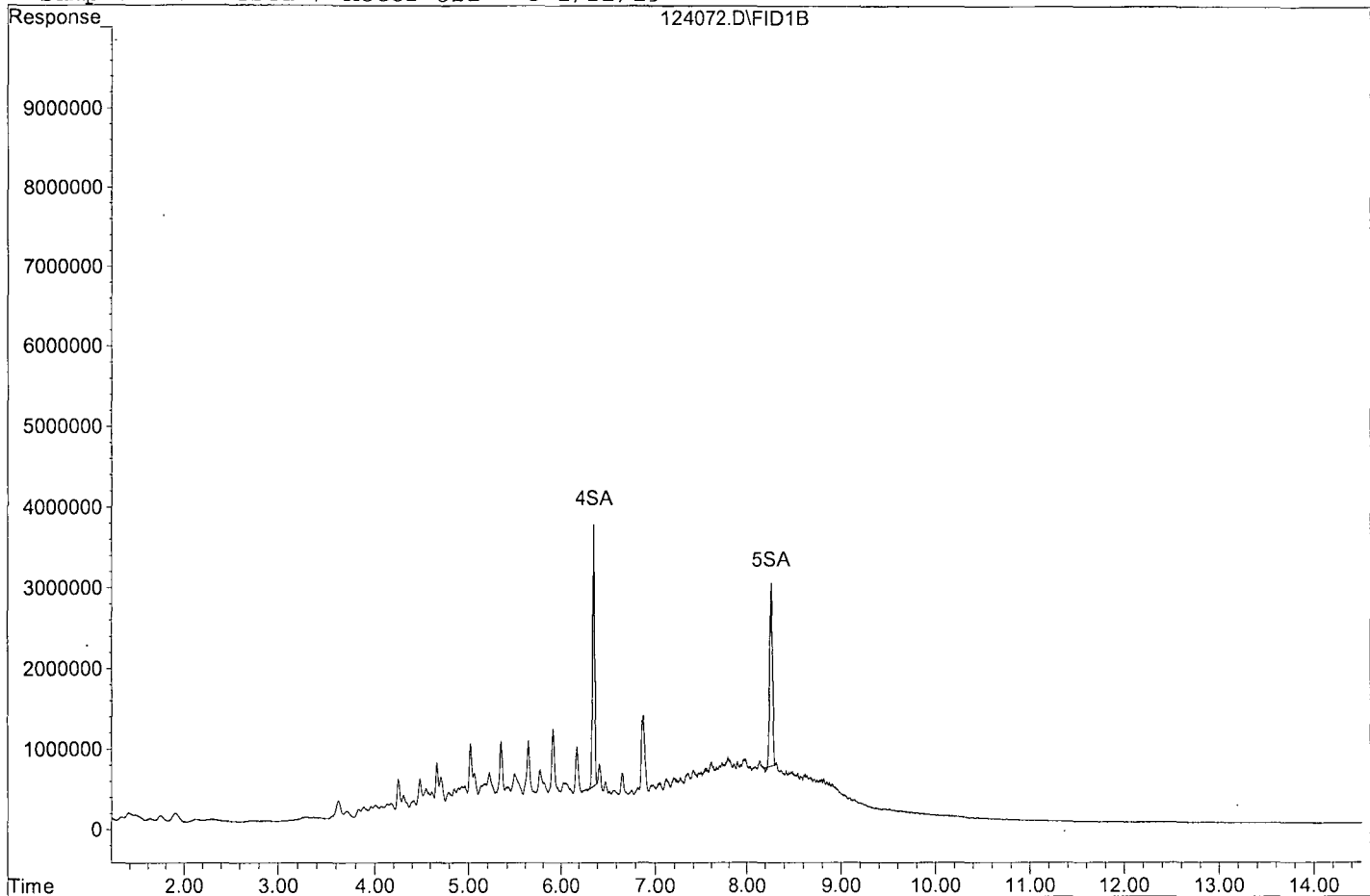
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	52069794	12.892 ppb
Surrogate Spike 30.000		Recovery =	42.97%
5) SA Octacosane(S)	8.26	46068587	12.276 ppb
Surrogate Spike 30.000		Recovery =	40.92%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	608639669	256.185 ppb
2) HBTM Motor Oil (C24-C40)	9.23	483822490	260.231 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124072.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 02/01/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 201002.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1159300	2.4	HATM
2	HBTM	Motor Oil (C24-C40)	929601	956797	2.9	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	1952230	3.3	SA
4	SA	Octacosane(S)	1876370	1973610	5.2	SA
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39						
40		Average			3.5	

Data File : G:\APOLLO\DATA\190201\201002.D Vial: 2  
 Acq On : 2-1-19 10:08:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 10:18 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

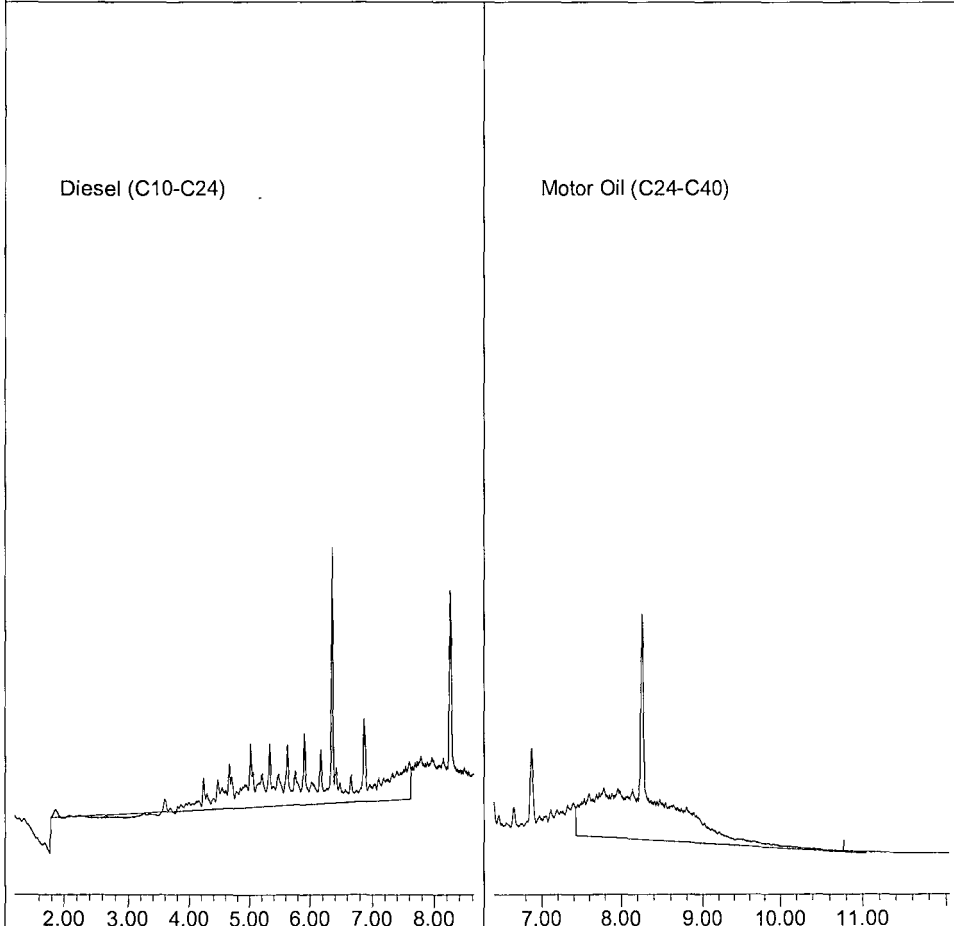
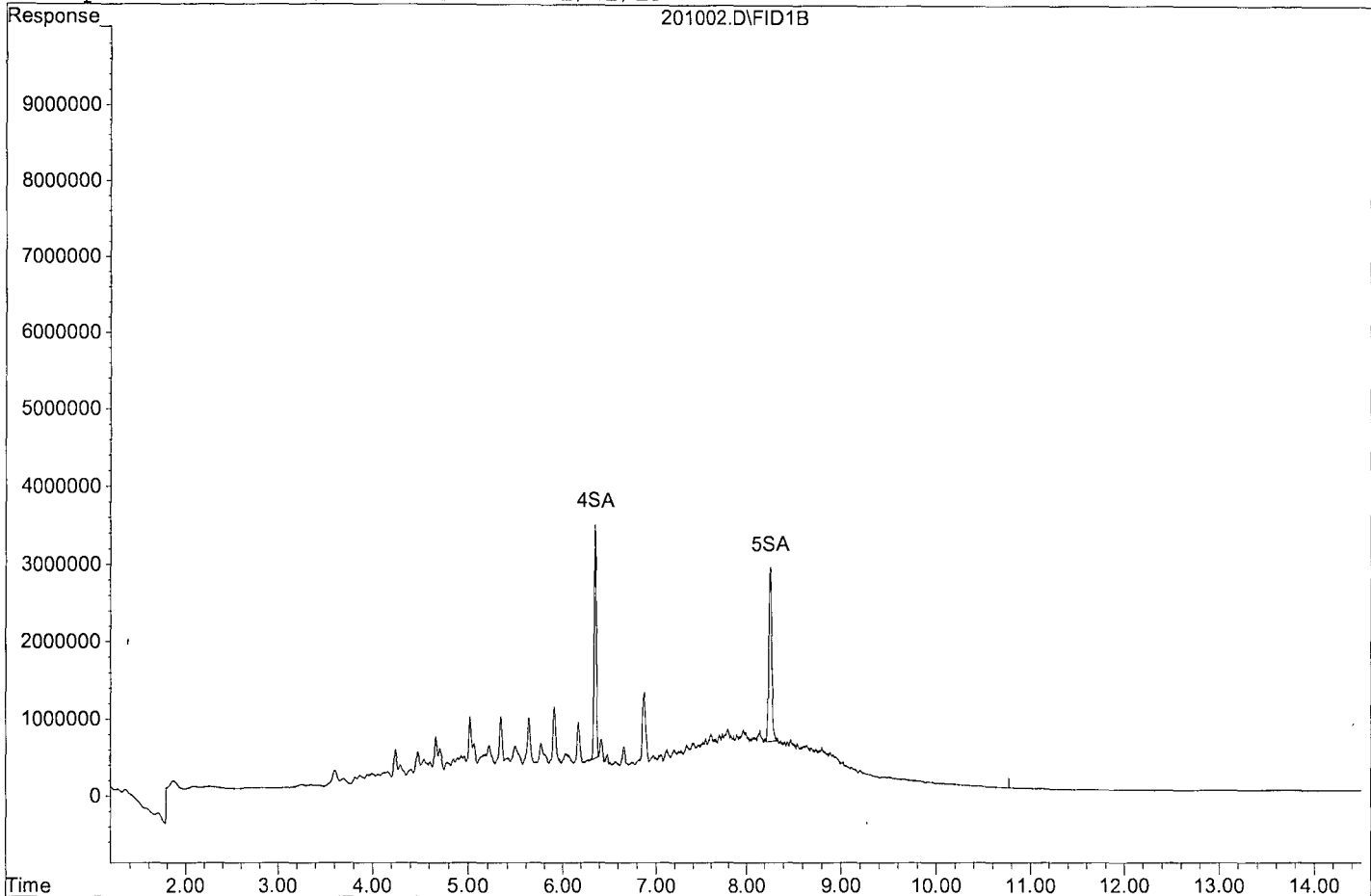
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	48805769	12.084 ppb
Surrogate Spike 30.000		Recovery =	40.28%
5) SA Octacosane(S)	8.26	49340235	13.148 ppb
Surrogate Spike 30.000		Recovery =	43.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	579650789	243.983 ppb
2) HBTM Motor Oil (C24-C40)	9.23	478398393	257.314 ppb



Quantitation Report

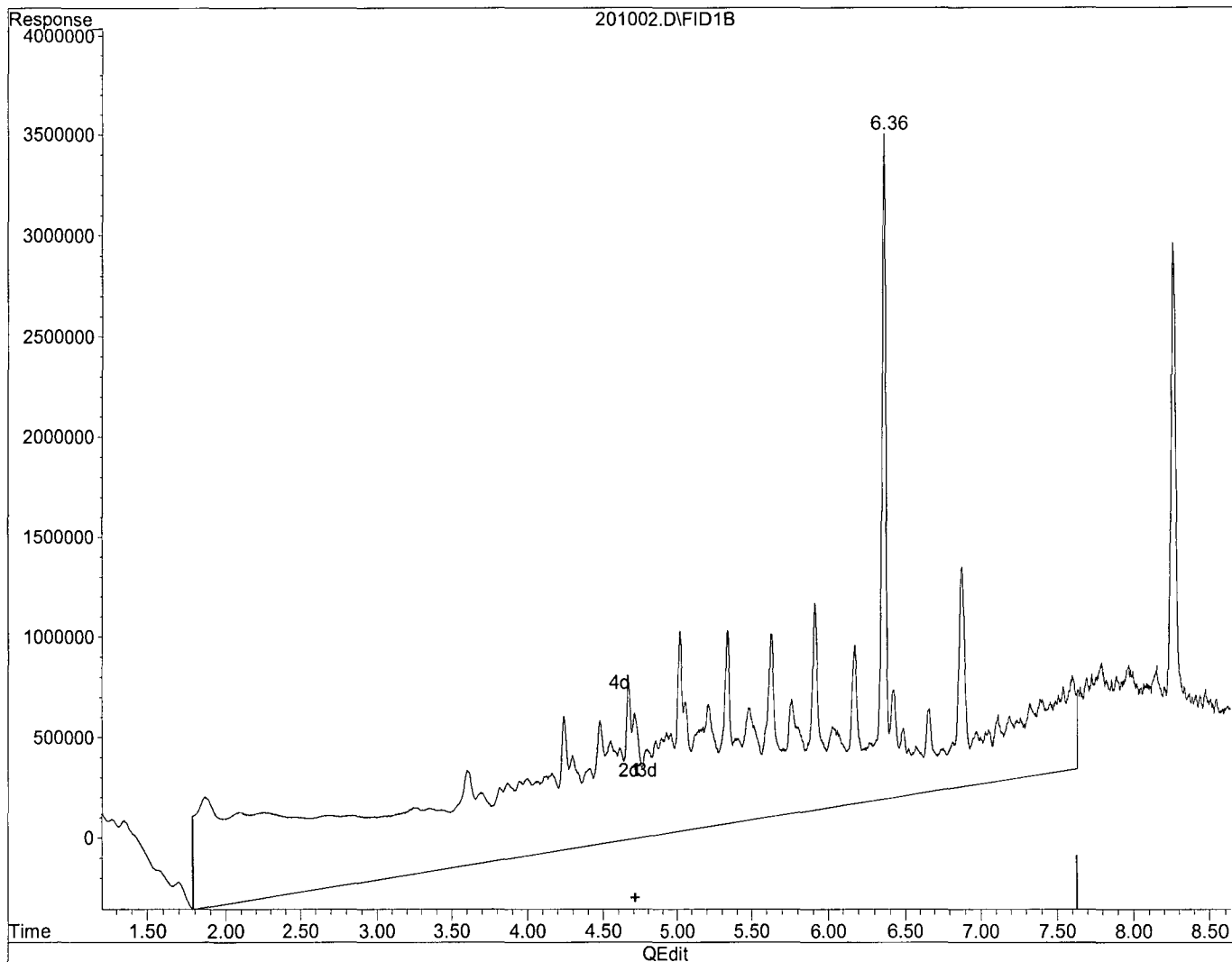
Data File: G:\APOLLO\DATA\190201\201002.D  
Sample : Diesel / Motor Oil - 3 1/21/19



Quantitation Report

Data File : G:\APOLLO\DATA\190201\201002.D Vial: 2  
Acq On : 2-1-19 10:08:50 Operator: DP  
Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
Misc : water Multiplr: 1.00  
IntFile : events.e  
Quant Time: Feb 1 10:17 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration

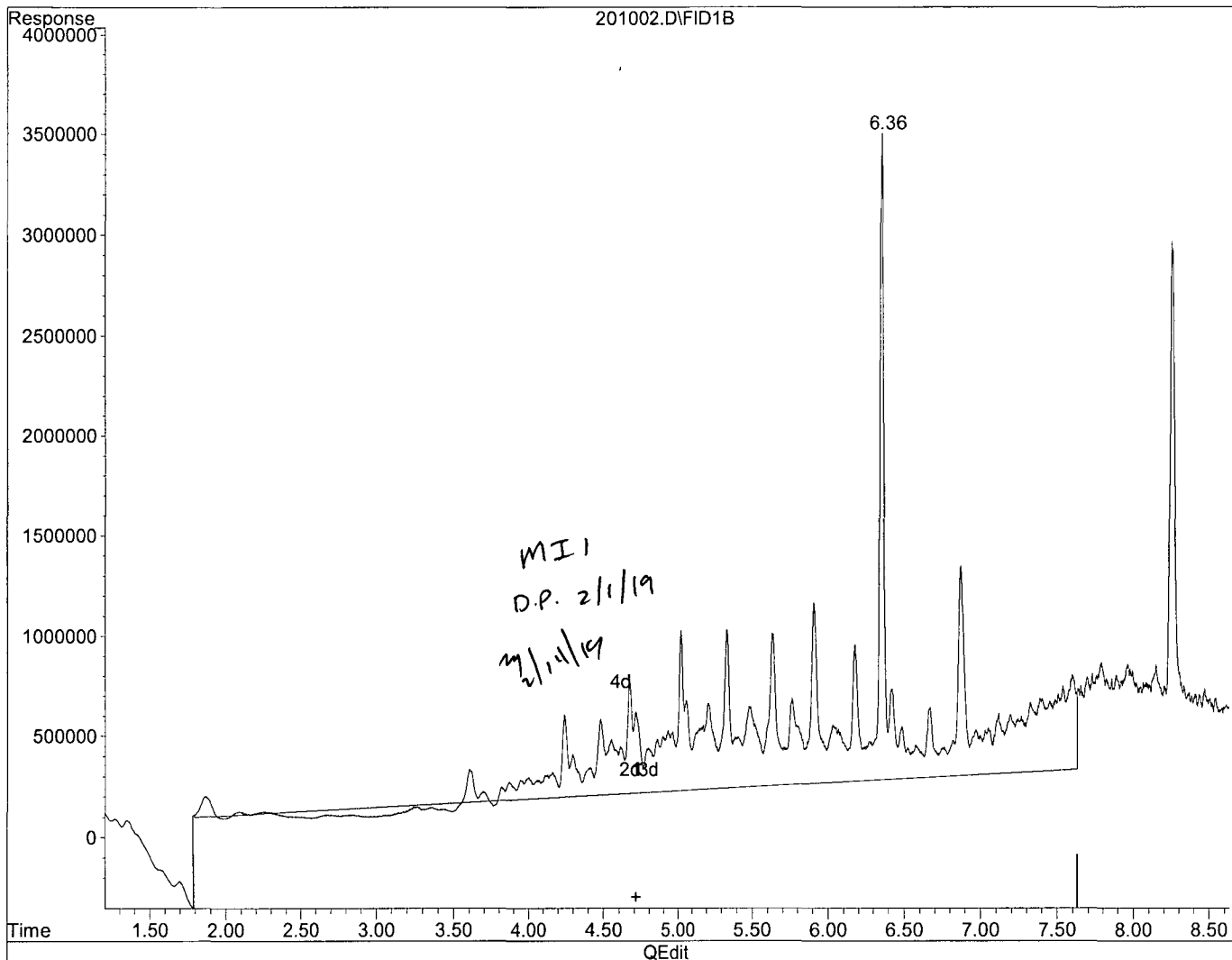


(1) Diesel (C10-C24) (HATM)  
4.71min 561.899ppb m  
response 1334947779

Quantitation Report

Data File : G:\APOLLO\DATA\190201\201002.D Vial: 2  
Acq On : 2-1-19 10:08:50 Operator: DP  
Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
Misc : water Multiplr: 1.00  
IntFile : events.e  
Quant Time: Feb 1 10:17 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 243.983ppb m  
response 579650789

Data File : G:\APOLLO\DATA\190201\201003.D Vial: 3  
 Acq On : 2-1-19 10:28:46 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 10:59 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

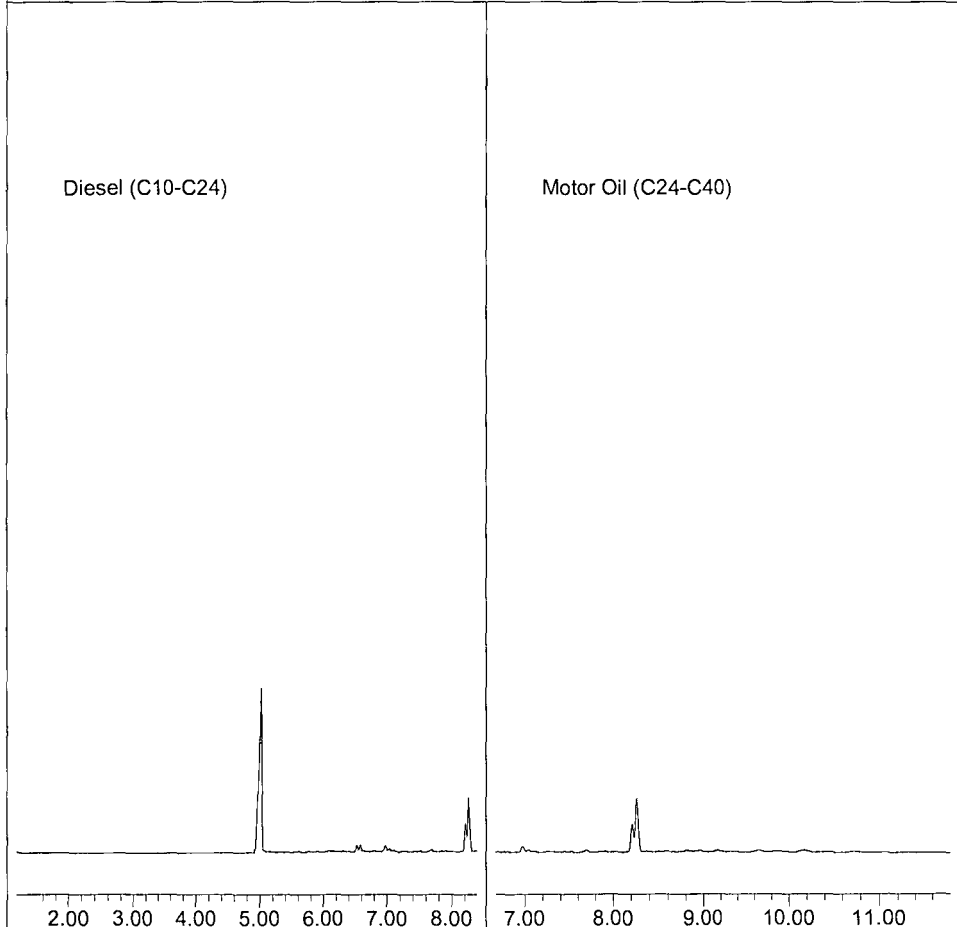
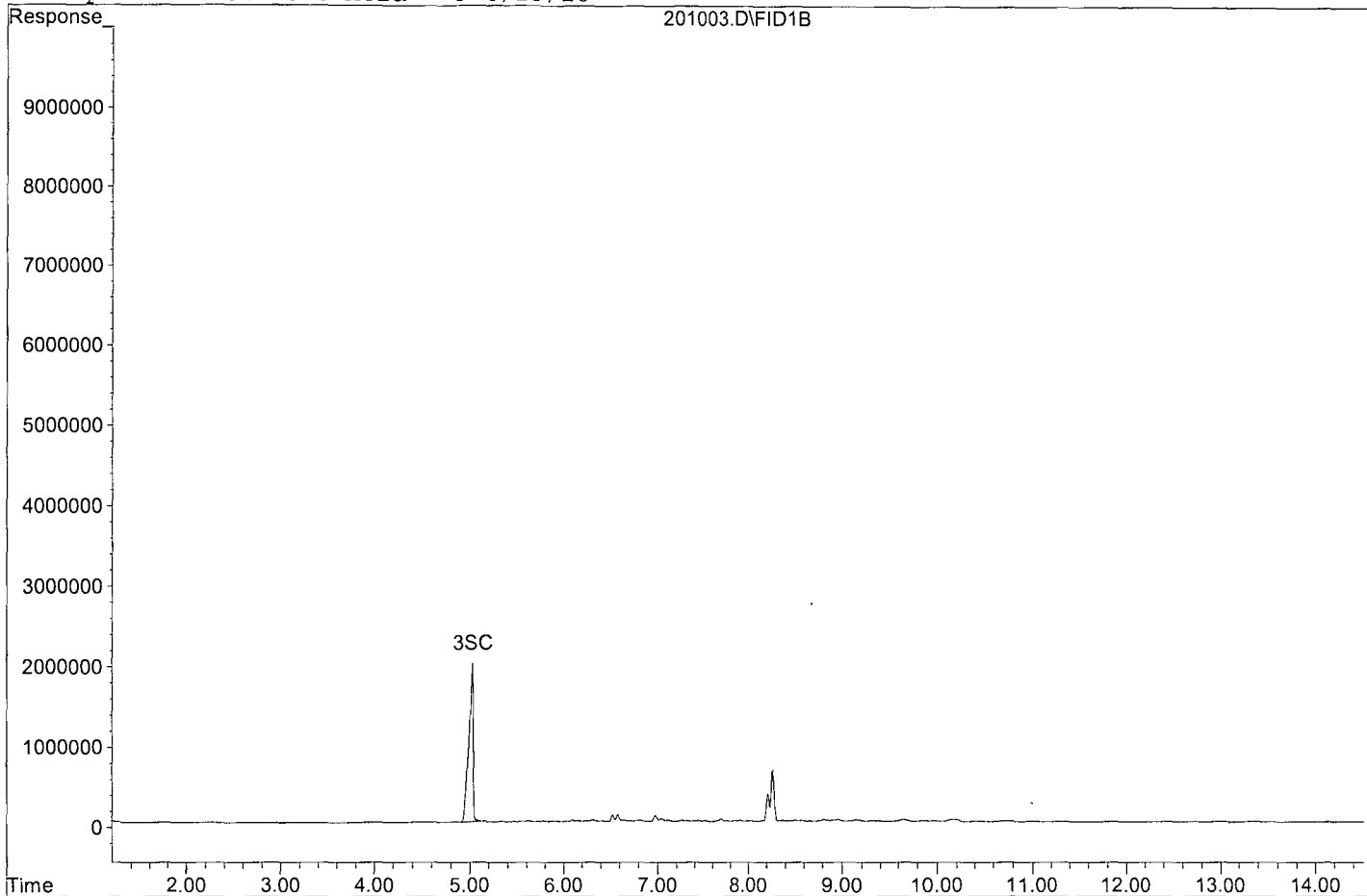
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.03	62782446	31.609 ppb
Surrogate Spike 24.000		Recovery =	131.70%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201003.D

Sample : Decanoic Acid - 3 8/23/18



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 02/01/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 201019.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1121110	5.6	HATM
2	HBTM	Motor Oil (C24-C40)	929601	933910	0.46	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	1970040	2.4	SA
4	SA	Octacosane(S)	1876370	1985560	5.8	SA
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39						
40		Average			3.6	

Data File : G:\APOLLO\DATA\190201\201019.D Vial: 19  
 Acq On : 2-1-19 15:55:38 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 16:03 2019 Quant Results File: DOC0117.RES

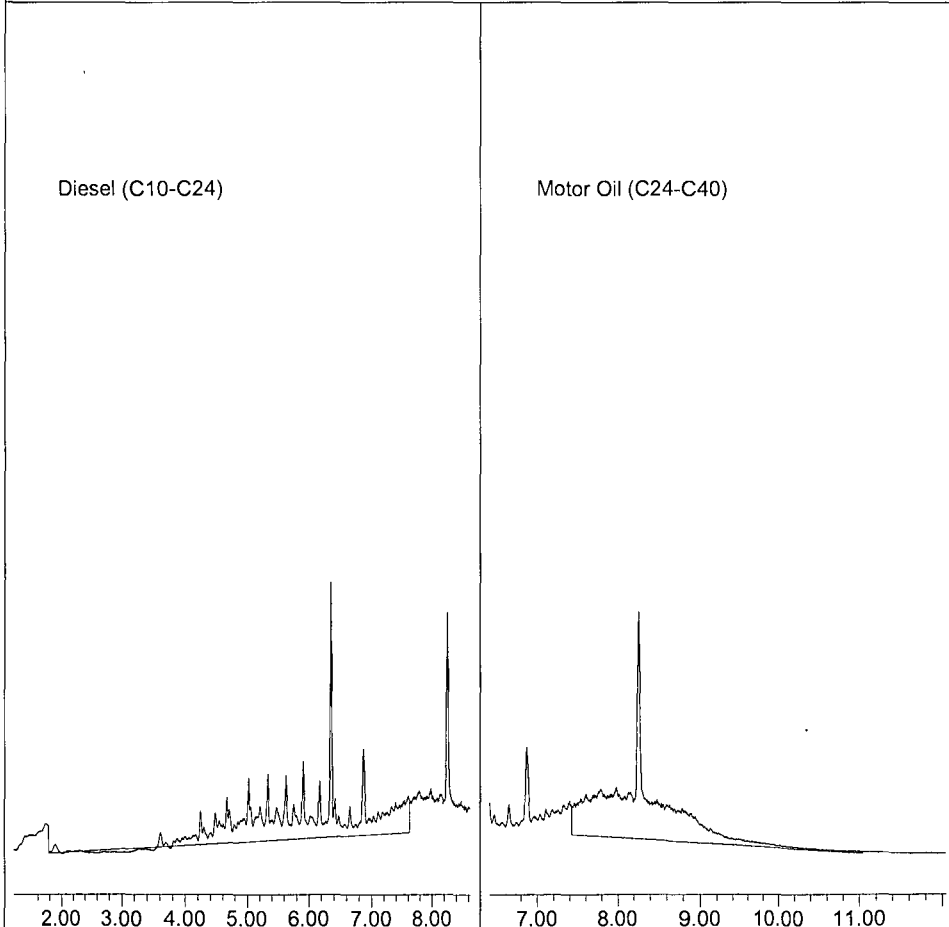
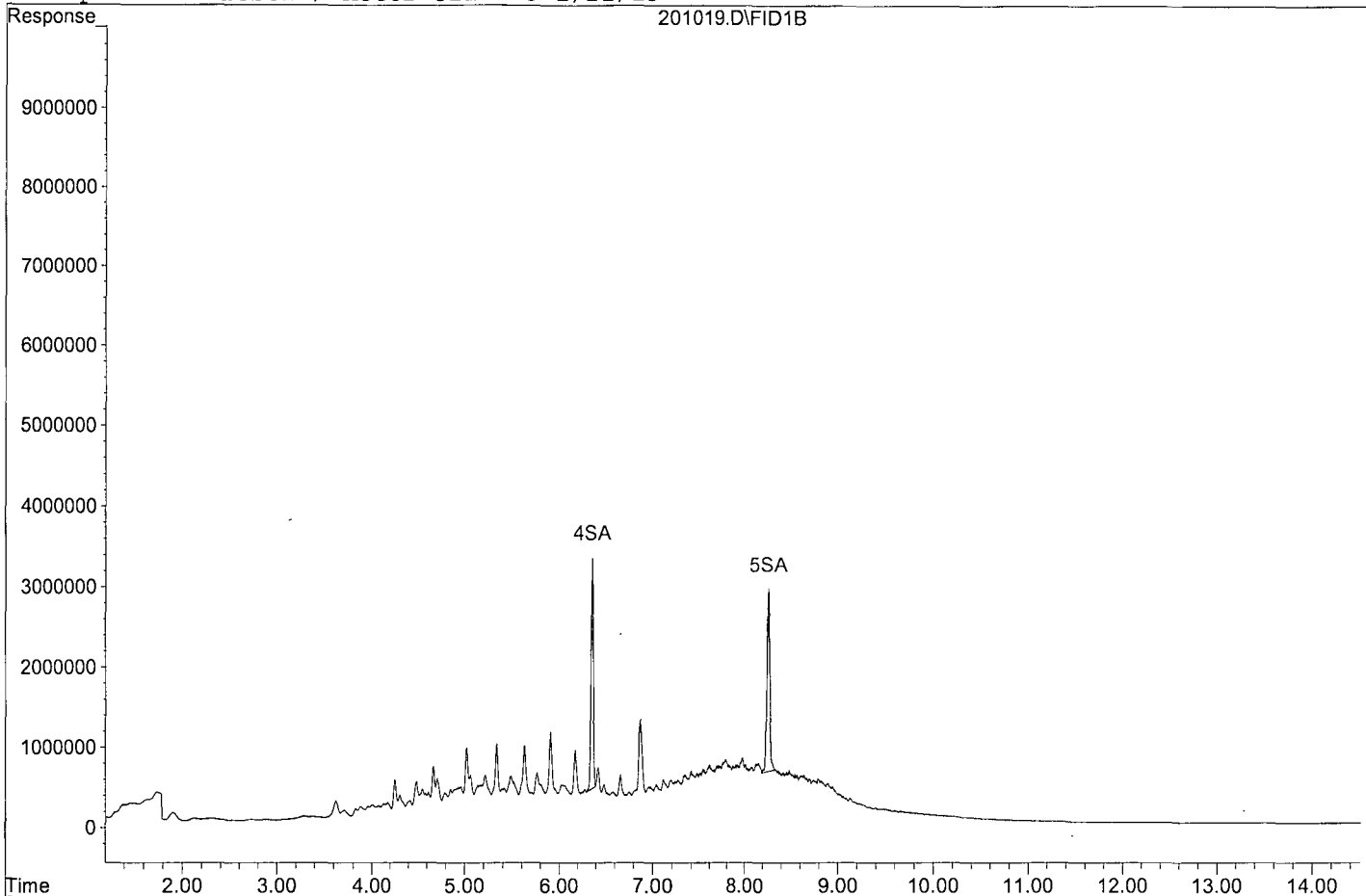
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	49250953	12.194 ppb
Surrogate Spike 30.000		Recovery =	40.65%
5) SA Octacosane(S)	8.26	49639090	13.227 ppb
Surrogate Spike 30.000		Recovery =	44.09%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	560556794	235.946 ppb
2) HBTM Motor Oil (C24-C40)	9.23	466955084	251.159 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201019.D  
Sample : Diesel / Motor Oil - 3 1/21/19





Data File : G:\APOLLO\DATA\190201\201020.D Vial: 20  
 Acq On : 2-1-19 16:15:43 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 16:24 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

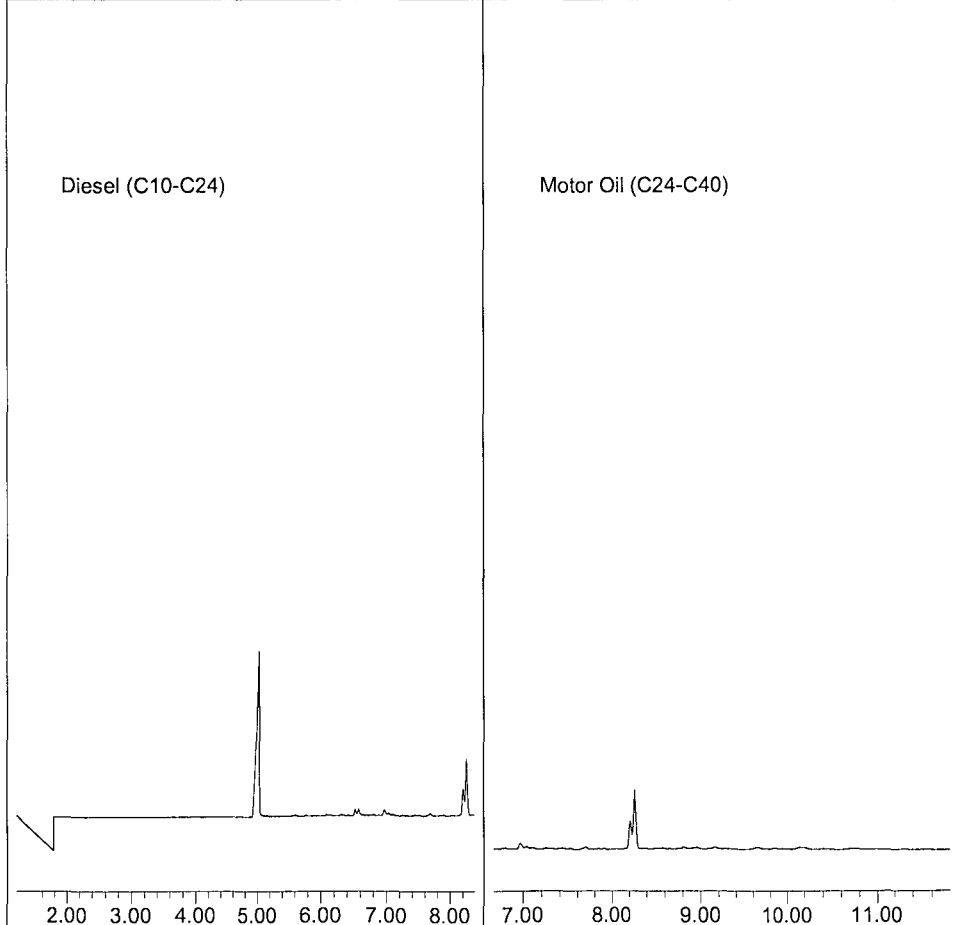
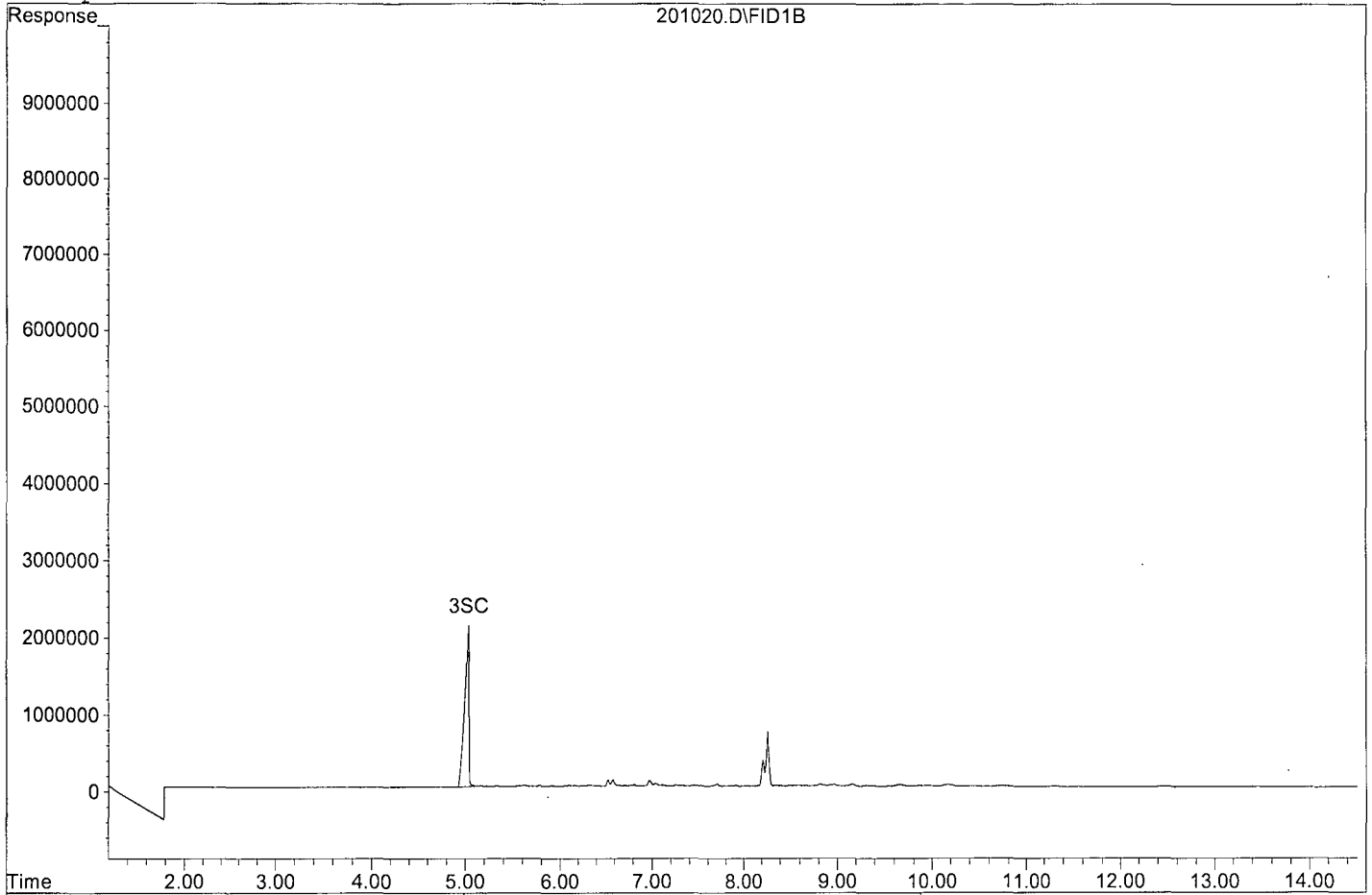
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.03	64249129	32.347 ppb
Surrogate Spike 24.000	Recovery	=	134.78%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201020.D

Sample : Decanoic Acid - 3 8/23/18



**ORGANICS**  
**Raw Data**

Data File : G:\APOLLO\DATA\190124\124031.D Vial: 31  
 Acq On : 1-25-19 18:43:58 Operator: DP  
 Sample : AZ85520W10 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:44 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

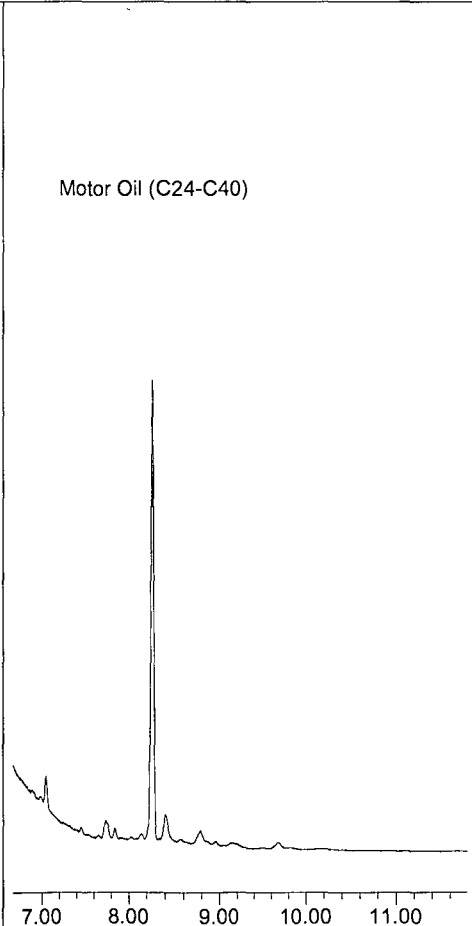
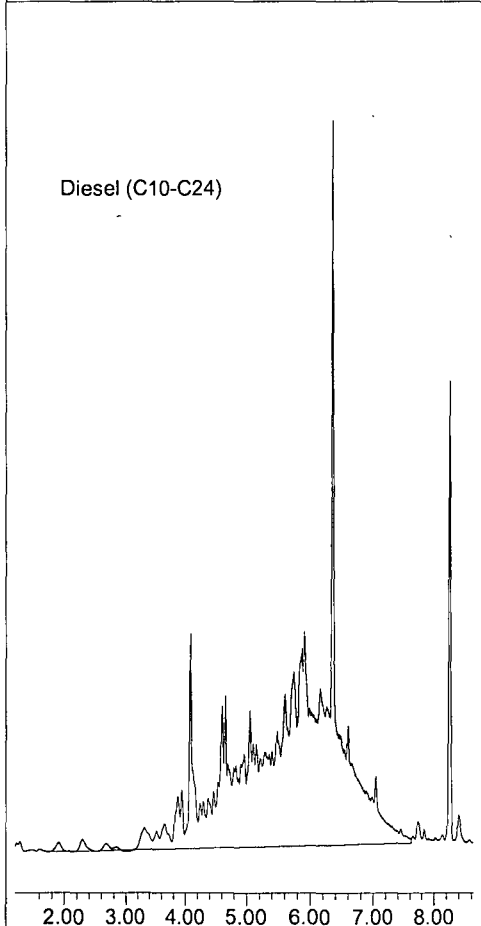
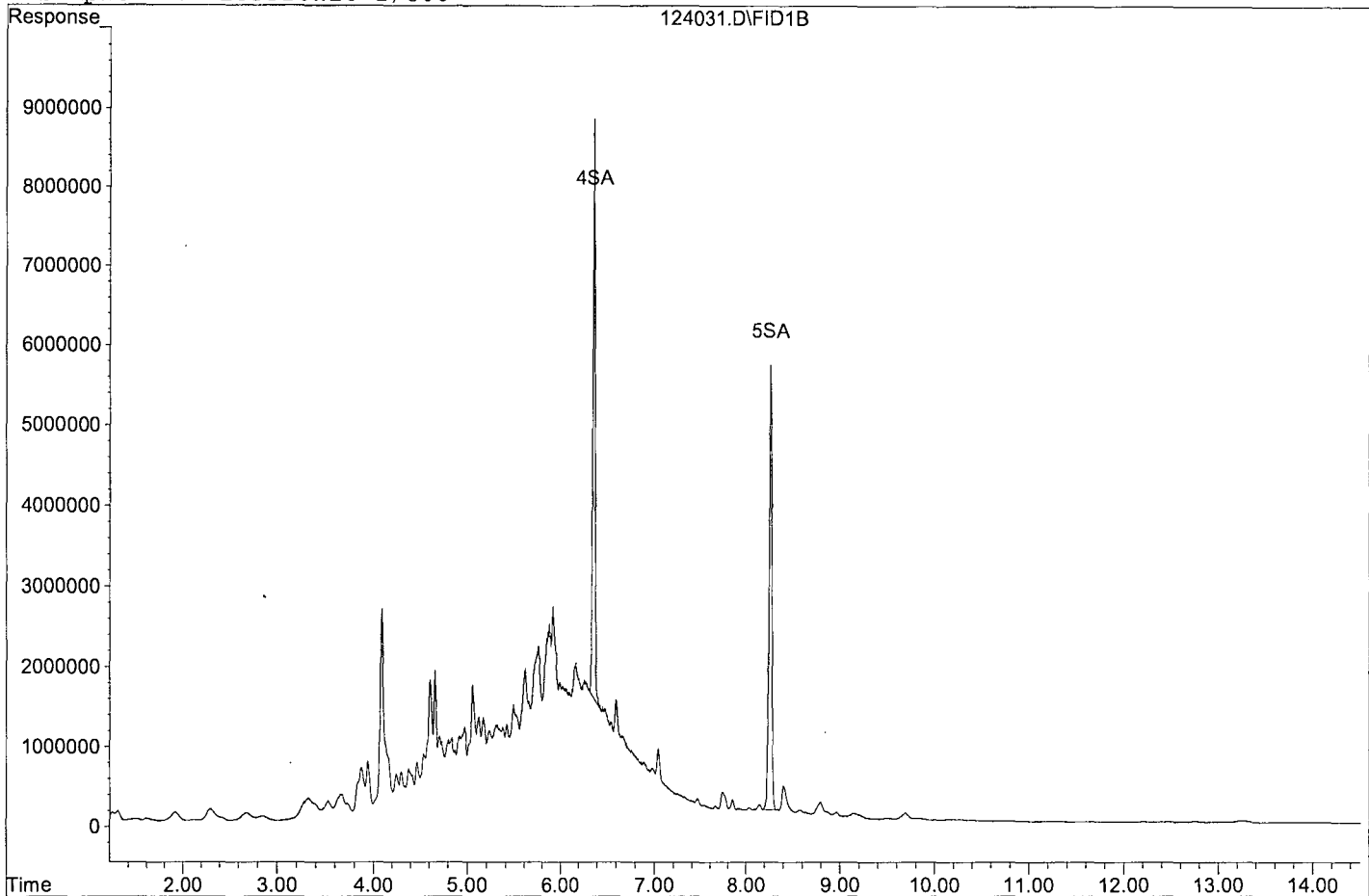
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	121709148	75.335 ppb
Surrogate Spike 75.000		Recovery =	100.45%
5) SA Octacosane(S)	8.26	116316741	77.488 ppb
Surrogate Spike 75.000		Recovery =	103.32%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	2254997830	2372.903 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124031.D

Sample : AZ85520W10 2/800



Data File : G:\APOLLO\DATA\190201\201012.D Vial: 12  
 Acq On : 2-1-19 13:28:50 Operator: DP  
 Sample : AZ85520W10 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 13:38 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

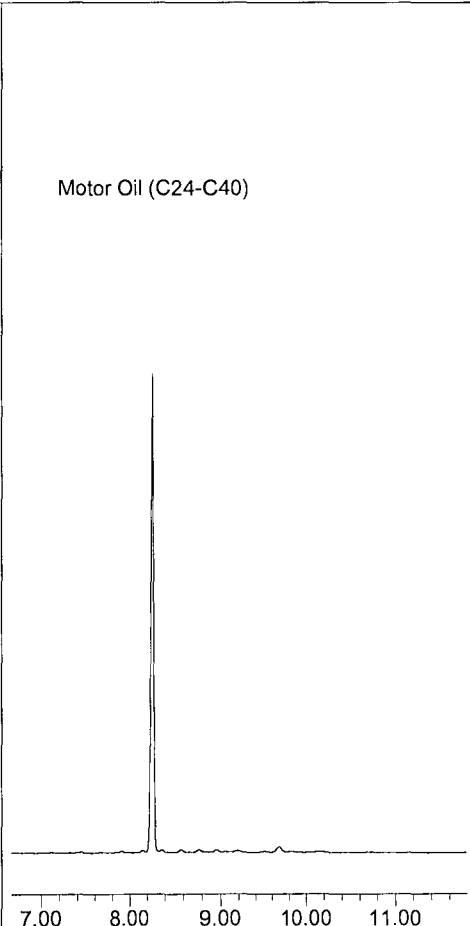
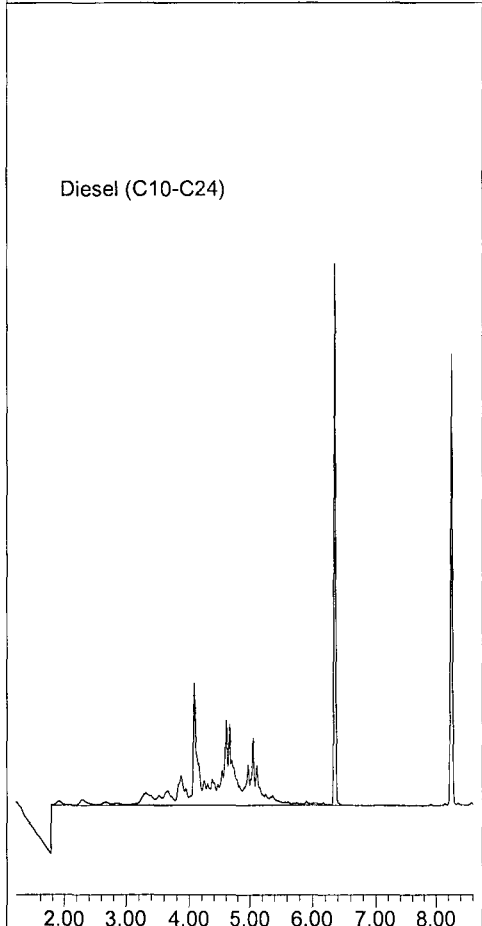
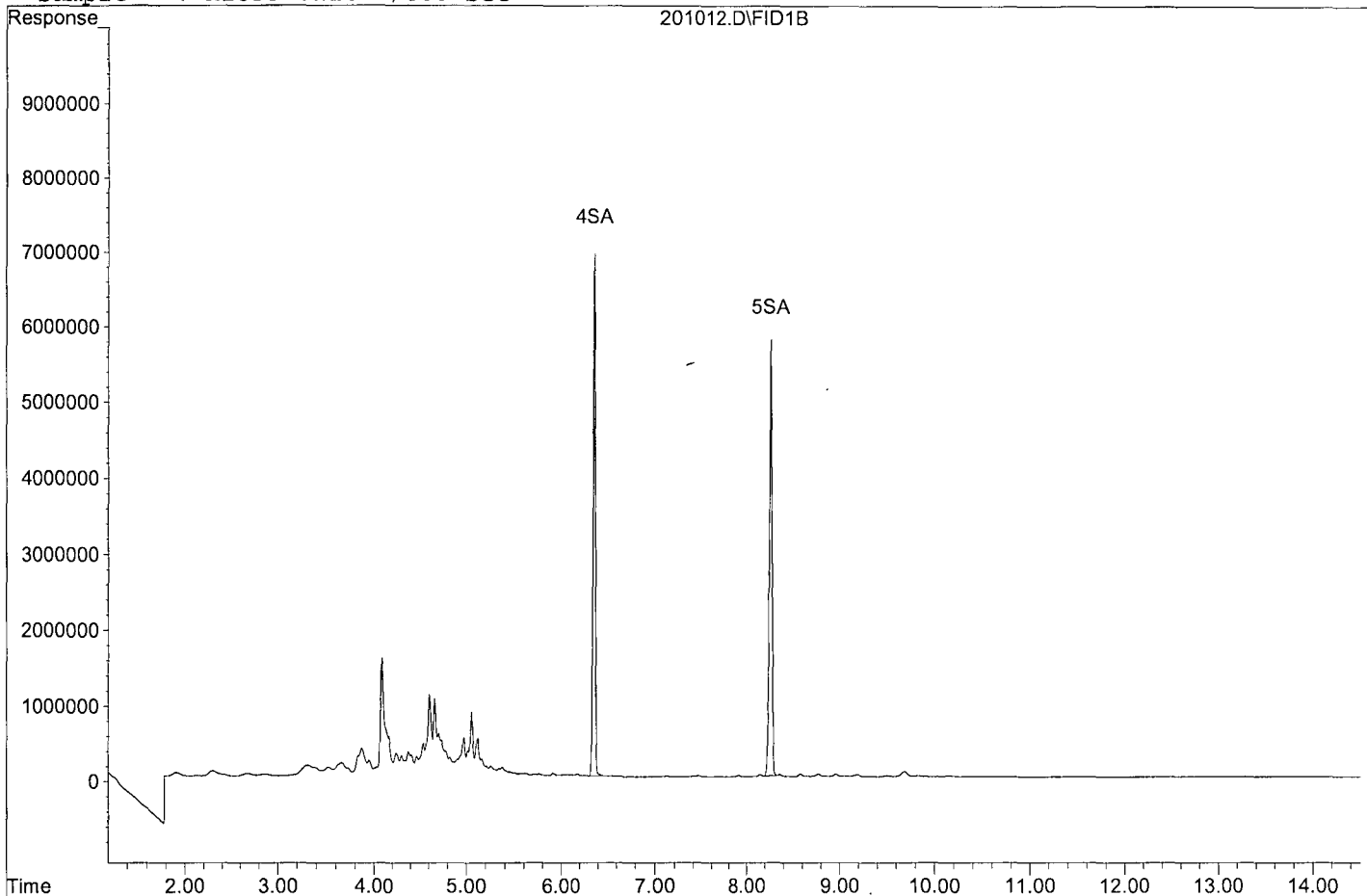
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	117088162	72.475 ppb
Surrogate Spike 75.000		Recovery =	96.63%
5) SA Octacosane(S)	8.26	117524636	78.293 ppb
Surrogate Spike 75.000		Recovery =	104.39%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	395835938	416.533 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201012.D

Sample : AZ85520W10 2/800 SGC



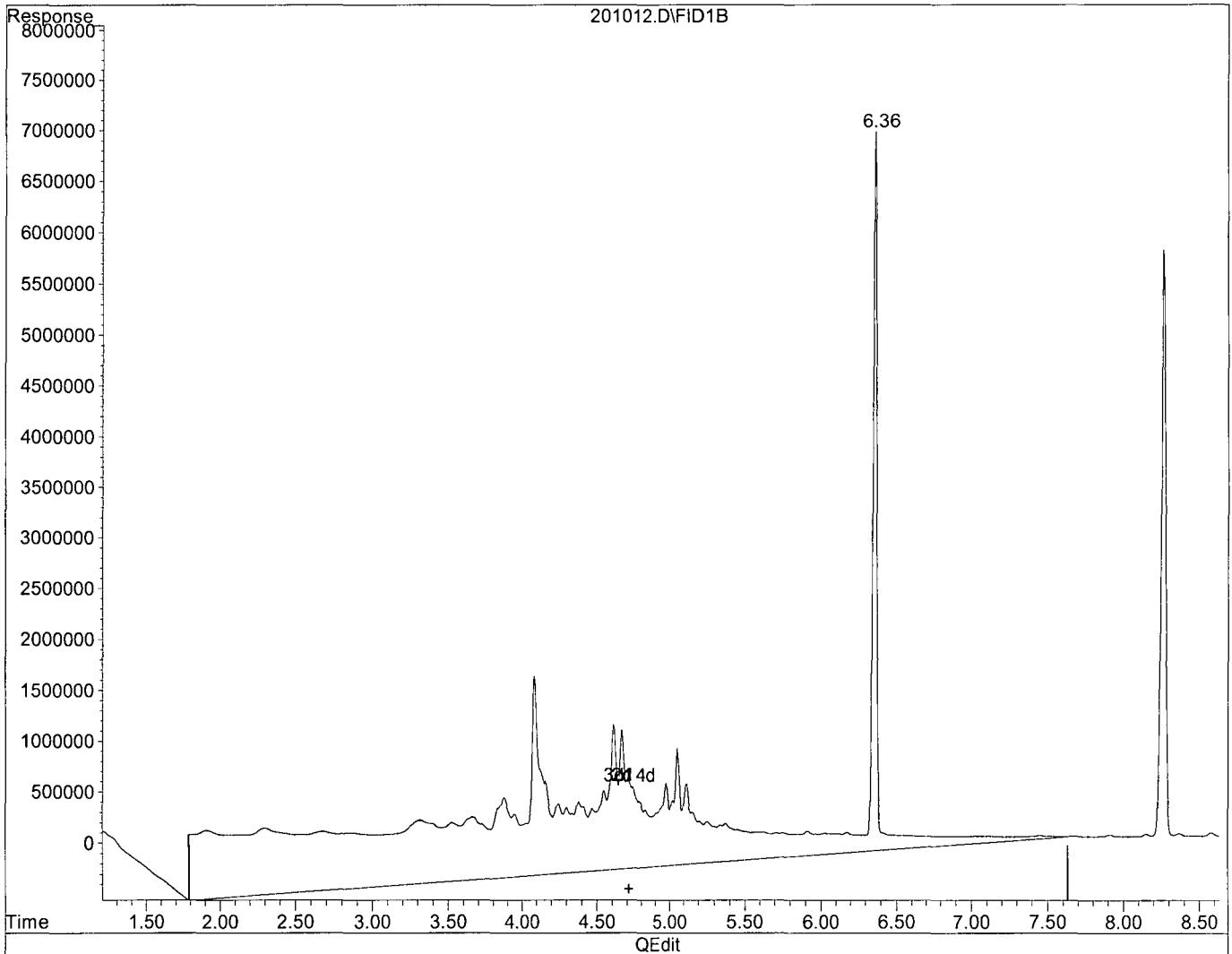
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201012.D  
Acq On : 2-1-19 13:28:50  
Sample : AZ85520W10 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 13:38 2019

Vial: 12  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1561.565ppb m  
response 1483973529



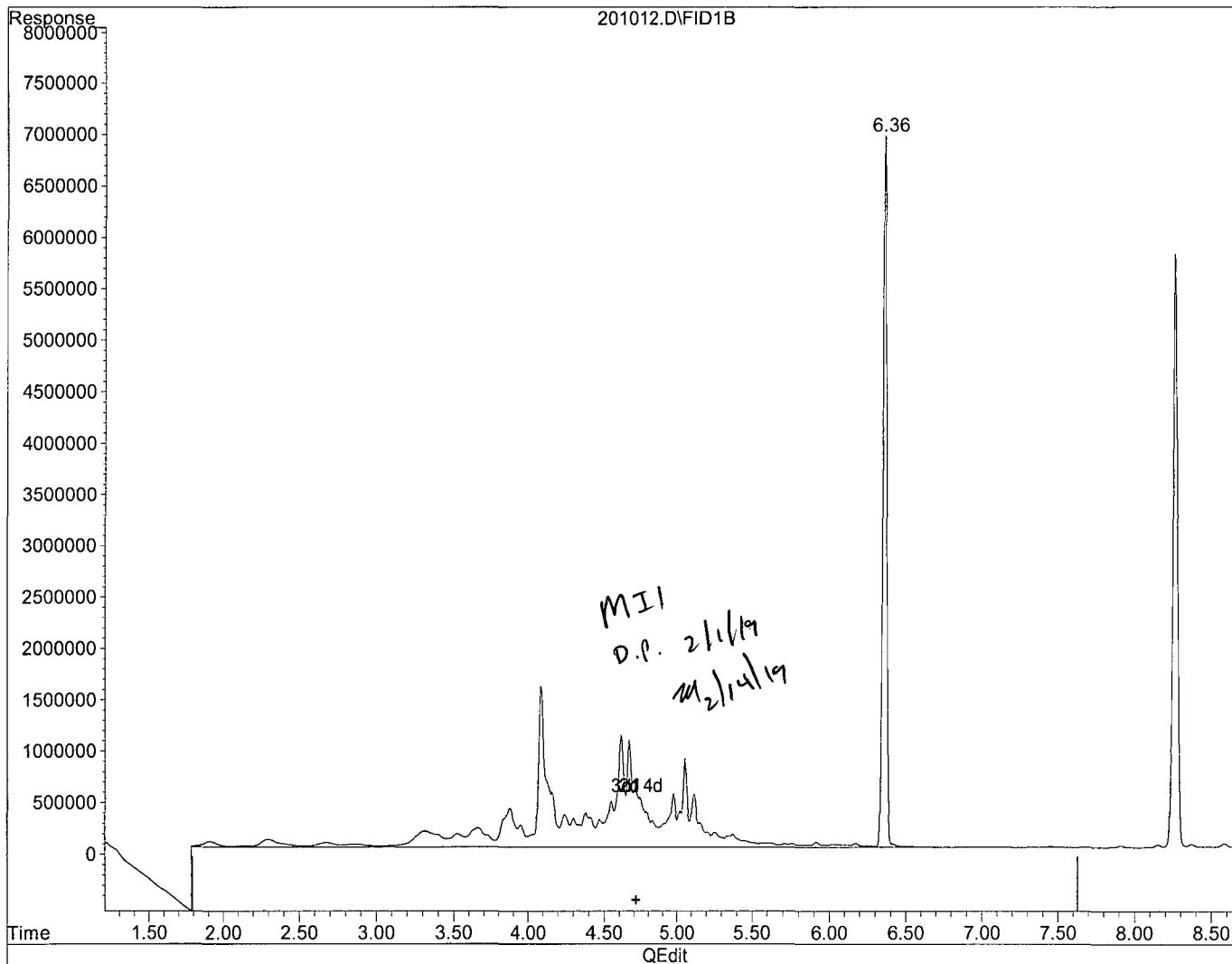
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201012.D  
Acq On : 2-1-19 13:28:50  
Sample : AZ85520W10 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 13:38 2019

Vial: 12  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 416.533ppb m  
response 395835938

(+) = Expected Retention Time

Data File : G:\APOLLO\DATA\190124\124069.D Vial: 69  
 Acq On : 1-29-19 19:20:47 Operator: DP  
 Sample : AZ85521W11 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 10:00 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

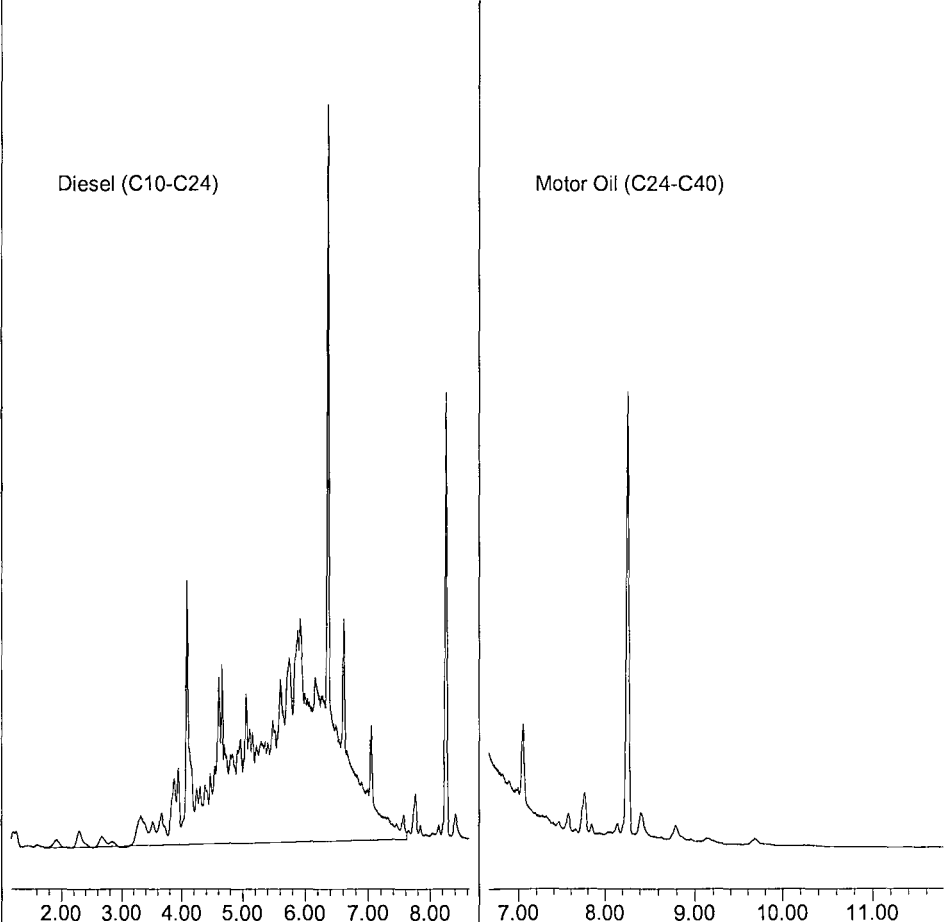
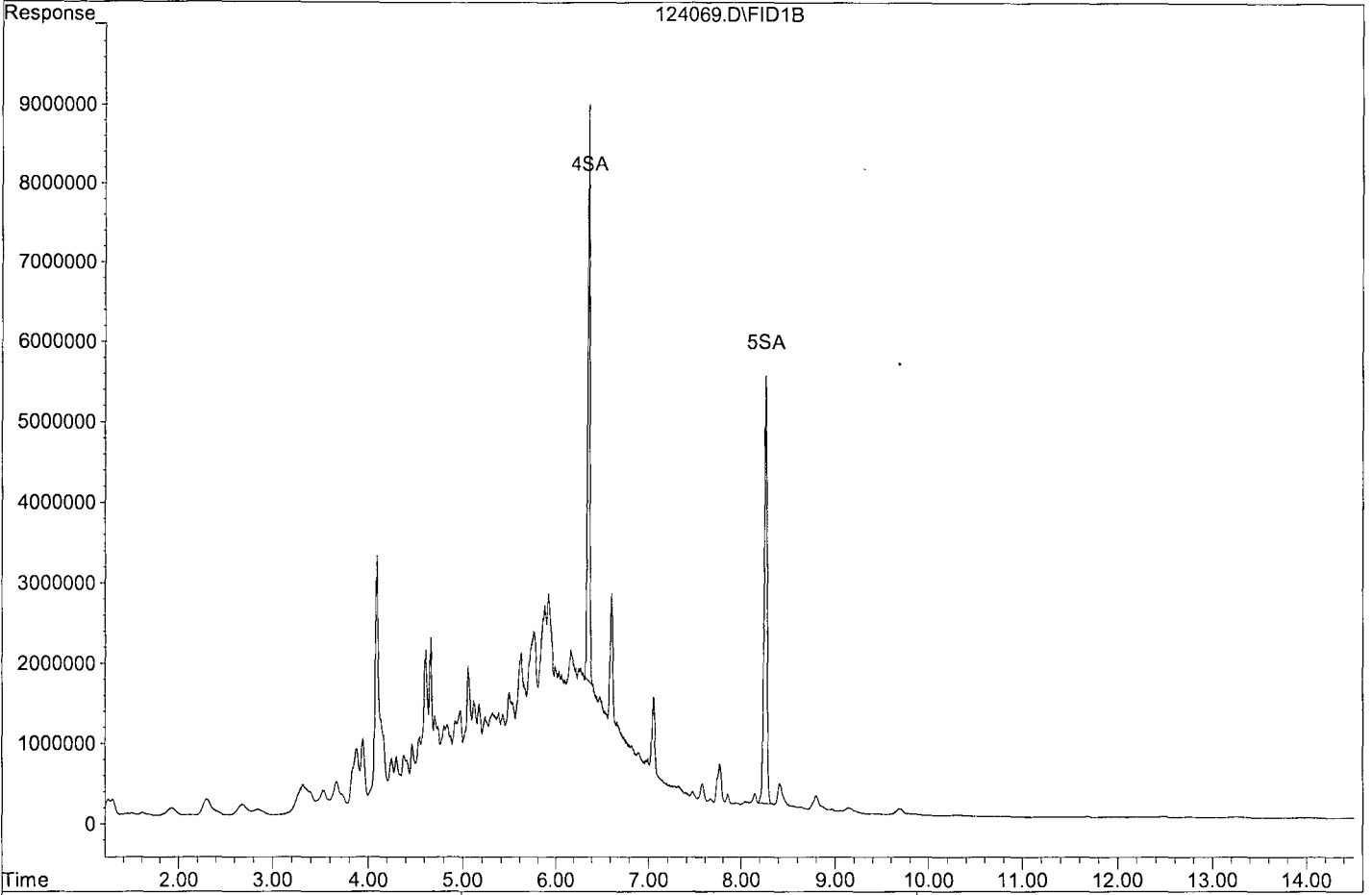
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	116065778	71.842 ppb
Surrogate Spike 75.000		Recovery =	95.79%
5) SA Octacosane(S)	8.26	111671704	74.394 ppb
Surrogate Spike 75.000		Recovery =	99.19%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	2539382564	2672.157 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124069.D

Sample : AZ85521W11 2/800



Data File : G:\APOLLO\DATA\190201\201007.D Vial: 7  
 Acq On : 2-1-19 11:48:08 Operator: DP  
 Sample : AZ85521W11 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 12:33 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

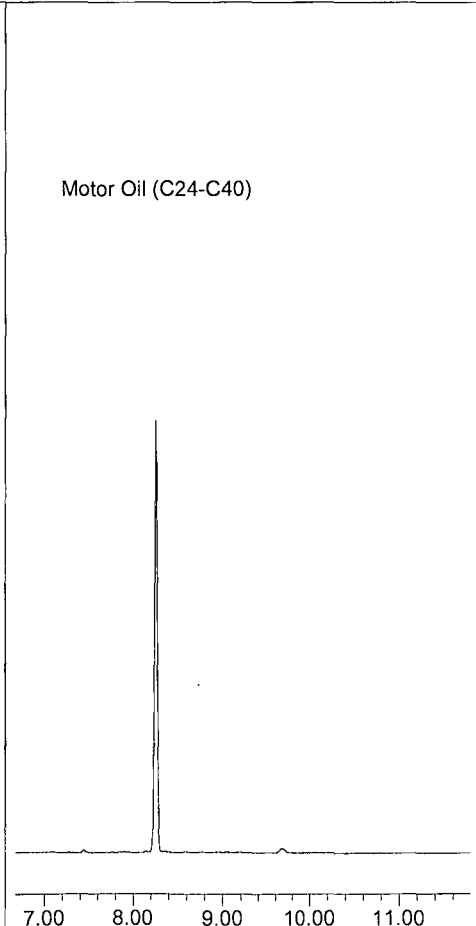
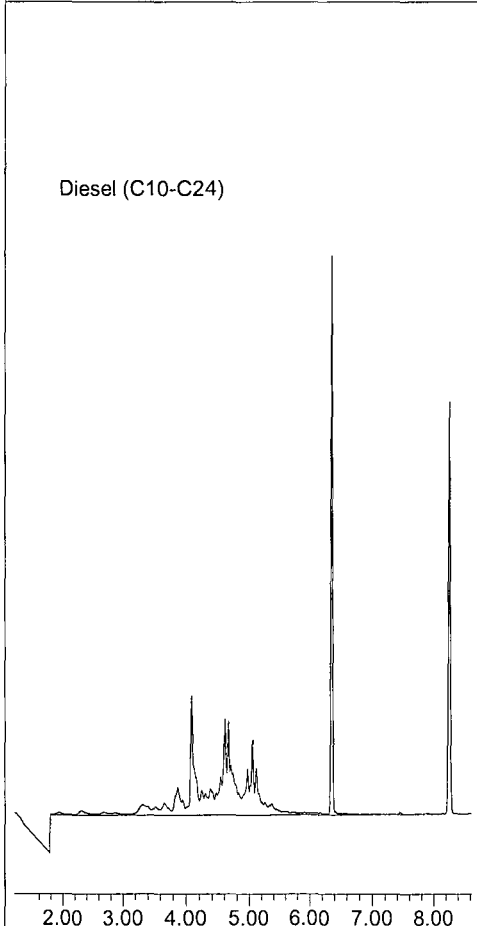
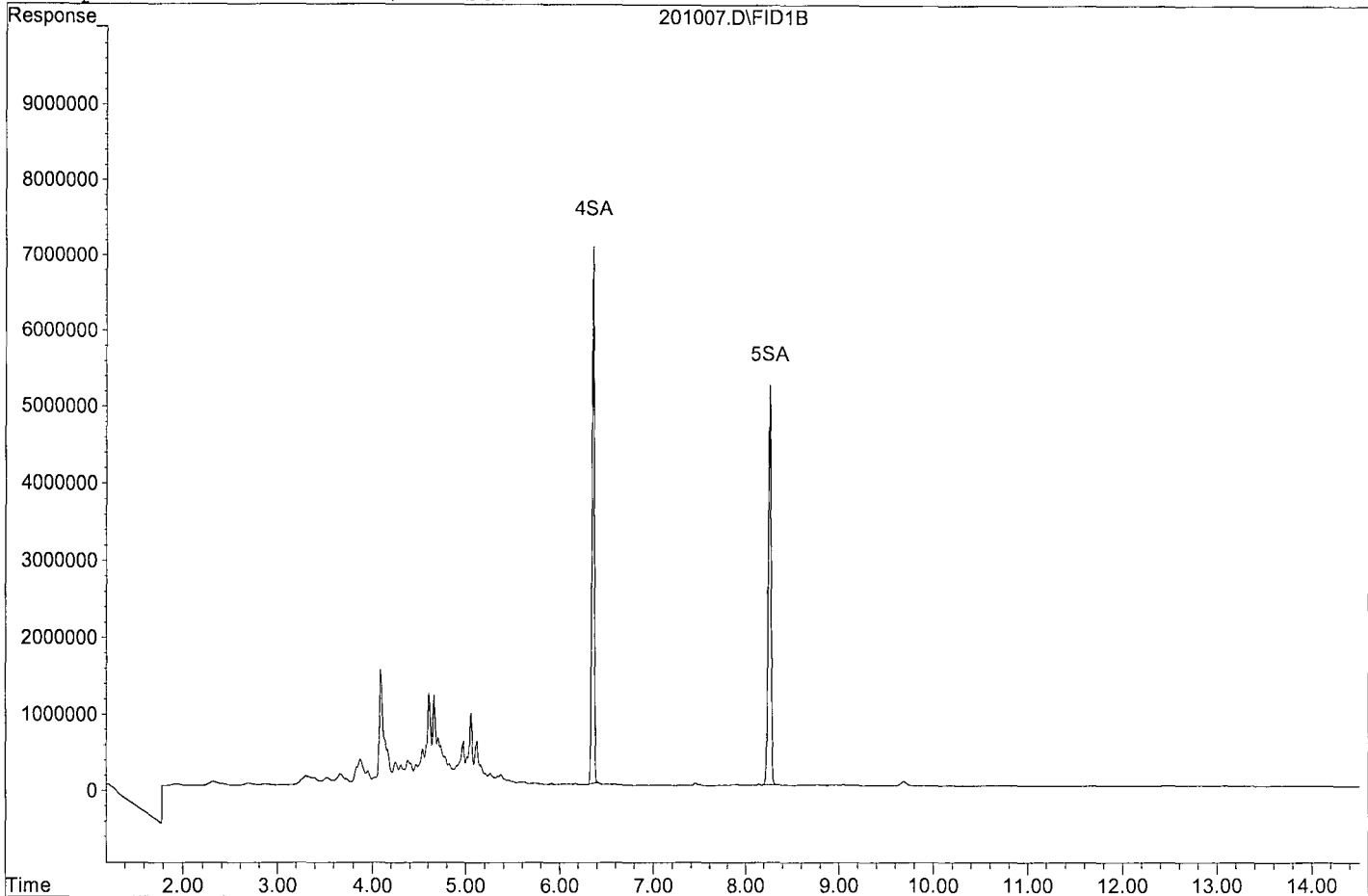
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	118040852	73.064 ppb
Surrogate Spike 75.000		Recovery =	97.42%
5) SA Octacosane(S)	8.26	110669619	73.726 ppb
Surrogate Spike 75.000		Recovery =	98.30%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	406569247	427.827 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201007.D

Sample : AZ85521W11 2/800 SGC



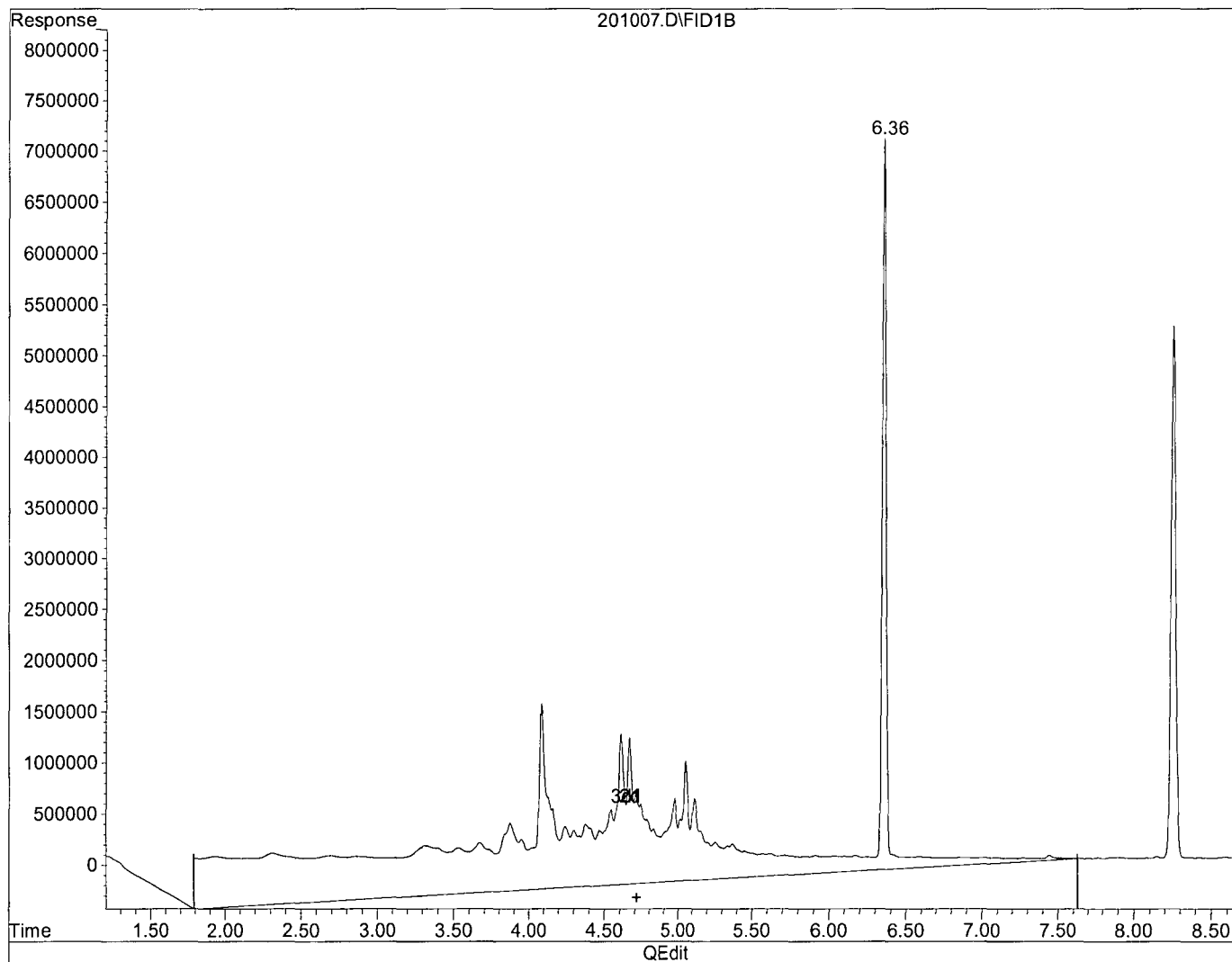
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201007.D  
Acq On : 2-1-19 11:48:08  
Sample : AZ85521W11 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 12:33 2019

Vial: 7  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 1310.937ppb m

response 1245798700

(+) = Expected Retention Time

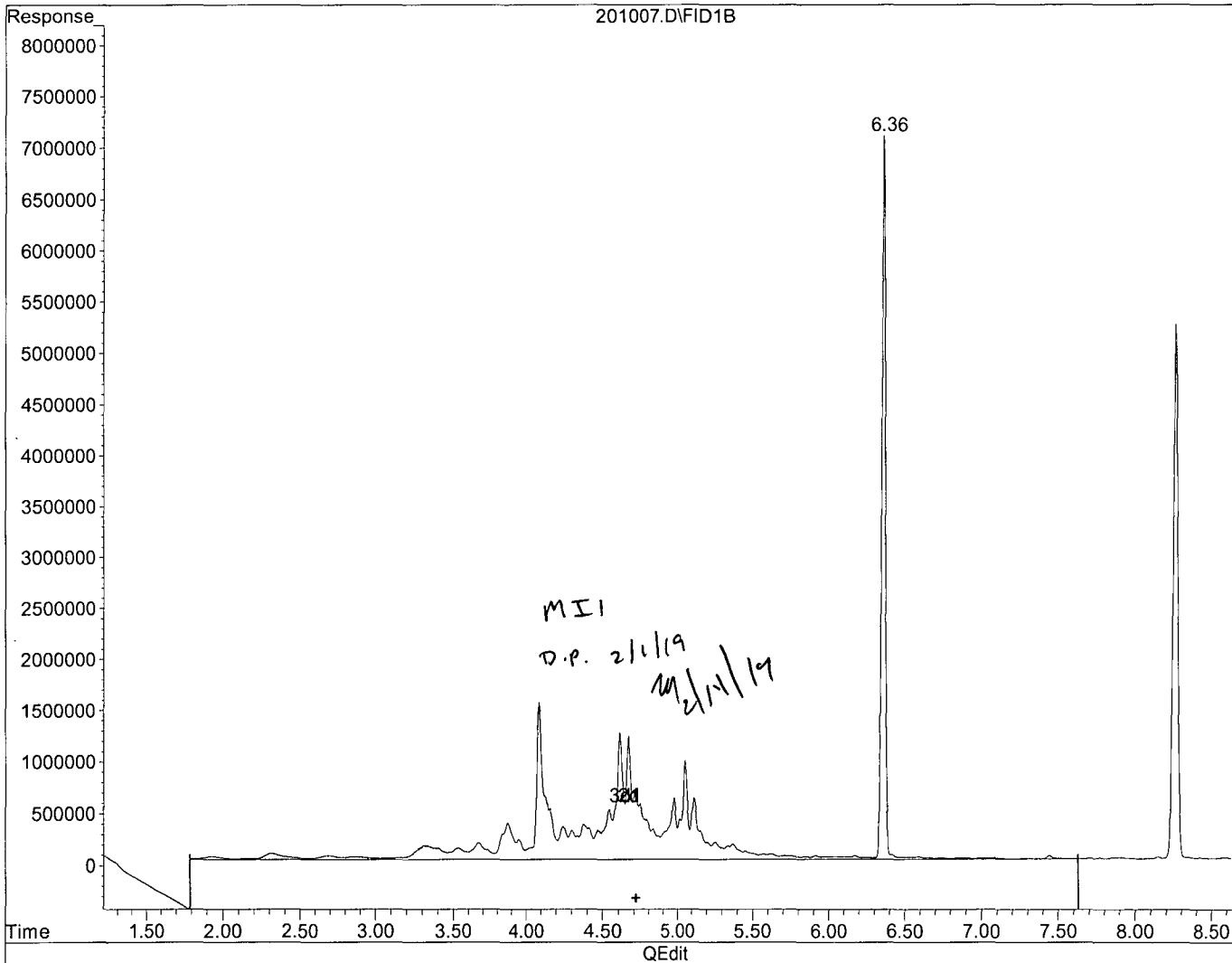
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201007.D  
Acq On : 2-1-19 11:48:08  
Sample : AZ85521W11 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 12:33 2019

Vial: 7  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 427.827ppb m

response 406569247

(+) = Expected Retention Time

Data File : G:\APOLLO\DATA\190124\124032.D Vial: 32  
 Acq On : 1-25-19 19:03:44 Operator: DP  
 Sample : AZ85523W13 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:44 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.36	132803621	82.202 ppb
Surrogate Spike 75.000		Recovery =	109.60%
5) SA Octacosane(S)	8.26	127697008	85.069 ppb
Surrogate Spike 75.000		Recovery =	113.43%

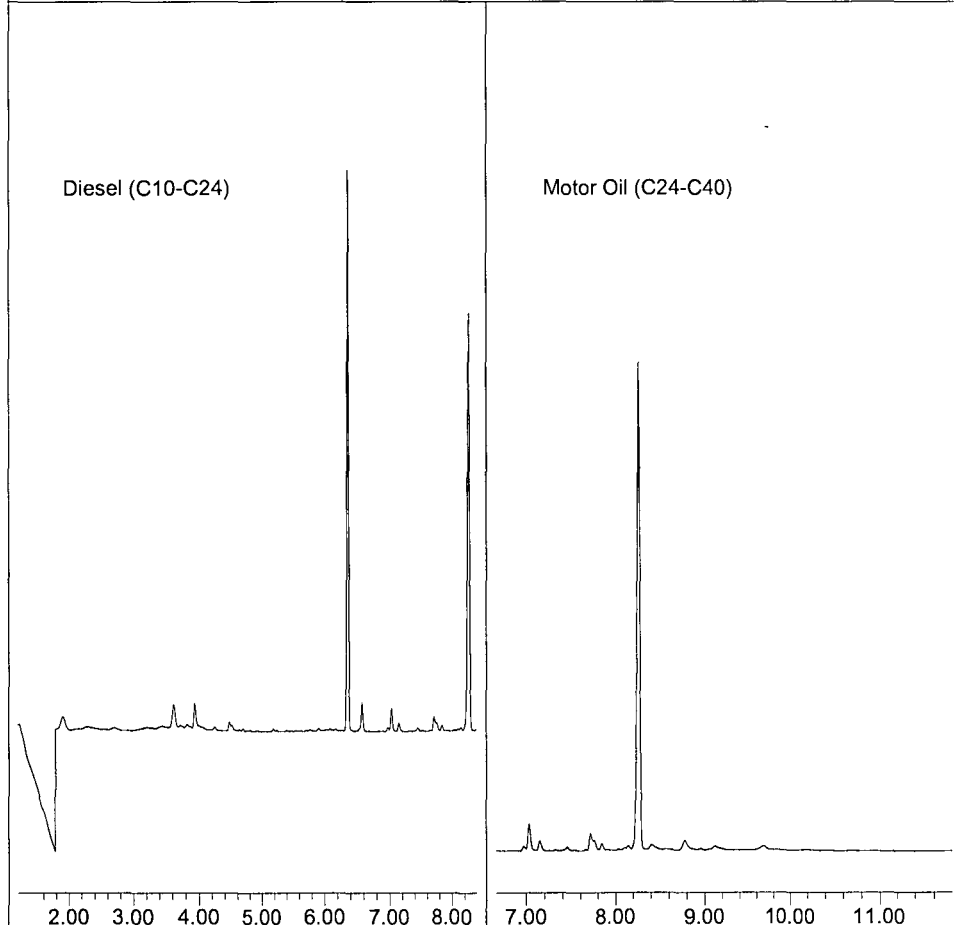
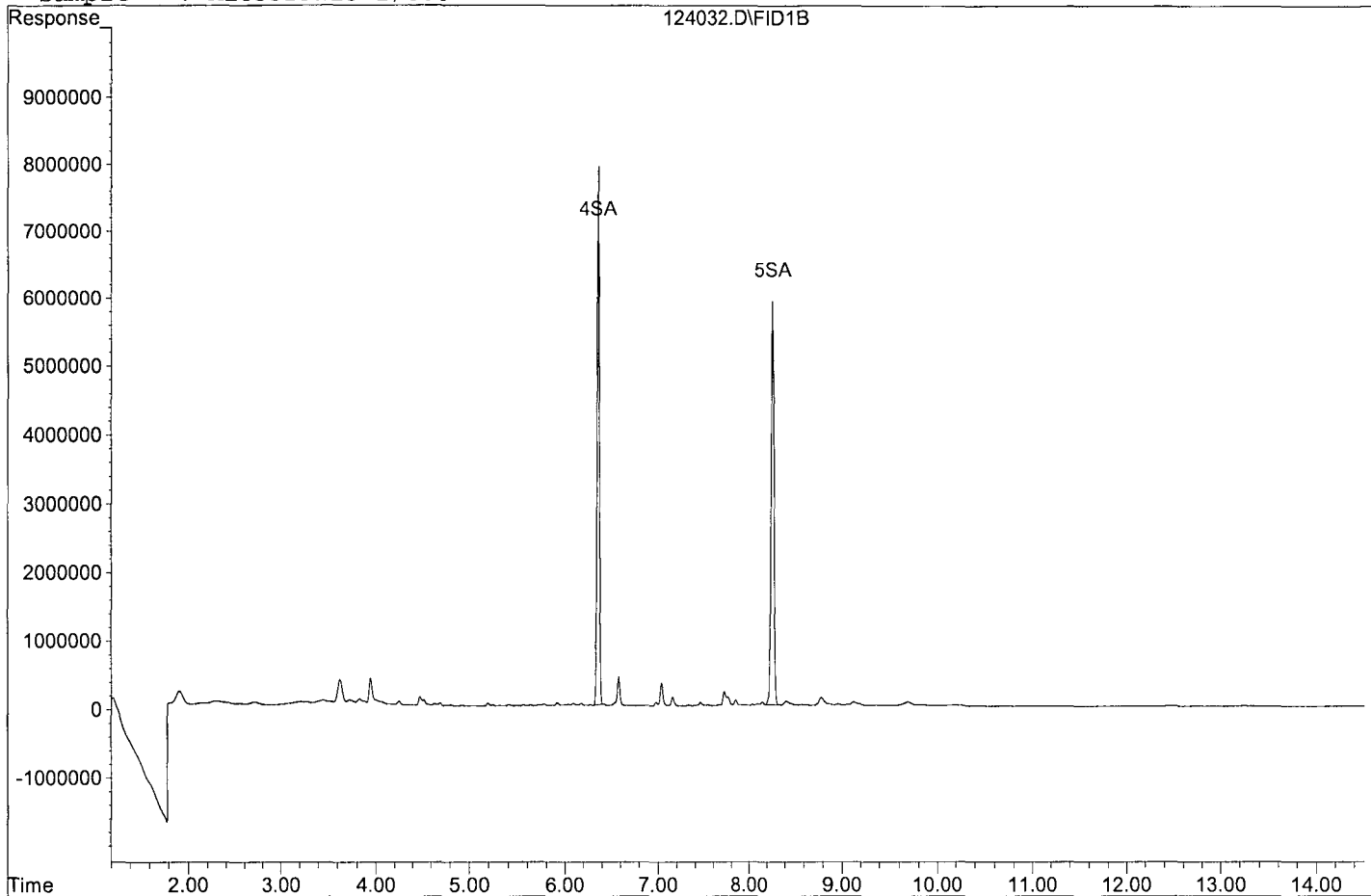
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124032.D

Sample : AZ85523W13 2/800



Data File : G:\APOLLO\DATA\190124\124033.D Vial: 33  
 Acq On : 1-25-19 19:23:31 Operator: DP  
 Sample : AZ85525W10 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:44 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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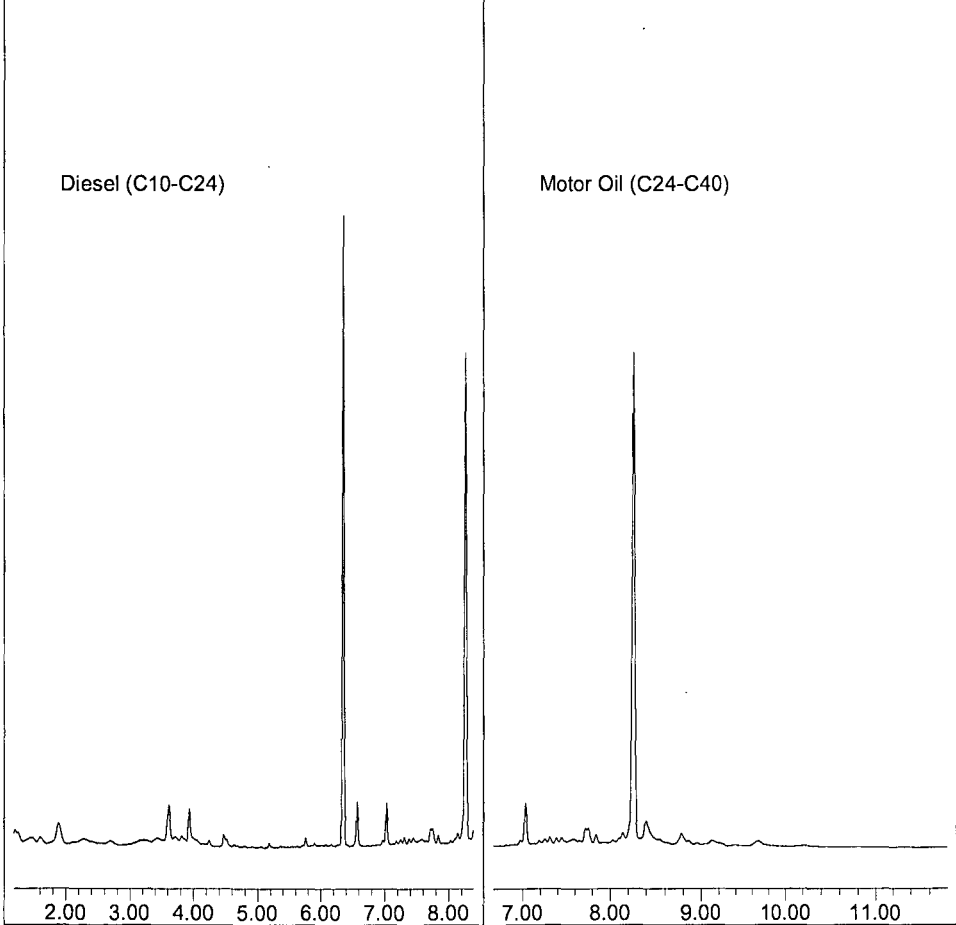
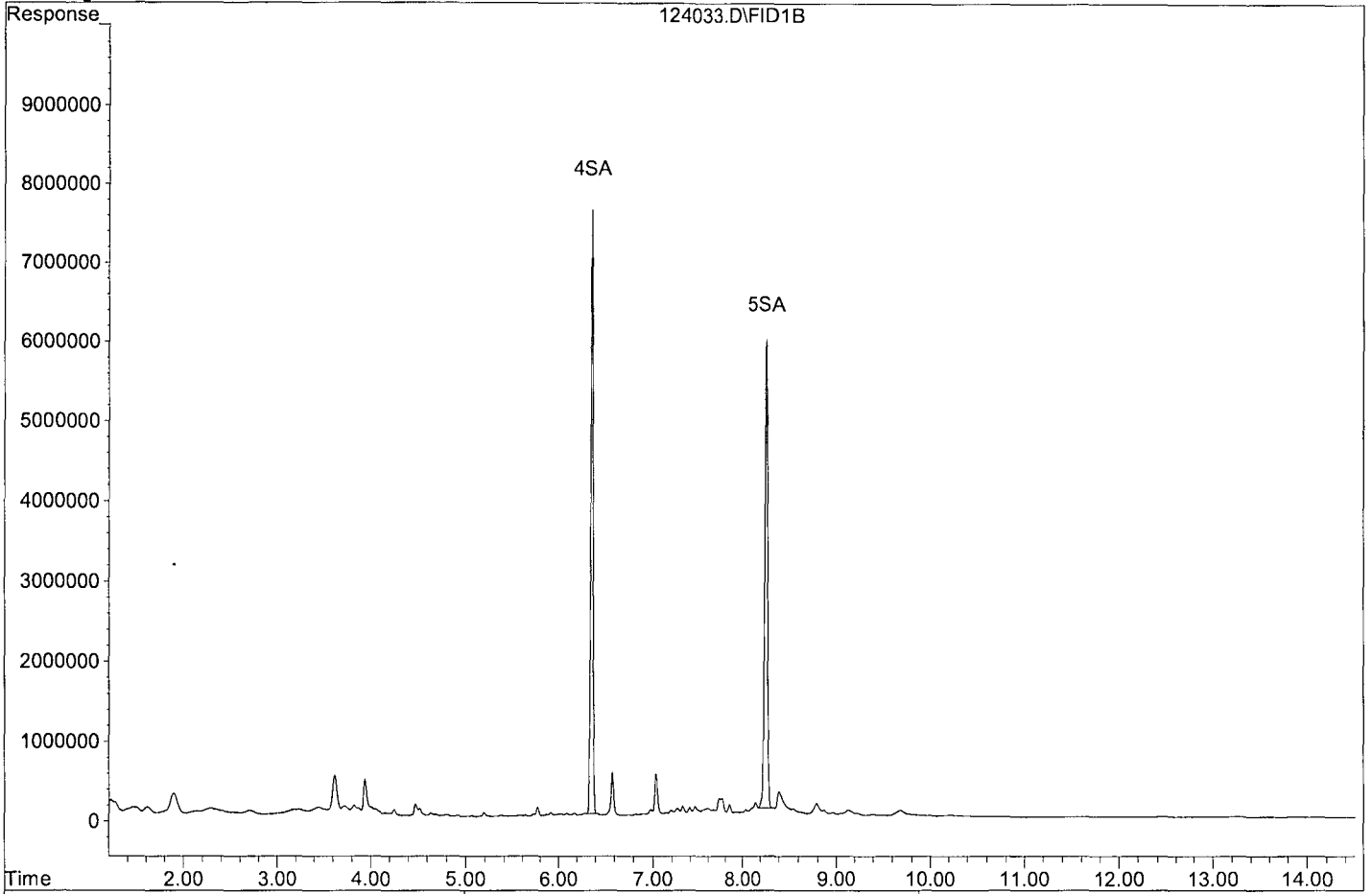
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	128693005	79.658 ppb
Surrogate Spike 75.000		Recovery =	106.21%
5) SA Octacosane(S)	8.26	126929435	84.558 ppb
Surrogate Spike 75.000		Recovery =	112.74%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124033.D

Sample : AZ85525W10 2/800



Data File : G:\APOLLO\DATA\190124\124034.D Vial: 34  
 Acq On : 1-25-19 19:42:39 Operator: DP  
 Sample : AZ85527W11 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:44 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

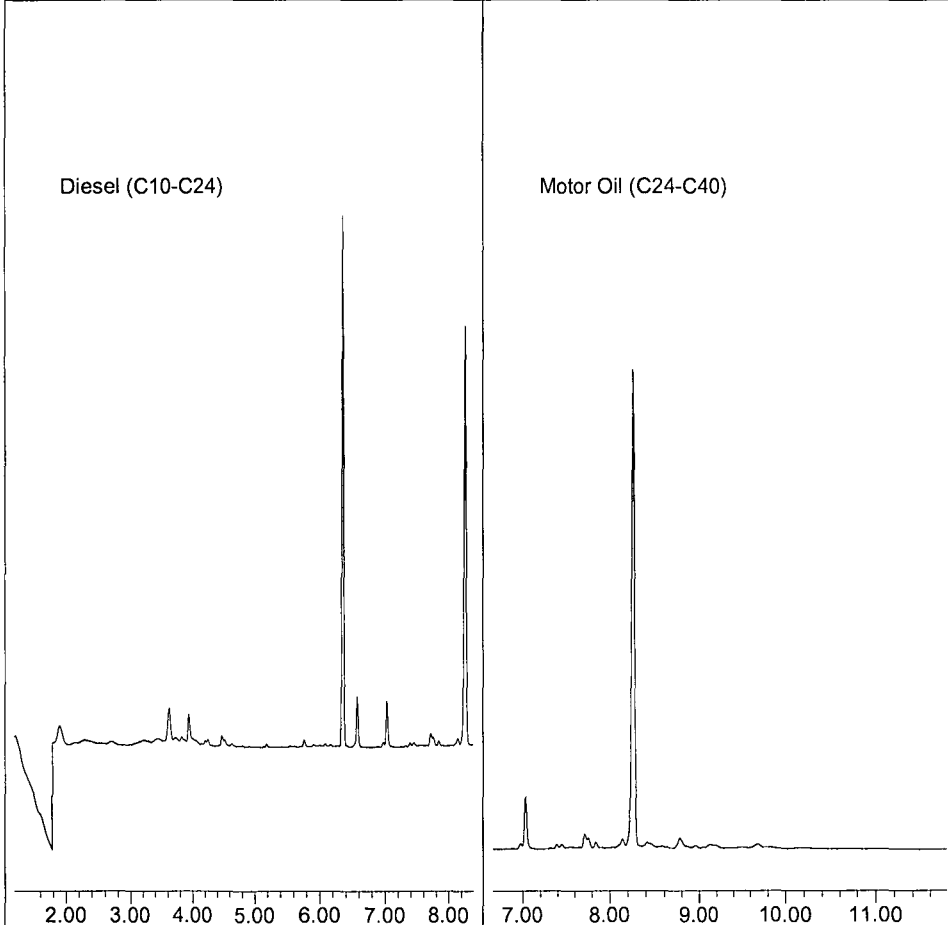
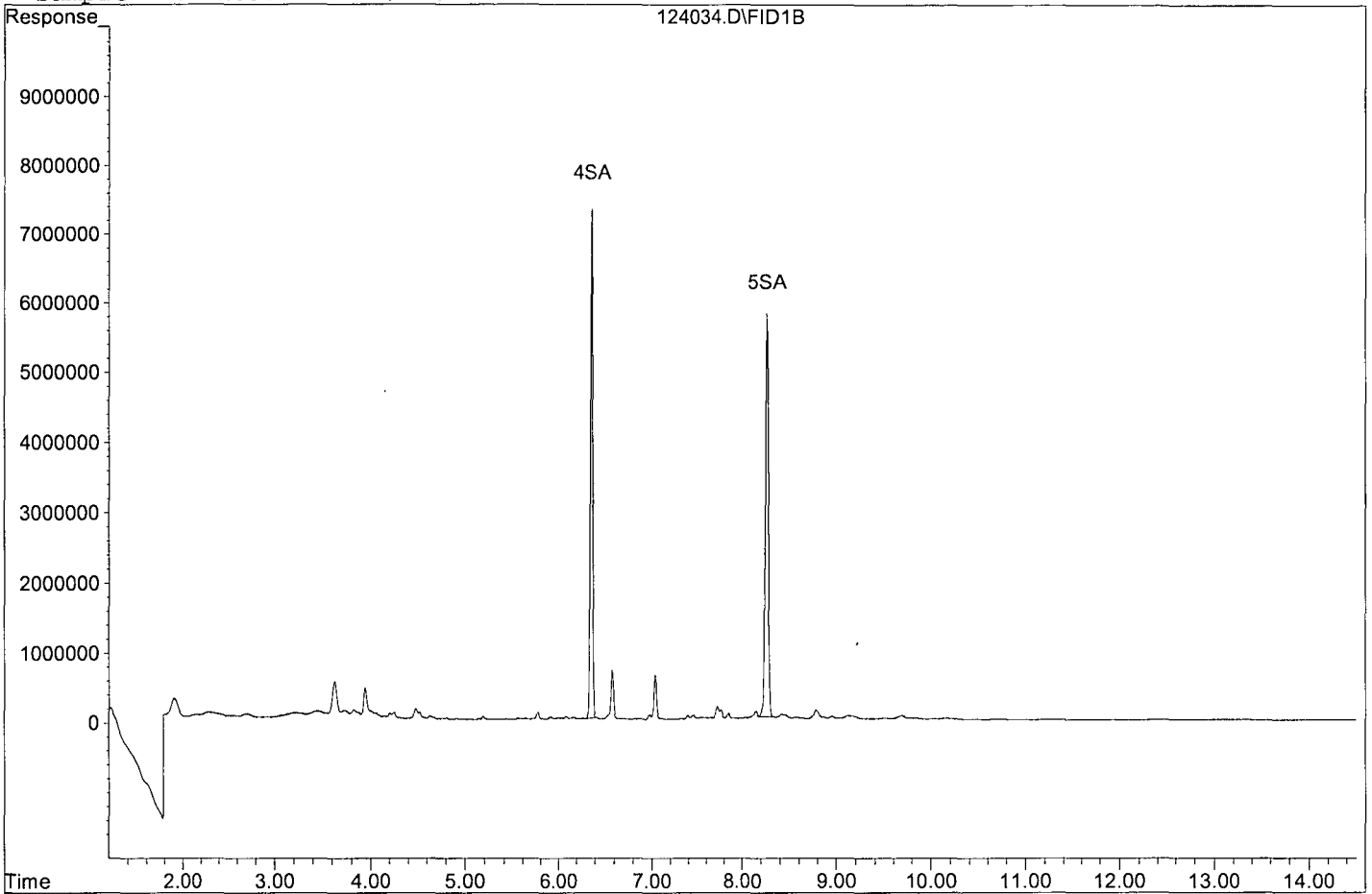
4) SA Ortho-Terphenyl(S)	6.36	122738115	75.972 ppb
Surrogate Spike 75.000		Recovery =	101.30%
5) SA Octacosane(S)	8.26	123770001	82.453 ppb
Surrogate Spike 75.000		Recovery =	109.94%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124034.D

Sample : AZ85527W11 2/800



Data File : G:\APOLLO\DATA\190124\124024.D Vial: 24  
 Acq On : 1-25-19 16:25:09 Operator: DP  
 Sample : 190124A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:41 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

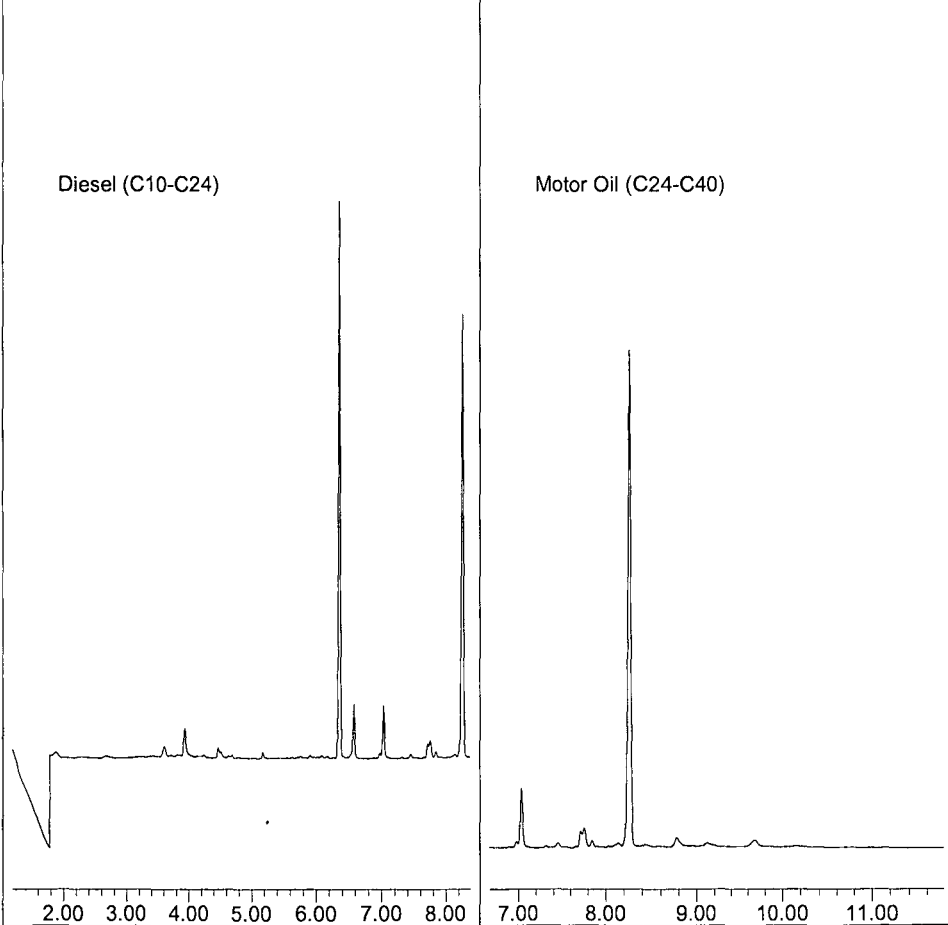
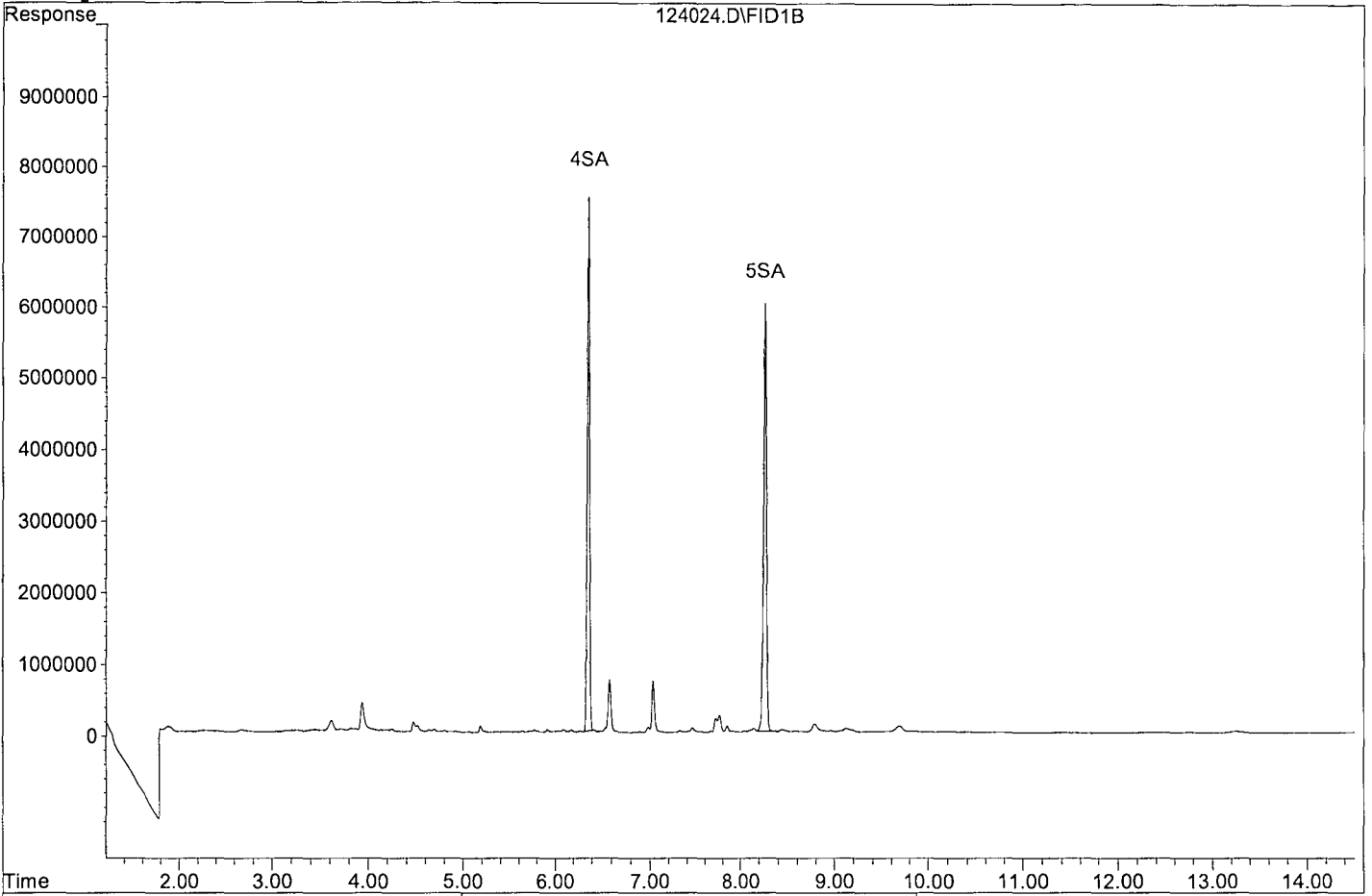
4) SA Ortho-Terphenyl(S)	6.36	125037138	77.395 ppb
Surrogate Spike 75.000		Recovery =	103.19%
5) SA Octacosane(S)	8.26	125782181	83.794 ppb
Surrogate Spike 75.000		Recovery =	111.73%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124024.D

Sample : 190124A BLK 2/800



Data File : G:\APOLLO\DATA\190124\124066.D Vial: 66  
 Acq On : 1-29-19 18:20:50 Operator: DP  
 Sample : 190128A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 9:59 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	111635960	69.100 ppb
Surrogate Spike 75.000		Recovery =	92.13%
5) SA Octacosane(S)	8.26	120365980	80.186 ppb
Surrogate Spike 75.000		Recovery =	106.91%

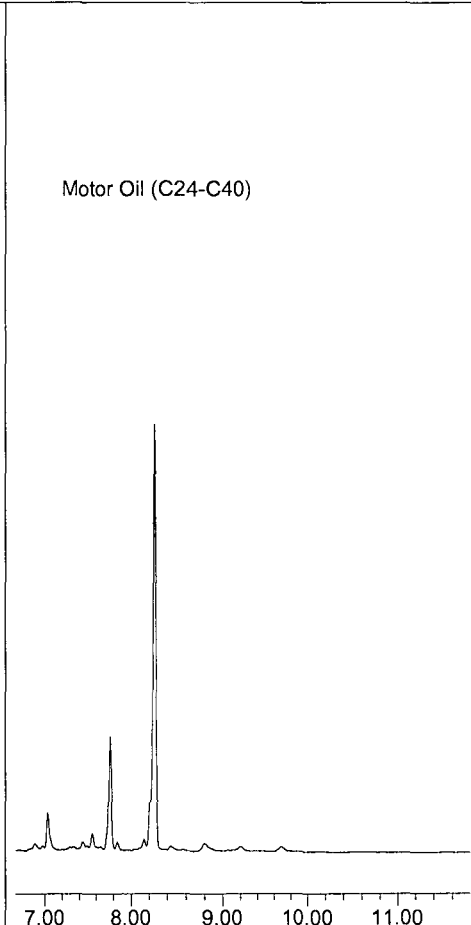
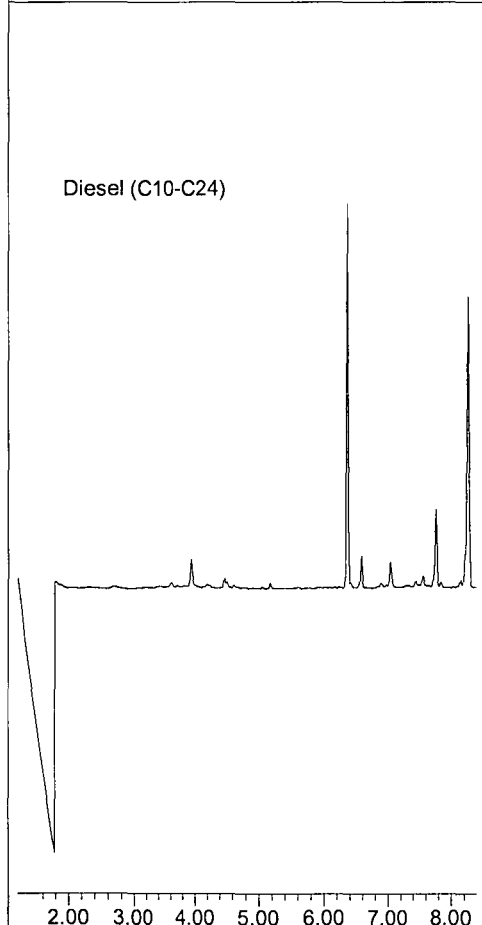
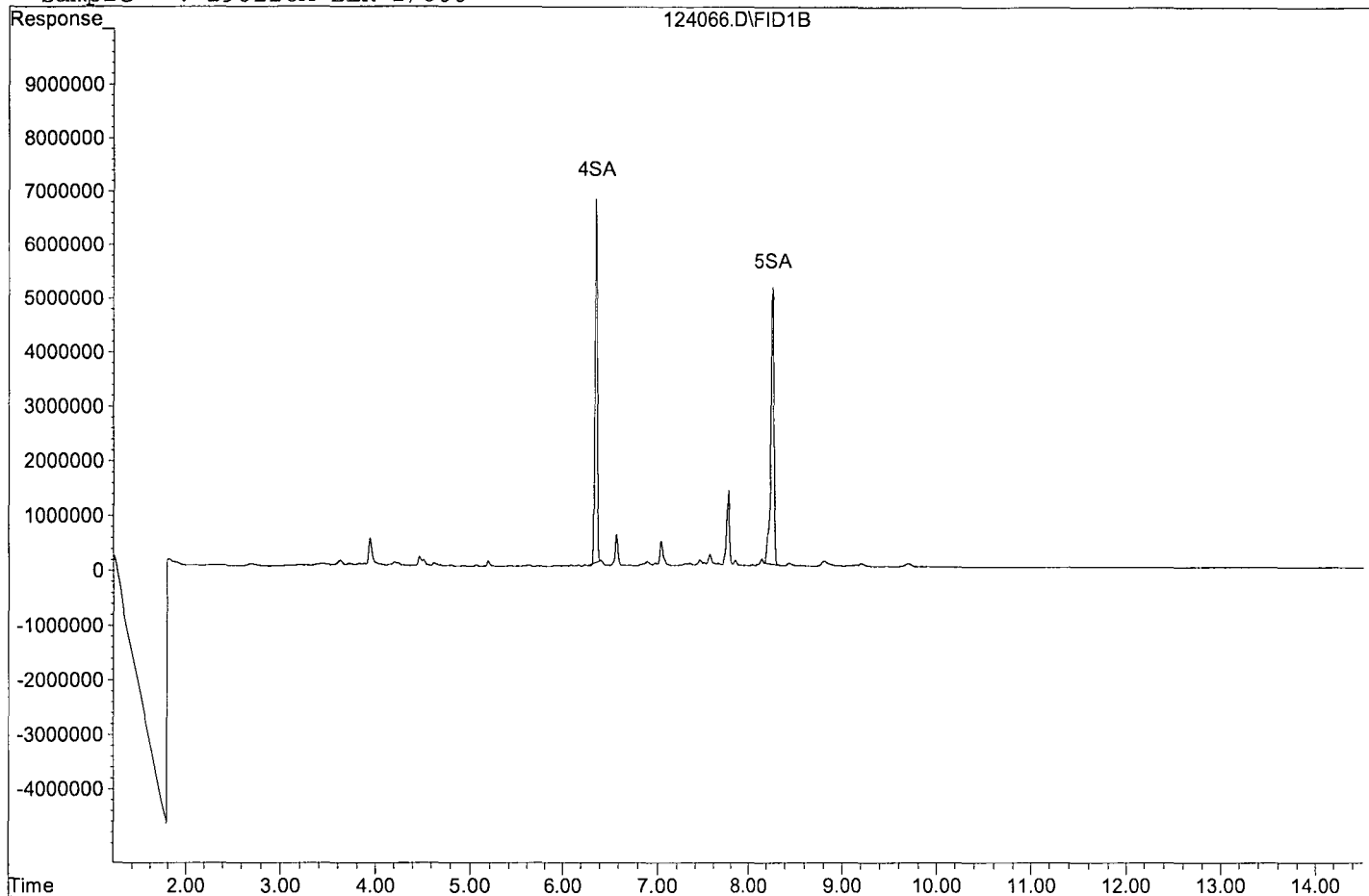
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124066.D

Sample : 190128A BLK 2/800



Data File : G:\APOLLO\DATA\190201\201004.D Vial: 4  
 Acq On : 2-1-19 10:48:41 Operator: DP  
 Sample : 190128A BLK 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 11:00 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

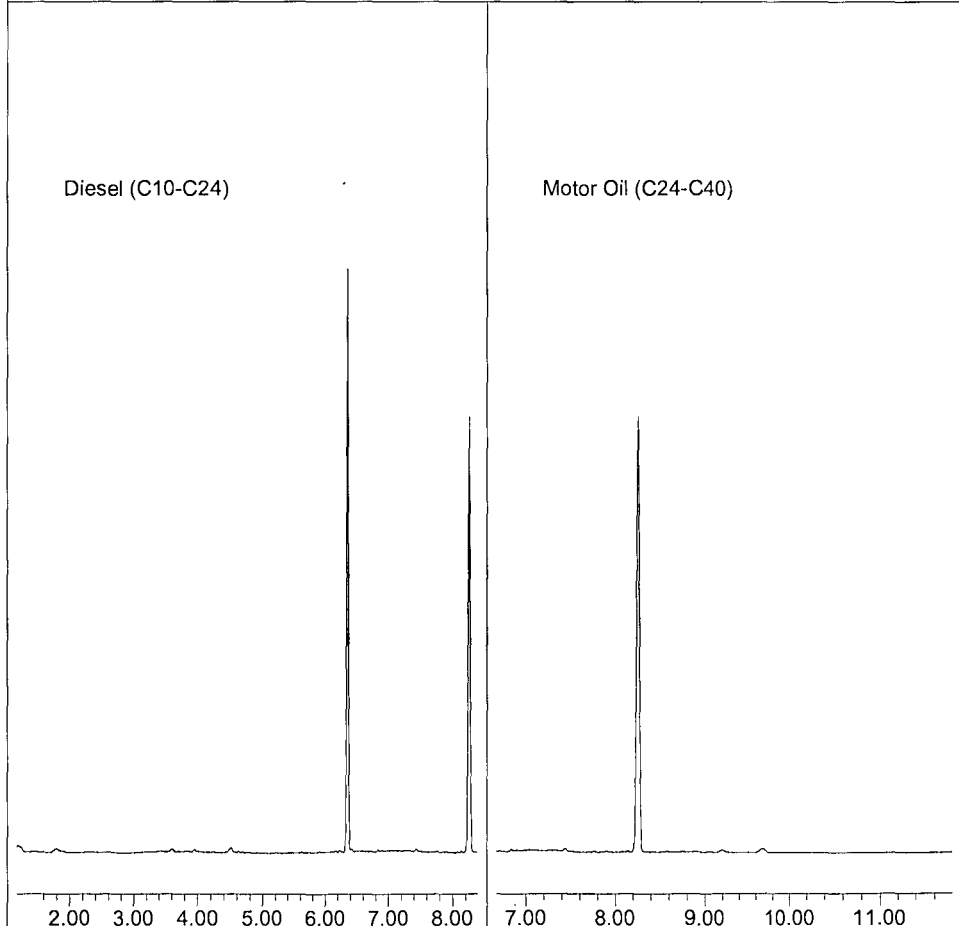
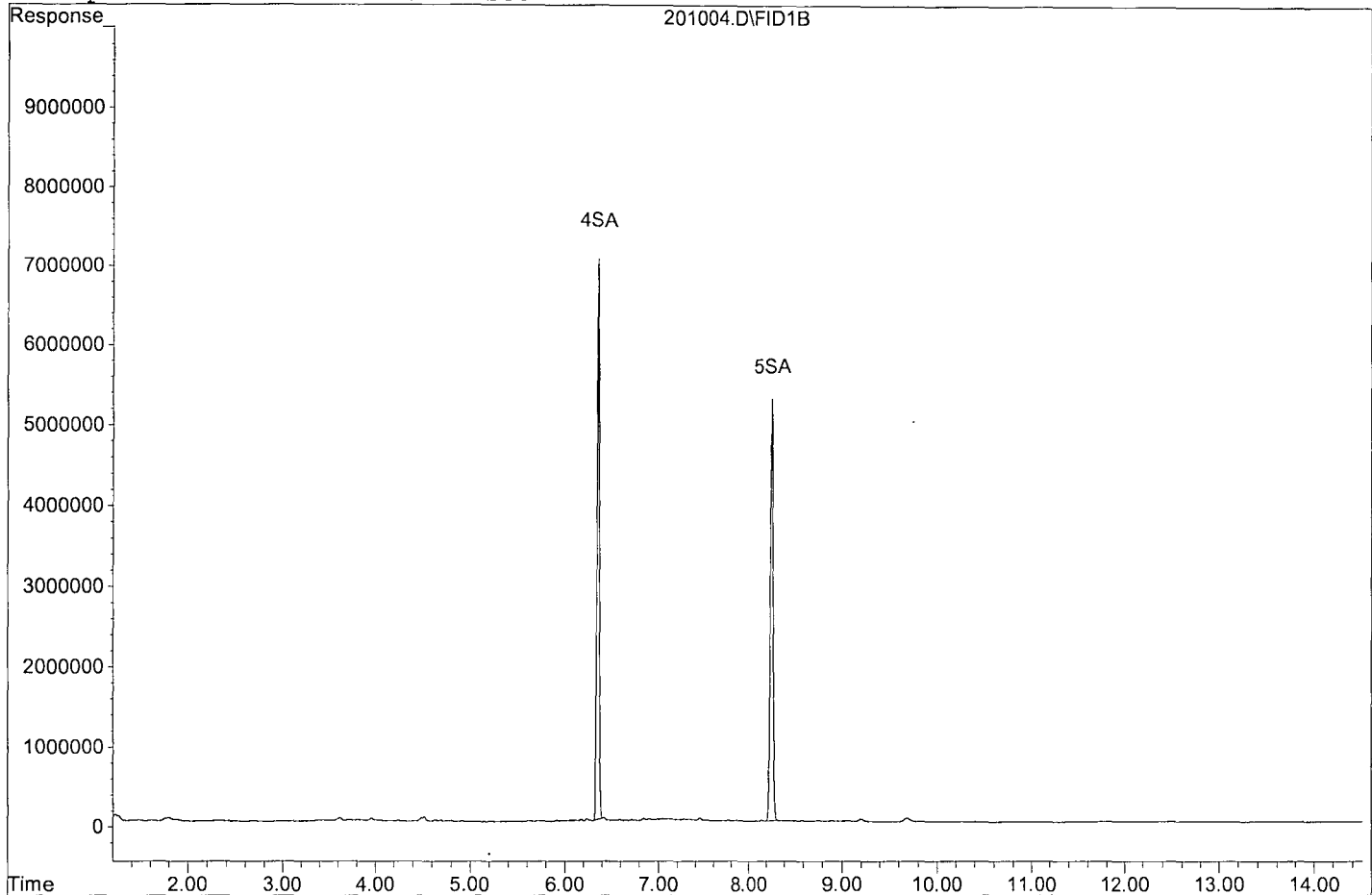
Compound	R.T.	Response	Conc Units
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System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	119427425	73.923 ppb
Surrogate Spike 75.000		Recovery =	98.56%
5) SA Octacosane(S)	8.26	112135443	74.703 ppb
Surrogate Spike 75.000		Recovery =	99.60%

Target Compounds

Data File: G:\APOLLO\DATA\190201\201004.D

Sample : 190128A BLK 2/800 SGC



Data File : G:\APOLLO\DATA\190201\201009.D Vial: 9  
 Acq On : 2-1-19 12:28:25 Operator: DP  
 Sample : 190124A BLK 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 13:27 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

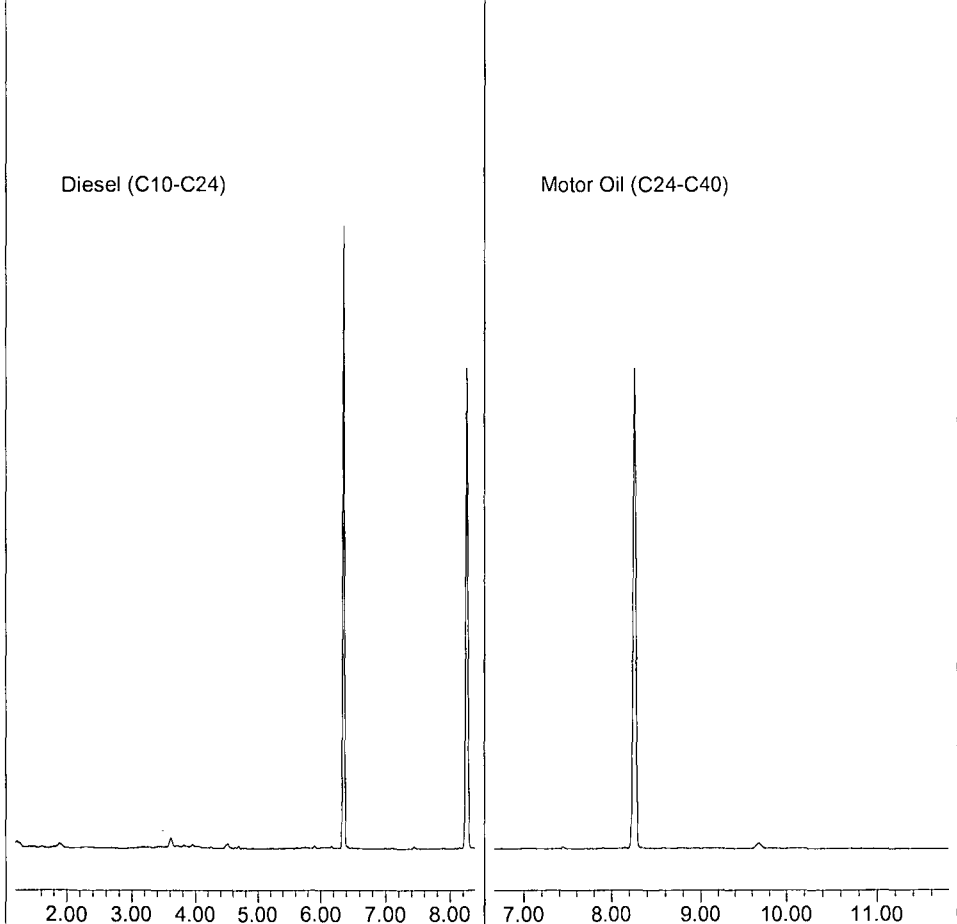
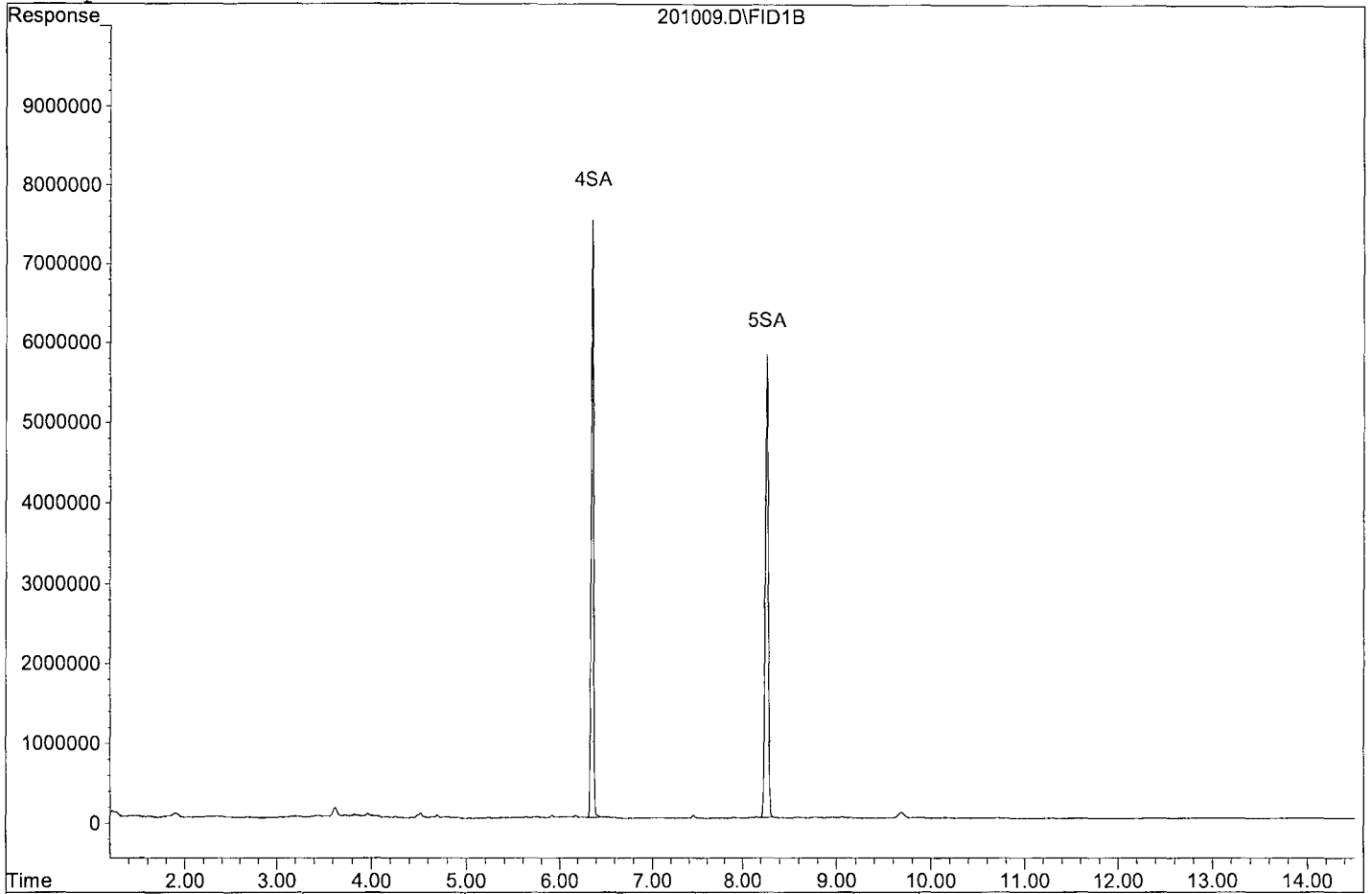
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	127655805	79.016 ppb
Surrogate Spike 75.000		Recovery =	105.35%
5) SA Octacosane(S)	8.26	125789103	83.798 ppb
Surrogate Spike 75.000		Recovery =	111.73%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201009.D

Sample : 190124A BLK 2/800 SGC



Data File : G:\APOLLO\DATA\190124\124025.D Vial: 25  
 Acq On : 1-25-19 16:44:30 Operator: DP  
 Sample : 190124A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:41 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

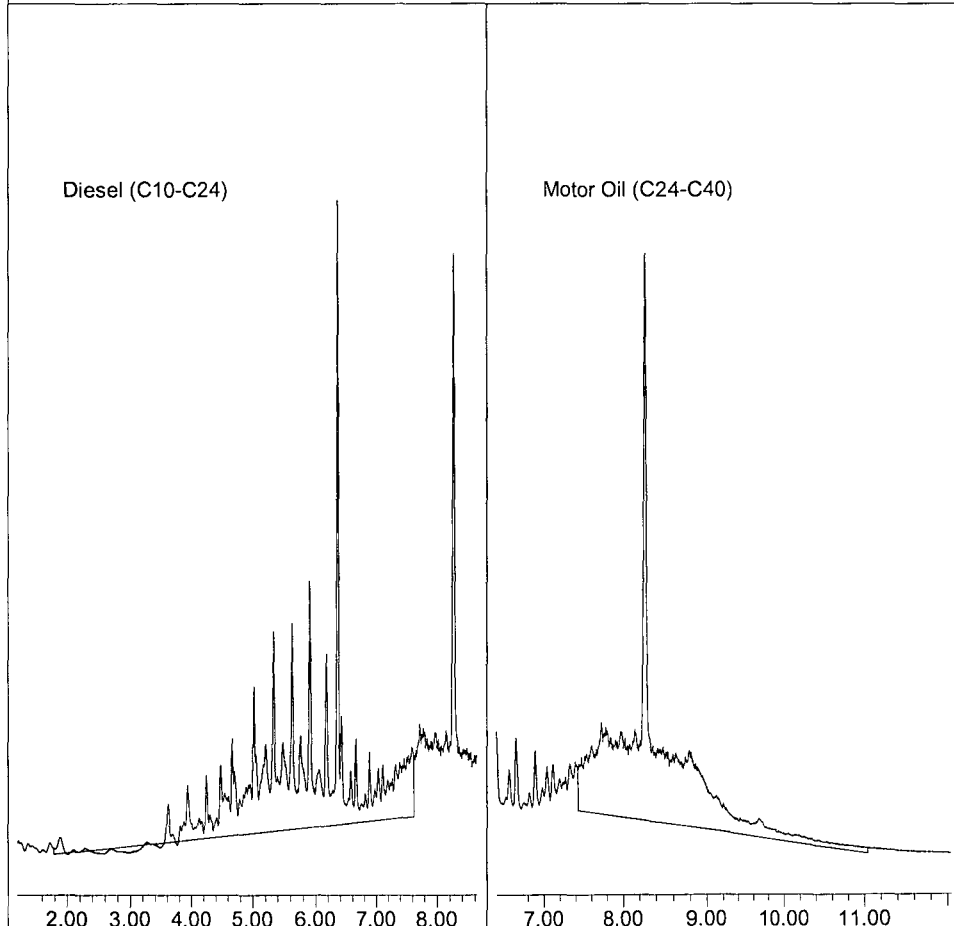
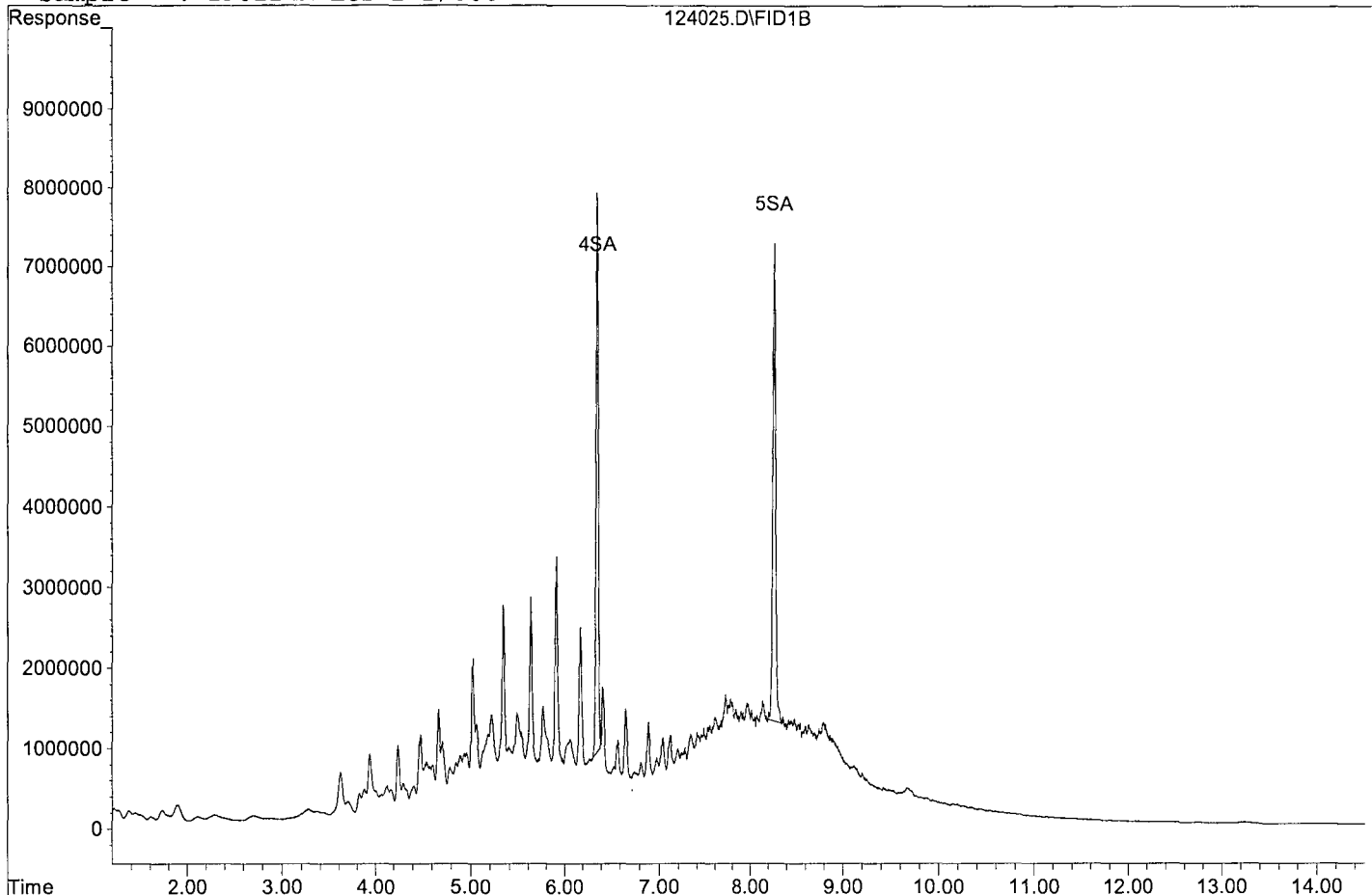
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	120731645	74.730 ppb
Surrogate Spike 75.000		Recovery =	99.64%
5) SA Octacosane(S)	8.27	128377864	85.523 ppb
Surrogate Spike 75.000		Recovery =	114.03%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1259945928	1325.824 ppb
2) HBTM Motor Oil (C24-C40)	9.23	917867016	1234.221 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124025.D

Sample : 190124A LCS-1 2/800



Data File : G:\APOLLO\DATA\190124\124067.D Vial: 67  
 Acq On : 1-29-19 18:40:52 Operator: DP  
 Sample : 190128A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 9:59 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

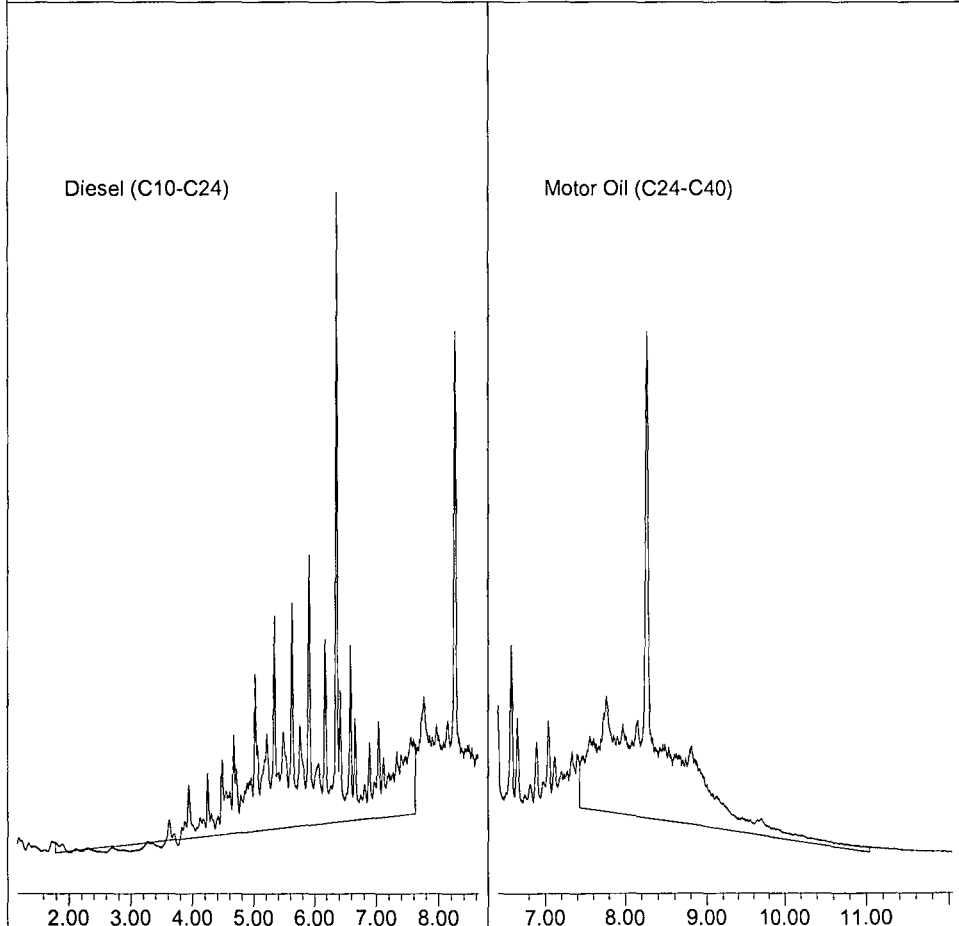
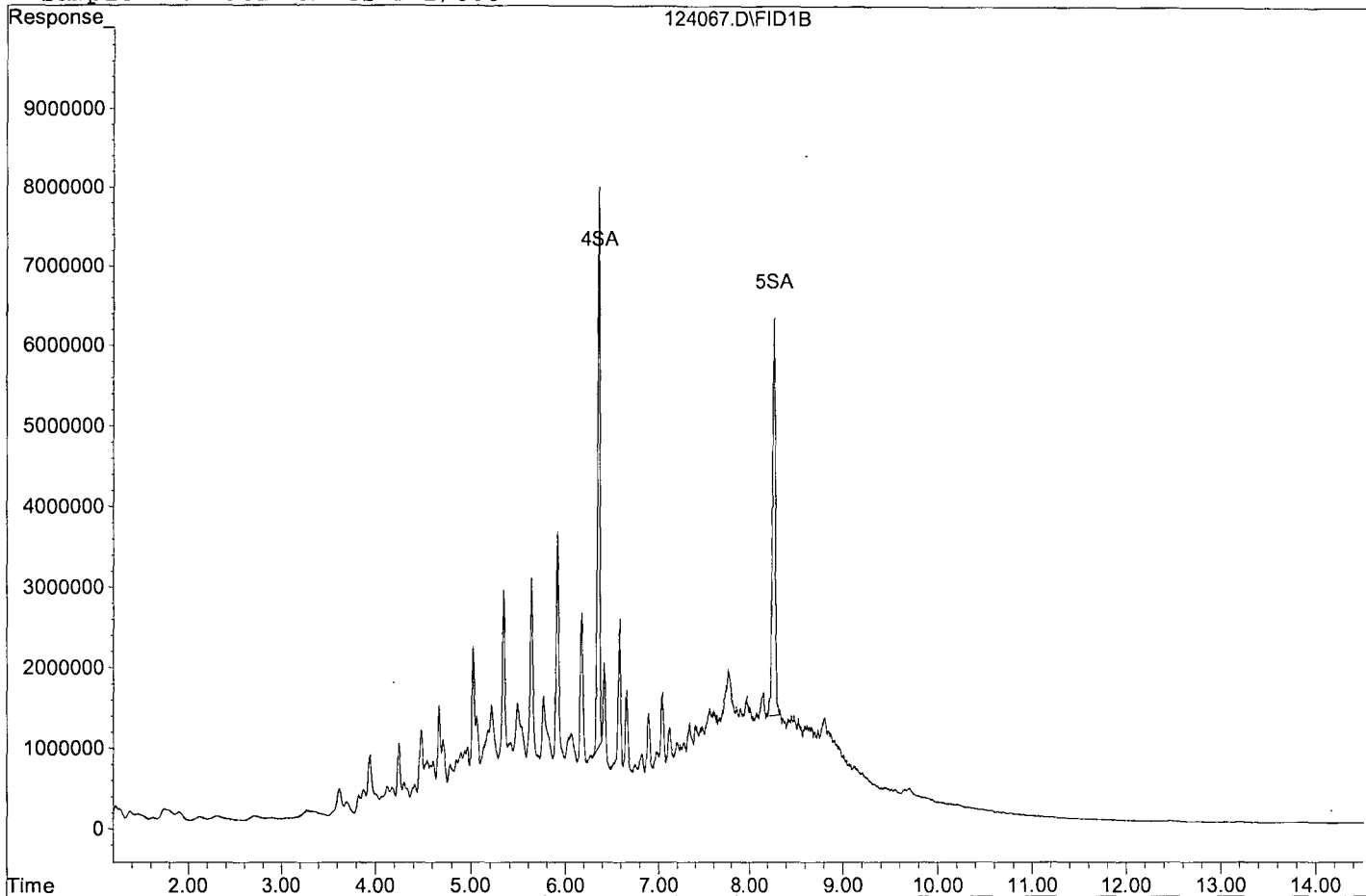
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	115997983	71.800 ppb
Surrogate Spike 75.000		Recovery =	95.73%
5) SA Octacosane(S)	8.27	109685379	73.070 ppb
Surrogate Spike 75.000		Recovery =	97.43%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1377893970	1449.939 ppb
2) HBTM Motor Oil (C24-C40)	9.23	935078567	1257.365 ppb



Data File: G:\APOLLO\DATA\190124\124067.D

Sample : 190128A LCS-1 2/800



Data File : G:\APOLLO\DATA\190201\201005.D Vial: 5  
 Acq On : 2-1-19 11:08:34 Operator: DP  
 Sample : 190128A LCS-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 11:27 2019 Quant Results File: DOC0117.RES

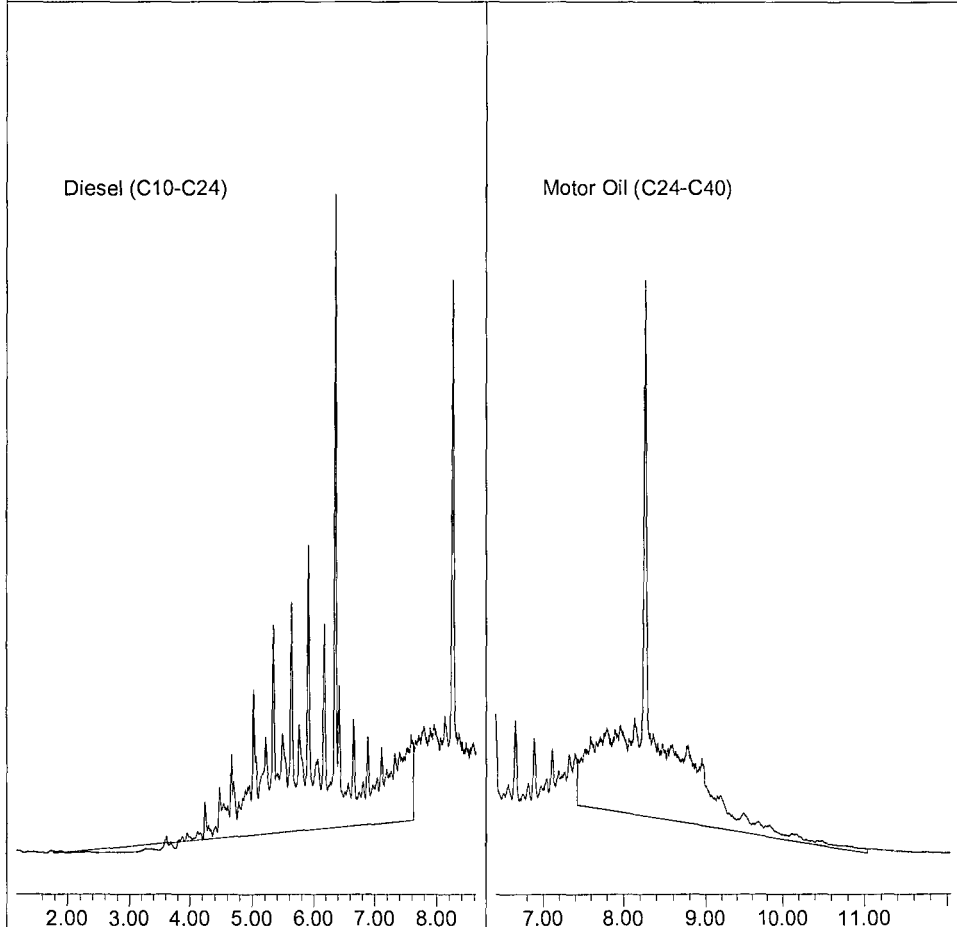
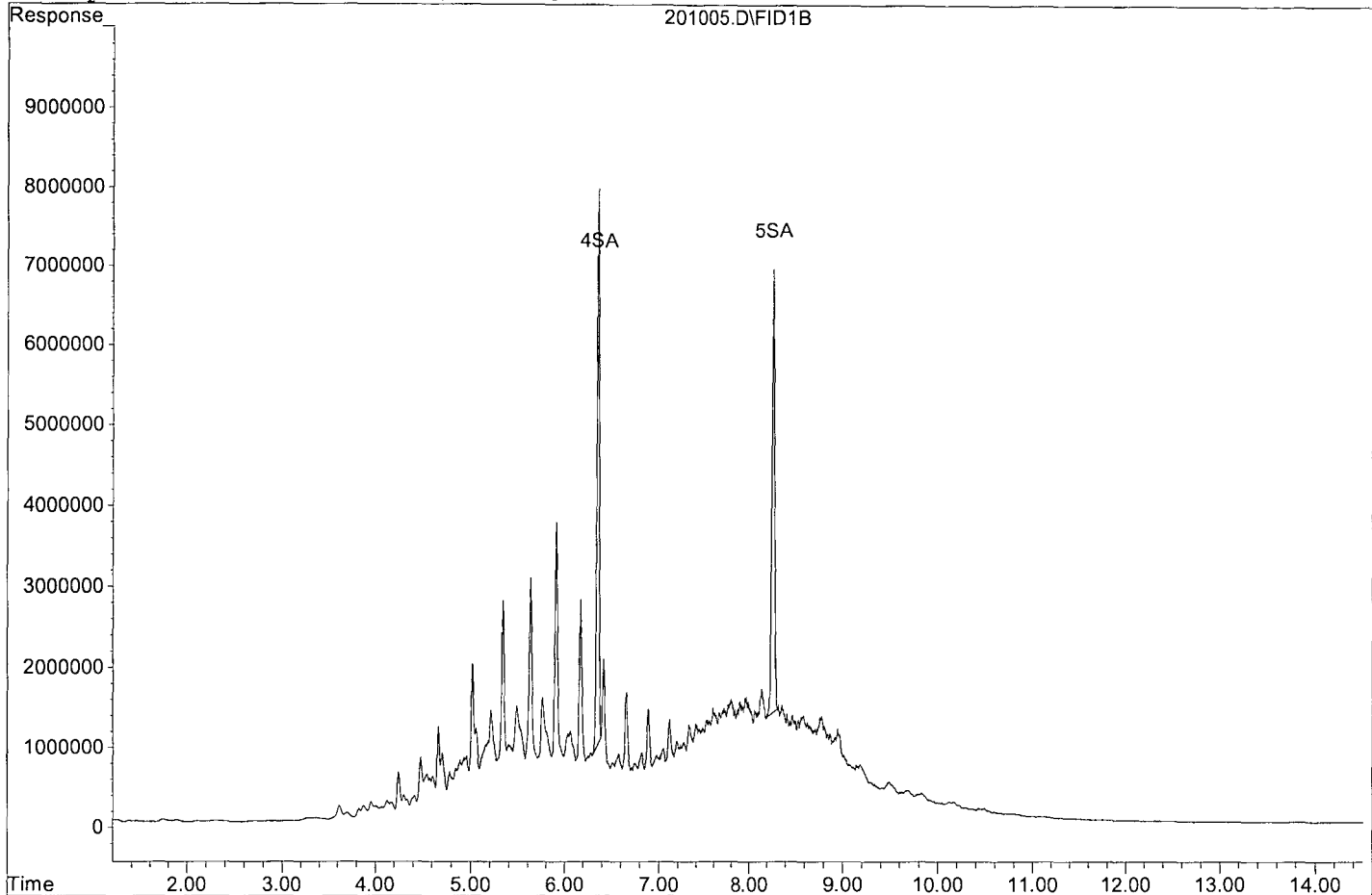
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	119540186	73.992 ppb
Surrogate Spike 75.000		Recovery =	98.66%
5) SA Octacosane(S)	8.27	110413476	73.555 ppb
Surrogate Spike 75.000		Recovery =	98.07%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1364434098	1435.775 ppb
2) HBTM Motor Oil (C24-C40)	9.23	912862913	1227.493 ppb

Data File: G:\APOLLO\DATA\190201\201005.D

Sample : 190128A LCS-1 2/800 SGC



Data File : G:\APOLLO\DATA\190201\201010.D Vial: 10  
 Acq On : 2-1-19 12:48:33 Operator: DP  
 Sample : 190124A LCS-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 13:28 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

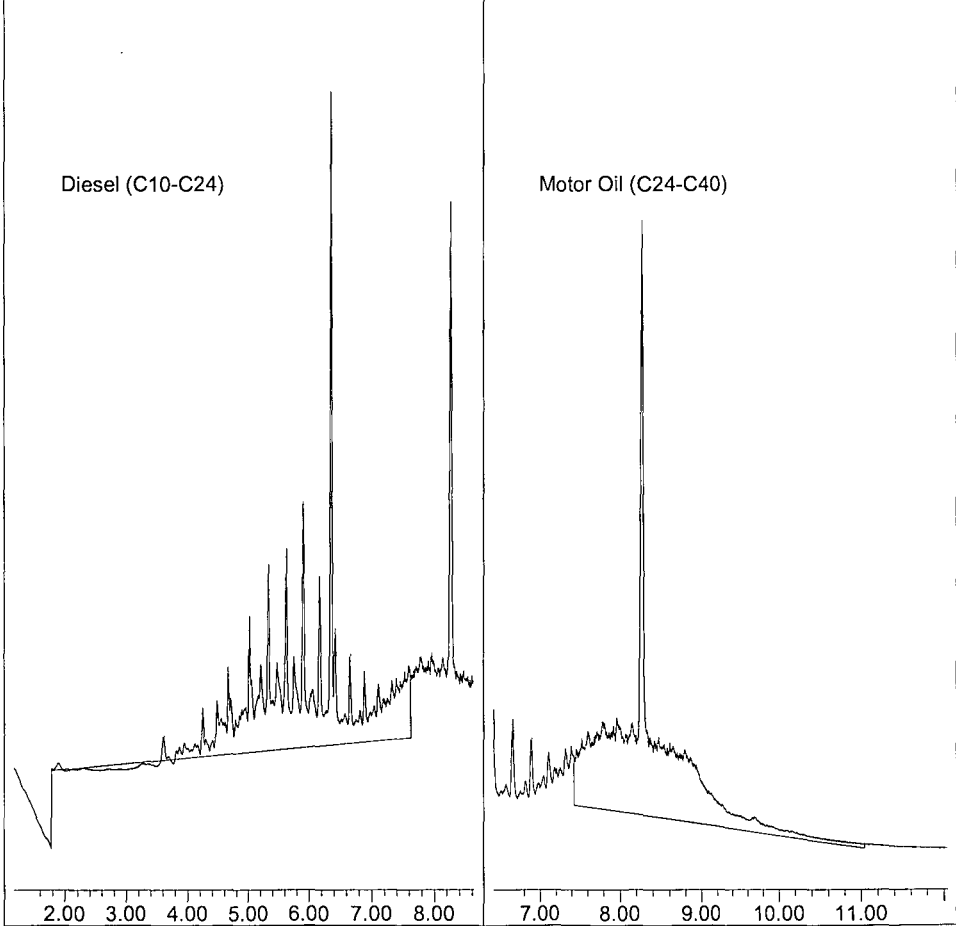
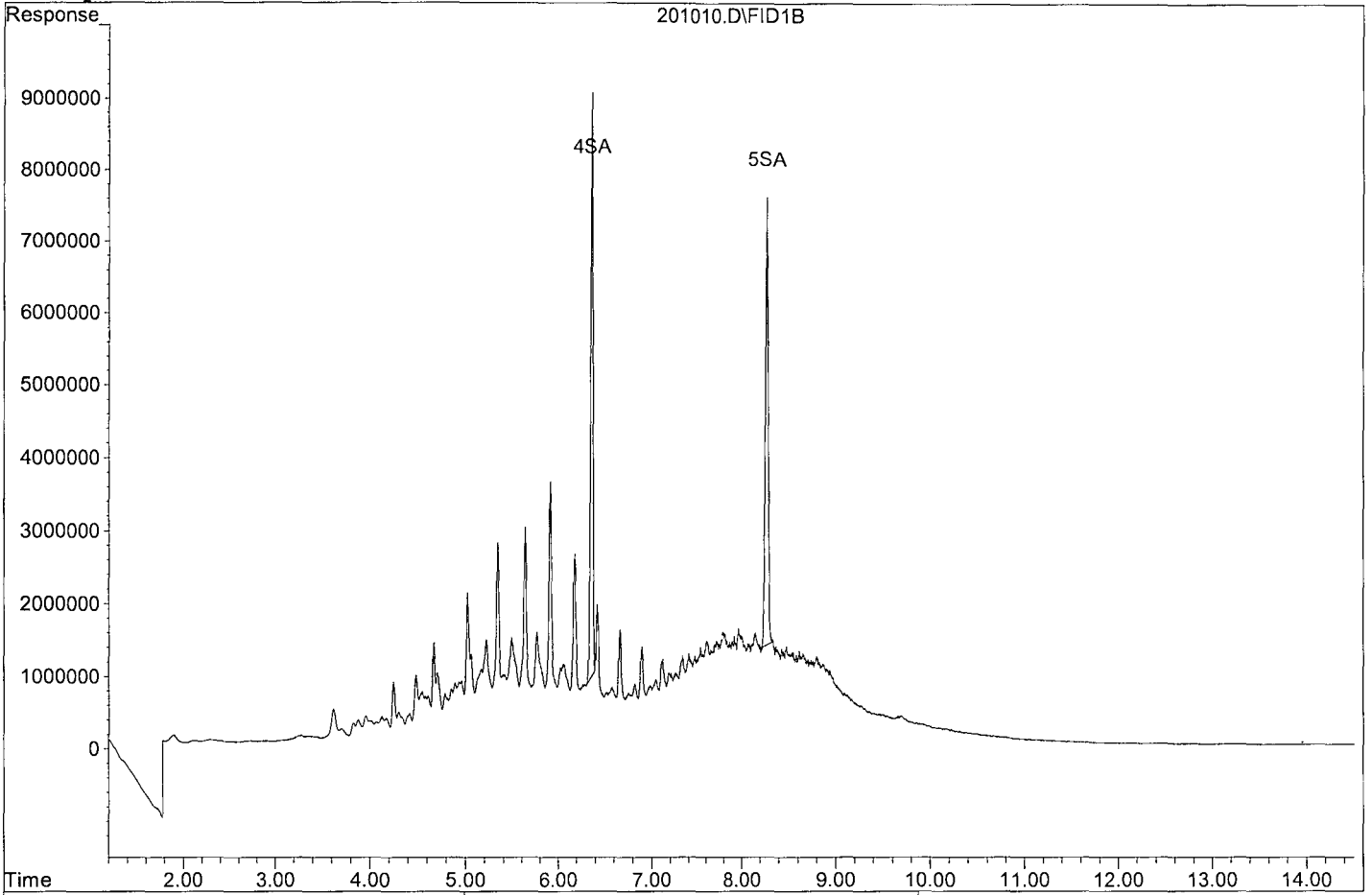
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	135254802	83.719 ppb
Surrogate Spike 75.000		Recovery =	111.63%
5) SA Octacosane(S)	8.27	127819790	85.151 ppb
Surrogate Spike 75.000		Recovery =	113.53%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1311098971	1379.651 ppb
2) HBTM Motor Oil (C24-C40)	9.23	943665036	1268.911 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201010.D

Sample : 190124A LCS-1 2/800 SGC



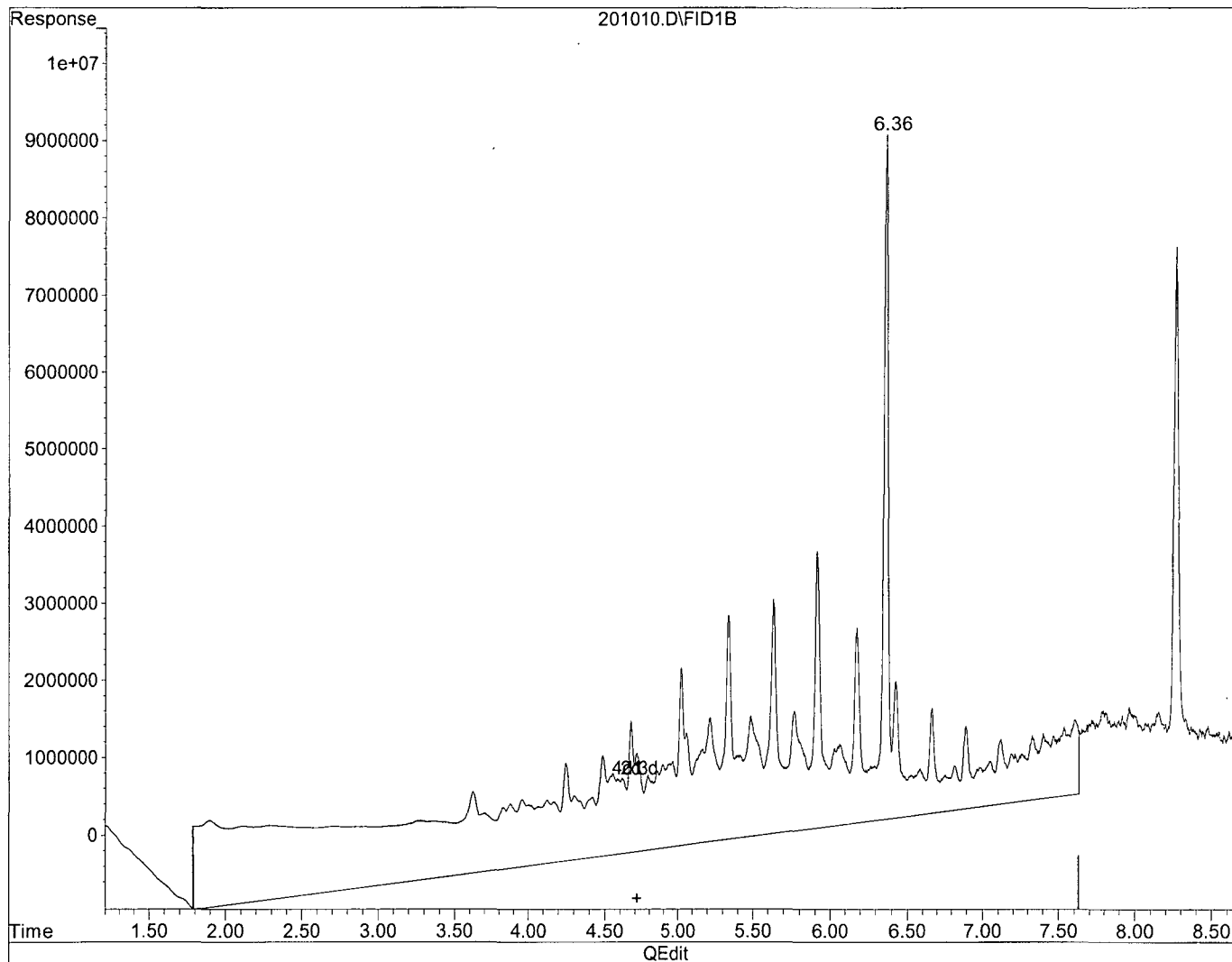
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201010.D  
Acq On : 2-1-19 12:48:33  
Sample : 190124A LCS-1 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 13:27 2019

Vial: 10  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 3255.336ppb m

response 3093583976

(+) = Expected Retention Time

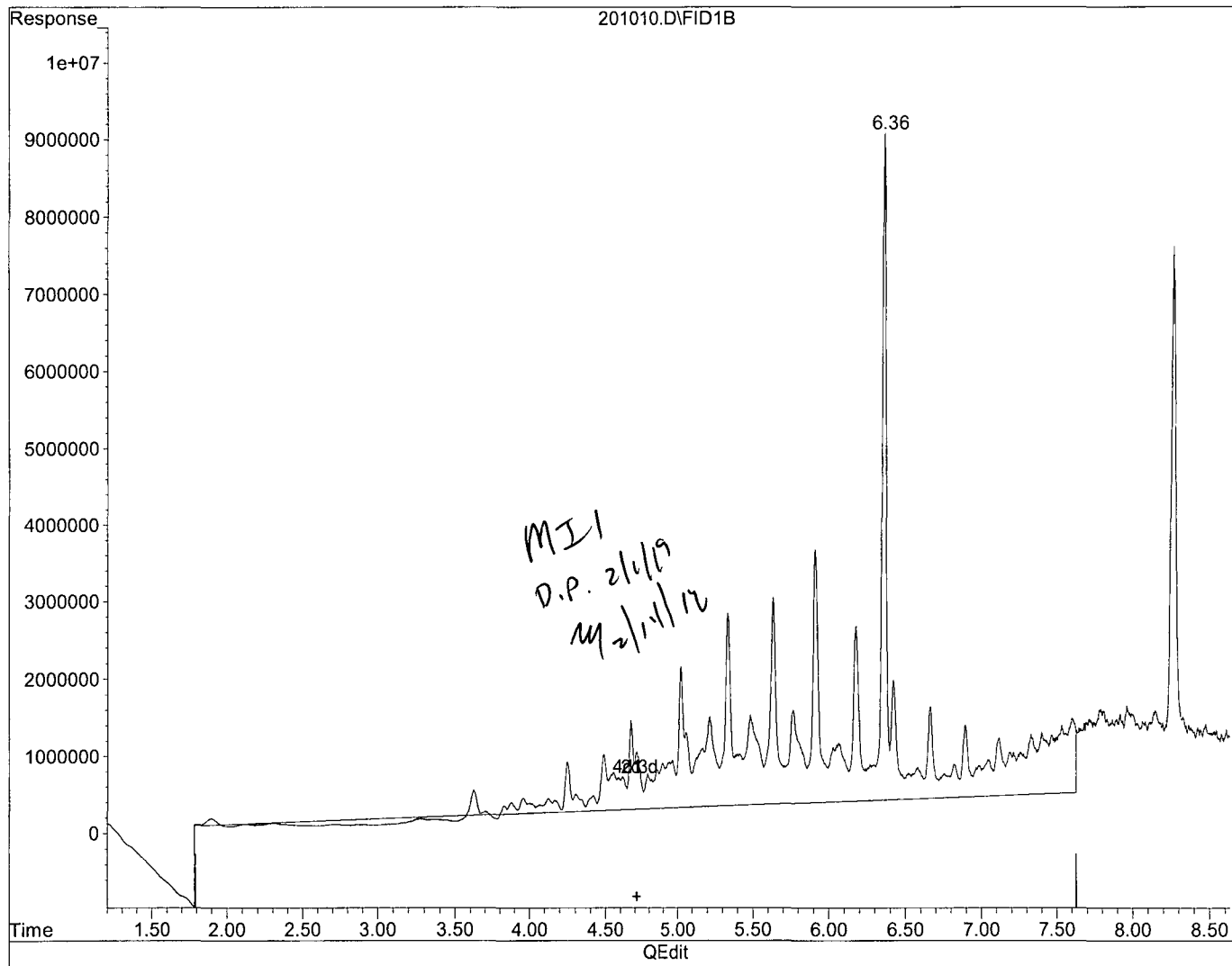
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201010.D  
Acq On : 2-1-19 12:48:33  
Sample : 190124A LCS-1 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 13:27 2019

Vial: 10  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1379.651ppb m  
response 1311098971

Data File : G:\APOLLO\DATA\190124\124026.D Vial: 26  
 Acq On : 1-25-19 17:04:28 Operator: DP  
 Sample : 190124A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 28 9:41 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

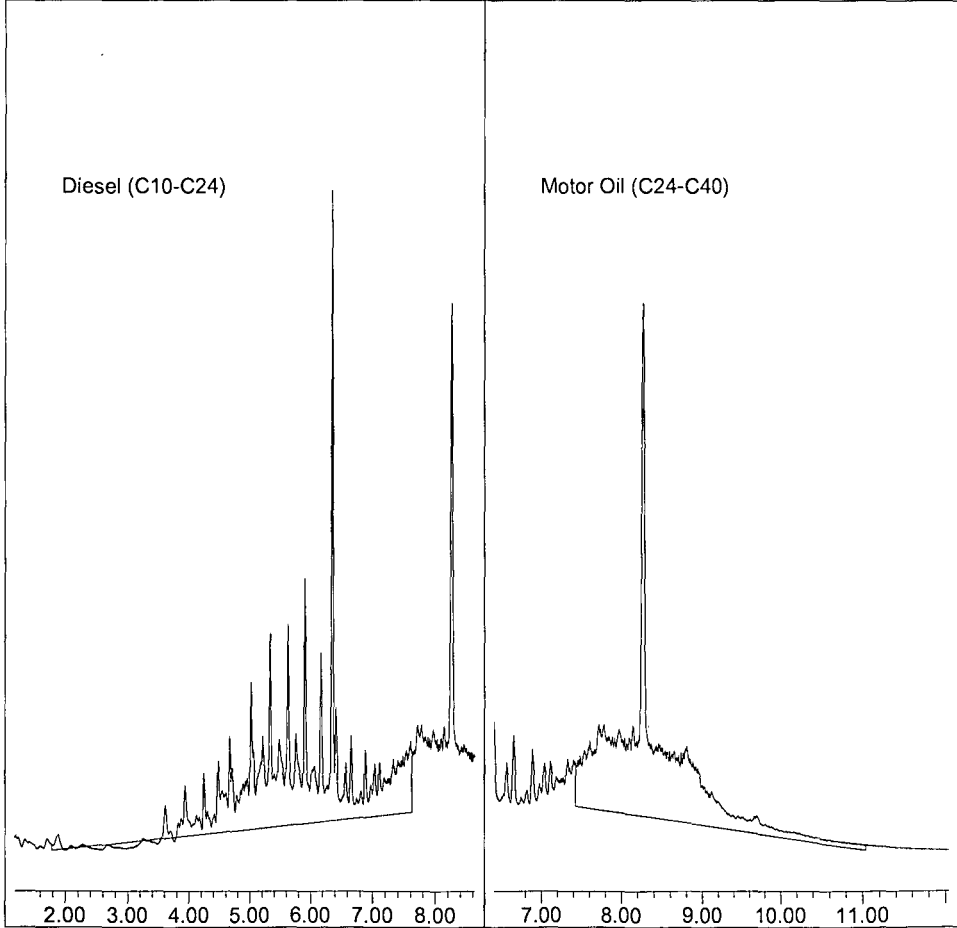
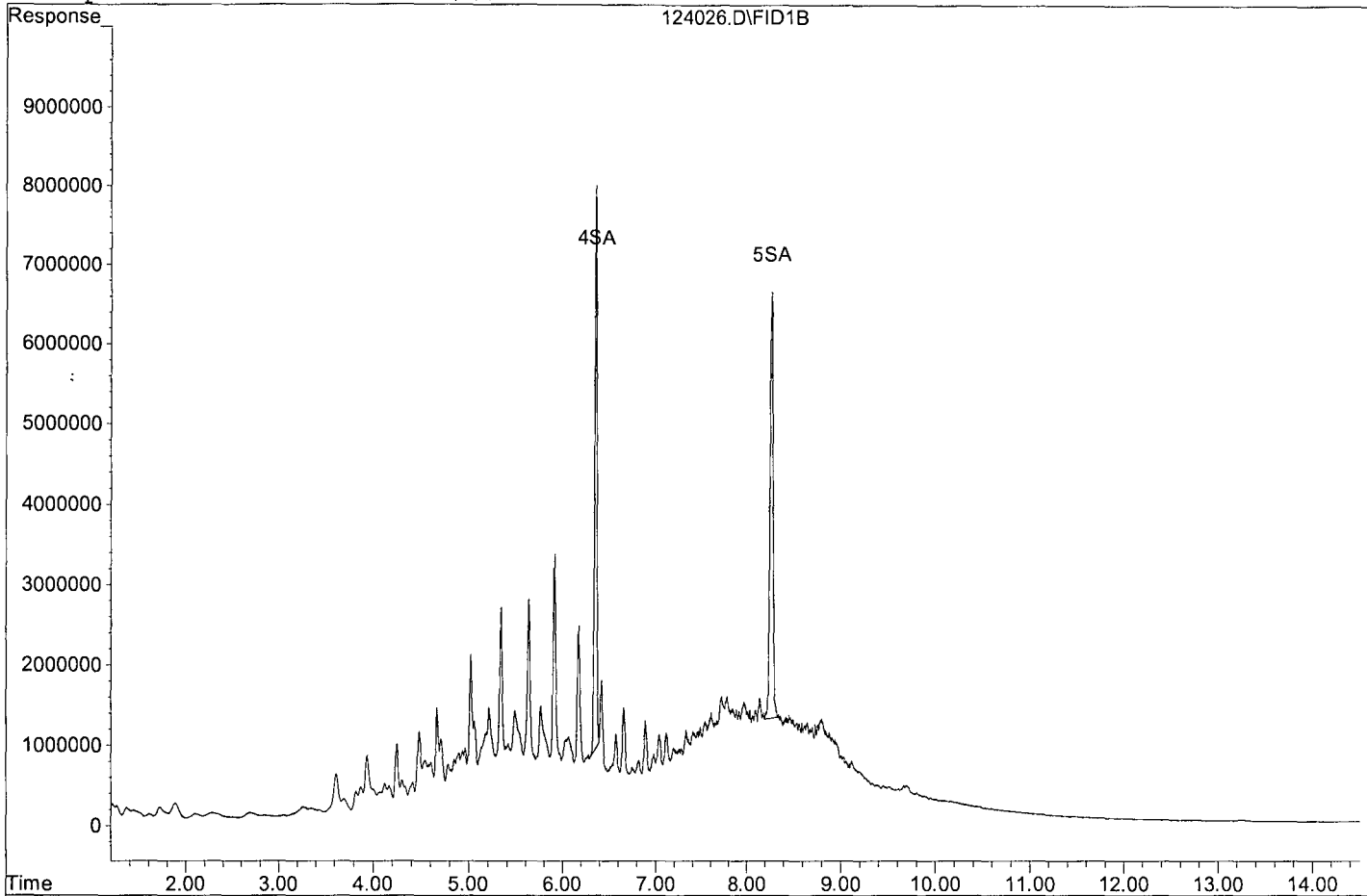
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	118719780	73.485 ppb
Surrogate Spike 75.000		Recovery =	97.98%
5) SA Octacosane(S)	8.27	125545605	83.636 ppb
Surrogate Spike 75.000		Recovery =	111.51%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1245400594	1310.518 ppb
2) HBTM Motor Oil (C24-C40)	9.23	904643924	1216.441 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124026.D

Sample : 190124A LCSD-1 2/800



Data File : G:\APOLLO\DATA\190124\124068.D Vial: 68  
 Acq On : 1-29-19 19:00:50 Operator: DP  
 Sample : 190128A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 10:00 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

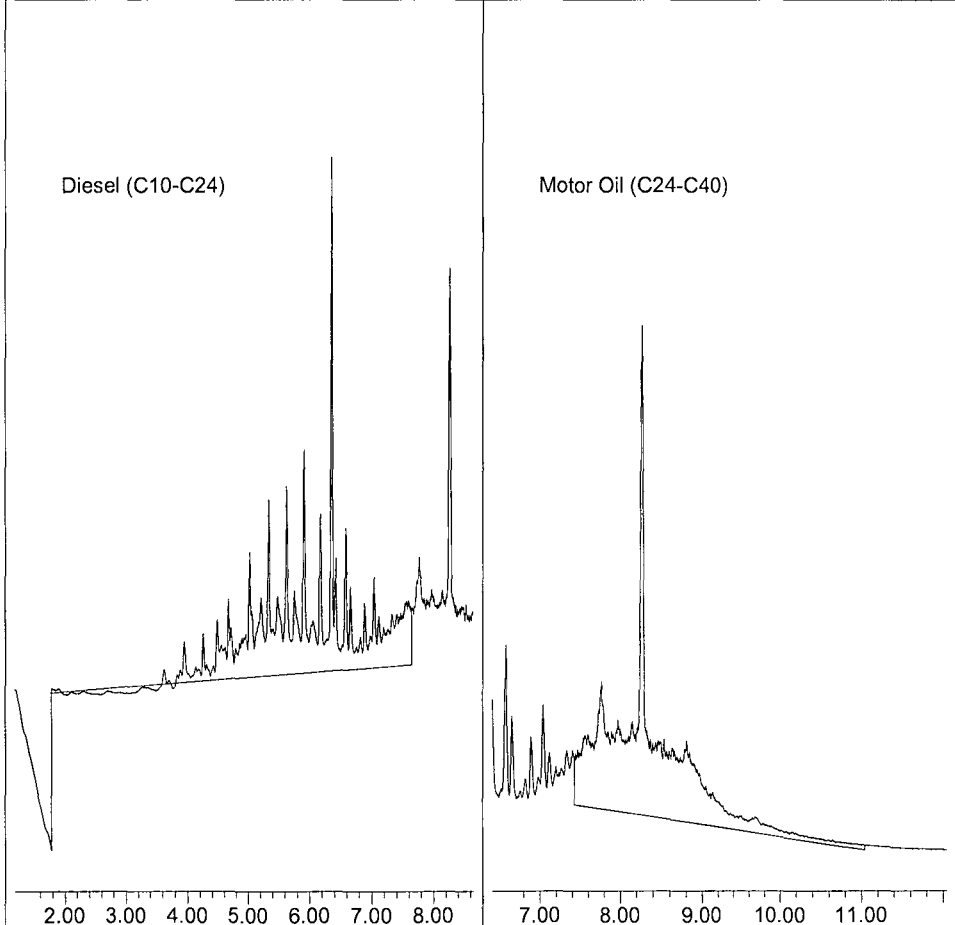
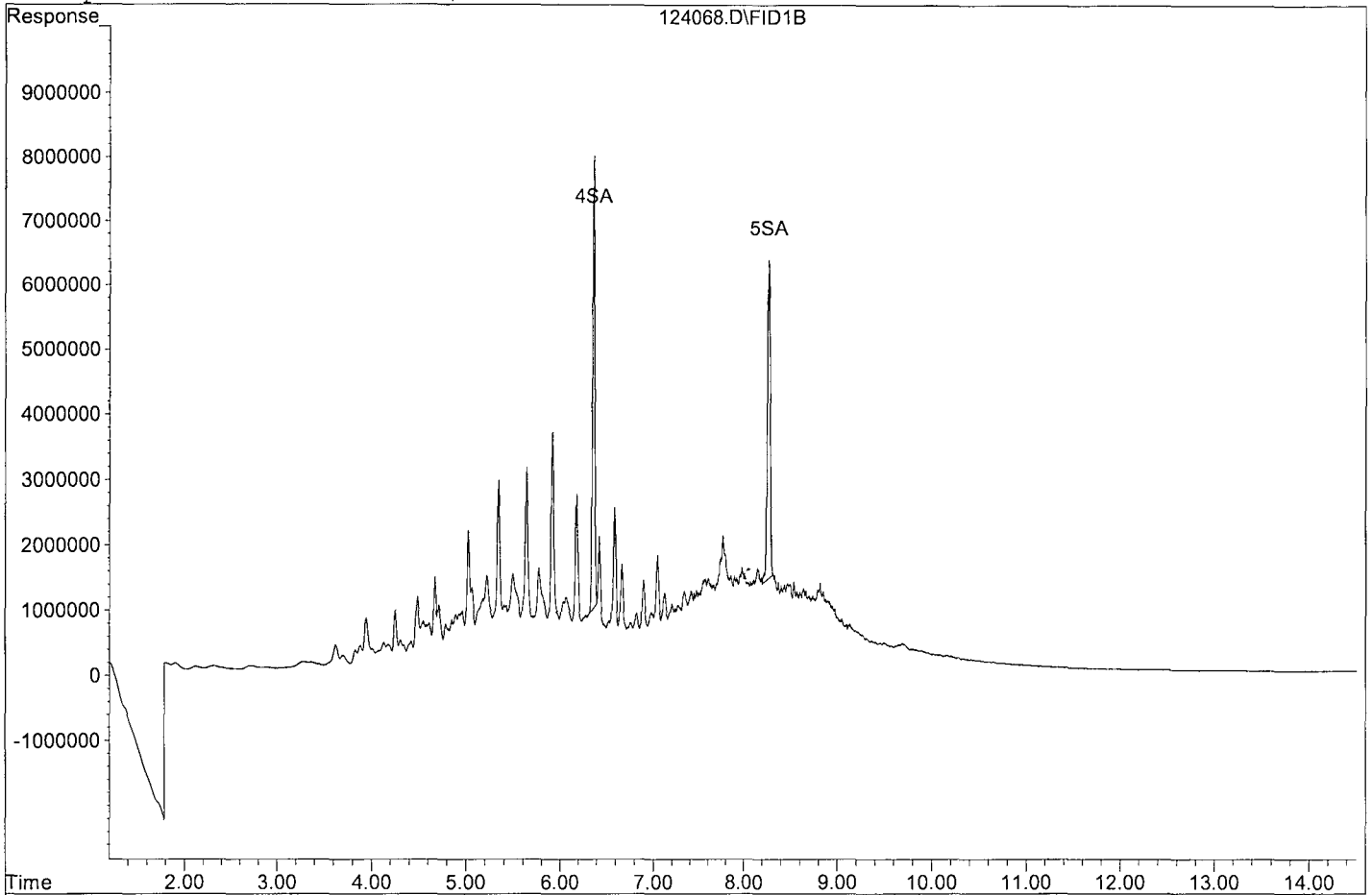
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	115433307	71.450 ppb
Surrogate Spike 75.000		Recovery =	95.27%
5) SA Octacosane(S)	8.27	105728166	70.434 ppb
Surrogate Spike 75.000		Recovery =	93.91%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1431606334	1506.460 ppb
2) HBTM Motor Oil (C24-C40)	9.23	950564304	1278.188 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124068.D

Sample : 190128A LCSD-1 2/800



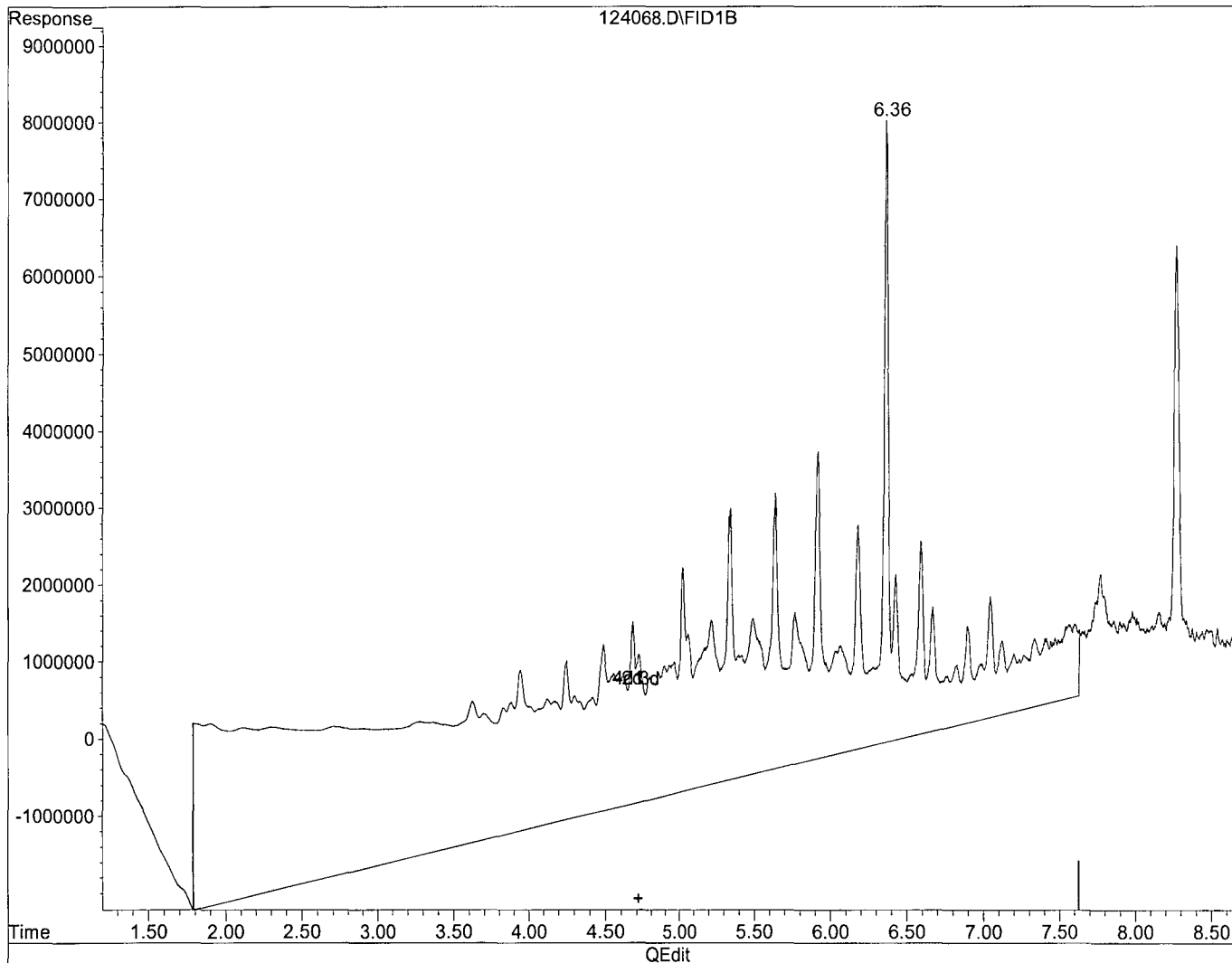
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124068.D  
Acq On : 1-29-19 19:00:50  
Sample : 190128A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 9:59 2019

Vial: 68  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 5731.343ppb m  
response 5446562897

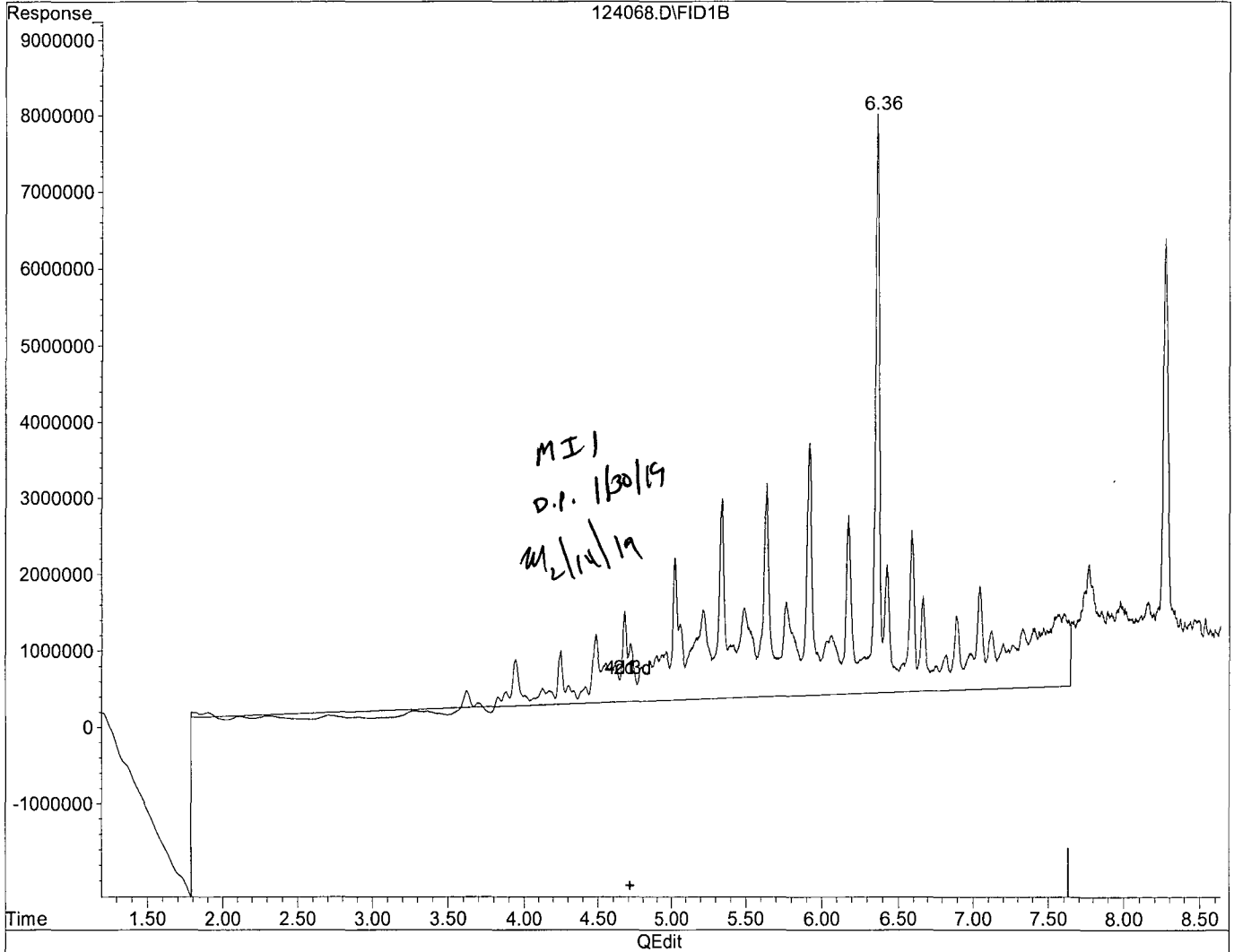
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124068.D  
Acq On : 1-29-19 19:00:50  
Sample : 190128A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 9:59 2019

Vial: 68  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1506.460ppb m  
response 1431606334

Data File : G:\APOLLO\DATA\190201\201006.D Vial: 6  
 Acq On : 2-1-19 11:28:41 Operator: DP  
 Sample : 190128A LCSD-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 11:36 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

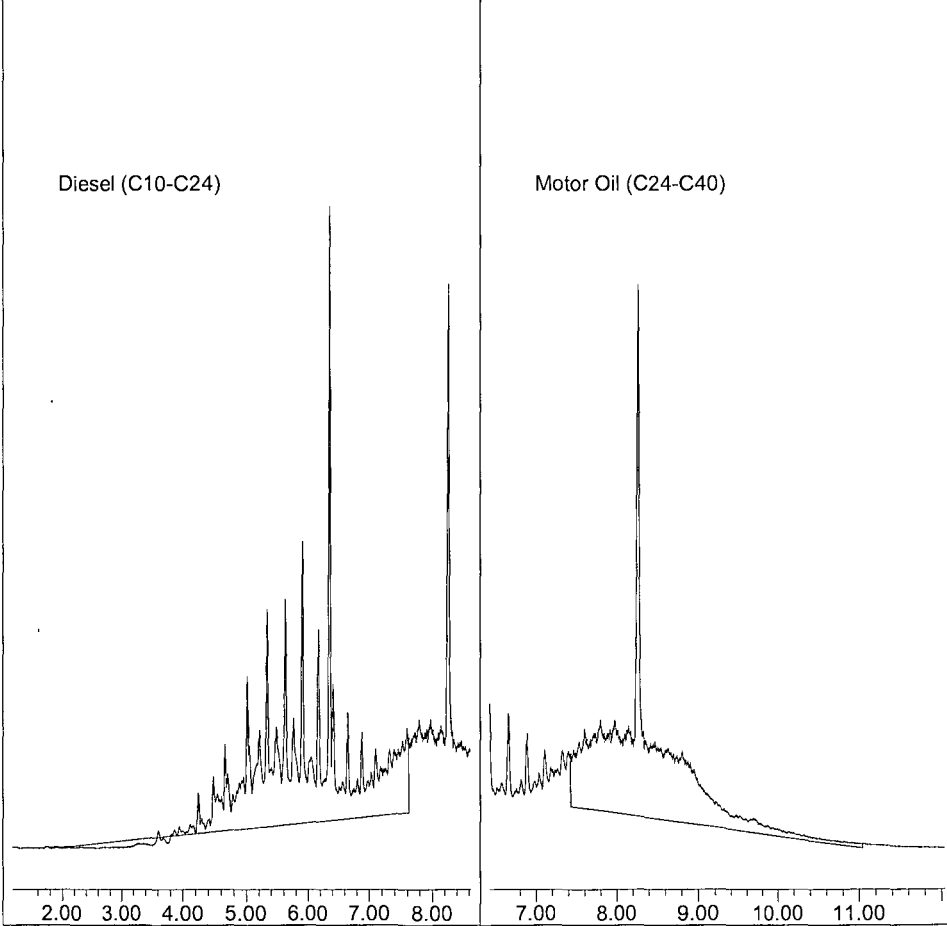
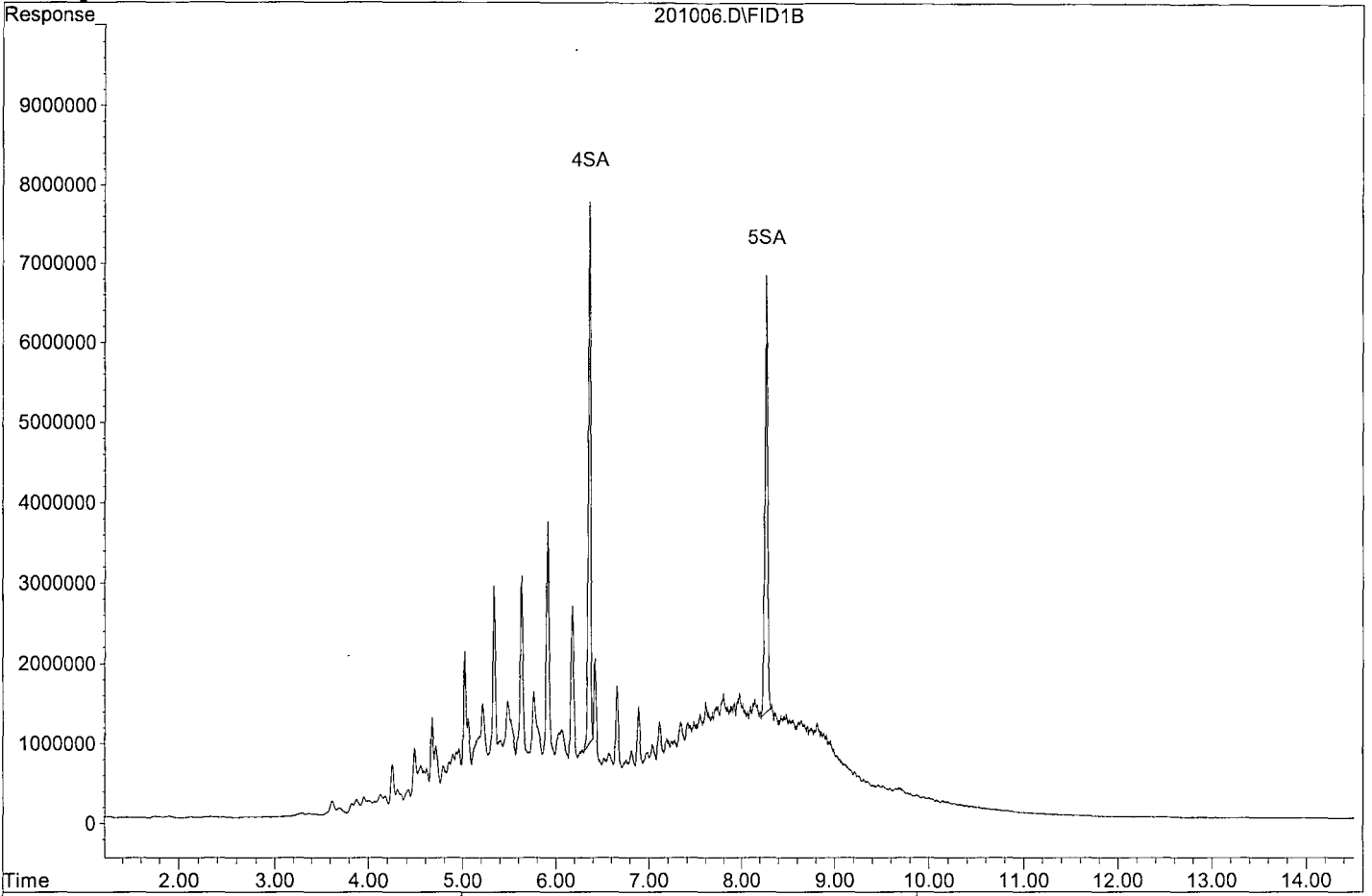
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	117997390	73.037 ppb
Surrogate Spike 75.000		Recovery =	97.38%
5) SA Octacosane(S)	8.27	109746892	73.111 ppb
Surrogate Spike 75.000		Recovery =	97.48%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1325560768	1394.869 ppb
2) HBTM Motor Oil (C24-C40)	9.23	934442387	1256.510 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201006.D

Sample : 190128A LCSD-1 2/800 SGC



Data File : G:\APOLLO\DATA\190201\201011.D Vial: 11  
 Acq On : 2-1-19 13:08:42 Operator: DP  
 Sample : 190124A LCSD-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 13:28 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

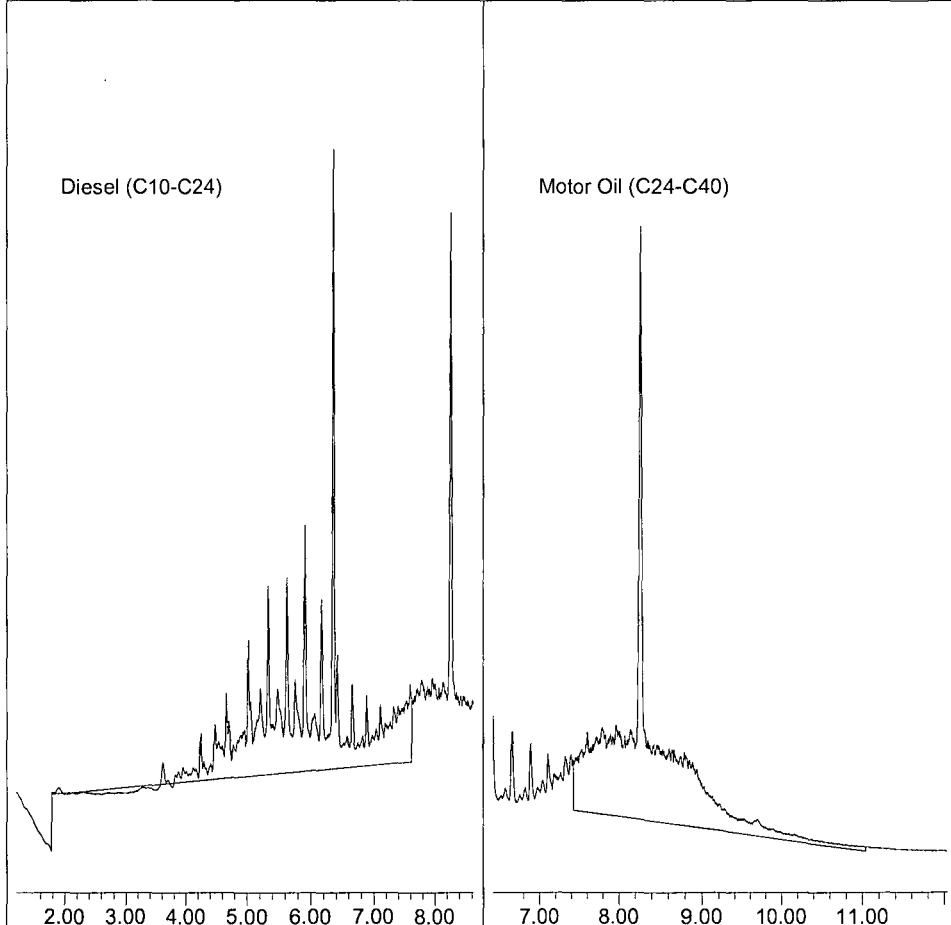
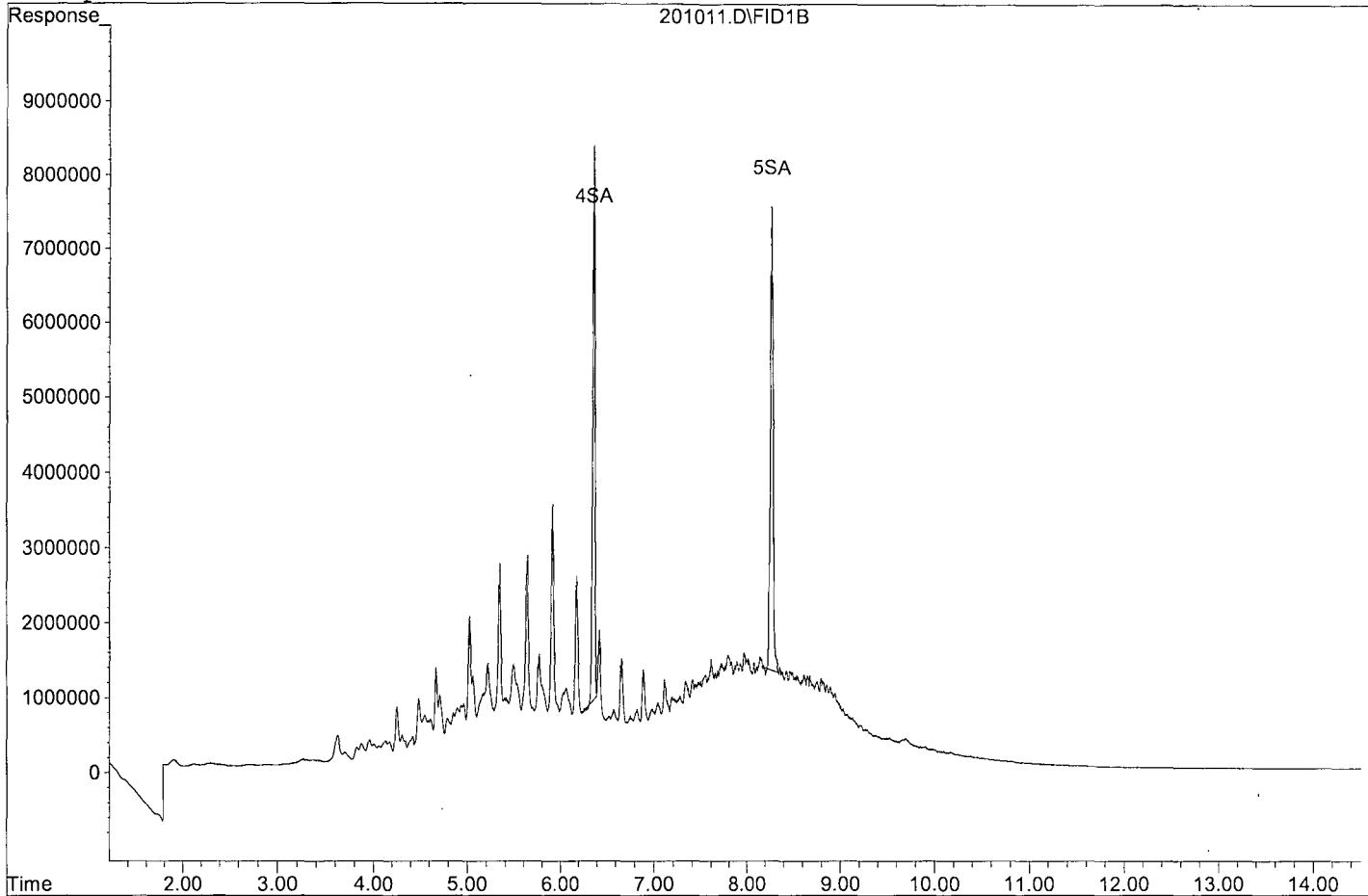
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	126812268	78.494 ppb
Surrogate Spike 75.000		Recovery =	104.66%
5) SA Octacosane(S)	8.26	127786783	85.129 ppb
Surrogate Spike 75.000		Recovery =	113.51%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1266923907	1333.167 ppb
2) HBTM Motor Oil (C24-C40)	9.23	940279675	1264.359 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190201\201011.D

Sample : 190124A LCSD-1 2/800 SGC



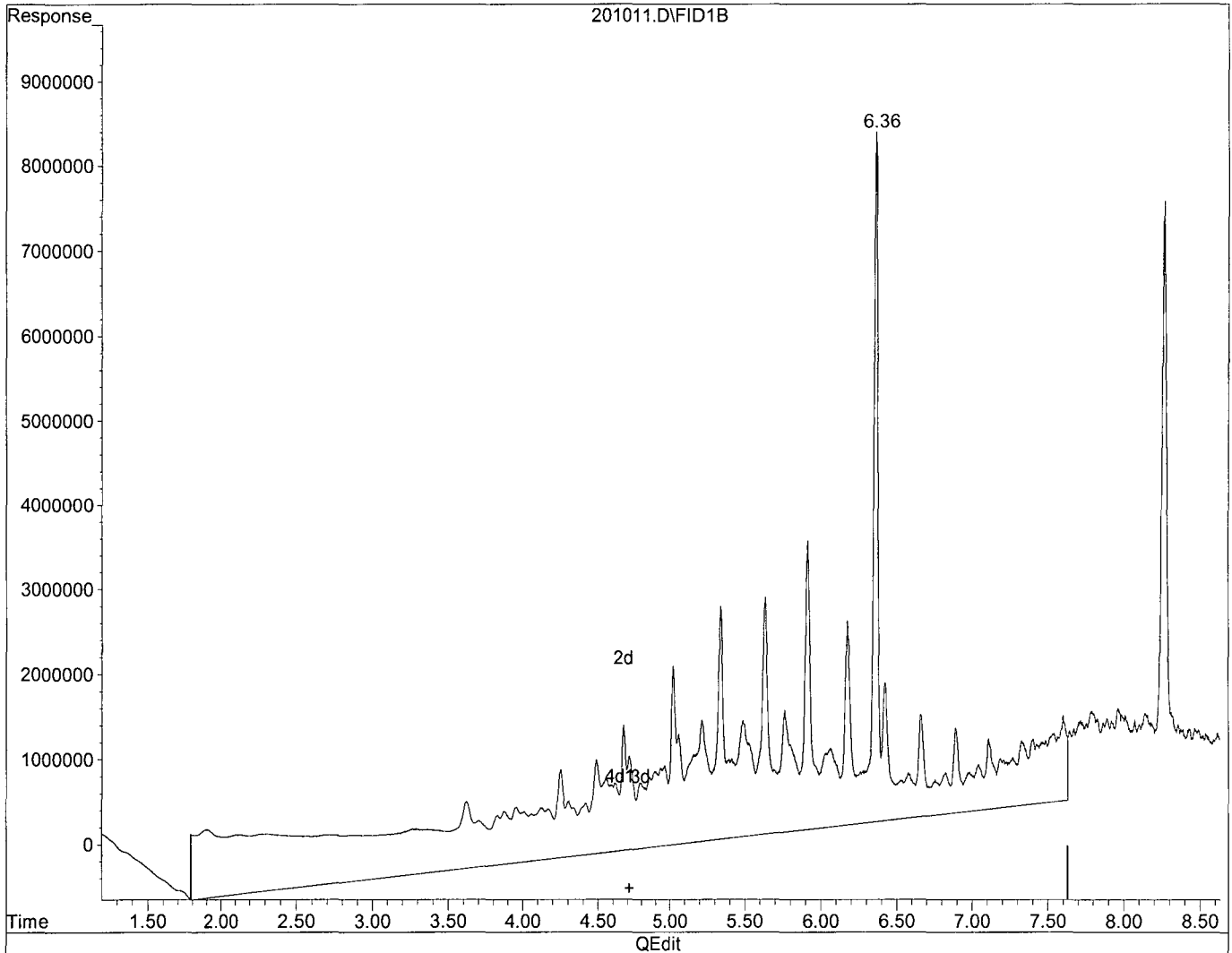
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201011.D  
Acq On : 2-1-19 13:08:42  
Sample : 190124A LCSD-1 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 13:28 2019

Vial: 11  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 2639.420ppb m  
response 2508271849

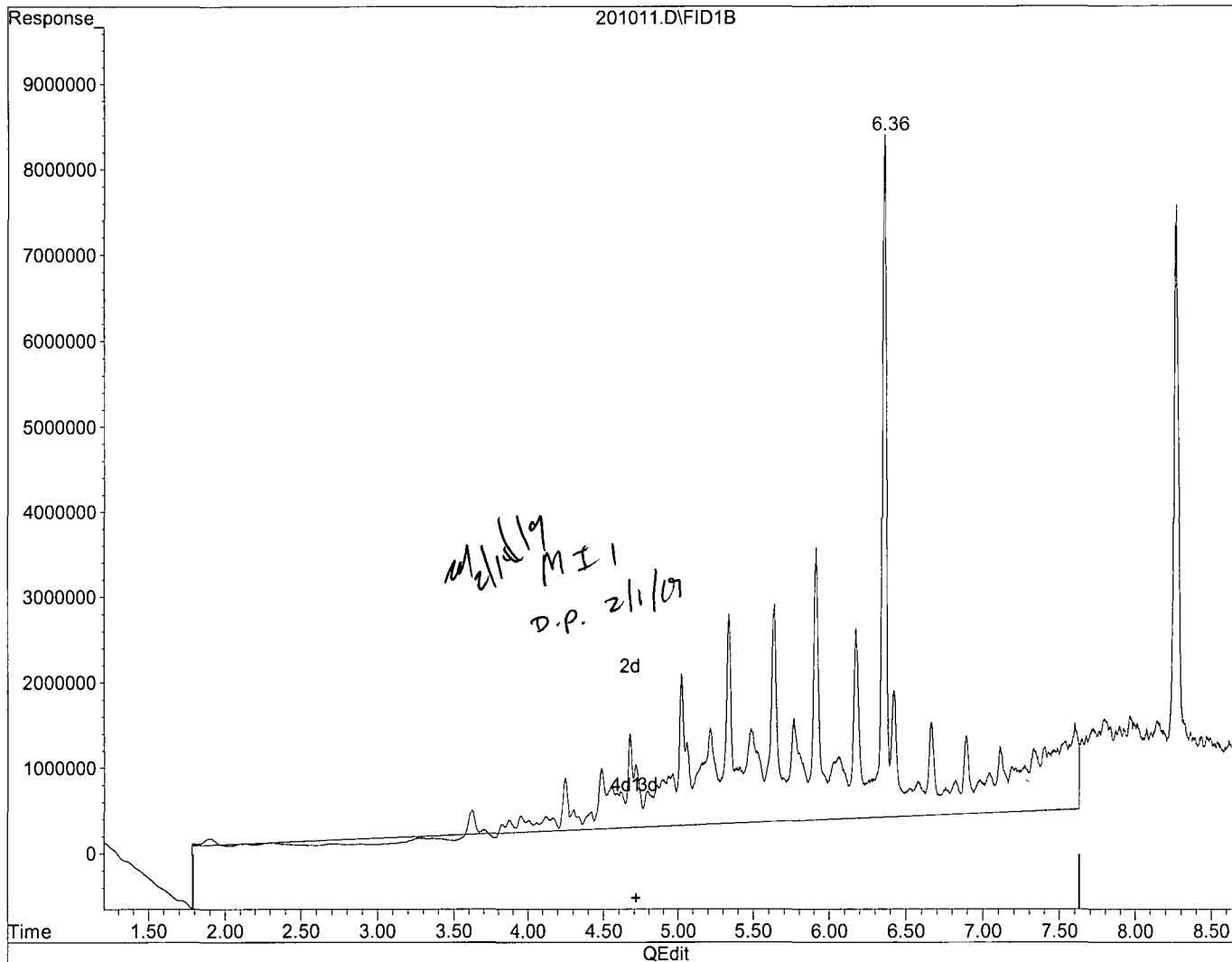
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201011.D  
Acq On : 2-1-19 13:08:42  
Sample : 190124A LCSD-1 2/800 SGC  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 13:28 2019

Vial: 11  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 1333.167ppb m

response 1266923907

(+) = Expected Retention Time

Diesel / Motor Oil Calibration Standard										
Prepared: 01/15/19						Prepared By (Initials): DP				
Expires: 01/15/20										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0135614-39409	01/15/20	03/31/25	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	A0135245-39351	01/15/20	03/31/25	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	CL12572-39691	08/13/19	06/30/23	1666uL			100
Diesel / Motor Oil Second Source (SS)										
Prepared: 01/15/19						Prepared By (Initials): DP				
Expires: 01/15/20										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2 Second Source	O2SI	G34-011598-03	50,000	G34-319187-38958	08/02/19	09/29/21	50uL	10mL	MC	250
Motor Oil Second Source	O2SI	116390-02-SS	50,000	301142-37652	07/13/19	03/05/22	50uL			
Diesel / Motor Oil Calibration Curve										
Prepared: 01/17/19						Prepared By (Initials): DP				
Expires: 07/17/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 1	2,000	Prepared 01/17/19	01/15/20	N/A	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 2	2,000	Prepared 01/17/19	01/15/20	N/A	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 3	2,000	Prepared 01/17/19	01/15/20	N/A	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 4	2,000	Prepared 01/17/19	01/15/20	N/A	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 5	2,000	Prepared 01/17/19	01/15/20	N/A	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 6	2,000	Prepared 01/17/19	01/15/20	N/A	100uL	100uL	N/A	2,000
Diesel / Motor Oil CCV										
Prepared: 01/21/19						Prepared By (Initials): DP				
Expires: 07/22/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil STD	APPL	Diesel / Motor Oil CCV	2,000	Prepared 01/15/19	01/15/20	N/A	1250uL	10mL	MC	250

**Motor Oil Spike**

Prepared: 11/15/18

Prepared By (Initials): DP

Expires: 11/15/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Motor Oil Composite	Restek	31464	50,000	A0135245-39352	11/15/19	03/31/25	N/A	N/A	N/A	50,000

**Diesel Spike**

Prepared: 12/11/18

Prepared By (Initials): DP

Expires: 12/11/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Absolute	51046	50,000	111715-39355	12/11/19	11/17/20	N/A	N/A	N/A	50,000

THC Surrogate										
Prepared: 11/21/18						Prepared By (Initials): DP				
Expires: 10/18/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	CL12572-39687	10/18/19	06/30/23	N/A	N/A	N/A	600

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190124A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19		Surrogate ID 1	THC Surrogate 12-17-18 EXP 12-17-19			
Spiked ID 2	Motor Oil Spike 12-0-18 EXP 12-20-19		Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:		NO		
Spiked ID 7			Ext. Start Time:	01/24/19 15:00	01/25/19 09:00		
Spiked ID 8			Ext. End Time:	01/25/19 15:30			
			GC Requires Extract By:	01/30/19 0:00			
			pH1	2	01/24/19 1:35:00 PM	Water Bath Temp Criteria	35,35,35 °
			pH2				
			pH3				

Spiked By: KY

Date 01/24/19

Witnessed By: DL

Date 01/24/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190124A Blk			0.100	1	800	2	2	01/24/19 13:40	
					equip	E-HP3 E-WB1				
2	190124A LCS-1	0.020	1,2	0.100	1	800	2	2	01/24/19 13:40	
					equip	E-HP4 E-WB2				
3	190124A LCSD-1	0.020	1,2	0.100	1	800	2	2	01/24/19 13:40	
					equip	E-HP9 E-WB2				
4	AZ84057 AZ84057W25			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP10 E-WB3				
5	AZ84059 AZ84059W07			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP11 E-WB1				
6	AZ84061 AZ84061W27			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP12 E-WB2				
7	AZ84062 AZ84062W08			0.100	1	800	2	2	01/24/19 13:40	87650
					equip	E-HP13 E-WB3				
8	AZ85520 AZ85520W10			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP14 E-WB1				
9	AZ85523 AZ85523W13			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP15 E-WB2				
10	AZ85525 AZ85525W10			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP16 E-WB3				
11	AZ85527 AZ85527W11			0.100	1	800	2	2	01/24/19 13:40	87932
					equip	E-HP17 E-WB1				

*Kay 1/28/19*

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC849161
Dichloromethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	DP
Date	1/26/19
Time	9:50
Refrigerator	H66671

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/28/19 1:47:36 PM

Reviewed By: *Kay* Date *1/28/19*  
 Page 277 of 953  
 Ext\_ID 61595



# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH- 3520C w/SGC	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ005SGC	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 1-25-19 EXP 1-25-20				
Spiked ID 2	Motor Oil Spike 12-20-18 EXP 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/28/19 15:30			
Spiked ID 8		Ext. End Time:		01/29/19 9:30 , 01/29/19 11:30			
<b>GC Requires Extract By:</b>				01/30/19 0:00			
pH1	2	01/28/19 1:50:00 PM		Water Bath Temp Criteria		35,35,35 °	
pH2							
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190128A Blk			0.100	1	800	2	2	01/28/19 14:15	
						equip	E-HP11 E-WB1			
2	190128A LCS-1	0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	
						equip	E-HP10 E-WB2			
3	190128A LCSD-1	0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	
						equip	E-HP9 E-WB3			
4	AZ85521 AZ85521W11			0.100	1	800	2	2	01/28/19 14:15	87932
						equip	E-HP7 E-WB1			
5	AZ85565 AZ85565W24			0.100	1	800	2	2	01/28/19 14:15	87940
						equip	E-HP6 E-WB2			
6	AZ85567 AZ85567W21			0.100	1	800	2	2	01/28/19 14:15	87940
						equip	E-HP4 E-WB3			

Kyr 1/29/19

Solvent and Lot#	
1+1 HCL (5mLs)	11-19-18
PH Strips	HC 849161
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 2:00:56 PM

Reviewed By: *Kyr* Date: *1/29/19*

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190124A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19		Surrogate ID 1	THC Surrogate 12-17-18 EXP 12-17-19			
Spiked ID 2	Motor Oil Spike 12-0-18 EXP 12-20-19		Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:		NO		
Spiked ID 7			Ext. Start Time:		01/24/19 15:00		
Spiked ID 8			Ext. End Time:		01/25/19 15:30		
				GC Requires Extract By:		01/30/19 0:00	
		pH1	2	01/24/19 1:35:00 PM	Water Bath Temp Criteria		35,35,35 °
		pH2					
		pH3					

Spiked By: KY

Date 01/24/19

Witnessed By: DL

Date 01/24/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190124A Blk			0.100	1	800	2	2	01/24/19 13:40	*
						equip		E-HP3 E-WB1		
2	190124A LCS-1	0.020	1,2	0.100	1	800	2	2	01/24/19 13:40	*
						equip		E-HP4 E-WB2		
3	190124A LCSD-1	0.020	1,2	0.100	1	800	2	2	01/24/19 13:40	*
						equip		E-HP9 E-WB2		
4	AZ84057 AZ84057W25			0.100	1	800	2	2	01/24/19 13:40	87650
						equip		E-HP10 E-WB3		
5	AZ84059 AZ84059W07			0.100	1	800	2	2	01/24/19 13:40	87650
						equip		E-HP11 E-WB1		
6	AZ84061 AZ84061W27			0.100	1	800	2	2	01/24/19 13:40	87650
						equip		E-HP12 E-WB2		
7	AZ84062 AZ84062W08			0.100	1	800	2	2	01/24/19 13:40	87650
						equip		E-HP13 E-WB3		
8	AZ85520 AZ85520W10			0.100	1	800	2	2	01/24/19 13:40	87932 *
						equip		E-HP14 E-WB1		
9	AZ85523 AZ85523W13			0.100	1	800	2	2	01/24/19 13:40	87932
						equip		E-HP15 E-WB2		
10	AZ85525 AZ85525W10			0.100	1	800	2	2	01/24/19 13:40	87932
						equip		E-HP16 E-WB3		
11	AZ85527 AZ85527W11			0.100	1	800	2	2	01/24/19 13:40	87932
						equip		E-HP17 E-WB1		

*KY 1/31/19*

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573
Silica Gel (*)	021111q

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/28/19 1:47:36 PM

Reviewed By: *KY* Date *1/31/19*

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH- 3520C w/SGC	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ005SGC	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 1-25-19 EXP 1-25-20				
Spiked ID 2	Motor Oil Spike 12-20-18 EXP 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/28/19 15:30			
Spiked ID 8		Ext. End Time:		01/29/19 9:30			
		GC Requires Extract By:		01/30/19 0:00			
pH1	2	01/28/19 1:50:00 PM		Water Bath Temp Criteria		35,35,35 °	
pH2							
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190128A Bk			0.100	1	800	2	2	01/28/19 14:15	*
						equip E-HP11 E-WB1				
2	190128A LCS-1	0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	*
						equip E-HP10 E-WB2				
3	190128A LCSD-1	0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	*
						equip E-HP9 E-WB3				
4	AZ85521 AZ85521W11			0.100	1	800	2	2	01/28/19 14:15	87932 *
						equip E-HP7 E-WB1				
5	AZ85565 AZ85565W24			0.100	1	800	2	2	01/28/19 14:15	87940
						equip E-HP6 E-WB2				
6	AZ85567 AZ85567W21			0.100	1	800	2	2	01/28/19 14:15	87940 *
						equip E-HP4 E-WB3				

Key 1/31/19

Solvent and Lot#	
1+1 HCL (5mLs)	11-19-18
PH Strips	HC 849161
Filter Paper	400148
B. Sodium Sulfate	2018110573
Silica Gel (*)	021111q

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 2:00:56 PM.

Reviewed By: *Key* Date *1/31/19*

## Injection Log

Directory: G:\APOLLO\DATA\180814\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
17	814017.D	1	Decanoic Acid - 1 8/13/18	Mix(C)	8-14-18 16:56:27
18	814018.D	1	Decanoic Acid - 2 8/13/18	Mix(C)	8-14-18 17:15:48
19	814019.D	1	Decanoic Acid - 3 8/13/18	Mix(C)	8-14-18 17:35:59
20	814020.D	1	Decanoic Acid - 4 8/13/18	Mix(C)	8-14-18 17:56:16
21	814021.D	1	Decanoic Acid - 5 8/13/18	Mix(C)	8-14-18 18:16:22
22	814022.D	1	Decanoic Acid - 6 8/13/18	Mix(C)	8-14-18 18:36:30
2	117002.D	1	Diesel / Motor Oil - 1 1/17/19	water	1-17-19 16:38:28
3	117003.D	1	Diesel / Motor Oil - 2 1/17/19	water	1-17-19 16:58:29
4	117004.D	1	Diesel / Motor Oil - 3 1/17/19	water	1-17-19 17:17:50
5	117005.D	1	Diesel / Motor Oil - 4 1/17/19	water	1-17-19 17:37:44
6	117006.D	1	Diesel / Motor Oil - 5 1/17/19	water	1-17-19 17:57:32
7	117007.D	1	Diesel / Motor Oil - 6 1/17/19	water	1-17-19 18:17:22
8	117008.D	1	Diesel / Motor Oil - SS 1/15/19	water	1-17-19 18:37:21
22	124022.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-25-19 15:45:29
24	124024.D	2.5	190124A BLK 2/800	water	1-25-19 16:25:09
25	124025.D	2.5	190124A LCS-1 2/800	water	1-25-19 16:44:30
26	124026.D	2.5	190124A LCSD-1 2/800	water	1-25-19 17:04:28
31	124031.D	2.5	AZ85520W10 2/800	water	1-25-19 18:43:58
32	124032.D	2.5	AZ85523W13 2/800	water	1-25-19 19:03:44
33	124033.D	2.5	AZ85525W10 2/800	water	1-25-19 19:23:31
34	124034.D	2.5	AZ85527W11 2/800	water	1-25-19 19:42:39
44	124044.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-25-19 22:58:02
61	124061.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 16:41:00
66	124066.D	2.5	190128A BLK 2/800	water	1-29-19 18:20:50
67	124067.D	2.5	190128A LCS-1 2/800	water	1-29-19 18:40:52
68	124068.D	2.5	190128A LCSD-1 2/800	water	1-29-19 19:00:50
69	124069.D	2.5	AZ85521W11 2/800	water	1-29-19 19:20:47
72	124072.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 20:19:55
2	201002.D	1	Diesel / Motor Oil - 3 1/21/19	water	2-1-19 10:08:50
3	201003.D	1	Decanoic Acid - 3 8/23/18	water	2-1-19 10:28:46
4	201004.D	2.5	190128A BLK 2/800 SGC	water	2-1-19 10:48:41
5	201005.D	2.5	190128A LCS-1 2/800 SGC	water	2-1-19 11:08:34
6	201006.D	2.5	190128A LCSD-1 2/800 SGC	water	2-1-19 11:28:41
7	201007.D	2.5	AZ85521W11 2/800 SGC	water	2-1-19 11:48:08
9	201009.D	2.5	190124A BLK 2/800 SGC	water	2-1-19 12:28:25
10	201010.D	2.5	190124A LCS-1 2/800 SGC	water	2-1-19 12:48:33
11	201011.D	2.5	190124A LCSD-1 2/800 SGC	water	2-1-19 13:08:42
12	201012.D	2.5	AZ85520W10 2/800 SGC	water	2-1-19 13:28:50
19	201019.D	1	Diesel / Motor Oil - 3 1/21/19	water	2-1-19 15:55:38
20	201020.D	1	Decanoic Acid - 3 8/23/18	water	2-1-19 16:15:43

**ORGANICS**  
**Calibration Data**

PAH by GCMS SIM  
EPA 8270 SIM

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/22/19  
Instrument: Linus

Initials: \_\_\_\_\_

0122L003.D 0122L004.D 0122L005.D 0122L006.D 0122L007.D 0122L008.D 0122L009.D 0122L010.D

	Compound	0.1	0.2	0.5	1	5	10	50	100		Avg	%RSD	Type	r^2	Q	MRF
1	I Naphthalene-D8(IS)															
2	S Surrogate Recovery (NBZ)	0.5368	0.4662	0.3581	0.3806	0.4597	0.4513	0.4398	0.4353		0.44	12	S			
3	TM Naphthalene	1.501	1.326	1.089	1.286	1.383	1.355	1.095	1.039		1.3	13	TM			0.700
4	S 2-Methylnaphthalene-D10 (2M)	1.165	1.119	0.8912	1.140	1.265	1.295	1.170	1.119		1.1	11	S			
5	TM 2-Methylnaphthalene	0.8415	0.7811	0.6384	0.7893	0.8609	0.8572	0.6703	0.6454		0.76	13	TM			0.400
6	TM 1-Methylnaphthalene	0.9488	0.7945	0.6729	0.8072	0.8294	0.8268	0.6596	0.6061		0.77	15	TM			
7	I Acenaphthene-D10(IS)															
8	S Surrogate Recovery (FBP)	2.032	1.654	1.457	1.744	1.923	1.928	1.728	1.675		1.8	10	S			
9	TM Acenaphthylene	6.283	5.718	4.707	5.612	6.305	6.346	5.135	4.672		5.6	12	TM			0.900
10	*TM Acenaphthene	1.920	1.700	1.428	1.705	1.810	1.782	1.400	1.360		1.6	13	*TM			0.900
11	TM Fluorene	2.106	1.923	1.607	1.975	2.155	2.142	1.716	1.657		1.9	12	TM			0.900
12	I Phenanthrene-D10(IS)															
13	TM Phenanthrene	1.596	1.429	1.206	1.461	1.584	1.571	1.261	1.133		1.4	13	TM			0.700
14	TM Anthracene	1.546	1.378	1.157	1.401	1.639	1.579	1.259	1.212		1.4	13	TM			0.700
15	S Fluoranthene-D10 (FRT)	1.960	1.740	1.370	1.644	1.947	1.964	1.702	1.672		1.7	12	S			
16	*TM Fluoranthene	2.487	2.295	1.834	2.252	2.506	2.476	1.900	1.837		2.2	14	*TM			0.600
17	I Chrysene-D12(IS)															
18	TM Pyrene	1.754	1.558	1.296	1.539	1.745	1.699	1.421	1.348		1.5	12	TM			0.600
19	S Surrogate Recovery (TPH)	0.8778	0.8099	0.6667	0.7580	0.8727	0.8657	0.8359	0.7712		0.81	9.0	S			
20	TM Benz (a) anthracene	1.671	1.359	1.076	1.304	1.538	1.509	1.341	1.262		1.4	13	TM			0.800
21	TM Chrysene	1.479	1.472	1.188	1.390	1.453	1.388	1.153	1.067		1.3	12	TM			0.700
22	TM Indeno (1,2,3-cd) pyrene	1.529	1.415	1.156	1.393	1.490	1.490	1.274	1.181		1.4	11	TM			0.500
23	I Perylene-D12(IS)															
24	TM Benzo (b) fluoranthene	1.433	1.243	1.096	1.291	1.531	1.603	1.305	1.301		1.4	12	TM			0.700
25	TM Benzo (k) fluoranthene	1.579	1.319	1.194	1.327	1.553	1.603	1.299	1.266		1.4	11	TM			0.700
26	*TM Benzo (a) pyrene	1.308	1.224	1.092	1.285	1.456	1.489	1.256	1.223		1.3	10.0	*TM			0.700
27	TM Dibenz (a,h) anthracene	1.354	1.225	1.012	1.231	1.275	1.310	1.060	1.044		1.2	11	TM			0.400
28	TM Benzo (g,h,i) perylene	1.377	1.229	1.021	1.247	1.271	1.322	1.097	1.043		1.2	11	TM			0.500
29																
30																
31																
32																
33																
34																
35																

Data File : M:\LINUS\DATA\L190122\0122L003.D Vial: 3  
 Acq On : 22 Jan 19 9:37 Operator: MA  
 Sample : 0.1 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 09:56:33 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	4.03	136	15835	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7110	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13830	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20163	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19644	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
2) Surrogate Recovery (NBZ)	3.22	82	170	0.04555	ppb	0.00
Spiked Amount 5.000			Recovery =	0.920%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	369	0.03991	ppb	-0.01
Spiked Amount 5.000			Recovery =	0.800%		
8) Surrogate Recovery (FBP)	5.31	172	289	0.04745	ppb	-0.01
Spiked Amount 5.000			Recovery =	0.940%		
15) Fluoranthene-D10 (FRT)	9.20	212	542	0.04079	ppb	0.00
Spiked Amount 5.000			Recovery =	0.820%		
19) Surrogate Recovery (TPH)	9.67	244	354	0.04542	ppb	-0.01
Spiked Amount 5.000			Recovery =	0.900%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	951	0.12746	ppb	99
5) 2-Methylnaphthalene	4.88	142	533	0.11867	ppb	97
6) 1-Methylnaphthalene	4.99	142	601	0.13228	ppb	97
9) Acenaphthylene	5.92	152	1787	0.11640	ppb	98
10) Acenaphthene	6.11	154	546	0.12405	ppb	92
11) Fluorene	6.72	166	599	0.11841	ppb	93
13) Phenanthrene	7.83	178	883	0.11967	ppb	98
14) Anthracene	7.89	178	855	0.11674	ppb	99
16) Fluoranthene	9.22	202	1376	0.11919	ppb	98
18) Pyrene	9.48	202	1415	0.12511	ppb	# 89
20) Benz. (a) anthracene	10.89	228	1348	0.13332	ppb	96
21) Chrysene	10.95	228	1193	0.12015	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.83	276	1233	0.11749	ppb	# 82
24) Benzo (b) fluoranthene	12.66	252	1126	0.11931	ppb	98
25) Benzo (k) fluoranthene	12.71	252	1241	0.11008	ppb	96
26) Benzo (a) pyrene	13.22	252	1028	0.11184	ppb	98
27) Dibenz (a,h) anthracene	14.85	278	1064	0.12449	ppb	94
28) Benzo (g,h,i) perylene	15.18	276	1082	0.12500	ppb	96

Quantitation Report

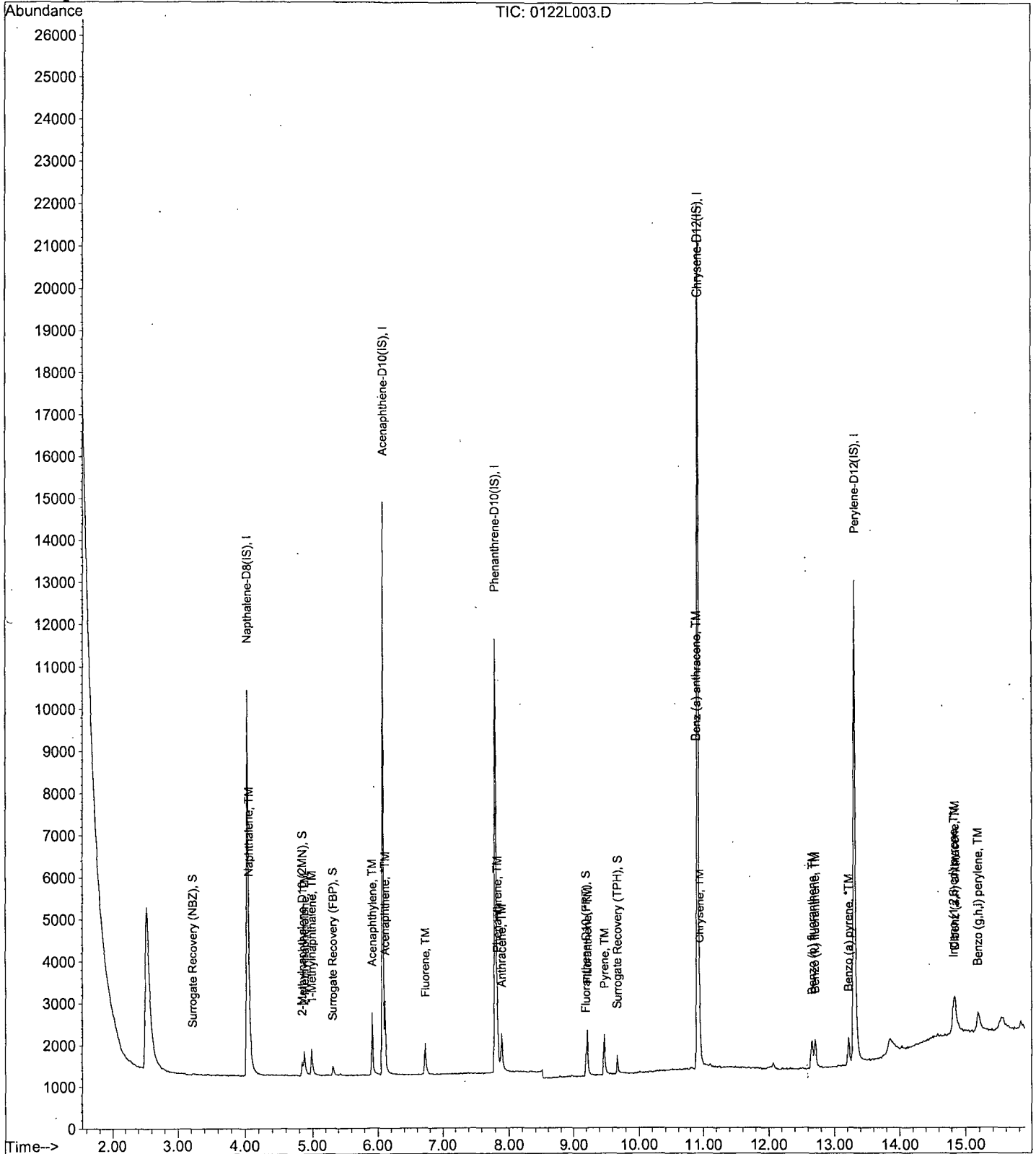
Data File : M:\LINUS\DATA\L190122\0122L003.D  
 Acq On : 22 Jan 19 9:37  
 Sample : 0.1 SIM 01/18/19  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration





Data File : M:\LINUS\DATA\L190122\0122L004.D Vial: 4  
 Acq On : 22 Jan 19 9:59 Operator: MA  
 Sample : 0.2 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8(IS)	4.03	136	18660	2.50000	ppb	-0.01
7) Acenaphthene-D10(IS)	6.07	164	8631	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	16928	2.50000	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	24788	2.50000	ppb	-0.02
23) Perylene-D12(IS)	13.30	264	24016	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.24	82	348	0.07912	ppb	0.01
Spiked Amount	5.000		Recovery	= 1.580%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	835	0.07663	ppb	-0.01
Spiked Amount	5.000		Recovery	= 1.540%		
8) Surrogate Recovery (FBP)	5.31	172	571	0.07723	ppb	-0.01
Spiked Amount	5.000		Recovery	= 1.540%		
15) Fluoranthene-D10 (FRT)	9.20	212	1178	0.07243	ppb	0.00
Spiked Amount	5.000		Recovery	= 1.440%		
19) Surrogate Recovery (TPH)	9.67	244	803	0.08381	ppb	0.00
Spiked Amount	5.000		Recovery	= 1.680%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	1979	0.22509	ppb	99
5) 2-Methylnaphthalene	4.88	142	1166	0.22030	ppb	99
6) 1-Methylnaphthalene	4.99	142	1186	0.22151	ppb	97
9) Acenaphthylene	5.92	152	3948	0.21185	ppb	99
10) Acenaphthene	6.11	154	1174	0.21972	ppb	98
11) Fluorene	6.72	166	1328	0.21626	ppb	100
13) Phenanthrene	7.83	178	1935	0.21425	ppb	99
14) Anthracene	7.89	178	1866	0.20815	ppb	99
16) Fluoranthene	9.22	202	3108	0.21994	ppb	97
18) Pyrene	9.47	202	3089	0.22216	ppb	99
20) Benz (a) anthracene	10.89	228	2695	0.21680	ppb	98
21) Chrysene	10.95	228	2920	0.23921	ppb	96
22) Indeno (1,2,3-cd) pyrene	14.82	276	2806	0.21749	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	2388	0.20696	ppb	# 98
25) Benzo (k) fluoranthene	12.71	252	2534	0.18385	ppb	99
26) Benzo (a) pyrene	13.22	252	2352	0.20930	ppb	97
27) Dibenz (a,h) anthracene	14.85	278	2354	0.22529	ppb	94
28) Benzo (g,h,i) perylene	15.19	276	2362	0.22319	ppb	95

Quantitation Report

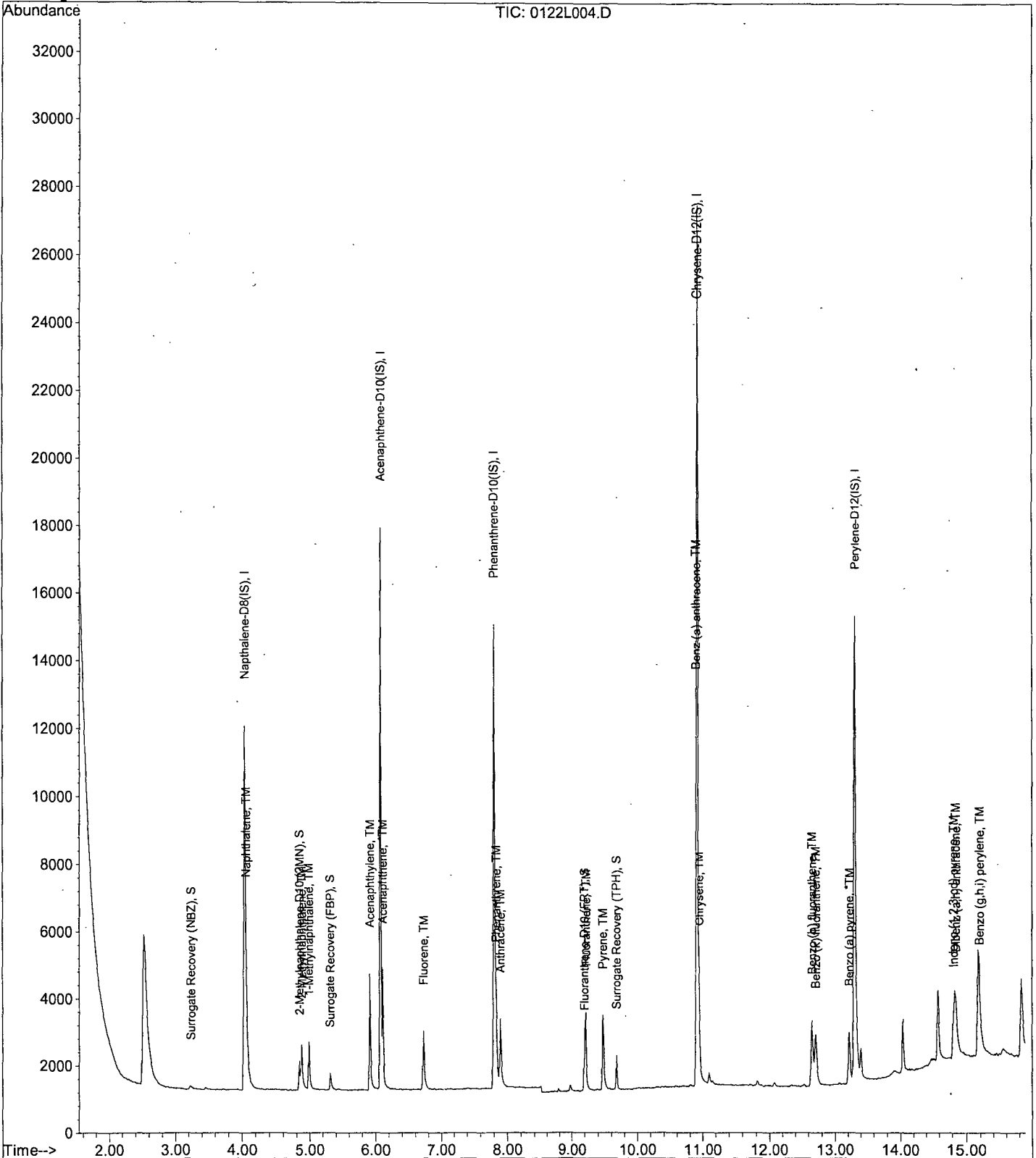
Data File : M:\LINUS\DATA\L190122\0122L004.D  
Acq On : 22 Jan 19 9:59  
Sample : 0.2 SIM 01/18/19  
Misc :

Vial: 4  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L005.D Vial: 5  
 Acq On : 22 Jan 19 10:21 Operator: MA  
 Sample : 0.5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	19378	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8194	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15631	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	22574	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	21122	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	694	0.15194	ppb	0.00
Spiked Amount	5.000		Recovery	=	3.040%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	1727	0.15263	ppb	-0.01
Spiked Amount	5.000		Recovery	=	3.060%	
8) Surrogate Recovery (FBP)	5.31	172	1194	0.17011	ppb	-0.01
Spiked Amount	5.000		Recovery	=	3.400%	
15) Fluoranthene-D10 (FRT)	9.18	212	2141	0.14256	ppb	-0.01
Spiked Amount	5.000		Recovery	=	2.860%	
19) Surrogate Recovery (TPH)	9.67	244	1505	0.17248	ppb	0.00
Spiked Amount	5.000		Recovery	=	3.440%	
Target Compounds						
3) Naphthalene	4.06	128	4220	0.46220	ppb	99
5) 2-Methylnaphthalene	4.88	142	2474	0.45012	ppb	100
6) 1-Methylnaphthalene	4.99	142	2608	0.46906	ppb	95
9) Acenaphthylene	5.92	152	7714	0.43600	ppb	98
10) Acenaphthene	6.11	154	2341	0.46149	ppb	95
11) Fluorene	6.72	166	2634	0.45181	ppb	100
13) Phenanthrene	7.83	178	3771	0.45218	ppb	98
14) Anthracene	7.89	178	3618	0.43707	ppb	99
16) Fluoranthene	9.21	202	5733	0.43937	ppb #	89
18) Pyrene	9.47	202	5849	0.46191	ppb	93
20) Benz (a) anthracene	10.89	228	4857	0.42905	ppb	98
21) Chrysene	10.93	228	5362	0.48235	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.82	276	5219	0.44419	ppb #	86
24) Benzo (b) fluoranthene	12.65	252	4632	0.45644	ppb	98
25) Benzo (k) fluoranthene	12.70	252	5045	0.41618	ppb	98
26) Benzo (a) pyrene	13.22	252	4615	0.46695	ppb	99
27) Dibenz (a,h) anthracene	14.84	278	4275	0.46520	ppb	95
28) Benzo (g,h,i) perylene	15.17	276	4311	0.46317	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

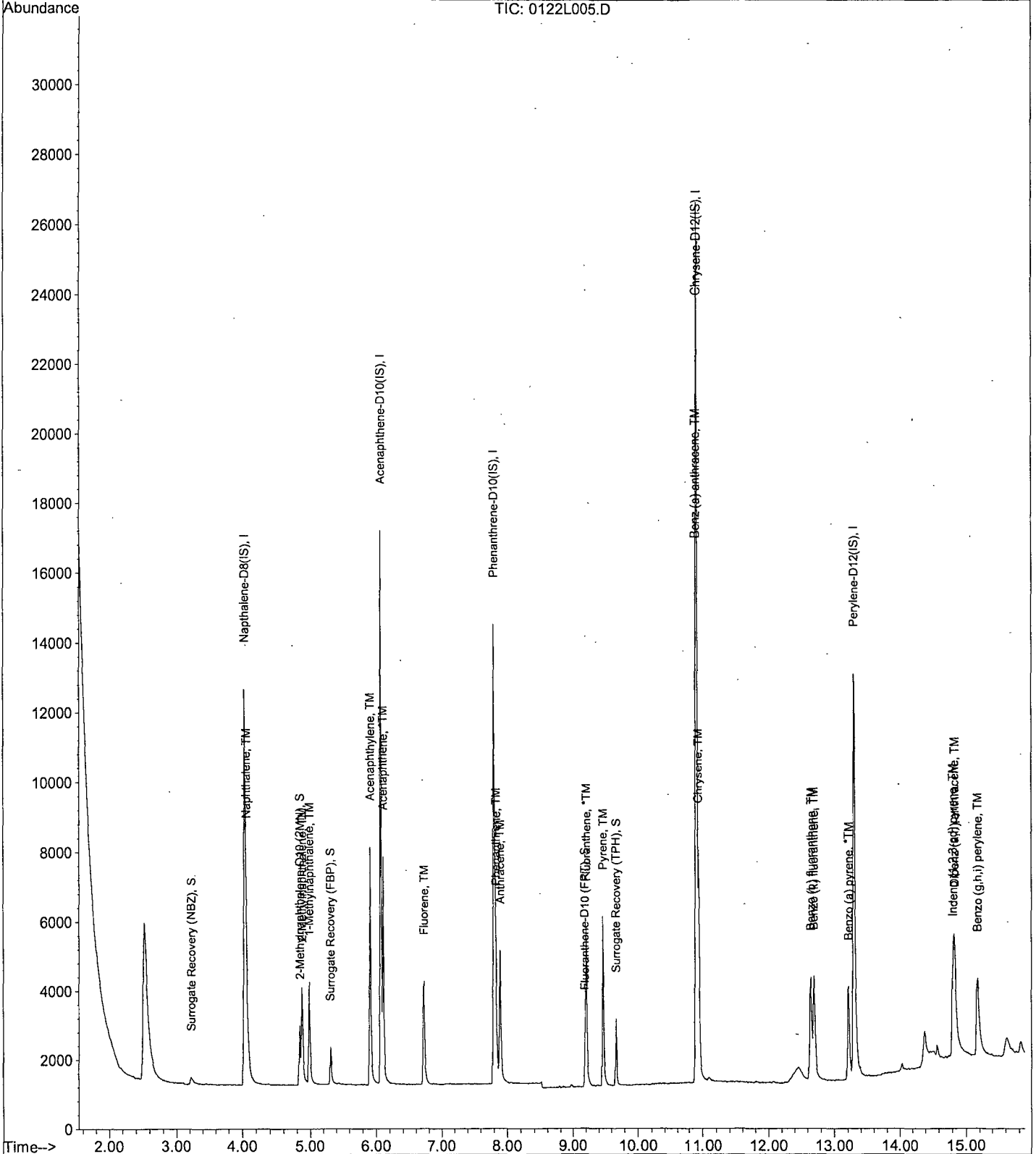
Data File : M:\LINUS\DATA\L190122\0122L005.D  
Acq On : 22 Jan 19 10:21  
Sample : 0.5 SIM 01/18/19  
Misc :

Vial: 5  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L006.D Vial: 6  
 Acq On : 22 Jan 19 10:43 Operator: MA  
 Sample : 1 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8(IS)	4.03	136	17997	2.50000	ppb	-0.01
7) Acenaphthene-D10(IS)	6.07	164	8238	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	16224	2.50000	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	23806	2.50000	ppb	-0.02
23) Perylene-D12(IS)	13.29	264	22387	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	1370	0.32296	ppb	0.00
Spiked Amount	5.000					
Recovery				=	6.460%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	4102	0.39034	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	7.800%	
8) Surrogate Recovery (FBP)	5.31	172	2874	0.40727	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	8.140%	
15) Fluoranthene-D10 (FRT)	9.18	212	5335	0.34225	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	6.840%	
19) Surrogate Recovery (TPH)	9.67	244	3609	0.39220	ppb	0.00
Spiked Amount	5.000					
Recovery				=	7.840%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	9261	1.09215	ppb	99
5) 2-Methylnaphthalene	4.88	142	5682	1.11310	ppb	97
6) 1-Methylnaphthalene	4.99	142	5811	1.12533	ppb	96
9) Acenaphthylene	5.92	152	18493	1.03965	ppb	99
10) Acenaphthene	6.11	154	5619	1.10178	ppb	98
11) Fluorene	6.71	166	6507	1.11018	ppb	96
13) Phenanthrene	7.83	178	9481	1.09531	ppb	97
14) Anthracene	7.89	178	9094	1.05845	ppb	99
16) Fluoranthene	9.21	202	14616	1.07921	ppb	# 93
18) Pyrene	9.47	202	14652	1.09722	ppb	90
20) Benz (a) anthracene	10.89	228	12417	1.04011	ppb	99
21) Chrysene	10.93	228	13234	1.12887	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.80	276	13263	1.07040	ppb	# 88
24) Benzo (b) fluoranthene	12.64	252	11564	1.07514	ppb	# 98
25) Benzo (k) fluoranthene	12.70	252	11886	0.92512	ppb	98
26) Benzo (a) pyrene	13.21	252	11511	1.09889	ppb	99
27) Dibenz (a,h) anthracene	14.83	278	11022	1.13162	ppb	99
28) Benzo (g,h,i) perylene	15.16	276	11170	1.13229	ppb	95

Quantitation Report

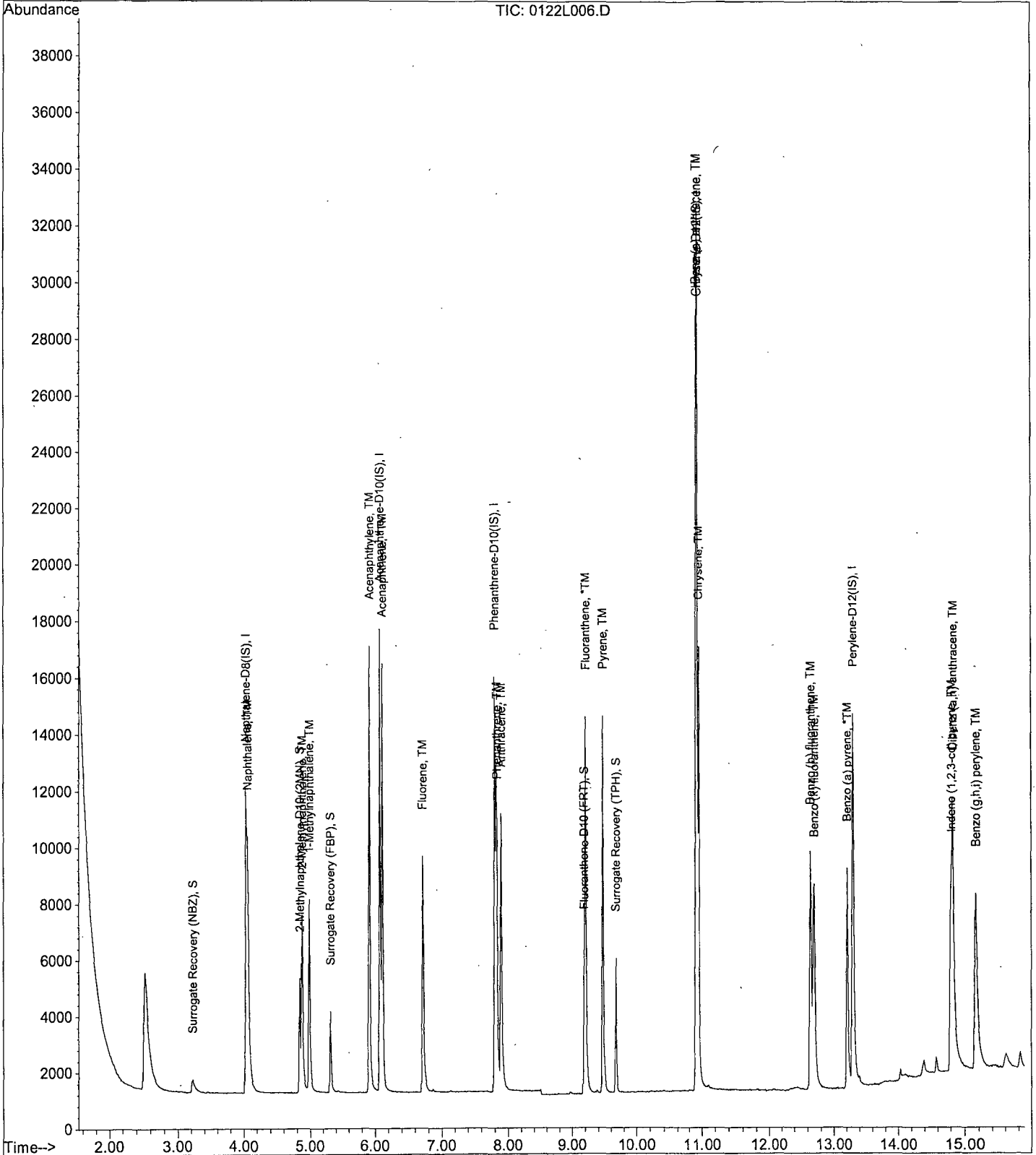
Data File : M:\LINUS\DATA\L190122\L0122L006.D  
Acq On : 22 Jan 19 10:43  
Sample : 1 SIM 01/18/19  
Misc :

Vial: 6  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L007.D  
 Acq On : 22 Jan 19 11:30  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:47 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:16 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	4.03	136	16548	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7268	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13995	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19950	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19225	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
2) Surrogate Recovery (NBZ)	3.21	82	7607	2.60121	ppb	-0.01
Spiked Amount 5.000			Recovery =	52.020%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	20941	2.75267	ppb	-0.02
Spiked Amount 5.000			Recovery =	55.060%		
8) Surrogate Recovery (FBP)	5.31	172	13978	2.69964	ppb	-0.01
Spiked Amount 5.000			Recovery =	54.000%		
15) Fluoranthene-D10 (FRT)	9.18	212	27245	2.76398	ppb	-0.01
Spiked Amount 5.000			Recovery =	55.280%		
19) Surrogate Recovery (TPH)	9.67	244	17410	2.68552	ppb	-0.01
Spiked Amount 5.000			Recovery =	53.720%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	45784	5.47796	ppb	100
5) 2-Methylnaphthalene	4.87	142	28493	5.66542	ppb	100
6) 1-Methylnaphthalene	4.97	142	27451	5.39862	ppb	100
9) Acenaphthylene	5.90	152	91655	5.61140	ppb	100
10) Acenaphthene	6.11	154	26309	5.54466	ppb	100
11) Fluorene	6.71	166	31330	5.66322	ppb	100
13) Phenanthrene	7.82	178	44335	5.57391	ppb	100
14) Anthracene	7.88	178	45862	5.88051	ppb	100
16) Fluoranthene	9.21	202	70142	5.71546	ppb	100
18) Pyrene	9.46	202	69644	5.66416	ppb	100
20) Benz (a) anthracene	10.89	228	61372	5.59012	ppb	100
21) Chrysene	10.93	228	57972	5.50231	ppb	100
22) Indeno (1,2,3-cd) pyrene	14.79	276	59462	5.44362	ppb	100
24) Benzo (b) fluoranthene	12.64	252	58876	5.66105	ppb	100
25) Benzo (k) fluoranthene	12.68	252	59717	5.64321	ppb	100
26) Benzo (a) pyrene	13.21	252	55980	5.65364	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	49007	5.37458	ppb	100
28) Benzo (g,h,i) perylene	15.15	276	48865	5.30011	ppb	100

Quantitation Report

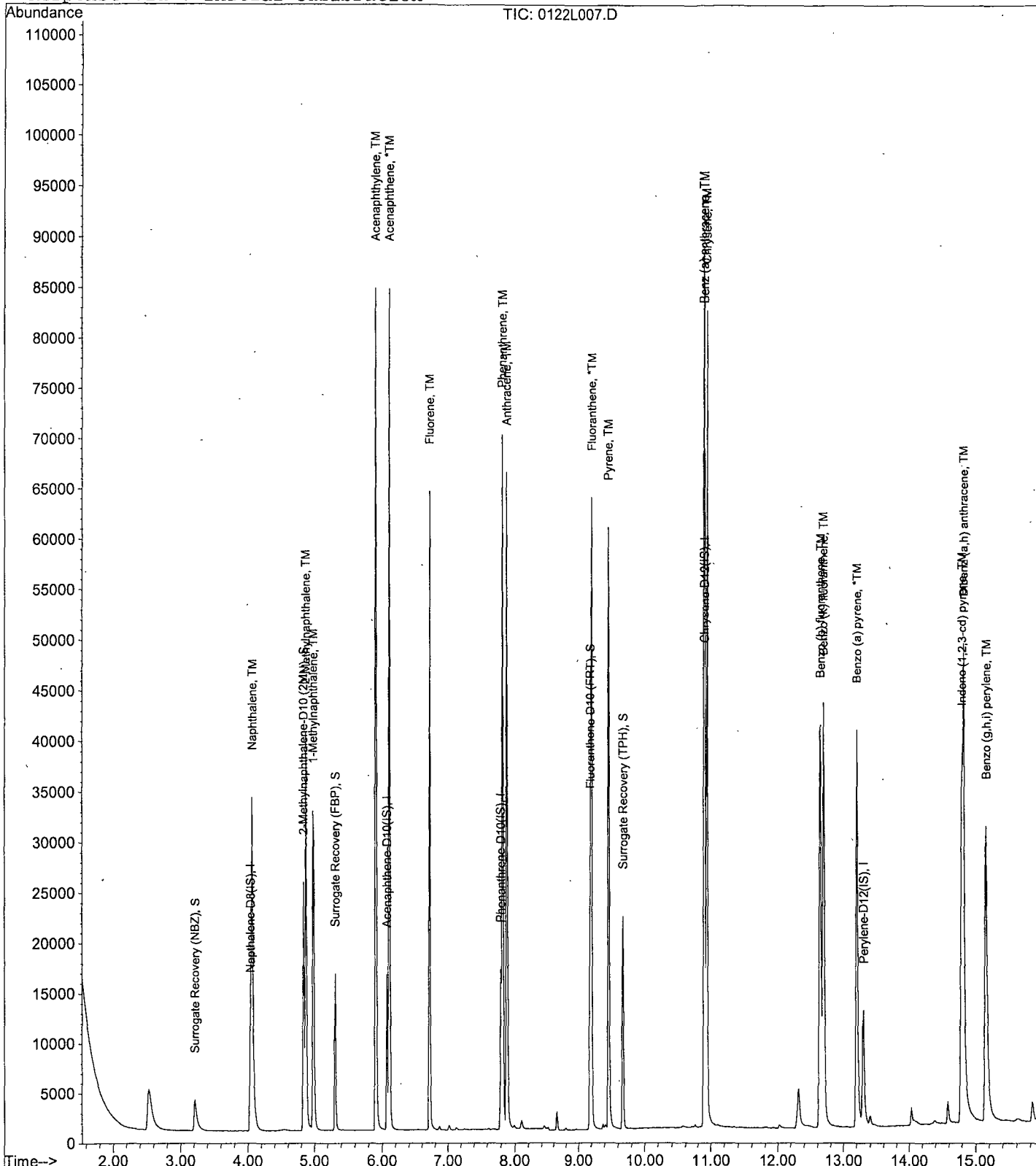
Data File : M:\LINUS\DATA\L190122\0122L007.D  
Acq On : 22 Jan 19, 11:30  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 7  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:47 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





Data File : M:\LINUS\DATA\L190122\0122L008.D Vial: 8  
 Acq On : 22 Jan 19 11:53 Operator: MA  
 Sample : 10 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 12:48 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	16401	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7199	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13870	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20037	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18684	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.20	82	14805	5.85339	ppb	-0.02
Spiked Amount 5.000			Recovery =	117.060%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	42463	6.47148	ppb	-0.02
Spiked Amount 5.000			Recovery =	129.420%		
8) Surrogate Recovery (FBP)	5.31	172	27763	6.17375	ppb	-0.01
Spiked Amount 5.000			Recovery =	123.480%		
15) Fluoranthene-D10 (FRT)	9.18	212	54468	6.35262	ppb	-0.01
Spiked Amount 5.000			Recovery =	127.060%		
19) Surrogate Recovery (TPH)	9.66	244	34694	6.13619	ppb	-0.02
Spiked Amount 5.000			Recovery =	122.720%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	88896	11.85448	ppb	100
5) 2-Methylnaphthalene	4.87	142	56236	12.48160	ppb	100
6) 1-Methylnaphthalene	4.97	142	54242	11.87753	ppb	100
9) Acenaphthylene	5.90	152	182742	12.55338	ppb	99
10) Acenaphthene	6.11	154	51321	12.04426	ppb	98
11) Fluorene	6.71	166	61684	12.48808	ppb	99
13) Phenanthrene	7.82	178	87145	12.24258	ppb	100
14) Anthracene	7.88	178	87619	12.57174	ppb	100
16) Fluoranthene	9.21	202	137396	12.46906	ppb	97
18) Pyrene	9.46	202	136155	12.26524	ppb	96
20) Benz (a) anthracene	10.89	228	120980	12.29858	ppb	100
21) Chrysene	10.93	228	111248	11.62149	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	119439	12.13320	ppb	# 84
24) Benzo (b) fluoranthene	12.63	252	119776	13.26251	ppb	# 97
25) Benzo (k) fluoranthene	12.63	252	119773	12.99689	ppb	99
26) Benzo (a) pyrene	13.20	252	111267	12.95931	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	97893	12.25147	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	98835	12.27085	ppb	# 94

Quantitation Report

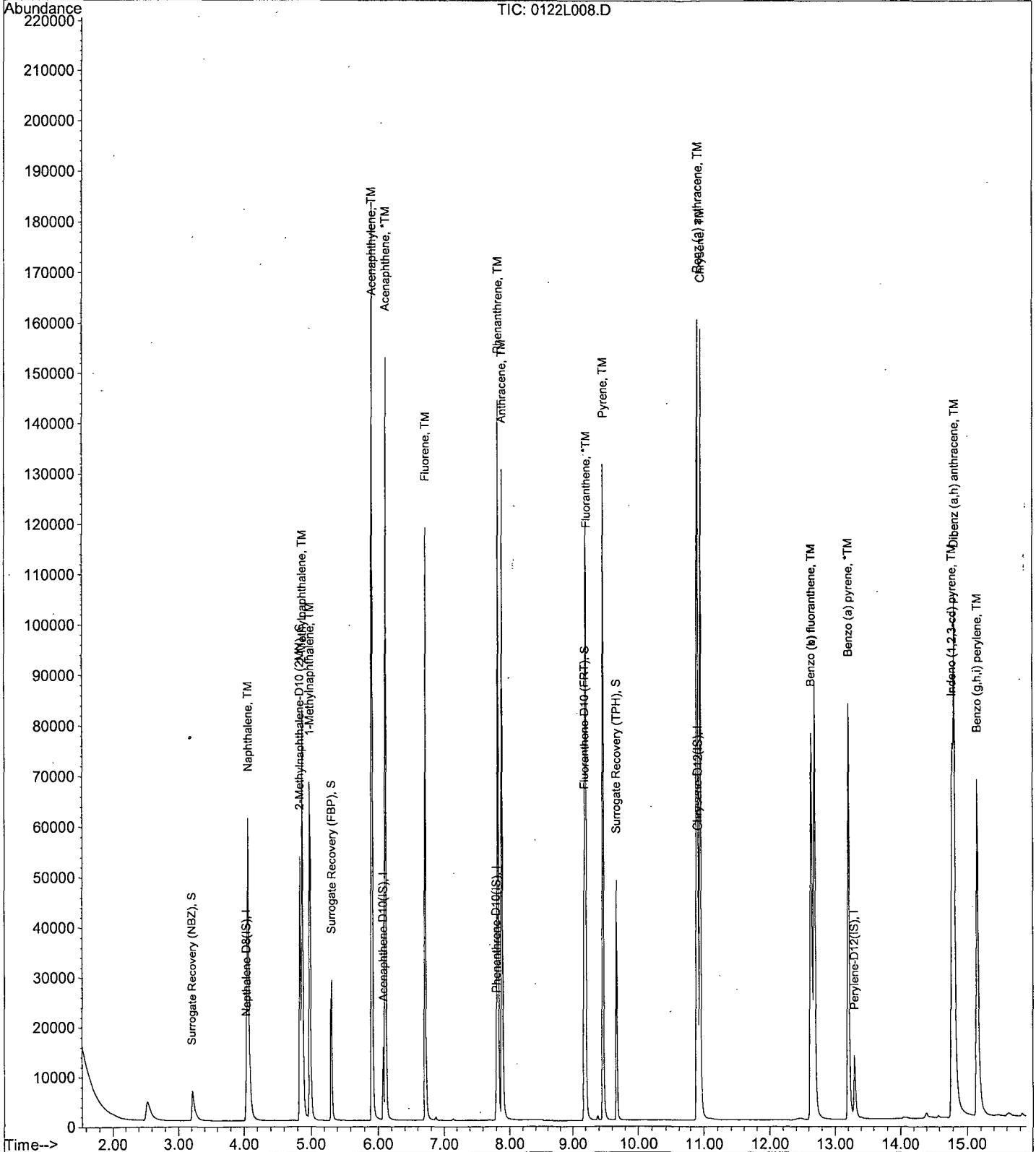
Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:48 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L009.D  
 Acq On : 22 Jan 19 12:15  
 Sample : 50 SIM 01/18/19  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:48:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16882	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7435	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14943	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.91	240	19605	2.50000	ppb	-0.01
23) Perylene-D12 (IS)	13.29	264	18780	2.50000	ppb	-0.03

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.20	82	74252	28.52027	ppb	-0.02
Spiked Amount	5.000					
					Recovery = 570.400%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	197601	29.25691	ppb	-0.02
Spiked Amount	5.000					
					Recovery = 585.140%	
8) Surrogate Recovery (FBP)	5.31	172	128459	27.65911	ppb	-0.01
Spiked Amount	5.000					
					Recovery = 553.180%	
15) Fluoranthene-D10 (FRT)	9.18	212	254396	27.53979	ppb	-0.01
Spiked Amount	5.000					
					Recovery = 550.800%	
19) Surrogate Recovery (TPH)	9.67	244	163882	29.62386	ppb	-0.01
Spiked Amount	5.000					
					Recovery = 592.480%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	369785	47.90669	ppb	100
5) 2-Methylnaphthalene	4.87	142	226326	48.80191	ppb	99
6) 1-Methylnaphthalene	4.99	142	222700	47.37585	ppb	94
9) Acenaphthylene	5.92	152	763610	50.79081	ppb	97
10) Acenaphthene	6.11	154	208204	47.31133	ppb	95
11) Fluorene	6.71	166	255227	50.03119	ppb	97
13) Phenanthrene	7.83	178	376921	49.14954	ppb	98
14) Anthracene	7.89	178	376399	50.12843	ppb	99
16) Fluoranthene	9.21	202	567787	47.82815	ppb	# 84
18) Pyrene	9.47	202	556994	51.28126	ppb	99
20) Benz (a) anthracene	10.90	228	525902	54.64017	ppb	100
21) Chrysene	10.95	228	451974	48.25575	ppb	# 98
22) Indeno (1,2,3-cd) pyrene	14.82	276	499473	51.85698	ppb	# 90
24) Benzo (b) fluoranthene	12.65	252	490265	54.00836	ppb	100
25) Benzo (k) fluoranthene	12.72	252	488050	50.37199	ppb	100
26) Benzo (a) pyrene	13.22	252	471645	54.65189	ppb	99
27) Dibenzo (a,h) anthracene	14.85	278	398222	49.58336	ppb	# 94
28) Benzo (g,h,i) perylene	15.17	276	411886	50.87625	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

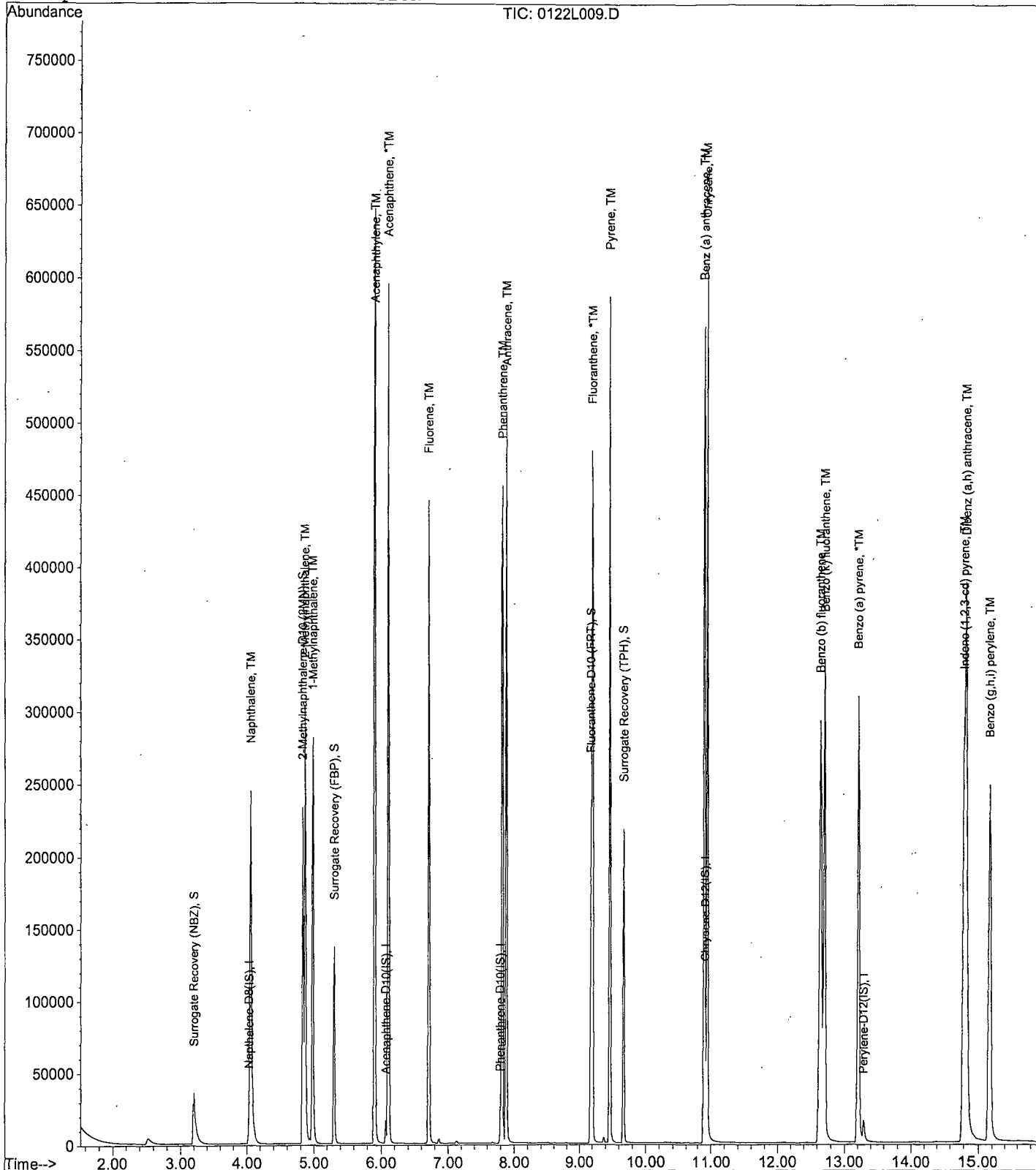
Data File : M:\LINUS\DATA\L190122\0122L009.D  
 Acq On : 22 Jan 19 12:15  
 Sample : 50 SIM 01/18/19  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA\_8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L010.D Vial: 10  
 Acq On : 22 Jan 19 12:37 Operator: MA  
 Sample : 100 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 13:02 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Napthalene-D8 (IS)	4.03	136	16509	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7340	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14625	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.92	240	19570	2.50000	ppb	0.00
23) Perylene-D12 (IS)	13.30	264	18015	2.50000	ppb	-0.02

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.20	82	143716	49.35106	ppb	-0.02
Spiked Amount	5.000		Recovery	=	987.020%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	369507	48.84651	ppb	-0.02
Spiked Amount	5.000		Recovery	=	976.940%	
8) Surrogate Recovery (FBP)	5.31	172	245947	47.38619	ppb	-0.01
Spiked Amount	5.000		Recovery	=	947.720%	
15) Fluoranthene-D10 (FRT)	9.20	212	489050	47.77794	ppb	0.00
Spiked Amount	5.000		Recovery	=	955.560%	
19) Surrogate Recovery (TPH)	9.67	244	301836	47.76577	ppb	-0.01
Spiked Amount	5.000		Recovery	=	955.320%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	686154	82.50506	ppb	99
5) 2-Methylnaphthalene	4.88	142	426189	84.86301	ppb	97
6) 1-Methylnaphthalene	4.99	142	400215	78.89615	ppb	96
9) Acenaphthylene	5.92	152	1371750	83.47032	ppb	99
10) Acenaphthene	6.12	154	399394	83.03305	ppb	99
11) Fluorene	6.72	166	486427	86.73013	ppb	99
13) Phenanthrene	7.83	178	662559	80.60560	ppb	99
14) Anthracene	7.91	178	708940	86.78483	ppb	98
16) Fluoranthene	9.23	202	1074355	83.53801	ppb	# 93
18) Pyrene	9.48	202	1055051	87.24305	ppb	94
20) Benz (a) anthracene	10.91	228	987627	91.25364	ppb	99
21) Chrysene	10.97	228	835356	80.61549	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.86	276	924286	86.44058	ppb	# 71
24) Benzo (b) fluoranthene	12.67	252	937424	96.32808	ppb	# 97
25) Benzo (k) fluoranthene	12.74	252	912491	92.99727	ppb	100
26) Benzo (a) pyrene	13.25	252	880967	94.64847	ppb	# 96
27) Dibenz (a,h) anthracene	14.88	278	752245	87.80959	ppb	# 88
28) Benzo (g,h,i) perylene	15.21	276	751231	86.81489	ppb	# 92

Quantitation Report

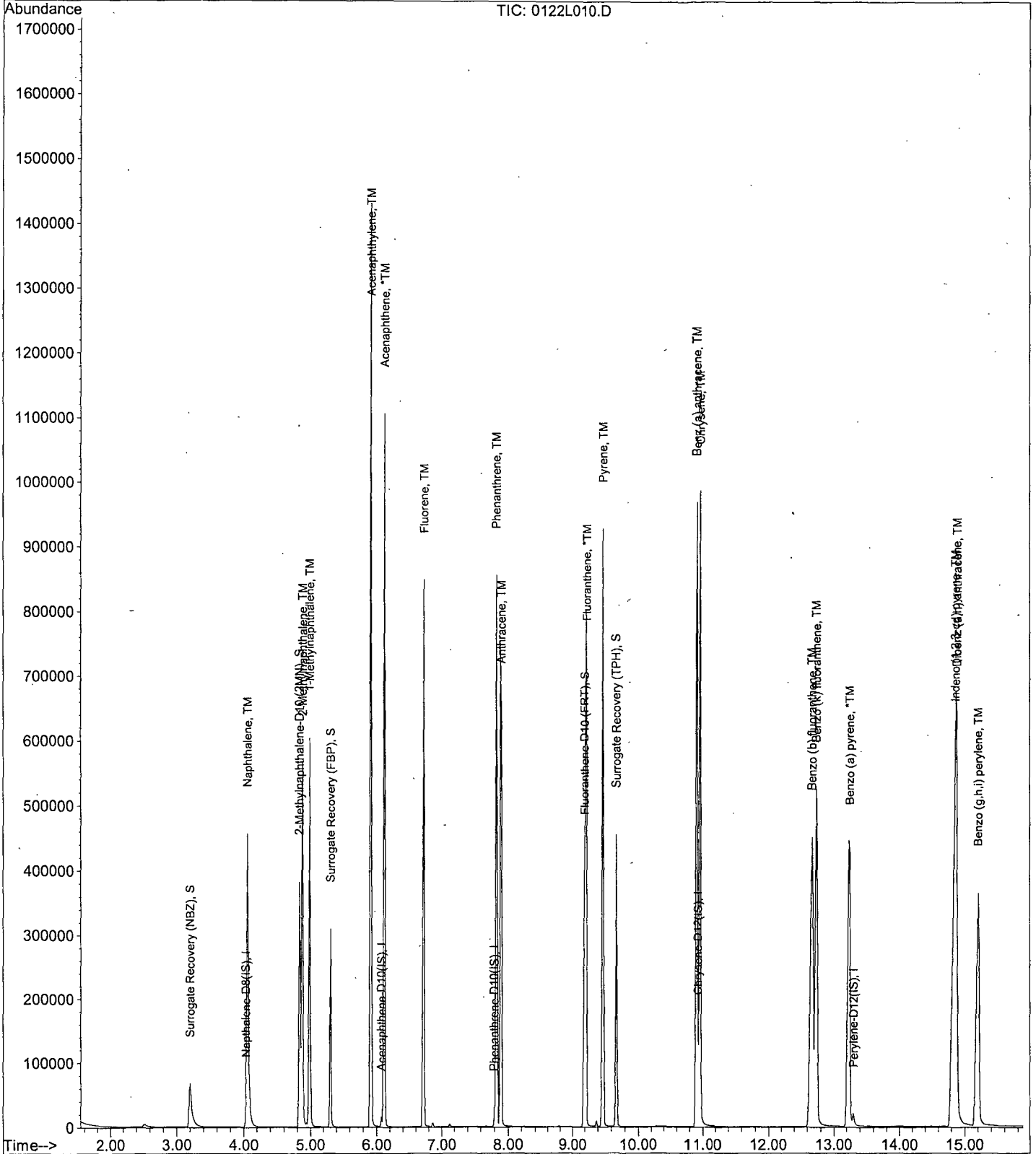
Data File : M:\LINUS\DATA\L190122\0122L010.D  
 Acq On : 22 Jan 19 12:37  
 Sample : 100 SIM 01/18/19  
 Misc :

Vial: 10  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 13:02 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L011.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Naphthalene	1.259	1.319	4.7	TM
2	TM	2-Methylnaphthalene	0.7605	0.8383	10	TM
3	TM	1-Methylnaphthalene	0.7682	0.8611	12	TM
4	TM	Acenaphthylene	5.597	6.034	7.8	TM
5	*TM	Acenaphthene	1.638	1.715	4.7	*TM
6	TM	Fluorene	1.910	2.087	9.2	TM
7	TM	Phenanthrene	1.405	1.525	8.5	TM
8	TM	Anthracene	1.396	1.436	2.8	TM
9	*TM	Fluoranthene	2.198	2.322	5.6	*TM
10	TM	Pyrene	1.545	1.638	6.0	TM
11	TM	Benz (a) anthracene	1.383	1.444	4.5	TM
12	TM	Chrysene	1.324	1.416	6.9	TM
13	TM	Indeno (1,2,3-cd) pyrene	1.366	1.426	4.4	TM
14	TM	Benzo (b) fluoranthene	1.350	1.445	7.0	TM
15	TM	Benzo (k) fluoranthene	1.393	1.606	15	TM
16	*TM	Benzo (a) pyrene	1.292	1.370	6.1	*TM
17	TM	Dibenz (a,h) anthracene	1.189	1.313	10	TM
18	TM	Benzo (g,h,i) perylene	1.201	1.300	8.3	TM
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Average

7.4

Data File : M:\LINUS\DATA\L190122\0122L011.D Vial: 11  
 Acq On : 22 Jan 19 12:59 Operator: MA  
 Sample : SS SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 13:19 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	15442	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	6948	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13744	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19942	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18334	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
4) 2-Methylnaphthalene-D10 (2)	0.00	152	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
8) Surrogate Recovery (FBP)	0.00	172	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
15) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
19) Surrogate Recovery (TPH)	0.00	244	0d	0.00000	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	40738	5.23692	ppb	100
5) 2-Methylnaphthalene	4.87	142	25890	5.51144	ppb	97
6) 1-Methylnaphthalene	4.99	142	26593	5.60463	ppb	94
9) Acenaphthylene	5.90	152	83849	5.39003	ppb	100
10) Acenaphthene	6.11	154	23838	5.23547	ppb	100
11) Fluorene	6.71	166	28998	5.46206	ppb	99
13) Phenanthrene	7.82	178	41914	5.42603	ppb	99
14) Anthracene	7.88	178	39465	5.14078	ppb	99
16) Fluoranthene	9.21	202	63819	5.28043	ppb	100
18) Pyrene	9.46	202	65311	5.29988	ppb	97
20) Benz (a) anthracene	10.88	228	57608	5.22351	ppb	96
21) Chrysene	10.93	228	56462	5.34719	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	56868	5.21917	ppb #	91
24) Benzo (b) fluoranthene	12.63	252	52976	5.34901	ppb	99
25) Benzo (k) fluoranthene	12.68	252	58877	5.76480	ppb #	96
26) Benzo (a) pyrene	13.20	252	50232	5.30288	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	48137	5.52127	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	47680	5.41420	ppb	95



Quantitation Report

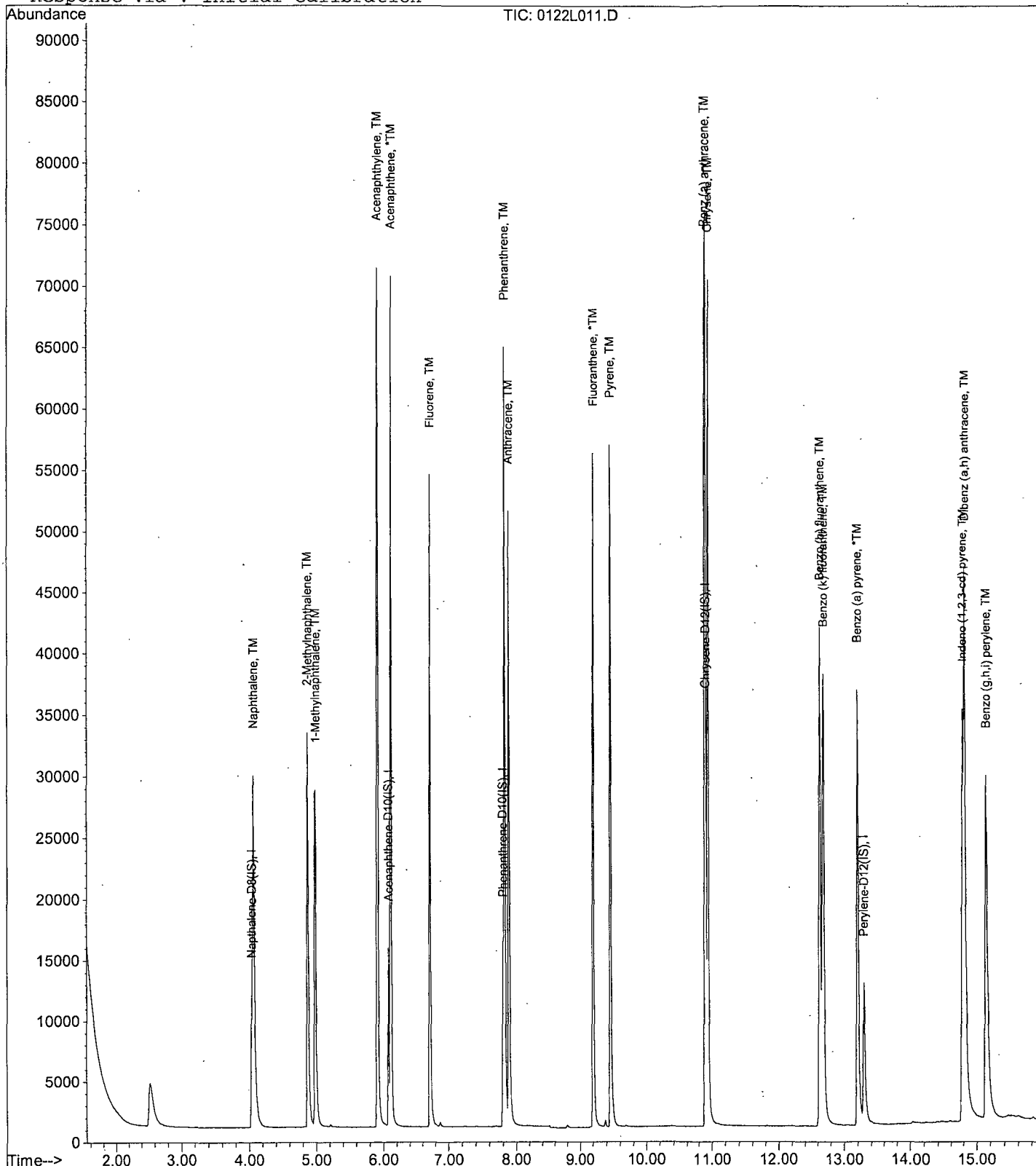
Data File : M:\LINUS\DATA\L190122\0122L011.D  
Acq On : 22 Jan 19 12:59  
Sample : SS SIM 01/18/19  
Misc :

Vial: 11  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 13:19 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Name of Final Standard SIM Curve  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	200uL	MC 56258 190 uL	5.0 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	5 uL			
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL			2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	100 uL	MC 56258 90 uL	10 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	5 uL			
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200	CL13117-40078	12/28/19	25 uL	100uL	MC 56258 50 uL	50 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	25 uL			
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	50 uL	100uL	na	100 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	50 uL			
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL			2.5ug/mL

Name of Final Standard 8270 PAH SIM Second Source  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	CL13121 - 40082	12/28/19	5 uL	200uL	MC 56258 195uL	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL			2.5ug/mL

PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L037.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4497	2.0	S
3	TM	Naphthalene	1.259	1.293	2.7	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.302	14	S
5	TM	2-Methylnaphthalene	0.7605	0.8062	6.0	TM
6	TM	1-Methylnaphthalene	0.7682	0.7986	4.0	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	2.085	18	S
9	TM	Acenaphthylene	5.597	6.311	13	TM
10	*TM	Acenaphthene	1.638	1.715	4.7	*TM
11	TM	Fluorene	1.910	2.151	13	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.450	3.2	TM
14	TM	Anthracene	1.396	1.487	6.5	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.985	13	S
16	*TM	Fluoranthene	2.198	2.284	3.9	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.666	7.8	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.8998	11	S
20	TM	Benz (a) anthracene	1.383	1.403	1.4	TM
21	TM	Chrysene	1.324	1.364	3.0	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.528	12	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.426	5.6	TM
25	TM	Benzo (k) fluoranthene	1.393	1.408	1.1	TM
26	*TM	Benzo (a) pyrene	1.292	1.323	2.4	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.217	2.3	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.213	1.0	TM
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Average

6.6

Data File : M:\LINUS\DATA\L190122\0122L037.D Vial: 37  
 Acq On : 30 Jan 19 6:36 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 30 7:02 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QI	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	19859	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	8550	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	17827	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	24656	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	25628	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QI	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.24	82	8930	2.54921	ppb	0.01
Spiked Amount	5.000		Recovery	=	50.980%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	25853	2.84109	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.820%	
8) Surrogate Recovery (FBP)	5.31	172	17827	2.94862	ppb	-0.01
Spiked Amount	5.000		Recovery	=	58.980%	
15) Fluoranthene-D10 (FRT)	9.17	212	35392	2.83659	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.740%	
19) Surrogate Recovery (TPH)	9.66	244	22185	2.78659	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.740%	

Target Compounds	R.T.	QI	Response	Conc	Units	Qvalue
3) Naphthalene	4.07	128	51352	5.13310	ppb	100
5) 2-Methylnaphthalene	4.87	142	32020	5.30031	ppb	98
6) 1-Methylnaphthalene	4.97	142	31720	5.19827	ppb	100
9) Acenaphthylene	5.90	152	107919	5.63748	ppb	99
10) Acenaphthene	6.11	154	29329	5.23452	ppb	96
11) Fluorene	6.71	166	36786	5.63073	ppb	98
13) Phenanthrene	7.82	178	51696	5.15959	ppb	98
14) Anthracene	7.88	178	53002	5.32285	ppb	99
16) Fluoranthene	9.20	202	81433	5.19463	ppb	# 94
18) Pyrene	9.46	202	82132	5.39061	ppb	# 90
20) Benz (a) anthracene	10.88	228	69160	5.07201	ppb	99
21) Chrysene	10.92	228	67249	5.15111	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	75324	5.59130	ppb	92
24) Benzo (b) fluoranthene	12.62	252	73091	5.27959	ppb	# 96
25) Benzo (k) fluoranthene	12.67	252	72152	5.05393	ppb	98
26) Benzo (a) pyrene	13.20	252	67797	5.12017	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	62355	5.11651	ppb	94
28) Benzo (g,h,i) perylene	15.14	276	62194	5.05230	ppb	97

Quantitation Report

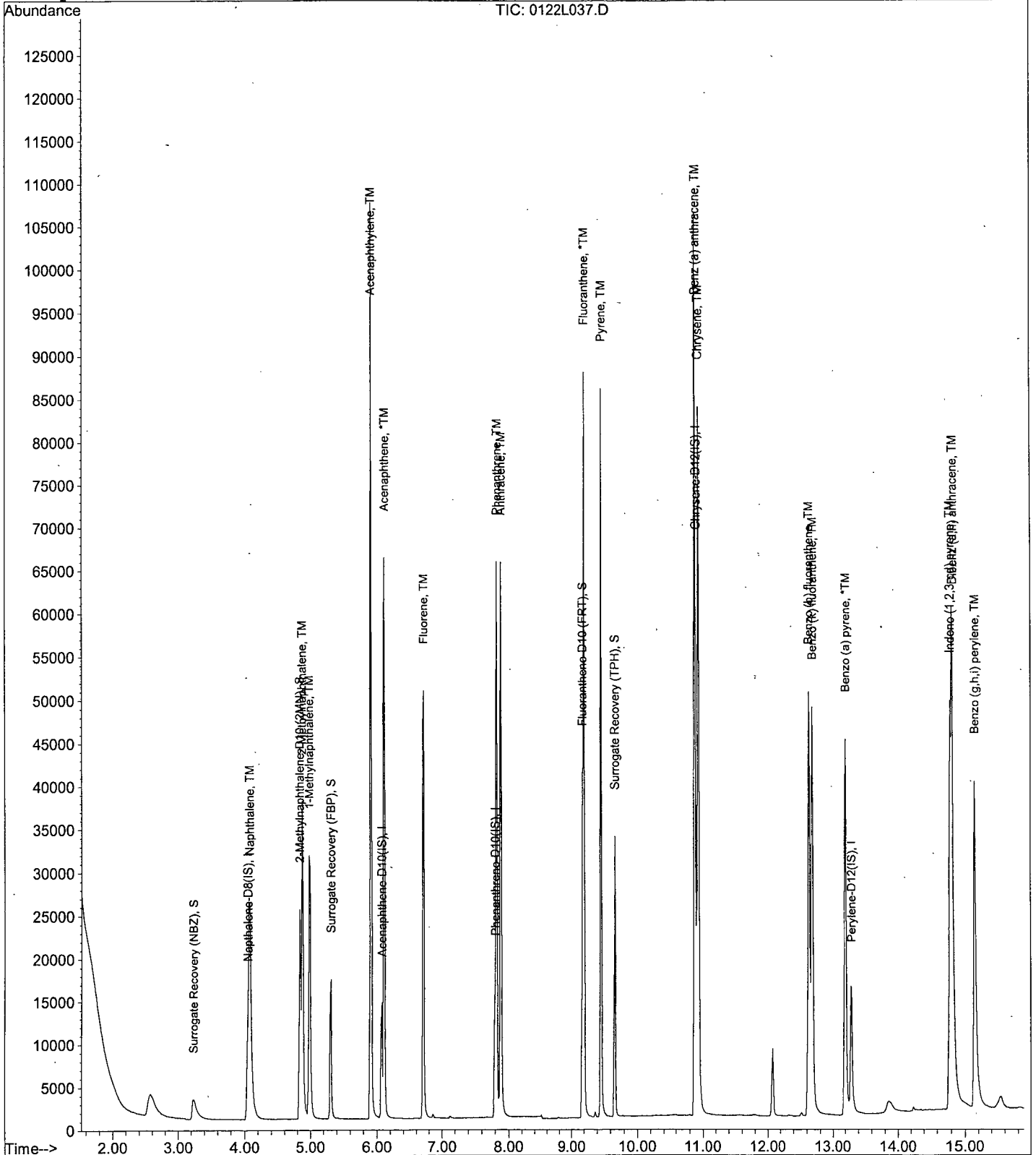
Data File : M:\LINUS\DATA\L190122\0122L037.D  
Acq On : 30 Jan 19 6:36  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 37  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 30 7:02 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L062.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Naphthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4459	1.1	S
3	TM	Naphthalene	1.259	1.375	9.2	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.302	14	S
5	TM	2-Methylnaphthalene	0.7605	0.8624	13	TM
6	TM	1-Methylnaphthalene	0.7682	0.8556	11	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.811	2.5	S
9	TM	Acenaphthylene	5.597	6.274	12	TM
10	*TM	Acenaphthene	1.638	1.855	13	*TM
11	TM	Fluorene	1.910	2.118	11	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.609	14	TM
14	TM	Anthracene	1.396	1.698	22	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.831	4.6	S
16	*TM	Fluoranthene	2.198	2.315	5.3	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.765	14	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9081	12	S
20	TM	Benz (a) anthracene	1.383	1.526	10	TM
21	TM	Chrysene	1.324	1.513	14	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.670	22	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.530	13	TM
25	TM	Benzo (k) fluoranthene	1.393	1.670	20	TM
26	*TM	Benzo (a) pyrene	1.292	1.508	17	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.360	14	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.327	10	TM
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

12.1

Data File : M:\LINUS\DATA\L190122\0122L062.D Vial: 62  
 Acq On : 30 Jan 19 15:59 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 31 5:57 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	28957	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	12989	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	24307	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	32029	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	32359	2.50000	ppb	-0.03

System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.25	82	12911	2.52766	ppb	0.02
Spiked Amount	5.000		Recovery	= 50.560%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	37711	2.84214	ppb	-0.01
Spiked Amount	5.000		Recovery	= 56.840%		
8) Surrogate Recovery (FBP)	5.31	172	23528	2.56163	ppb	-0.01
Spiked Amount	5.000		Recovery	= 51.240%		
15) Fluoranthene-D10 (FRT)	9.17	212	44501	2.61582	ppb	-0.02
Spiked Amount	5.000		Recovery	= 52.320%		
19) Surrogate Recovery (TPH)	9.66	244	29084	2.81221	ppb	-0.02
Spiked Amount	5.000		Recovery	= 56.240%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.07	128	79658	5.46079	ppb	100
5) 2-Methylnaphthalene	4.88	142	49943	5.66967	ppb	99
6) 1-Methylnaphthalene	4.99	142	49549	5.56884	ppb	96
9) Acenaphthylene	5.90	152	162989	5.60449	ppb	99
10) Acenaphthene	6.11	154	48184	5.66073	ppb	95
11) Fluorene	6.71	166	55023	5.54392	ppb	97
13) Phenanthrene	7.82	178	78202	5.72431	ppb	99
14) Anthracene	7.88	178	82555	6.08054	ppb	99
16) Fluoranthene	9.20	202	112524	5.26436	ppb	# 89
18) Pyrene	9.46	202	113043	5.71148	ppb	96
20) Benz (a) anthracene	10.88	228	97745	5.51822	ppb	97
21) Chrysene	10.93	228	96888	5.71300	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.78	276	106987	6.11350	ppb	# 78
24) Benzo (b) fluoranthene	12.63	252	99046	5.66621	ppb	# 98
25) Benzo (k) fluoranthene	12.68	252	108052	5.99423	ppb	97
26) Benzo (a) pyrene	13.20	252	97598	5.83760	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	88022	5.72022	ppb	98
28) Benzo (g,h,i) perylene	15.15	276	85859	5.52390	ppb	96

Quantitation Report

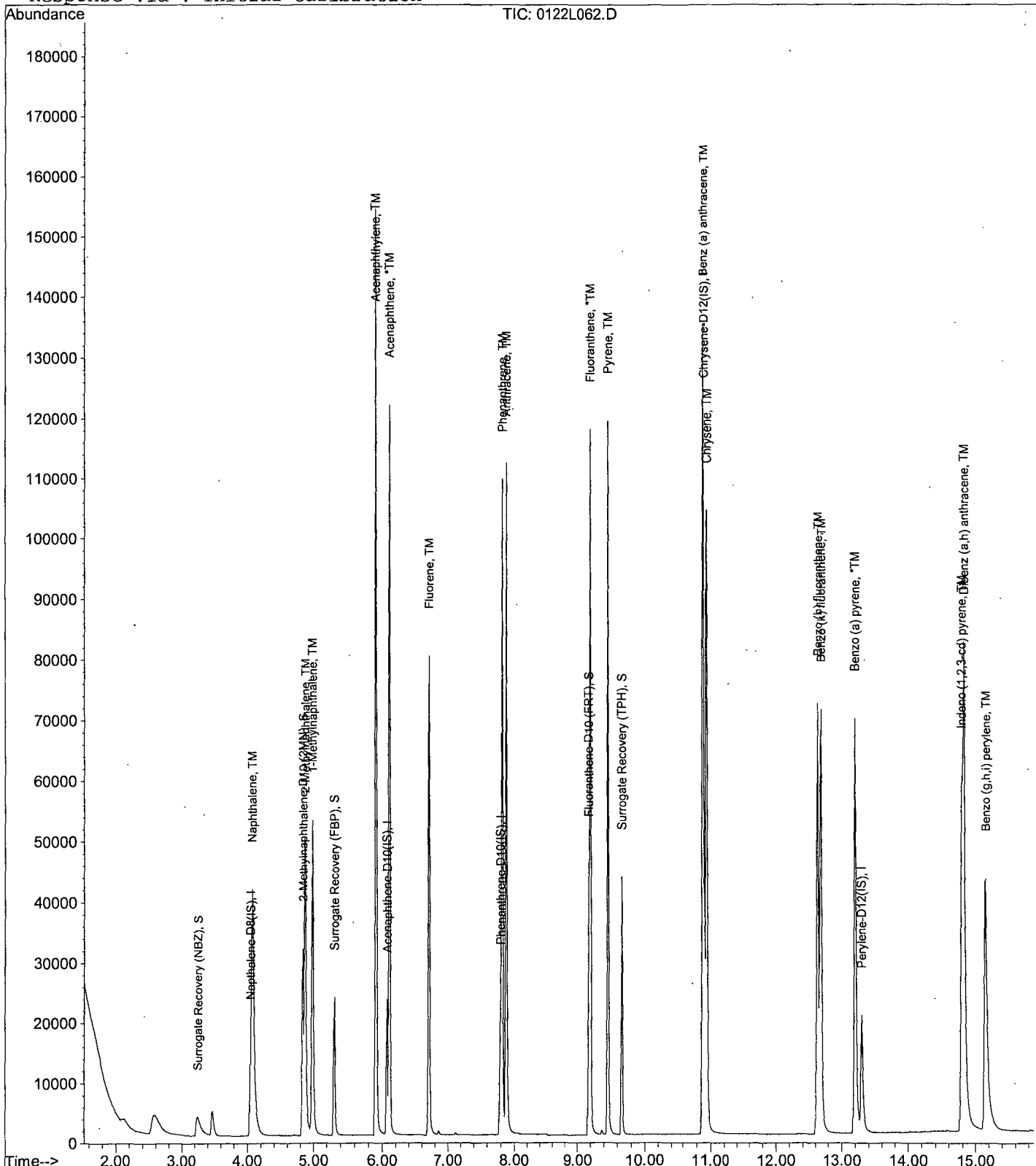
Data File : M:\LINUS\DATA\L190122\0122L062.D  
Acq On : 30 Jan 19 15:59  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 62  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 31 5:57 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





**ORGANICS**  
**Raw Data**

Data File : M:\LINUS\DATA\L190122\0122L051.D Vial: 51  
 Acq On : 30 Jan 19 11:56 Operator: MA  
 Sample : AZ85520W11 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 12:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	15217	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7538	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15280	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	23769	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	22907	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	287654	133.9564	ppb	0.00
Spiked Amount	6.250		Recovery	= 2143.296%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	39527	7.0861	ppb	-0.02
Spiked Amount	6.250		Recovery	= 113.376%		
8) Surrogate Recovery (FBP)	5.31	172	464785	108.9964	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1743.936%		
15) Fluoranthene-D10 (FRT)	9.17	212	53714	6.2783	ppb	-0.02
Spiked Amount	6.250		Recovery	= 100.448%		
19) Surrogate Recovery (TPH)	9.67	244	485088	79.0053	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1264.080%		
Target Compounds						
3) Naphthalene	4.07	128	193176	31.5002	ppb	96
5) 2-Methylnaphthalene	4.87	142	32597	8.8023	ppb	97
6) 1-Methylnaphthalene	4.99	142	42937	11.4788	ppb	96

Quantitation Report

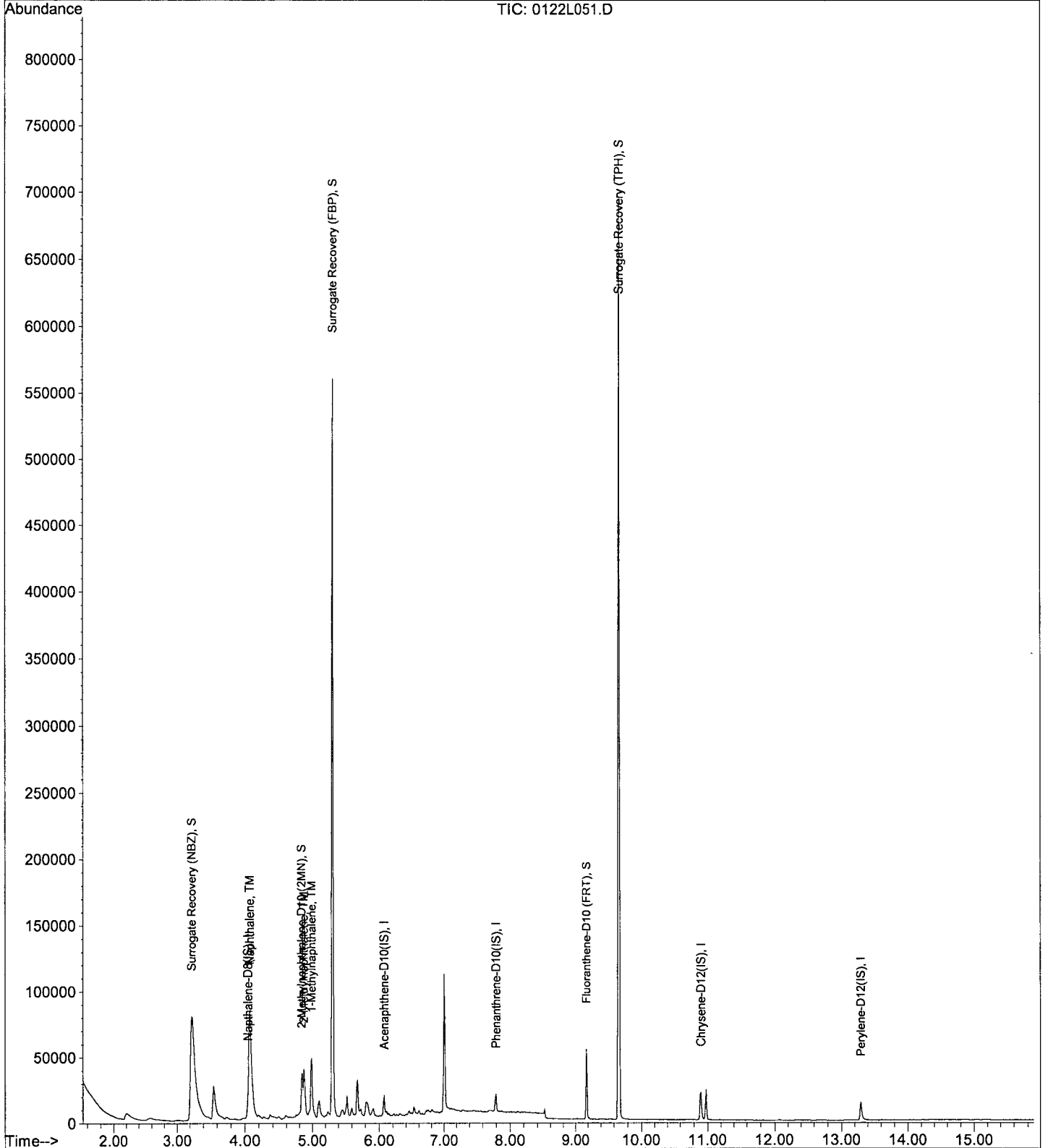
Data File : M:\LINUS\DATA\L190122\0122L051.D  
Acq On : 30 Jan 19 11:56  
Sample : AZ85520W11 1/800  
Misc :

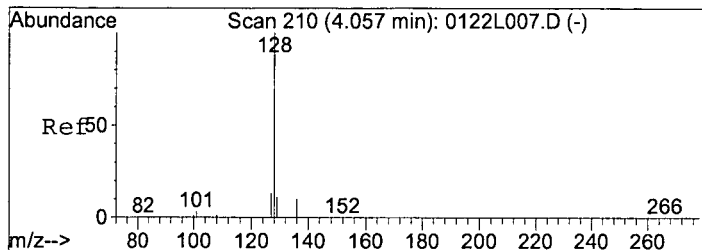
Vial: 51  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 12:50 2019

Quant Results File: L0122.RES

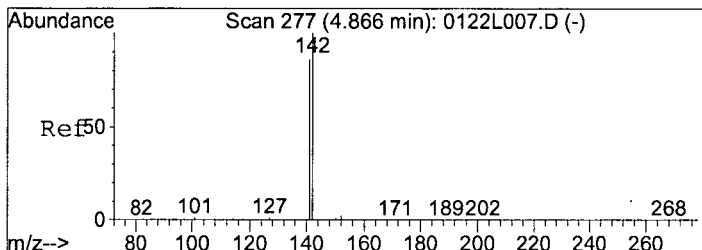
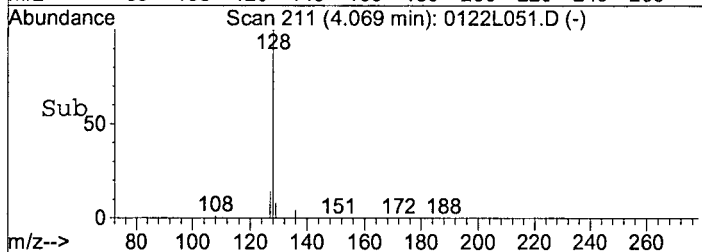
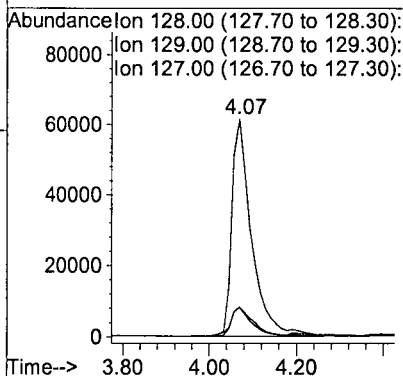
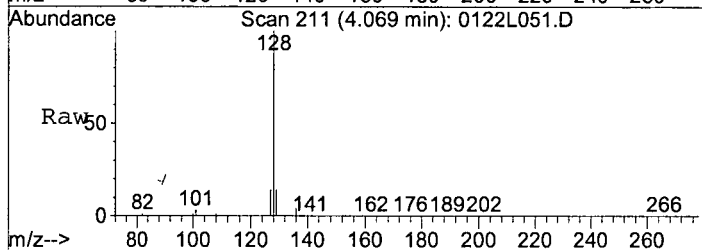
Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





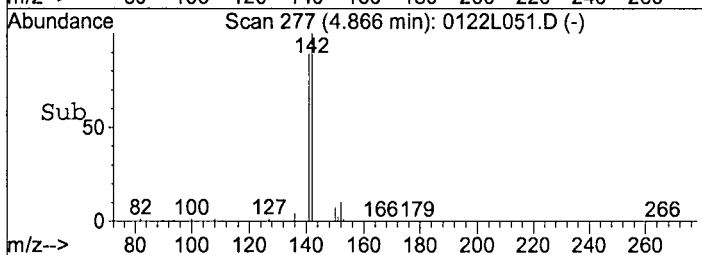
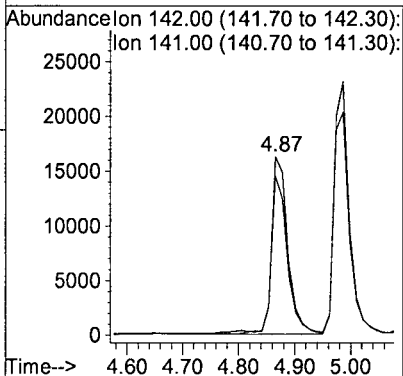
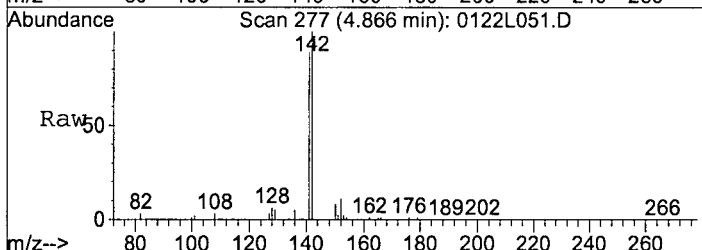
#3  
 Naphthalene  
 Concen: 31.5002 ppb  
 RT: 4.07 min Scan# 211  
 Delta R.T. -0.00 min  
 Lab File: 0122L051.D  
 Acq: 30 Jan 19 11:56

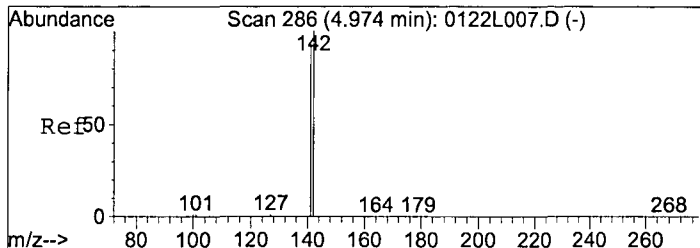
Tgt Ion:128 Resp: 193176  
 Ion Ratio Lower Upper  
 128 100  
 129 13.4 7.6 14.2  
 127 13.4 9.0 16.6



#5  
 2-Methylnaphthalene  
 Concen: 8.8023 ppb  
 RT: 4.87 min Scan# 277  
 Delta R.T. -0.02 min  
 Lab File: 0122L051.D  
 Acq: 30 Jan 19 11:56

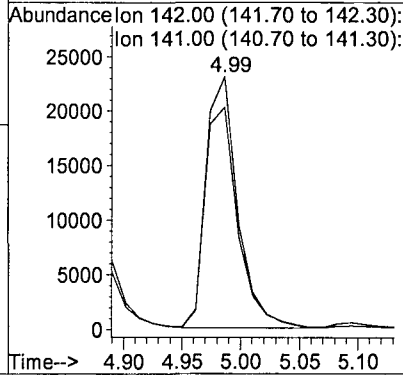
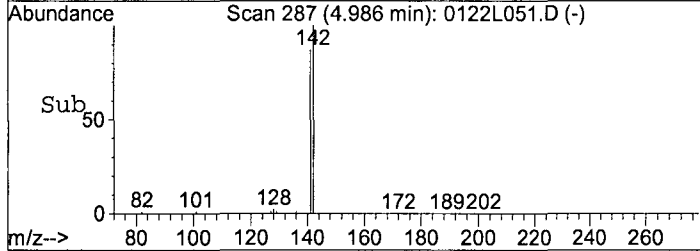
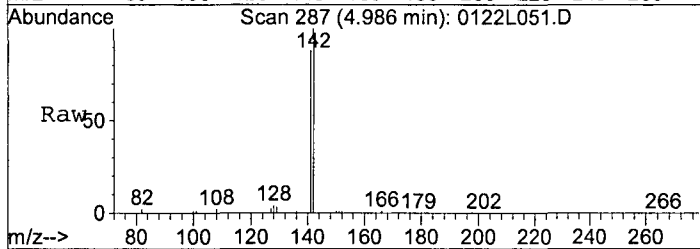
Tgt Ion:142 Resp: 32597  
 Ion Ratio Lower Upper  
 142 100  
 141 88.3 60.2 111.8





#6  
 1-Methylnaphthalene  
 Concen: 11.4788 ppb  
 RT: 4.99 min Scan# 287  
 Delta R.T. -0.01 min  
 Lab File: 0122L051.D  
 Acq: 30 Jan 19 11:56

Tgt Ion:142 Resp: 42937  
 Ion Ratio Lower Upper  
 142 100  
 141 87.6 64.1 119.1



Data File : M:\LINUS\DATA\L190122\0122L052.D Vial: 52  
 Acq On : 30 Jan 19 12:18 Operator: MA  
 Sample : AZ85521W10 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 12:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	18033	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	8180	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15337	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	24914	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	24873	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	295639	116.1759	ppb	0.00
Spiked Amount	6.250		Recovery	=	1858.816%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	39354	5.9534	ppb	-0.02
Spiked Amount	6.250		Recovery	=	95.248%	
8) Surrogate Recovery (FBP)	5.31	172	457408	98.8478	ppb	-0.01
Spiked Amount	6.250		Recovery	=	1581.568%	
15) Fluoranthene-D10 (FRT)	9.17	212	55457	6.4580	ppb	-0.02
Spiked Amount	6.250		Recovery	=	103.328%	
19) Surrogate Recovery (TPH)	9.67	244	481343	74.7925	ppb	0.00
Spiked Amount	6.250		Recovery	=	1196.672%	
Target Compounds						
3) Naphthalene	4.07	128	186529	25.6666	ppb	96
5) 2-Methylnaphthalene	4.87	142	31386	7.1518	ppb	100
6) 1-Methylnaphthalene	4.99	142	42429	9.5717	ppb	98

Quantitation Report

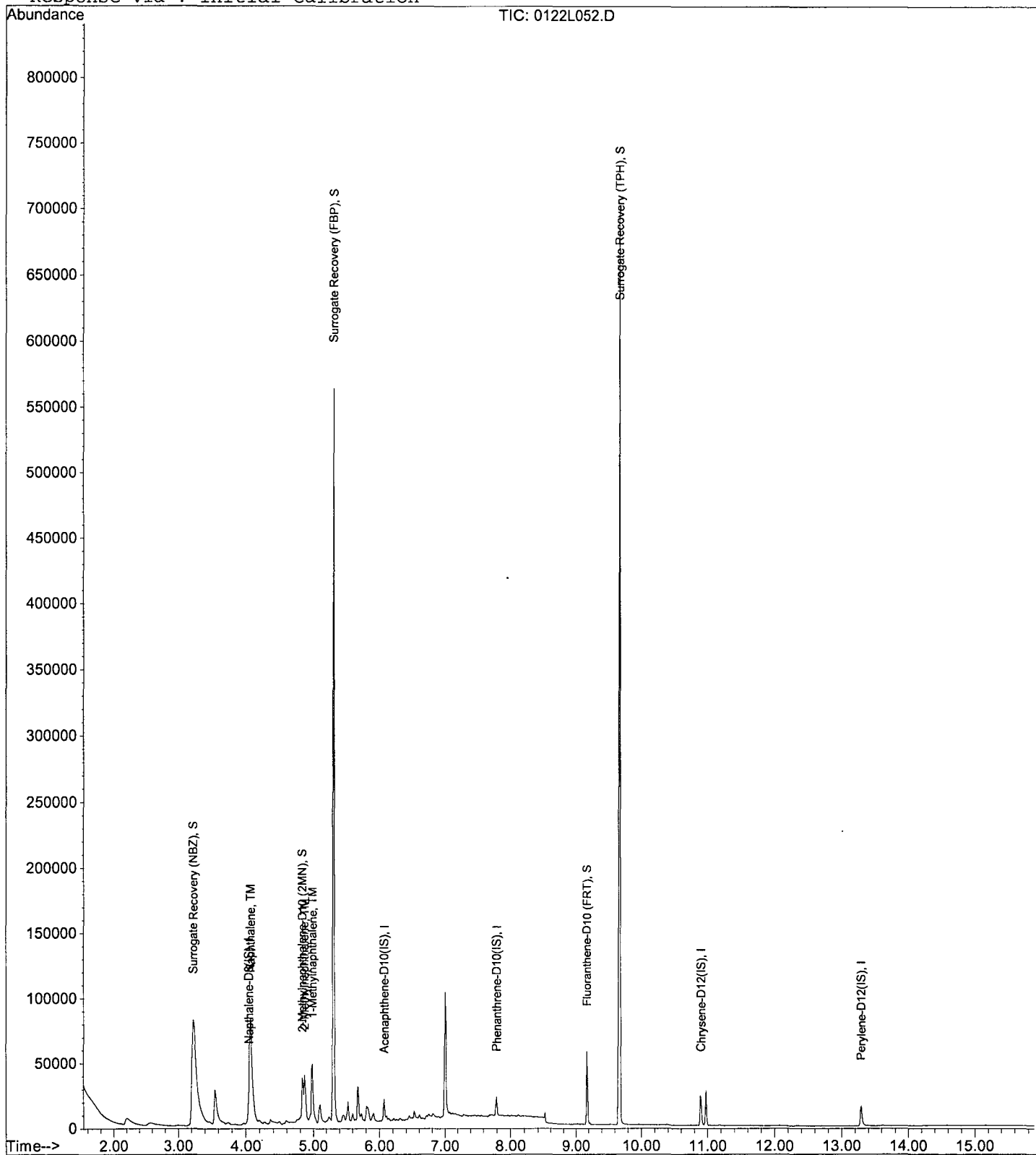
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Acq On : 30 Jan 19 12:18  
Sample : AZ85521W10 1/800  
Misc :

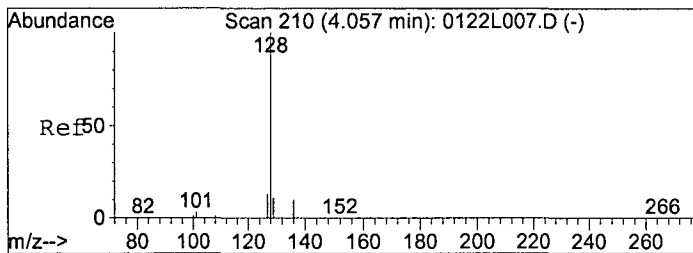
Vial: 52  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 12:51 2019

Quant Results File: L0122.RES

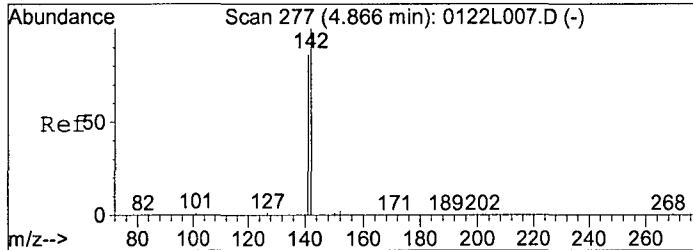
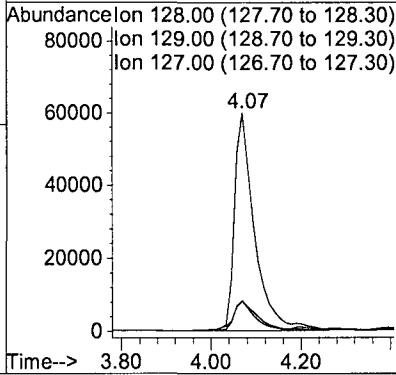
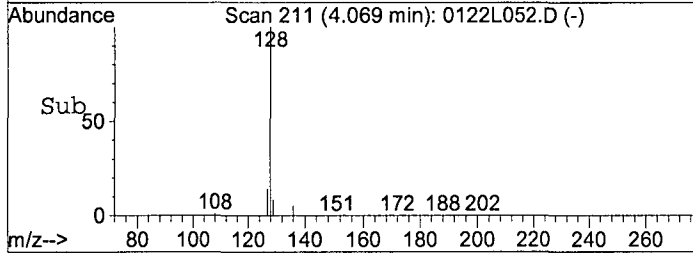
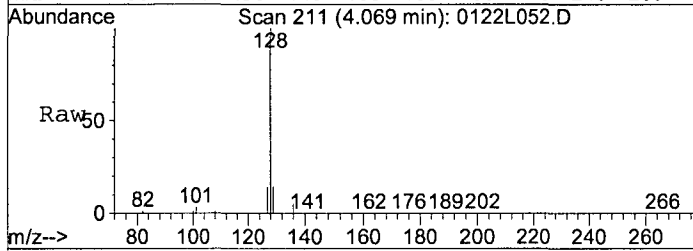
Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





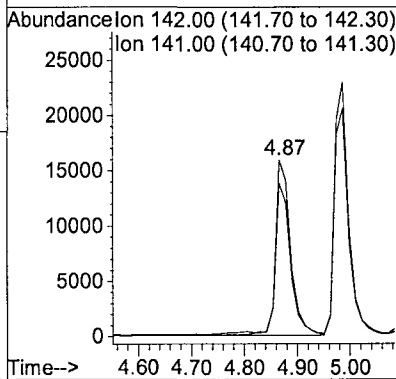
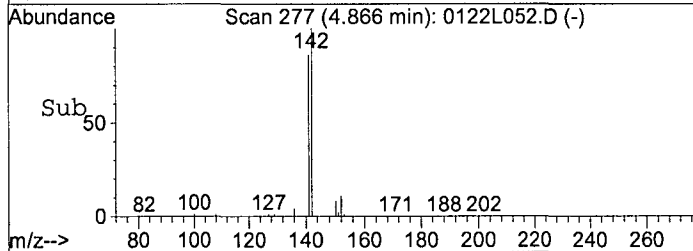
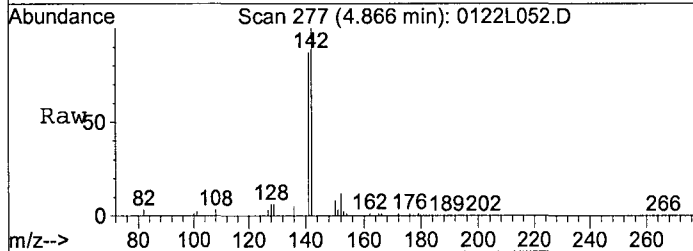
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 Naphthalene  
 Concen: 25.6666 ppb  
 RT: 4.07 min Scan# 211  
 Delta R.T. -0.00 min  
 Lab File: 0122L052.D  
 Acq: 30 Jan 19 12:18

Tgt Ion	Resp	Lower	Upper
128	186529		
129	13.7	7.6	14.2
127	13.5	9.0	16.6

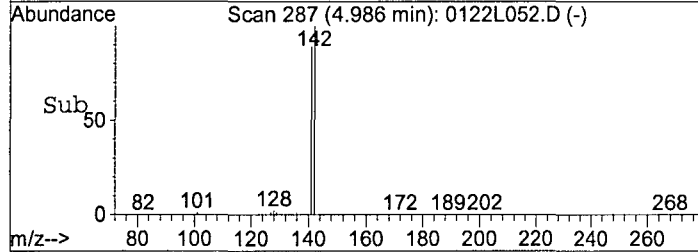
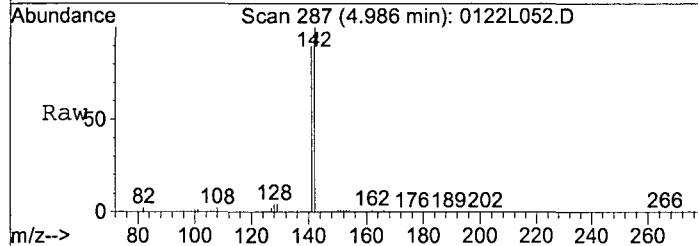
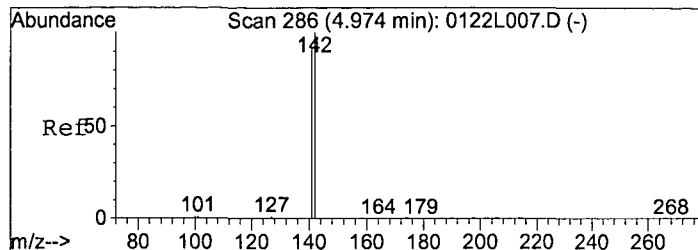


#5  
 2-Methylnaphthalene  
 Concen: 7.1518 ppb  
 RT: 4.87 min Scan# 277  
 Delta R.T. -0.02 min  
 Lab File: 0122L052.D  
 Acq: 30 Jan 19 12:18

Tgt Ion	Resp	Lower	Upper
142	31386		
141	86.2	60.2	111.8

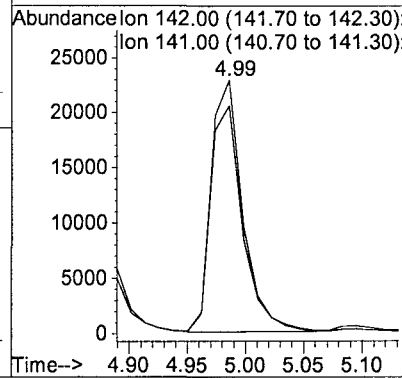






#6  
 1-Methylnaphthalene  
 Concen: 9.5717 ppb  
 RT: 4.99 min Scan# 287  
 Delta R.T. -0.01 min  
 Lab File: 0122L052.D  
 Acq: 30 Jan 19 12:18

Tgt Ion	Resp	Lower	Upper
142	100		
141	89.3	64.1	119.1



Data File : M:\LINUS\DATA\L190122\0122L053.D Vial: 53  
 Acq On : 30 Jan 19 12:41 Operator: MA  
 Sample : AZ85523W10 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 13:10 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	17870	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7858	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15667	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	21711	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	15267	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	292883	116.1427	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1858.288%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	41266	6.2995	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 100.800%	
8) Surrogate Recovery (FBP)	5.31	172	460096	103.5030	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1656.048%	
15) Fluoranthene-D10 (FRT)	9.17	212	51500	5.8709	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 93.936%	
19) Surrogate Recovery (TPH)	9.67	244	582192	103.8085	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1660.944%	

Target Compounds Qvalue

Quantitation Report

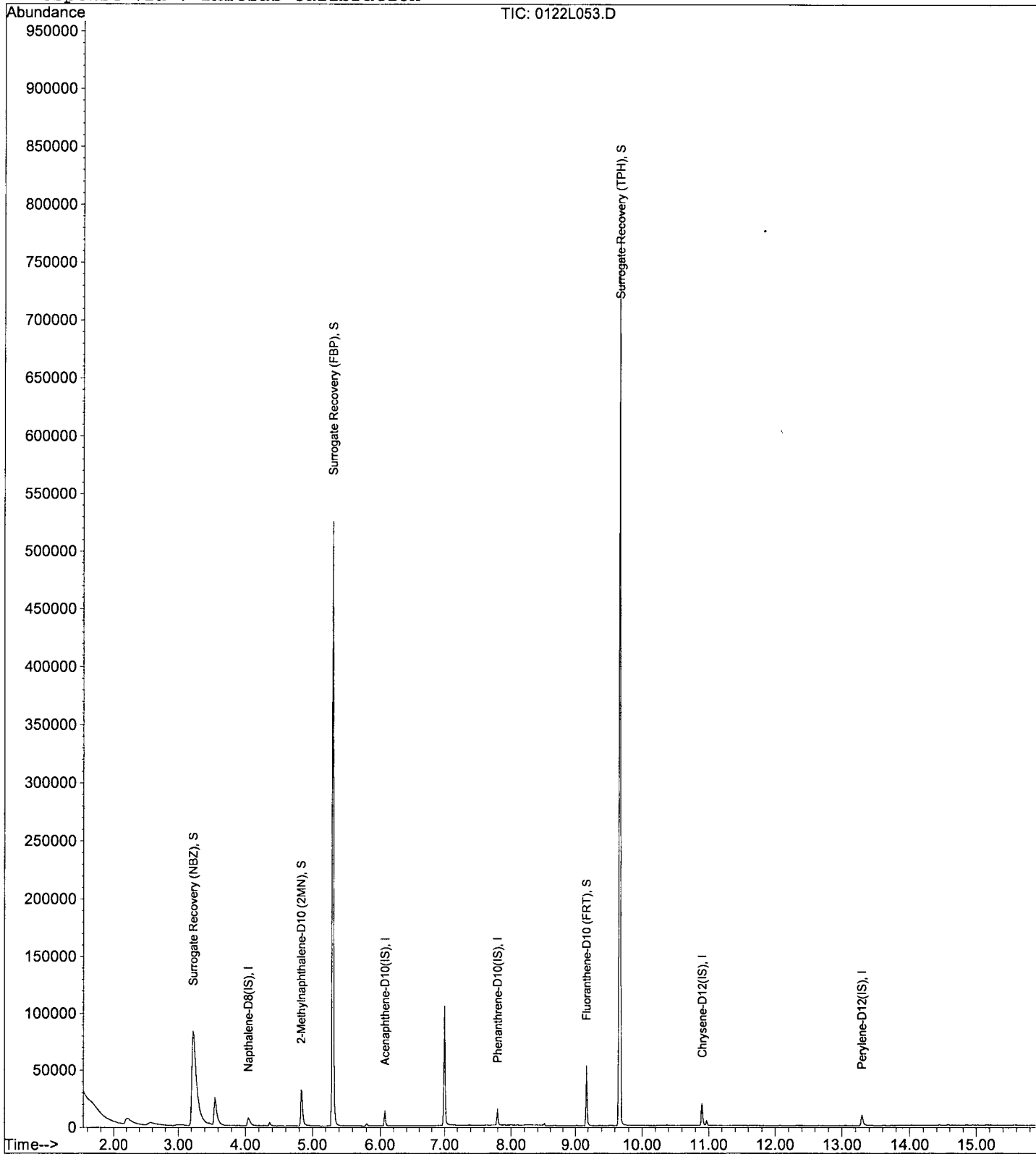
Data File : M:\LINUS\DATA\L190122\0122L053.D  
Acq On : 30 Jan 19 12:41  
Sample : AZ85523W10 1/800  
Misc :

Vial: 53  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 13:10 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L054.D Vial: 54  
 Acq On : 30 Jan 19 13:03 Operator: MA  
 Sample : AZ85525W11 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 13:22 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.05	136	17692	2.5000	ppb	0.00
7) Acenaphthene-D10(IS)	6.07	164	7842	2.5000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	16037	2.5000	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	22684	2.5000	ppb	-0.02
23) Perylene-D12(IS)	13.29	264	20180	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	321848	128.9128	ppb	0.00
Spiked Amount	6.250		Recovery	= 2062.608%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	41874	6.4567	ppb	-0.02
Spiked Amount	6.250		Recovery	= 103.312%		
8) Surrogate Recovery (FBP)	5.31	172	512869	115.6101	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1849.760%		
15) Fluoranthene-D10 (FRT)	9.17	212	62779	6.9915	ppb	-0.02
Spiked Amount	6.250		Recovery	= 111.872%		
19) Surrogate Recovery (TPH)	9.67	244	674647	115.1340	ppb	0.00
Spiked Amount	6.250		Recovery	= 1842.144%		

Target Compounds Qvalue

Quantitation Report

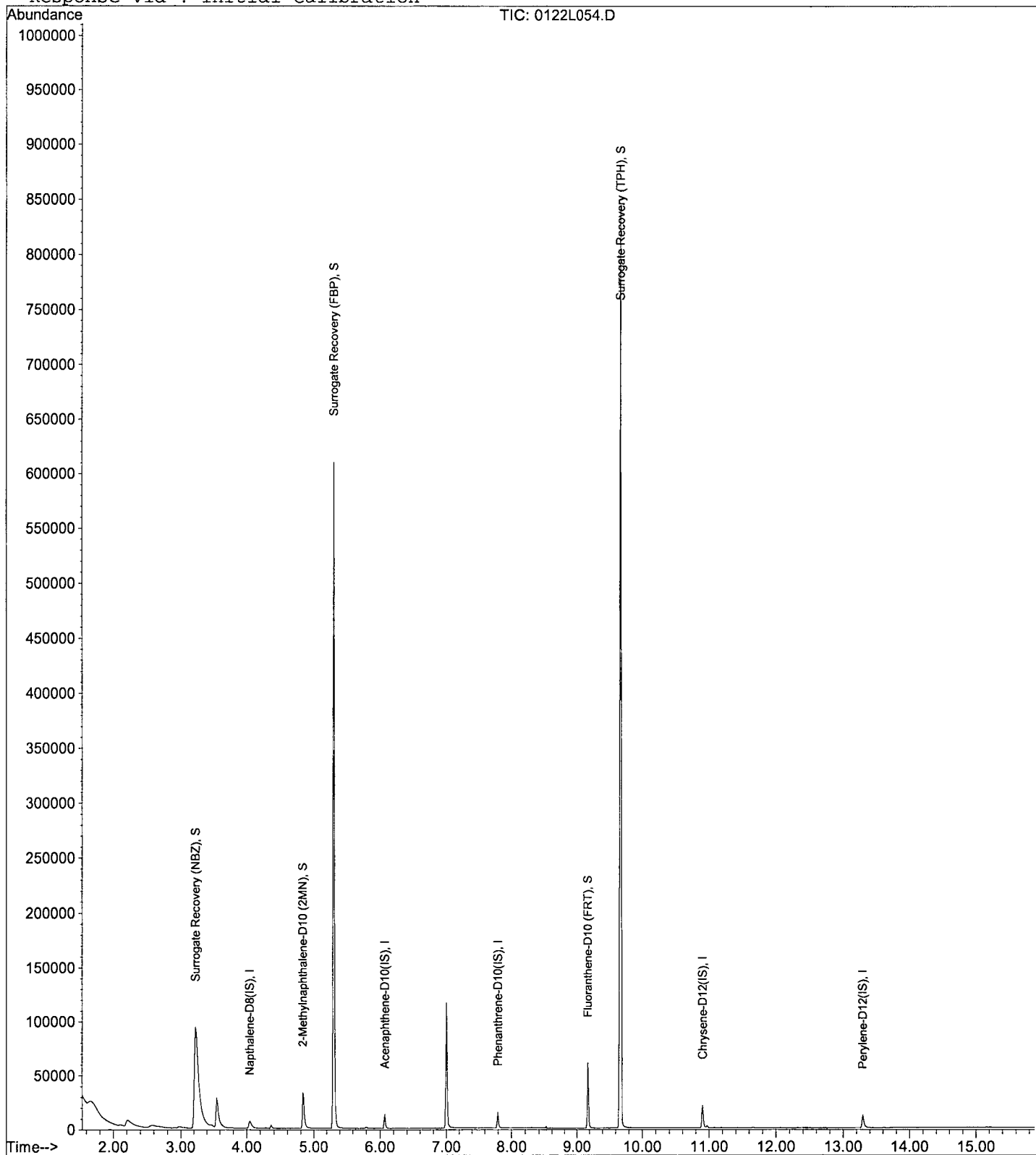
Data File : M:\LINUS\DATA\L190122\0122L054.D  
Acq On : 30 Jan 19 13:03  
Sample : AZ85525W11 1/800  
Misc :

Vial: 54  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 13:22 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L055.D  
 Acq On : 30 Jan 19 13:25  
 Sample : AZ85527W10 1/800  
 Misc :

Vial: 55  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.25

Quant Time: Jan 30 13:46 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	15400	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	6524	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14087	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	18817	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	7287	2.5000	ppb	-0.03

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.22	82	307580	141.5336	ppb	0.00
Spiked Amount	6.250					
					Recovery = 2264.544%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	46038	8.1553	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 130.480%	
8) Surrogate Recovery (FBP)	5.31	172	506629	137.2753	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 2196.400%	
15) Fluoranthene-D10 (FRT)	9.17	212	60125	7.6228	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 121.968%	
19) Surrogate Recovery (TPH)	9.67	244	615104	126.5449	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 2024.720%	

Target Compounds

Qvalue

Quantitation Report

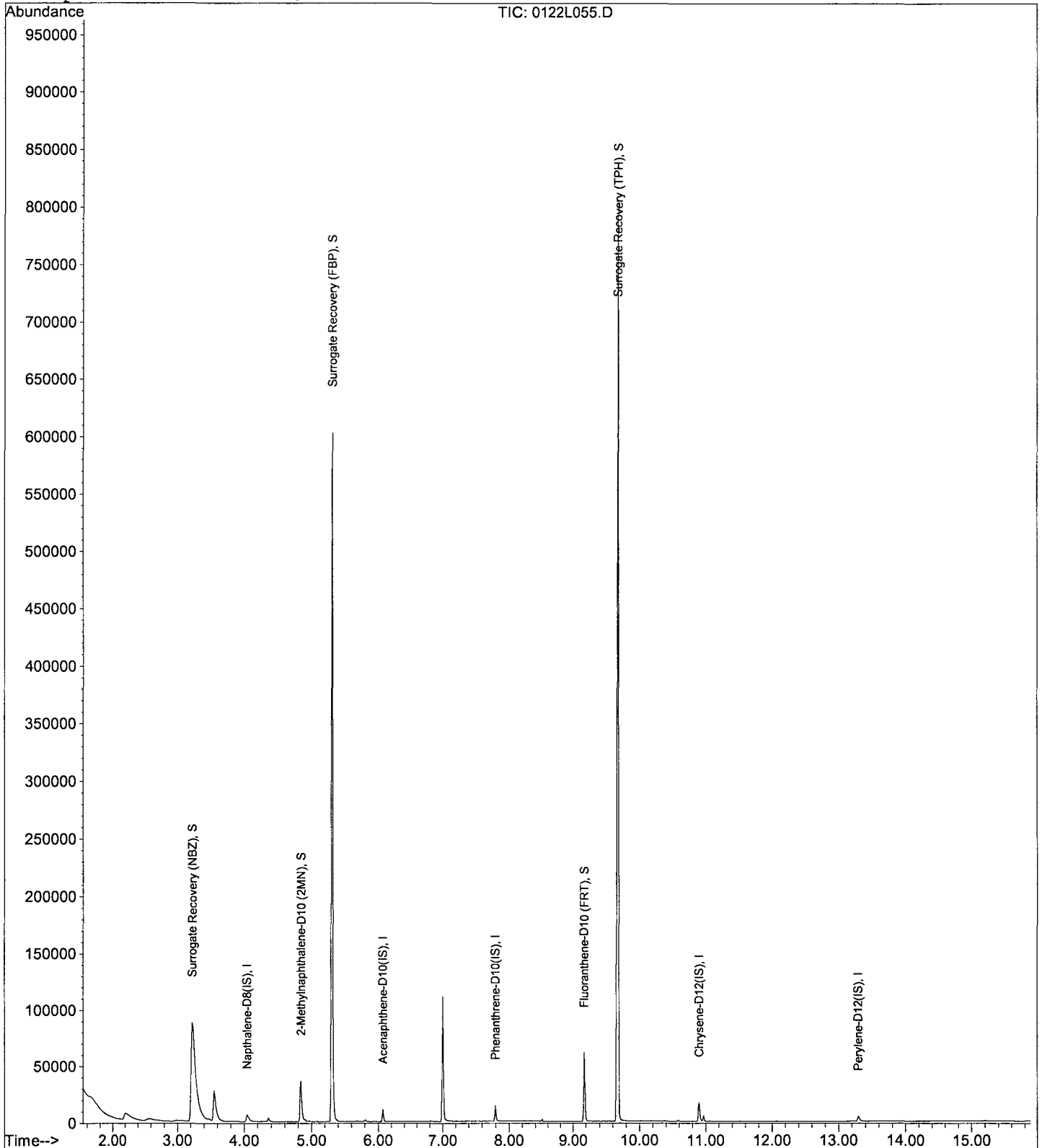
Data File : M:\LINUS\DATA\L190122\0122L055.D  
Acq On : 30 Jan 19 13:25  
Sample : AZ85527W10 1/800  
Misc :

Vial: 55  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 13:46 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L056.D Vial: 56  
 Acq On : 30 Jan 19 13:46 Operator: MA  
 Sample : 190128A BLK 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 14:03 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	19493	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	9066	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	17925	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	24268	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	24237	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	305288	110.9822	ppb	0.00
Spiked Amount	6.250		Recovery	=	1775.712%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	42235	5.9107	ppb	-0.01
Spiked Amount	6.250		Recovery	=	94.576%	
8) Surrogate Recovery (FBP)	5.31	172	510301	99.5009	ppb	-0.01
Spiked Amount	6.250		Recovery	=	1592.016%	
15) Fluoranthene-D10 (FRT)	9.17	212	59280	5.9065	ppb	-0.02
Spiked Amount	6.250		Recovery	=	94.496%	
19) Surrogate Recovery (TPH)	9.67	244	615268	98.1470	ppb	-0.01
Spiked Amount	6.250		Recovery	=	1570.352%	

Target Compounds Qvalue



Quantitation Report

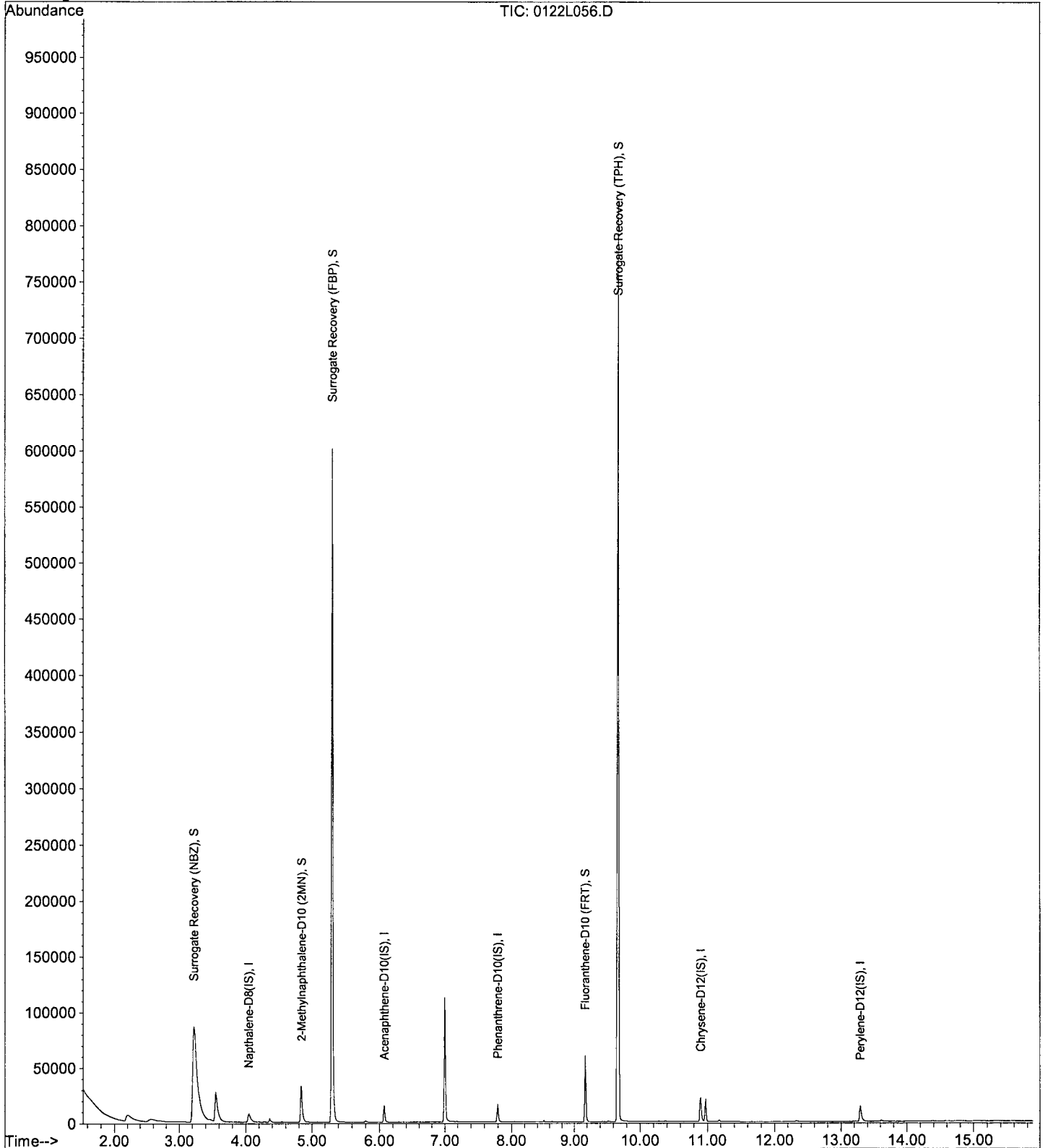
Data File : M:\LINUS\DATA\L190122\0122L056.D  
Acq On : 30 Jan 19 13:46  
Sample : 190128A BLK 1/800  
Misc :

Vial: 56  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 14:03 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L057.D Vial: 57  
 Acq On : 30 Jan 19 14:07 Operator: MA  
 Sample : 190128A LCS-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 14:24 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	13343	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	5524	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	10530	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	16261	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	8811	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.27	82	518	0.2751	ppb	0.05
Spiked Amount	6.250		Recovery	=	4.400%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	35462	7.2502	ppb	-0.01
Spiked Amount	6.250		Recovery	=	116.000%	
8) Surrogate Recovery (FBP)	5.31	172	345	0.1104	ppb	-0.01
Spiked Amount	6.250		Recovery	=	1.760%	
15) Fluoranthene-D10 (FRT)	9.17	212	49216	8.3475	ppb	-0.02
Spiked Amount	6.250		Recovery	=	133.568%	
19) Surrogate Recovery (TPH)	9.67	244	592	0.1409	ppb	-0.01
Spiked Amount	6.250		Recovery	=	2.256%	
Target Compounds						
3) Naphthalene	4.07	128	32899	6.1181	ppb	100
5) 2-Methylnaphthalene	4.88	142	20151	6.2057	ppb	98
6) 1-Methylnaphthalene	4.99	142	20182	6.1532	ppb	96
9) Acenaphthylene	5.90	152	40975	4.1412	ppb	99
10) Acenaphthene	6.11	154	18069	6.2393	ppb	96
11) Fluorene	6.71	166	21431	6.3467	ppb	100
13) Phenanthrene	7.82	178	31512	6.6557	ppb	98
14) Anthracene	7.88	178	25023	5.3180	ppb	99
16) Fluoranthene	9.20	202	53261	7.1899	ppb	# 92
18) Pyrene	9.46	202	49469	6.1538	ppb	94
20) Benz (a) anthracene	10.88	228	41857	5.8181	ppb	98
21) Chrysene	10.92	228	47238	6.8579	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	42858	6.0297	ppb	# 80
24) Benzo (b) fluoranthene	12.63	252	42795	11.2390	ppb	99
25) Benzo (k) fluoranthene	12.67	252	45834	11.6726	ppb	99
26) Benzo (a) pyrene	13.20	252	31629	8.6848	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	37199	11.0977	ppb	98
28) Benzo (g,h,i) perylene	15.15	276	34784	10.2735	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0122L057.D L0122.M Fri Feb 01 13:45:52 2019

Quantitation Report

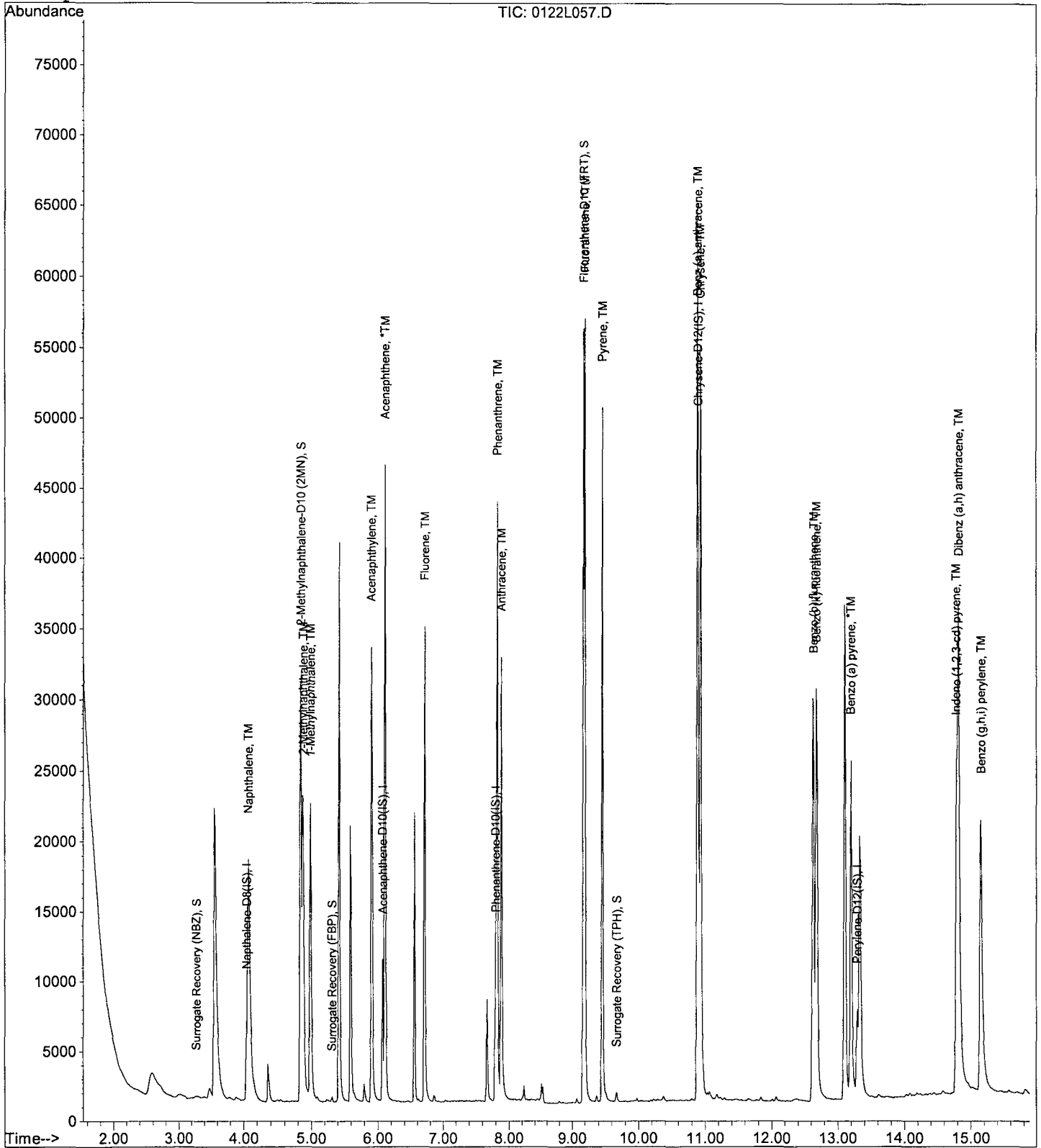
Data File : M:\LINUS\DATA\L190122\0122L057.D  
Acq On : 30 Jan 19 14:07  
Sample : 190128A LCS-2 1/800  
Misc :

Vial: 57  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 14:24 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L058.D Vial: 58  
 Acq On : 30 Jan 19 14:29 Operator: MA  
 Sample : 190128A LCSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:05 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	17209	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7101	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15358	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	20683	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	8214	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.27	82	528	0.2174	ppb	0.05
Spiked Amount	6.250		Recovery	=	3.472%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	42122	6.6772	ppb	-0.01
Spiked Amount	6.250		Recovery	=	106.832%	
8) Surrogate Recovery (FBP)	5.29	172	28	0.0070	ppb	-0.04
Spiked Amount	6.250		Recovery	=	0.112%	
15) Fluoranthene-D10 (FRT)	9.17	212	60272	7.0091	ppb	-0.02
Spiked Amount	6.250		Recovery	=	112.144%	
19) Surrogate Recovery (TPH)	9.67	244	139	0.0260	ppb	-0.01
Spiked Amount	6.250		Recovery	=	0.416%	
Target Compounds						
3) Naphthalene	4.07	128	37370	5.3884	ppb	100
5) 2-Methylnaphthalene	4.88	142	23763	5.6740	ppb	97
6) 1-Methylnaphthalene	4.99	142	23397	5.5309	ppb	96
9) Acenaphthylene	5.90	152	49168	3.8657	ppb	100
10) Acenaphthene	6.11	154	21682	5.8242	ppb	96
11) Fluorene	6.71	166	27708	6.3833	ppb	99
13) Phenanthrene	7.82	178	41608	6.0254	ppb	98
14) Anthracene	7.88	178	33445	4.8735	ppb	99
16) Fluoranthene	9.20	202	64929	6.0096	ppb	# 89
18) Pyrene	9.46	202	57962	5.6688	ppb	93
20) Benz (a) anthracene	10.88	228	49110	5.3668	ppb	98
21) Chrysene	10.93	228	55454	6.3295	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.79	276	49586	5.4848	ppb	# 81
24) Benzo (b) fluoranthene	12.63	252	52825	14.8815	ppb	# 98
25) Benzo (k) fluoranthene	12.68	252	56618	15.4670	ppb	97
26) Benzo (a) pyrene	13.20	252	37265	10.9760	ppb	# 96
27) Dibenz (a,h) anthracene	14.83	278	42644	13.6468	ppb	96
28) Benzo (g,h,i) perylene	15.16	276	39208	12.4218	ppb	# 93

(#) = qualifier out of range (m) = manual integration  
 0122L058.D L0122.M Fri Feb 01 13:45:54 2019

Quantitation Report

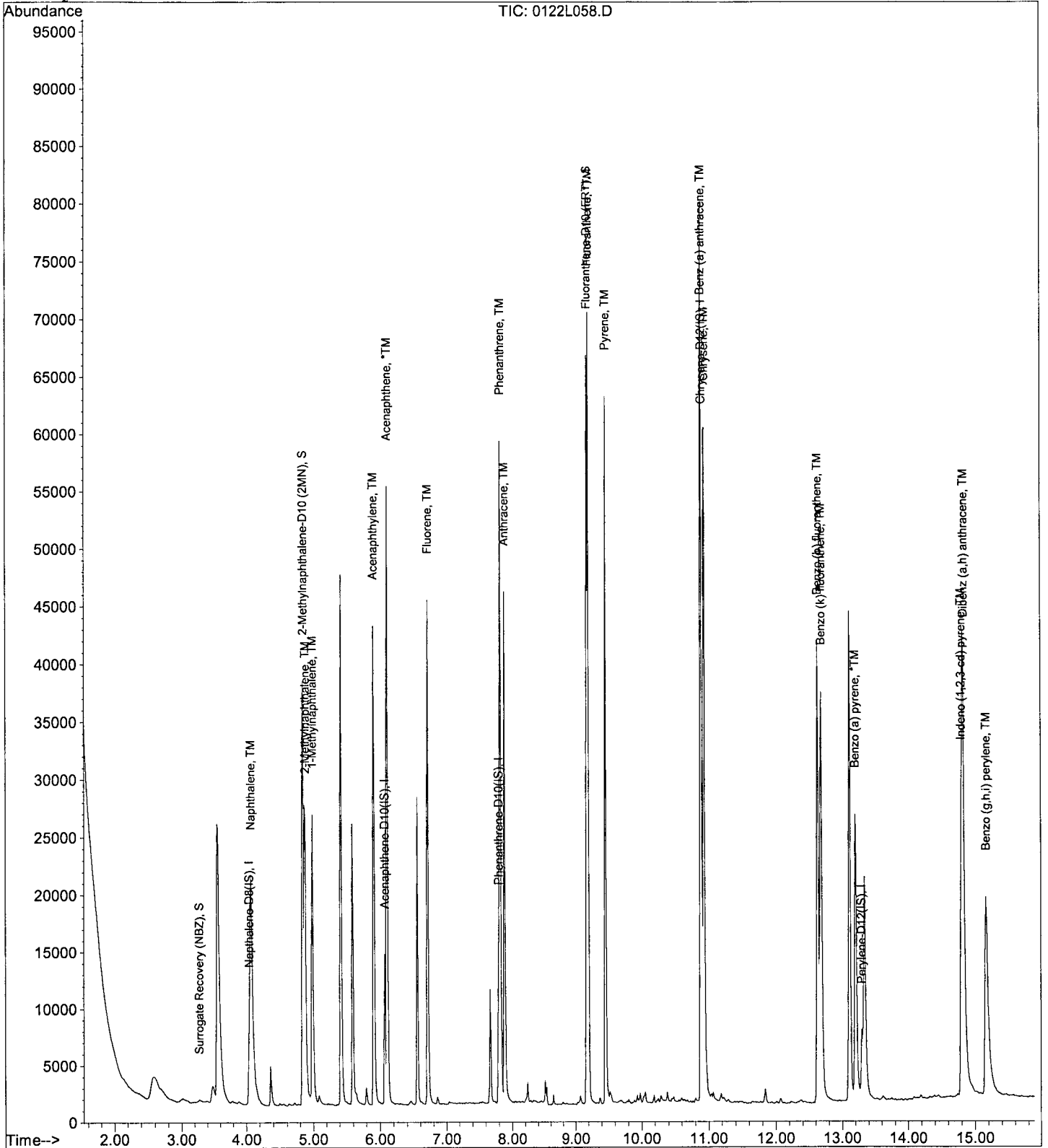
Data File : M:\LINUS\DATA\L190122\0122L058.D  
Acq On : 30 Jan 19 14:29  
Sample : 190128A LCSD-2 1/800  
Misc :

Vial: 58  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 31 6:05 2019

Quant Results File: L0122.RES

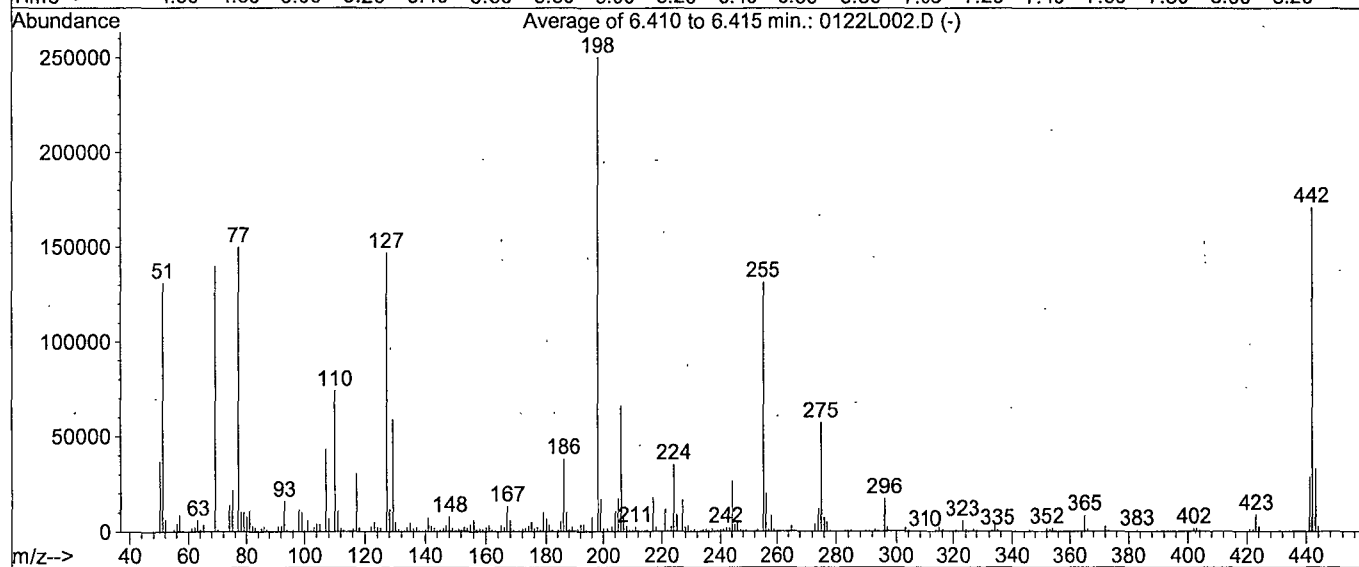
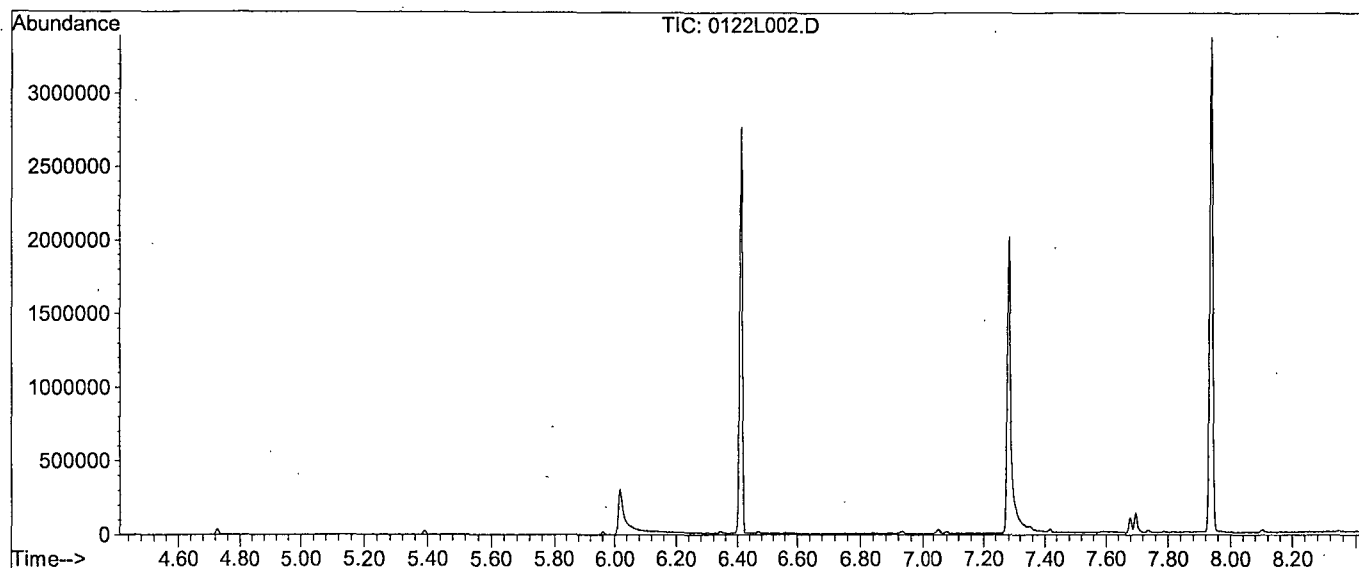
Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L002.D  
 Acq On : 22 Jan 19 9:21  
 Sample : SV Tune 10/11/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0115.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1536, 1537, 1538; Background Corrected with Scan 1526

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	52.3	131012	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.8	1098	PASS
127	198	10	80	58.6	146811	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	250517	PASS
199	198	5	9	6.7	16904	PASS
275	198	10	60	22.8	57021	PASS
365	198	1	100	3.3	8323	PASS
441	442	0.01	24	16.7	28459	PASS
442	198	50	150	68.2	170773	PASS
443	442	15	24	19.2	32747	PASS

Data File Name: 0122L002.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 22 Jan 2019 09:21  
Method File: DFTPP2.M  
Sample Name: SV Tune 10/11/18  
Vial Number: 2  
Instrument Name: Linus

#	Name	Ret Time	Target Response
1)	DDT	7.95	23063100
2)	DDD	7.71	1029070
3)	DDE	7.88	0

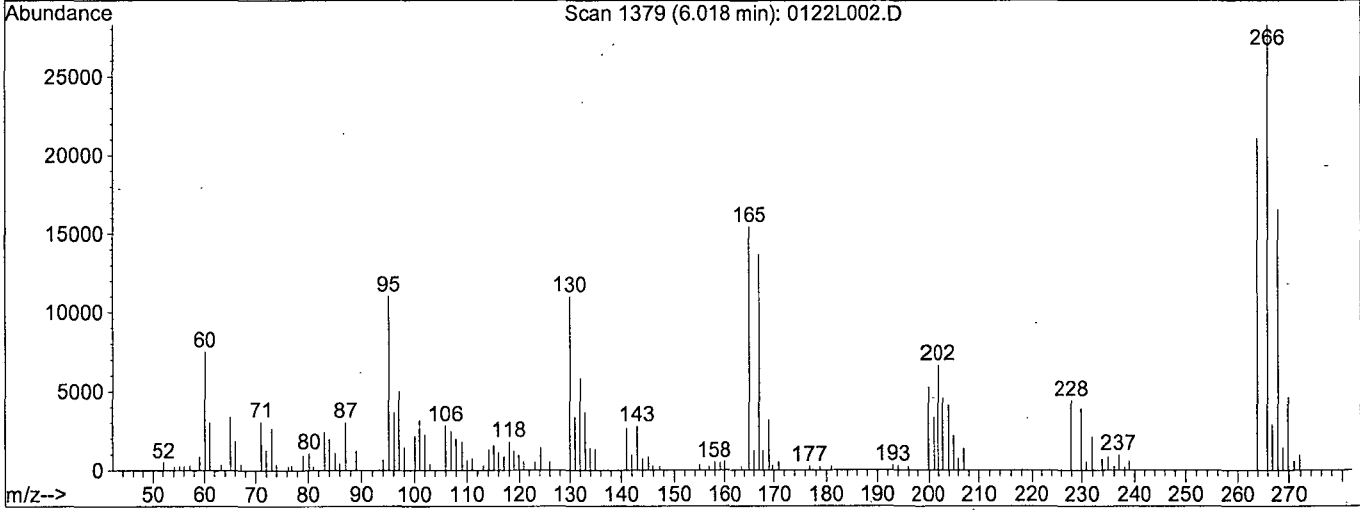
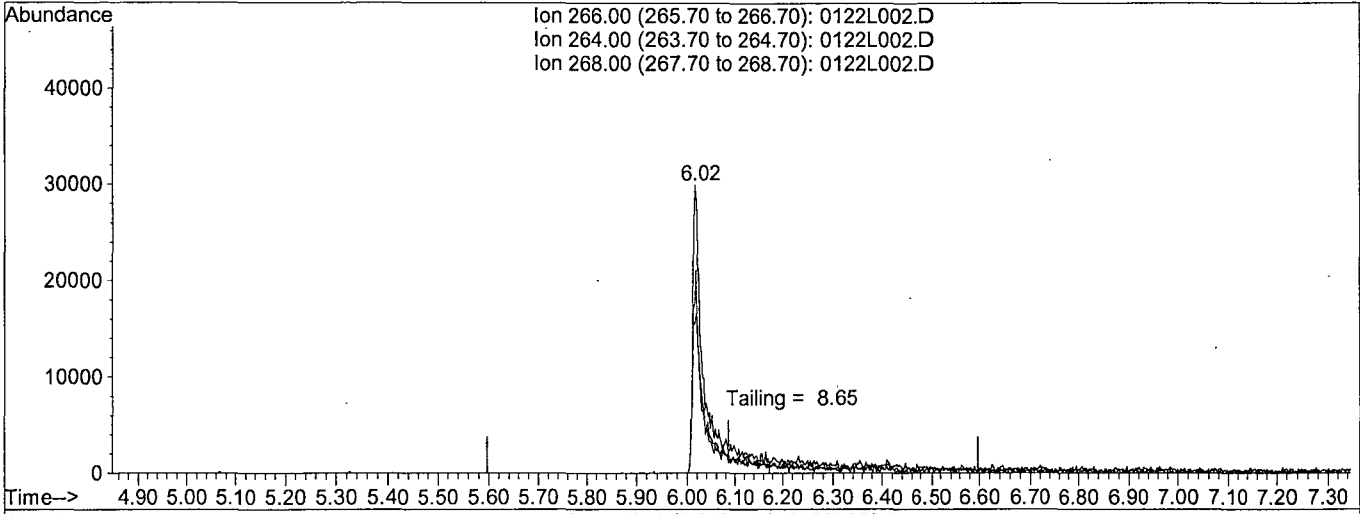
Breakdown 4.27

Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L002.D  
 Acq On : 22 Jan 19 9:21  
 Sample : SV Tune 10/11/18  
 Misc :  
 Quant Time: Jan 22 9:53 2019

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 15 15:07:08 2019  
 Response via : Single Level Calibration



TIC: 0122L002.D

(5) Pentachlorophenol

6.02min 0.0000

response 304865

Ion	Exp%	Act%
266.00	100	100
264.00	63.70	53.20
268.00	59.20	60.40
0.00	0.00	0.00

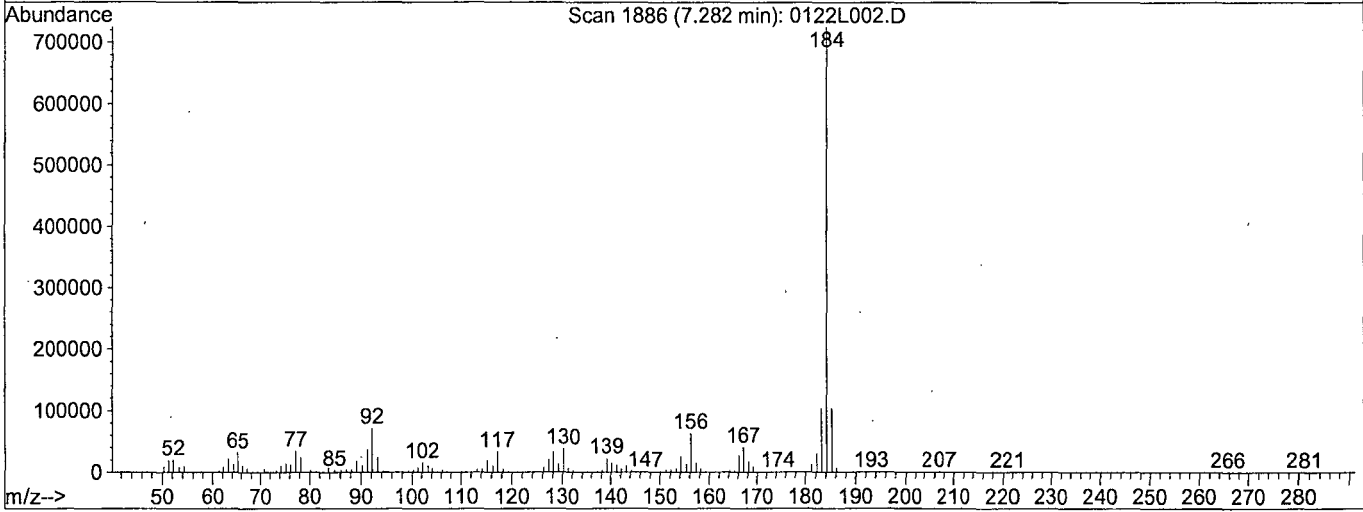
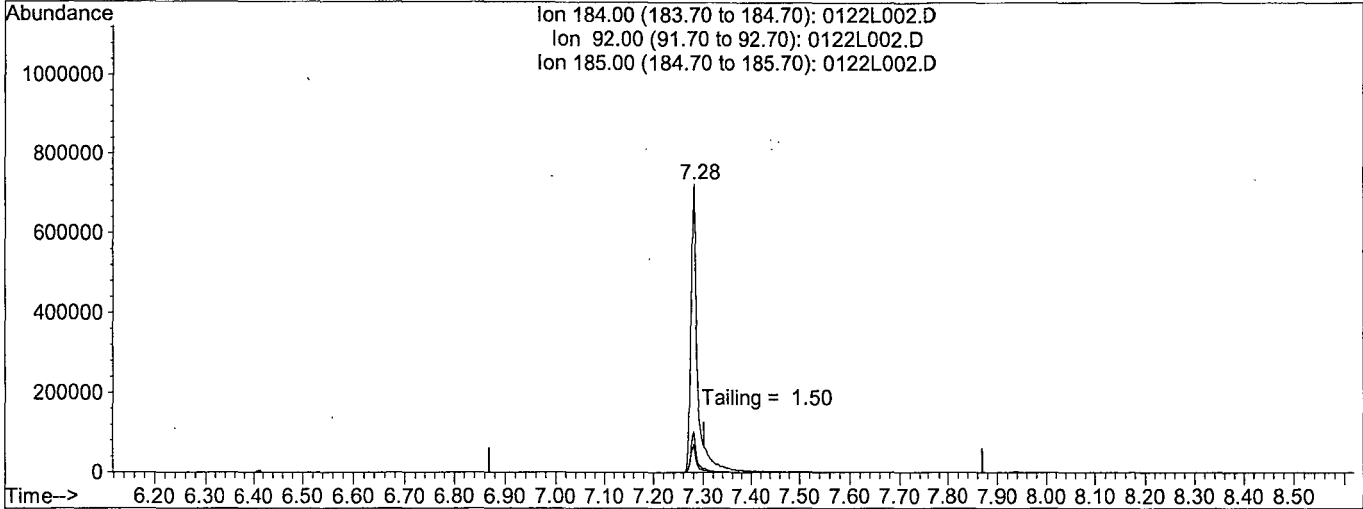


Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L002.D  
 Acq On : 22 Jan 19 9:21  
 Sample : SV Tune 10/11/18  
 Misc :  
 Quant Time: Jan 22 9:53 2019

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190121\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 15 15:07:08 2019  
 Response via : Single Level Calibration



TIC: 0122L002.D

(6) Benzidine

7.28min 0.0000

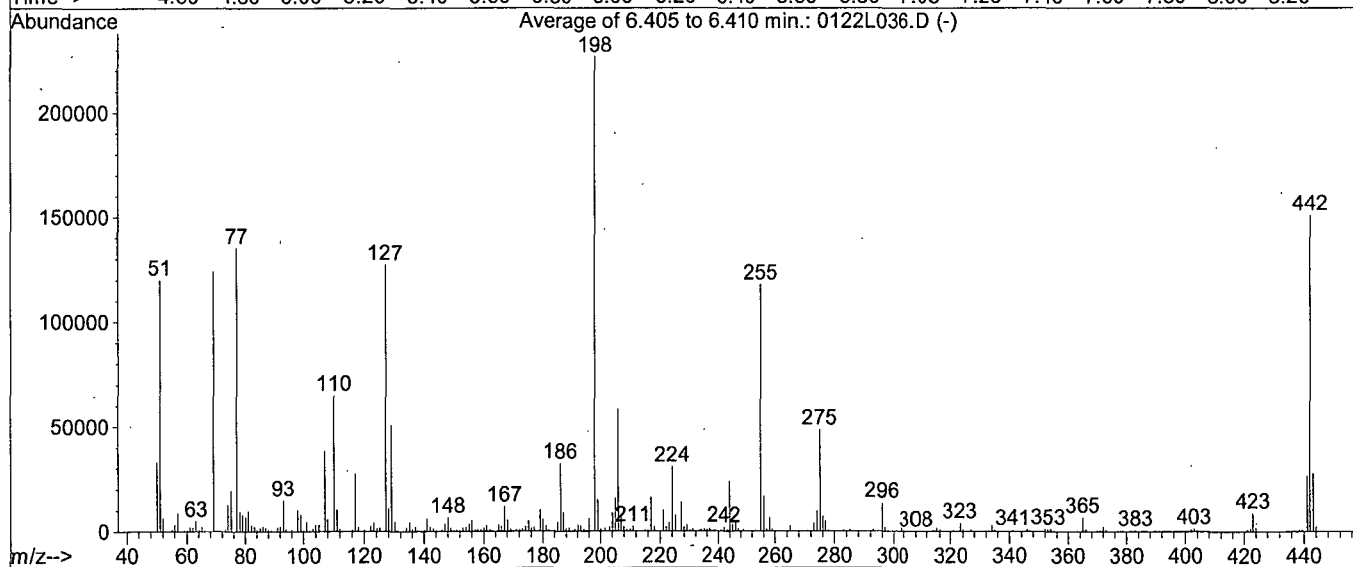
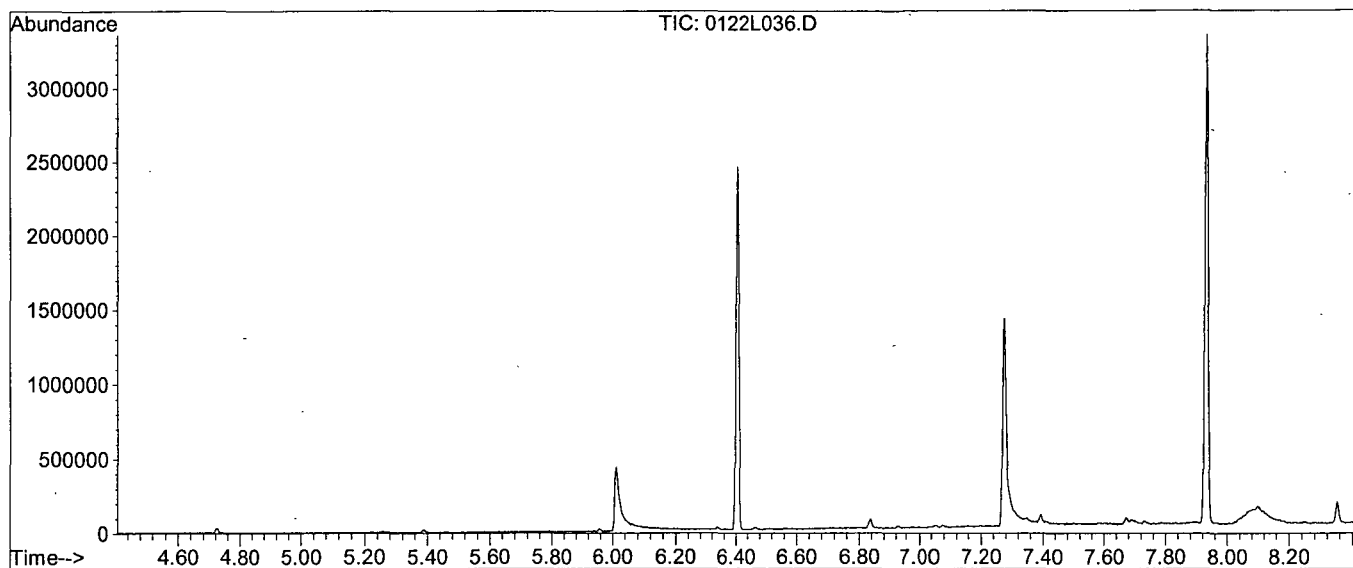
response 6253465

Ion	Exp%	Act%
184.00	100	100
92.00	8.30	7.91
185.00	14.20	14.84
0.00	0.00	0.00

Data File : M:\LINUS\DATA\L190122\0122L036.D  
 Acq On : 30 Jan 19 6:19  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 36  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	52.9	119923	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	338	PASS
127	198	10	80	56.0	127067	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	226816	PASS
199	198	5	9	6.6	15063	PASS
275	198	10	60	21.3	48307	PASS
365	198	1	100	2.9	6619	PASS
441	442	0.01	24	17.5	26315	PASS
442	198	50	150	66.5	150784	PASS
443	442	15	24	18.4	27739	PASS

Data File Name: 0122L036.D  
Data File Path: M:\LINUS\DATA\L190122\  
Operator: MA  
Date Acquired: 30 Jan 2019 06:19  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 36  
Instrument Name: Linus

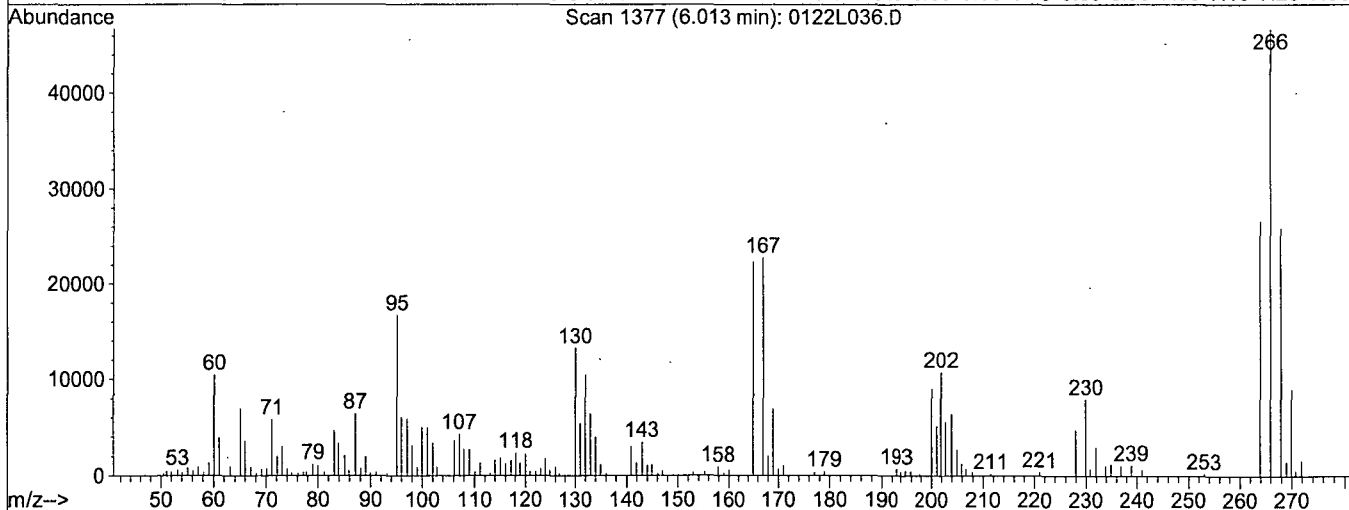
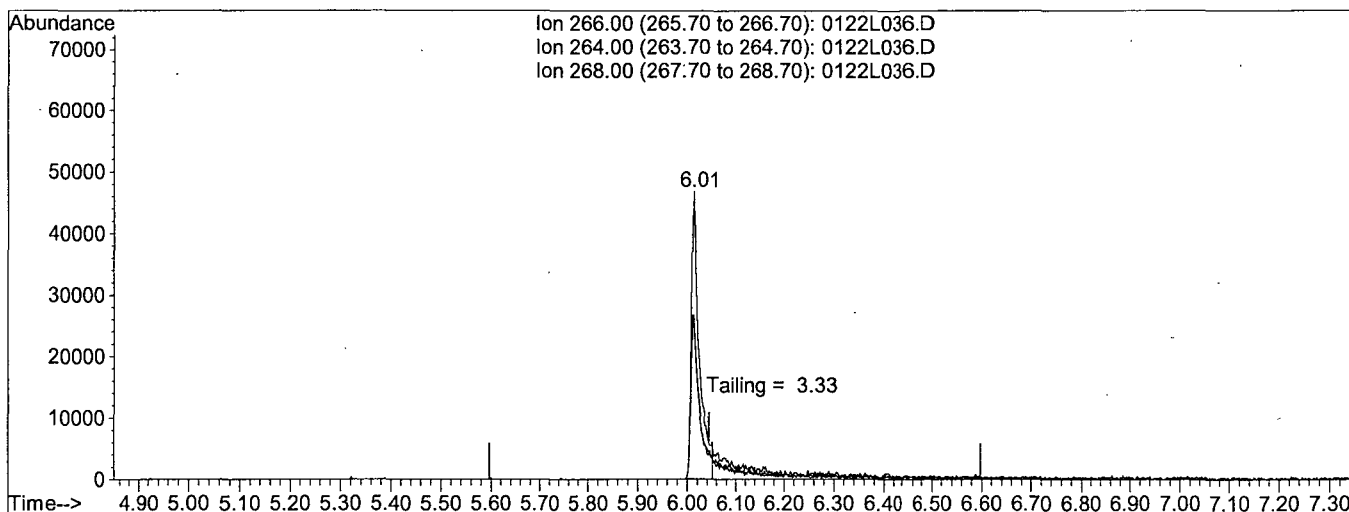
#	Name	Ret Time	Target Response
1)	DDT	7.95	22632300
2)	DDD	7.71	428978
3)	DDE	7.88	0

Breakdown 1.86

Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L036.D Vial: 36  
 Acq On : 30 Jan 19 6:19 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Linus  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 30 6:37 2019 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 15 15:07:08 2019  
 Response via : Single Level Calibration



TIC: 0122L036.D

(5) Pentachlorophenol

6.01min 0.0000

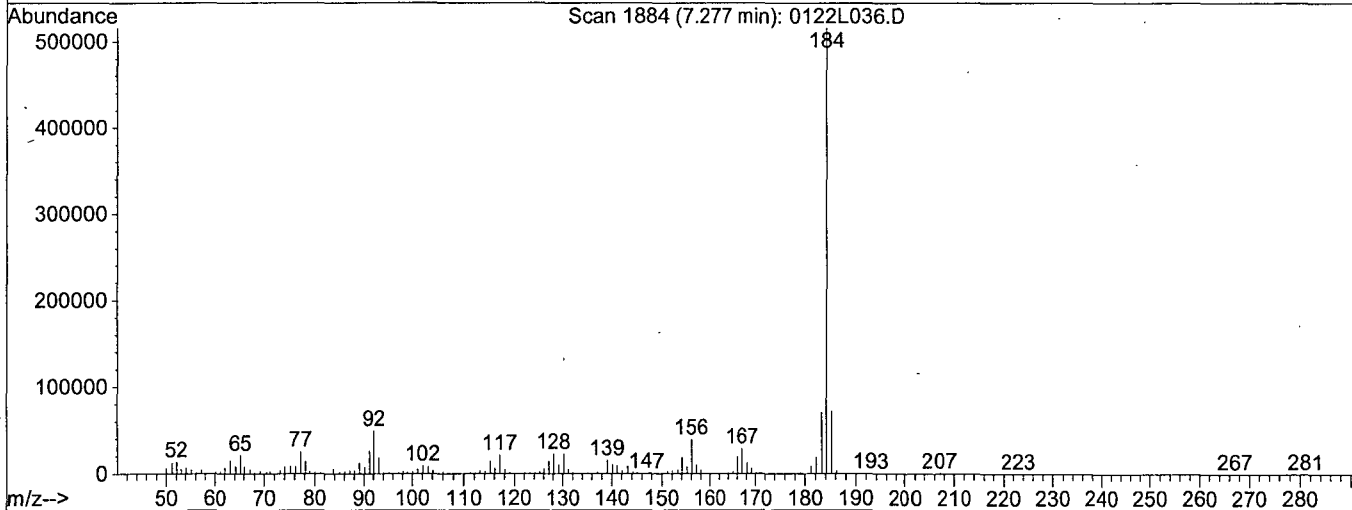
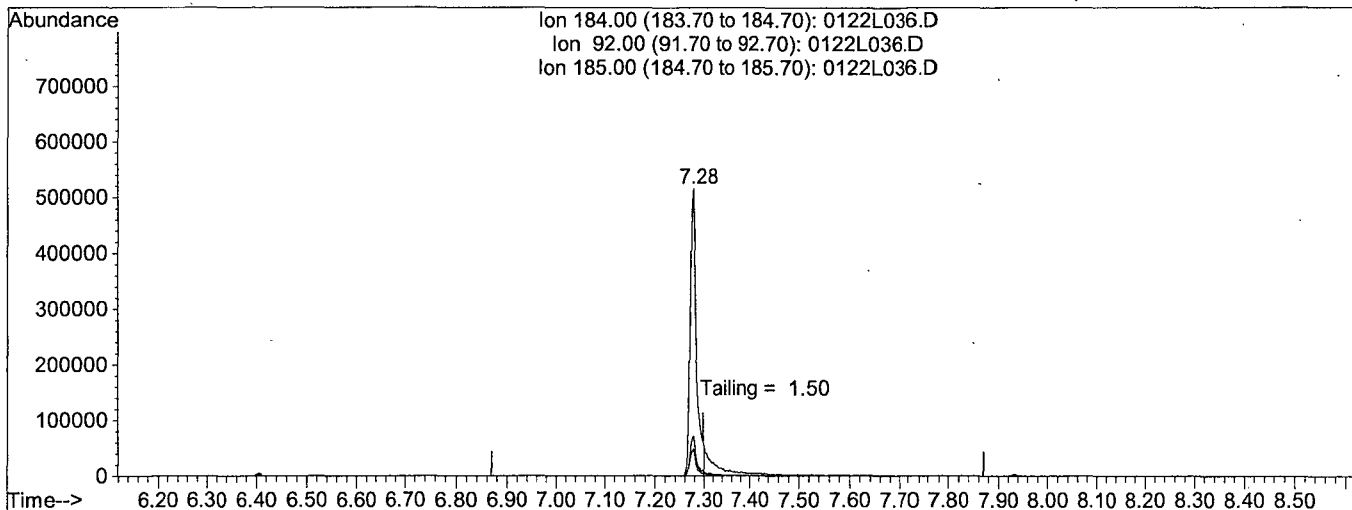
response 495156

Ion	Exp%	Act%
266.00	100	100
264.00	63.70	66.25
268.00	59.20	56.21
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L036.D Vial: 36  
 Acq On : 30 Jan 19 6:19 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Linus  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 30 6:37 2019 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 15 15:07:08 2019  
 Response via : Single Level Calibration



TIC: 0122L036.D

(6) Benzidine

7.28min 0.0000

response 5093065

Ion	Exp%	Act%
184.00	100	100
92.00	8.30	9.03
185.00	14.20	12.55
0.00	0.00	0.00

Name of Final Standard 8270 SIM PAH Internal Standard  
 Prep Date 11/06/18  
 Exp Date 11/06/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	A0130603-38560	11/06/19	350 uL	5,600 uL	MC 56258-5,250 uL	125 ug/mL

Name of Final Standard PAH SIM Spike (Ampules)  
 Prep Date 12/17/18  
 Exp Date 12/17/19

Prep'd By (Initials) OA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01	200 ug/mL	353450-39730	12/17/19	1 mL	1 mL	NA	200ug/mL

Name of  
Final  
Standard

**SIM Surrogate**

Prep'd By (Initials)

**GA**

Prep Date **01/24/19**

Exp Date **06/07/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0131716 - 38554 A0137718 - 39318	06/07/19 01/24/20	1250 uL	25 mL	Acetone #1017171	100 ug/mL

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19	Surrogate ID 3					
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19	Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: NO					
Spiked ID 7		Ext. Start Time:	01/28/19 15:30	, 01/30/19 11:15			
Spiked ID 8		Ext. End Time:	01/29/19 10:00	, 01/30/19 06:30, 01/30/19 11:00			
		GC Requires Extract By:	01/31/19 0:00				
pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria		75,77 °C		
pH2	14	1/29/19 10:30:00 AM					
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 190128A Blk				1,0.050	1,2	800	1	2/1	01/28/19 14:20	
2 190128A LCS-1		0.250	1	1	1	800	1	2/1	01/28/19 14:20	
3 190128A LCS-2		0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
4 190128A LCS-3		0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
5 190128A LCS-D-1		0.250	1	1	1	800	1	2/1	01/28/19 14:20	
6 190128A LCS-D-2		0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
7 190128A LCS-D-3		0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
8 AZ85404	AZ85404W33			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87916
9 AZ85493	AZ85493W24			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87929
10 AZ85520	AZ85520W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
11 AZ85521	AZ85521W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
12 AZ85523	AZ85523W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
13 AZ85525	AZ85525W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
14 AZ85527	AZ85527W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
15 AZ85560	AZ85560W20			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87935
16 AZ85565	AZ85565W22			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87940

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	01/30/19
Time	12:50
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *KY*

Date 2/1/19



# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19	Surrogate ID 3					
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19	Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:	01/28/19 15:30	01/28/19 11:15			
Spiked ID 8		Ext. End Time:	01/29/19 10:00	01/29/19 00:30, 01/30/19 11:00			
		GC Requires Extract By:	01/31/19 0:00				
pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria		75,77 °C		
pH2	14	1/29/19 10:30:00 AM					
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85567 AZ85567W22			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87940
						equip	E-HP12 E-WB5			

Ker 21/19

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *Ker* Date 21/19  
 Page 342 of 953  
 Ext\_ID 61593

## Injection Log

Directory: M:\LINUS\DATA\L190122\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	0122L002.D	1	SV Tune 10/11/18		22 Jan 19 9:21
3	0122L003.D	1	0.1 SIM 01/18/19		22 Jan 19 9:37
4	0122L004.D	1	0.2 SIM 01/18/19		22 Jan 19 9:59
5	0122L005.D	1	0.5 SIM 01/18/19		22 Jan 19 10:21
6	0122L006.D	1	1 SIM 01/18/19		22 Jan 19 10:43
7	0122L007.D	1	5 SIM 01/18/19		22 Jan 19 11:30
8	0122L008.D	1	10 SIM 01/18/19		22 Jan 19 11:53
9	0122L009.D	1	50 SIM 01/18/19		22 Jan 19 12:15
10	0122L010.D	1	100 SIM 01/18/19		22 Jan 19 12:37
11	0122L011.D	1	SS SIM 01/18/19		22 Jan 19 12:59
36	0122L036.D	1	SV TUNE 11/10/18		30 Jan 19 6:19
37	0122L037.D	1	5 SIM 01/18/19		30 Jan 19 6:36
51	0122L051.D	1.25	AZ85520W11 1/800		30 Jan 19 11:56
52	0122L052.D	1.25	AZ85521W10 1/800		30 Jan 19 12:18
53	0122L053.D	1.25	AZ85523W10 1/800		30 Jan 19 12:41
54	0122L054.D	1.25	AZ85525W11 1/800		30 Jan 19 13:03
55	0122L055.D	1.25	AZ85527W10 1/800		30 Jan 19 13:25
56	0122L056.D	1.25	190128A BLK 1/800		30 Jan 19 13:46
57	0122L057.D	1.25	190128A LCS-2 1/800		30 Jan 19 14:07
58	0122L058.D	1.25	190128A LCSD-2 1/800		30 Jan 19 14:29
62	0122L062.D	1	5 SIM 01/18/19		30 Jan 19 15:59

**ORGANICS**  
**Calibration Data**

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

0124Y016.D 0124Y017.D 0124Y018.D 0124Y033.D 0124Y020.D 0124Y015.D 0124Y021.D 0124Y022.D 0124Y023.D

	Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type	r <sup>2</sup>	Q	MRF	
1	I 1,4-dichlorobenzene-D4(1S)	ISTD																
2	1,4-Dioxane		0.2010	0.2484	0.1994	0.2178	0.2503	0.2439	0.1987	0.2300		0.22	10					
3	TM n-Nitrosodimethylamine		0.3036	0.3464	0.3472	0.3686	0.3760	0.3802	0.3692	0.4098		0.36	8.6	TM				
4	TM Pyridine		0.6226	0.9649	0.9041	0.8601	0.9985	0.9071	0.8936	0.9876		0.89	13	TM				
5	S 2-Fluorophenol (S)		1.464	1.647	1.696	1.931	1.714	1.935	1.978	1.907		1.8	10	S				
6	S Phenol-D6 (S)		1.955	2.290	2.260	2.539	2.267	2.507	2.532	2.442		2.3	8.5	S				
7	*TM Phenol		2.309	3.261	3.084	3.089	3.172	3.085	3.021	3.188		3.0	9.9	*TM			0.800	
8	TM Aniline		2.291	3.413	3.293	3.218	3.311	3.249	3.188	3.375		3.2	11	TM				
9	TM Bis (2-chloroethyl) ether		1.107	1.513	1.402	1.404	1.463	1.392	1.379	1.490		1.4	9.0	TM			0.700	
10	TM 2-Chlorophenol		1.663	2.317	2.143	2.142	2.214	2.152	2.142	2.311		2.1	9.6	TM			0.800	
11	TM 1,3-DCB		1.862	2.463	2.257	2.276	2.341	2.265	2.278	2.432		2.3	8.1	TM				
12	*TM 1,4-DCB		1.940	2.591	2.299	2.299	2.379	2.314	2.289	2.459		2.3	8.0	*TM				
13	TM Benzyl alcohol		0.9641	1.383	1.344	1.346	1.411	1.369	1.373	1.455		1.3	11	TM				
14	TM 1,2-DCB		1.768	2.340	2.165	2.152	2.212	2.150	2.136	2.280		2.2	7.9	TM				
15	TM 2-Methylphenol		1.393	1.915	1.834	1.841	1.908	1.859	1.837	1.986		1.8	9.9	TM			0.700	
16	TM Bis (2-chloroisopropyl) ether		1.751	2.355	2.130	2.076	2.164	2.068	2.037	2.161		2.1	8.1	TM			0.010	
17	TM Acetophenone		2.287	3.133	2.851	2.790	2.854	2.733	2.701	2.853		2.8	8.5	TM			0.010	
18	TM 3&4-Methylphenol		1.687	2.384	2.207	2.169	2.236	2.161	2.120	2.247		2.2	9.5	TM			0.600	
19	**TM n-Nitrosodi-n-propylamine		1.290	1.739	1.600	1.552	1.616	1.548	1.528	1.628		1.6	8.2	**TM			0.500	
20	TM Hexachloroethane		0.6787	0.9014	0.8397	0.8456	0.8839	0.8545	0.8606	0.9193		0.85	8.7	TM			0.300	
21	I Napthalene-D8(1S)	ISTD																
22	S Nitrobenzene-D5(S)		0.4172	0.4561	0.4585	0.5041	0.4742	0.4998	0.5077	0.4929		0.48	6.5	S				
23	TM Nitrobenzene		0.4469	0.5751	0.5371	0.5310	0.5810	0.5343	0.5232	0.5564		0.54	7.8	TM			0.200	
24	TM Isophorone		0.7599	0.9777	0.9504	0.9246	1.023	0.9350	0.9196	0.9841		0.93	8.4	TM			0.400	
25	*TM 2-Nitrophenol		0.1948	0.2706	0.2673	0.2678	0.2879	0.2720	0.2649	0.2844		0.26	11	*TM			0.100	
26	TM 2,4-Dimethylphenol		0.3309	0.4574	0.4473	0.4439	0.4880	0.4322	0.4209	0.4700		0.44	11	TM			0.200	
27	TM Benzoic acid			0.2515	0.3383	0.3387	0.3922	0.3729	0.3299	0.3663		0.34	13	TM				
28	TM Bis (2-chloroethoxy) methane		0.4805	0.6305	0.5898	0.5703	0.6237	0.5769	0.5647	0.5992		0.58	8.0	TM			0.300	
29	*TM 2,4-Dichlorophenol		0.2454	0.3924	0.3797	0.3834	0.4214	0.3911	0.3838	0.4066		0.38	14	*TM			0.200	
30	TM 1,2,4-Trichlorobenzene		0.3572	0.4552	0.4197	0.4116	0.4453	0.4123	0.4080	0.4301		0.42	7.1	TM				
31	TM 3,4-Dimethylphenol		0.4569	0.6144	0.5866	0.5901	0.6511	0.6054	0.5866	0.6284		0.59	9.9	TM				
32	TM Naphthalene		1.224	1.541	1.429	1.405	1.534	1.409	1.372	1.442		1.4	7.0	TM			0.700	
33	TM 4-Chloroaniline		0.4196	0.5900	0.5787	0.5395	0.5729	0.5252	0.4856	0.4901		0.53	11	TM			0.010	
34	TM 2,6-Dichlorophenol		0.2964	0.3976	0.3779	0.3724	0.4050	0.3739	0.3662	0.3853		0.37	8.9	TM				
35	TM Hexachloropropene		0.1833	0.2513	0.2596	0.2564	0.2830	0.2654	0.2601	0.2772		0.25	12	TM				

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q
36	*TM	Hexachlorobutadiene		0.1855	0.2329	0.2183	0.2157	0.2306	0.2159	0.2133	0.2276		0.22	6.9	*TM		0.010
37	TM	Caprolactum			0.1761	0.1918	0.1813	0.2044	0.1887	0.1842	0.1967		0.19	5.1	TM		0.010
38	*TM	4-Chloro-3-methylphenol		0.3189	0.4315	0.4287	0.4246	0.4671	0.4341	0.4259	0.4540		0.42	11	*TM		0.200
39	TM	2-Methylnaphthalene		0.7750	0.9767	0.9344	0.9063	0.9850	0.9230	0.8855	0.9371		0.92	7.2	TM		0.400
40	TM	1-Methylnaphthalene		0.7978	0.9910	0.9253	0.9071	0.9825	0.9103	0.8816	0.9236		0.91	6.6	TM		
41	I	Acenaphthene-D10(IS)	ISTD														
42	**TML	Hexachlorocyclopentadiene		0.0268	0.0999	0.2275	0.2530	0.3014	0.2855	0.2979			0.21	51	**TML	0.996	0.050
43	TM	1,2,4,5-Tetrachlorobenzene		0.5955	0.6952	0.6554	0.6773	0.7402	0.6738	0.6303	0.7074		0.67	6.7	TM		0.010
44	*TM	2,4,6-Trichlorophenol		0.3002	0.4102	0.4294	0.4630	0.5087	0.4583	0.4386	0.5003		0.44	15	*TM		0.200
45	TM	2,4,5-Trichlorophenol		0.4330	0.5116	0.4827	0.4976	0.5457	0.4923	0.4709	0.5287		0.50	7.1	TM		0.200
46	S	2-Fluorobiphenyl(S)		1.625	1.611	1.507	1.734	1.604	1.650	1.614	1.613		1.6	3.8	S		
47	TM	1,1'-Biphenyl		1.781	2.065	1.968	2.025	2.175	1.951	1.867	2.049		2.0	6.2	TM		0.010
48	TM	2-Chloronaphthalene		1.378	1.590	1.494	1.548	1.646	1.481	1.423	1.571		1.5	5.9	TM		0.800
49	TM	2-Nitroaniline		0.3769	0.4826	0.4917	0.5116	0.5641	0.4985	0.4806	0.5374		0.49	11	TM		0.010
50	TM	Dimethyl phthalate		1.529	1.833	1.788	1.826	1.980	1.784	1.703	1.879		1.8	7.4	TM		0.010
51	TM	2,6-DNT		0.2877	0.3968	0.4059	0.4128	0.4512	0.4131	0.3984	0.4457		0.40	13	TM		0.200
52	TM	Acenaphthylene		2.072	2.461	2.402	2.474	2.659	2.394	2.275	2.504		2.4	7.2	TM		0.900
53	TM	3-Nitroaniline		0.3376	0.4515	0.4701	0.4800	0.5102	0.4646	0.4380	0.4849		0.45	11	TM		0.010
54	*TM	Acenaphthene		1.424	1.620	1.539	1.584	1.710	1.526	1.442	1.616		1.6	6.1	*TM		0.900
55	**TML	2,4-Dinitrophenol			0.0858	0.1951	0.1966	0.2219	0.2297	0.2173			0.19	28	**TML	0.993	0.010
56	**TM	4-Nitrophenol			0.2666	0.2169	0.2453	0.3062	0.2859	0.2836	0.3294		0.28	14	**TM		0.010
57	TM	Dibenzofuran		2.016	2.307	2.196	2.232	2.383	2.132	2.013	2.186		2.2	5.9	TM		0.800
58	TM	2,4-DNT		0.3898	0.5315	0.5442	0.5489	0.5964	0.5400	0.5147	0.5706		0.53	12	TM		0.200
59	TM	2,3,4,6-Tetrachlorophenol		0.2834	0.3521	0.3620	0.3746	0.4076	0.3725	0.3622	0.4018		0.36	10	TM		0.010
60	TM	Diethyl phthalate		1.482	1.741	1.704	1.730	1.874	1.675	1.580	1.784		1.7	7.1	TM		0.010
61	TM	4-Chlorophenyl phenyl ether		0.7891	0.9079	0.8509	0.8738	0.9244	0.8287	0.7845	0.8542		0.85	5.9	TM		0.400
62	TM	Fluorene		1.610	1.844	1.765	1.800	1.920	1.706	1.609	1.746		1.7	6.2	TM		0.900
63	TM	4-Nitroaniline		0.3704	0.4711	0.4796	0.4923	0.5304	0.4469	0.4228	0.4690		0.46	10	TM		0.010
64	S	2,4,6-Tribromophenol(S)		0.1476	0.1571	0.1526	0.1804	0.1668	0.1735	0.1716	0.1759		0.17	7.2	S		
65	I	Phenanthrene-D10(IS)	ISTD														
66	TM	4,6-Dinitro-2-methylphenol			0.1285	0.1724	0.1795	0.1979	0.1866	0.1812	0.2048		0.18	14	TM		0.010
67	TM	Diphenyl amine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161		0.71	6.3	TM		
68	*TM	n-Nitrosodiphenylamine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161		0.71	6.3	*TM		0.010
69	TM	1,2-Diphenylhydrazine		0.8393	0.9626	0.9494	0.9785	1.077	0.9618	1.037	1.152		0.99	9.5	TM		
70	TM	4-Bromophenyl phenyl ether		0.2070	0.2339	0.2359	0.2466	0.2634	0.2451	0.2263	0.2537		0.24	7.3	TM		0.100

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type	Q
71	TM	Hexachlorobenzene		0.1973	0.2291	0.2190	0.2309	0.2483	0.2277	0.2140	0.2412	0.23	7.1	TM	0.100
72	TM	Atrazine		0.1931	0.2446	0.2396	0.2514	0.2738	0.2448	0.2302	0.2596	0.24	9.8	TM	0.010
73	*TM	Pentachlorophenol			0.1082	0.1268	0.1398	0.1629	0.1475	0.1404	0.1642	0.14	14	*TM	0.050
74	TM	Phenanthrene		1.216	1.392	1.334	1.397	1.499	1.346	1.245	1.387	1.4	6.7	TM	0.700
75	TM	Anthracene		1.230	1.425	1.366	1.438	1.535	1.381	1.283	1.421	1.4	6.8	TM	0.700
76	TM	Carbazol		1.112	1.272	1.251	1.292	1.398	1.257	1.168	1.316	1.3	7.0	TM	0.010
77	TM	Di-n-butylphthalate		1.241	1.480	1.498	1.545	1.690	1.484	1.399	1.543	1.5	8.7	TM	0.010
78	*TM	Fluoranthene		1.277	1.487	1.454	1.489	1.613	1.457	1.344	1.491	1.5	7.0	*TM	0.600
79	I	Chrysene-D12(IS)	ISTD												
80	TM	Benzidine		0.3273	0.5090	0.5365	0.5127	0.5486	0.5087	0.4832	0.5314	0.49	14	TM	
81	TM	Pyrene		1.510	1.711	1.686	1.730	1.876	1.674	1.614	1.782	1.7	6.4	TM	0.600
82	S	Terphenyl-D14(S)		0.9724	0.9816	0.9517	1.100	1.010	1.044	1.040	1.063	1.0	4.9	S	
83	TM	Butyl benzyphthalate		0.5931	0.7238	0.7708	0.7869	0.8621	0.7758	0.7515	0.8250	0.76	11	TM	0.010
84	TM	3,3'-Dichlorobenzidine		0.3876	0.5178	0.5500	0.5455	0.5955	0.5299	0.4962	0.5426	0.52	12	TM	0.010
85	TM	Benz (a) anthracene		1.338	1.486	1.435	1.485	1.664	1.484	1.400	1.553	1.5	6.6	TM	0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.9337	1.069	1.068	1.077	1.217	1.043	0.9862	1.080	1.1	7.7	TM	0.010
87	TM	Chrysene		1.282	1.463	1.453	1.480	1.548	1.436	1.382	1.540	1.4	6.0	TM	0.700
88	*TM	Di-n-octylphthalate		1.339	1.676	1.828	1.873	2.078	1.835	1.774	1.976	1.8	12	*TM	0.010
89	I	Perylene-D12(IS)	ISTD												
90	TM	Benzo (b) fluoranthene		1.259	1.442	1.425	1.498	1.752	1.503	1.399	1.733	1.5	11	TM	0.700
91	TM	Benzo (k) fluoranthene		1.297	1.493	1.470	1.545	1.505	1.401	1.398	1.435	1.4	5.4	TM	0.700
92	*TM	Benzo (a) pyrene	1.270	1.120	1.343	1.345	1.434	1.536	1.372	1.315	1.496	1.4	9.1	*TM	0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.143	1.345	1.386	1.461	1.580	1.400	1.349	1.536	1.4	9.6	TM	0.500
94	TM	Dibenz (a,h) anthracene	1.164	1.060	1.244	1.258	1.335	1.437	1.271	1.222	1.399	1.3	9.2	TM	0.400
95	TM	Benzo (g,h,i) perylene		1.023	1.195	1.224	1.286	1.399	1.232	1.201	1.362	1.2	9.3	TM	0.500
96															
97															
98															
99															
100															
101															
102															
103															
104															
105															

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y016.D  
 Acq On : 25 Jan 19 9:53  
 Sample : 4ug/mL 8270 01/24/19  
 Misc :

Vial: 16  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:15 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	441679	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1882270	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1025541	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1966994	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1763281	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1696541	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	0.00	112	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery	=	0.000%	
6) Phenol-D6 (S)	0.00	99	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery	=	0.000%	
22) Nitrobenzene-D5 (S)	0.00	82	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery	=	0.000%	
46) 2-Fluorobiphenyl (S)	0.00	172	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery	=	0.000%	
64) 2,4,6-Tribromophenol (S)	0.00	330	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery	=	0.000%	
82) Terphenyl-D14 (S)	0.00	244	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery	=	0.000%	
Target Compounds						
92) Benzo (a) pyrene	15.55	252	215402	4.01854	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	197436	3.98872	ppb	99

Quantitation Report

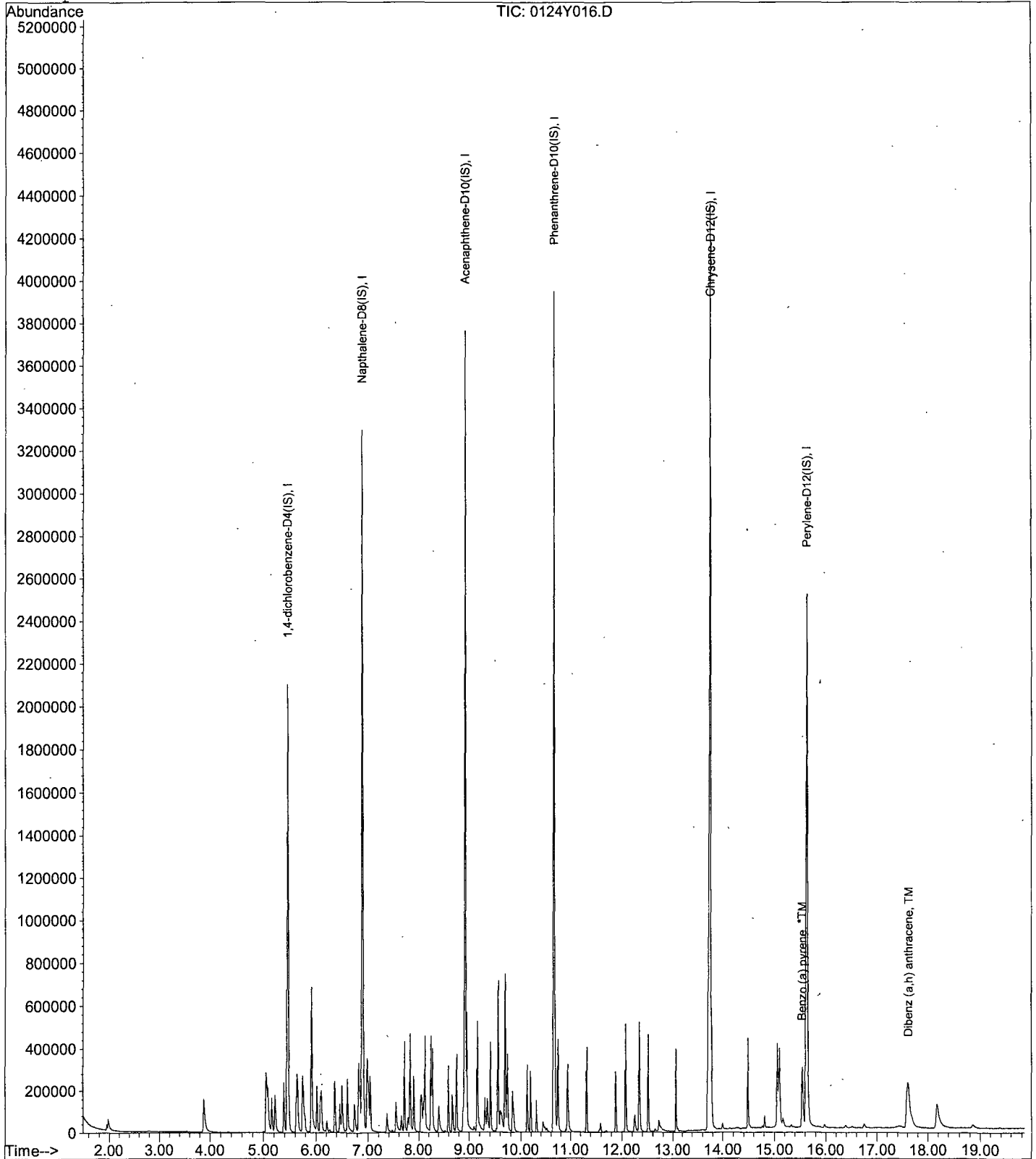
Data File : M:\YODA\DATA\Y190124\0124Y016.D  
Acq On : 25 Jan 19 9:53  
Sample : 4ug/mL 8270 01/24/19  
Misc :

Vial: 16  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:15 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	433806	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1862853	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1024206	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1955322	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1777036	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1697848	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	158780	9.11528	ppb	0.01
Spiked Amount 200.000			Recovery	=	4.558%	
6) Phenol-D6 (S)	5.05	99	211993	9.21070	ppb	0.00
Spiked Amount 200.000			Recovery	=	4.606%	
22) Nitrobenzene-D5 (S)	6.09	82	97141	4.70950	ppb	0.00
Spiked Amount 100.000			Recovery	=	4.710%	
46) 2-Fluorobiphenyl (S)	8.13	172	208026	4.99771	ppb	0.00
Spiked Amount 100.000			Recovery	=	4.998%	
64) 2,4,6-Tribromophenol (S)	9.85	330	37804	8.79031	ppb	0.00
Spiked Amount 200.000			Recovery	=	4.395%	
82) Terphenyl-D14 (S)	12.52	244	215993	4.65872	ppb	0.00
Spiked Amount 100.000			Recovery	=	4.659%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	1090	0.57680		91
3) n-Nitrosodimethylamine	1.95	42	16461	5.13857	ppb	94
4) Pyridine	1.98	79	33762	4.24827	ppb	96
7) Phenol	5.07	94	125184	4.49703	ppb	97
8) Aniline	5.09	93	124237	6.74291	ppb	94
9) Bis (2-chloroethyl) ether	5.16	63	60048	4.34169	ppb	97
10) 2-Chlorophenol	5.23	128	90184	4.67937	ppb	94
11) 1,3-DCB	5.40	146	100957	5.05261	ppb	99
12) 1,4-DCB	5.48	146	105192	5.19009	ppb	99
13) Benzyl alcohol	5.63	108	52278	4.28441	ppb	96
14) 1,2-DCB	5.65	146	95867	5.05812	ppb	99
15) 2-Methylphenol	5.75	107	75528	4.80831	ppb	98
16) Bis (2-chloroisopropyl) et	5.77	45	94938	4.14003	ppb	97
17) Acetophenone	5.91	105	124039	4.96640	ppb	91
18) 3&4-Methylphenol	5.92	107	182967	9.37874	ppb	99
19) n-Nitrosodi-n-propylamine	5.91	70	69974	4.72570	ppb	99
20) Hexachloroethane	6.03	117	36804	4.73413	ppb	96
23) Nitrobenzene	6.11	77	104065	4.95234	ppb	96
24) Isophorone	6.37	82	176946	4.71645	ppb	95
25) 2-Nitrophenol	6.47	139	45356	4.84831	ppb	99
26) 2,4-Dimethylphenol	6.51	122	77050	4.47597	ppb	99
27) Benzoic acid	6.62	105	28927	2.75298	ppb	92
28) Bis (2-chloroethoxy) metha	6.62	93	111881	4.76503	ppb	99
29) 2,4-Dichlorophenol	6.75	162	57137	3.93210	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	83169	5.27706	ppb	96
31) 3,4-Dimethylphenol	6.85	107	106384	4.64367	ppb	97
32) Napthalene	6.93	128	285107	5.16052	ppb	99
33) 4-Chloroaniline	6.99	127	97717	4.63173	ppb	99
34) 2,6-Dichlorophenol	7.00	162	69020	4.84772	ppb	95
35) Hexachloropropene	7.02	213	42691	4.62772	ppb	97
36) Hexachlorobutadiene	7.05	225	43193	5.21952	ppb	97
37) Caprolactum	7.47	55	1195	0.15005	ppb	# 36

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	74252	4.55952	ppb	97
39) 2-Methylnaphthalene	7.72	142	180460	5.14530	ppb	99
40) 1-Methylnaphthalene	7.83	142	185768	5.28579	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	3428	5.53579	ppb	88
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	76235	4.71955	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	38434	3.61995	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	55433	4.84840	ppb	97
47) 1,1'-Biphenyl	8.25	154	227953	4.84265	ppb	98
48) 2-Chloronaphthalene	8.28	162	176377	4.92611	ppb	94
49) 2-Nitroaniline	8.40	65	48257	4.02083	ppb	95
50) Dimethyl phthalate	8.60	163	195702	4.76078	ppb	100
51) 2,6-DNT	8.68	165	36830	4.30328	ppb	91
52) Acenaphthylene	8.76	152	265238	4.76003	ppb	97
53) 3-Nitroaniline	8.89	138	43223	4.19099	ppb	97
54) Acenaphthene	8.96	154	182254	4.96067	ppb	99
55) 2,4-Dinitrophenol	9.06	184	658	8.05478	ppb	# 33
56) 4-Nitrophenol	9.15	65	23069	3.17827	ppb	80
57) Dibenzofuran	9.16	168	258059	5.10906	ppb	97
58) 2,4-DNT	9.15	165	49898	4.40819	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	36282	4.29569	ppb	96
60) Diethyl phthalate	9.41	149	189707	4.80021	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	101023	5.14228	ppb	91
62) Fluorene	9.56	166	206121	5.05430	ppb	100
63) 4-Nitroaniline	9.61	138	47426	4.61367	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	17537	2.42073	ppb	96
67) Diphenyl amine	9.69	169	314635	9.52215	ppb	100
68) n-Nitrosodiphenylamine	9.69	169	314635	9.52215	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	205129	4.13217	ppb	97
70) 4-Bromophenyl phenyl ether	10.13	248	50606	4.40498	ppb	89
71) Hexachlorobenzene	10.19	284	48221	4.39067	ppb	91
72) Atrazine	10.32	200	23603	2.09887	ppb	99
73) Pentachlorophenol	10.45	266	16395	2.42031	ppb	95
74) Phenanthrene	10.69	178	297175	4.81234	ppb	100
75) Anthracene	10.74	178	300675	4.74183	ppb	99
76) Carbazol	10.94	167	271825	4.72407	ppb	98
77) Di-n-butylphthalate	11.32	149	303348	4.49966	ppb	99
78) Fluoranthene	12.08	202	312240	4.72269	ppb	98
80) Benzidine	12.25	184	72705	5.45225	ppb	97
81) Pyrene	12.35	202	335405	4.91780	ppb	98
83) Butyl benzylphthalate	13.07	149	131736	4.51371	ppb	90
84) 3,3'-Dichlorobenzidine	13.71	252	86100	4.42832	ppb	98
85) Benz (a) anthracene	13.74	228	297279	5.01836	ppb	98
86) Bis (2-ethylhexyl) phthala	13.72	149	207396	5.26210	ppb	# 95
87) Chrysene	13.78	228	284704	4.80830	ppb	99
88) Di-n-octylphthalate	14.48	149	297371	4.40999	ppb	98
90) Benzo (b) fluoranthene	15.07	252	267244	4.53531	ppb	99
91) Benzo (k) fluoranthene	15.11	252	275294	4.84812	ppb	99
92) Benzo (a) pyrene	15.55	252	237730	4.44308	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.59	276	242506	4.50565	ppb	96
94) Dibenz (a,h) anthracene	17.61	278	224895	4.56524	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	217110	4.50340	ppb	97

Quantitation Report

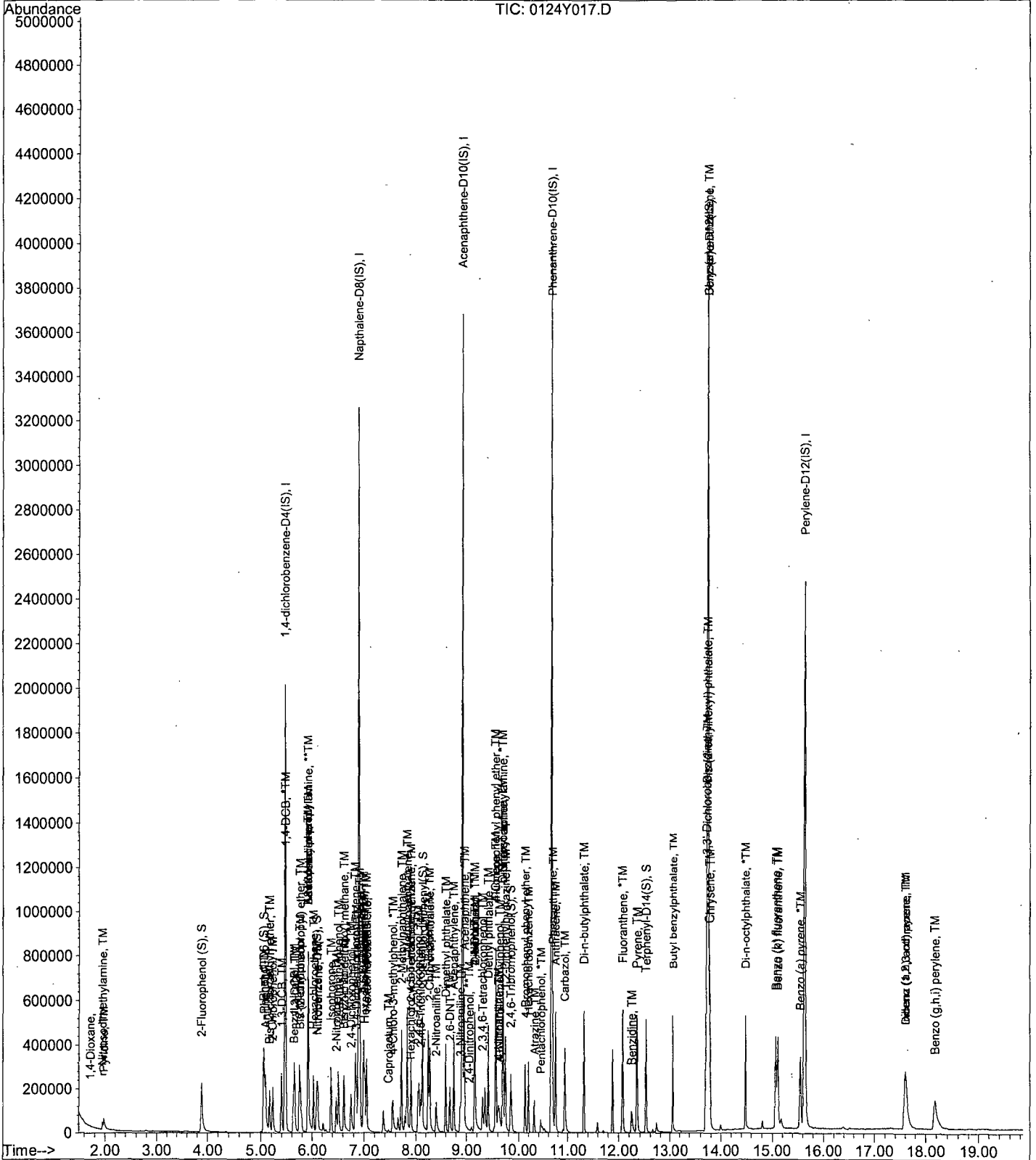
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Acq On : 25 Jan 19 10:21  
Sample : 5ug/mL 8270 01/24/19  
Misc :

Vial: 17  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y018.D Vial: 18  
 Acq On : 25 Jan 19 10:49 Operator: MA  
 Sample : 10ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 11:06 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	384341	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1739801	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1039183	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2028761	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1850112	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1783876	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
5) 2-Fluorophenol (S)	3.88	112	316592	20.53949	ppb	0.00
Spiked Amount	200.000		Recovery	=	10.270%	
6) Phenol-D6 (S)	5.05	99	440013	21.66685	ppb	0.00
Spiked Amount	200.000		Recovery	=	10.834%	
22) Nitrobenzene-D5 (S)	6.09	82	198391	10.26779	ppb	0.00
Spiked Amount	100.000		Recovery	=	10.268%	
46) 2-Fluorobiphenyl (S)	8.13	172	418518	9.97848	ppb	0.00
Spiked Amount	100.000		Recovery	=	9.978%	
64) 2,4,6-Tribromophenol (S)	9.85	330	81639	18.82269	ppb	0.00
Spiked Amount	200.000		Recovery	=	9.412%	
82) Terphenyl-D14 (S)	12.51	244	454030	9.47395	ppb	0.00
Spiked Amount	100.000		Recovery	=	9.474%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	2387	1.43229		93
3) n-Nitrosodimethylamine	1.95	42	33282	11.82047	ppb	93
4) Pyridine	1.97	79	92711	13.48027	ppb	95
7) Phenol	5.06	94	313314	12.97943	ppb	100
8) Aniline	5.09	93	327926	17.05779	ppb	98
9) Bis (2-chloroethyl) ether	5.16	63	145392	12.15860	ppb	96
10) 2-Chlorophenol	5.22	128	222632	13.20506	ppb	99
11) 1,3-DCB	5.39	146	236649	13.46726	ppb	99
12) 1,4-DCB	5.48	146	248996	13.95093	ppb	98
13) Benzyl alcohol	5.62	108	132840	12.48051	ppb	95
14) 1,2-DCB	5.65	146	224867	13.49664	ppb	96
15) 2-Methylphenol	5.75	107	183959	13.32530	ppb	97
16) Bis (2-chloroisopropyl) et	5.76	45	226279	11.57309	ppb	99
17) Acetophenone	5.92	105	301056	13.80954	ppb	87
18) 3&4-Methylphenol	5.91	107	458174	26.98121	ppb	95
19) n-Nitrosodi-n-propylamine	5.91	70	167080	12.97727	ppb	99
20) Hexachloroethane	6.02	117	86615	12.72916	ppb	96
23) Nitrobenzene	6.11	77	250149	12.87562	ppb	94
24) Isophorone	6.38	82	425236	12.32322	ppb	99
25) 2-Nitrophenol	6.47	139	117688	13.32620	ppb	99
26) 2,4-Dimethylphenol	6.51	122	198936	12.56466	ppb	99
27) Benzoic acid	6.63	105	109400	11.81149	ppb	95
28) Bis (2-chloroethoxy) metha	6.62	93	274235	12.76702	ppb	99
29) 2,4-Dichlorophenol	6.75	162	170664	12.99975	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	197991	13.52465	ppb	100
31) 3,4-Dimethylphenol	6.85	107	267251	12.69235	ppb	98
32) Napthalene	6.92	128	670423	13.15159	ppb	99
33) 4-Chloroaniline	6.99	127	256609	13.35270	ppb	98
34) 2,6-Dichlorophenol	7.00	162	172928	13.15852	ppb	99
35) Hexachloropropene	7.02	213	109295	12.68217	ppb	99
36) Hexachlorobutadiene	7.05	225	101284	13.21557	ppb	99
37) Caprolactum	7.38	55	76598	11.82877	ppb	96

Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	187678	12.50412	ppb	99
39) 2-Methylnaphthalene	7.71	142	424829	13.07207	ppb	100
40) 1-Methylnaphthalene	7.82	142	431022	13.18742	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	25947	8.64993	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	180614	11.32970	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	106564	10.25727	ppb	98
45) 2,4,5-Trichlorophenol	8.09	196	132923	11.57256	ppb	94
47) 1,1'-Biphenyl	8.25	154	536521	11.49396	ppb	99
48) 2-Chloronaphthalene	8.28	162	413165	11.62515	ppb	98
49) 2-Nitroaniline	8.40	65	125367	10.51312	ppb	96
50) Dimethyl phthalate	8.60	163	476215	11.65010	ppb	99
51) 2,6-DNT	8.68	165	103086	11.85231	ppb	85
52) Acenaphthylene	8.76	152	639384	11.52284	ppb	100
53) 3-Nitroaniline	8.88	138	117306	11.40934	ppb	90
54) Acenaphthene	8.96	154	420910	11.54206	ppb	100
55) 2,4-Dinitrophenol	9.02	184	22288	11.33622	ppb	96
56) 4-Nitrophenol	9.15	65	69255	9.85262	ppb	81
57) Dibenzofuran	9.16	168	599251	11.90622	ppb	99
58) 2,4-DNT	9.15	165	138090	11.98503	ppb	92
59) 2,3,4,6-Tetrachlorophenol	9.31	232	91483	10.74912	ppb	99
60) Diethyl phthalate	9.41	149	452309	11.51698	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	235880	12.01438	ppb	96
62) Fluorene	9.56	166	479043	11.78218	ppb	100
63) 4-Nitroaniline	9.60	138	122396	11.95160	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.63	198	65167	9.35947	ppb	97
67) Diphenyl amine	9.69	169	744703	22.27867	ppb	99
68) n-Nitrosodiphenylamine	9.69	169	744703	22.27867	ppb	99
69) 1,2-Diphenylhydrazine	9.74	77	488203	9.83872	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	118641	10.25921	ppb	97
71) Hexachlorobenzene	10.19	284	116191	10.54252	ppb	# 85
72) Atrazine	10.31	200	62029	5.43603	ppb	98
73) Pentachlorophenol	10.44	266	54861	8.42679	ppb	94
74) Phenanthrene	10.68	178	705975	11.26347	ppb	98
75) Anthracene	10.75	178	722528	11.20099	ppb	99
76) Carbazol	10.93	167	645327	11.02334	ppb	98
77) Di-n-butylphthalate	11.32	149	750554	10.93554	ppb	99
78) Fluoranthene	12.08	202	754194	11.20916	ppb	99
80) Benzidine	12.24	184	235410	13.07671	ppb	99
81) Pyrene	12.35	202	791563	11.29349	ppb	100
83) Butyl benzylphthalate	13.08	149	334771	11.08547	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	239496	12.05618	ppb	99
85) Benz (a) anthracene	13.74	228	687210	11.28964	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	494589	11.99644	ppb	99
87) Chrysene	13.78	228	676758	11.17616	ppb	99
88) Di-n-octylphthalate	14.48	149	775210	11.06033	ppb	95
90) Benzo (b) fluoranthene	15.07	252	643284	10.74979	ppb	100
91) Benzo (k) fluoranthene	15.10	252	665843	11.43139	ppb	98
92) Benzo (a) pyrene	15.55	252	599150	10.90497	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	599788	10.86003	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	554735	10.91790	ppb	97
95) Benzo (g,h,i) perylene	18.16	276	532716	10.75641	ppb	99

Quantitation Report

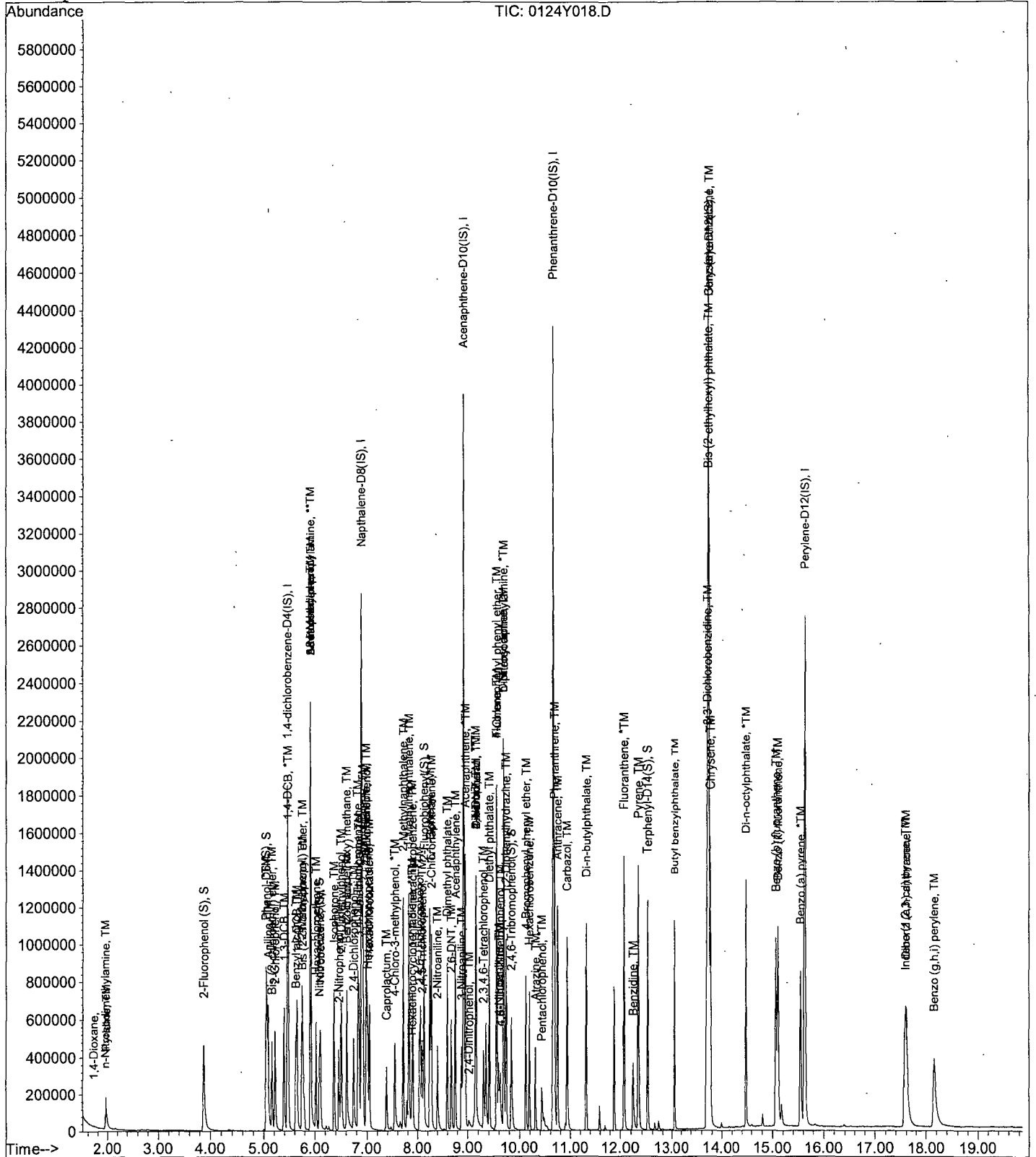
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Acq On : 25 Jan 19 10:49  
Sample : 10ug/mL 8270 01/24/19  
Misc :

Vial: 18  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	636350	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2822233	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1682401	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	3270571	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2912554	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	2895614	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	1079558	38.19181	ppb	0.02
Spiked Amount 200.000			Recovery =	19.096%		
6) Phenol-D6 (S)	5.06	99	1438233	38.70168	ppb	0.00
Spiked Amount 200.000			Recovery =	19.351%		
22) Nitrobenzene-D5 (S)	6.10	82	647018	19.21156	ppb	0.00
Spiked Amount 100.000			Recovery =	19.212%		
46) 2-Fluorobiphenyl (S)	8.13	172	1267437	18.31256	ppb	0.00
Spiked Amount 100.000			Recovery =	18.313%		
64) 2,4,6-Tribromophenol (S)	9.85	330	256663	36.47674	ppb	0.00
Spiked Amount 200.000			Recovery =	18.239%		
82) Terphenyl-D14 (S)	12.51	244	1385929	18.53138	ppb	0.00
Spiked Amount 100.000			Recovery =	18.531%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	6343	1.78753		# 40
3) n-Nitrosodimethylamine	1.97	42	110467	19.65117	ppb	99
4) Pyridine	1.99	79	287660	20.82293	ppb	98
7) Phenol	5.07	94	981147	21.01690	ppb	96
8) Aniline	5.10	93	1047674	21.82394	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	446038	20.68812	ppb	94
10) 2-Chlorophenol	5.23	128	681991	20.66769	ppb	97
11) 1,3-DCB	5.39	146	718229	20.40878	ppb	98
12) 1,4-DCB	5.49	146	731607	20.35996	ppb	98
13) Benzyl alcohol	5.62	108	427502	20.86251	ppb	100
14) 1,2-DCB	5.65	146	688805	20.68155	ppb	98
15) 2-Methylphenol	5.75	107	583589	20.77993	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	677853	20.93213	ppb	98
17) Acetophenone	5.92	105	907012	21.16813	ppb	96
18) 3&4-Methylphenol	5.92	107	1404575	42.32633	ppb	100
19) n-Nitrosodi-n-propylamine	5.91	70	508956	21.09969	ppb	96
20) Hexachloroethane	6.02	117	267187	20.37551	ppb	91
23) Nitrobenzene	6.12	77	757965	20.48330	ppb	100
24) Isophorone	6.38	82	1341118	20.81504	ppb	96
25) 2-Nitrophenol	6.47	139	377174	20.80099	ppb	97
26) 2,4-Dimethylphenol	6.52	122	631247	21.01422	ppb	97
27) Benzoic acid	6.64	105	477365	20.56102	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	832246	20.80697	ppb	99
29) 2,4-Dichlorophenol	6.75	162	535793	20.69550	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	592289	20.55579	ppb	99
31) 3,4-Dimethylphenol	6.85	107	827785	20.40945	ppb	99
32) Naphthalene	6.92	128	2017143	20.57394	ppb	100
33) 4-Chloroaniline	6.99	127	816613	23.12180	ppb	99
34) 2,6-Dichlorophenol	7.00	162	533260	20.81659	ppb	99
35) Hexachloropropene	7.02	213	366301	20.91040	ppb	100
36) Hexachlorobutadiene	7.05	225	307988	20.51106	ppb	99
37) Caprolactum	7.40	55	270633	20.95717	ppb	97

Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	605008	20.75534	ppb	99
39) 2-Methylnaphthalene	7.71	142	1318606	20.92289	ppb	99
40) 1-Methylnaphthalene	7.83	142	1305773	20.69797	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	191376	21.57080	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	551349	19.64363	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	361209	19.89672	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	406036	19.63299	ppb	96
47) 1,1'-Biphenyl	8.25	154	1655511	19.99468	ppb	99
48) 2-Chloronaphthalene	8.28	162	1256537	19.88748	ppb	98
49) 2-Nitroaniline	8.40	65	413623	20.12430	ppb	94
50) Dimethyl phthalate	8.60	163	1504216	20.21148	ppb	100
51) 2,6-DNT	8.68	165	341441	20.51423	ppb #	80
52) Acenaphthylene	8.76	152	2020333	20.16825	ppb	100
53) 3-Nitroaniline	8.88	138	395406	21.11807	ppb	90
54) Acenaphthene	8.96	154	1294988	19.94266	ppb	99
55) 2,4-Dinitrophenol	9.01	184	164125	22.39567	ppb	93
56) 4-Nitrophenol	9.09	65	182439	16.32491	ppb	99
57) Dibenzofuran	9.16	168	1847609	20.28865	ppb	99
58) 2,4-DNT	9.15	165	457778	20.84223	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.31	232	304485	20.10263	ppb	97
60) Diethyl phthalate	9.42	149	1433219	20.26618	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	715742	20.13953	ppb	98
62) Fluorene	9.56	166	1484736	20.34866	ppb	99
63) 4-Nitroaniline	9.60	138	403406	21.13706	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.63	198	281851	19.79880	ppb	90
67) Diphenyl amine	9.70	169	2288686	39.99363	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2288686	39.99363	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1552599	19.28814	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	385777	20.00697	ppb	96
71) Hexachlorobenzene	10.19	284	358181	19.60977	ppb #	82
72) Atrazine	10.31	200	195866	10.00458	ppb	98
73) Pentachlorophenol	10.43	266	207382	18.32753	ppb	99
74) Phenanthrene	10.68	178	2181956	19.92184	ppb	99
75) Anthracene	10.75	178	2233354	19.89161	ppb	100
76) Carbazol	10.94	167	2046080	20.08647	ppb	97
77) Di-n-butylphthalate	11.32	149	2449042	20.43049	ppb	100
78) Fluoranthene	12.08	202	2378299	20.22733	ppb	99
80) Benzidine	12.23	184	781270	23.13756	ppb	99
81) Pyrene	12.35	202	2455450	20.10623	ppb	100
83) Butyl benzylphthalate	13.07	149	1122474	20.60463	ppb	86
84) 3,3'-Dichlorobenzidine	13.70	252	800909	22.00303	ppb #	96
85) Benz (a) anthracene	13.74	228	2089802	19.61471	ppb	100
86) Bis (2-ethylhexyl) phthala	13.72	149	1554697	20.44048	ppb #	94
87) Chrysene	13.79	228	2116115	20.36358	ppb	99
88) Di-n-octylphthalate	14.48	149	2662183	20.67607	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2063545	19.14984	ppb	99
91) Benzo (k) fluoranthene	15.10	252	2127884	20.66410	ppb	99
92) Benzo (a) pyrene	15.55	252	1946711	20.00326	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	2006323	20.06100	ppb	99
94) Dibenzo (a,h) anthracene	17.60	278	1821992	20.10773	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	1772162	20.01866	ppb	100



Quantitation Report

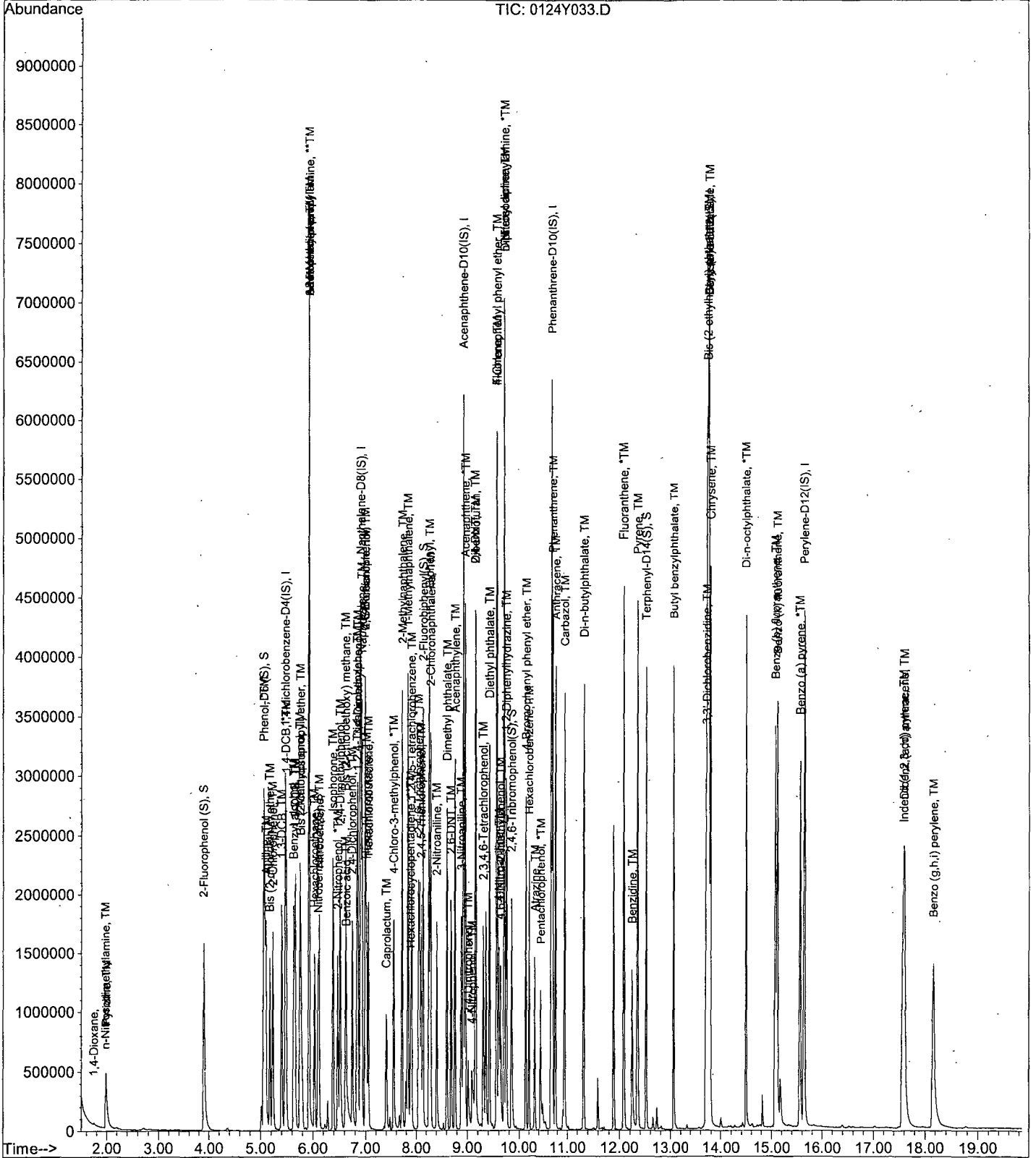
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Acq On : 28 Jan 19 13:36  
Sample : 20ug/mL 8270 01/24/19  
Misc :

Vial: 33  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y020.D Vial: 20  
 Acq On : 25 Jan 19 11:44 Operator: MA  
 Sample : 40ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 11:57 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	408392	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1826097	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1029111	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1952804	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1752683	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1690710	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.87	112	1576988	96.03480	ppb	0.00
Spiked Amount				200.000		
Recovery						= 48.018%
6) Phenol-D6 (S)	5.05	99	2074169	95.72002	ppb	0.00
Spiked Amount				200.000		
Recovery						= 47.860%
22) Nitrobenzene-D5 (S)	6.09	82	920567	45.10467	ppb	0.00
Spiked Amount				100.000		
Recovery						= 45.105%
46) 2-Fluorobiphenyl (S)	8.13	172	1784780	43.52172	ppb	0.00
Spiked Amount				100.000		
Recovery						= 43.522%
64) 2,4,6-Tribromophenol (S)	9.85	330	371290	88.61400	ppb	0.00
Spiked Amount				200.000		
Recovery						= 44.307%
82) Terphenyl-D14 (S)	12.51	244	1928566	43.95301	ppb	0.00
Spiked Amount				100.000		
Recovery						= 43.953%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	8893	4.60032		85
3) n-Nitrosodimethylamine	1.94	42	150528	46.74232	ppb	96
4) Pyridine	1.96	79	351271	44.18707	ppb	100
7) Phenol	5.07	94	1261343	46.82655	ppb	96
8) Aniline	5.09	93	1314100	62.04190	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	573382	43.98308	ppb	99
10) 2-Chlorophenol	5.22	128	874660	46.11987	ppb	100
11) 1,3-DCB	5.39	146	929323	46.62662	ppb	99
12) 1,4-DCB	5.48	146	938789	46.00154	ppb	99
13) Benzyl alcohol	5.63	108	549797	46.45135	ppb	96
14) 1,2-DCB	5.64	146	878821	46.40937	ppb	99
15) 2-Methylphenol	5.75	107	751943	47.78444	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	847848	41.05298	ppb	100
17) Acetophenone	5.92	105	1139391	46.49578	ppb	97
18) 3&4-Methylphenol	5.92	107	1771636	93.15009	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	633950	44.61799	ppb	99
20) Hexachloroethane	6.03	117	345343	45.34081	ppb	97
23) Nitrobenzene	6.12	77	969667	44.81490	ppb	99
24) Isophorone	6.38	82	1688334	44.66263	ppb	96
25) 2-Nitrophenol	6.47	139	489091	48.03698	ppb	100
26) 2,4-Dimethylphenol	6.52	122	810674	46.22740	ppb	98
27) Benzoic acid	6.65	105	618515	56.35463	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1041352	44.18621	ppb	99
29) 2,4-Dichlorophenol	6.75	162	700142	47.67577	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	751549	45.52085	ppb	98
31) 3,4-Dimethylphenol	6.85	107	1077521	46.09716	ppb	98
32) Napthalene	6.93	128	2565227	45.16039	ppb	100
33) 4-Chloroaniline	6.99	127	985263	45.18327	ppb	99
34) 2,6-Dichlorophenol	7.00	162	680077	46.24222	ppb	99
35) Hexachloropropene	7.02	213	468255	47.83385	ppb	99
36) Hexachlorobutadiene	7.06	225	393866	45.81648	ppb	98
37) Caprolactum	7.42	55	331158	48.21368	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y020.D  
 Acq On : 25 Jan 19 11:44  
 Sample : 40ug/mL 8270 01/24/19  
 Misc :

Vial: 20  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	775271	46.64409	ppb	99
39) 2-Methylnaphthalene	7.71	142	1654926	45.58868	ppb	100
40) 1-Methylnaphthalene	7.83	142	1656365	45.28050	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	260385	37.52819	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	697052	43.25958	ppb	99
44) 2,4,6-Trichlorophenol	8.04	196	476510	46.12089	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	512115	43.18820	ppb	98
47) 1,1'-Biphenyl	8.25	154	2083441	44.06097	ppb	99
48) 2-Chloronaphthalene	8.28	162	1593407	44.06701	ppb	98
49) 2-Nitroaniline	8.40	65	526512	44.12615	ppb	97
50) Dimethyl phthalate	8.61	163	1878647	44.85122	ppb	100
51) 2,6-DNT	8.69	165	424850	46.29368	ppb	96
52) Acenaphthylene	8.76	152	2546320	45.04805	ppb	100
53) 3-Nitroaniline	8.88	138	493983	46.59969	ppb	93
54) Acenaphthene	8.96	154	1629656	44.02788	ppb	100
55) 2,4-Dinitrophenol	9.01	184	202328	49.83992	ppb	94
56) 4-Nitrophenol	9.09	65	252473	37.36787	ppb	99
57) Dibenzofuran	9.16	168	2296507	44.72552	ppb	99
58) 2,4-DNT	9.15	165	564838	46.45799	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	385457	44.53544	ppb	97
60) Diethyl phthalate	9.42	149	1780276	44.67228	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	899275	44.93476	ppb	95
62) Fluorene	9.56	166	1851974	44.77181	ppb	100
63) 4-Nitroaniline	9.60	138	506599	47.29416	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	350459	51.16538	ppb	92
67) Diphenyl amine	9.70	169	2815867	86.66649	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2815867	86.66649	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1910724	40.62544	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	481519	43.40023	ppb	96
71) Hexachlorobenzene	10.20	284	450841	42.81056	ppb	97
72) Atrazine	10.31	200	245469	21.89136	ppb	98
73) Pentachlorophenol	10.43	266	273044	44.84102	ppb	99
74) Phenanthrene	10.69	178	2727361	44.43391	ppb	99
75) Anthracene	10.75	178	2807769	44.55359	ppb	100
76) Carbazol	10.94	167	2523384	44.09131	ppb	97
77) Di-n-butylphthalate	11.33	149	3017620	44.85844	ppb	100
78) Fluoranthene	12.08	202	2906835	43.98185	ppb	100
80) Benzidine	12.24	184	898587	45.75595	ppb	99
81) Pyrene	12.35	202	3031839	44.58907	ppb	100
83) Butyl benzylphthalate	13.08	149	1379263	46.39175	ppb	97
84) 3,3'-Dichlorobenzidine	13.70	252	956135	47.45949	ppb #	98
85) Benz (a) anthracene	13.74	228	2602250	44.02477	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	1887612	45.82238	ppb #	95
87) Chrysene	13.79	228	2593818	44.52277	ppb	100
88) Di-n-octylphthalate	14.48	149	3283408	47.07623	ppb #	94
90) Benzo (b) fluoranthene	15.07	252	2532432	43.64482	ppb	98
91) Benzo (k) fluoranthene	15.10	252	2611986	46.58763	ppb	98
92) Benzo (a) pyrene	15.55	252	2424047	45.72107	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2469600	46.03273	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2257333	45.81781	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2175059	45.42992	ppb	99

Quantitation Report

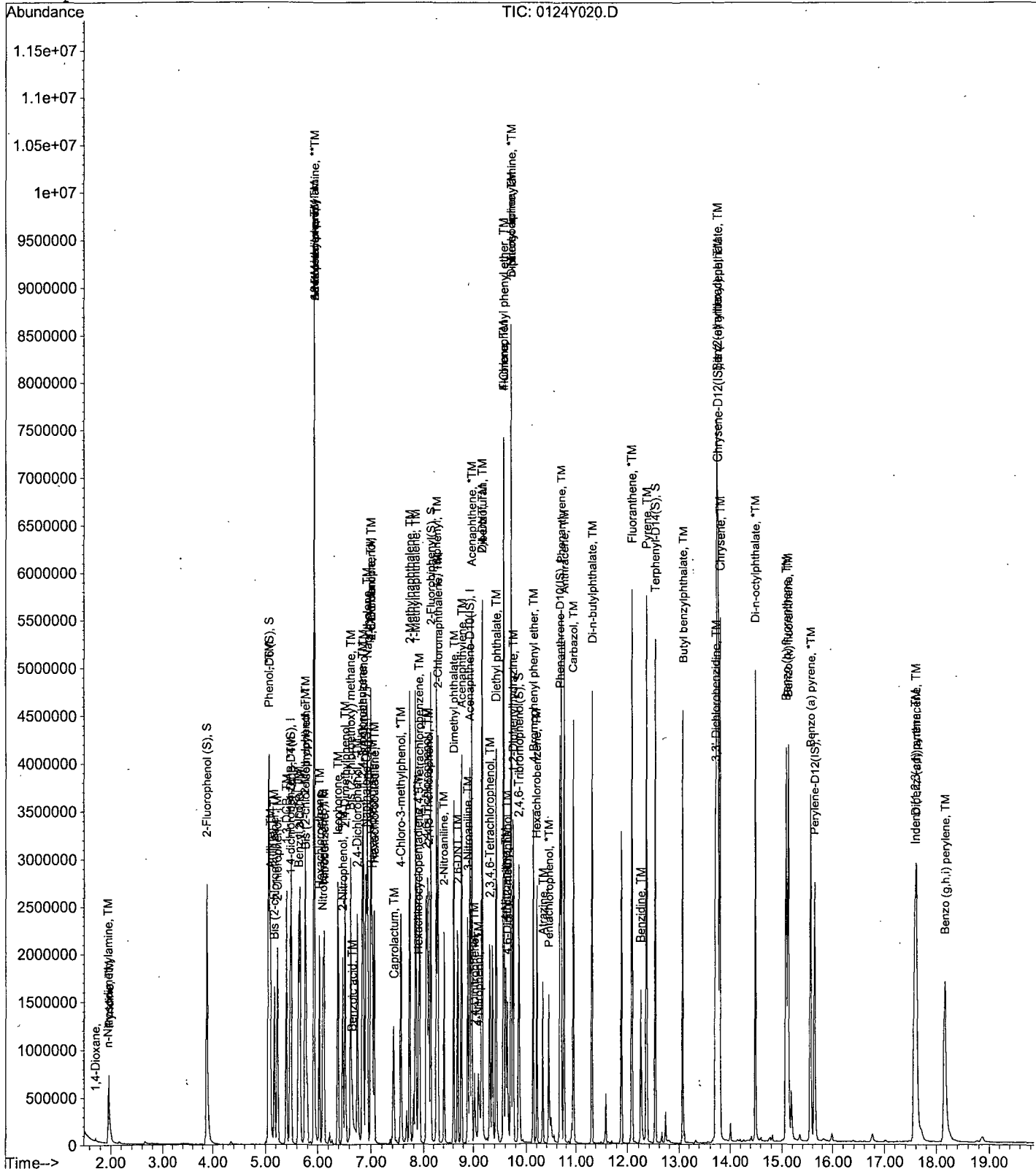
Data File : M:\YODA\DATA\Y190124\0124Y020.D  
Acq On : 25 Jan 19 11:44  
Sample : 40ug/mL 8270 01/24/19  
Misc :

Vial: 20  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y015.D Vial: 15  
 Acq On : 25 Jan 19 7:20 Operator: MA  
 Sample : 50ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 10:13 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	414061	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1774388	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1005371	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1908764	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1698051	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1677536	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.87	112	1774474	106.72722	ppb	0.00
Spiked Amount 200.000			Recovery =	53.363%		
6) Phenol-D6 (S)	5.05	99	2346261	106.80179	ppb	0.00
Spiked Amount 200.000			Recovery =	53.401%		
22) Nitrobenzene-D5 (S)	6.09	82	1051841	53.53683	ppb	0.00
Spiked Amount 100.000			Recovery =	53.537%		
46) 2-Fluorobiphenyl (S)	8.13	172	2016382	49.35001	ppb	0.00
Spiked Amount 100.000			Recovery =	49.350%		
64) 2,4,6-Tribromophenol (S)	9.85	330	419249	99.31143	ppb	0.00
Spiked Amount 200.000			Recovery =	49.656%		
82) Terphenyl-D14 (S)	12.51	244	2143936	48.39314	ppb	0.00
Spiked Amount 100.000			Recovery =	48.393%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	12955	7.18240		100
3) n-Nitrosodimethylamine	1.94	42	194605	63.64599	ppb	100
4) Pyridine	1.96	79	516800	68.12982	ppb	100
7) Phenol	5.07	94	1641696	61.78760	ppb	100
8) Aniline	5.09	93	1713521	82.39935	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	757200	57.35908	ppb	100
10) 2-Chlorophenol	5.22	128	1145751	62.28435	ppb	100
11) 1,3-DCB	5.39	146	1211613	63.52942	ppb	100
12) 1,4-DCB	5.48	146	1231153	63.64076	ppb	100
13) Benzyl alcohol	5.63	108	730277	62.70332	ppb	100
14) 1,2-DCB	5.64	146	1145010	63.29364	ppb	100
15) 2-Methylphenol	5.75	107	987729	65.88002	ppb	100
16) Bis (2-chloroisopropyl) et	5.77	45	1119934	51.16664	ppb	100
17) Acetophenone	5.92	105	1477135	61.96329	ppb	100
18) 3&4-Methylphenol	5.92	107	2314803	124.31319	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	836205	59.16615	ppb	100
20) Hexachloroethane	6.03	117	457500	61.65493	ppb	100
23) Nitrobenzene	6.12	77	1288575	64.37919	ppb	100
24) Isophorone	6.39	82	2269915	63.52050	ppb	100
25) 2-Nitrophenol	6.47	139	638487	71.65350	ppb	100
26) 2,4-Dimethylphenol	6.52	122	1082343	66.00996	ppb	100
27) Benzoic acid	6.66	105	869869	86.91271	ppb	100
28) Bis (2-chloroethoxy) metha	6.62	93	1383448	61.85884	ppb	100
29) 2,4-Dichlorophenol	6.75	162	934592	67.52420	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	987733	65.79606	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1444182	66.18149	ppb	100
32) Naphthalene	6.93	128	3403361	64.67306	ppb	100
33) 4-Chloroaniline	6.99	127	1270710	63.23385	ppb	100
34) 2,6-Dichlorophenol	7.00	162	898322	66.24065	ppb	100
35) Hexachloropropene	7.02	213	627626	71.42681	ppb	100
36) Hexachlorobutadiene	7.06	225	511358	64.87426	ppb	100
37) Caprolactum	7.43	55	453404	59.77045	ppb	100

Data File : M:\YODA\DATA\Y190124\0124Y015.D  
 Acq On : 25 Jan 19 7:20  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1035975	66.78669	ppb	100
39) 2-Methylnaphthalene	7.71	142	2184777	65.39842	ppb	100
40) 1-Methylnaphthalene	7.83	142	2179083	65.09430	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	378734	51.68775	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	930158	58.66291	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	639238	61.33524	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	685751	61.10232	ppb	100
47) 1,1'-Biphenyl	8.25	154	2732730	59.14192	ppb	100
48) 2-Chloronaphthalene	8.28	162	2068546	58.85563	ppb	100
49) 2-Nitroaniline	8.40	65	708868	60.17019	ppb	100
50) Dimethyl phthalate	8.61	163	2488618	61.67396	ppb	100
51) 2,6-DNT	8.69	165	567043	67.49549	ppb	100
52) Acenaphthylene	8.76	152	3341916	61.09854	ppb	100
53) 3-Nitroaniline	8.88	138	641142	63.33110	ppb	100
54) Acenaphthene	8.96	154	2149307	59.59678	ppb	100
55) 2,4-Dinitrophenol	9.01	184	278852	68.71932	ppb	100
56) 4-Nitrophenol	9.09	65	384761	54.00246	ppb	100
57) Dibenzofuran	9.16	168	2994672	60.39932	ppb	100
58) 2,4-DNT	9.15	165	749501	67.45448	ppb	100
59) 2,3,4,6-Tetrachlorophenol	9.31	232	512262	61.78663	ppb	100
60) Diethyl phthalate	9.42	149	2355039	60.70661	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1161750	60.24333	ppb	100
62) Fluorene	9.56	166	2412535	60.26614	ppb	100
63) 4-Nitroaniline	9.61	138	666535	66.05633	ppb	100
66) 4,6-Dinitro-2-methylphenol	9.64	198	472238	66.77560	ppb	100
67) Diphenyl amine	9.70	169	3715091	115.17640	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3715091	115.17640	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2569030	53.01351	ppb	100
70) 4-Bromophenyl phenyl ether	10.13	248	628479	56.04009	ppb	100
71) Hexachlorobenzene	10.20	284	592346	55.25050	ppb	100
72) Atrazine	10.32	200	326684	29.75859	ppb	100
73) Pentachlorophenol	10.43	266	388571	58.76203	ppb	100
74) Phenanthrene	10.69	178	3576095	59.32245	ppb	100
75) Anthracene	10.75	178	3661605	59.15429	ppb	100
76) Carbazol	10.95	167	3335622	59.38406	ppb	100
77) Di-n-butylphthalate	11.33	149	4032317	61.27161	ppb	100
78) Fluoranthene	12.08	202	3849484	59.64433	ppb	100
80) Benzidine	12.24	184	1164345	61.38179	ppb	100
81) Pyrene	12.35	202	3982978	61.11597	ppb	100
83) Butyl benzylphthalate	13.08	149	1829888	65.61444	ppb	100
84) 3,3'-Dichlorobenzidine	13.71	252	1264021	68.03546	ppb	100
85) Benz (a) anthracene	13.74	228	3532562	62.40700	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2582639	68.57527	ppb	100
87) Chrysene	13.79	228	3286756	58.09122	ppb	100
88) Di-n-octylphthalate	14.49	149	4410272	68.44635	ppb	100
90) Benzo (b) fluoranthene	15.08	252	3673387	63.09472	ppb	100
91) Benzo (k) fluoranthene	15.11	252	3156080	56.25376	ppb	100
92) Benzo (a) pyrene	15.55	252	3221278	60.77698	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3312285	62.28582	ppb	100
94) Dibenz (a,h) anthracene	17.61	278	3013495	61.57009	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2934416	61.60401	ppb	100

Quantitation Report

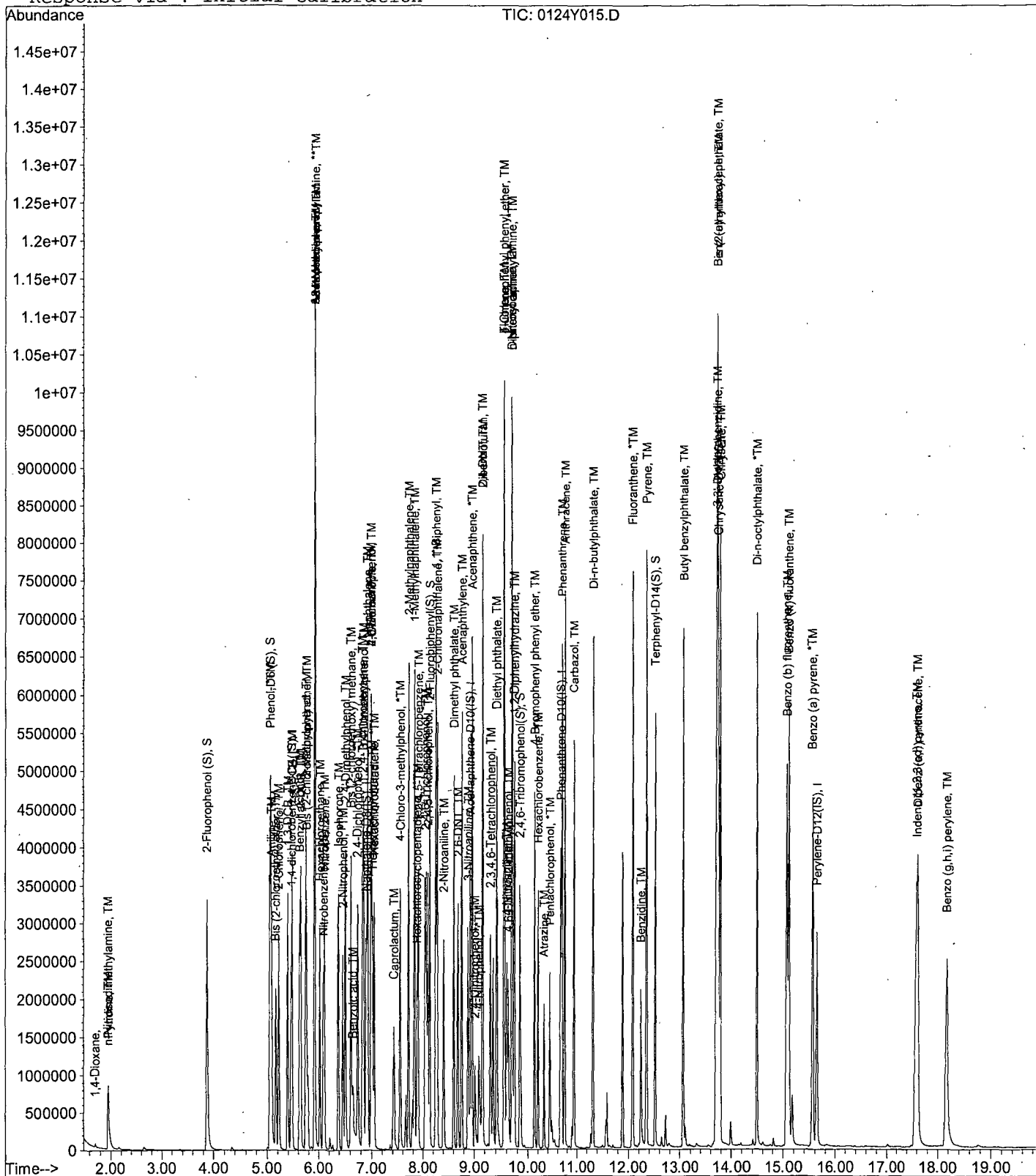
Data File : M:\YODA\DATA\Y190124\0124Y015.D  
Acq On : 25 Jan 19 7:20  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 15  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	411492	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1847622	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1087788	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2043698	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1825170	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1822854	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.88	112	2388786	139.91173	ppb	0.00
Spiked Amount				200.000		
Recovery						= 69.956%
6) Phenol-D6 (S)	5.06	99	3094929	137.28392	ppb	0.00
Spiked Amount				200.000		
Recovery						= 68.642%
22) Nitrobenzene-D5 (S)	6.10	82	1385267	65.82130	ppb	0.00
Spiked Amount				100.000		
Recovery						= 65.821%
46) 2-Fluorobiphenyl (S)	8.14	172	2691759	61.53111	ppb	0.00
Spiked Amount				100.000		
Recovery						= 61.531%
64) 2,4,6-Tribromophenol (S)	9.86	330	566249	127.04869	ppb	0.00
Spiked Amount				200.000		
Recovery						= 63.525%
82) Terphenyl-D14 (S)	12.51	244	2859499	61.98232	ppb	0.00
Spiked Amount				100.000		
Recovery						= 61.982%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15055	7.35395		98
3) n-Nitrosodimethylamine	1.94	42	234687	69.57953	ppb	92
4) Pyridine	1.96	79	559879	67.49718	ppb	99
7) Phenol	5.08	94	1903943	67.69059	ppb	90
8) Aniline	5.09	93	2005258	97.05679	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	859457	63.95748	ppb	96
10) 2-Chlorophenol	5.23	128	1328278	67.03092	ppb	95
11) 1,3-DCB	5.39	146	1398342	66.86645	ppb	99
12) 1,4-DCB	5.48	146	1428123	66.71691	ppb	99
13) Benzyl alcohol	5.62	108	844806	68.44766	ppb	99
14) 1,2-DCB	5.65	146	1327093	66.81074	ppb	97
15) 2-Methylphenol	5.75	107	1147188	69.20556	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1276374	60.79362	ppb	# 93
17) Acetophenone	5.92	105	1686876	65.70510	ppb	96
18) 3&4-Methylphenol	5.93	107	2667787	134.04591	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	955387	64.70552	ppb	97
20) Hexachloroethane	6.02	117	527414	66.49643	ppb	92
23) Nitrobenzene	6.12	77	1480669	65.69034	ppb	96
24) Isophorone	6.39	82	2591162	65.95824	ppb	97
25) 2-Nitrophenol	6.47	139	753885	70.14750	ppb	95
26) 2,4-Dimethylphenol	6.52	122	1197903	65.32117	ppb	99
27) Benzoic acid	6.67	105	1033459	86.56029	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1598772	65.35066	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1084013	70.36616	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	1142665	66.06580	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1677901	68.69908	ppb	97
32) Napthalene	6.92	128	3904346	65.86913	ppb	100
33) 4-Chloroaniline	7.00	127	1455527	64.54043	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1036115	67.19592	ppb	98
35) Hexachloropropene	7.02	213	735631	71.37657	ppb	99
36) Hexachlorobutadiene	7.05	225	598218	66.49856	ppb	99
37) Caprolactum	7.43	55	523076	73.96100	ppb	99



## Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1202951	69.24052	ppb	95
39) 2-Methylnaphthalene	7.71	142	2558030	67.41383	ppb	99
40) 1-Methylnaphthalene	7.83	142	2522812	65.98369	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	465849	58.92991	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1099351	63.54491	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	747759	67.19329	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	803269	63.02165	ppb	94
47) 1,1'-Biphenyl	8.25	154	3182683	62.55468	ppb	99
48) 2-Chloronaphthalene	8.28	162	2416128	62.03380	ppb	99
49) 2-Nitroaniline	8.41	65	813392	63.67971	ppb	88
50) Dimethyl phthalate	8.60	163	2911438	64.28604	ppb	99
51) 2,6-DNT	8.69	165	674079	67.65007	ppb	89
52) Acenaphthylene	8.76	152	3906723	63.98517	ppb	100
53) 3-Nitroaniline	8.89	138	758104	66.12012	ppb	90
54) Acenaphthene	8.97	154	2490018	62.43796	ppb	100
55) 2,4-Dinitrophenol	9.02	184	374823	82.05906	ppb	89
56) 4-Nitrophenol	9.09	65	466498	66.71350	ppb	98
57) Dibenzofuran	9.16	168	3479456	62.68371	ppb	98
58) 2,4-DNT	9.16	165	881163	66.74748	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	607779	65.40593	ppb	96
60) Diethyl phthalate	9.43	149	2733586	63.51185	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.56	204	1352119	62.49603	ppb	90
62) Fluorene	9.57	166	2782910	62.35255	ppb	100
63) 4-Nitroaniline	9.62	138	729227	62.72259	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.64	198	571889	76.48129	ppb	91
67) Diphenyl amine	9.71	169	4324107	125.43365	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	4324107	125.43365	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2948425	59.57822	ppb	96
70) 4-Bromophenyl phenyl ether	10.13	248	751419	64.07488	ppb	96
71) Hexachlorobenzene	10.20	284	698037	62.77685	ppb	93
72) Atrazine	10.32	200	375225	31.55538	ppb	99
73) Pentachlorophenol	10.43	266	452076	70.41952	ppb	98
74) Phenanthrene	10.69	178	4126819	63.01664	ppb	100
75) Anthracene	10.75	178	4232567	62.94612	ppb	100
76) Carbazol	10.94	167	3854357	63.29312	ppb	98
77) Di-n-butylphthalate	11.32	149	4548380	63.48597	ppb	99
78) Fluoranthene	12.08	202	4467332	63.49679	ppb	98
80) Benzidine	12.24	184	1392654	66.15707	ppb	97
81) Pyrene	12.35	202	4582066	63.30843	ppb	100
83) Butyl benzylphthalate	13.08	149	2123881	66.71496	ppb	97
84) 3,3'-Dichlorobenzidine	13.71	252	1450726	67.29146	ppb	99
85) Benz (a) anthracene	13.74	228	4063341	64.69439	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2855356	64.56887	ppb	98
87) Chrysene	13.78	228	3930215	63.46061	ppb	100
88) Di-n-octylphthalate	14.49	149	5023122	67.13574	ppb	98
90) Benzo (b) fluoranthene	15.08	252	4110006	64.78398	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3831221	62.41409	ppb	98
92) Benzo (a) pyrene	15.56	252	3751562	64.72168	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.58	276	3829234	65.10334	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	3476233	64.50384	ppb	98
95) Benzo (g,h,i) perylene	18.18	276	3368865	64.36887	ppb	99

Quantitation Report

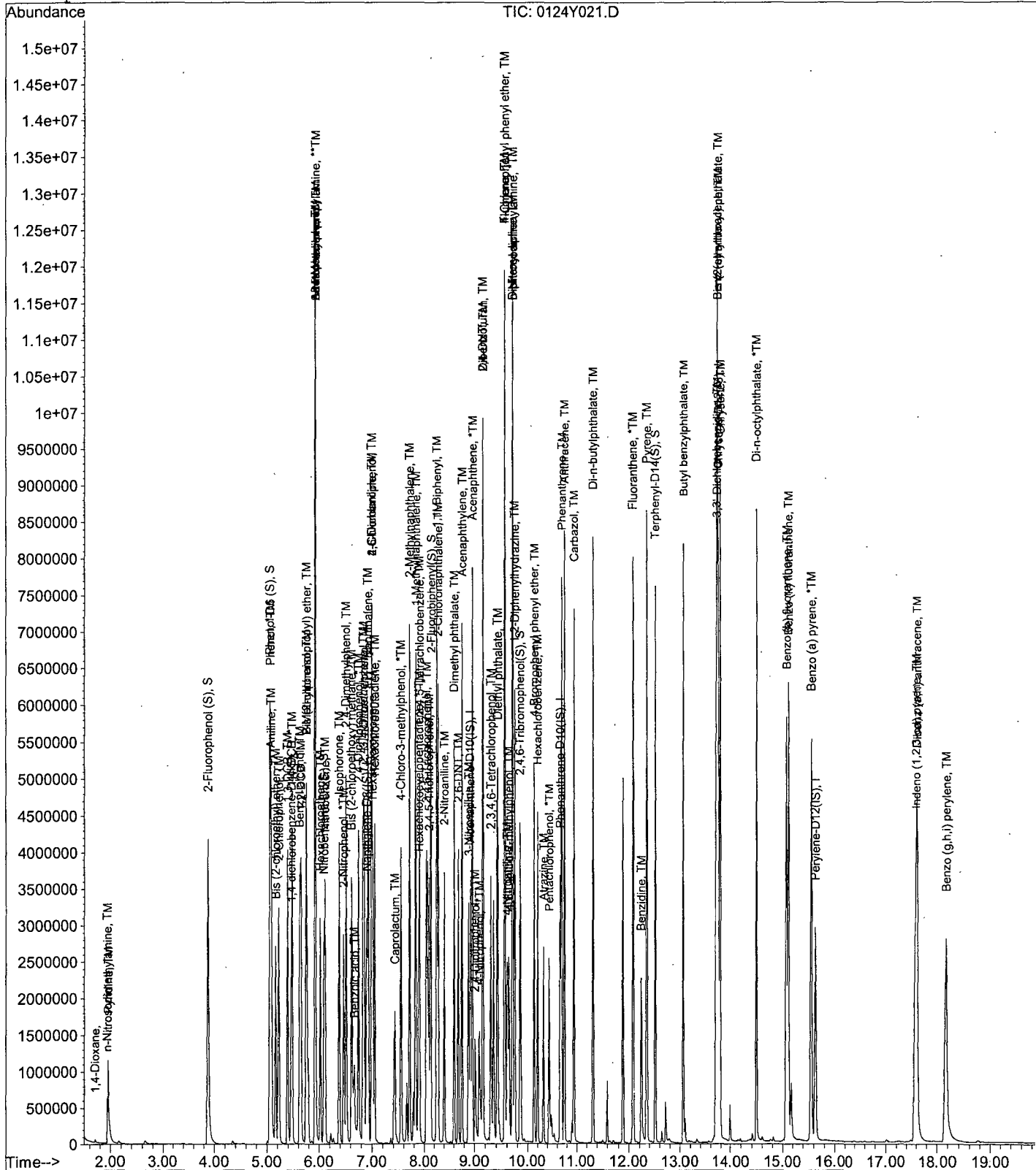
Data File : M:\YODA\DATA\Y190124\0124Y021.D  
Acq On : 25 Jan 19 12:11  
Sample : 60ug/mL 8270 01/24/19  
Misc :

Vial: 21  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y022.D Vial: 22  
 Acq On : 25 Jan 19 12:39 Operator: MA  
 Sample : 80ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 13:02 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	390377	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1776812	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1059625	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2046360	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1763849	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1771022	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.88	112	3088976	185.47310	ppb	0.00
Spiked Amount 200.000			Recovery = 92.737%			
6) Phenol-D6 (S)	5.06	99	3953802	179.89705	ppb	0.00
Spiked Amount 200.000			Recovery = 89.949%			
22) Nitrobenzene-D5 (S)	6.10	82	1804113	87.68532	ppb	0.00
Spiked Amount 100.000			Recovery = 87.685%			
46) 2-Fluorobiphenyl (S)	8.14	172	3420176	79.89967	ppb	0.00
Spiked Amount 100.000			Recovery = 79.900%			
64) 2,4,6-Tribromophenol (S)	9.86	330	727255	167.25732	ppb	0.00
Spiked Amount 200.000			Recovery = 83.629%			
82) Terphenyl-D14 (S)	12.52	244	3667120	82.00033	ppb	0.00
Spiked Amount 100.000			Recovery = 82.000%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15511	7.51444		72
3) n-Nitrosodimethylamine	1.94	42	288229	86.04170	ppb	89
4) Pyridine	1.96	79	697679	84.73709	ppb	100
7) Phenol	5.08	94	2358274	85.23173	ppb	91
8) Aniline	5.10	93	2489180	119.40676	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	1076644	82.53804	ppb	95
10) 2-Chlorophenol	5.23	128	1672258	85.80938	ppb	97
11) 1,3-DCB	5.39	146	1778320	86.15822	ppb	98
12) 1,4-DCB	5.49	146	1787289	84.50692	ppb	98
13) Benzyl alcohol	5.63	108	1072292	88.46892	ppb	94
14) 1,2-DCB	5.65	146	1667744	85.09298	ppb	97
15) 2-Methylphenol	5.75	107	1433948	87.27826	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1590546	79.05994	ppb	# 86
17) Acetophenone	5.93	105	2108764	83.42297	ppb	97
18) 3&4-Methylphenol	5.93	107	3310187	168.84789	ppb	100
19) n-Nitrosodi-n-propylamine	5.93	70	1192858	82.57022	ppb	99
20) Hexachloroethane	6.02	117	671891	86.23765	ppb	90
23) Nitrobenzene	6.13	77	1859324	83.03849	ppb	97
24) Isophorone	6.39	82	3268065	83.85452	ppb	99
25) 2-Nitrophenol	6.48	139	941527	87.24439	ppb	94
26) 2,4-Dimethylphenol	6.52	122	1495864	82.27582	ppb	98
27) Benzoic acid	6.69	105	1172491	94.71906	ppb	98
28) Bis (2-chloroethoxy) metha	6.63	93	2006734	82.81745	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1363953	88.32544	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1449991	84.05610	ppb	97
31) 3,4-Dimethylphenol	6.86	107	2084631	85.46152	ppb	98
32) Naphthalene	6.93	128	4875097	82.59448	ppb	100
33) 4-Chloroaniline	7.00	127	1725667	77.69143	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1301355	84.49556	ppb	98
35) Hexachloropropene	7.02	213	924461	89.22651	ppb	99
36) Hexachlorobutadiene	7.05	225	757876	84.43582	ppb	98
37) Caprolactum	7.44	55	654459	93.87552	ppb	100

Data File : M:\YODA\DATA\Y190124\0124Y022.D Vial: 22  
 Acq On : 25 Jan 19 12:39 Operator: MA  
 Sample : 80ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1513654	87.06098	ppb	100
39) 2-Methylnaphthalene	7.71	142	3146756	82.97836	ppb	99
40) 1-Methylnaphthalene	7.83	142	3133044	82.22878	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	631254	78.79714	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1335660	77.68918	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	929432	83.85905	ppb	97
45) 2,4,5-Trichlorophenol	8.10	196	997882	78.83150	ppb	97
47) 1,1'-Biphenyl	8.26	154	3955801	78.21989	ppb	98
48) 2-Chloronaphthalene	8.29	162	3015805	77.95661	ppb	98
49) 2-Nitroaniline	8.41	65	1018616	80.87427	ppb	92
50) Dimethyl phthalate	8.61	163	3609843	79.88493	ppb	99
51) 2,6-DNT	8.70	165	844260	84.43330	ppb	91
52) Acenaphthylene	8.76	152	4822141	79.16164	ppb	100
53) 3-Nitroaniline	8.89	138	928189	81.28531	ppb	94
54) Acenaphthene	8.97	154	3056253	77.17140	ppb	100
55) 2,4-Dinitrophenol	9.02	184	460548	96.14185	ppb	91
56) 4-Nitrophenol	9.10	65	601091	88.48440	ppb	95
57) Dibenzofuran	9.16	168	4265758	77.08443	ppb	97
58) 2,4-DNT	9.16	165	1090701	82.46328	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	767671	83.24367	ppb	95
60) Diethyl phthalate	9.43	149	3348639	78.15623	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.56	204	1662617	77.15444	ppb	93
62) Fluorene	9.57	166	3410866	76.86824	ppb	100
63) 4-Nitroaniline	9.62	138	896039	77.75631	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	741553	95.23484	ppb	99
67) Diphenyl amine	9.71	169	5296492	150.79364	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	5296492	150.79364	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	4242116	84.81525	ppb	94
70) 4-Bromophenyl phenyl ether	10.14	248	926151	77.57348	ppb	88
71) Hexachlorobenzene	10.20	284	875905	77.71894	ppb	91
72) Atrazine	10.32	200	471083	38.93444	ppb	98
73) Pentachlorophenol	10.44	266	574673	88.00062	ppb	97
74) Phenanthrene	10.69	178	5093537	76.13277	ppb	100
75) Anthracene	10.75	178	5251660	76.54085	ppb	100
76) Carbazol	10.94	167	4781015	76.94485	ppb	98
77) Di-n-butylphthalate	11.32	149	5725493	78.34953	ppb	99
78) Fluoranthene	12.09	202	5499034	76.51468	ppb	97
80) Benzidine	12.24	184	1704671	73.49542	ppb	97
81) Pyrene	12.35	202	5693688	79.55389	ppb	99
83) Butyl benzylphthalate	13.08	149	2651101	83.69807	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	1750394	81.51398	ppb	98
85) Benz (a) anthracene	13.75	228	4939935	79.29669	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	3478919	78.91435	ppb	98
87) Chrysene	13.79	228	4874253	79.65689	ppb	99
88) Di-n-octylphthalate	14.49	149	6257268	83.98293	ppb	97
90) Benzo (b) fluoranthene	15.07	252	4954951	78.33436	ppb	99
91) Benzo (k) fluoranthene	15.12	252	4952396	81.94906	ppb	99
92) Benzo (a) pyrene	15.56	252	4659102	81.23823	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.59	276	4779081	81.77579	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	4328036	81.09588	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	4252951	81.97289	ppb	99

Quantitation Report

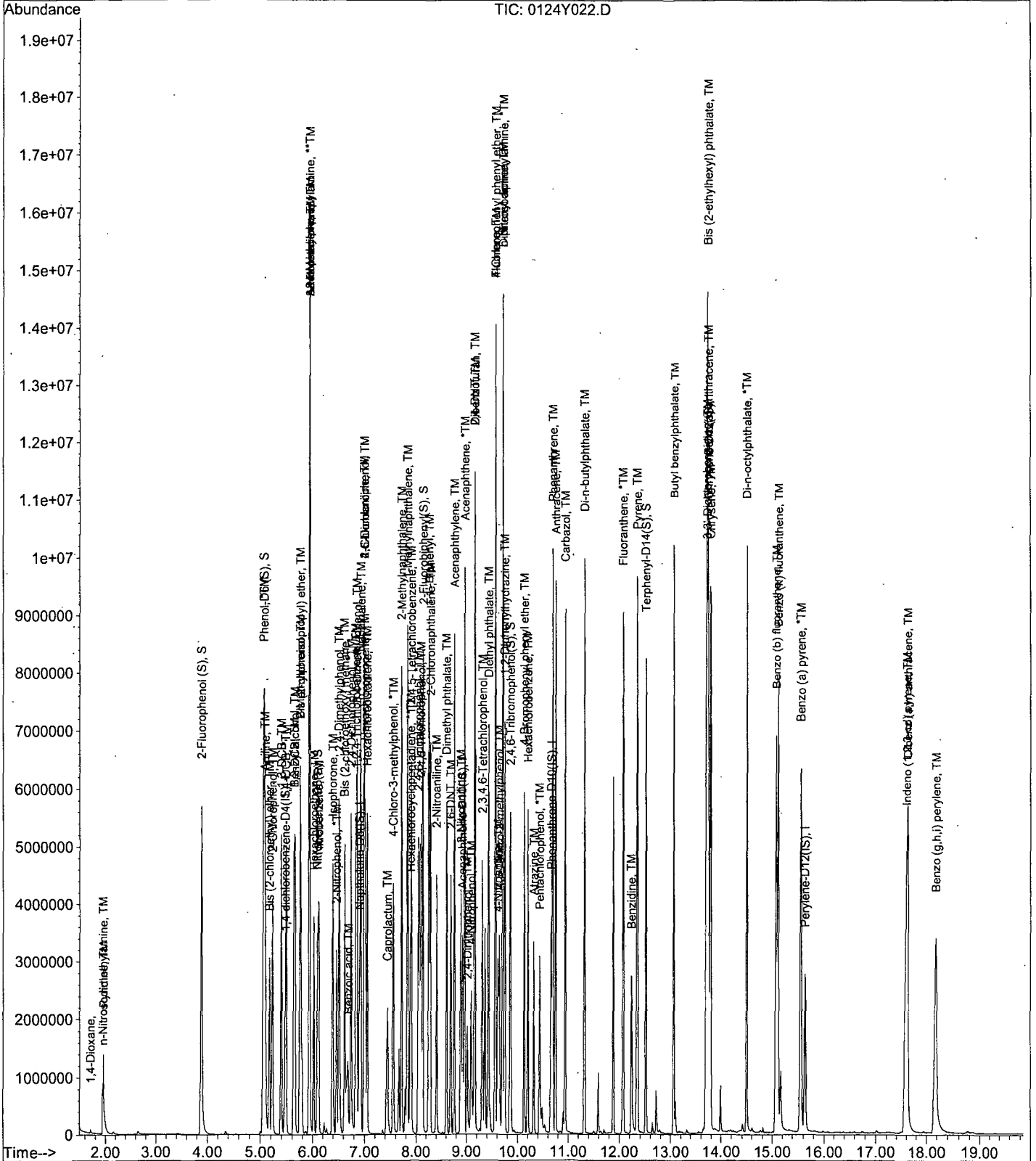
Data File : M:\YODA\DATA\Y190124\0124Y022.D  
Acq On : 25 Jan 19 12:39  
Sample : 80ug/mL 8270 01/24/19  
Misc :

Vial: 22  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	369028	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1684122	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	958383	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	1833191	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1593355	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1574038	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	3517772	218.05743	ppb	0.00
Spiked Amount	200.000					
					Recovery = 109.029%	
6) Phenol-D6 (S)	5.07	99	4506620	212.13191	ppb	0.02
Spiked Amount	200.000				Recovery = 106.066%	
22) Nitrobenzene-D5 (S)	6.10	82	2075102	104.76853	ppb	0.00
Spiked Amount	100.000				Recovery = 104.769%	
46) 2-Fluorobiphenyl (S)	8.14	172	3864993	99.49368	ppb	0.00
Spiked Amount	100.000				Recovery = 99.494%	
64) 2,4,6-Tribromophenol (S)	9.86	330	843089	213.66568	ppb	0.00
Spiked Amount	200.000				Recovery = 106.833%	
82) Terphenyl-D14 (S)	12.52	244	4235562	104.75775	ppb	0.00
Spiked Amount	100.000				Recovery = 104.758%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	21223	10.61042		85
3) n-Nitrosodimethylamine	1.95	42	378062	115.37176	ppb	78
4) Pyridine	1.96	79	911139	113.60957	ppb	98
7) Phenol	5.09	94	2940939	109.44414	ppb #	75
8) Aniline	5.10	93	3113942	135.46800	ppb	96
9) Bis (2-chloroethyl) ether	5.17	63	1375041	109.91033	ppb	98
10) 2-Chlorophenol	5.23	128	2131761	112.54263	ppb	98
11) 1,3-DCB	5.39	146	2244057	111.37429	ppb	98
12) 1,4-DCB	5.49	146	2268718	110.04841	ppb	98
13) Benzyl alcohol	5.63	108	1342620	113.91313	ppb	99
14) 1,2-DCB	5.65	146	2103625	110.13676	ppb	98
15) 2-Methylphenol	5.75	107	1832669	113.94939	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1993329	104.61607	ppb #	76
17) Acetophenone	5.93	105	2632203	106.93049	ppb	90
18) 3&4-Methylphenol	5.94	107	4146604	217.27081	ppb	97
19) n-Nitrosodi-n-propylamine	5.93	70	1501508	107.49302	ppb	98
20) Hexachloroethane	6.02	117	848109	112.09751	ppb	89
23) Nitrobenzene	6.13	77	2342621	107.56140	ppb	100
24) Isophorone	6.40	82	4143509	109.37870	ppb	97
25) 2-Nitrophenol	6.48	139	1197455	113.03844	ppb	96
26) 2,4-Dimethylphenol	6.53	122	1978968	112.13683	ppb	99
27) Benzoic acid	6.70	105	1542045	125.57459	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2522989	107.22198	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1711713	112.94899	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	1811029	107.19704	ppb	98
31) 3,4-Dimethylphenol	6.86	107	2645726	110.94561	ppb	100
32) Naphthalene	6.93	128	6069171	105.32980	ppb	100
33) 4-Chloroaniline	7.00	127	2063322	96.10560	ppb	99
34) 2,6-Dichlorophenol	7.01	162	1622155	107.64178	ppb	99
35) Hexachloropropene	7.02	213	1167286	114.53420	ppb	100
36) Hexachlorobutadiene	7.05	225	958401	109.07716	ppb	98
37) Caprolactum	7.45	55	828168	123.09343	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y023.D Vial: 23  
 Acq On : 25 Jan 19 13:07 Operator: MA  
 Sample : 100ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 13:25 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1911489	112.23315	ppb	98
39) 2-Methylnaphthalene	7.72	142	3945297	106.48229	ppb	99
40) 1-Methylnaphthalene	7.83	142	3888604	104.67399	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	861901	114.64271	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1694943	107.65840	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	1198737	117.92398	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	1266846	108.97004	ppb	98
47) 1,1'-Biphenyl	8.26	154	4909140	105.71606	ppb	98
48) 2-Chloronaphthalene	8.29	162	3763364	106.06503	ppb	99
49) 2-Nitroaniline	8.41	65	1287497	111.93280	ppb	96
50) Dimethyl phthalate	8.61	163	4502449	108.28243	ppb	100
51) 2,6-DNT	8.70	165	1067927	115.60401	ppb	100
52) Acenaphthylene	8.76	152	6000220	107.15505	ppb	100
53) 3-Nitroaniline	8.89	138	1161704	110.46197	ppb	96
54) Acenaphthene	8.97	154	3871991	106.71414	ppb	100
55) 2,4-Dinitrophenol	9.02	184	628043	130.63629	ppb	97
56) 4-Nitrophenol	9.10	65	789110	129.35218	ppb	99
57) Dibenzofuran	9.17	168	5237511	103.01684	ppb	99
58) 2,4-DNT	9.17	165	1367064	111.91777	ppb	85
59) 2,3,4,6-Tetrachlorophenol	9.31	232	962675	113.66677	ppb	94
60) Diethyl phthalate	9.43	149	4275410	108.65157	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	2046659	103.16033	ppb	94
62) Fluorene	9.57	166	4183100	102.50265	ppb	100
63) 4-Nitroaniline	9.63	138	1123718	105.55637	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.65	198	938503	131.25620	ppb	94
67) Diphenyl amine	9.72	169	6563877	207.51246	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	6563877	207.51246	ppb	99
69) 1,2-Diphenylhydrazine	9.75	77	5281854	118.32410	ppb	91
70) 4-Bromophenyl phenyl ether	10.14	248	1162593	108.52969	ppb	93
71) Hexachlorobenzene	10.20	284	1105478	109.26263	ppb	# 85
72) Atrazine	10.33	200	594812	54.68055	ppb	99
73) Pentachlorophenol	10.44	266	752725	128.44553	ppb	98
74) Phenanthrene	10.69	178	6357117	105.02352	ppb	100
75) Anthracene	10.76	178	6513717	105.00530	ppb	99
76) Carbazol	10.94	167	6031129	107.43352	ppb	97
77) Di-n-butylphthalate	11.32	149	7069564	106.85870	ppb	98
78) Fluoranthene	12.09	202	6831981	105.11853	ppb	99
80) Benzidine	12.24	184	2116848	105.65380	ppb	98
81) Pyrene	12.36	202	7097992	108.08786	ppb	100
83) Butyl benzylphthalate	13.08	149	3286296	112.53736	ppb	91
84) 3,3'-Dichlorobenzidine	13.71	252	2161447	108.82542	ppb	# 97
85) Benz (a) anthracene	13.75	228	6187037	108.12217	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	4303302	105.70566	ppb	97
87) Chrysene	13.79	228	6136199	109.64013	ppb	99
88) Di-n-octylphthalate	14.49	149	7872322	114.69387	ppb	96
90) Benzo (b) fluoranthene	15.08	252	6819800	120.21812	ppb	99
91) Benzo (k) fluoranthene	15.12	252	5648056	102.19151	ppb	99
92) Benzo (a) pyrene	15.57	252	5887626	113.66648	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.59	276	6044154	114.14032	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	5506458	114.28713	ppb	100
95) Benzo (g,h,i) perylene	18.19	276	5357774	114.13819	ppb	100

Quantitation Report

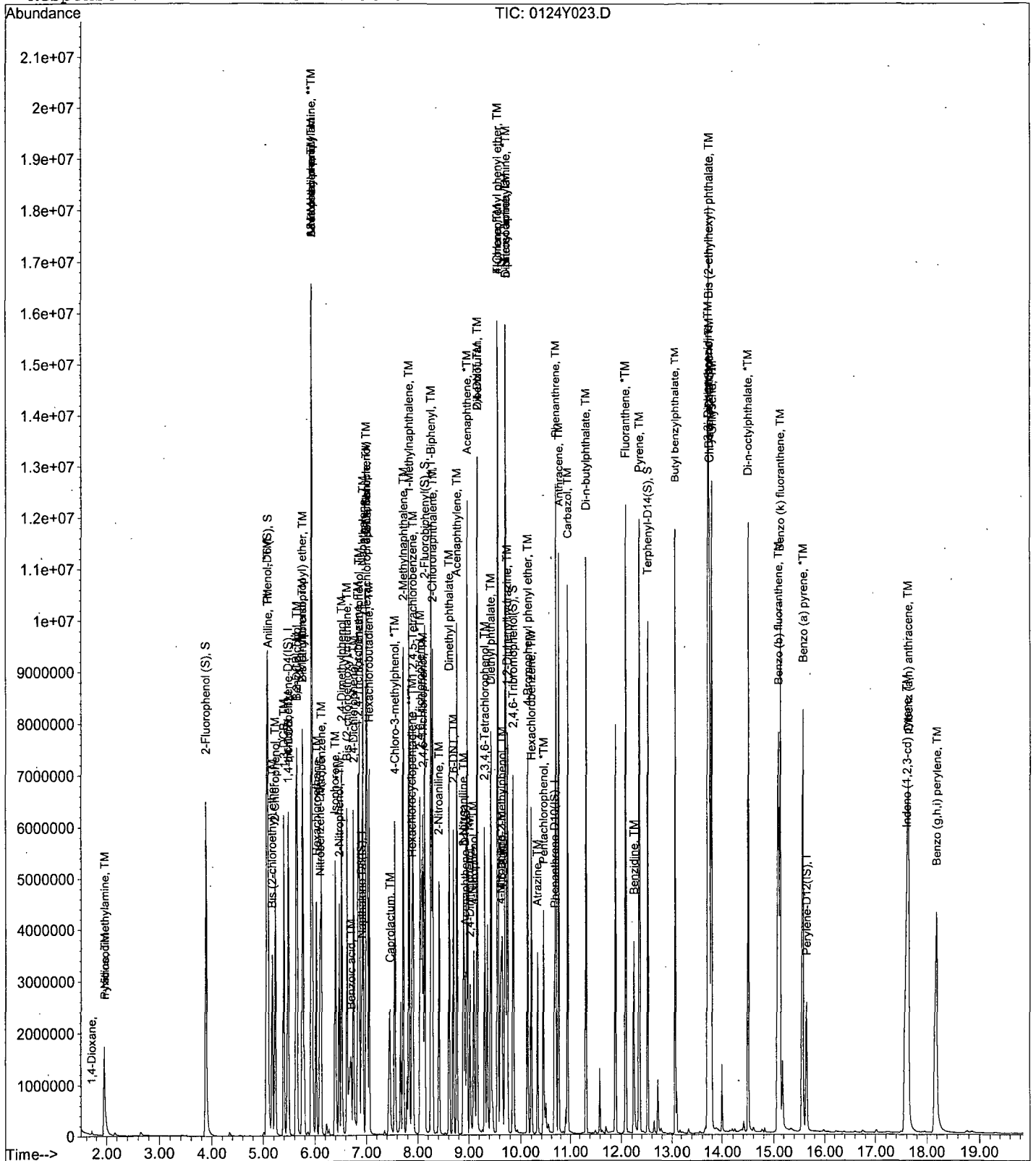
Data File : M:\YODA\DATA\Y190124\0124Y023.D  
Acq On : 25 Jan 19 13:07  
Sample : 100ug/mL 8270 01/24/19  
Misc :

Vial: 23  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
1		1,4-Dioxane	0.2237	0.2222	0.68	
2	TM	n-Nitrosodimethylamine	0.3626	0.3593	0.90	TM
3	TM	Pyridine	0.8923	0.9235	3.5	TM
4	*TM	Phenol	3.026	2.969	1.9	*TM
5	TM	Aniline	3.167	3.000	5.3	TM
6	TM	Bis (2-chloroethyl) ether	1.394	1.327	4.8	TM
7	TM	2-Chlorophenol	2.135	2.080	2.6	TM
8	TM	1,3-DCB	2.272	2.228	1.9	TM
9	*TM	1,4-DCB	2.321	2.241	3.5	*TM
10	TM	Benzyl alcohol	1.331	1.255	5.7	TM
11	TM	1,2-DCB	2.150	2.089	2.9	TM
12	TM	2-Methylphenol	1.822	1.746	4.2	TM
13	TM	Bis (2-chloroisopropyl) ether	2.093	1.968	6.0	TM
14	TM	Acetophenone	2.775	2.579	7.1	TM
15	TM	3&4-Methylphenol	2.152	2.049	4.8	TM
16	**TM	n-Nitrosodi-n-propylamine	1.563	1.452	7.1	**TM
17	TM	Hexachloroethane	0.8480	0.8171	3.6	TM
18	TM	Nitrobenzene	0.5356	0.5518	3.0	TM
19	TM	Isophorone	0.9343	0.9637	3.1	TM
20	*TM	2-Nitrophenol	0.2637	0.2706	2.6	*TM
21	TM	2,4-Dimethylphenol	0.4363	0.4511	3.4	TM
22	TM	Benzoic acid	0.3414	0.3692	8.2	TM
23	TM	Bis (2-chloroethoxy) methane	0.5794	0.5715	1.4	TM
24	*TM	2,4-Dichlorophenol	0.3755	0.3920	4.4	*TM
25	TM	1,2,4-Trichlorobenzene	0.4174	0.4207	0.78	TM
26	TM	3,4-Dimethylphenol	0.5899	0.6009	1.9	TM
27	TM	Naphthalene	1.420	1.398	1.5	TM
28	TM	4-Chloroaniline	0.5252	0.5196	1.1	TM
29	TM	2,6-Dichlorophenol	0.3718	0.3779	1.6	TM
30	TM	Hexachloropropene	0.2546	0.2632	3.4	TM
31	*TM	Hexachlorobutadiene	0.2175	0.2221	2.1	*TM
32	TM	Caprolactum	0.1890	0.1906	0.85	TM
33	*TM	4-Chloro-3-methylphenol	0.4231	0.4348	2.8	*TM
34	TM	2-Methylnaphthalene	0.9154	0.8857	3.2	TM
35	TM	1-Methylnaphthalene	0.9149	0.9061	0.96	TM
36	**TML	Hexachlorocyclopentadiene	0.2131	0.3252	53	**TML 13
37	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.7344	9.3	TM
38	*TM	2,4,6-Trichlorophenol	0.4386	0.5022	15	*TM
39	TM	2,4,5-Trichlorophenol	0.4953	0.5390	8.8	TM
40	TM	1,1'-Biphenyl	1.985	2.208	11	TM

Average

5.2

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2-Chloronaphthalene	1.516	1.702	12	TM
42	TM	2-Nitroaniline	0.4929	0.5434	10	TM
43	TM	Dimethyl phthalate	1.790	1.944	8.6	TM
44	TM	2,6-DNT	0.4015	0.4696	17	TM
45	TM	Acenaphthylene	2.405	2.664	11	TM
46	TM	3-Nitroaniline	0.4546	0.4922	8.3	TM
47	*TM	Acenaphthene	1.558	1.693	8.7	*TM
48	**TML	2,4-Dinitrophenol	0.1911	0.2391	25	**TML 10
49	**TM	4-Nitrophenol	0.2763	0.2845	3.0	**TM
50	TM	Dibenzofuran	2.183	2.306	5.6	TM
51	TM	2,4-DNT	0.5295	0.6234	18	TM
52	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.4330	19	TM
53	TM	Diethyl phthalate	1.696	1.855	9.4	TM
54	TM	4-Chlorophenyl phenyl ether	0.8517	0.9262	8.7	TM
55	TM	Fluorene	1.750	1.915	9.4	TM
56	TM	4-Nitroaniline	0.4603	0.5193	13	TM
57	TM	4,6-Dinitro-2-methylphenol	0.1787	0.2120	19	TM
58	TM	Diphenyl amine	0.7057	0.7914	12	TM
59	*TM	n-Nitrosodiphenylamine	0.7057	0.7914	12	*TM
60	TM	1,2-Diphenylhydrazine	0.9947	1.099	10	TM
61	TM	4-Bromophenyl phenyl ether	0.2390	0.2673	12	TM
62	TM	Hexachlorobenzene	0.2259	0.2560	13	TM
63	TM	Atrazine	0.2421	0.2663	10.0	TM
64	*TM	Pentachlorophenol	0.1414	0.1559	10	*TM
65	TM	Phenanthrene	1.352	1.515	12	TM
66	TM	Anthracene	1.385	1.525	10	TM
67	TM	Carbazol	1.258	1.450	15	TM
68	TM	Di-n-butylphthalate	1.485	1.684	13	TM
69	*TM	Fluoranthene	1.452	1.629	12	*TM
70	TM	Benzidine	0.4947	0.5317	7.5	TM
71	TM	Pyrene	1.698	1.882	11	TM
72	TM	Butyl benzylphthalate	0.7611	0.8756	15	TM
73	TM	3,3'-Dichlorobenzidine	0.5206	0.6069	17	TM
74	TM	Benz (a) anthracene	1.481	1.633	10	TM
75	TM	Bis (2-ethylhexyl) phthalate	1.059	1.175	11	TM
76	TM	Chrysene	1.448	1.604	11	TM
77	*TM	Di-n-octylphthalate	1.797	2.065	15	*TM
78	TM	Benzo (b) fluoranthene	1.501	1.609	7.2	TM
79	TM	Benzo (k) fluoranthene	1.443	1.462	1.3	TM
80	*TM	Benzo (a) pyrene	1.359	1.566	15	*TM

Average

11.7

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

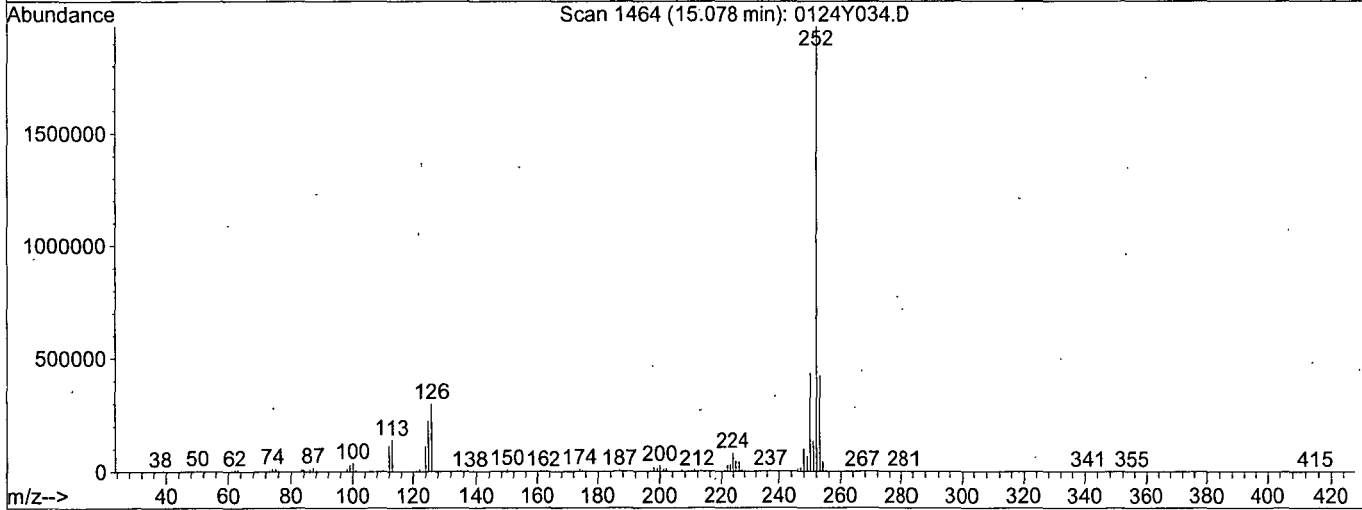
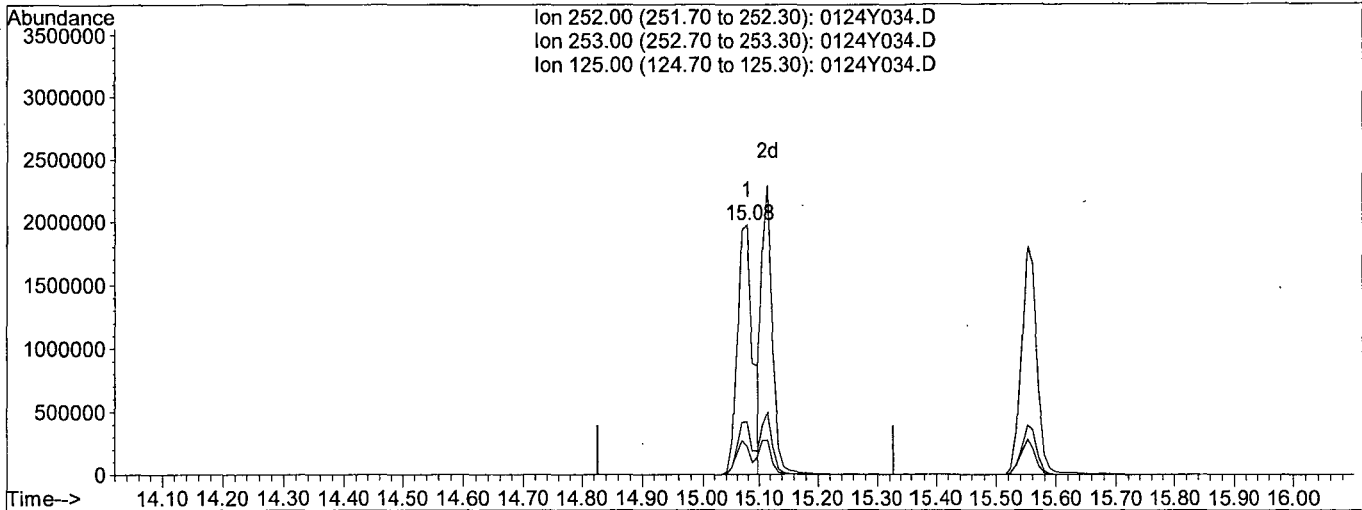
		Compound	MEAN	CCRF	%D	%Drift
81	TM	Indeno (1,2,3-cd) pyrene	1.400	1.669	19	TM
82	TM	Dibenz (a,h) anthracene	1.266	1.452	15	TM
83	TM	Benzo (g,h,i) perylene	1.240	1.331	7.4	TM
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120		Average			13.8	

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :  
 Quant Time: Jan 28 15:00 2019

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

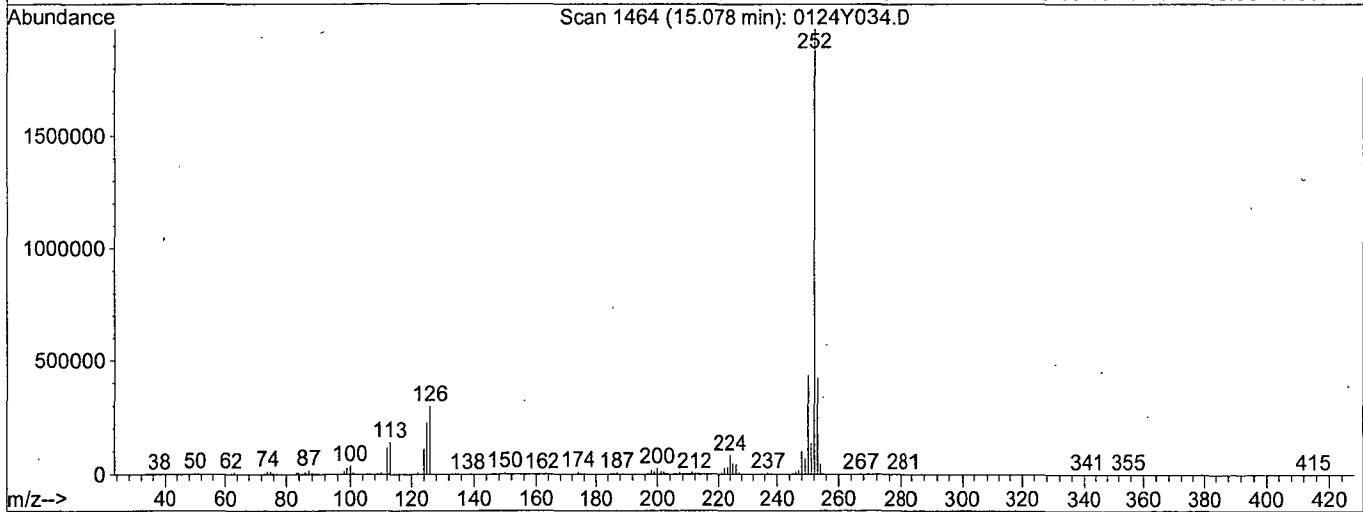
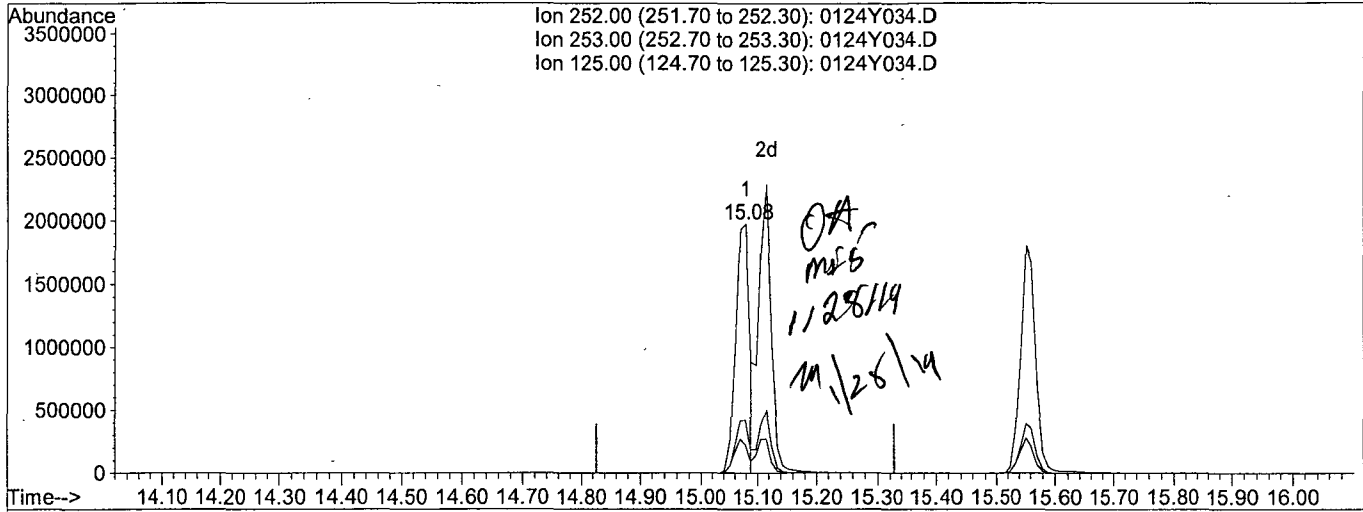
(90) Benzo (b) fluoranthene (TM)		
15.08min	61.5896ppb	
response	3871985	
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :  
 Quant Time: Jan 28 15:00 2019

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 53.5898ppb m

response 3369057

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y034.D Vial: 34  
 Acq On : 28 Jan 19 14:11 Operator: MA  
 Sample : SS-8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 28 15:00 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	458368	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1938809	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1014849	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1912266	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1708227	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1674833	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	0.00	112	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
6) Phenol-D6 (S)	0.00	99	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5 (S)	6.03	82	108224	4.68761	ppb	-0.06
Spiked Amount 100.000			Recovery =	4.688%		
46) 2-Fluorobiphenyl (S)	8.13	172	213	0.00518	ppb	0.00
Spiked Amount 100.000			Recovery =	0.005%		
64) 2,4,6-Tribromophenol (S)	0.00	330	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
82) Terphenyl-D14 (S)	12.52	244	770	0.01767	ppb	0.00
Spiked Amount 100.000			Recovery =	0.018%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	12729	4.96599		86
3) n-Nitrosodimethylamine	1.96	42	205883	49.54778	ppb	87
4) Pyridine	1.98	79	529141	51.74874	ppb	96
7) Phenol	5.07	94	1701203	49.06389	ppb	94
8) Aniline	5.09	93	1718990	47.36392	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	760366	47.60321	ppb	91
10) 2-Chlorophenol	5.23	128	1191637	48.69709	ppb	96
11) 1,3-DCB	5.40	146	1276386	49.03029	ppb	99
12) 1,4-DCB	5.49	146	1283777	48.26248	ppb	97
13) Benzyl alcohol	5.63	108	718943	47.15114	ppb	97
14) 1,2-DCB	5.66	146	1196773	48.56573	ppb	97
15) 2-Methylphenol	5.75	107	1000280	47.91957	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1127555	47.01882	ppb	100
17) Acetophenone	5.92	105	1477412	46.45588	ppb	99
18) 3&4-Methylphenol	5.92	107	2347562	95.21848	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	832033	46.46922	ppb	99
20) Hexachloroethane	6.03	117	468170	48.18007	ppb	95
23) Nitrobenzene	6.12	77	1337322	51.51079	ppb	100
24) Isophorone	6.39	82	2335484	51.57041	ppb	100
25) 2-Nitrophenol	6.47	139	655816	51.30629	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1093253	51.69152	ppb	97
27) Benzoic acid	6.66	105	894833	54.07578	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1384922	49.31027	ppb	100
29) 2,4-Dichlorophenol	6.74	162	949905	52.19556	ppb	95
30) 1,2,4-Trichlorobenzene	6.83	180	1019586	50.39201	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1456405	50.93263	ppb	100
32) Naphthalene	6.93	128	3388497	49.24639	ppb	100
33) 4-Chloroaniline	6.99	127	1259364	49.47066	ppb	99
34) 2,6-Dichlorophenol	7.00	162	915959	50.82211	ppb	99
35) Hexachloropropene	7.02	213	637825	51.69508	ppb	99
36) Hexachlorobutadiene	7.05	225	538197	51.06295	ppb	97
37) Caprolactum	7.42	55	462035	50.42547	ppb	98

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1053821	51.38731	ppb	99
39) 2-Methylnaphthalene	7.72	142	2146475	48.37837	ppb	99
40) 1-Methylnaphthalene	7.83	142	2195869	49.51781	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	412511	56.53516	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	931572	54.64934	ppb	97
44) 2,4,6-Trichlorophenol	8.04	196	637106	57.25617	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	683790	54.41270	ppb	97
47) 1,1'-Biphenyl	8.25	154	2800863	55.61888	ppb	99
48) 2-Chloronaphthalene	8.28	162	2159211	56.12559	ppb	98
49) 2-Nitroaniline	8.40	65	689275	55.11518	ppb	97
50) Dimethyl phthalate	8.61	163	2465503	54.27961	ppb	100
51) 2,6-DNT	8.69	165	595747	58.49045	ppb	97
52) Acenaphthylene	8.77	152	3379049	55.37197	ppb	99
53) 3-Nitroaniline	8.89	138	624378	54.13436	ppb	95
54) Acenaphthene	8.96	154	2148281	54.35989	ppb	99
55) 2,4-Dinitrophenol	9.02	184	303263	55.09102	ppb	93
56) 4-Nitrophenol	9.09	65	360931	51.49458	ppb	96
57) Dibenzofuran	9.16	168	2924995	52.81029	ppb	100
58) 2,4-DNT	9.16	165	790761	58.86232	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	549310	59.39518	ppb	96
60) Diethyl phthalate	9.42	149	2353679	54.68973	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1174961	54.37478	ppb	96
62) Fluorene	9.56	166	2428778	54.70594	ppb	100
63) 4-Nitroaniline	9.61	138	658803	56.41060	ppb	93
66) 4,6-Dinitro-2-methylphenol	9.64	198	506716	59.32023	ppb	96
67) Diphenyl amine	9.70	169	3783179	112.13803	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3783179	112.13803	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2626496	55.23523	ppb	88
70) 4-Bromophenyl phenyl ether	10.13	248	638862	55.91557	ppb	97
71) Hexachlorobenzene	10.20	284	611901	56.65132	ppb #	82
72) Atrazine	10.32	200	318295	27.49651	ppb	97
73) Pentachlorophenol	10.44	266	372770	55.14520	ppb	98
74) Phenanthrene	10.69	178	3621712	56.03684	ppb	99
75) Anthracene	10.75	178	3644386	55.05050	ppb	100
76) Carbazol	10.94	167	3465221	57.59909	ppb	97
77) Di-n-butylphthalate	11.33	149	4025120	56.70186	ppb	100
78) Fluoranthene	12.08	202	3892862	56.09809	ppb	100
80) Benzidine	12.24	184	1135359	53.74461	ppb	99
81) Pyrene	12.35	202	4018707	55.42232	ppb	100
83) Butyl benzylphthalate	13.08	149	1869616	57.51923	ppb	95
84) 3,3'-Dichlorobenzidine	13.71	252	1295998	58.28828	ppb	98
85) Benz (a) anthracene	13.74	228	3486147	55.12946	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2508599	55.45746	ppb #	94
87) Chrysene	13.79	228	3424994	55.38630	ppb	99
88) Di-n-octylphthalate	14.48	149	4408873	57.43934	ppb #	94
90) Benzo (b) fluoranthene	15.08	252	3369057m	53.58981	ppb	99
91) Benzo (k) fluoranthene	15.12	252	3061298	50.66483	ppb	100
92) Benzo (a) pyrene	15.55	252	3279011	57.62317	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3494580	59.61887	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	3040489	57.37576	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2787424	53.67772	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

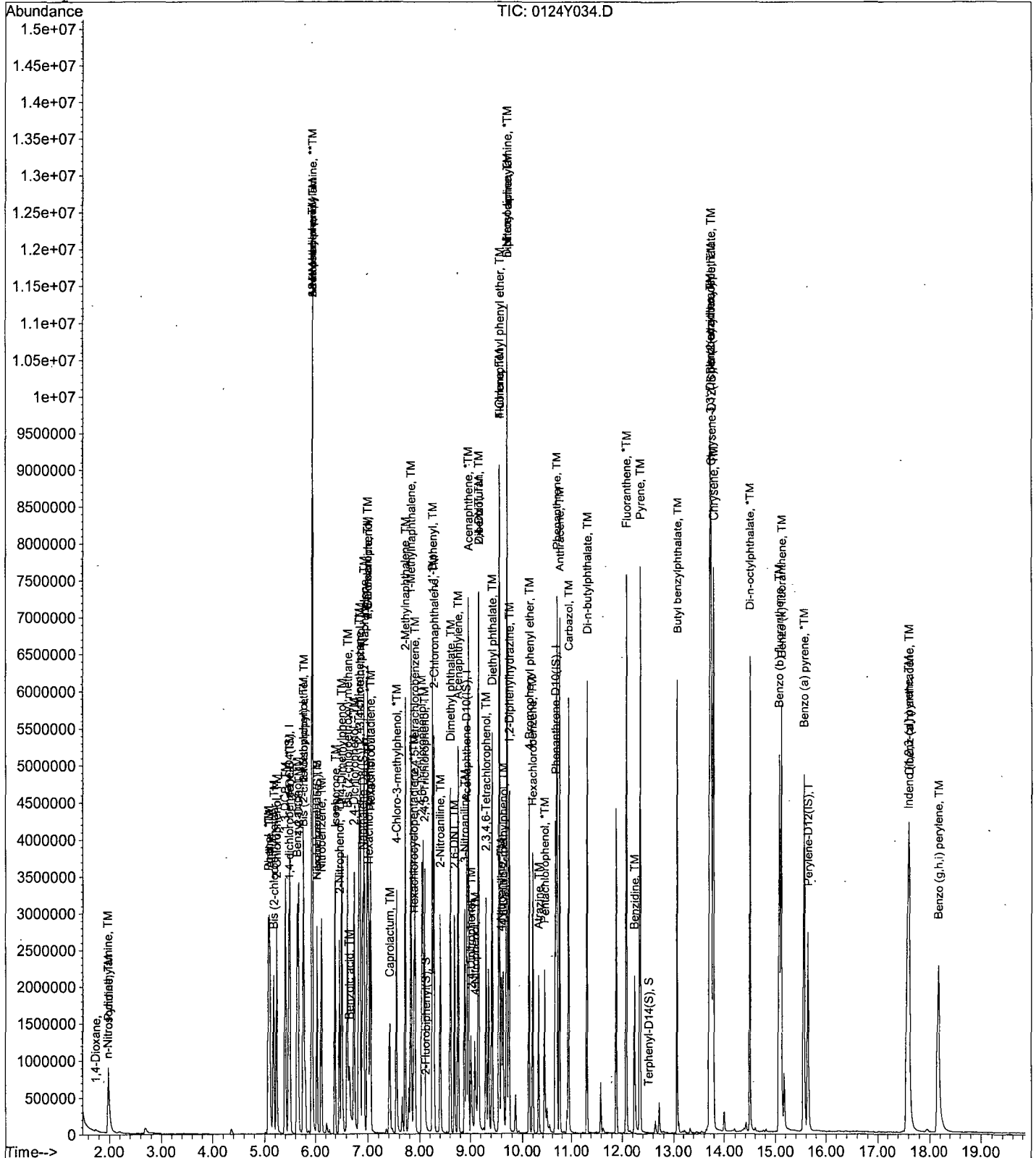
Data File : M:\YODA\DATA\Y190124\0124Y034.D  
Acq On : 28 Jan 19 14:11  
Sample : SS-8270 01/24/19  
Misc :

Vial: 34  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y054.D

		Compound	MEAN	CCRF	%D	%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I
42	**TML	Hexachlorocyclopentadiene	0.2131	0.2507	18	**TML 10
43	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6821	1.5	TM
44	*TM	2,4,6-Trichlorophenol	0.4386	0.4542	3.6	*TM
45	TM	2,4,5-Trichlorophenol	0.4953	0.4959	0.12	TM
46	S	2-Fluorobiphenyl(S)	1.620	1.714	5.8	S
47	TM	1,1'-Biphenyl	1.985	1.989	0.19	TM
48	TM	2-Chloronaphthalene	1.516	1.515	0.12	TM
49	TM	2-Nitroaniline	0.4929	0.4855	1.5	TM
50	TM	Dimethyl phthalate	1.790	1.772	1.0	TM
51	TM	2,6-DNT	0.4015	0.4029	0.36	TM
52	TM	Acenaphthylene	2.405	2.409	0.15	TM
53	TM	3-Nitroaniline	0.4546	0.4604	1.3	TM
54	*TM	Acenaphthene	1.558	1.540	1.1	*TM
55	**TML	2,4-Dinitrophenol	0.1911	0.1579	17	**TML 24 *NT
56	**TM	4-Nitrophenol	0.2763	0.2394	13	**TM
57	TM	Dibenzofuran	2.183	2.134	2.2	TM
58	TM	2,4-DNT	0.5295	0.5262	0.62	TM
59	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3703	1.6	TM
60	TM	Diethyl phthalate	1.696	1.628	4.0	TM
61	TM	4-Chlorophenyl phenyl ether	0.8517	0.8355	1.9	TM
62	TM	Fluorene	1.750	1.721	1.7	TM
63	TM	4-Nitroaniline	0.4603	0.4749	3.2	TM
64	S	2,4,6-Tribromophenol(S)	0.1657	0.1823	10	S
65	I	Phenanthrene-D10(IS)	ISTD			I
66	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1645	7.9	TM
67	TM	Diphenyl amine	0.7057	0.6971	1.2	TM
68	*TM	n-Nitrosodiphenylamine	0.7057	0.6971	1.2	*TM
69	TM	1,2-Diphenylhydrazine	0.9947	0.9419	5.3	TM
70	TM	4-Bromophenyl phenyl ether	0.2390	0.2470	3.3	TM
71	TM	Hexachlorobenzene	0.2259	0.2311	2.3	TM
72	TM	Atrazine	0.2421	0.2422	0.03	TM
73	*TM	Pentachlorophenol	0.1414	0.1506	6.5	*TM
74	TM	Phenanthrene	1.352	1.341	0.79	TM
75	TM	Anthracene	1.385	1.371	1.0	TM
76	TM	Carbazol	1.258	1.265	0.56	TM
77	TM	Di-n-butylphthalate	1.485	1.501	1.1	TM
78	*TM	Fluoranthene	1.452	1.445	0.46	*TM
79	I	Chrysene-D12(IS)	ISTD			I
80	TM	Benzidine	0.4947	0.4440	10	TM

Average

3.6

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y054.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.698	1.689	0.51	TM
82	S	Terphenyl-D14(S)	1.020	1.079	5.7	S
83	TM	Butyl benzylphthalate	0.7611	0.7608	0.04	TM
84	TM	3,3'-Dichlorobenzidine	0.5206	0.5395	3.6	TM
85	TM	Benz (a) anthracene	1.481	1.470	0.75	TM
86	TM	Bis (2-ethylhexyl) phthalate	1.059	1.055	0.37	TM
87	TM	Chrysene	1.448	1.418	2.1	TM
88	*TM	Di-n-octylphthalate	1.797	1.808	0.62	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.501	1.524	1.5	TM
91	TM	Benzo (k) fluoranthene	1.443	1.393	3.4	TM
92	*TM	Benzo (a) pyrene	1.359	1.374	1.1	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.400	1.405	0.39	TM
94	TM	Dibenz (a,h) anthracene	1.266	1.276	0.85	TM
95	TM	Benzo (g,h,i) perylene	1.240	1.242	0.18	TM
96						
97						
98						
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100						
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107						
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109						
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115						
116						
117						
118						
119						
120						

Average

1.5

Data File : M:\YODA\DATA\Y190124\0124Y054.D  
 Acq On : 30 Jan 19 14:28  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 54  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:43 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	482742	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2108172	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1179923	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2236673	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1992380	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1987707	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	2299686	106.80630	ppb	0.02
Spiked Amount	200.000					
				Recovery =	53.403%	
6) Phenol-D6 (S)	5.06	99	2973052	104.87249	ppb	0.00
Spiked Amount	200.000					
				Recovery =	52.436%	
22) Nitrobenzene-D5 (S)	6.10	82	1280062	50.99037	ppb	0.00
Spiked Amount	100.000					
				Recovery =	50.990%	
46) 2-Fluorobiphenyl (S)	8.13	172	2527825	52.90612	ppb	0.00
Spiked Amount	100.000					
				Recovery =	52.906%	
64) 2,4,6-Tribromophenol (S)	9.85	330	537844	110.04080	ppb	0.00
Spiked Amount	200.000					
				Recovery =	55.020%	
82) Terphenyl-D14 (S)	12.51	244	2686468	52.85521	ppb	0.00
Spiked Amount	100.000					
				Recovery =	52.855%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	13049	4.83379		71
3) n-Nitrosodimethylamine	1.97	42	217939	49.80098	ppb	98
4) Pyridine	1.99	79	577395	53.61677	ppb	96
7) Phenol	5.07	94	1782379	48.80959	ppb	97
8) Aniline	5.10	93	1864291	48.77387	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	825712	49.08416	ppb	96
10) 2-Chlorophenol	5.22	128	1238096	48.04106	ppb	98
11) 1,3-DCB	5.39	146	1310032	47.78191	ppb	98
12) 1,4-DCB	5.48	146	1321130	47.15902	ppb	97
13) Benzyl alcohol	5.62	108	784529	48.85466	ppb	98
14) 1,2-DCB	5.65	146	1241901	47.85246	ppb	97
15) 2-Methylphenol	5.74	107	1066079	48.49309	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1284134	50.84445	ppb	97
17) Acetophenone	5.92	105	1565042	46.72661	ppb	99
18) 3&4-Methylphenol	5.92	107	2489894	95.89241	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	891215	47.26139	ppb	99
20) Hexachloroethane	6.02	117	477093	46.61934	ppb	96
23) Nitrobenzene	6.12	77	1336889	47.35726	ppb	100
24) Isophorone	6.39	82	2410748	48.95584	ppb	100
25) 2-Nitrophenol	6.47	139	642768	46.24575	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1134431	49.32938	ppb	97
27) Benzoic acid	6.66	105	847365	47.09343	ppb	97
28) Bis (2-chloroethoxy) metha	6.62	93	1482861	48.55584	ppb	100
29) 2,4-Dichlorophenol	6.75	162	989731	50.01491	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	1066115	48.45860	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1511882	48.62513	ppb	98
32) Napthalene	6.92	128	3602118	48.14533	ppb	100
33) 4-Chloroaniline	6.99	127	1359929	49.12942	ppb	99
34) 2,6-Dichlorophenol	7.00	162	953279	48.64359	ppb	99
35) Hexachloropropene	7.02	213	633922	47.25116	ppb	100
36) Hexachlorobutadiene	7.05	225	551942	48.16006	ppb	99
37) Caprolactum	7.42	55	489462	49.12732	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y054.D  
 Acq On : 30 Jan 19 14:28  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 54  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:43 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1081621	48.50574	ppb	99
39) 2-Methylnaphthalene	7.71	142	2338139	48.46460	ppb	99
40) 1-Methylnaphthalene	7.82	142	2309987	47.90640	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	369830	44.94482	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1006055	50.76191	ppb	99
44) 2,4,6-Trichlorophenol	8.04	196	669937	51.78361	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	731438	50.06138	ppb	98
47) 1,1'-Biphenyl	8.25	154	2932919	50.09314	ppb	100
48) 2-Chloronaphthalene	8.28	162	2233742	49.93978	ppb	98
49) 2-Nitroaniline	8.40	65	716093	49.24883	ppb	99
50) Dimethyl phthalate	8.60	163	2613284	49.48408	ppb	100
51) 2,6-DNT	8.69	165	594244	50.18058	ppb	97
52) Acenaphthylene	8.76	152	3552884	50.07538	ppb	99
53) 3-Nitroaniline	8.88	138	678986	50.63304	ppb	96
54) Acenaphthene	8.96	154	2271371	49.43373	ppb	100
55) 2,4-Dinitrophenol	9.01	184	232818	38.07236	ppb	99
56) 4-Nitrophenol	9.09	65	353132	43.33334	ppb	98
57) Dibenzofuran	9.16	168	3147981	48.88474	ppb	98
58) 2,4-DNT	9.15	165	776149	49.69183	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	546166	50.79326	ppb	97
60) Diethyl phthalate	9.42	149	2400600	47.97623	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1232303	49.05003	ppb	96
62) Fluorene	9.56	166	2537647	49.16156	ppb	100
63) 4-Nitroaniline	9.61	138	700400	51.58210	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.63	198	459859	46.02658	ppb	100
67) Diphenyl amine	9.70	169	3898233	98.78924	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3898233	98.78924	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2633443	47.34882	ppb	98
70) 4-Bromophenyl phenyl ether	10.13	248	690564	51.67440	ppb	96
71) Hexachlorobenzene	10.20	284	646253	51.15373	ppb	95
72) Atrazine	10.32	200	338602	25.00823	ppb	98
73) Pentachlorophenol	10.43	266	421088	53.25808	ppb	98
74) Phenanthrene	10.68	178	3750055	49.60702	ppb	99
75) Anthracene	10.75	178	3832327	49.49317	ppb	100
76) Carbazol	10.94	167	3537940	50.27835	ppb	99
77) Di-n-butylphthalate	11.32	149	4197394	50.55266	ppb	99
78) Fluoranthene	12.08	202	4039698	49.77070	ppb	98
80) Benzidine	12.23	184	1105719	44.87659	ppb	99
81) Pyrene	12.35	202	4206921	49.74347	ppb	99
83) Butyl benzylphthalate	13.08	149	1894800	49.98013	ppb	99
84) 3,3'-Dichlorobenzidine	13.71	252	1343503	51.80706	ppb	98
85) Benz (a) anthracene	13.74	228	3660034	49.62455	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2628309	49.81711	ppb	100
87) Chrysene	13.78	228	3532219	48.97377	ppb	100
88) Di-n-octylphthalate	14.49	149	4503859	50.30834	ppb	100
90) Benzo (b) fluoranthene	15.07	252	3785379	50.73438	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3462132	48.27961	ppb	99
92) Benzo (a) pyrene	15.55	252	3413289	50.54131	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3491909	50.19620	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	3171178	50.42255	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	3086896	50.08783	ppb	99

Quantitation Report

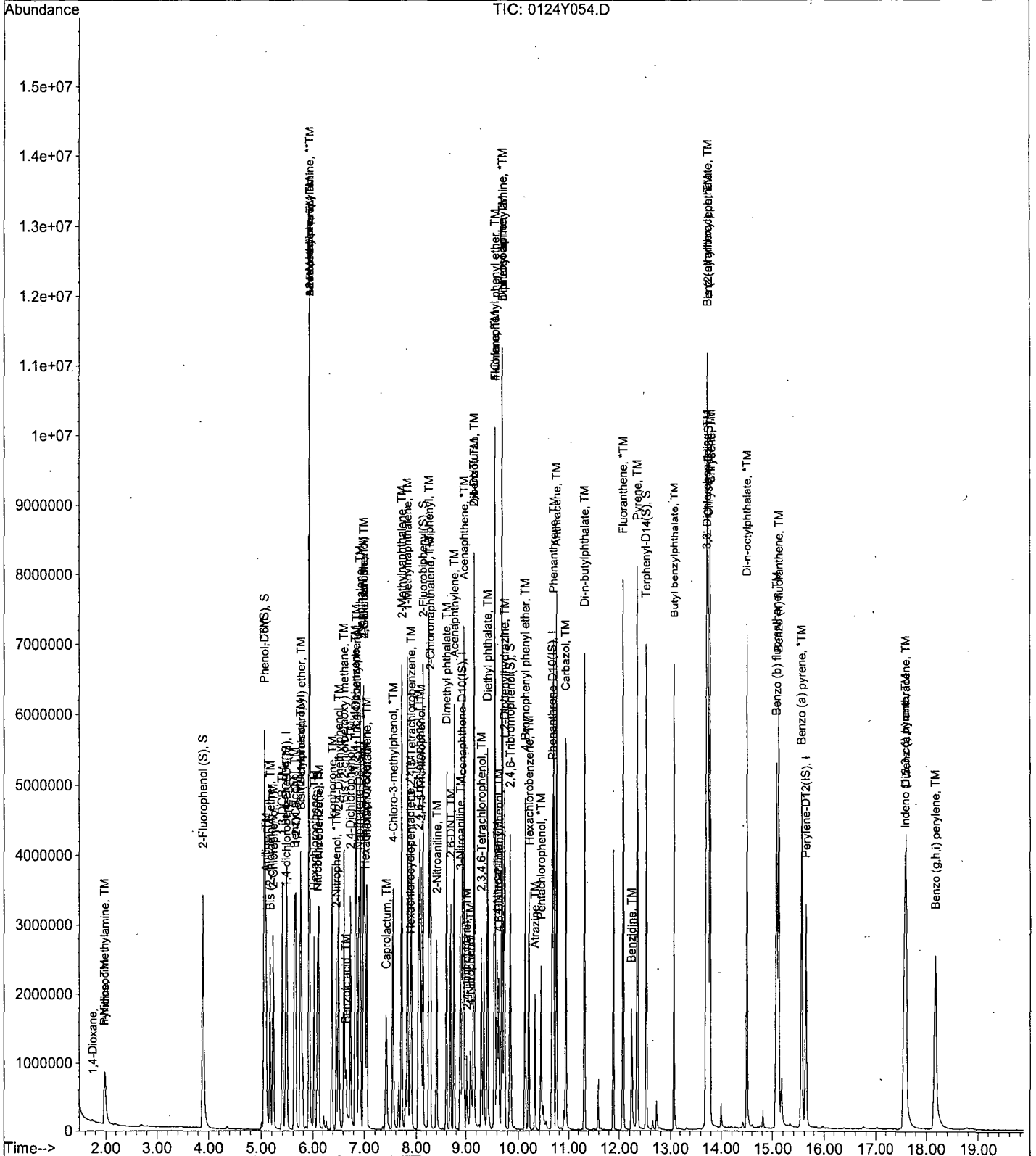
Data File : M:\YODA\DATA\Y190124\0124Y054.D  
 Acq On : 30 Jan 19 14:28  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 54  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:43 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y065.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2165	3.2	
3	TM	n-Nitrosodimethylamine	0.3626	0.3718	2.5	TM
4	S	2-Fluorophenol (S)	1.784	1.861	4.3	S
5	S	Phenol-D6 (S)	2.349	2.422	3.1	S
6	*TM	Phenol	3.026	2.767	8.5	*TM
7	TM	Aniline	3.167	2.059	35	TM
8	TM	Bis (2-chloroethyl) ether	1.394	1.330	4.6	TM
9	TM	2-Chlorophenol	2.135	2.022	5.3	TM
10	TM	1,3-DCB	2.272	2.148	5.5	TM
11	*TM	1,4-DCB	2.321	2.158	7.0	*TM
12	TM	Benzyl alcohol	1.331	0.8004	40	TM
13	TM	1,2-DCB	2.150	2.015	6.3	TM
14	TM	2-Methylphenol	1.822	1.690	7.2	TM
15	TM	Bis (2-chloroisopropyl) ether	2.093	1.966	6.1	TM
16	TM	Acetophenone	2.775	2.613	5.8	TM
17	TM	3&4-Methylphenol	2.152	2.016	6.3	TM
18	**TM	n-Nitrosodi-n-propylamine	1.563	1.466	6.1	**TM
19	TM	Hexachloroethane	0.8480	0.7888	7.0	TM
20	I	Napthalene-D8(IS)	ISTD			I
21	S	Nitrobenzene-D5(S)	0.4763	0.4994	4.8	S
22	TM	Nitrobenzene	0.5356	0.5171	3.5	TM
23	TM	Isophorone	0.9343	0.9212	1.4	TM
24	*TM	2-Nitrophenol	0.2637	0.2552	3.2	*TM
25	TM	2,4-Dimethylphenol	0.4363	0.4103	6.0	TM
26	TM	Benzoic acid	0.3414	0.2504	27	TM
27	TM	Bis (2-chloroethoxy) methane	0.5794	0.5621	3.0	TM
28	*TM	2,4-Dichlorophenol	0.3755	0.3791	0.97	*TM
29	TM	1,2,4-Trichlorobenzene	0.4174	0.4074	2.4	TM
30	TM	3,4-Dimethylphenol	0.5899	0.5649	4.2	TM
31	TM	Napthalene	1.420	1.379	2.9	TM
32	TM	4-Chloroaniline	0.5252	0.4301	18	TM
33	TM	2,6-Dichlorophenol	0.3718	0.3738	0.54	TM
34	TM	Hexachloropropene	0.2546	0.2524	0.84	TM
35	*TM	Hexachlorobutadiene	0.2175	0.2114	2.8	*TM
36	TM	Caprolactum	0.1890	0.1829	3.2	TM
37	*TM	4-Chloro-3-methylphenol	0.4231	0.3894	8.0	*TM
38	TM	2-Methylnapthalene	0.9154	0.8905	2.7	TM
39	TM	1-Methylnapthalene	0.9149	0.8815	3.6	TM
40	I	Acenaphthene-D10(IS)	ISTD			I

Average

7.1

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y065.D

		Compound	MEAN	CCRF	%D	%Drift
41	**TML	Hexachlorocyclopentadiene	0.2131	0.2988	40	**TML 4.8
42	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6730	0.16	TM
43	*TM	2,4,6-Trichlorophenol	0.4386	0.4578	4.4	*TM
44	TM	2,4,5-Trichlorophenol	0.4953	0.4855	2.0	TM
45	S	2-Fluorobiphenyl(S)	1.620	1.721	6.3	S
46	TM	1,1'-Biphenyl	1.985	1.998	0.68	TM
47	TM	2-Chloronaphthalene	1.516	1.526	0.65	TM
48	TM	2-Nitroaniline	0.4929	0.4986	1.1	TM
49	TM	Dimethyl phthalate	1.790	1.805	0.83	TM
50	TM	2,6-DNT	0.4015	0.4130	2.9	TM
51	TM	Acenaphthylene	2.405	2.411	0.24	TM
52	TM	3-Nitroaniline	0.4546	0.4390	3.4	TM
53	*TM	Acenaphthene	1.558	1.556	0.11	*TM
54	**TML	2,4-Dinitrophenol	0.1911	0.1627	15	**TML 22
55	**TM	4-Nitrophenol	0.2763	0.2257	18	**TM
56	TM	Dibenzofuran	2.183	2.180	0.16	TM
57	TM	2,4-DNT	0.5295	0.5379	1.6	TM
58	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3526	3.3	TM
59	TM	Diethyl phthalate	1.696	1.695	0.07	TM
60	TM	4-Chlorophenyl phenyl ether	0.8517	0.8553	0.42	TM
61	TM	Fluorene	1.750	1.768	1.0	TM
62	TM	4-Nitroaniline	0.4603	0.4491	2.4	TM
63	S	2,4,6-Tribromophenol(S)	0.1657	0.1805	8.9	S
64	I	Phenanthrene-D10(IS)	ISTD			I
65	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1626	9.0	TM
66	TM	Diphenyl amine	0.7057	0.7132	1.1	TM
67	*TM	n-Nitrosodiphenylamine	0.7057	0.7132	1.1	*TM
68	TM	1,2-Diphenylhydrazine	0.9947	0.9670	2.8	TM
69	TM	4-Bromophenyl phenyl ether	0.2390	0.2439	2.1	TM
70	TM	Hexachlorobenzene	0.2259	0.2309	2.2	TM
71	TM	Atrazine	0.2421	0.1066	56	TM *NT
72	*TM	Pentachlorophenol	0.1414	0.1179	17	*TM
73	TM	Phenanthrene	1.352	1.371	1.4	TM
74	TM	Anthracene	1.385	1.393	0.61	TM
75	TM	Carbazol	1.258	1.285	2.1	TM
76	TM	Di-n-butylphthalate	1.485	1.509	1.6	TM
77	*TM	Fluoranthene	1.452	1.465	0.90	*TM
78	I	Chrysene-D12(IS)	ISTD			I
79	TM	Benzidine	0.4947	0.1733	65	TM *NT
80	TM	Pyrene	1.698	1.696	0.12	TM

Average

7.3

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y065.D

		Compound	MEAN	CCRF	%D	%Drift
81	S	Terphenyl-D14(S)	1.020	1.077	5.5	S
82	TM	Butyl benzylphthalate	0.7611	0.7853	3.2	TM
83	TM	3,3'-Dichlorobenzidine	0.5206	0.4741	8.9	TM
84	TM	Benz (a) anthracene	1.481	1.477	0.28	TM
85	TM	Bis (2-ethylhexyl) phthalate	1.059	1.057	0.22	TM
86	TM	Chrysene	1.448	1.416	2.2	TM
87	*TM	Di-n-octylphthalate	1.797	1.842	2.5	*TM
88	I	Perylene-D12(IS)	ISTD			I
89	TM	Benzo (b) fluoranthene	1.501	1.584	5.5	TM
90	TM	Benzo (k) fluoranthene	1.443	1.399	3.1	TM
91	*TM	Benzo (a) pyrene	1.359	1.414	4.1	*TM
92	TM	Indeno (1,2,3-cd) pyrene	1.400	1.432	2.3	TM
93	TM	Dibenz (a,h) anthracene	1.266	1.311	3.6	TM
94	TM	Benzo (g,h,i) perylene	1.240	1.231	0.71	TM
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119						
120						

Average

3.2



Data File : M:\YODA\DATA\Y190124\0124Y065.D  
 Acq On : 30 Jan 19 19:35  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 65  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:45 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	457117	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1949789	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1099019	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2075607	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1848016	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1779909	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.92	112	2126777	104.31289	ppb	0.05
Spiked Amount				200.000		
				Recovery =	52.157%	
6) Phenol-D6 (S)	5.08	99	2768232	103.12151	ppb	0.03
Spiked Amount				200.000		
				Recovery =	51.561%	
22) Nitrobenzene-D5 (S)	6.10	82	1217037	52.41787	ppb	0.00
Spiked Amount				100.000		
				Recovery =	52.418%	
46) 2-Fluorobiphenyl (S)	8.14	172	2364825	53.13814	ppb	0.00
Spiked Amount				100.000		
				Recovery =	53.138%	
64) 2,4,6-Tribromophenol (S)	9.86	330	495997	108.94942	ppb	0.00
Spiked Amount				200.000		
				Recovery =	54.475%	
82) Terphenyl-D14 (S)	12.51	244	2487667	52.76729	ppb	0.00
Spiked Amount				100.000		
				Recovery =	52.767%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	12369	4.83875		# 22
3) n-Nitrosodimethylamine	1.98	42	212441	51.26595	ppb	93
7) Phenol	5.09	94	1581276	45.72992	ppb	95
8) Aniline	5.17	93	1176567	32.50707	ppb	# 97
9) Bis (2-chloroethyl) ether	5.17	63	759881	47.70304	ppb	97
10) 2-Chlorophenol	5.24	128	1155144	47.33497	ppb	99
11) 1,3-DCB	5.40	146	1227284	47.27313	ppb	99
12) 1,4-DCB	5.48	146	1232879	46.47586	ppb	100
13) Benzyl alcohol	5.64	108	457318	30.07481	ppb	95
14) 1,2-DCB	5.65	146	1151143	46.84188	ppb	99
15) 2-Methylphenol	5.77	107	965575	46.38358	ppb	95
16) Bis (2-chloroisopropyl) et	5.77	45	1123147	46.96318	ppb	# 60
17) Acetophenone	5.93	105	1493125	47.07845	ppb	86
18) 3&4-Methylphenol	5.94	107	2303727	93.69623	ppb	99
19) n-Nitrosodi-n-propylamine	5.93	70	837915	46.92580	ppb	98
20) Hexachloroethane	6.03	117	450726	46.51183	ppb	94
23) Nitrobenzene	6.12	77	1260395	48.27433	ppb	97
24) Isophorone	6.38	82	2245259	49.29893	ppb	96
25) 2-Nitrophenol	6.48	139	622049	48.39055	ppb	95
26) 2,4-Dimethylphenol	6.52	122	999940	47.01322	ppb	99
27) Benzoic acid	6.67	105	610226	36.66899	ppb	100
28) Bis (2-chloroethoxy) metha	6.63	93	1369927	48.50170	ppb	99
29) 2,4-Dichlorophenol	6.76	162	923933	50.48255	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	992942	48.79880	ppb	99
31) 3,4-Dimethylphenol	6.87	107	1376879	47.88033	ppb	97
32) Napthalene	6.93	128	3359823	48.55468	ppb	100
33) 4-Chloroaniline	7.13	127	1048321	40.94851	ppb	98
34) 2,6-Dichlorophenol	7.00	162	911147	50.27042	ppb	99
35) Hexachloropropene	7.02	213	615212	49.58153	ppb	99
36) Hexachlorobutadiene	7.05	225	515184	48.60426	ppb	99
37) Caprolactum	7.43	55	445789	48.37844	ppb	99
38) 4-Chloro-3-methylphenol	7.56	107	949070	46.01874	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y065.D  
 Acq On : 30 Jan 19 19:35  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 65  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:45 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) 2-Methylnaphthalene	7.71	142	2170366	48.64136	ppb	99
40) 1-Methylnaphthalene	7.83	142	2148490	48.17656	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	410432	52.42144	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	924494	50.08051	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	628941	52.19354	ppb	98
45) 2,4,5-Trichlorophenol	8.11	196	667016	49.01285	ppb	96
47) 1,1'-Biphenyl	8.25	154	2745304	50.34045	ppb	99
48) 2-Chloronaphthalene	8.28	162	2096544	50.32295	ppb	99
49) 2-Nitroaniline	8.41	65	684941	50.57409	ppb	94
50) Dimethyl phthalate	8.60	163	2479958	50.41639	ppb	99
51) 2,6-DNT	8.69	165	567379	51.43901	ppb	90
52) Acenaphthylene	8.76	152	3312306	50.12128	ppb	100
53) 3-Nitroaniline	8.90	138	603112	48.28582	ppb	96
54) Acenaphthene	8.97	154	2137500	49.94475	ppb	99
55) 2,4-Dinitrophenol	9.02	184	223533	39.09119	ppb	93
56) 4-Nitrophenol	9.16	65	310110	40.85539	ppb	83
57) Dibenzofuran	9.16	168	2994352	49.92206	ppb	96
58) 2,4-DNT	9.16	165	738907	50.78999	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	484344	48.35973	ppb	97
60) Diethyl phthalate	9.42	149	2328714	49.96558	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	1174928	50.20899	ppb	89
62) Fluorene	9.56	166	2429119	50.52330	ppb	99
63) 4-Nitroaniline	9.62	138	616973	48.78289	ppb	96
66) 4,6-Dinitro-2-methylphenol	9.63	198	421826	45.49616	ppb	97
67) Diphenyl amine	9.71	169	3700879	101.06577	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	3700879	101.06577	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2508871	48.60947	ppb	97
70) 4-Bromophenyl phenyl ether	10.13	248	632892	51.03387	ppb	96
71) Hexachlorobenzene	10.20	284	598955	51.08887	ppb	98
72) Atrazine	10.33	200	138313	11.00814	ppb	99
73) Pentachlorophenol	10.44	266	305935	41.69645	ppb	98
74) Phenanthrene	10.69	178	3555823	50.68775	ppb	99
75) Anthracene	10.75	178	3614825	50.30688	ppb	100
76) Carbazol	10.94	167	3334447	51.06363	ppb	97
77) Di-n-butylphthalate	11.32	149	3914410	50.80284	ppb	99
78) Fluoranthene	12.08	202	3800053	50.45124	ppb	98
80) Benzidine	12.33	184	400387	17.51949	ppb	99
81) Pyrene	12.34	202	3917366	49.93814	ppb	100
83) Butyl benzylphthalate	13.08	149	1813997	51.58662	ppb	99
84) 3,3'-Dichlorobenzidine	13.71	252	1095293	45.53518	ppb	98
85) Benz (a) anthracene	13.74	228	3410816	49.85815	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2441486	49.89107	ppb	99
87) Chrysene	13.78	228	3271023	48.89517	ppb	99
88) Di-n-octylphthalate	14.49	149	4255131	51.24301	ppb	100
90) Benzo (b) fluoranthene	15.07	252	3524406	52.75134	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3112482	48.47095	ppb	99
92) Benzo (a) pyrene	15.56	252	3146576	52.03148	ppb	96
93) Indeno (1,2,3-cd) pyrene	17.57	276	3185113	51.13136	ppb	97
94) Dibenz (a,h) anthracene	17.61	278	2916608	51.78891	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2739743	49.64489	ppb	100

Quantitation Report

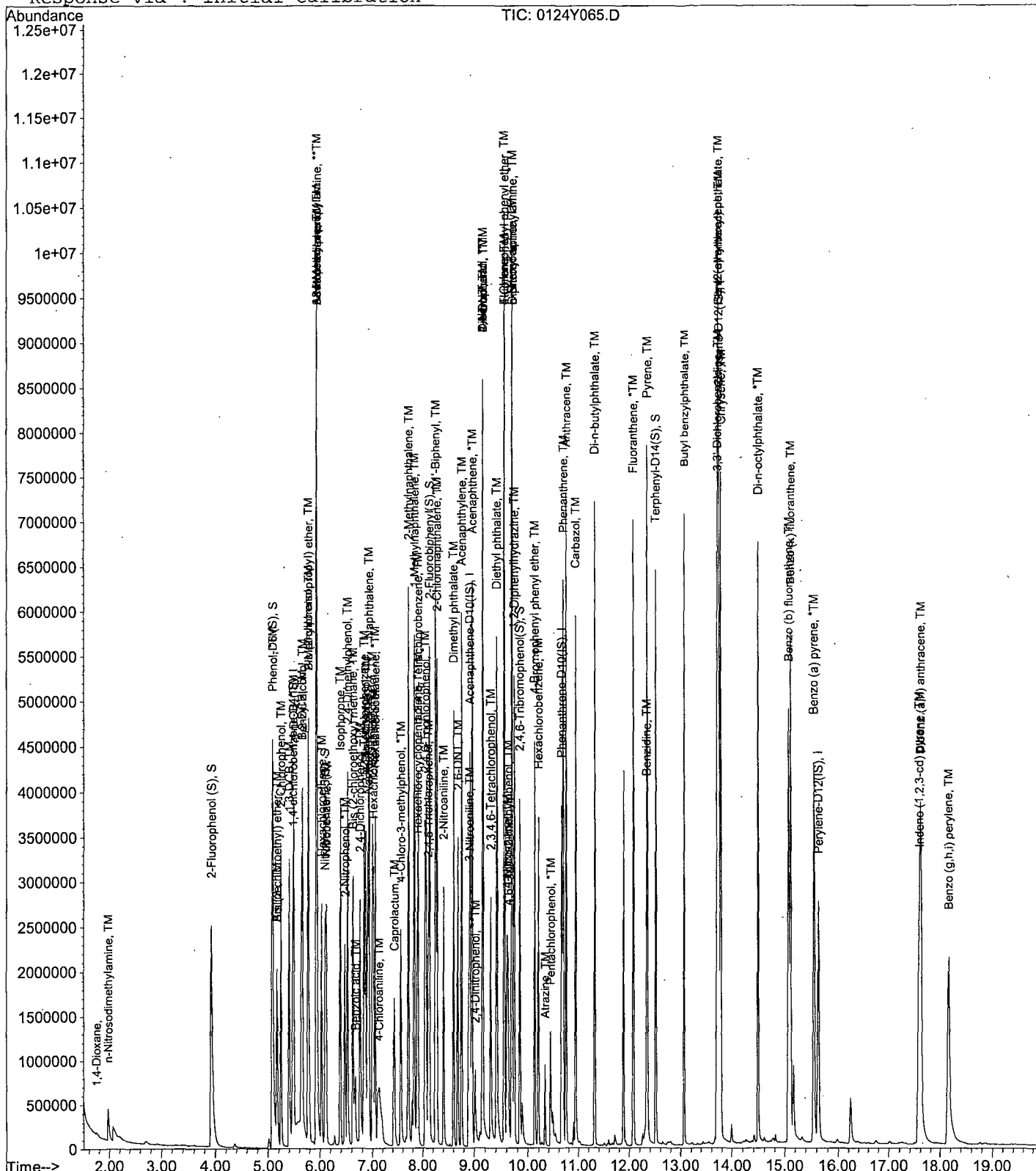
Data File : M:\YODA\DATA\Y190124\0124Y065.D  
Acq On : 30 Jan 19 19:35  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 65  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 31 5:45 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y190124\0124Y058.D  
 Acq On : 30 Jan 19 16:20  
 Sample : AZ85520W11 1/800  
 Misc :

Vial: 58  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:23 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	477493	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.90	136	2017729	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1223659	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2462960	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	2215995	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	2149042	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3506786	205.8238	ppb	0.03
Spiked Amount 250.000				Recovery =	82.330%	
6) Phenol-D6 (S)	5.06	99	4545743	202.6385	ppb	0.01
Spiked Amount 250.000				Recovery =	81.056%	
22) Nitrobenzene-D5 (S)	6.09	82	2092113	108.8418	ppb	0.00
Spiked Amount 125.000				Recovery =	87.074%	
46) 2-Fluorobiphenyl (S)	8.13	172	3809497	96.1014	ppb	0.00
Spiked Amount 125.000				Recovery =	76.881%	
64) 2,4,6-Tribromophenol (S)	9.85	330	928924	229.0767	ppb	0.00
Spiked Amount 250.000				Recovery =	91.631%	
82) Terphenyl-D14 (S)	12.52	244	3383607	74.8169	ppb	0.00
Spiked Amount 125.000				Recovery =	59.854%	

Target Compounds

Qvalue

Quantitation Report

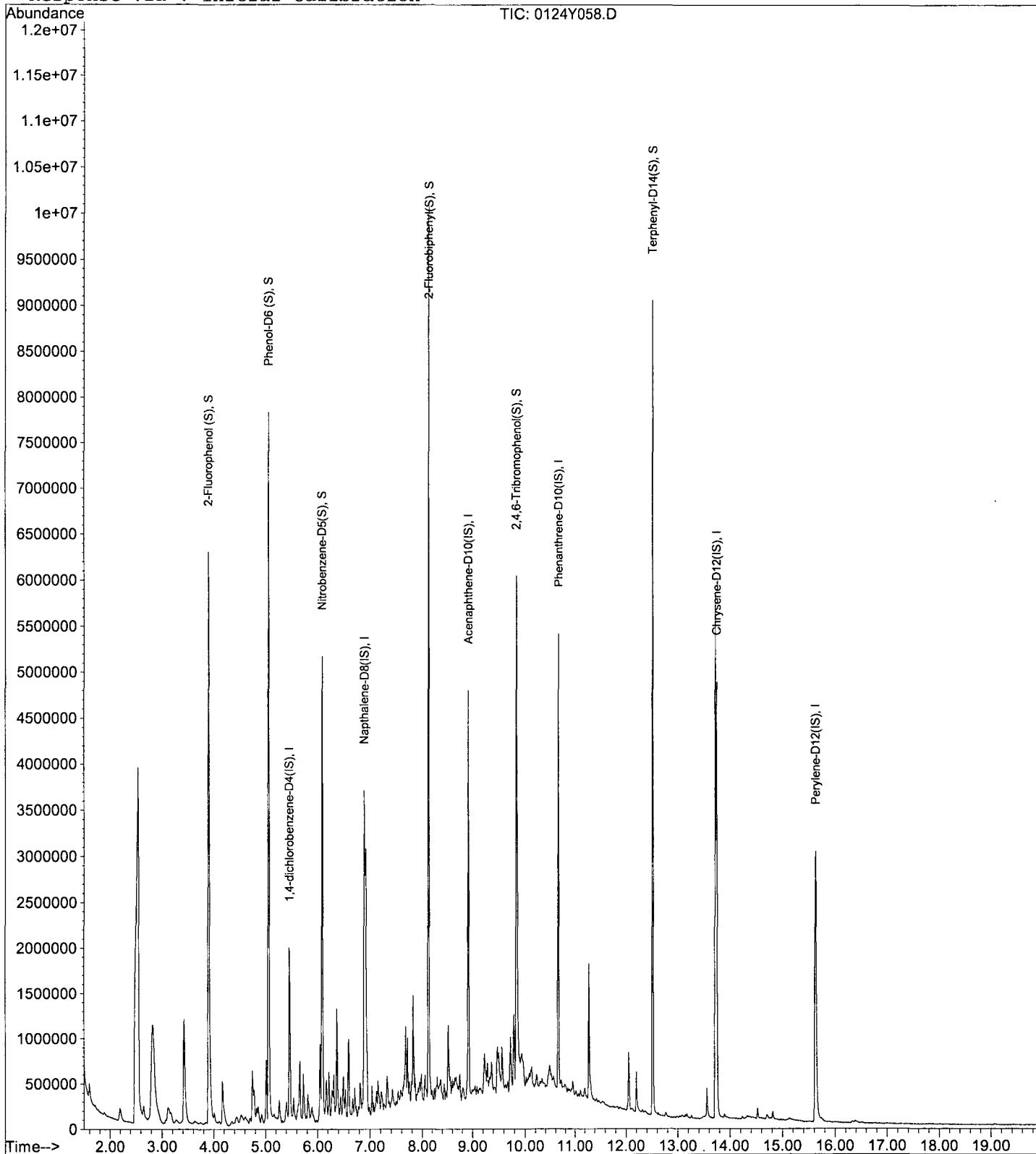
Data File : M:\YODA\DATA\Y190124\0124Y058.D  
Acq On : 30 Jan 19 16:20  
Sample : AZ85520W11 1/800  
Misc :

Vial: 58  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:23 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 30 Jan 19 16:20  
Data File: M:\YODA\DATA\Y190124\0124Y058.D  
Name: AZ85520W11 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
2-Pentanone, 4-hydro	3.43	43.2	ppb	2682900	ISTD01	5.47	3107240	40.0
0124Y058.D Y0125NC.M			Mon Feb 11 09:58:42	2019				

## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y058.D  
 Acq On : 30 Jan 19 16:20  
 Sample : AZ85520W11 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 58  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

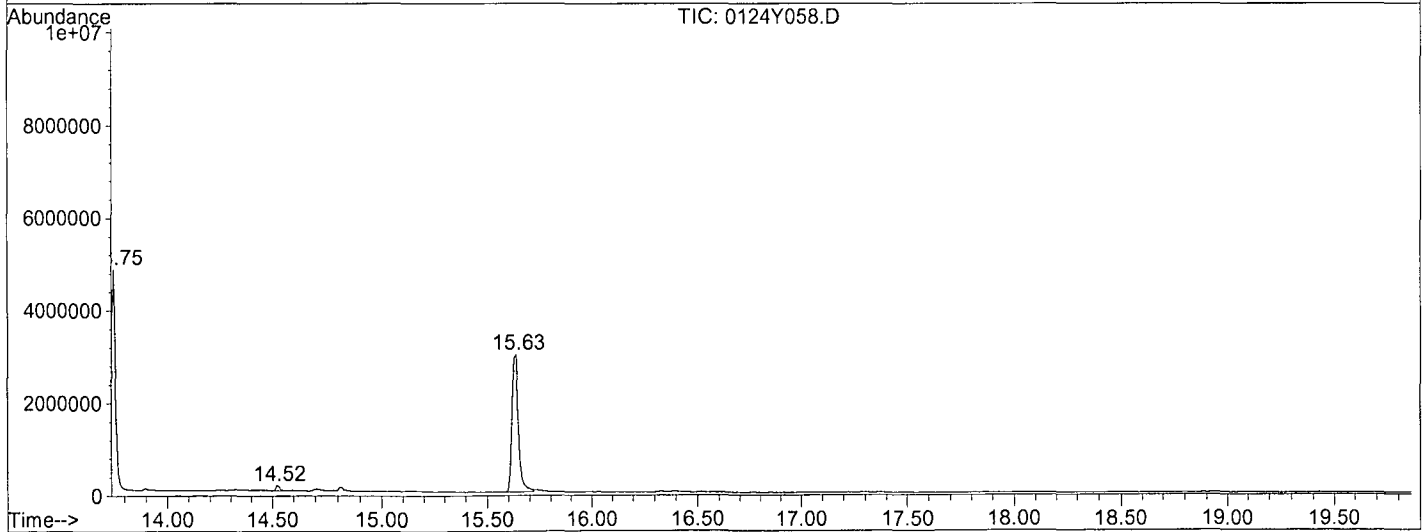
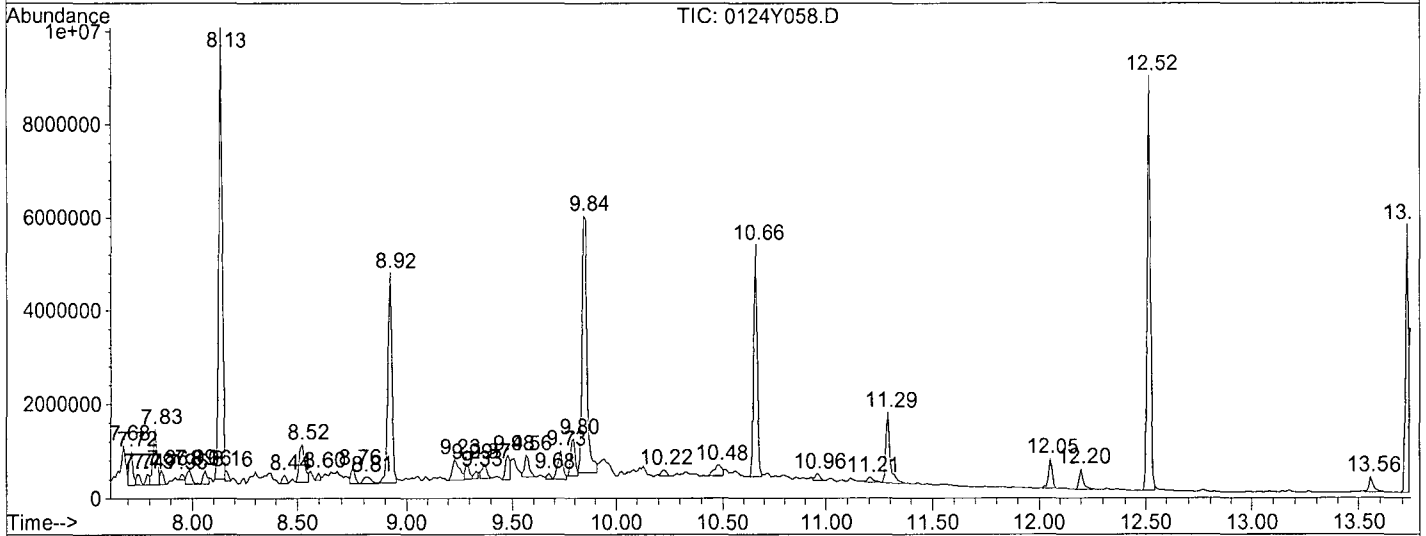
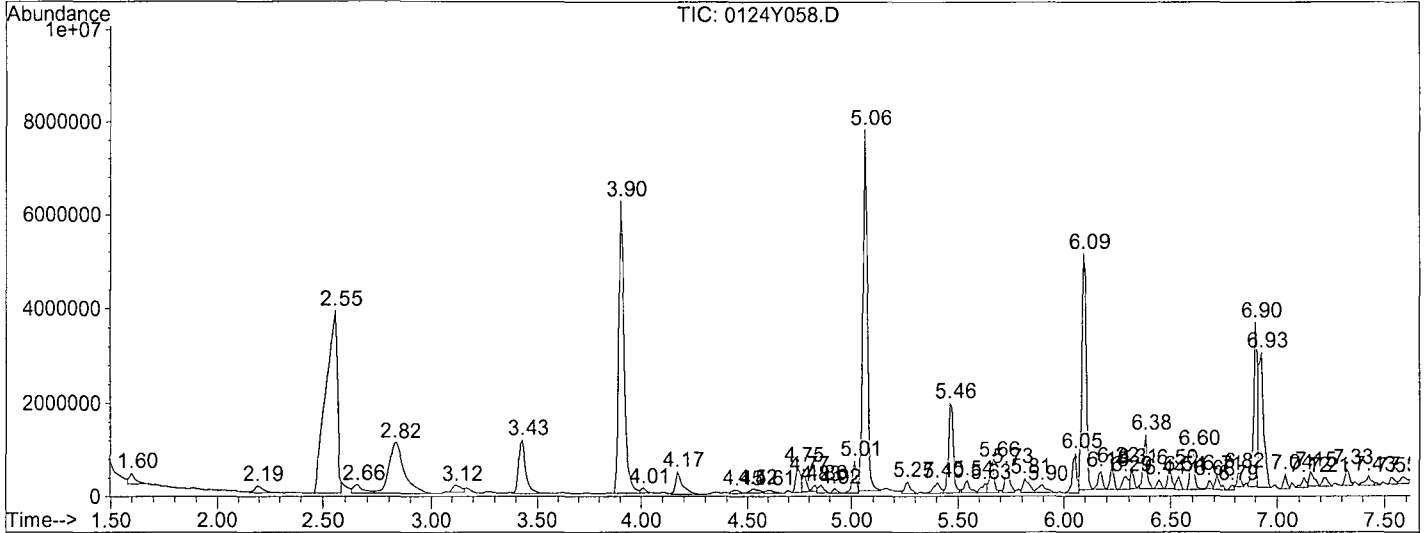
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.598	10	12	20	rVB	230696	3842927	448778	3.16%	0.269%
2	2.193	72	76	88	rVB	150024	4506973	452570	3.19%	0.272%
3	2.555	104	115	118	rBV	3885765	17584779	14183171	100.00%	8.512%
4	2.657	123	126	134	rVV2	182349	3592716	552064	3.89%	0.331%
5	2.824	134	144	167	rVB	1085656	13879713	5497435	38.76%	3.299%
6	3.121	172	176	180	rBV3	140791	2496527	441879	3.12%	0.265%
7	3.427	204	209	226	rVB	1152350	8103316	2682900	18.92%	1.610%
8	3.901	256	260	270	rBV	6232161	14655128	11263727	79.42%	6.760%
9	4.012	270	272	279	rVB	109881	2597821	187042	1.32%	0.112%
10	4.170	286	289	303	rVB	487747	5266666	1088749	7.68%	0.653%
11	4.448	314	319	323	rVV3	67708	2391916	186419	1.31%	0.112%
12	4.523	323	327	333	rVV2	84121	2753462	280179	1.98%	0.168%
13	4.606	333	336	343	rVB5	71160	2778239	228455	1.61%	0.137%
14	4.745	348	351	353	rBV	557020	2255828	934807	6.59%	0.561%
15	4.773	353	354	357	rVV2	333781	1838274	459254	3.24%	0.276%
16	4.829	357	360	361	rVV2	125225	1242534	191098	1.35%	0.115%
17	4.857	361	363	367	rVB	176342	1956039	289245	2.04%	0.174%
18	4.922	367	370	375	rVB2	99897	2104374	161625	1.14%	0.097%
19	5.015	375	380	382	rBV	691246	2602495	861400	6.07%	0.517%
20	5.061	382	385	393	rBV	7723169	16765920	10913045	76.94%	6.550%
21	5.265	404	407	412	rVB2	252688	2562099	458194	3.23%	0.275%
22	5.405	415	422	425	rVV2	231997	2969587	527462	3.72%	0.317%
23	5.460	425	428	433	rVV	1930881	5258889	3107238	21.91%	1.865%
24	5.544	434	437	442	rVV	273985	2614531	505860	3.57%	0.304%
25	5.627	442	446	447	rVV3	198356	1728707	405838	2.86%	0.244%
26	5.665	447	450	453	rVV	676522	2864221	1046485	7.38%	0.628%
27	5.730	455	457	461	rVV2	534014	2629170	822289	5.80%	0.494%
28	5.813	464	466	471	rVV3	311338	2630391	641768	4.52%	0.385%
29	5.897	471	475	481	rVB3	170089	3127797	472157	3.33%	0.283%
30	6.054	486	492	494	rBV	856859	3313339	1348490	9.51%	0.809%
31	6.092	494	496	501	rVV	5023591	12498469	7092845	50.01%	4.257%
32	6.175	501	505	507	rVV	387261	2238378	561782	3.96%	0.337%
33	6.222	507	510	513	rVB	482593	2181509	570493	4.02%	0.342%
34	6.287	513	517	519	rBV2	293019	2234426	625181	4.41%	0.375%
35	6.314	519	520	523	rVV2	430806	1953436	401120	2.83%	0.241%
36	6.379	524	527	531	rVB2	1166474	3487237	1418324	10.00%	0.851%
37	6.444	531	534	537	rVB3	210067	1906229	278073	1.96%	0.167%
38	6.500	537	540	542	rBV2	426202	2054004	604626	4.26%	0.363%
39	6.537	542	544	548	rVB2	301379	2217587	361744	2.55%	0.217%
40	6.602	548	551	557	rBV	856530	4019121	1274408	8.99%	0.765%
41	6.676	557	559	561	rBV	183677	1326675	211878	1.49%	0.127%
42	6.714	561	563	568	rVB2	319984	2593515	486552	3.43%	0.292%
43	6.788	568	571	572	rBV2	117977	1241570	173833	1.23%	0.104%
44	6.816	572	574	577	rVV2	298224	2997746	501746	2.90%	0.247%
45	6.899	579	583	584	rVV	3495146	6207059	4621395	32.58%	2.774%



LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y058.D  
 Operator : MA  
 Acquired : 30 Jan 19 16:20 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ85520W11 1/800  
 Misc Info :  
 Vial Number: 58  
 Quant File : Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y058.D  
 Acq On : 30 Jan 19 16:20  
 Sample : AZ85520W11 1/800  
 Misc :

Vial: 58  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

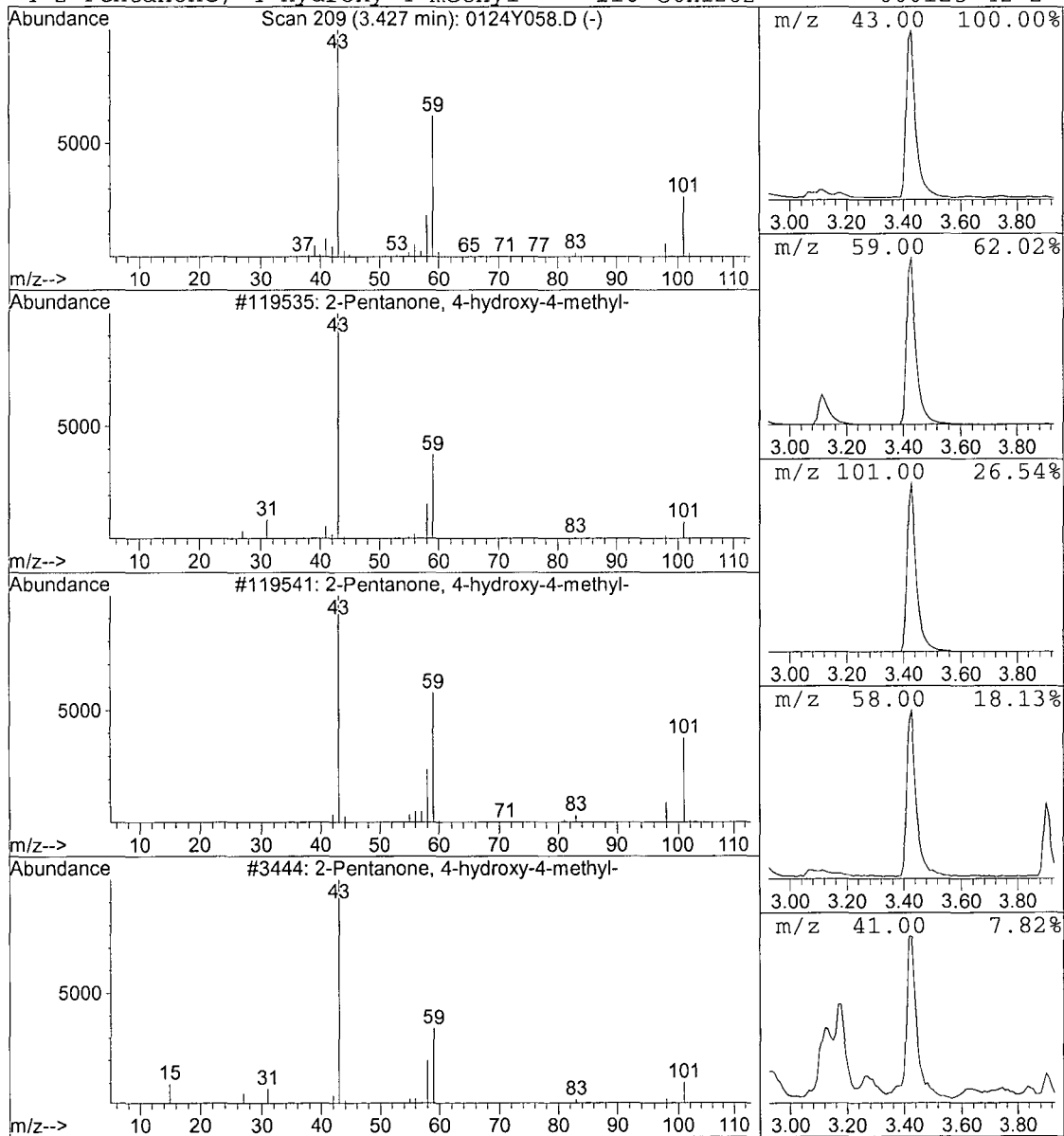
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 2-Pentanone, 4-hydroxy-4-methyl Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.43	43.17 ppb	2682900	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	72
2		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
3		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	40
4		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	40



Data File : M:\YODA\DATA\Y190124\0124Y059.D Vial: 59  
 Acq On : 30 Jan 19 16:48 Operator: MA  
 Sample : AZ85521W10 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:22 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	420853	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.90	136	1784271	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1124051	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2218142	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1989938	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1942693	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.90	112	3618286	240.9494	ppb	0.03
Spiked Amount 250.000						
					Recovery = 96.380%	
6) Phenol-D6 (S)	5.06	99	4698003	237.6113	ppb	0.01
Spiked Amount 250.000						
					Recovery = 95.044%	
22) Nitrobenzene-D5 (S)	6.09	82	2168075	127.5518	ppb	0.00
Spiked Amount 125.000						
					Recovery = 102.042%	
46) 2-Fluorobiphenyl (S)	8.13	172	3931154	107.9584	ppb	0.00
Spiked Amount 125.000						
					Recovery = 86.366%	
64) 2,4,6-Tribromophenol (S)	9.85	330	952778	255.7801	ppb	0.00
Spiked Amount 250.000						
					Recovery = 102.312%	
82) Terphenyl-D14 (S)	12.52	244	3375094	83.1064	ppb	0.00
Spiked Amount 125.000						
					Recovery = 66.485%	

Target Compounds Qvalue

Quantitation Report

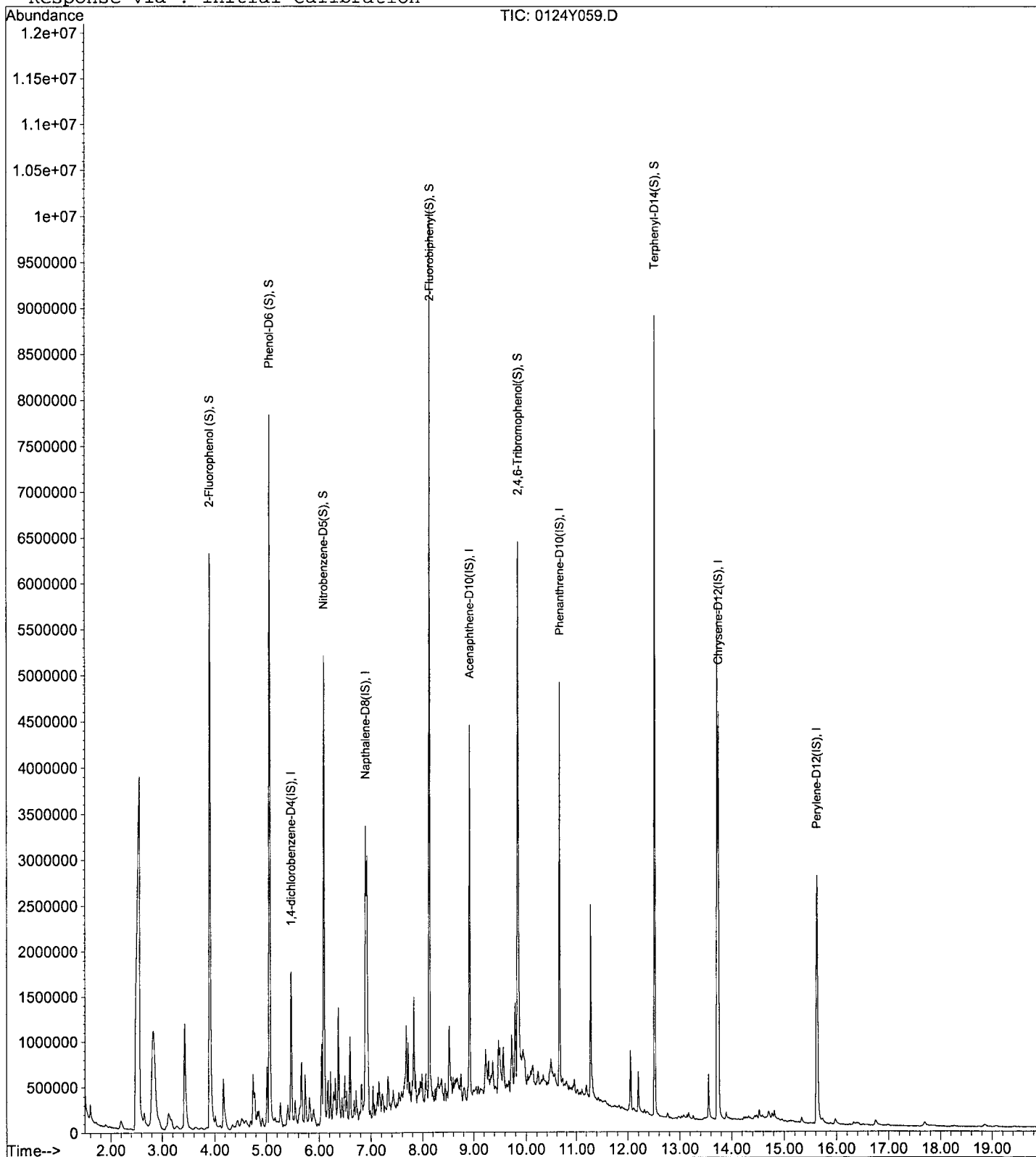
Data File : M:\YODA\DATA\Y190124\0124Y059.D  
Acq On : 30 Jan 19 16:48  
Sample : AZ85521W10 1/800  
Misc :

Vial: 59  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:22 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y059.D                   Vial: 59  
Acq On    : 30 Jan 19  16:48                   Operator: MA  
Sample    : AZ85521W10 1/800                  Inst     : Yoda  
Misc       :                                    Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title        : EPA 8270C  
Library      : M:\DATABASE\WILEY138.L

No Library Search Compounds Detected

\*\*\*\*\*

Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 30 Jan 19 16:48  
Data File: M:\YODA\DATA\Y190124\0124Y059.D  
Name: AZ85521W10 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
0124Y059.D Y0125NC.M			Mon Feb 11 10:01:32		2019			

## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y059.D  
 Acq On : 30 Jan 19 16:48  
 Sample : AZ85521W10 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 59  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

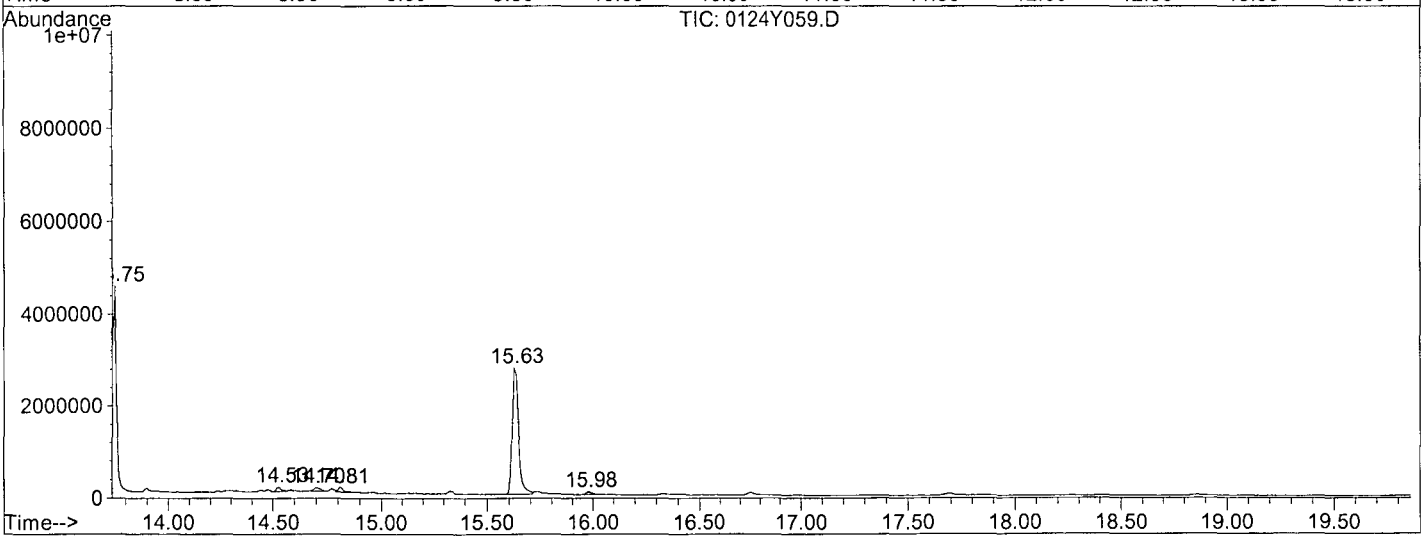
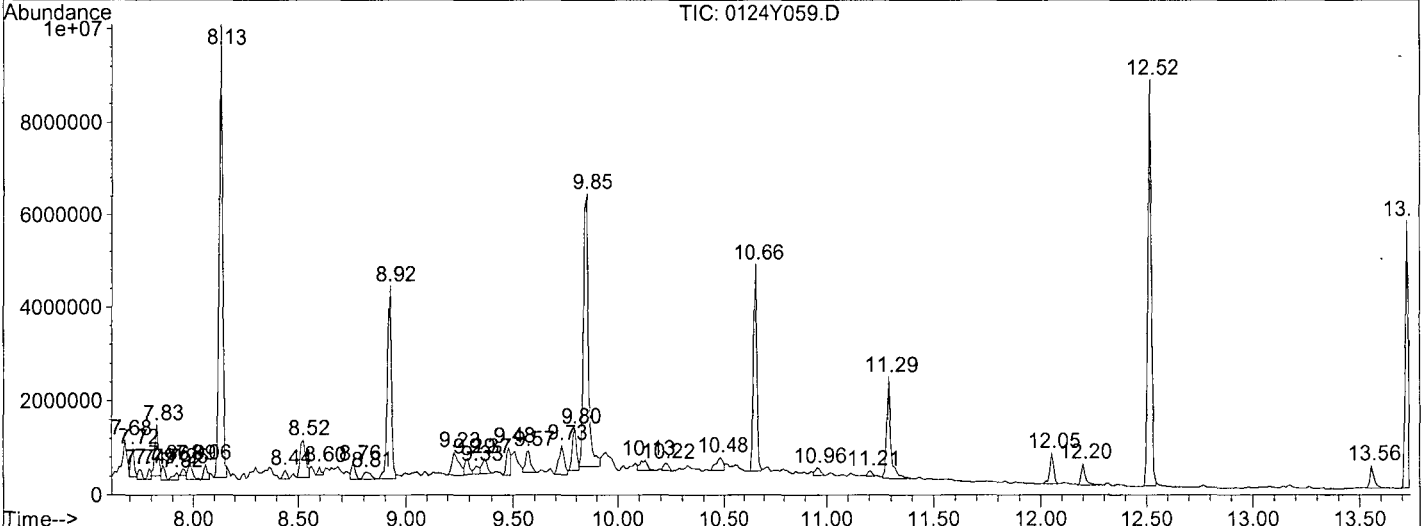
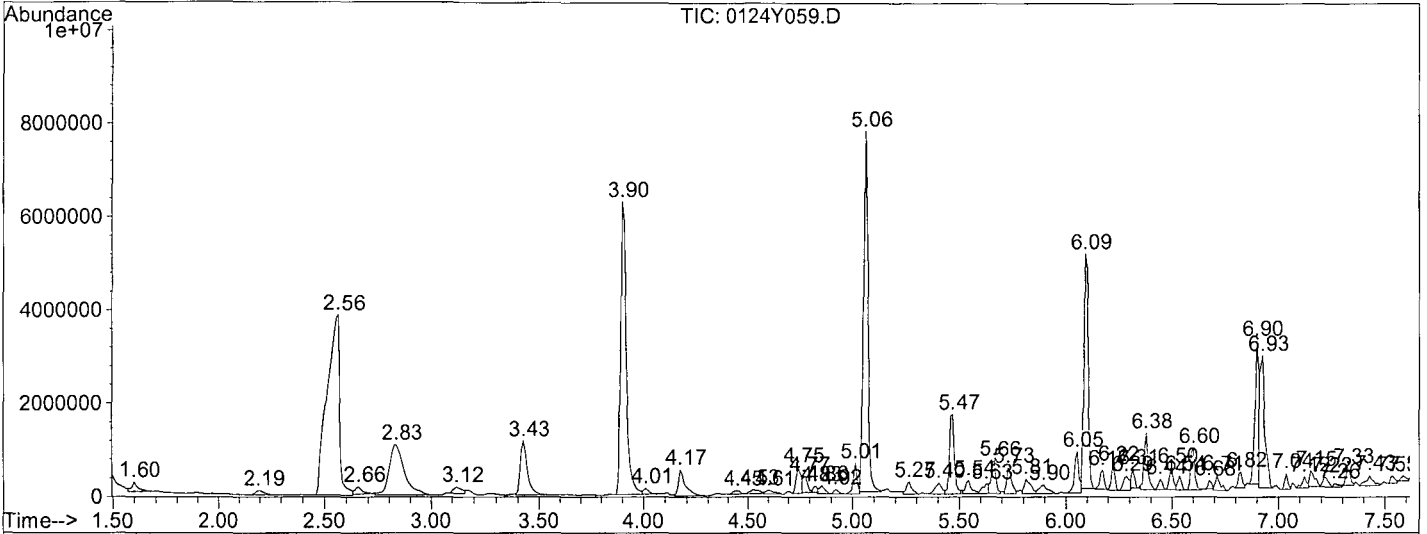
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.598	9	12	21	rVB2	203142	2651684	414232	2.71%	0.245%
2	2.192	71	76	85	rVB	87906	2381729	258509	1.69%	0.153%
3	2.564	104	116	123	rBV	3861290	18117731	15299827	100.00%	9.050%
4	2.656	123	126	134	rVV2	152103	2334624	358976	2.35%	0.212%
5	2.833	134	145	168	rVB	1082400	10955867	5489584	35.88%	3.247%
6	3.121	171	176	180	rBV2	143994	1853678	426545	2.79%	0.252%
7	3.427	205	209	226	rVB	1159302	6291292	2698038	17.63%	1.596%
8	3.900	257	260	270	rBV	6273763	14910138	11722585	76.62%	6.934%
9	4.012	270	272	280	rVB	123735	2022871	208065	1.36%	0.123%
10	4.170	286	289	303	rVB	553934	3924043	1209655	7.91%	0.715%
11	4.448	314	319	322	rVV5	73081	1457085	190011	1.24%	0.112%
12	4.532	322	328	333	rVV3	87164	2032970	292547	1.91%	0.173%
13	4.606	333	336	343	rVB6	74064	1928717	227397	1.49%	0.135%
14	4.745	348	351	353	rBV	554685	1823643	929661	6.08%	0.550%
15	4.773	353	354	358	rVV2	341369	1828157	522897	3.42%	0.309%
16	4.829	358	360	361	rVV2	130500	784322	182418	1.19%	0.108%
17	4.857	361	363	368	rVB2	171311	1636182	294768	1.93%	0.174%
18	4.922	368	370	375	rVB2	100177	1379699	167184	1.09%	0.099%
19	5.014	375	380	382	rBV	655707	1969604	831131	5.43%	0.492%
20	5.061	382	385	393	rBV	7723017	16097855	11344951	74.15%	6.710%
21	5.265	404	407	412	rVB2	266049	1915317	488408	3.19%	0.289%
22	5.404	417	422	425	rVV2	241170	1847769	543128	3.55%	0.321%
23	5.469	425	429	433	rVV	1705021	4252594	2793105	18.26%	1.652%
24	5.544	434	437	442	rVV	287016	1969681	538721	3.52%	0.319%
25	5.627	442	446	447	rVV2	210879	1336991	432370	2.83%	0.256%
26	5.664	447	450	453	rVV	703001	2435367	1109713	7.25%	0.656%
27	5.729	455	457	461	rVV2	558834	2181375	884144	5.78%	0.523%
28	5.813	464	466	471	rVV3	317007	2097306	678444	4.43%	0.401%
29	5.896	471	475	481	rVB4	185353	2339581	510234	3.33%	0.302%
30	6.054	486	492	494	rBV	889139	2690385	1385160	9.05%	0.819%
31	6.091	494	496	501	rVB	5033104	11937739	7204714	47.09%	4.261%
32	6.175	501	505	507	rVB	414066	1762938	580649	3.80%	0.343%
33	6.221	507	510	513	rVB	519536	1723256	605696	3.96%	0.358%
34	6.286	513	517	519	rBV2	301039	1761203	645491	4.22%	0.382%
35	6.314	519	520	523	rVB2	402658	1576195	360842	2.36%	0.213%
36	6.379	524	527	531	rVB2	1210423	3014092	1499338	9.80%	0.887%
37	6.444	531	534	537	rBV3	221339	1426754	296242	1.94%	0.175%
38	6.500	537	540	542	rBV2	458831	1691369	636755	4.16%	0.377%
39	6.537	542	544	548	rVB2	308106	1752647	374702	2.45%	0.222%
40	6.602	548	551	555	rBV	901633	2821079	1255307	8.20%	0.742%
41	6.676	557	559	561	rBV	185567	1004380	217719	1.42%	0.129%
42	6.713	561	563	568	rVB2	319243	2031389	498815	3.26%	0.295%
43	6.825	572	575	577	rBV2	328797	1544575	481684	3.15%	0.285%
44	6.899	579	583	584	rVV	3079171	8840420	2682202	26.60%	2.407%
45	6.927	584	586	591	rVB2	2843025	10891910	4387645	28.68%	2.595%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y059.D  
 Operator : MA  
 Acquired : 30 Jan 19 16:48 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ85521W10 1/800  
 Misc Info :  
 Vial Number: 59  
 Quant File :Y0125NC.RES (RTE Integrator)





Data File : M:\YODA\DATA\Y190124\0124Y060.D Vial: 60  
 Acq On : 30 Jan 19 17:16 Operator: MA  
 Sample : AZ85523W10 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:21 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	575603	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2385778	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1200434	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2389718	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	2120864	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1103396	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.91	112	3644341	177.4391	ppb	0.04
Spiked Amount 250.000			Recovery =	70.976%		
6) Phenol-D6 (S)	5.07	99	4384663	162.1427	ppb	0.02
Spiked Amount 250.000			Recovery =	64.857%		
22) Nitrobenzene-D5 (S)	6.10	82	2107619	92.7332	ppb	0.00
Spiked Amount 125.000			Recovery =	74.186%		
46) 2-Fluorobiphenyl (S)	8.13	172	3956116	101.7310	ppb	0.00
Spiked Amount 125.000			Recovery =	81.385%		
64) 2,4,6-Tribromophenol (S)	9.85	330	931078	234.0501	ppb	0.00
Spiked Amount 250.000			Recovery =	93.620%		
82) Terphenyl-D14 (S)	12.51	244	4231923	97.7717	ppb	0.00
Spiked Amount 125.000			Recovery =	78.218%		

Target Compounds Qvalue

Quantitation Report

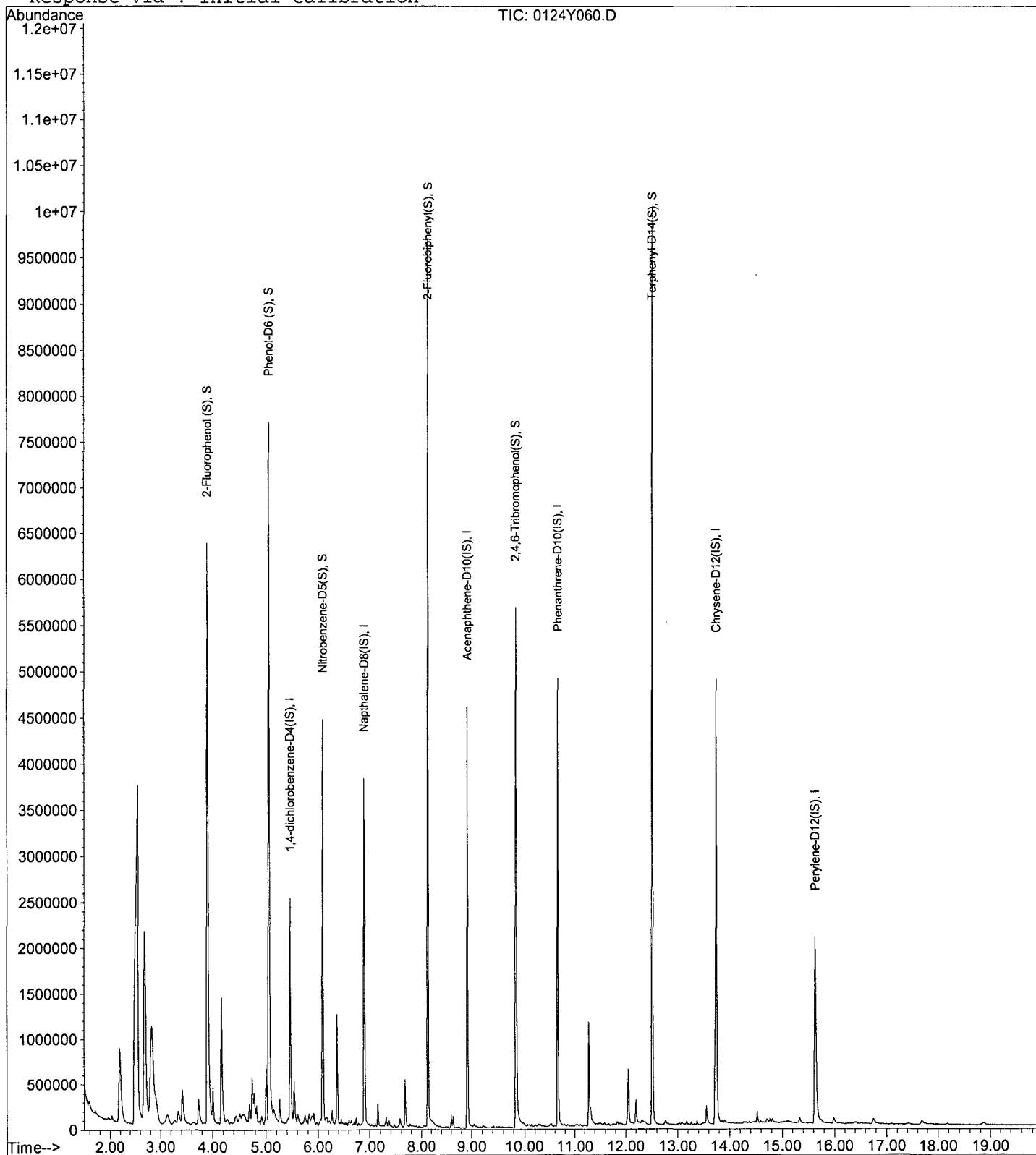
Data File : M:\YODA\DATA\Y190124\0124Y060.D  
Acq On : 30 Jan 19 17:16  
Sample : AZ85523W10 1/800  
Misc :

Vial: 60  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:21 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 30 Jan 19 17:16  
Data File: M:\YODA\DATA\Y190124\0124Y060.D  
Name: AZ85523W10 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.70	83.9	ppb	5890970	ISTD01	5.47	3512000	40.0
2-Pentanone, 4-hydro	3.43	11.7	ppb	819910	ISTD01	5.47	3512000	40.0
Cyclotetrasiloxane,	5.01	12.3	ppb	860708	ISTD01	5.47	3512000	40.0

0124Y060.D Y0125NC.M Mon Feb 11 10:06:03 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y060.D  
 Acq On : 30 Jan 19 17:16  
 Sample : AZ85523W10 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 60  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

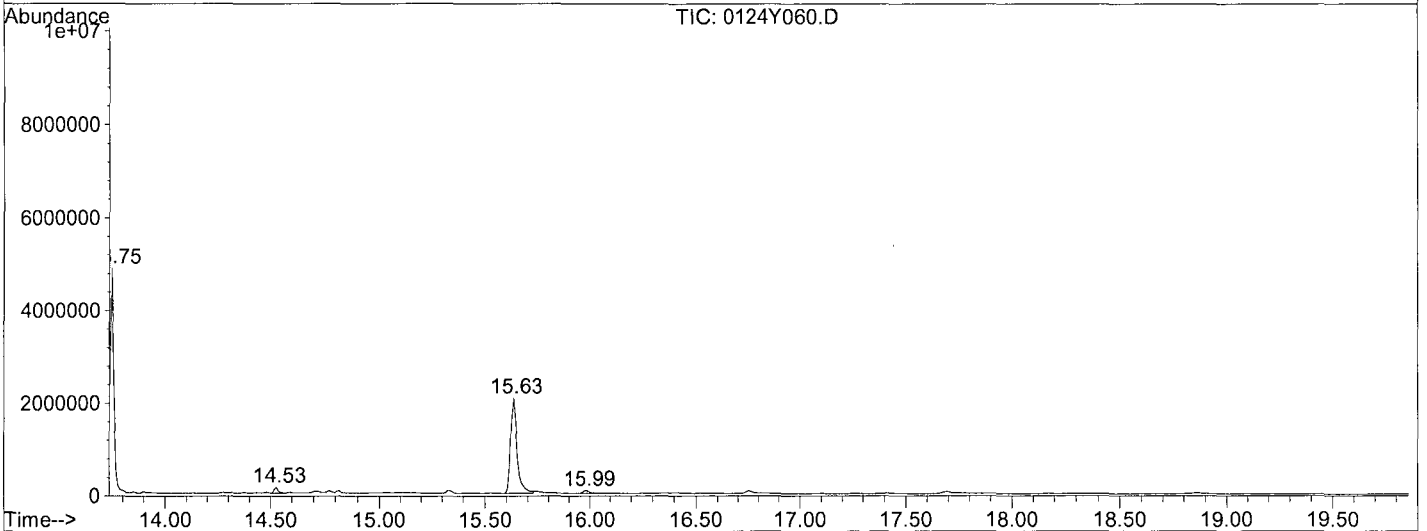
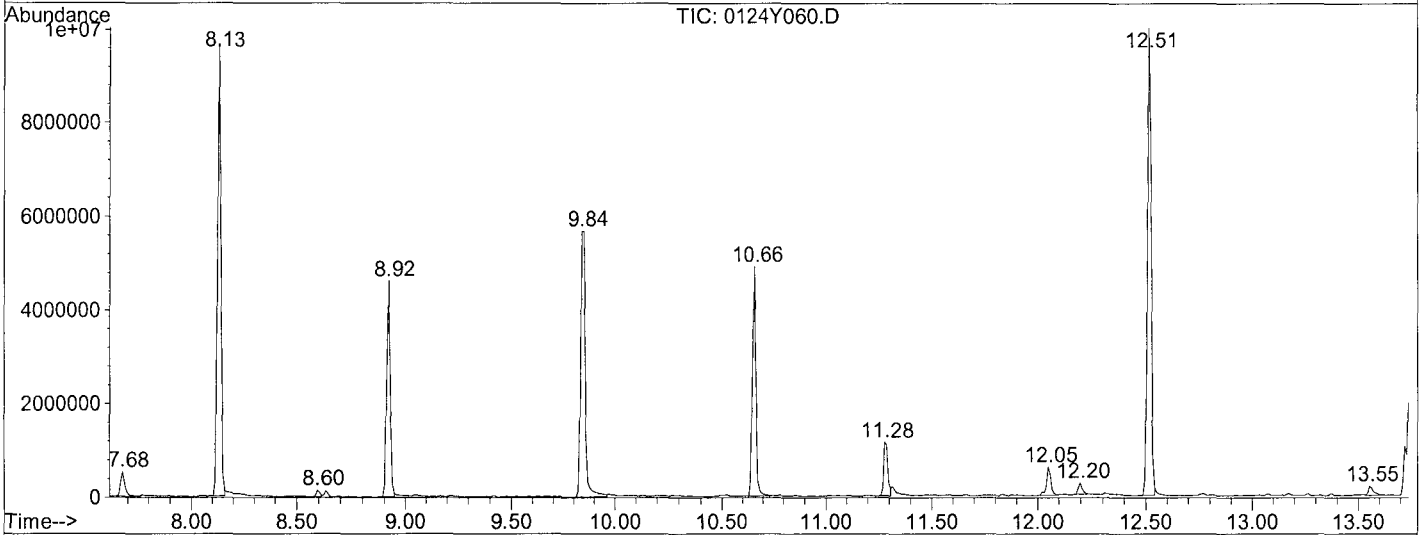
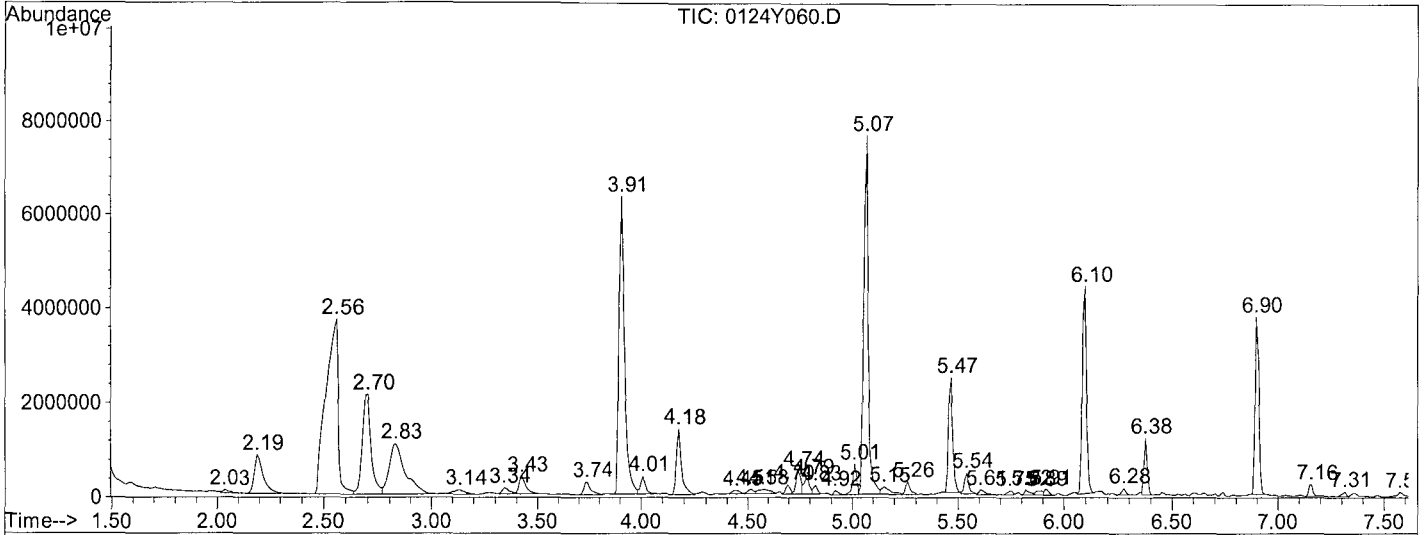
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.033	57	59	71	rVB	68500	3244373	163024	1.13%	0.117%
2	2.190	71	76	91	rVB	825981	6809916	2500908	17.26%	1.799%
3	2.562	105	116	124	rBV	3701184	19054788	14486726	100.00%	10.421%
4	2.701	124	131	138	rVV	2113245	9059806	5890971	40.66%	4.238%
5	2.831	138	145	166	rVB2	1073099	12692391	5579991	38.52%	4.014%
6	3.137	171	178	187	rVB2	99071	3790057	406474	2.81%	0.292%
7	3.342	197	200	206	rVV	133380	2234325	322174	2.22%	0.232%
8	3.425	206	209	218	rVB	371427	3656459	819910	5.66%	0.590%
9	3.741	238	243	251	rBV	271809	3316200	653123	4.51%	0.470%
10	3.908	257	261	269	rBV	6322147	14447804	11745837	81.08%	8.449%
11	4.010	269	272	280	rVB	386411	3197686	627318	4.33%	0.451%
12	4.177	286	290	298	rBV	1387574	4815660	2299054	15.87%	1.654%
13	4.446	314	319	323	rBV4	77280	2107905	219195	1.51%	0.158%
14	4.511	323	326	329	rVV2	102750	1525581	220182	1.52%	0.158%
15	4.576	329	333	340	rVV4	89733	2911329	390405	2.69%	0.281%
16	4.697	343	346	348	rVV	202721	1388964	300970	2.08%	0.217%
17	4.743	348	351	353	rVV	494036	1899475	784131	5.41%	0.564%
18	4.790	353	356	358	rVV3	322975	1965966	619672	4.28%	0.446%
19	4.827	358	360	363	rVB	183317	1497039	244672	1.69%	0.176%
20	4.920	368	370	375	rBV2	92760	1681666	161557	1.12%	0.116%
21	5.013	375	380	382	rBV	650292	2334163	860708	5.94%	0.619%
22	5.068	382	386	393	rVV	7637920	14457470	11687962	80.68%	8.408%
23	5.152	393	395	404	rVV4	154979	3097042	446952	3.09%	0.322%
24	5.263	404	407	412	rVB2	266675	2170696	425954	2.94%	0.306%
25	5.467	425	429	434	rVV	2423566	5530059	3511996	24.24%	2.526%
26	5.542	434	437	442	rVB	453198	2464606	643688	4.44%	0.463%
27	5.607	442	444	452	rVB4	108285	2410756	229040	1.58%	0.165%
28	5.746	455	459	461	rBV2	91310	1403923	160336	1.11%	0.115%
29	5.820	465	467	471	rBV3	114772	1498155	215851	1.49%	0.155%
30	5.894	471	475	476	rVV2	91598	1316485	209720	1.45%	0.151%
31	5.913	476	477	481	rVB2	127660	1361851	178012	1.23%	0.128%
32	6.099	493	497	501	rVB	4388473	7727905	5945352	41.04%	4.277%
33	6.275	513	516	519	rVB	144288	1439247	177704	1.23%	0.128%
34	6.377	525	527	530	rVB	1194987	2934266	1203607	8.31%	0.866%
35	6.897	580	583	587	rBV	3754139	6102334	4580205	31.62%	3.295%
36	7.157	608	611	616	rBV	257330	1979989	361245	2.49%	0.260%
37	7.315	623	628	630	rVB2	101405	1520455	146912	1.01%	0.106%
38	7.575	648	656	661	rBV3	98925	2729365	224786	1.55%	0.162%
39	7.677	664	667	675	rVB2	518833	2992153	730023	5.04%	0.525%
40	8.132	713	716	719	rBV	9652673	12484518	10780143	74.41%	7.755%
41	8.596	762	766	768	rBV	140632	1313012	166086	1.15%	0.119%
42	8.921	798	801	804	rBV	4600863	6843777	5251341	36.25%	3.778%
43	9.840	897	900	913	rBV	5670639	12541566	8861641	61.17%	6.375%
44	10.657	984	988	997	rBV	4895714	8545400	6630824	41.42%	4.317%
45	11.279	1052	1055	1058	rBV	1141917	2807559	1613695	11.14%	1.161%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y060.D  
Operator : MA  
Acquired : 30 Jan 19 17:16 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85523W10 1/800  
Misc Info :  
Vial Number: 60  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y060.D  
 Acq On : 30 Jan 19 17:16  
 Sample : AZ85523W10 1/800  
 Misc :

Vial: 60  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

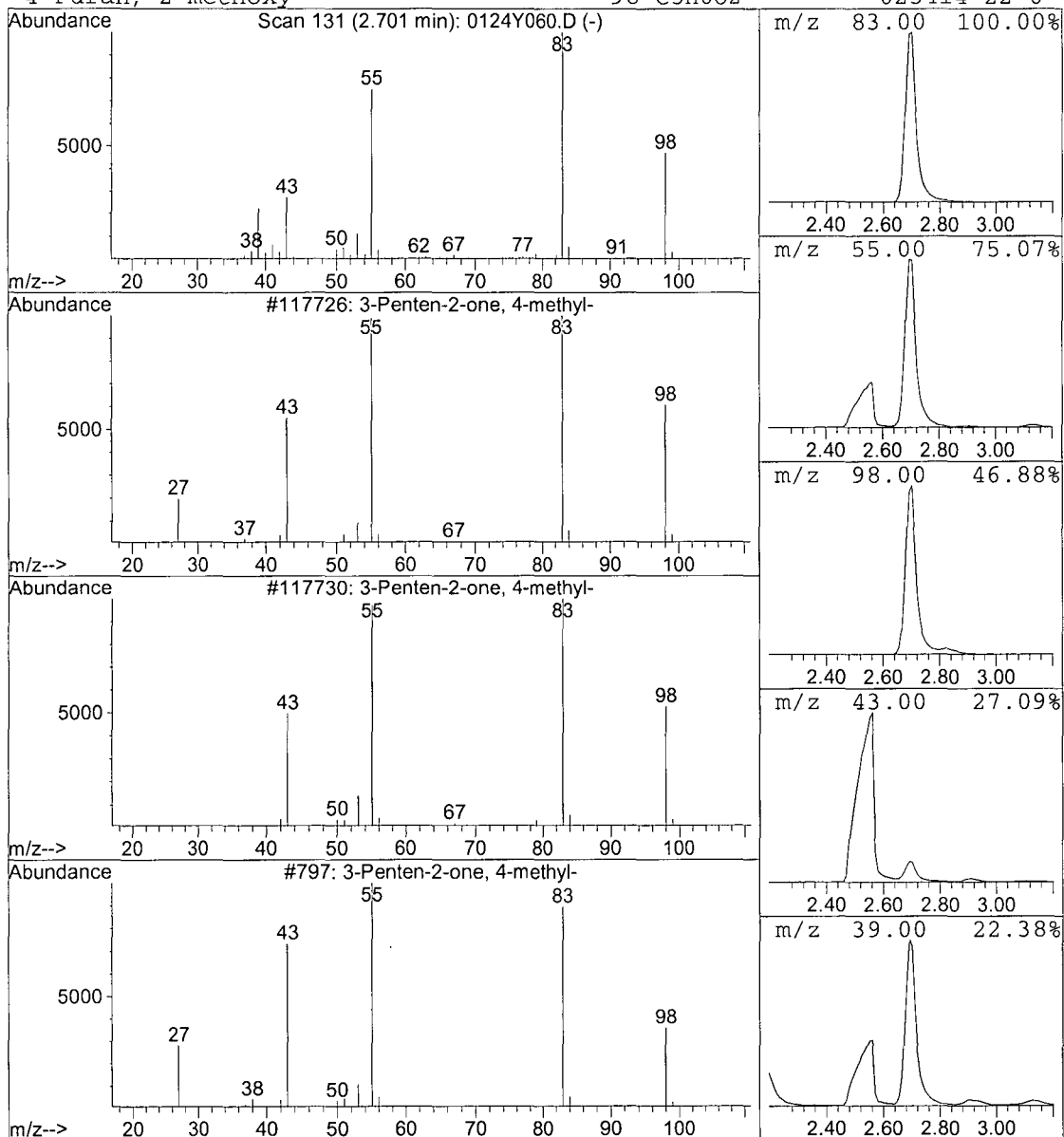
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.70	83.87 ppb	5890970	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	90
3		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	83
4		Furan, 2-methoxy-	98	C5H6O2	025414-22-6	78



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y060.D  
 Acq On : 30 Jan 19 17:16  
 Sample : AZ85523W10 1/800  
 Misc :

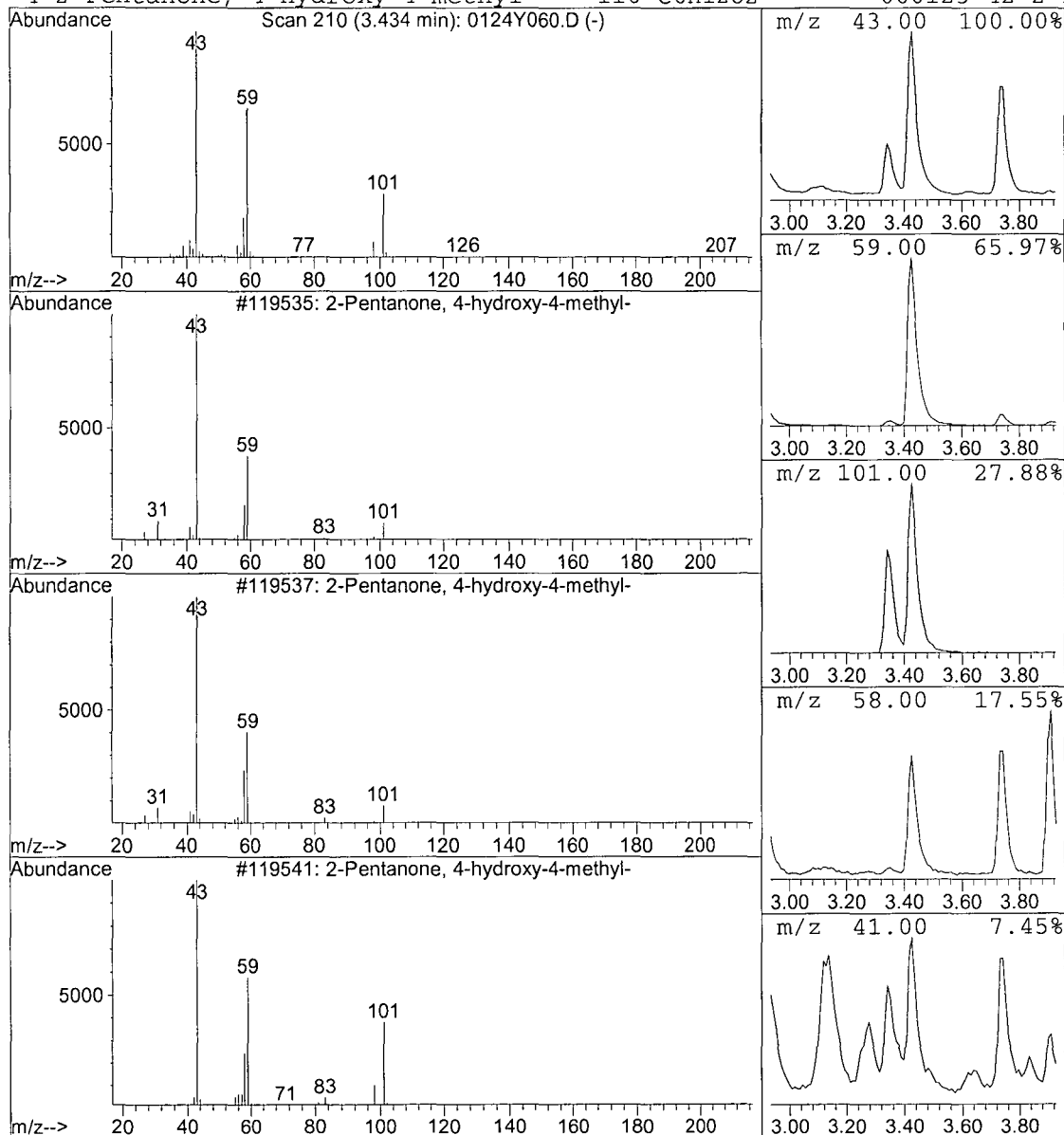
Vial: 60  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 2-Pentanone, 4-hydroxy-4-methyl Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.43	11.67 ppb	819910	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	72		
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	64		
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	53		
4	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38		



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y060.D  
 Acq On : 30 Jan 19 17:16  
 Sample : AZ85523W10 1/800  
 Misc :

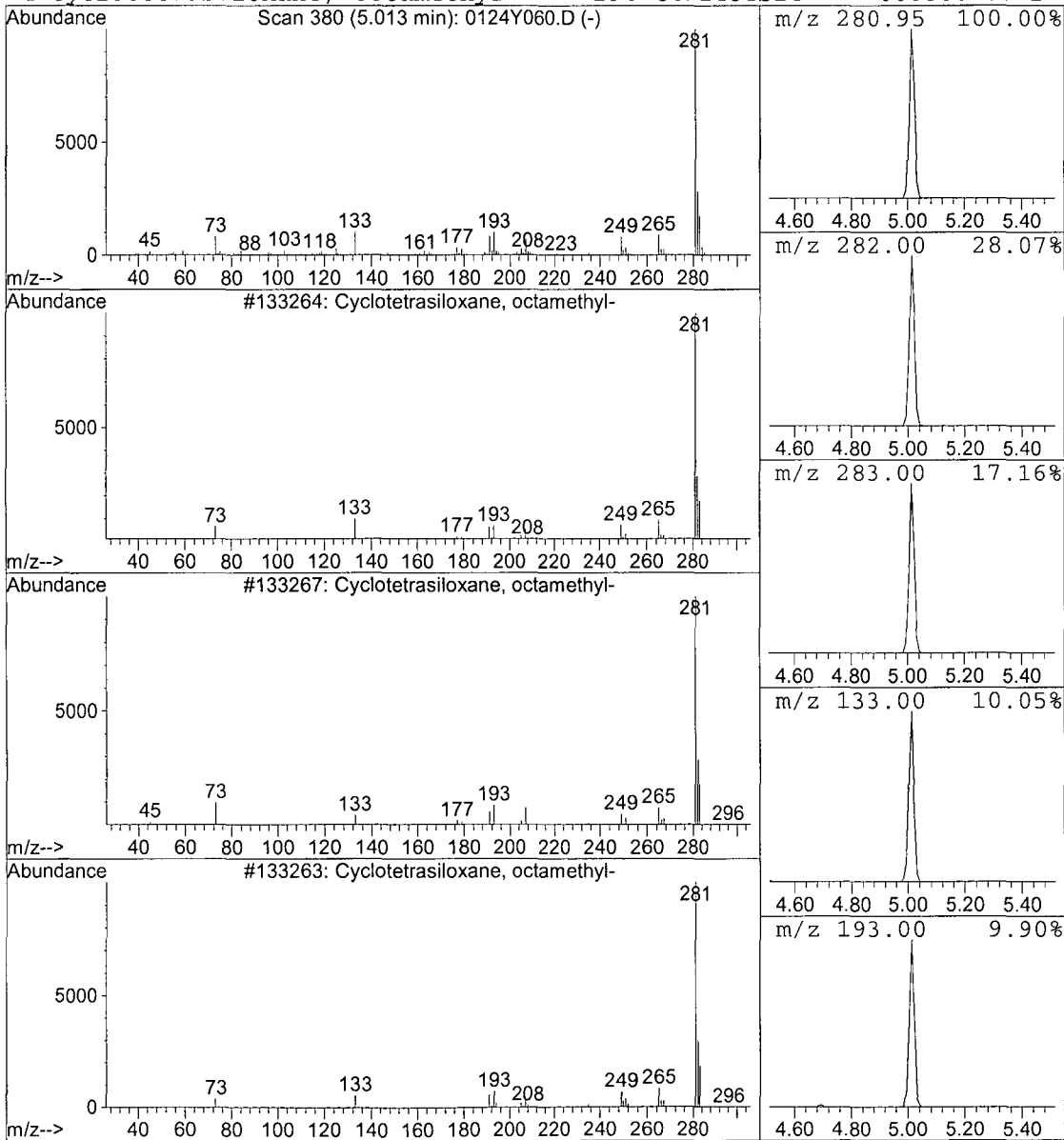
Vial: 60  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Cyclotetrasiloxane, octamethyl Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.01	12.25 ppb	860708	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
3		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
4		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	78





Data File : M:\YODA\DATA\Y190124\0124Y061.D  
 Acq On : 30 Jan 19 17:44  
 Sample : AZ85525W11 1/800  
 Misc :

Vial: 61  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:20 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	547633	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2316422	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1211652	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2337948	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	2083657	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1953504	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.92	112	3707699	189.7441	ppb	0.04
Spiked Amount 250.000			Recovery =	75.898%		
6) Phenol-D6 (S)	5.07	99	4838060	188.0467	ppb	0.02
Spiked Amount 250.000			Recovery =	75.219%		
22) Nitrobenzene-D5 (S)	6.10	82	2144964	97.2021	ppb	0.00
Spiked Amount 125.000			Recovery =	77.762%		
46) 2-Fluorobiphenyl (S)	8.13	172	4035408	102.8092	ppb	0.00
Spiked Amount 125.000			Recovery =	82.247%		
64) 2,4,6-Tribromophenol (S)	9.85	330	946879	235.8184	ppb	0.00
Spiked Amount 250.000			Recovery =	94.327%		
82) Terphenyl-D14 (S)	12.51	244	4363670	102.6157	ppb	0.00
Spiked Amount 125.000			Recovery =	82.093%		

Target Compounds

Qvalue

Quantitation Report

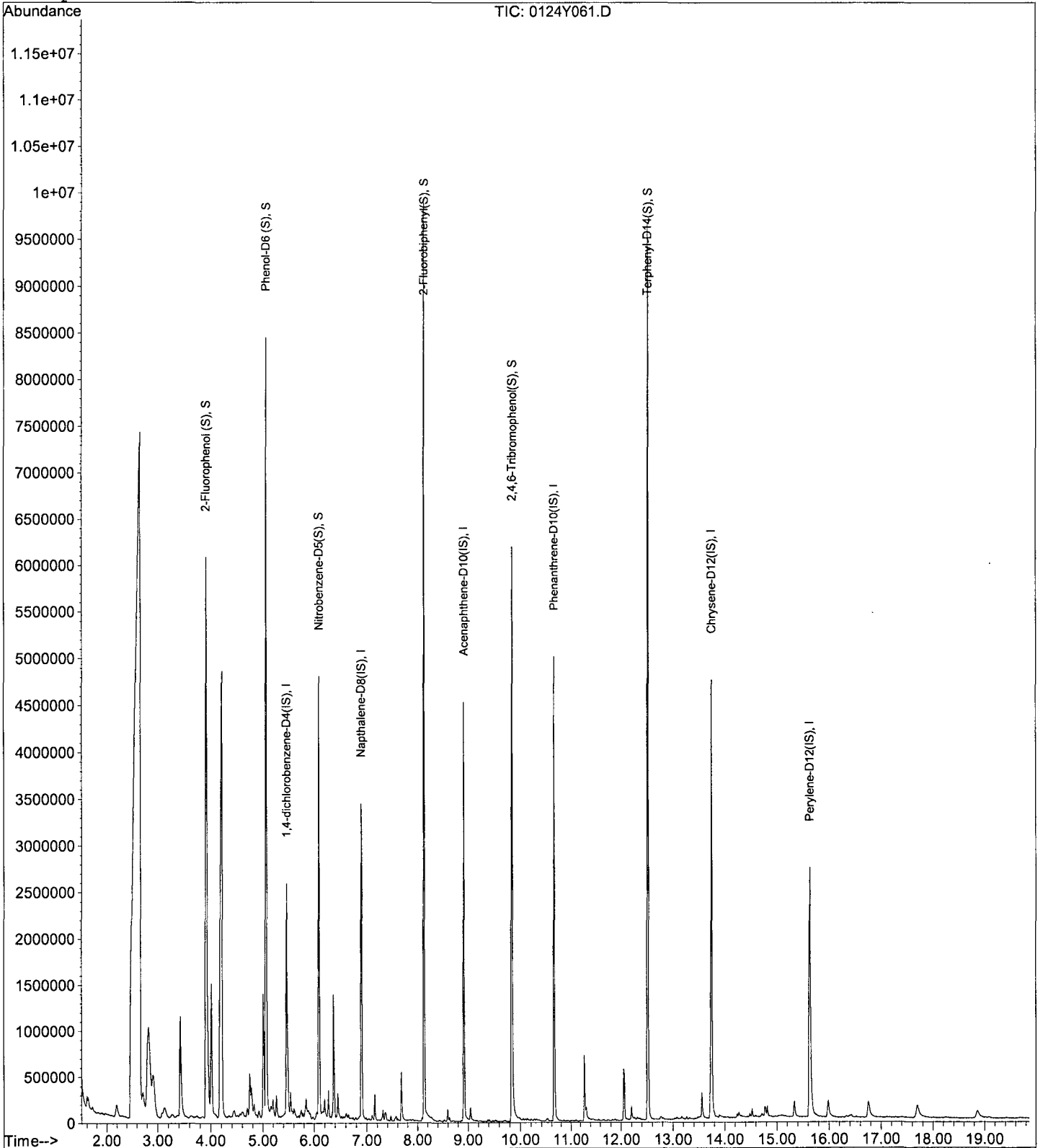
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Acq On : 30 Jan 19 17:44  
Sample : AZ85525W11 1/800  
Misc :

Vial: 61  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:20 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 30 Jan 19 17:44  
Data File: M:\YODA\DATA\Y190124\0124Y061.D  
Name: AZ85525W11 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
4H-Pyran-4-one, tetr	4.02	32.1	ppb	2601000	ISTD01	5.47	4047970	40.0
Cyclotetrasiloxane,	5.01	22.2	ppb	1798490	ISTD01	5.47	4047970	40.0

0124Y061.D Y0125NC.M      Mon Feb 11 10:08:41 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y061.D  
 Acq On : 30 Jan 19 17:44  
 Sample : AZ85525W11 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 61  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.002 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

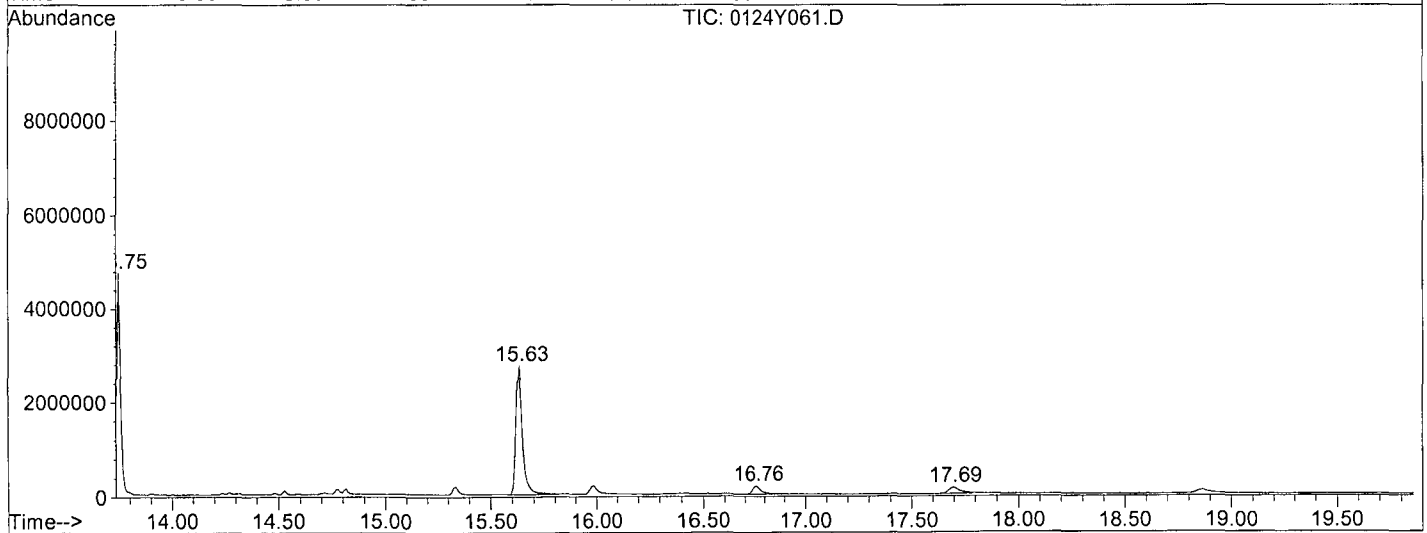
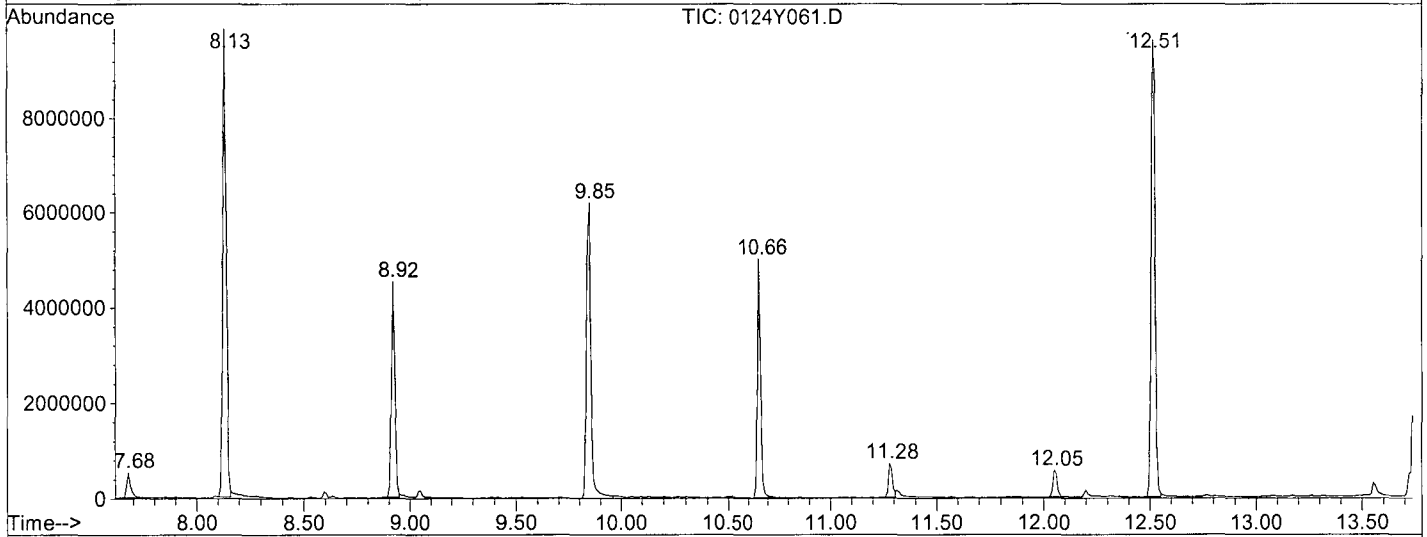
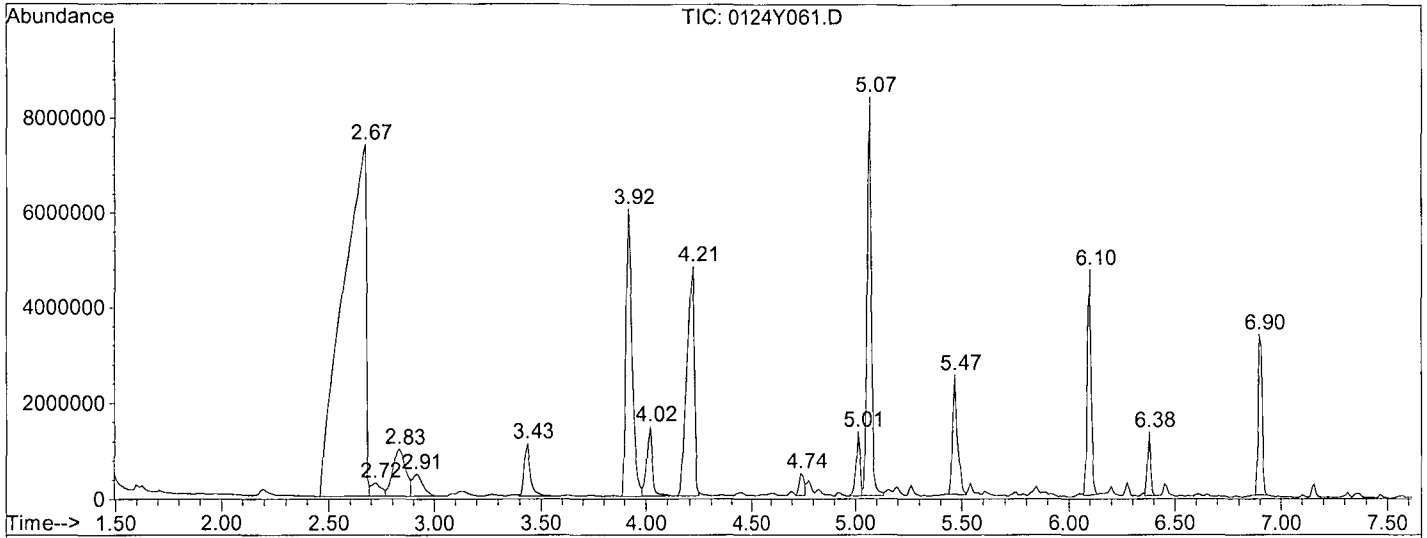
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.672	104	128	130	rBV	7376196	60235167	55753451	100.00%	30.869%
2	2.719	130	133	138	rVV	275880	2771918	899273	1.61%	0.498%
3	2.830	138	145	151	rVV	980196	6978191	4225127	7.58%	2.339%
4	2.914	151	154	168	rVB2	462987	6272583	1628490	2.92%	0.902%
5	3.434	206	210	226	rVB	1098753	5824437	2159193	3.87%	1.195%
6	3.916	258	262	269	rBV	6028381	14167009	12155472	21.80%	6.730%
7	4.019	269	273	285	rVB	1449479	6492010	2601004	4.67%	1.440%
8	4.213	286	294	297	rBV	4803086	13095525	11147102	19.99%	6.172%
9	4.743	348	351	353	rVV	462784	1689419	756232	1.36%	0.419%
10	5.012	375	380	382	rBV	1341869	3044452	1798488	3.23%	0.996%
11	5.068	382	386	393	rVV	8383687	14342962	11895248	21.34%	6.586%
12	5.467	425	429	435	rBV2	2487963	5919836	4047974	7.26%	2.241%
13	6.098	494	497	501	rVV	4714091	8653737	6052702	10.86%	3.351%
14	6.376	525	527	531	rVB	1326442	3195294	1376794	2.47%	0.762%
15	6.896	580	583	587	rBV	3372761	5658640	4415056	7.92%	2.444%
16	7.676	664	667	678	rBV	524966	3074947	741065	1.33%	0.410%
17	8.131	713	716	719	rBV	9851016	12427197	11047802	19.82%	6.117%
18	8.920	798	801	804	rBV	4510365	6519387	5173764	9.28%	2.865%
19	9.849	897	901	913	rBV	6185458	11972337	9003911	16.15%	4.985%
20	10.656	985	988	1000	rBV	5001605	9264452	5869093	10.53%	3.250%
21	11.278	1052	1055	1058	rBV	708651	1927742	962409	1.73%	0.533%
22	12.049	1135	1138	1143	rBV	553987	2078529	773997	1.39%	0.429%
23	12.513	1185	1188	1192	rBV	9630417	14552800	12887633	23.12%	7.135%
24	13.748	1315	1321	1329	rBV	4729242	8815128	6462429	11.59%	3.578%
25	15.632	1519	1524	1544	rBV	2708786	9977486	5651534	10.14%	3.129%
26	16.755	1639	1645	1659	rBV2	172827	3939748	564367	1.01%	0.312%
27	17.693	1738	1746	1756	rBV2	138491	3594776	565480	1.01%	0.313%

Sum of corrected areas: 180615090

0124Y061.D Y0125NC.M Mon Feb 11 10:08:38 2019

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y061.D  
 Operator : MA  
 Acquired : 30 Jan 19 17:44 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ85525W11 1/800  
 Misc Info :  
 Vial Number: 61  
 Quant File : Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y061.D  
 Acq On : 30 Jan 19 17:44  
 Sample : AZ85525W11 1/800  
 Misc :

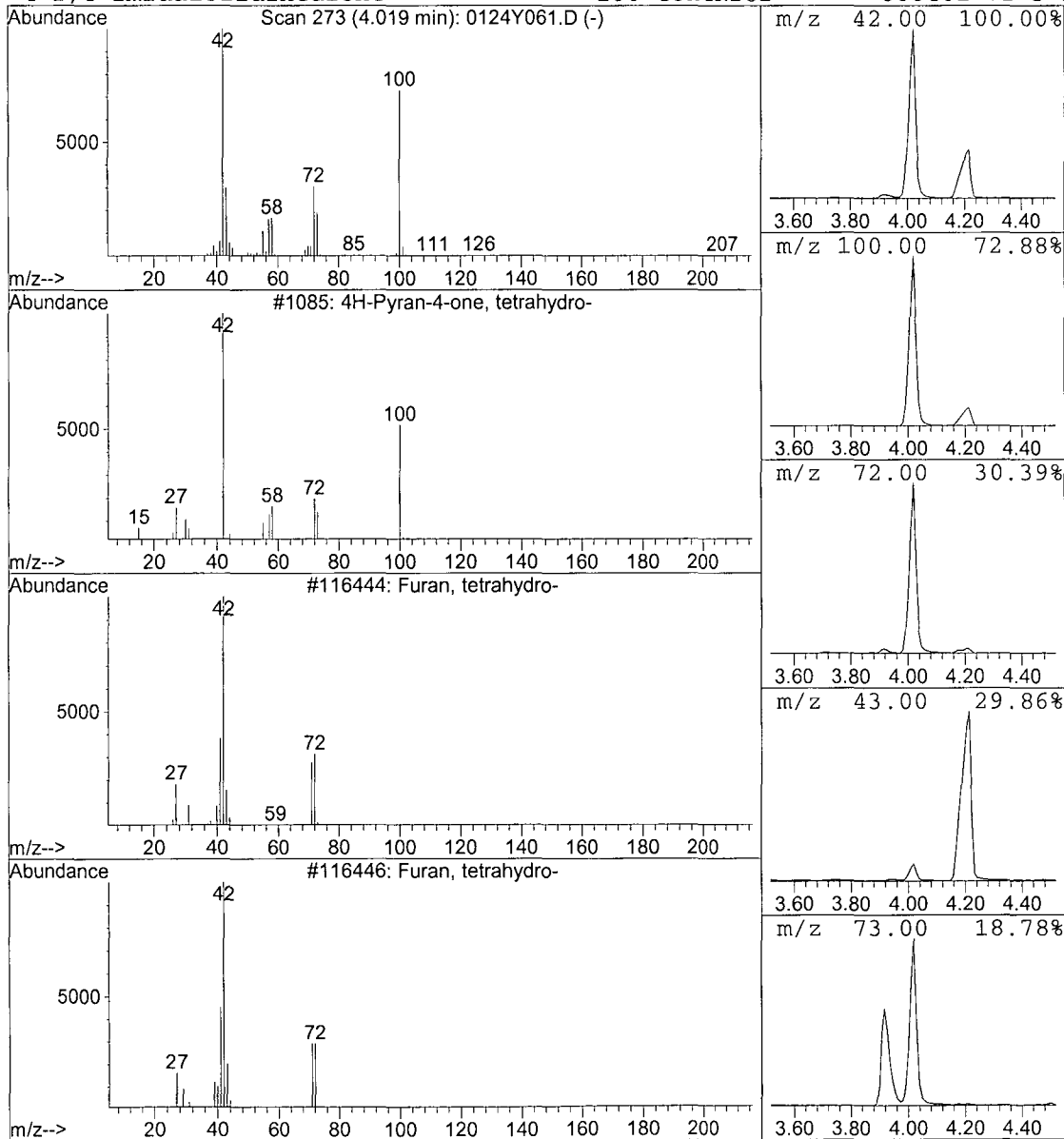
Vial: 61  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 4H-Pyran-4-one, tetrahydro- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.02	32.13 ppb	2601000	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Pyran-4-one, tetrahydro-	100	C5H8O2	029943-42-8	91
2		Furan, tetrahydro-	72	C4H8O	000109-99-9	38
3		Furan, tetrahydro-	72	C4H8O	000109-99-9	37
4		2,4-Imidazolidinedione	100	C3H4N2O2	000461-72-3	27



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y061.D  
 Acq On : 30 Jan 19 17:44  
 Sample : AZ85525W11 1/800  
 Misc :

Vial: 61  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

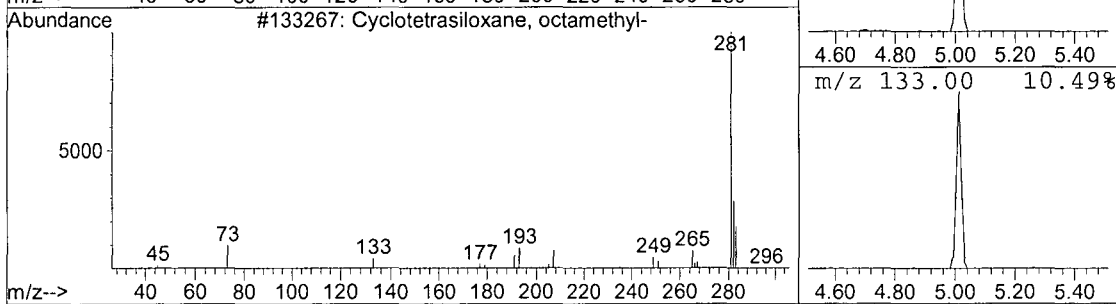
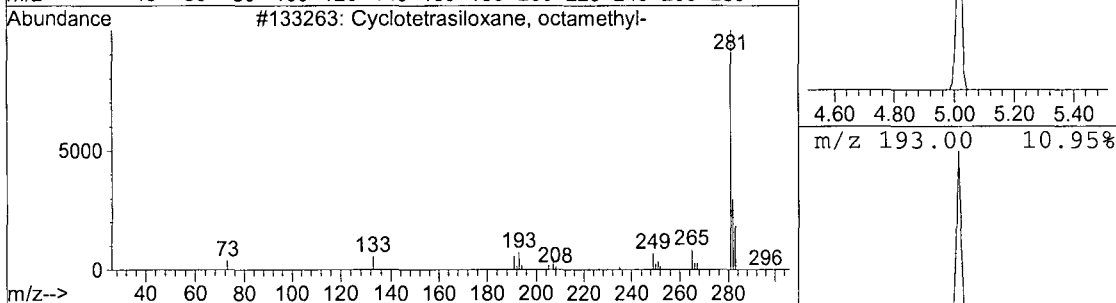
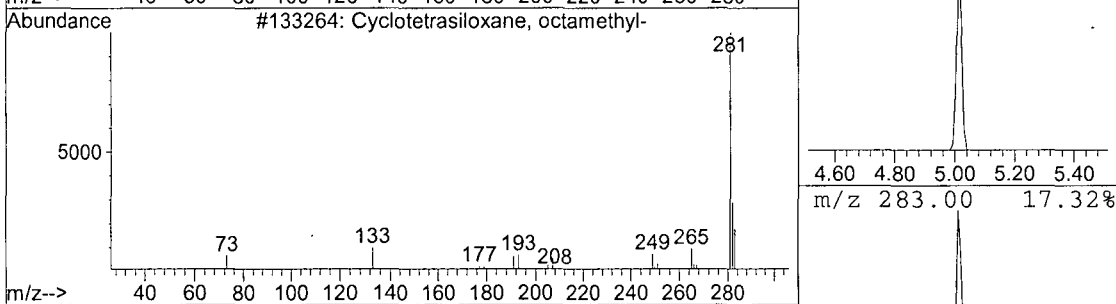
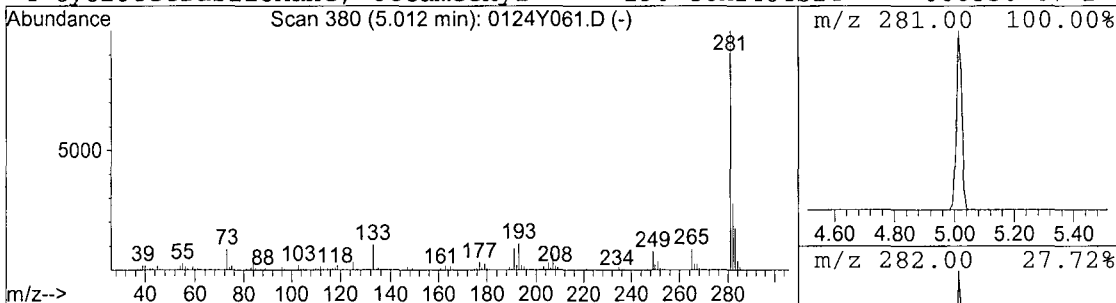
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Cyclotetrasiloxane, octamethyl Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.01	22.21 ppb	1798490	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
3		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
4		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87



Data File : M:\YODA\DATA\Y190124\0124Y062.D  
 Acq On : 30 Jan 19 18:11  
 Sample : AZ85527W10 1/800  
 Misc :

Vial: 62  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:20 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	519645	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2163806	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1038278	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2252894	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1925778	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	419278	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.92	112	3588314	193.5250	ppb	0.04
Spiked Amount 250.000						
						Recovery = 77.410%
6) Phenol-D6 (S)	5.07	99	4194853	171.8281	ppb	0.02
Spiked Amount 250.000						
						Recovery = 68.731%
22) Nitrobenzene-D5 (S)	6.10	82	2072719	100.5531	ppb	0.00
Spiked Amount 125.000						
						Recovery = 80.442%
46) 2-Fluorobiphenyl (S)	8.13	172	3928709	116.8043	ppb	0.00
Spiked Amount 125.000						
						Recovery = 93.443%
64) 2,4,6-Tribromophenol (S)	9.85	330	904781	262.9607	ppb	0.00
Spiked Amount 250.000						
						Recovery = 105.184%
82) Terphenyl-D14 (S)	12.52	244	4226605	107.5409	ppb	0.00
Spiked Amount 125.000						
						Recovery = 86.033%

Target Compounds

Qvalue



Quantitation Report

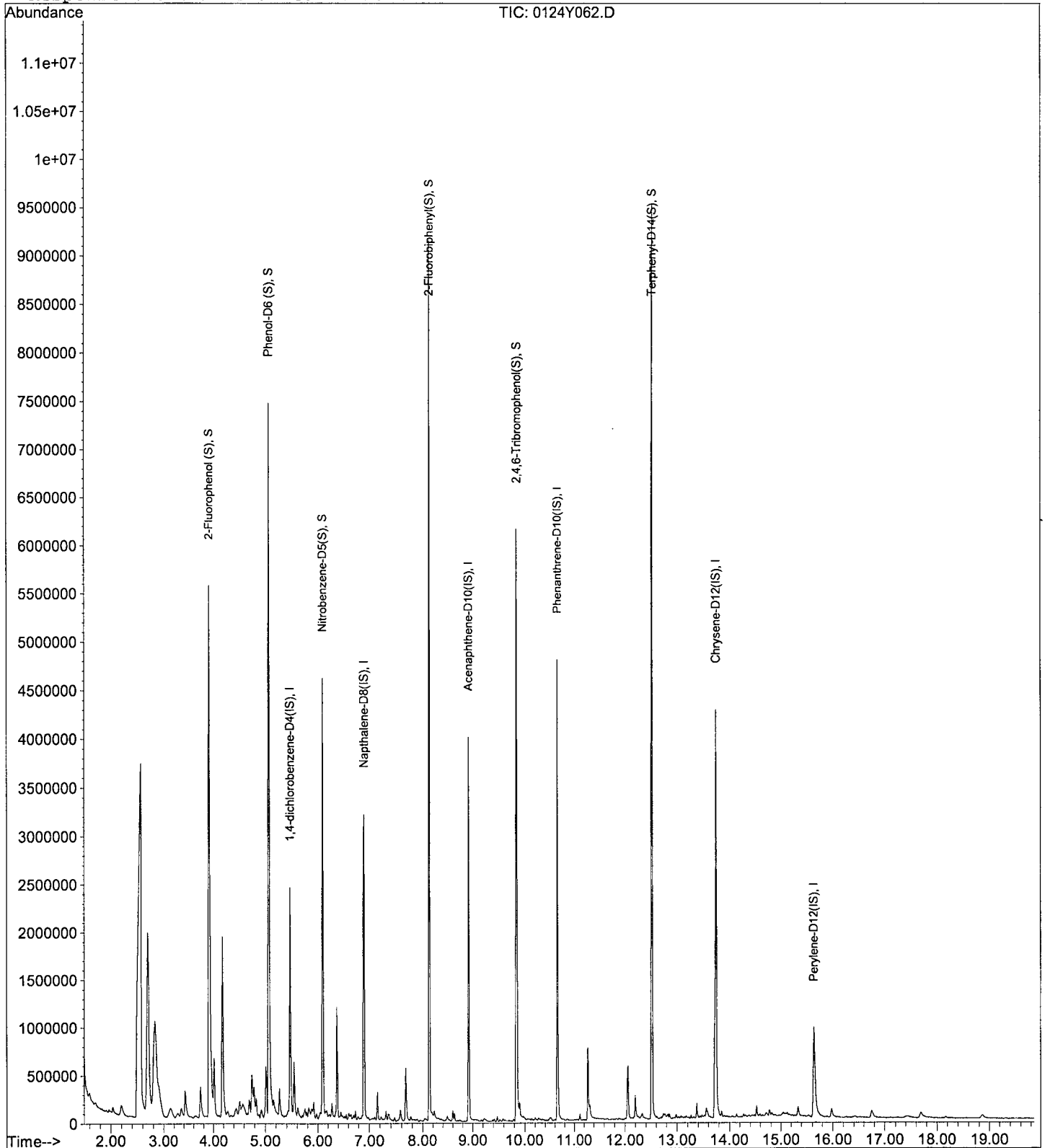
Data File : M:\YODA\DATA\Y190124\0124Y062.D  
Acq On : 30 Jan 19 18:11  
Sample : AZ85527W10 1/800  
Misc :

Vial: 62  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:20 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 30 Jan 19 18:11  
Data File: M:\YODA\DATA\Y190124\0124Y062.D  
Name: AZ85527W10 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.70	67.5	ppb	4571890	ISTD01	5.47	3385100	40.0
Cyclotetrasiloxane,	5.01	12.0	ppb	813564	ISTD01	5.47	3385100	40.0

0124Y062.D Y0125NC.M      Mon Feb 11 10:11:06 2019

## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y062.D  
 Acq On : 30 Jan 19 18:11  
 Sample : AZ85527W10 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 62  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

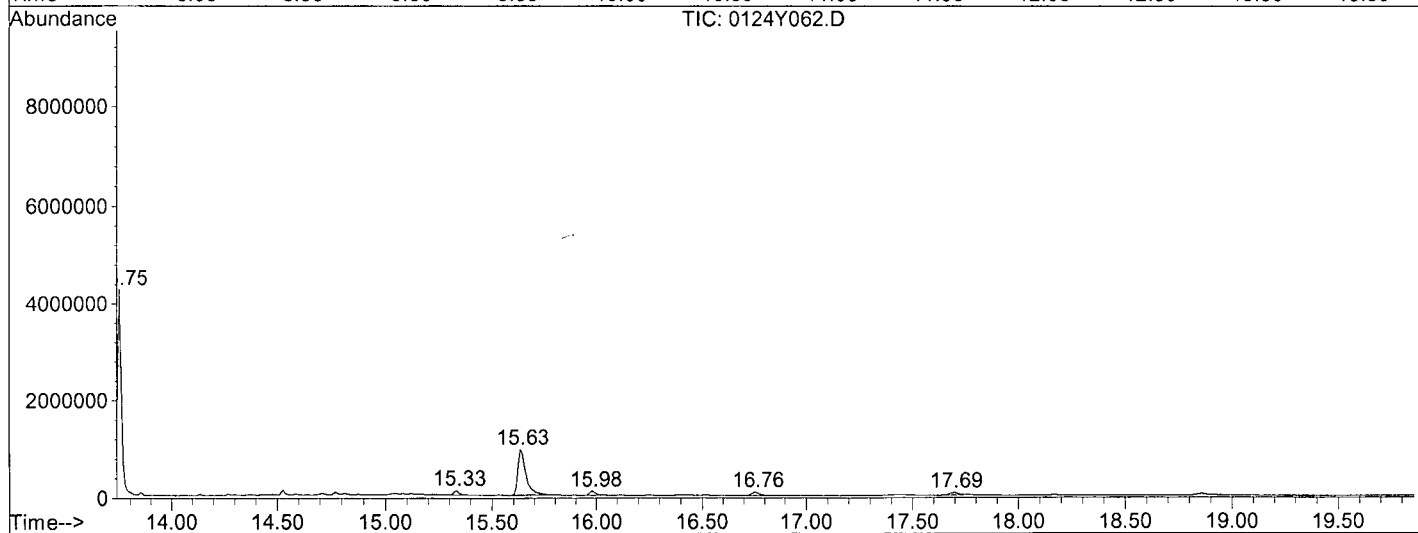
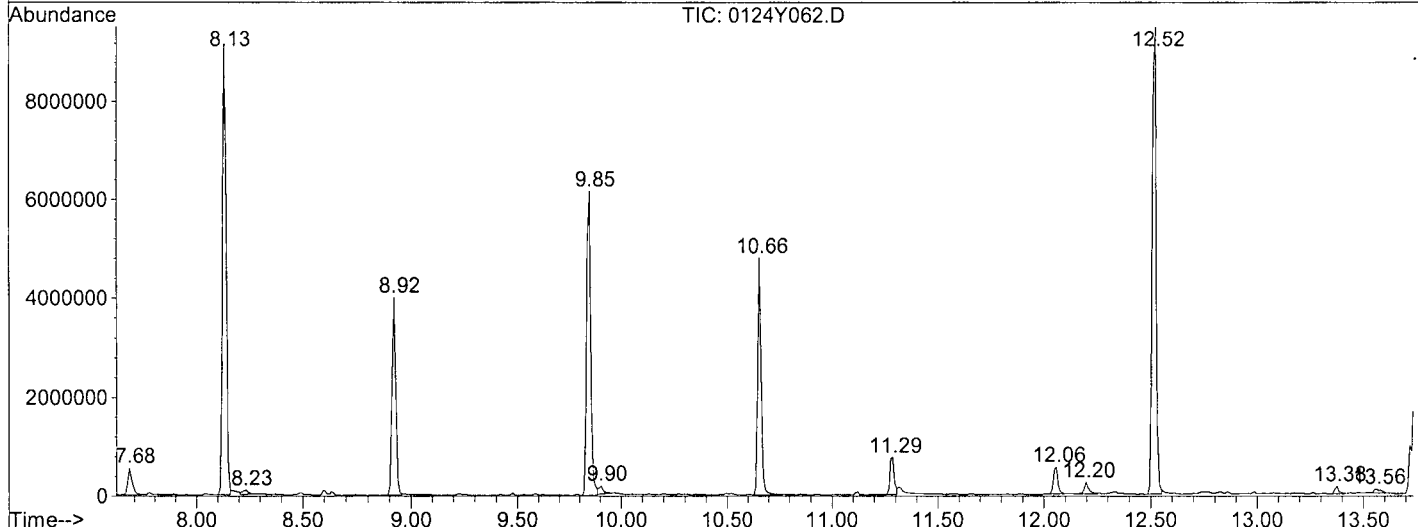
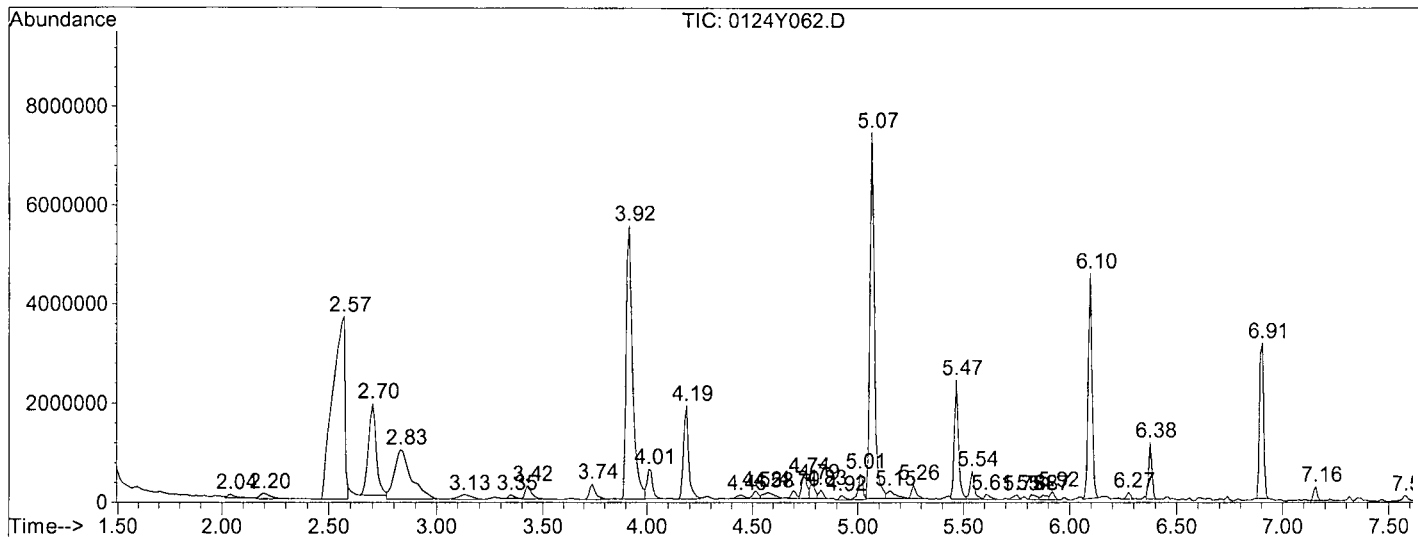
Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.041	57	60	71	rVB	79725	3513271	201094	1.39%	0.152%
2	2.199	73	77	90	rVB	116021	4385717	410219	2.83%	0.311%
3	2.570	105	117	119	rBV	3675644	17608406	14492255	100.00%	10.987%
4	2.700	125	131	138	rBV	1841277	7923381	4571892	31.55%	3.466%
5	2.830	138	145	168	rVB2	1001958	13555990	5502271	37.97%	4.171%
6	3.127	171	177	187	rVB2	91585	4023751	406736	2.81%	0.308%
7	3.350	197	201	206	rBV	77379	2205382	177127	1.22%	0.134%
8	3.424	206	209	221	rVB	269431	4055294	589510	4.07%	0.447%
9	3.740	239	243	252	rBV	321161	3619390	707114	4.88%	0.536%
10	3.916	258	262	270	rBV	5511351	14471747	11602279	80.06%	8.796%
11	4.009	270	272	280	rVB	601783	4176145	1069182	7.38%	0.811%
12	4.185	287	291	298	rBV	1876251	5829175	3181018	21.95%	2.412%
13	4.445	314	319	323	rBV3	78889	2268495	225427	1.56%	0.171%
14	4.520	323	327	329	rVV2	150950	1715168	312549	2.16%	0.237%
15	4.575	329	333	340	rVV4	125041	3210010	482423	3.33%	0.366%
16	4.696	343	346	349	rVV	161065	1642186	270352	1.87%	0.205%
17	4.742	349	351	354	rVV	422629	2204125	820291	5.66%	0.622%
18	4.789	354	356	358	rVV2	296910	1682056	472836	3.26%	0.358%
19	4.826	358	360	363	rVB	176277	1543826	253383	1.75%	0.192%
20	4.919	368	370	375	rBV2	83988	1760822	165078	1.14%	0.125%
21	5.012	375	380	383	rBV	528824	2614355	813564	5.61%	0.617%
22	5.067	383	386	393	rVV	7396639	16072507	11282402	77.85%	8.554%
23	5.151	393	395	404	rVV3	162676	3305317	451768	3.12%	0.343%
24	5.262	404	407	413	rVB2	279093	2525958	444505	3.07%	0.337%
25	5.466	426	429	434	rVV	2396393	5793183	3385098	23.36%	2.566%
26	5.541	434	437	442	rVV	566874	2698790	780342	5.38%	0.592%
27	5.606	442	444	452	rVB2	103634	2514815	219596	1.52%	0.166%
28	5.754	456	460	462	rVV2	88830	1558426	173224	1.20%	0.131%
29	5.819	465	467	471	rVV2	103226	1578040	220037	1.52%	0.167%
30	5.875	471	473	476	rVV2	93522	1382646	209445	1.45%	0.159%
31	5.921	476	478	481	rVB2	164273	1484548	209585	1.45%	0.159%
32	6.098	493	497	501	rVV	4529244	7681383	5824505	40.19%	4.416%
33	6.274	513	516	519	rBV2	140248	1532589	181373	1.25%	0.138%
34	6.376	525	527	531	rVB	1147037	3061382	1193385	8.23%	0.905%
35	6.905	581	584	587	rBV	3140579	6481481	4151034	28.64%	3.147%
36	7.156	608	611	614	rBV	287526	1662007	356928	2.46%	0.271%
37	7.583	648	657	662	rBV3	111224	3172996	243607	1.68%	0.185%
38	7.676	664	667	675	rVB2	542580	3183587	791153	5.46%	0.600%
39	8.131	713	716	719	rBV	9130817	12327687	10792813	74.47%	8.182%
40	8.233	724	727	733	rVB	82580	2199216	167996	1.16%	0.127%
41	8.920	798	801	805	rBV	3989868	6554757	4730208	32.64%	3.586%
42	9.848	897	901	905	rBV	6148887	10257295	8430003	58.17%	6.391%
43	9.904	905	907	913	rVB	159039	2233990	251382	1.73%	0.191%
44	10.656	985	988	1000	rBV	4784654	11431948	391948	39.14%	4.300%
45	11.287	1052	1056	1058	rBV	752068	2379813	1106610	7.64%	0.839%

File : M:\YODA\DATA\Y190124\0124Y062.D  
 Operator : MA  
 Acquired : 30 Jan 19 18:11 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ85527W10 1/800  
 Misc Info :  
 Vial Number: 62  
 Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y062.D  
 Acq On : 30 Jan 19 18:11  
 Sample : AZ85527W10 1/800  
 Misc :

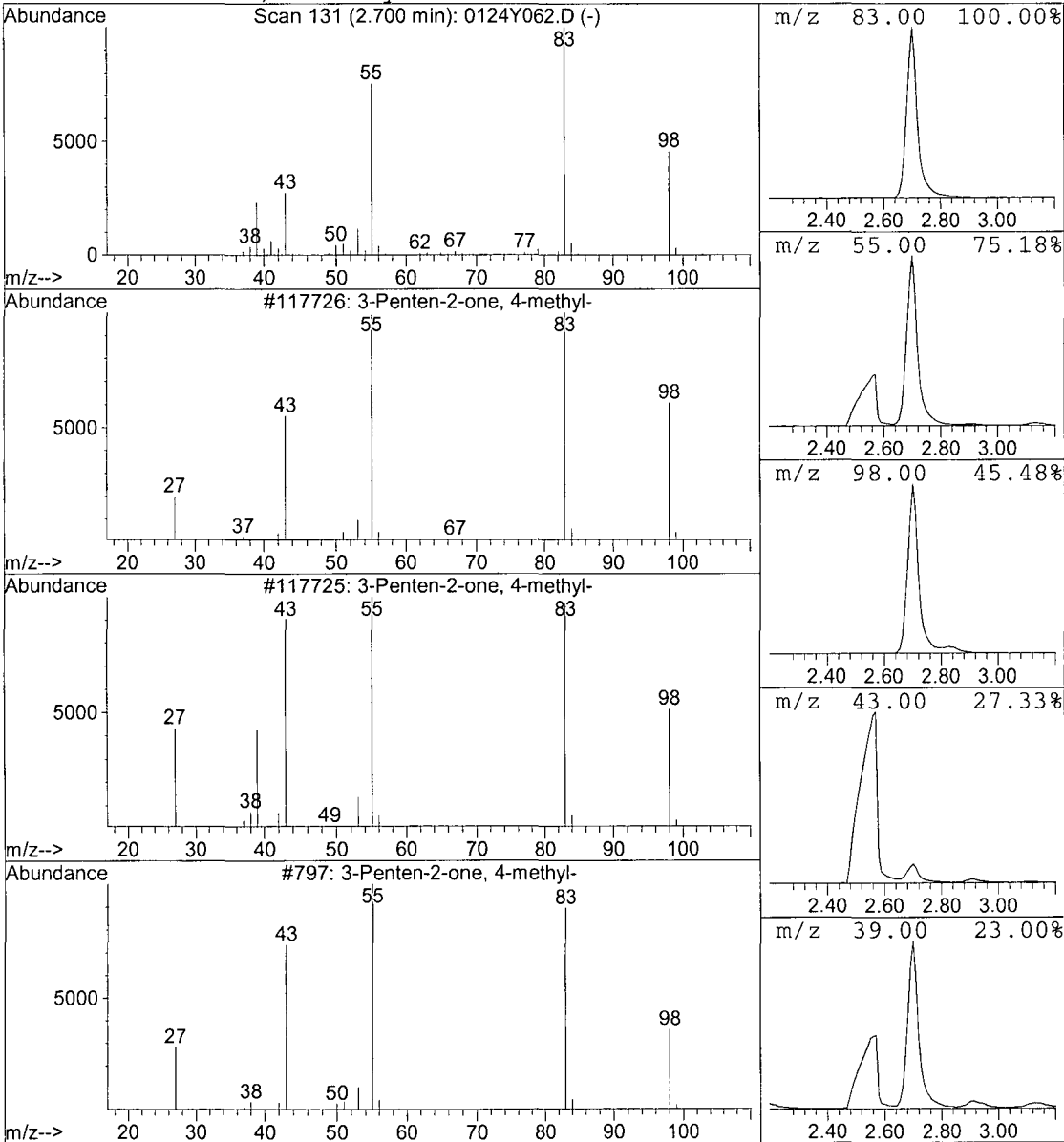
Vial: 62  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.70	67.53 ppb	4571890	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	90
3		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	83
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	80



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y062.D  
 Acq On : 30 Jan 19 18:11  
 Sample : AZ85527W10 1/800  
 Misc :

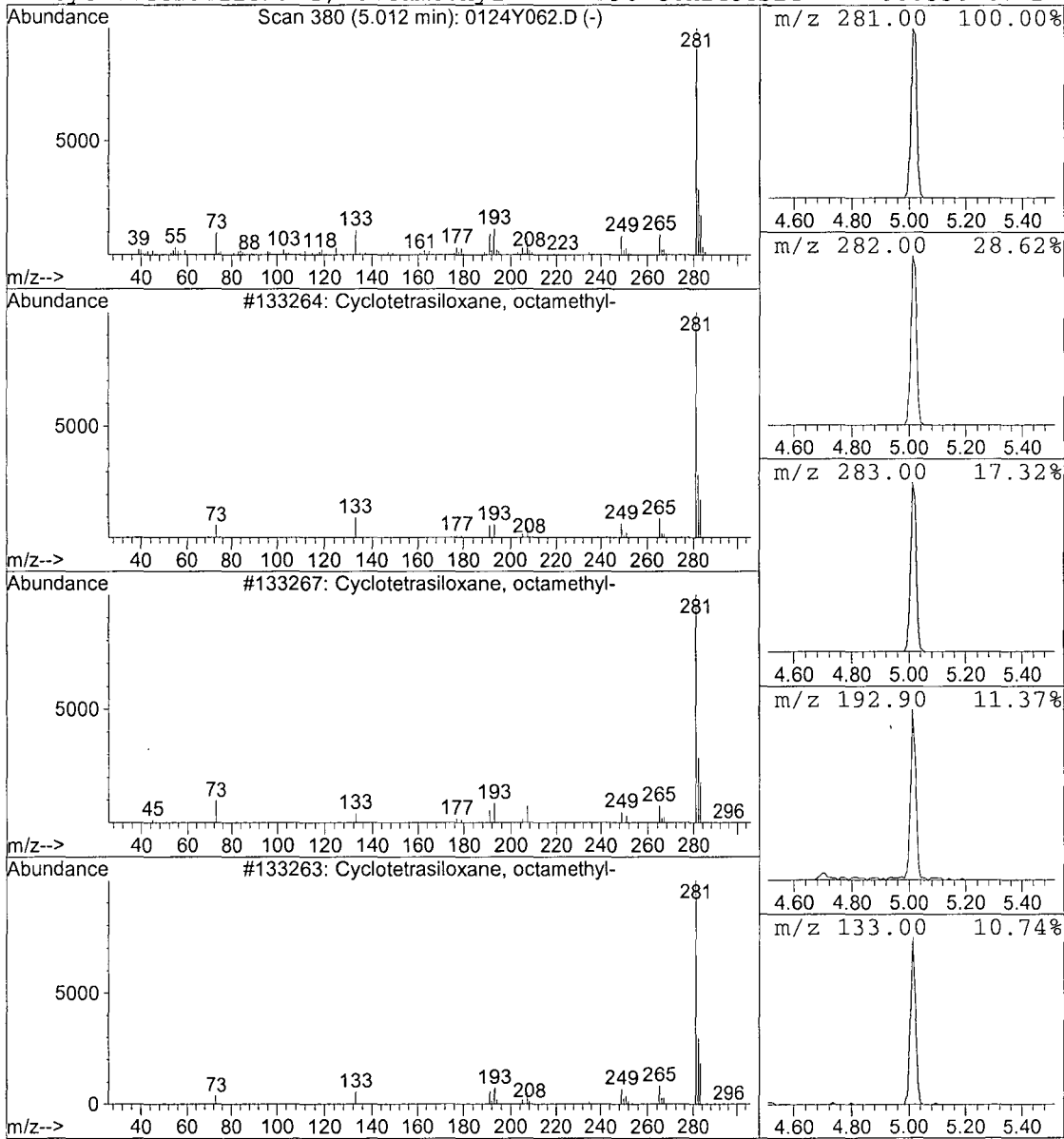
Vial: 62  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Cyclotetrasiloxane, octamethyl Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.01	12.02 ppb	813564	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
3		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
4		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	80



Data File : M:\YODA\DATA\Y190124\0124Y055.D Vial: 55  
 Acq On : 30 Jan 19 14:56 Operator: MA  
 Sample : 190128A BLK 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Feb 7 13:47 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	397504	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1702989	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1043237	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2087360	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1877559	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1713751	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.90	112	3634101	256.21757	ppb	0.03
Spiked Amount	250.000					
					Recovery =	102.487%
6) Phenol-D6 (S)	5.06	99	4629772	247.91469	ppb	0.00
Spiked Amount	250.000					
					Recovery =	99.166%
22) Nitrobenzene-D5 (S)	6.10	82	2150874	132.57949	ppb	0.00
Spiked Amount	125.000					
					Recovery =	106.063%
46) 2-Fluorobiphenyl (S)	8.13	172	4091841	121.07608	ppb	0.00
Spiked Amount	125.000					
					Recovery =	96.861%
64) 2,4,6-Tribromophenol (S)	9.85	330	952080	275.39216	ppb	0.00
Spiked Amount	250.000					
					Recovery =	110.157%
82) Terphenyl-D14 (S)	12.52	244	4503683	117.53373	ppb	0.00
Spiked Amount	125.000					
					Recovery =	94.027%

Target Compounds Qvalue

Quantitation Report

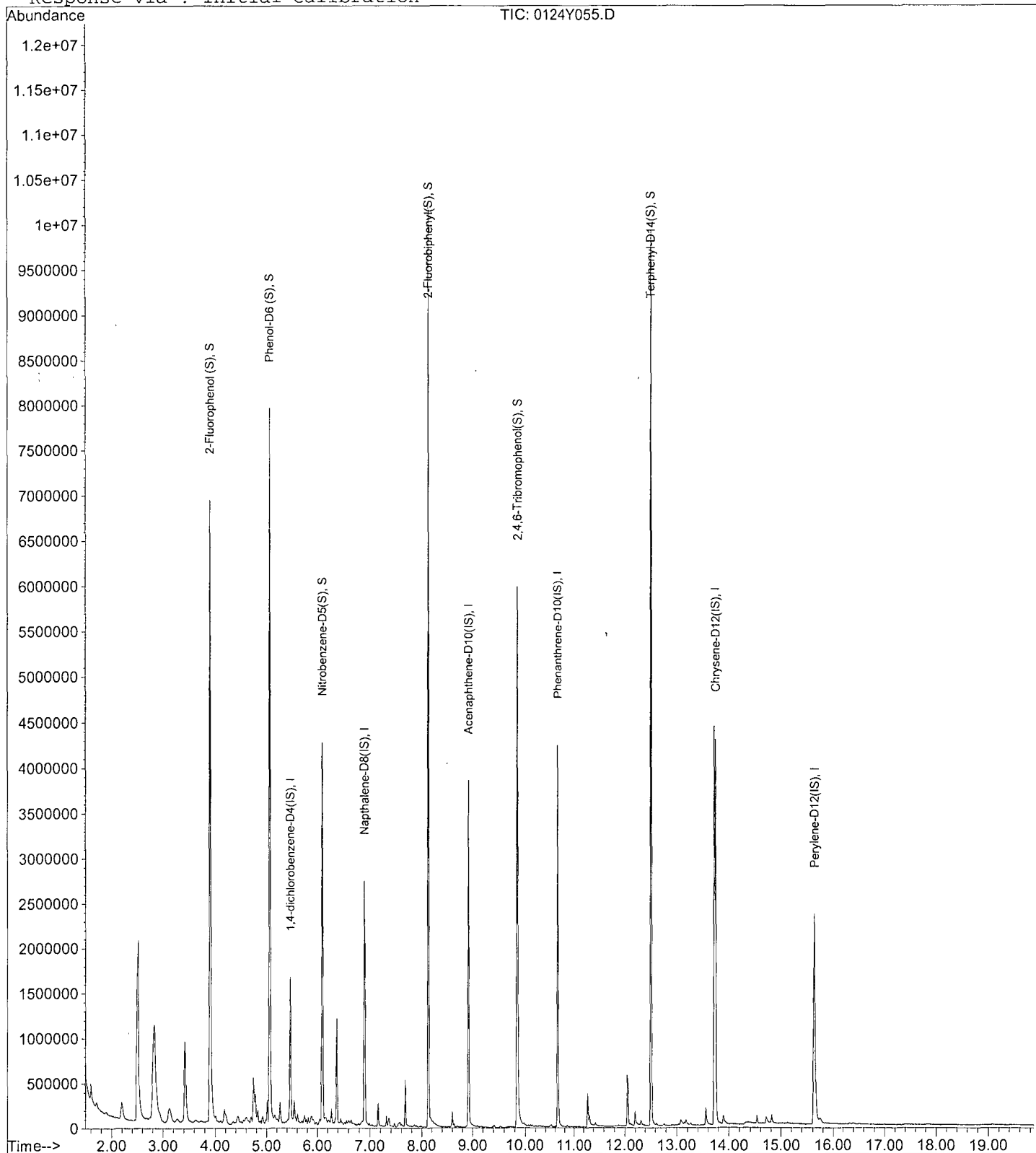
Data File : M:\YODA\DATA\Y190124\0124Y055.D  
Acq On : 30 Jan 19 14:56  
Sample : 190128A BLK 1/800  
Misc :

Vial: 55  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 7 13:47 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration





Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 30 Jan 19 14:56  
 Data File: M:\YODA\DATA\Y190124\0124Y055.D  
 Name: 190128A BLK 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.19	12.6	ppb	589519	ISTD01	5.47	2340150	40.0
Ethene, tetrachloro-	2.82	105.1	ppb	4921080	ISTD01	5.47	2340150	40.0
Butanedioic acid, di	5.54	7.2	ppb	334891	ISTD01	5.47	2340150	40.0
Pentanedioic acid, d	6.38	17.4	ppb	1179470	ISTD02	6.90	3385010	40.0
Hexanedioic acid, di	7.16	5.2	ppb	355228	ISTD02	6.90	3385010	40.0

0124Y055.D Y0125NC.M Mon Feb 11 09:51:17 2019

## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

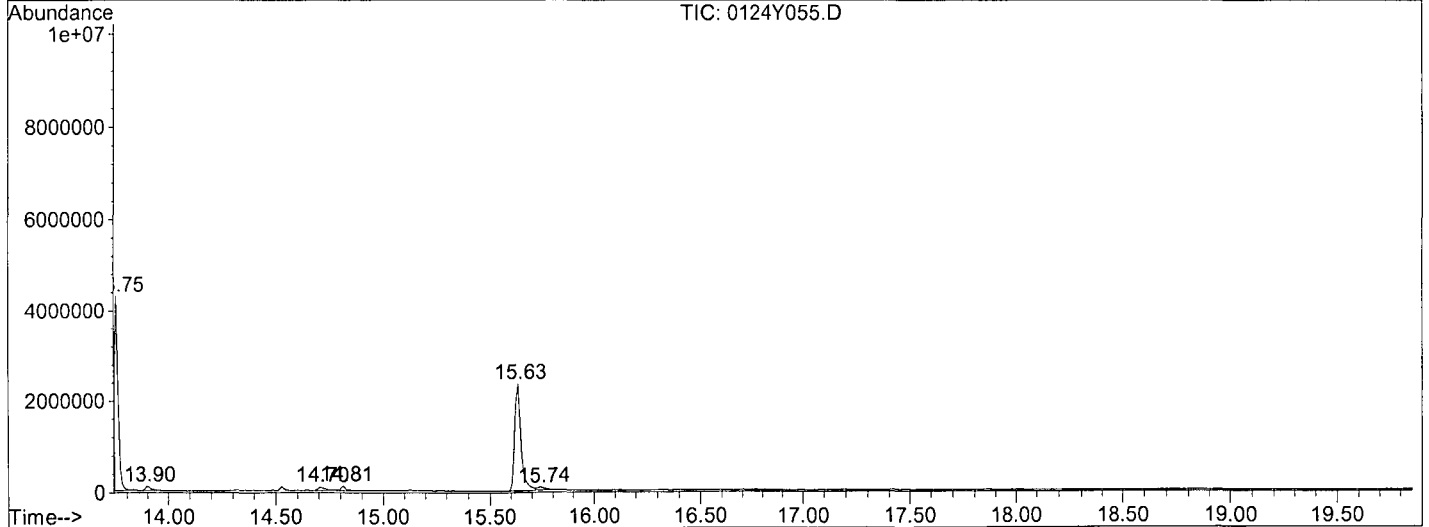
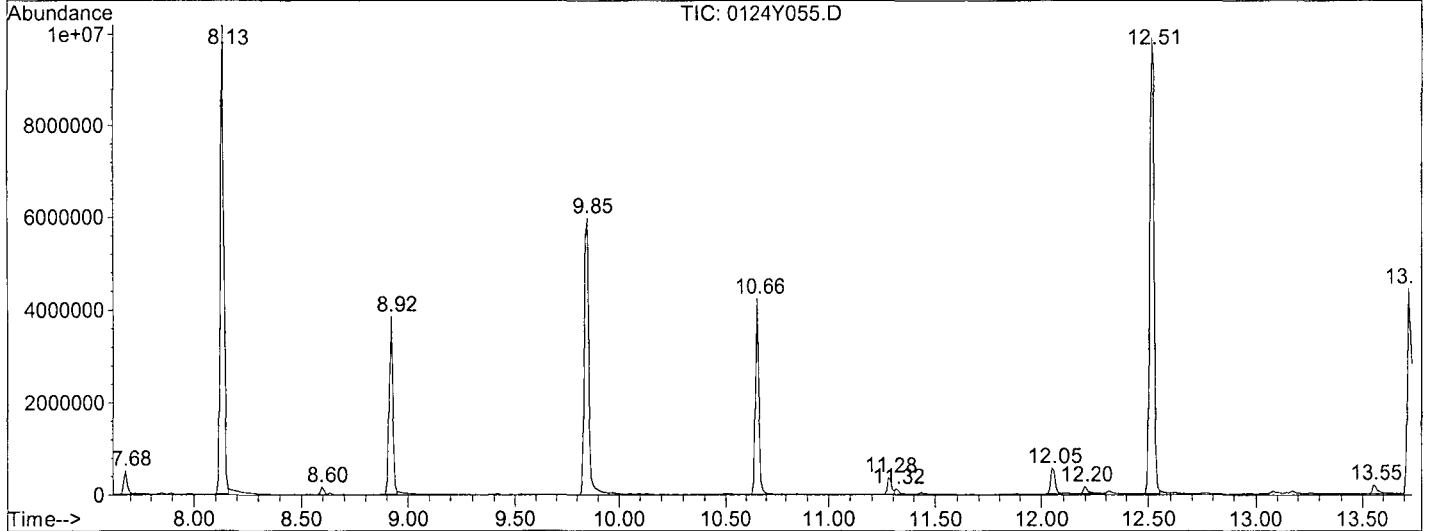
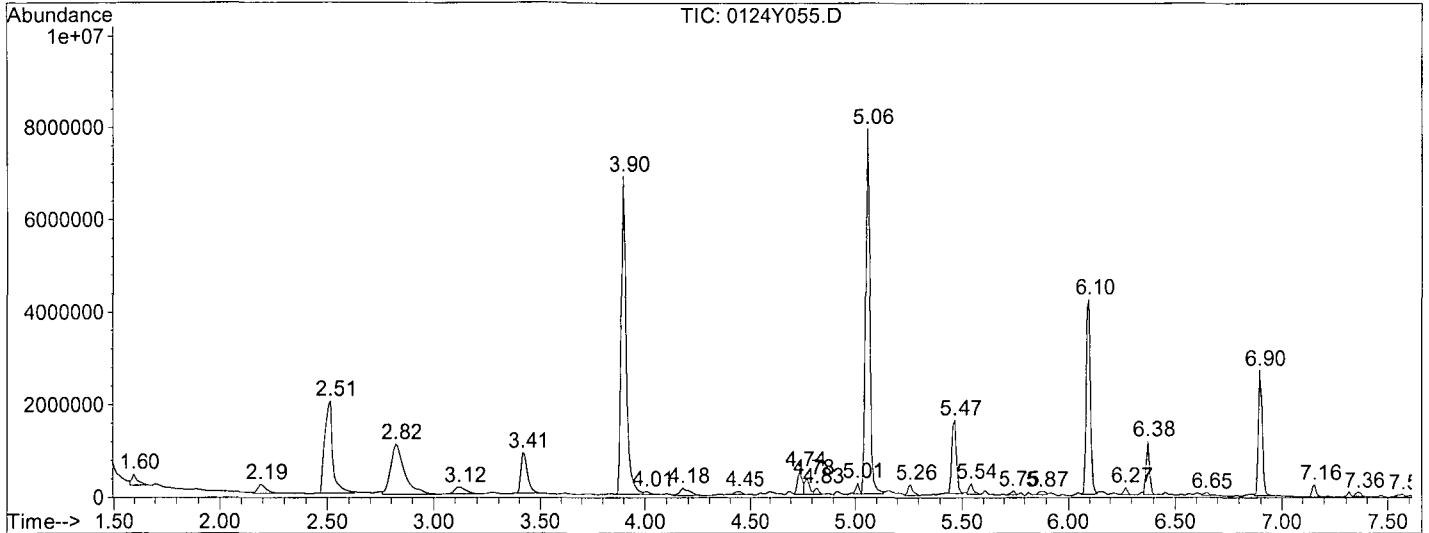
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.595	10	12	21	rVB	244742	4005139	477234	3.60%	0.413%
2	2.189	72	76	91	rVB	198231	5350218	589519	4.45%	0.510%
3	2.514	105	111	123	rBV	1993347	9653895	5270167	39.80%	4.556%
4	2.821	137	144	166	rVB2	1079332	12284789	4921081	37.17%	4.254%
5	3.118	169	176	187	rVV2	153873	4894034	609754	4.61%	0.527%
6	3.415	205	208	219	rVB	879434	5568712	1915746	14.47%	1.656%
7	3.898	256	260	270	rBV	6868153	15021221	11636016	87.88%	10.059%
8	4.009	270	272	279	rVB2	68715	2399535	134649	1.02%	0.116%
9	4.176	285	290	303	rVB2	169468	4753137	547019	4.13%	0.473%
10	4.445	314	319	323	rBV3	73527	2326181	192002	1.45%	0.166%
11	4.742	348	351	353	rVV	496091	2084021	816183	6.16%	0.706%
12	4.780	353	355	358	rVV2	317358	2128152	523021	3.95%	0.452%
13	4.826	358	360	363	rVB	131293	1514252	172878	1.31%	0.149%
14	5.012	378	380	382	rVB	238804	1317760	242688	1.83%	0.210%
15	5.058	382	385	393	rBV	7894577	16711167	11184754	84.48%	9.669%
16	5.262	404	407	412	rVB2	233632	2351407	392625	2.97%	0.339%
17	5.466	425	429	433	rBV	1579265	4322940	2340146	17.67%	2.023%
18	5.541	435	437	442	rVB	234992	2283150	334891	2.53%	0.289%
19	5.745	455	459	461	rBV4	87593	1540933	137604	1.04%	0.119%
20	5.875	469	473	476	rBV3	75606	1807198	181800	1.37%	0.157%
21	6.098	493	497	501	rVV	4203789	8035774	6048964	45.69%	5.229%
22	6.274	513	516	519	rVB	159089	1611585	187791	1.42%	0.162%
23	6.376	525	527	531	rVB	1151956	3448303	1179466	8.91%	1.020%
24	6.646	554	556	564	rVB2	60560	2487210	134812	1.02%	0.117%
25	6.896	580	583	591	rVB	2708465	6049818	3385005	25.57%	2.926%
26	7.156	608	611	616	rBV	256158	2175266	355228	2.68%	0.307%
27	7.360	630	633	638	rVB	91153	2055140	175891	1.33%	0.152%
28	7.574	648	656	658	rBV2	53556	2345072	149350	1.13%	0.129%
29	7.676	664	667	671	rBV	512356	2223201	621836	4.70%	0.538%
30	8.131	713	716	719	rBV	10177355	12913469	11093093	83.78%	9.589%
31	8.595	763	766	769	rBV	165635	1508582	192783	1.46%	0.167%
32	8.920	797	801	804	rBV	3837486	6028104	4472738	33.78%	3.866%
33	9.848	897	901	912	rBV	5980203	12401422	8791135	66.40%	7.599%
34	10.656	985	988	1001	rBV	4230032	9928189	5204673	39.31%	4.499%
35	11.278	1052	1055	1058	rBV2	368946	1826391	511667	3.86%	0.442%
36	11.315	1058	1059	1070	rVB	122026	3249305	190092	1.44%	0.164%
37	12.048	1135	1138	1143	rBV	561916	2550617	770202	5.82%	0.666%
38	12.197	1151	1154	1164	rBV	159336	3173936	272545	2.06%	0.236%
39	12.513	1185	1188	1192	rBV	9898061	15247345	13240309	100.00%	11.446%
40	13.552	1297	1300	1311	rBV2	190041	3494334	344669	2.60%	0.298%
41	13.720	1315	1318	1320	rBV	4423061	7271072	6134355	46.33%	5.303%
42	13.747	1320	1321	1329	rVB	4258862	16778641	4029767	30.44%	3.484%
43	13.896	1334	1337	1343	rBV2	88635	2234978	173001	1.31%	0.150%
44	14.704	1421	1424	1433	rBV2	76512	5555397	555397	1.48%	0.169%
45	14.815	1433	1436	1446	rVB	98985	3215338	172503	1.30%	0.149%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y055.D  
 Operator : MA  
 Acquired : 30 Jan 19 14:56 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: 190128A BLK 1/800  
 Misc Info :  
 Vial Number: 55  
 Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

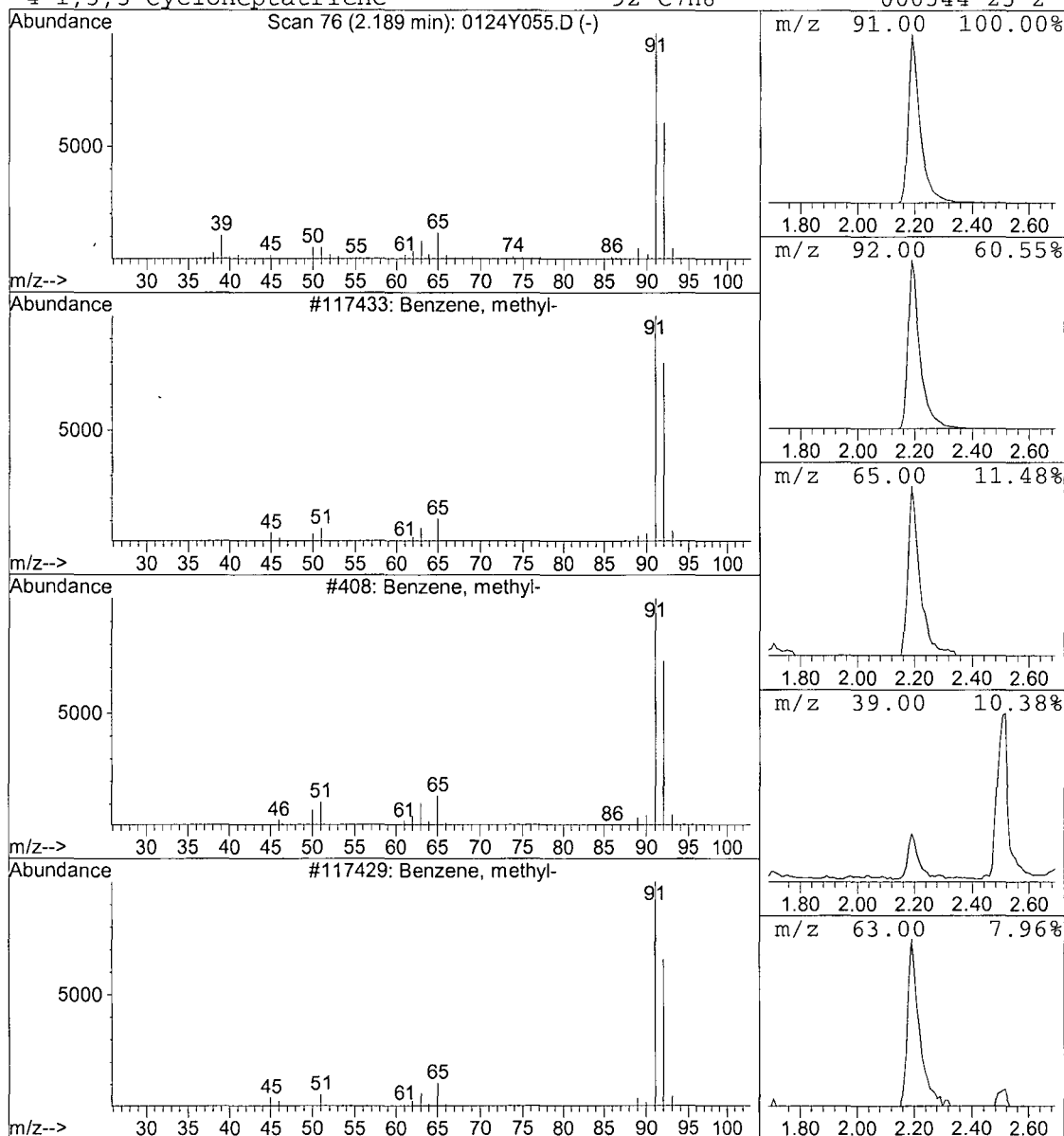
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzene, methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.19	12.60 ppb	589519	1,4-dichlorobenzene-D4 (IS)	5.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	91
2	Benzene, methyl-	92	C7H8	000108-88-3	91
3	Benzene, methyl-	92	C7H8	000108-88-3	91
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

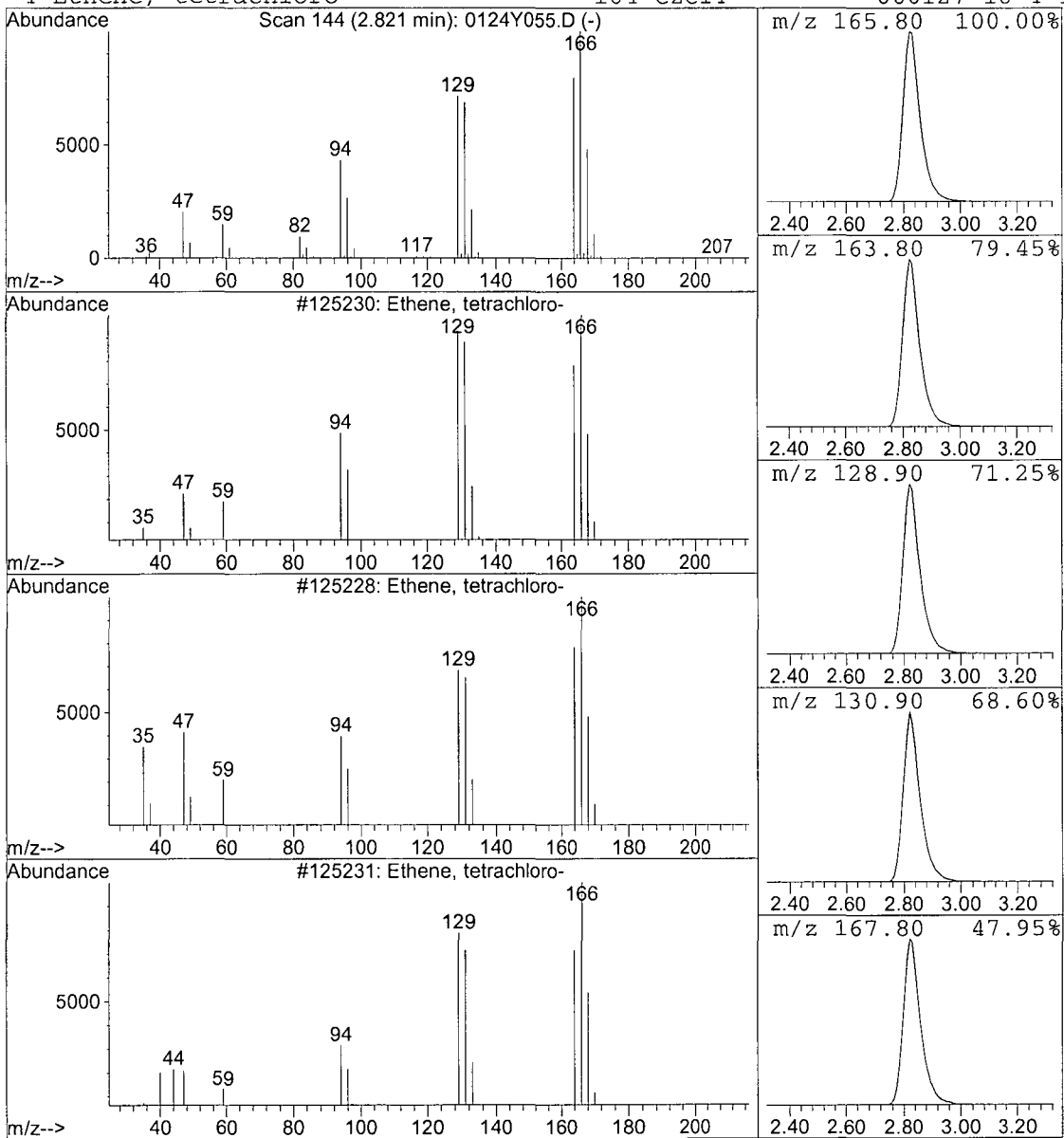
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Ethene, tetrachloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	105.15 ppb	4921080	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
3		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96
4		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

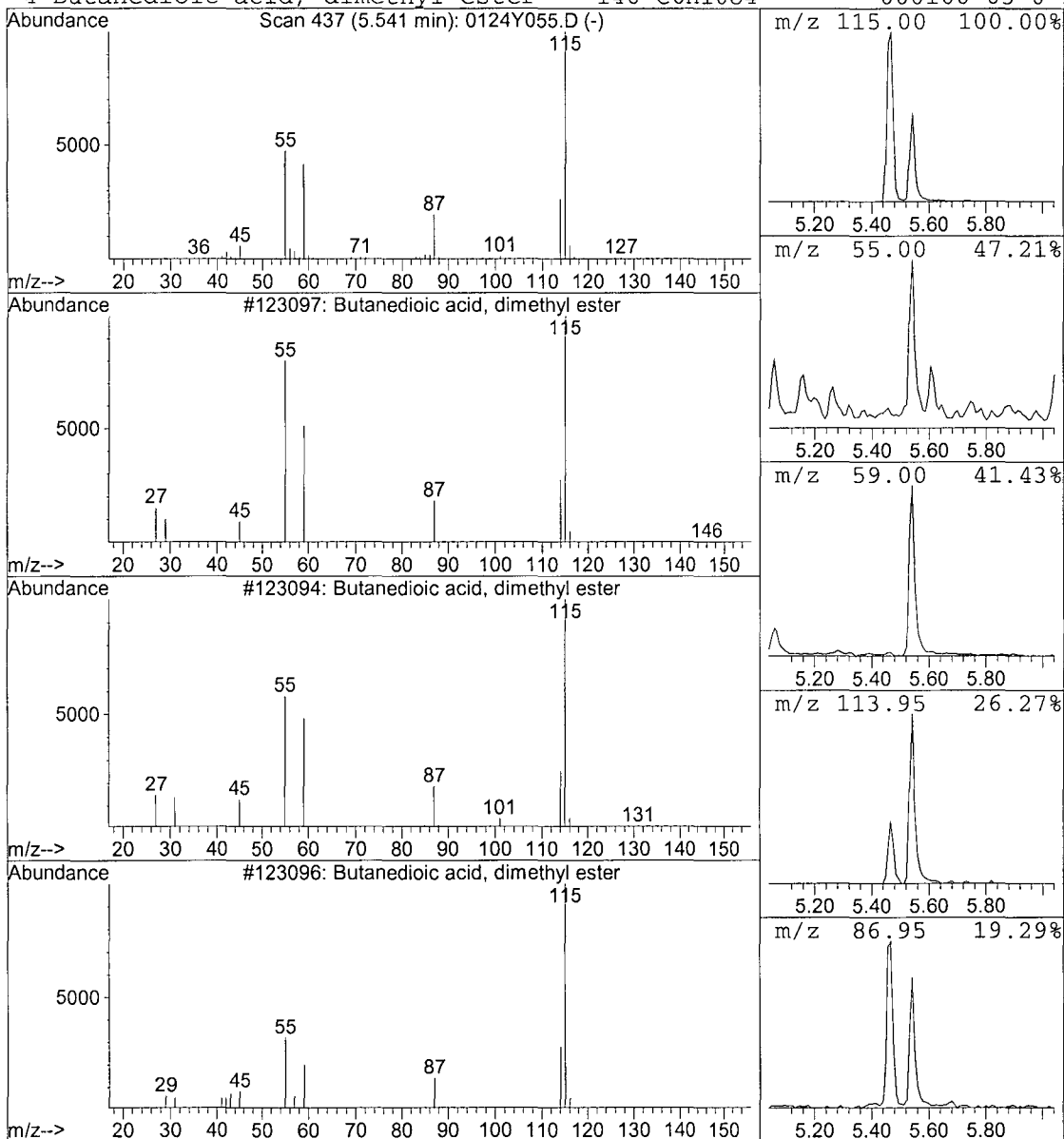
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Butanedioic acid, dimethyl est Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.54	7.16 ppb	334891	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
2		Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
3		Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	59
4		Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	56



Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

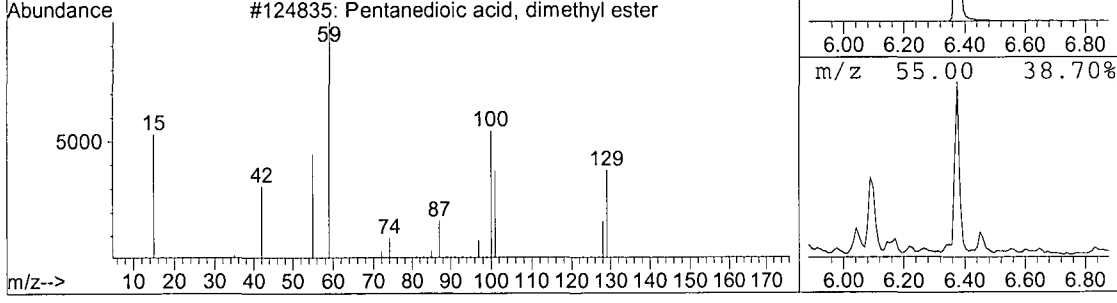
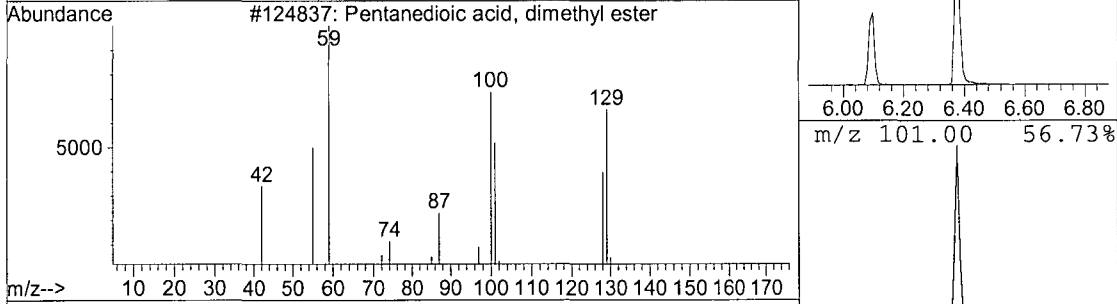
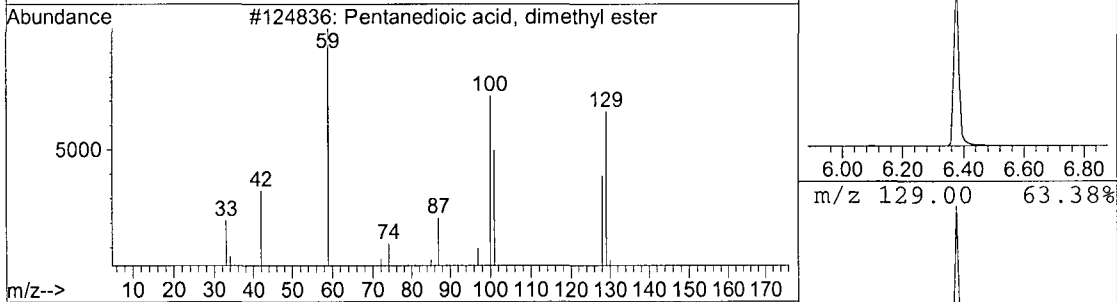
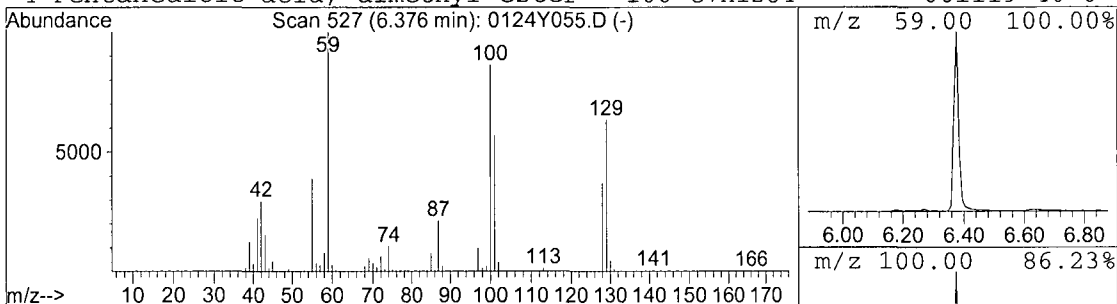
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Pentanedioic acid, dimethyl es Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.38	17.42 ppb	1179470	Napthalene-D8(IS)	6.90

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	83
3		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
4		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78



Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

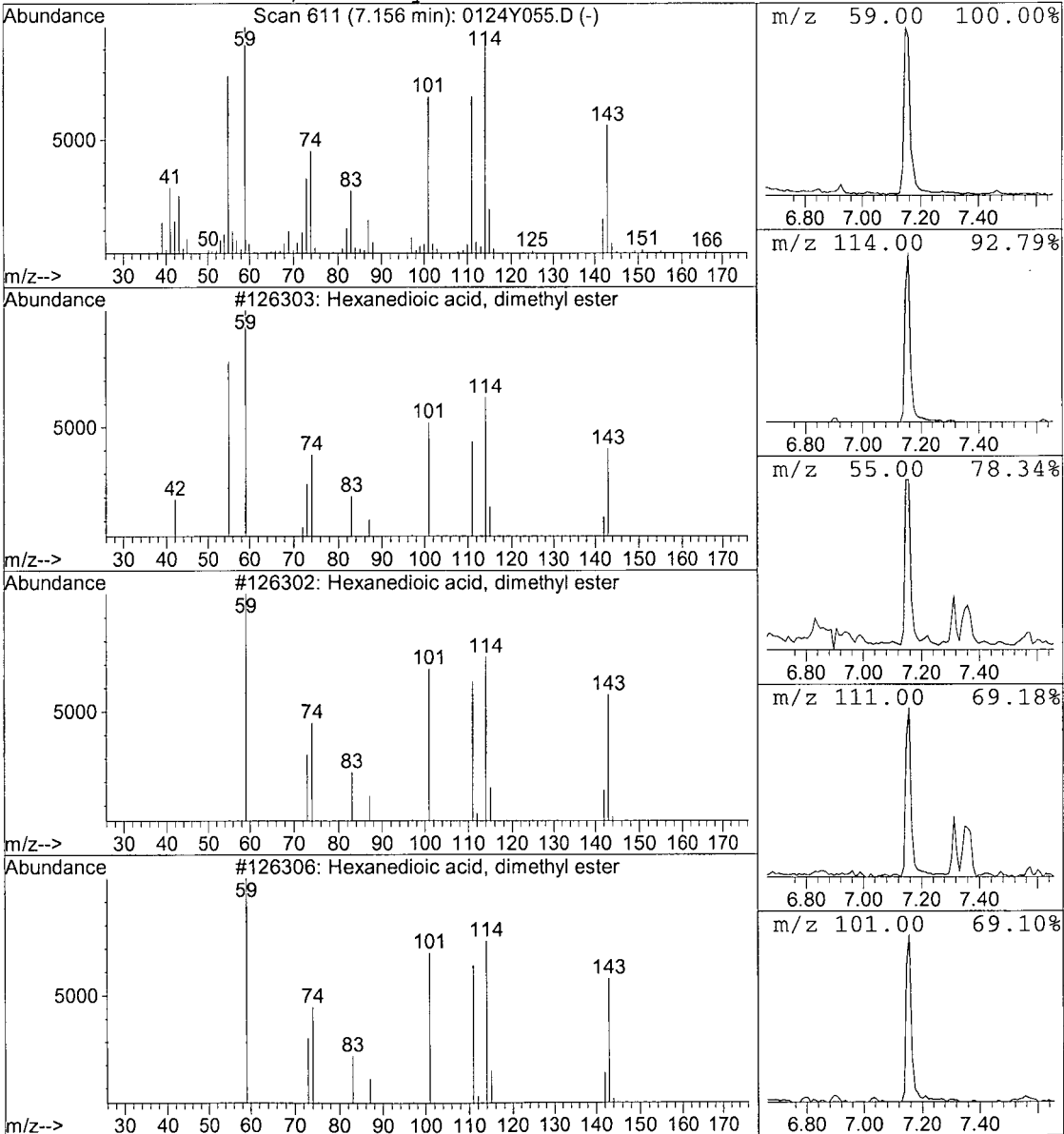
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 5 Hexanedioic acid, dimethyl est Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.16	5.25 ppb	355228	Napthalene-D8 (IS)	6.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
2	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
3	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
4	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91





Data File : M:\YODA\DATA\Y190124\0124Y056.D  
 Acq On : 30 Jan 19 15:24  
 Sample : 190128A LCS-1 1/800  
 Misc :

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	457917	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1909311	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1115986	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2176917	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1926866	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1886148	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.91	112	3839495	234.9853	ppb	0.04
Spiked Amount	250.000		Recovery	=	93.994%	
6) Phenol-D6 (S)	5.07	99	5066404	235.5034	ppb	0.02
Spiked Amount	250.000		Recovery	=	94.201%	
22) Nitrobenzene-D5 (S)	6.10	82	2202037	121.0657	ppb	0.00
Spiked Amount	125.000		Recovery	=	96.853%	
46) 2-Fluorobiphenyl (S)	8.14	172	4168086	115.2924	ppb	0.00
Spiked Amount	125.000		Recovery	=	92.234%	
64) 2,4,6-Tribromophenol (S)	9.86	330	981990	265.5274	ppb	0.00
Spiked Amount	250.000		Recovery	=	106.211%	
82) Terphenyl-D14 (S)	12.52	244	4458092	113.3668	ppb	0.00
Spiked Amount	125.000		Recovery	=	90.694%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.73	58	14437	7.0474		93
3) n-Nitrosodimethylamine	1.97	42	184665	55.6065	ppb	100
4) Pyridine	1.99	79	302405	37.0045	ppb	97
7) Phenol	5.09	94	1547482	55.8430	ppb	92
8) Aniline	5.10	93	1257162	43.3414	ppb	90
9) Bis (2-chloroethyl) ether	5.18	63	736144	57.6652	ppb	89
10) 2-Chlorophenol	5.23	128	1113811	56.9519	ppb	95
11) 1,3-DCB	5.40	146	928696	44.6368	ppb	98
12) 1,4-DCB	5.49	146	967220	45.4970	ppb	99
13) Benzyl alcohol	5.63	108	721516	59.2081	ppb	93
14) 1,2-DCB	5.65	146	933306	47.3892	ppb	98
15) 2-Methylphenol	5.75	107	966760	57.9492	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1125661	58.7326	ppb	# 85
17) Acetophenone	5.92	105	1441455	56.7124	ppb	100
18) 3&4-Methylphenol	5.93	107	2272780	115.3451	ppb	97
19) n-Nitrosodi-n-propylamine	5.92	70	814411	56.9123	ppb	98
20) Hexachloroethane	6.03	117	304393	39.1955	ppb	90
23) Nitrobenzene	6.12	77	1252632	61.2427	ppb	95
24) Isophorone	6.39	82	2221079	62.2524	ppb	99
25) 2-Nitrophenol	6.47	139	612881	60.8602	ppb	96
26) 2,4-Dimethylphenol	6.52	122	957734	57.4794	ppb	99
27) Benzoic acid	6.66	105	804469	61.7076	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1366308	61.7489	ppb	99
29) 2,4-Dichlorophenol	6.75	162	914907	63.8115	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	819212	51.3928	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1397590	62.0386	ppb	100
32) Napthalene	6.92	128	3074441	56.7155	ppb	100
33) 4-Chloroaniline	6.99	127	593178	29.5767	ppb	98
34) 2,6-Dichlorophenol	7.00	162	892518	62.8582	ppb	100
35) Hexachloropropene	7.02	213	375862	38.6674	ppb	100
36) Hexachlorobutadiene	7.05	225	359286	43.2686	ppb	98
37) Caprolactum	7.42	55	437379	60.5901	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y056.D  
 Acq On : 30 Jan 19 15:24  
 Sample : 190128A LCS-1 1/800  
 Misc :

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1013986	62.7609	ppb	95
39) 2-Methylnaphthalene	7.71	142	2014074	57.6195	ppb	98
40) 1-Methylnaphthalene	7.82	142	2016171	57.7100	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	127085	25.1061	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	847158	56.4918	ppb	100
44) 2,4,6-Trichlorophenol	8.05	196	625017	63.8492	ppb	97
45) 2,4,5-Trichlorophenol	8.09	196	675383	61.0914	ppb	100
47) 1,1'-Biphenyl	8.25	154	2591109	58.4883	ppb	99
48) 2-Chloronaphthalene	8.28	162	1998743	59.0576	ppb	99
49) 2-Nitroaniline	8.40	65	670967	60.9863	ppb	99
50) Dimethyl phthalate	8.60	163	2548088	63.7673	ppb	100
51) 2,6-DNT	8.69	165	561886	62.7082	ppb	99
52) Acenaphthylene	8.76	152	3168066	59.0123	ppb	99
53) 3-Nitroaniline	8.88	138	321517	31.6871	ppb	92
54) Acenaphthene	8.96	154	2049821	58.9598	ppb	100
55) 2,4-Dinitrophenol	9.01	184	284288	59.6251	ppb	96
56) 4-Nitrophenol	9.09	65	346705	56.2277	ppb	98
57) Dibenzofuran	9.16	168	2939102	60.3199	ppb	98
58) 2,4-DNT	9.15	165	745341	63.0667	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.31	232	513043	63.0580	ppb	97
60) Diethyl phthalate	9.42	149	2314469	61.1312	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1139756	59.9568	ppb	97
62) Fluorene	9.56	166	2353058	60.2465	ppb	100
63) 4-Nitroaniline	9.61	138	567570	55.2430	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.64	198	451912	58.0910	ppb	99
67) Diphenyl amine	9.70	169	3539990	115.2165	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3539990	115.2165	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2483913	57.3578	ppb	99
70) 4-Bromophenyl phenyl ether	10.13	248	634614	60.9890	ppb	97
71) Hexachlorobenzene	10.20	284	602971	61.2974	ppb	97
72) Atrazine	10.32	200	266377	25.2674	ppb	98
73) Pentachlorophenol	10.43	266	398288	64.6965	ppb	99
74) Phenanthrene	10.68	178	3475307	59.0431	ppb	100
75) Anthracene	10.75	178	3513193	58.2714	ppb	100
76) Carbazol	10.94	167	3246831	59.2599	ppb	100
77) Di-n-butylphthalate	11.32	149	3938060	60.9140	ppb	100
78) Fluoranthene	12.08	202	3745495	59.2659	ppb	99
80) Benzidine	12.25	184	28148	1.4766	ppb	# 86
81) Pyrene	12.35	202	3877241	59.2550	ppb	100
83) Butyl benzylphthalate	13.08	149	1785374	60.8687	ppb	98
84) 3,3'-Dichlorobenzidine	13.71	252	527194	26.2755	ppb	98
85) Benz (a) anthracene	13.74	228	3350543	58.7161	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2491980	61.0488	ppb	100
87) Chrysene	13.78	228	3233196	57.9400	ppb	99
88) Di-n-octylphthalate	14.49	149	4316393	62.3170	ppb	100
90) Benzo (b) fluoranthene	15.08	252	3606168	63.6686	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3013217	55.3525	ppb	99
92) Benzo (a) pyrene	15.55	252	3079916	60.0757	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3195892	60.5183	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	2918560	61.1307	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2807537	60.0098	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0124Y056.D Y0125NC.M Fri Feb 01 13:30:17 2019

Quantitation Report

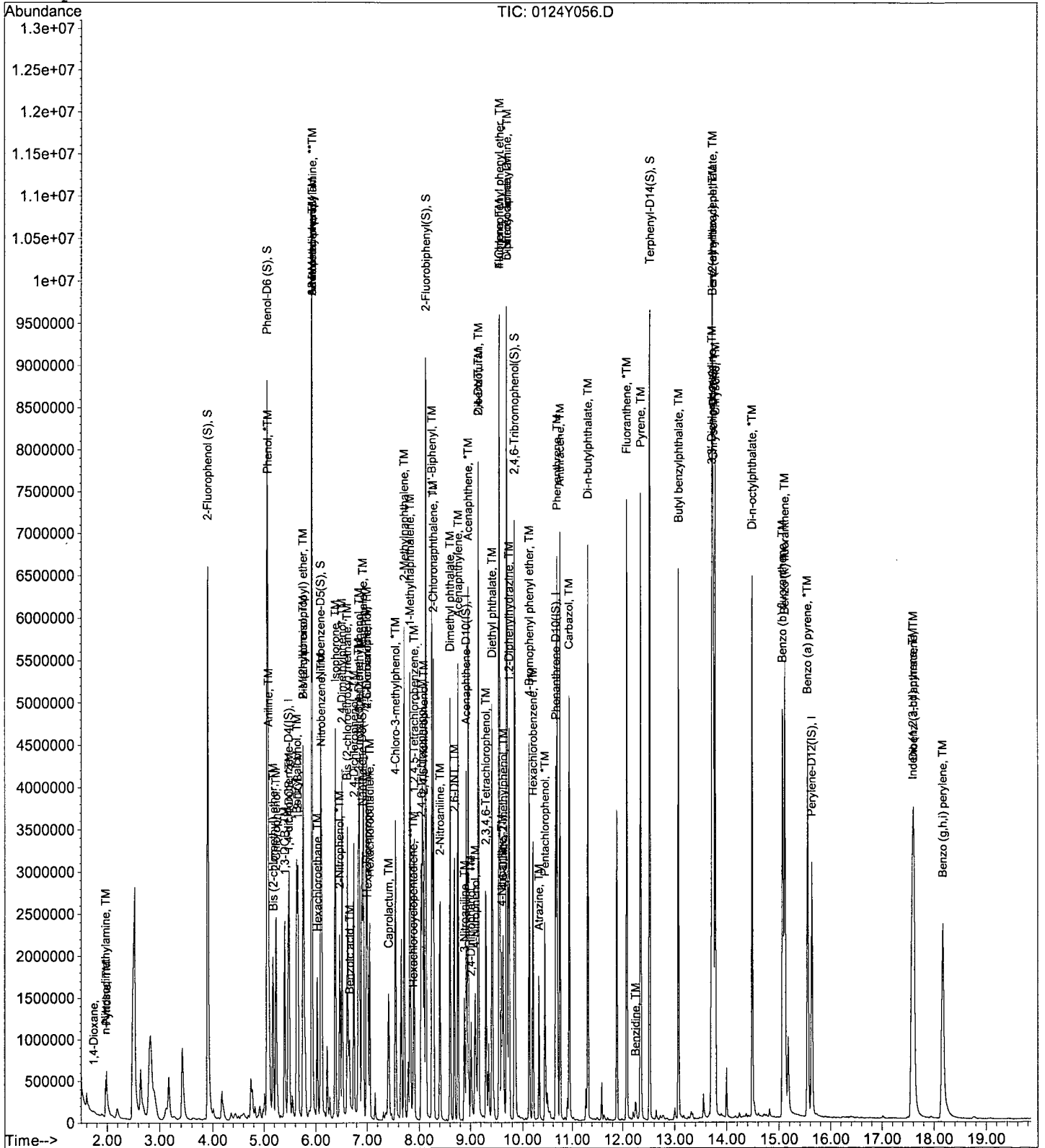
Data File : M:\YODA\DATA\Y190124\0124Y056.D  
Acq On : 30 Jan 19 15:24  
Sample : 190128A LCS-1 1/800  
Misc :

Vial: 56  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y057.D  
 Acq On : 30 Jan 19 15:52  
 Sample : 190128A LCSD-1 1/800  
 Misc :

Vial: 57  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	451272	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.90	136	1964856	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1129757	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2164133	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1894709	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1817504	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.91	112	3777995	234.6261	ppb	0.04
Spiked Amount 250.000			Recovery =	93.850%		
6) Phenol-D6 (S)	5.07	99	4962251	234.0585	ppb	0.02
Spiked Amount 250.000			Recovery =	93.624%		
22) Nitrobenzene-D5 (S)	6.10	82	2147309	114.7194	ppb	0.01
Spiked Amount 125.000			Recovery =	91.775%		
46) 2-Fluorobiphenyl (S)	8.13	172	4028255	110.0663	ppb	0.00
Spiked Amount 125.000			Recovery =	88.053%		
64) 2,4,6-Tribromophenol (S)	9.85	330	957479	255.7439	ppb	0.00
Spiked Amount 250.000			Recovery =	102.298%		
82) Terphenyl-D14 (S)	12.52	244	4315870	111.6128	ppb	0.00
Spiked Amount 125.000			Recovery =	89.290%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.70	58	487	0.2412		79
3) n-Nitrosodimethylamine	1.97	42	181386	55.4234	ppb	99
4) Pyridine	1.99	79	369217	45.8454	ppb	98
7) Phenol	5.08	94	1523095	55.7723	ppb	96
8) Aniline	5.10	93	1342714	46.9725	ppb	97
9) Bis (2-chloroethyl) ether	5.17	63	709782	56.4189	ppb	97
10) 2-Chlorophenol	5.23	128	1084762	56.2833	ppb	99
11) 1,3-DCB	5.40	146	950579	46.3614	ppb	98
12) 1,4-DCB	5.49	146	979018	46.7301	ppb	98
13) Benzyl alcohol	5.63	108	710403	59.1546	ppb	99
14) 1,2-DCB	5.66	146	959277	49.4252	ppb	97
15) 2-Methylphenol	5.76	107	939699	57.1565	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1094917	57.9697	ppb	93
17) Acetophenone	5.92	105	1399529	55.8736	ppb	99
18) 3&4-Methylphenol	5.92	107	2219746	114.3124	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	795789	56.4298	ppb	99
20) Hexachloroethane	6.03	117	304365	39.7690	ppb	94
23) Nitrobenzene	6.12	77	1230905	58.4791	ppb	97
24) Isophorone	6.39	82	2173466	59.1958	ppb	100
25) 2-Nitrophenol	6.47	139	597603	57.6654	ppb	98
26) 2,4-Dimethylphenol	6.52	122	966587	56.3708	ppb	97
27) Benzoic acid	6.67	105	800128	59.6396	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1330177	58.4165	ppb	100
29) 2,4-Dichlorophenol	6.75	162	889456	60.2826	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	830909	50.6530	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1346605	58.0856	ppb	99
32) Napthalene	6.93	128	3049777	54.6701	ppb	100
33) 4-Chloroaniline	6.99	127	586728	28.4281	ppb	99
34) 2,6-Dichlorophenol	7.00	162	862667	59.0383	ppb	98
35) Hexachloropropene	7.02	213	363387	36.3272	ppb	100
36) Hexachlorobutadiene	7.06	225	367185	42.9698	ppb	100
37) Caprolactum	7.42	55	429624	57.8333	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0124Y057.D Y0125NC.M Fri Feb 01 13:30:20 2019

Data File : M:\YODA\DATA\Y190124\0124Y057.D  
 Acq On : 30 Jan 19 15:52  
 Sample : 190128A LCSD-1 1/800  
 Misc :

Vial: 57  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	984160	59.1928	ppb	100
39) 2-Methylnaphthalene	7.72	142	1981736	55.0916	ppb	100
40) 1-Methylnaphthalene	7.83	142	1982061	55.1298	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	127453	24.9407	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	824564	54.3149	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	619124	62.4762	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	654731	58.5015	ppb	97
47) 1,1'-Biphenyl	8.25	154	2557086	57.0167	ppb	99
48) 2-Chloronaphthalene	8.28	162	1968101	57.4433	ppb	98
49) 2-Nitroaniline	8.40	65	651653	58.5088	ppb	96
50) Dimethyl phthalate	8.61	163	2454790	60.6837	ppb	100
51) 2,6-DNT	8.69	165	550935	60.7365	ppb	95
52) Acenaphthylene	8.76	152	3088993	56.8380	ppb	100
53) 3-Nitroaniline	8.89	138	509426	49.5944	ppb	92
54) Acenaphthene	8.96	154	2007969	57.0520	ppb	100
55) 2,4-Dinitrophenol	9.02	184	291240	60.2639	ppb	92
56) 4-Nitrophenol	9.09	65	351317	56.2811	ppb	97
57) Dibenzofuran	9.16	168	2839573	57.5669	ppb	98
58) 2,4-DNT	9.15	165	715783	59.8274	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.30	232	502125	60.9638	ppb	94
60) Diethyl phthalate	9.42	149	2241581	58.4843	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1096417	56.9739	ppb	95
62) Fluorene	9.56	166	2265701	57.3028	ppb	100
63) 4-Nitroaniline	9.61	138	604493	58.1196	ppb	91
66) 4,6-Dinitro-2-methylphenol	9.64	198	448466	57.9885	ppb	92
67) Diphenyl amine	9.70	169	3478049	113.8692	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3478049	113.8692	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2411075	56.0047	ppb	91
70) 4-Bromophenyl phenyl ether	10.13	248	611083	59.0745	ppb	93
71) Hexachlorobenzene	10.19	284	582449	59.5609	ppb	# 85
72) Atrazine	10.32	200	274693	26.2102	ppb	98
73) Pentachlorophenol	10.44	266	388554	63.4881	ppb	98
74) Phenanthrene	10.69	178	3348552	57.2257	ppb	99
75) Anthracene	10.75	178	3376487	56.3347	ppb	100
76) Carbazol	10.94	167	3196135	58.6792	ppb	98
77) Di-n-butylphthalate	11.33	149	3841738	59.7751	ppb	99
78) Fluoranthene	12.08	202	3606239	57.3995	ppb	100
80) Benzidine	12.25	184	153562	8.1922	ppb	97
81) Pyrene	12.35	202	3745697	58.2162	ppb	99
83) Butyl benzylphthalate	13.07	149	1790993	62.0966	ppb	88
84) 3,3'-Dichlorobenzidine	13.70	252	496092	25.1450	ppb	# 98
85) Benz (a) anthracene	13.74	228	3161229	56.3387	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2680834	66.7900	ppb	# 94
87) Chrysene	13.79	228	3225716	58.7871	ppb	99
88) Di-n-octylphthalate	14.48	149	4239125	62.2402	ppb	95
90) Benzo (b) fluoranthene	15.07	252	3149375	57.7038	ppb	98
91) Benzo (k) fluoranthene	15.11	252	3242326	61.8107	ppb	98
92) Benzo (a) pyrene	15.55	252	2969448	60.1085	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3083312	60.5916	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2810267	61.0856	ppb	98
95) Benzo (g,h,i) perylene	18.17	276	2737074	60.7133	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0124Y057.D Y0125NC.M Fri Feb 01 13:30:21 2019

Quantitation Report

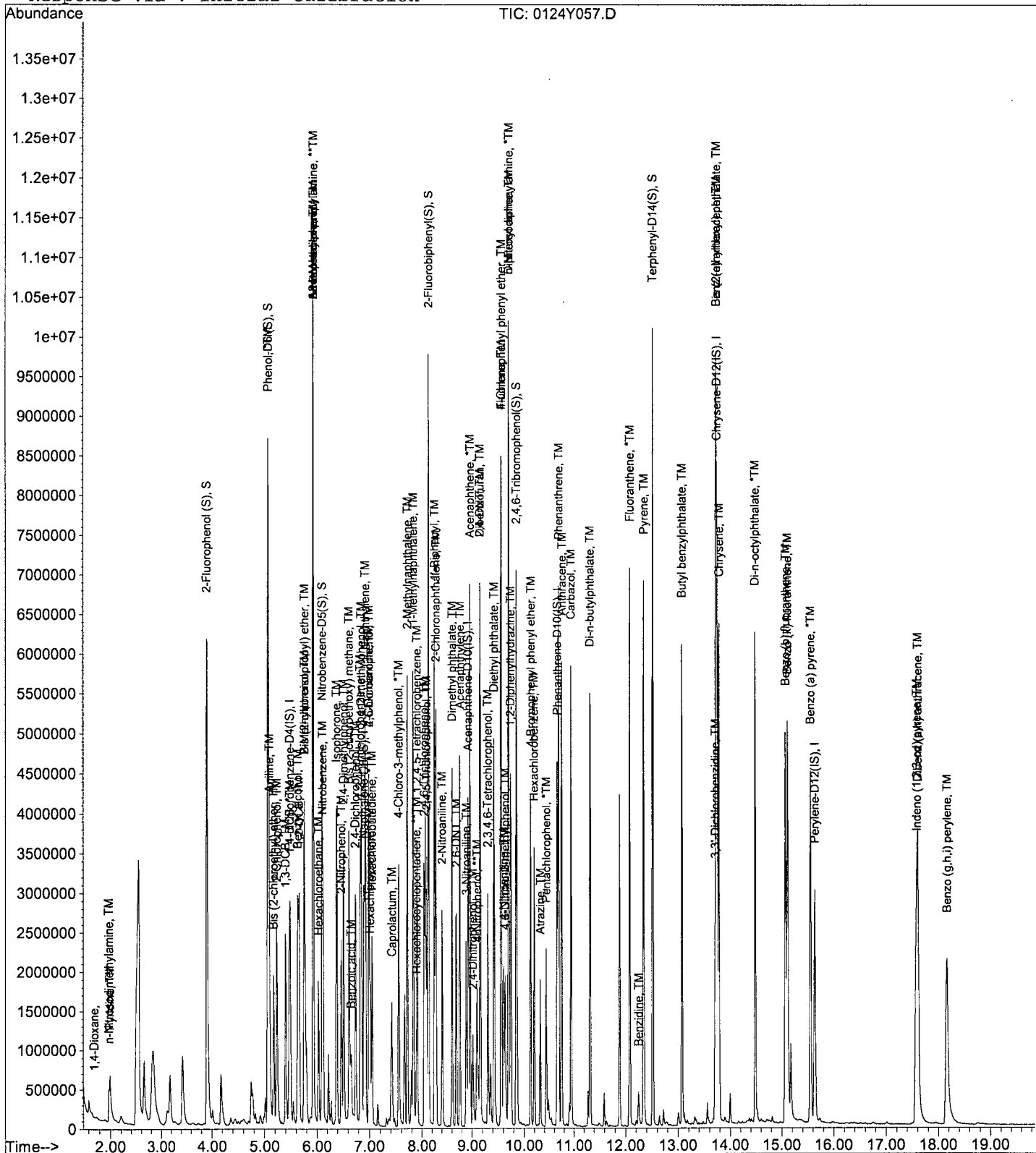
Data File : M:\YODA\DATA\Y190124\0124Y057.D  
Acq On : 30 Jan 19 15:52  
Sample : 190128A LCSD-1 1/800  
Misc :

Vial: 57  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

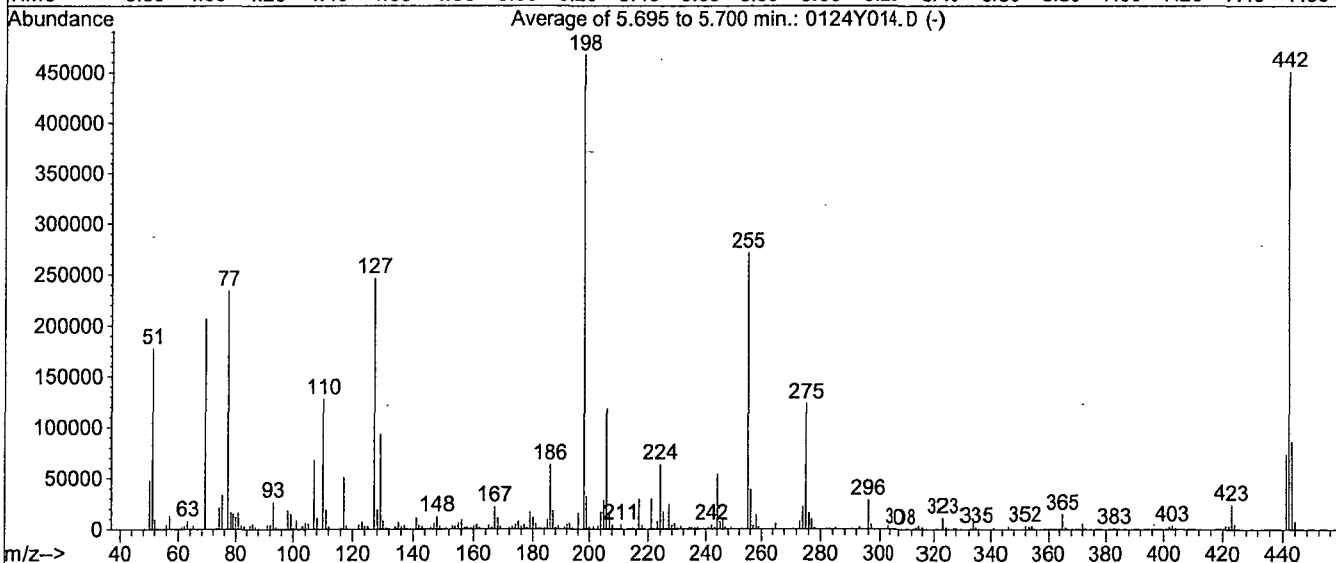
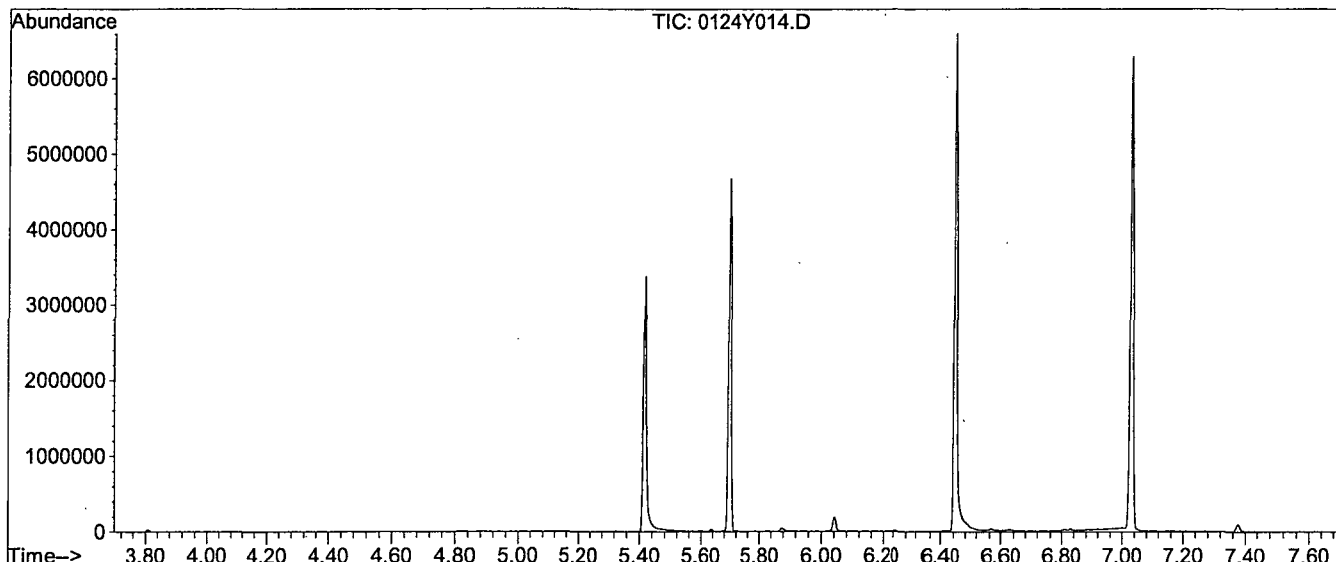
Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 844, 845, 846; Background Corrected with Scan 836

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.0	177707	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	324	PASS
127	198	10	80	52.7	246677	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	467755	PASS
199	198	5	9	6.9	32176	PASS
275	198	10	60	26.4	123307	PASS
365	198	1	100	3.2	14799	PASS
441	442	0.01	24	16.3	73683	PASS
442	198	50	150	96.4	451136	PASS
443	442	15	24	19.1	86139	PASS

M:\YODA\DATA\Y190124\0124Y014.D

Data File Name: 0124Y014.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 25 Jan 2019 07:05  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 14  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	45543100
2)	DDD	6.83	289306
3)	DDE	6.98	50792

Breakdown 0.74

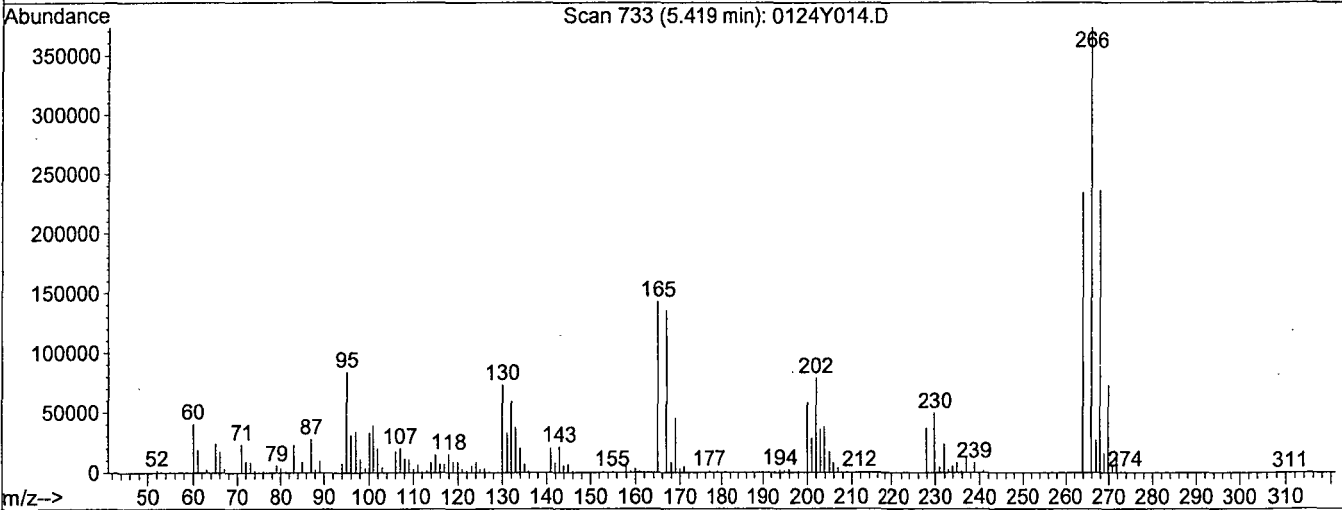
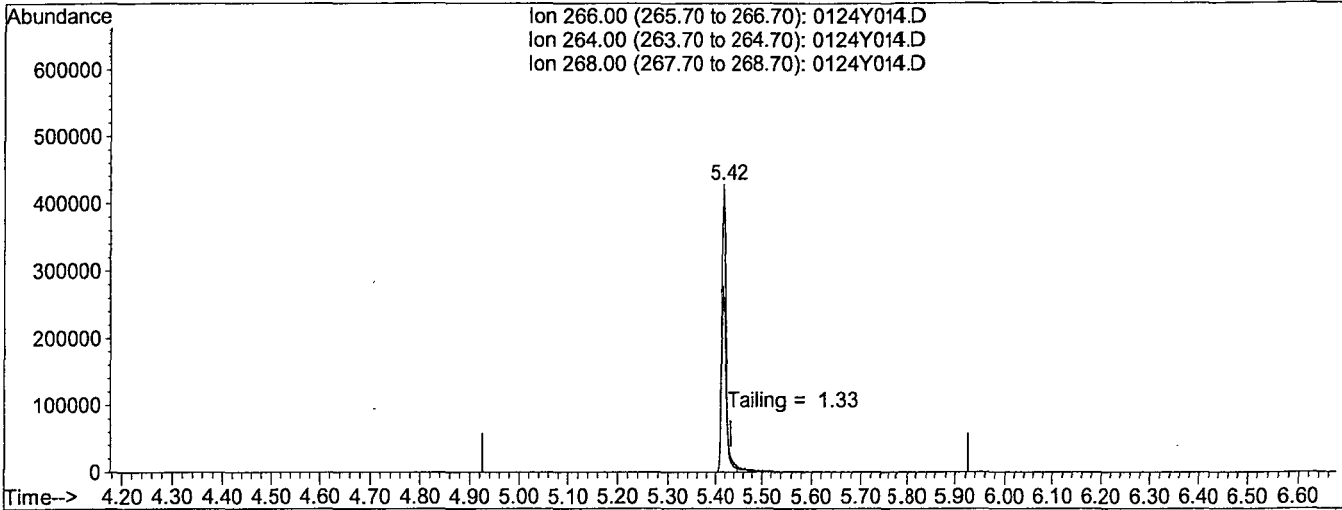


Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 25 7:20 2019

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y014.D

(5) Pentachlorophenol

5.42min 0.0000

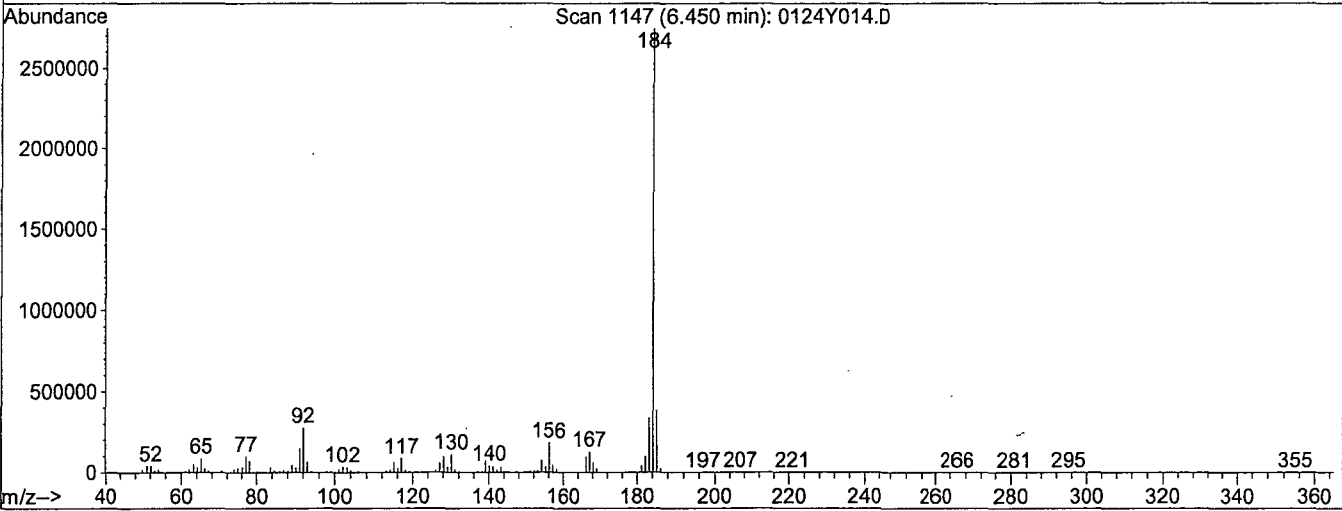
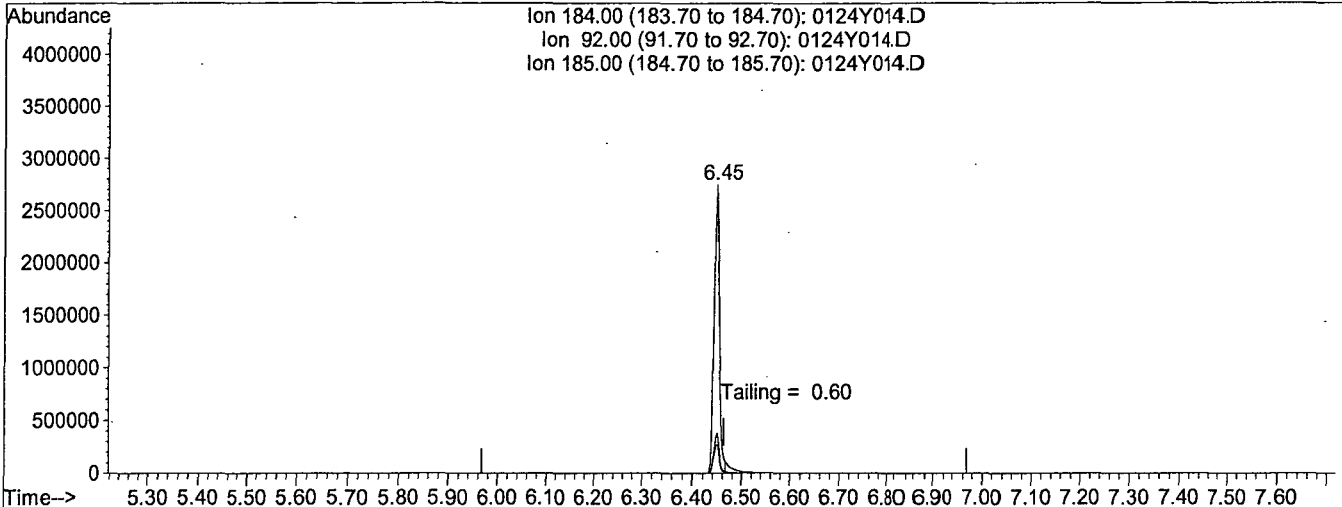
response 2758498

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	64.93
268.00	62.10	64.03
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y014.D Vial: 14  
 Acq On : 25 Jan 19 7:05 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 25 7:20 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y014.D

(6) Benzidine

6.45min 0.0000

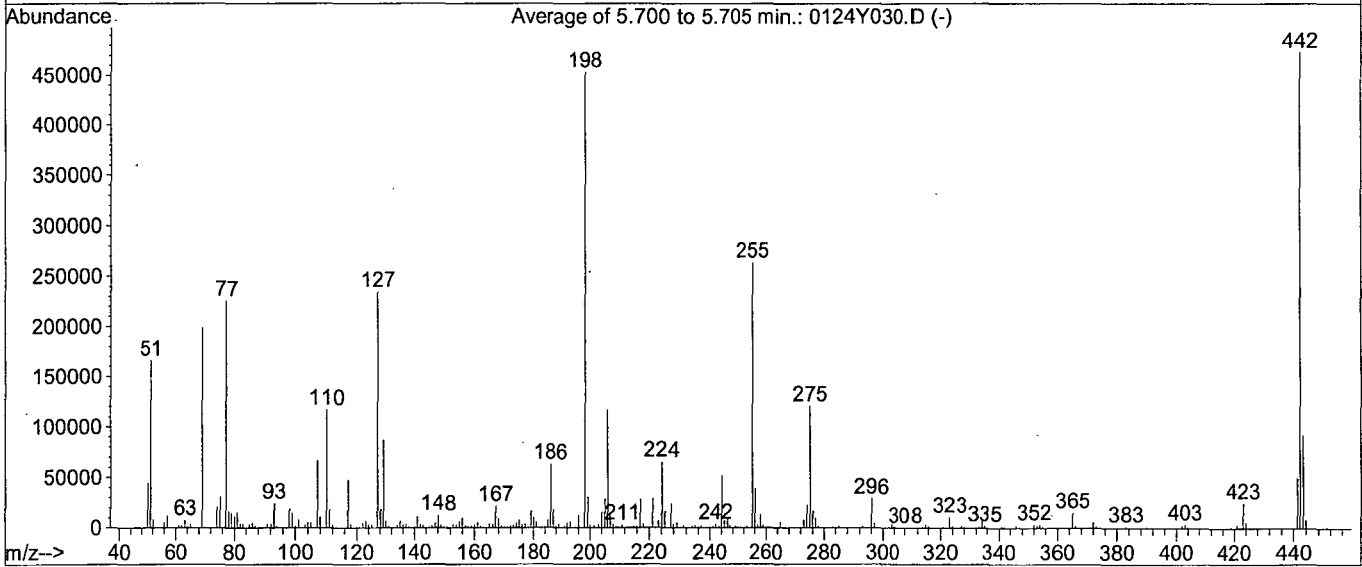
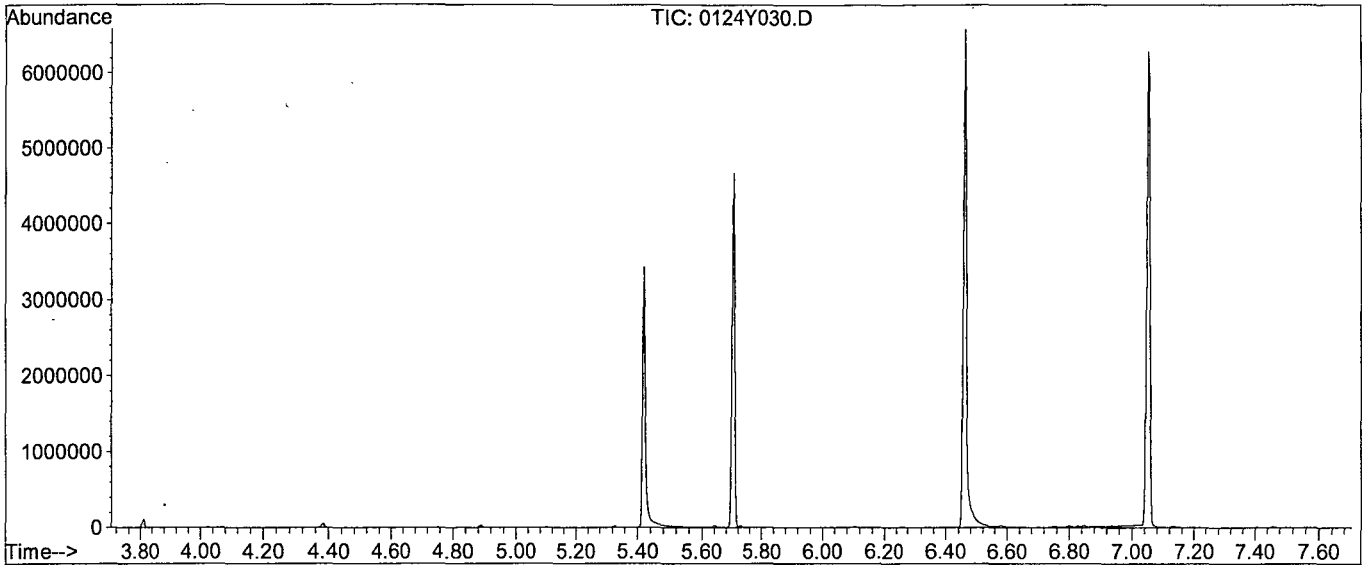
response 21096537

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.55
185.00	13.80	14.00
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 847, 848, 849; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.7	166219	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	962	PASS
127	198	10	80	51.8	234731	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	453312	PASS
199	198	5	9	6.7	30395	PASS
275	198	10	60	26.6	120363	PASS
365	198	1	100	3.4	15570	PASS
441	442	0.01	24	10.6	50421	PASS
442	198	50	150	104.5	473707	PASS
443	442	15	24	19.5	92189	PASS

Data File Name: 0124Y030.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 28 Jan 2019 11:49  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 30  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	45582200
2)	DDD	6.83	168406
3)	DDE	6.98	0

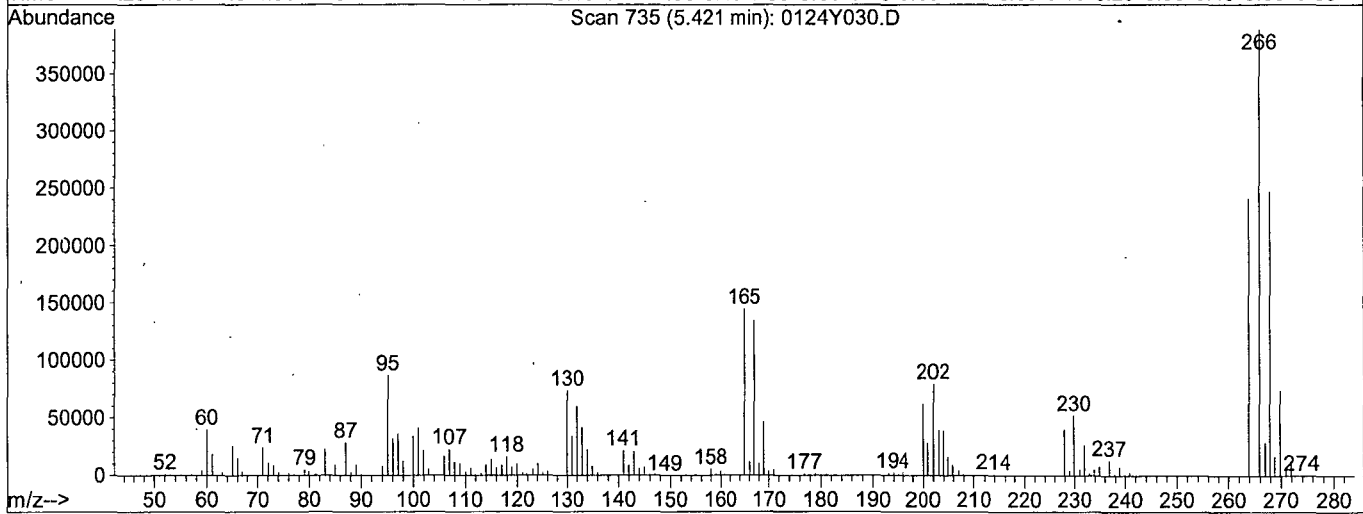
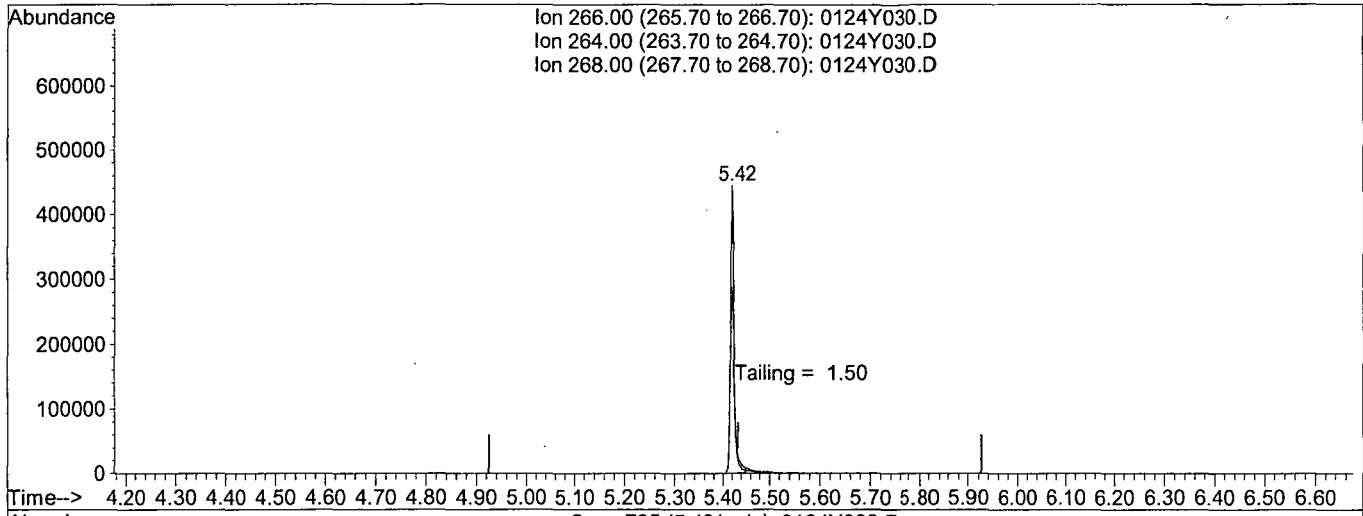
Breakdown 0.37

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 12:04 2019

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y030.D

(5) Pentachlorophenol

5.42min 0.0000

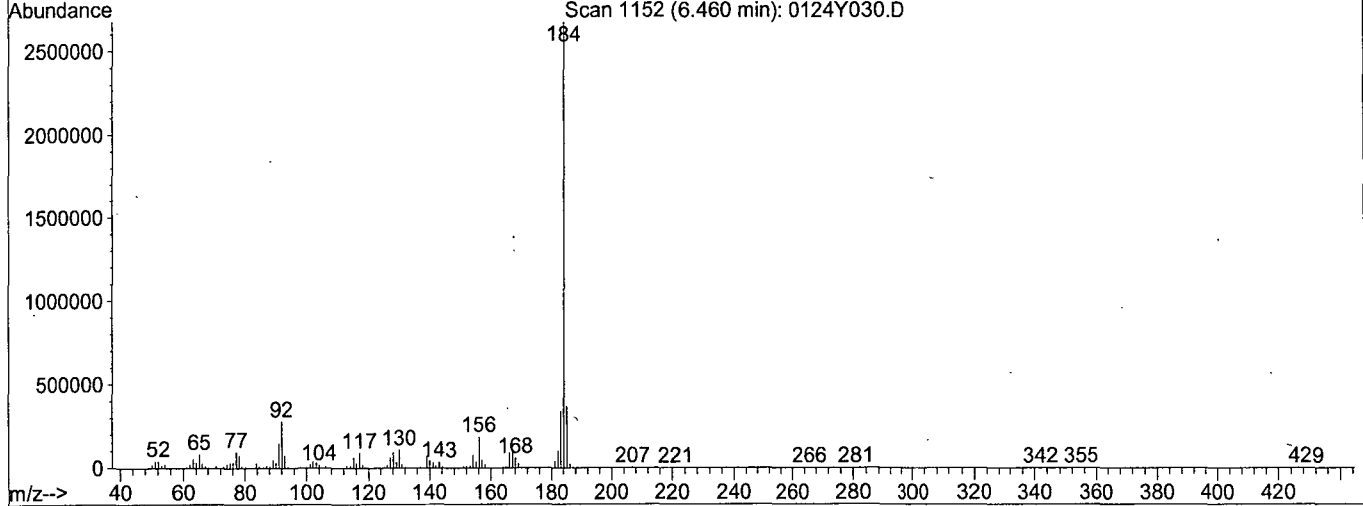
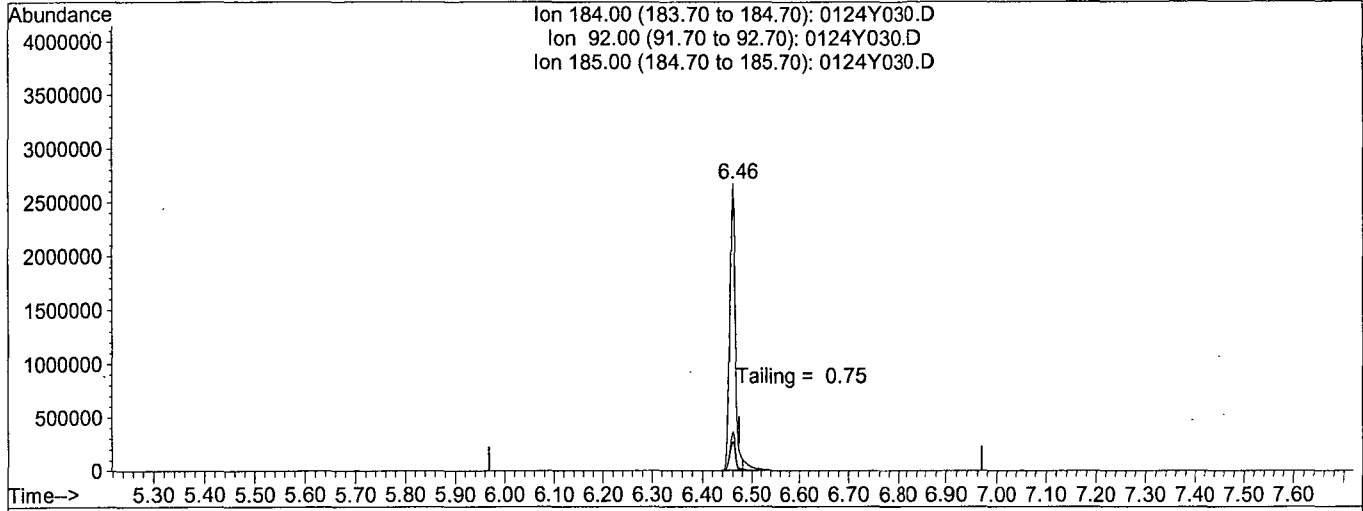
response 2670044

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	60.30
268.00	62.10	65.12
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y030.D Vial: 30  
 Acq On : 28 Jan 19 11:49 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 28 12:04 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y030.D

(6) Benzidine

6.46min 0.0000

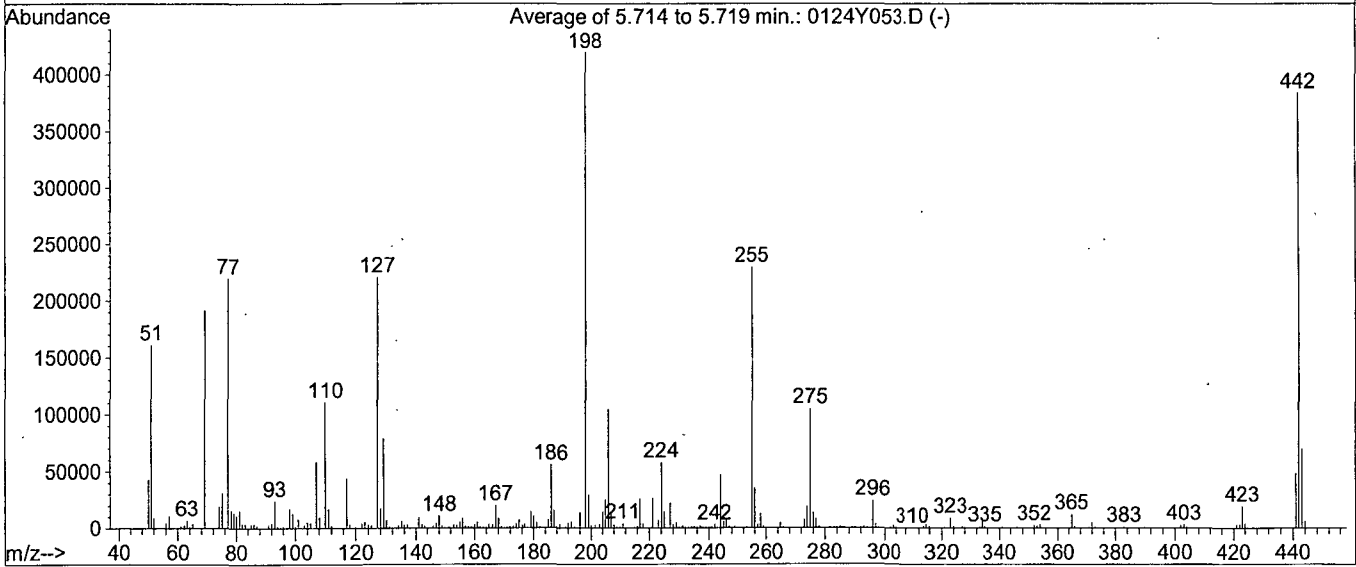
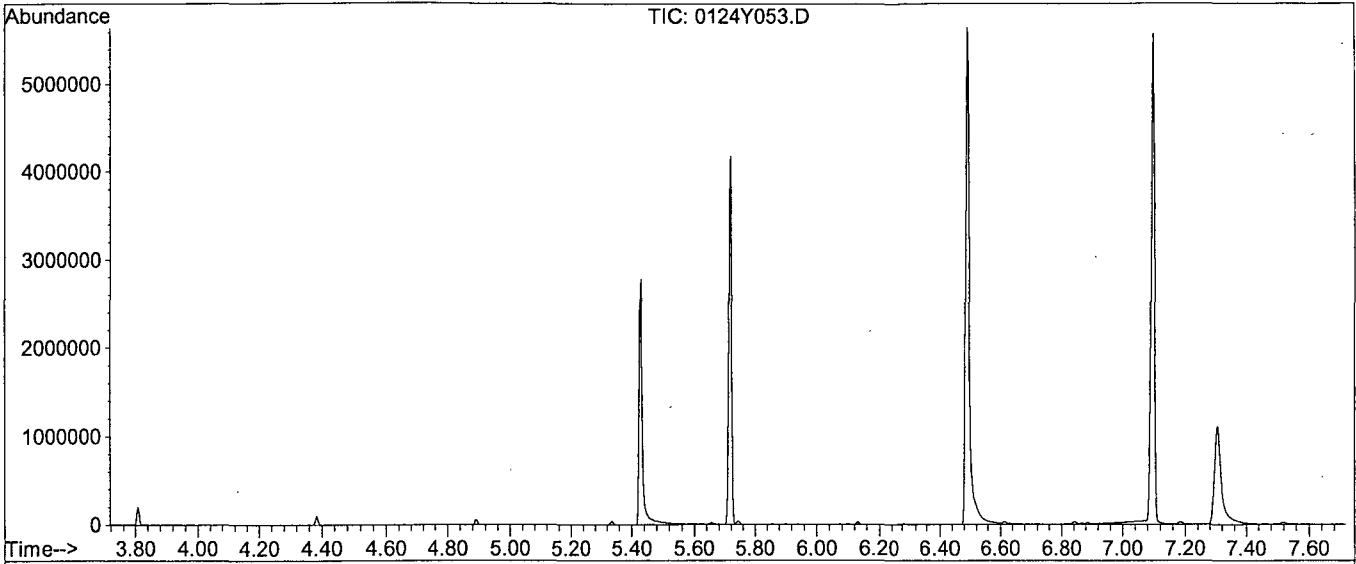
response 21118726

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.26
185.00	13.80	13.74
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y053.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 852, 853, 854; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.3	160992	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	701	PASS
127	198	10	80	52.6	220885	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	419925	PASS
199	198	5	9	7.0	29411	PASS
275	198	10	60	25.0	104971	PASS
365	198	1	100	2.9	12350	PASS
441	442	0.01	24	12.7	48587	PASS
442	198	50	150	91.4	384021	PASS
443	442	15	24	18.4	70520	PASS

M:\YODA\DATA\Y190124\0124Y053.D

Data File Name: 0124Y053.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 30 Jan 2019 07:56  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 93  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	40517600
2)	DDD	6.83	245385
3)	DDE	6.98	0

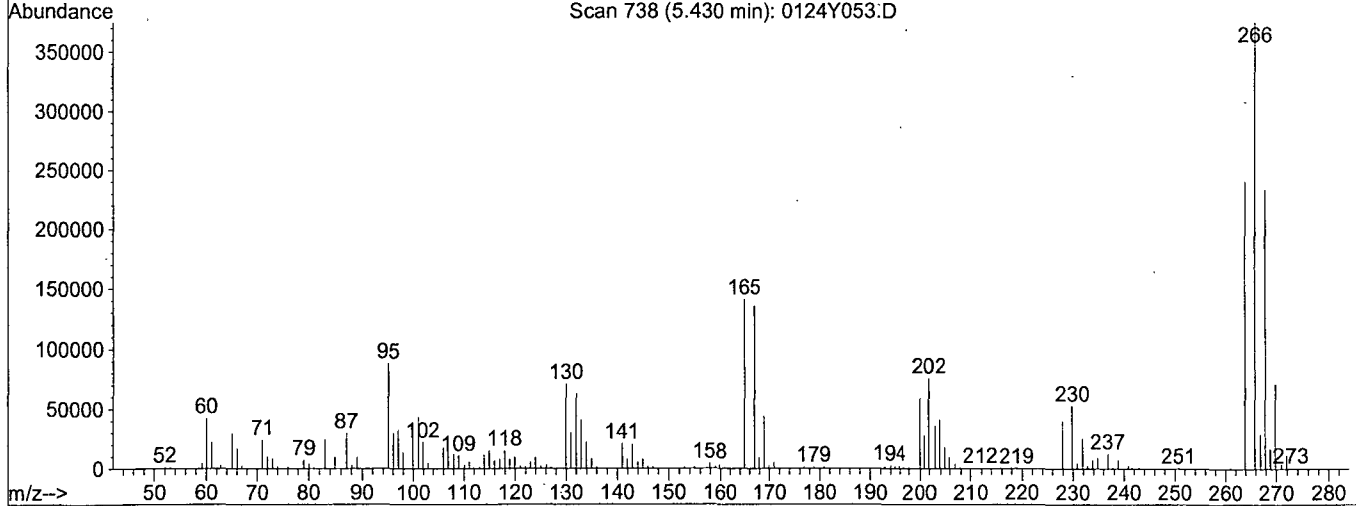
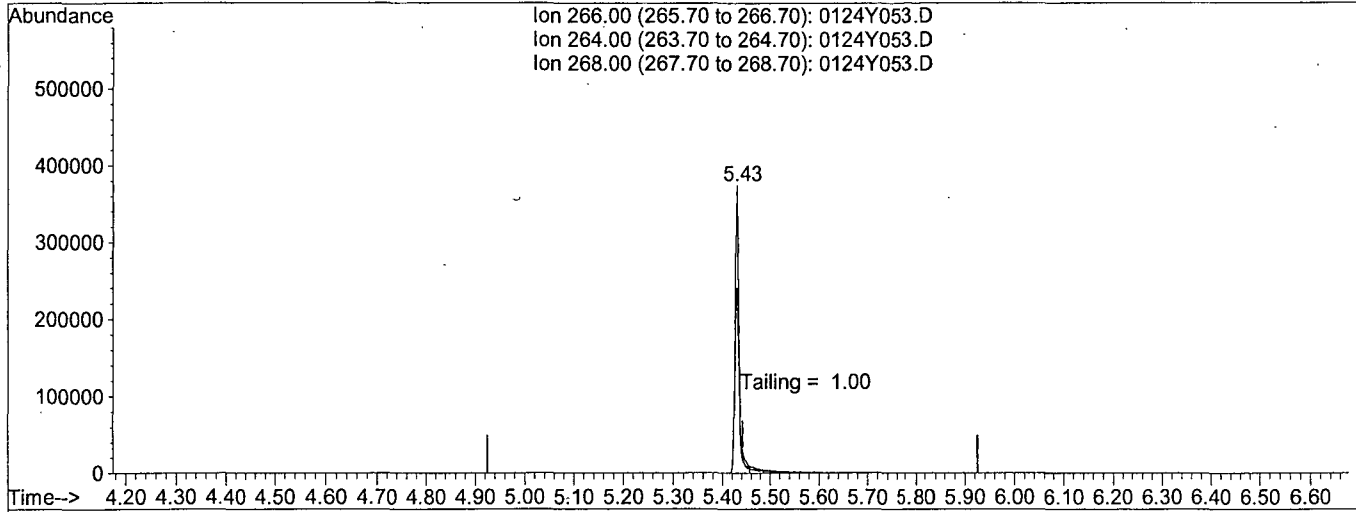
Breakdown 0.60



Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y053.D Vial: 93  
 Acq On : 30 Jan 19 7:56 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Jan 31 5:55 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y053.D

(5) Pentachlorophenol

5.43min 0.0000

response 2388849

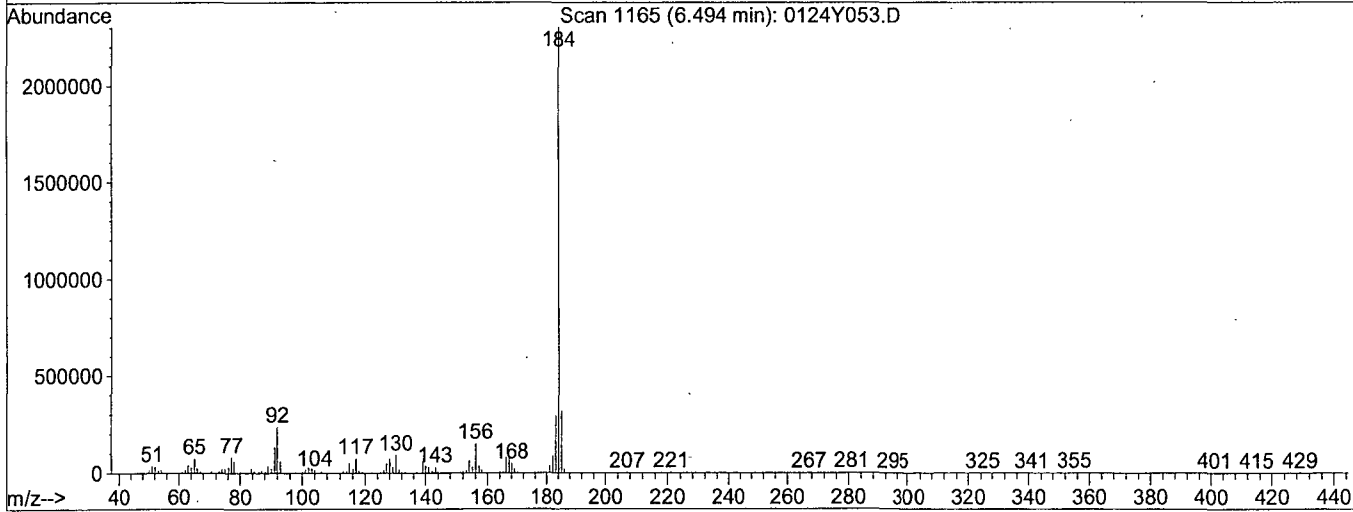
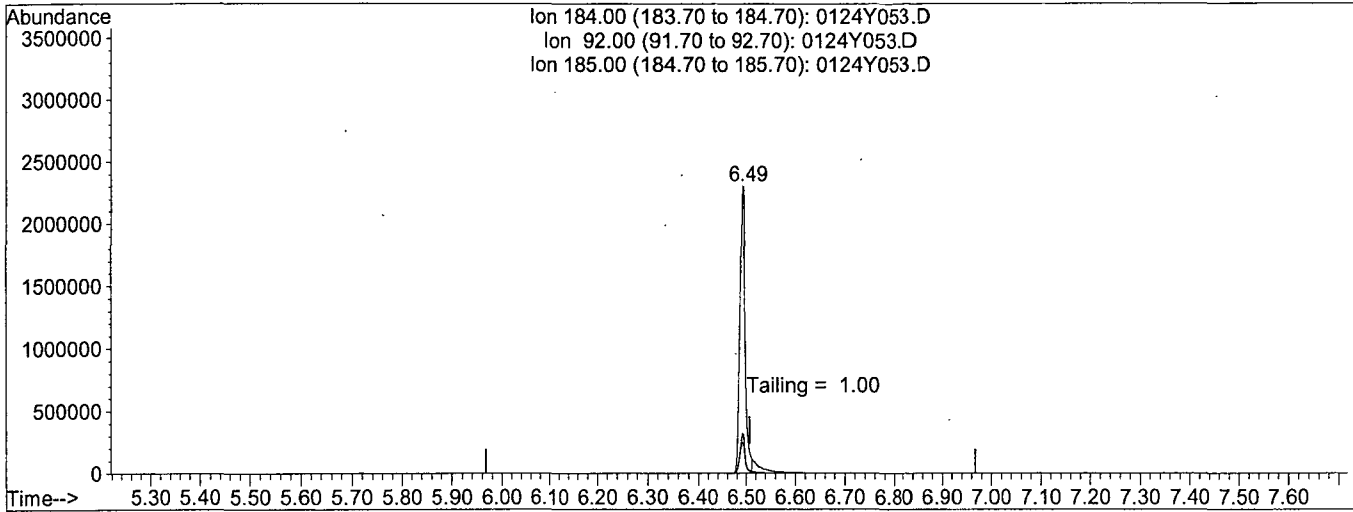
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	63.78
268.00	62.10	64.30
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y053.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 31 5:55 2019

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y053.D

(6) Benzidine

6.49min 0.0000

response 19654115

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.99
185.00	13.80	14.04
0.00	0.00	0.00

Name of Final Standard  
Prep Date  
Exp Date

8270 Full Scan Standard Curve

01/23/19

09/17/19

Prep'd By (Initials)

OA

Initial Standard Information	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent+ Lot# (or APPL Prep Date)	Final Standard Conc.(range)
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	4 uL	200uL	MC 56258 192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	4 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	10 uL	100uL	MC 56258 80 uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	10 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	20 uL	100uL	MC 56258 60 uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	20 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	200 uL	MC 56258 100 uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	30 uL	100uL	MC 56258 40 uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	30 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	40 uL	100uL	MC 56258 20 uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	40 uL			

SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			

**Name of Final Standard**      8270 Full Scan Second Source      **Prep'd By (Initials)**      OA  
**Prep Date**                      11/15/18  
**Exp Date**                         04/19/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent Lot# (or APPL Prep Date)	Final Standard Conc.(range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	04/19/18	04/19/19	50 uL	200uL	MC 56258 150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			

Name of  
Final  
Standard 8270 Full Scan Spike  
Prep Date 11/09/18  
Exp Date 10/20/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	051018-39433	11/09/19	1.0 mL	20 mL	NA	2000 ug/mL
10002	Absolute	10002	2000	051018-39437	11/09/19	1.0 mL			2000 ug/mL
10004	Absolute	10004	2000	071618-39441	11/09/19	1.0 mL			2000 ug/mL
10005	Absolute	10005	2000	032018-39609	11/09/19	1.0 mL			2000 ug/mL
10006	Absolute	10006	2000	071318-39447	11/09/19	1.0 mL			2000 ug/mL
10007	Absolute	10007	2000	080116-39614	11/09/19	1.0 mL			2000 ug/mL
10018	Absolute	10018	2000	062718-39452	11/09/19	1.0 mL			2000 ug/mL
70023	Absolute	70023	1000	020818-39457	11/09/19	1.0 mL			1000 ug/mL
82705	Absolute	82705	2000	081418-39618	11/09/19	1.0 mL			2000 ug/mL
94552	Absolute	94552	various	102017-39621	10/20/19	1.0 mL			various

Name of Final Standard 8270 Surrogate 200/400 ppm  
 Prep Date 10/17/18  
 Exp Date 09/27/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352-39395	10/17/19	200 uL	5 mL	MC 56258	400 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243-39166	09/27/19	200 uL			200 ug/mL

Name of Final Standard 8270 Internal Standard (Ampule)

Prep'd By (Initials)

OA

Prep Date 01/16/19  
Exp Date 01/16/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatiles Internal Standard	Restek	31206	2mg/mL	A0138585-39544	01/16/20	1 mL	1 mL	NA	2mg/mL

Name of  
Final  
Standard

**8270 SS STOCK**

Prep'd By (Initials)

**OA**

Prep Date **04/19/18**

Exp Date **04/19/19**

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
	Absolute	10001	2000	G34-081717-38180	04/19/19	1.0 mL	10 mL	NA	2000 ug/mL
	Absolute	10002	2000	G34-020217-38183	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10004	2000	010815-38624	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10005	2000	041317-37803	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10006	2000	011718-38826	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10007	2000	020515-38628	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10018	2000	G34-030216-38198	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	70023	1000	013118-38829	04/19/19	1.0 mL	*	*	1000 ug/mL
	Absolute	82705	2000	090617-38831	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	94552	various	013118-38824	04/19/19	1.0 mL	*	*	various



Name of  
 Final **8270 Surrogate 100/200**  
 Standard **ppm**

Prep'd By (Initials) **GA**

Prep Date **11/06/18**

Exp Date **09/27/19**

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Allquot from Stock	Final Volume	Final Solvent+ Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352 - 39395	10/17/19	5.0 mL	250 mL	Acetone #030817A	200 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243 - 39166 & A0140132 - 39545	09/27/19 11/06/19	5.0 mL	250 mL	*	100 ug/mL

# Organic Extraction Worksheet

<b>Method</b> Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b> 190128A	<b>Extraction Method</b> LIQ003	<b>Units</b> mL
Spiked ID 1 8270T Spike 11-20-18 EXP 10-20-19	Surrogate ID 1 8270 Surrogate 12-6-18 EXP 10-17-19		
Spiked ID 2 Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2 SIM Surrogate 12-14-18 EXO 12-14-19		
Spiked ID 3 DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19	Surrogate ID 3		
Spiked ID 4 HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19	Surrogate ID 4		
Spiked ID 5	Surrogate ID 5		
Spiked ID 6	Sufficient Vol for Matrix QC: NO		
Spiked ID 7	Ext. Start Time:	01/28/19 15:30, 01/29/19 16:15	
Spiked ID 8	Ext. End Time:	01/29/19 10:00, 01/30/19 06:30, 01/30/19 11:00	
GC Requires Extract By:		01/31/19 0:00	
pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria 75,77 °C
pH2	14	1/29/19 10:30:00 AM	
pH3			

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190128A Blk			1,0.050	1,2	800	1	2/1	01/28/19 14:20	
					equip	E-HP51 E-WB6				
2	190128A LCS-1	0.250	1	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP50 E-WB6				
3	190128A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
					equip	E-HP49 E-WB6				
4	190128A LCS-3	0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP48 E-WB6				
5	190128A LCSD-1	0.250	1	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP47 E-WB6				
6	190128A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
					equip	E-HP25 E-WB6				
7	190128A LCSD-3	0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP26 E-WB6				
8	AZ85404 AZ85404W33			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87916
					equip	E-HP27 E-WB6				
9	AZ85493 AZ85493W24			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87929
					equip	E-HP28 E-WB6				
10	AZ85520 AZ85520W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP29 E-WB6				
11	AZ85521 AZ85521W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP30 E-WB6				
12	AZ85523 AZ85523W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP17 E-WB6				
13	AZ85525 AZ85525W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP16 E-WB6				
14	AZ85527 AZ85527W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP15 E-WB5				
15	AZ85560 AZ85560W20			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87935
					equip	E-HP14 E-WB5				
16	AZ85565 AZ85565W22			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87940
					equip	E-HP13 E-WB5				

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	01/30/19
Time	12:50
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *ky*

Date *2/1/19*  
Page 463 of 953  
Ext\_ID 61593

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19	Surrogate ID 3					
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19	Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/28/19 15:30, 01/28/19 11:15			
Spiked ID 8		Ext. End Time:		01/29/19 10:00, 01/29/19 00:30, 01/30/19 11:00			
GC Requires Extract By:				01/31/19 0:00			
pH1	2	01/28/19 2:30:00 PM		Water Bath Temp Criteria		75,77 °C	
pH2	14	1/29/19 10:30:00 AM					
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17 AZ85567	AZ85567W22			1.0.050	1.2	800	1	2/1	01/28/19 14:20	87940
						equip		E-HP12 E-WB5		

Ker 2/1/19

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *Ker* Date 2/1/19  
 Page 464 of 953  
 Ext\_ID 61593

## Injection Log

Directory: M:\YODA\DATA\Y190124\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
14	0124Y014.D	1	SV TUNE 11/10/18		25 Jan 19 7:05
15	0124Y015.D	1	50ug/mL 8270 01/24/19		25 Jan 19 7:20
16	0124Y016.D	1	4ug/mL 8270 01/24/19		25 Jan 19 9:53
17	0124Y017.D	1	5ug/mL 8270 01/24/19		25 Jan 19 10:21
18	0124Y018.D	1	10ug/mL 8270 01/24/19		25 Jan 19 10:49
20	0124Y020.D	1	40ug/mL 8270 01/24/19		25 Jan 19 11:44
21	0124Y021.D	1	60ug/mL 8270 01/24/19		25 Jan 19 12:11
22	0124Y022.D	1	80ug/mL 8270 01/24/19		25 Jan 19 12:39
23	0124Y023.D	1	100ug/mL 8270 01/24/19		25 Jan 19 13:07
30	0124Y030.D	1	SV TUNE 11/10/18		28 Jan 19 11:49
33	0124Y033.D	1	20ug/mL 8270 01/24/19		28 Jan 19 13:36
34	0124Y034.D	1	SS-8270 01/24/19		28 Jan 19 14:11
93	0124Y053.D	1	SV TUNE 11/10/18		30 Jan 19 7:56
54	0124Y054.D	1	50ug/mL 8270 01/24/19		30 Jan 19 14:28
55	0124Y055.D	1.25	190128A BLK 1/800		30 Jan 19 14:56
56	0124Y056.D	1.25	190128A LCS-1 1/800		30 Jan 19 15:24
57	0124Y057.D	1.25	190128A LCSD-1 1/800		30 Jan 19 15:52
58	0124Y058.D	1.25	AZ85520W11 1/800		30 Jan 19 16:20
59	0124Y059.D	1.25	AZ85521W10 1/800		30 Jan 19 16:48
60	0124Y060.D	1.25	AZ85523W10 1/800		30 Jan 19 17:16
61	0124Y061.D	1.25	AZ85525W11 1/800		30 Jan 19 17:44
62	0124Y062.D	1.25	AZ85527W10 1/800		30 Jan 19 18:11
65	0124Y065.D	1	50ug/mL 8270 01/24/19		30 Jan 19 19:35

**ORGANICS**  
**Calibration Data**

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 11/28/18  
Instrument: Yoda

Initials: \_\_\_\_\_

1128Y004.D 1128Y005.D 1128Y006.D 1128Y007.D 1128Y012.D 1128Y008.D 1128Y009.D 1128Y010.D

	Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r^2	Q	MRF
1	I 1,4-dichlorobenzene-D4(IS)																
2	TM 2-(2-Methoxyethoxy)ethanol	0.2305	0.2453	0.2498	0.2070	0.2284	0.2415	0.2719	0.2475			0.24	7.9	TM			
3	I Napthalene-D8(IS)																
4	I Acenaphthene-D10(IS)																
5	I Phenanthrene-D10(IS)																
6	I Chrysene-D12(IS)																
7	I Perylene-D12(IS)																
8																	
9																	
10																	
11																	
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14																	
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34																	
35																	

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y004.D Vial: 4  
 Acq On : 28 Nov 18 8:08 Operator: MA  
 Sample : 50ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	846679	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3808187	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1917814	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3593004	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3055748	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3109829	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	243946	76.98478	ppb	99

Quantitation Report

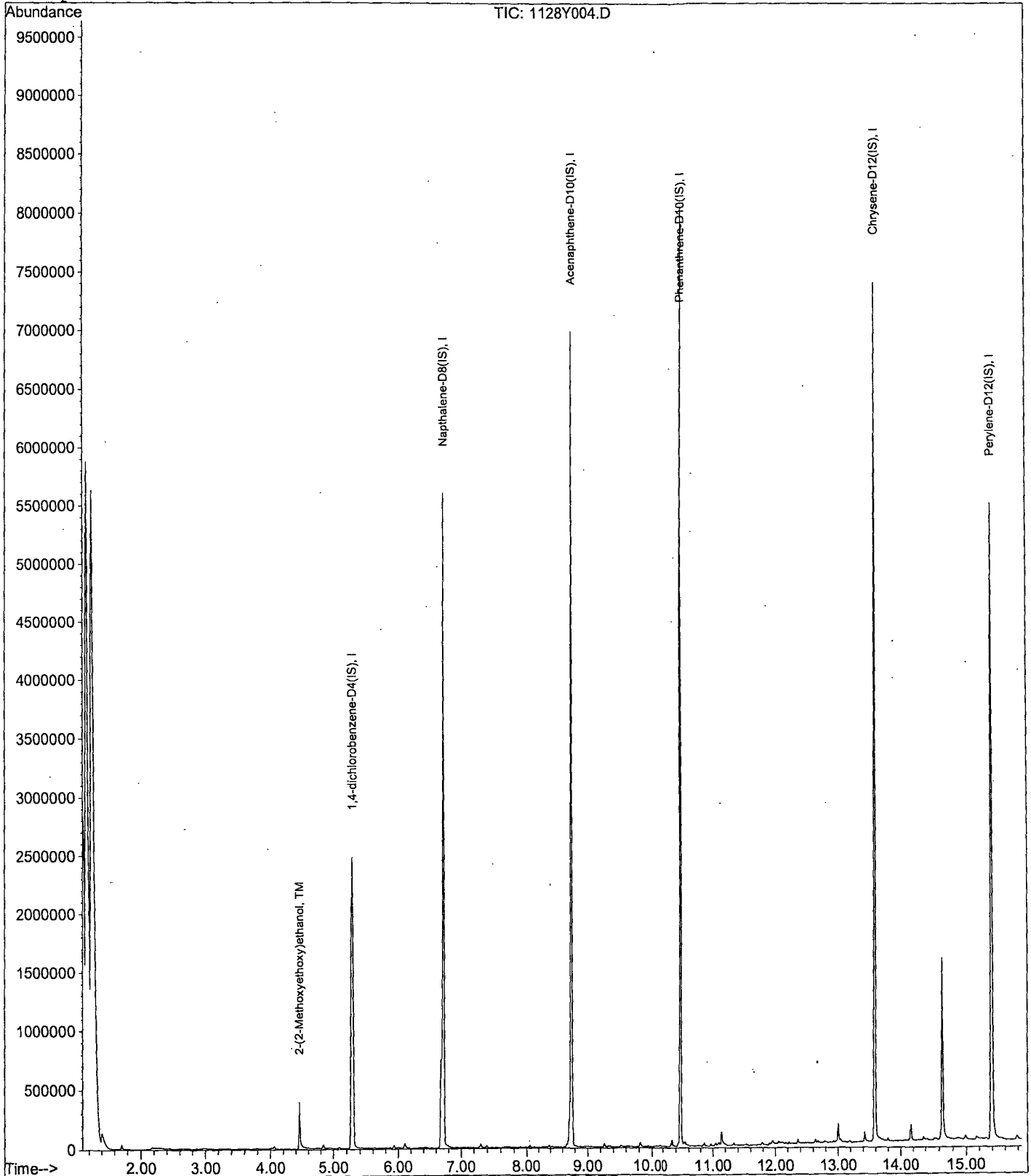
Data File : M:\YODA\DATA\Y181128M\1128Y004.D  
Acq On : 28 Nov 18 8:08  
Sample : 50ug/ml MEE 08/01/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y005.D Vial: 5  
 Acq On : 28 Nov 18 8:32 Operator: MA  
 Sample : 100ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	833525	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3655933	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1870603	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3472767	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	2784977	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2713194	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.47	45	511054	121.26713	ppb	99

Quantitation Report

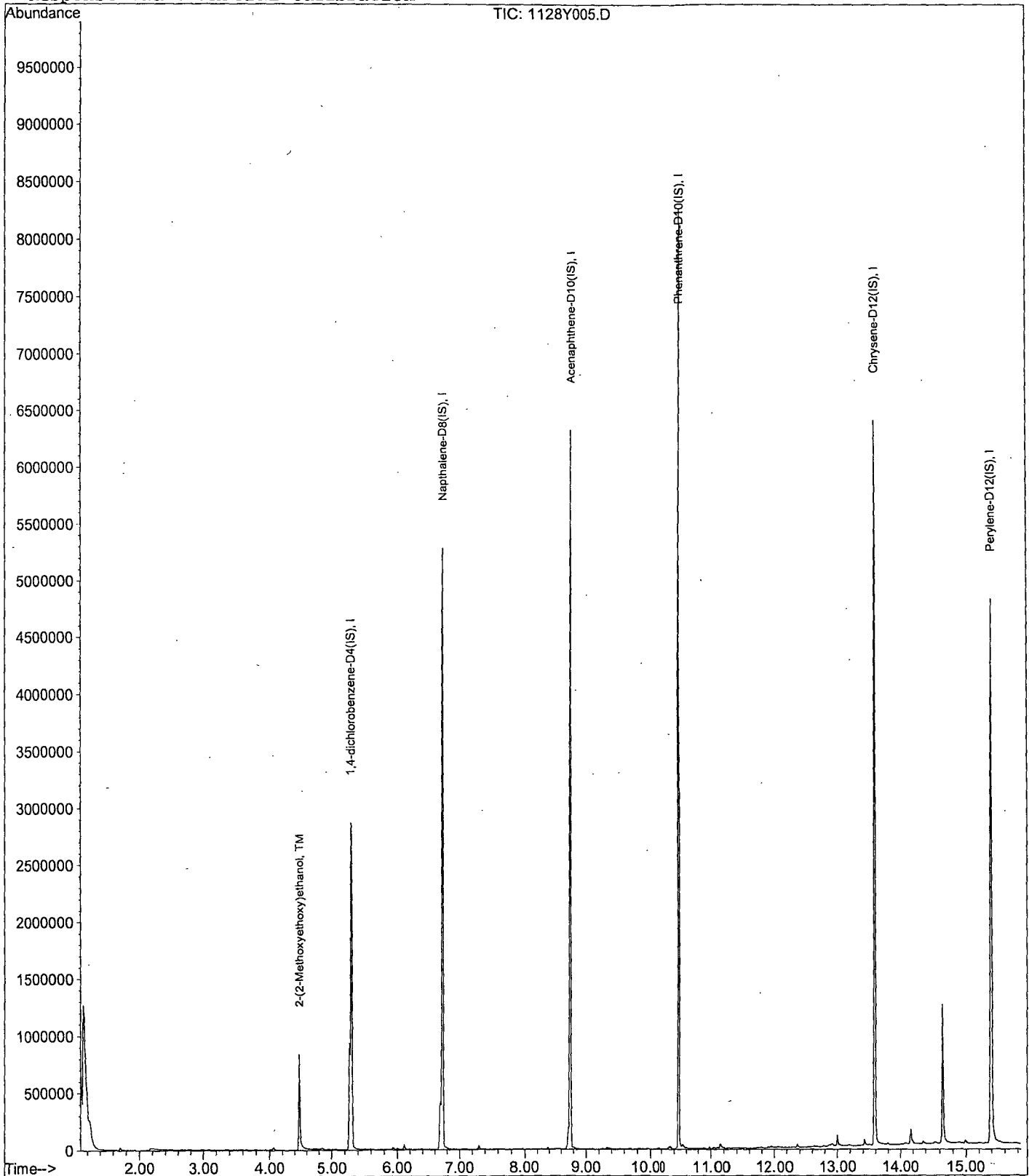
Data File : M:\YODA\DATA\Y181128M\1128Y005.D  
Acq On : 28 Nov 18 8:32  
Sample : 100ug/ml MEE 08/01/18  
Misc : soil

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y006.D Vial: 6  
 Acq On : 28 Nov 18 8:55 Operator: MA  
 Sample : 200ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	906220	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4175598	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2128971	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3974569	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3488549	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3293123	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1131710	207.88279	ppb	99

Quantitation Report

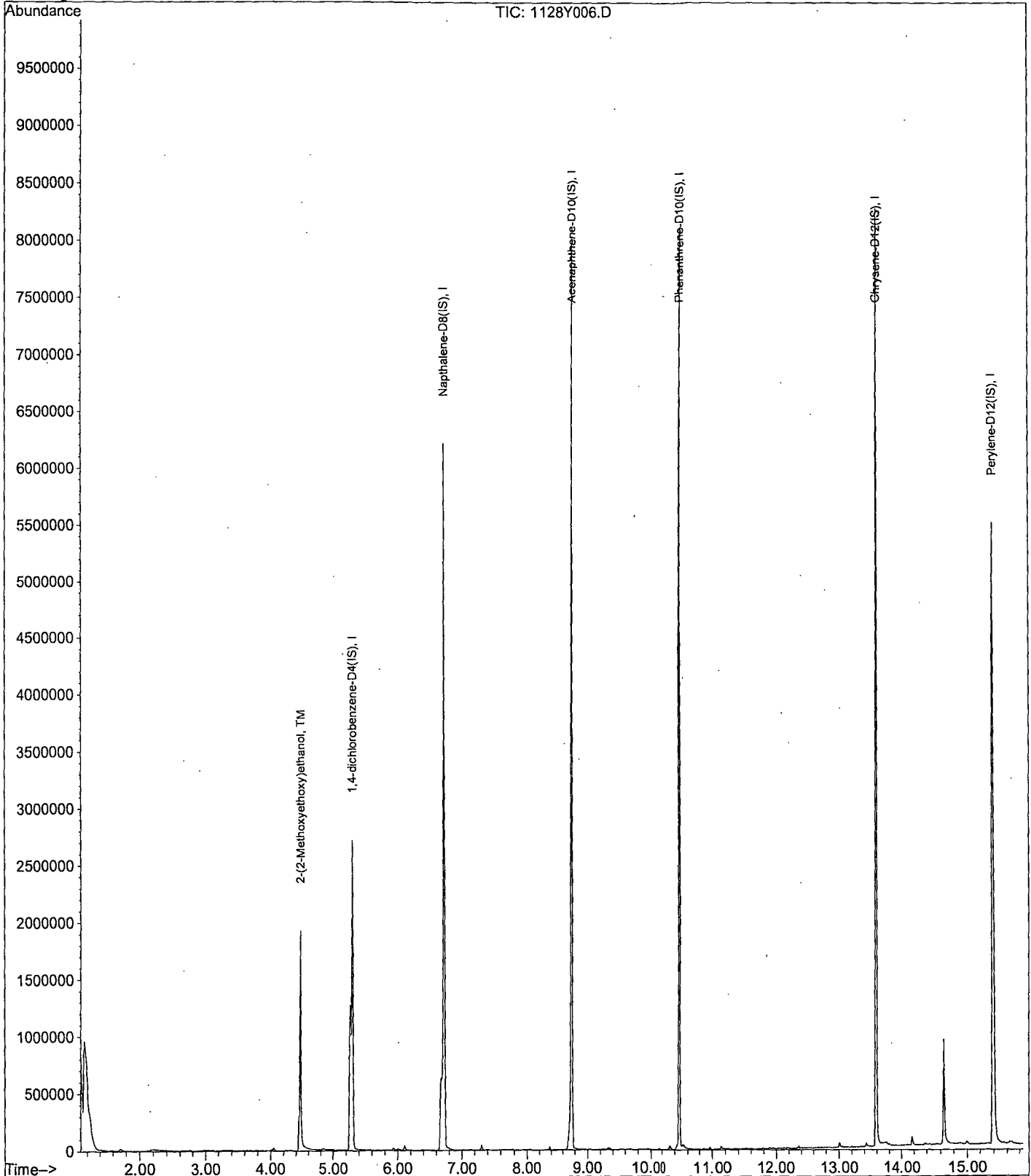
Data File : M:\YODA\DATA\Y181128M\1128Y006.D  
Acq On : 28 Nov 18 8:55  
Sample : 200ug/ml MEE 08/01/18  
Misc : soil

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y007.D Vial: 7  
 Acq On : 28 Nov 18 9:19 Operator: MA  
 Sample : 400ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:31 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	948008	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4475913	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2298421	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	4282330	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3776629	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3748965	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1962520	319.79035	ppb	100

Quantitation Report

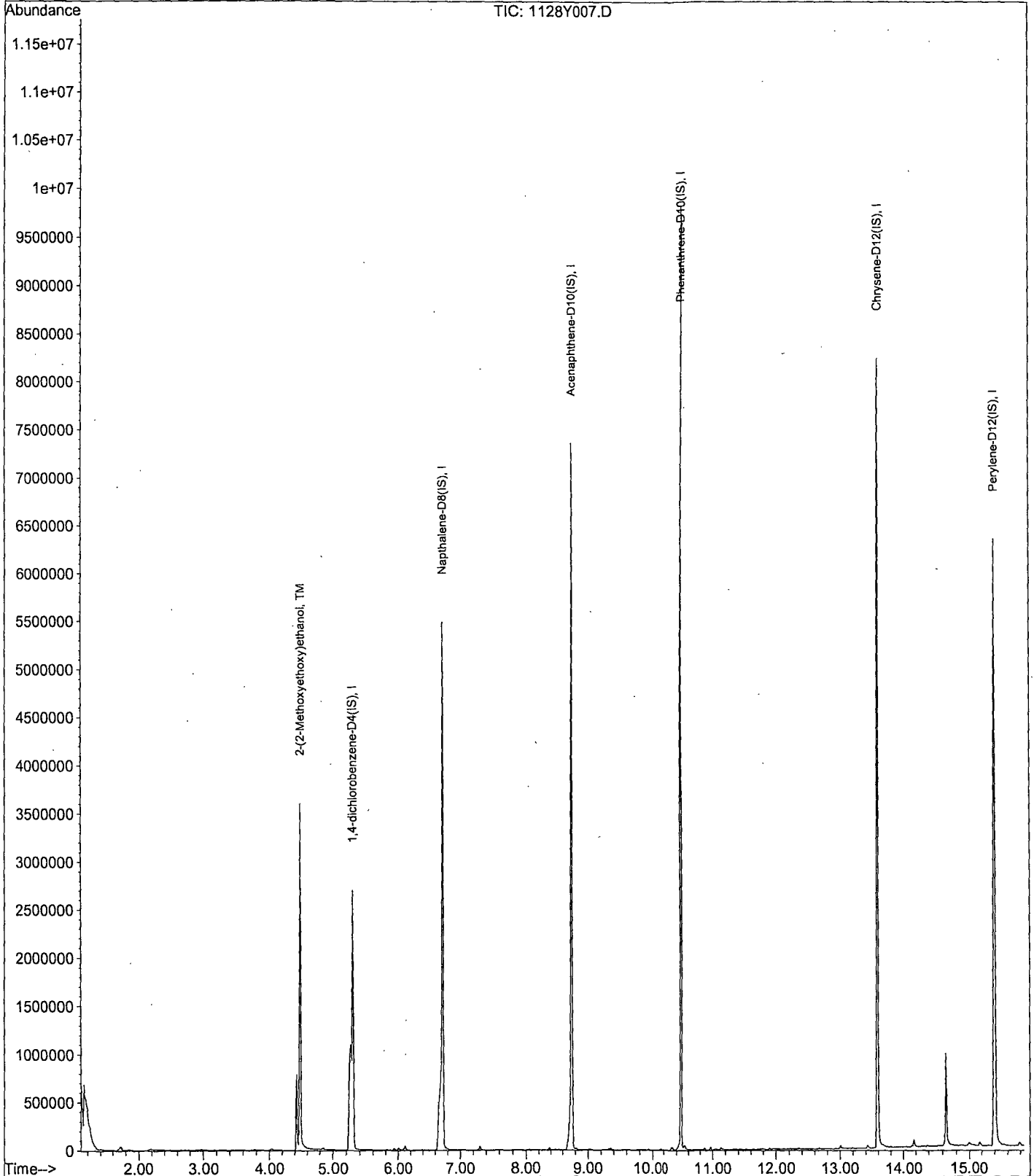
Data File : M:\YODA\DATA\Y181128M\1128Y007.D  
Acq On : 28 Nov 18 9:19  
Sample : 400ug/ml MEE 08/01/18  
Misc : soil

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:31 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y012.D Vial: 12  
 Acq On : 28 Nov 18 11:17 Operator: MA  
 Sample : 500ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:25 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 09:56:17 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	830482	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3639618	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1806558	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3340149	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	2995047	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2844171	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2370937	400.21340	ppb	100

Quantitation Report

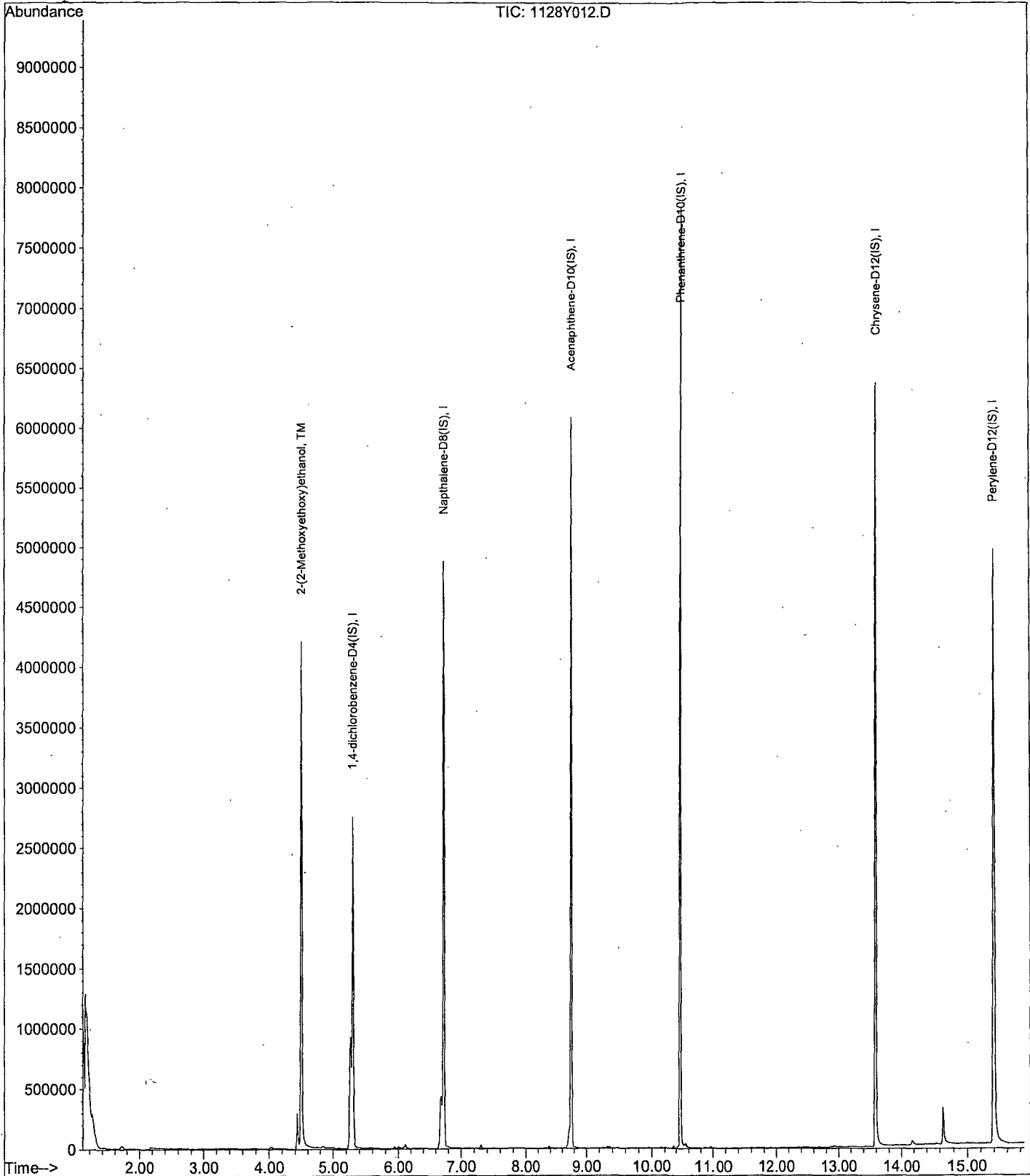
Data File : M:\YODA\DATA\Y181128M\1128Y012.D  
Acq On : 28 Nov 18 11:17  
Sample : 500ug/ml MEE 08/01/18  
Misc : soil

Vial: 12  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:25 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y008.D, Vial: 8  
 Acq On : 28 Nov 18 9:43 Operator: MA  
 Sample : 600ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	856651m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3531920	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2073085	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3859845	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3489580	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3140389	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.50	45	3103564	483.70926	ppb	100

Quantitation Report

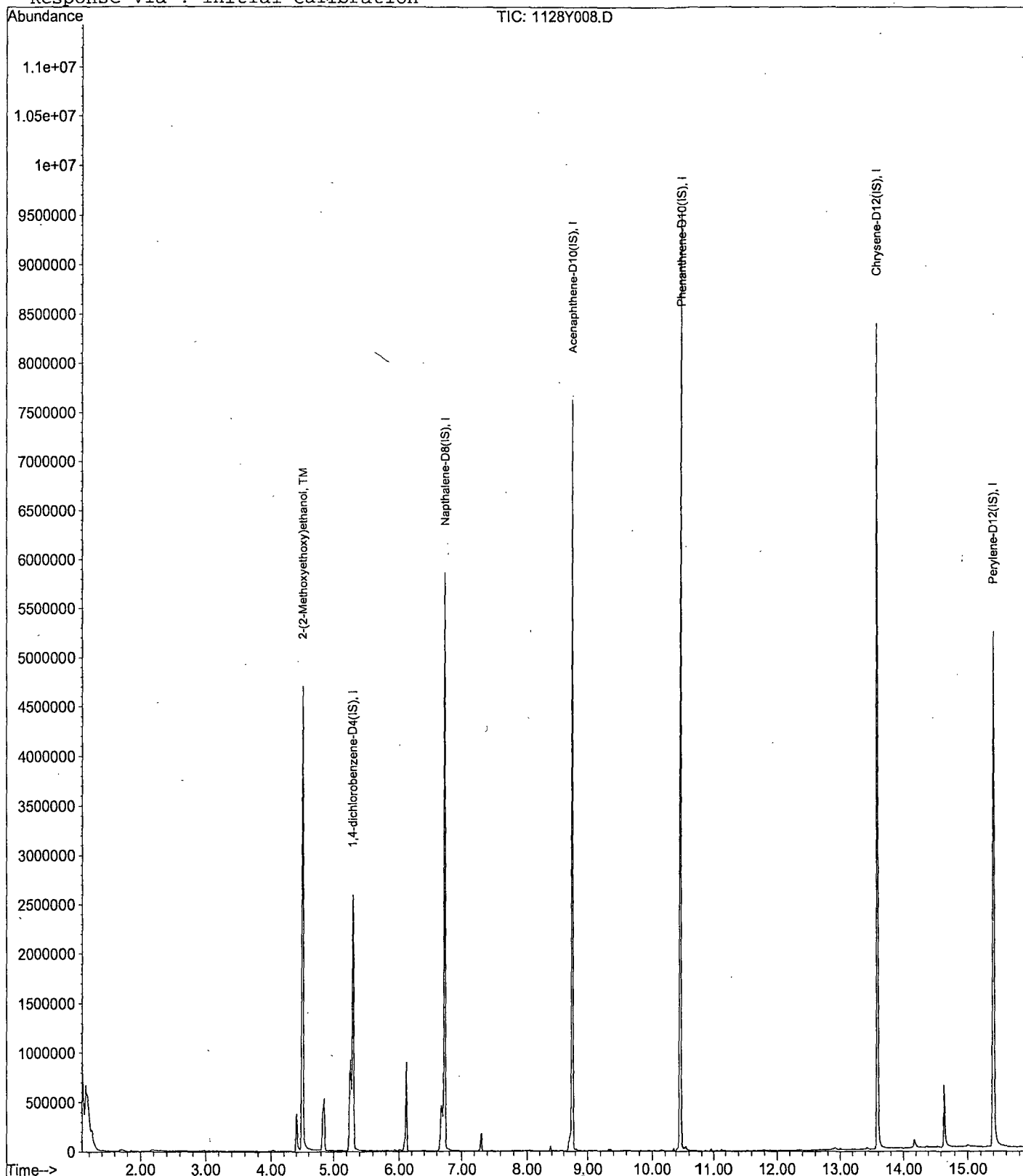
Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
Acq On : 28 Nov 18 9:43  
Sample : 600ug/ml MEE 08/01/18  
Misc : soil

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

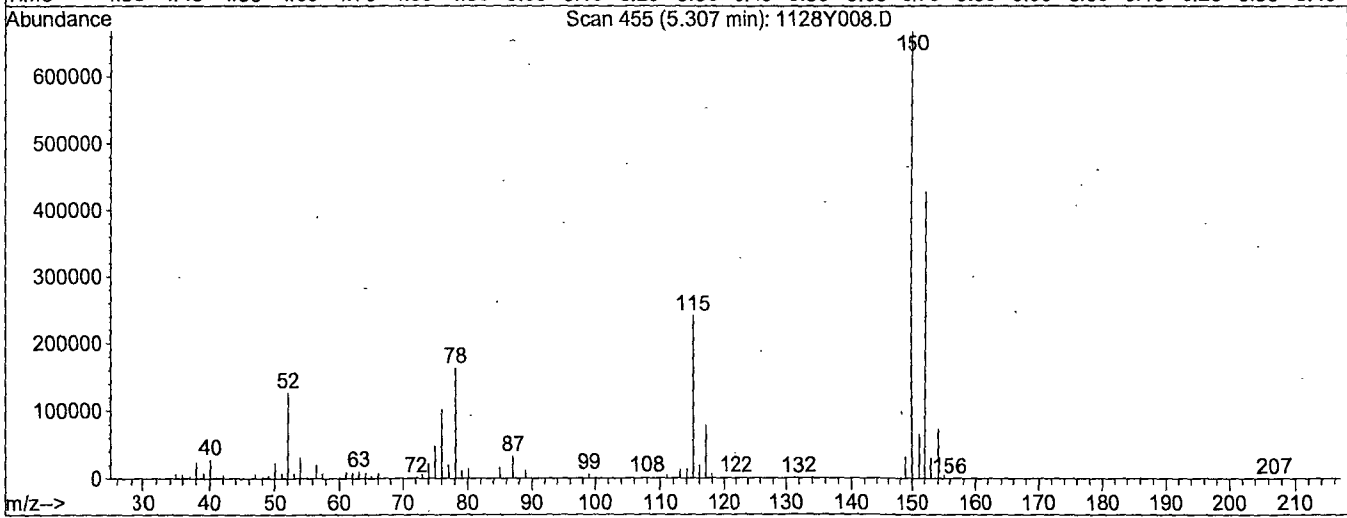
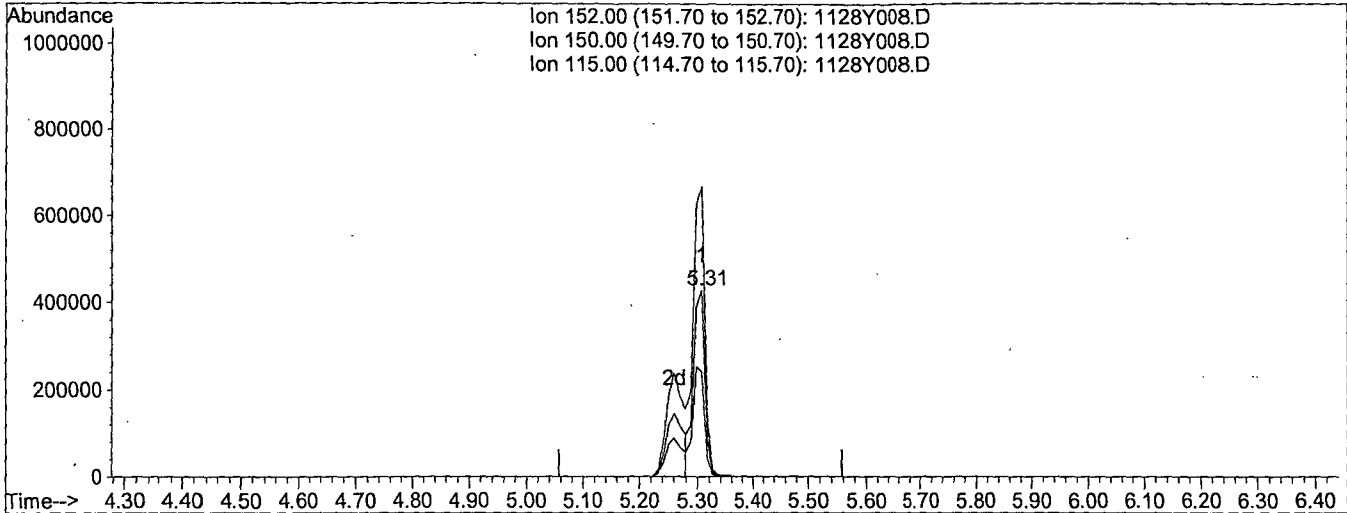


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.31min 40.0000ppb

response 580797

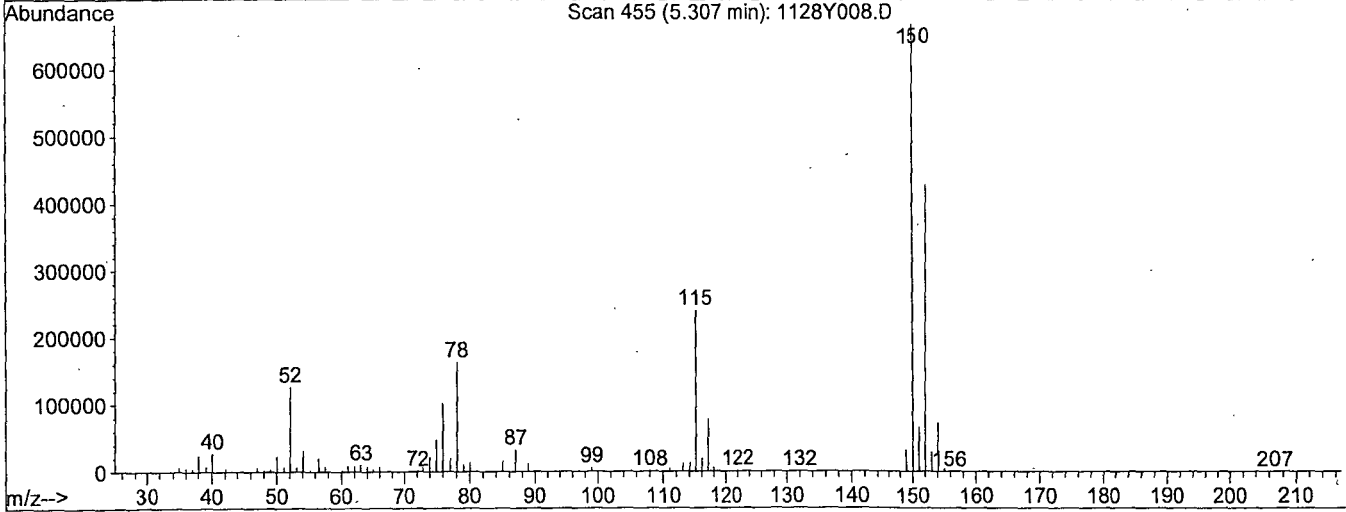
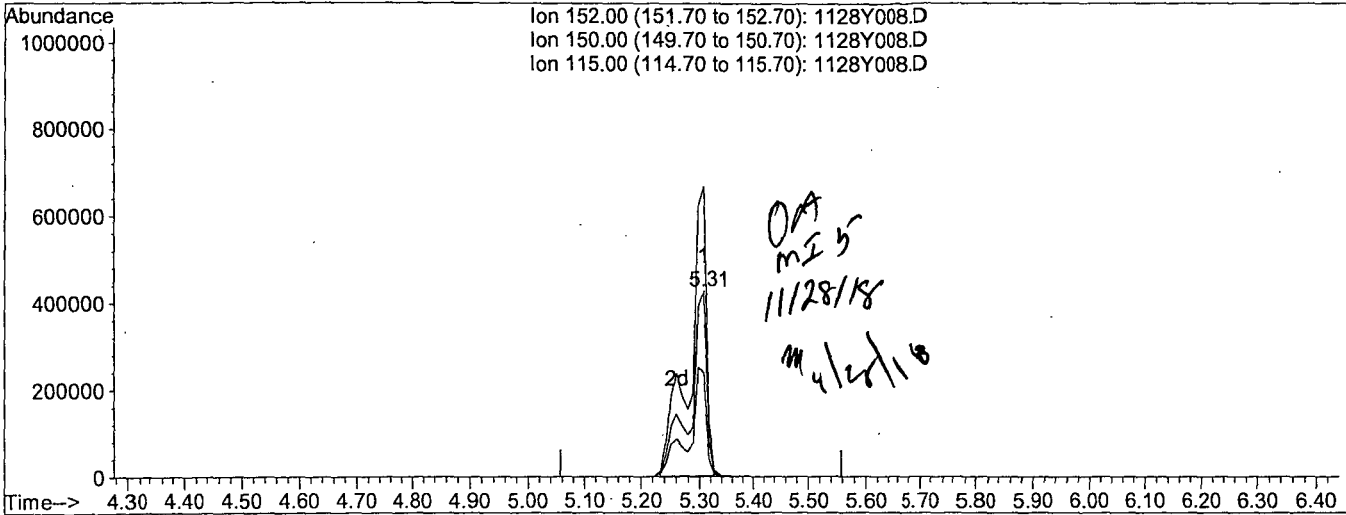
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.26
115.00	56.30	56.24
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
Acq On : 28 Nov 18 9:43  
Sample : 600ug/ml MEE 08/01/18  
Misc : soil  
Quant Time: Nov 28 11:40 2018

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:40:16 2018  
Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.31min 40.0000ppb m

response 856651

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.25
115.00	56.30	56.26
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y009.D Vial: 9  
 Acq On : 28 Nov 18 10:06 Operator: MA  
 Sample : 800ug/ml MEE 08/01/18 Inst. : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	785528m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3646286	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2099263	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3938984	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3411642	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2743638	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.52	45	4272210	778.75542	ppb	98

Quantitation Report

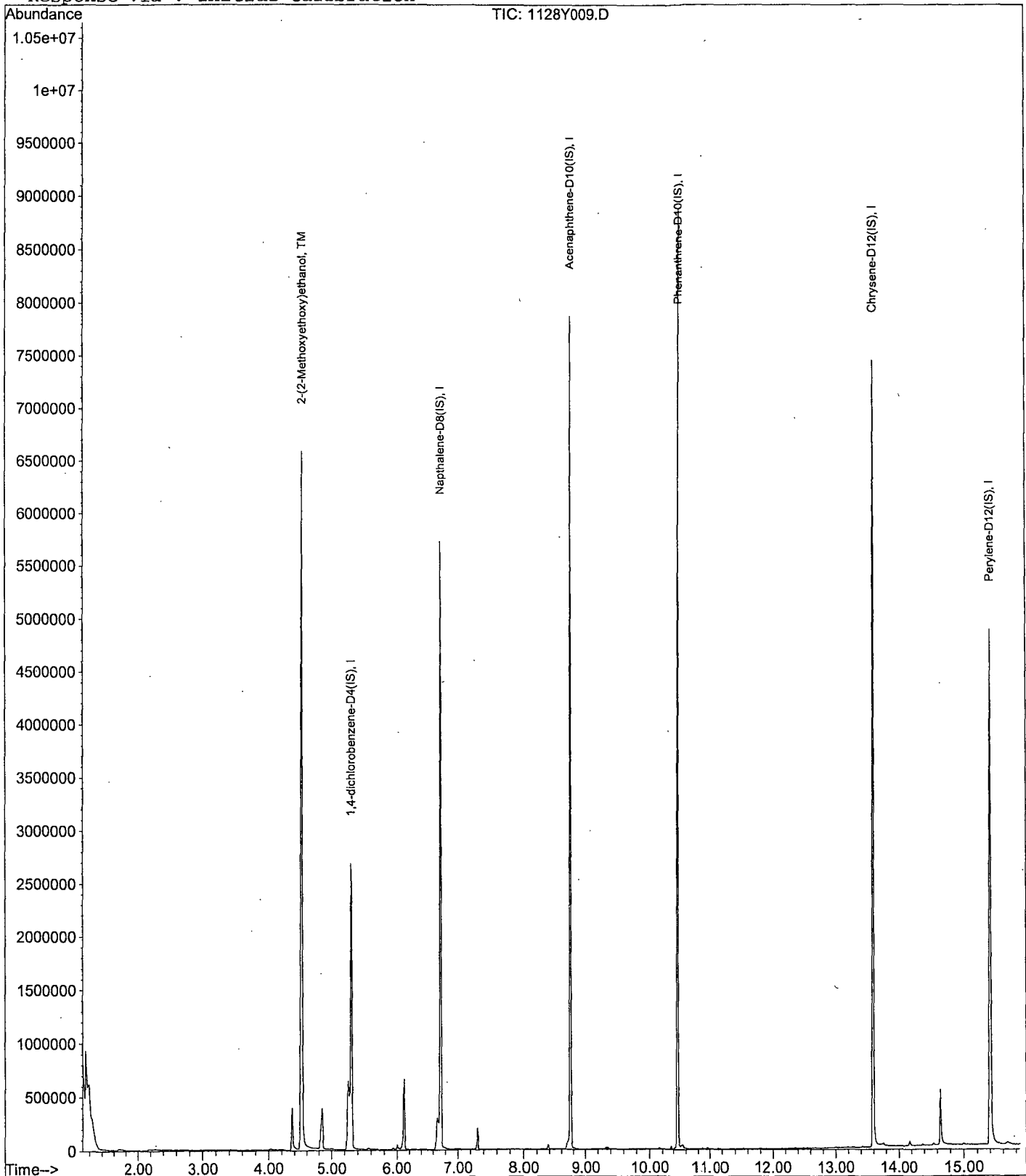
Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
Acq On : 28 Nov 18 10:06  
Sample : 800ug/ml MEE 08/01/18  
Misc : soil

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

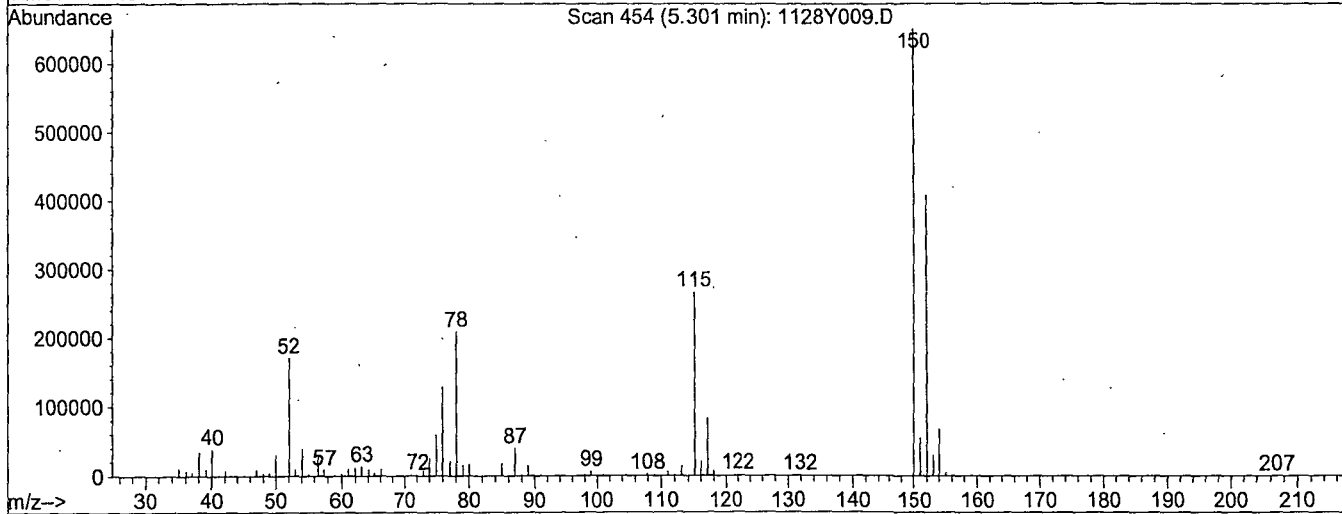
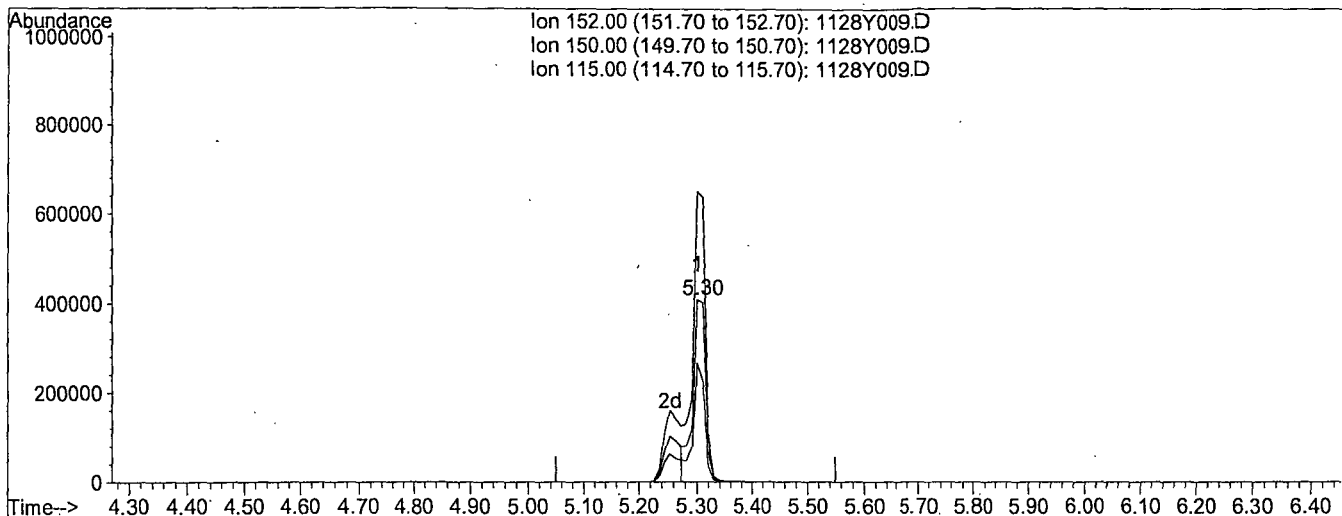


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:31 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 614492

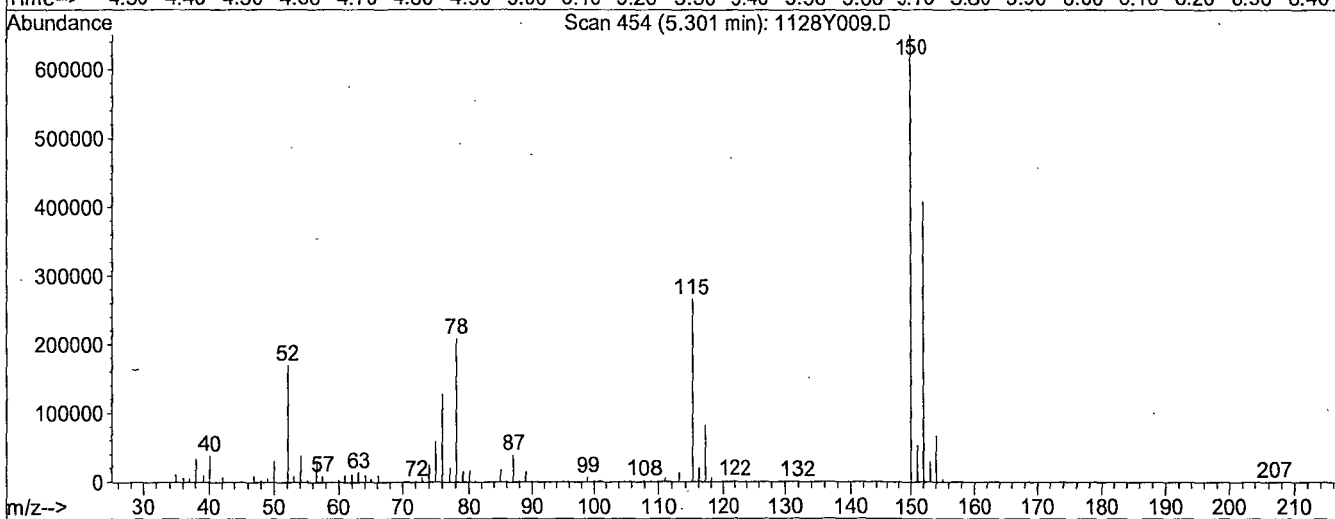
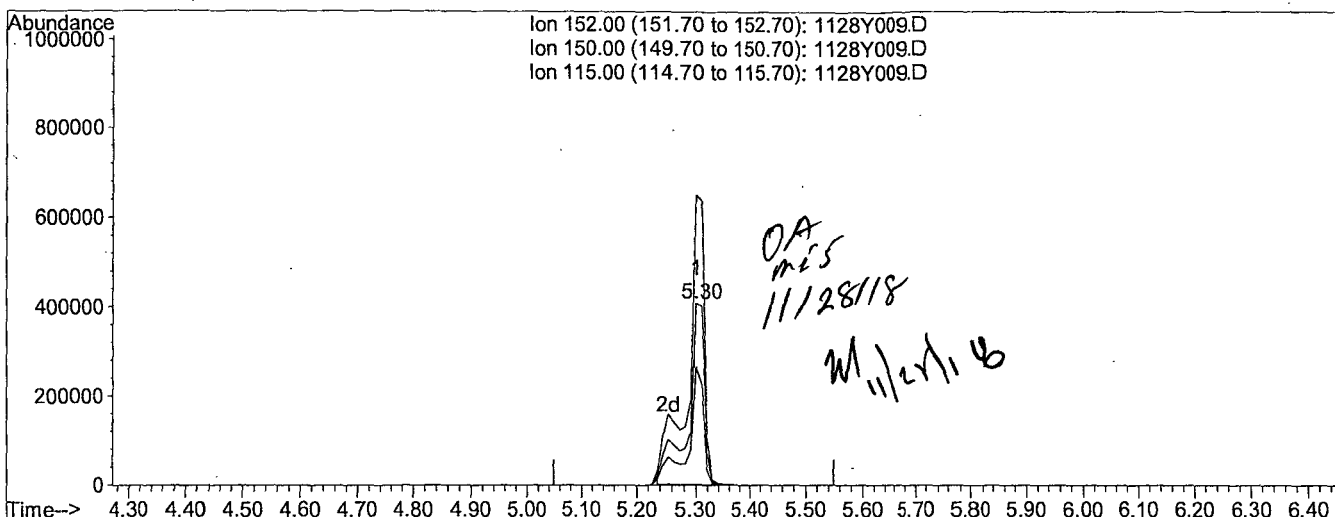
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.30
115.00	63.20	65.14
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 785528

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.35
115.00	63.20	65.18
0.00	0.00	0.00



Quantitation Report (QT Reviewed)

Data-File : M:\YODA\DATA\Y181128M\1128Y010.D Vial: 10.  
 Acq On : 28 Nov 18 10:30 Operator: MA  
 Sample : 1000ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:41 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	817975m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3554268	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2016499	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3774107	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3353765	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3559145	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.53	45	5060771	787.46043	ppb	98

Quantitation Report

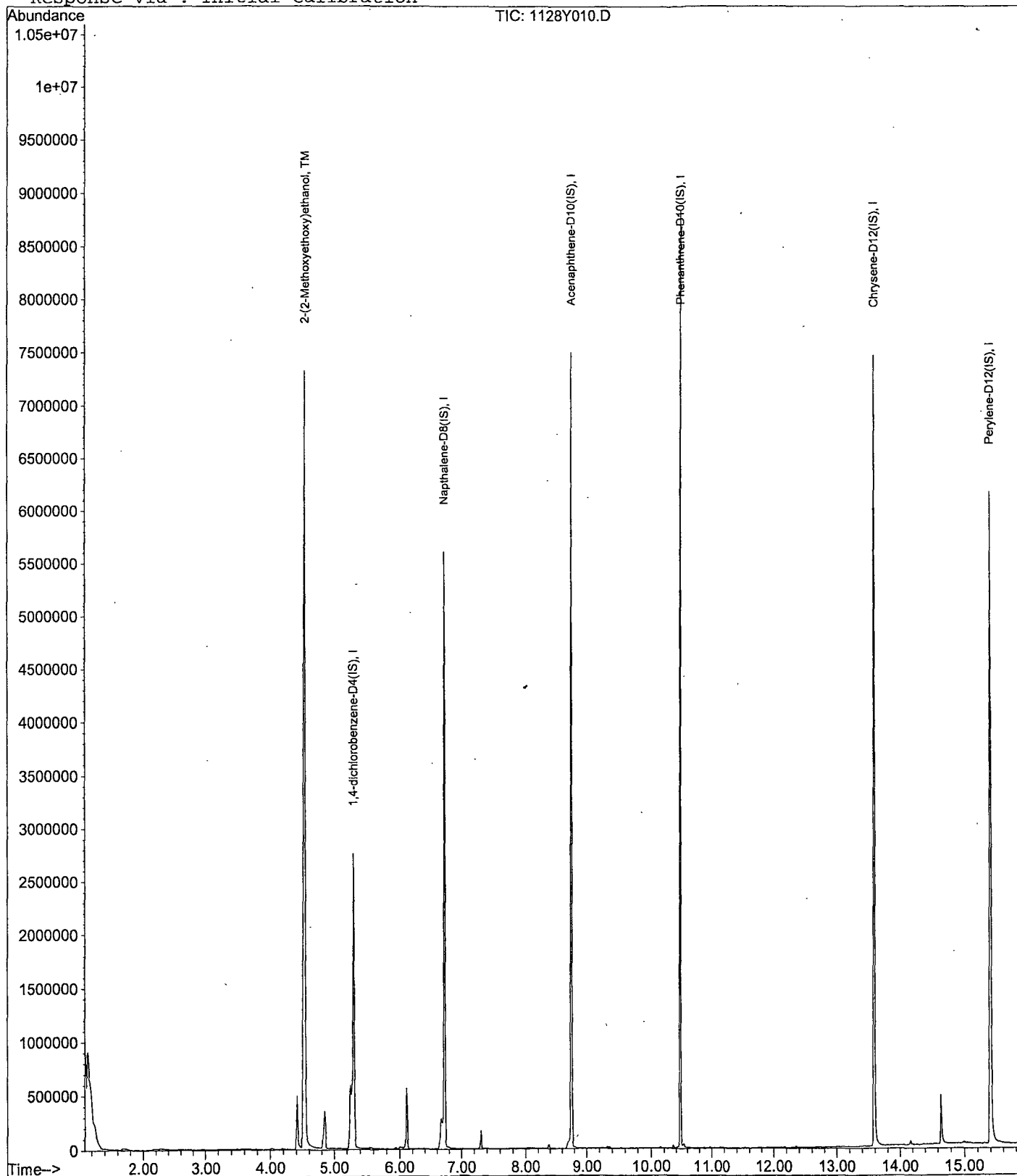
Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
Acq On : 28 Nov 18 10:30  
Sample : 1000ug/ml MEE 08/01/18  
Misc : soil

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:41 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

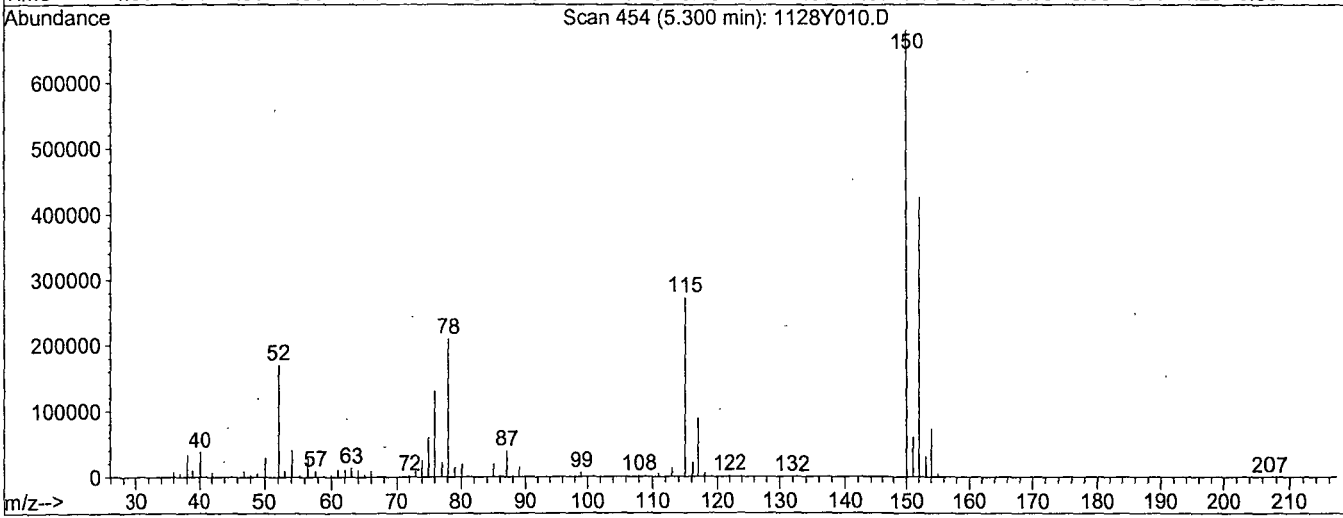
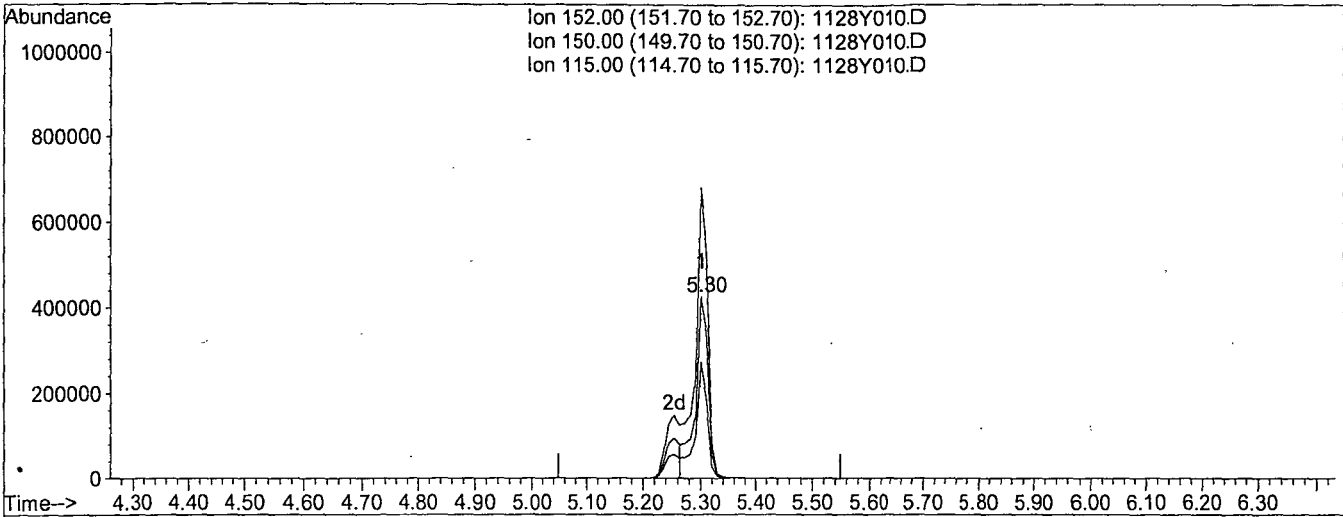


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:32 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.30min 40.0000ppb

response 652352

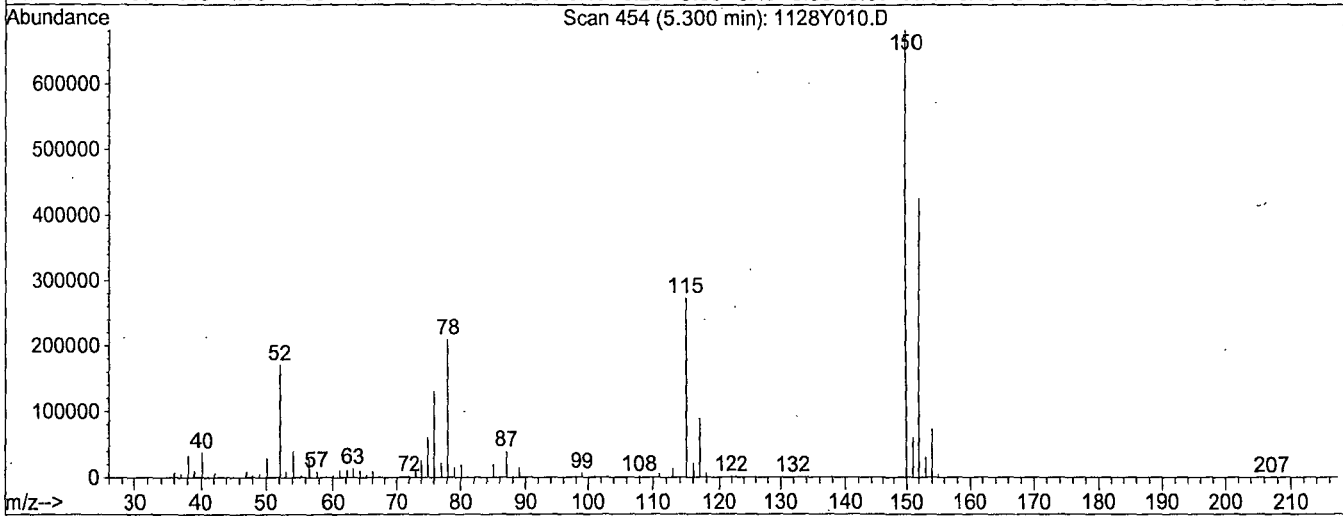
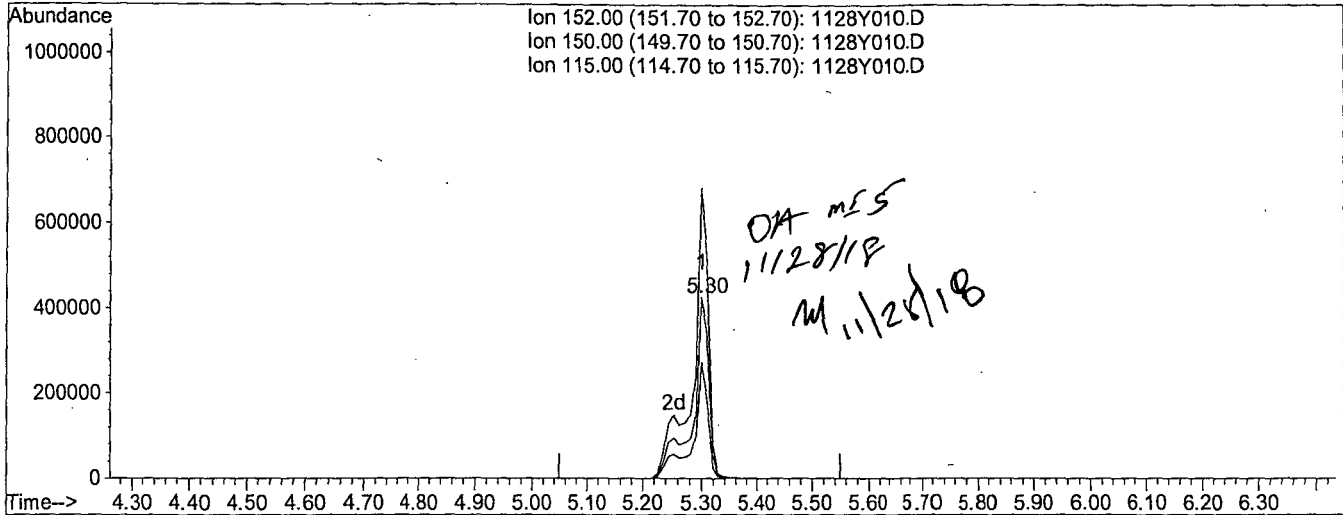
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.08
115.00	63.20	64.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:41 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 817975

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.10
115.00	63.20	64.11
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 11/28/18  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y014.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2671	11	TM
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
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35						
36						
37						
38						
39						
40						

Average

11.0

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y014.D Vial: 14  
 Acq On : 28 Nov 18 12:26 Operator: MA  
 Sample : SS ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 12:58 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	835108m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3156594	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1957153	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3684850	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3336185	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3221218	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2787828	555.84367	ppb	100

Quantitation Report

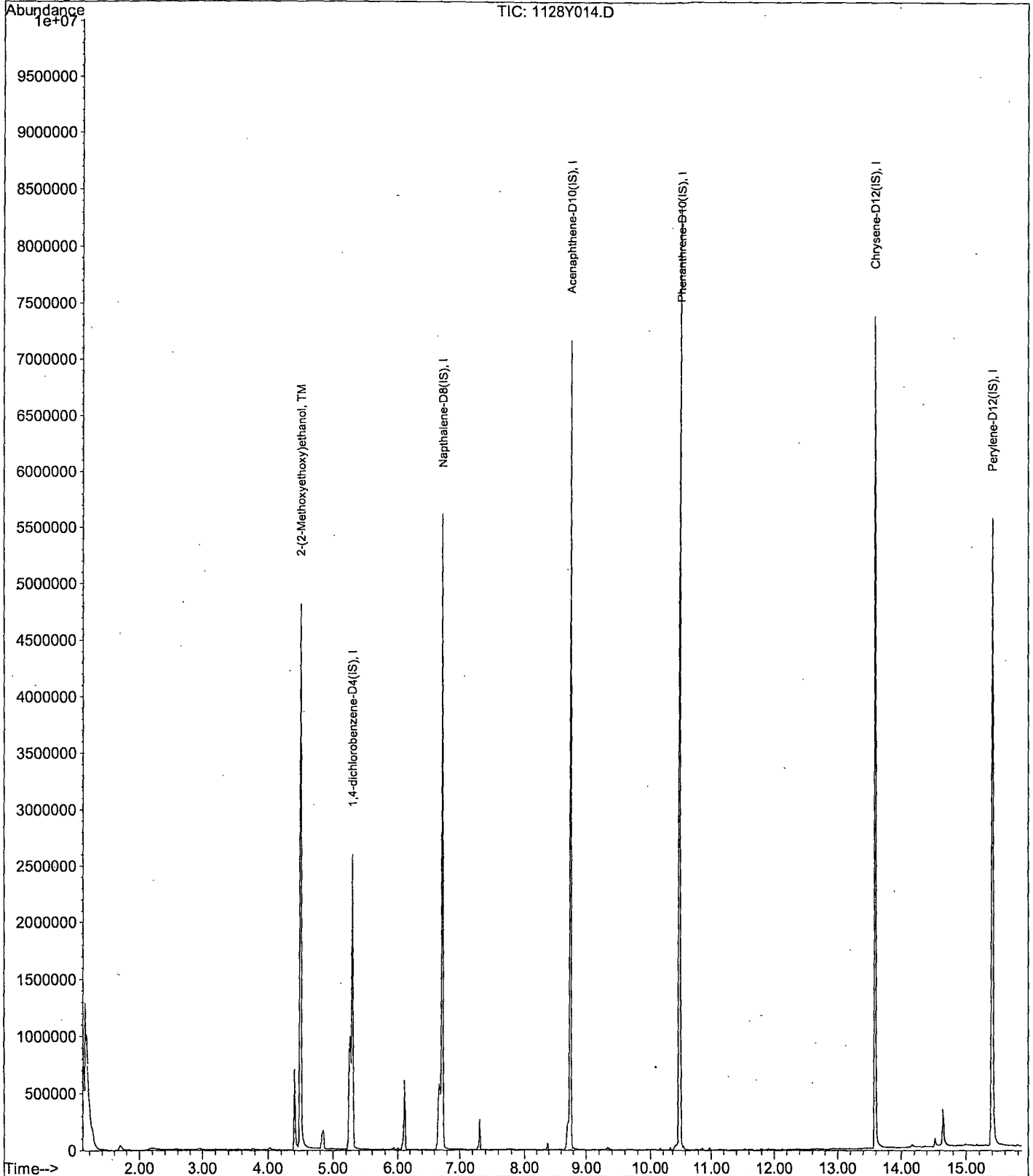
Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
Acq On : 28 Nov 18 12:26  
Sample : SS ug/ml MEE 08/01/18  
Misc : soil

Vial: 14  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 12:58 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

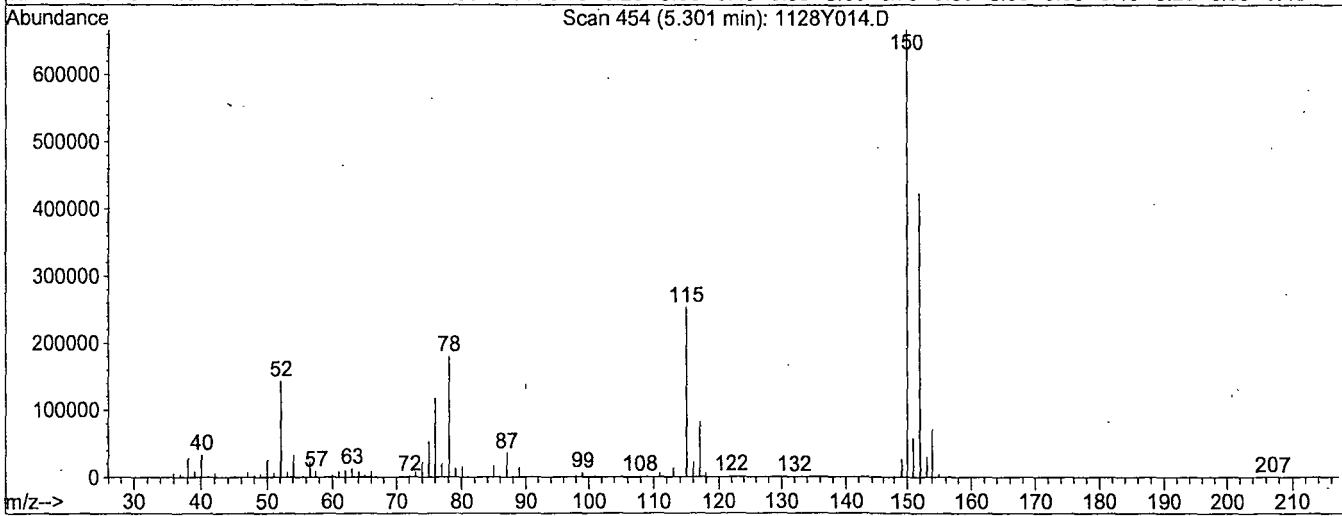
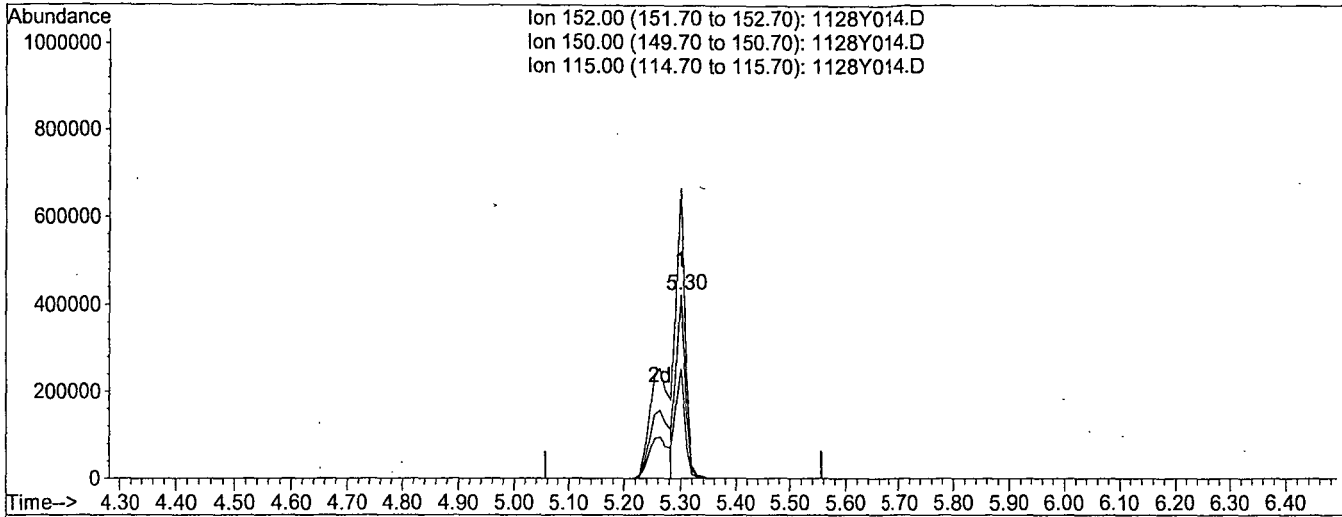


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 473674

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.54
115.00	56.30	59.84
0.00	0.00	0.00

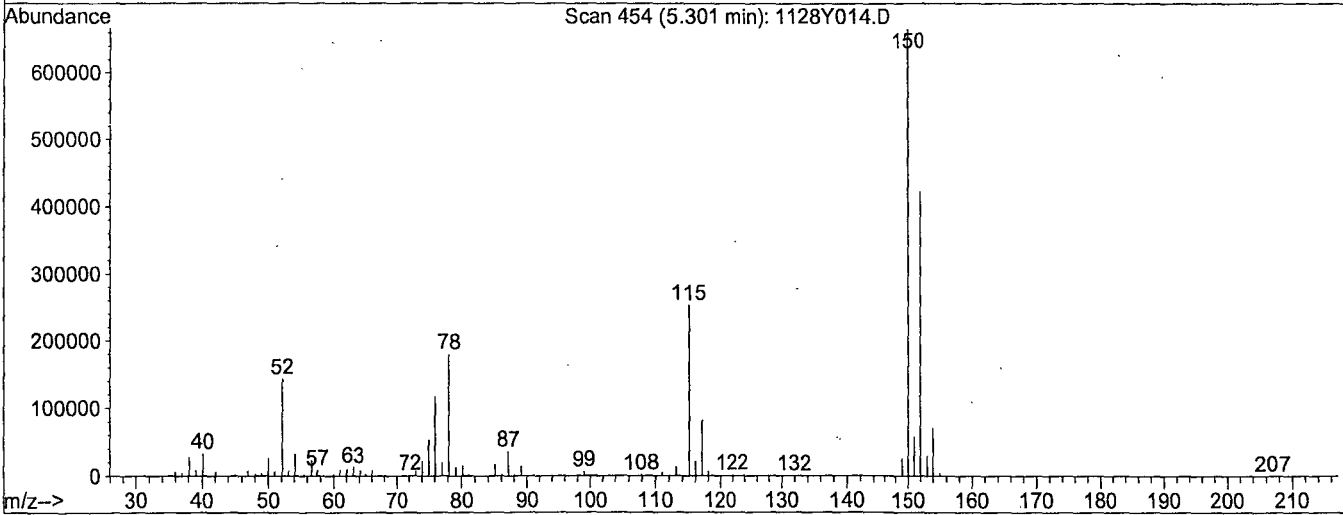
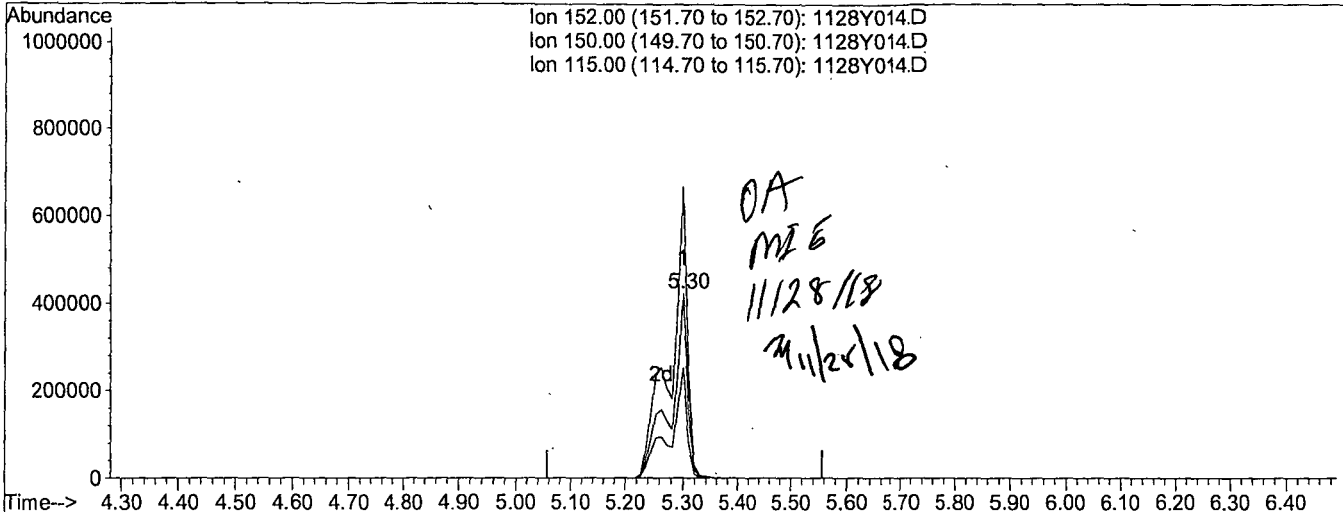


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.30min 40.0000ppb m

response 835108

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.52
115.00	56.30	59.85
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y057.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2337	2.7	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
8					
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39					
40	Average			2.7	

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y057.D Vial: 57  
 Acq On : 29 Jan 19 8:51 Operator: MA  
 Sample : 500ug/mL mee 12/12/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 8:56 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.22	152	614573	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.65	136	2630250	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1440513	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2797253	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2568643	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2576041	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.41	45	1795438	486.43662	ppb	96

Quantitation Report

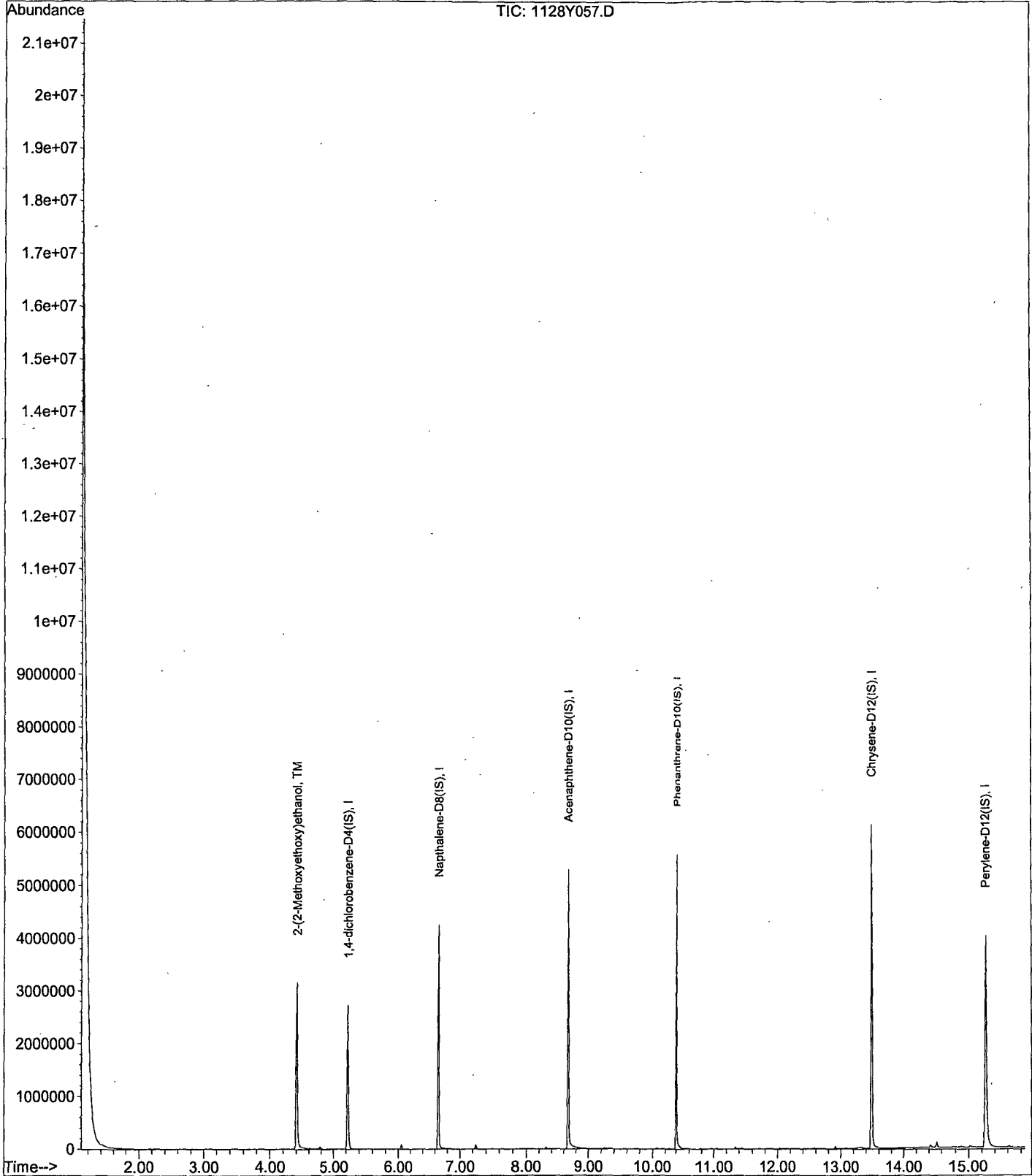
Data File : M:\YODA\DATA\Y181128M\1128Y057.D  
Acq On : 29 Jan 19 8:51  
Sample : 500ug/mL mee 12/12/18  
Misc : soil

Vial: 57  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 8:56 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y088.D

	Compound	MEAN	CCRF	%D	%Drift
1	1,4-dichlorobenzene-D4(IS)	ISTD			
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	Napthalene-D8(IS)	ISTD			
4	Acenaphthene-D10(IS)	ISTD			
5	Phenanthrene-D10(IS)	ISTD			
6	Chrysene-D12(IS)	ISTD			
7	Perylene-D12(IS)	ISTD			
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40	Average			8.2	

2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y088.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
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40	Average			8.2	

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
 Acq On : 29 Jan 19 21:24  
 Sample : 500ug/ml MEE 12/19/18  
 Misc : soil

Vial: 88  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	611145	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.66	136	2644721	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1462932	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2896073	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2668383	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2642413	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.41	45	1684434	458.92220	ppb	96

Quantitation Report

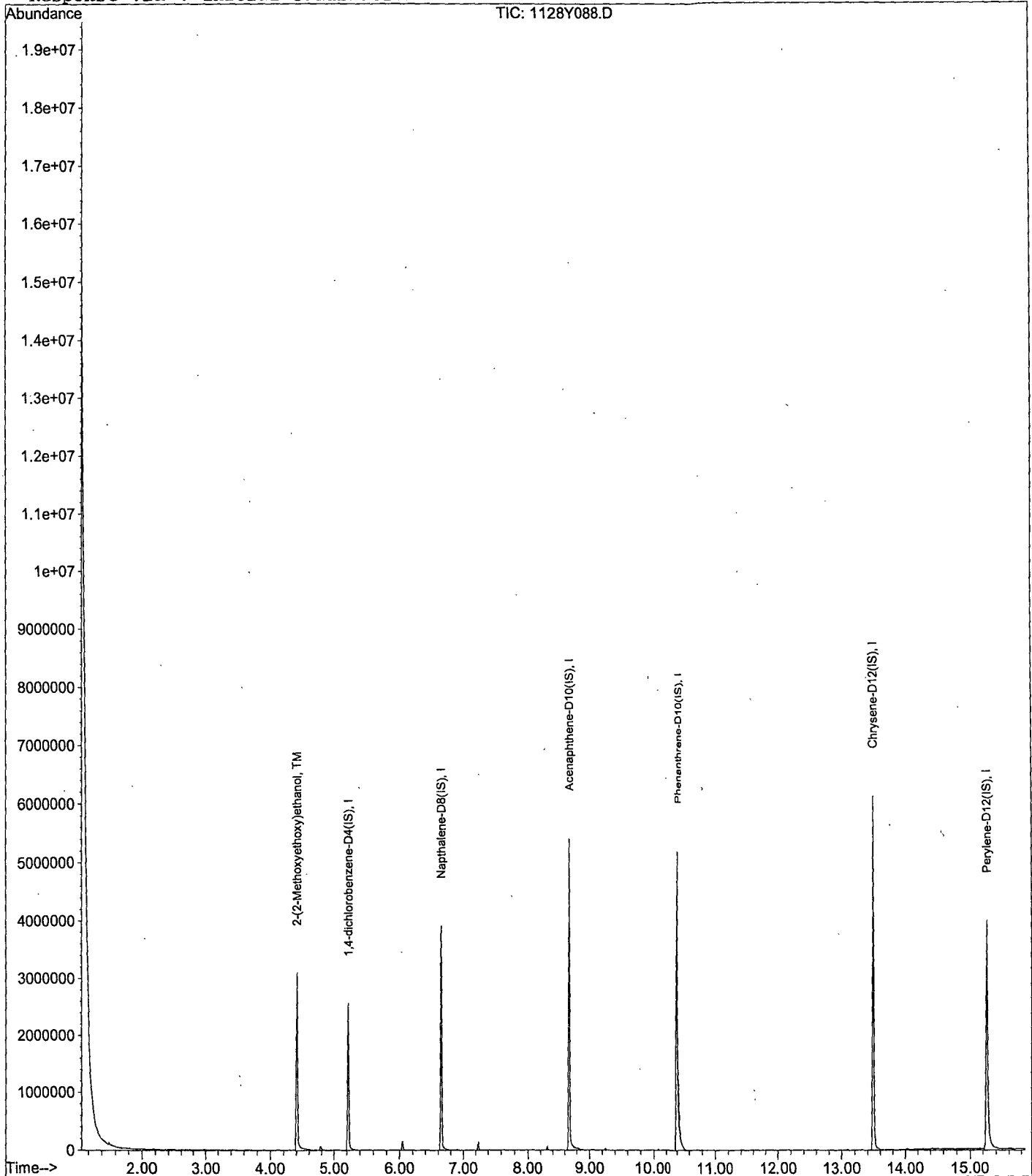
Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
Acq On : 29 Jan 19 21:24  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 88  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y094.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2563	6.7	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
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Average

6.7

Data File : M:\YODA\DATA\Y181128M\1128Y094.D Vial: 94  
 Acq On : 30 Jan 19 8:52 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 8:57 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	518699	40.00000	ppb	-0.07
3) Napthalene-D8 (IS)	6.65	136	2104684	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	1087736	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	2067856	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1821184	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1705599	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.44	45	1662065	533.53378	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

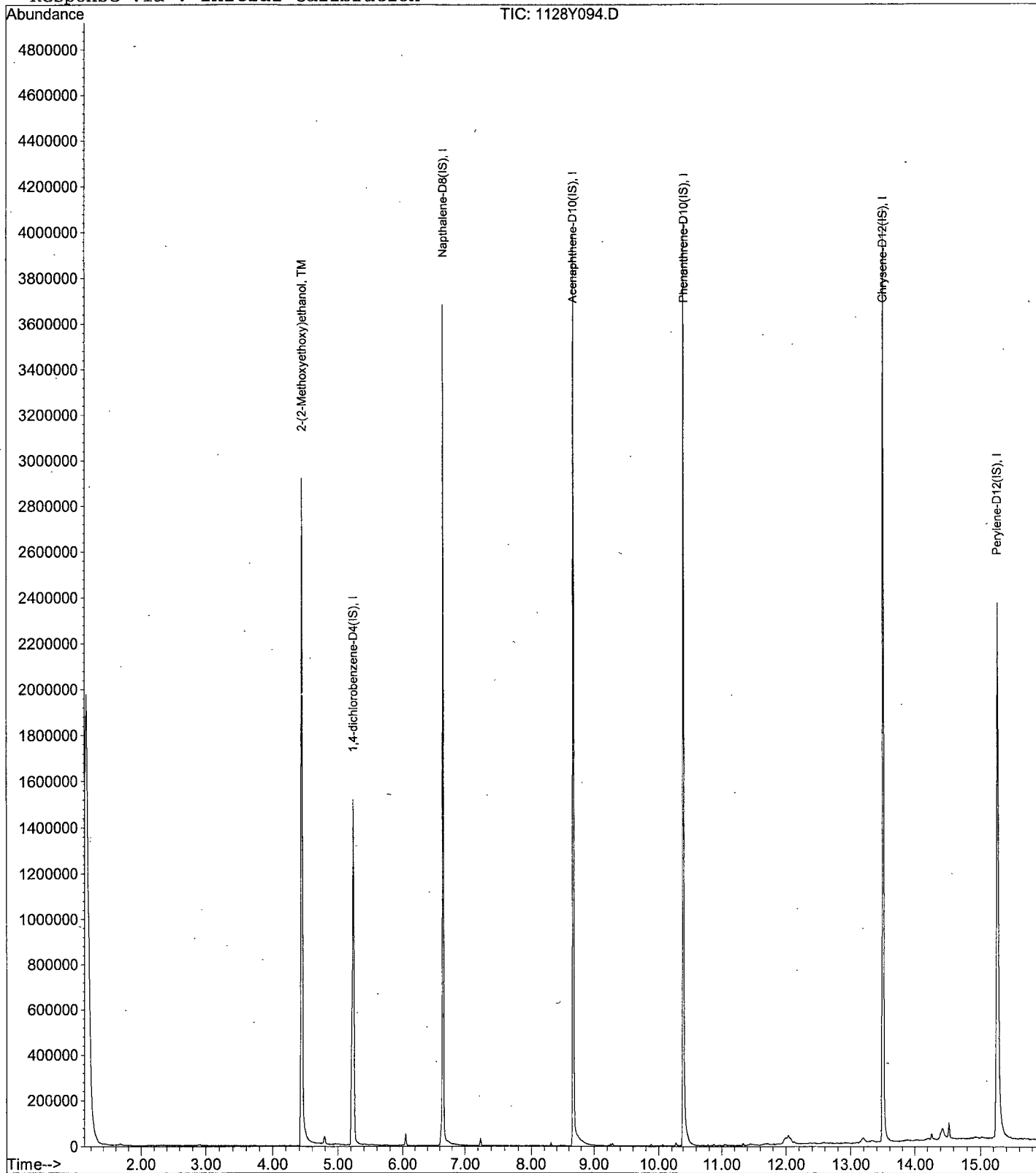
Data File : M:\YODA\DATA\Y181128M\1128Y094.D  
Acq On : 30 Jan 19 8:52  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 94  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 8:57 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/30/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y098.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2503	4.2	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
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Average

4.2

Data File : M:\YODA\DATA\Y181128M\1128Y098.D Vial: 98  
 Acq On : 30 Jan 19 11:16 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 11:29 2019

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	504597	40.00000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	2027190	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1053001	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	2013724	40.00000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1764522	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.25	264	1645023	40.00000	ppb	-0.15

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.44	45	1578886	520.99726	ppb	.94

Quantitation Report

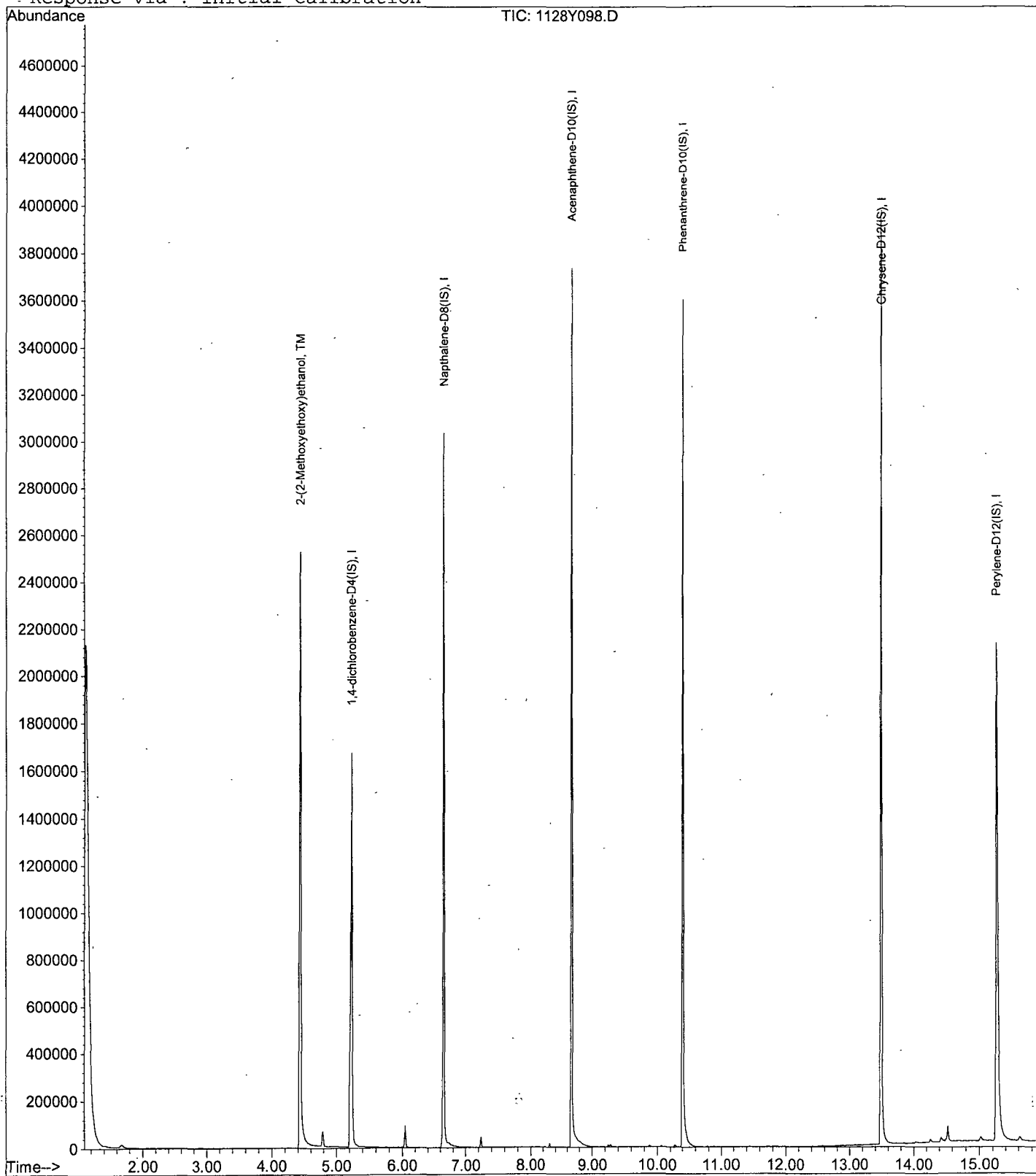
Data File : M:\YODA\DATA\Y181128M\1128Y098.D  
Acq On : 30 Jan 19 11:16  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 98  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 11:29 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 9:32  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y101.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2443	1.7	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
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Average

1.7

Data File : M:\YODA\DATA\Y181128M\1128Y101.D Vial: 1  
 Acq On : 1 Feb 19 9:32 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 9:55 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	468889	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1873588	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	981470	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1867635	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1576721	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1451631	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	1431881	508.47103	ppb	95

(#) = qualifier out of range (m) = manual integration



Quantitation Report

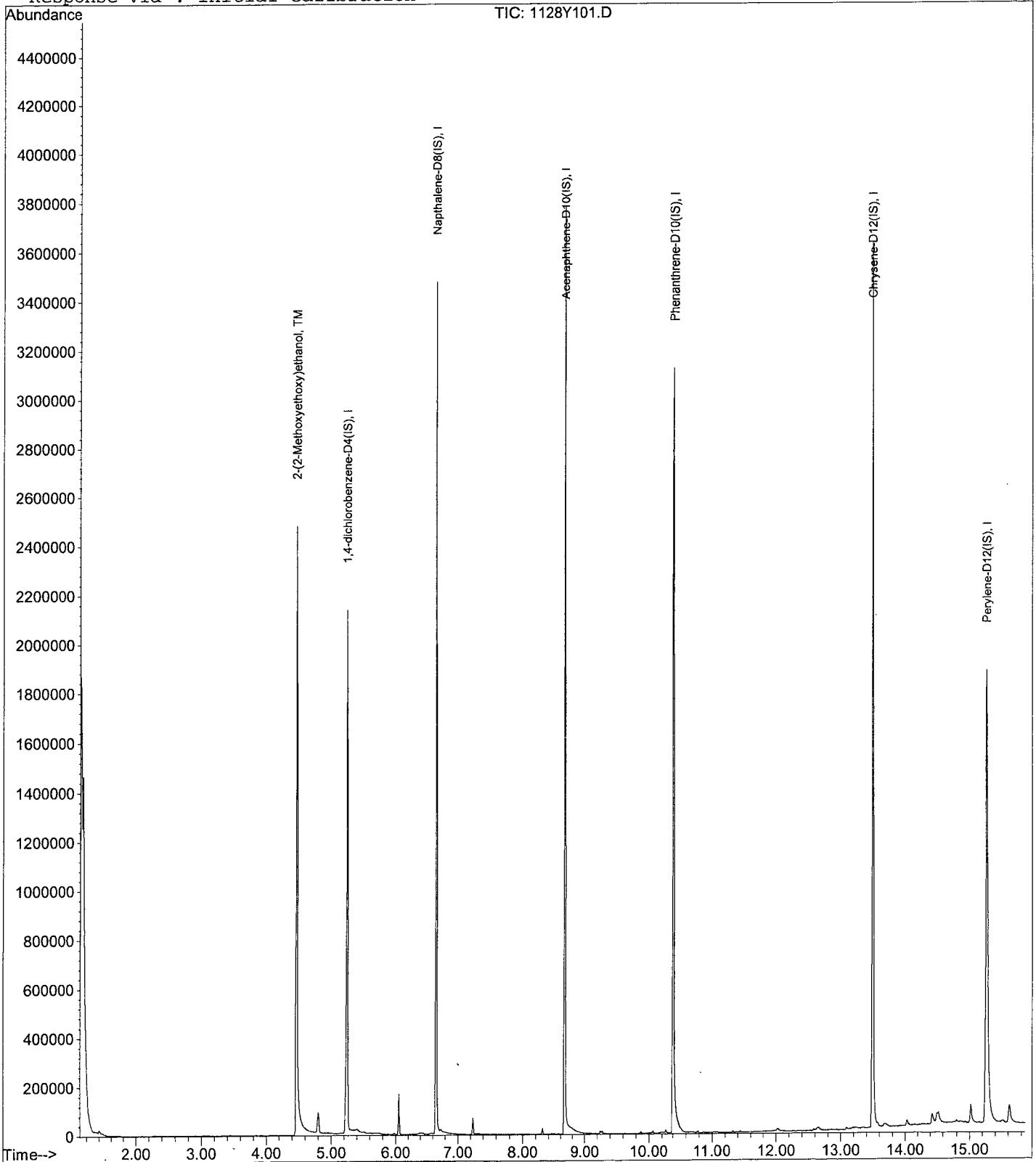
Data File : M:\YODA\DATA\Y181128M\1128Y101.D  
Acq On : 1 Feb 19 9:32  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 1  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 9:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 1 Feb 19 10:44

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y104.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2321	3.4	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
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Average

3.4

Data File : M:\YODA\DATA\Y181128M\1128Y104.D Vial: 4  
 Acq On : 1 Feb 19 10:44 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 11:08 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	464116	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1879796	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	985125	40.00000	ppb	-0.08
5) Phenanthrene-D10 (IS)	10.40	188	1843557	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1605500	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1444131	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.47	45	1346483	483.06288	ppb	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

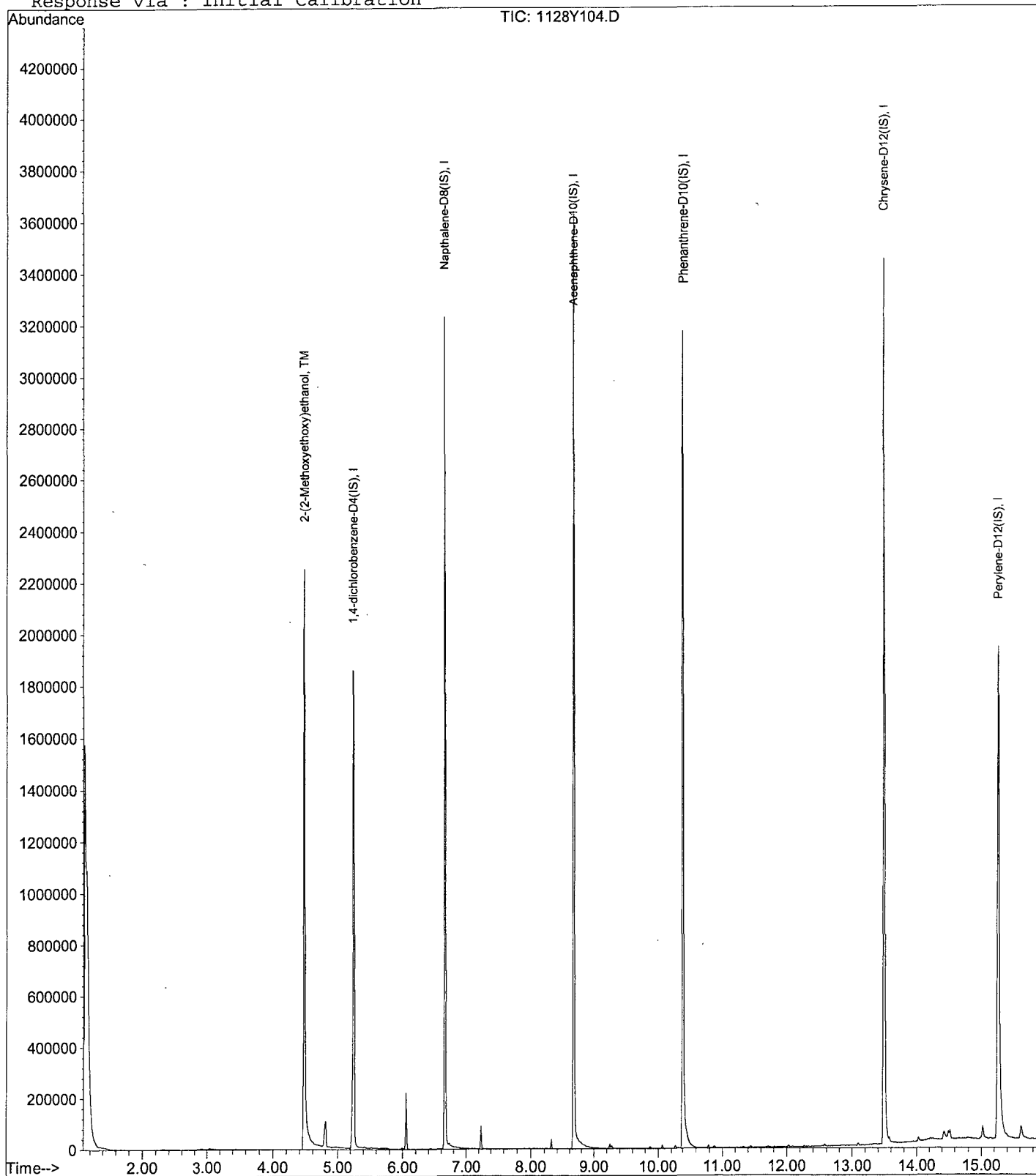
Data File : M:\YODA\DATA\Y181128M\1128Y104.D  
Acq On : 1 Feb 19 10:44  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 11:08 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y181128M\1128Y068.D Vial: 68  
 Acq On : 29 Jan 19 13:31 Operator: MA  
 Sample : AZ85520W09 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 13:45 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	339005	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1373136	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	779647	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1556696	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1261768	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1088164	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

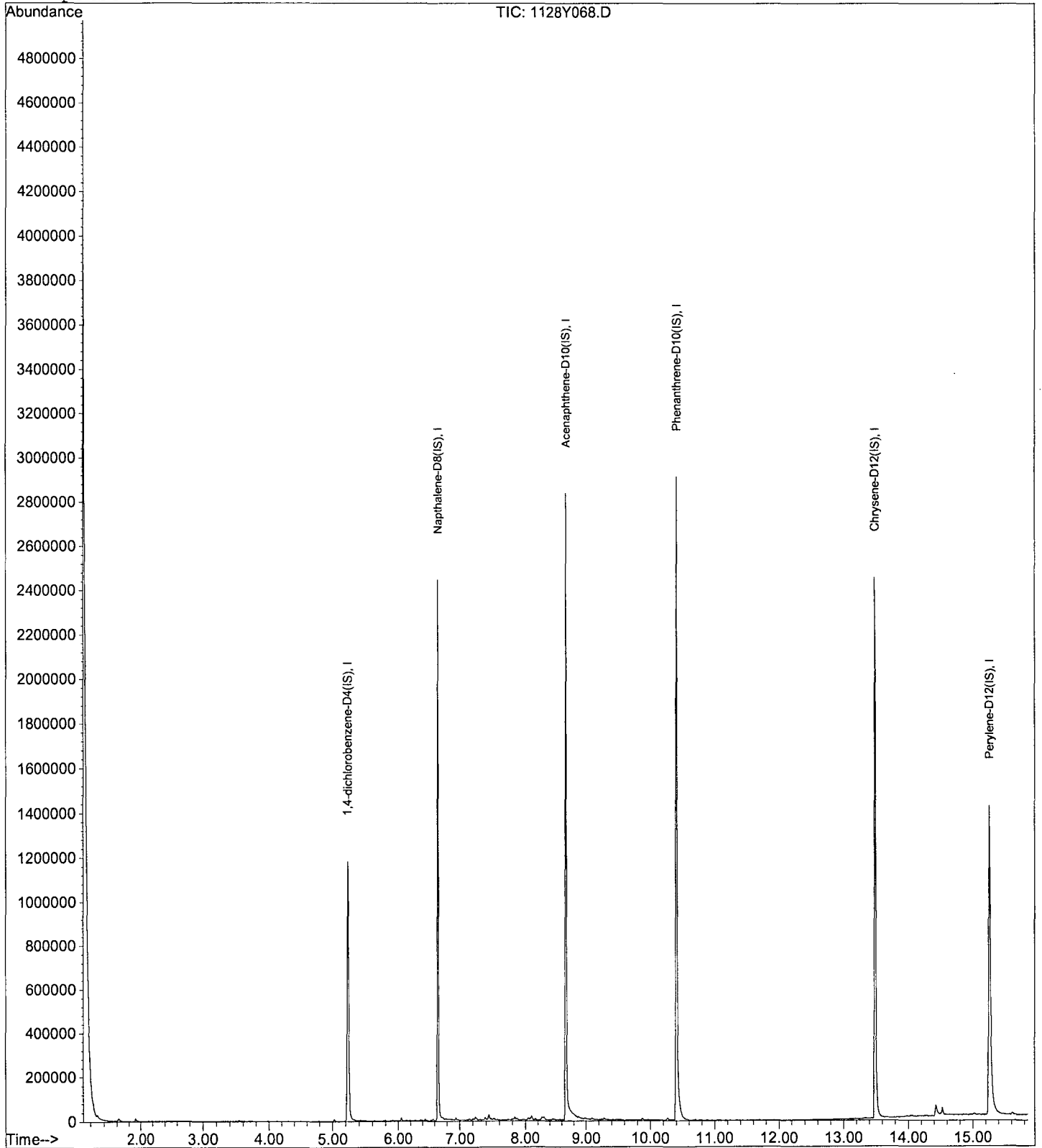
Data File : M:\YODA\DATA\Y181128M\1128Y068.D  
Acq On : 29 Jan 19 13:31  
Sample : AZ85520W09 2/500  
Misc : soil

Vial: 68  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 13:45 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y069.D Vial: 69  
 Acq On : 29 Jan 19 13:54 Operator: MA  
 Sample : AZ85521W05 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:06 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	322417	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1331413	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	850232	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1671511	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1298288	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1148898	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report

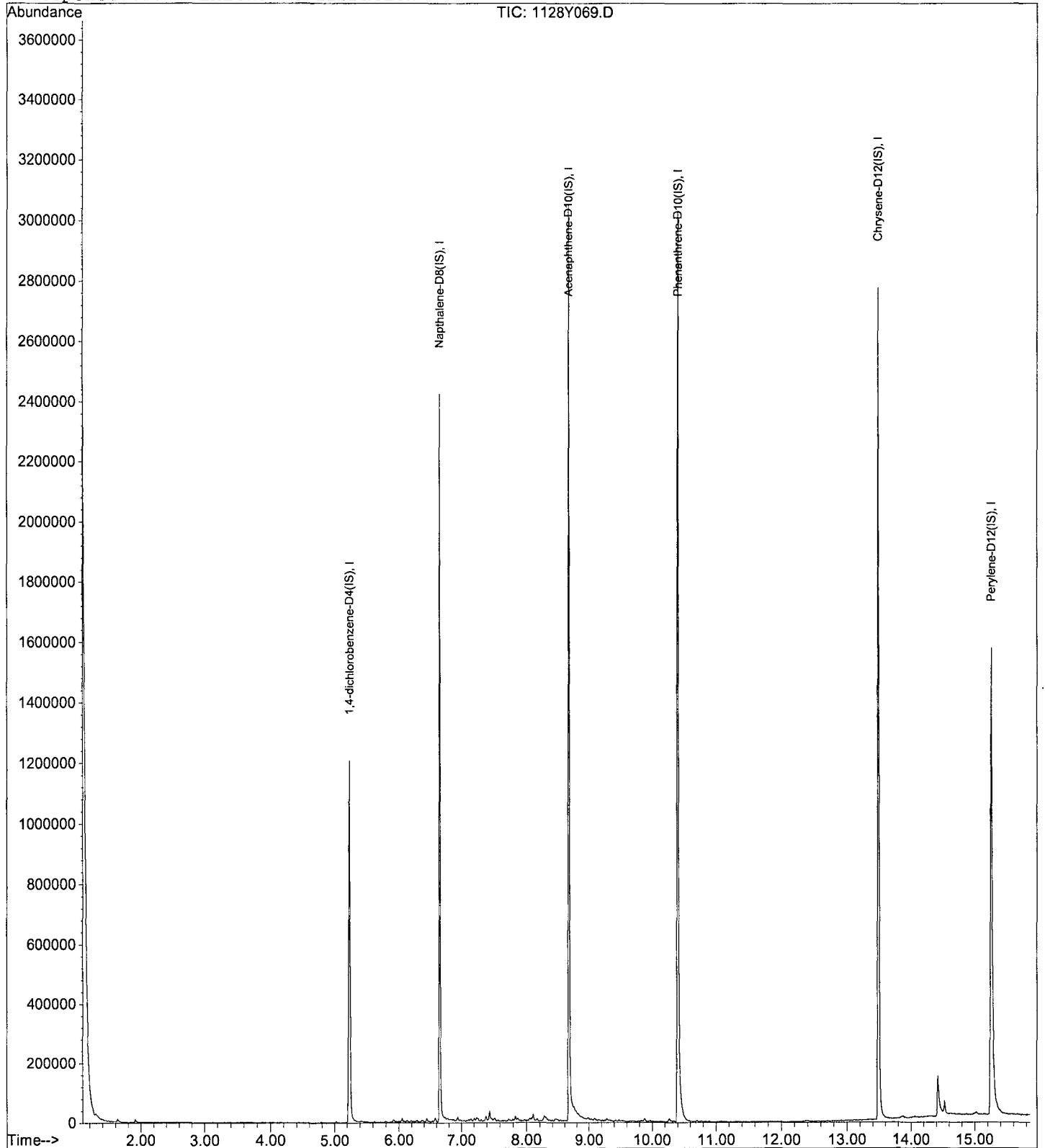
Data File : M:\YODA\DATA\Y181128M\1128Y069.D  
Acq On : 29 Jan 19 13:54  
Sample : AZ85521W05 2/500  
Misc : soil

Vial: 69  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:06 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y070.D Vial: 70  
 Acq On : 29 Jan 19 14:18 Operator: MA  
 Sample : AZ85523W08 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:06 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	379120	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1516588	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	889621	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1836687	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1539849	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1447078	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

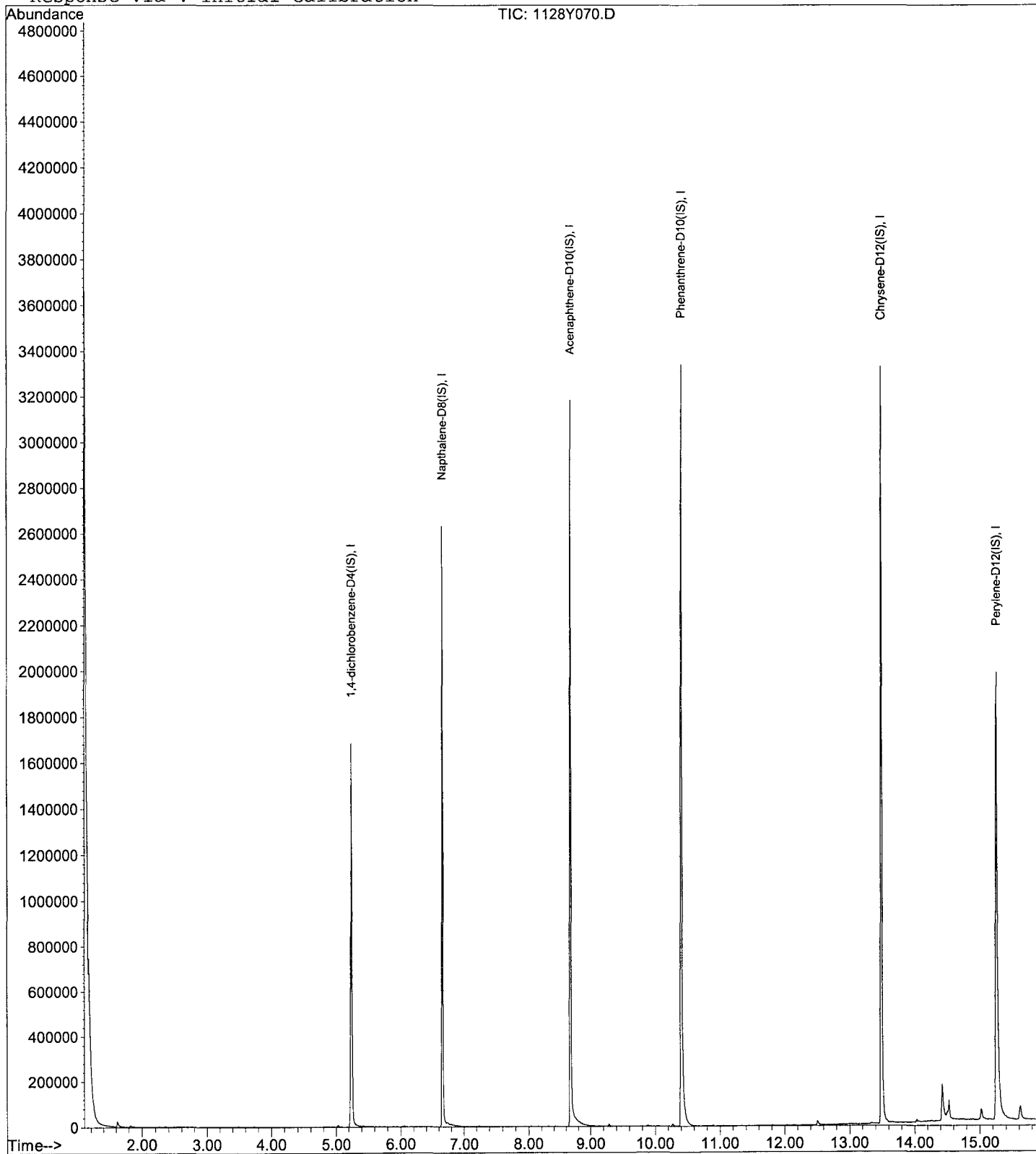
Data File : M:\YODA\DATA\Y181128M\1128Y070.D  
Acq On : 29 Jan 19 14:18  
Sample : AZ85523W08 2/500  
Misc : soil

Vial: 70  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:06 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y071.D Vial: 71  
 Acq On : 29 Jan 19 14:41 Operator: MA  
 Sample : AZ85525W08 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	366513	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1520717	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	859162	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1723081	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1464656	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1357613	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

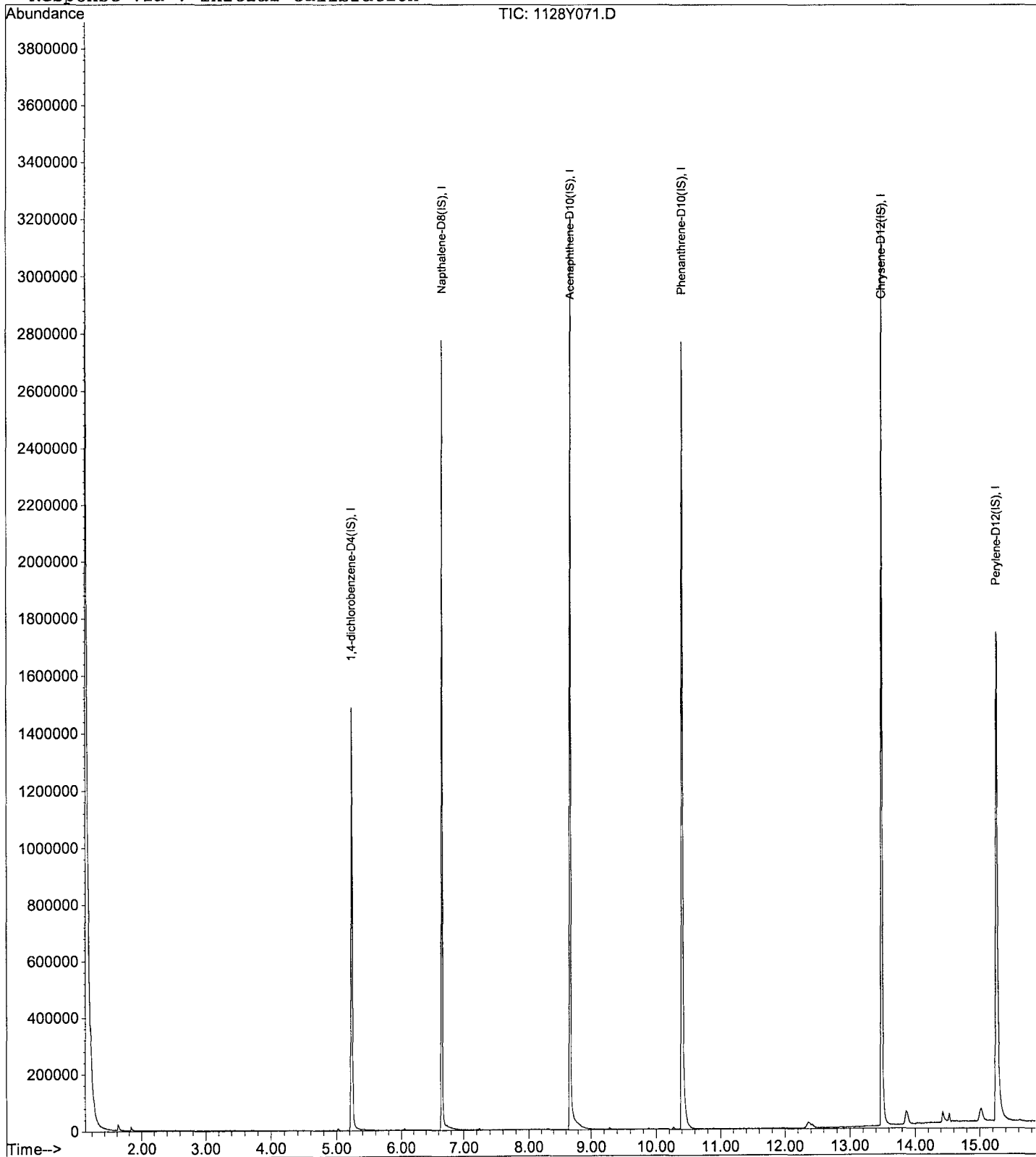
Data File : M:\YODA\DATA\Y181128M\1128Y071.D  
Acq On : 29 Jan 19 14:41  
Sample : AZ85525W08 2/500  
Misc : soil

Vial: 71  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y095.D Vial: 95  
 Acq On : 30 Jan 19 9:17 Operator: MA  
 Sample : AZ85527W08 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 10:03 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	396481	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	1650523	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	859055	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1645746	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1367433	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1290304	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

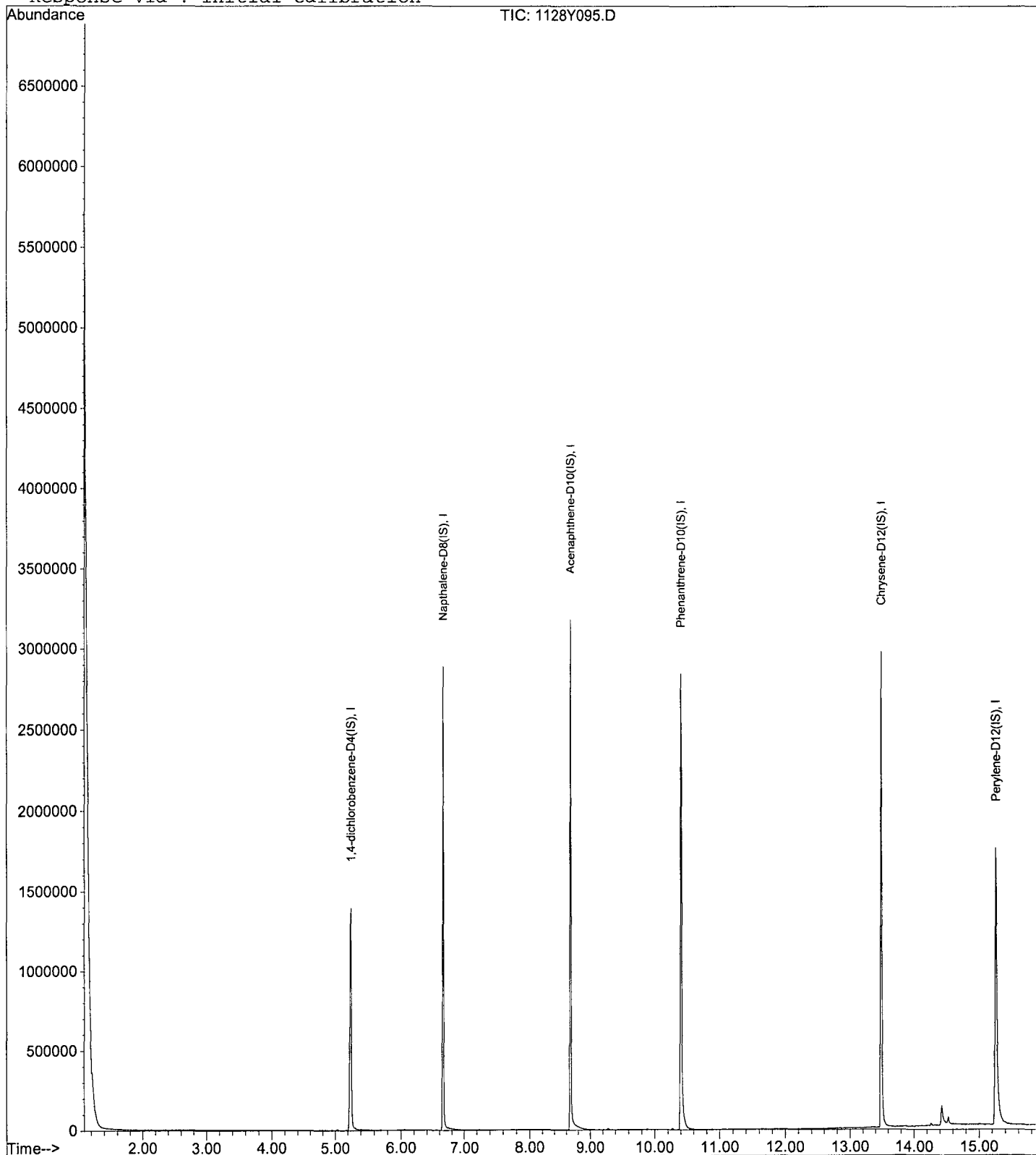
Data File : M:\YODA\DATA\Y181128M\1128Y095.D  
Acq On : 30 Jan 19 9:17  
Sample : AZ85527W08 2/500  
Misc : soil

Vial: 95  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 10:03 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y086.D Vial: 86  
 Acq On : 29 Jan 19 20:36 Operator: MA  
 Sample : 190128A BLK 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	429029	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	1804755	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	894647	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	1665679	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1447939	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1322650	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report

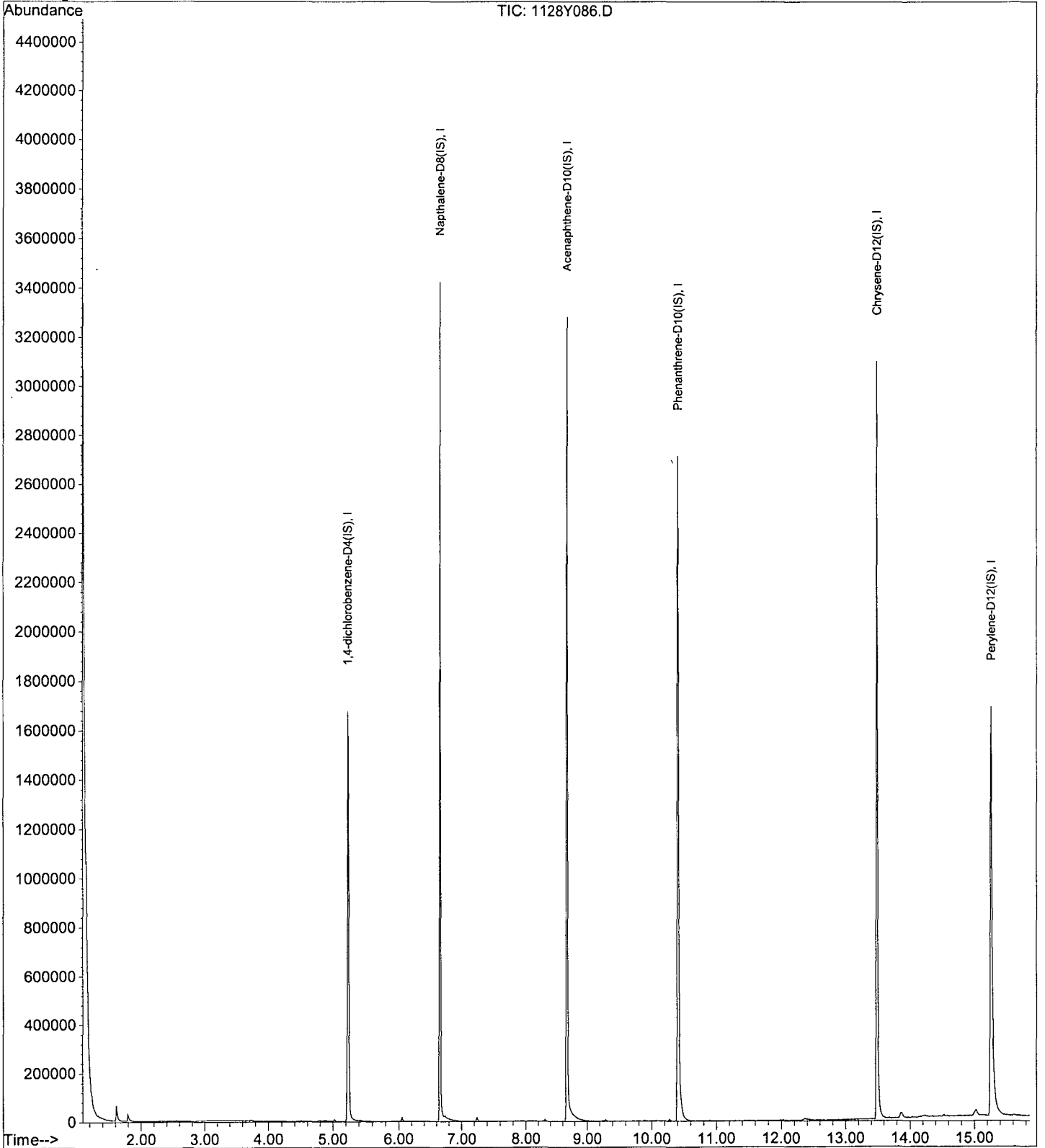
Data File : M:\YODA\DATA\Y181128M\1128Y086.D  
Acq On : 29 Jan 19 20:36  
Sample : 190128A BLK 2/500  
Misc : soil

Vial: 86  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y102.D Vial: 2  
 Acq On : 1 Feb 19 9:56 Operator: MA  
 Sample : 190128A LCS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 10:27 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	307091	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1402122	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	792591	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1492774	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1077392	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	971847	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	163673	88.7441	ppb	95

Quantitation Report

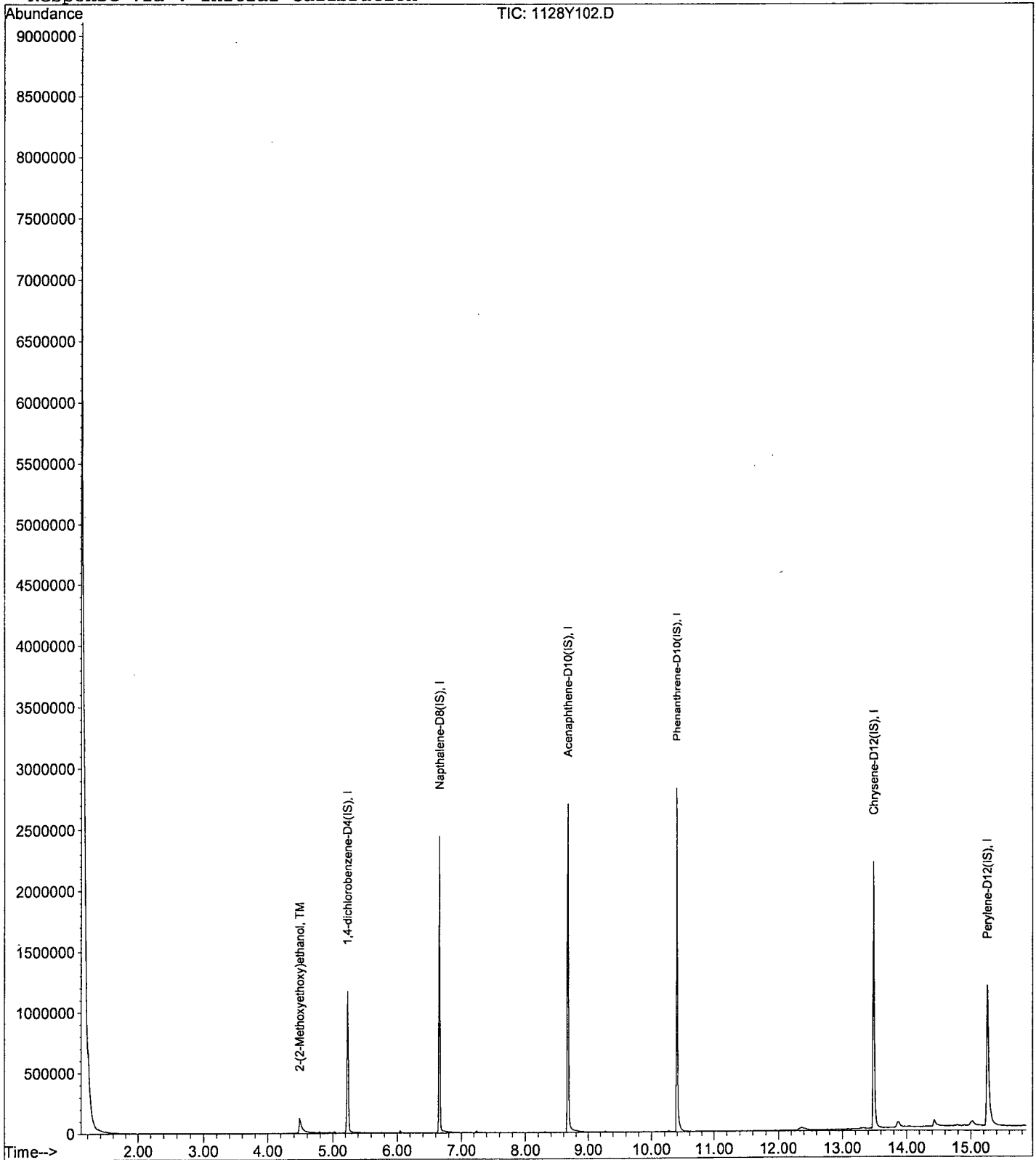
Data File : M:\YODA\DATA\Y181128M\1128Y102.D  
Acq On : 1 Feb 19 9:56  
Sample : 190128A LCS-1 2/500  
Misc : soil

Vial: 2  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 10:27 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y103.D Vial: 3  
 Acq On : 1 Feb 19 10:19 Operator: MA  
 Sample : 190128A LCSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 10:27 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	403357	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1743268	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	949174	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1744190	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1349741	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.25	264	1235186	40.0000	ppb	-0.15

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.51	45	141807	58.5379	ppb	94

Quantitation Report

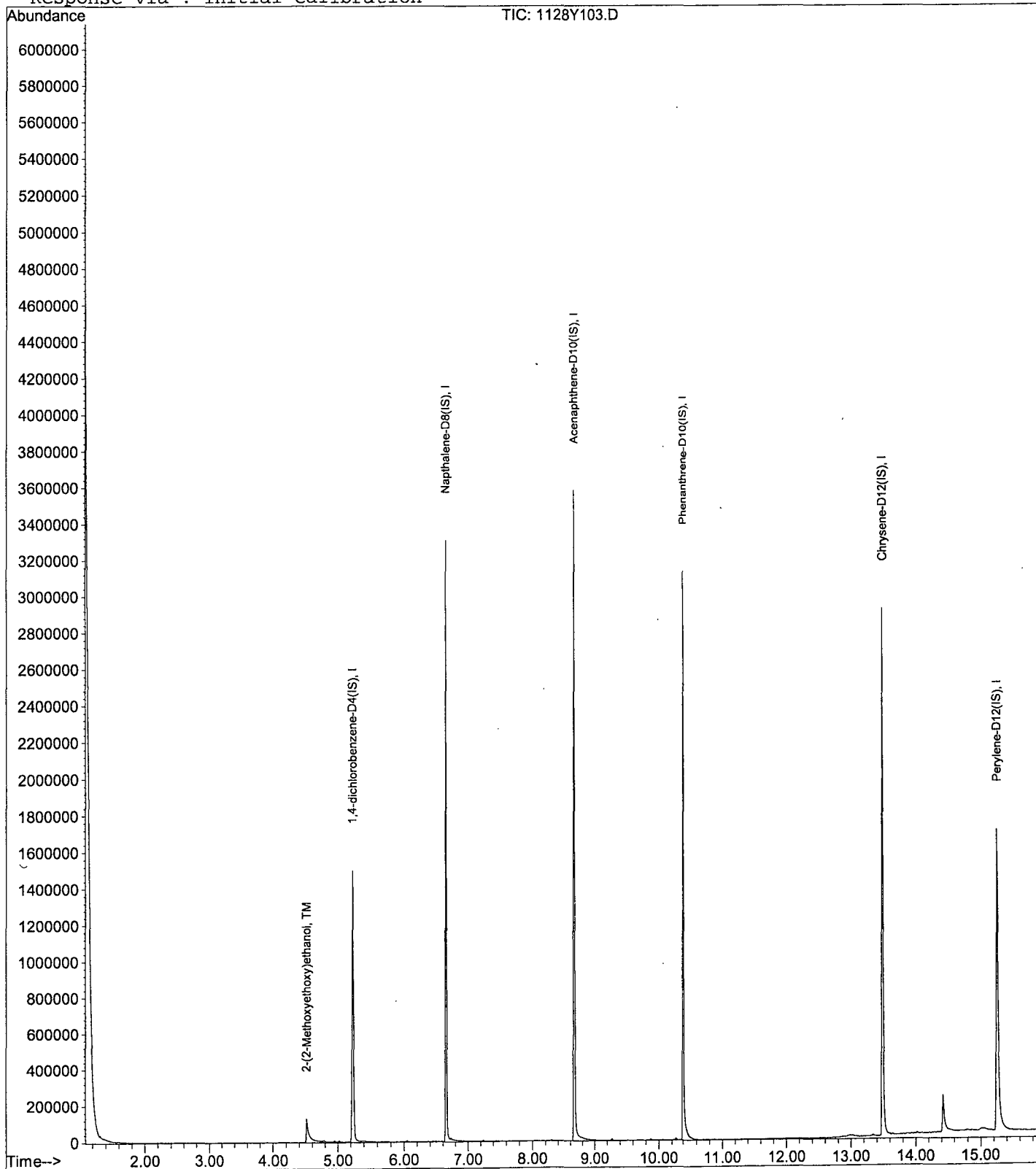
Data File : M:\YODA\DATA\Y181128M\1128Y103.D  
Acq On : 1 Feb 19 10:19  
Sample : 190128A LCSD-1 2/500  
Misc : soil

Vial: 3  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 10:27 2019

Quant Results File: YMEE1128.RES

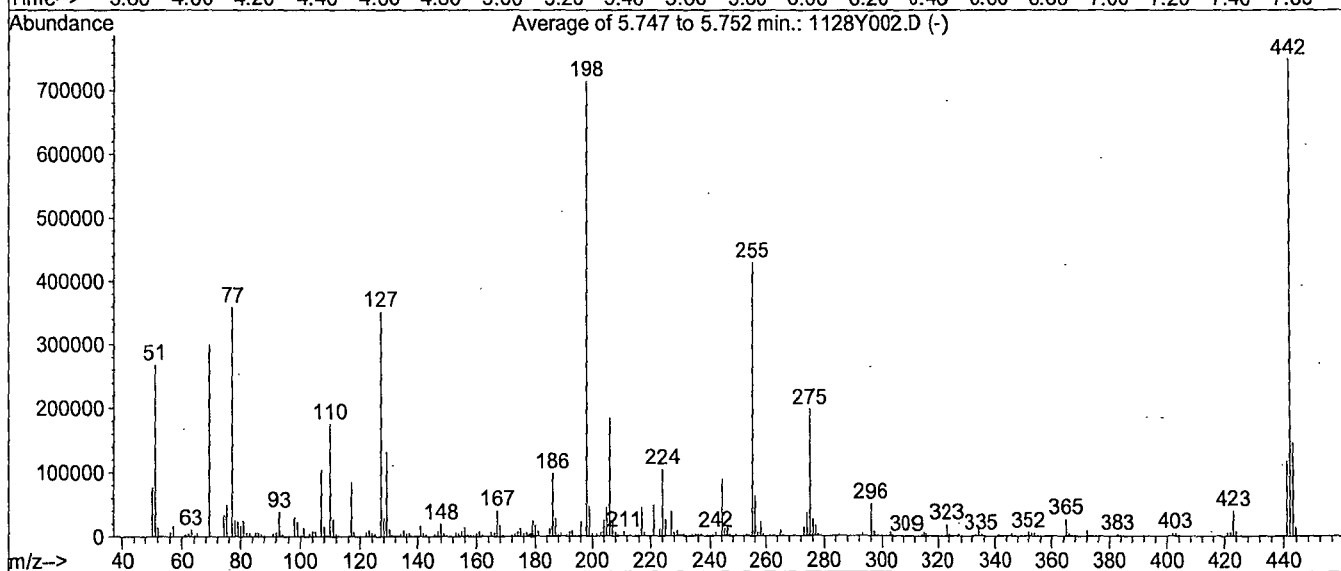
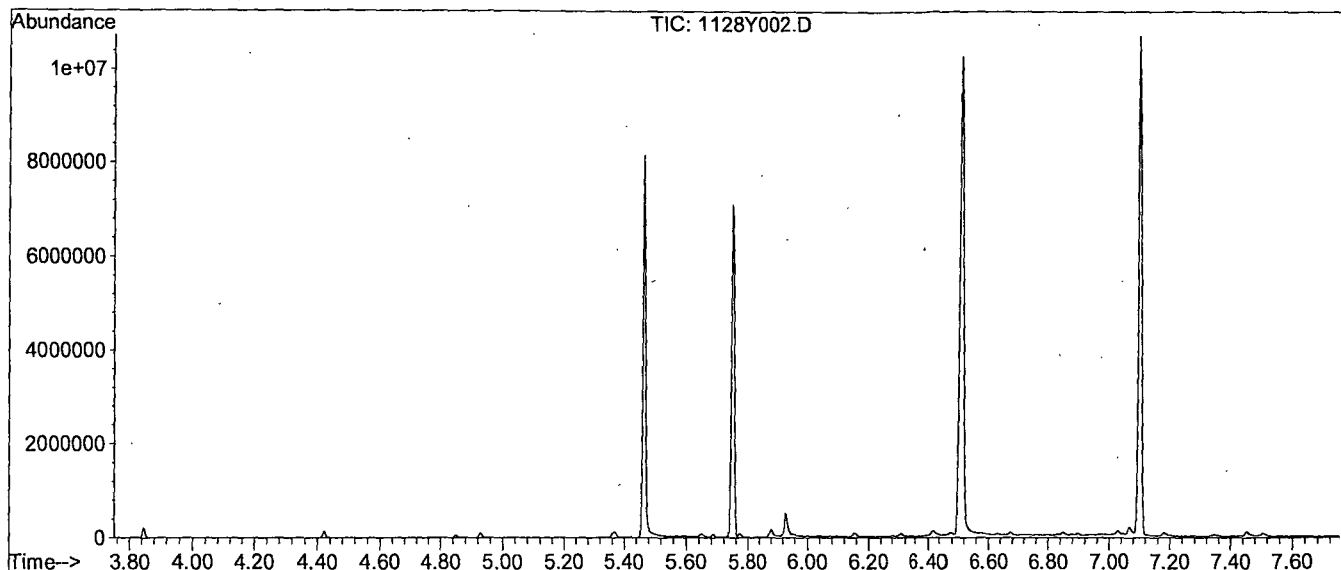
Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 865, 866, 867; Background Corrected with Scan 856

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	37.6	268391	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	1292	PASS
127	198	10	80	49.3	352384	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	714581	PASS
199	198	5	9	6.6	46827	PASS
275	198	10	60	27.6	197547	PASS
365	198	1	100	3.7	26576	PASS
441	442	0.01	24	15.6	116851	PASS
442	198	50	150	104.9	749675	PASS
443	442	15	24	19.5	145880	PASS

M:\YODA\DATA\Y181128M\1128Y002.D

Data File Name: 1128Y002.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 28 Nov 2018 07:30  
Method File: DFTPP2.M  
Sample Name: SV Tune 03/07/18  
Vial Number: 2  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	75896800
2)	DDD	6.90	747340
3)	DDE	7.03	414795

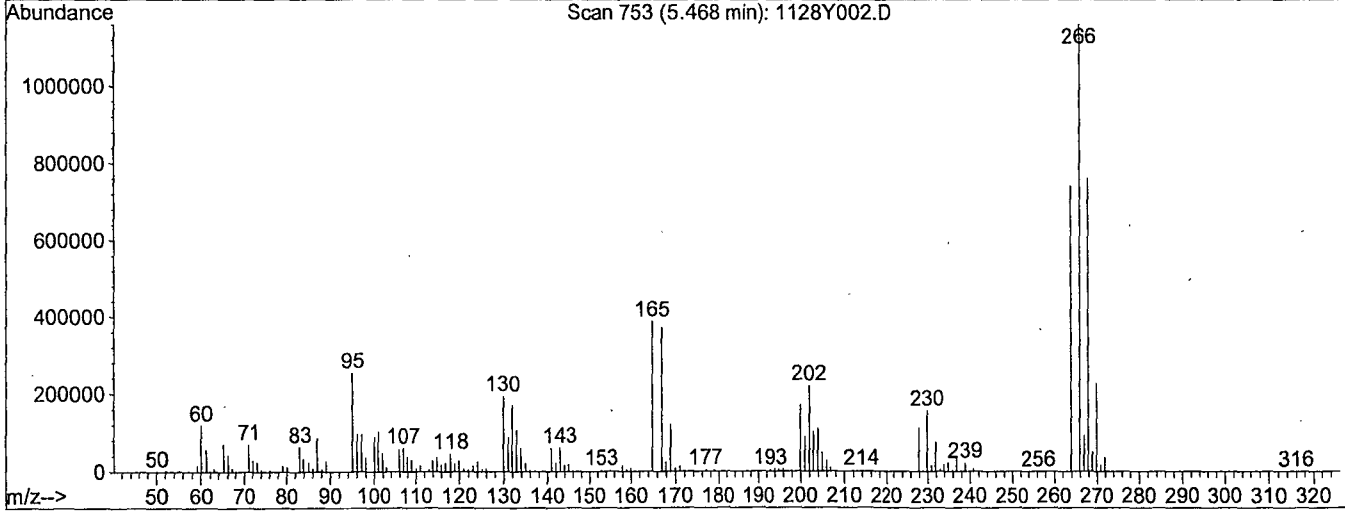
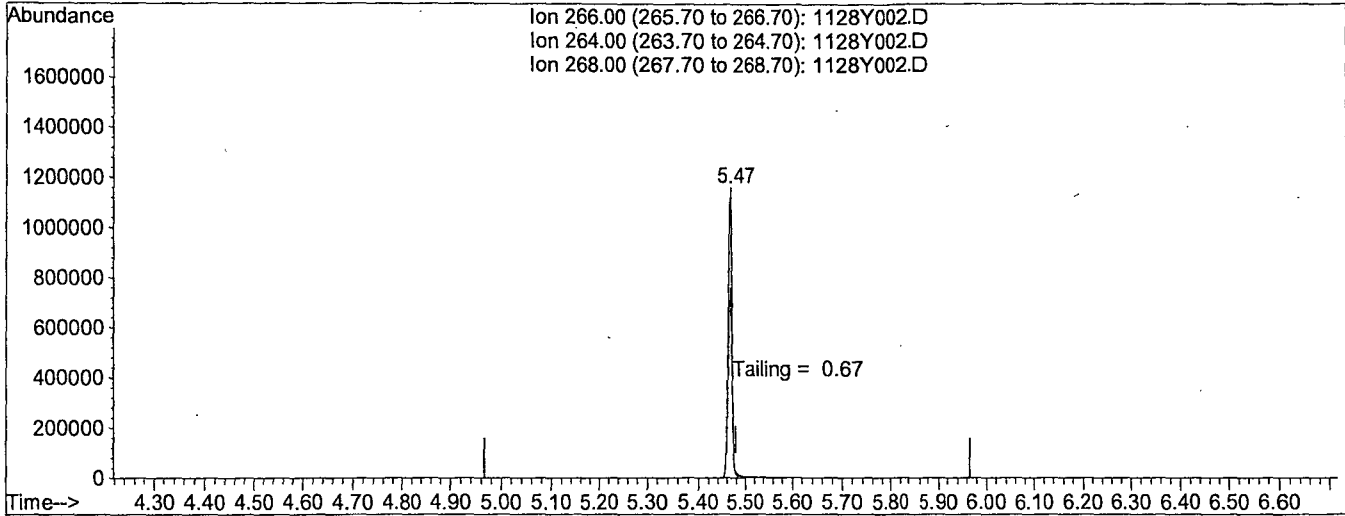
Breakdown 1.51

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :  
 Quant Time: Nov 28 10:24 2018

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

(5) Pentachlorophenol

5.47min 0.0000

response 7009891

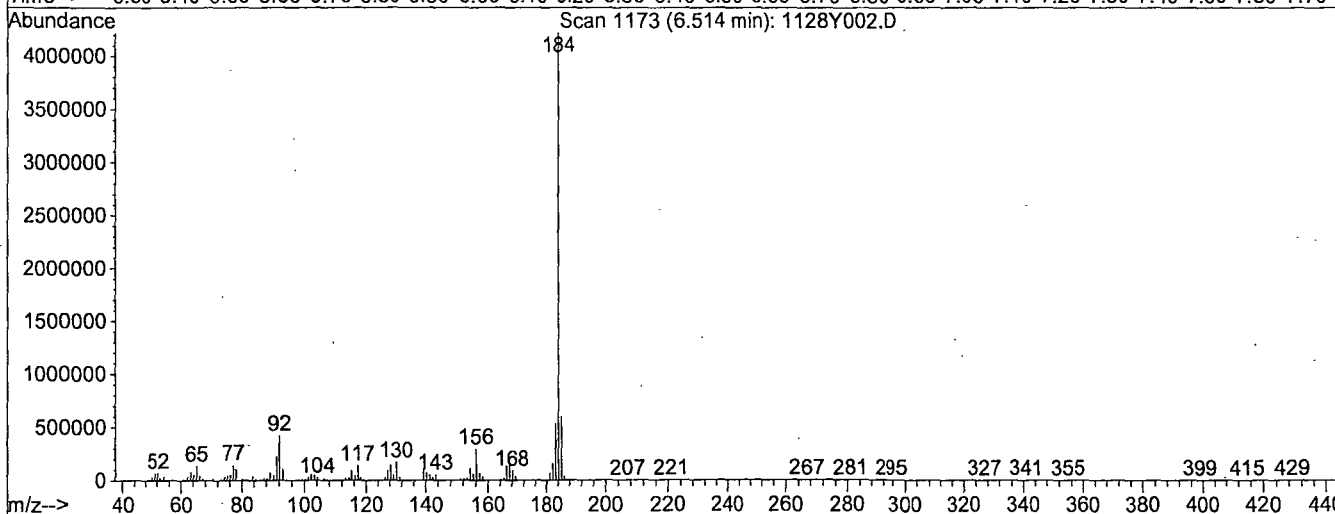
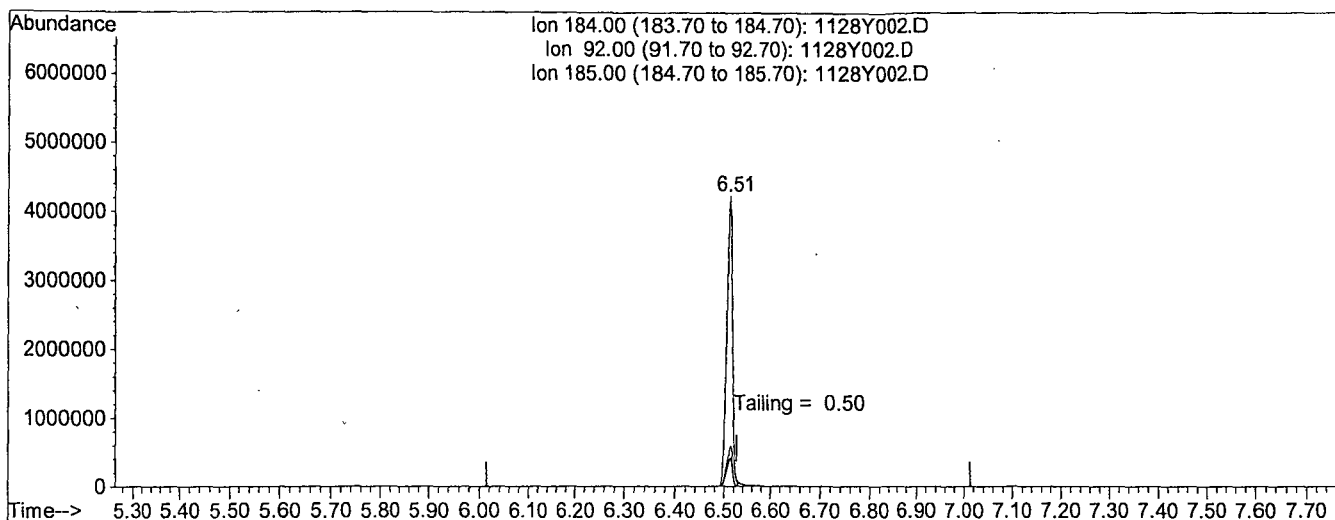
Ion	Exp%	Act%
266.00	100	100
264.00	63.80	61.59
268.00	65.50	63.39
0.00	0.00	0.00



Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D Vial: 2  
 Acq On : 28 Nov 18 7:30 Operator: MA  
 Sample : SV Tune 03/07/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Nov 28 10:24 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

(6) Benzidine

6.52min 0.0000

response 35701269

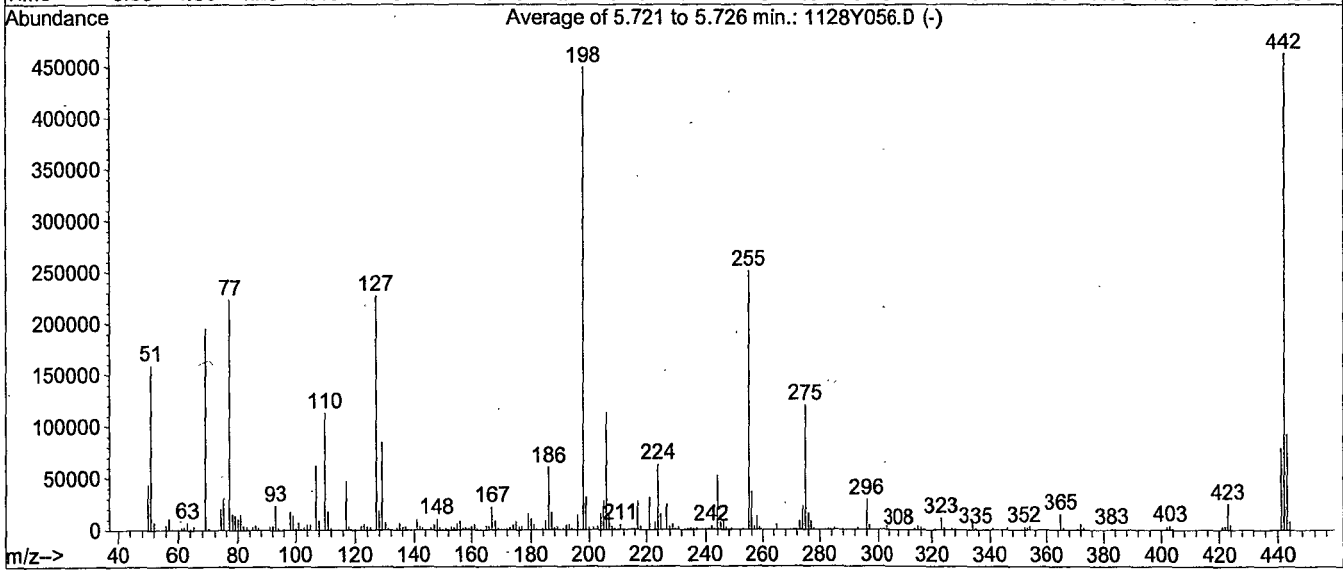
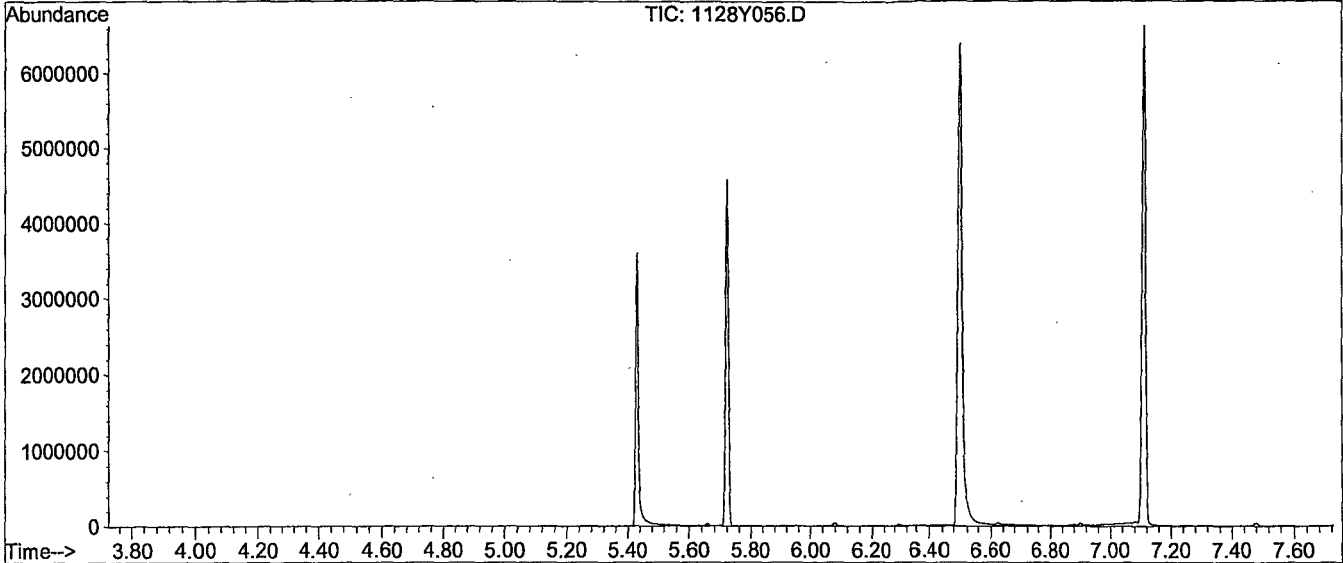
Ion	Exp%	Act%
184.00	100	100
92.00	9.90	10.15
185.00	14.00	14.16
0.00	0.00	0.00

DFTPP

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
 Acq On : 29 Jan 19 8:36  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 855, 856, 857; Background Corrected with Scan 846

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.4	158979	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1146	PASS
127	198	10	80	50.5	226944	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	449557	PASS
199	198	5	9	6.9	31235	PASS
275	198	10	60	26.7	120224	PASS
365	198	1	100	3.4	15263	PASS
441	442	0.01	24	16.9	78525	PASS
442	198	50	150	103.1	463467	PASS
443	442	15	24	19.9	92080	PASS

Data File Name: 1128Y056.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 29 Jan 2019 08:36  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 56  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.11	48684800
2)	DDD	6.90	257255
3)	DDE	7.18	0

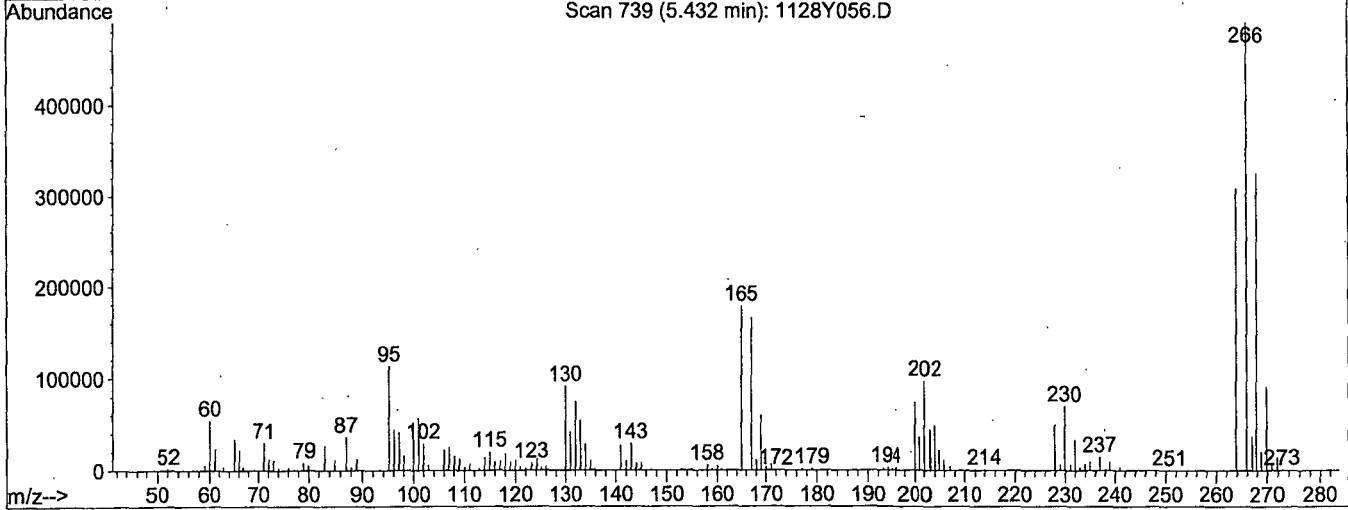
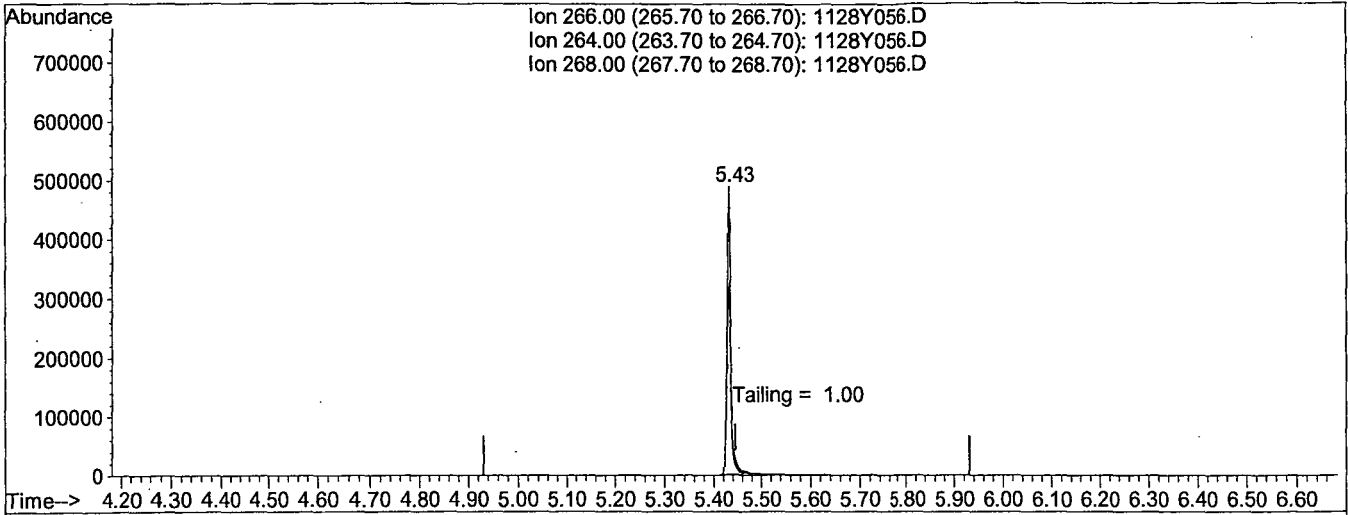
Breakdown 0.53

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
Acq On : 29 Jan 19 8:36  
Sample : SV TUNE 11/10/18  
Misc : soil  
Quant Time: Jan 29 8:37 2019

Vial: 56  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
Title :  
Last Update : Tue Jan 29 08:36:56 2019  
Response via : Single Level Calibration



TIC: 1128Y056.D

(5) Pentachlorophenol

5.43min 0.0000

response 3073868

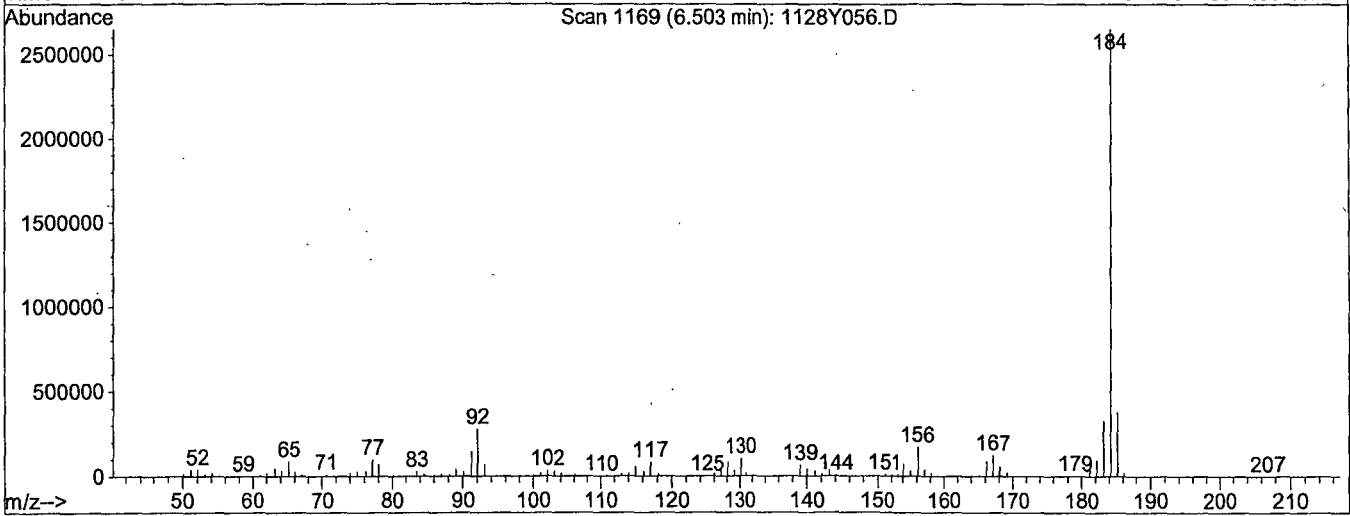
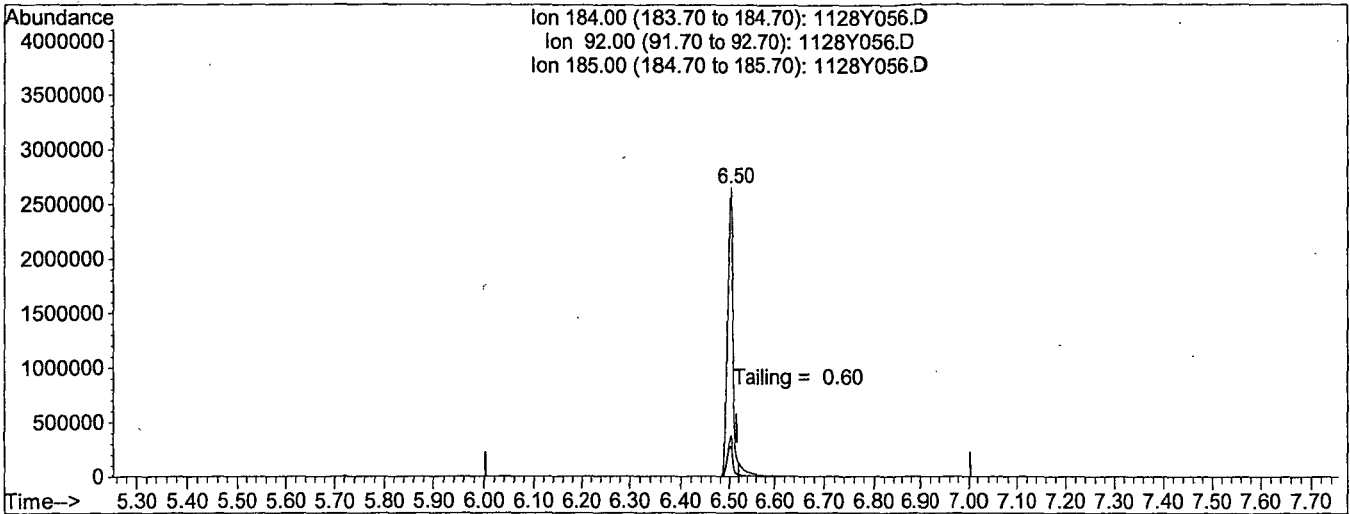
Ion	Exp%	Act%
266.00	100	100
264.00	63.10	62.99
268.00	66.50	63.06
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
 Acq On : 29 Jan 19 8:36  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 29 8:37 2019

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 29 08:36:56 2019  
 Response via : Single Level Calibration



TIC: 1128Y056.D

(6) Benzidine

6.50min 0.0000

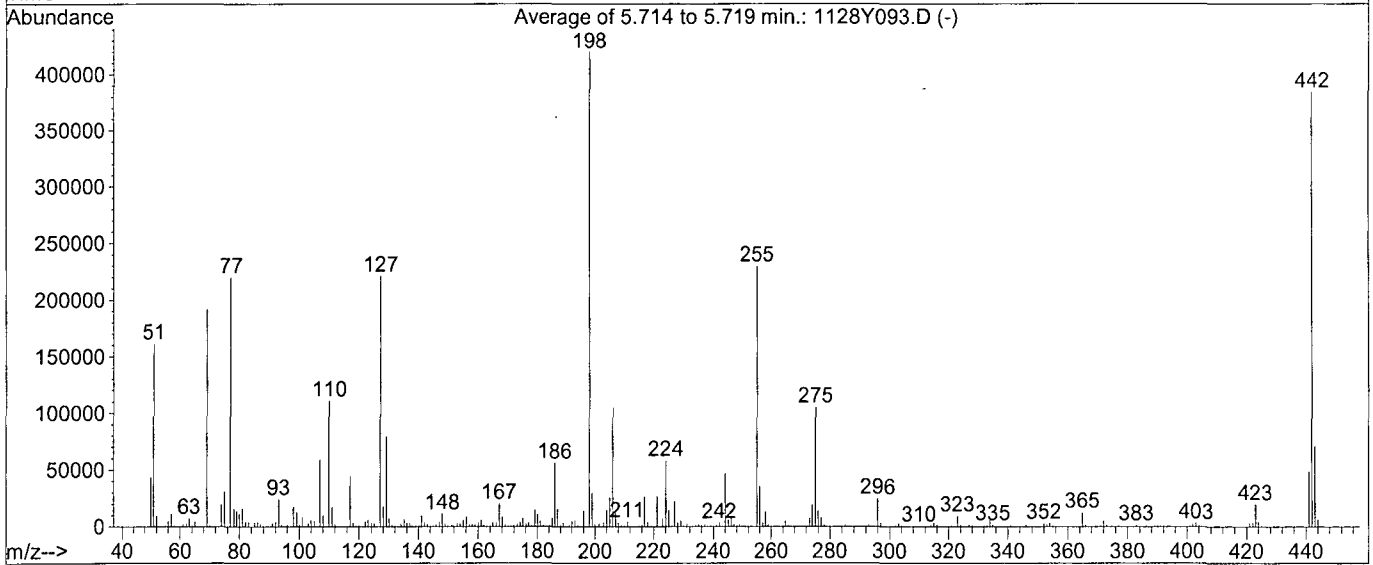
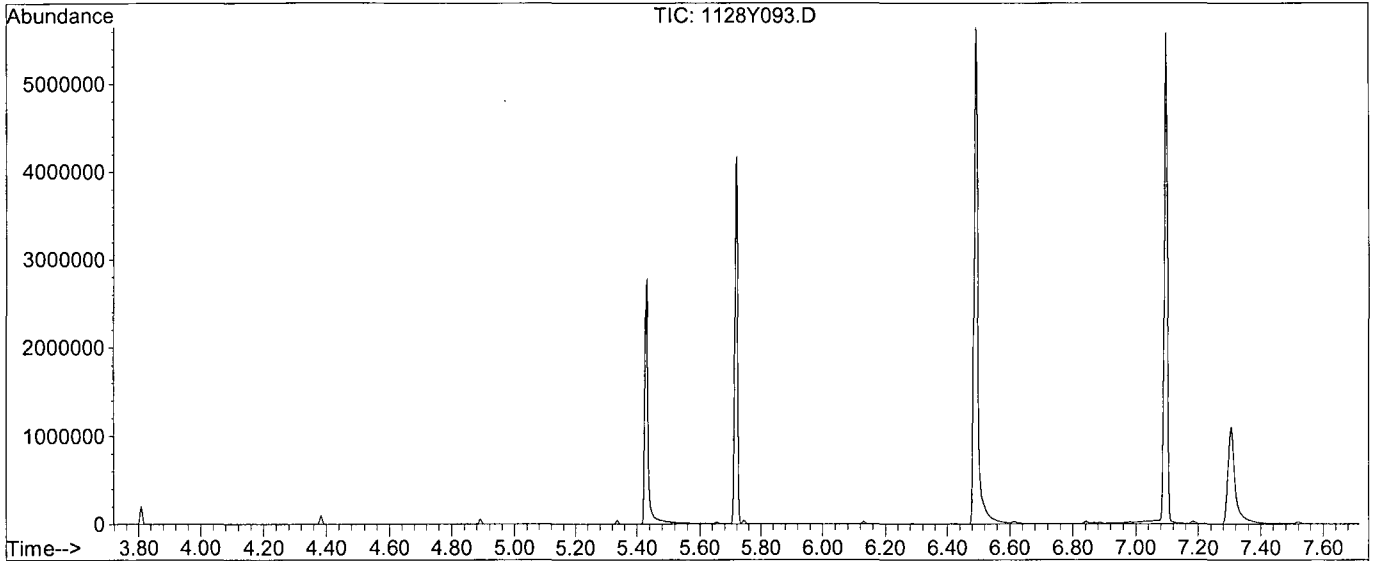
response 22876598

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.94
185.00	14.30	14.29
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y093.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 852, 853, 854; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.3	160992	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	701	PASS
127	198	10	80	52.6	220885	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	419925	PASS
199	198	5	9	7.0	29411	PASS
275	198	10	60	25.0	104971	PASS
365	198	1	100	2.9	12350	PASS
441	442	0.01	24	12.7	48587	PASS
442	198	50	150	91.4	384021	PASS
443	442	15	24	18.4	70520	PASS

Data File Name: 1128Y093.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 30 Jan 2019 07:56  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 93  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	39883400
2)	DDD	6.89	183880
3)	DDE	7.04	52658

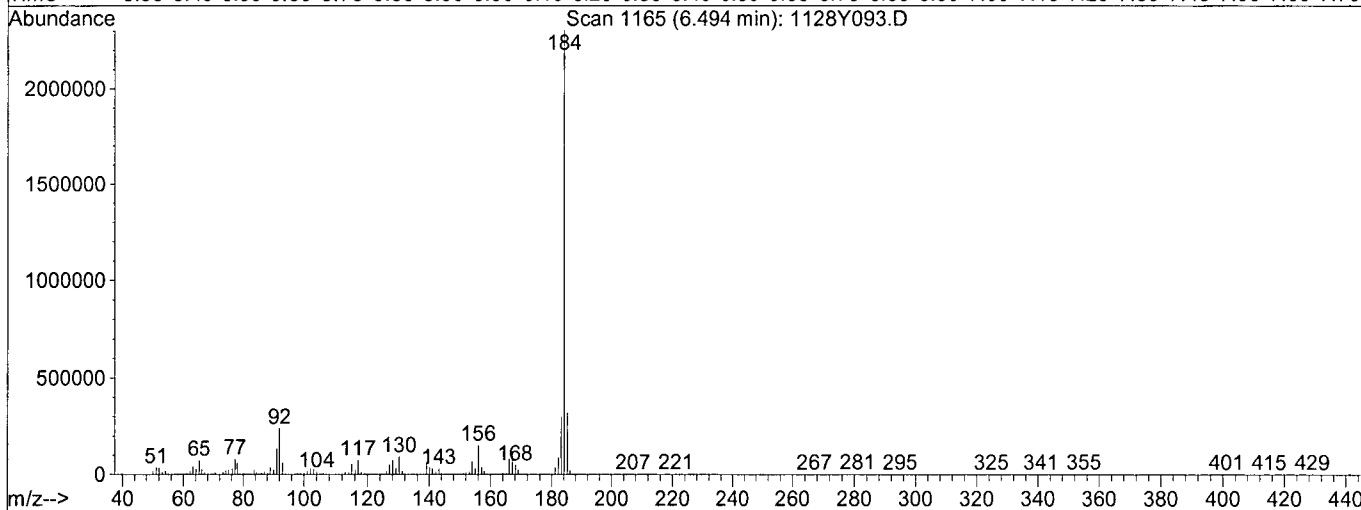
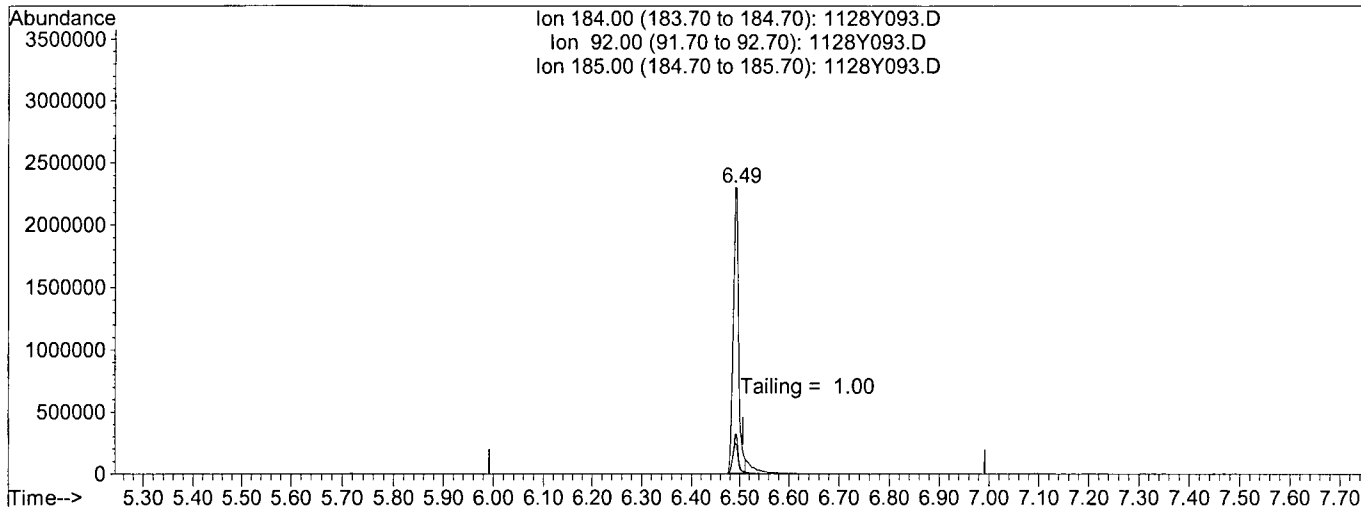
Breakdown 0.59

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y093.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 30 8:02 2019

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y093.D

(6) Benzidine

6.49min 0.0000

response 19651640

Ion	Exp%	Act%
184.00	100	100
92.00	10.90	10.99
185.00	14.10	14.04
0.00	0.00	0.00

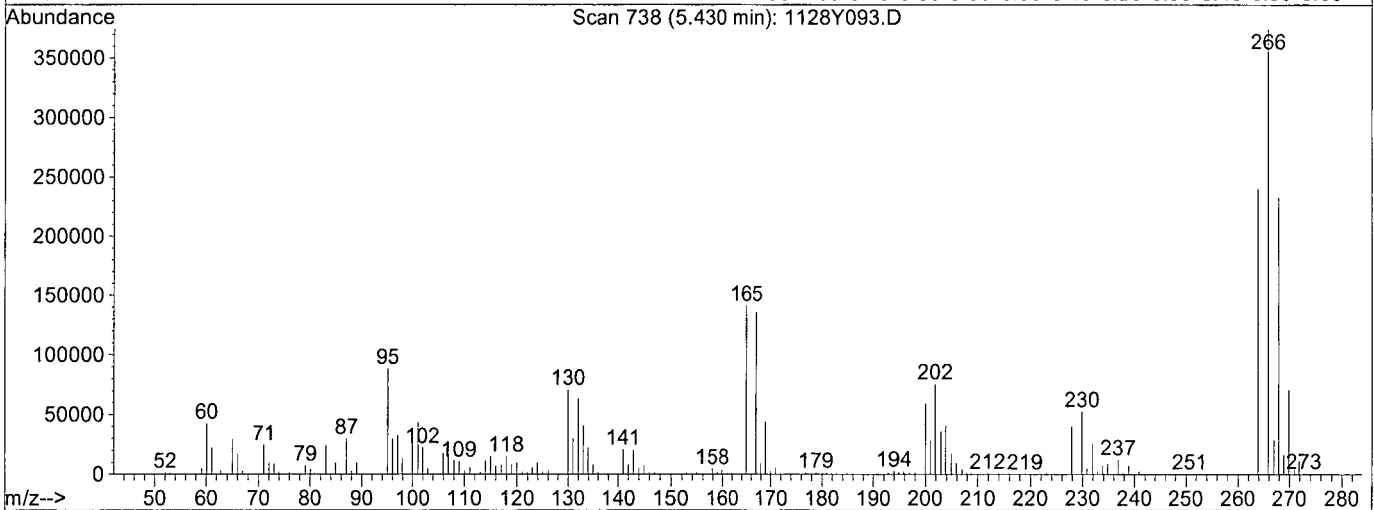
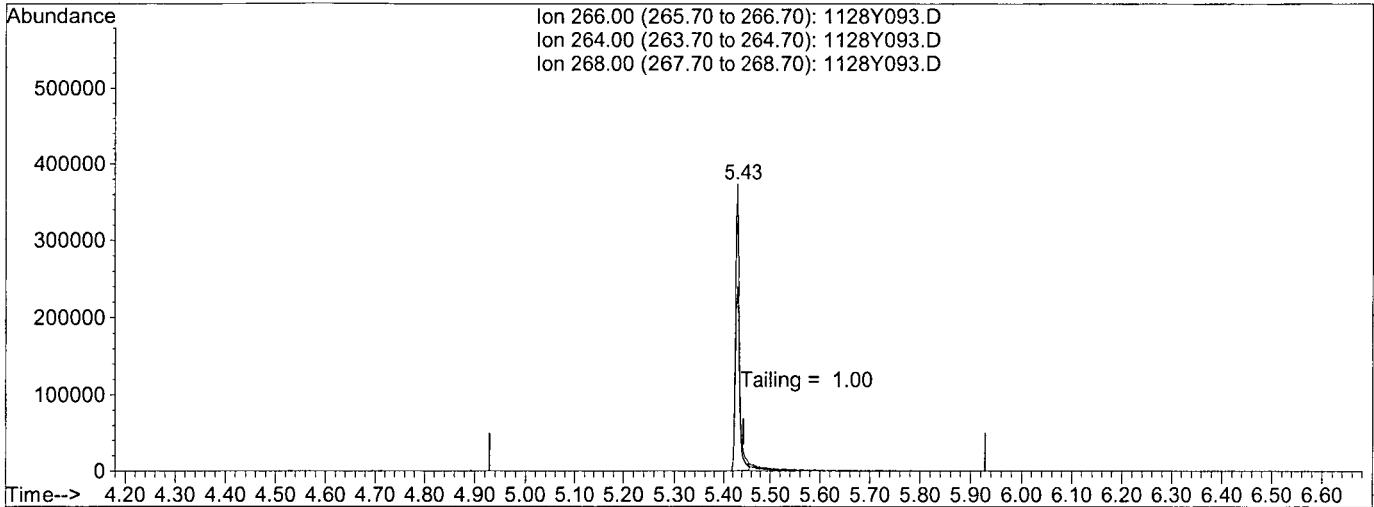


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y093.D  
Acq On : 30 Jan 19 7:56  
Sample : SV TUNE 11/10/18  
Misc : soil  
Quant Time: Jan 30 8:02 2019

Vial: 93  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
Title :  
Last Update : Wed Jan 30 08:02:01 2019  
Response via : Single Level Calibration



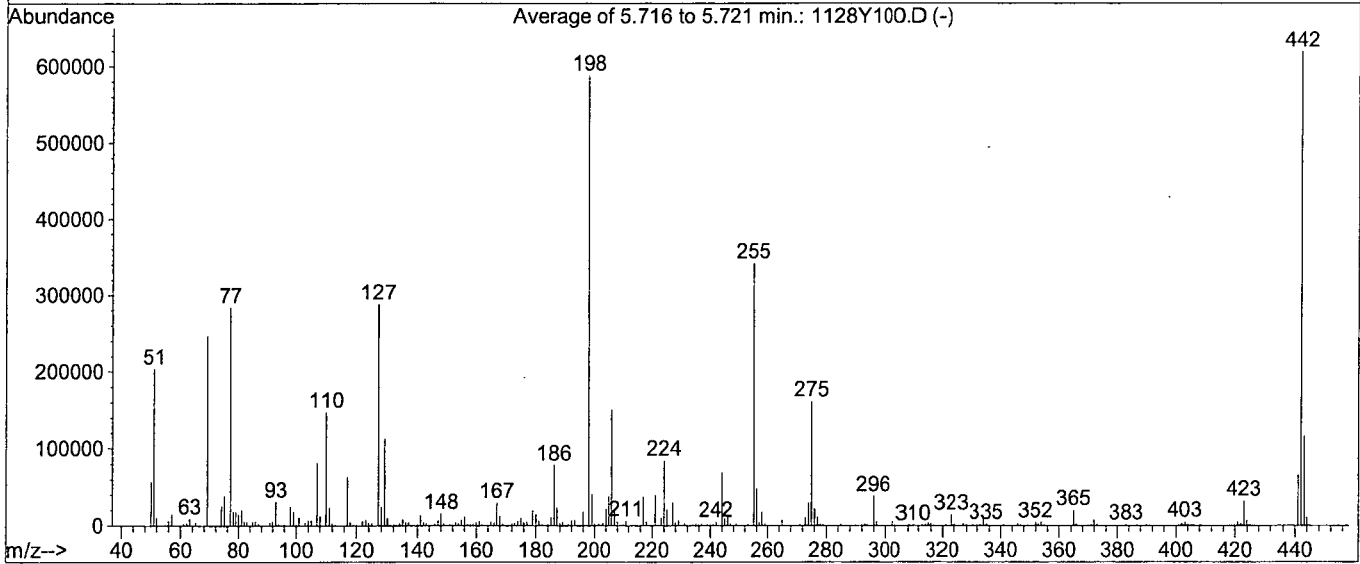
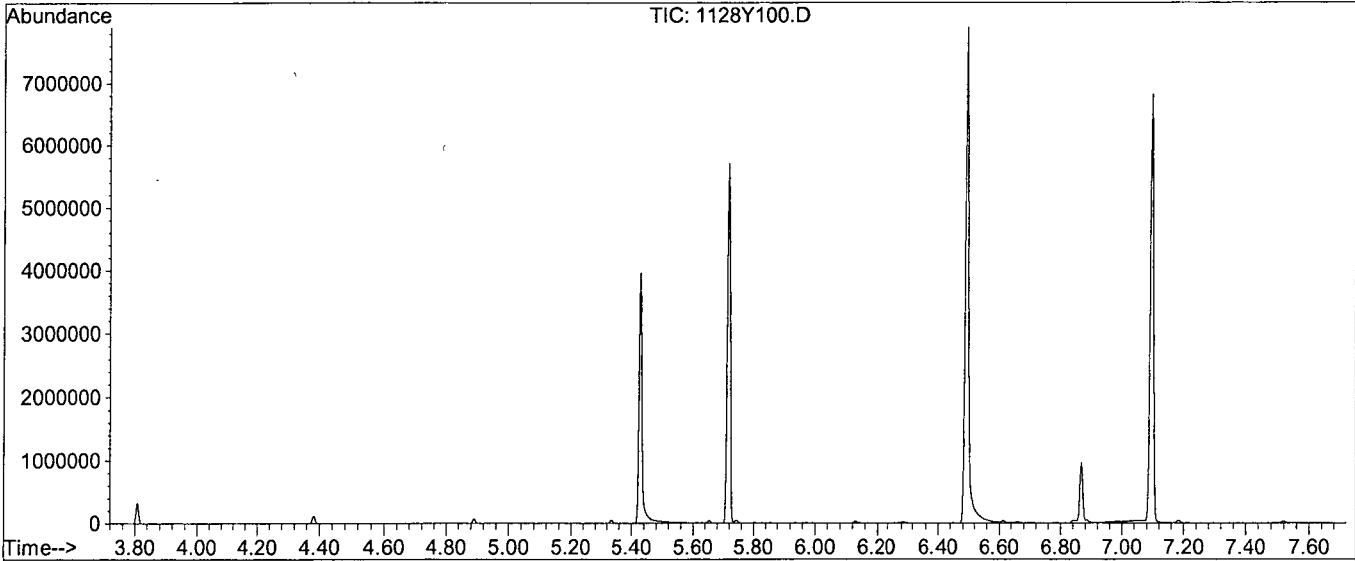
TIC: 1128Y093.D

(5) Pentachlorophenol		
5.43min	0.0000	
response	2431377	
Ion	Exp%	Act%
266.00	100	100
264.00	64.20	62.73
268.00	62.40	65.33
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y100.D  
 Acq On : 1 Feb 19 9:17  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 853, 854, 855; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	34.6	203840	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	809	PASS
127	198	10	80	49.0	287979	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	588288	PASS
199	198	5	9	6.9	40451	PASS
275	198	10	60	27.4	160939	PASS
365	198	1	100	3.4	19896	PASS
441	442	0.01	24	10.5	65189	PASS
442	198	50	150	105.3	619285	PASS
443	442	15	24	18.8	116187	PASS

Data File Name: 1128Y100.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 1 Feb 19 9:17  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 100  
Instrument Name: Yoda

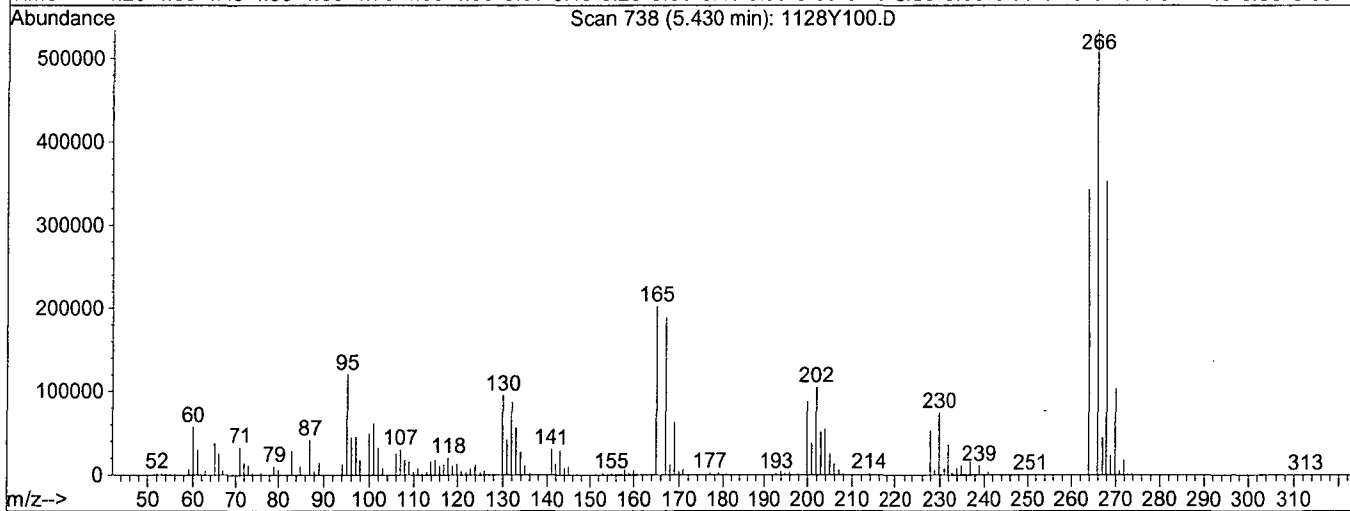
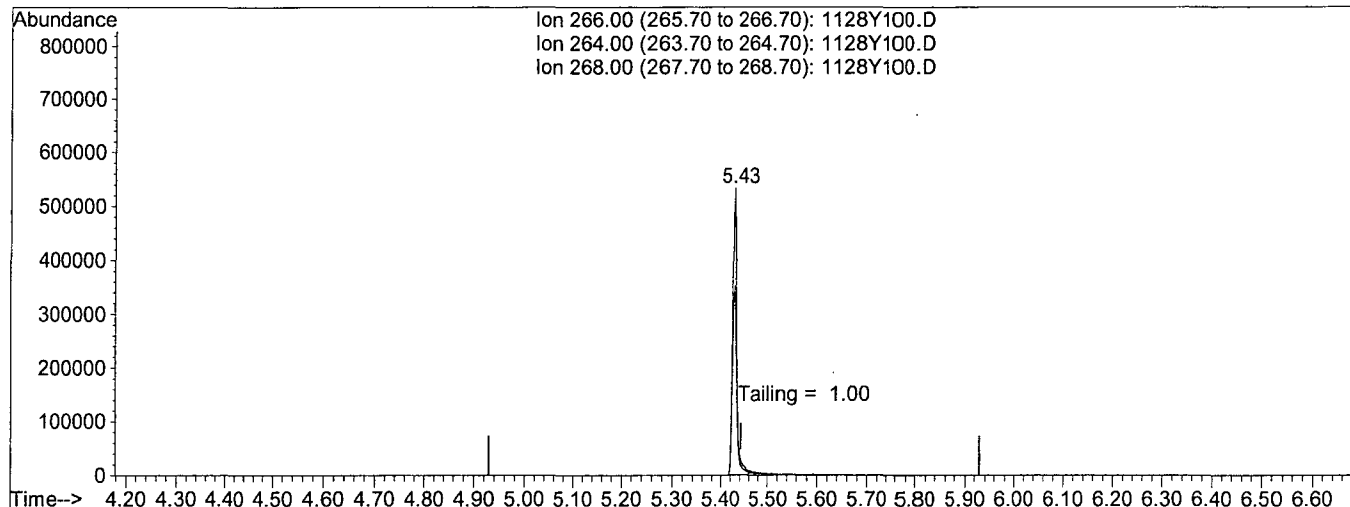
#	Name	Ret Time	Target Response
1)	DDT	7.10	52603900
2)	DDD	6.89	403043
3)	DDE	7.04	33343

Breakdown 0.82

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y100.D Vial: 100  
 Acq On : 1 Feb 19 9:17 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Feb 1 9:33 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y100.D

(5) Pentachlorophenol

5.43min 0.0000

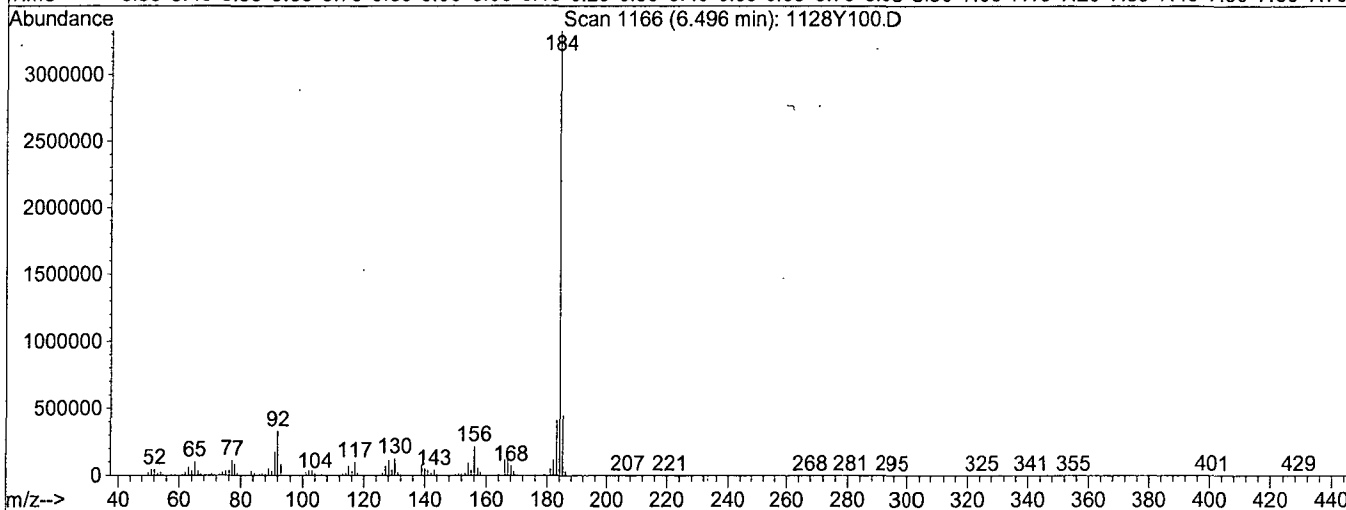
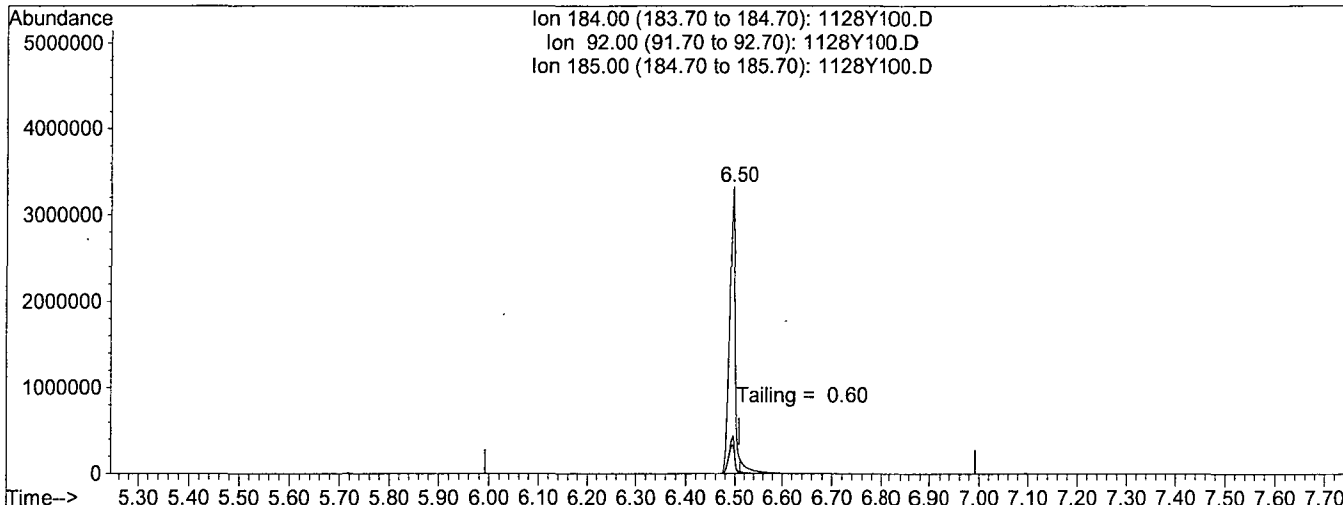
response 3490414

Ion	Exp%	Act%
266.00	100	100
264.00	64.20	61.20
268.00	62.40	63.41
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y100.D Vial: 100  
 Acq On : 1 Feb 19 9:17 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Feb 1 9:33 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y100.D

(6) Benzidine

6.50min 0.0000

response 28645968

Ion	Exp%	Act%
184.00	100	100
92.00	10.90	10.63
185.00	14.10	13.33
0.00	0.00	0.00

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/19						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MEE	Neat 99.5%	HEM SERVIC	0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 7/31/22				

0.097ml were spiked in 500ml of water and extracted on 07/27/18. Final concentration is 2000ug/L  
 QC on 05/04/18

Name of Final Standard Diethylene Glycol

Prep'd By (Initials) GA

Prep Date 07/25/18  
Exp Date 11/10/18

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	216101007-37330 and 37331	10/03/18	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do MEE M STD Stock (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 11/10/18 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 0801Y064

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/18						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MEE	Neat 99.5%	HEM SERVICE	0.1032g	10 mL	10320ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 08/04/18				

0.097ml were spiked in 500ml of water and extracted on 06/07/17. Final concentration is 2000ug

APPL re-certified MEE SS stock Lot 5259000-37082 and extended the expiration date to 8/04/18 per verification with a different source Accu Standards Lot # 216101007-37334.5 injected on 05/04/18



Name of  
Final

Standard 8270 Internal Standard (Ampule)

Prep'd By (Initials)

OA

Prep Date 06/22/18

Exp Date 06/22/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
EPA 8270 Semivolatiles Internal Standard	RESTEK	CRM48902	2000 ug/mL	A0130603-38562	06/22/19	1000 uL	1 mL	NA	100ug/mL

Name of  
Final

Standard

MEE CCV

Prep'd By (Initials)

OA

Prep Date

12/19/18

Exp Date

11/06/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD	APPL		2000 ug/mL	12/17/18	12/17/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	11/29/18	11/06/19	4 uL	*	*	*

Name of  
Final  
Standard Diethylene Glycol

Prep'd By (Initials) OA

Prep Date 12/17/18

Exp Date 02/28/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	21610100 7-37332 and 37333	02/28/19	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 02/28/19 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 1128Y014

Name of  
Final

Standard MEE Curve

Prep'd By (Initials)

GA

Prep Date 08/01/18

Exp Date 02/28/19

Initial Standard Information						Final Standard Information			
MEE M STD Stock	APPL		200 ug/mL	07/27/18	02/28/19	5 uL	200uL	Methanol 195uL	50 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	5 uL	100uL	Methanol 95uL	100 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	10 uL	100uL	Methanol 90 uL	200 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	20 uL	100uL	Methanol 80 uL	400 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	200 uL	Methanol 150 uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	30 uL	100uL	Methanol 70 uL	600 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	40 uL	100uL	Methanol 60 uL	800 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	100uL	Methanol 50uL	1000 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*

Name of

Final

Standard

MEE Second Source

Prep'd By (Initials)

GA

Prep Date

08/01/18

Exp Date

06/22/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	07/27/18	07/27/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*

# Organic Extraction Worksheet

<b>Method</b>	Solid Phase Extraction of 2MEE in Water	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	MWE2MEE	<b>Units</b>	mL
Spiked ID 1	Diethylene Glycol 12-17-18 EXP 2-28-19	Surrogate ID 1					
Spiked ID 2	2MEE SS 10320ug/mL 8-3-18 exp 8-3-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		YES			
Spiked ID 7		Ext. Start Time:		01/28/19 10:55			
Spiked ID 8		Ext. End Time:		01/29/19 9:05			
		GC Requires Extract By:		01/31/19 0:00			
		pH1		Water Bath Temp Criteria			
		pH2					
		pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: CFM

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
1	190128A Blk			NA	NA	500	2	7	01/28/19 10:55		
2	190128A LCS-1	0.040	1	NA	NA	500	2	7	01/28/19 10:55		
3	190128A LCSD-1	0.040	1	NA	NA	500	2	7	01/28/19 10:55		
4	AZ85520	AZ85520W09		NA	NA	500	2	7	01/28/19 10:55	87932	
5	AZ85521	AZ85521W05		NA	NA	500	2	7	01/28/19 10:55	87932	
6	AZ85523	AZ85523W08		NA	NA	500	2	7	01/28/19 10:55	87932	
7	AZ85525	AZ85525W08		NA	NA	500	2	7	01/28/19 10:55	87932	
8	AZ85527	AZ85527W08		NA	NA	500	2	7	01/28/19 10:55	87932	
9	AZ85562 MS-1	AZ85562W26	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87940
10	AZ85562 MSD-1	AZ85562W25	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87940
11	AZ85562	AZ85562W24		NA	NA	500	2	7	01/28/19 10:55	87940	
12	AZ85563	AZ85563W05		NA	NA	500	2	7	01/28/19 10:55	87940	
13	AZ85565	AZ85565W19		NA	NA	500	2	7	01/28/19 10:55	87940	
14	AZ85567	AZ85567W19		NA	NA	500	2	7	01/28/19 10:55	87940	
15	AZ85569	AZ85569W19		NA	NA	500	2	7	01/28/19 10:55	87940	
16	AZ85643 MS-1	AZ85643W23	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87956

<b>Solvent and Lot#</b>	
ENVI-Carb Plus 400MG/1ML	
Reverible Tube Lot:	10689901
PH Strip	HC 849161
Di Water	1-28-19
Dichloromethane	18G194011
Methanol	58179

<b>Extraction COC Transfer</b>	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	01/30/19
Time	10:10
Refrigerator	# down

<b>Technician's Initials</b>	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:07:47 PM

Reviewed By: *KY*

Date: *1/29/19*

# Organic Extraction Worksheet

<b>Method</b>	Solid Phase Extraction of 2MEE in Water	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	MWE2MEE	<b>Units</b>	mL
Spiked ID 1	Diethylene Glycol 12-17-18 EXP 2-28-19	Surrogate ID 1					
Spiked ID 2	2MEE SS 10320ug/mL 8-3-18 exp 8-3-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		YES			
Spiked ID 7		Ext. Start Time:		01/28/19 10:55			
Spiked ID 8		Ext. End Time:		01/29/19 9:05			
		GC Requires Extract By:		01/31/19 0:00			
		pH1		Water Bath Temp Criteria			
		pH2					
		pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: CFM

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
17	AZ85643 MSD-1	AZ85643W25	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87956
	equip										
18	AZ85643	AZ85643W26			NA	NA	500	2	7	01/28/19 10:55	87956
	equip										
19	AZ85644	AZ85644W06			NA	NA	500	2	7	01/28/19 10:55	87956
	equip										
20	AZ85646	AZ85646W18			NA	NA	500	2	7	01/28/19 10:55	87956
	equip										
21	AZ85653	AZ85653W18			NA	NA	500	2	7	01/28/19 10:55	87956
	equip										
22	SS		0.097	2	NA	NA	500	2	7	01/28/19 10:55	
	equip										

Kyr 11/29/19

<b>Solvent and Lot#</b>	
ENVI-Carb Plus 400MG/1ML	
Reverible Tube Lot:	10689901
PH Strip	HC 849161
Di Water	1-28-19
Dichloromethane	18G194011
Methanol	58179

<b>Extraction COC Transfer</b>	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

<b>Technician's Initials</b>	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:07:47 PM

Reviewed By: *Kyr* Date *11/29/19*

## Injection Log

Directory: M:\YODA\DATA\Y181128M\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1128Y002.D	1	SV Tune 03/07/18		28 Nov 18 7:30
2	4	1128Y004.D	1	50ug/ml MEE 08/01/18	soil	28 Nov 18 8:08
3	5	1128Y005.D	1	100ug/ml MEE 08/01/18	soil	28 Nov 18 8:32
4	6	1128Y006.D	1	200ug/ml MEE 08/01/18	soil	28 Nov 18 8:55
5	7	1128Y007.D	1	400ug/ml MEE 08/01/18	soil	28 Nov 18 9:19
6	8	1128Y008.D	1	600ug/ml MEE 08/01/18	soil	28 Nov 18 9:43
7	9	1128Y009.D	1	800ug/ml MEE 08/01/18	soil	28 Nov 18 10:06
8	10	1128Y010.D	1	1000ug/ml MEE 08/01/18	soil	28 Nov 18 10:30
9	12	1128Y012.D	1	500ug/ml MEE 08/01/18	soil	28 Nov 18 11:17
10	14	1128Y014.D	1	SS ug/ml MEE 08/01/18	soil	28 Nov 18 12:26
11	56	1128Y056.D	1	SV TUNE 11/10/18	soil	29 Jan 19 8:36
12	57	1128Y057.D	1	500ug/mL mee 12/12/18	soil	29 Jan 19 8:51
13	68	1128Y068.D	1	AZ85520W09 2/500	soil	29 Jan 19 13:31
14	69	1128Y069.D	1	AZ85521W05 2/500	soil	29 Jan 19 13:54
15	70	1128Y070.D	1	AZ85523W08 2/500	soil	29 Jan 19 14:18
16	71	1128Y071.D	1	AZ85525W08 2/500	soil	29 Jan 19 14:41
17	86	1128Y086.D	1	190128A BLK 2/500	soil	29 Jan 19 20:36
18	88	1128Y088.D	1	500ug/ml MEE 12/19/18	soil	29 Jan 19 21:24
19	93	1128Y093.D	1	SV TUNE 11/10/18	soil	30 Jan 19 7:56
20	94	1128Y094.D	1	500ug/ml MEE 12/19/18	soil	30 Jan 19 8:52
21	95	1128Y095.D	1	AZ85527W08 2/500	soil	30 Jan 19 9:17
22	98	1128Y098.D	1	500ug/ml MEE 12/19/18	soil	30 Jan 19 11:16
23	100	1128Y100.D	1	SV TUNE 11/10/18	soil	1 Feb 19 9:17
24	1	1128Y101.D	1	500ug/ml MEE 12/19/18	soil	1 Feb 19 9:32
25	2	1128Y102.D	1	190128A LCS-1 2/500	soil	1 Feb 19 9:56
26	3	1128Y103.D	1	190128A LCSD-1 2/500	soil	1 Feb 19 10:19
27	4	1128Y104.D	1	500ug/ml MEE 12/19/18	soil	1 Feb 19 10:44



**ORGANICS**  
**Calibration Data**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/28/19 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

0128L03.D    0128L04.D    0128L05.D    0128L06.D    0128L07.D    0128L08.D    0128L09.D    0128L10.D    0128L12.D    0128L11.D

	Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TM Freon 1113		0.0898	0.1058	0.1098	0.1141	0.0940	0.1018	0.0971	0.1070	0.0956	0.10	8.0	TM			
3	TML Dichlorodifluoromethane		0.1186	0.2346	0.1632	0.1366	0.1551	0.1726	0.1707	0.1660	0.1681	0.17	19	TML	1.000		
4	TML Freon 114		0.1777	0.1766	0.1637	0.1095	0.1346	0.1359	0.1241	0.1059	0.1243	0.14	20	TML	0.991		
5	TM**L Chloromethane		0.4531	0.3981	0.2709	0.2841	0.2751	0.2678	0.2555	0.2584	0.2609	0.30	24	TM**L	1.000		
6	TM* Vinyl chloride		0.1696	0.2074	0.2017	0.1835	0.1993	0.1942	0.1970	0.2141	0.2043	0.20	6.8	TM*			
7	TM 2-Chloro-1,1,1-trifluoroethane		0.1667	0.1779	0.1811	0.1754	0.1640	0.1712	0.1573	0.1476	0.1548	0.17	6.8	TM			
8	TML Bromomethane		0.1776	0.1614	0.1403	0.1335	0.1292	0.1179	0.1148	0.1143	0.1137	0.13	17	TML	1.000		
9	TML Chloroethane		0.1416	0.1331	0.0996	0.1114	0.0977	0.0931	0.0872		0.0929	0.11	19	TML	0.998		
10	TM Dichlorofluoromethane		0.4362	0.3737	0.3313	0.3001	0.3233	0.3079	0.3110	0.3205	0.3164	0.34	13	TM			
11	TM Trichlorofluoromethane		0.2237	0.2883	0.2567	0.2656	0.2810	0.2811	0.2819	0.2939	0.2910	0.27	8.1	TM			
12	TM Acrolein	0.0495	0.0457	0.0477	0.0459	0.0448	0.0450	0.0440	0.0425	0.0427	0.0424	0.05	5.1	TM			
13	TML Acetone		0.2299	0.1209	0.0845	0.0468	0.0470	0.0422	0.0371		0.0399	0.08	82	TML	0.997		
14	TM Freon-113		0.1188	0.1658	0.1502	0.1394	0.1526	0.1389	0.1465	0.1522	0.1533	0.15	9.0	TM			
15	TM*L 1,1-DCE		0.0657	0.0513	0.0439	0.0464	0.0370	0.0440	0.0442	0.0439	0.0421	0.05	17	TM*L	0.999		
16	TML t-Butanol	0.0403	0.0276	0.0270	0.0242	0.0253	0.0244	0.0234				0.03	21	TML	0.997		
17	TML 2-Propanol			0.0235	0.0220	0.0151	0.0157	0.0150	0.0144	0.0150	0.0144	0.02	22	TML	0.997		
18	TM Acetonitrile		0.0363	0.0356	0.0338	0.0326	0.0326	0.0330	0.0309	0.0314	0.0311	0.03	5.8	TM			
19	TML Methyl Acetate		0.3276	0.2260	0.2111	0.1841	0.1805	0.1731	0.1635	0.1631	0.1706	0.20	26	TML	1.000		
20	TML Iodomethane		0.0576	0.0381	0.0402	0.0451	0.0528	0.0620	0.0768	0.0895	0.0861	0.06	32	TML	0.995		
21	TM Acrylonitrile		0.1188	0.1005	0.0782	0.0912	0.0847	0.0831	0.0816	0.0781	0.0796	0.09	15	TM			
22	TML Methylene chloride		0.8197	0.4388	0.2771	0.2123	0.2089	0.1929	0.1881	0.1890	0.1945	0.30	69	TML	1.000		
23	TM Carbon disulfide		0.6354	0.5743	0.5221	0.4879	0.4944	0.4765	0.4947	0.5035	0.5028	0.52	9.8	TM			
24	TM Methyl t-butyl ether (MtBE)		0.5590	0.5812	0.5979	0.6035	0.5958	0.5901	0.6096	0.6039	0.6065	0.59	2.7	TM			
25	TM Trans-1,2-DCE		0.1025	0.0855	0.0858	0.0874	0.0874	0.0856	0.0828	0.0850	0.0869	0.09	6.6	TM			
26	TM Diisopropyl Ether		0.6984	0.6265	0.6269	0.6368	0.6193	0.6039	0.6211	0.6284	0.6288	0.63	4.2	TM			
27	TM** 2,2-Dichloro-1,1,1-trifluoroethane													TM**			
28	TM** 1,1-DCA		0.3581	0.3356	0.3820	0.3402	0.3567	0.3459	0.3523	0.3552	0.3553	0.35	3.8	TM**			
29	TM Vinyl Acetate		0.1857	0.1736	0.1565	0.1788	0.1651	0.1607	0.1669	0.1571	0.1664	0.17	5.9	TM			
30	TM Ethyl tert Butyl Ether		0.5709	0.5756	0.5669	0.6240	0.6116	0.5990	0.6141	0.6235	0.6172	0.60	3.9	TM			
31	TML MEK (2-Butanone)		0.1349	0.2207	0.1708	0.1328	0.1242	0.1364	0.1120	0.1150	0.1161	0.14	25	TML	0.999		
32	TM Cis-1,2-DCE		0.2714	0.2314	0.2270	0.2310	0.2247	0.2231	0.2295	0.2306	0.2314	0.23	6.3	TM			
33	TM 2,2-Dichloropropane		0.4001	0.3561	0.3259	0.3104	0.2783	0.2847	0.2848	0.2904	0.2881	0.31	13	TM			
34	TM 2-Methylpentane													TM			
35	TML 3-Methylpentane													TML			

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/28/19 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type		Q	MRF
36	TM*	Chloroform		0.3914	0.3844	0.3705	0.3691	0.3707	0.3703	0.3745	0.3746	0.3787	0.38	2.0	TM*			
37	TM	Bromochloromethane		0.0713	0.0578	0.0505	0.0585	0.0589	0.0556	0.0589	0.0538	0.0576	0.06	9.8	TM			
38	S	Dibromofluoromethane(S)	0.5786	0.5271	0.4726	0.4590	0.4831	0.4862	0.4858	0.4849	0.4728	0.4653	0.49	7.3	S			
39	TM	1,1,1-TCA		0.1673	0.1276	0.1488	0.1406	0.1384	0.1360	0.1411	0.1407	0.1411	0.14	7.6	TM			
40	TML	Cyclohexane		0.2076	0.2293	0.2269	0.1706	0.1605	0.1515	0.1566	0.1670	0.1658	0.18	17	TML	0.999		
41	TM	1,1-Dichloropropene		0.2790	0.2661	0.2544	0.2410	0.2481	0.2480	0.2588	0.2652	0.2606	0.26	4.5	TM			
42	TM	2,2,4-Trimethylpentane		0.5291	0.5660	0.5182	0.4455	0.4893	0.5005	0.5243	0.5561	0.5323	0.52	7.0	TM			
43	S	1,2-DCA-D4(S)	0.6725	0.6469	0.5511	0.5503	0.5606	0.5609	0.5646	0.5474	0.5318	0.5328	0.57	8.4	S			
44	TM	Carbon Tetrachloride		0.2595	0.2672	0.2698	0.2727	0.2736	0.2714	0.2829	0.2940	0.2899	0.28	4.0	TM			
45	TM	Tert Amyl Methyl Ether		0.6917	0.6814	0.6049	0.5988	0.6043	0.6107	0.6247	0.6291	0.6312	0.63	5.4	TM			
46	TML	Methylcyclopentane													TML			
47	TM	1,2-DCA		0.3007	0.2966	0.3100	0.3039	0.3084	0.3079	0.3051	0.3020	0.3093	0.30	1.5	TM			
48	TM	Benzene		0.8710	0.8266	0.7805	0.8190	0.8165	0.7848	0.8141	0.8251	0.8239	0.82	3.2	TM			
49	TM	TCE		0.1214	0.1103	0.1287	0.1174	0.1189	0.1149	0.1205	0.1211	0.1204	0.12	4.2	TM			
50	TM	2-Pentanone		0.2008	0.2112	0.1962	0.1985	0.1999	0.2005	0.1856	0.1938	0.1867	0.20	4.0	TM			
51	TM*	1,2-Dichloropropane		0.2615	0.2147	0.2238	0.2240	0.2218	0.2165	0.2215	0.2220	0.2236	0.23	6.2	TM*			
52	TM	Bromodichloromethane		0.1698	0.1635	0.1599	0.1628	0.1651	0.1613	0.1683	0.1659	0.1630	0.16	1.9	TM			
53	TM	Methyl Cyclohexane		0.3138	0.2641	0.2759	0.2430	0.2668	0.2592	0.2890	0.3007	0.2945	0.28	8.1	TM			
54	TM	Dibromomethane		0.1464	0.1496	0.1536	0.1579	0.1601	0.1558	0.1559	0.1562	0.1579	0.15	2.8	TM			
55	TM	2-Chloroethyl vinyl ether					0.0062	0.0059	0.0050	0.0054	0.0059	0.0057	0.01	7.6	TM			
56	TML	MIBK (methyl isobutyl ketone)		0.4446	0.2952	0.2789	0.2395	0.2511	0.2336	0.2230	0.2328	0.2253	0.27	26	TML	0.999		
57	TM	1-Bromo-2-chloroethane		0.1692	0.1977	0.1606	0.1803	0.1778	0.1773	0.1763	0.1761	0.1789	0.18	5.6	TM			
58	TM	Cis-1,3-Dichloropropene		0.3775	0.3502	0.3359	0.3420	0.3674	0.3475	0.3617	0.3673	0.3647	0.36	3.9	TM			
59	TM*	Toluene		0.4373	0.4021	0.4614	0.4503	0.4711	0.4666	0.4949	0.5128	0.4915	0.47	7.2	TM*			
60	TM	Trans-1,3-Dichloropropene		0.3430	0.3259	0.3256	0.3440	0.3291	0.3246	0.3425	0.3511	0.3469	0.34	3.1	TM			
61	TM	1,1,2-TCA		0.1765	0.1816	0.1732	0.1729	0.1796	0.1763	0.1786	0.1797	0.1809	0.18	1.8	TM			
62	TML	2-Hexanone		0.2578	0.2417	0.1674	0.1528	0.1579	0.1607	0.1484	0.1641	0.1608	0.18	23	TML	0.999		
63	I	Chlorobenzene-D5 (IS)																
64	S	Toluene-D8(S)	3.031	3.045	2.442	2.383	2.511	2.462	2.471	2.288	2.132	2.256	2.5	12	S			
65	TM	1,2-EDB		0.1953	0.1996	0.1697	0.1773	0.1604	0.1675	0.1628	0.1516	0.1579	0.17	9.7	TM			
66	TML	Tetrachloroethene		0.2594	0.2246	0.1764	0.1875	0.1819	0.1844	0.1731	0.1638	0.1788	0.19	16	TML	0.998		
67	TML	1-Chlorohexane		0.5606	0.4137	0.2732	0.2987	0.2992	0.2990	0.3018	0.3183	0.3175	0.34	27	TML	1.000		
68	TM	1,1,1,2-Tetrachloroethane		0.2801	0.3277	0.2795	0.3180	0.3246	0.3065	0.2983	0.2884	0.3023	0.30	6.0	TM			
69	TM	m&p-Xylene		0.7507	0.7569	0.7448	0.8578	0.8543	0.8709	0.8969	0.9338	0.9342	0.84	9.0	TM			
70	TM	o-Xylene		0.2074	0.1790	0.1798	0.2124	0.2126	0.2370	0.2438	0.2603	0.2472	0.22	13	TM			

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc. \_\_\_\_\_

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/28/19 \_\_\_\_\_

Matrix: \_\_\_\_\_

Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type		Q	MRF
71	TM	Styrene		0.6008	0.6214	0.5963	0.6456	0.7048	0.7283	0.7443	0.8023	0.7890	0.69	11	TM			
72	S	4-Bromofluorobenzene(S)	0.9081	0.8451	0.7081	0.6531	0.7094	0.6818	0.7052	0.7482	0.7785	0.7587	0.75	10	S			
73	TM	1,3-Dichloropropane		0.5270	0.5074	0.4463	0.5309	0.4854	0.4894	0.4676	0.4402	0.4715	0.49	6.7	TM			
74	TM	Dibromochloromethane		0.3857	0.3551	0.3506	0.3866	0.3523	0.3463	0.3380	0.3236	0.3387	0.35	6.0	TM			
75	TM**	Chlorobenzene		0.8632	0.7408	0.7617	0.7712	0.7589	0.7636	0.7462	0.7429	0.7551	0.77	4.9	TM**			
76	TM*	Ethylbenzene		0.7039	0.5761	0.6002	0.6801	0.6379	0.6516	0.6606	0.6863	0.7018	0.66	6.8	TM*			
77	TM**	Bromoform		0.3028	0.2713	0.2345	0.2488	0.2458	0.2443	0.2370	0.2461	0.2448	0.25	8.5	TM**			
78	I	1,4-Dichlorobenzene-D (IS)																
79	TM	Isopropylbenzene		1.988	2.121	2.140	2.119	2.089	2.308	2.403	2.217	2.182	2.2	5.7	TM			
80	TM**	1,1,2,2-Tetrachloroethane		0.7105	0.7779	0.8266	0.7703	0.7519	0.7090	0.7713	0.7162	0.7320	0.75	5.2	TM**			
81	TML	1,2,3-Trichloropropane		0.1306	0.1852	0.1857	0.1366	0.1337	0.1331	0.1248	0.1160	0.1164	0.14	19	TML	0.999		
82	TML	t-1,4-Dichloro-2-Butene		0.1134	0.1135	0.1730	0.1680	0.1666	0.1629	0.1863	0.1680	0.1820	0.16	17	TML	0.997		
83	TM	Bromobenzene		0.3475	0.4341	0.3688	0.3667	0.3282	0.3479	0.3817	0.3316	0.3321	0.36	9.3	TM			
84	TM	n-Propylbenzene		1.384	1.129	1.240	1.316	1.347	1.348	1.478	1.411	1.377	1.3	7.6	TM			
85	TM	4-Ethyltoluene		1.776	1.658	1.765	1.870	1.953	2.017	2.331	2.241	2.182	2.0	12	TM			
86	TM	2-Chlorotoluene		0.8271	0.8168	0.8086	0.8254	0.7853	0.7777	0.8661	0.8376	0.8201	0.82	3.2	TM			
87	TM	1,3,5-Trimethylbenzene		1.559	1.609	1.494	1.551	1.600	1.692	1.963	1.875	1.830	1.7	9.8	TM			
88	TM	4-Chlorotoluene		0.8271	0.8168	0.9318	0.9276	0.9024	0.9508	1.034	1.006	0.9714	0.93	7.9	TM			
89	TM	Tert-Butylbenzene		1.413	1.595	1.765	1.711	1.731	1.738	1.882	1.864	1.790	1.7	8.3	TM			
90	TM	1,2,4-Trimethylbenzene		1.324	1.557	1.395	1.501	1.512	1.650	1.831	1.863	1.741	1.6	12	TM			
91	TM	Sec-Butylbenzene		2.030	1.896	2.009	2.092	2.108	2.109	2.231	2.297	2.161	2.1	5.7	TM			
92	TM	p-Isopropyltoluene		0.9362	0.9086	0.9436	0.9496	0.9166	0.9962	1.025	1.124	1.036	0.98	7.2	TM			
93	TM	Benzyl Chloride		1.082	0.9402	0.8842	0.9061	0.8321	0.8140	0.8385	0.9546	0.8793	0.90	9.1	TM			
94	TM	1,3-DCB		0.6977	0.7339	0.5944	0.6194	0.6337	0.5854	0.5796	0.6218	0.5907	0.63	8.5	TM			
95	TM	1,4-DCB		1.337	1.222	1.248	1.251	1.212	1.190	1.164	1.182	1.165	1.2	4.5	TM			
96	TM	n-Butylbenzene		1.082	0.9402	0.8842	0.9061	0.8321	0.8140	0.8385	0.9546	0.8793	0.90	9.1	TM			
97	TM	1,2-DCB		1.125	1.264	1.203	1.261	1.144	1.157	1.081	1.171	1.100	1.2	5.6	TM			
98	TM	Hexachloroethane		0.3898	0.4676	0.4231	0.4479	0.4320	0.4224	0.3969	0.4314	0.3878	0.42	6.4	TM			
99	TML	1,2-Dibromo-3-chloropropane		0.2065	0.1547	0.1727	0.1570	0.1414	0.1421	0.1339	0.1390	0.1211	0.15	17	TML	0.996		
100	TM	1,2,4-Trichlorobenzene		0.8283	0.7511	0.8239	0.7486	0.6979	0.7359	0.7217	0.6652	0.6522	0.74	8.4	TM			
101	TM	Hexachlorobutadiene		0.3982	0.3685	0.3686	0.3849	0.3651	0.3836	0.3533	0.3204	0.3213	0.36	7.5	TM			
102	TM	Naphthalene		1.849	1.610	1.515	1.558	1.550	1.564	1.548	1.478	1.396	1.6	7.9	TM			
103	TM	1,2,3-Trichlorobenzene		0.3535	0.4502	0.2933	0.3171	0.3315	0.3343	0.3480	0.3019	0.2962	0.34	14	TM			
104																		
105																		

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L03.D  
 Acq On : 28 Jan 19 15:03  
 Sample : 0.3ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:00 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 07:59:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	414464	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	262144	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	124304	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	47965	6.1150	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	24.460%
43) 1,2-DCA-D4(S)	6.07	65	55743	6.0932	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	24.372%
64) Toluene-D8(S)	8.37	98	158889	7.2752	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	29.100%
72) 4-Bromofluorobenzene(S)	11.26	95	47612	5.4158	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	21.664%
Target Compounds						Qvalue
12) Acrolein	2.42	56	8204	7.0027	ppb	# 92
16) t-Butanol	3.38	59	6689	13.8657	ppb	97

Quantitation Report

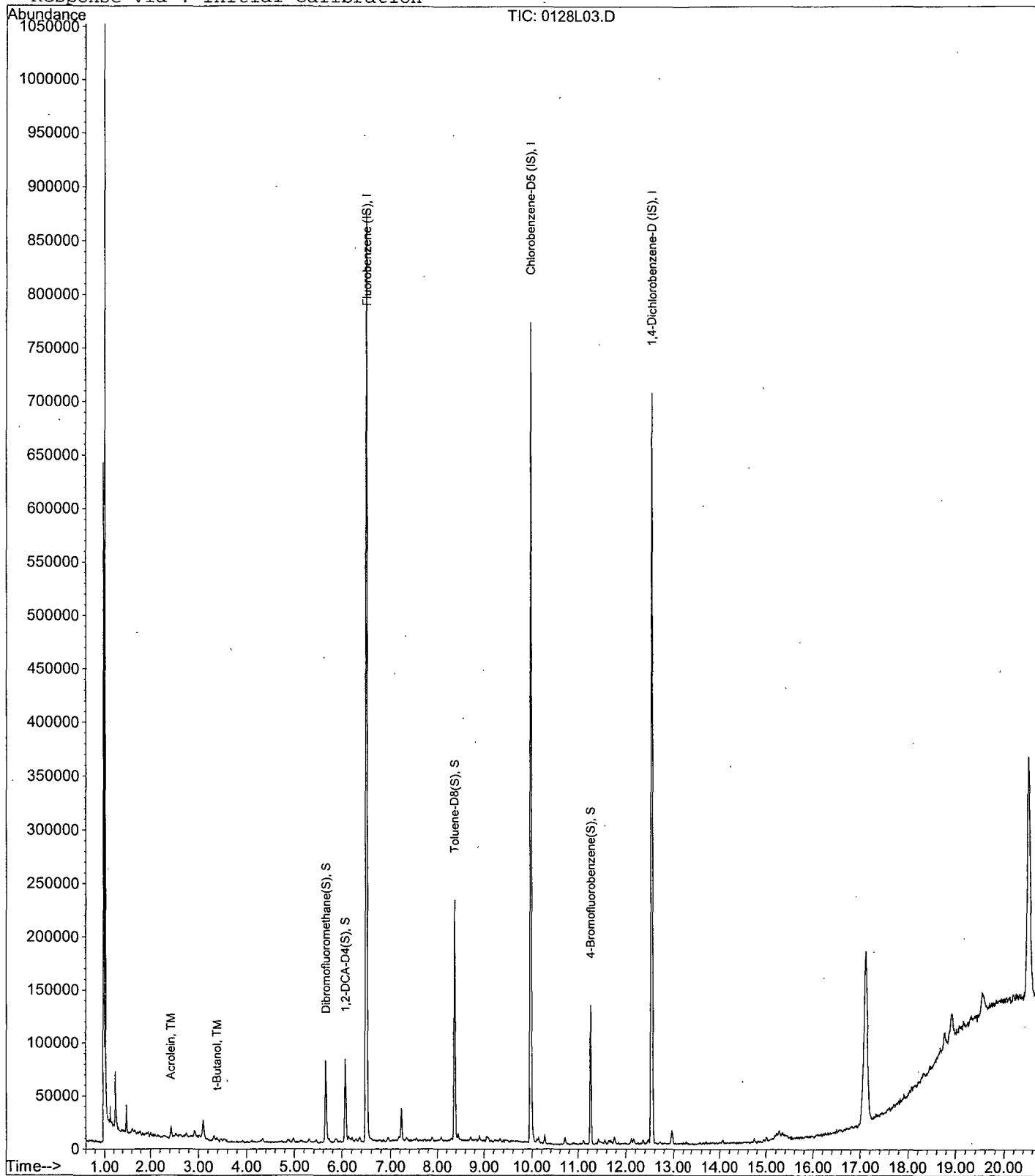
Data File : M:\LOKI\DATA\190128\0128L03.D  
Acq On : 28 Jan 19 15:03  
Sample : 0.3ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 8:00 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L04.D  
 Acq On : 28 Jan 19 15:31  
 Sample : 0.5ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD: 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	419520	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	260416	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	125192	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	44226	5.5704	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.280%	
43) 1,2-DCA-D4(S)	6.07	65	54279	5.8616	ppb	0.00
Spiked Amount	25.000		Recovery	=	23.448%	
64) Toluene-D8(S)	8.37	98	158592	7.3098	ppb	0.00
Spiked Amount	25.000		Recovery	=	29.240%	
72) 4-Bromofluorobenzene(S)	11.26	95	44018	5.0402	ppb	0.00
Spiked Amount	25.000		Recovery	=	20.160%	
Target Compounds						
						Qvalue
2) Freon 1113	1.12	116	7532	3.3994	ppb	99
3) Dichlorodifluoromethane	1.15	85	995	0.8411	ppb	95
4) Freon 114	1.25	85	1491	0.5359	ppb	76
5) Chloromethane	1.29	50	3802	0.6614	ppb	94
6) Vinyl chloride	1.38	62	1423	0.2821	ppb	92
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	13984	3.2747	ppb	94
8) Bromomethane	1.66	94	1490	-0.6930	ppb	89
9) Chloroethane	1.76	64	1188	0.4311	ppb	# 76
10) Dichlorofluoromethane	1.95	67	3660	0.3984	ppb	90
11) Trichlorofluoromethane	2.00	101	1877	0.2650	ppb	87
12) Acrolein	2.43	56	19180	17.5062	ppb	# 92
13) Acetone	2.61	43	1929	-0.3737	ppb	93
14) Freon-113	2.54	101	997	0.2543	ppb	88
15) 1,1-DCE	2.52	63	551	0.4237	ppb	# 61
16) t-Butanol	3.38	59	11565	23.6844	ppb	94
17) 2-Propanol	2.84	45	1939	5.5039	ppb	# 55
18) Acetonitrile	2.92	41	15228	18.5125	ppb	# 94
19) Methyl Acetate	3.01	43	2749	0.9278	ppb	# 61
20) Iodomethane	2.66	142	483	3.6263	ppb	# 72
21) Acrylonitrile	3.44	52	997	0.3199	ppb	92
22) Methylene chloride	3.09	84	6878	1.2869	ppb	95
23) Carbon disulfide	2.73	76	5331	0.3910	ppb	96
24) Methyl t-butyl ether (MtBE)	3.53	73	4690	0.3688	ppb	# 84
25) Trans-1,2-DCE	2.52	96	860	0.3634	ppb	# 89
26) Diisopropyl Ether	4.33	45	5860	0.4268	ppb	96
27) 2,2-Dichloro-1,1,1-trifluo	1.87	85	20	0.1135	ppb	# 1
28) 1,1-DCA	4.11	63	3005	0.3814	ppb	# 86
29) Vinyl Acetate	4.27	43	1558	0.5255	ppb	95
30) Ethyl tert Butyl Ether	4.87	59	4790	0.3970	ppb	# 88
31) MEK (2-Butanone)	5.08	43	1132	0.6516	ppb	# 54
32) Cis-1,2-DCE	4.97	96	2277	0.5003	ppb	# 59
33) 2,2-Dichloropropane	4.97	77	3357	0.5370	ppb	94
34) 2-Methylpentane	2.41	71	43	7.8929	ppb	# 20
35) 3-Methylpentane	2.81	57	224	10.7348	ppb	# 43
36) Chloroform	5.44	83	3284	0.4707	ppb	80
37) Bromochloromethane	5.30	128	598	0.5355	ppb	96
39) 1,1,1-TCA	5.65	97	1404	0.5512	ppb	88
40) Cyclohexane	5.72	41	1742	0.5493	ppb	# 74
41) 1,1-Dichloropropene	5.88	75	2341	0.4760	ppb	# 77

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L04.D  
 Acq On : 28 Jan 19 15:31  
 Sample : 0.5ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.29	57	4439	0.4891	ppb	# 73
44) Carbon Tetrachloride	5.86	117	2177	0.4175	ppb	97
45) Tert Amyl Methyl Ether	6.36	73	5804	0.5277	ppb	94
46) Methylcyclopentane	3.93	56	206	28.6294	ppb	100
47) 1,2-DCA	6.17	62	2523	0.4429	ppb	# 41
48) Benzene	6.13	78	7308	0.4923	ppb	# 90
49) TCE	6.95	130	1019	0.4176	ppb	# 81
50) 2-Pentanone	7.22	43	84247	28.8203	ppb	98
51) 1,2-Dichloropropane	7.20	63	2194	0.5561	ppb	# 84
52) Bromodichloromethane	7.54	83	1425	0.4791	ppb	# 93
53) Methyl Cyclohexane	7.17	83	2633	0.5008	ppb	# 70
54) Dibromomethane	7.34	93	1228	0.4470	ppb	85
55) 2-Chloroethyl vinyl ether	7.98	43	334	3.1685	ppb	# 34
56) MIBK (methyl isobutyl ket	8.28	43	3730	0.9341	ppb	91
57) 1-Bromo-2-chloroethane	7.88	63	1420	0.4697	ppb	86
58) Cis-1,3-Dichloropropene	8.07	75	3167	0.4867	ppb	# 77
59) Toluene	8.44	91	3669	0.4156	ppb	95
60) Trans-1,3-Dichloropropene	8.70	75	2878	0.4634	ppb	91
61) 1,1,2-TCA	8.90	83	1481	0.4666	ppb	89
62) 2-Hexanone	9.22	43	2163	0.8118	ppb	# 71
65) 1,2-EDB	9.44	107	1017	0.6084	ppb	81
66) Tetrachloroethene	9.05	166	1351	0.6590	ppb	# 77
67) 1-Chlorohexane	9.97	91	2920	0.3797	ppb	# 4
68) 1,1,1,2-Tetrachloroethane	10.10	131	1459	0.4314	ppb	82
69) m&p-Xylene	10.27	91	7820	0.7793	ppb	# 78
70) o-Xylene	10.70	106	1080	0.3732	ppb	97
71) Styrene	10.71	104	3129	0.3491	ppb	# 71
73) 1,3-Dichloropropane	9.08	76	2745	0.5702	ppb	82
74) Dibromochloromethane	9.33	129	2009	0.5569	ppb	100
75) Chlorobenzene	10.00	112	4496	0.5433	ppb	98
76) Ethylbenzene	10.13	91	3666	0.4915	ppb	91
77) Bromoform	10.90	173	1577	0.5386	ppb	# 57
79) Isopropylbenzene	11.11	105	4977	0.4313	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	1779	0.5159	ppb	# 65
81) 1,2,3-Trichloropropane	11.47	110	327	0.5487	ppb	# 73
82) t-1,4-Dichloro-2-Butene	11.49	53	284	0.3620	ppb	97
83) Bromobenzene	11.42	156	870	0.4650	ppb	100
84) n-Propylbenzene	11.56	91	3466	0.4891	ppb	99
85) 4-Ethyltoluene	11.68	105	4447	0.4156	ppb	98
86) 2-Chlorotoluene	11.77	91	2071	0.4644	ppb	89
87) 1,3,5-Trimethylbenzene	11.76	105	3903	0.4238	ppb	80
88) 4-Chlorotoluene	11.77	91	2071	0.4104	ppb	# 78
89) Tert-Butylbenzene	12.11	119	3538	0.3616	ppb	85
90) 1,2,4-Trimethylbenzene	12.17	105	3316	0.3674	ppb	97
91) Sec-Butylbenzene	12.36	105	5083	0.4270	ppb	91
92) p-Isopropyltoluene	12.52	119	2344	0.4241	ppb	92
93) Benzyl Chloride	12.71	91	2710	0.6685	ppb	96
94) 1,3-DCB	12.46	146	1747	0.5227	ppb	91
95) 1,4-DCB	12.56	146	3347	0.5083	ppb	# 74
96) n-Butylbenzene	12.71	91	2710	0.6685	ppb	# 75
97) 1,2-DCB	12.97	146	2818	0.4397	ppb	91
98) Hexachloroethane	13.26	117	976	0.4787	ppb	# 63
100) 1,2,4-Trichlorobenzene	14.75	180	2074	0.5128	ppb	# 82
101) Hexachlorobutadiene	14.93	225	997	0.4955	ppb	# 66



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L04.D Vial: 3  
 Acq On : 28 Jan 19 15:31 Operator: PM, DG, SV, CMM, KV  
 Sample : 0.5ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
102) Naphthalene	15.01	128	4629	0.5467	ppb	93
103) 1,2,3-Trichlorobenzene	15.28	180	885	0.4850	ppb #	86

Quantitation Report

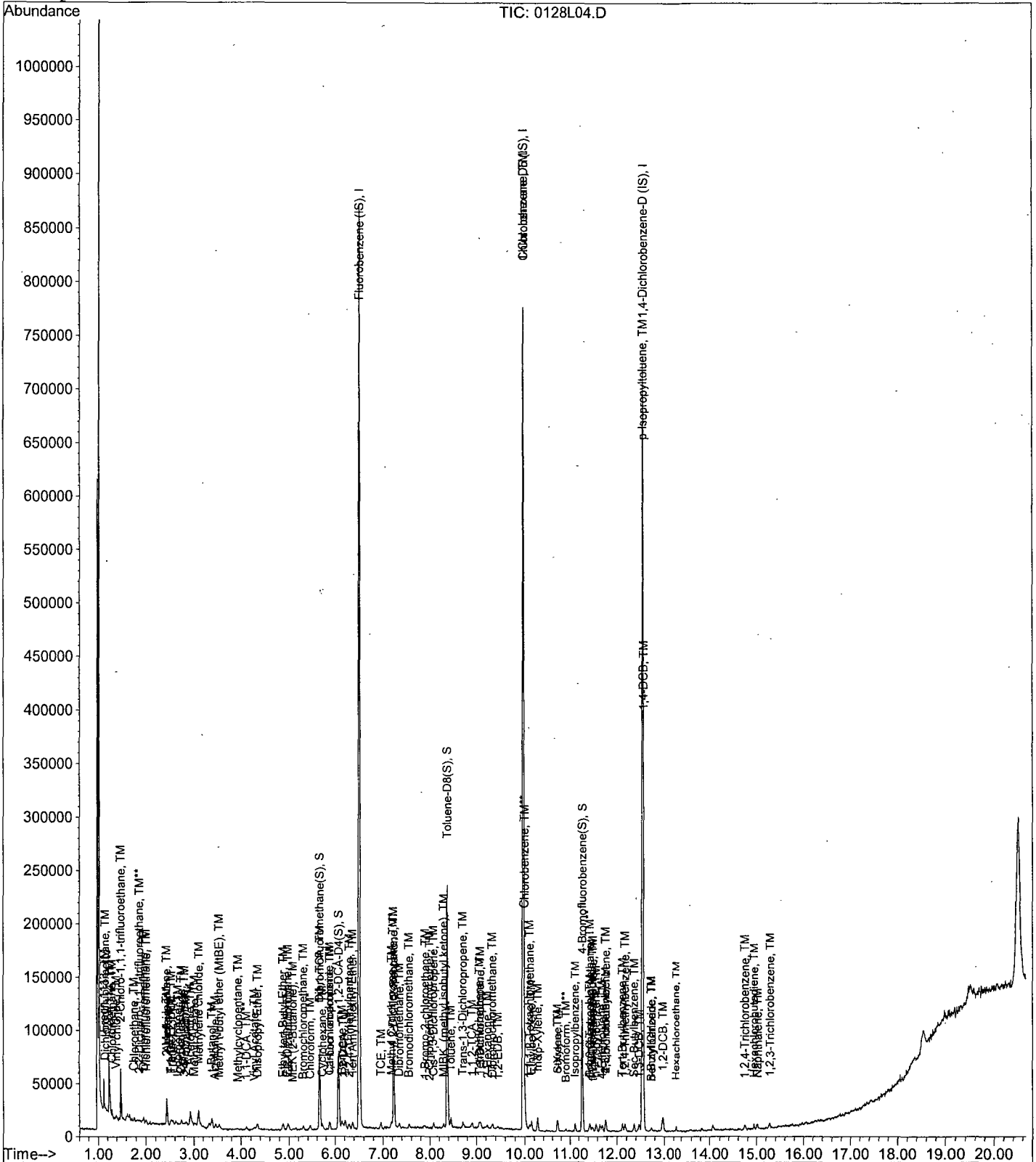
Data File : M:\LOKI\DATA\190128\0128L04.D  
Acq On : 28 Jan 19 15:31  
Sample : 0.5ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L05.D  
 Acq On : 28 Jan 19 16:00  
 Sample : 1.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	400384	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	262528	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	116336	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	75694	9.9896	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.960%	
43) 1,2-DCA-D4(S)	6.07	65	88263	9.9872	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.948%	
64) Toluene-D8(S)	8.37	98	256471	11.7261	ppb	0.00
Spiked Amount	25.000		Recovery	=	46.904%	
72) 4-Bromofluorobenzene(S)	11.26	95	74359	8.4459	ppb	0.00
Spiked Amount	25.000		Recovery	=	33.784%	
Target Compounds						
2) Freon 1113	1.12	116	16948	8.0147	ppb	99
3) Dichlorodifluoromethane	1.14	85	3757	1.5489	ppb	# 81
4) Freon 114	1.25	85	2829	1.0655	ppb	96
5) Chloromethane	1.29	50	6375	1.1620	ppb	97
6) Vinyl chloride	1.38	62	3322	0.6900	ppb	# 81
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	28496	6.9919	ppb	98
8) Bromomethane	1.66	94	2585	-0.2858	ppb	88
9) Chloroethane	1.76	64	2131	0.8391	ppb	97
10) Dichlorofluoromethane	1.95	67	5985	0.6827	ppb	95
11) Trichlorofluoromethane	2.00	101	4617	0.6830	ppb	93
12) Acrolein	2.43	56	38171	37.6088	ppb	# 99
13) Acetone	2.61	43	1937	-0.2700	ppb	89
14) Freon-113	2.54	101	2655	0.7095	ppb	# 75
15) 1,1-DCE	2.52	63	821	0.6616	ppb	# 47
16) t-Butanol	3.38	59	21610	46.3711	ppb	# 86
17) 2-Propanol	2.83	45	3766	11.2008	ppb	# 74
18) Acetonitrile	2.92	41	28502	36.3057	ppb	93
19) Methyl Acetate	3.02	43	3619	1.1493	ppb	93
20) Iodomethane	2.67	142	610	3.6943	ppb	# 90
21) Acrylonitrile	3.44	52	1609	0.7402	ppb	95
22) Methylene chloride	3.09	84	7028	1.3811	ppb	97
23) Carbon disulfide	2.73	76	9198	0.7069	ppb	# 92
24) Methyl t-butyl ether (MtBE)	3.54	73	9308	0.7670	ppb	# 86
25) Trans-1,2-DCE	2.52	96	1369	0.6061	ppb	86
26) Diisopropyl Ether	4.33	45	10034	0.7658	ppb	92
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	149	0.8861	ppb	# 80
28) 1,1-DCA	4.11	63	5374	0.7147	ppb	# 83
29) Vinyl Acetate	4.28	43	2781	0.9829	ppb	# 89
30) Ethyl tert Butyl Ether	4.88	59	9219	0.8007	ppb	96
31) MEK (2-Butanone)	5.08	43	3535	1.7950	ppb	# 83
32) Cis-1,2-DCE	4.98	96	3706	0.8533	ppb	84
33) 2,2-Dichloropropane	4.96	77	5703	0.9558	ppb	# 85
34) 2-Methylpentane	2.31	71	161	30.9649	ppb	# 1
35) 3-Methylpentane	2.79	57	148	7.4317	ppb	# 26
36) Chloroform	5.45	83	6157	0.9246	ppb	92
37) Bromochloromethane	5.31	128	925	0.8679	ppb	93
39) 1,1,1-TCA	5.65	97	2043	0.8404	ppb	94
40) Cyclohexane	5.72	41	3673	1.2218	ppb	77
41) 1,1-Dichloropropene	5.88	75	4262	0.9080	ppb	97

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L05.D  
 Acq On : 28 Jan 19 16:00  
 Sample : 1.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.29	57	9064	1.0465	ppb	# 73
44) Carbon Tetrachloride	5.86	117	4280	0.8600	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	10913	1.0396	ppb	# 85
46) Methylcyclopentane	3.95	56	174	25.3379	ppb	100
47) 1,2-DCA	6.16	62	4750	0.8737	ppb	# 89
48) Benzene	6.13	78	13238	0.9344	ppb	87
49) TCE	6.95	130	1767	0.7587	ppb	89
50) 2-Pentanone	7.22	43	169102	60.6134	ppb	99
51) 1,2-Dichloropropane	7.21	63	3439	0.9133	ppb	99
52) Bromodichloromethane	7.54	83	2619	0.9225	ppb	# 94
53) Methyl Cyclohexane	7.17	83	4230	0.8429	ppb	92
54) Dibromomethane	7.34	93	2396	0.9139	ppb	90
55) 2-Chloroethyl vinyl ether	8.08	43	315	3.1311	ppb	# 34
56) MIBK (methyl isobutyl ket	8.29	43	4728	1.2407	ppb	93
57) 1-Bromo-2-chloroethane	7.89	63	3167	1.0977	ppb	# 82
58) Cis-1,3-Dichloropropene	8.07	75	5609	0.9031	ppb	91
59) Toluene	8.44	91	6440	0.7644	ppb	86
60) Trans-1,3-Dichloropropene	8.70	75	5220	0.8806	ppb	96
61) 1,1,2-TCA	8.90	83	2909	0.9604	ppb	91
62) 2-Hexanone	9.22	43	3871	1.5223	ppb	# 73
65) 1,2-EDB	9.44	107	2096	1.2438	ppb	82
66) Tetrachloroethene	9.05	166	2359	1.1414	ppb	# 83
67) 1-Chlorohexane	10.00	91	4344	0.7937	ppb	95
68) 1,1,1,2-Tetrachloroethane	10.09	131	3441	1.0092	ppb	97
69) m&p-Xylene	10.27	91	15896	1.5713	ppb	90
70) o-Xylene	10.70	106	1880	0.6444	ppb	93
71) Styrene	10.71	104	6525	0.7221	ppb	80
73) 1,3-Dichloropropane	9.08	76	5328	1.0978	ppb	99
74) Dibromochloromethane	9.33	129	3729	1.0254	ppb	95
75) Chlorobenzene	10.00	112	7779	0.9325	ppb	98
76) Ethylbenzene	10.14	91	6050	0.8045	ppb	94
77) Bromoform	10.89	173	2849	0.9652	ppb	83
79) Isopropylbenzene	11.11	105	9870	0.9204	ppb	92
80) 1,1,2,2-Tetrachloroethane	11.43	83	3620	1.1298	ppb	# 98
81) 1,2,3-Trichloropropane	11.47	110	862	1.5564	ppb	# 71
82) t-1,4-Dichloro-2-Butene	11.49	53	528	0.7243	ppb	90
83) Bromobenzene	11.42	156	2020	1.1619	ppb	# 66
84) n-Propylbenzene	11.56	91	5254	0.7978	ppb	90
85) 4-Ethyltoluene	11.69	105	7717	0.7761	ppb	99
86) 2-Chlorotoluene	11.77	91	3801	0.9173	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	7488	0.8750	ppb	91
88) 4-Chlorotoluene	11.77	91	3801	0.8106	ppb	89
89) Tert-Butylbenzene	12.12	119	7423	0.8164	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	7245	0.8638	ppb	95
91) Sec-Butylbenzene	12.35	105	8821	0.7974	ppb	97
92) p-Isopropyltoluene	12.52	119	4228	0.8231	ppb	93
93) Benzyl Chloride	12.71	91	4375	1.1613	ppb	97
94) 1,3-DCB	12.46	146	3415	1.0995	ppb	85
95) 1,4-DCB	12.56	146	5686	0.9292	ppb	93
96) n-Butylbenzene	12.71	91	4375	1.1613	ppb	# 90
97) 1,2-DCB	12.97	146	5882	0.9877	ppb	98
98) Hexachloroethane	13.26	117	2176	1.1486	ppb	81
99) 1,2-Dibromo-3-chloropropan	13.82	75	720	0.4297	ppb	# 83
100) 1,2,4-Trichlorobenzene	14.75	180	3495	0.9299	ppb	# 80

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L05.D  
 Acq On : 28 Jan 19 16:00  
 Sample : 1.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	1715	0.9172	ppb	95
102) Naphthalene	15.01	128	7491	0.9521	ppb	92
103) 1,2,3-Trichlorobenzene	15.27	180	2095	1.2355	ppb #	70

Quantitation Report

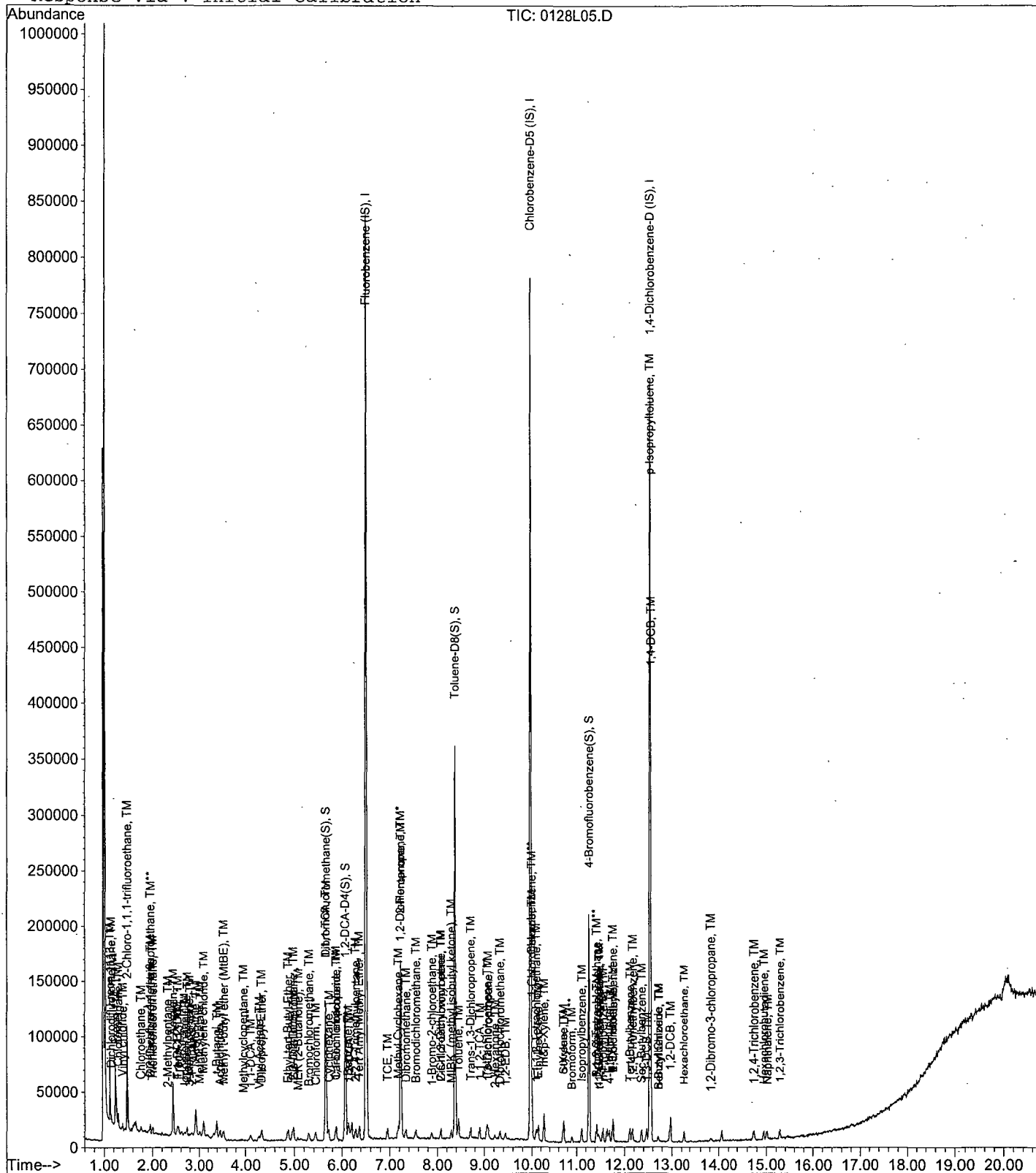
Data File : M:\LOKI\DATA\190128\0128L05.D  
 Acq On : 28 Jan 19 16:00  
 Sample : 1.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L06.D  
 Acq On : 28 Jan 19 16:29  
 Sample : 2.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	394368	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	273536	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	114176	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	72400	9.7006	ppb	0.00
Spiked Amount	25.000		Recovery	=	38.804%	
43) 1,2-DCA-D4(S)	6.07	65	86807	9.9722	ppb	0.00
Spiked Amount	25.000		Recovery	=	39.888%	
64) Toluene-D8(S)	8.37	98	260744	11.4417	ppb	0.00
Spiked Amount	25.000		Recovery	=	45.768%	
72) 4-Bromofluorobenzene(S)	11.27	95	71461	7.7901	ppb	0.00
Spiked Amount	25.000		Recovery	=	31.160%	
Target Compounds						
						Qvalue
2) Freon 1113	1.12	116	34638	16.6301	ppb	99
3) Dichlorodifluoromethane	1.15	85	5148	1.9200	ppb	96
4) Freon 114	1.25	85	5166	1.9753	ppb	92
5) Chloromethane	1.29	50	8547	1.5816	ppb	# 87
6) Vinyl chloride	1.38	62	6362	1.3416	ppb	99
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	57128	14.2310	ppb	96
8) Bromomethane	1.66	94	4427	0.3827	ppb	93
9) Chloroethane	1.76	64	3143	1.2728	ppb	88
10) Dichlorofluoromethane	1.95	67	10452	1.2104	ppb	99
11) Trichlorofluoromethane	2.00	101	8098	1.2162	ppb	89
12) Acrolein	2.42	56	54343	54.8124	ppb	# 98
13) Acetone	2.61	43	2666	0.5617	ppb	100
14) Freon-113	2.55	101	4738	1.2854	ppb	94
15) 1,1-DCE	2.52	63	1386	1.1339	ppb	87
16) t-Butanol	3.38	59	28645	62.4045	ppb	97
17) 2-Propanol	2.84	45	6927	20.9165	ppb	# 88
18) Acetonitrile	2.92	41	39974	51.6954	ppb	89
19) Methyl Acetate	3.02	43	6660	1.8488	ppb	95
20) Iodomethane	2.67	142	1269	4.0036	ppb	# 92
21) Acrylonitrile	3.45	52	2468	1.3135	ppb	# 65
22) Methylene chloride	3.09	84	8741	1.7562	ppb	99
23) Carbon disulfide	2.73	76	16471	1.2851	ppb	96
24) Methyl t-butyl ether (MtBE)	3.53	73	18863	1.5780	ppb	92
25) Trans-1,2-DCE	2.52	96	2706	1.2163	ppb	81
26) Diisopropyl Ether	4.33	45	19778	1.5325	ppb	92
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	312	1.8838	ppb	94
28) 1,1-DCA	4.10	63	12053	1.6275	ppb	95
29) Vinyl Acetate	4.27	43	4938	1.7718	ppb	96
30) Ethyl tert Butyl Ether	4.87	59	17885	1.5771	ppb	98
31) MEK (2-Butanone)	5.07	43	5390	2.6974	ppb	# 85
32) Cis-1,2-DCE	4.98	96	7161	1.6739	ppb	94
33) 2,2-Dichloropropane	4.96	77	10282	1.7495	ppb	# 92
34) 2-Methylpentane	2.43	71	70	13.6684	ppb	# 1
35) 3-Methylpentane	2.76	57	42	2.1412	ppb	# 25
36) Chloroform	5.45	83	11690	1.7822	ppb	95
37) Bromochloromethane	5.31	128	1594	1.5184	ppb	99
39) 1,1,1-TCA	5.65	97	4694	1.9604	ppb	92
40) Cyclohexane	5.73	41	7160	2.4248	ppb	74
41) 1,1-Dichloropropene	5.88	75	8026	1.7360	ppb	97

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L06.D  
 Acq On : 28 Jan 19 16:29  
 Sample : 2.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.28	57	16348	1.9162	ppb	96
44) Carbon Tetrachloride	5.87	117	8513	1.7366	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	19085	1.8458	ppb #	91
46) Methylcyclopentane	3.92	56	121	17.8888	ppb	100
47) 1,2-DCA	6.16	62	9779	1.8261	ppb #	84
48) Benzene	6.13	78	24623	1.7646	ppb	96
49) TCE	6.95	130	4060	1.7698	ppb	93
50) 2-Pentanone	7.22	43	232125	84.4728	ppb	100
51) 1,2-Dichloropropane	7.21	63	7062	1.9040	ppb #	84
52) Bromodichloromethane	7.55	83	5046	1.8046	ppb	92
53) Methyl Cyclohexane	7.17	83	8703	1.7608	ppb	97
54) Dibromomethane	7.33	93	4847	1.8770	ppb	96
55) 2-Chloroethyl vinyl ether	7.92	43	419	4.2284	ppb #	34
56) MIBK (methyl isobutyl ket	8.29	43	8799	2.3442	ppb	99
57) 1-Bromo-2-chloroethane	7.88	63	5066	1.7827	ppb	92
58) Cis-1,3-Dichloropropene	8.07	75	10597	1.7323	ppb	96
59) Toluene	8.44	91	14556	1.7541	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	10271	1.7592	ppb	96
61) 1,1,2-TCA	8.90	83	5465	1.8317	ppb	90
62) 2-Hexanone	9.22	43	5280	2.1081	ppb #	81
65) 1,2-EDB	9.44	107	3713	2.1146	ppb	87
66) Tetrachloroethene	9.05	166	3861	1.7930	ppb	81
67) 1-Chlorohexane	10.00	91	5978	1.2056	ppb #	77
68) 1,1,1,2-Tetrachloroethane	10.10	131	6117	1.7219	ppb	80
69) m&p-Xylene	10.27	91	32595	3.0923	ppb	95
70) o-Xylene	10.70	106	3934	1.2942	ppb	89
71) Styrene	10.71	104	13048	1.3859	ppb	92
73) 1,3-Dichloropropane	9.08	76	9767	1.9314	ppb	99
74) Dibromochloromethane	9.32	129	7672	2.0247	ppb	96
75) Chlorobenzene	10.00	112	16669	1.9178	ppb	97
76) Ethylbenzene	10.13	91	13134	1.6763	ppb	98
77) Bromoform	10.90	173	5131	1.6683	ppb	93
79) Isopropylbenzene	11.11	105	19550	1.8576	ppb	93
80) 1,1,2,2-Tetrachloroethane	11.43	83	7550	2.4008	ppb	89
81) 1,2,3-Trichloropropane	11.47	110	1696	3.1202	ppb #	69
82) t-1,4-Dichloro-2-Butene	11.50	53	1580	2.2085	ppb #	71
83) Bromobenzene	11.43	156	3369	1.9746	ppb	87
84) n-Propylbenzene	11.56	91	11329	1.7528	ppb	100
85) 4-Ethyltoluene	11.69	105	16124	1.6523	ppb	98
86) 2-Chlorotoluene	11.64	91	7386	1.8161	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	13642	1.6243	ppb	96
88) 4-Chlorotoluene	11.76	91	8511	1.8494	ppb	96
89) Tert-Butylbenzene	12.11	119	16122	1.8068	ppb	95
90) 1,2,4-Trimethylbenzene	12.17	105	12746	1.5484	ppb	98
91) Sec-Butylbenzene	12.36	105	18351	1.6903	ppb	95
92) p-Isopropyltoluene	12.52	119	8619	1.7098	ppb	97
93) Benzyl Chloride	12.72	91	8076	2.1843	ppb	98
94) 1,3-DCB	12.46	146	5429	1.7810	ppb	89
95) 1,4-DCB	12.57	146	11397	1.8977	ppb	89
96) n-Butylbenzene	12.72	91	8076	2.1843	ppb	98
97) 1,2-DCB	12.97	146	10987	1.8798	ppb	94
98) Hexachloroethane	13.25	117	3865	2.0788	ppb #	76
99) 1,2-Dibromo-3-chloropropan	13.82	75	1577	1.7693	ppb	92
100) 1,2,4-Trichlorobenzene	14.74	180	7526	2.0403	ppb	91



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L06.D  
 Acq On : 28 Jan 19 16:29  
 Sample : 2.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	3367	1.8347	ppb	90
102) Naphthalene	15.01	128	13839	1.7921	ppb	90
103) 1,2,3-Trichlorobenzene	15.28	180	2679	1.6098	ppb	83

Quantitation Report

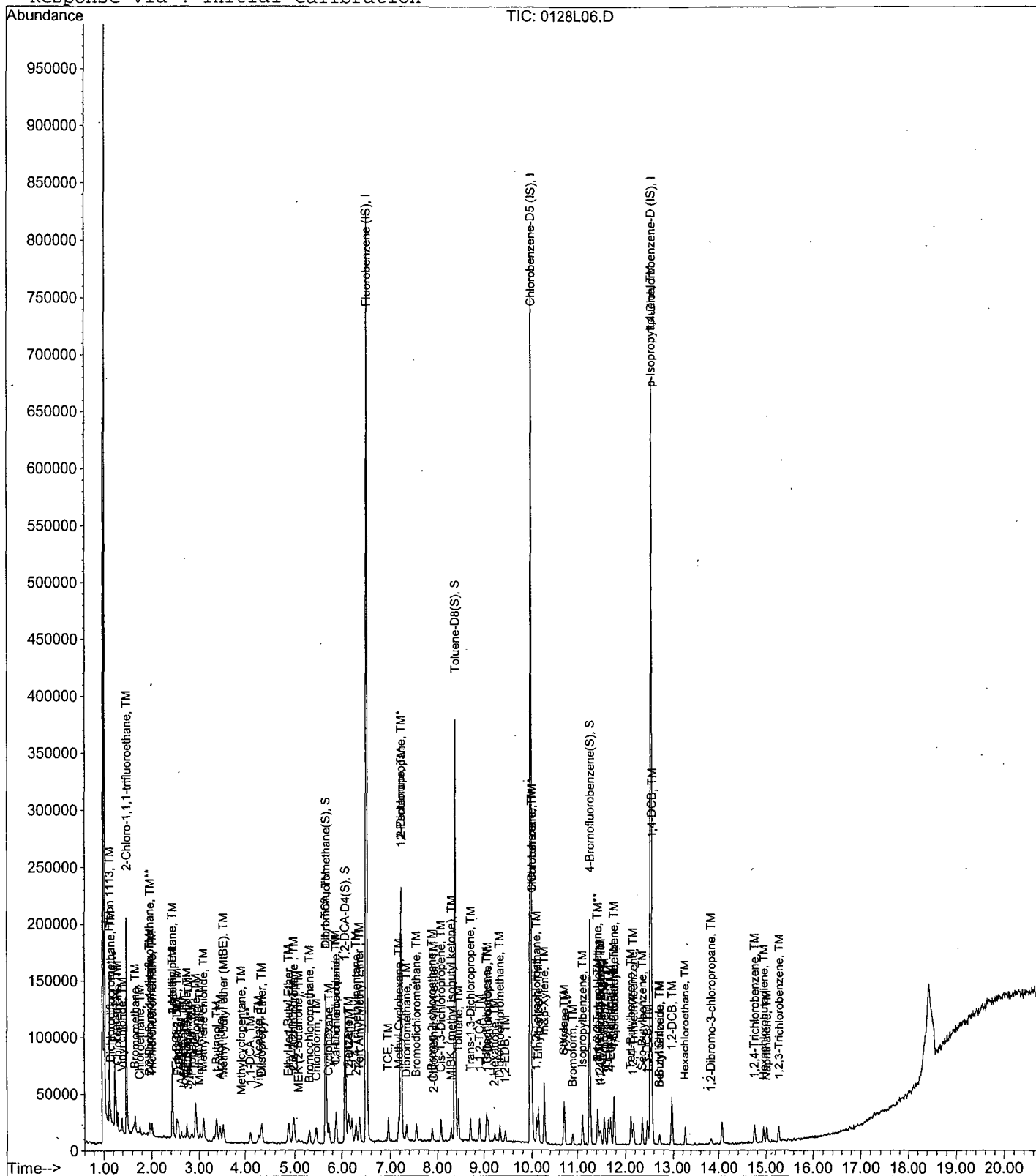
Data File : M:\LOKI\DATA\190128\0128L06.D  
 Acq On : 28 Jan 19 16:29  
 Sample : 2.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:06 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L07.D  
 Acq On : 28 Jan 19 16:57  
 Sample : 5.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	406976	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	273664	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	125568	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	196617	25.5279	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.112%	
43) 1,2-DCA-D4(S)	6.07	65	228144	25.3969	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.588%	
64) Toluene-D8(S)	8.37	98	687108	30.1368	ppb	0.00
Spiked Amount	25.000		Recovery	=	120.548%	
72) 4-Bromofluorobenzene(S)	11.27	95	194145	21.1542	ppb	0.00
Spiked Amount	25.000		Recovery	=	84.616%	
Target Compounds						
2) Freon 1113	1.12	116	74318	34.5755	ppb	99
3) Dichlorodifluoromethane	1.15	85	11115	3.3656	ppb	99
4) Freon 114	1.25	85	8912	3.3021	ppb	97
5) Chloromethane	1.29	50	23128	4.1472	ppb	91
6) Vinyl chloride	1.38	62	14934	3.0517	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	114184	27.5628	ppb	100
8) Bromomethane	1.66	94	10863	2.5507	ppb	92
9) Chloroethane	1.76	64	9071	3.6186	ppb	97
10) Dichlorofluoromethane	1.95	67	24428	2.7412	ppb	90
11) Trichlorofluoromethane	2.00	101	21621	3.1466	ppb	97
12) Acrolein	2.43	56	72873	71.5299	ppb	# 99
13) Acetone	2.61	43	3808	1.6852	ppb	98
14) Freon-113	2.54	101	11343	2.9819	ppb	92
15) 1,1-DCE	2.53	63	3776	2.9934	ppb	# 46
16) t-Butanol	3.38	59	41252	87.0854	ppb	99
17) 2-Propanol	2.83	45	9858	28.8446	ppb	# 59
18) Acetonitrile	2.92	41	53148	66.6030	ppb	# 96
19) Methyl Acetate	3.01	43	14982	3.6244	ppb	89
20) Iodomethane	2.67	142	3669	5.0620	ppb	95
21) Acrylonitrile	3.45	52	7420	4.3785	ppb	97
22) Methylene chloride	3.09	84	17284	3.4079	ppb	86
23) Carbon disulfide	2.73	76	39709	3.0022	ppb	97
24) Methyl t-butyl ether (MtBE)	3.53	73	49119	3.9818	ppb	95
25) Trans-1,2-DCE	2.52	96	7113	3.0982	ppb	96
26) Diisopropyl Ether	4.33	45	51832	3.8918	ppb	97
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	859	5.0259	ppb	# 47
28) 1,1-DCA	4.10	63	27694	3.6236	ppb	90
29) Vinyl Acetate	4.27	43	14553	5.0601	ppb	95
30) Ethyl tert Butyl Ether	4.87	59	50791	4.3399	ppb	95
31) MEK (2-Butanone)	5.07	43	10806	5.1005	ppb	92
32) Cis-1,2-DCE	4.98	96	18801	4.2586	ppb	86
33) 2,2-Dichloropropane	4.97	77	25263	4.1654	ppb	98
34) 2-Methylpentane	2.43	71	41	7.7577	ppb	# 1
35) 3-Methylpentane	2.82	57	165	8.1511	ppb	100
36) Chloroform	5.45	83	30042	4.4383	ppb	92
37) Bromochloromethane	5.29	128	4764	4.3975	ppb	94
39) 1,1,1-TCA	5.65	97	11443	4.6310	ppb	93
40) Cyclohexane	5.71	41	13883	4.5621	ppb	89
41) 1,1-Dichloropropene	5.88	75	19618	4.1119	ppb	97

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L07.D  
 Acq On : 28 Jan 19 16:57  
 Sample : 5.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.29	57	36265	4.1191	ppb	# 84
44) Carbon Tetrachloride	5.87	117	22197	4.3879	ppb	85
45) Tert Amyl Methyl Ether	6.36	73	48742	4.5681	ppb	99
46) Methylcyclopentane	3.99	56	133	19.0538	ppb	# 100
47) 1,2-DCA	6.17	62	24738	4.4763	ppb	99
48) Benzene	6.13	78	66663	4.6294	ppb	97
49) TCE	6.95	130	9554	4.0357	ppb	97
50) 2-Pentanone	7.22	43	323201	113.9726	ppb	98
51) 1,2-Dichloropropane	7.20	63	18235	4.7640	ppb	99
52) Bromodichloromethane	7.54	83	13253	4.5928	ppb	92
53) Methyl Cyclohexane	7.17	83	19782	3.8783	ppb	99
54) Dibromomethane	7.34	93	12855	4.8238	ppb	89
55) 2-Chloroethyl vinyl ether	7.93	43	507	4.9580	ppb	# 62
56) MIBK (methyl isobutyl ket	8.29	43	19494	5.0325	ppb	100
57) 1-Bromo-2-chloroethane	7.88	63	14677	5.0048	ppb	92
58) Cis-1,3-Dichloropropene	8.07	75	27837	4.4096	ppb	94
59) Toluene	8.44	91	36656	4.2804	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	27998	4.6468	ppb	100
61) 1,1,2-TCA	8.90	83	14070	4.5697	ppb	97
62) 2-Hexanone	9.22	43	12437	4.8119	ppb	# 87
65) 1,2-EDB	9.44	107	9706	5.5251	ppb	96
66) Tetrachloroethene	9.06	166	10263	4.7638	ppb	93
67) 1-Chlorohexane	10.00	91	16346	4.1453	ppb	95
68) 1,1,1,2-Tetrachloroethane	10.09	131	17406	4.8975	ppb	90
69) m&p-Xylene	10.27	91	93904	8.9045	ppb	99
70) o-Xylene	10.70	106	11625	3.8226	ppb	98
71) Styrene	10.71	104	35333	3.7513	ppb	91
73) 1,3-Dichloropropane	9.08	76	29056	5.7432	ppb	94
74) Dibromochloromethane	9.33	129	21162	5.5821	ppb	97
75) Chlorobenzene	10.00	112	42211	4.8542	ppb	99
76) Ethylbenzene	10.13	91	37224	4.7487	ppb	94
77) Bromoform	10.90	173	13619	4.4260	ppb	98
79) Isopropylbenzene	11.11	105	53222	4.5982	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	19346	5.5937	ppb	98
81) 1,2,3-Trichloropropane	11.47	110	3430	5.7378	ppb	96
82) t-1,4-Dichloro-2-Butene	11.50	53	4220	5.3636	ppb	87
83) Bromobenzene	11.43	156	9210	4.9082	ppb	95
84) n-Propylbenzene	11.56	91	33042	4.6483	ppb	97
85) 4-Ethyltoluene	11.69	105	46954	4.3751	ppb	97
86) 2-Chlorotoluene	11.65	91	20728	4.6344	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	38946	4.2165	ppb	96
88) 4-Chlorotoluene	11.77	91	23296	4.6029	ppb	100
89) Tert-Butylbenzene	12.12	119	42968	4.3785	ppb	98
90) 1,2,4-Trimethylbenzene	12.17	105	37700	4.1642	ppb	96
91) Sec-Butylbenzene	12.36	105	52532	4.3997	ppb	99
92) p-Isopropyltoluene	12.52	119	23848	4.3016	ppb	94
93) Benzyl Chloride	12.71	91	22755	5.5960	ppb	96
94) 1,3-DCB	12.47	146	15555	4.6399	ppb	95
95) 1,4-DCB	12.56	146	31412	4.7557	ppb	97
96) n-Butylbenzene	12.71	91	22755	5.5960	ppb	99
97) 1,2-DCB	12.97	146	31679	4.9284	ppb	93
98) Hexachloroethane	13.26	117	11248	5.5008	ppb	87
99) 1,2-Dibromo-3-chloropropan	13.82	75	3942	4.8589	ppb	92
100) 1,2,4-Trichlorobenzene	14.74	180	18800	4.6344	ppb	92

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L07.D  
 Acq On : 28 Jan 19 16:57  
 Sample : 5.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	9667	4.7898	ppb	96
102) Naphthalene	15.01	128	39138	4.6085	ppb	99
103) 1,2,3-Trichlorobenzene	15.28	180	7964	4.3513	ppb	89

Quantitation Report

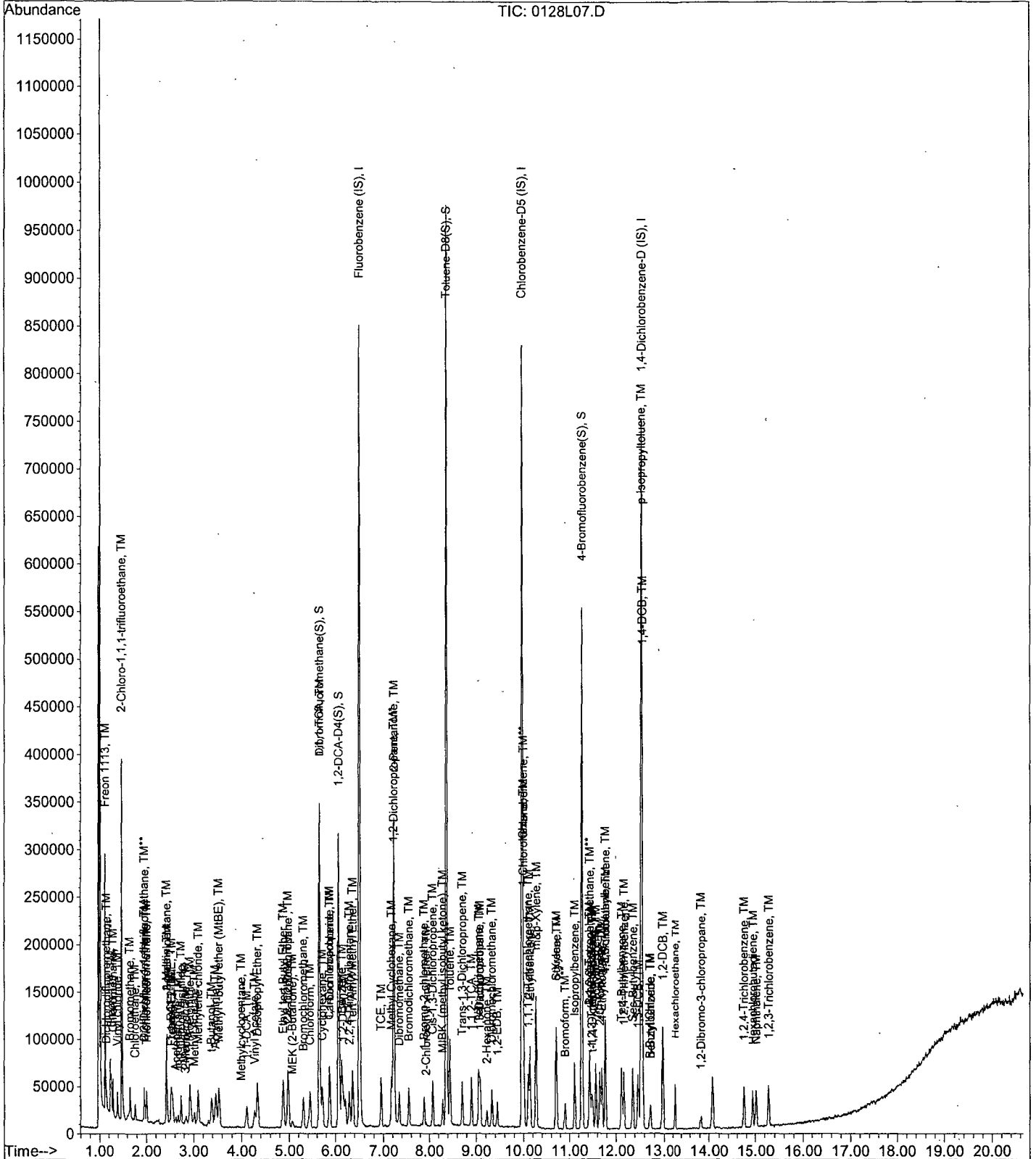
Data File : M:\LOKI\DATA\190128\0128L07.D  
Acq On : 28 Jan 19 16:57  
Sample : 5.0ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L08.D  
 Acq On : 28 Jan 19 17:26  
 Sample : 10ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	408128	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	289088	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	128392	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	198416	25.6887	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	102.756%
43) 1,2-DCA-D4(S)	6.07	65	228932	25.4126	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	101.652%
64) Toluene-D8(S)	8.37	98	711839	29.5557	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	118.224%
72) 4-Bromofluorobenzene(S)	11.26	95	197094	20.3297	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	81.320%
Target Compounds						Qvalue
2) Freon 1113	1.12	116	153403	71.1674	ppb	100
3) Dichlorodifluoromethane	1.14	85	25320	6.9133	ppb	100
4) Freon 114	1.25	85	21976	8.1197	ppb	100
5) Chloromethane	1.29	50	44912	8.0307	ppb	100
6) Vinyl chloride	1.38	62	32536	6.6298	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	267776	64.4559	ppb	100
8) Bromomethane	1.65	94	21095	6.0543	ppb	100
9) Chloroethane	1.75	64	15952	6.3703	ppb	100
10) Dichlorofluoromethane	1.95	67	52782	5.9062	ppb	100
11) Trichlorofluoromethane	2.00	101	45876	6.6577	ppb	100
12) Acrolein	2.42	56	91753	90.0676	ppb	100
13) Acetone	2.61	43	7666	5.7635	ppb	100
14) Freon-113	2.54	101	24909	6.5298	ppb	100
15) 1,1-DCE	2.52	63	6043	4.7770	ppb	100
16) t-Butanol	3.38	59	49719	104.6634	ppb	100
17) 2-Propanol	2.84	45	25613	74.7324	ppb	# 100
18) Acetonitrile	2.92	41	66442	83.0276	ppb	100
19) Methyl Acetate	3.01	43	29471	6.7789	ppb	100
20) Iodomethane	2.66	142	8620	7.2720	ppb	100
21) Acrylonitrile	3.45	52	13829	8.3850	ppb	100
22) Methylene chloride	3.10	84	34102	6.7501	ppb	100
23) Carbon disulfide	2.73	76	80709	6.0847	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	97264	7.8624	ppb	100
25) Trans-1,2-DCE	2.52	96	14266	6.1963	ppb	100
26) Diisopropyl Ether	4.33	45	101100	7.5696	ppb	100
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	1714	10.0000	ppb	100
28) 1,1-DCA	4.10	63	58228	7.5973	ppb	100
29) Vinyl Acetate	4.27	43	26955	9.3459	ppb	100
30) Ethyl tert Butyl Ether	4.87	59	99839	8.5067	ppb	100
31) MEK (2-Butanone)	5.07	43	20268	9.4105	ppb	100
32) Cis-1,2-DCE	4.98	96	36677	8.2843	ppb	100
33) 2,2-Dichloropropane	4.96	77	45436	7.4703	ppb	100
34) 2-Methylpentane	2.43	71	53	10.0000	ppb	100
35) 3-Methylpentane	2.78	57	203	10.0000	ppb	100
36) Chloroform	5.45	83	60525	8.9164	ppb	100
37) Bromochloromethane	5.30	128	9617	8.8521	ppb	100
39) 1,1,1-TCA	5.65	97	22600	9.1205	ppb	100
40) Cyclohexane	5.71	41	26207	8.5936	ppb	100
41) 1,1-Dichloropropene	5.88	75	40496	8.4639	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L08.D  
 Acq On : 28 Jan 19 17:26  
 Sample : 10ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.28	57	79886	9.0481	ppb	100
44) Carbon Tetrachloride	5.87	117	44671	8.8056	ppb	100
45) Tert Amyl Methyl Ether	6.36	73	98648	9.2192	ppb	100
46) Methylcyclopentane	3.98	56	70	10.0000	ppb	100
47) 1,2-DCA	6.16	62	50344	9.0840	ppb	100
48) Benzene	6.13	78	133301	9.2309	ppb	100
49) TCE	6.95	130	19416	8.1784	ppb	100
50) 2-Pentanone	7.22	43	407939	143.4484	ppb	100
51) 1,2-Dichloropropane	7.20	63	36215	9.4347	ppb	100
52) Bromodichloromethane	7.54	83	26952	9.3138	ppb	100
53) Methyl Cyclohexane	7.17	83	43552	8.5143	ppb	100
54) Dibromomethane	7.34	93	26136	9.7797	ppb	100
55) 2-Chloroethyl vinyl ether	7.94	43	957	9.3321	ppb	100
56) MIBK (methyl isobutyl ket	8.28	43	41000	10.5546	ppb	100
57) 1-Bromo-2-chloroethane	7.88	63	29032	9.8719	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	59976	9.4739	ppb	100
59) Toluene	8.44	91	76912	8.9559	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	53721	8.8908	ppb	100
61) 1,1,2-TCA	8.90	83	29324	9.4972	ppb	100
62) 2-Hexanone	9.22	43	25770	9.9422	ppb	100
65) 1,2-EDB	9.44	107	18552	9.9972	ppb	100
66) Tetrachloroethene	9.05	166	21032	9.2416	ppb	100
67) 1-Chlorohexane	10.00	91	34599	8.7985	ppb	100
68) 1,1,1,2-Tetrachloroethane	10.09	131	37539	9.9987	ppb	100
69) m&p-Xylene	10.26	91	197564	17.7346	ppb	100
70) o-Xylene	10.70	106	24584	7.6525	ppb	100
71) Styrene	10.71	104	81495	8.1906	ppb	100
73) 1,3-Dichloropropane	9.08	76	56134	10.5034	ppb	100
74) Dibromochloromethane	9.33	129	40736	10.1720	ppb	100
75) Chlorobenzene	9.99	112	87761	9.5539	ppb	100
76) Ethylbenzene	10.13	91	73768	8.9085	ppb	100
77) Bromoform	10.90	173	28428	8.7459	ppb	100
79) Isopropylbenzene	11.11	105	107272	9.0642	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	38616	10.9199	ppb	100
81) 1,2,3-Trichloropropane	11.47	110	6867	11.2346	ppb	100
82) t-1,4-Dichloro-2-Butene	11.49	53	8557	10.6367	ppb	100
83) Bromobenzene	11.42	156	16856	8.7854	ppb	100
84) n-Propylbenzene	11.56	91	69196	9.5203	ppb	100
85) 4-Ethyltoluene	11.69	105	100304	9.1406	ppb	100
86) 2-Chlorotoluene	11.64	91	40328	8.8183	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	82153	8.6987	ppb	100
88) 4-Chlorotoluene	11.76	91	46344	8.9554	ppb	100
89) Tert-Butylbenzene	12.11	119	88882	8.8580	ppb	100
90) 1,2,4-Trimethylbenzene	12.17	105	77636	8.3869	ppb	100
91) Sec-Butylbenzene	12.35	105	108280	8.8693	ppb	100
92) p-Isopropyltoluene	12.52	119	47072	8.3039	ppb	100
93) Benzyl Chloride	12.71	91	42732	10.2777	ppb	100
94) 1,3-DCB	12.46	146	32544	9.4941	ppb	100
95) 1,4-DCB	12.56	146	62238	9.2155	ppb	100
96) n-Butylbenzene	12.71	91	42732	10.2777	ppb	100
97) 1,2-DCB	12.97	146	58736	8.9367	ppb	100
98) Hexachloroethane	13.25	117	22186	10.6114	ppb	100
99) 1,2-Dibromo-3-chloropropan	13.82	75	7263	9.2832	ppb	100
100) 1,2,4-Trichlorobenzene	14.74	180	35841	8.6408	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L08.D Vial: 7  
 Acq On : 28 Jan 19 17:26 Operator: PM,DG,SV,CMM,KV  
 Sample : 10ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.93	225	18751	9.0863	ppb	100
102) Naphthalene	15.01	128	79606	9.1675	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	17024	9.0969	ppb	100

Quantitation Report

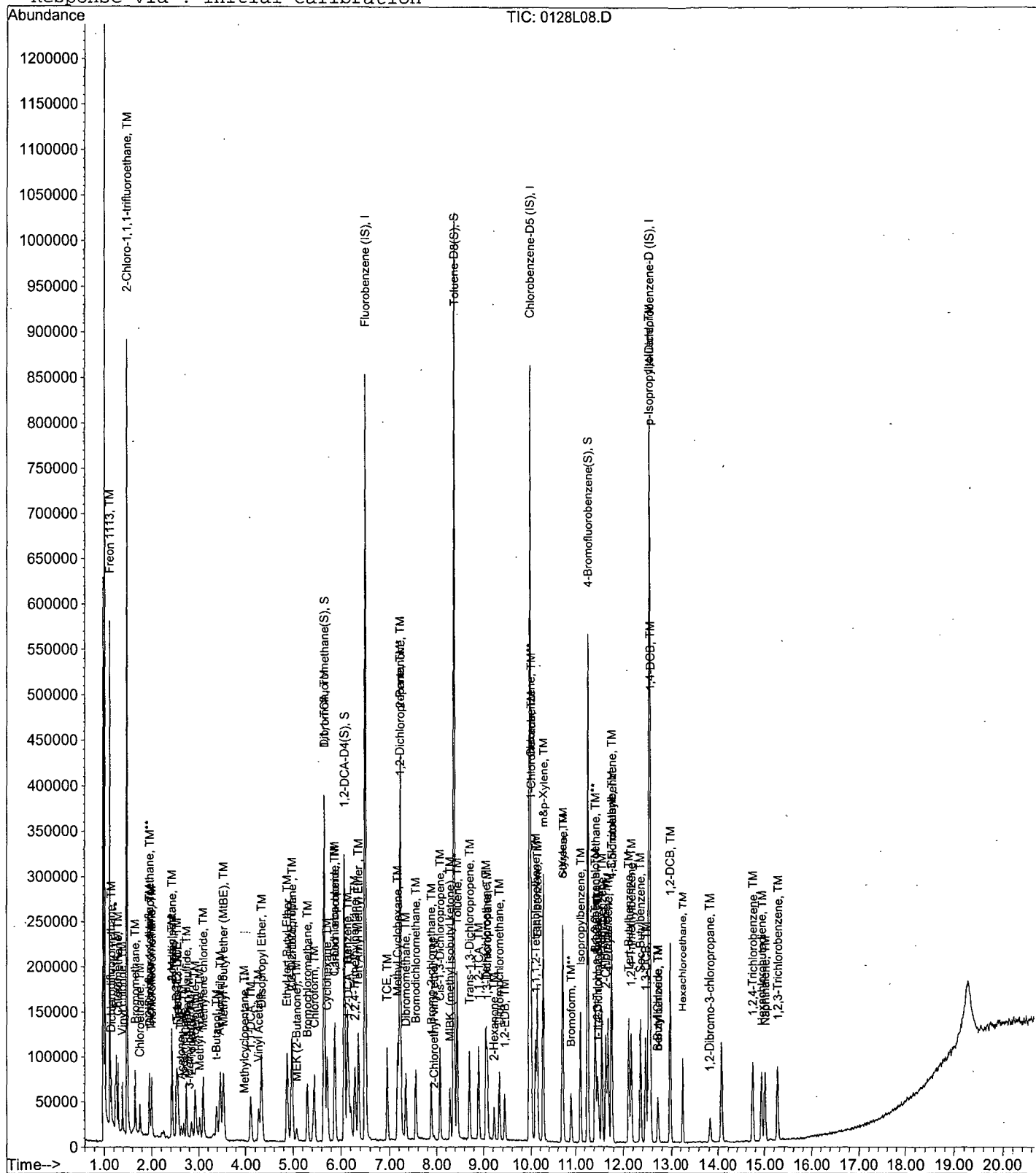
Data File : M:\LOKI\DATA\190128\0128L08.D  
 Acq On : 28 Jan 19 17:26  
 Sample : 10ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L09.D  
 Acq On : 28 Jan 19 17:55  
 Sample : 20ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	412032	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	296000	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	129368	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
38) Dibromofluoromethane(S)	5.65	111	400321	51.3381	ppb	0.00
Spiked Amount	25.000		Recovery	=	205.352%	
43) 1,2-DCA-D4(S)	6.07	65	465272	51.1583	ppb	0.00
Spiked Amount	25.000		Recovery	=	204.632%	
64) Toluene-D8(S)	8.37	98	1462858	59.3198	ppb	0.00
Spiked Amount	25.000		Recovery	=	237.280%	
72) 4-Bromofluorobenzene(S)	11.27	95	417458	42.0542	ppb	0.00
Spiked Amount	25.000		Recovery	=	168.216%	
<b>Target Compounds</b>						
						Qvalue
2) Freon 1113	1.12	116	201391	92.5450	ppb	99
3) Dichlorodifluoromethane	1.14	85	56879	14.8146	ppb	95
4) Freon 114	1.25	85	44800	16.3959	ppb	95
5) Chloromethane	1.29	50	88277	15.6353	ppb	100
6) Vinyl chloride	1.38	62	64002	12.9180	ppb	99
7) 2-Chloro-1,1,1-trifluoroet	1.47	118	338624	80.7373	ppb	99
8) Bromomethane	1.65	94	38856	12.0279	ppb	95
9) Chloroethane	1.75	64	30698	12.1727	ppb	93
10) Dichlorofluoromethane	1.95	67	101483	11.2481	ppb	100
11) Trichlorofluoromethane	2.00	101	92647	13.3179	ppb	100
12) Acrolein	2.43	56	108731	105.8993	ppb	100
13) Acetone	2.61	43	13910	12.2430	ppb	# 89
14) Freon-113	2.54	101	45777	11.8866	ppb	92
15) 1,1-DCE	2.52	63	14510	11.3615	ppb	78
16) t-Butanol	3.39	59	57862	120.6511	ppb	96
17) 2-Propanol	2.85	45	29663	85.7293	ppb	# 97
18) Acetonitrile	2.92	41	81690	101.1146	ppb	# 89
19) Methyl Acetate	3.02	43	57068	12.6866	ppb	93
20) Iodomethane	2.67	142	20424	12.4655	ppb	97
21) Acrylonitrile	3.45	52	27387	16.7257	ppb	88
22) Methylene chloride	3.09	84	63590	12.5073	ppb	98
23) Carbon disulfide	2.73	76	157054	11.7282	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	194505	15.5739	ppb	97
25) Trans-1,2-DCE	2.52	96	28200	12.1323	ppb	94
26) Diisopropyl Ether	4.33	45	199046	14.7619	ppb	98
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	3685	21.2957	ppb	75
28) 1,1-DCA	4.10	63	114006	14.7341	ppb	96
29) Vinyl Acetate	4.27	43	52982	18.1959	ppb	100
30) Ethyl tert Butyl Ether	4.87	59	197442	16.6636	ppb	99
31) MEK (2-Butanone)	5.07	43	44952	20.4960	ppb	96
32) Cis-1,2-DCE	4.98	96	73540	16.4532	ppb	91
33) 2,2-Dichloropropane	4.96	77	93844	15.2831	ppb	97
34) 2-Methylpentane	2.47	71	40	7.4757	ppb	# 1
35) 3-Methylpentane	2.79	57	228	11.1251	ppb	# 1
36) Chloroform	5.45	83	122067	17.8123	ppb	94
37) Bromochloromethane	5.30	128	18312	16.6958	ppb	95
39) 1,1,1-TCA	5.65	97	44832	17.9210	ppb	98
40) Cyclohexane	5.71	41	49923	16.2214	ppb	91
41) 1,1-Dichloropropene	5.88	75	81760	16.9263	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L09.D  
 Acq On : 28 Jan 19 17:55  
 Sample : 20ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.29	57	164989	18.5100	ppb	96
44) Carbon Tetrachloride	5.87	117	89458	17.4670	ppb	97
45) Tert Amyl Methyl Ether	6.36	73	201297	18.6340	ppb	98
46) Methylcyclopentane	3.94	56	39	5.5186	ppb	100
47) 1,2-DCA	6.16	62	101492	18.1395	ppb	97
48) Benzene	6.13	78	258682	17.7437	ppb	97
49) TCE	6.95	130	37888	15.8079	ppb	99
50) 2-Pentanone	7.22	43	495661	172.6436	ppb	100
51) 1,2-Dichloropropane	7.20	63	71364	18.4155	ppb	98
52) Bromodichloromethane	7.54	83	53168	18.1991	ppb	95
53) Methyl Cyclohexane	7.17	83	85443	16.5456	ppb	99
54) Dibromomethane	7.34	93	51350	19.0323	ppb	96
55) 2-Chloroethyl vinyl ether	7.94	43	1639	15.8312	ppb #	84
56) MIBK (methyl isobutyl ket	8.28	43	77000	19.6343	ppb	97
57) 1-Bromo-2-chloroethane	7.88	63	58432	19.6808	ppb	97
58) Cis-1,3-Dichloropropene	8.07	75	114549	17.9230	ppb	98
59) Toluene	8.44	91	153792	17.7384	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	106985	17.5382	ppb	95
61) 1,1,2-TCA	8.90	83	58127	18.6472	ppb	94
62) 2-Hexanone	9.22	43	52975	20.2445	ppb	95
65) 1,2-EDB	9.44	107	39656	20.8707	ppb	95
66) Tetrachloroethene	9.05	166	43656	18.7347	ppb	92
67) 1-Chlorohexane	10.00	91	70813	18.0772	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	72578	18.8800	ppb	91
69) m&p-Xylene	10.27	91	412457	36.1601	ppb	96
70) o-Xylene	10.70	106	56112	17.0587	ppb	96
71) Styrene	10.71	104	172466	16.9288	ppb	98
73) 1,3-Dichloropropane	9.08	76	115886	21.1774	ppb	93
74) Dibromochloromethane	9.33	129	81992	19.9958	ppb	100
75) Chlorobenzene	10.00	112	180827	19.2256	ppb	97
76) Ethylbenzene	10.13	91	154304	18.1992	ppb	100
77) Bromoform	10.90	173	57860	17.3849	ppb	100
79) Isopropylbenzene	11.11	105	238870	20.0315	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	73374	20.5922	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	13779	22.3728	ppb	97
82) t-1,4-Dichloro-2-Butene	11.50	53	16857	20.7958	ppb	93
83) Bromobenzene	11.43	156	36008	18.6259	ppb	94
84) n-Propylbenzene	11.56	91	139497	19.0479	ppb	98
85) 4-Ethyltoluene	11.69	105	208728	18.8777	ppb	99
86) 2-Chlorotoluene	11.64	91	80490	17.4675	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	175101	18.4005	ppb	94
88) 4-Chlorotoluene	11.76	91	98400	18.8711	ppb	99
89) Tert-Butylbenzene	12.12	119	179910	17.7947	ppb	99
90) 1,2,4-Trimethylbenzene	12.17	105	170811	18.3131	ppb	95
91) Sec-Butylbenzene	12.36	105	218262	17.7431	ppb	100
92) p-Isopropyltoluene	12.52	119	103104	18.0512	ppb	97
93) Benzyl Chloride	12.71	91	84243	20.1089	ppb	98
94) 1,3-DCB	12.46	146	60584	17.5408	ppb	97
95) 1,4-DCB	12.56	146	123170	18.1000	ppb	99
96) n-Butylbenzene	12.71	91	84243	20.1089	ppb	97
97) 1,2-DCB	12.97	146	119720	18.0780	ppb	95
98) Hexachloroethane	13.26	117	43711	20.7489	ppb	93
99) 1,2-Dibromo-3-chloropropan	13.82	75	14706	19.3188	ppb	85
100) 1,2,4-Trichlorobenzene	14.74	180	76161	18.2229	ppb	94

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L09.D  
 Acq On : 28 Jan 19 17:55  
 Sample : 20ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	39698	19.0917	ppb	94
102) Naphthalene	15.01	128	161814	18.4941	ppb	98
103) 1,2,3-Trichlorobenzene	15.28	180	34600	18.3492	ppb	96

Quantitation Report

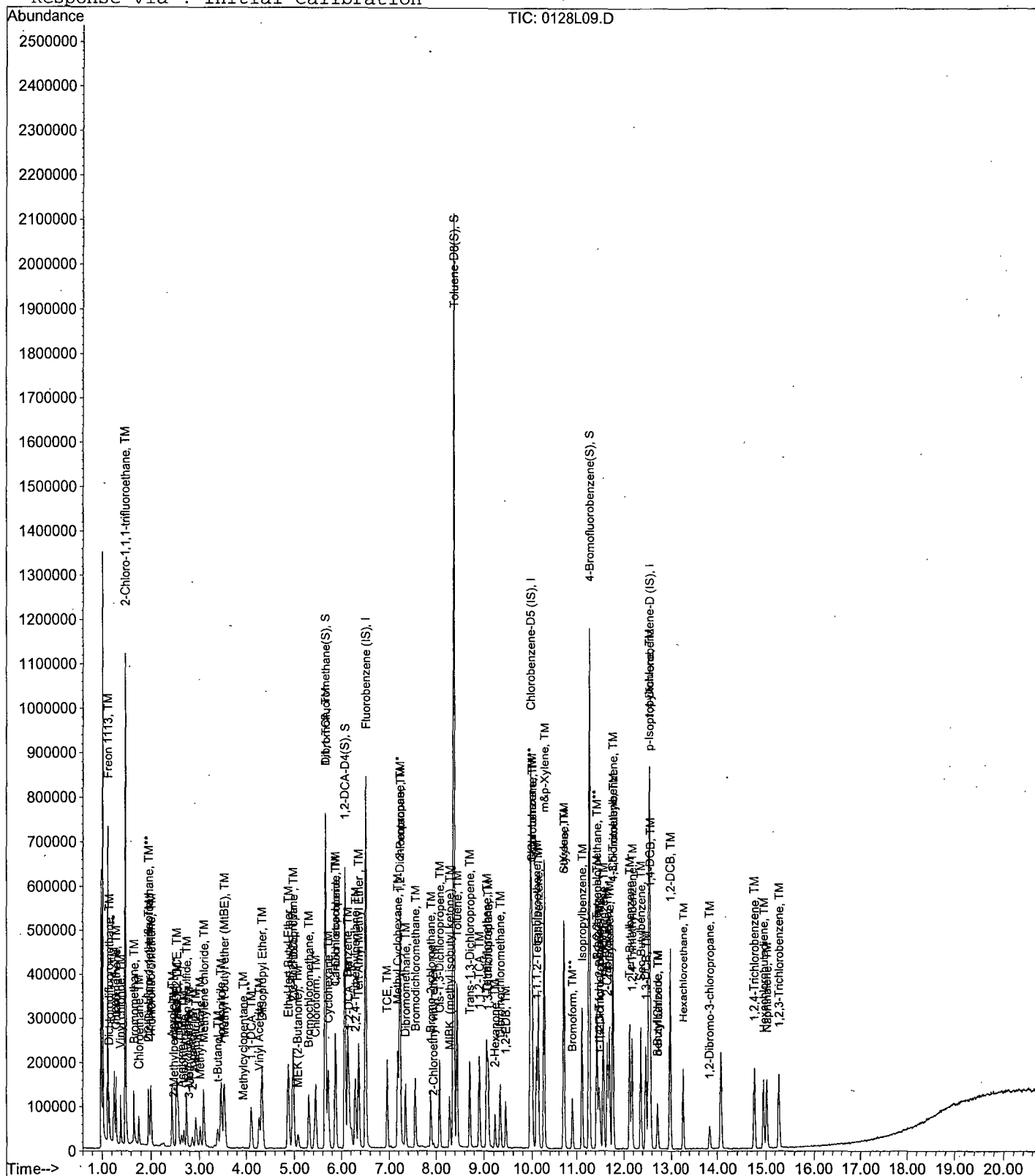
Data File : M:\LOKI\DATA\190128\0128L09.D  
Acq On : 28 Jan 19 17:55  
Sample : 20ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L10.D  
 Acq On : 28 Jan 19 18:23  
 Sample : 40ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	423040	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	328192	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	146240	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	410242	51.2414	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 204.964%	
43) 1,2-DCA-D4(S)	6.07	65	463142	49.5989	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 198.396%	
64) Toluene-D8(S)	8.37	98	1501546	54.9161	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 219.664%	
72) 4-Bromofluorobenzene(S)	11.27	95	491105	44.6205	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 178.484%	
Target Compounds						
						Qvalue
2) Freon 1113	1.12	116	229948	102.9182	ppb	99
3) Dichlorodifluoromethane	1.14	85	115564	29.3656	ppb	99
4) Freon 114	1.25	85	84008	29.9451	ppb	95
5) Chloromethane	1.29	50	172911	29.8285	ppb	95
6) Vinyl chloride	1.38	62	133346	26.2138	ppb	98
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	372608	86.5283	ppb	99
8) Bromomethane	1.65	94	77688	24.5508	ppb	88
9) Chloroethane	1.75	64	58995	22.8132	ppb	96
10) Dichlorofluoromethane	1.95	67	210519	22.7261	ppb	100
11) Trichlorofluoromethane	1.99	101	190827	26.7174	ppb	97
12) Acrolein	2.42	56	125962	119.6197	ppb	# 97
13) Acetone	2.61	43	25128	23.3357	ppb	94
14) Freon-113	2.54	101	99153	25.0763	ppb	92
15) 1,1-DCE	2.52	63	29904	22.8059	ppb	75
16) t-Butanol	3.39	59	60403	122.6722	ppb	98
17) 2-Propanol	2.85	45	34179	96.2106	ppb	# 99
18) Acetonitrile	2.92	41	91418	110.2113	ppb	88
19) Methyl Acetate	3.01	43	110672	23.6573	ppb	91
20) Iodomethane	2.66	142	52008	25.8599	ppb	96
21) Acrylonitrile	3.44	52	55206	33.1157	ppb	80
22) Methylene chloride	3.09	84	127327	24.4363	ppb	96
23) Carbon disulfide	2.73	76	334863	24.3557	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	412645	32.1806	ppb	97
25) Trans-1,2-DCE	2.52	96	56072	23.4959	ppb	92
26) Diisopropyl Ether	4.33	45	420368	30.3646	ppb	99
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	7234	40.7176	ppb	# 69
28) 1,1-DCA	4.10	63	238427	30.0124	ppb	96
29) Vinyl Acetate	4.27	43	112961	37.7854	ppb	99
30) Ethyl tert Butyl Ether	4.87	59	415665	34.1682	ppb	96
31) MEK (2-Butanone)	5.07	43	75811	33.5715	ppb	91
32) Cis-1,2-DCE	4.98	96	155311	33.8437	ppb	89
33) 2,2-Dichloropropane	4.96	77	192769	30.5768	ppb	97
34) 2-Methylpentane	2.27	71	40	7.2811	ppb	# 1
35) 3-Methylpentane	2.77	57	68	3.2317	ppb	# 1
36) Chloroform	5.45	83	253479	36.0258	ppb	96
37) Bromochloromethane	5.30	128	39880	35.4141	ppb	98
39) 1,1,1-TCA	5.65	97	95480	37.1738	ppb	99
40) Cyclohexane	5.71	41	105985	33.5489	ppb	97
41) 1,1-Dichloropropene	5.88	75	175146	35.3160	ppb	97

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L10.D  
 Acq On : 28 Jan 19 18:23  
 Sample : 40ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.28	57	354878	38.7774	ppb	95
44) Carbon Tetrachloride	5.87	117	191462	36.4110	ppb	99
45) Tert Amyl Methyl Ether	6.36	73	422817	38.1216	ppb	100
46) Methylcyclopentane	3.99	56	49	6.7533	ppb #	100
47) 1,2-DCA	6.16	62	206539	35.9537	ppb	96
48) Benzene	6.13	78	551028	36.8130	ppb	97
49) TCE	6.95	130	81552	33.1404	ppb	99
50) 2-Pentanone	7.22	43	549729	186.4936	ppb	100
51) 1,2-Dichloropropane	7.20	63	149924	37.6812	ppb	99
52) Bromodichloromethane	7.54	83	113928	37.9821	ppb	98
53) Methyl Cyclohexane	7.17	83	195630	36.8969	ppb	97
54) Dibromomethane	7.34	93	105554	38.1044	ppb	94
55) 2-Chloroethyl vinyl ether	7.93	43	3668	34.5075	ppb #	85
56) MIBK (methyl isobutyl ket	8.28	43	150961	37.4921	ppb	99
57) 1-Bromo-2-chloroethane	7.88	63	119312	39.1404	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	244813	37.3080	ppb	98
59) Toluene	8.44	91	334984	37.6318	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	231812	37.0124	ppb	99
61) 1,1,2-TCA	8.90	83	120888	37.7719	ppb	97
62) 2-Hexanone	9.22	43	100462	37.3927	ppb	94
65) 1,2-EDB	9.44	107	85480	40.5747	ppb	93
66) Tetrachloroethene	9.05	166	90912	35.1875	ppb	97
67) 1-Chlorohexane	10.00	91	158467	36.9850	ppb	98
68) 1,1,1,2-Tetrachloroethane	10.09	131	156620	36.7458	ppb	86
69) m&p-Xylene	10.26	91	941893	74.4761	ppb	100
70) o-Xylene	10.70	106	128008	35.0986	ppb	94
71) Styrene	10.71	104	390833	34.6000	ppb	99
73) 1,3-Dichloropropane	9.08	76	245544	40.4701	ppb	92
74) Dibromochloromethane	9.33	129	177500	39.0418	ppb	97
75) Chlorobenzene	10.00	112	391837	37.5739	ppb	98
76) Ethylbenzene	10.13	91	346880	36.8993	ppb	99
77) Bromoform	10.90	173	124465	33.7291	ppb	98
79) Isopropylbenzene	11.11	105	562340	41.7169	ppb	98
80) 1,1,2,2-Tetrachloroethane	11.43	83	180474	44.8060	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	29192	41.9303	ppb	87
82) t-1,4-Dichloro-2-Butene	11.50	53	43581	47.5612	ppb	92
83) Bromobenzene	11.43	156	89304	40.8648	ppb	94
84) n-Propylbenzene	11.56	91	345756	41.7650	ppb	100
85) 4-Ethyltoluene	11.69	105	545366	43.6331	ppb	97
86) 2-Chlorotoluene	11.64	91	202663	38.9066	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	459374	42.7040	ppb	96
88) 4-Chlorotoluene	11.77	91	241964	41.0500	ppb	98
89) Tert-Butylbenzene	12.11	119	440302	38.5253	ppb	99
90) 1,2,4-Trimethylbenzene	12.17	105	428445	40.6352	ppb	96
91) Sec-Butylbenzene	12.36	105	521948	37.5352	ppb	100
92) p-Isopropyltoluene	12.52	119	239936	37.1610	ppb	96
93) Benzyl Chloride	12.71	91	196185	41.4268	ppb	99
94) 1,3-DCB	12.47	146	135616	34.7347	ppb	96
95) 1,4-DCB	12.56	146	272422	35.4142	ppb	99
96) n-Butylbenzene	12.71	91	196185	41.4268	ppb	97
97) 1,2-DCB	12.97	146	252960	33.7907	ppb	97
98) Hexachloroethane	13.26	117	92873	38.9991	ppb	91
99) 1,2-Dibromo-3-chloropropan	13.82	75	31342	37.0052	ppb	87
100) 1,2,4-Trichlorobenzene	14.74	180	168876	35.7448	ppb	97



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L10.D Vial: 9  
 Acq On : 28 Jan 19 18:23 Operator: PM, DG, SV, CMM, KV  
 Sample : 40ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	82665	35.1688	ppb	95
102) Naphthalene	15.01	128	362175	36.6181	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	81416	38.1955	ppb	99

Quantitation Report

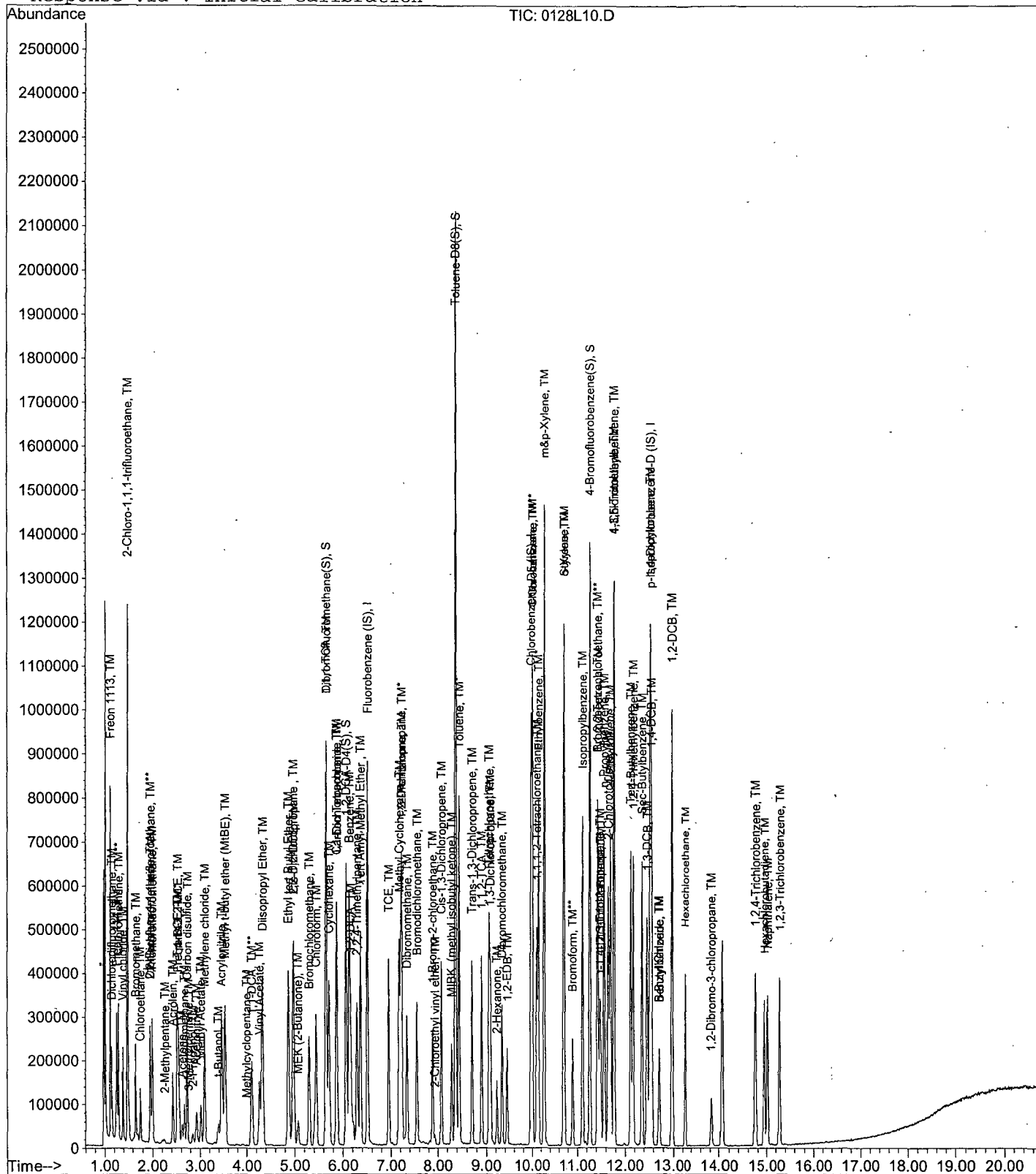
Data File : M:\LOKI\DATA\190128\0128L10.D  
Acq On : 28 Jan 19 18:23  
Sample : 40ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L11.D  
 Acq On : 28 Jan 19 18:52  
 Sample : 50ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	427264	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	334016	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	171456	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	795174	98.3395	ppb	0.00
Spiked Amount	25.000		Recovery	=	393.356%	
43) 1,2-DCA-D4(S)	6.07	65	910540	96.5478	ppb	0.00
Spiked Amount	25.000		Recovery	=	386.192%	
64) Toluene-D8(S)	8.37	98	3014125	108.3137	ppb	0.00
Spiked Amount	25.000		Recovery	=	433.256%	
72) 4-Bromofluorobenzene(S)	11.27	95	1013641	90.4910	ppb	0.00
Spiked Amount	25.000		Recovery	=	361.964%	
Target Compounds						
2) Freon 1113	1.11	116	245121	108.6246	ppb	99
3) Dichlorodifluoromethane	1.14	85	143617	36.3864	ppb	99
4) Freon 114	1.25	85	106192	37.4785	ppb	94
5) Chloromethane	1.29	50	222966	38.0831	ppb	99
6) Vinyl chloride	1.38	62	174602	33.9848	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	396928	91.2647	ppb	99
8) Bromomethane	1.65	94	97168	30.6871	ppb	90
9) Chloroethane	1.74	64	79380	30.4035	ppb	99
10) Dichlorofluoromethane	1.95	67	270356	28.8971	ppb	99
11) Trichlorofluoromethane	1.99	101	248647	34.4685	ppb	95
12) Acrolein	2.43	56	145061	136.5378	ppb	# 98
13) Acetone	2.62	43	34106	32.1729	ppb	98
14) Freon-113	2.54	101	130993	32.8013	ppb	92
15) 1,1-DCE	2.52	63	35976	27.1654	ppb	86
16) t-Butanol	3.40	59	81835	164.5553	ppb	93
17) 2-Propanol	2.86	45	37039	103.2305	ppb	# 99
18) Acetonitrile	2.92	41	106131	126.6840	ppb	89
19) Methyl Acetate	3.02	43	145757	30.7445	ppb	92
20) Iodomethane	2.66	142	73592	34.8604	ppb	99
21) Acrylonitrile	3.45	52	67983	40.4402	ppb	85
22) Methylene chloride	3.09	84	166203	31.5956	ppb	100
23) Carbon disulfide	2.73	76	429651	30.9409	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	518231	40.0153	ppb	98
25) Trans-1,2-DCE	2.52	96	74264	30.8112	ppb	93
26) Diisopropyl Ether	4.33	45	537309	38.4280	ppb	100
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	9803	54.6321	ppb	# 73
28) 1,1-DCA	4.10	63	303628	37.8418	ppb	96
29) Vinyl Acetate	4.27	43	142208	47.0982	ppb	98
30) Ethyl tert Butyl Ether	4.87	59	527424	42.9263	ppb	98
31) MEK (2-Butanone)	5.07	43	99245	43.4704	ppb	89
32) Cis-1,2-DCE	4.98	96	197717	42.6584	ppb	91
33) 2,2-Dichloropropane	4.96	77	246202	38.6662	ppb	97
34) 2-Methylpentane	2.42	71	44	7.9301	ppb	# 1
35) 3-Methylpentane	2.79	57	146	6.8700	ppb	# 43
36) Chloroform	5.45	83	323581	45.5344	ppb	95
37) Bromochloromethane	5.30	128	49256	43.3077	ppb	98
39) 1,1,1-TCA	5.65	97	120560	46.4743	ppb	99
40) Cyclohexane	5.72	41	141673	44.4046	ppb	96
41) 1,1-Dichloropropene	5.88	75	222655	44.4518	ppb	97

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L11.D  
 Acq On : 28 Jan 19 18:52  
 Sample : 50ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.29	57	454838	49.2087	ppb	97
44) Carbon Tetrachloride	5.87	117	247696	46.6395	ppb	98
45) Tert Amyl Methyl Ether	6.36	73	539354	48.1480	ppb	97
46) Methylcyclopentane	4.02	56	44	6.0042	ppb	100
47) 1,2-DCA	6.17	62	264298	45.5534	ppb	98
48) Benzene	6.13	78	704007	46.5682	ppb	98
49) TCE	6.95	130	102872	41.3909	ppb	99
50) 2-Pentanone	7.23	43	638124	214.3411	ppb	99
51) 1,2-Dichloropropane	7.21	63	191106	47.5569	ppb	99
52) Bromodichloromethane	7.55	83	139328	45.9909	ppb	97
53) Methyl Cyclohexane	7.17	83	251662	46.9956	ppb	96
54) Dibromomethane	7.34	93	134971	48.2421	ppb	97
55) 2-Chloroethyl vinyl ether	7.94	43	4833	45.0179	ppb #	86
56) MIBK (methyl isobutyl ket	8.29	43	192530	47.3432	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	152832	49.6409	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	311621	47.0197	ppb	97
59) Toluene	8.44	91	419968	46.7124	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	296450	46.8650	ppb	99
61) 1,1,2-TCA	8.90	83	154582	47.8222	ppb	98
62) 2-Hexanone	9.22	43	137373	50.6258	ppb	92
65) 1,2-EDB	9.44	107	105488	49.1989	ppb	97
66) Tetrachloroethene	9.05	166	119424	45.4171	ppb	98
67) 1-Chlorohexane	10.00	91	212085	48.7905	ppb	97
68) 1,1,1,2-Tetrachloroethane	10.09	131	201941	46.5528	ppb	88
69) m&p-Xylene	10.27	91	1248126	96.9693	ppb	98
70) o-Xylene	10.70	106	165120	44.4849	ppb	99
71) Styrene	10.71	104	527046	45.8453	ppb	98
73) 1,3-Dichloropropane	9.08	76	314994	51.0115	ppb	94
74) Dibromochloromethane	9.33	129	226287	48.9048	ppb	99
75) Chlorobenzene	10.00	112	504462	47.5302	ppb	98
76) Ethylbenzene	10.13	91	468800	48.9989	ppb	98
77) Bromoform	10.90	173	163566	43.5524	ppb	100
79) Isopropylbenzene	11.11	105	748139	47.3378	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	251014	53.1537	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	39904	48.8870	ppb	99
82) t-1,4-Dichloro-2-Butene	11.49	53	62407	58.0902	ppb	93
83) Bromobenzene	11.43	156	113896	44.4529	ppb	95
84) n-Propylbenzene	11.56	91	472126	48.6423	ppb	99
85) 4-Ethyltoluene	11.69	105	748380	51.0697	ppb	96
86) 2-Chlorotoluene	11.64	91	281229	46.0493	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	627645	49.7656	ppb	97
88) 4-Chlorotoluene	11.76	91	333120	48.2032	ppb	99
89) Tert-Butylbenzene	12.12	119	613902	45.8151	ppb	99
90) 1,2,4-Trimethylbenzene	12.17	105	596940	48.2894	ppb	98
91) Sec-Butylbenzene	12.36	105	740875	45.4433	ppb	98
92) p-Isopropyltoluene	12.52	119	355264	46.9306	ppb	96
93) Benzyl Chloride	12.72	91	301538	54.3090	ppb	99
94) 1,3-DCB	12.46	146	202560	44.2507	ppb	96
95) 1,4-DCB	12.56	146	399448	44.2903	ppb	98
96) n-Butylbenzene	12.72	91	301538	54.3090	ppb	96
97) 1,2-DCB	12.97	146	377077	42.9624	ppb	98
98) Hexachloroethane	13.26	117	132978	47.6276	ppb	90
99) 1,2-Dibromo-3-chloropropan	13.82	75	41537	41.9155	ppb	88
100) 1,2,4-Trichlorobenzene	14.74	180	223635	40.3736	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L11.D Vial: 10  
 Acq On : 28 Jan 19 18:52 Operator: PM, DG, SV, CMM, KV  
 Sample : 50ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	110179	39.9805 ppb	94
102) Naphthalene	15.01	128	478634	41.2757 ppb	95
103) 1,2,3-Trichlorobenzene	15.28	180	101568	40.6417 ppb	93

Quantitation Report

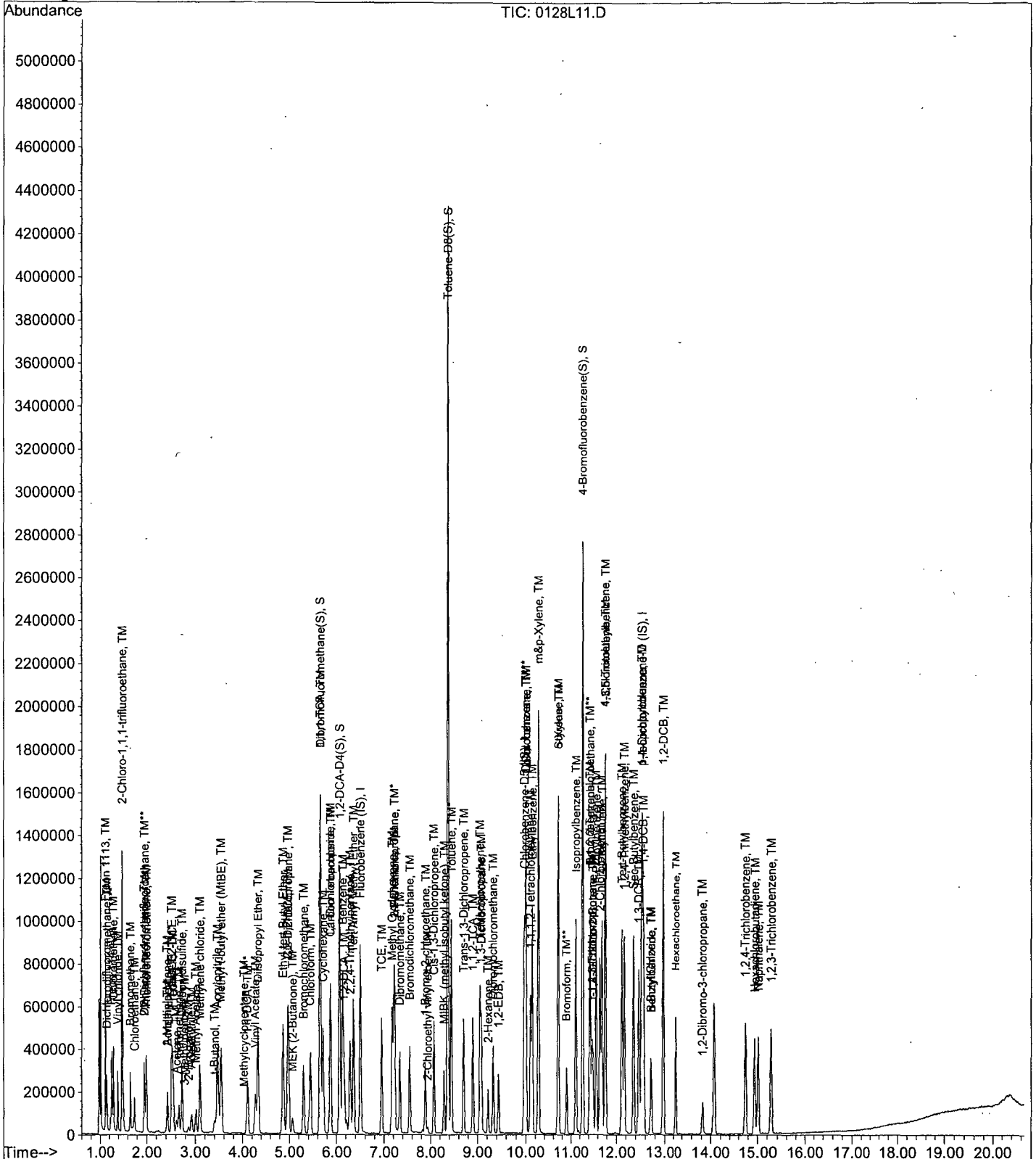
Data File : M:\LOKI\DATA\190128\0128L11.D  
Acq On : 28 Jan 19 18:52  
Sample : 50ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L12.D  
 Acq On : 28 Jan 19 19:21  
 Sample : 100ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	399808	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	335744	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	174784	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	756147	99.9348	ppb	0.00
Spiked Amount	25.000		Recovery	=	399.740%	
43) 1,2-DCA-D4 (S)	6.07	65	850540	96.3791	ppb	0.00
Spiked Amount	25.000		Recovery	=	385.516%	
64) Toluene-D8 (S)	8.37	98	2863025	102.3543	ppb	0.00
Spiked Amount	25.000		Recovery	=	409.416%	
72) 4-Bromofluorobenzene(S)	11.26	95	1045481	92.8531	ppb	0.00
Spiked Amount	25.000		Recovery	=	371.412%	
Target Compounds						
						Qvalue
2) Freon 1113	1.12	116	273849	129.6891	ppb	99
3) Dichlorodifluoromethane	1.14	85	265475	76.0029	ppb	100
4) Freon 114	1.25	85	169280	63.8471	ppb	96
5) Chloromethane	1.29	50	413237	75.4289	ppb	97
6) Vinyl chloride	1.38	62	342398	71.2215	ppb	99
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	377728	92.8143	ppb	98
8) Bromomethane	1.65	94	182720	62.8708	ppb	90
9) Chloroethane	1.74	64	117947	48.2967	ppb	99
10) Dichlorofluoromethane	1.95	67	512474	58.5377	ppb	99
11) Trichlorofluoromethane	1.99	101	469956	69.6212	ppb	99
12) Acrolein	2.43	56	153625	154.6627	ppb	98
13) Acetone	2.62	43	43568	44.7838	ppb	95
14) Freon-113	2.54	101	243435	65.1435	ppb	96
15) 1,1-DCE	2.51	63	70184	56.6352	ppb	78
16) t-Butanol	3.42	59	95276	204.7392	ppb	96
17) 2-Propanol	2.90	45	38325	114.1499	ppb	# 99
18) Acetonitrile	2.93	41	112946	144.0772	ppb	92
19) Methyl Acetate	3.02	43	260909	58.4989	ppb	95
20) Iodomethane	2.66	142	143168	68.7896	ppb	98
21) Acrylonitrile	3.45	52	124930	79.6970	ppb	75
22) Methylene chloride	3.09	84	302332	61.4652	ppb	97
23) Carbon disulfide	2.73	76	805161	61.9648	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	965716	79.6887	ppb	97
25) Trans-1,2-DCE	2.52	96	135886	60.2490	ppb	94
26) Diisopropyl Ether	4.33	45	1004914	76.8063	ppb	98
27) 2,2-Dichloro-1,1,1-trifluo	1.95	85	17995	107.1731	ppb	77
28) 1,1-DCA	4.10	63	567981	75.6499	ppb	95
29) Vinyl Acetate	4.27	43	251195	88.9070	ppb	98
30) Ethyl tert Butyl Ether	4.87	59	997134	86.7284	ppb	98
31) MEK (2-Butanone)	5.07	43	183956	85.9627	ppb	89
32) Cis-1,2-DCE	4.98	96	368844	85.0449	ppb	93
33) 2,2-Dichloropropane	4.96	77	464380	77.9397	ppb	97
34) 2-Methylpentane	2.41	71	319	61.4412	ppb	# 77
35) 3-Methylpentane	2.80	57	229	11.5155	ppb	90
36) Chloroform	5.45	83	599007	90.0810	ppb	97
37) Bromochloromethane	5.30	128	86032	80.8371	ppb	96
39) 1,1,1-TCA	5.65	97	225024	92.7008	ppb	100
40) Cyclohexane	5.72	41	267008	89.4424	ppb	94
41) 1,1-Dichloropropene	5.88	75	424191	90.5030	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L12.D  
 Acq On : 28 Jan 19 19:21  
 Sample : 100ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) 2,2,4-Trimethylpentane	6.28	57	889353	102.8263	ppb	95
44) Carbon Tetrachloride	5.87	117	470194	94.6143	ppb	98
45) Tert Amyl Methyl Ether	6.36	73	1006065	95.9787	ppb	97
46) Methylcyclopentane	3.91	56	1339	195.2664	ppb	100
47) 1,2-DCA	6.17	62	482896	88.9458	ppb	98
48) Benzene	6.13	78	1319461	93.2726	ppb	98
49) TCE	6.95	130	193600	83.2449	ppb	99
50) 2-Pentanone	7.23	43	697452	250.3569	ppb	99
51) 1,2-Dichloropropane	7.21	63	354984	94.4045	ppb	99
52) Bromodichloromethane	7.55	83	265280	93.5800	ppb	98
53) Methyl Cyclohexane	7.17	83	480818	95.9545	ppb	100
54) Dibromomethane	7.34	93	249728	95.3889	ppb	94
55) 2-Chloroethyl vinyl ether	7.93	43	9367	93.2426	ppb	99
56) MIBK (methyl isobutyl ket	8.29	43	372229	97.8171	ppb	99
57) 1-Bromo-2-chloroethane	7.88	63	281600	97.7470	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	587337	94.7077	ppb	99
59) Toluene	8.44	91	820032	97.4747	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	561509	94.8634	ppb	97
61) 1,1,2-TCA	8.90	83	287327	94.9931	ppb	97
62) 2-Hexanone	9.22	43	262375	103.3326	ppb	93
65) 1,2-EDB	9.44	107	203584	94.4615	ppb	96
66) Tetrachloroethene	9.05	166	219968	83.2235	ppb	98
67) 1-Chlorohexane	10.00	91	427439	98.3200	ppb	95
68) 1,1,1,2-Tetrachloroethane	10.09	131	387253	88.8128	ppb	88
69) m&p-Xylene	10.26	91	2508074	193.8542	ppb	99
70) o-Xylene	10.70	106	349568	93.6923	ppb	95
71) Styrene	10.71	104	1077416	93.2370	ppb	98
73) 1,3-Dichloropropane	9.08	76	591169	95.2438	ppb	95
74) Dibromochloromethane	9.33	129	434569	93.4350	ppb	99
75) Chlorobenzene	10.00	112	997726	93.5215	ppb	98
76) Ethylbenzene	10.13	91	921671	95.8372	ppb	98
77) Bromoform	10.90	173	330526	87.5555	ppb	100
79) Isopropylbenzene	11.11	105	1549982	96.2063	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	500725	104.0125	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	81096	97.4603	ppb	99
82) t-1,4-Dichloro-2-Butene	11.49	53	117453	107.2468	ppb	91
83) Bromobenzene	11.42	156	231808	88.7506	ppb	94
84) n-Propylbenzene	11.56	91	986234	99.6752	ppb	98
85) 4-Ethyltoluene	11.69	105	1566930	104.8919	ppb	97
86) 2-Chlorotoluene	11.64	91	585574	94.0579	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	1310589	101.9372	ppb	97
88) 4-Chlorotoluene	11.76	91	703552	99.8671	ppb	99
89) Tert-Butylbenzene	12.11	119	1303169	95.4028	ppb	99
90) 1,2,4-Trimethylbenzene	12.17	105	1302368	103.3489	ppb	96
91) Sec-Butylbenzene	12.36	105	1606225	96.6457	ppb	99
92) p-Isopropyltoluene	12.52	119	785803	101.8286	ppb	97
93) Benzyl Chloride	12.71	91	667375	117.9099	ppb	99
94) 1,3-DCB	12.46	146	434688	93.1526	ppb	95
95) 1,4-DCB	12.56	146	826306	89.8754	ppb	99
96) n-Butylbenzene	12.71	91	667375	117.9099	ppb	96
97) 1,2-DCB	12.97	146	818650	91.4971	ppb	98
98) Hexachloroethane	13.26	117	301595	105.9629	ppb	89
99) 1,2-Dibromo-3-chloropropan	13.82	75	97188	97.0584	ppb	92
100) 1,2,4-Trichlorobenzene	14.74	180	465088	82.3653	ppb	95



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L12.D  
 Acq On : 28 Jan 19 19:21  
 Sample : 100ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 08:06:28 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	14.94	225	224030	79.7456	ppb	94
102) Naphthalene	15.01	128	1033648	87.4408	ppb	96
103) 1,2,3-Trichlorobenzene	15.27	180	211072	82.8509	ppb	97

Quantitation Report

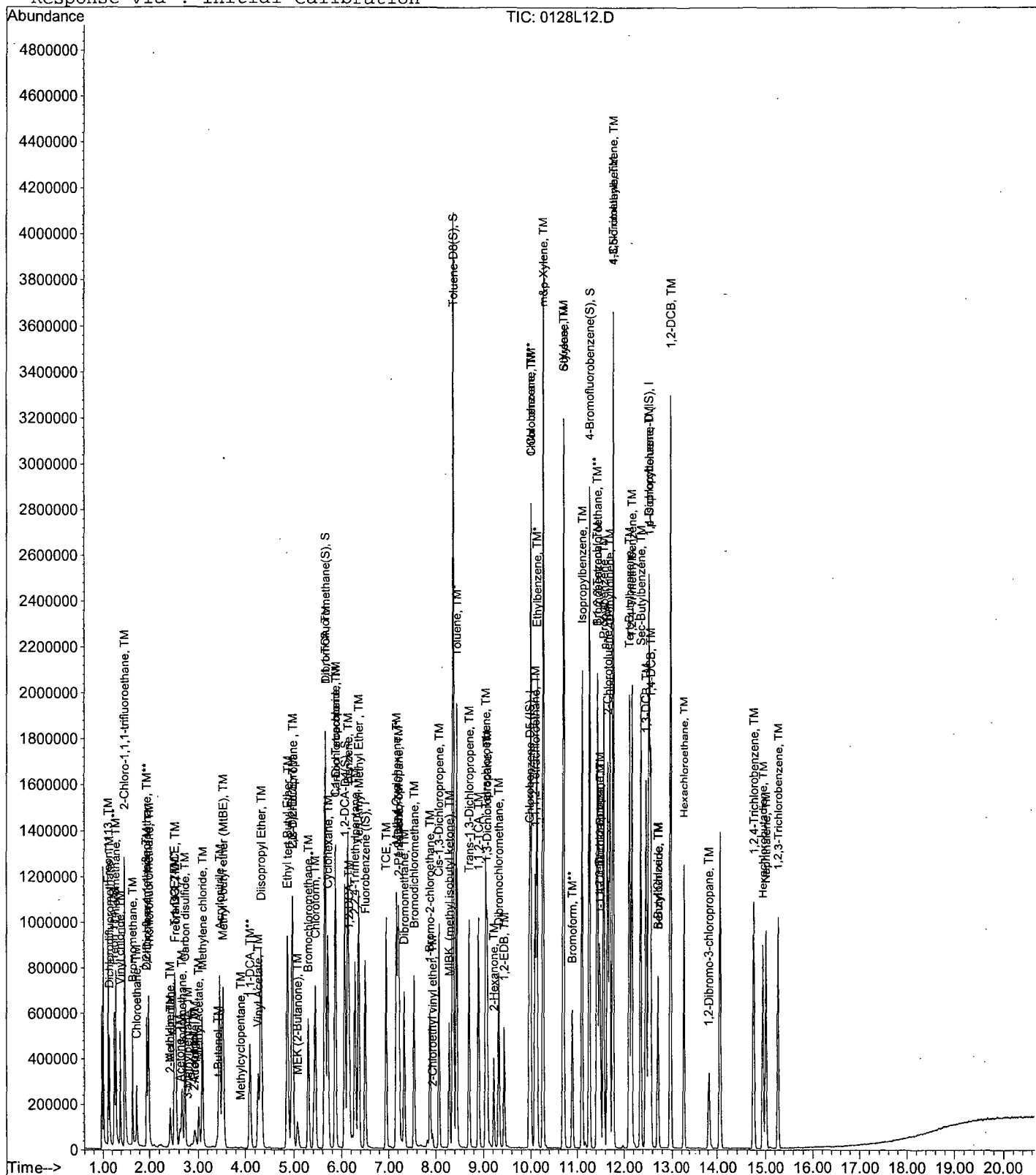
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Acq On : 28 Jan 19 19:21  
Sample : 100ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

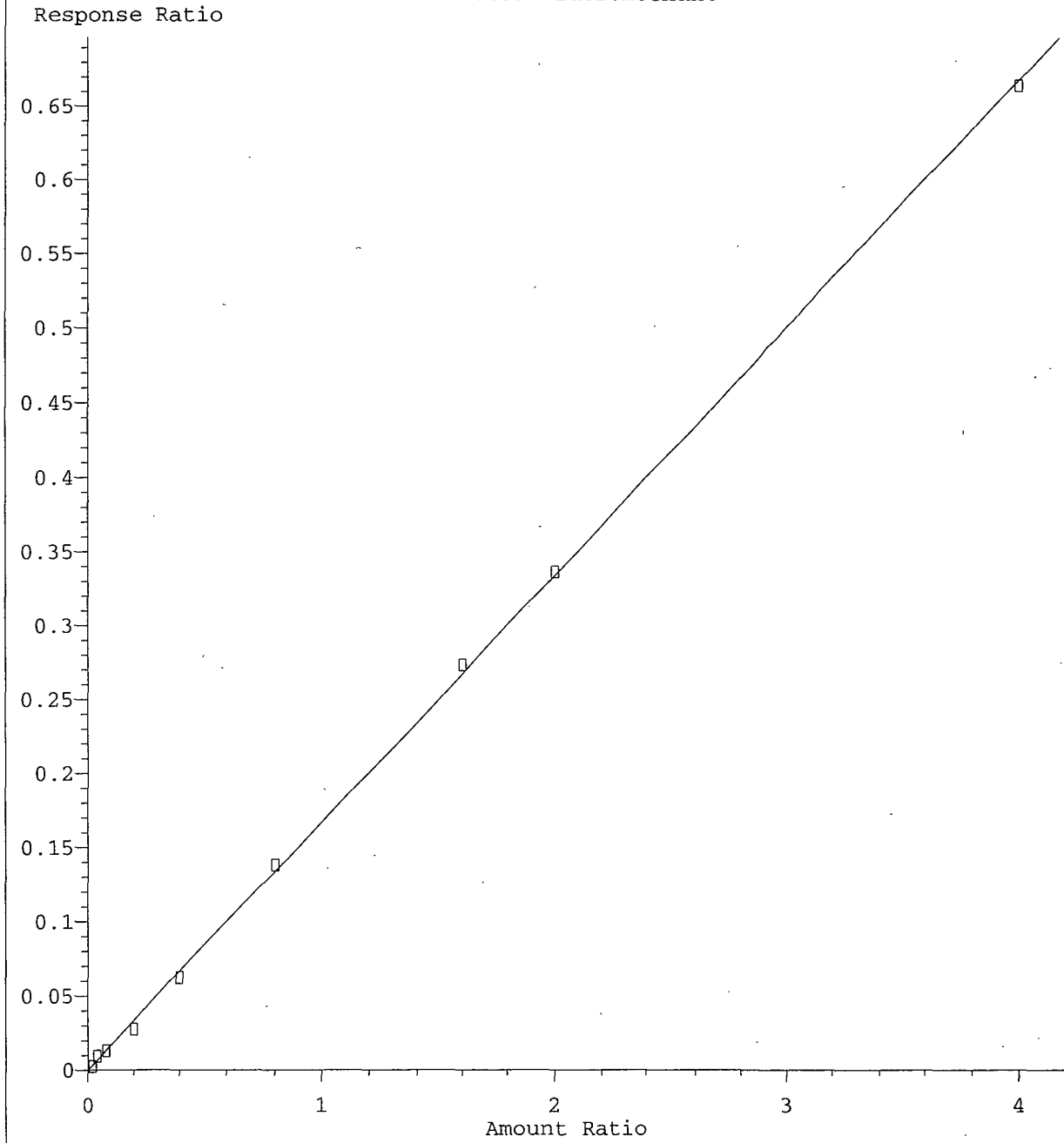
Quant Time: Jan 29 8:07 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration

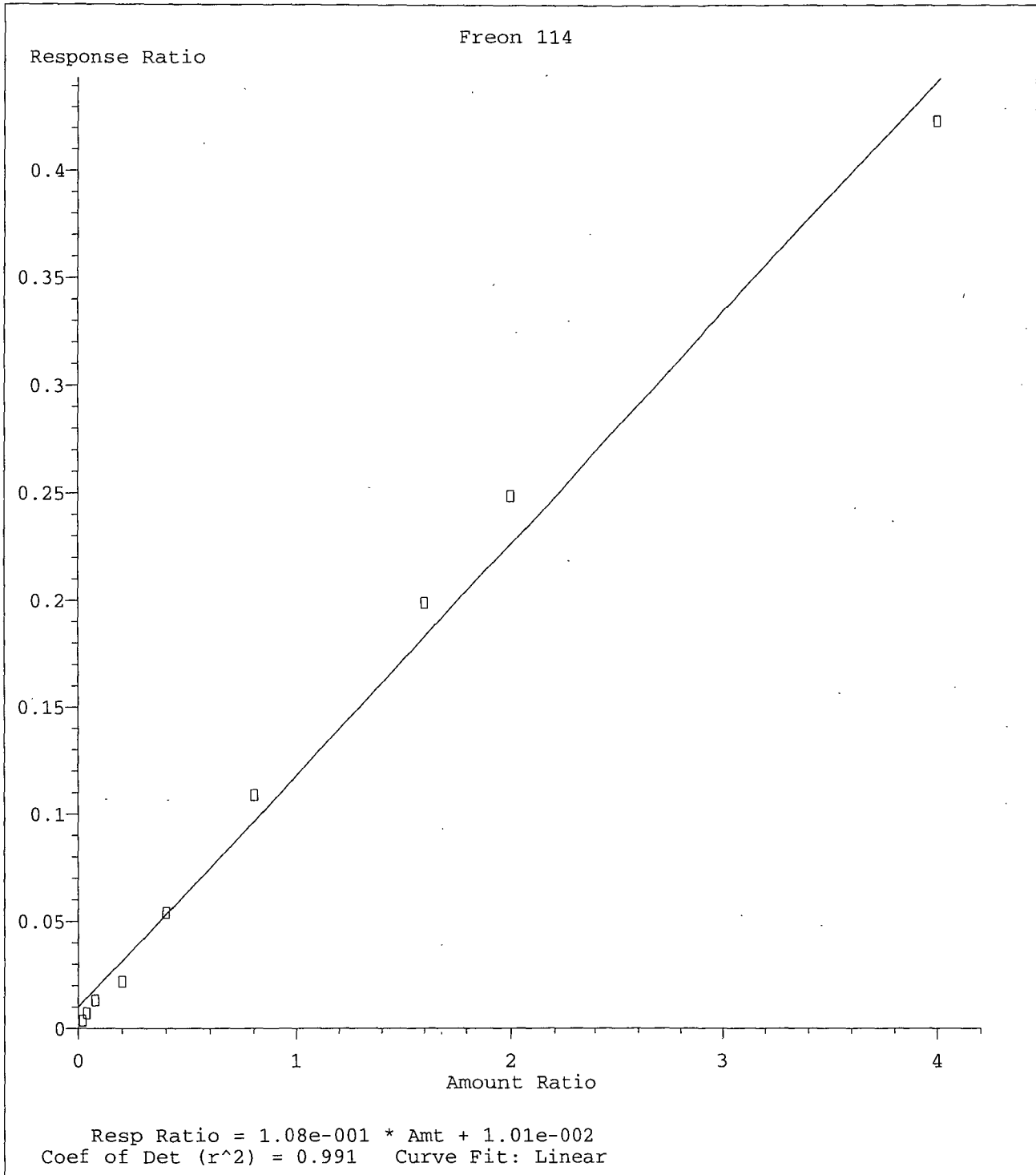


Dichlorodifluoromethane

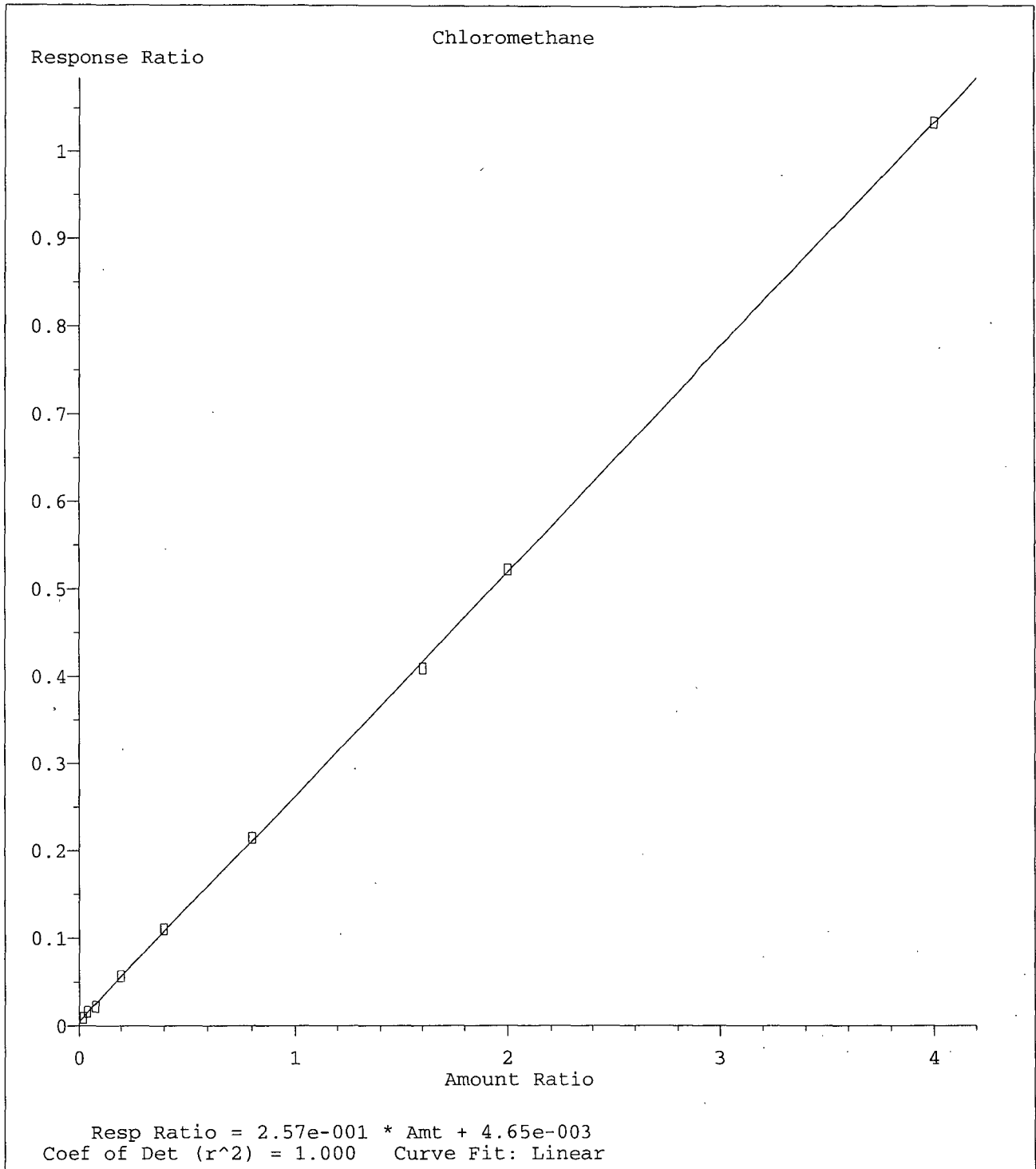


Resp Ratio = 1.67e-001 \* Amt - 3.99e-005  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

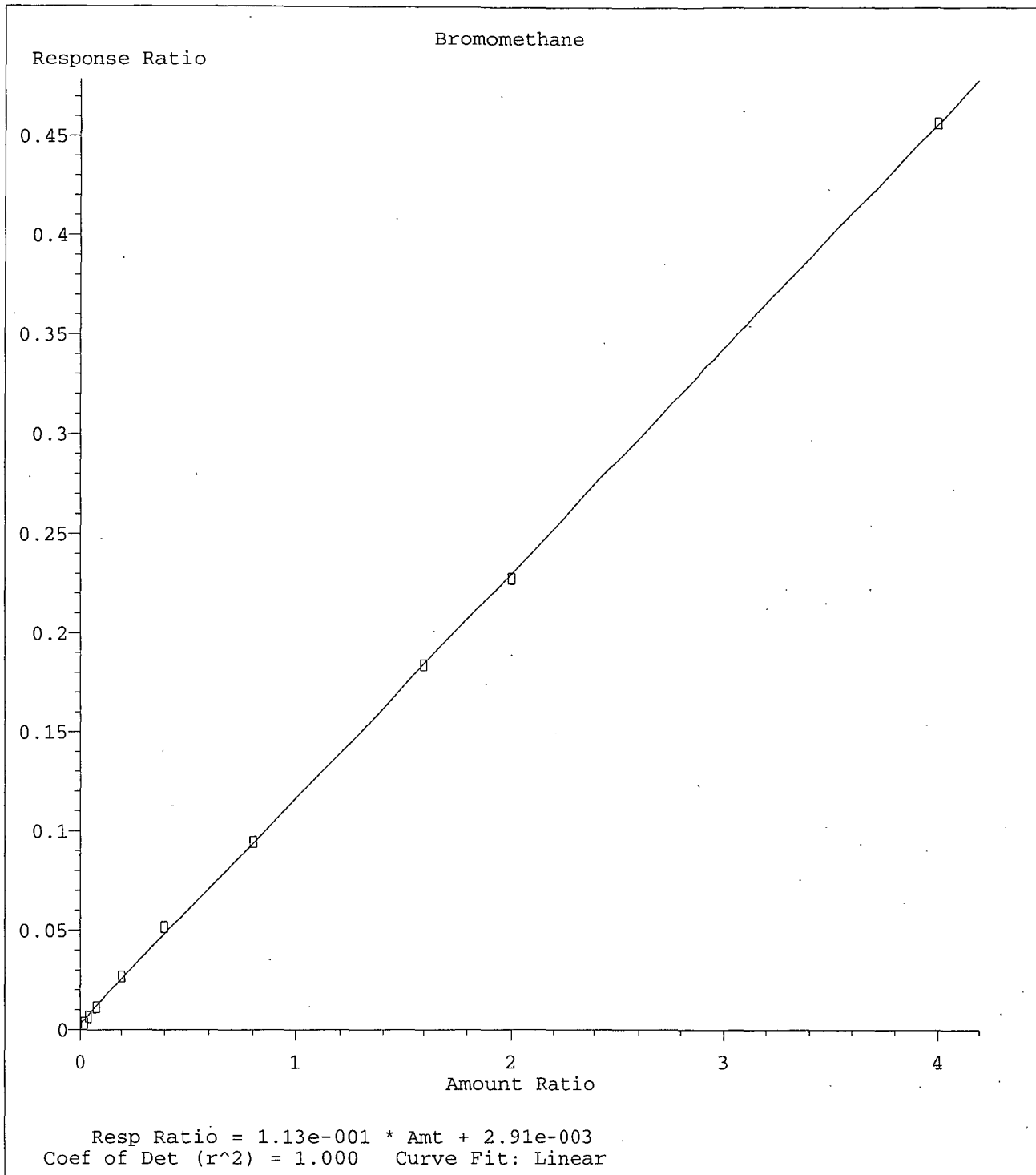
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Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



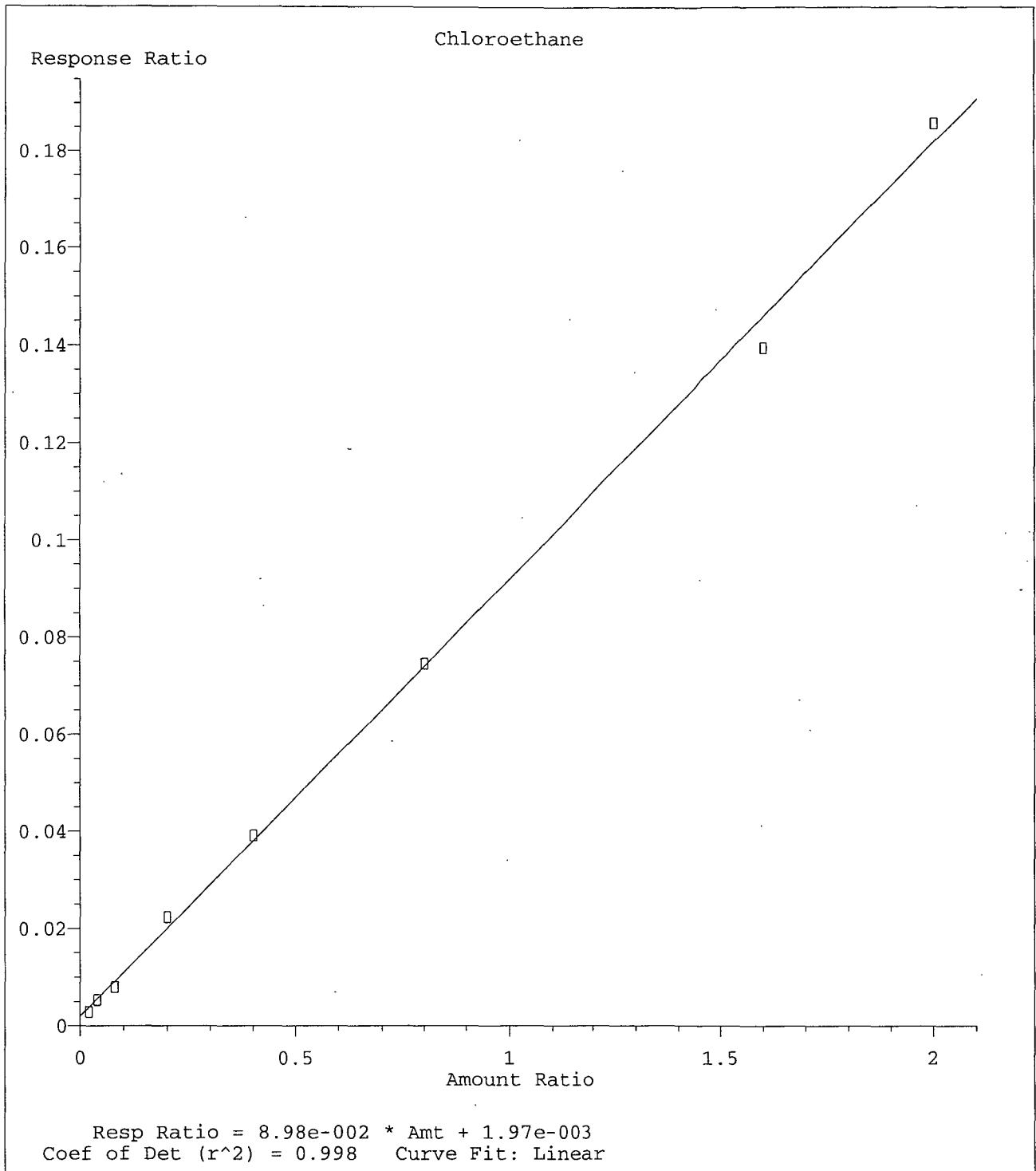
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Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



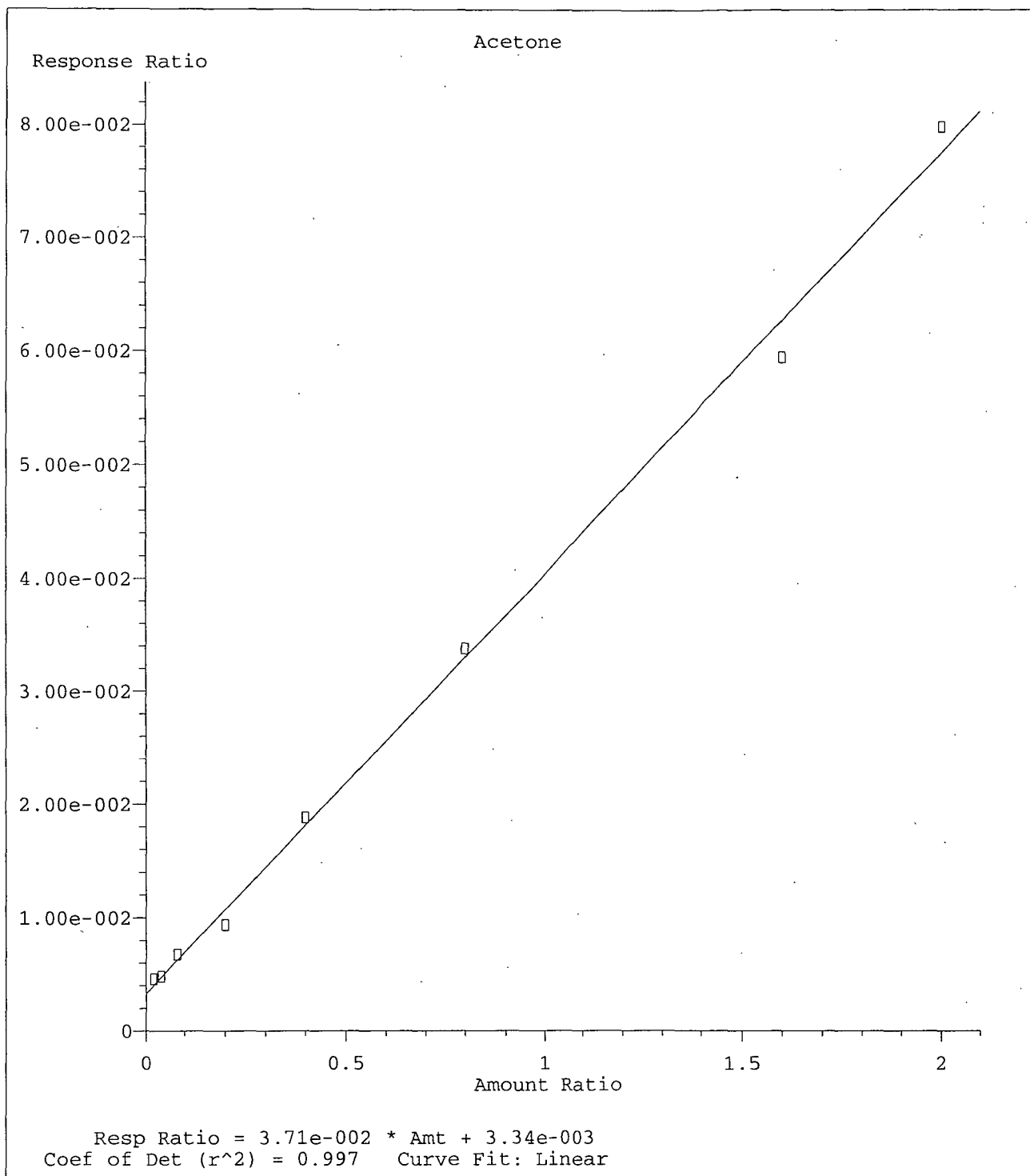
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

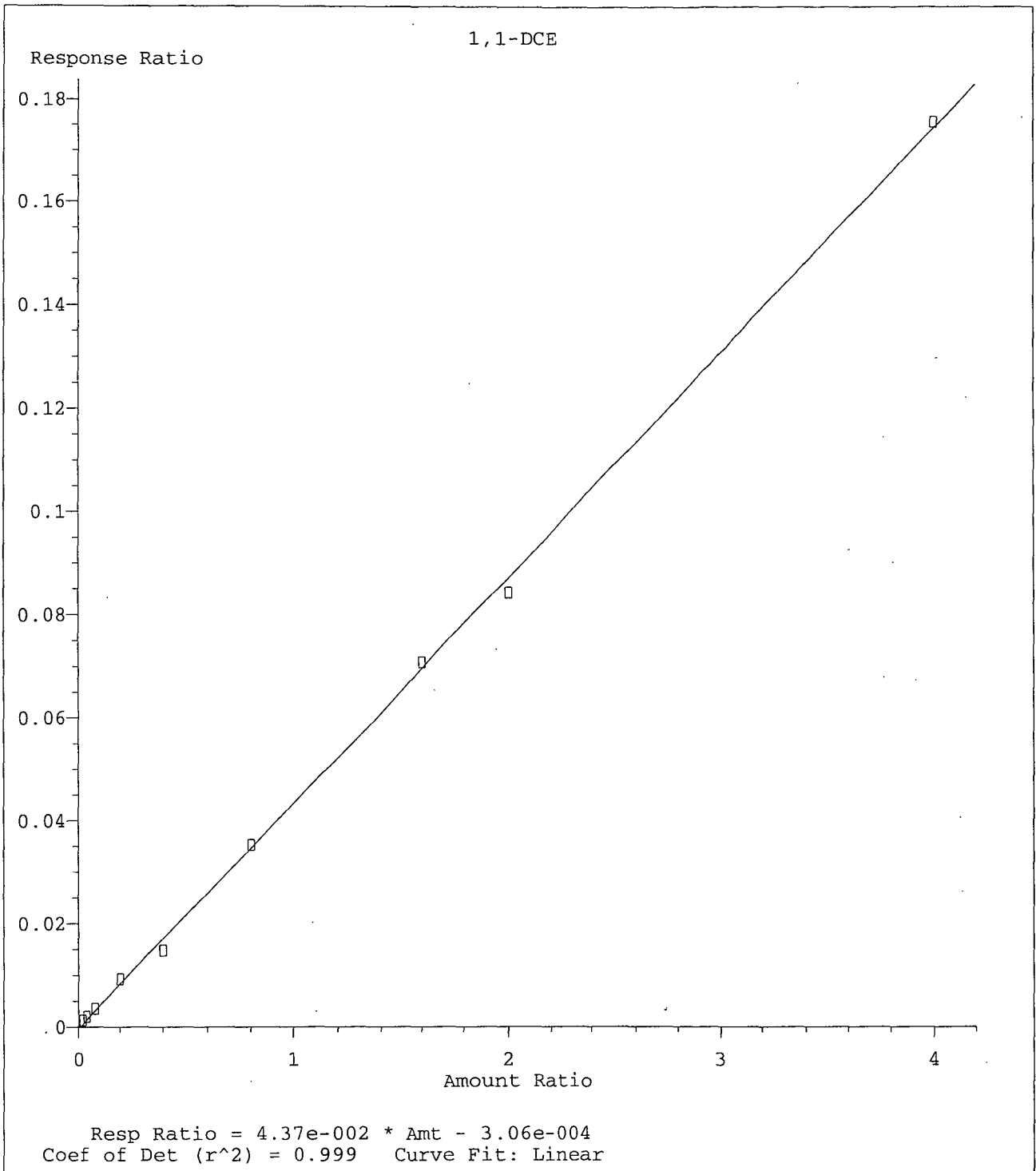


Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

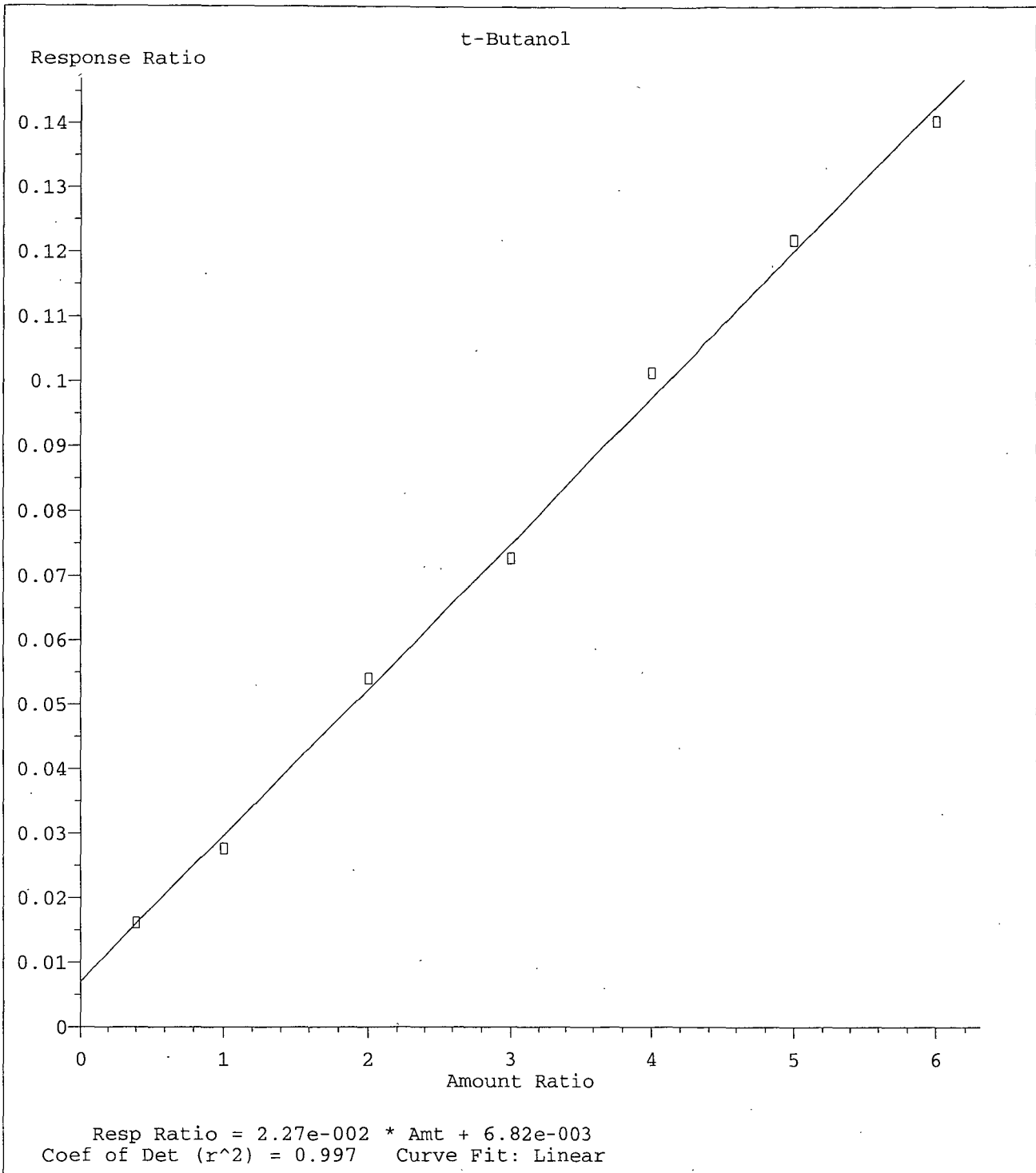


Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

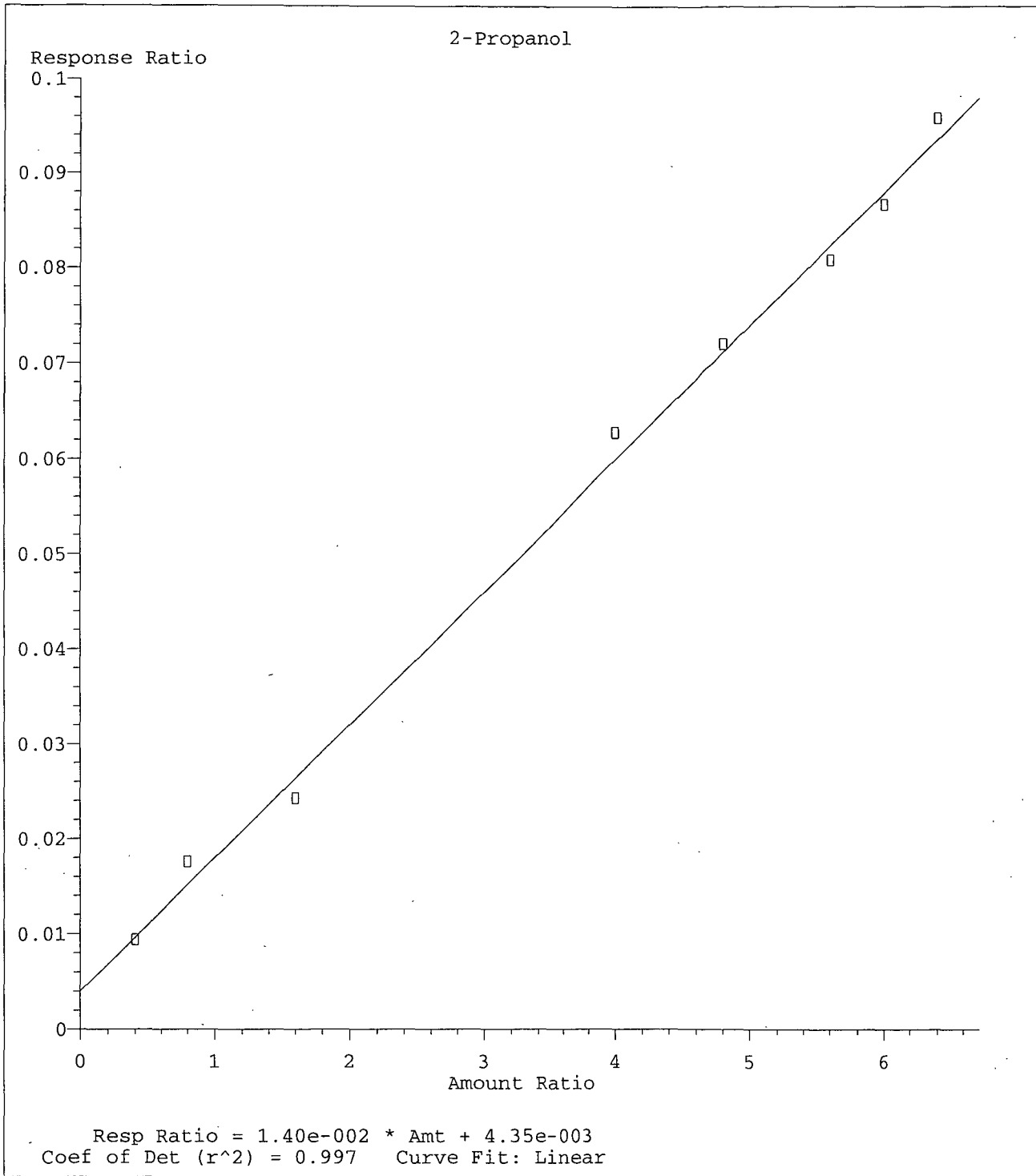




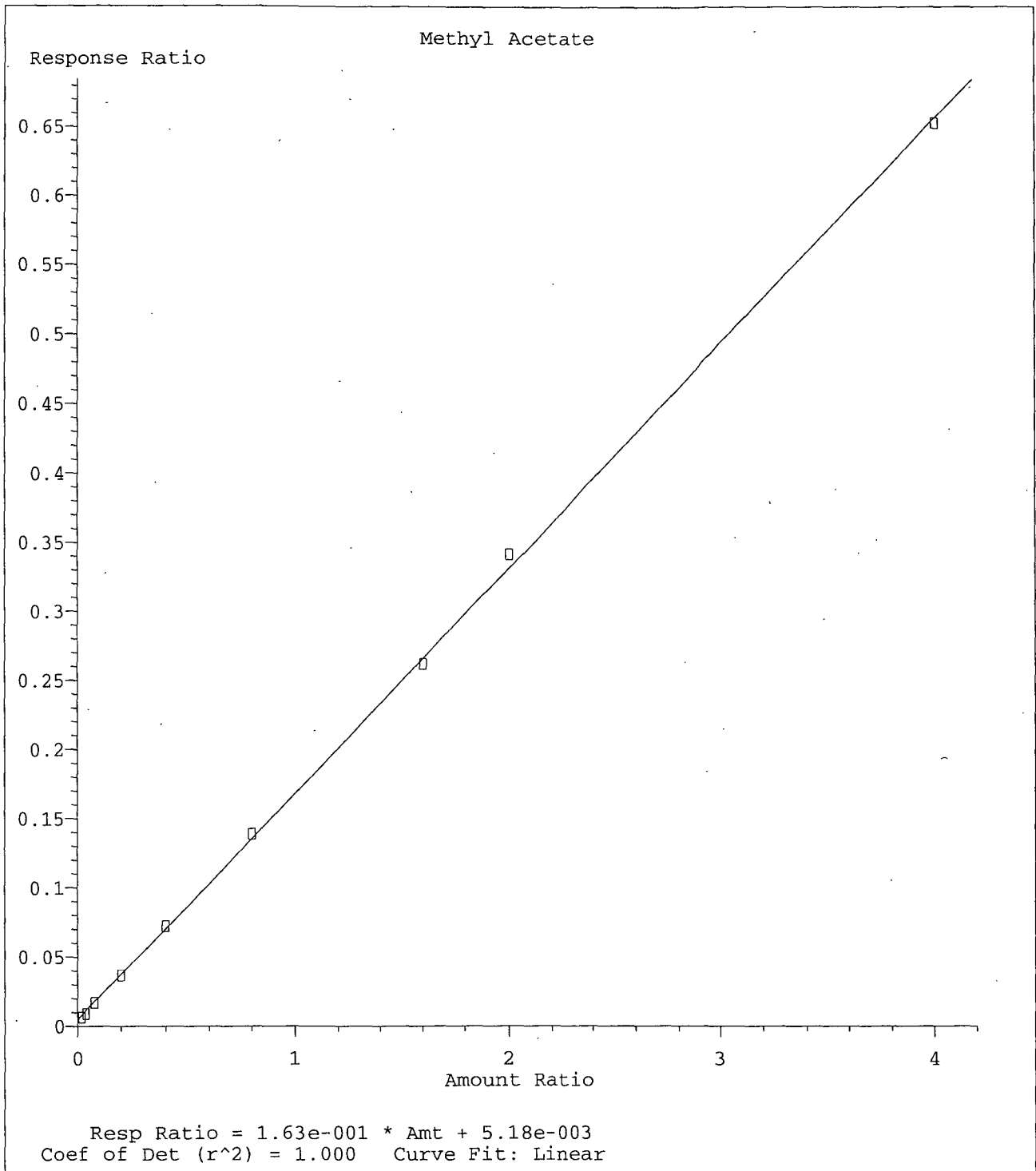
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



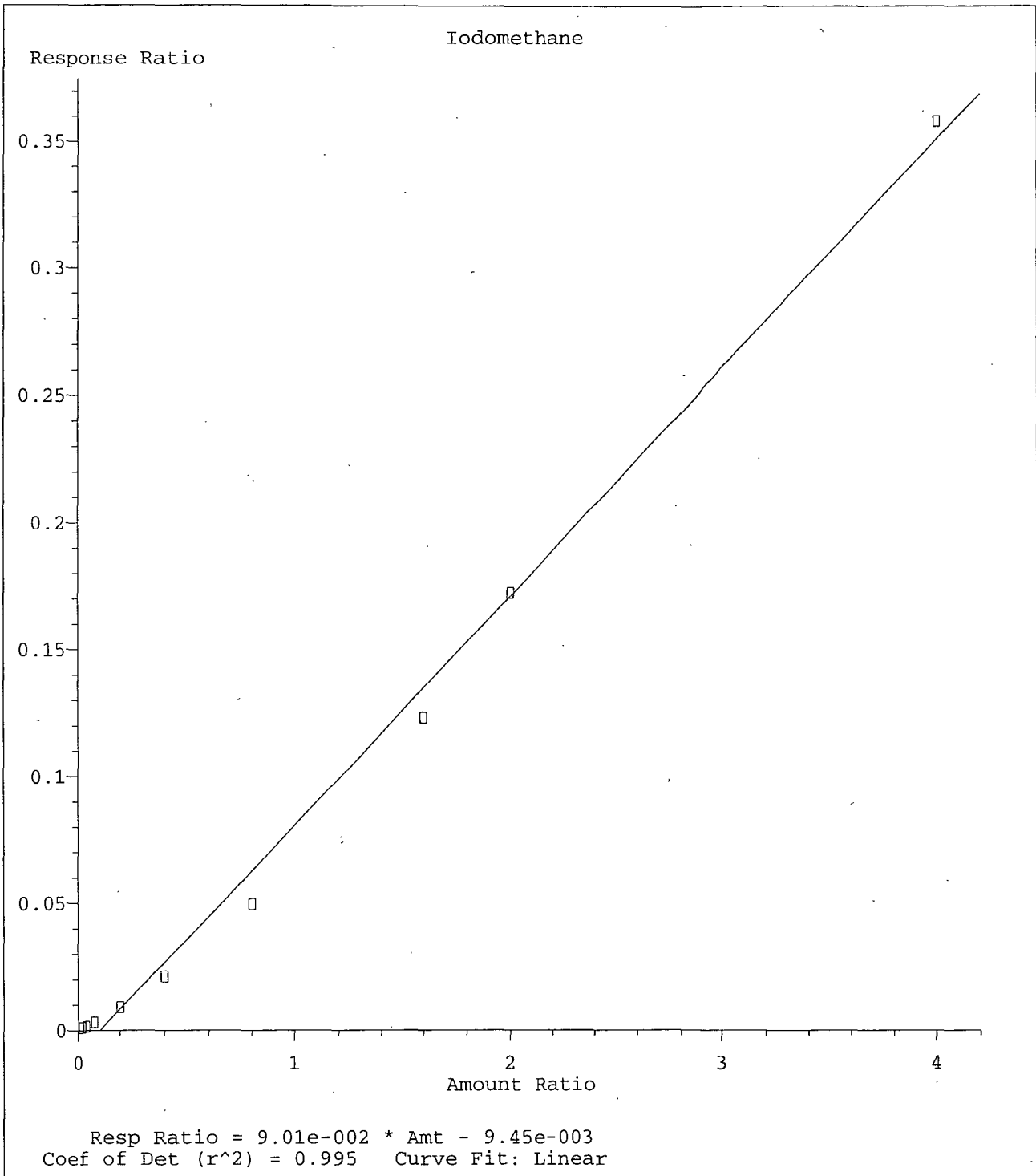
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



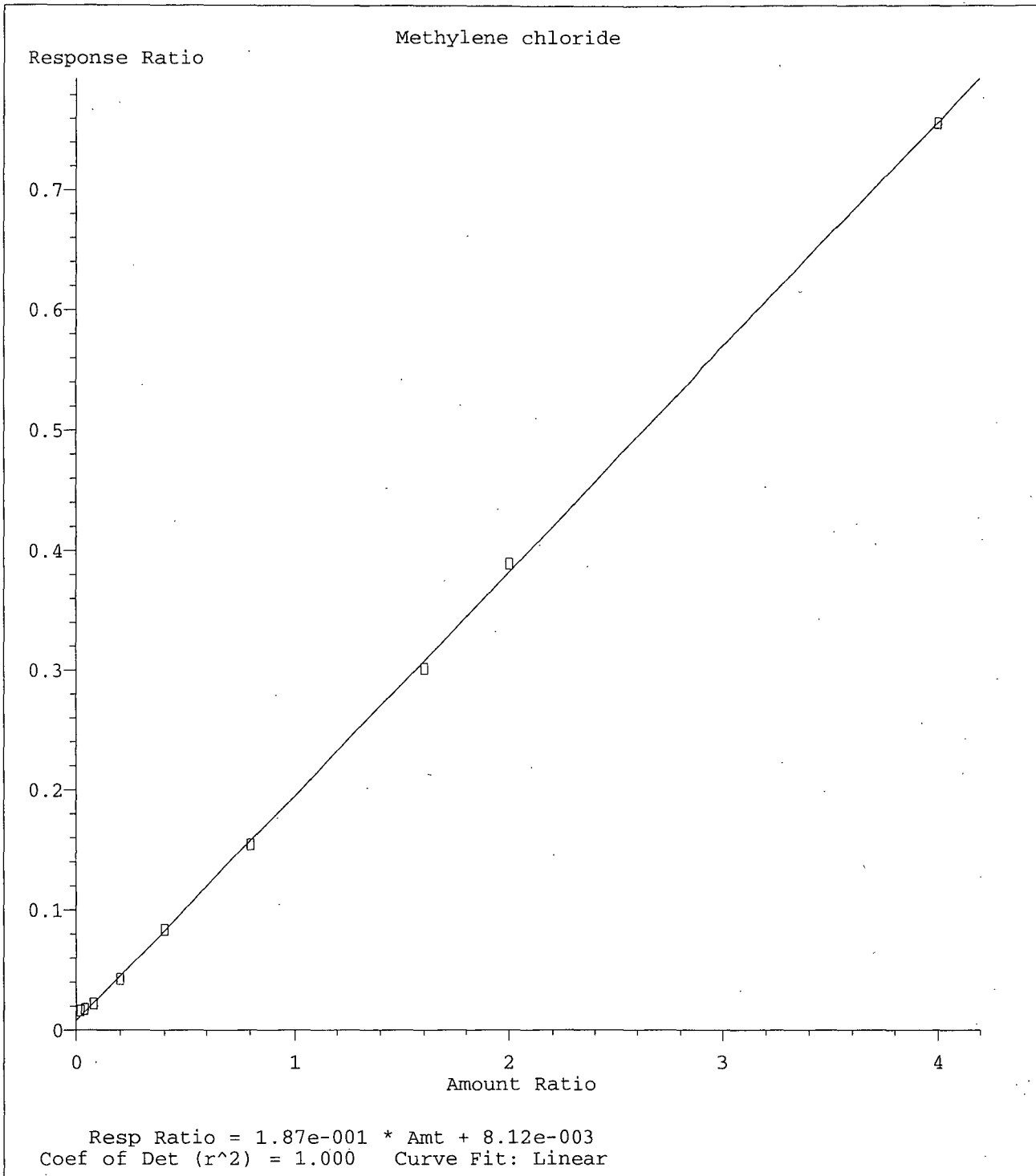
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

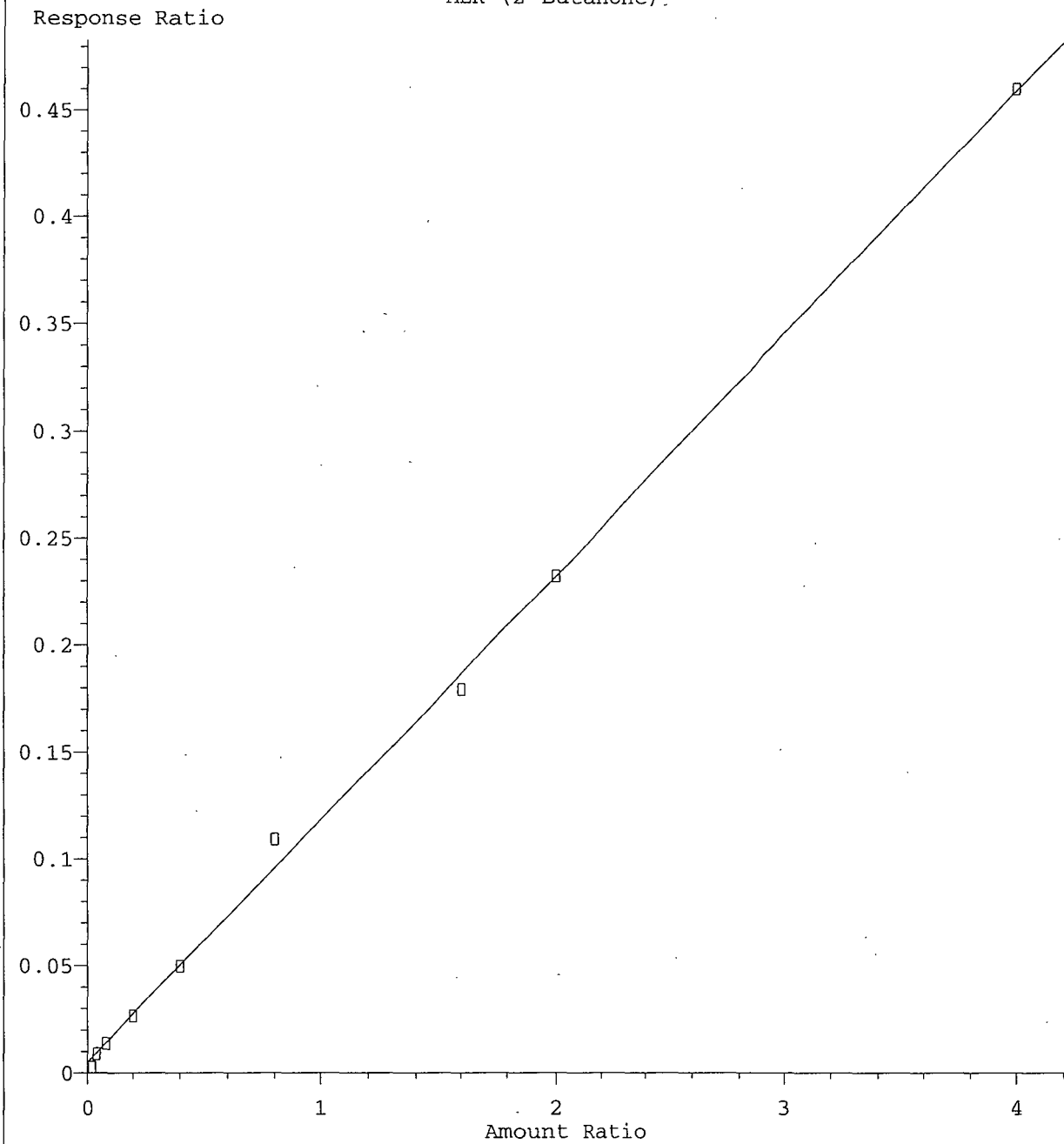


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Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



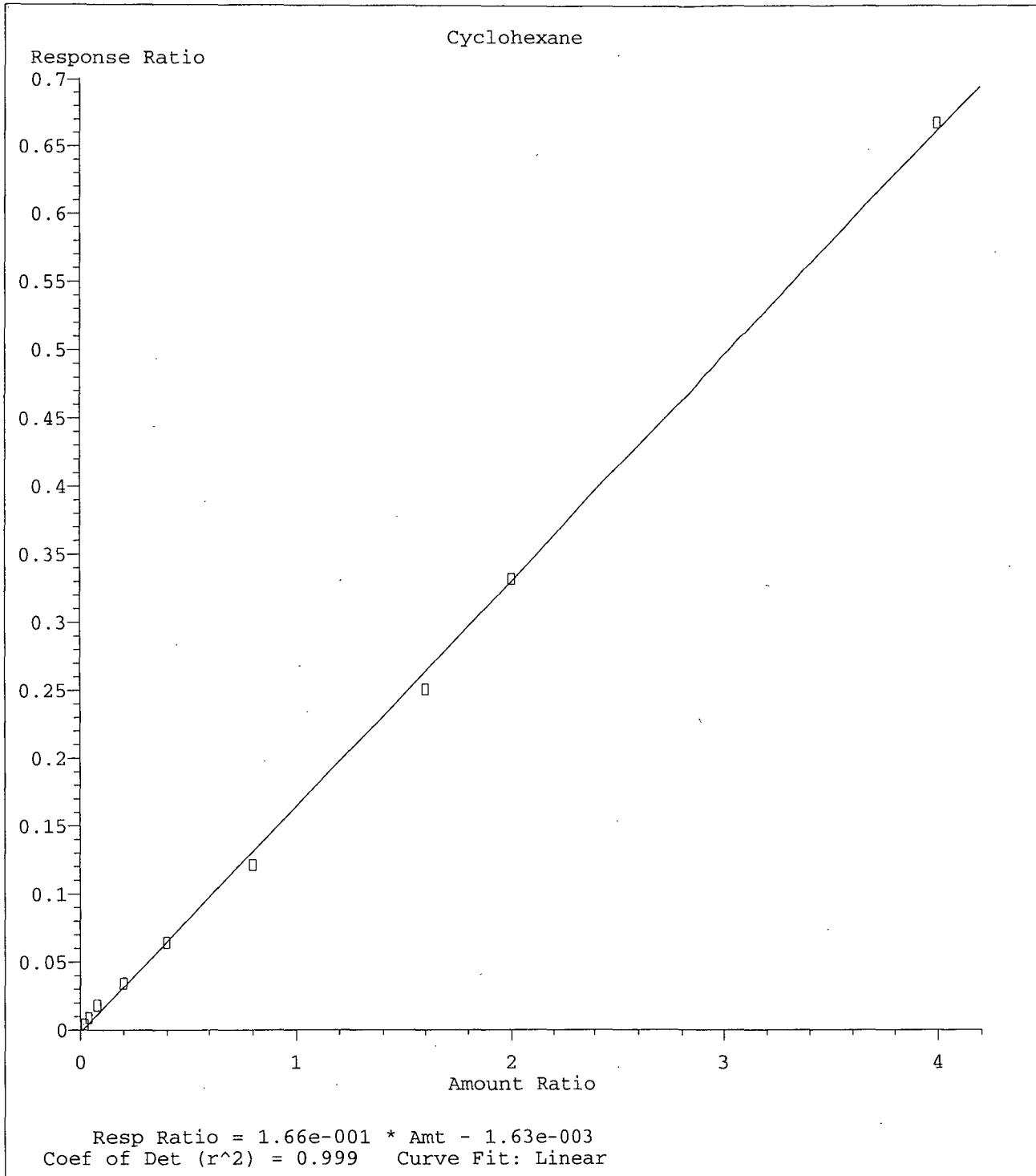
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

MEK (2-Butanone)



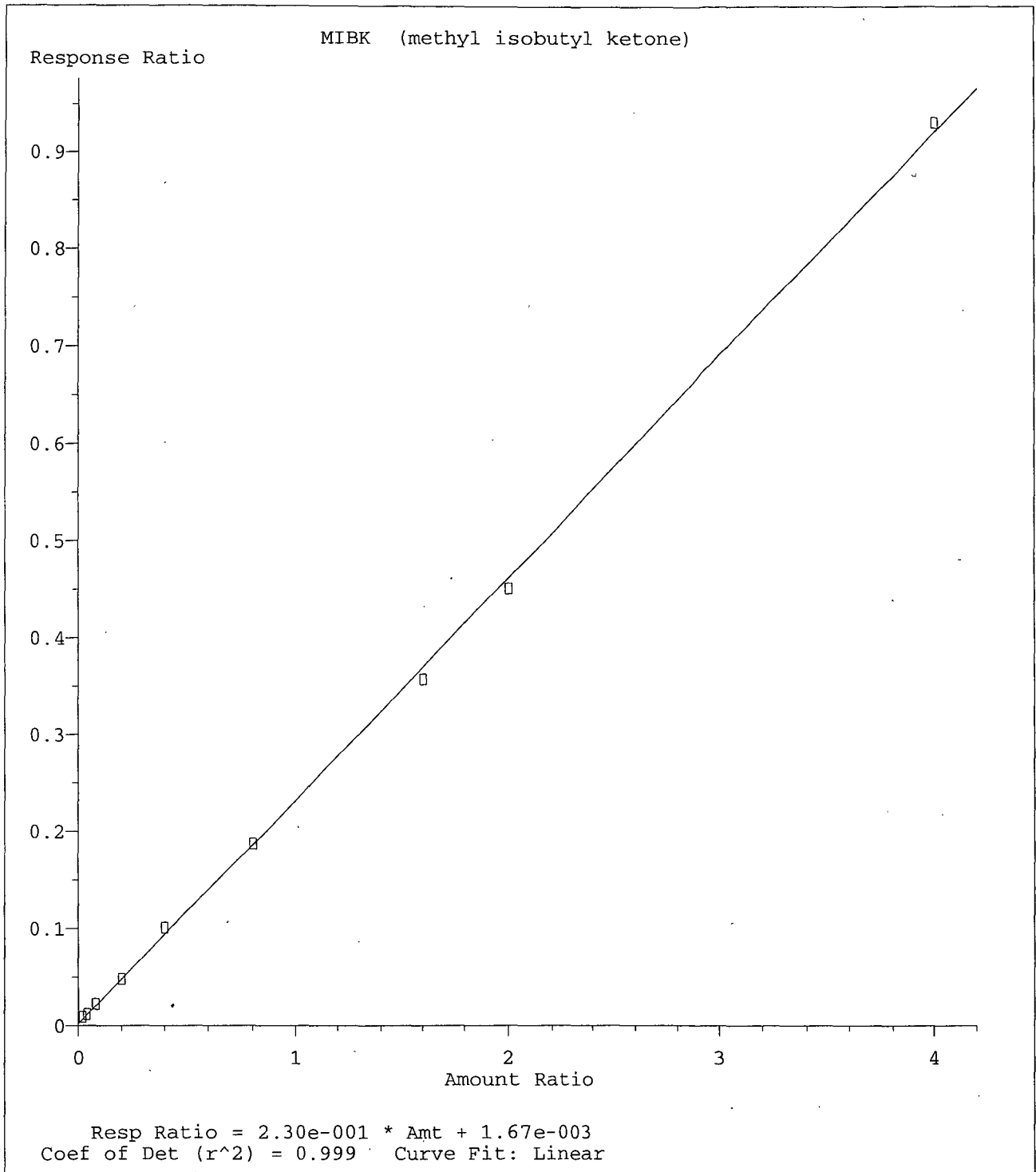
Resp Ratio = 1.14e-001 \* Amt + 4.72e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

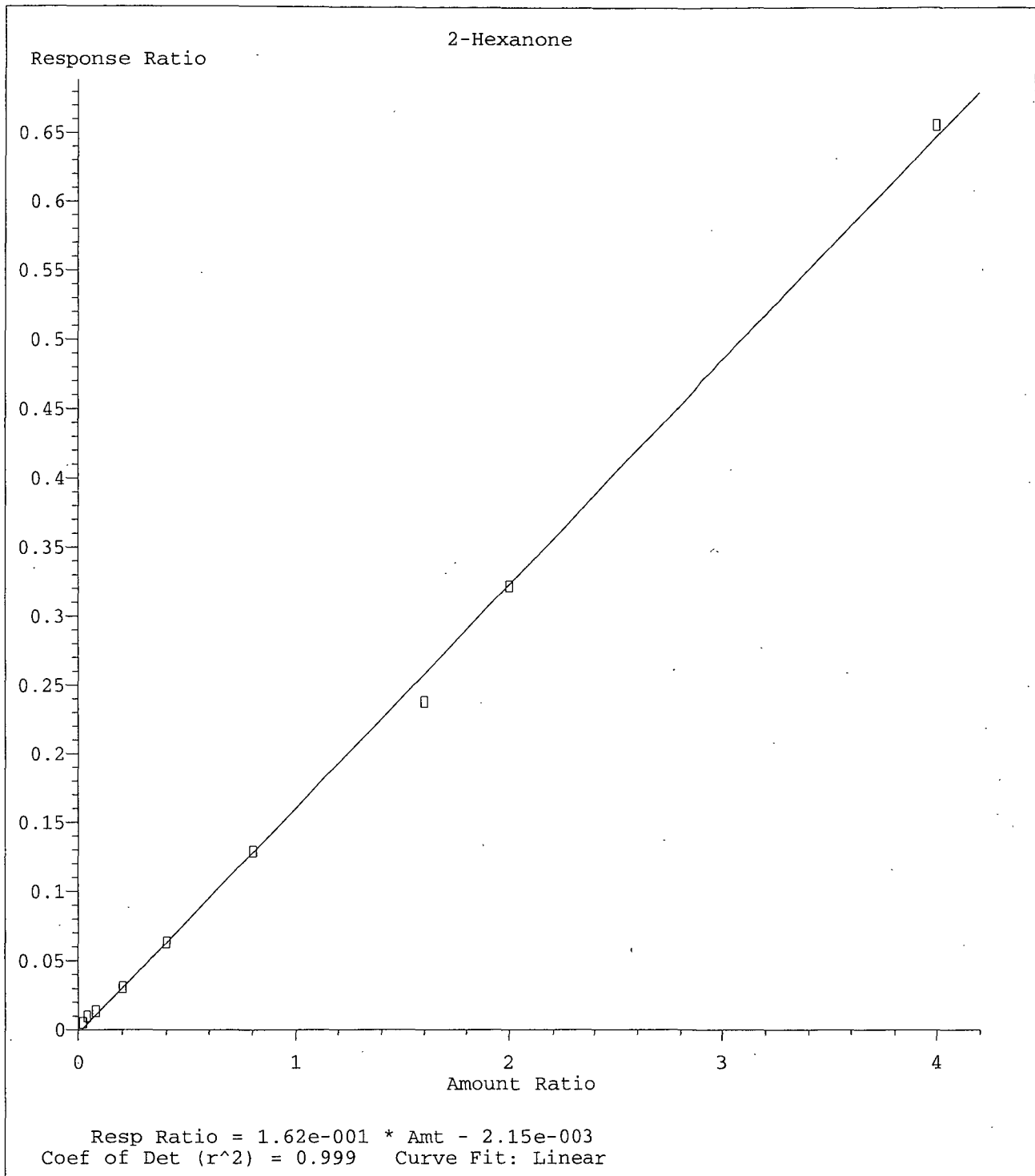


Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

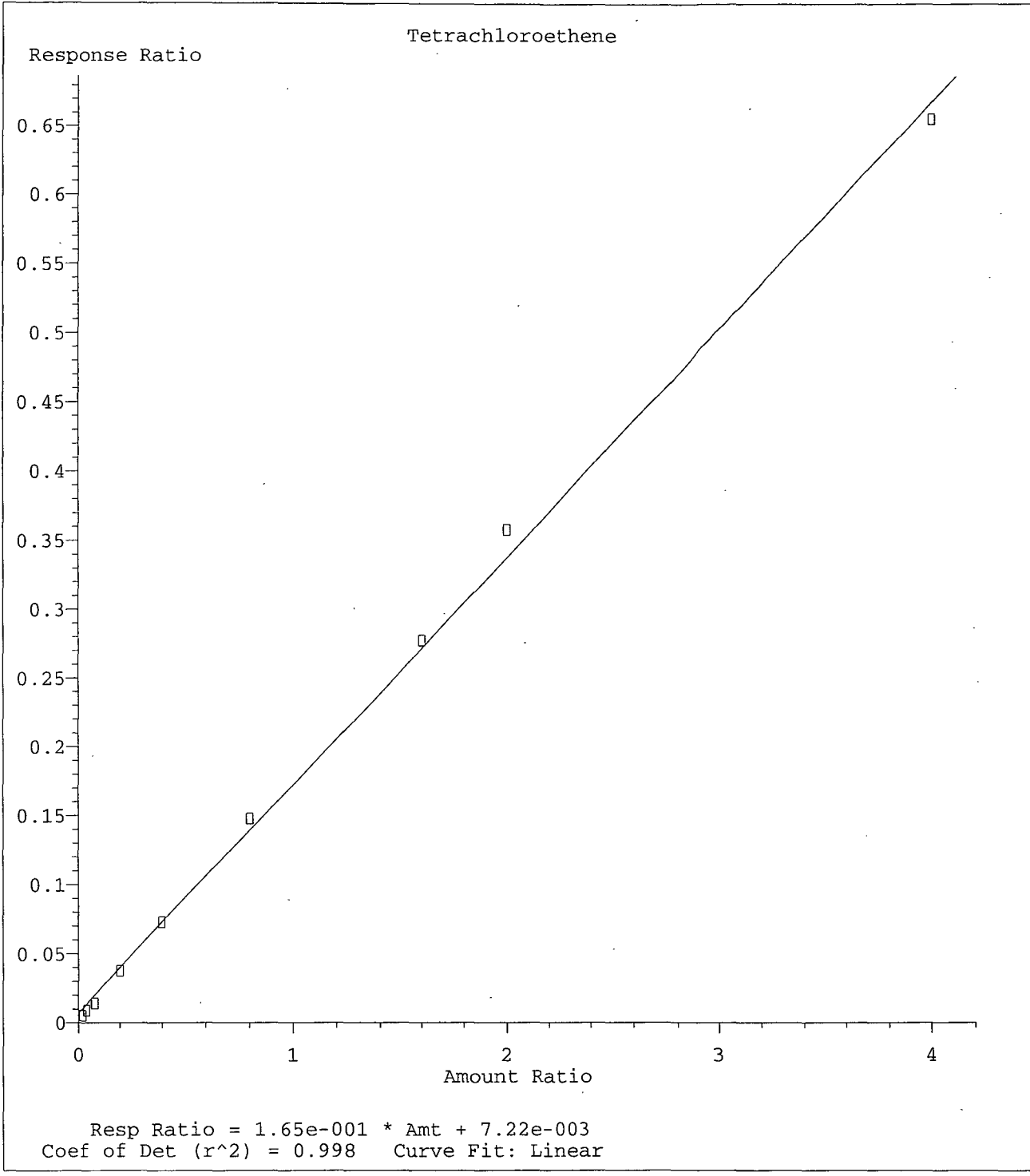




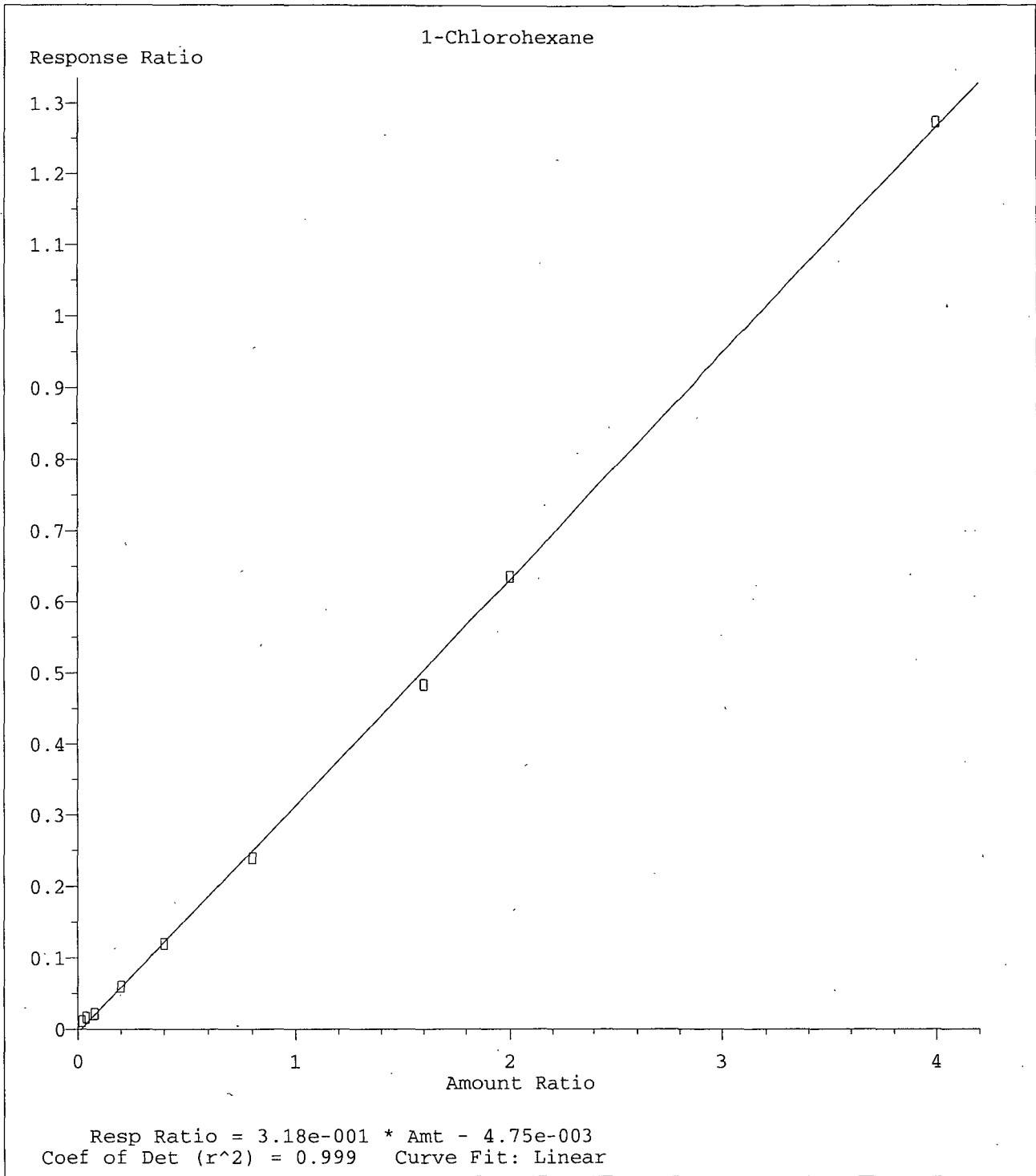
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



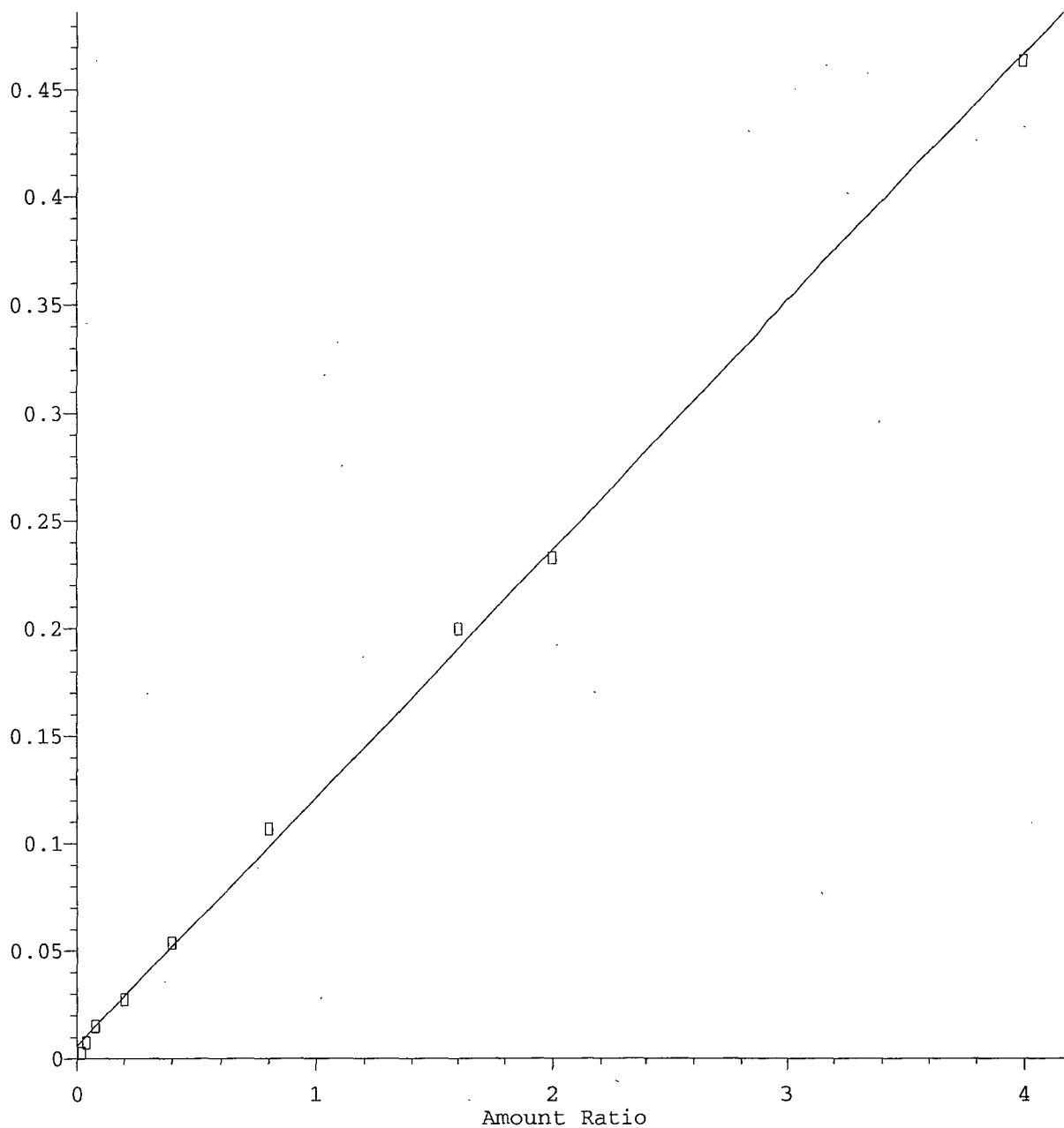
Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

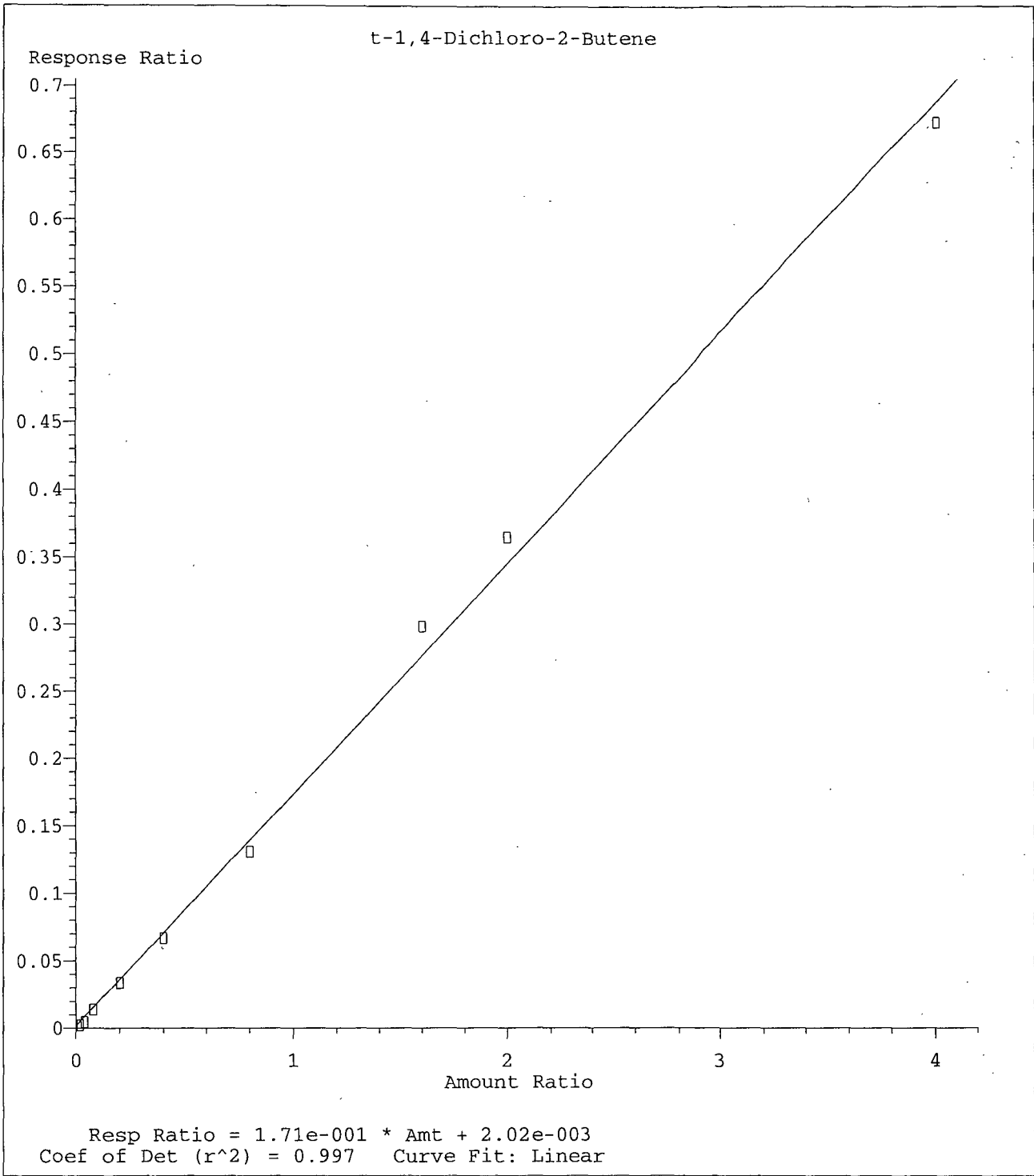
1,2,3-Trichloropropane

Response Ratio

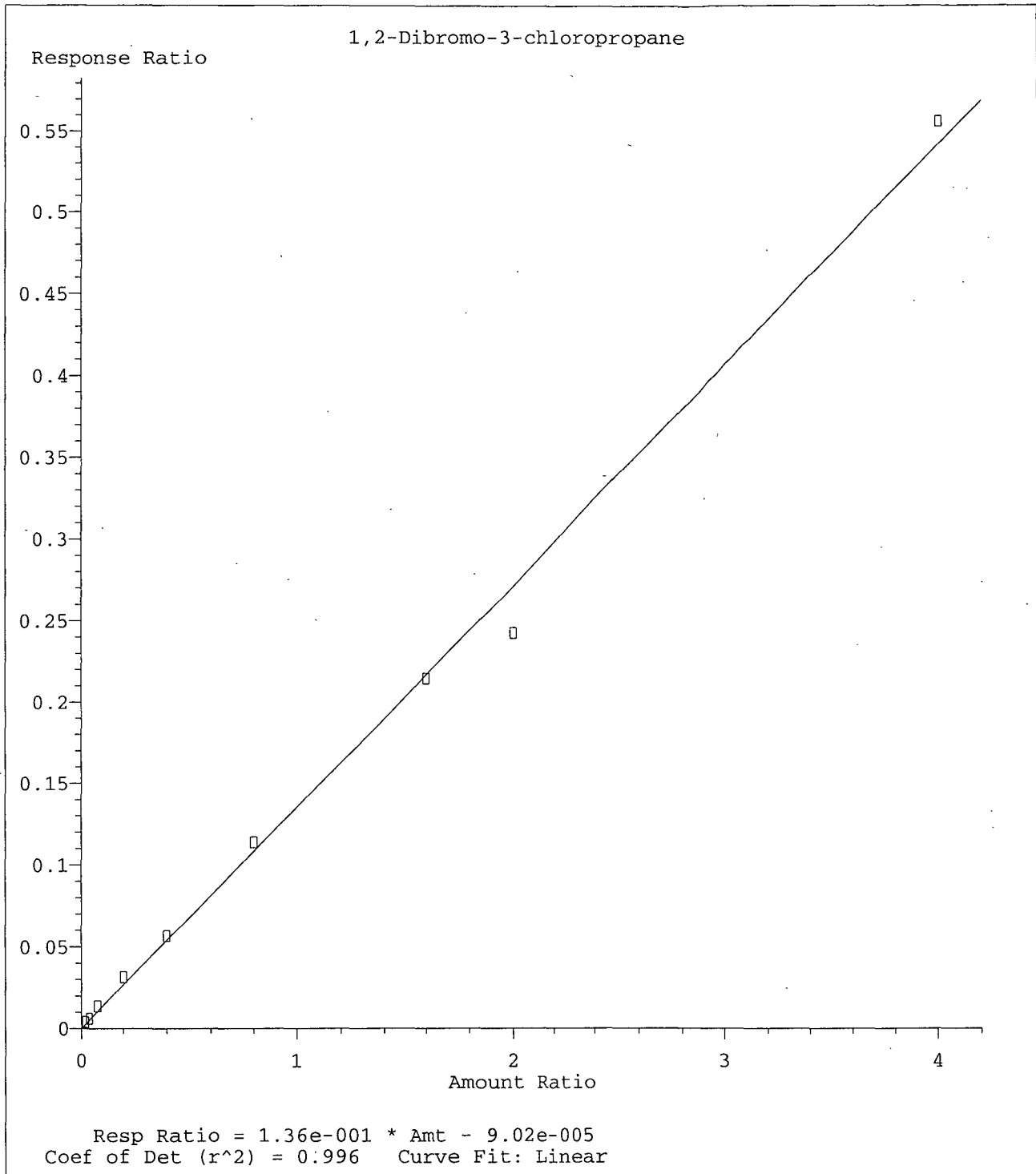


Resp Ratio = 1.15e-001 \* Amt + 6.09e-003  
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019



Method Name: M:\LOKI\DATA\190128\L0128W.M  
Calibration Table Last Updated: Tue Jan 29 09:06:22 2019

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Loki  
Initial Cal. Date: 01/28/19  
Data File: 0128L14.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	Freon 1113	0.1017	0.1019	0.26	TM	
2	TML	Dichlorodifluoromethane	0.1650	0.1744	5.7	TML	4.5
3	TML	Freon 114	0.1391	0.1331	4.4	TML	0.19
4	TM**L	Chloromethane	0.3027	0.2590	14	TM**L	3.8
5	TM*	Vinyl chloride	0.1968	0.1968	0.01	TM*	
6	TM	2-Chloro-1,1,1-trifluoroethane	0.1662	0.1692	1.8	TM	
7	TML	Bromomethane	0.1336	0.1362	1.9	TML	14
8	TML	Chloroethane	0.1071	0.0904	16	TML	4.8
9	TM	Dichlorofluoromethane	0.3356	0.3124	6.9	TM	
10	TM	Trichlorofluoromethane	0.2737	0.2790	1.9	TM	
11	TM	Acrolein	0.0450	0.0376	16	TM	
12	TML	Acetone	0.0810	0.0394	51	TML	16
13	TM	Freon-113	0.1464	0.1561	6.6	TM	
14	TM*L	1,1-DCE	0.0465	0.0433	6.9	TM*L	0.85
15	TML	t-Butanol	0.0275	0.0217	21	TML	11
16	TML	2-Propanol	0.0169	0.0141	17	TML	7.0
17	TM	Acetonitrile	0.0330	0.0300	9.3	TM	
18	TML	Methyl Acetate	0.2000	0.1587	21	TML	10
19	TML	Iodomethane	0.0609	0.0518	15	TML	16
20	TM	Acrylonitrile	0.0884	0.0734	17	TM	
21	TML	Methylene chloride	0.3024	0.1914	37	TML	8.5
22	TM	Carbon disulfide	0.5213	0.4995	4.2	TM	
23	TM	Methyl t-butyl ether (MtBE)	0.5941	0.5720	3.7	TM	
24	TM	Trans-1,2-DCE	0.0876	0.0870	0.76	TM	
25	TM	Diisopropyl Ether	0.6322	0.6055	4.2	TM	
26	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0112	0.00	TM**	
27	TM**	1,1-DCA	0.3535	0.3446	2.5	TM**	
28	TM	Vinyl Acetate	0.1679	0.1344	20	TM	
29	TM	Ethyl tert Butyl Ether	0.6003	0.5863	2.3	TM	
30	TML	MEK (2-Butanone)	0.1403	0.1235	12	TML	1.8
31	TM	Cis-1,2-DCE	0.2333	0.2217	5.0	TM	
32	TM	2,2-Dichloropropane	0.3132	0.2928	6.5	TM	
33	TM	2-Methylpentane	0.0000	0.0003	0.00	TM	
34	TML	3-Methylpentane	0.0000	0.0003	0.00	TML	
35	TM*	Chloroform	0.3760	0.3683	2.0	TM*	
36	TM	Bromochloromethane	0.0581	0.0596	2.5	TM	
37	TM	1,1,1-TCA	0.1424	0.1377	3.3	TM	
38	TML	Cyclohexane	0.1818	0.1608	12	TML	0.57
39	TM	1,1-Dichloropropene	0.2579	0.2483	3.7	TM	
40	TM	2,2,4-Trimethylpentane	0.5179	0.5098	1.6	TM	

Average

8.9



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Loki  
Cal. Date: 01/28/19  
Data File: 0128L14.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.2757	0.2790	1.2	TM
42	TM	Tert Amyl Methyl Ether	0.6308	0.5834	7.5	TM
43	TML	Methylcyclopentane	0.0000	0.0002	0.00	TML
44	TM	1,2-DCA	0.3049	0.2959	3.0	TM
45	TM	Benzene	0.8179	0.8040	1.7	TM
46	TM	TCE	0.1193	0.1203	0.86	TM
47	TM	2-Pentanone	0.1970	0.1782	9.6	TM
48	TM*	1,2-Dichloropropane	0.2255	0.2135	5.3	TM*
49	TM	Bromodichloromethane	0.1644	0.1587	3.5	TM
50	TM	Methyl Cyclohexane	0.2786	0.2786	0.01	TM
51	TM	Dibromomethane	0.1548	0.1473	4.9	TM
52	TM	2-Chloroethyl vinyl ether	0.0057	0.0057	0.45	TM
53	TML	MIBK (methyl isobutyl ketone)	0.2693	0.2231	17	TML 4.8
54	TM	1-Bromo-2-chloroethane	0.1771	0.1677	5.3	TM
55	TM	Cis-1,3-Dichloropropene	0.3571	0.3481	2.5	TM
56	TM*	Toluene	0.4653	0.4787	2.9	TM*
57	TM	Trans-1,3-Dichloropropene	0.3370	0.3235	4.0	TM
58	TM	1,1,2-TCA	0.1777	0.1765	0.68	TM
59	TML	2-Hexanone	0.1791	0.1619	9.6	TML 2.9
60	TM	1,2-EDB	0.1713	0.1463	15	TM
61	TML	Tetrachloroethene	0.1922	0.1788	7.0	TML 2.7
62	TML	1-Chlorohexane	0.3424	0.3000	12	TML 1.8
63	TM	1,1,1,2-Tetrachloroethane	0.3028	0.2974	1.8	TM
64	TM	m&p-Xylene	0.8445	0.8605	1.9	TM
65	TM	o-Xylene	0.2199	0.2299	4.5	TM
66	TM	Styrene	0.6925	0.7025	1.4	TM
67	TM	1,3-Dichloropropane	0.4851	0.4539	6.4	TM
68	TM	Dibromochloromethane	0.3530	0.3254	7.8	TM
69	TM**	Chlorobenzene	0.7671	0.7288	5.0	TM**
70	TM*	Ethylbenzene	0.6554	0.6303	3.8	TM*
71	TM**	Bromoform	0.2528	0.2239	11	TM**
72	TM	Isopropylbenzene	2.174	2.531	16	TM
73	TM**	1,1,1,2-Tetrachloroethane	0.7518	0.7678	2.1	TM**
74	TML	1,2,3-Trichloropropane	0.1402	0.1432	2.1	TML 11
75	TML	t-1,4-Dichloro-2-Butene	0.1593	0.2017	27	TML 15
76	TM	Bromobenzene	0.3598	0.4058	13	TM
77	TM	n-Propylbenzene	1.337	1.573	18	TM
78	TM	4-Ethyltoluene	1.977	2.300	16	TM
79	TM	2-Chlorotoluene	0.8183	0.9406	15	TM
80	TM	1,3,5-Trimethylbenzene	1.686	1.839	9.1	TM
Average					6.9	

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Loki  
Cal. Date: 01/28/19  
Data File: 0128L14.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	4-Chlorotoluene	0.9298	1.037	12	TM
82	TM	Tert-Butylbenzene	1.721	1.824	6.0	TM
83	TM	1,2,4-Trimethylbenzene	1.597	1.640	2.7	TM
84	TM	Sec-Butylbenzene	2.104	2.157	2.5	TM
85	TM	p-Isopropyltoluene	0.9818	0.9739	0.80	TM
86	TM	Benzyl Chloride	0.9035	0.7804	14	TM
87	TM	1,3-DCB	0.6285	0.6079	3.3	TM
88	TM	1,4-DCB	1.219	1.211	0.67	TM
89	TM	n-Butylbenzene	0.9035	0.7804	14	TM
90	TM	1,2-DCB	1.167	1.176	0.75	TM
91	TM	Hexachloroethane	0.4221	0.4313	2.2	TM
92	TML	1,2-Dibromo-3-chloropropane	0.1520	0.1378	9.4	TML 1.8
93	TM	1,2,4-Trichlorobenzene	0.7361	0.7406	0.61	TM
94	TM	Hexachlorobutadiene	0.3627	0.3853	6.2	TM
95	TM	Naphthalene	1.563	1.569	0.37	TM
96	TM	1,2,3-Trichlorobenzene	0.3362	0.3390	0.82	TM
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						
Average					4.8	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L14.D  
 Acq On : 28 Jan 19 20:18  
 Sample : (SS)10ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	431360	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	334592	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	134464	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	201595	23.7697	ppb	0.00
Spiked Amount			Recovery	=	95.080%	
43) 1,2-DCA-D4(S)	6.07	65	233733	23.6867	ppb	0.00
Spiked Amount			Recovery	=	94.748%	
64) Toluene-D8(S)	8.37	98	737456	22.0223	ppb	0.00
Spiked Amount			Recovery	=	88.088%	
72) 4-Bromofluorobenzene(S)	11.27	95	237119	23.6346	ppb	0.00
Spiked Amount			Recovery	=	94.540%	
Target Compounds						
2) Freon 1113	1.12	116	175886	100.2643	ppb	100
3) Dichlorodifluoromethane	1.14	85	30093	10.4530	ppb	99
4) Freon 114	1.25	85	22960	9.9813	ppb	99
5) Chloromethane	1.29	50	44685	9.6202	ppb	97
6) Vinyl chloride	1.38	62	33957	10.0009	ppb	99
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	291904	101.7770	ppb	99
8) Bromomethane	1.65	94	23504	11.3785	ppb	92
9) Chloroethane	1.75	64	15593	9.5175	ppb	93
10) Dichlorofluoromethane	1.95	67	53901	9.3085	ppb	100
11) Trichlorofluoromethane	2.00	101	48139	10.1941	ppb	100
12) Acrolein	2.42	56	81132	104.4486	ppb	# 100
13) Acetone	2.61	43	6796	8.3711	ppb	95
14) Freon-113	2.55	101	26928	10.6602	ppb	95
15) 1,1-DCE	2.52	63	7471	10.0847	ppb	81
16) t-Butanol	3.38	59	46795	111.8691	ppb	98
17) 2-Propanol	2.84	45	24336	92.9579	ppb	# 98
18) Acetonitrile	2.92	41	64637	113.4270	ppb	# 86
19) Methyl Acetate	3.01	43	27389	8.9505	ppb	89
20) Iodomethane	2.67	142	8935	8.3659	ppb	99
21) Acrylonitrile	3.44	52	12667	8.3035	ppb	73
22) Methylene chloride	3.09	84	33032	9.1496	ppb	98
23) Carbon disulfide	2.73	76	86187	9.5825	ppb	98
24) Methyl t-butyl ether (MtBE)	3.53	73	98695	9.6272	ppb	95
25) Trans-1,2-DCE	2.52	96	15007	9.9237	ppb	95
26) Diisopropyl Ether	4.33	45	104475	9.5773	ppb	99
28) 1,1-DCA	4.10	63	59460	9.7492	ppb	97
29) Vinyl Acetate	4.27	43	23192	8.0067	ppb	97
30) Ethyl tert Butyl Ether	4.87	59	101168	9.7671	ppb	99
31) MEK (2-Butanone)	5.06	43	21305	9.8179	ppb	90
32) Cis-1,2-DCE	4.98	96	38258	9.5027	ppb	94
33) 2,2-Dichloropropane	4.96	77	50528	9.3500	ppb	95
36) Chloroform	5.45	83	63556	9.7957	ppb	93
37) Bromochloromethane	5.30	128	10279	10.2535	ppb	96
39) 1,1,1-TCA	5.65	97	23752	9.6672	ppb	100
40) Cyclohexane	5.71	41	27744	9.9429	ppb	95
41) 1,1-Dichloropropene	5.88	75	42842	9.6272	ppb	95
42) 2,2,4-Trimethylpentane	6.29	57	87967	9.8437	ppb	95
44) Carbon Tetrachloride	5.87	117	48134	10.1197	ppb	99
45) Tert Amyl Methyl Ether	6.36	73	100663	9.2493	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L14.D  
 Acq On : 28 Jan 19 20:18  
 Sample : (SS)10ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	51048	9.7042	ppb	100
48) Benzene	6.13	78	138733	9.8303	ppb	97
49) TCE	6.95	130	20760	10.0857	ppb	98
50) 2-Pentanone	7.22	43	384268	113.0309	ppb	100
51) 1,2-Dichloropropane	7.20	63	36844	9.4692	ppb	97
52) Bromodichloromethane	7.54	83	27376	9.6498	ppb	99
53) Methyl Cyclohexane	7.17	83	48068	10.0010	ppb	95
54) Dibromomethane	7.34	93	25417	9.5142	ppb	86
55) 2-Chloroethyl vinyl ether	7.94	43	982	10.0448	ppb	93
56) MIBK (methyl isobutyl ket	8.28	43	38490	9.5199	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	28944	9.4702	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	60062	9.7473	ppb	97
59) Toluene	8.44	91	82600	10.2878	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	55811	9.5994	ppb	98
61) 1,1,2-TCA	8.90	83	30454	9.9321	ppb	96
62) 2-Hexanone	9.22	43	27932	10.2941	ppb	97
65) 1,2-EDB	9.44	107	19584	8.5402	ppb	99
66) Tetrachloroethene	9.05	166	23936	9.7275	ppb	95
67) 1-Chlorohexane	10.00	91	40153	9.8236	ppb	95
68) 1,1,1,2-Tetrachloroethane	10.10	131	39800	9.8202	ppb	91
69) m&p-Xylene	10.27	91	230340	20.3804	ppb	100
70) o-Xylene	10.70	106	30768	10.4530	ppb	94
71) Styrene	10.72	104	94023	10.1446	ppb	96
73) 1,3-Dichloropropane	9.08	76	60753	9.3578	ppb	93
74) Dibromochloromethane	9.33	129	43553	9.2188	ppb	94
75) Chlorobenzene	10.00	112	97537	9.5005	ppb	98
76) Ethylbenzene	10.13	91	84352	9.6166	ppb	97
77) Bromoform	10.90	173	29963	8.8545	ppb	100
79) Isopropylbenzene	11.11	105	136131	11.6414	ppb	98
80) 1,1,2,2-Tetrachloroethane	11.43	83	41295	10.2131	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	7704	11.1044	ppb	95
82) t-1,4-Dichloro-2-Butene	11.49	53	10851	11.4727	ppb	98
83) Bromobenzene	11.43	156	21824	11.2758	ppb	95
84) n-Propylbenzene	11.56	91	84587	11.7659	ppb	100
85) 4-Ethyltoluene	11.69	105	123702	11.6329	ppb	99
86) 2-Chlorotoluene	11.64	91	50592	11.4948	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	98887	10.9062	ppb	100
88) 4-Chlorotoluene	11.77	91	55800	11.1575	ppb	99
89) Tert-Butylbenzene	12.12	119	98109	10.5988	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	88203	10.2674	ppb	99
91) Sec-Butylbenzene	12.36	105	116016	10.2538	ppb	98
92) p-Isopropyltoluene	12.53	119	52384	9.9200	ppb	94
93) Benzyl Chloride	12.72	91	41973	8.6376	ppb	100
94) 1,3-DCB	12.47	146	32696	9.6722	ppb	96
95) 1,4-DCB	12.57	146	65119	9.9327	ppb	97
96) n-Butylbenzene	12.72	91	41973	8.6376	ppb	98
97) 1,2-DCB	12.98	146	63257	10.0751	ppb	94
98) Hexachloroethane	13.26	117	23199	10.2186	ppb	91
99) 1,2-Dibromo-3-chloropropan	13.82	75	7411	10.1794	ppb	92
100) 1,2,4-Trichlorobenzene	14.75	180	39834	10.0613	ppb	95
101) Hexachlorobutadiene	14.94	225	20724	10.6243	ppb	88
102) Naphthalene	15.01	128	84384	10.0372	ppb	95
103) 1,2,3-Trichlorobenzene	15.28	180	18232	10.0821	ppb	97

Quantitation Report

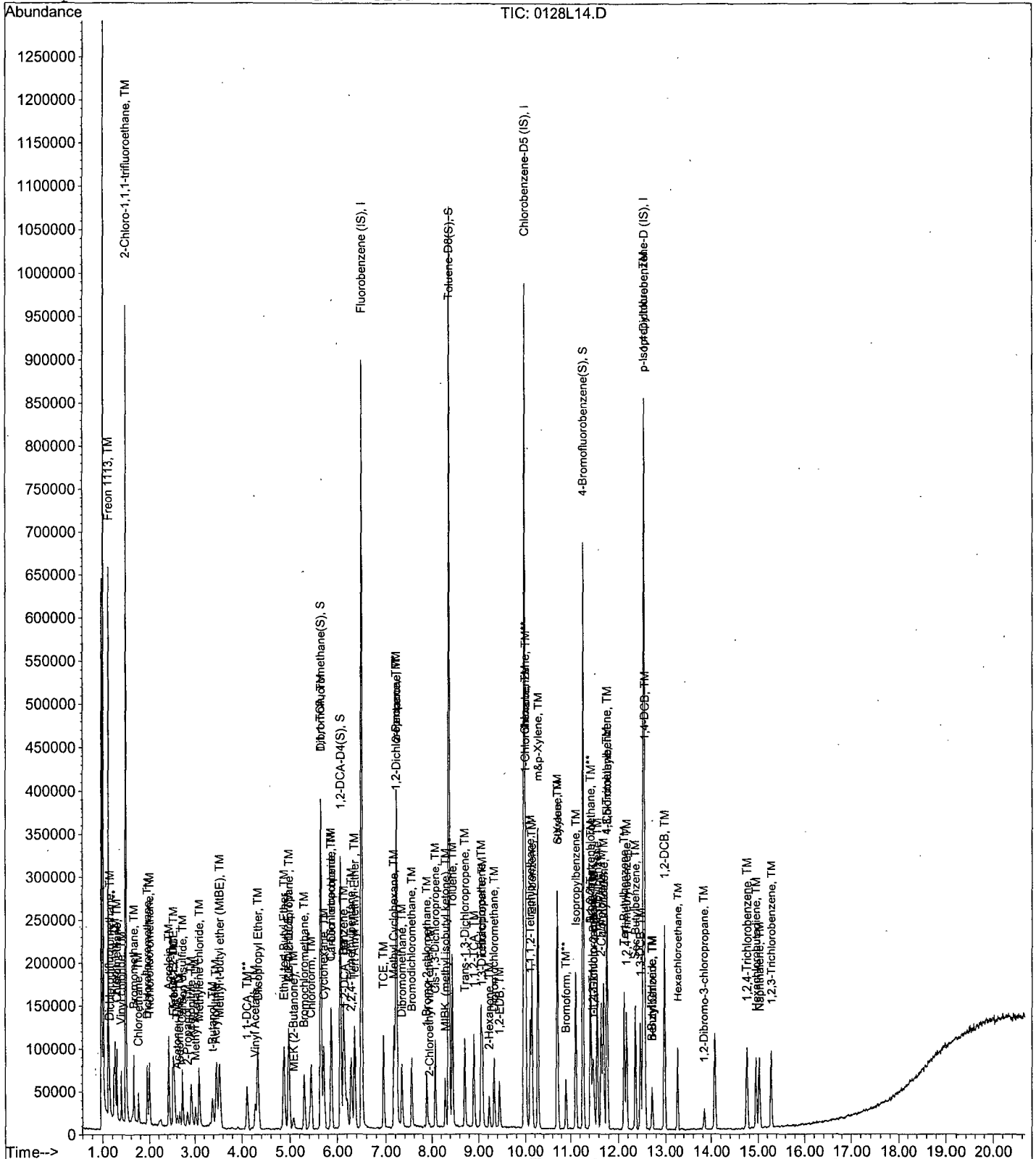
Data File : M:\LOKI\DATA\190128\0128L14.D  
Acq On : 28 Jan 19 20:18  
Sample : (SS)10ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 13  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/29/19

Matrix: \_\_\_\_\_

Instrument: Loki

Initial Cal. Date: 01/28/19

Data File: 0128L38.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TM Freon 1113	0.1017	0.1039	2.2	TM
3	TML Dichlorodifluoromethane	0.1650	0.1842	12	TML 10
4	TML Freon 114	0.1391	0.1506	8.2	TML 16
5	TM**L Chloromethane	0.3027	0.2728	9.9	TM**L 1.6
6	TM* Vinyl chloride	0.1968	0.1996	1.4	TM*
7	TM 2-Chloro-1,1,1-trifluoroethane	0.1662	0.1880	13	TM
8	TML Bromomethane	0.1336	0.1450	8.5	TML 21
9	TML Chloroethane	0.1071	0.1011	5.5	TML 7.2
10	TM Dichlorofluoromethane	0.3356	0.3203	4.6	TM
11	TM Trichlorofluoromethane	0.2737	0.3036	11	TM
12	TM Acrolein	0.0450	0.0319	29	TM
13	TML Acetone	0.0810	0.0387	52	TML 18
14	TM Freon-113	0.1464	0.1574	7.5	TM
15	TM*L 1,1-DCE	0.0465	0.0445	4.3	TM*L 3.6
16	TML t-Butanol	0.0275	0.0220	20	TML 9.3
17	TML 2-Propanol	0.0169	0.0127	25	TML 17
18	TM Acetonitrile	0.0330	0.0277	16	TM
19	TML Methyl Acetate	0.2000	0.1580	21	TML 11
20	TML Iodomethane	0.0609	0.0290	52	TML 42
21	TM Acrylonitrile	0.0884	0.0710	20	TM
22	TML Methylene chloride	0.3024	0.1950	36	TML 6.6
23	TM Carbon disulfide	0.5213	0.4997	4.1	TM
24	TM Methyl t-butyl ether (MtBE)	0.5941	0.5777	2.8	TM
25	TM Trans-1,2-DCE	0.0876	0.0959	9.4	TM
26	TM Diisopropyl Ether	0.6322	0.6115	3.3	TM
27	TM** 2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0122	0.00	TM**
28	TM** 1,1-DCA	0.3535	0.3595	1.7	TM**
29	TM Vinyl Acetate	0.1679	0.1124	33	TM
30	TM Ethyl tert Butyl Ether	0.6003	0.5985	0.30	TM
31	TML MEK (2-Butanone)	0.1403	0.1091	22	TML 14
32	TM Cis-1,2-DCE	0.2333	0.2434	4.3	TM
33	TM 2,2-Dichloropropane	0.3132	0.2471	21	TM
34	TM 2-Methylpentane	0.0000	0.0003	0.00	TM
35	TML 3-Methylpentane	0.0000	0.0001	0.00	TML
36	TM* Chloroform	0.3760	0.3855	2.5	TM*
37	TM Bromochloromethane	0.0581	0.0601	3.5	TM
38	S Dibromofluoromethane(S)	0.4915	0.4920	0.10	S
39	TM 1,1,1-TCA	0.1424	0.1494	4.9	TM
40	TML Cyclohexane	0.1818	0.1777	2.3	TML 9.6

Average

12.2

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Loki  
Cal. Date: 01/28/19  
Data File: 0128L38.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	1,1-Dichloropropene	0.2579	0.2638	2.3	TM
42	TM	2,2,4-Trimethylpentane	0.5179	0.4952	4.4	TM
43	S	1,2-DCA-D4(S)	0.5719	0.5617	1.8	S
44	TM	Carbon Tetrachloride	0.2757	0.3098	12	TM
45	TM	Tert Amyl Methyl Ether	0.6308	0.6018	4.6	TM
46	TML	Methylcyclopentane	0.0000	0.0028	0.00	TML
47	TM	1,2-DCA	0.3049	0.3107	1.9	TM
48	TM	Benzene	0.8179	0.8386	2.5	TM
49	TM	TCE	0.1193	0.1364	14	TM
50	TM	2-Pentanone	0.1970	0.1750	11	TM
51	TM*	1,2-Dichloropropane	0.2255	0.2176	3.5	TM*
52	TM	Bromodichloromethane	0.1644	0.1721	4.6	TM
53	TM	Methyl Cyclohexane	0.2786	0.2899	4.1	TM
54	TM	Dibromomethane	0.1548	0.1656	7.0	TM
55	TM	2-Chloroethyl vinyl ether	0.0057	0.0038	34	TM
56	TML	MIBK (methyl isobutyl ketone)	0.2693	0.2129	21	TML 9.2
57	TM	1-Bromo-2-chloroethane	0.1771	0.1865	5.3	TM
58	TM	Cis-1,3-Dichloropropene	0.3571	0.3602	0.85	TM
59	TM*	Toluene	0.4653	0.5084	9.3	TM*
60	TM	Trans-1,3-Dichloropropene	0.3370	0.3378	0.25	TM
61	TM	1,1,2-TCA	0.1777	0.1845	3.8	TM
62	TML	2-Hexanone	0.1791	0.1377	23	TML 12
63	I	Chlorobenzene-D5 (IS)	ISTD			I
64	S	Toluene-D8(S)	2.502	2.276	9.1	S
65	TM	1,2-EDB	0.1713	0.1577	8.0	TM
66	TML	Tetrachloroethene	0.1922	0.1768	8.0	TML 4.0
67	TML	1-Chlorohexane	0.3424	0.3096	9.6	TML 1.3
68	TM	1,1,1,2-Tetrachloroethane	0.3028	0.3237	6.9	TM
69	TM	m&p-Xylene	0.8445	0.8892	5.3	TM
70	TM	o-Xylene	0.2199	0.2474	12	TM
71	TM	Styrene	0.6925	0.7623	10	TM
72	S	4-Bromofluorobenzene(S)	0.7496	0.7975	6.4	S
73	TM	1,3-Dichloropropane	0.4851	0.4842	0.18	TM
74	TM	Dibromochloromethane	0.3530	0.3534	0.12	TM
75	TM**	Chlorobenzene	0.7671	0.8079	5.3	TM**
76	TM*	Ethylbenzene	0.6554	0.6791	3.6	TM*
77	TM**	Bromoform	0.2528	0.2595	2.6	TM**
78	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
79	TM	Isopropylbenzene	2.174	2.385	9.7	TM
80	TM**	1,1,2,2-Tetrachloroethane	0.7518	0.7206	4.1	TM**

Average

7.2

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Loki  
Cal. Date: 01/28/19  
Data File: 0128L38.D

		Compound	MEAN	CCRF	%D		%Drift
81	TML	1,2,3-Trichloropropane	0.1402	0.1259	10	TML	4.0
82	TML	t-1,4-Dichloro-2-Butene	0.1593	0.1531	3.9	TML	14
83	TM	Bromobenzene	0.3598	0.3653	1.5	TM	
84	TM	n-Propylbenzene	1.337	1.467	9.8	TM	
85	TM	4-Ethyltoluene	1.977	2.131	7.8	TM	
86	TM	2-Chlorotoluene	0.8183	0.8930	9.1	TM	
87	TM	1,3,5-Trimethylbenzene	1.686	1.794	6.4	TM	
88	TM	4-Chlorotoluene	0.9298	1.040	12	TM	
89	TM	Tert-Butylbenzene	1.721	1.876	9.0	TM	
90	TM	1,2,4-Trimethylbenzene	1.597	1.635	2.4	TM	
91	TM	Sec-Butylbenzene	2.104	2.319	10	TM	
92	TM	p-Isopropyltoluene	0.9818	0.9216	6.1	TM	
93	TM	Benzyl Chloride	0.9035	0.5852	35	TM	
94	TM	1,3-DCB	0.6285	0.6427	2.3	TM	
95	TM	1,4-DCB	1.219	1.271	4.3	TM	
96	TM	n-Butylbenzene	0.9035	0.5852	35	TM	
97	TM	1,2-DCB	1.167	1.196	2.4	TM	
98	TM	Hexachloroethane	0.4221	0.4696	11	TM	
99	TML	1,2-Dibromo-3-chloropropane	0.1520	0.1233	19	TML	8.9
100	TM	1,2,4-Trichlorobenzene	0.7361	0.5427	26	TM	
101	TM	Hexachlorobutadiene	0.3627	0.3006	17	TM	
102	TM	Naphthalene	1.563	1.068	32	TM	
103	TM	1,2,3-Trichlorobenzene	0.3362	0.2600	23	TM	
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							

Average

12.8



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L38.D  
 Acq On : 29 Jan 19 7:43  
 Sample : Ending CCV 10ug/L 01/28/19  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	381632	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307200	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	145920	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S) Spiked Amount 25.000	5.65	111	187777	25.0254	ppb	0.00
				Recovery = 100.100%		
43) 1,2-DCA-D4(S) Spiked Amount 25.000	6.07	65	214363	24.5544	ppb	0.00
				Recovery = 98.216%		
64) Toluene-D8(S) Spiked Amount 25.000	8.37	98	699065	22.7373	ppb	0.00
				Recovery = 90.948%		
72) 4-Bromofluorobenzene(S) Spiked Amount 25.000	11.26	95	244991	26.5966	ppb	0.00
				Recovery = 106.388%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	158658	102.2285	ppb	99
3) Dichlorodifluoromethane	1.14	85	28115	11.0381	ppb	92
4) Freon 114	1.25	85	22992	11.6045	ppb	97
5) Chloromethane	1.29	50	41637	10.1561	ppb	96
6) Vinyl chloride	1.38	62	30471	10.1436	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	286976	113.0967	ppb	99
8) Bromomethane	1.65	94	22128	12.1493	ppb	99
9) Chloroethane	1.76	64	15439	10.7166	ppb	99
10) Dichlorofluoromethane	1.95	67	48894	9.5441	ppb	93
11) Trichlorofluoromethane	2.00	101	46342	11.0923	ppb	99
12) Acrolein	2.42	56	60788	88.4552	ppb	# 99
13) Acetone	2.61	43	5906	8.1829	ppb	97
14) Freon-113	2.54	101	24031	10.7529	ppb	92
15) 1,1-DCE	2.52	63	6796	10.3639	ppb	89
16) t-Butanol	3.37	59	41944	113.4366	ppb	95
17) 2-Propanol	2.84	45	19319	82.6114	ppb	# 99
18) Acetonitrile	2.92	41	52814	104.7561	ppb	92
19) Methyl Acetate	3.01	43	24116	8.9040	ppb	91
20) Iodomethane	2.67	142	4420	5.8334	ppb	96
21) Acrylonitrile	3.44	52	10831	8.0251	ppb	90
22) Methylene chloride	3.10	84	29762	9.3380	ppb	99
23) Carbon disulfide	2.73	76	76280	9.5861	ppb	98
24) Methyl t-butyl ether (MtBE)	3.53	73	88183	9.7226	ppb	95
25) Trans-1,2-DCE	2.52	96	14642	10.9440	ppb	98
26) Diisopropyl Ether	4.33	45	93341	9.6716	ppb	95
28) 1,1-DCA	4.10	63	54886	10.1719	ppb	98
29) Vinyl Acetate	4.33	43	17152	6.6931	ppb	# 70
30) Ethyl tert Butyl Ether	4.87	59	91360	9.9695	ppb	98
31) MEK (2-Butanone)	5.07	43	16651	8.5520	ppb	91
32) Cis-1,2-DCE	4.98	96	37155	10.4313	ppb	89
33) 2,2-Dichloropropane	4.96	77	37716	7.8886	ppb	99
36) Chloroform	5.45	83	58850	10.2523	ppb	97
37) Bromochloromethane	5.30	128	9177	10.3471	ppb	84
39) 1,1,1-TCA	5.65	97	22800	10.4889	ppb	94
40) Cyclohexane	5.71	41	27119	10.9595	ppb	94
41) 1,1-Dichloropropene	5.88	75	40268	10.2278	ppb	96
42) 2,2,4-Trimethylpentane	6.29	57	75595	9.5615	ppb	# 92
44) Carbon Tetrachloride	5.87	117	47285	11.2365	ppb	91
45) Tert Amyl Methyl Ether	6.36	73	91865	9.5408	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L38.D  
 Acq On : 29 Jan 19 7:43  
 Sample : Ending CCV 10ug/L 01/28/19  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	47428	10.1909	ppb	93
48) Benzene	6.13	78	128018	10.2530	ppb	98
49) TCE	6.95	130	20816	11.4307	ppb	98
50) 2-Pentanone	7.22	43	333941	111.0268	ppb	99
51) 1,2-Dichloropropane	7.21	63	33212	9.6480	ppb	98
52) Bromodichloromethane	7.55	83	26264	10.4642	ppb	100
53) Methyl Cyclohexane	7.17	83	44247	10.4056	ppb	99
54) Dibromomethane	7.33	93	25279	10.6956	ppb	93
55) 2-Chloroethyl vinyl ether	7.93	43	575	6.6481	ppb #	85
56) MIBK (methyl isobutyl ket	8.28	43	32497	9.0766	ppb	96
57) 1-Bromo-2-chloroethane	7.88	63	28472	10.5297	ppb	93
58) Cis-1,3-Dichloropropene	8.07	75	54980	10.0852	ppb	95
59) Toluene	8.44	91	77616	10.9267	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	51566	10.0250	ppb	92
61) 1,1,2-TCA	8.90	83	28168	10.3836	ppb	96
62) 2-Hexanone	9.22	43	21020	8.8056	ppb	91
65) 1,2-EDB	9.44	107	19376	9.2029	ppb	98
66) Tetrachloroethene	9.05	166	21720	9.6013	ppb	94
67) 1-Chlorohexane	10.00	91	38048	10.1266	ppb	92
68) 1,1,1,2-Tetrachloroethane	10.09	131	39772	10.6883	ppb	88
69) m&p-Xylene	10.26	91	218520	21.0586	ppb	96
70) o-Xylene	10.70	106	30400	11.2489	ppb	91
71) Styrene	10.71	104	93672	11.0079	ppb	97
73) 1,3-Dichloropropane	9.08	76	59500	9.9820	ppb	91
74) Dibromochloromethane	9.33	129	43428	10.0120	ppb	99
75) Chlorobenzene	10.00	112	99279	10.5325	ppb	98
76) Ethylbenzene	10.13	91	83448	10.3618	ppb	98
77) Bromoform	10.90	173	31886	10.2629	ppb	97
79) Isopropylbenzene	11.11	105	139181	10.9678	ppb	96
80) 1,1,2,2-Tetrachloroethane	11.43	83	42062	9.5861	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	7348	9.6000	ppb	100
82) t-1,4-Dichloro-2-Butene	11.50	53	8934	8.6332	ppb	88
83) Bromobenzene	11.43	156	21320	10.1506	ppb	94
84) n-Propylbenzene	11.56	91	85645	10.9778	ppb	99
85) 4-Ethyltoluene	11.69	105	124362	10.7768	ppb	95
86) 2-Chlorotoluene	11.65	91	52120	10.9123	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	104699	10.6406	ppb	98
88) 4-Chlorotoluene	11.77	91	60720	11.1881	ppb	98
89) Tert-Butylbenzene	12.12	119	109494	10.9001	ppb	98
90) 1,2,4-Trimethylbenzene	12.17	105	95427	10.2362	ppb	98
91) Sec-Butylbenzene	12.36	105	135354	11.0238	ppb	96
92) p-Isopropyltoluene	12.52	119	53792	9.3869	ppb	96
93) Benzyl Chloride	12.71	91	34159	6.4777	ppb	98
94) 1,3-DCB	12.46	146	37512	10.2257	ppb	94
95) 1,4-DCB	12.56	146	74205	10.4300	ppb	97
96) n-Butylbenzene	12.71	91	34159	6.4777	ppb	99
97) 1,2-DCB	12.97	146	69781	10.2417	ppb	95
98) Hexachloroethane	13.26	117	27411	11.1259	ppb	79
99) 1,2-Dibromo-3-chloropropan	13.82	75	7199	9.1137	ppb	90
100) 1,2,4-Trichlorobenzene	14.74	180	31675	7.3724	ppb	93
101) Hexachlorobutadiene	14.94	225	17546	8.2889	ppb	96
102) Naphthalene	15.01	128	62360	6.8352	ppb	98
103) 1,2,3-Trichlorobenzene	15.28	180	15175	7.7328	ppb	98

Quantitation Report

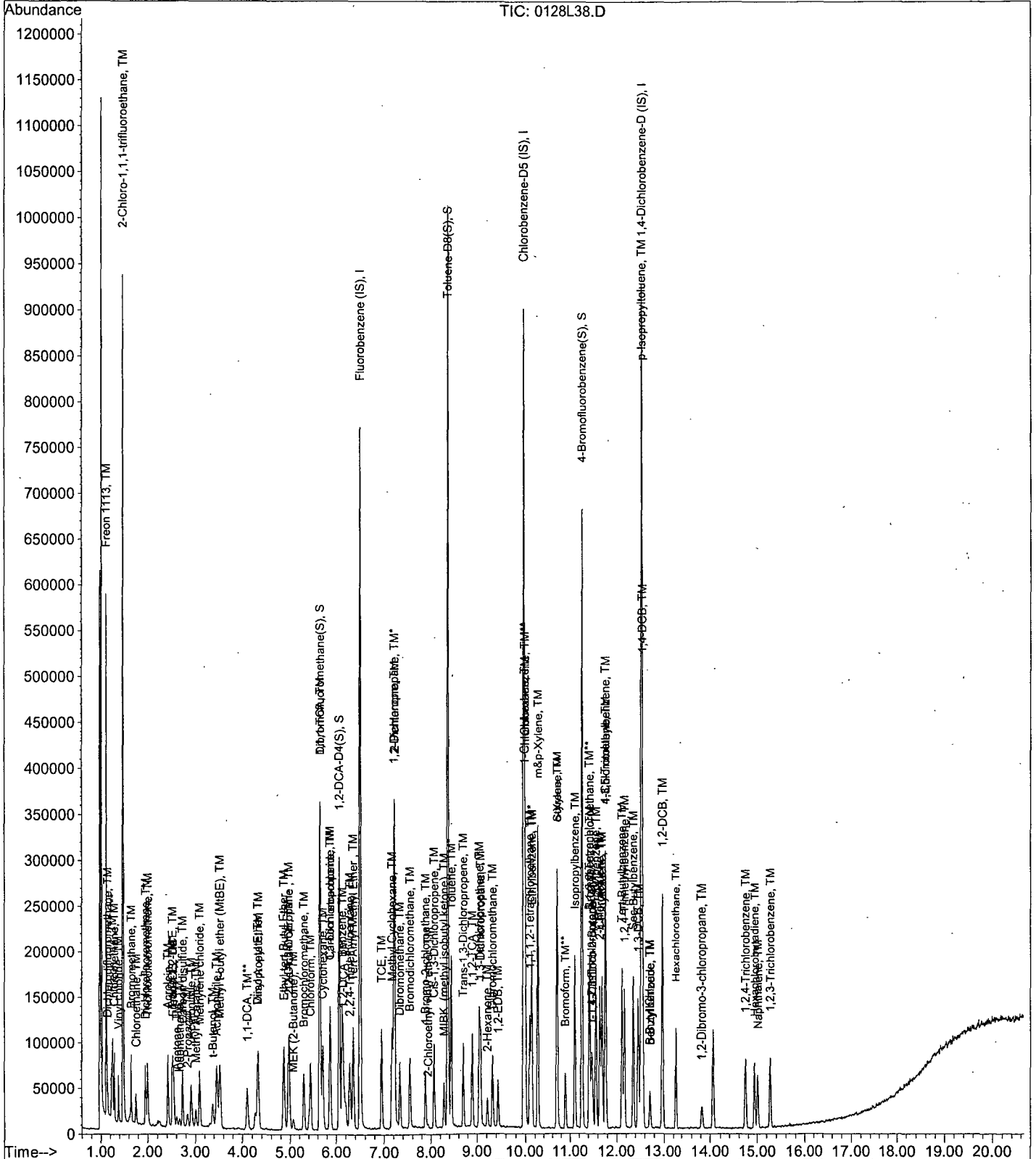
Data File : M:\LOKI\DATA\190128\0128L38.D  
 Acq On : 29 Jan 19 7:43  
 Sample : Ending CCV 10ug/L 01/28/19  
 Misc : IS&S 11/8/18

Vial: 37  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\LOKI\DATA\190128\0128L25.D Vial: 24  
 Acq On : 29 Jan 19 1:32 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85519W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:27 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	391104	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	306432	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	120232	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	192930	25.0895	ppb	0.00
Spiked Amount	25.000					
					Recovery = 100.356%	
43) 1,2-DCA-D4(S)	6.07	65	216786	24.2306	ppb	0.00
Spiked Amount	25.000					
					Recovery = 96.924%	
64) Toluene-D8(S)	8.37	98	698968	22.7912	ppb	0.00
Spiked Amount	25.000					
					Recovery = 91.164%	
72) 4-Bromofluorobenzene(S)	11.26	95	223805	24.3575	ppb	0.00
Spiked Amount	25.000					
					Recovery = 97.432%	

Target Compounds Qvalue

Quantitation Report

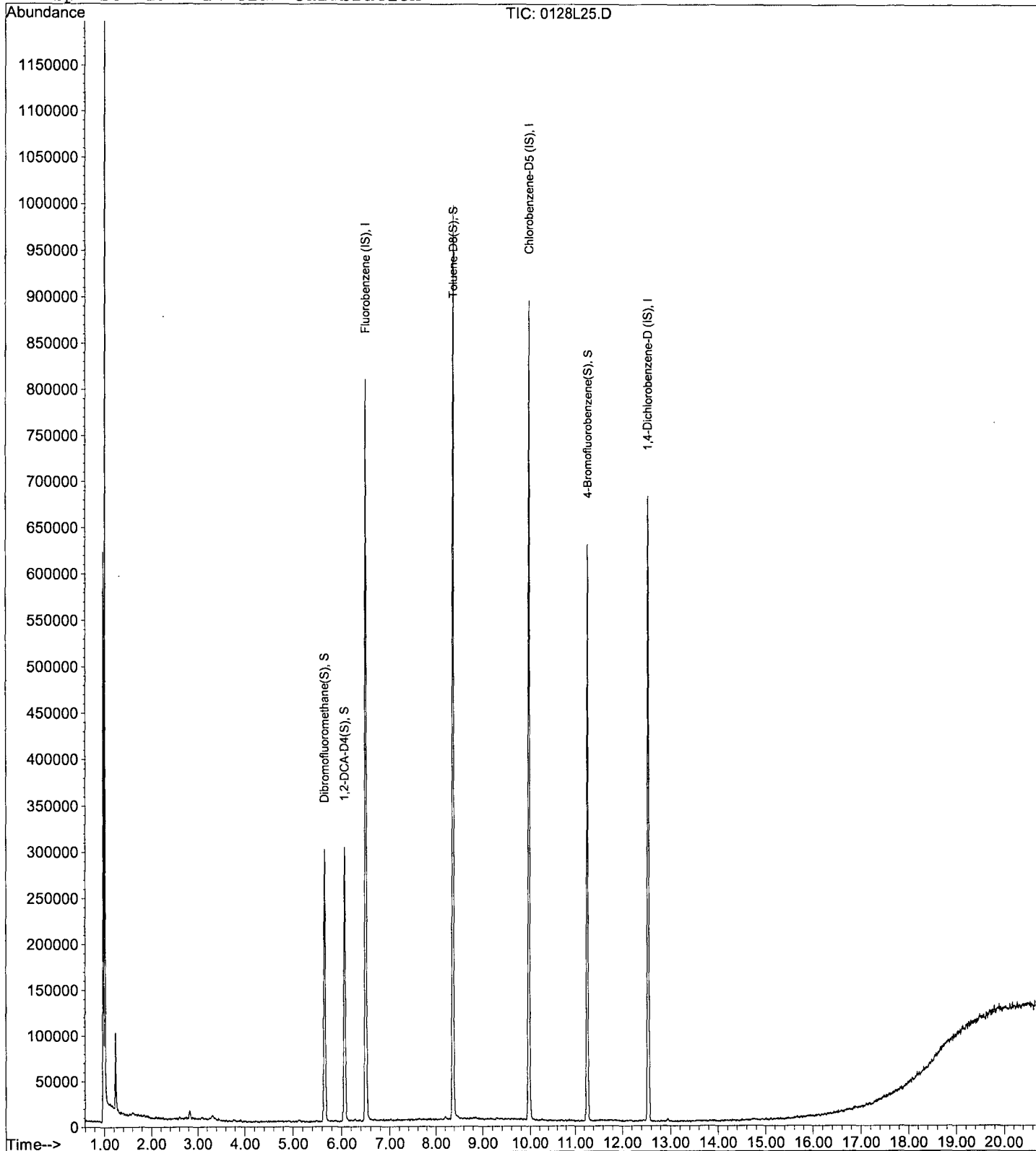
Data File : M:\LOKI\DATA\190128\0128L25.D  
Acq On : 29 Jan 19 1:32  
Sample : AZ85519W01  
Misc : IS&S 11/8/18

Vial: 24  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:27 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L28.D Vial: 27  
 Acq On : 29 Jan 19 2:58 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85520W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:31 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	395200	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	314944	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	128624	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	191881	24.6944	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	98.776%
43) 1,2-DCA-D4(S)	6.07	65	215954	23.8874	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.548%
64) Toluene-D8(S)	8.37	98	691752	21.9462	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	87.784%
72) 4-Bromofluorobenzene(S)	11.26	95	226035	23.9353	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.740%

Target Compounds Qvalue

Quantitation Report

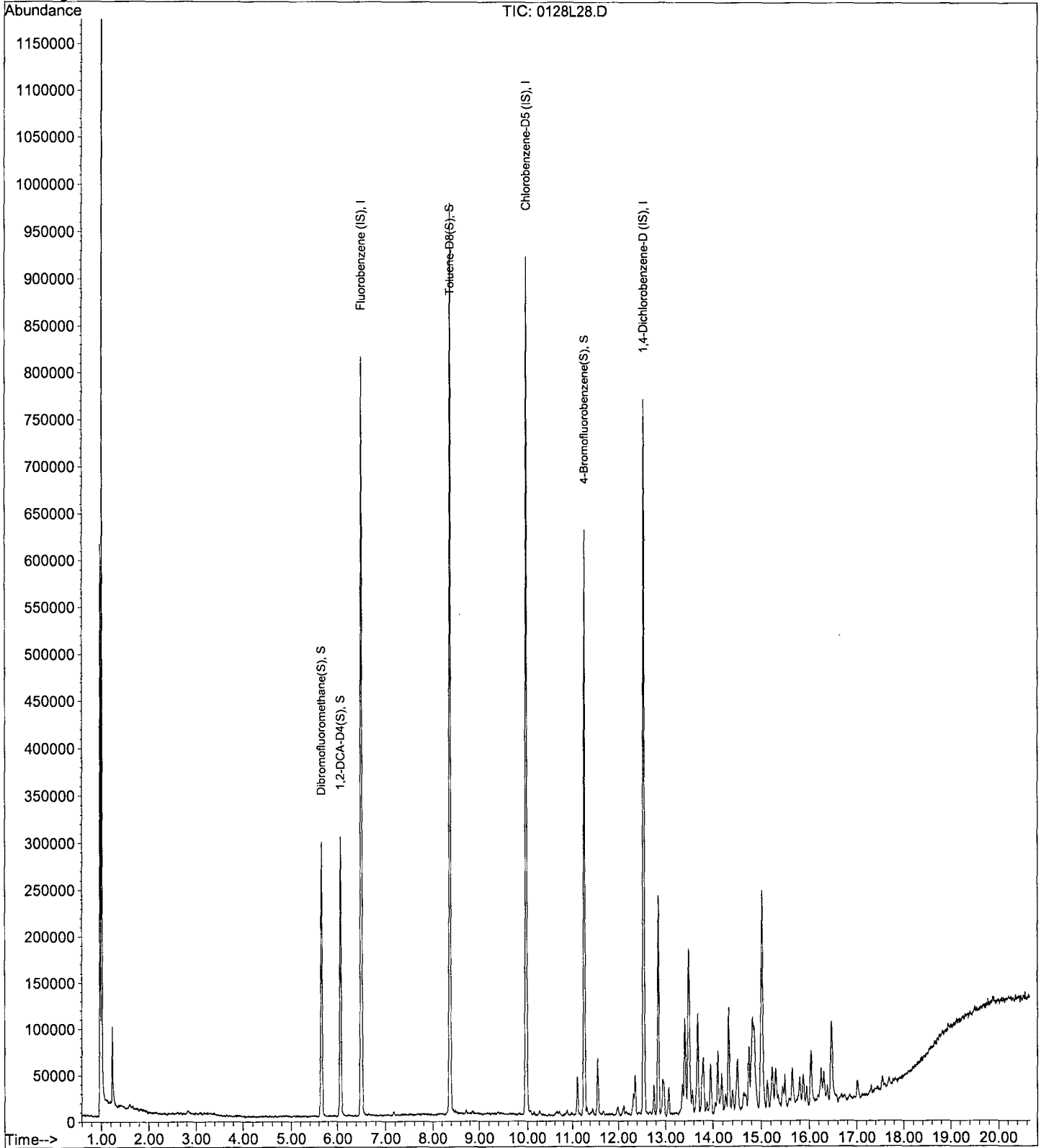
Data File : M:\LOKI\DATA\190128\0128L28.D  
Acq On : 29 Jan 19 2:58  
Sample : AZ85520W01  
Misc : IS&S 11/8/18

Vial: 27  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:31 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190128\0130L38.D Vial: 37  
 Acq On : 31 Jan 19 1:53 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85520W02 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

*ReInject*

Quant Time: Jan 31 14:29 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	305408	25.00	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	274688	25.00	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	139968	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	155772	25.94	ppb	0.00
Spiked Amount 25.000			Recovery =	103.764%		
43) 1,2-DCA-D4(S)	6.07	65	174600	24.99	ppb	0.00
Spiked Amount 25.000			Recovery =	99.964%		
64) Toluene-D8(S)	8.37	98	594615	21.63	ppb	0.00
Spiked Amount 25.000			Recovery =	86.516%		
72) 4-Bromofluorobenzene(S)	11.26	95	223817	27.17	ppb	0.00
Spiked Amount 25.000			Recovery =	108.696%		

Target Compounds Qvalue

Quantitation Report

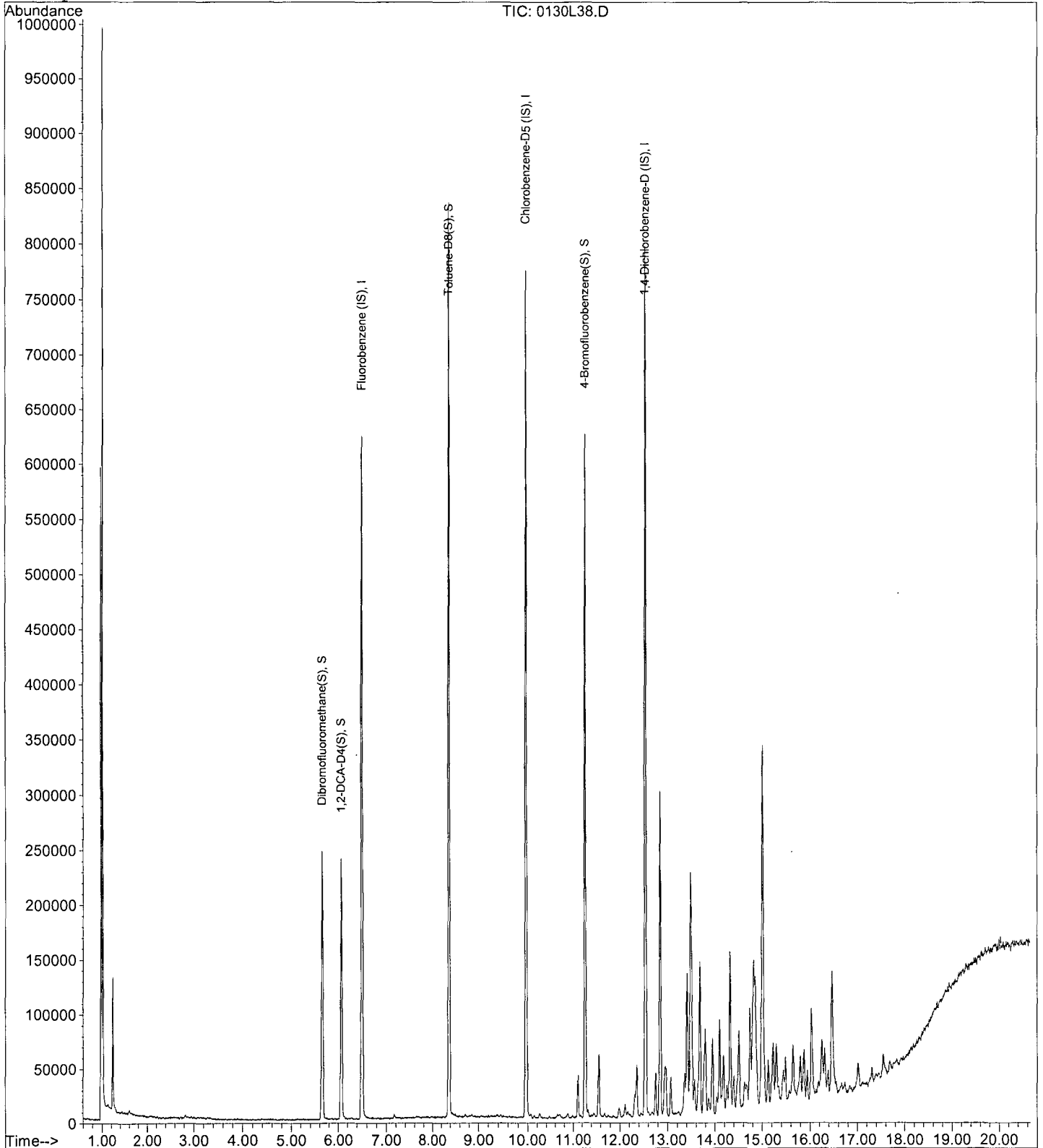
Data File : M:\LOKI\DATA\190128\0130L38.D  
Acq On : 31 Jan 19 1:53  
Sample : AZ85520W02  
Misc : IS&S 11/8/18

Vial: 37  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:29 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L29.D Vial: 28  
 Acq On : 29 Jan 19 3:27 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85521W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:33 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	413248	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	333952	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	140608	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	193617	23.8296	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.320%
43) 1,2-DCA-D4(S)	6.07	65	214190	22.6576	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	90.632%
64) Toluene-D8(S)	8.37	98	696670	20.8442	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	83.376%
72) 4-Bromofluorobenzene(S)	11.27	95	238922	23.8599	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.440%

Target Compounds Qvalue

Quantitation Report

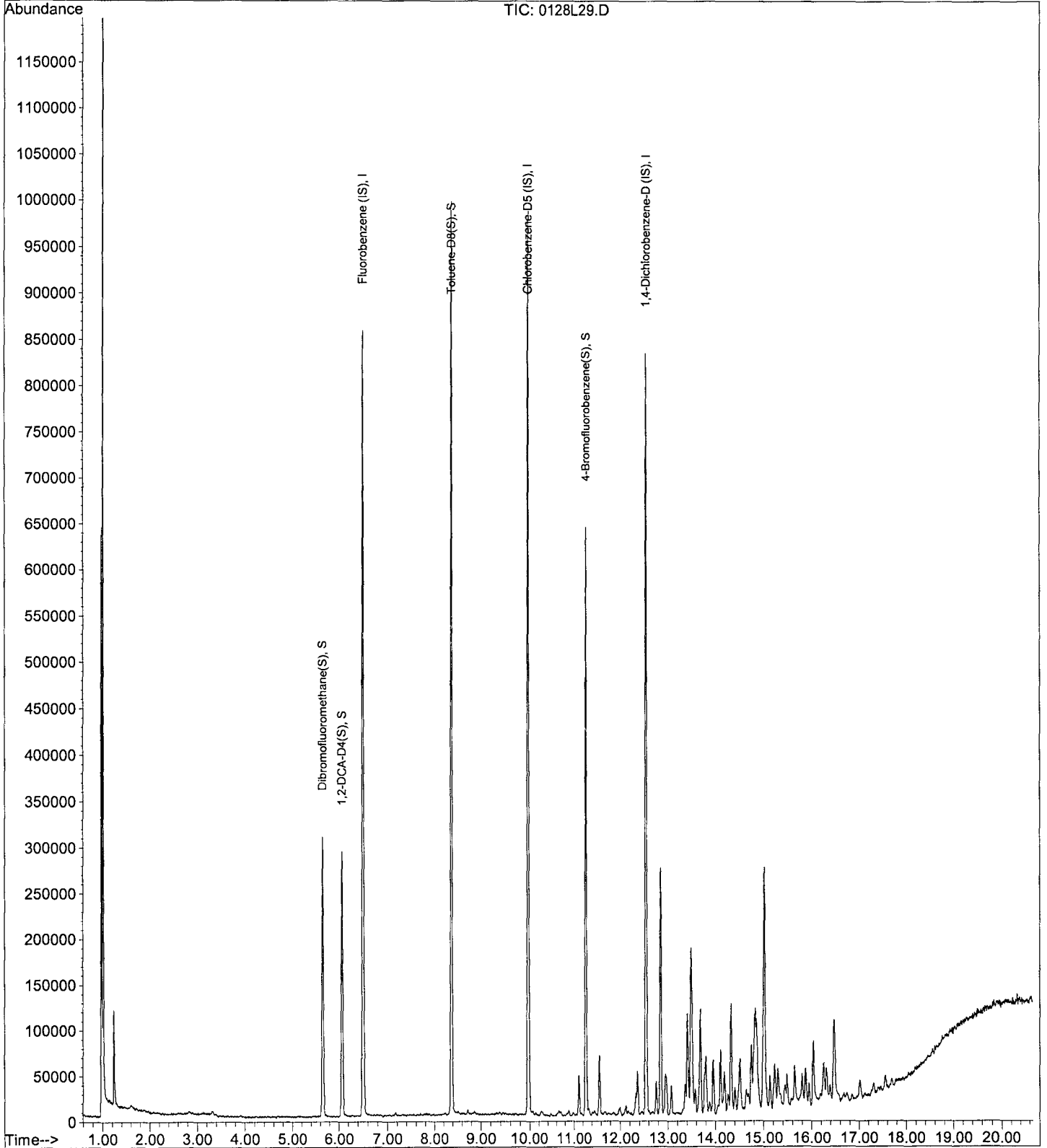
Data File : M:\LOKI\DATA\190128\0128L29.D  
Acq On : 29 Jan 19 3:27  
Sample : AZ85521W01  
Misc : IS&S 11/8/18

Vial: 28  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:33 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0130L39.D  
 Acq On : 31 Jan 19 2:22  
 Sample : AZ85521W02  
 Misc : IS&S 11/8/18

Vial: 38  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

*ReInject*

Quant Time: Jan 31 14:30 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	316544	25.00	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	272832	25.00	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	141824	25.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Dibromofluoromethane(S)	5.65	111	160612	25.81	ppb	0.00
Spiked Amount 25.000			Recovery =	103.224%		
43) 1,2-DCA-D4(S)	6.07	65	174415	24.09	ppb	0.00
Spiked Amount 25.000			Recovery =	96.348%		
64) Toluene-D8(S)	8.37	98	605502	22.17	ppb	0.00
Spiked Amount 25.000			Recovery =	88.700%		↓
72) 4-Bromofluorobenzene(S)	11.26	95	225095	27.51	ppb	0.00
Spiked Amount 25.000			Recovery =	110.060%		

Target Compounds Qvalue

Quantitation Report

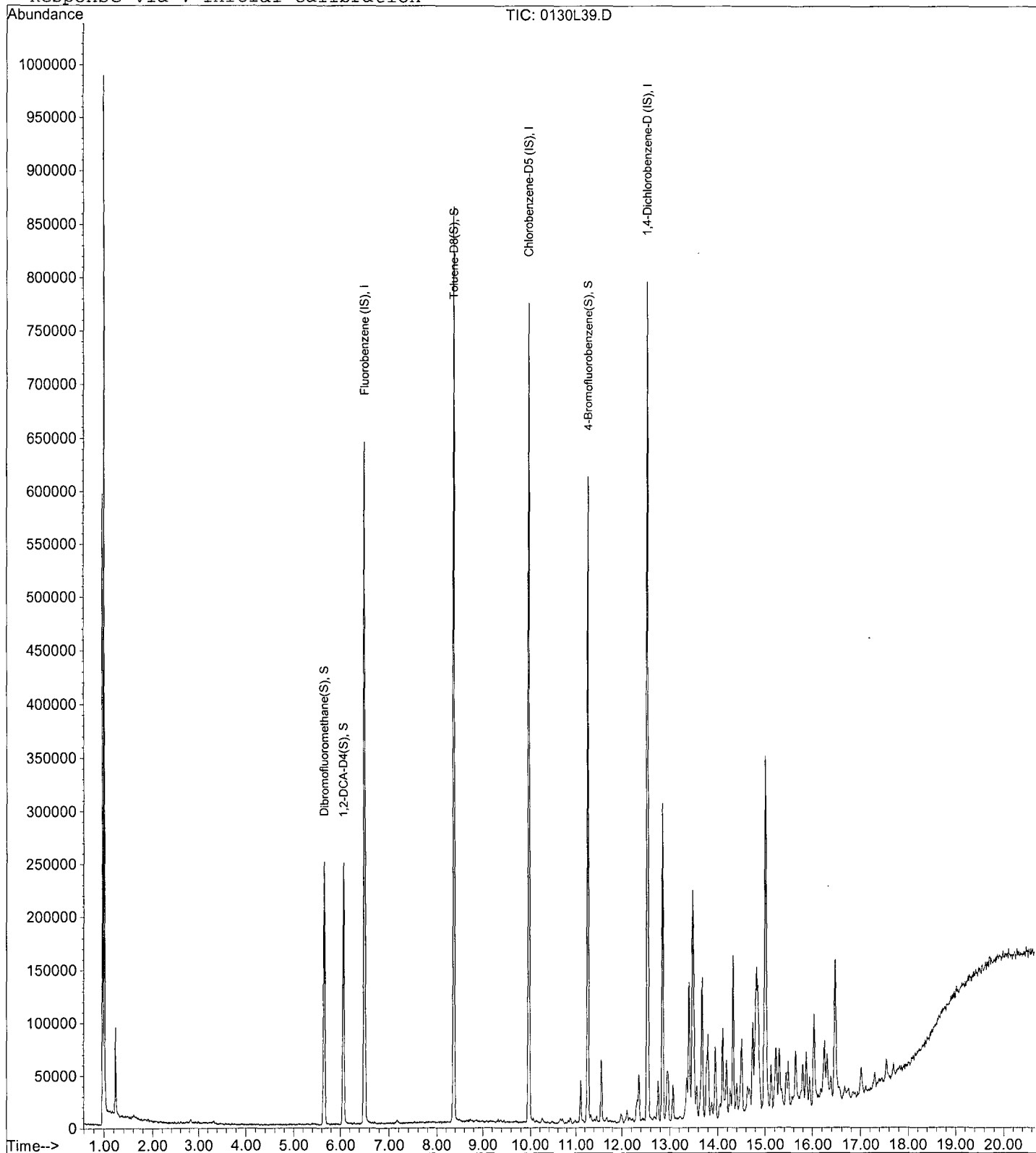
Data File : M:\LOKI\DATA\190128\0130L39.D  
Acq On : 31 Jan 19 2:22  
Sample : AZ85521W02  
Misc : IS&S 11/8/18

Vial: 38  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:30 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L26.D Vial: 25  
 Acq On : 29 Jan 19 2:01 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85522W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:28 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	392320	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	301056	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	116720	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	195559	25.3525	ppb	0.00
Spiked Amount				25.000		
				Recovery =	101.412%	
43) 1,2-DCA-D4(S)	6.07	65	221668	24.6995	ppb	0.00
Spiked Amount				25.000		
				Recovery =	98.796%	
64) Toluene-D8(S)	8.37	98	711662	23.6194	ppb	0.00
Spiked Amount				25.000		
				Recovery =	94.476%	
72) 4-Bromofluorobenzene(S)	11.26	95	226916	25.1371	ppb	0.00
Spiked Amount				25.000		
				Recovery =	100.548%	

Target Compounds Qvalue

Quantitation Report

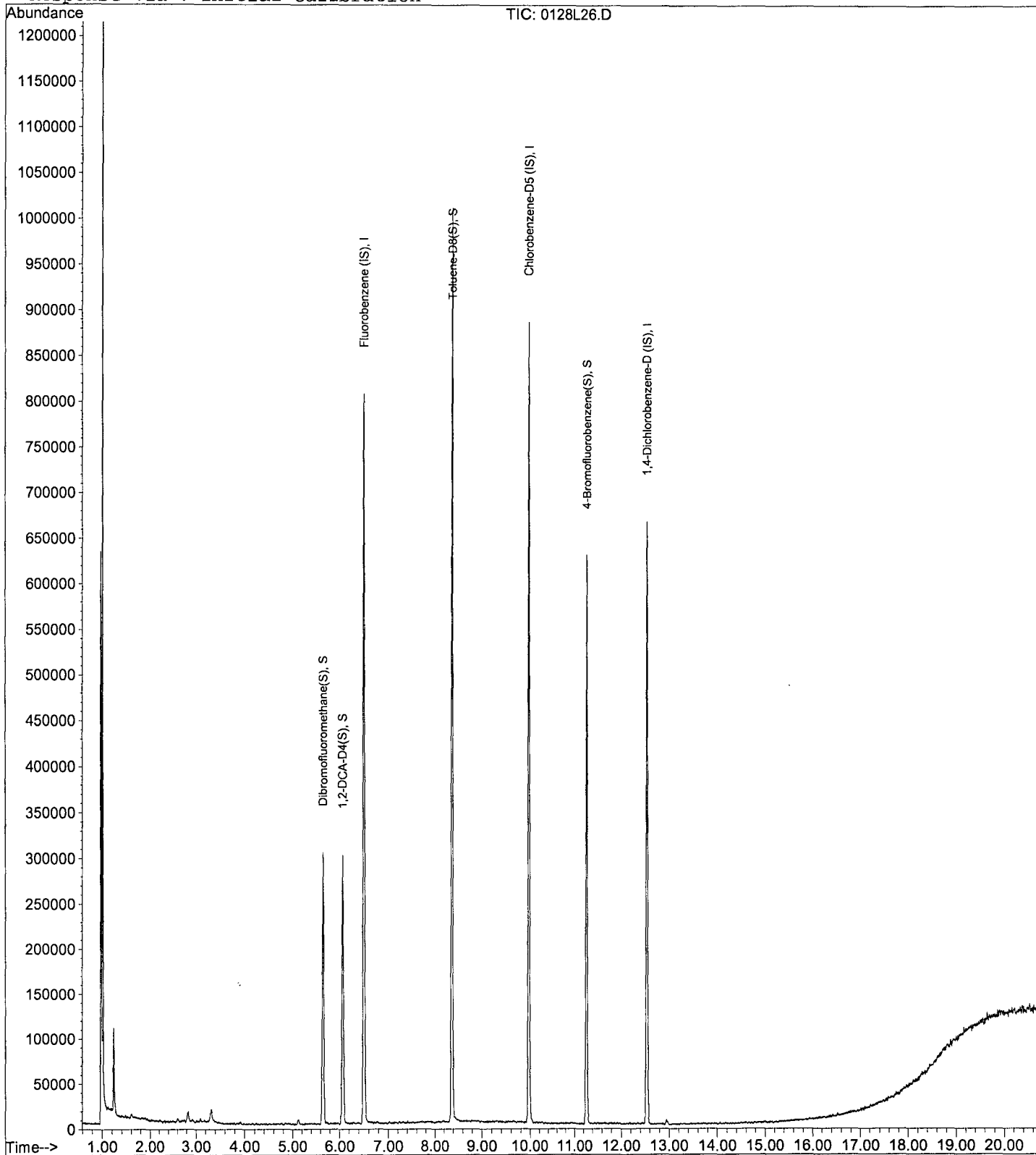
Data File : M:\LOKI\DATA\190128\0128L26.D  
Acq On : 29 Jan 19 2:01  
Sample : AZ85522W01  
Misc : IS&S 11/8/18

Vial: 25  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:28 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190128\0128L30.D Vial: 29  
 Acq On : 29 Jan 19 3:55 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85523W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:35 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	372608	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	302592	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	133504	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
38) Dibromofluoromethane(S)	5.65	111	186122	25.4056	ppb	0.00
Spiked Amount				25.000		
					Recovery = 101.624%	
43) 1,2-DCA-D4(S)	6.07	65	212834	24.9697	ppb	0.00
Spiked Amount				25.000		
					Recovery = 99.880%	
64) Toluene-D8(S)	8.37	98	690576	22.8033	ppb	0.00
Spiked Amount				25.000		
					Recovery = 91.212%	
72) 4-Bromofluorobenzene(S)	11.26	95	231555	25.5208	ppb	0.00
Spiked Amount				25.000		
					Recovery = 102.084%	
<b>Target Compounds</b>						Qvalue
69) m&p-Xylene	10.26	91	1799	0.1760	ppb	93

Quantitation Report

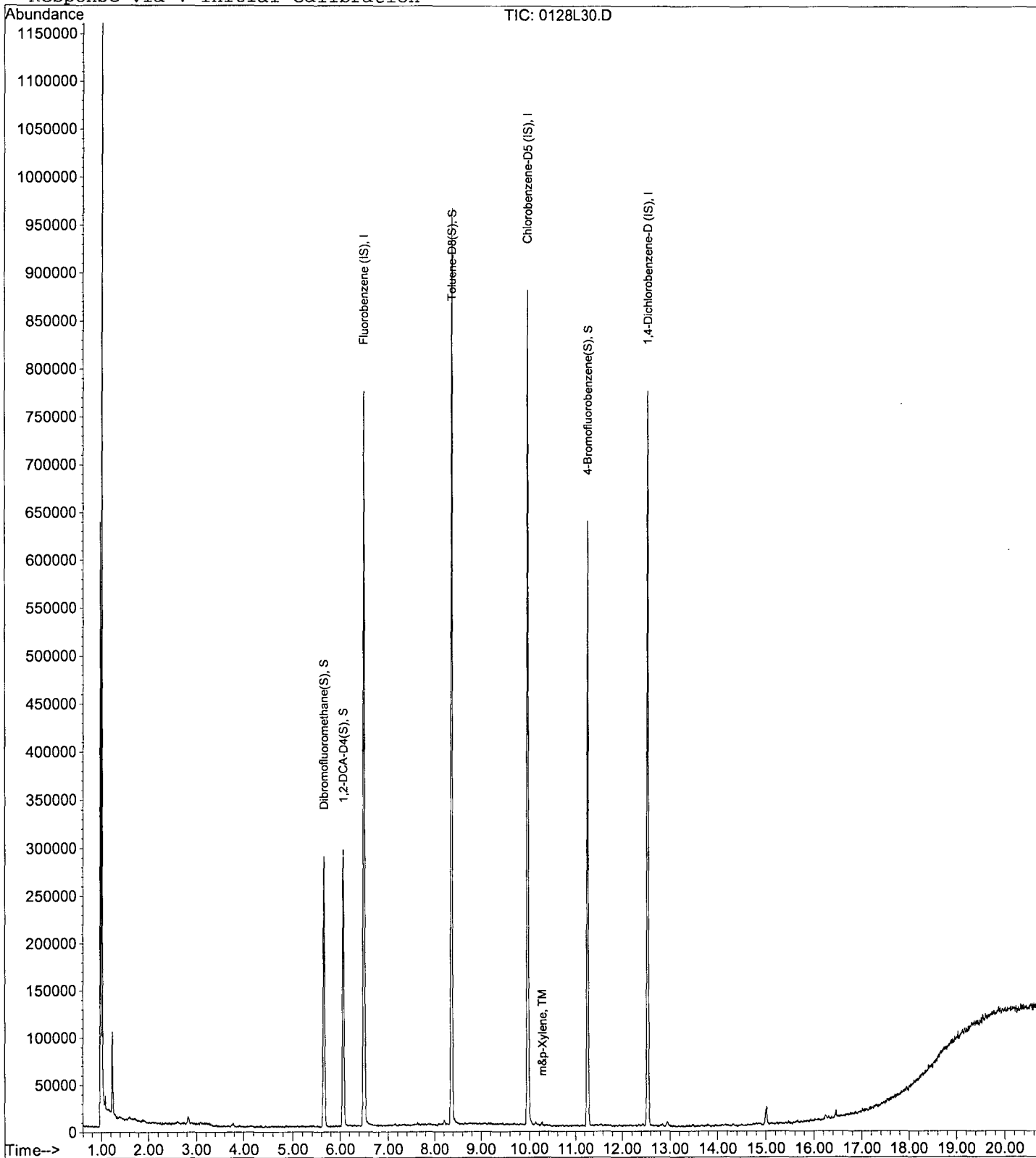
Data File : M:\LOKI\DATA\190128\0128L30.D  
Acq On : 29 Jan 19 3:55  
Sample : AZ85523W01  
Misc : IS&S 11/8/18

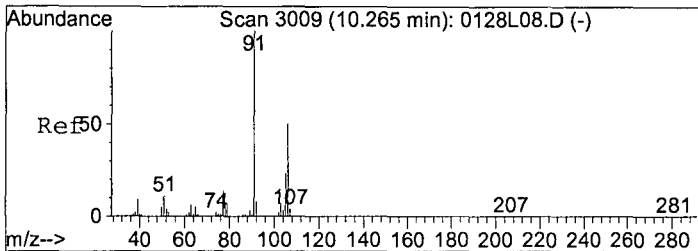
Vial: 29  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:35 2019

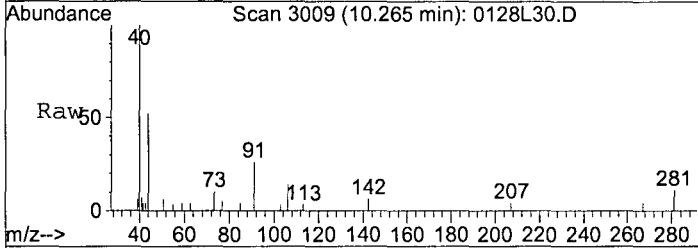
Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration

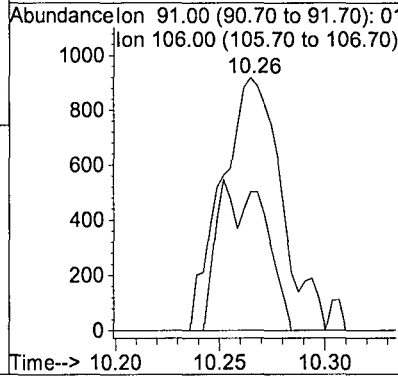
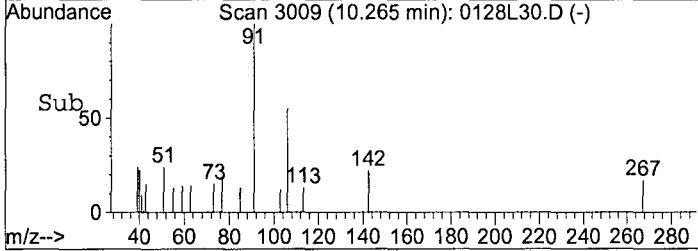




#69  
 m&p-Xylene  
 Concen: 0.1760 ppb  
 RT: 10.26 min Scan# 3009  
 Delta R.T. -0.00 min  
 Lab File: 0128L30.D  
 Acq: 29 Jan 19 3:55



Tgt Ion: 91 Resp: 1799  
 Ion Ratio Lower Upper  
 91 100  
 106 54.7 39.8 59.6



Data File : M:\LOKI\DATA\190128\0128L31.D Vial: 30  
 Acq On : 29 Jan 19 4:24 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85524W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:36 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	389824	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	306880	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	126088	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	194151	25.3312	ppb	0.00
Spiked Amount				25.000		
					Recovery = 101.324%	
43) 1,2-DCA-D4(S)	6.07	65	223970	25.1158	ppb	0.00
Spiked Amount				25.000		
					Recovery = 100.464%	
64) Toluene-D8(S)	8.37	98	722243	23.5157	ppb	0.00
Spiked Amount				25.000		
					Recovery = 94.064%	
72) 4-Bromofluorobenzene(S)	11.26	95	234983	25.5367	ppb	0.00
Spiked Amount				25.000		
					Recovery = 102.148%	

Target Compounds Qvalue

Quantitation Report

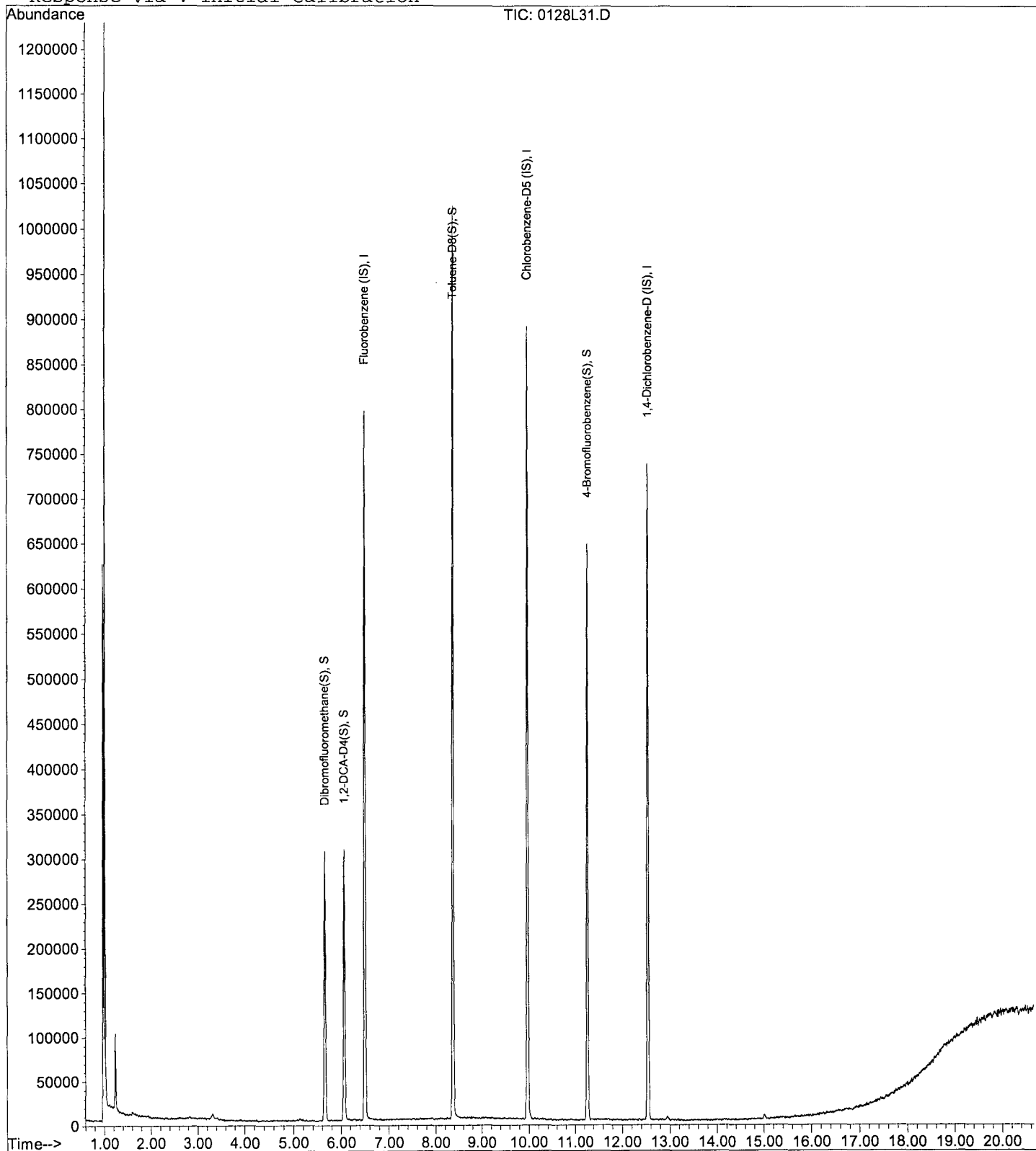
Data File : M:\LOKI\DATA\190128\0128L31.D  
Acq On : 29 Jan 19 4:24  
Sample : AZ85524W01  
Misc : IS&S 11/8/18

Vial: 30  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:36 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L32.D Vial: 31  
 Acq On : 29 Jan 19 4:52 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85525W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:37 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	364736	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	292928	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	130736	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	184874	25.7799	ppb	0.00
Spiked Amount				25.000		
					Recovery = 103.120%	
43) 1,2-DCA-D4(S)	6.07	65	207414	24.8591	ppb	0.00
Spiked Amount				25.000		
					Recovery = 99.436%	
64) Toluene-D8(S)	8.37	98	669135	22.8242	ppb	0.00
Spiked Amount				25.000		
					Recovery = 91.296%	
72) 4-Bromofluorobenzene(S)	11.26	95	228569	26.0228	ppb	0.00
Spiked Amount				25.000		
					Recovery = 104.092%	

Target Compounds Qvalue

Quantitation Report

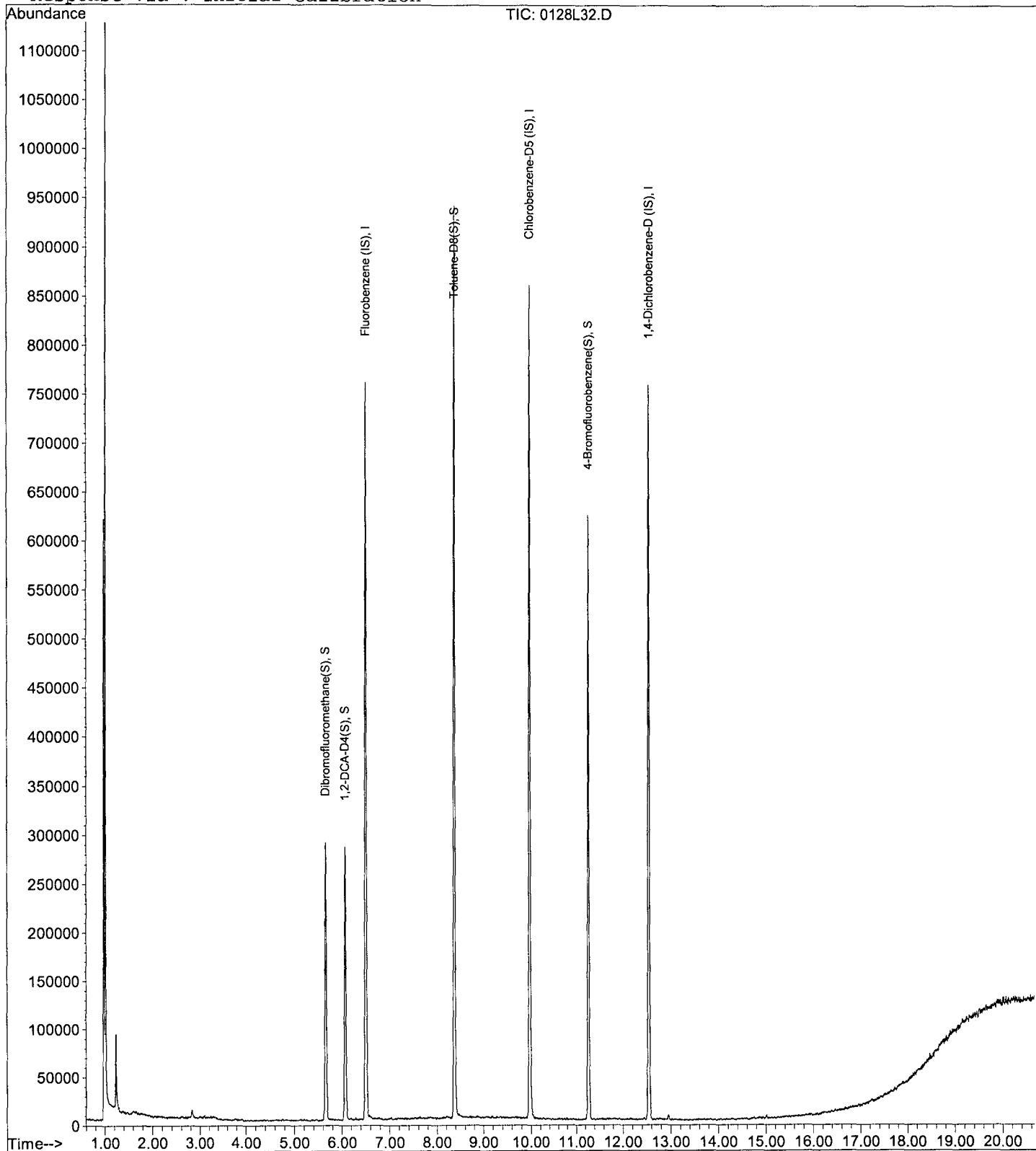
Data File : M:\LOKI\DATA\190128\0128L32.D  
Acq On : 29 Jan 19 4:52  
Sample : AZ85525W01  
Misc : IS&S 11/8/18

Vial: 31  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:37 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L27.D Vial: 26  
 Acq On : 29 Jan 19 2:29 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85526W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:29 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	385856	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307456	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	126240	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	191482	25.2398	ppb	0.00
Spiked Amount				25.000		
					Recovery =	100.960%
43) 1,2-DCA-D4(S)	6.07	65	218495	24.7538	ppb	0.00
Spiked Amount				25.000		
					Recovery =	99.016%
64) Toluene-D8(S)	8.37	98	706377	22.9560	ppb	0.00
Spiked Amount				25.000		
					Recovery =	91.824%
72) 4-Bromofluorobenzene(S)	11.26	95	230665	25.0205	ppb	0.00
Spiked Amount				25.000		
					Recovery =	100.080%

Target Compounds Qvalue



Quantitation Report

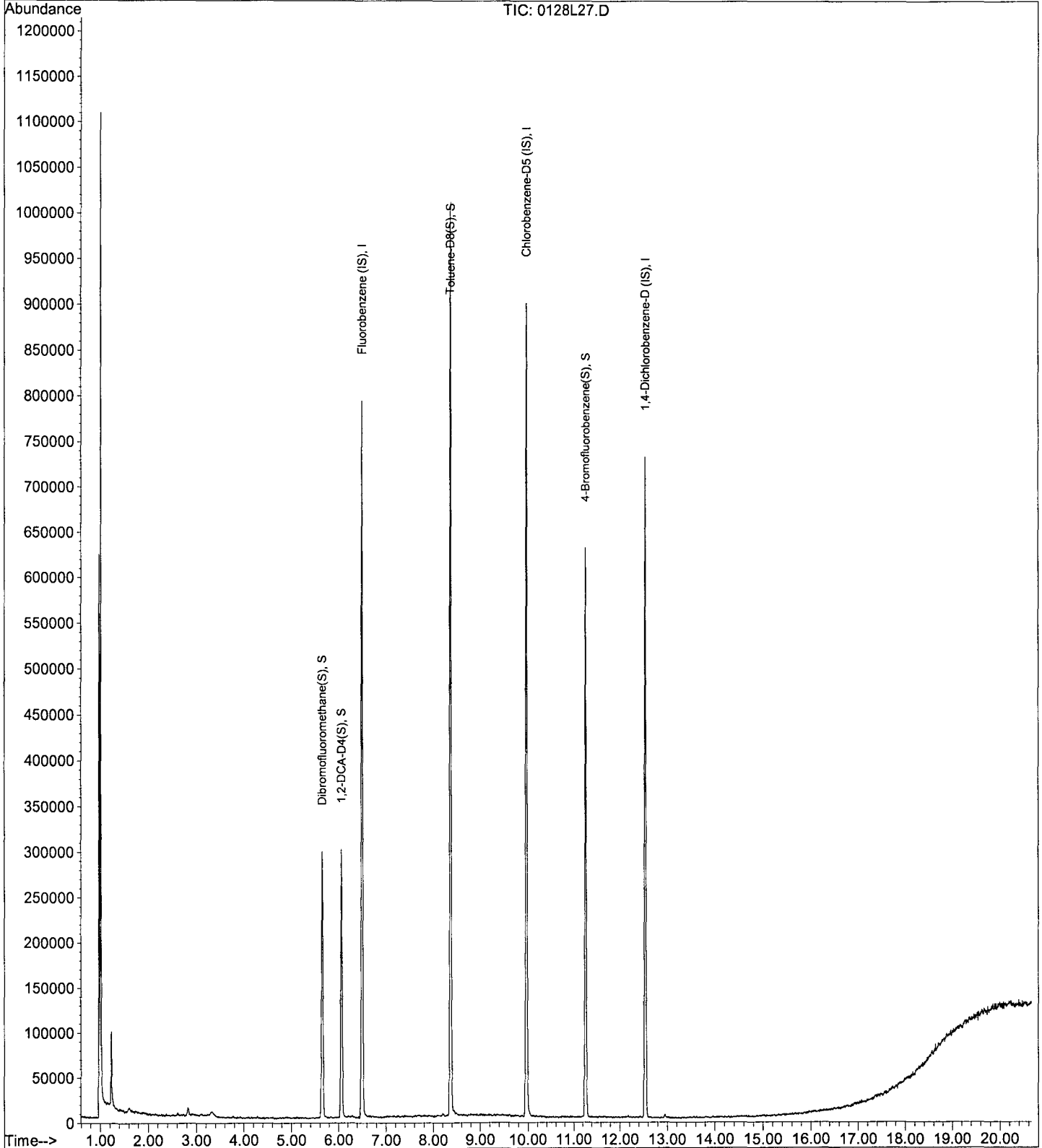
Data File : M:\LOKI\DATA\190128\0128L27.D  
Acq On : 29 Jan 19 2:29  
Sample : AZ85526W01  
Misc : IS&S 11/8/18

Vial: 26  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:29 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L33.D Vial: 32  
 Acq On : 29 Jan 19 5:21 Operator: PM, DG, SV, CMM, KV  
 Sample : AZ85527W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 11:38 2019 Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	408192	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	325632	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	136512	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	196105	24.4348	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	97.740%
43) 1,2-DCA-D4(S)	6.07	65	222715	23.8512	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.404%
64) Toluene-D8(S)	8.37	98	698426	21.4307	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	85.724%
72) 4-Bromofluorobenzene(S)	11.26	95	236151	24.1858	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	96.744%

Target Compounds Qvalue

Quantitation Report

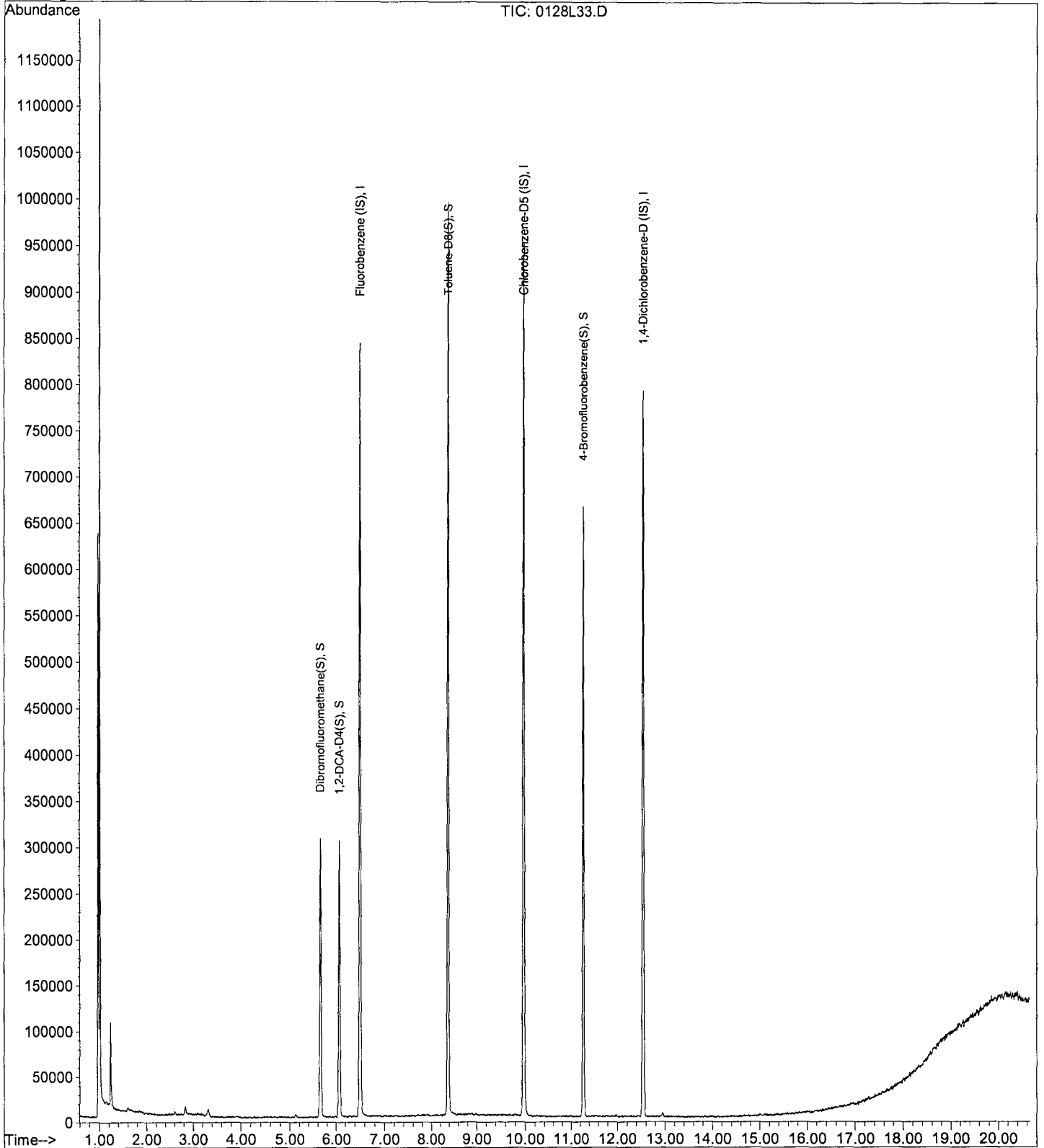
Data File : M:\LOKI\DATA\190128\0128L33.D  
Acq On : 29 Jan 19 5:21  
Sample : AZ85527W01  
Misc : IS&S 11/8/18

Vial: 32  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 11:38 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0130L40.D  
 Acq On : 31 Jan 19 2:50  
 Sample : AZ85527W02  
 Misc : IS&S 11/8/18

Vial: 39  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:30 2019

*Reinject*

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	306048	25.00	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	263808	25.00	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	138048	25.00	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	154945	25.75	ppb	0.00
Spiked Amount	25.000					
					Recovery =	103.000%
43) 1,2-DCA-D4(S)	6.07	65	169183	24.17	ppb	0.00
Spiked Amount	25.000					
					Recovery =	96.660%
64) Toluene-D8(S)	8.37	98	575767	21.81	ppb	0.00
Spiked Amount	25.000					
					Recovery =	87.228%
72) 4-Bromofluorobenzene(S)	11.26	95	210334	26.59	ppb	0.00
Spiked Amount	25.000					
					Recovery =	106.360%

Target Compounds

Qvalue

Quantitation Report

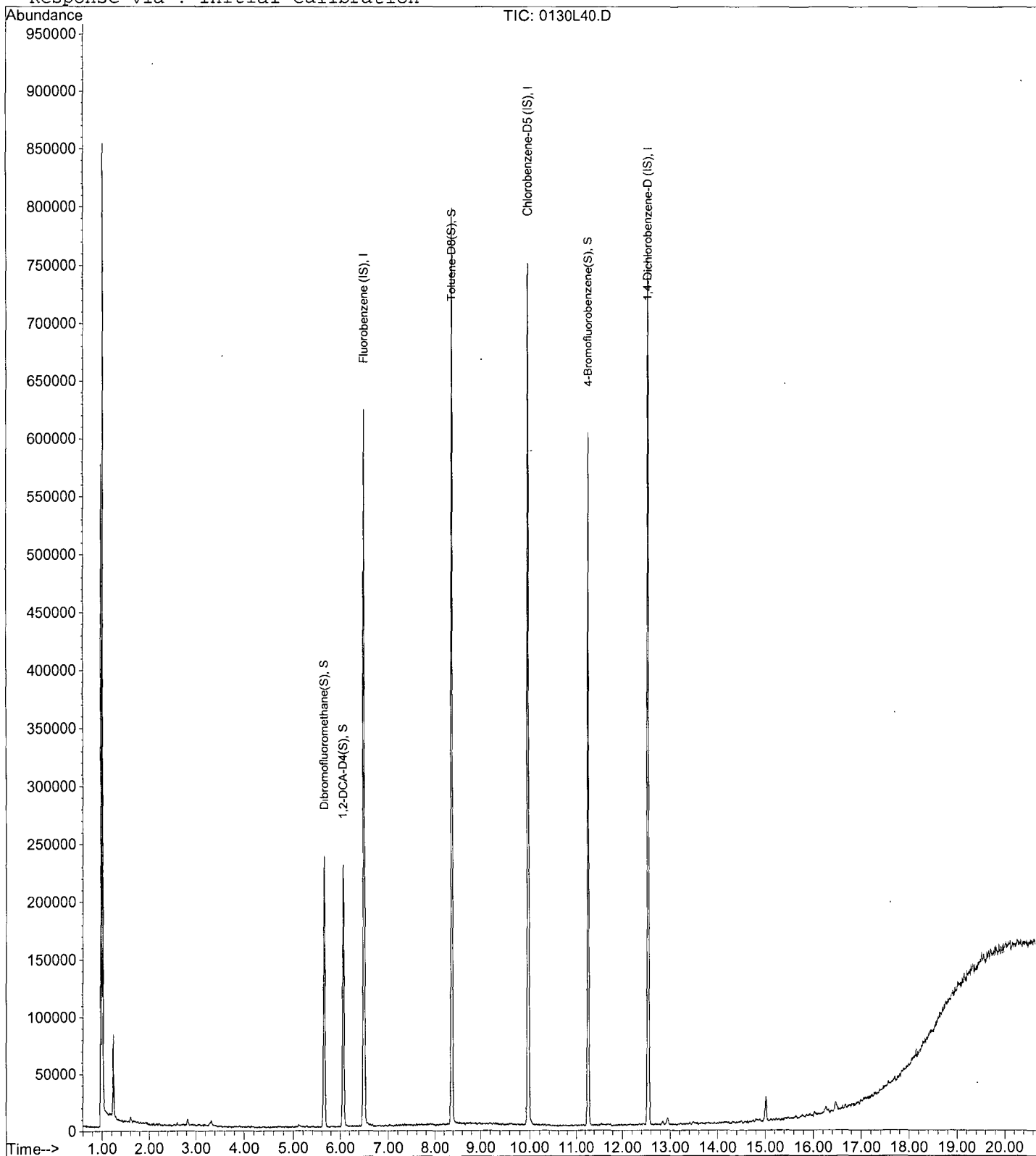
Data File : M:\LOKI\DATA\190128\0130L40.D  
Acq On : 31 Jan 19 2:50  
Sample : AZ85527W02  
Misc : IS&S 11/8/18

Vial: 39  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:30 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L22.D  
 Acq On : 29 Jan 19 00:06  
 Sample : 190128A blk  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:23 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	381568	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	292096	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	111128	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	188308	25.1004	ppb	0.00
Spiked Amount						Recovery = 100.400%
43) 1,2-DCA-D4(S)	6.07	65	215707	24.7125	ppb	0.00
Spiked Amount						Recovery = 98.852%
64) Toluene-D8(S)	8.37	98	687717	23.5249	ppb	0.00
Spiked Amount						Recovery = 94.100%
72) 4-Bromofluorobenzene(S)	11.27	95	216438	24.7118	ppb	0.00
Spiked Amount						Recovery = 98.848%

Target Compounds Qvalue

Quantitation Report

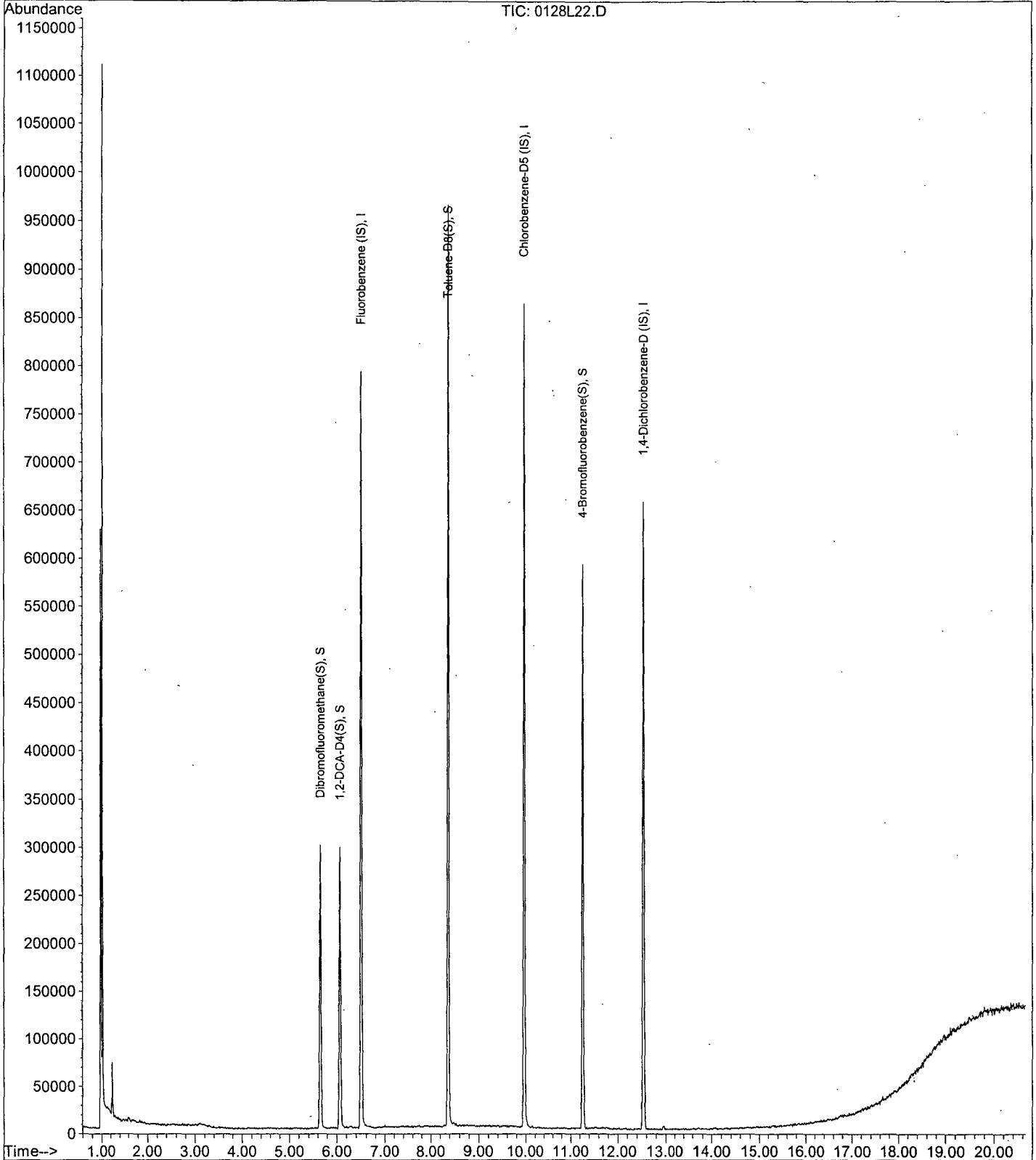
Data File : M:\LOKI\DATA\190128\0128L22.D  
Acq On : 29 Jan 19 00:06  
Sample : 190128A blk  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 9:23 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L16.D  
 Acq On : 28 Jan 19 21:15  
 Sample : 190128A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	418368	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	328000	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	133440	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
38) Dibromofluoromethane(S)	5.65	111	203586	24.7499	ppb	0.00
Spiked Amount 25.000			Recovery =	99.000%		
43) 1,2-DCA-D4(S)	6.07	65	236084	24.6680	ppb	0.00
Spiked Amount 25.000			Recovery =	98.672%		
64) Toluene-D8(S)	8.37	98	751236	22.8847	ppb	0.00
Spiked Amount 25.000			Recovery =	91.540%		
72) 4-Bromofluorobenzene(S)	11.26	95	240636	24.4672	ppb	0.00
Spiked Amount 25.000			Recovery =	97.868%		
<b>Target Compounds</b>						Qvalue
2) Freon 1113	1.12	116	184569	108.4814	ppb	100
3) Dichlorodifluoromethane	1.14	85	32185	11.5262	ppb	98
4) Freon 114	1.25	85	26032	12.0615	ppb	100
5) Chloromethane	1.29	50	45171	10.0459	ppb	95
6) Vinyl chloride	1.38	62	35233	10.6990	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	323264	116.2113	ppb	99
8) Bromomethane	1.65	94	23816	11.9162	ppb	98
9) Chloroethane	1.75	64	16600	10.5002	ppb	90
10) Dichlorofluoromethane	1.95	67	57525	10.2429	ppb	98
11) Trichlorofluoromethane	2.00	101	50768	11.0847	ppb	97
12) Acrolein	2.43	56	86672	115.0457	ppb	# 99
13) Acetone	2.61	43	6566	8.3303	ppb	# 88
14) Freon-113	2.54	101	27601	11.2659	ppb	93
15) 1,1-DCE	2.52	63	7621	10.5975	ppb	83
16) t-Butanol	3.38	59	40357	98.6427	ppb	99
17) 2-Propanol	2.84	45	23530	92.6462	ppb	# 93
18) Acetonitrile	2.92	41	63097	114.1630	ppb	90
19) Methyl Acetate	3.01	43	28577	9.6889	ppb	90
20) Iodomethane	2.67	142	9231	8.7405	ppb	96
21) Acrylonitrile	3.45	52	13139	8.8804	ppb	72
22) Methylene chloride	3.10	84	36238	10.4917	ppb	93
23) Carbon disulfide	2.73	76	89586	10.2697	ppb	98
24) Methyl t-butyl ether (MtBE)	3.53	73	104898	10.5500	ppb	98
25) Trans-1,2-DCE	2.52	96	14919	10.1719	ppb	88
26) Diisopropyl Ether	4.33	45	107656	10.1754	ppb	97
28) 1,1-DCA	4.10	63	61478	10.3931	ppb	97
29) Vinyl Acetate	4.27	43	28807	10.2540	ppb	96
30) Ethyl tert Butyl Ether	4.87	59	109589	10.9087	ppb	98
31) MEK (2-Butanone)	5.07	43	19325	9.1148	ppb	92
32) Cis-1,2-DCE	4.98	96	41704	10.6804	ppb	93
33) 2,2-Dichloropropane	4.96	77	52777	10.0695	ppb	95
36) Chloroform	5.45	83	66982	10.6444	ppb	95
37) Bromochloromethane	5.29	128	10568	10.8692	ppb	95
39) 1,1,1-TCA	5.65	97	26408	11.0820	ppb	97
40) Cyclohexane	5.71	41	29011	10.7006	ppb	97
41) 1,1-Dichloropropene	5.88	75	44974	10.4201	ppb	99
42) 2,2,4-Trimethylpentane	6.29	57	90231	10.4106	ppb	97
44) Carbon Tetrachloride	5.87	117	50135	10.8677	ppb	98
45) Tert Amyl Methyl Ether	6.36	73	108321	10.2620	ppb	98



## Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L16.D  
 Acq On : 28 Jan 19 21:15  
 Sample : 190128A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	54693	10.7200	ppb	98
48) Benzene	6.13	78	147811	10.7987	ppb	95
49) TCE	6.95	130	21632	10.8357	ppb	96
50) 2-Pentanone	7.22	43	397652	120.6000	ppb	100
51) 1,2-Dichloropropane	7.20	63	39244	10.3992	ppb	100
52) Bromodichloromethane	7.54	83	27736	10.0803	ppb	97
53) Methyl Cyclohexane	7.17	83	51891	11.1317	ppb	92
54) Dibromomethane	7.34	93	29122	11.2396	ppb	92
55) 2-Chloroethyl vinyl ether	7.93	43	878	9.2599	ppb	90
56) MIBK (methyl isobutyl ket	8.28	43	39626	10.1163	ppb	94
57) 1-Bromo-2-chloroethane	7.89	63	31280	10.5524	ppb	92
58) Cis-1,3-Dichloropropene	8.07	75	62691	10.4899	ppb	96
59) Toluene	8.44	91	88264	11.3346	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	59637	10.5760	ppb	98
61) 1,1,2-TCA	8.90	83	31604	10.6272	ppb	98
62) 2-Hexanone	9.22	43	27174	10.3247	ppb	94
65) 1,2-EDB	9.44	107	21824	9.7083	ppb	100
66) Tetrachloroethene	9.05	166	24072	10.0077	ppb	98
67) 1-Chlorohexane	10.00	91	42776	10.6432	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	42119	10.6012	ppb	89
69) m&p-Xylene	10.26	91	244863	22.1009	ppb	99
70) o-Xylene	10.70	106	31528	10.9265	ppb	99
71) Styrene	10.71	104	100007	11.0071	ppb	94
73) 1,3-Dichloropropane	9.08	76	63476	9.9737	ppb	99
74) Dibromochloromethane	9.33	129	47694	10.2982	ppb	92
75) Chlorobenzene	9.99	112	104700	10.4032	ppb	98
76) Ethylbenzene	10.13	91	91136	10.5988	ppb	99
77) Bromoform	10.90	173	33242	10.0209	ppb	91
79) Isopropylbenzene	11.11	105	144243	12.4298	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	45364	11.3056	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	8105	11.8514	ppb	97
82) t-1,4-Dichloro-2-Butene	11.49	53	10517	11.1981	ppb	94
83) Bromobenzene	11.42	156	21824	11.3624	ppb	98
84) n-Propylbenzene	11.56	91	88296	12.3761	ppb	100
85) 4-Ethyltoluene	11.69	105	132672	12.5722	ppb	97
86) 2-Chlorotoluene	11.64	91	54235	12.4171	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	107418	11.9380	ppb	97
88) 4-Chlorotoluene	11.77	91	61168	12.3248	ppb	96
89) Tert-Butylbenzene	12.11	119	107799	11.7350	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	100251	11.7594	ppb	94
91) Sec-Butylbenzene	12.36	105	124791	11.1140	ppb	97
92) p-Isopropyltoluene	12.52	119	55336	10.5594	ppb	96
93) Benzyl Chloride	12.71	91	41513	8.6085	ppb	97
94) 1,3-DCB	12.46	146	34664	10.3331	ppb	96
95) 1,4-DCB	12.56	146	69882	10.7411	ppb	98
96) n-Butylbenzene	12.71	91	41513	8.6085	ppb	98
97) 1,2-DCB	12.97	146	66767	10.7158	ppb	95
98) Hexachloroethane	13.26	117	23947	10.6290	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.82	75	7415	10.2629	ppb	94
100) 1,2,4-Trichlorobenzene	14.74	180	40549	10.3205	ppb	93
101) Hexachlorobutadiene	14.94	225	20542	10.6118	ppb	86
102) Naphthalene	15.01	128	83151	9.9664	ppb	97
103) 1,2,3-Trichlorobenzene	15.27	180	18760	10.4537	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0128L16.D L0128W.M Tue Jan 29 09:16:22 2019 Page 662 of 953

Quantitation Report

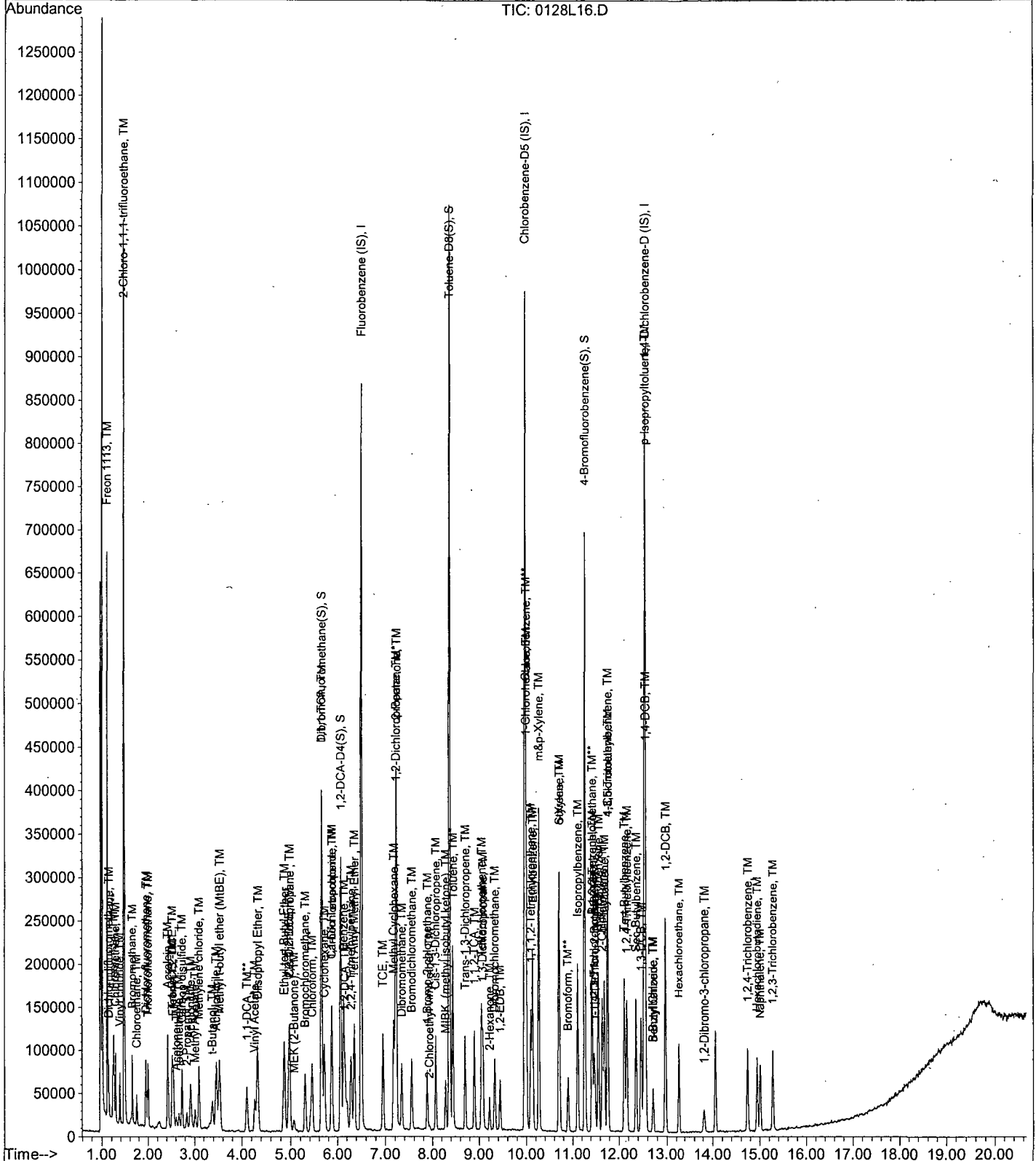
Data File : M:\LOKI\DATA\190128\0128L16.D  
 Acq On : 28 Jan 19 21:15  
 Sample : 190128A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L17.D  
 Acq On : 28 Jan 19 21:44  
 Sample : 190128A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 16  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	401792	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	308096	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	128800	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	202666	25.6545	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.620%	
43) 1,2-DCA-D4(S)	6.07	65	225348	24.5176	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.072%	
64) Toluene-D8(S)	8.37	98	726079	23.5473	ppb	0.00
Spiked Amount	25.000		Recovery	=	94.188%	
72) 4-Bromofluorobenzene(S)	11.26	95	234975	25.4351	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.740%	
Target Compounds						Qvalue
2) Freon 1113	1.12	116	163606	100.1274	ppb	100
3) Dichlorodifluoromethane	1.14	85	27426	10.2278	ppb	98
4) Freon 114	1.25	85	24312	11.6652	ppb	90
5) Chloromethane	1.29	50	45967	10.6716	ppb	100
6) Vinyl chloride	1.38	62	34055	10.7679	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	283968	106.2961	ppb	99
8) Bromomethane	1.65	94	22079	11.4806	ppb	97
9) Chloroethane	1.76	64	16737	11.0509	ppb	97
10) Dichlorofluoromethane	1.95	67	53566	9.9314	ppb	95
11) Trichlorofluoromethane	2.00	101	47435	10.7842	ppb	99
12) Acrolein	2.42	56	79940	110.4875	ppb	# 97
13) Acetone	2.61	43	6183	8.1242	ppb	# 84
14) Freon-113	2.54	101	25590	10.8760	ppb	98
15) 1,1-DCE	2.52	63	6730	9.7587	ppb	85
16) t-Butanol	3.37	59	46300	119.2982	ppb	96
17) 2-Propanol	2.83	45	22542	92.3986	ppb	# 86
18) Acetonitrile	2.92	41	61595	116.0431	ppb	92
19) Methyl Acetate	3.01	43	26107	9.1779	ppb	89
20) Iodomethane	2.67	142	9285	9.0302	ppb	94
21) Acrylonitrile	3.44	52	13113	9.2284	ppb	88
22) Methylene chloride	3.09	84	33676	10.1171	ppb	98
23) Carbon disulfide	2.73	76	83925	10.0176	ppb	97
24) Methyl t-butyl ether (MtBE)	3.53	73	94564	9.9030	ppb	95
25) Trans-1,2-DCE	2.52	96	14610	10.3721	ppb	99
26) Diisopropyl Ether	4.33	45	99357	9.7784	ppb	100
28) 1,1-DCA	4.10	63	58724	10.3371	ppb	98
29) Vinyl Acetate	4.26	43	25219	9.3472	ppb	99
30) Ethyl tert Butyl Ether	4.86	59	98984	10.2595	ppb	99
31) MEK (2-Butanone)	5.07	43	18443	9.0512	ppb	93
32) Cis-1,2-DCE	4.98	96	37185	9.9159	ppb	88
33) 2,2-Dichloropropane	4.96	77	48683	9.6716	ppb	98
36) Chloroform	5.44	83	62508	10.3432	ppb	93
37) Bromochloromethane	5.30	128	9856	10.5551	ppb	95
39) 1,1,1-TCA	5.65	97	23624	10.3227	ppb	98
40) Cyclohexane	5.72	41	27892	10.7120	ppb	97
41) 1,1-Dichloropropene	5.88	75	44141	10.6490	ppb	96
42) 2,2,4-Trimethylpentane	6.28	57	86221	10.3583	ppb	# 87
44) Carbon Tetrachloride	5.87	117	45505	10.2710	ppb	96
45) Tert Amyl Methyl Ether	6.36	73	99990	9.8636	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0128L17.D L0128W.M Tue Jan 29 09:27:51 Page 664 of 953

## Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L17.D  
 Acq On : 28 Jan 19 21:44  
 Sample : 190128A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 16  
 Operator: PM, DG, SV, GMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Quant Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	50937	10.3957	ppb	98
48) Benzene	6.13	78	134780	10.2529	ppb	97
49) TCE	6.95	130	20064	10.4649	ppb	97
50) 2-Pentanone	7.22	43	367521	116.0603	ppb	99
51) 1,2-Dichloropropane	7.21	63	35700	9.8504	ppb	100
52) Bromodichloromethane	7.54	83	26880	10.1723	ppb #	99
53) Methyl Cyclohexane	7.17	83	46875	10.4705	ppb	97
54) Dibromomethane	7.34	93	25305	10.1694	ppb	87
55) 2-Chloroethyl vinyl ether	7.95	43	943	10.3558	ppb	98
56) MIBK (methyl isobutyl ket	8.28	43	37775	10.0403	ppb	93
57) 1-Bromo-2-chloroethane	7.88	63	29536	10.3751	ppb	95
58) Cis-1,3-Dichloropropene	8.07	75	57449	10.0094	ppb	97
59) Toluene	8.44	91	80672	10.7871	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	55836	10.3105	ppb	96
61) 1,1,2-TCA	8.90	83	29137	10.2019	ppb	96
62) 2-Hexanone	9.22	43	25715	10.1783	ppb	98
65) 1,2-EDB	9.44	107	18720	8.8655	ppb	96
66) Tetrachloroethene	9.05	166	23656	10.5206	ppb	96
67) 1-Chlorohexane	10.00	91	39808	10.5481	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	38966	10.4413	ppb	82
69) m&p-Xylene	10.26	91	224887	21.6092	ppb	97
70) o-Xylene	10.70	106	29712	10.9623	ppb	97
71) Styrene	10.71	104	91665	10.7408	ppb	97
73) 1,3-Dichloropropane	9.08	76	59490	9.9513	ppb	91
74) Dibromochloromethane	9.33	129	41715	9.5891	ppb	89
75) Chlorobenzene	9.99	112	100684	10.6504	ppb	99
76) Ethylbenzene	10.13	91	86016	10.6496	ppb	100
77) Bromoform	10.89	173	31446	10.0919	ppb	97
79) Isopropylbenzene	11.11	105	139416	12.4466	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	42231	10.9039	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	7827	11.8578	ppb	95
82) t-1,4-Dichloro-2-Butene	11.49	53	9228	10.1527	ppb	92
83) Bromobenzene	11.42	156	21384	11.5344	ppb	99
84) n-Propylbenzene	11.56	91	82699	12.0091	ppb	99
85) 4-Ethyltoluene	11.69	105	123806	12.1547	ppb	98
86) 2-Chlorotoluene	11.64	91	50528	11.9851	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	103022	11.8619	ppb	95
88) 4-Chlorotoluene	11.76	91	54832	11.4461	ppb	95
89) Tert-Butylbenzene	12.11	119	102399	11.5487	ppb	98
90) 1,2,4-Trimethylbenzene	12.16	105	96013	11.6680	ppb	96
91) Sec-Butylbenzene	12.35	105	119869	11.0603	ppb	99
92) p-Isopropyltoluene	12.52	119	53704	10.6172	ppb	96
93) Benzyl Chloride	12.71	91	38795	8.3347	ppb	97
94) 1,3-DCB	12.46	146	33152	10.2384	ppb	95
95) 1,4-DCB	12.56	146	62808	10.0015	ppb	98
96) n-Butylbenzene	12.71	91	38795	8.3347	ppb	98
97) 1,2-DCB	12.97	146	63351	10.5338	ppb	96
98) Hexachloroethane	13.26	117	23726	10.9103	ppb	93
99) 1,2-Dibromo-3-chloropropan	13.81	75	7111	10.1969	ppb	88
100) 1,2,4-Trichlorobenzene	14.74	180	38141	10.0573	ppb	96
101) Hexachlorobutadiene	14.94	225	20359	10.8961	ppb	89
102) Naphthalene	15.01	128	80105	9.9472	ppb	95
103) 1,2,3-Trichlorobenzene	15.28	180	17616	10.1699	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0128L17.D L0128W.M Tue Jan 29 09:27 Page 665 of 953

Quantitation Report

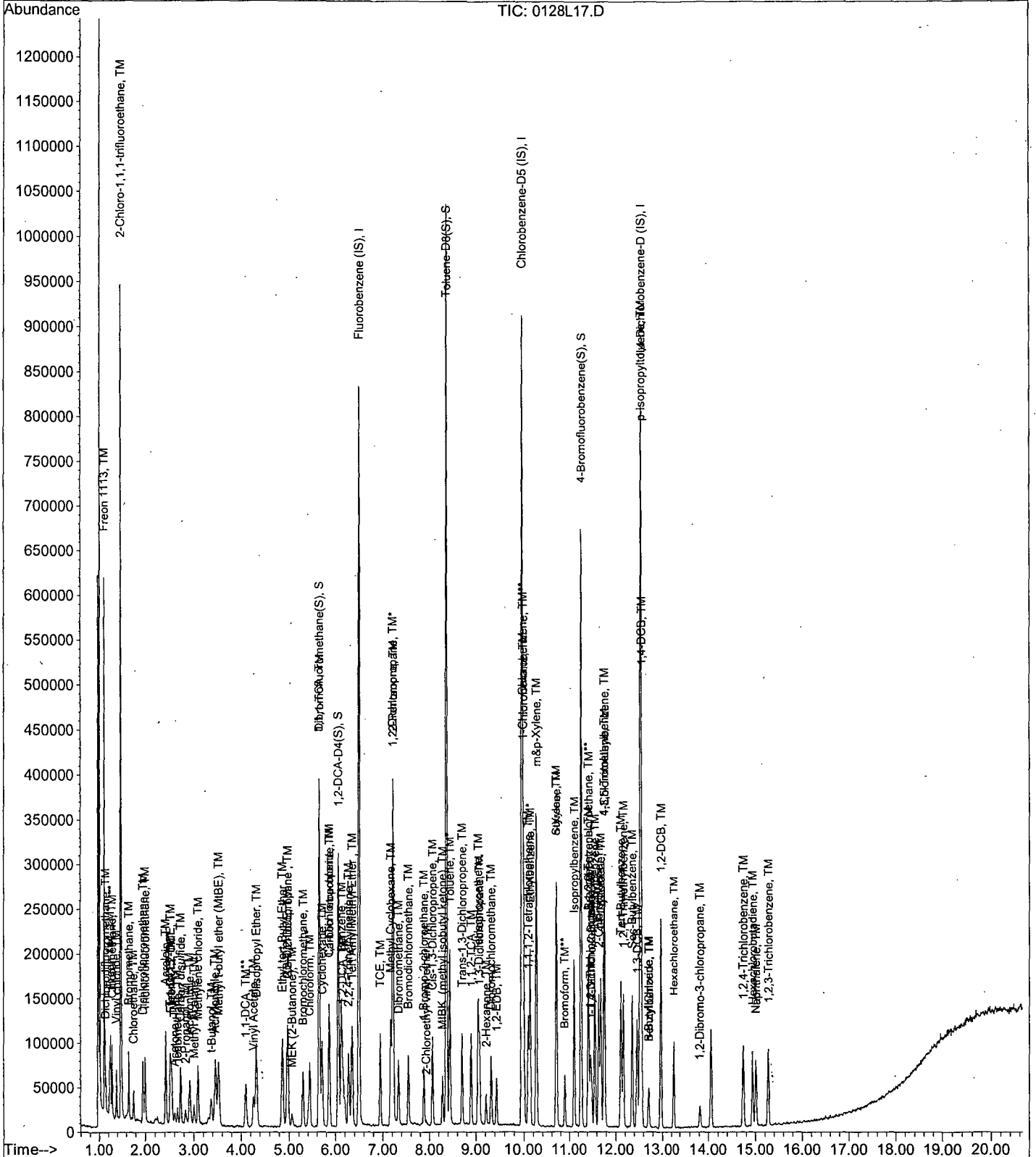
Data File : M:\LOKI\DATA\190128\0128L17.D  
Acq On : '28 Jan 19 21:44  
Sample : 190128A LCSD 10ug/L  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 29 9:16 2019

Quant Results File: L0128W.RES

Method : M:\LOKI\DATA\190128\L0128W.M. (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration

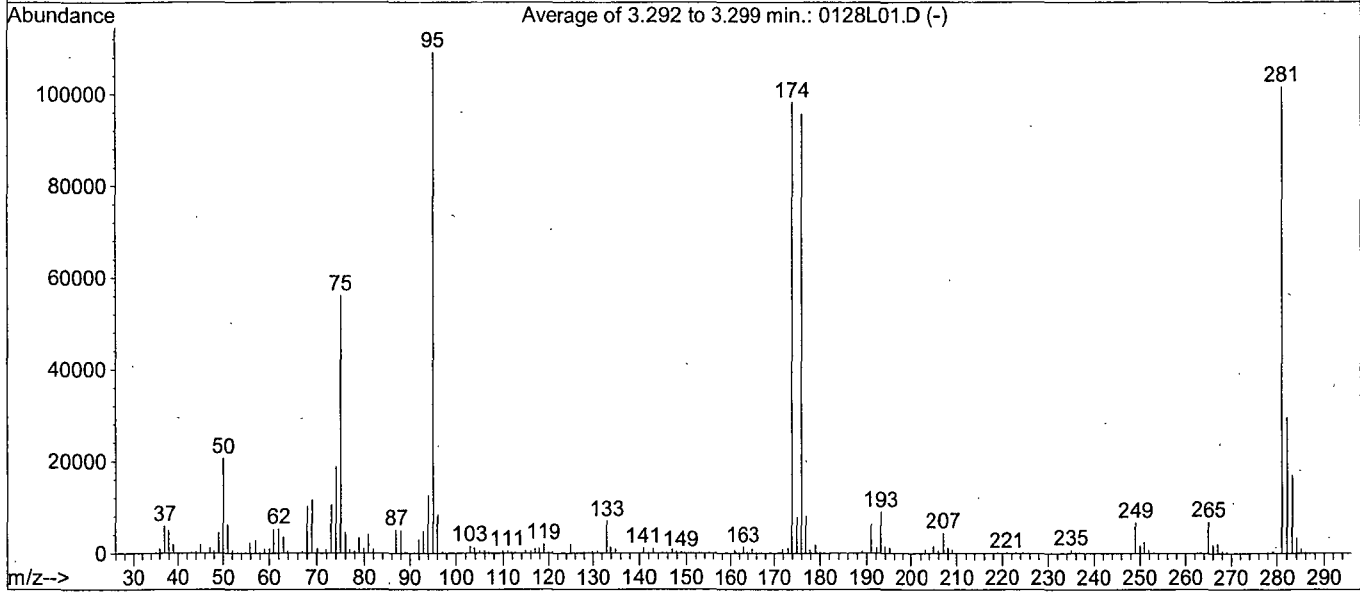
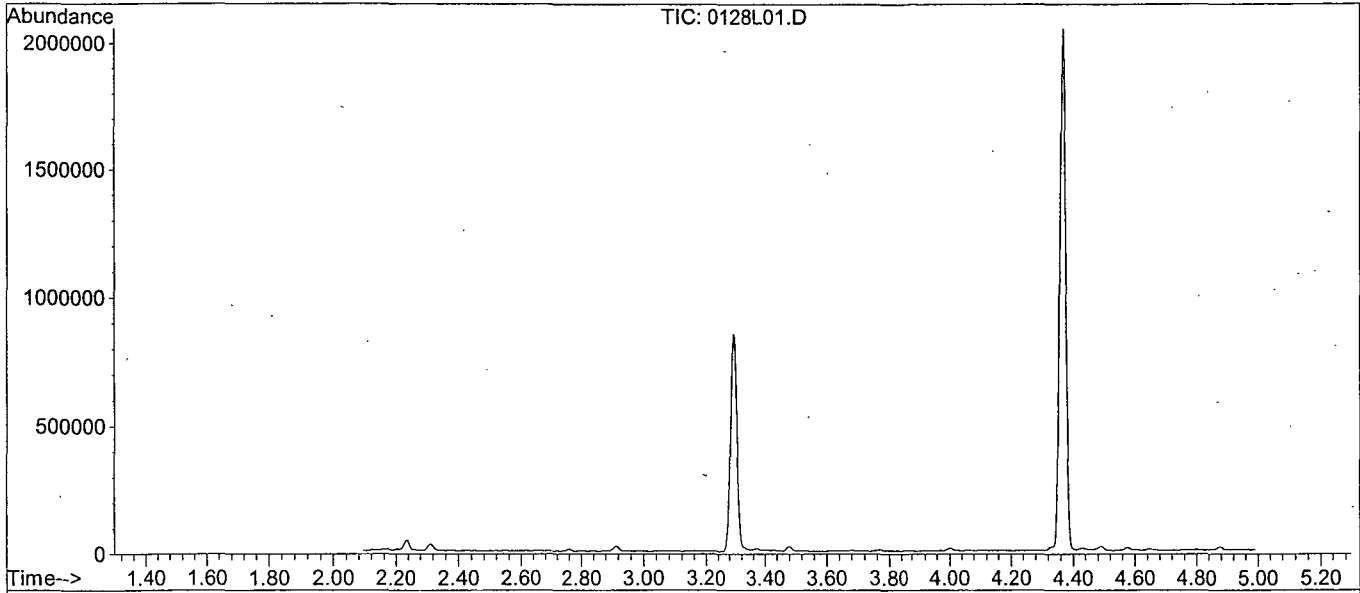


BFB

Data File : M:\LOKI\DATA\190128\0128L01.D  
Acq On : 28 Jan 19 14:12  
Sample : 25ug/L BFB STD 1/18/19  
Misc : 2ul

Vial: 1  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B



Spectrum Information: Average of 3.292 to 3.299 min.

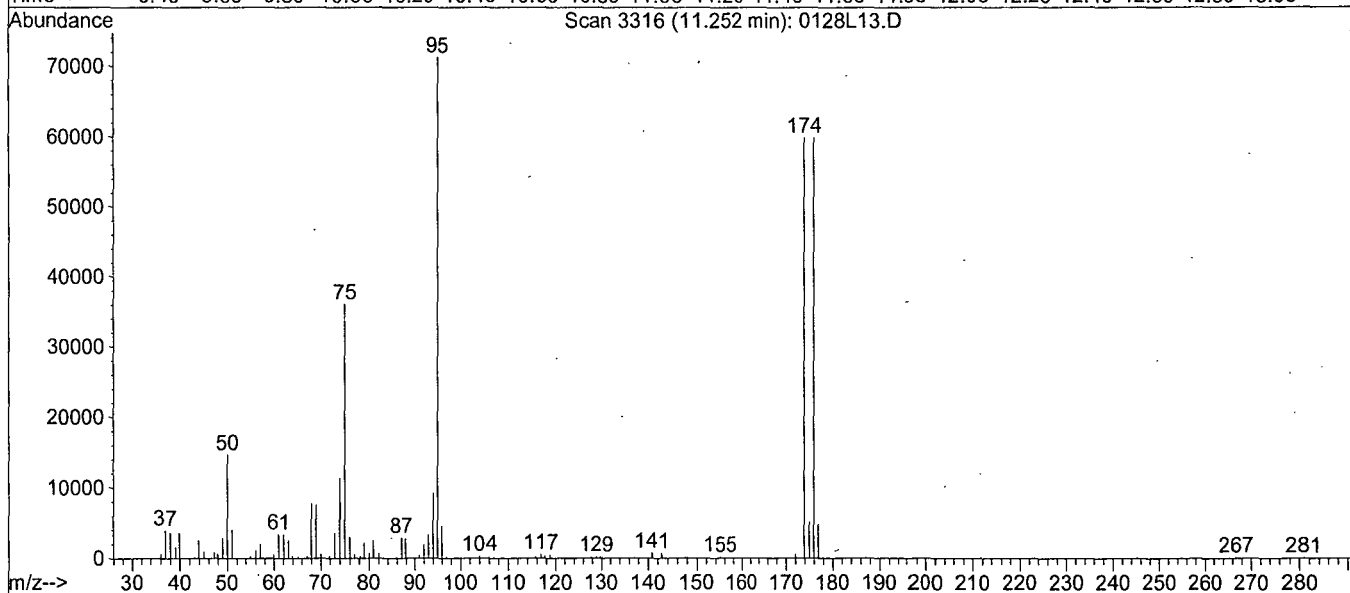
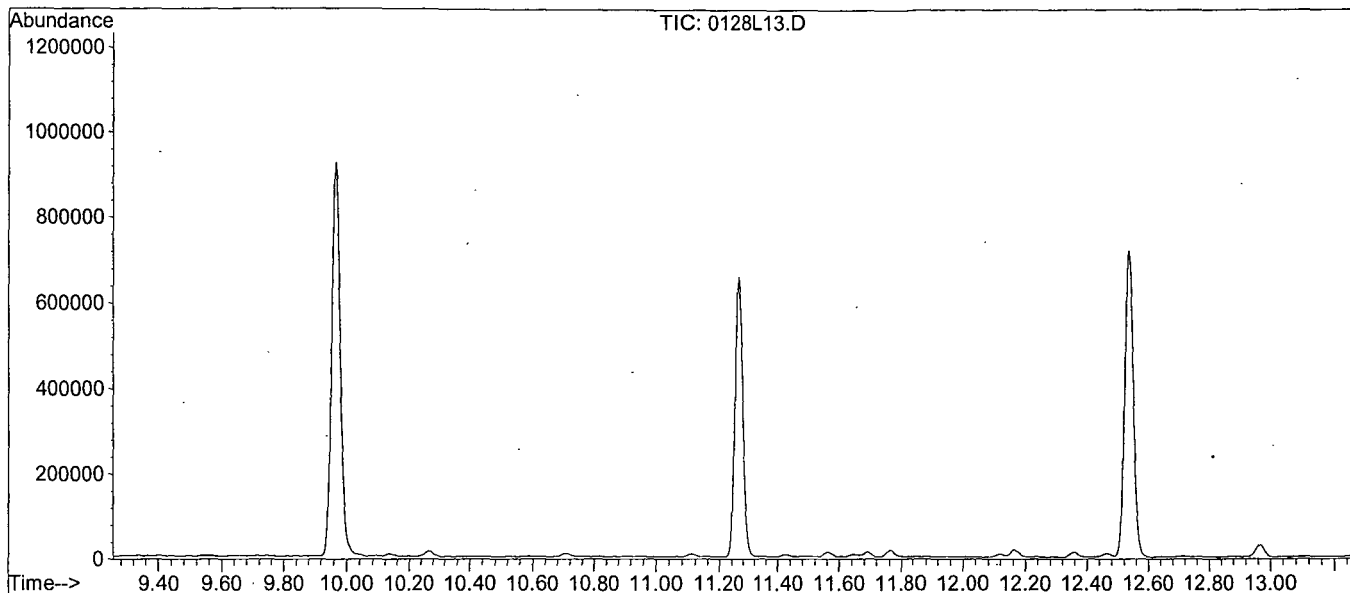
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	20635	PASS
75	95	30	60	51.4	56100	PASS
95	95	100	100	100.0	109163	PASS
96	95	5	9	7.7	8377	PASS
173	174	0.00	2	1.2	1136	PASS
174	95	50	100	90.0	98219	PASS
175	174	5	9	8.0	7810	PASS
176	174	95	101	97.5	95717	PASS
177	176	5	9	8.4	8083	PASS

BFB

Data File : M:\LOKI\DATA\190128\0128L13.D  
Acq On : 28 Jan 19 19:49  
Sample : 25ug/L BFB STD 1/18/19  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\190128\L0128W.M (RTE Integrator)  
Title : METHOD 8260B



Spectrum Information: Scan 3316

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	14697	PASS
75	95	30	60	50.7	36072	PASS
95	95	100	100	100.0	71176	PASS
96	95	5	9	6.4	4569	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.9	59752	PASS
175	174	5	9	8.5	5099	PASS
176	174	95	101	100.0	59744	PASS
177	176	5	9	8.1	4842	PASS

## Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
<b>0.3ug/L</b>						Prepared By (Initials): <u>PC</u>				
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 01/28/19	02/01/19	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 01/28/19	03/29/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 01/28/19	03/29/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	2uL			10
<b>0.5ug/L</b>										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 01/28/19	02/01/19	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 01/28/19	03/29/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 01/28/19	03/29/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	5uL			25
<b>1.0ug/L</b>										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 01/28/19	02/01/19	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 01/28/19	03/29/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 01/28/19	03/29/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	10uL			50
<b>2.0ug/L</b>										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 01/28/19	02/01/19	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 01/28/19	03/29/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 01/28/19	03/29/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	15uL			75
<b>5ug/L</b>										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 01/28/19	03/29/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 01/28/19	02/01/19	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 01/28/19	03/29/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 01/28/19	03/29/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	20uL			100
<b>10ug/L</b>										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 01/28/19	03/29/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 01/28/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 01/28/19	03/29/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 01/28/19	03/29/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	25uL			125



20ug/L										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 01/28/19	03/29/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 01/28/19	02/01/19	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 01/28/19	03/29/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 01/28/19	03/29/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	30uL			150
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	30uL			150
40ug/L										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 01/28/19	03/29/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 01/28/19	02/01/19	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 01/28/19	03/29/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 01/28/19	03/29/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	35uL			175
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	35uL			175
100ug/L										
Prepared: 01/28/19										
Expires: 02/27/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 01/28/19	03/29/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 01/28/19	02/01/19	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 01/28/19	03/29/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 01/28/19	03/29/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	40uL			200
VOA STD. TBA	Various		250	Prepared 01/28/19	02/01/19	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 01/28/19										
Expires: 02/27/19										
						Prepared By (Initials): PC				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 01/28/19	03/29/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI	8260 Water SS	50	Prepared 01/28/19	03/29/19	N/A	10uL			10
VOA STD. 6	Various	8260 Water SS	50	Prepared 01/28/19	02/13/19	N/A	10uL			10
VOA STD. TBA	Various	8260 Water SS	250	Prepared 01/28/19	02/13/19	N/A	25uL			250
VOA STD. TBA	Various	8260 Water SS	250	Prepared 01/28/19	02/13/19	N/A	25uL			250
VOA STD. TBA	Various	8260 Water SS	250	Prepared 01/28/19	02/13/19	N/A	25uL			250
8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)										
Prepared: 01/28/19										
Expires: 01/29/19										
						Prepared By (Initials): PC				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 01/28/19	03/29/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 01/28/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI	CCV/ LCS	50	Prepared 01/28/19	03/29/19	N/A	10uL			10
VOA STD. 2	O2SI	CCV/ LCS	50	Prepared 01/28/19	03/29/19	N/A	10uL			10
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 01/28/19	02/01/19	N/A	25uL			125
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 01/28/19	02/01/19	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 01/28/19										
Expires: 01/29/19										
						Prepared By (Initials): PC				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 01/28/19	03/29/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	LCS X4 Ketones	50	Prepared 01/28/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI	LCS X4 Ketones	50	Prepared 01/28/19	03/29/19	N/A	10uL			10
VOA STD. 2	O2SI	LCS X4 Ketones	50	Prepared 01/28/19	03/29/19	N/A	40uL			40
VOA STD. TBA	Various	LCS X4 Ketones	250	Prepared 01/28/19	02/01/19	N/A	25uL			125
VOA STD. TBA	Various	LCS X4 Ketones	250	Prepared 01/28/19	02/01/19	N/A	25uL			125

Loki 8260 Water Surrogate										
Prepared: 12/13/18						Prepared By (Initials): DG				
Expires: 04/02/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36335	07/28/19	04/02/19	375uL	15mL	Methanol	50
Loki 8260 Water Internal Standard										
Prepared: 11/08/18						Prepared By (Initials): DG				
Expires: 10/05/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Internal Standard Solution	O2SI	120004-02	2,000	326533-38441	10/05/19	04/27/21	375uL	15mL	Methanol	50

### Primary and Secondary Working Standards

Primary Standards										
VOA STD 7										
Prepared: 01/28/19 E										
Expires: 03/29/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL12966-39990	10/31/23	10/31/23	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-40038	01/17/20	09/18/23	200uL			50
Benzyl Chloride	O2SI	020228-02	1,000	082218-39817	01/17/20	12/04/19	200uL			50
VOA STD 8										
Prepared: 01/28/19 F										
Expires: 02/01/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL39322-39479	01/17/20	06/30/20	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL12490-39491	01/17/20	05/31/23	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13125-40120	02/01/19	02/01/19	100uL			50
VOA STD TBA										
Prepared: 01/28/19 G										
Expires: 02/01/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL12542-39530	01/17/20	05/31/20	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL13149-40121	02/01/19	02/01/19	100uL			250
VOA STD 1										
Prepared: 01/28/19 H										
Expires: 03/29/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	O2SI	020145-02	2,000	071018-39809	07/10/21	11/12/19	50	2mL	Methanol	50
VOA STD 2										
Prepared: 01/28/19 I										
Expires: 03/29/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	CL10956-39506	01/17/20	08/30/23	100	4mL	Methanol	50
VOA STD 9										
Prepared: 01/28/19 J										
Expires: 02/01/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 01/28/19	12/04/19	N/A	200uL	2mL	Methanol	5
VOA STD. 8			50	Prepared 01/28/19	02/01/19	N/A	200uL			5
VOA STD. 10										
Prepared: 01/28/19 K										
Expires: 03/29/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 01/28/19	01/17/20	N/A	200uL	2mL	Methanol	5
VOA STD. 12										
Prepared: 01/28/19 L										
Expires: 03/29/19										
Prepared By (Initials): PC										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 01/28/19	01/17/20	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards										
VOA STD. 3										
Prepared: 01/28/19 M										
Expires: 03/29/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL12730-39671	01/17/20	08/31/28	50uL	2mL	Methanol	50
VOA STD. 5										
Prepared: 01/28/19 N										
Expires: 03/29/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL12965-39986	10/31/23	10/31/23	50uL	2mL	Methanol	50
2-CEVE (SS)	Absolute	82408	2,000	112917-402102	11/29/20	07/10/21	50uL			50
VOA STD. 6										
Prepared: 01/28/19 O										
Expires: 02/13/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL12489-39970	01/17/20	05/31/23	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13145-40120	01/17/20	02/13/19	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	218051281-39858	01/02/20	05/14/28	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	214101335-04-39960	01/17/20	10/18/20	500uL			50
VOA STD. TBA										
Prepared: 01/28/19 P										
Expires: 02/13/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12542-39679	01/17/20	05/31/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	CL13181-40203	02/13/19	02/13/19	50uL			250
VOA STD. 0										
Prepared: 01/28/19 Q										
Expires: 03/29/19										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL12744-40002	01/17/20	08/30/20	50uL	2mL	Methanol	50
BFB Tune										
Prepared: 01/18/19										
Expires: 12/12/19										
Methanol Lot No. 202404-00945										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
4-Bromofluorobenzene	O2SI	020135-03	2,500	342387-39075	12/12/19	01/19/21	20uL	2mL	Methanol	25

## Injection Log

Directory: M:\LOKI\DATA\190128\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0128L01.D	1	25ug/L BFB STD 1/18/19	2ul	28 Jan 19 14:12
2	2	0128L03.D	1	0.3ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 15:03
3	3	0128L04.D	1	0.5ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 15:31
4	4	0128L05.D	1	1.0ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 16:00
5	5	0128L06.D	1	2.0ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 16:29
6	6	0128L07.D	1	5.0ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 16:57
7	7	0128L08.D	1	10ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 17:26
8	8	0128L09.D	1	20ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 17:55
9	9	0128L10.D	1	40ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 18:23
10	10	0128L11.D	1	50ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 18:52
11	11	0128L12.D	1	100ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 19:21
12	12	0128L13.D	1	25ug/L BFB STD 1/18/19	IS&S 11/8/18	28 Jan 19 19:49
13	13	0128L14.D	1	(SS)10ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 20:18
14	15	0128L16.D	1	190128A LCS 10ug/L	IS&S 11/8/18	28 Jan 19 21:15
15	16	0128L17.D	1	190128A LCSD 10ug/L	IS&S 11/8/18	28 Jan 19 21:44
16	21	0128L22.D	1	190128A blk	IS&S 11/8/18	29 Jan 19 00:06
17	24	0128L25.D	1	AZ85519W01	IS&S 11/8/18	29 Jan 19 1:32
18	25	0128L26.D	1	AZ85522W01	IS&S 11/8/18	29 Jan 19 2:01
19	26	0128L27.D	1	AZ85526W01	IS&S 11/8/18	29 Jan 19 2:29
20	27	0128L28.D	1	AZ85520W01	IS&S 11/8/18	29 Jan 19 2:58
21	28	0128L29.D	1	AZ85521W01	IS&S 11/8/18	29 Jan 19 3:27
22	29	0128L30.D	1	AZ85523W01	IS&S 11/8/18	29 Jan 19 3:55
23	30	0128L31.D	1	AZ85524W01	IS&S 11/8/18	29 Jan 19 4:24
24	31	0128L32.D	1	AZ85525W01	IS&S 11/8/18	29 Jan 19 4:52
25	32	0128L33.D	1	AZ85527W01	IS&S 11/8/18	29 Jan 19 5:21
26	37	0128L38.D	1	Ending CCV 10ug/L 01/28/19	IS&S 11/8/18	29 Jan 19 7:43

**ORGANICS**  
**Calibration Data**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/22/19  
Instrument: Loki

Initials: \_\_\_\_\_

0122L03.D 0122L04.D 0122L05.D 0122L06.D 0122L07.D 0122L08.D 0122L09.D

	Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TMHBL Gasoline C6-C10	14.2	5.991	3.156	1.510	0.9912	0.8940	0.8282				3.9	124	TMHBL	0.998		
3	I Chlorobenzene-D5 (IS)																
4	I 1,4-Dichlorobenzene-D (IS)																
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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35																	

Data File : M:\LOKI\DATA\190121\0122L03.D Vial: 2  
 Acq On : 22 Jan 19 14:10 Operator: PM,DG,SV,CMM,KV  
 Sample : 20ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:19 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	657725	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	773287	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	888330	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	7468095m	27.796	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L03.D  
 Acq On : 22 Jan 19 14:10  
 Sample : 20ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315648	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	269696	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	161216	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157557	26.4882	ppb	0.00
Spiked Amount	25.000					Recovery = 105.952%
3) 1,2-DCA-D4(S)	6.07	65	182006	26.2414	ppb	0.00
Spiked Amount	25.000					Recovery = 104.964%
5) Toluene-D8(S)	8.37	98	583651	26.4866	ppb	0.00
Spiked Amount	25.000					Recovery = 105.948%
6) 4-Bromofluorobenzene(S)	11.27	95	236797	25.6167	ppb	0.00
Spiked Amount	25.000					Recovery = 102.468%
Target Compounds						Qvalue

Quantitation Report

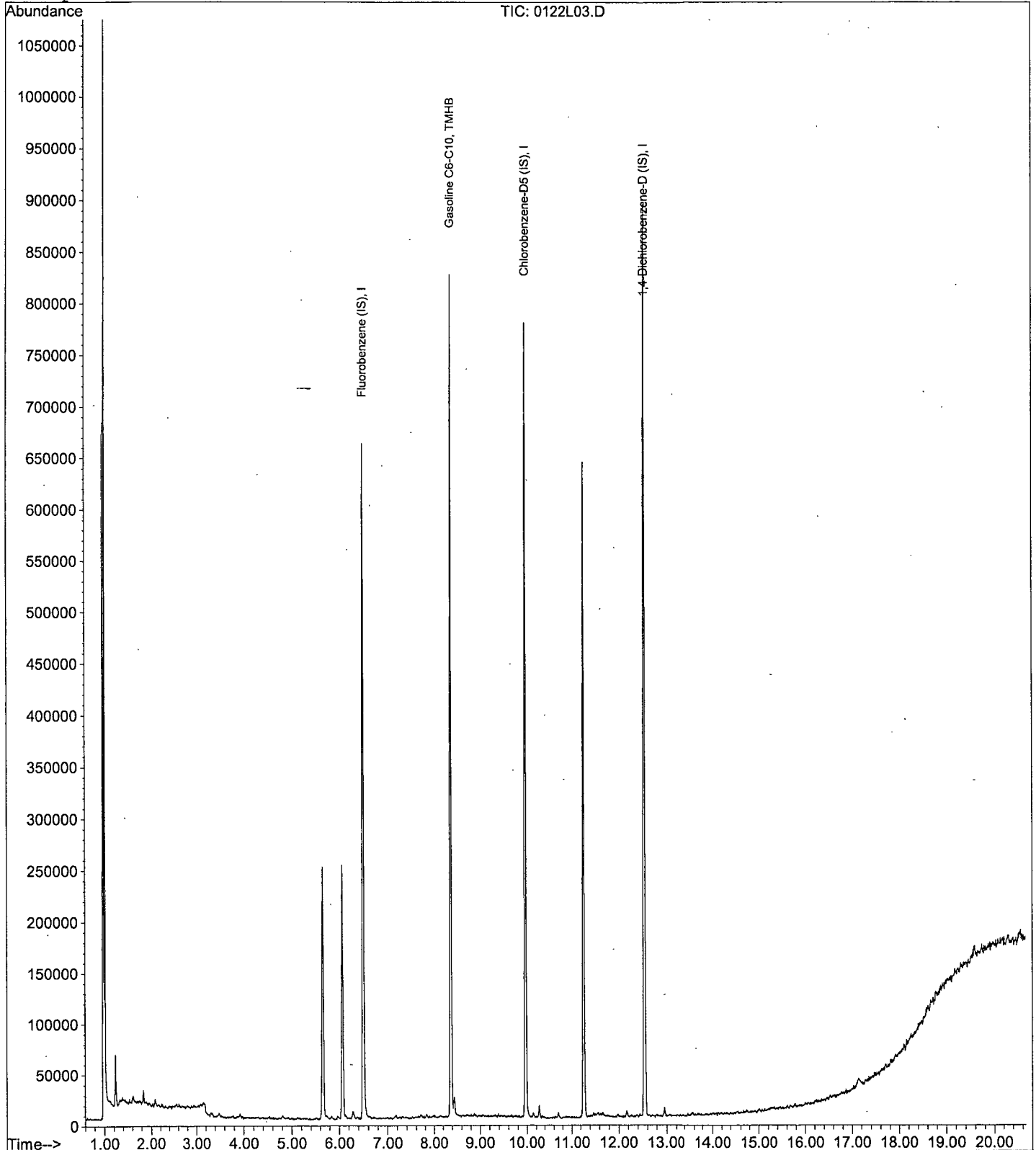
Data File : M:\LOKI\DATA\190121\0122L03.D  
Acq On : 22 Jan 19 14:10  
Sample : 20ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:19 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0122L04.D  
 Acq On : 22 Jan 19 14:39  
 Sample : 50ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	691706	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	846157	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	858020	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	9.97	TIC	8287767m	56.195	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L04.D  
 Acq On : 22 Jan 19 14:39  
 Sample : 50ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	335552	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	300864	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	155712	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	156820	24.8005	ppb	0.00
Spiked Amount						Recovery = 99.200%
3) 1,2-DCA-D4(S)	6.07	65	181620	24.6325	ppb	0.00
Spiked Amount						Recovery = 98.532%
5) Toluene-D8(S)	8.37	98	586804	23.8710	ppb	0.00
Spiked Amount						Recovery = 95.484%
6) 4-Bromofluorobenzene(S)	11.26	95	234045	22.6961	ppb	0.00
Spiked Amount						Recovery = 90.784%

Target Compounds

Qvalue

Quantitation Report

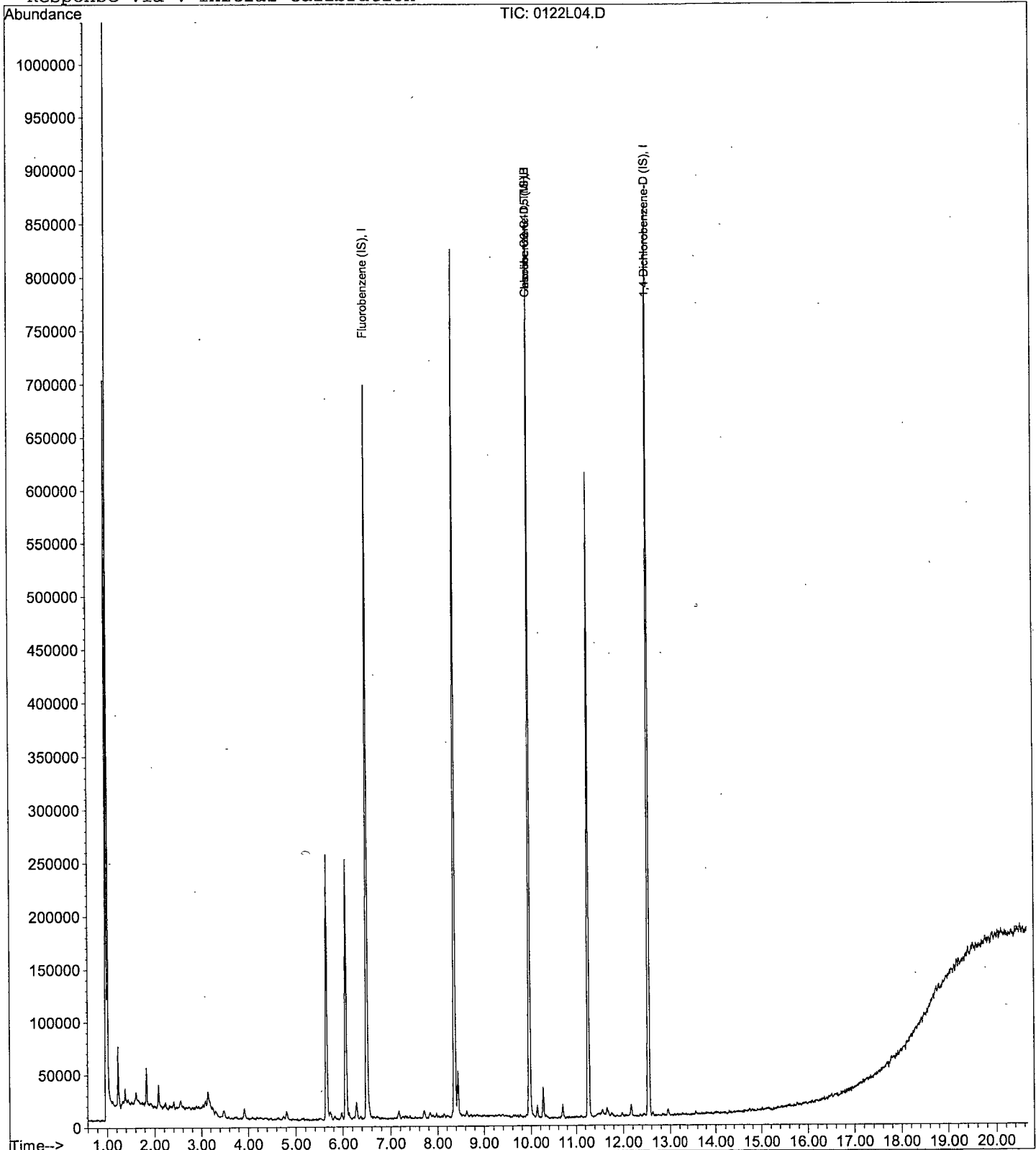
Data File : M:\LOKI\DATA\190121\0122L04.D  
Acq On : 22 Jan 19 14:39  
Sample : 50ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0122L05.D Vial: 4  
 Acq On : 22 Jan 19 15:07 Operator: PM,DG,SV,CMM,KV  
 Sample : 100ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:21 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	795029	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	937148	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	1003701	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	9.97	TIC	10034916m	85.194	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L05.D  
 Acq On : 22 Jan 19 15:07  
 Sample : 100ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	387456	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	333184	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	174272	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	156930	21.4932	ppb	0.00
Spiked Amount						Recovery = 85.972%
3) 1,2-DCA-D4(S)	6.07	65	181170	21.2799	ppb	0.00
Spiked Amount						Recovery = 85.120%
5) Toluene-D8(S)	8.37	98	575279	21.1321	ppb	0.00
Spiked Amount						Recovery = 84.528%
6) 4-Bromofluorobenzene(S)	11.26	95	227110	19.8872	ppb	0.00
Spiked Amount						Recovery = 79.548%

Target Compounds Qvalue

Quantitation Report

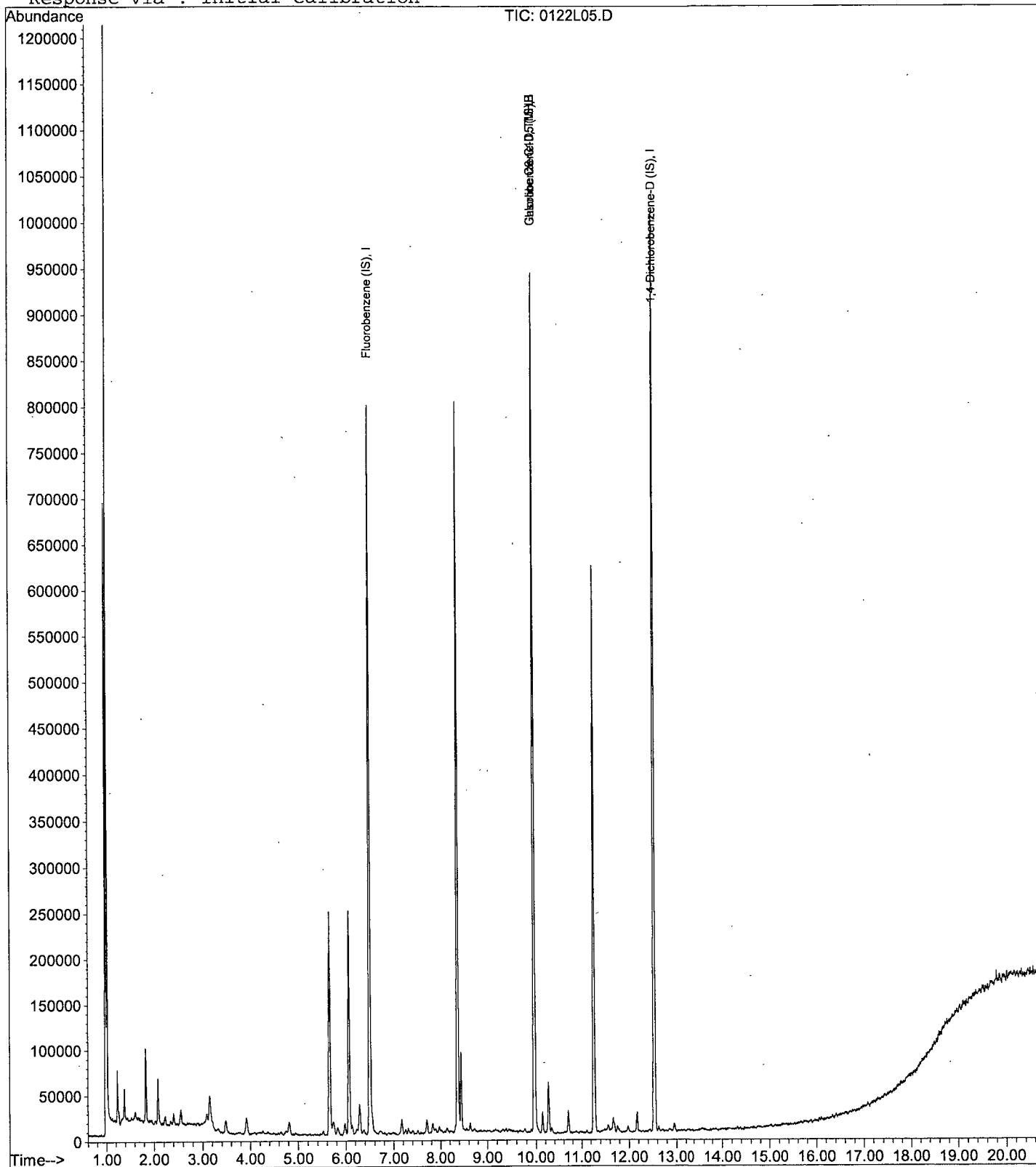
Data File : M:\LOKI\DATA\190121\0122L05.D  
Acq On : 22 Jan 19 15:07  
Sample : 100ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190121\0122L06.D Vial: 5  
 Acq On : 22 Jan 19 15:36 Operator: PM,DG,SV,CMM,KV  
 Sample : 300ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	TIC	658006	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	790181	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	849355	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11919364m	333.880	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L06.D  
 Acq On : 22 Jan 19 15:36  
 Sample : 300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315520	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	280000	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	151296	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	160111	26.9285	ppb	0.00
Spiked Amount				25.000		
					Recovery = 107.716%	
3) 1,2-DCA-D4(S)	6.07	65	184739	26.6463	ppb	0.00
Spiked Amount				25.000		
					Recovery = 106.584%	
5) Toluene-D8(S)	8.37	98	591987	25.8763	ppb	0.00
Spiked Amount				25.000		
					Recovery = 103.504%	
6) 4-Bromofluorobenzene(S)	11.26	95	238857	24.8887	ppb	0.00
Spiked Amount				25.000		
					Recovery = 99.556%	

Target Compounds Qvalue

Quantitation Report

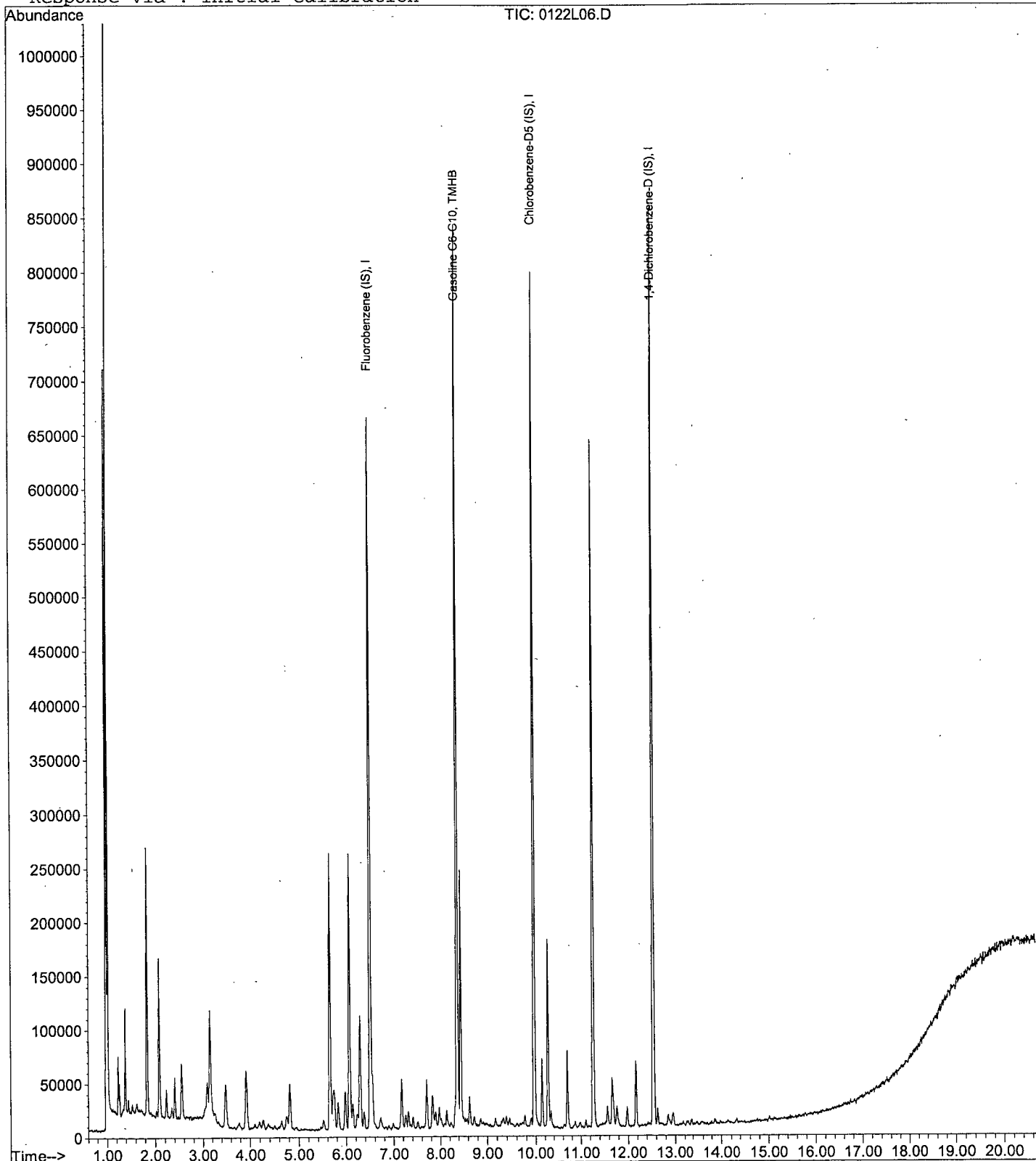
Data File : M:\LOKI\DATA\190121\0122L06.D  
Acq On : 22 Jan 19 15:36  
Sample : 300ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0122L07.D Vial: 6  
 Acq On : 22 Jan 19 16:04 Operator: PM,DG,SV,CMM,KV  
 Sample : 600ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	655093	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	794318	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	859138	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	15583633m	590.796	ppb	100

Data File : M:\LOKI\DATA\190121\0122L07.D  
 Acq On : 22 Jan 19 16:04  
 Sample : 600ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	321536	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	283584	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	151424	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	153983	25.4133	ppb	0.00
Spiked Amount						
						Recovery = 101.652%
3) 1,2-DCA-D4(S)	6.07	65	182681	25.8564	ppb	0.00
Spiked Amount						
						Recovery = 103.424%
5) Toluene-D8(S)	8.37	98	569135	24.5630	ppb	0.00
Spiked Amount						
						Recovery = 98.252%
6) 4-Bromofluorobenzene(S)	11.26	95	230967	23.7624	ppb	0.00
Spiked Amount						
						Recovery = 95.048%
Target Compounds						Qvalue

Quantitation Report

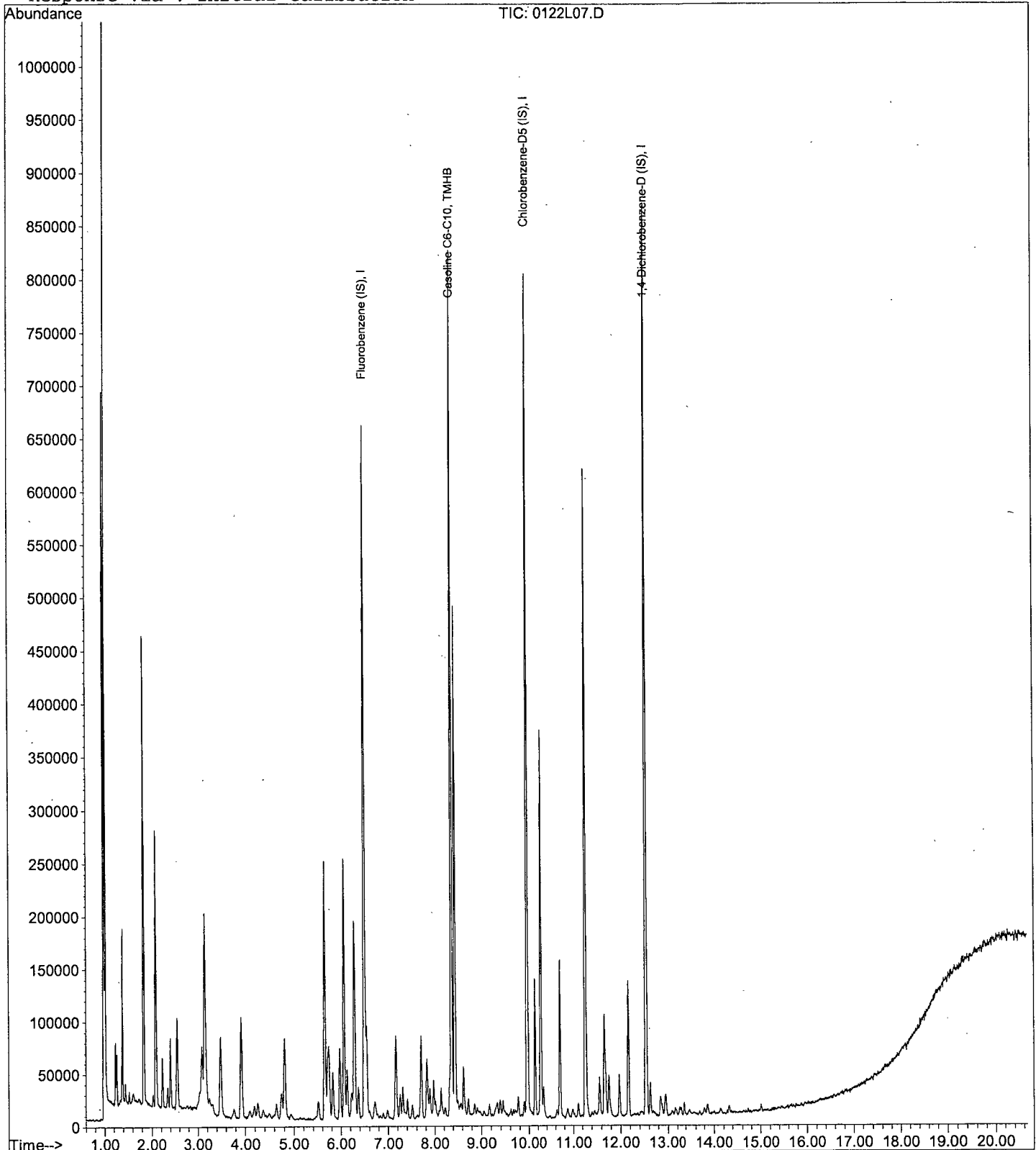
Data File : M:\LOKI\DATA\190121\0122L07.D  
Acq On : 22 Jan 19 16:04  
Sample : 600ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0122L08.D Vial: 7  
 Acq On : 22 Jan 19 16:33 Operator: PM,DG,SV,CMM,KV  
 Sample : 800ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	TIC	650619	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	767904	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	822805	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	18612406m	808.987	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L08.D  
 Acq On : 22 Jan 19 16:33  
 Sample : 800ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	313920	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	275584	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	147456	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157489	26.6225	ppb	0.00
Spiked Amount						
					Recovery = 106.492%	
3) 1,2-DCA-D4(S)	6.07	65	179529	26.0268	ppb	0.00
Spiked Amount						
					Recovery = 104.108%	
5) Toluene-D8(S)	8.37	98	580104	25.7632	ppb	0.00
Spiked Amount						
					Recovery = 103.052%	
6) 4-Bromofluorobenzene(S)	11.27	95	236208	25.0071	ppb	0.00
Spiked Amount						
					Recovery = 100.028%	
Target Compounds						Qvalue



Quantitation Report

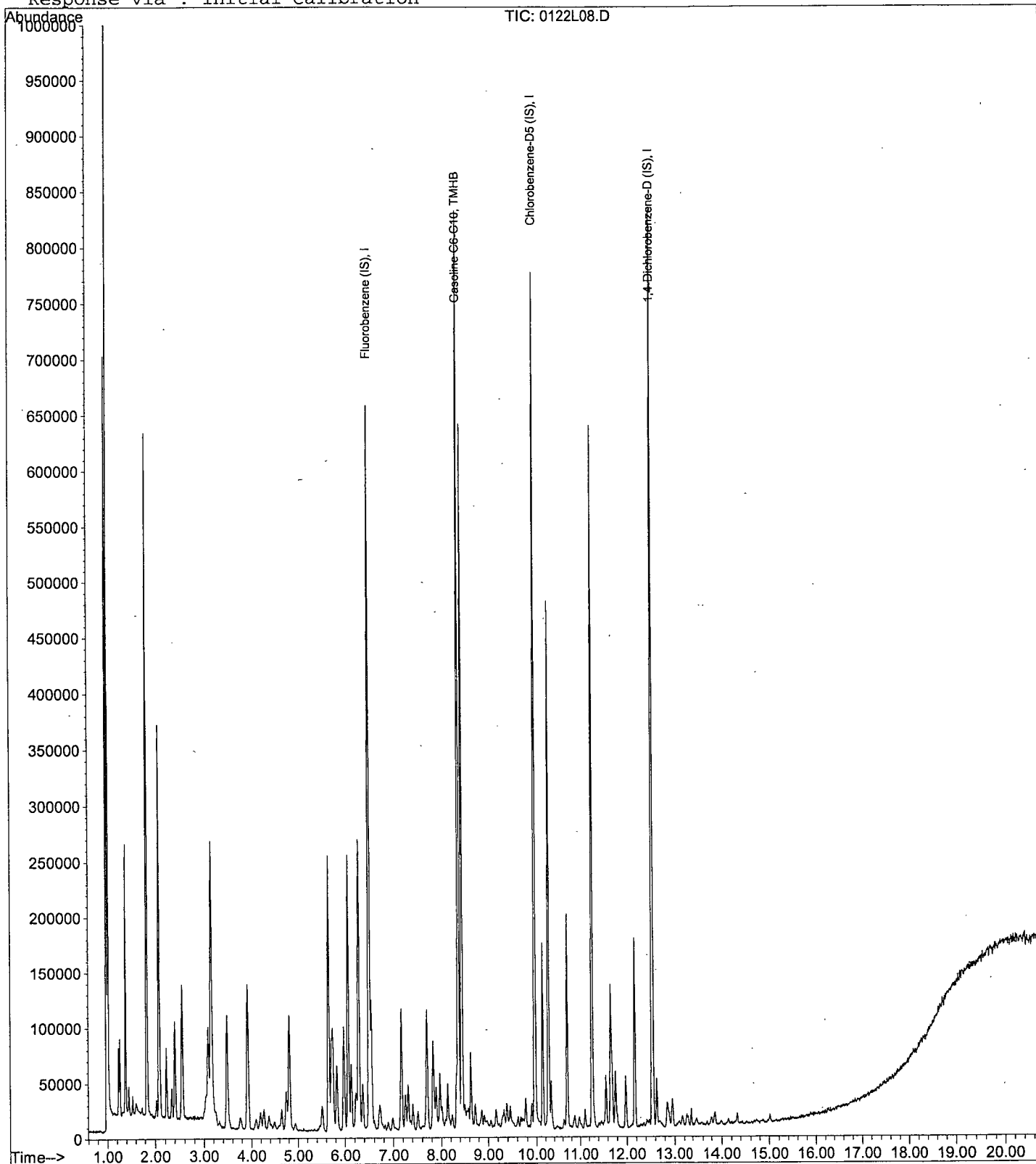
Data File : M:\LOKI\DATA\190121\0122L08.D  
Acq On : 22 Jan 19 16:33  
Sample : 800ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0122L09.D Vial: 8  
 Acq On : 22 Jan 19 17:01 Operator: PM,DG,SV,CMM,KV  
 Sample : 1000ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:23 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	TIC	644633	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	773447	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	813437	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	21356569m	1013.765	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L09.D  
 Acq On : 22 Jan 19 17:01  
 Sample : 1000ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315584	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	274176	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	146048	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	153101	25.7443	ppb	0.00
Spiked Amount	25.000				Recovery = 102.976%	
3) 1,2-DCA-D4(S)	6.07	65	179163	25.8368	ppb	0.00
Spiked Amount	25.000				Recovery = 103.348%	
5) Toluene-D8(S)	8.37	98	581229	25.9457	ppb	0.00
Spiked Amount	25.000				Recovery = 103.784%	
6) 4-Bromofluorobenzene(S)	11.26	95	233744	24.8733	ppb	0.00
Spiked Amount	25.000				Recovery = 99.492%	

Target Compounds

Qvalue

Quantitation Report

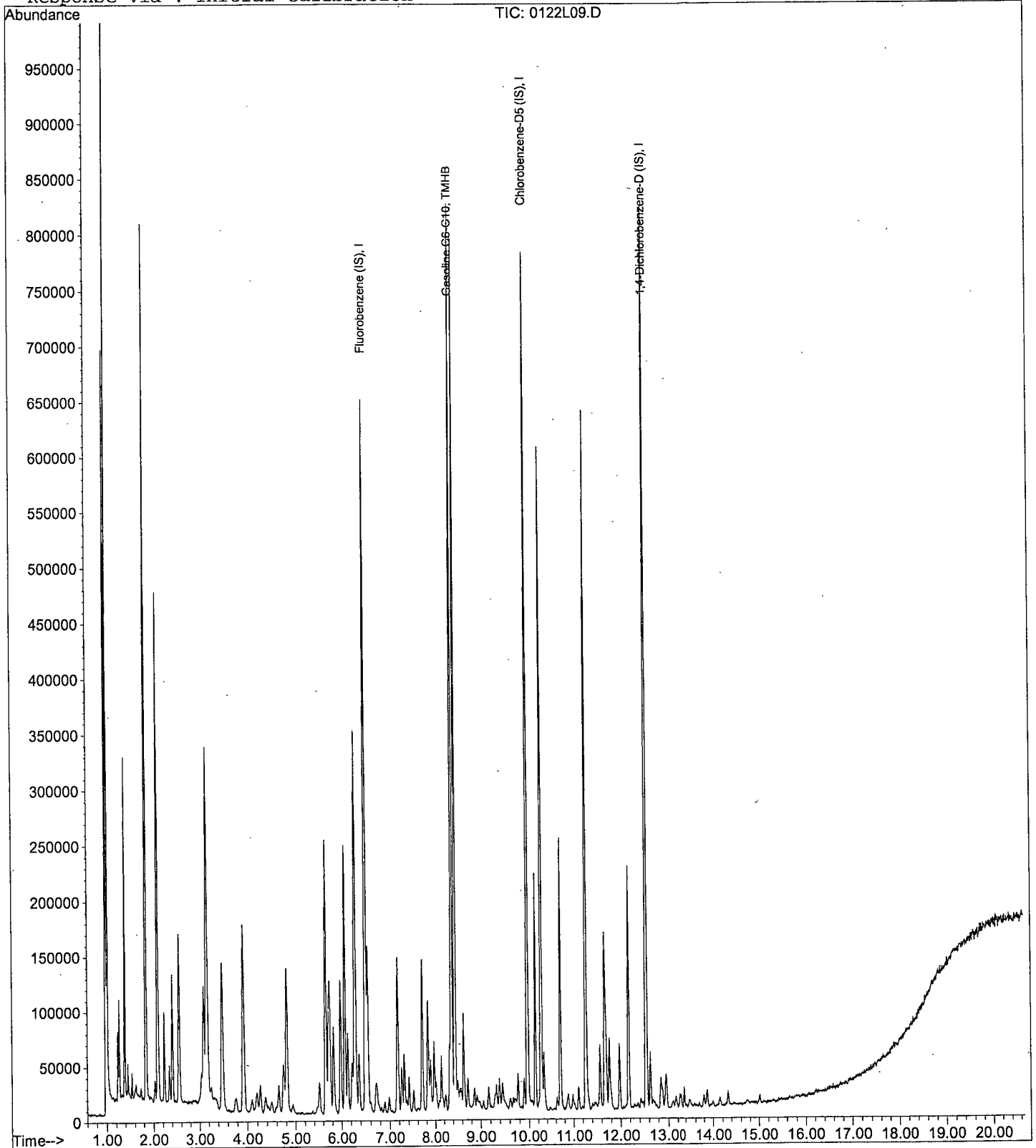
Data File : M:\LOKI\DATA\190121\0122L09.D  
Acq On : 22 Jan 19 17:01  
Sample : 1000ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

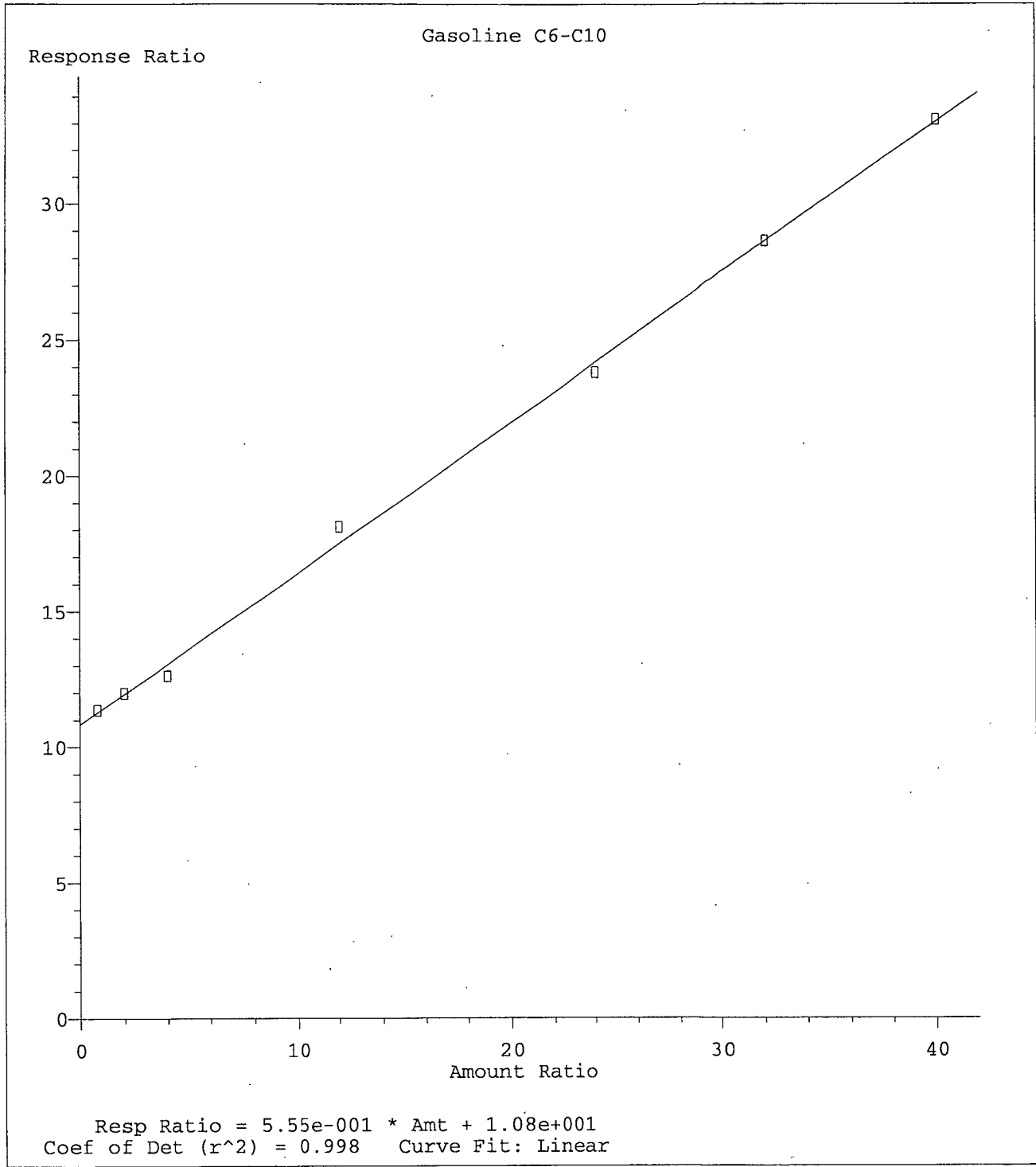
Vial: 8  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:23 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Method Name: M:\LOKI\DATA\190121\LGAS0122.M  
 Calibration Table Last Updated: Thu Jan 24 09:25:37 2019

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0122L12.D

	Compound	MEAN	CCRF	%D	%Drift
1	TMHB Gasoline C6-C10	3.937	1.468	63	TMHBL 1.7
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			63.0	

Data File : M:\LOKI\DATA\190121\0122L12.D Vial: 11  
 Acq On : 22 Jan 19 18:27 Operator: PM,DG,SV,CMM,KV  
 Sample : (SS)300ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:30 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	661911	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	791838	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	820940	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11658465m	305.154	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L12.D  
 Acq On : 22 Jan 19 18:27  
 Sample : (SS)300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 10:26 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	322112	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	279488	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	144704	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	152512	25.1255	ppb	0.00
Spiked Amount						Recovery = 100.504%
3) 1,2-DCA-D4(S)	6.07	65	178958	25.2842	ppb	0.00
Spiked Amount						Recovery = 101.136%
5) Toluene-D8(S)	8.37	98	563836	24.6909	ppb	0.00
Spiked Amount						Recovery = 98.764%
6) 4-Bromofluorobenzene(S)	11.27	95	231410	24.1569	ppb	0.00
Spiked Amount						Recovery = 96.628%

Target Compounds Qvalue



Quantitation Report

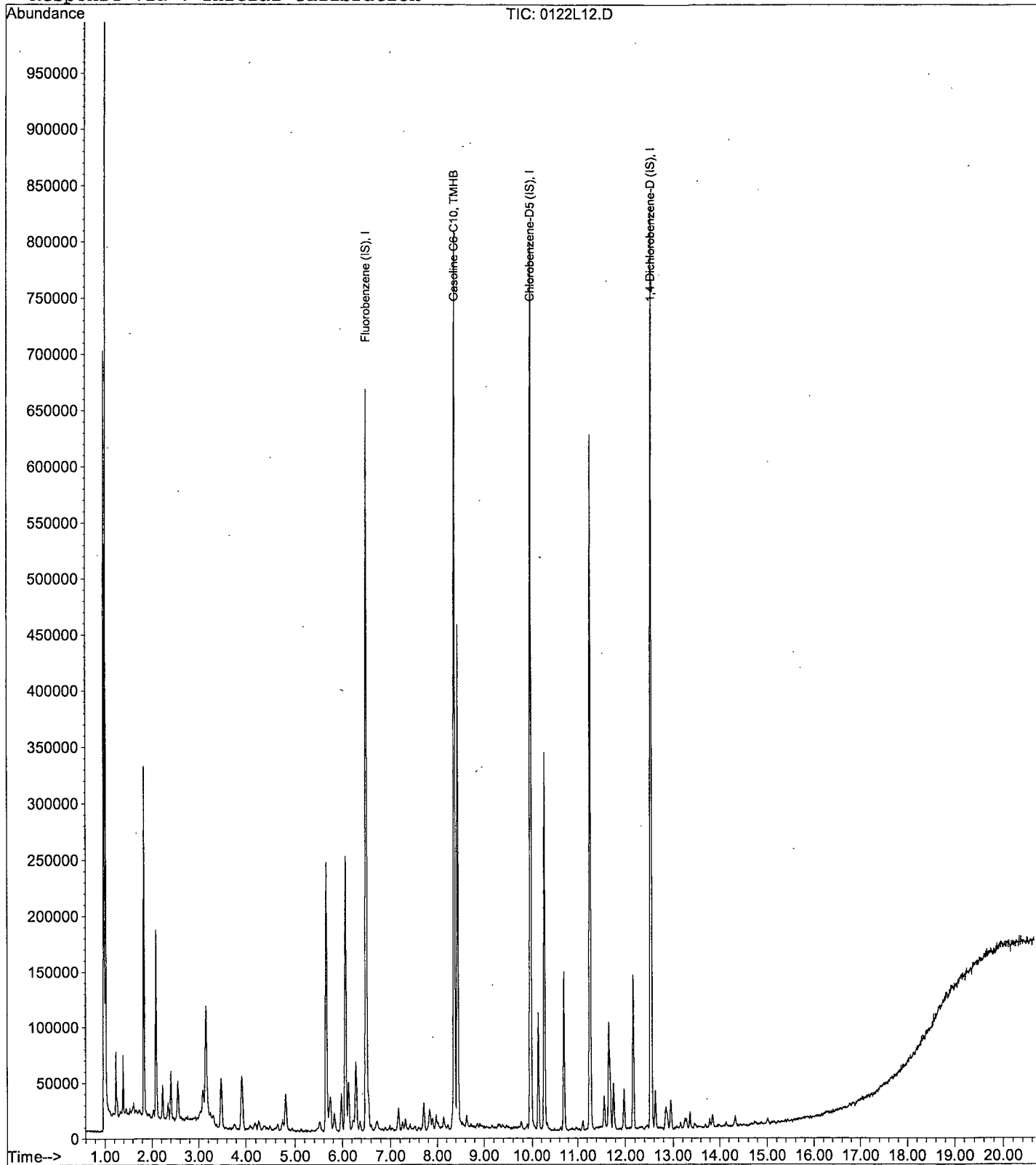
Data File : M:\LOKI\DATA\190121\0122L12.D  
Acq On : 22 Jan 19 18:27  
Sample : (SS)300ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:30 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/28/19  
Instrument: Loki

Initials: \_\_\_\_\_

0128L03.D 0128L04.D 0128L05.D 0128L06.D 0128L07.D 0128L08.D 0128L09.D 0128L10.D 0128L12.D 0128L11.D

	Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	r^2	Q	MRF
1	I Fluorobenzene (IS)																
2	S Dibromofluoromethane(S)	0.5786	0.5271	0.4726	0.4590	0.4831	0.4862	0.4858	0.4849	0.4728	0.4653	0.49	7.3	S			
3	S 1,2-DCA-D4(S)	0.6725	0.6469	0.5511	0.5503	0.5606	0.5609	0.5646	0.5474	0.5318	0.5328	0.57	8.4	S			
4	I Chlorobenzene-D5 (IS)																
5	S Toluene-D8(S)	3.031	3.045	2.442	2.383	2.511	2.462	2.471	2.288	2.132	2.256	2.5	12	S			
6	S 4-Bromofluorobenzene(S)	0.9081	0.8451	0.7081	0.6531	0.7094	0.6818	0.7052	0.7482	0.7785	0.7587	0.75	10	S			
7	I 1,4-Dichlorobenzene-D (IS)																
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
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35																	

Data File : M:\LOKI\DATA\190128\0128L03.D Vial: 2  
 Acq On : 28 Jan 19 15:03 Operator: PM,DG,SV,CMM,KV  
 Sample : 0.3ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	414464	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	262144	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	124304	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	47965	5.8860	ppb	0.00
Spiked Amount	25.000		Recovery	=	23.544%	
3) 1,2-DCA-D4(S)	6.07	65	55743	5.8793	ppb	0.00
Spiked Amount	25.000		Recovery	=	23.516%	
5) Toluene-D8(S)	8.37	98	158889	6.0562	ppb	0.00
Spiked Amount	25.000		Recovery	=	24.224%	
6) 4-Bromofluorobenzene(S)	11.26	95	47612	6.0572	ppb	0.00
Spiked Amount	25.000		Recovery	=	24.228%	

Target Compounds Qvalue

Quantitation Report

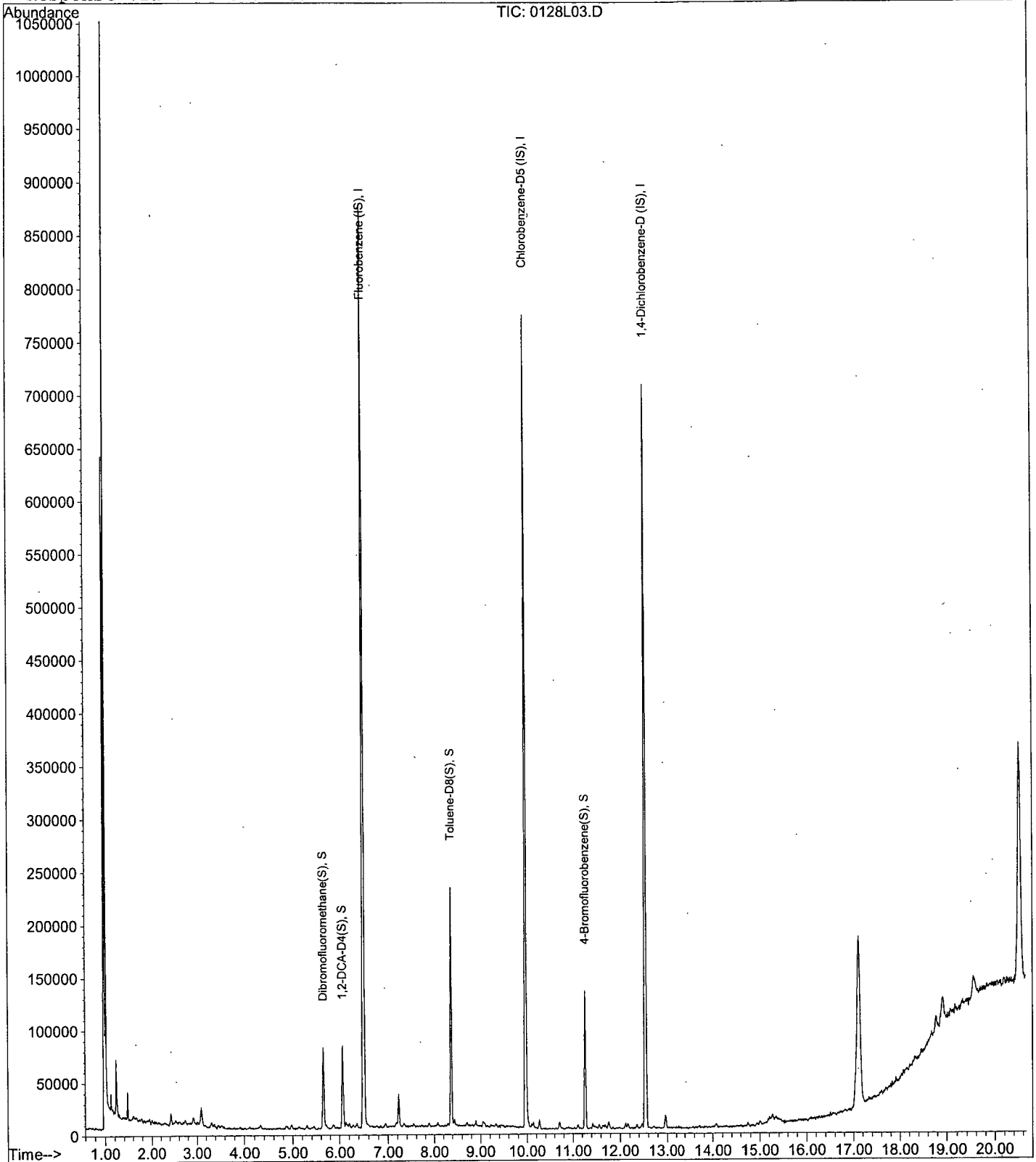
Data File : M:\LOKI\DATA\190128\0128L03.D  
Acq.On : 28 Jan 19 15:03  
Sample : 0.3ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L04.D  
 Acq On : 28 Jan 19 15:31  
 Sample : 0.5ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	419520	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	260416	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	125192	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	44226	5.3618	ppb	0.00
Spiked Amount 25.000			Recovery	=	21.448%	
3) 1,2-DCA-D4(S)	6.07	65	54279	5.6559	ppb	0.00
Spiked Amount 25.000			Recovery	=	22.624%	
5) Toluene-D8(S)	8.37	98	158592	6.0849	ppb	0.00
Spiked Amount 25.000			Recovery	=	24.340%	
6) 4-Bromofluorobenzene(S)	11.26	95	44018	5.6372	ppb	0.00
Spiked Amount 25.000			Recovery	=	22.548%	

Target Compounds Qvalue

Quantitation Report

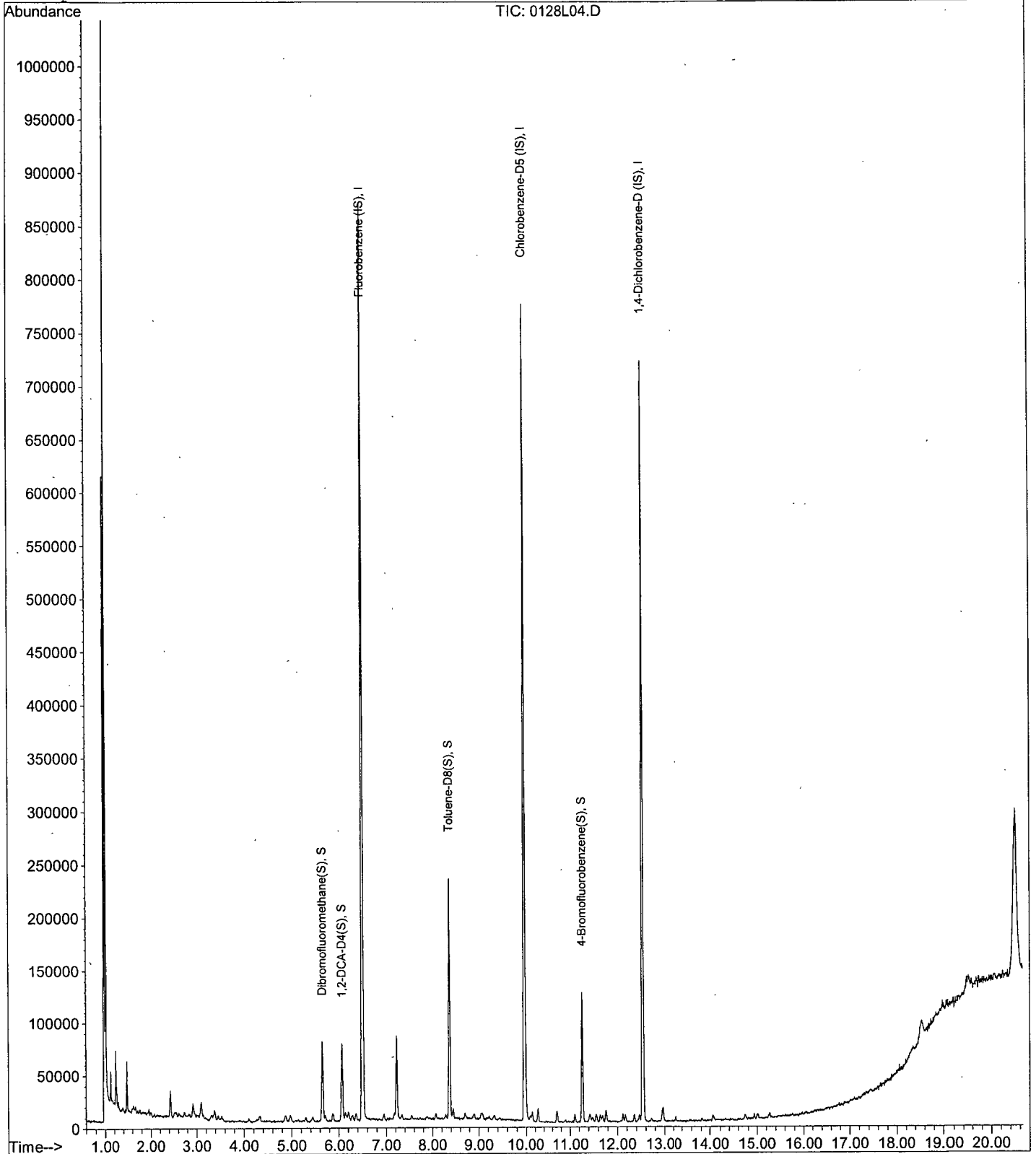
Data File : M:\LOKI\DATA\190128\0128L04.D  
Acq On : 28 Jan 19 15:31  
Sample : 0.5ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L05.D  
 Acq On : 28 Jan 19 16:00  
 Sample : 1.0ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 4  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	400384	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	262528	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	116336	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	75694	9.6154	ppb	0.00
Spiked Amount			Recovery	=	38.460%	
3) 1,2-DCA-D4 (S)	6.07	65	88263	9.6367	ppb	0.00
Spiked Amount			Recovery	=	38.548%	
5) Toluene-D8(S)	8.37	98	256471	9.7613	ppb	0.00
Spiked Amount			Recovery	=	39.044%	
6) 4-Bromofluorobenzene(S)	11.26	95	74359	9.4462	ppb	0.00
Spiked Amount			Recovery	=	37.784%	

Target Compounds

Qvalue

Quantitation Report

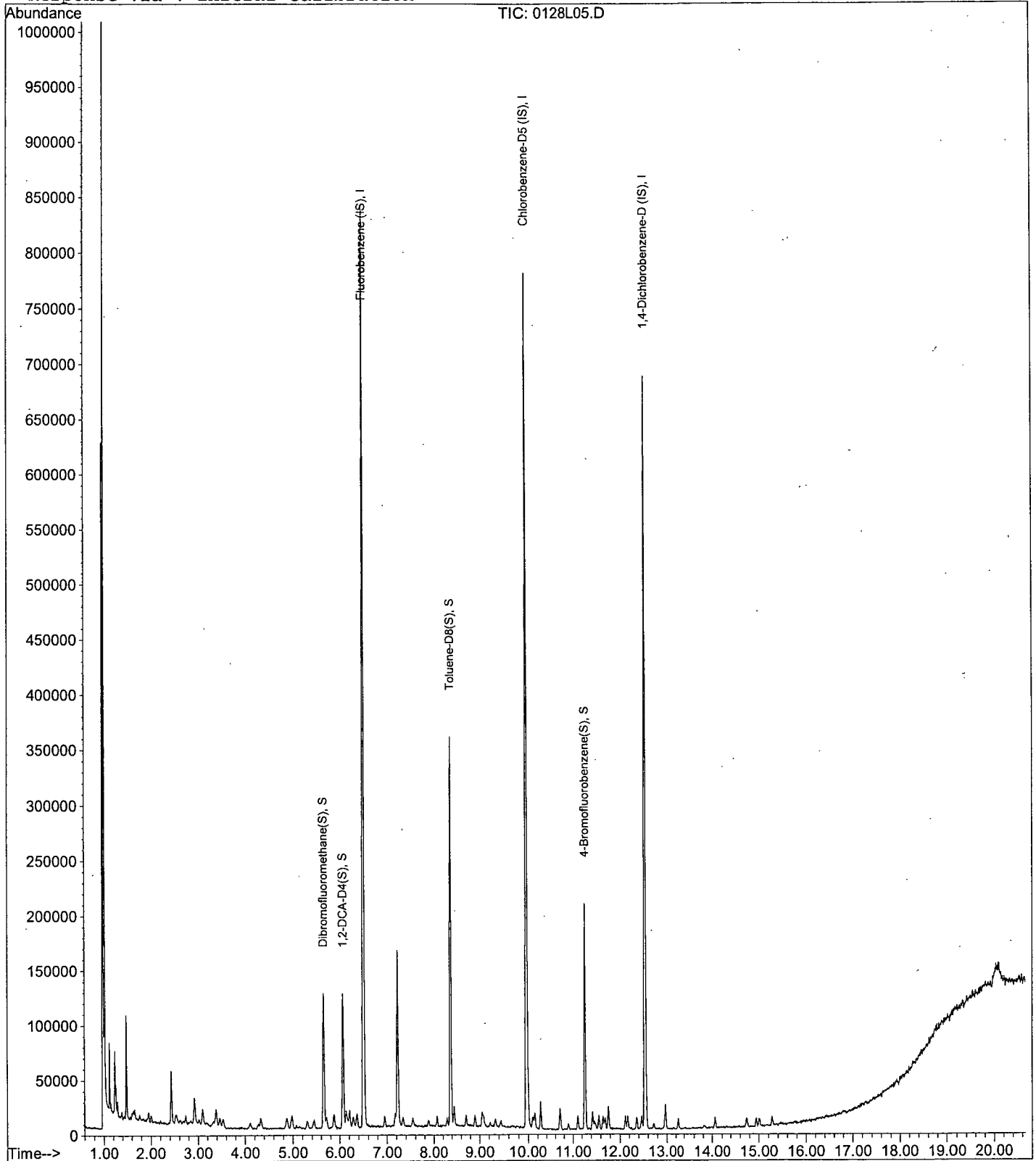
Data File : M:\LOKI\DATA\190128\0128L05.D  
Acq On : 28 Jan 19 16:00  
Sample : 1.0ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190128\0128L06.D Vial: 5  
 Acq On : 28 Jan 19 16:29 Operator: PM,DG,SV,CMM,KV  
 Sample : 2.0ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	394368	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	273536	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	114176	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	72400	9.3373	ppb	0.00
Spiked Amount : 25.000			Recovery =	37.348%		
3) 1,2-DCA-D4(S)	6.07	65	86807	9.6223	ppb	0.00
Spiked Amount : 25.000			Recovery =	38.488%		
5) Toluene-D8(S)	8.37	98	260744	9.5245	ppb	0.00
Spiked Amount : 25.000			Recovery =	38.100%		
6) 4-Bromofluorobenzene(S)	11.27	95	71461	8.7127	ppb	0.00
Spiked Amount : 25.000			Recovery =	34.852%		

Target Compounds Qvalue

Quantitation Report

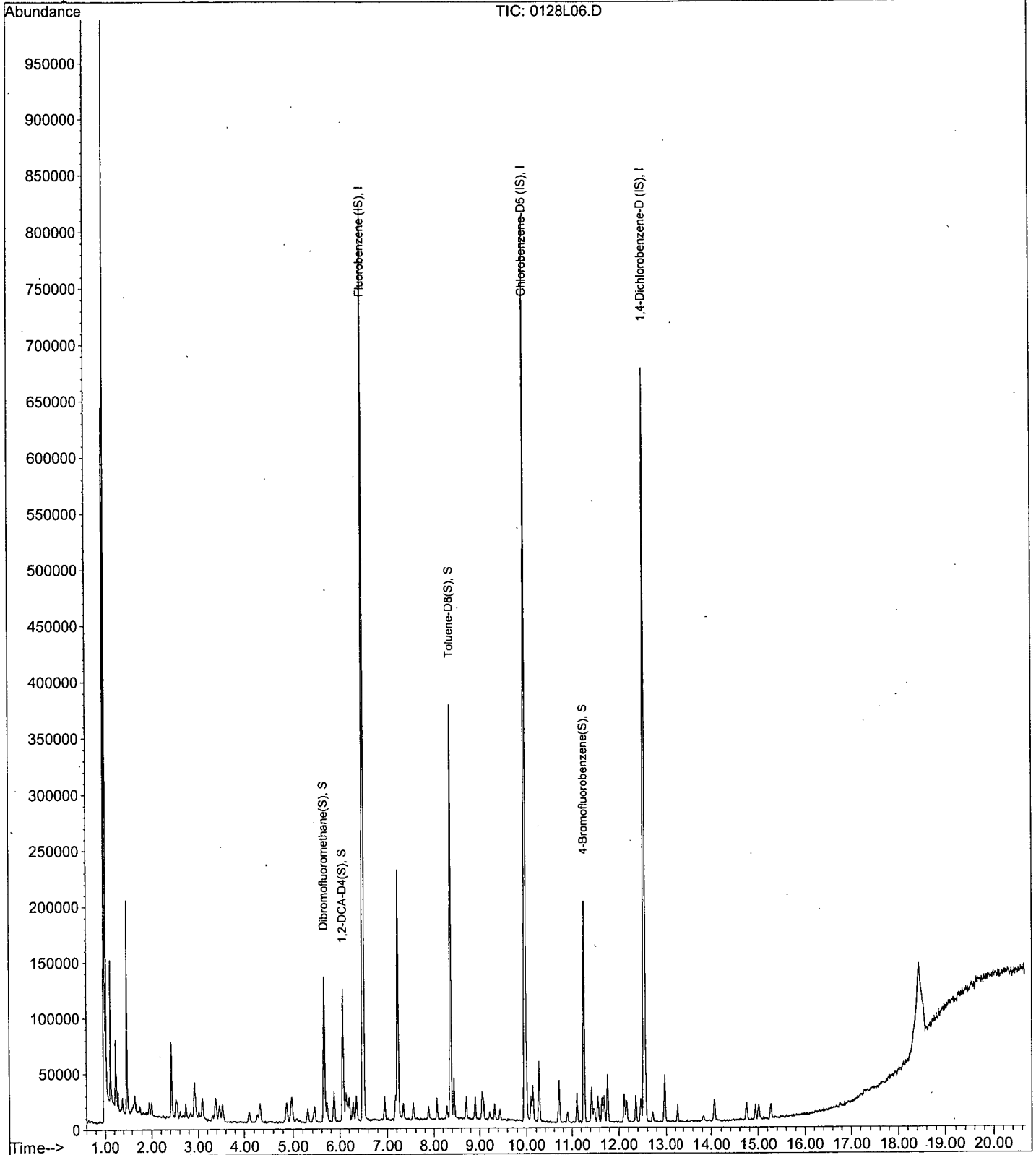
Data File : M:\LOKI\DATA\190128\0128L06.D  
Acq On : 28 Jan 19 16:29  
Sample : 2.0ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L07.D Vial: 6  
 Acq On : 28 Jan 19 16:57 Operator: PM, DG, SV, CMM, KV  
 Sample : 5.0ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	406976	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	273664	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	125568	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	196617	24.5718	ppb	0.00
Spiked Amount 25.000			Recovery =	98.288%		
3) 1,2-DCA-D4(S)	6.07	65	228144	24.5056	ppb	0.00
Spiked Amount 25.000			Recovery =	98.024%		
5) Toluene-D8(S)	8.37	98	687108	25.0871	ppb	0.00
Spiked Amount 25.000			Recovery =	100.348%		
6) 4-Bromofluorobenzene(S)	11.27	95	194145	23.6595	ppb	0.00
Spiked Amount 25.000			Recovery =	94.640%		

Target Compounds Qvalue

Quantitation Report

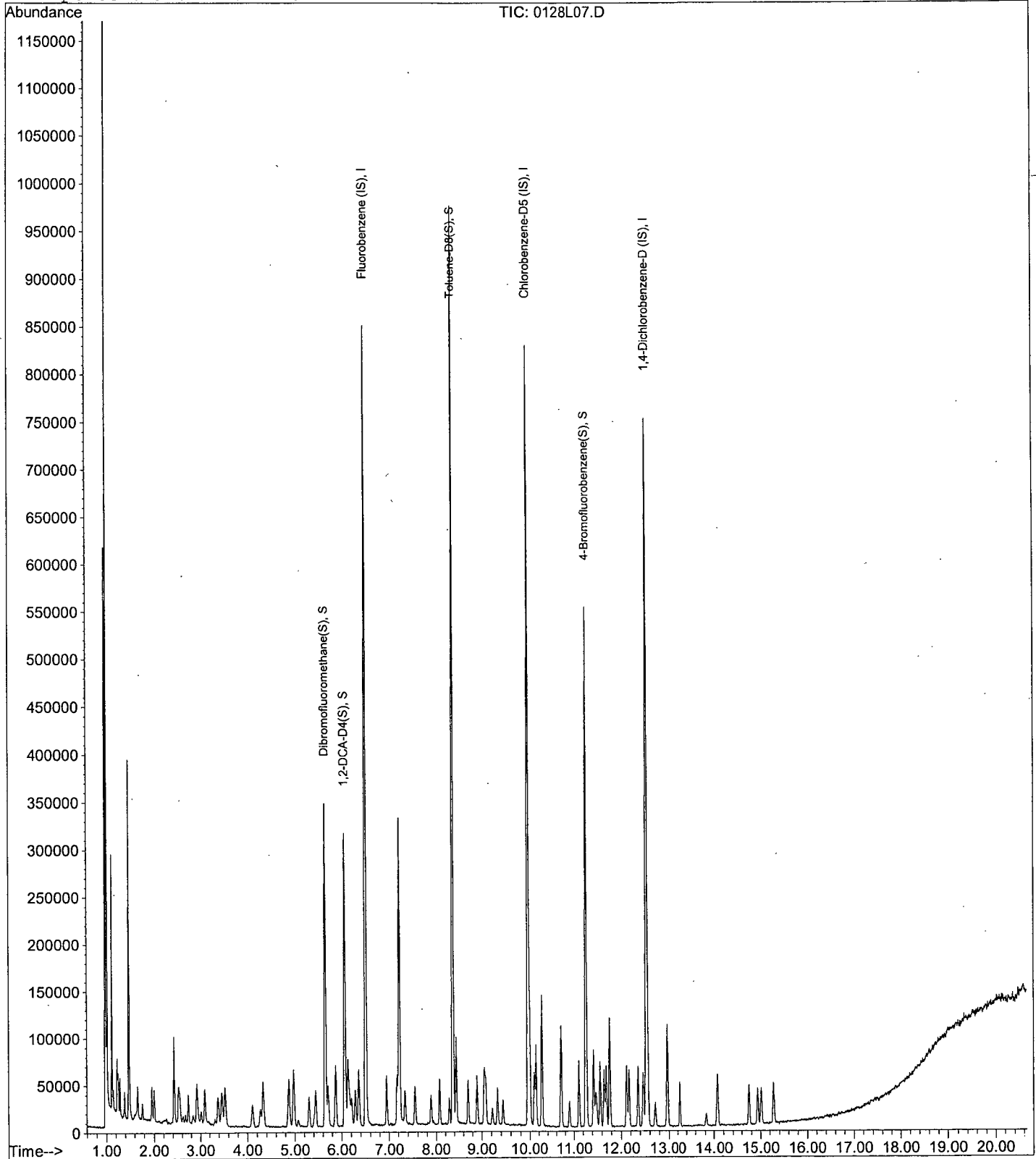
Data File : M:\LOKI\DATA\190128\0128L07.D  
Acq On : 28 Jan 19 16:57  
Sample : 5.0ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L08.D Vial: 7  
 Acq On : 28 Jan 19 17:26 Operator: PM,DG,SV,CMM,KV  
 Sample : 10ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	408128	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	289088	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	128392	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	198416	24.7266	ppb	0.00
Spiked Amount 25.000			Recovery =	98.908%		
3) 1,2-DCA-D4(S)	6.07	65	228932	24.5208	ppb	0.00
Spiked Amount 25.000			Recovery =	98.084%		
5) Toluene-D8(S)	8.37	98	711839	24.6034	ppb	0.00
Spiked Amount 25.000			Recovery =	98.412%		
6) 4-Bromofluorobenzene(S)	11.26	95	197094	22.7374	ppb	0.00
Spiked Amount 25.000			Recovery =	90.948%		

Target Compounds Qvalue

Quantitation Report

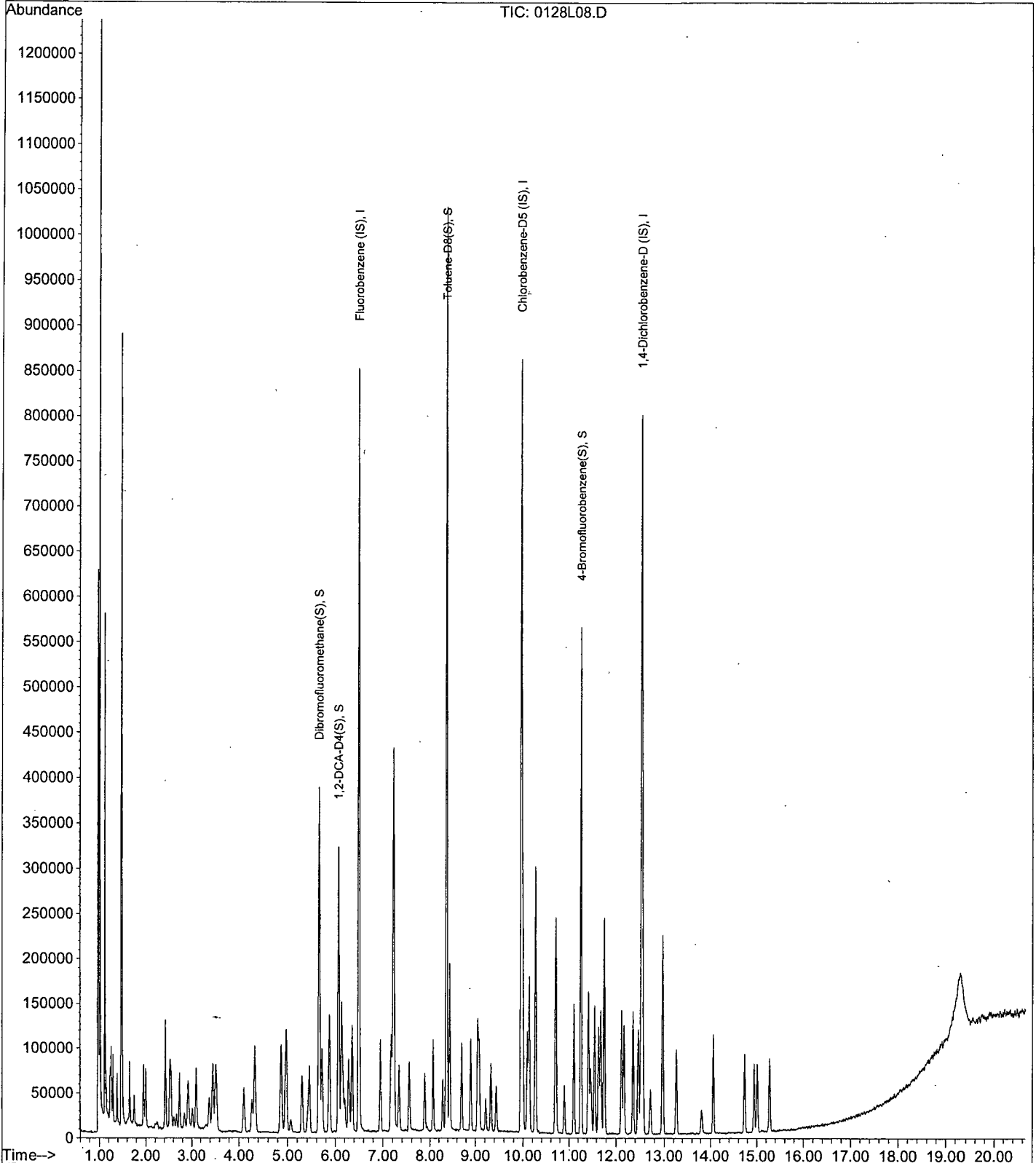
Data File : M:\LOKI\DATA\190128\0128L08.D  
Acq On : 28 Jan 19 17:26  
Sample : 10ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L09.D Vial: 8  
 Acq On : 28 Jan 19 17:55 Operator: PM, DG, SV, CMM, KV  
 Sample : 20ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	412032	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	296000	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	129368	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	400321	49.4153	ppb	0.00
Spiked Amount	25.000		Recovery	=	197.660%	
3) 1,2-DCA-D4(S)	6.07	65	465272	49.3630	ppb	0.00
Spiked Amount	25.000		Recovery	=	197.452%	
5) Toluene-D8(S)	8.37	98	1462858	49.3803	ppb	0.00
Spiked Amount	25.000		Recovery	=	197.520%	
6) 4-Bromofluorobenzene(S)	11.27	95	417458	47.0347	ppb	0.00
Spiked Amount	25.000		Recovery	=	188.140%	

Target Compounds Qvalue

Quantitation Report

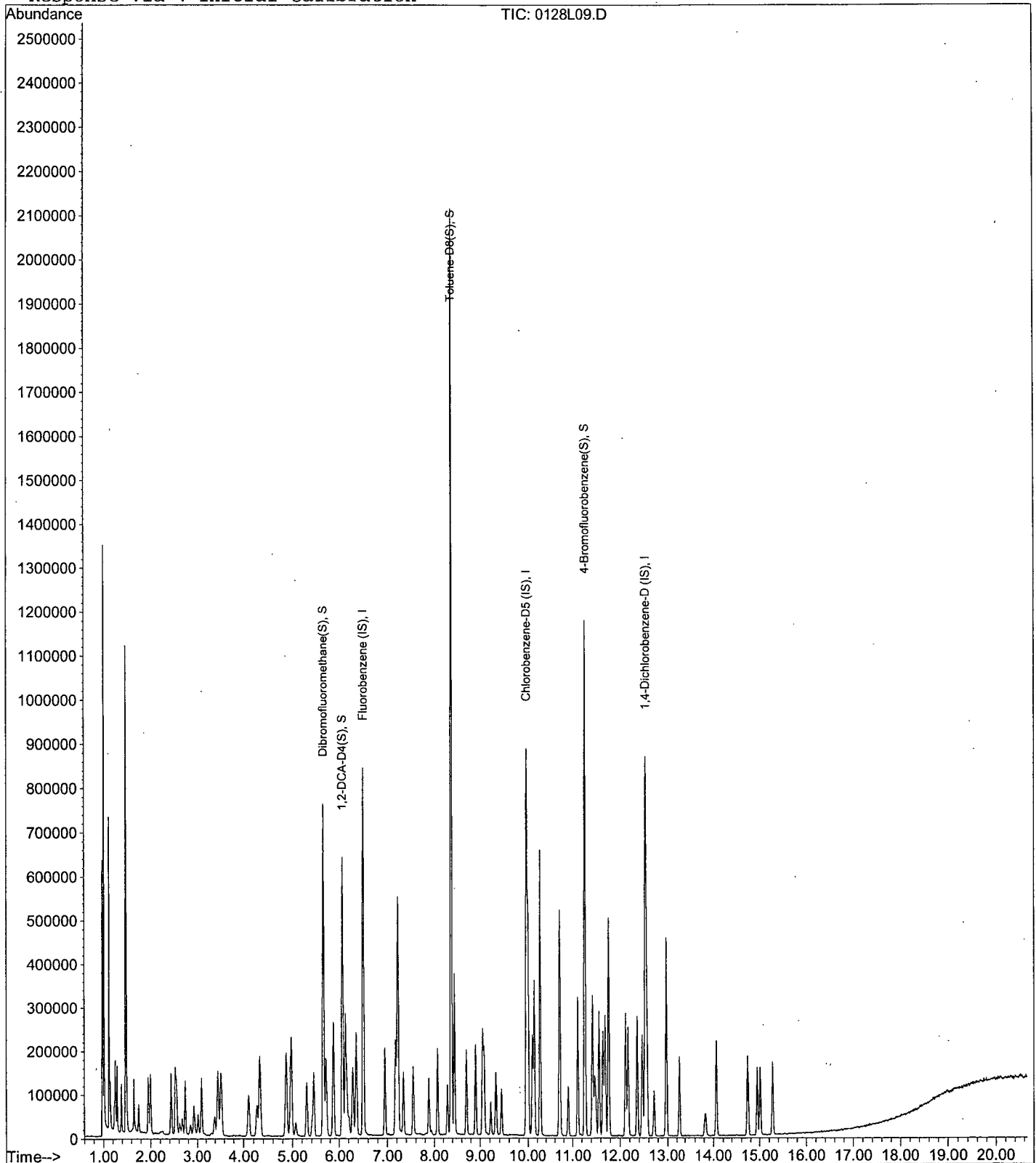
Data File : M:\LOKI\DATA\190128\0128L09.D  
Acq On : 28 Jan 19 17:55  
Sample : 20ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM,DG,SV,CMM,KV.  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration





Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L10.D Vial: 9  
 Acq On : 28 Jan 19 18:23 Operator: PM,DG,SV,CMM,KV  
 Sample : 40ug/L VOC STD 01/28/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	423040	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	328192	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	146240	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	410242	49.3222	ppb	0.00
Spiked Amount	25.000		Recovery	=	197.288%	
3) 1,2-DCA-D4(S)	6.07	65	463142	47.8584	ppb	0.00
Spiked Amount	25.000		Recovery	=	191.432%	
5) Toluene-D8(S)	8.37	98	1501546	45.7145	ppb	0.00
Spiked Amount	25.000		Recovery	=	182.856%	
6) 4-Bromofluorobenzene(S)	11.27	95	491105	49.9049	ppb	0.00
Spiked Amount	25.000		Recovery	=	199.620%	

Target Compounds Qvalue

Quantitation Report

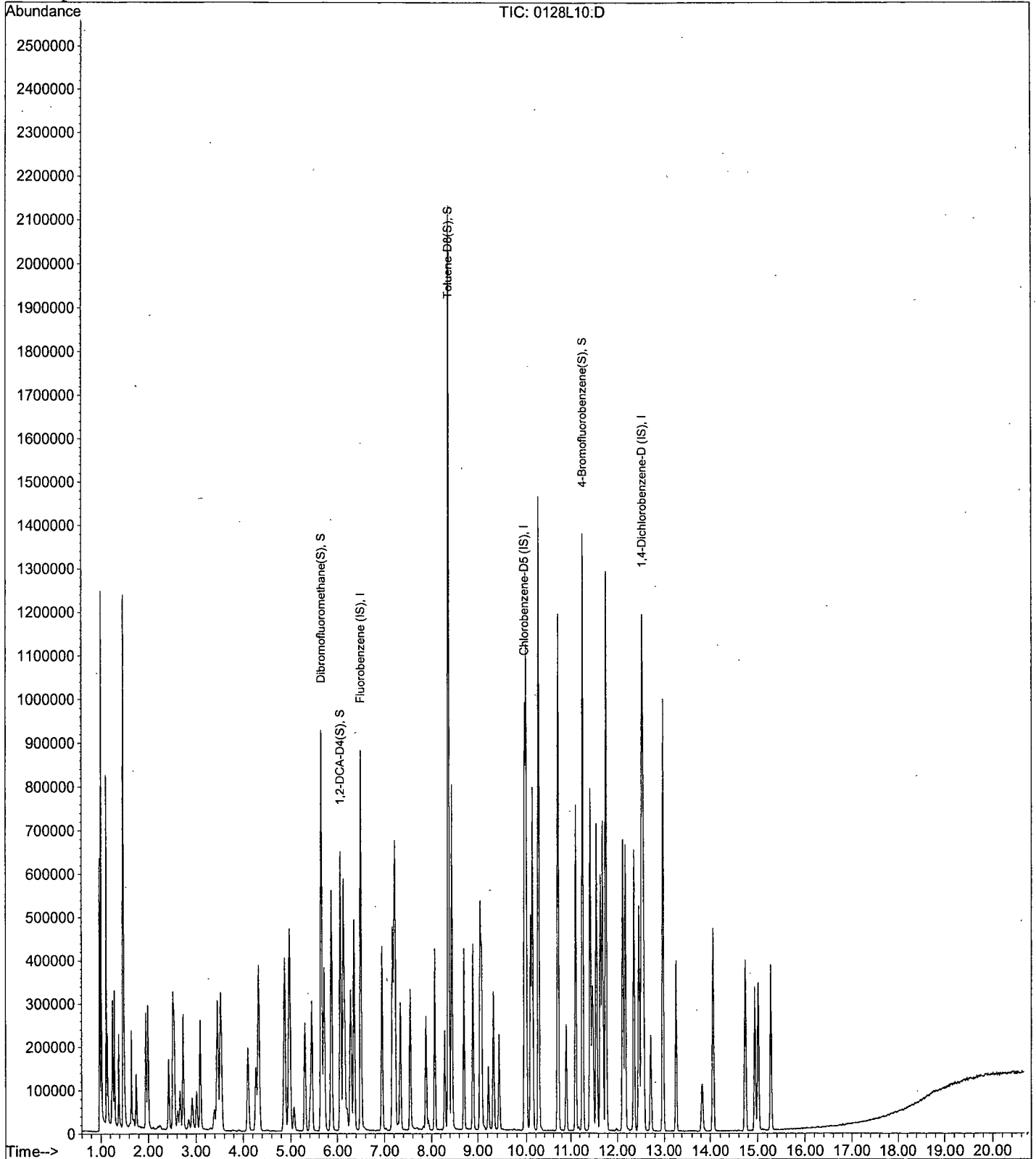
Data File : M:\LOKI\DATA\190128\0128L10.D  
Acq On : 28 Jan 19 18:23  
Sample : 40ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L11.D  
 Acq On : 28 Jan 19 18:52  
 Sample : 50ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	427264	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	334016	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	171456	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	795174	94.6564	ppb	0.00
Spiked Amount	25.000				Recovery = 378.624%	
3) 1,2-DCA-D4(S)	6.07	65	910540	93.1597	ppb	0.00
Spiked Amount	25.000				Recovery = 372.640%	
5) Toluene-D8(S)	8.37	98	3014125	90.1648	ppb	0.00
Spiked Amount	25.000				Recovery = 360.660%	
6) 4-Bromofluorobenzene(S)	11.27	95	1013641	101.2078	ppb	0.00
Spiked Amount	25.000				Recovery = 404.832%	

Target Compounds

Qvalue

Quantitation Report

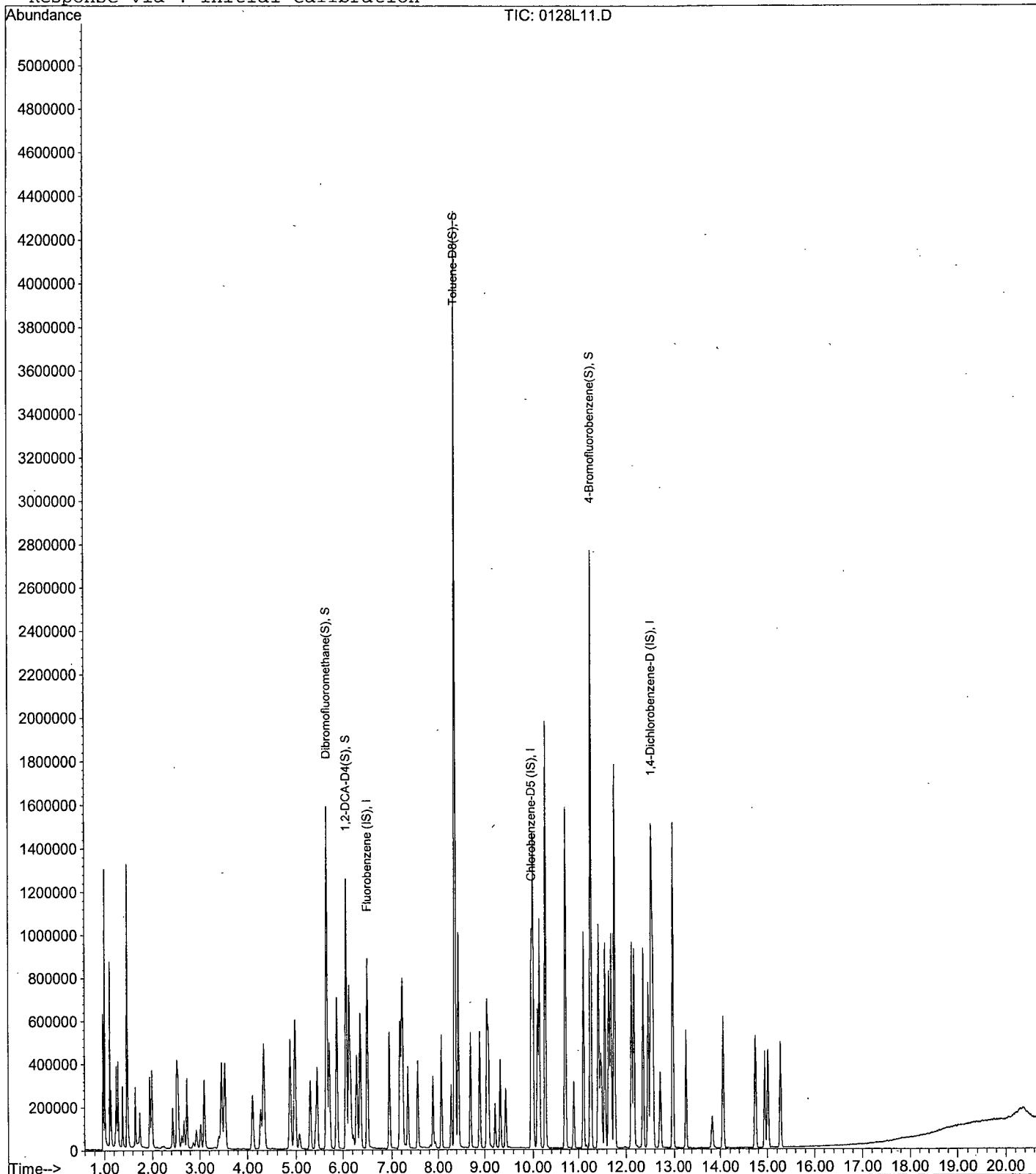
Data File : M:\LOKI\DATA\190128\0128L11.D  
Acq On : 28 Jan 19 18:52  
Sample : 50ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190128\0128L12.D  
 Acq On : 28 Jan 19 19:21  
 Sample : 100ug/L VOC STD 01/28/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	399808	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	335744	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	174784	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	756147	96.1920	ppb	0.00
Spiked Amount	25.000				Recovery = 384.768%	
3) 1,2-DCA-D4(S)	6.07	65	850540	92.9969	ppb	0.00
Spiked Amount	25.000				Recovery = 371.988%	
5) Toluene-D8(S)	8.37	98	2863025	85.2040	ppb	0.00
Spiked Amount	25.000				Recovery = 340.816%	
6) 4-Bromofluorobenzene(S)	11.26	95	1045481	103.8496	ppb	0.00
Spiked Amount	25.000				Recovery = 415.400%	

Target Compounds

Qvalue

Quantitation Report

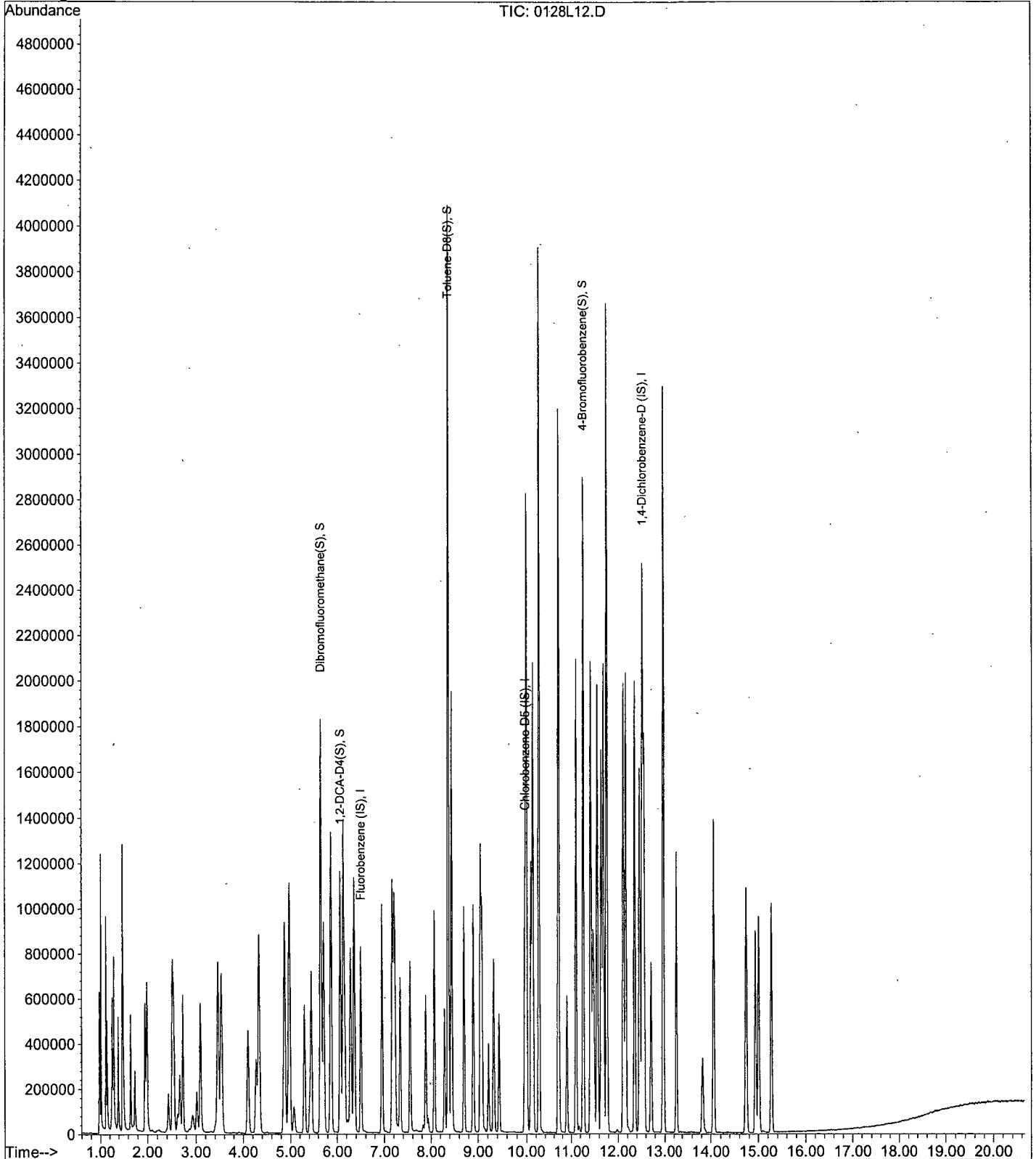
Data File : M:\LOKI\DATA\190128\0128L12.D  
Acq On : 28 Jan 19 19:21  
Sample : 100ug/L VOC STD 01/28/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 29 09:06:22 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: \_\_\_\_\_

Instrument: Loki

Initial Cal. Date: 01/28/19

Data File: 0128L18.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	3.937	1.434	64	TMHBL	4.3
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
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35							
36							
37							
38							
39							
40		Average			64.0		

Average

64.0

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: \_\_\_\_\_

Instrument: Loki

Initial Cal. Date: 01/28/19

Data File: 0128L18.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	S	Dibromofluoromethane(S)	0.4915	0.4937	0.43	S
3	S	1,2-DCA-D4(S)	0.5719	0.5603	2.0	S
4	I	Chlorobenzene-D5 (IS)	ISTD			I
5	S	Toluene-D8(S)	2.502	2.338	6.6	S
6	S	4-Bromofluorobenzene(S)	0.7496	0.7556	0.80	S
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40		Average			2.5	



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L18.D Vial: 17  
 Acq On : 28 Jan 19 22:12 Operator: PM,DG,SV,CMM,KV  
 Sample : 190128A CCV 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:47 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	814324	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	884948	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	684088	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	14015766m	287.0673	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L18.D  
 Acq On : 28 Jan 19 22:12  
 Sample : 190128A CCV 300ug/L  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	395392	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	302208	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	119408	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	195193	25.1085	ppb	0.00
Spiked Amount						Recovery = 100.432%
3) 1,2-DCA-D4(S)	6.07	65	221546	24.4941	ppb	0.00
Spiked Amount						Recovery = 97.976%
5) Toluene-D8(S)	8.37	98	706522	23.3595	ppb	0.00
Spiked Amount						Recovery = 93.436%
6) 4-Bromofluorobenzene(S)	11.26	95	228351	25.1996	ppb	0.00
Spiked Amount						Recovery = 100.800%
Target Compounds						Qvalue

Quantitation Report

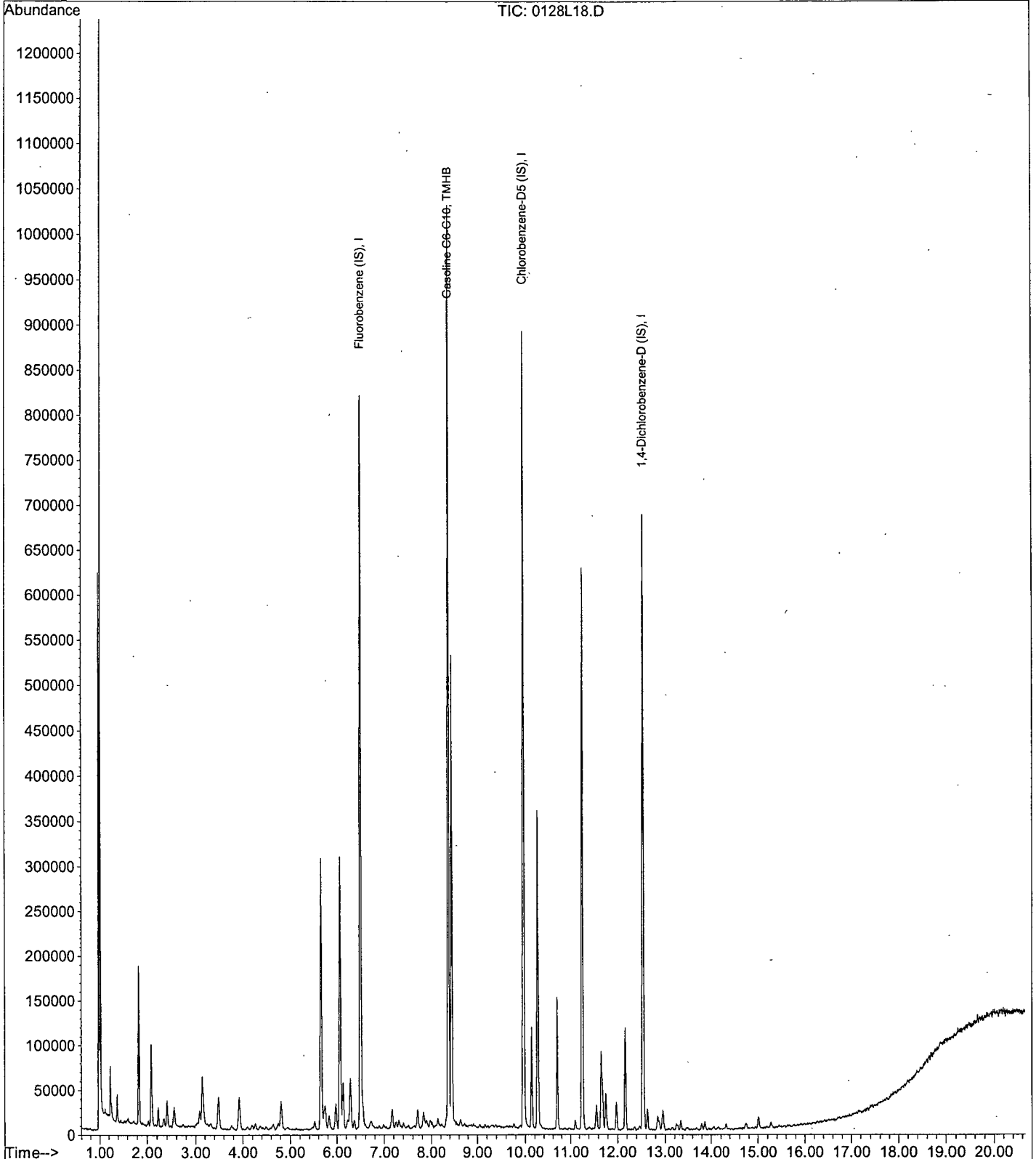
Data File : M:\LOKI\DATA\190128\0128L18.D  
Acq On : 28 Jan 19 22:12  
Sample : 190128A CCV 300ug/L  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:47 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Loki  
Initial Cal. Date: 01/28/19  
Data File: 0128L39.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	S Dibromofluoromethane(S)	0.4915	0.4993	1.6	S
3	S 1,2-DCA-D4(S)	0.5719	0.5593	2.2	S
4	I Chlorobenzene-D5 (IS)	ISTD			I
5	S Toluene-D8(S)	2.502	2.229	11	S
6	S 4-Bromofluorobenzene(S)	0.7496	0.7925	5.7	S
7	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
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25					
26					
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28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			5.1	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L39.D  
 Acq On : 29 Jan 19 8:12  
 Sample : Ending CCV 300ug/L 01/28/19  
 Misc : IS&S 11/8/18

Vial: 38  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 30 12:53 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	772414	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	883208	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	804122	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	13087227m	274.9923	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L39.D  
 Acq On : 29 Jan 19 8:12  
 Sample : Ending CCV 300ug/L 01/28/19  
 Misc : IS&S 11/8/18

Vial: 38  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	376256	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	305344	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	138624	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	187871	25.3957	ppb	0.00
Spiked Amount	25.000					Recovery = 101.584%
3) 1,2-DCA-D4(S)	6.07	65	210422	24.4474	ppb	0.00
Spiked Amount	25.000					Recovery = 97.788%
5) Toluene-D8(S)	8.37	98	680645	22.2728	ppb	0.00
Spiked Amount	25.000					Recovery = 89.092%
6) 4-Bromofluorobenzene(S)	11.27	95	241993	26.4308	ppb	0.00
Spiked Amount	25.000					Recovery = 105.724%

Target Compounds Qvalue

Quantitation Report

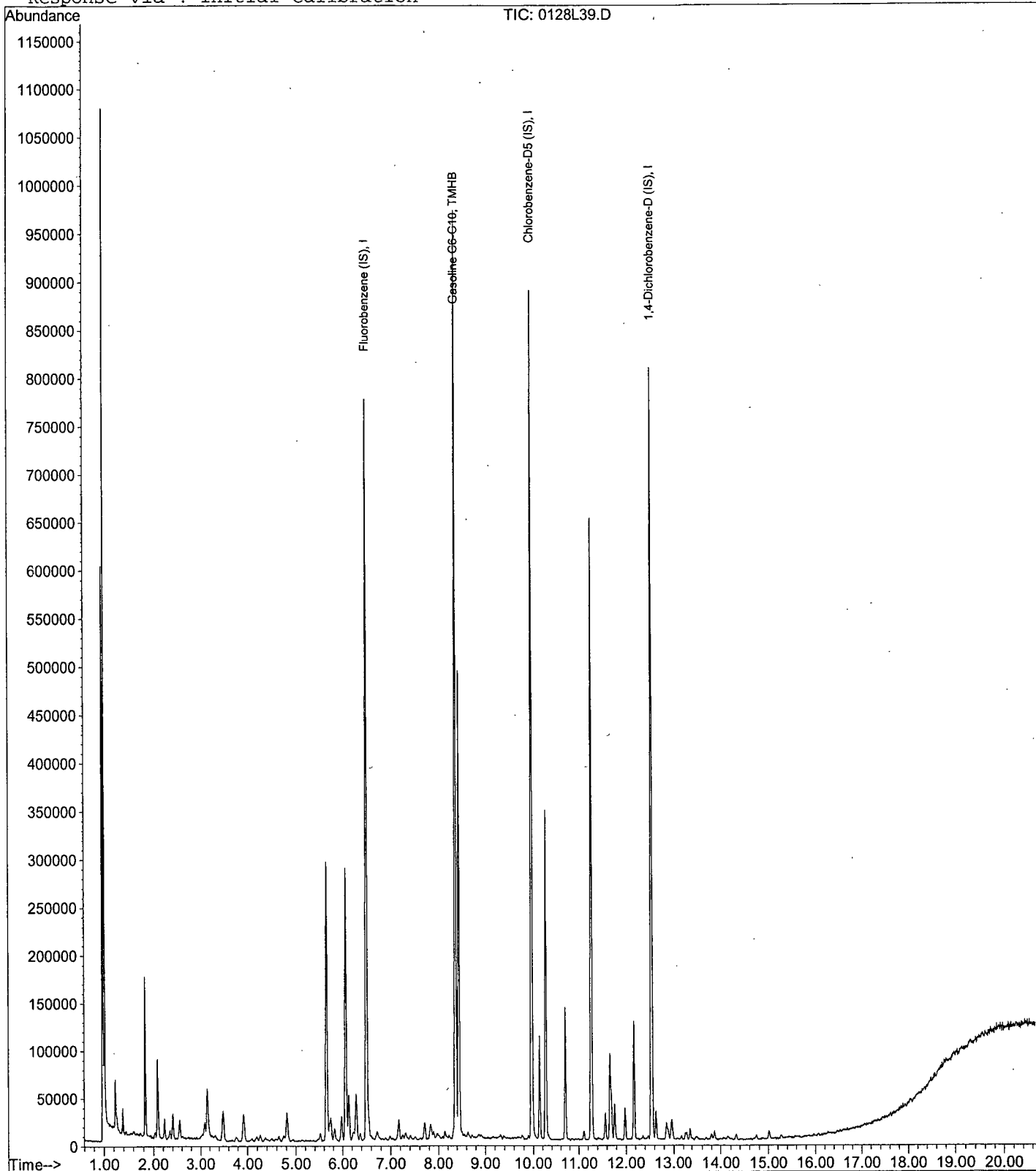
Data File : M:\LOKI\DATA\190128\0128L39.D  
Acq On : 29 Jan 19 8:12  
Sample : Ending CCV 300ug/L 01/28/19  
Misc : IS&S 11/8/18

Vial: 38  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:53 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L25.D Vial: 24  
 Acq On : 29 Jan 19 1:32 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85519W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:50 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	804650	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	889693	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	678313	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L25.D  
 Acq On : 29 Jan 19 1:32  
 Sample : AZ85519W01  
 Misc : IS&S 11/8/18

Vial: 24  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	391104	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	306432	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	120232	25.0000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	5.65	111	192930	25.0895	ppb	0.00
Spiked Amount				25.000		
				Recovery =	100.356%	
3) 1,2-DCA-D4(S)	6.07	65	216786	24.2306	ppb	0.00
Spiked Amount				25.000		
				Recovery =	96.924%	
5) Toluene-D8(S)	8.37	98	698968	22.7912	ppb	0.00
Spiked Amount				25.000		
				Recovery =	91.164%	
6) 4-Bromofluorobenzene(S)	11.26	95	223805	24.3575	ppb	0.00
Spiked Amount				25.000		
				Recovery =	97.432%	

Target Compounds

Qvalue

Quantitation Report

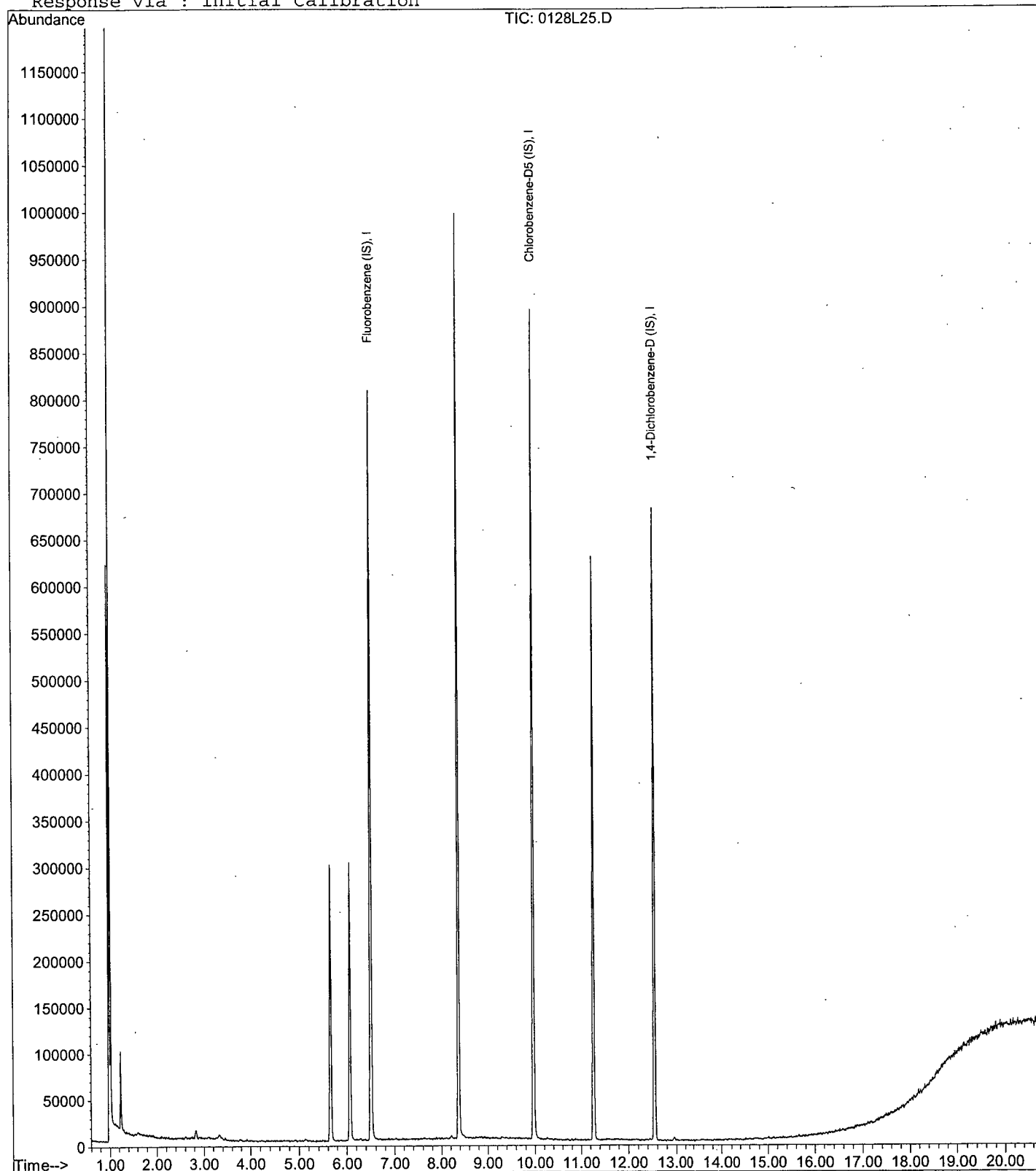
Data File : M:\LOKI\DATA\190128\0128L25.D  
Acq On : 29 Jan 19 1:32  
Sample : AZ85519W01  
Misc : IS&S 11/8/18

Vial: 24  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:50 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L26.D Vial: 25  
 Acq On : 29 Jan 19 2:01 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85522W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:50 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	802622	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	880510	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	663379	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L26.D  
 Acq On : 29 Jan 19 2:01  
 Sample : AZ85522W01  
 Misc : IS&S 11/8/18

Vial: 25  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	392320	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	301056	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	116720	25.0000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	5.65	111	195559	25.3525	ppb	0.00
Spiked Amount				25.000		
				Recovery =	101.412%	
3) 1,2-DCA-D4(S)	6.07	65	221668	24.6995	ppb	0.00
Spiked Amount				25.000		
				Recovery =	98.796%	
5) Toluene-D8(S)	8.37	98	711662	23.6194	ppb	0.00
Spiked Amount				25.000		
				Recovery =	94.476%	
6) 4-Bromofluorobenzene(S)	11.26	95	226916	25.1371	ppb	0.00
Spiked Amount				25.000		
				Recovery =	100.548%	

Target Compounds

Qvalue

Quantitation Report

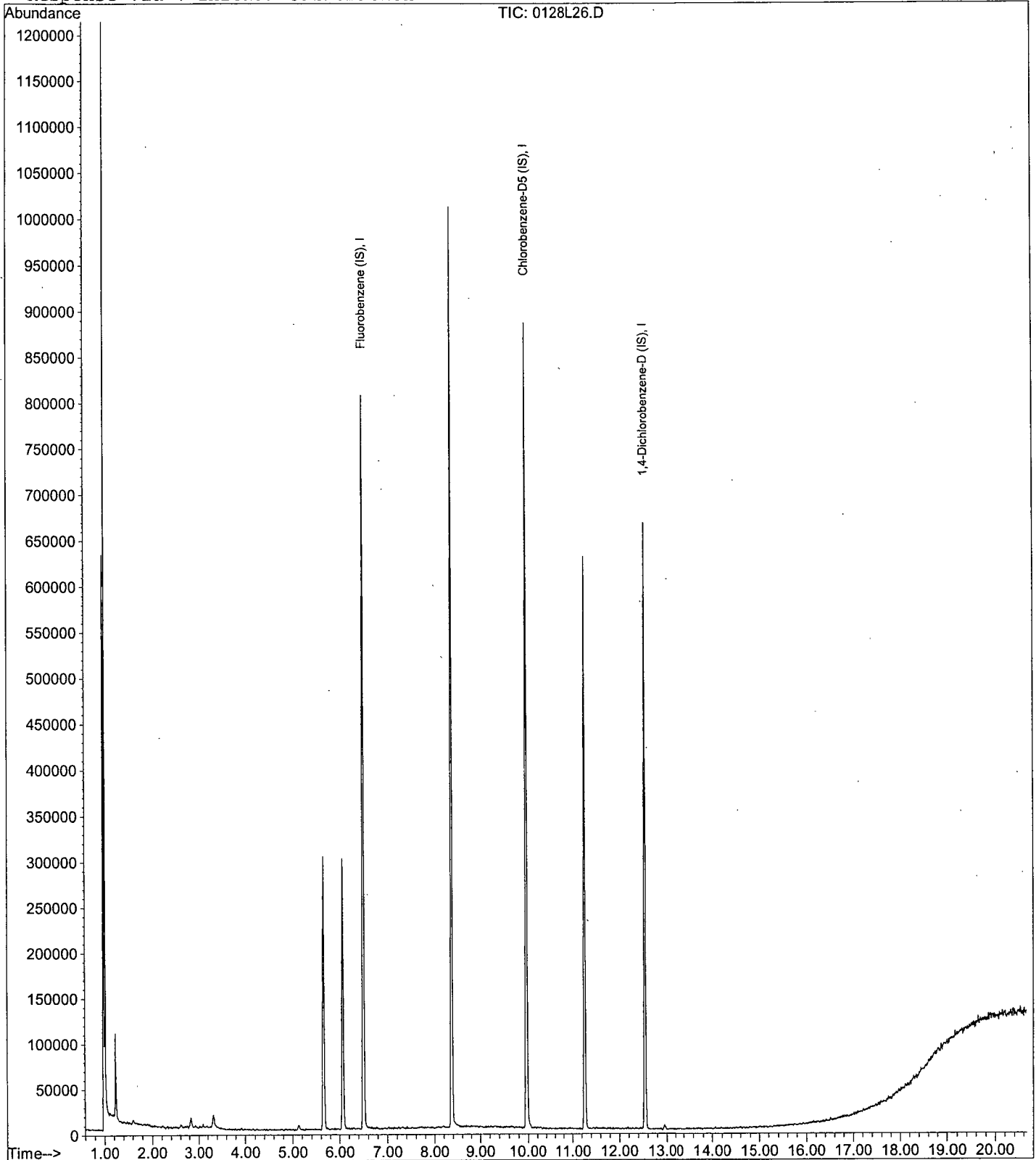
Data File : M:\LOKI\DATA\190128\0128L26.D  
Acq On : 29 Jan 19 2:01  
Sample : AZ85522W01  
Misc : IS&S 11/8/18

Vial: 25  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:50 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L27.D Vial: 26  
 Acq On : 29 Jan 19 2:29 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85526W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:50 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	789759	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	894882	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	727875	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L27.D  
 Acq On : 29 Jan 19 2:29  
 Sample : AZ85526W01  
 Misc : IS&S 11/8/18

Vial: 26  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	385856	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	307456	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	126240	25.0000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	5.65	111	191482	25.2398	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	100.960%
3) 1,2-DCA-D4(S)	6.07	65	218495	24.7538	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	99.016%
5) Toluene-D8(S)	8.37	98	706377	22.9560	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	91.824%
6) 4-Bromofluorobenzene(S)	11.26	95	230665	25.0205	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	100.080%

Target Compounds

Qvalue



Quantitation Report

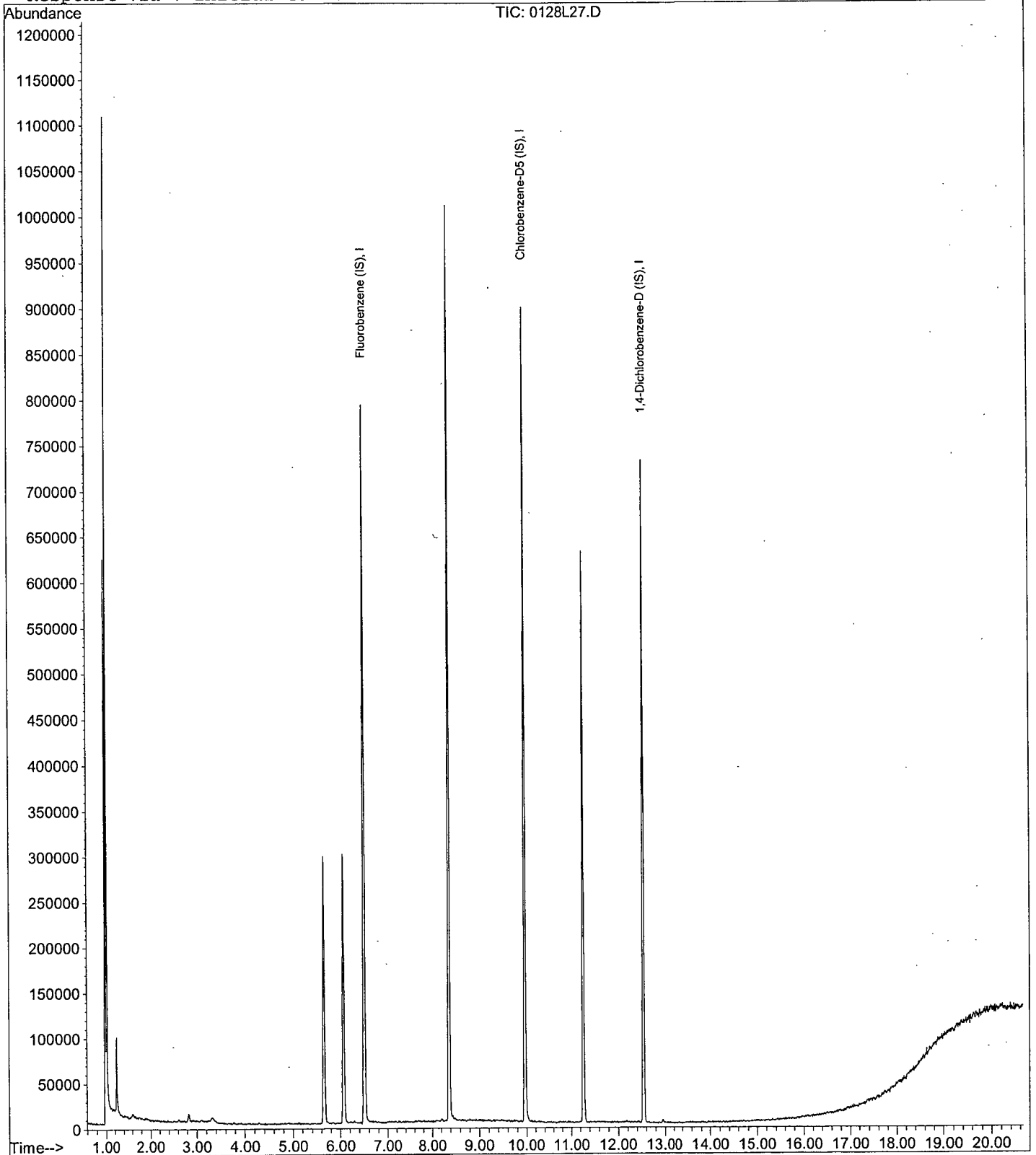
Data File : M:\LOKI\DATA\190128\0128L27.D  
Acq On : 29 Jan 19 2:29  
Sample : AZ85526W01  
Misc : IS&S 11/8/18

Vial: 26  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:50 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L28.D Vial: 27  
 Acq On : 29 Jan 19 2:58 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85520W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:51 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	811409	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	916479	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	764443	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	9650229m	47.6707	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L28.D  
 Acq On : 29 Jan 19 2:58  
 Sample : AZ85520W01  
 Misc : IS&S 11/8/18

Vial: 27  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIOn	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	395200	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	314944	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	128624	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	191881	24.6944	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	98.776%
3) 1,2-DCA-D4(S)	6.07	65	215954	23.8874	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.548%
5) Toluene-D8(S)	8.37	98	691752	21.9462	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	87.784%
6) 4-Bromofluorobenzene(S)	11.26	95	226035	23.9353	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	95.740%

Target Compounds

Qvalue

Quantitation Report

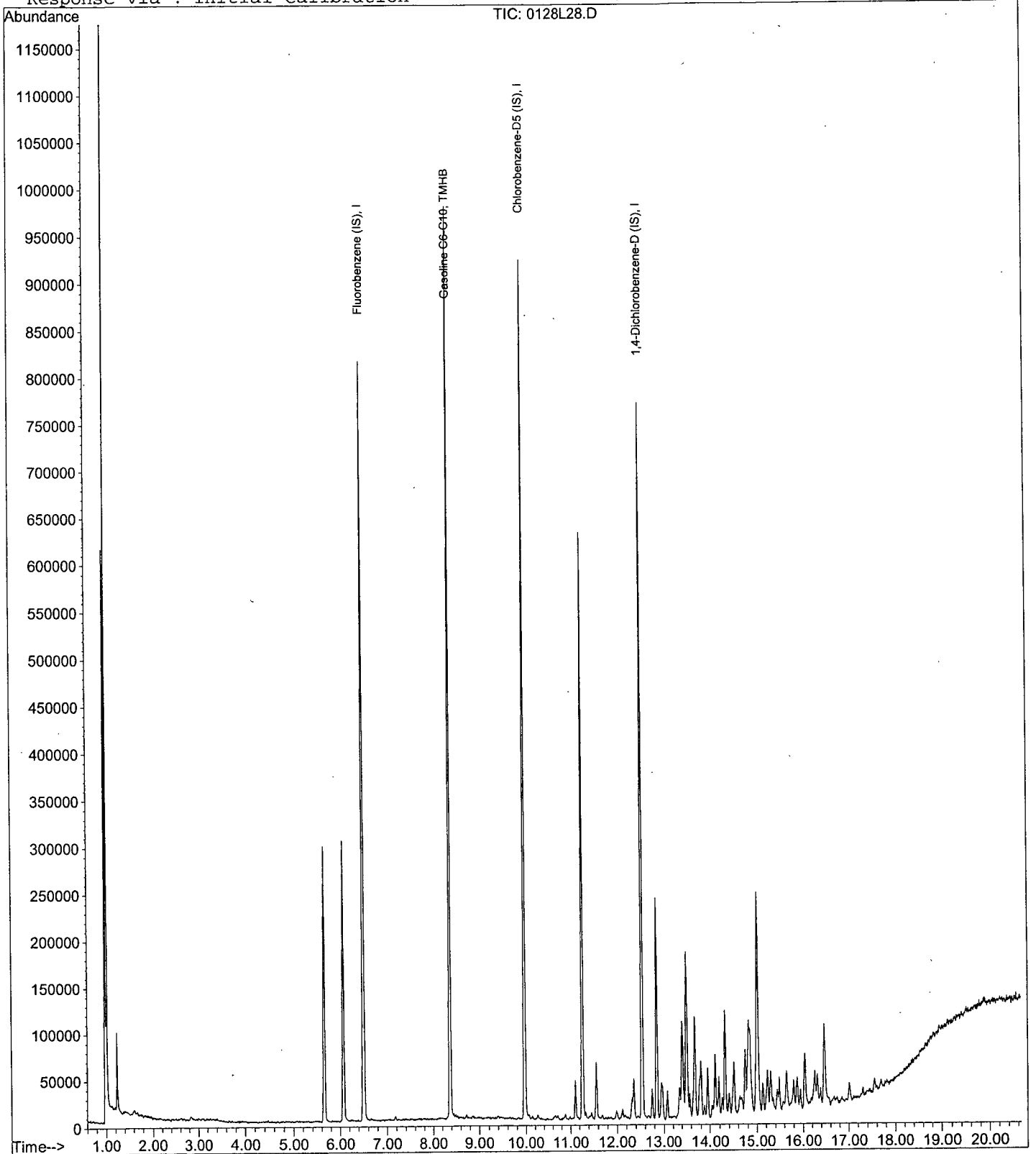
Data File : M:\LOKI\DATA\190128\0128L28.D  
Acq On : 29 Jan 19 2:58  
Sample : AZ85520W01  
Misc : IS&S 11/8/18

Vial: 27  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:51 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L29.D  
 Acq On : 29 Jan 19 3:27  
 Sample : AZ85521W01  
 Misc : IS&S 11/8/18

Vial: 28  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	853430	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	972024	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	827681	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	9669041m	22.3035	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L29.D  
 Acq On : 29 Jan 19 3:27  
 Sample : AZ85521W01  
 Misc : IS&S 11/8/18

Vial: 28  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	413248	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	333952	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	140608	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	193617	23.8296	ppb	0.00
Spiked Amount				25.000		
					Recovery =	95.320%
3) 1,2-DCA-D4(S)	6.07	65	214190	22.6576	ppb	0.00
Spiked Amount				25.000		
					Recovery =	90.632%
5) Toluene-D8(S)	8.37	98	696670	20.8442	ppb	0.00
Spiked Amount				25.000		
					Recovery =	83.376%
6) 4-Bromofluorobenzene(S)	11.27	95	238922	23.8599	ppb	0.00
Spiked Amount				25.000		
					Recovery =	95.440%
Target Compounds					Qvalue	

Quantitation Report

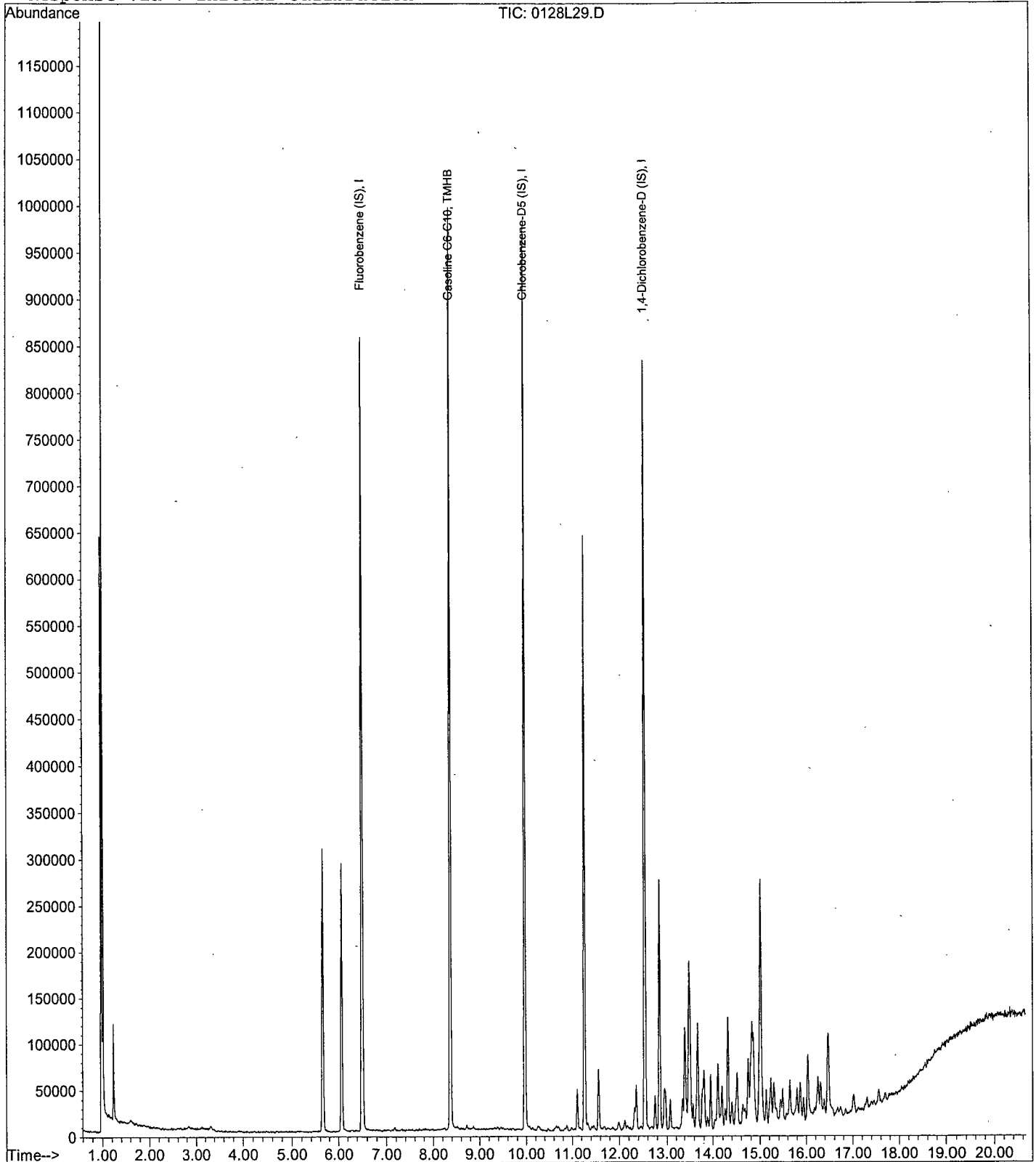
Data File : M:\LOKI\DATA\190128\0128L29.D  
Acq On : 29 Jan 19 3:27  
Sample : AZ85521W01  
Misc : IS&S 11/8/18

Vial: 28  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L30.D  
 Acq On : 29 Jan 19 3:55  
 Sample : AZ85523W01  
 Misc : IS&S 11/8/18

Vial: 29  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	770199	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	875163	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	770686	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L30.D Vial: 29  
 Acq On : 29 Jan 19 3:55 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85523W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	372608	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	302592	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	133504	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	186122	25.4056	ppb	0.00
Spiked Amount	25.000					Recovery = 101.624%
3) 1,2-DCA-D4(S)	6.07	65	212834	24.9697	ppb	0.00
Spiked Amount	25.000					Recovery = 99.880%
5) Toluene-D8(S)	8.37	98	690576	22.8033	ppb	0.00
Spiked Amount	25.000					Recovery = 91.212%
6) 4-Bromofluorobenzene(S)	11.26	95	231555	25.5208	ppb	0.00
Spiked Amount	25.000					Recovery = 102.084%
Target Compounds						Qvalue

Quantitation Report

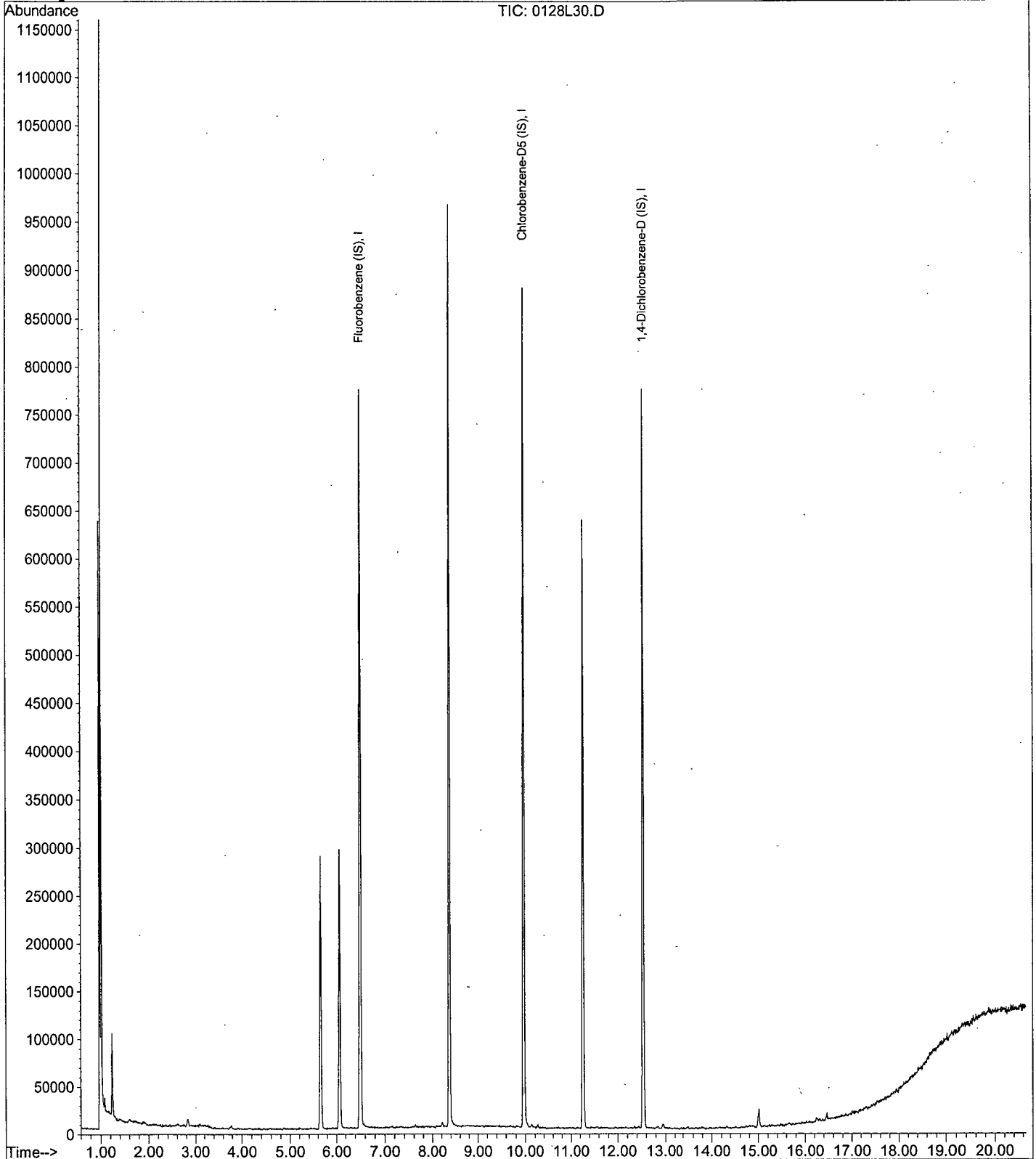
Data File : M:\LOKI\DATA\190128\0128L30.D  
Acq On : 29 Jan 19 3:55  
Sample : AZ85523W01  
Misc : IS&S 11/8/18

Vial: 29  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L31.D  
 Acq On : 29 Jan 19 4:24  
 Sample : AZ85524W01  
 Misc : IS&S 11/8/18

Vial: 30  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	791812	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	885561	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	733212	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L31.D  
 Acq On : 29 Jan 19 4:24  
 Sample : AZ85524W01  
 Misc : IS&S 11/8/18

Vial: 30  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	389824	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	306880	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	126088	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	194151	25.3312	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 101.324%	
3) 1,2-DCA-D4(S)	6.07	65	223970	25.1158	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 100.464%	
5) Toluene-D8(S)	8.37	98	722243	23.5157	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 94.064%	
6) 4-Bromofluorobenzene(S)	11.26	95	234983	25.5367	ppb	0.00
Spiked Amount				25.000		
				Recovery	= 102.148%	

Target Compounds Qvalue

Quantitation Report

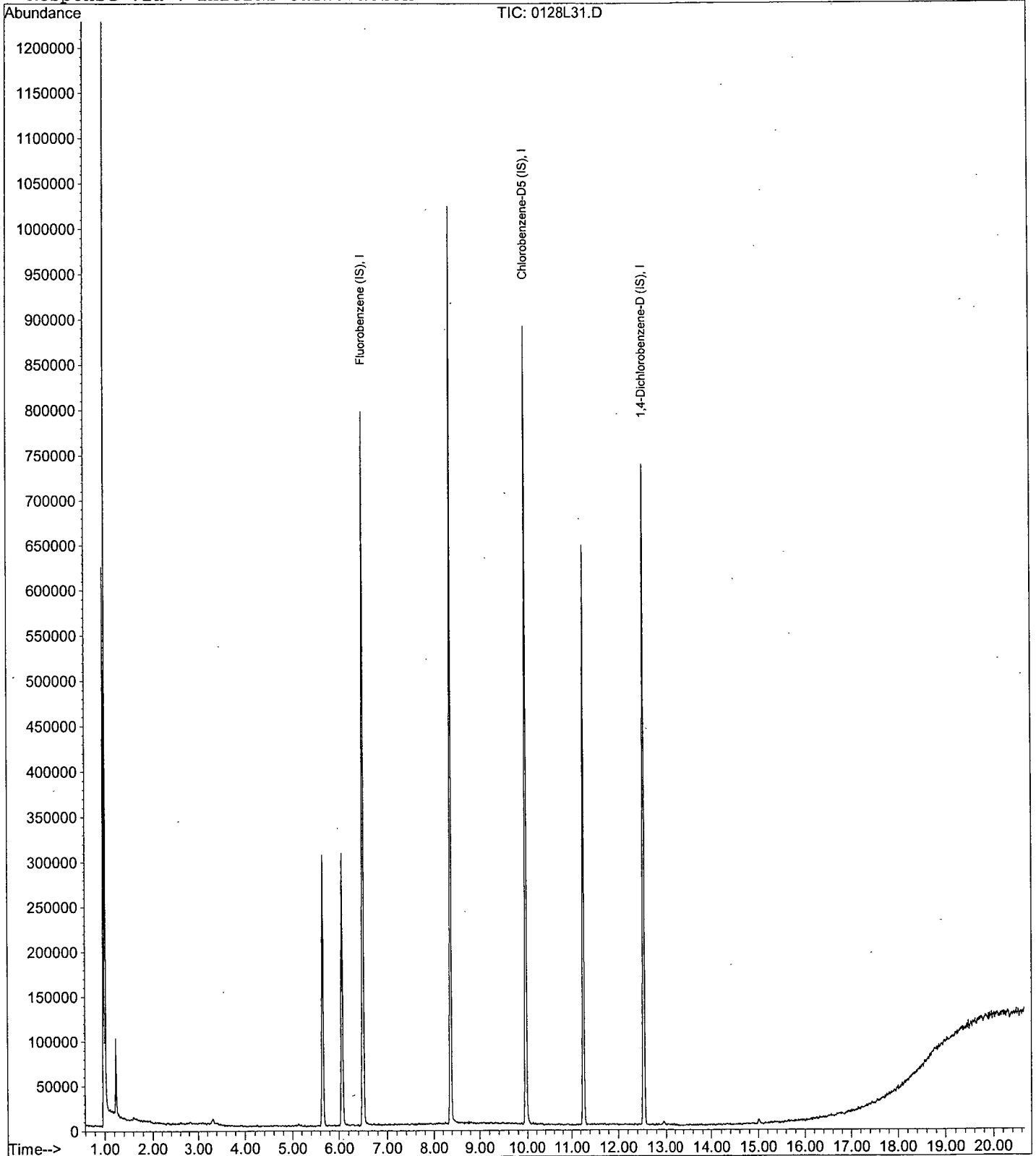
Data File : M:\LOKI\DATA\190128\0128L31.D  
Acq On : 29 Jan 19 4:24  
Sample : AZ85524W01  
Misc : IS&S 11/8/18

Vial: 30  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L32.D  
 Acq On : 29 Jan 19 4:52  
 Sample : AZ85525W01  
 Misc : IS&S 11/8/18

Vial: 31  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	756025	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	854665	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	754047	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds . Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L32.D  
 Acq On : 29 Jan 19 4:52  
 Sample : AZ85525W01  
 Misc : IS&S 11/8/18

Vial: 31  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	364736	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	292928	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	130736	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	184874	25.7799	ppb	0.00
Spiked Amount						
						Recovery = 103.120%
3) 1,2-DCA-D4(S)	6.07	65	207414	24.8591	ppb	0.00
Spiked Amount						
						Recovery = 99.436%
5) Toluene-D8(S)	8.37	98	669135	22.8242	ppb	0.00
Spiked Amount						
						Recovery = 91.296%
6) 4-Bromofluorobenzene(S)	11.26	95	228569	26.0228	ppb	0.00
Spiked Amount						
						Recovery = 104.092%
Target Compounds						Qvalue

Quantitation Report

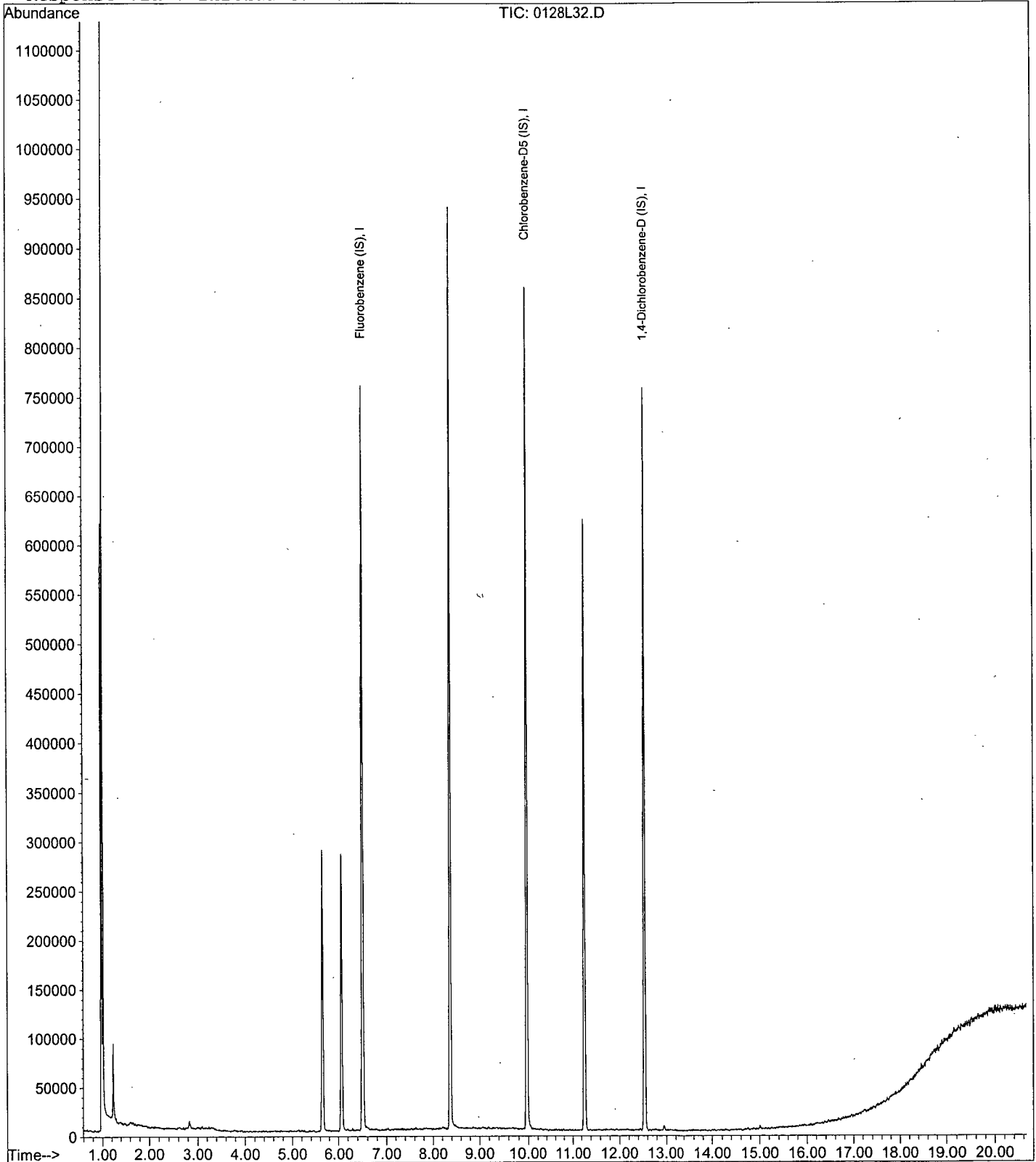
Data File : M:\LOKI\DATA\190128\0128L32.D  
Acq On : 29 Jan 19 4:52  
Sample : AZ85525W01  
Misc : IS&S 11/8/18

Vial: 31  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L33.D Vial: 32  
 Acq On : 29 Jan 19 5:21 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85527W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:52 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	839467	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	946351	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	788518	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L33.D Vial: 32  
 Acq On : 29 Jan 19 5:21 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85527W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	408192	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	325632	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	136512	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	196105	24.4348	ppb	0.00
Spiked Amount						
						Recovery = 97.740%
3) 1,2-DCA-D4(S)	6.07	65	222715	23.8512	ppb	0.00
Spiked Amount						
						Recovery = 95.404%
5) Toluene-D8(S)	8.37	98	698426	21.4307	ppb	0.00
Spiked Amount						
						Recovery = 85.724%
6) 4-Bromofluorobenzene(S)	11.26	95	236151	24.1858	ppb	0.00
Spiked Amount						
						Recovery = 96.744%

Target Compounds Qvalue

Quantitation Report

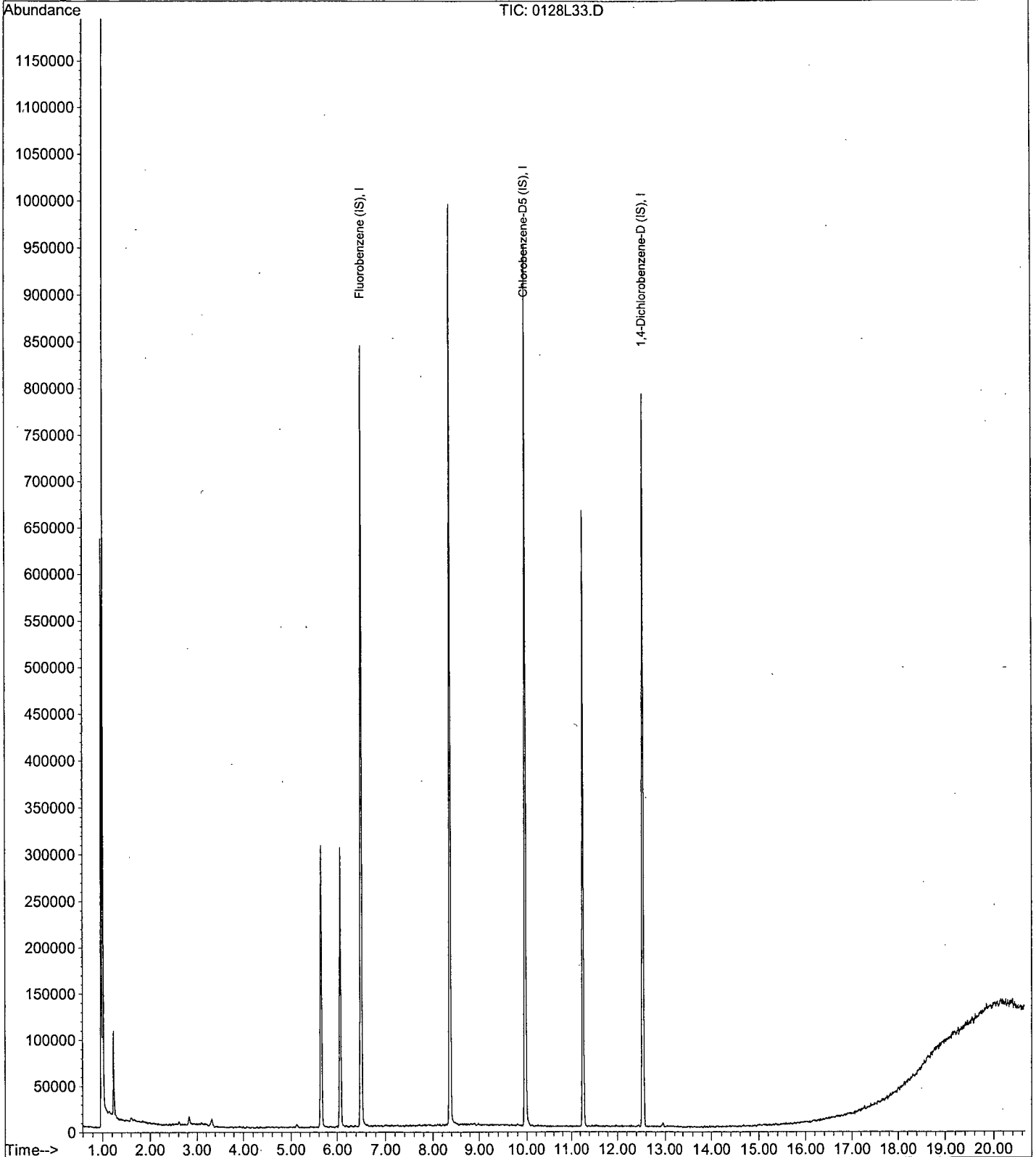
Data File : M:\LOKI\DATA\190128\0128L33.D  
Acq On : 29 Jan 19 5:21  
Sample : AZ85527W01  
Misc : IS&S 11/8/18

Vial: 32  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:52 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator).  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration.



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L22.D  
 Acq On : 29 Jan 19 00:06  
 Sample : 190128A blk  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 30 12:49 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	788659	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	858533	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	653653	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L22.D  
 Acq On : 29 Jan 19 00:06  
 Sample : 190128A blk  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	381568	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	292096	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	111128	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	188308	25.1004	ppb	0.00
Spiked Amount						
					Recovery = 100.400%	
3) 1,2-DCA-D4(S)	6.07	65	215707	24.7125	ppb	0.00
Spiked Amount						
					Recovery = 98.852%	
5) Toluene-D8(S)	8.37	98	687717	23.5249	ppb	0.00
Spiked Amount						
					Recovery = 94.100%	
6) 4-Bromofluorobenzene(S)	11.27	95	216438	24.7118	ppb	0.00
Spiked Amount						
					Recovery = 98.848%	
Target Compounds						Qvalue

Quantitation Report

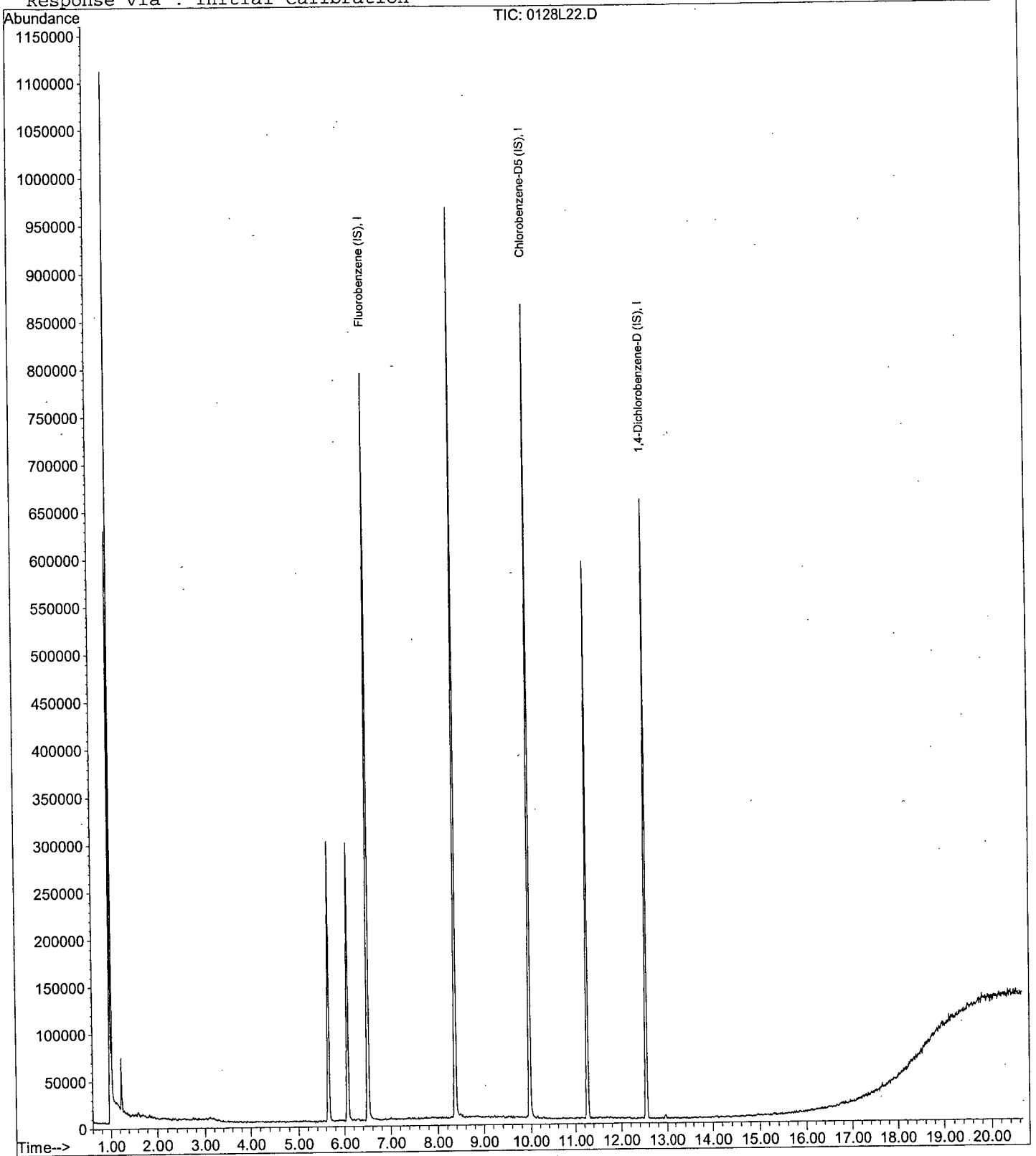
Data File : M:\LOKI\DATA\190128\0128L22.D  
Acq On : 29 Jan 19 00:06  
Sample : 190128A blk  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:49 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L23.D  
 Acq On : 29 Jan 19 00:35  
 Sample : AZ85645W01  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan. 30 12:49 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	883350	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	915168	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	683987	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L19.D Vial: 18  
 Acq On : 28 Jan 19 22:41 Operator: PM,DG,SV,CMM,KV  
 Sample : 190128A LCS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:56 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	926371	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	993135	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	782044	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	15416503m	261.4228	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L19.D Vial: 18  
 Acq On : 28 Jan 19 22:41 Operator: PM, DG, SV, CMM, KV  
 Sample : 190128A LCS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019 Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	451712	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	335936	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	137344	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	197243	22.2087	ppb	0.00
Spiked Amount				25.000		
					Recovery =	88.836%
3) 1,2-DCA-D4(S)	6.07	65	227111	21.9787	ppb	0.00
Spiked Amount				25.000		
					Recovery =	87.916%
5) Toluene-D8(S)	8.37	98	736629	21.9096	ppb	0.00
Spiked Amount				25.000		
					Recovery =	87.640%
6) 4-Bromofluorobenzene(S)	11.26	95	228334	22.6679	ppb	0.00
Spiked Amount				25.000		
					Recovery =	90.672%
Target Compounds					Qvalue	

Quantitation Report

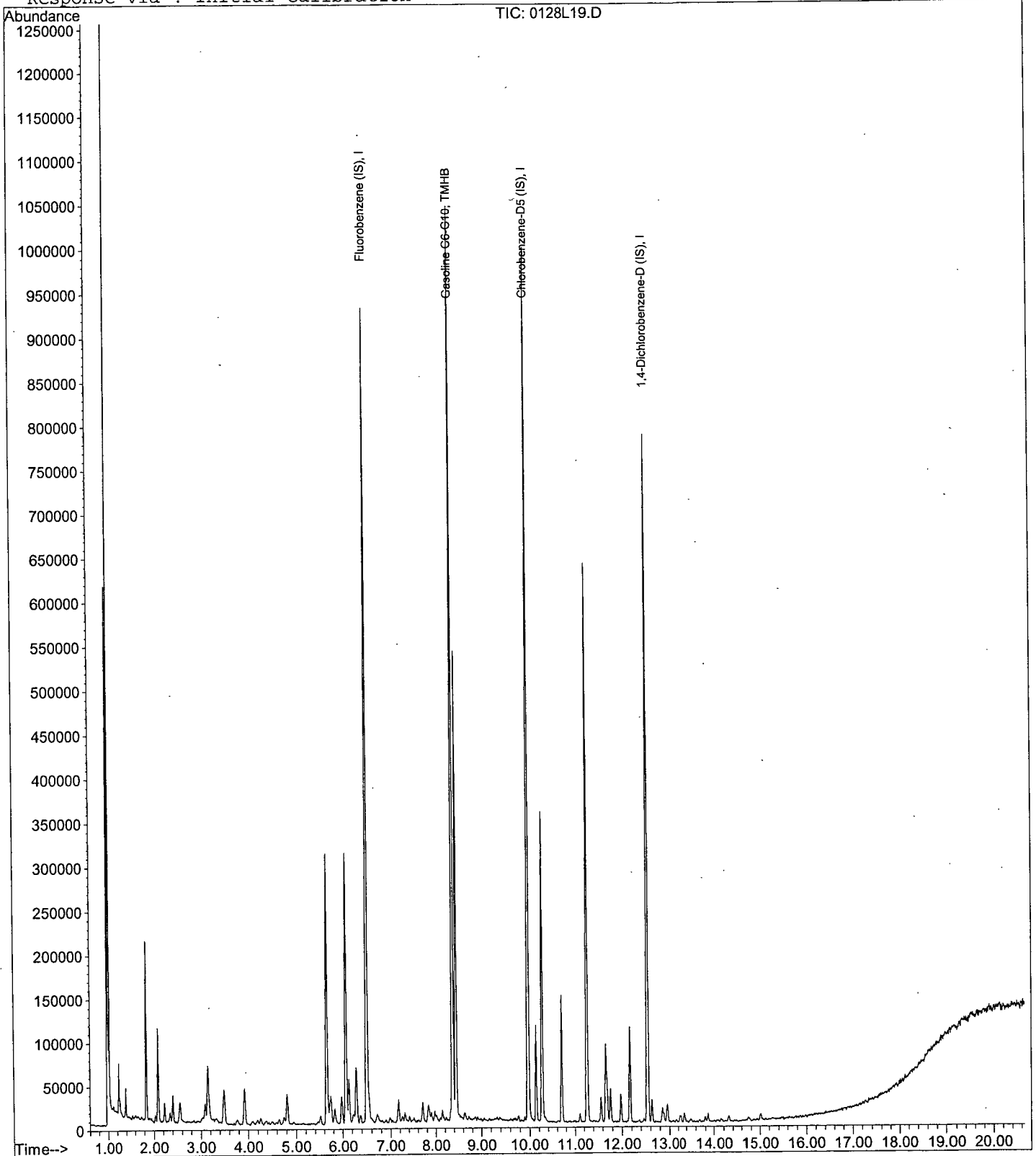
Data File : M:\LOKI\DATA\190128\0128L19.D  
Acq On : 28 Jan 19 22:41  
Sample : 190128A LCS 300ug/L  
Misc : IS&S 11/8/18

Vial: 18  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:56 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190128\0128L20.D Vial: 19  
 Acq On : 28 Jan 19 23:09 Operator: PM,DG,SV,CMM,KV  
 Sample : 190128A LCSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 30 12:48 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	815384	25.0000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	882471	25.0000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	708638	25.0000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	14110409m	291.2849	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190128\0128L20.D  
 Acq On : 28 Jan 19 23:09  
 Sample : 190128A LCSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 19  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 14:06 2019

Quant Results File: L0128SUR.RES

Quant Method : M:\LOKI\DATA\190128\L0128SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 29 09:06:22 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	394816	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	302400	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	127248	25.0000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	193879	24.9758	ppb	0.00
Spiked Amount						
					Recovery = 99.904%	
3) 1,2-DCA-D4(S)	6.07	65	222518	24.6374	ppb	0.00
Spiked Amount						
					Recovery = 98.548%	
5) Toluene-D8(S)	8.37	98	708702	23.4167	ppb	0.00
Spiked Amount						
					Recovery = 93.668%	
6) 4-Bromofluorobenzene(S)	11.26	95	227380	25.0765	ppb	0.00
Spiked Amount						
					Recovery = 100.308%	
Target Compounds						Qvalue

Quantitation Report

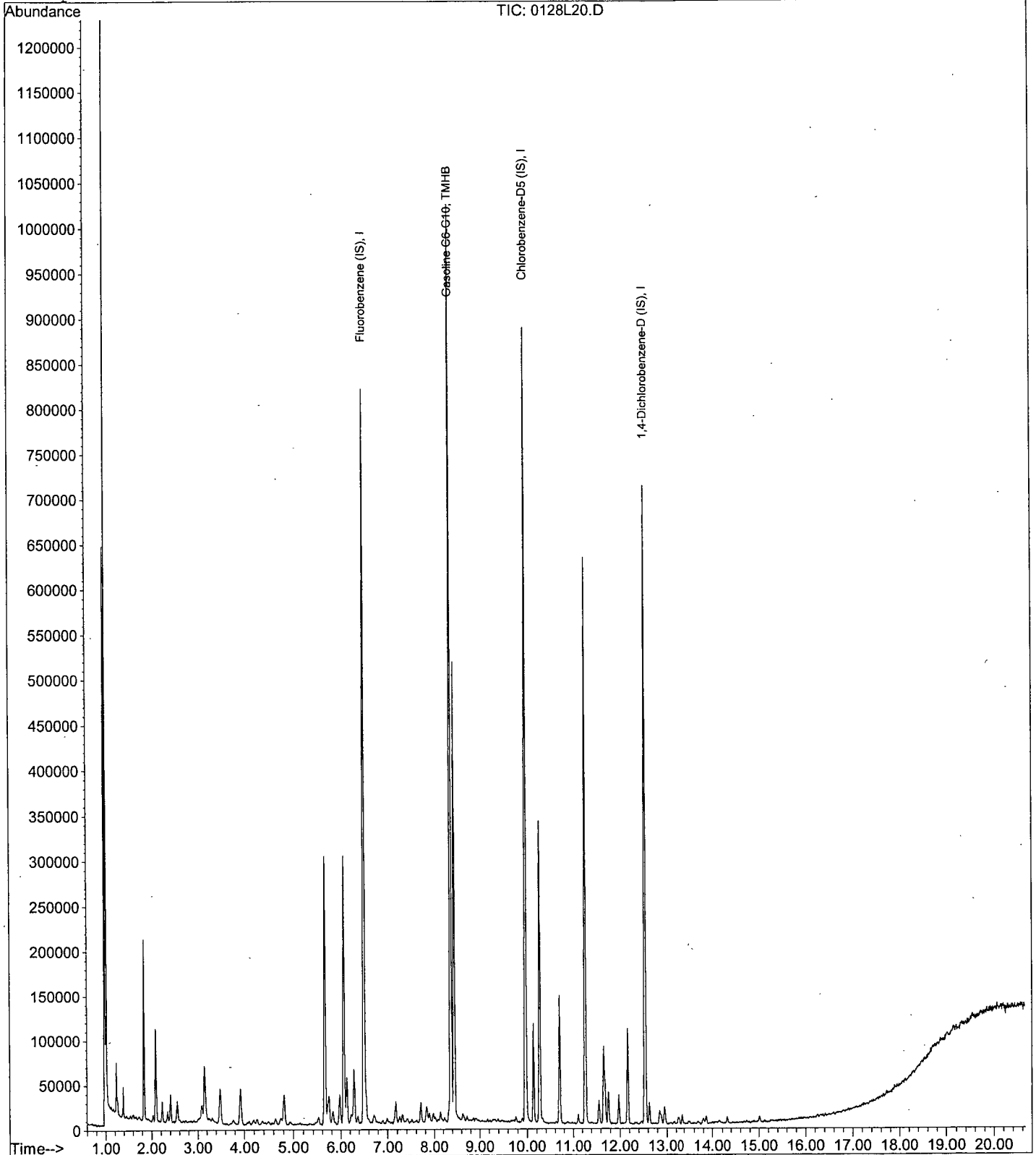
Data File : M:\LOKI\DATA\190128\0128L20.D  
Acq On : 28 Jan 19 23:09  
Sample : 190128A LCSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 19  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 30 12:48 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190128\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



### Loki Gas Standard Prep

<b>Gas Primary Working Standard</b>										
Prepared: 01/14/19						Prepared By (Initials): <u>CMM</u>				
Expires: 11/01/19										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39861	11/01/19	12/31/24	80uL	2mL	Methanol	2,000
<b>Gas Second Source (SS) Working Standard</b>										
Prepared: 01/14/19						Prepared By (Initials): <u>CMM</u>				
Expires: 01/14/20										
Methanol Lot No. 946										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (5,000ppm)	O2SI	020246-06	5,000	G34-326538-39193	01/14/20	10/31/20	800uL	2mL	Methanol	2,000
<b>Loki Gas Calibration Curve</b>										
Prepared: 01/22/19						Prepared By (Initials): <u>CMM</u>				
Expires: 03/23/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA Gasses Standards	Phenova	20ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	1uL	100mL	P&T Water	20
VOA Gasses Standards	Phenova	50ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	2.5uL	100mL	P&T Water	50
VOA Gasses Standards	Phenova	100ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	5uL	100mL	P&T Water	100
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	15uL	100mL	P&T Water	300
VOA Gasses Standards	Phenova	600ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	30uL	100mL	P&T Water	600
VOA Gasses Standards	Phenova	800ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	40uL	100mL	P&T Water	800
VOA Gasses Standards	Phenova	1,000ug/L	2,000	Prepared 01/14/19	11/01/19	N/A	50uL	100mL	P&T Water	1,000
<b>Loki Gas Second Source</b>										
Prepared: 01/22/19						Prepared By (Initials): <u>CMM</u>				
Expires: 03/23/19										

Gas Primary Working Standard										
Prepared: 01/14/19						Prepared By (Initials): <u>CMM</u>				
Expires: 12/31/24										
Methanol Lot No. 9077-02										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39861	11/01/19	12/31/24	80uL	2mL	Methanol	2,000
Gas Second Source (SS) Working Standard										
Prepared: 01/14/19						Prepared By (Initials): <u>CMM</u>				
Expires: 10/31/20										
Methanol Lot No. 946										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (5,000ppm)	O2SI	020246-06	5,000	G34-326538-39193	01/14/20	10/31/20	800uL	2mL	Methanol	2,000

## Injection Log

Directory: M:\LOKI\DATA\190121\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	0122L03.D	1	20ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 14:10
2	3	0122L04.D	1	50ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 14:39
3	4	0122L05.D	1	100ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 15:07
4	5	0122L06.D	1	300ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 15:36
5	6	0122L07.D	1	600ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 16:04
6	7	0122L08.D	1	800ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 16:33
7	8	0122L09.D	1	1000ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 17:01
8	11	0122L12.D	1	(SS)300ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 18:27
9	2	0128L03.D	1	0.3ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 15:03
10	3	0128L04.D	1	0.5ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 15:31
11	4	0128L05.D	1	1.0ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 16:00
12	5	0128L06.D	1	2.0ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 16:29
13	6	0128L07.D	1	5.0ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 16:57
14	7	0128L08.D	1	10ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 17:26
15	8	0128L09.D	1	20ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 17:55
16	9	0128L10.D	1	40ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 18:23
17	10	0128L11.D	1	50ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 18:52
18	11	0128L12.D	1	100ug/L VOC STD 01/28/19	IS&S 11/8/18	28 Jan 19 19:21
19	17	0128L18.D	1	190128A CCV 300ug/L	IS&S 11/8/18	28 Jan 19 22:12
20	18	0128L19.D	1	190128A LCS 300ug/L	IS&S 11/8/18	28 Jan 19 22:41
21	19	0128L20.D	1	190128A LCSD 300ug/L	IS&S 11/8/18	28 Jan 19 23:09
22	21	0128L22.D	1	190128A blk	IS&S 11/8/18	29 Jan 19 00:06
23	24	0128L25.D	1	AZ85519W01	IS&S 11/8/18	29 Jan 19 1:32
24	25	0128L26.D	1	AZ85522W01	IS&S 11/8/18	29 Jan 19 2:01
25	26	0128L27.D	1	AZ85526W01	IS&S 11/8/18	29 Jan 19 2:29
26	27	0128L28.D	1	AZ85520W01	IS&S 11/8/18	29 Jan 19 2:58
27	28	0128L29.D	1	AZ85521W01	IS&S 11/8/18	29 Jan 19 3:27
28	29	0128L30.D	1	AZ85523W01	IS&S 11/8/18	29 Jan 19 3:55
29	30	0128L31.D	1	AZ85524W01	IS&S 11/8/18	29 Jan 19 4:24
30	31	0128L32.D	1	AZ85525W01	IS&S 11/8/18	29 Jan 19 4:52
31	32	0128L33.D	1	AZ85527W01	IS&S 11/8/18	29 Jan 19 5:21
32	38	0128L39.D	1	Ending CCV 300ug/L 01/28/19	IS&S 11/8/18	29 Jan 19 8:12



**ORGANICS**  
**Calibration Data**

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/20/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initials: \_\_\_\_\_

19012000.D    19012001.D    19012002.D    19012003.D    19012005.D    19012007.D    19012008.D

		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r <sup>2</sup>	Q
1	ATML	Methane	31727	15184	9929	15034	12111	11418	8746				14878	52	ATM	0.994	
2	ATML	Ethane	25078	13064	8590	12630	9815	9659	7285				12303	49	ATM	0.994	
3	ATML	Ethene	22488	11903	7914	11685	9157	8919	6685				11250	47	ATM	0.993	
4																	
5																	
6																	
7																	
8																	
9																	
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11																	
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33																	
34																	
35																	

4.239405

Data File : G:\ROCKY\DATA\190120RS\19012000.D Vial: 1  
 Acq On : 20 Jan 19 11:58 Operator: cmm  
 Sample : RSK Std 1 01/20/19 Inst : 7890  
 Misc : 125uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:35 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:34:55 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

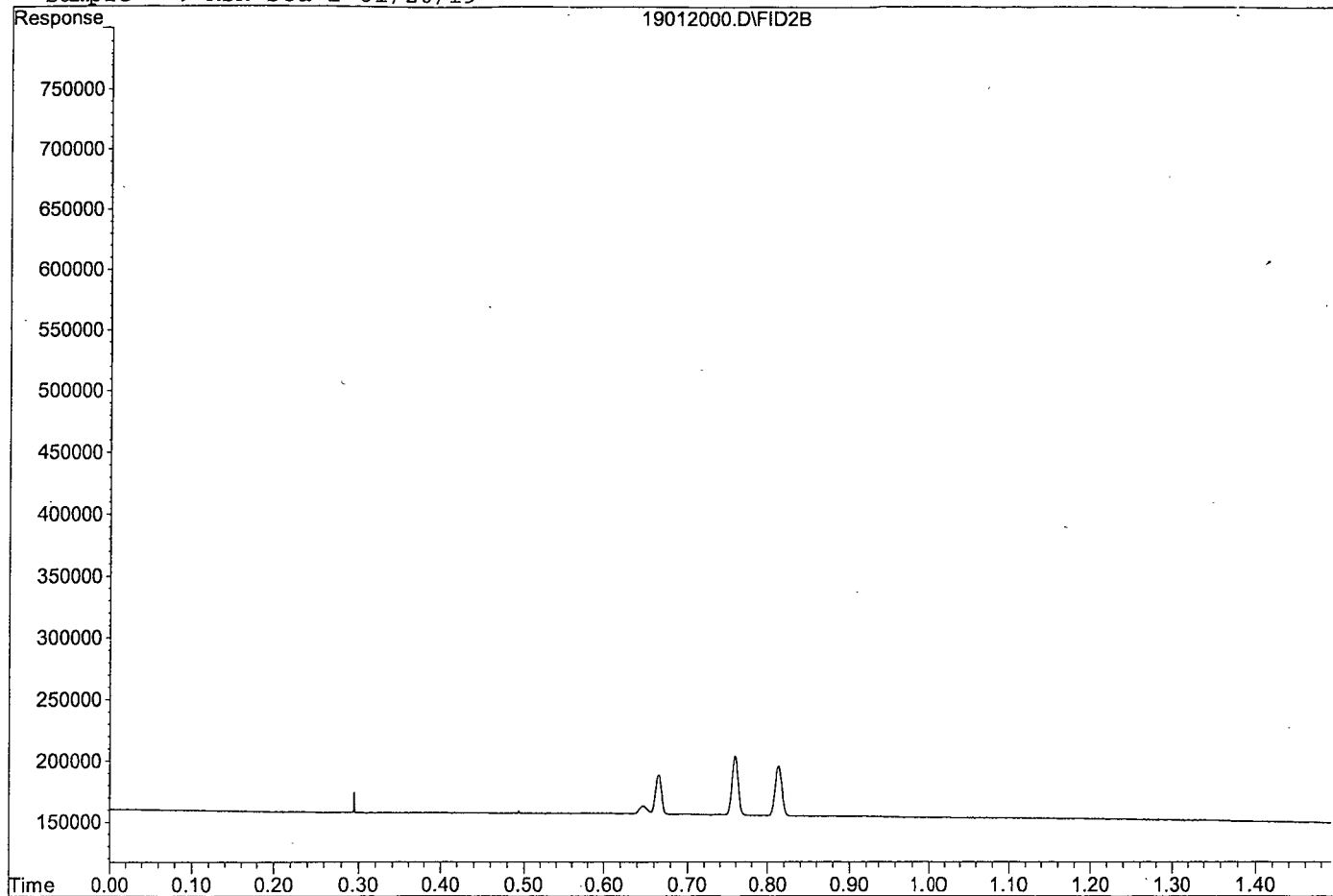
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.67	32996	N.D.	ppb
2) ATM Ethane	0.76	49028	N.D.	ppb
3) ATM Ethene	0.81	41040	N.D.	ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012000.D

Sample : RSK Std 1 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012001.D Vial: 2  
 Acq On : 20 Jan 19 12:02 Operator: cmm  
 Sample : RSK Std 2 01/20/19 Inst : 7890  
 Misc : 250uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:35 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:35:30 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

Target Compounds

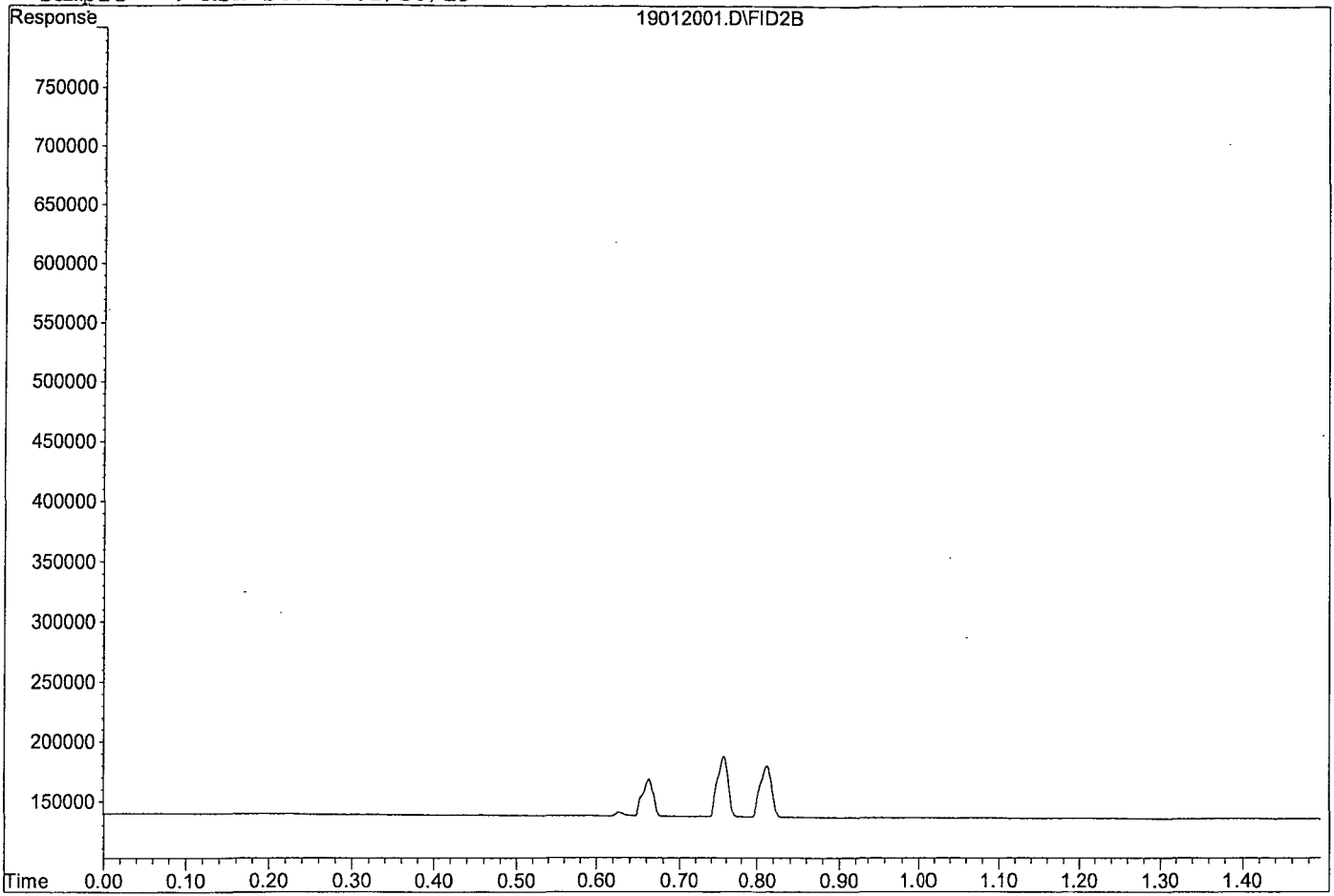
Target Compounds

1) ATM Methane	0.66	31584	N.D. ppb
2) ATM Ethane	0.76	51016	N.D. ppb
3) ATM Ethene	0.81	43446	N.D. ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012001.D

Sample : RSK Std 2 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012002.D Vial: 3  
 Acq On : 20 Jan 19 12:04 Operator: cmm  
 Sample : RSK Std 3 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:36 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:01 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

Target Compounds

Target Compounds

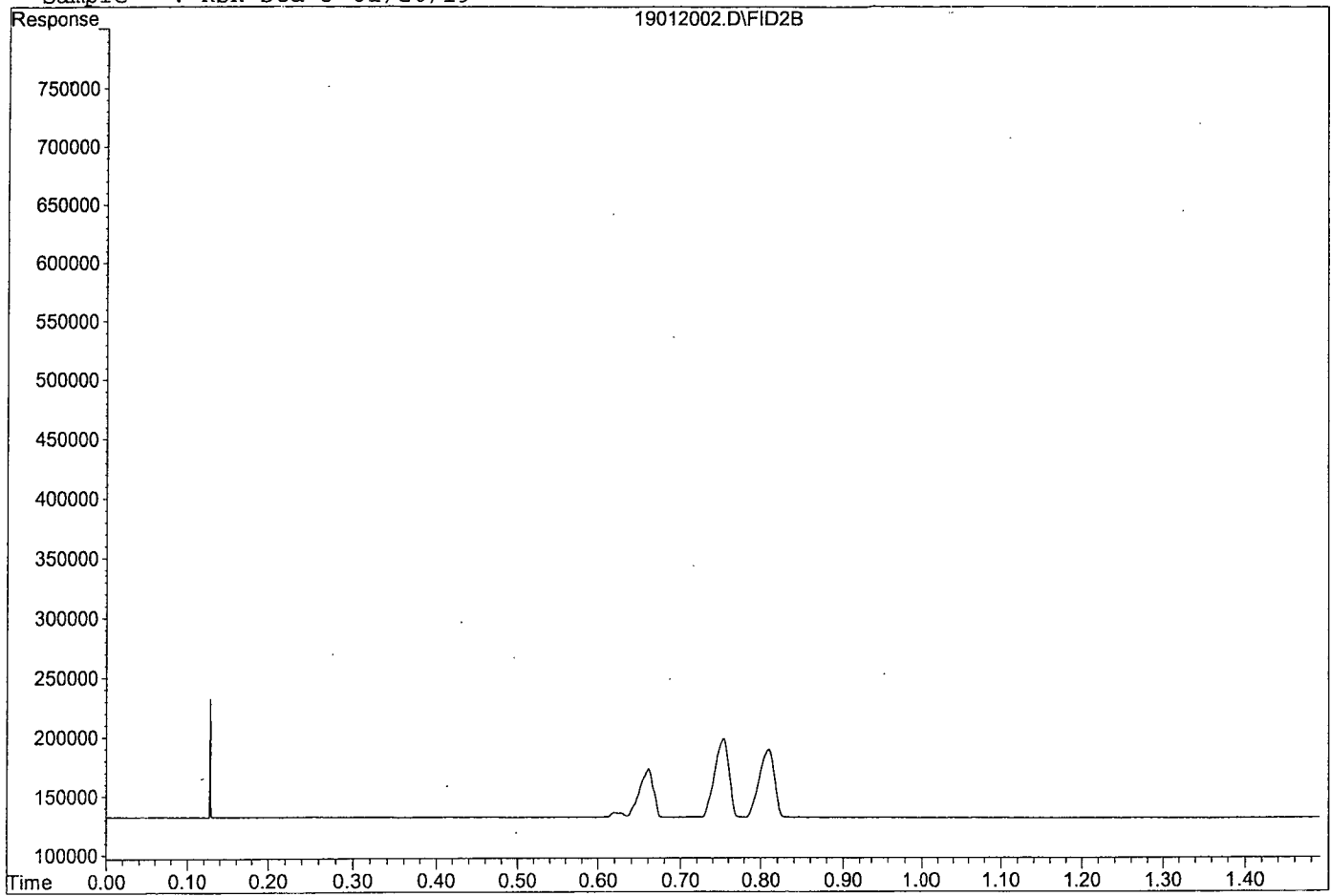
1) ATM Methane	0.66	41402	N.D. ppb
2) ATM Ethane	0.75	66998	N.D. ppb
3) ATM Ethene	0.81	57770	N.D. ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012002.D

Sample : RSK Std 3 01/20/19

19012002.D\FID2B





Data File : G:\ROCKY\DATA\190120RS\19012003.D Vial: 4  
 Acq On : 20 Jan 19 12:07 Operator: cmm  
 Sample : RSK Std 4 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:36 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.66	156731	17.650 ppb
2) ATM Ethane	0.75	246852	33.403 ppb
3) ATM Ethene	0.81	213014	30.693 ppb

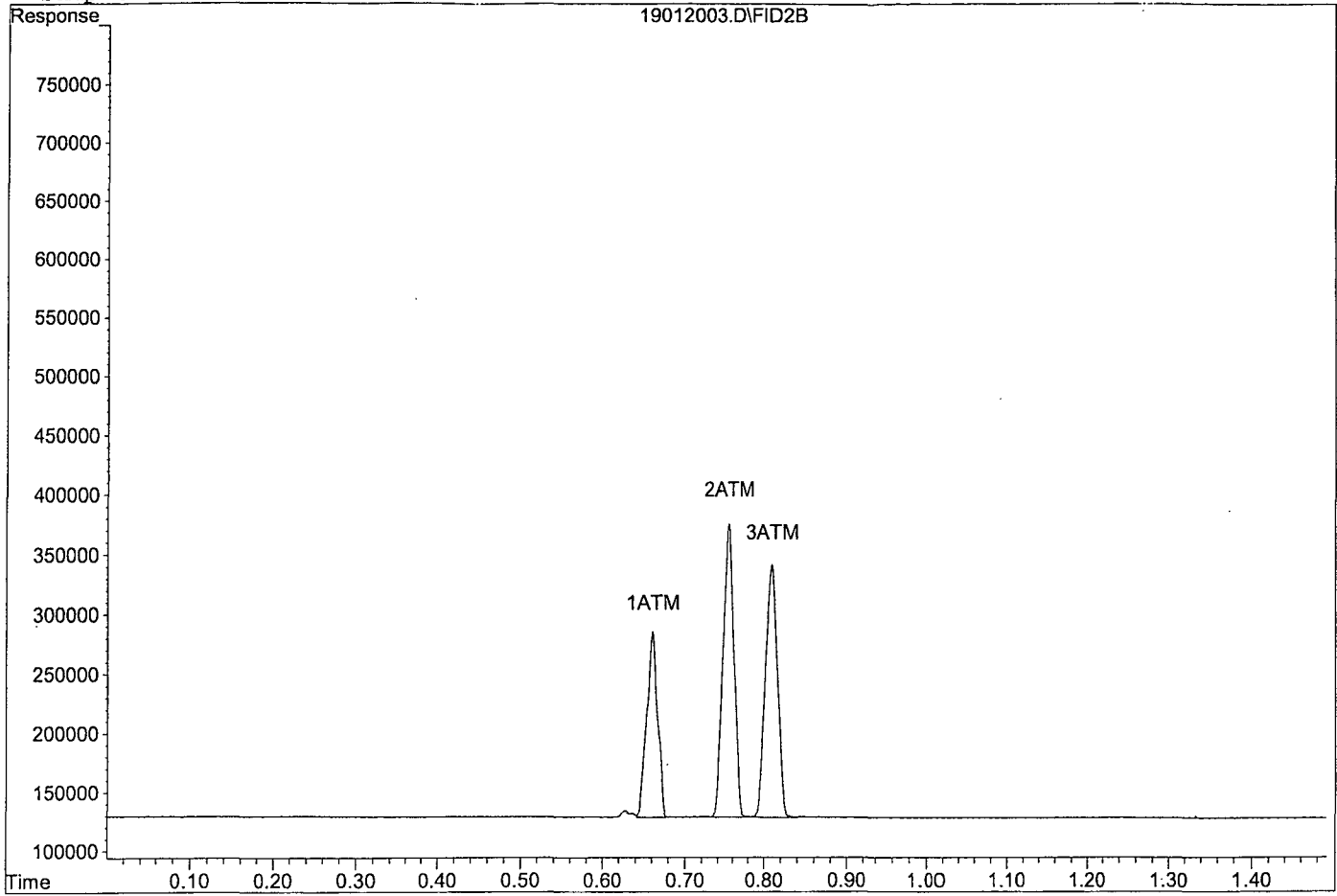
Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012003.D

Sample : RSK Std 4 01/20/19

19012003.D\FID2B



Data File : G:\ROCKY\DATA\190120RS\19012005.D Vial: 6  
 Acq On : 20 Jan 19 12:12 Operator: cmm  
 Sample : RSK Std 5 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:58 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

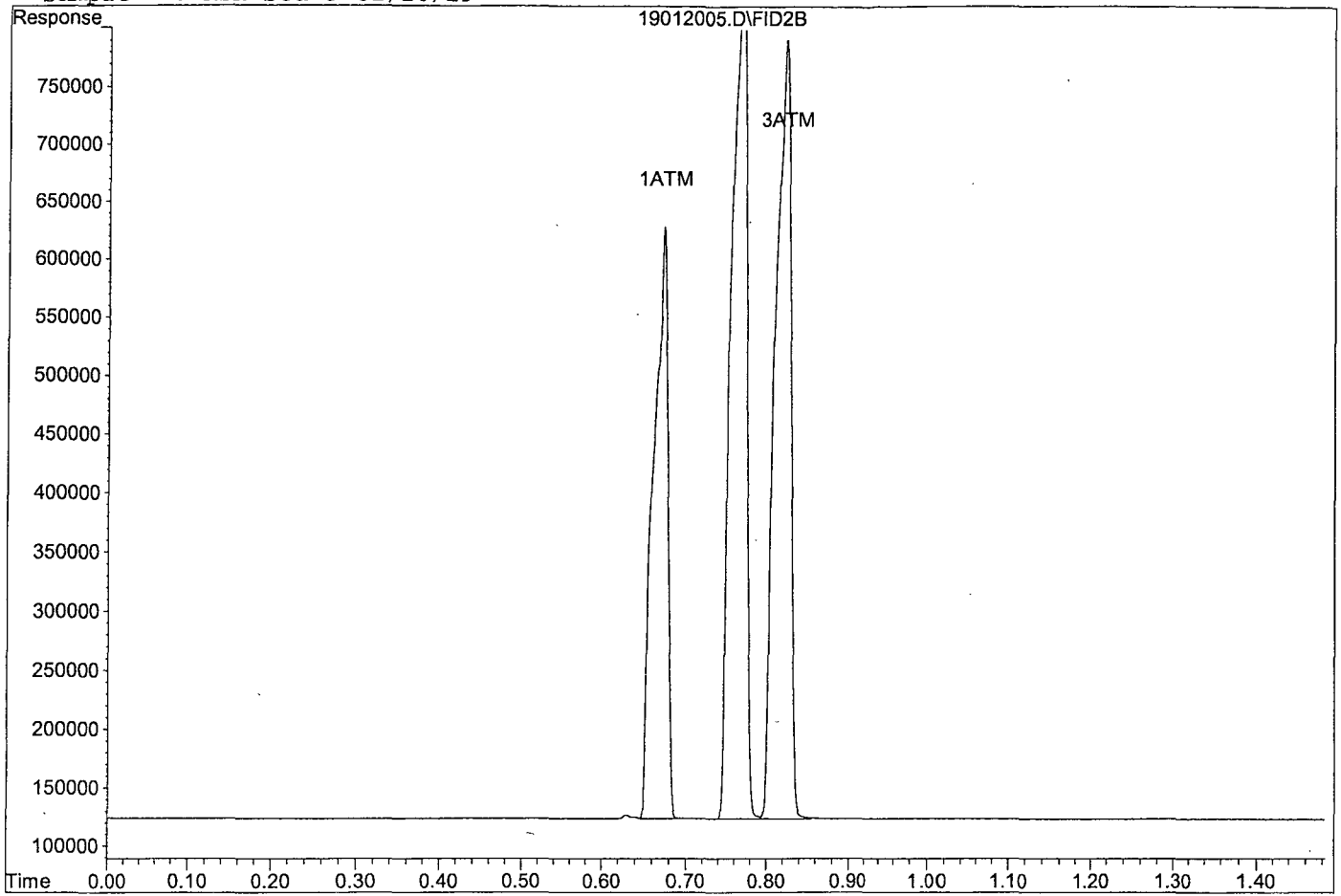
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	505025	97.832 ppb
2) ATM Ethane	0.77	767300	177.156 ppb
3) ATM Ethene	0.82	667740	167.580 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012005.D

Sample : RSK Std 5 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012007.D Vial: 8  
 Acq On : 20 Jan 19 12:17 Operator: cmm  
 Sample : RSK Std 6 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:37:36 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

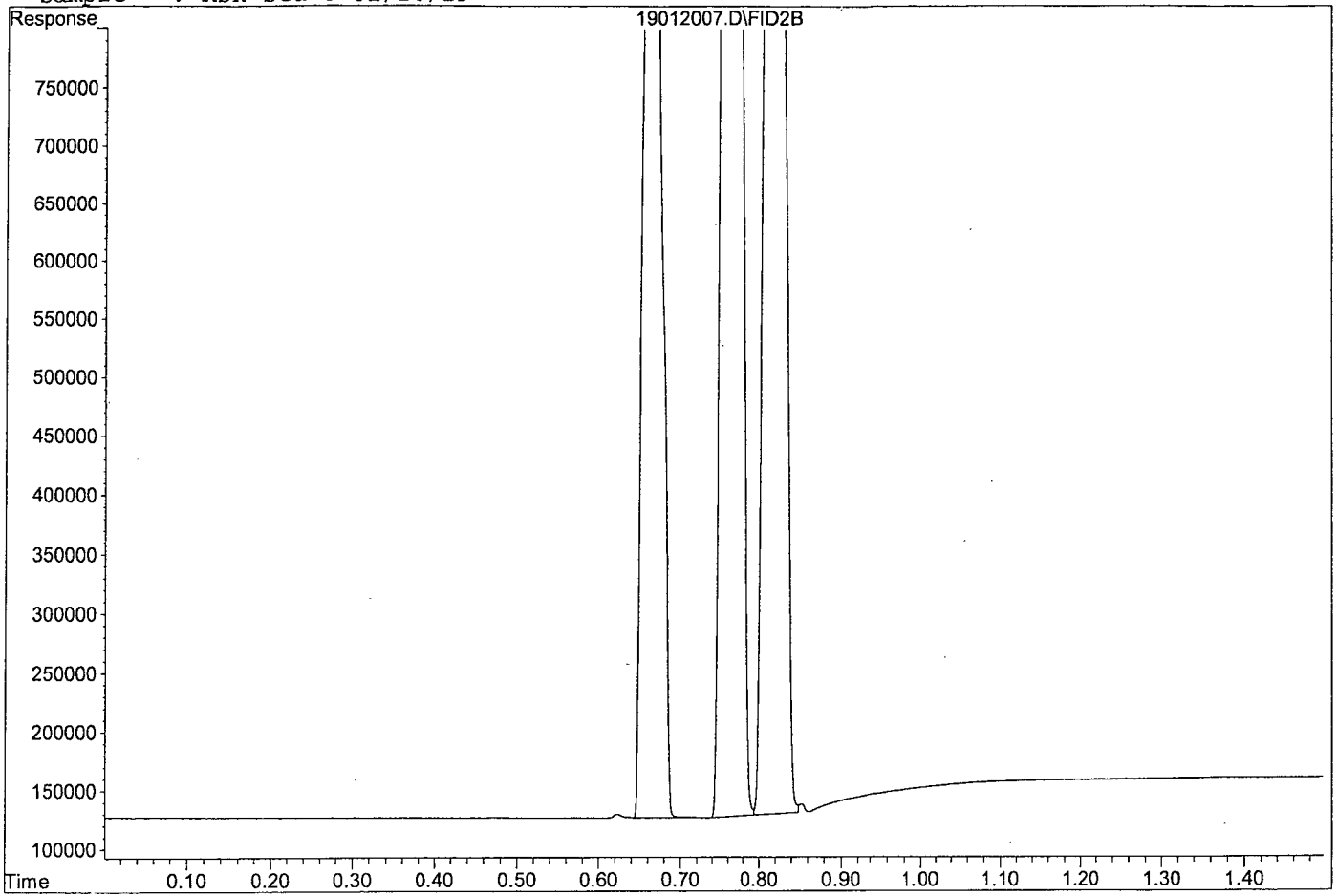
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	1190356	255.605 ppb
2) ATM Ethane	0.77	1887834	486.657 ppb
3) ATM Ethene	0.82	1625935	456.029 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012007.D

Sample : RSK Std 6 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012008.D Vial: 9  
 Acq On : 20 Jan 19 12:20 Operator: cmm  
 Sample : RSK Std 7 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:38 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:38:08 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

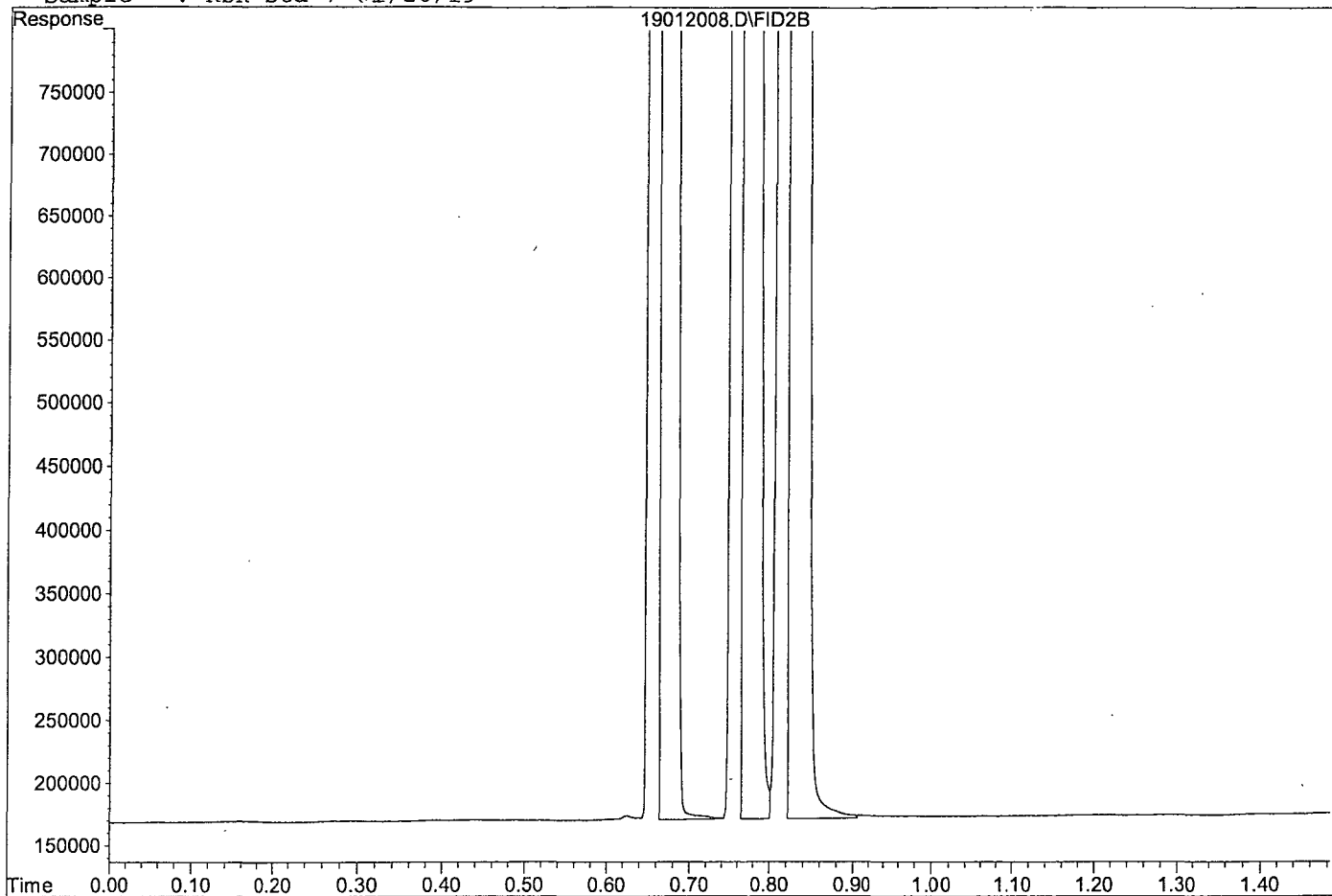
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	3646926	821.142 ppb
2) ATM Ethane	0.77	5694692	1538.144 ppb
3) ATM Ethene	0.83	4874710	1434.020 ppb

Target Compounds

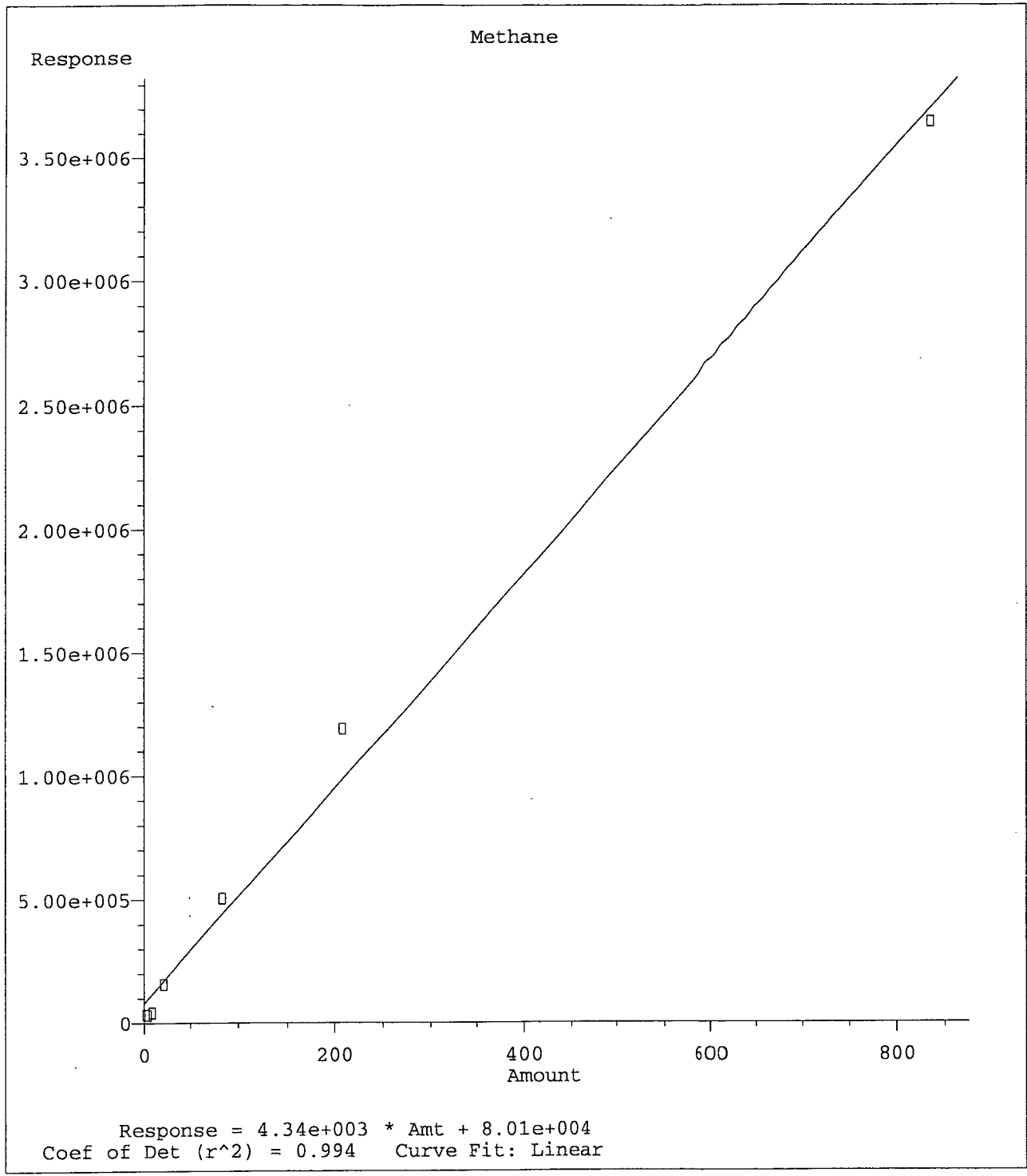
Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012008.D

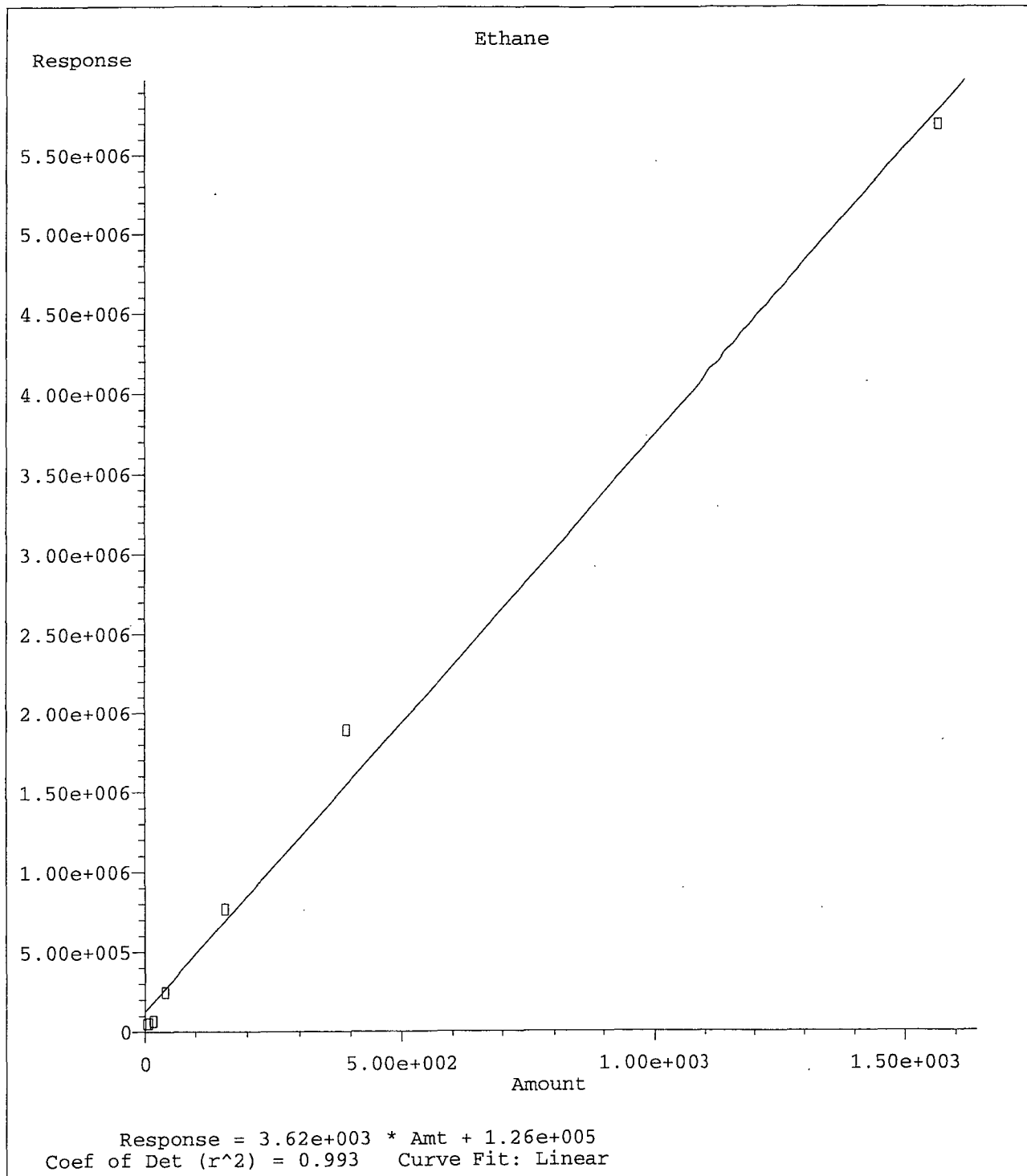
Sample : RSK Std 7 01/20/19



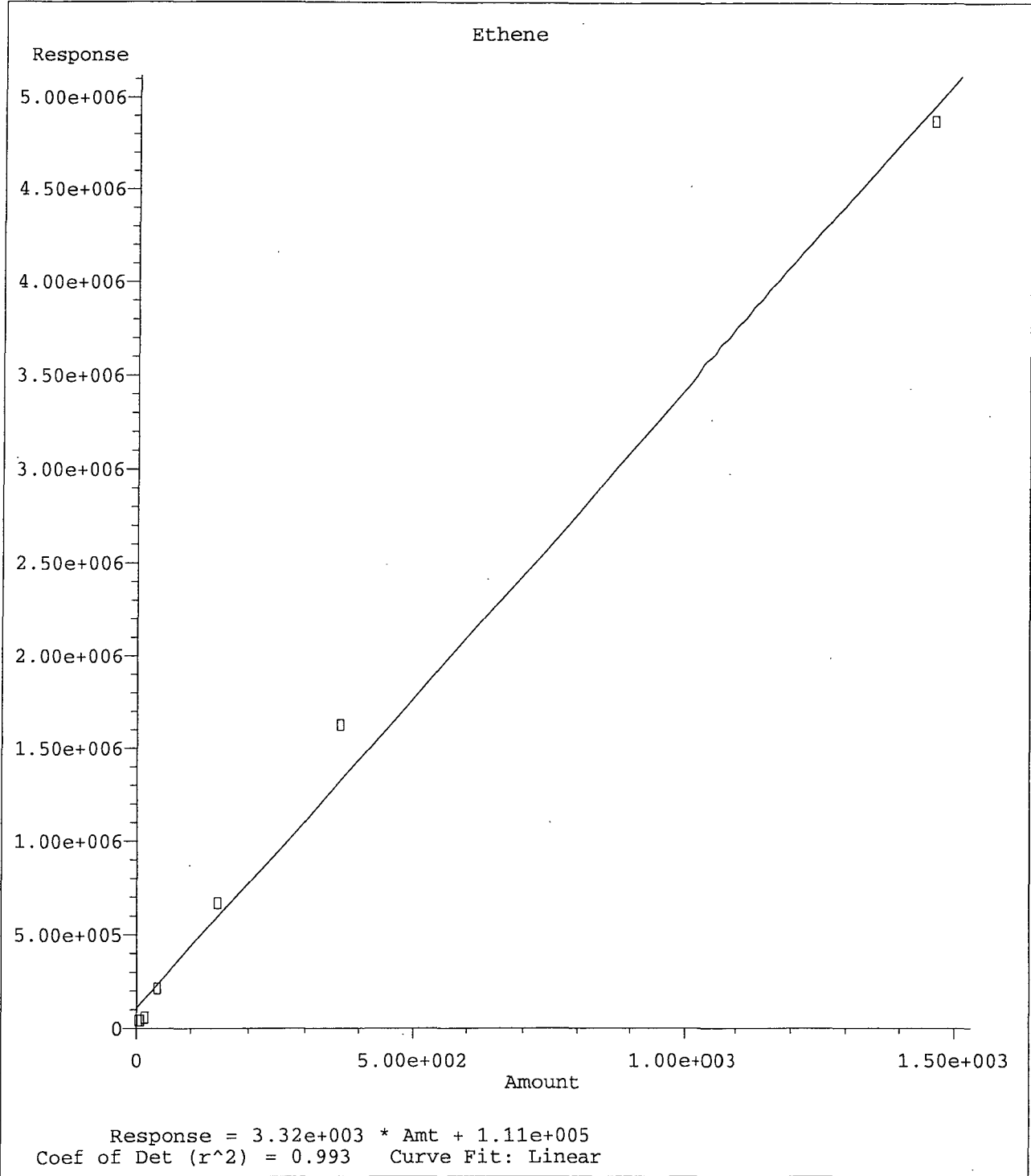




Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:32:56 2019



Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:32:56 2019



Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:33:08 2019

RSK 175  
RSK 175

Form 7

### Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/20/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initial Cal. Date: 01/20/19

Data File: 19012010.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	14878	10667	28	ATML	0.69
2	ATML	Ethane	12303	9330	24	ATML	6.6
3	ATML	Ethene	11250	8592	24	ATML	6.4
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Average

25.3

Data File : G:\ROCKY\DATA\190120RS\19012010.D Vial: 11  
 Acq On : 20 Jan 19 12:39 Operator: cmm  
 Sample : SS RSK Std 5 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:42 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:42:01 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

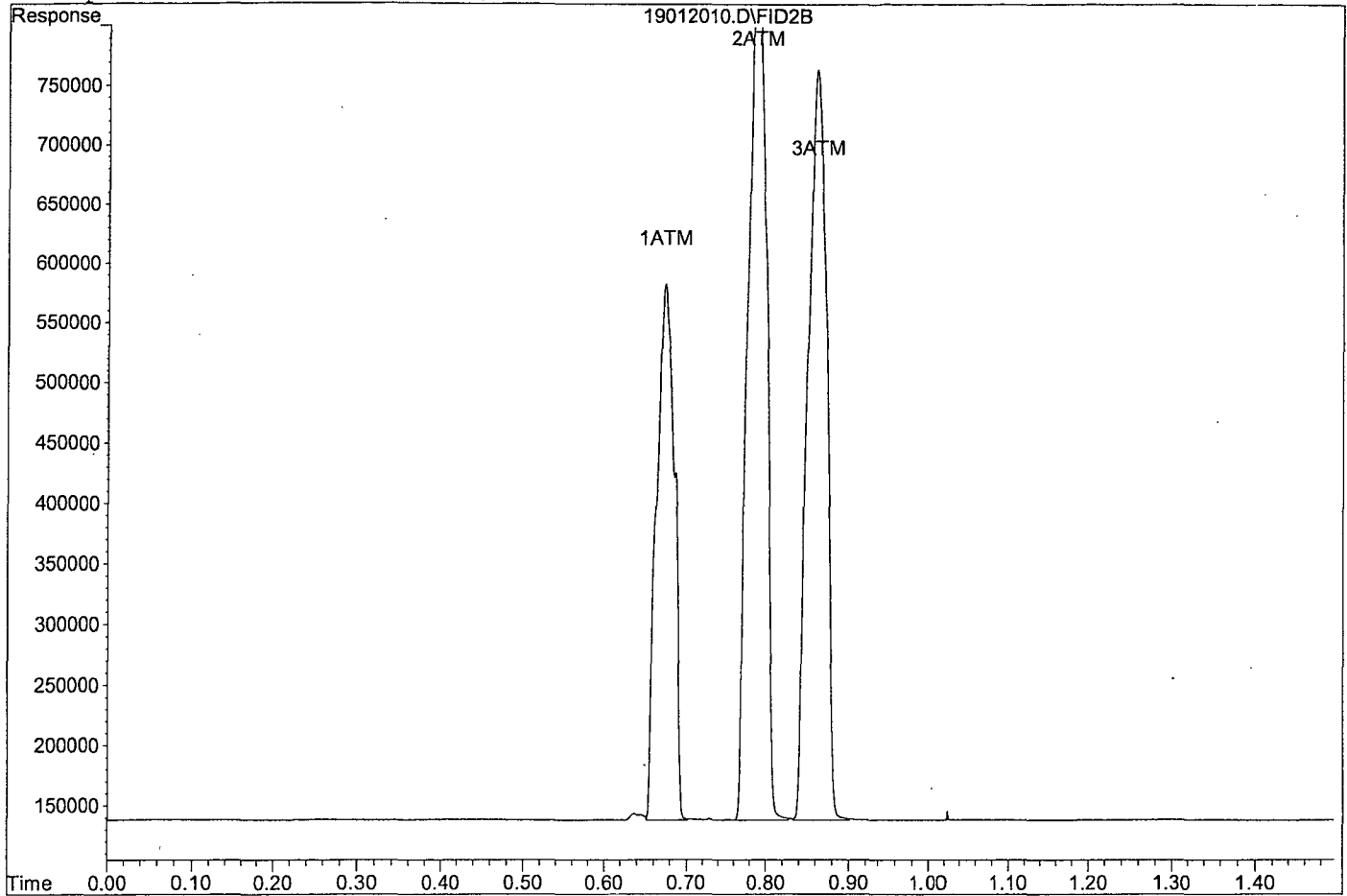
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	444826	83.973 ppb
2) ATM Ethane	0.79	729370	166.679 ppb
3) ATM Ethene	0.86	626499	155.165 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012010.D

Sample : SS RSK Std 5 01/20/19



RSK 175  
RSK 175

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initial Cal. Date: 01/20/19

Data File: 19012800.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	14878	12071	19	ATML	17
2	ATML	Ethane	12303	10218	17	ATML	19
3	ATML	Ethene	11250	9484	16	ATML	20
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
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19							
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25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Average

17.3

Data File : G:\ROCKY\DATA\190120RS\19012800.D Vial: 1  
 Acq On : 28 Jan 19 10:22 Operator: cmm  
 Sample : 190128A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:24 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:24:37 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.69	503374	97.452 ppb
2) ATM Ethane	0.81	798757	185.844 ppb
3) ATM Ethene	0.89	691542	174.745 ppb

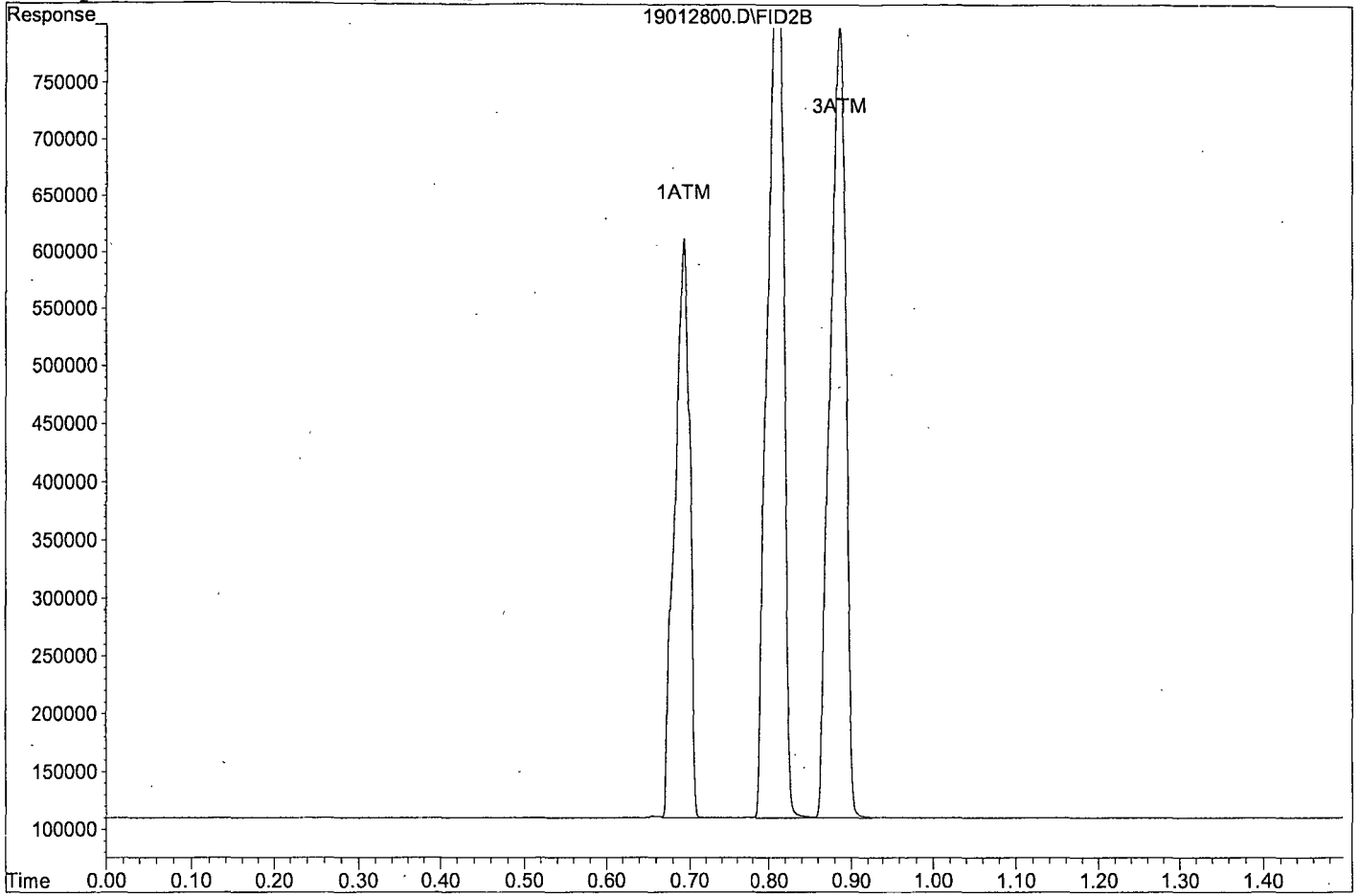
Target Compounds



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012800.D

Sample : 190128A LCS/CCV RSK Std 5



RSK 175  
RSK 175

Form 7  
Ending Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: 7890  
Initial Cal. Date: 01/20/19  
Data File: 19012832.D

	Compound	MEAN	CCRF	%D	%Drift	
1	ATML Methane	14878	11389	23	ATML	9.0
2	ATML Ethane	12303	9607	22	ATML	10
3	ATML Ethene	11250	8462	25	ATML	4.4
4						
5						
6						
7						
8						
9						
10						
11						
12						
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31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

23.3

Data File : G:\ROCKY\DATA\190120RS\19012832.D Vial: 33  
 Acq On : 28 Jan 19 11:49 Operator: cmm  
 Sample : Ending CCV RSK Std 5 01/28/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:52 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 11:51:55 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

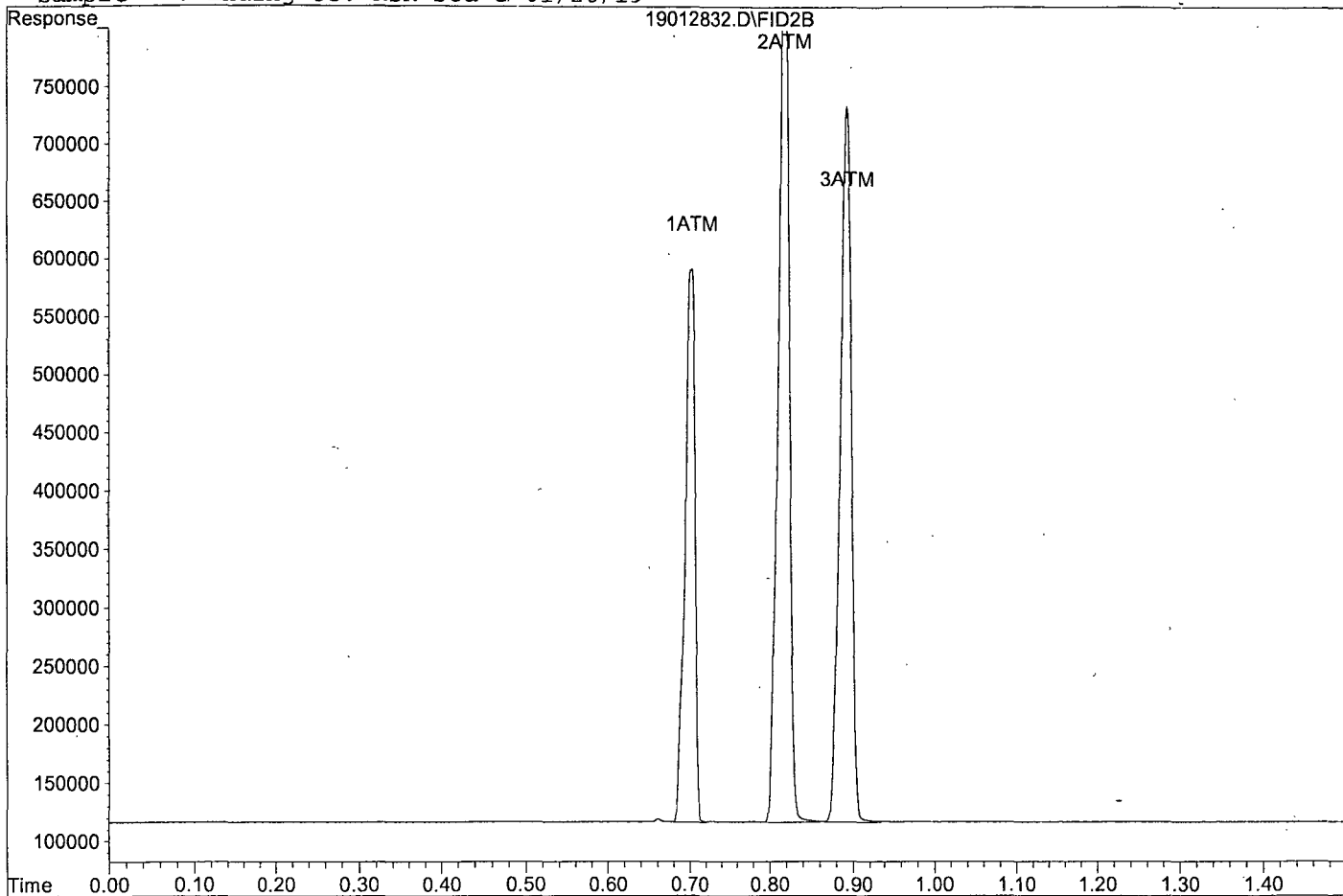
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.70	474919	90.901 ppb
2) ATM Ethane	0.82	751015	172.657 ppb
3) ATM Ethene	0.89	617077	152.329 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012832.D

Sample : Ending CCV RSK Std 5 01/28/19



**ORGANICS**  
**Raw Data**

Data File : G:\ROCKY\DATA\190120RS\19012803.D Vial: 4  
 Acq On : 28 Jan 19 10:31 Operator: cmm  
 Sample : AZ85519W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:34 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:28:05 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

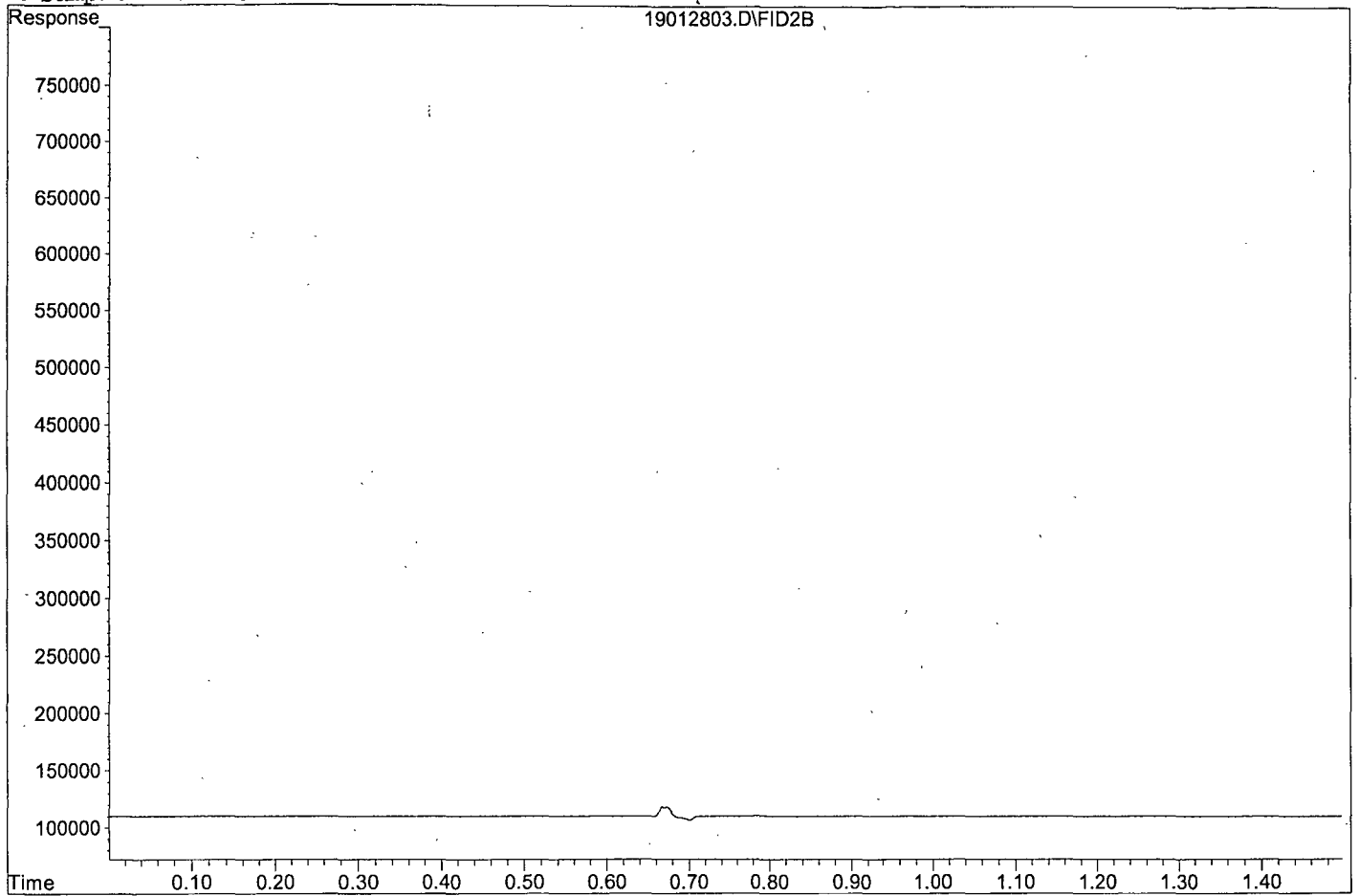
Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012803.D

Sample : AZ85519W04

19012803.D\FID2B



Data File : G:\ROCKY\DATA\190120RS\19012804.D Vial: 5  
 Acq On : 28 Jan 19 10:33 Operator: cmm  
 Sample : AZ85520W04 E Methane Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

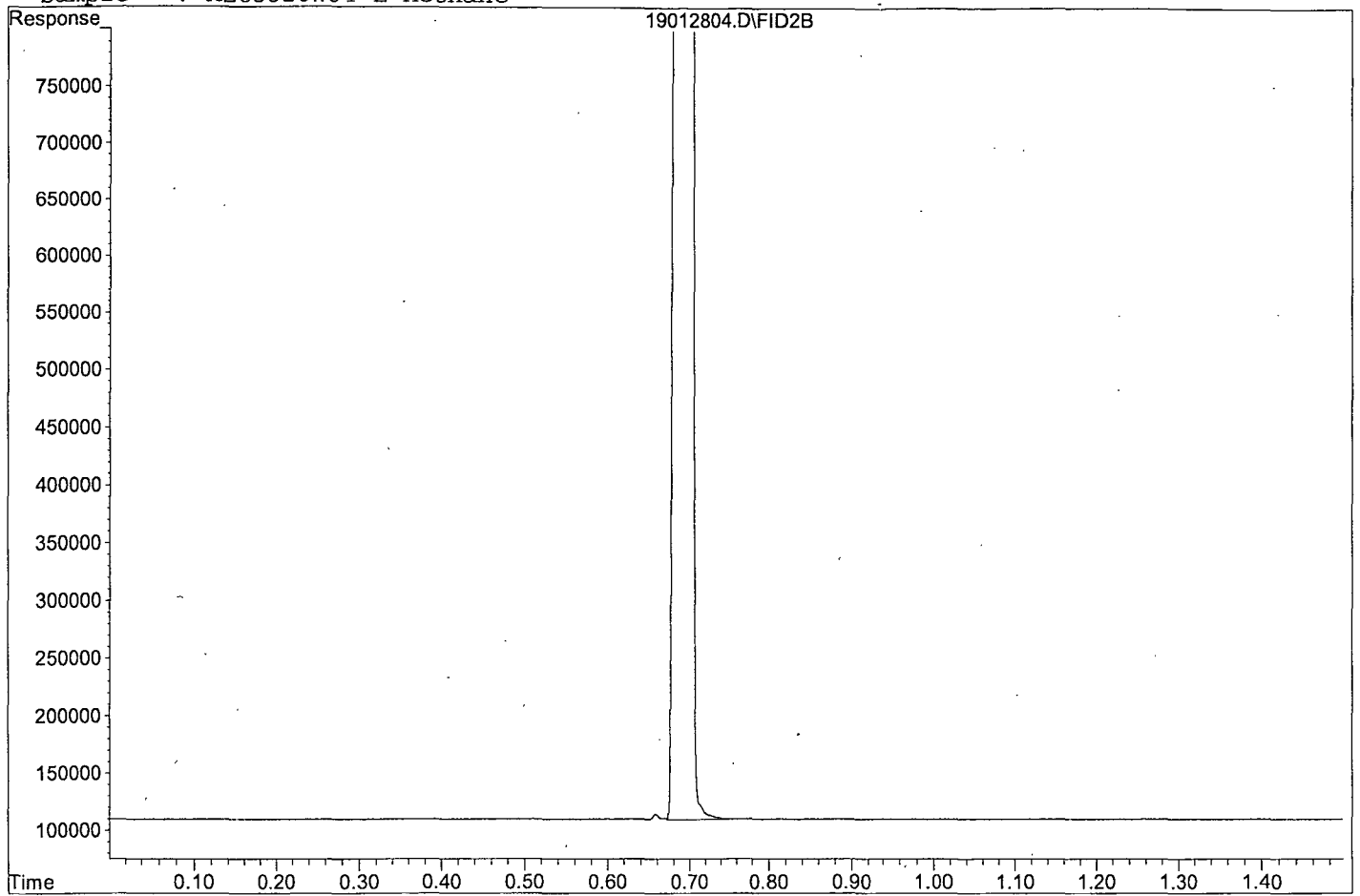
Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1) ATM Methane	0.70	6969540	1586.054	ppb
Target Compounds				
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012804.D

Sample : AZ85520W04 E Methane



Data File : G:\ROCKY\DATA\190120RS\19012806.D Vial: 7  
 Acq On : 28 Jan 19 10:39 Operator: cmm  
 Sample : AZ85520W04 DF10 Inst : 7890  
 Misc : Multiplr: 10.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:42 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

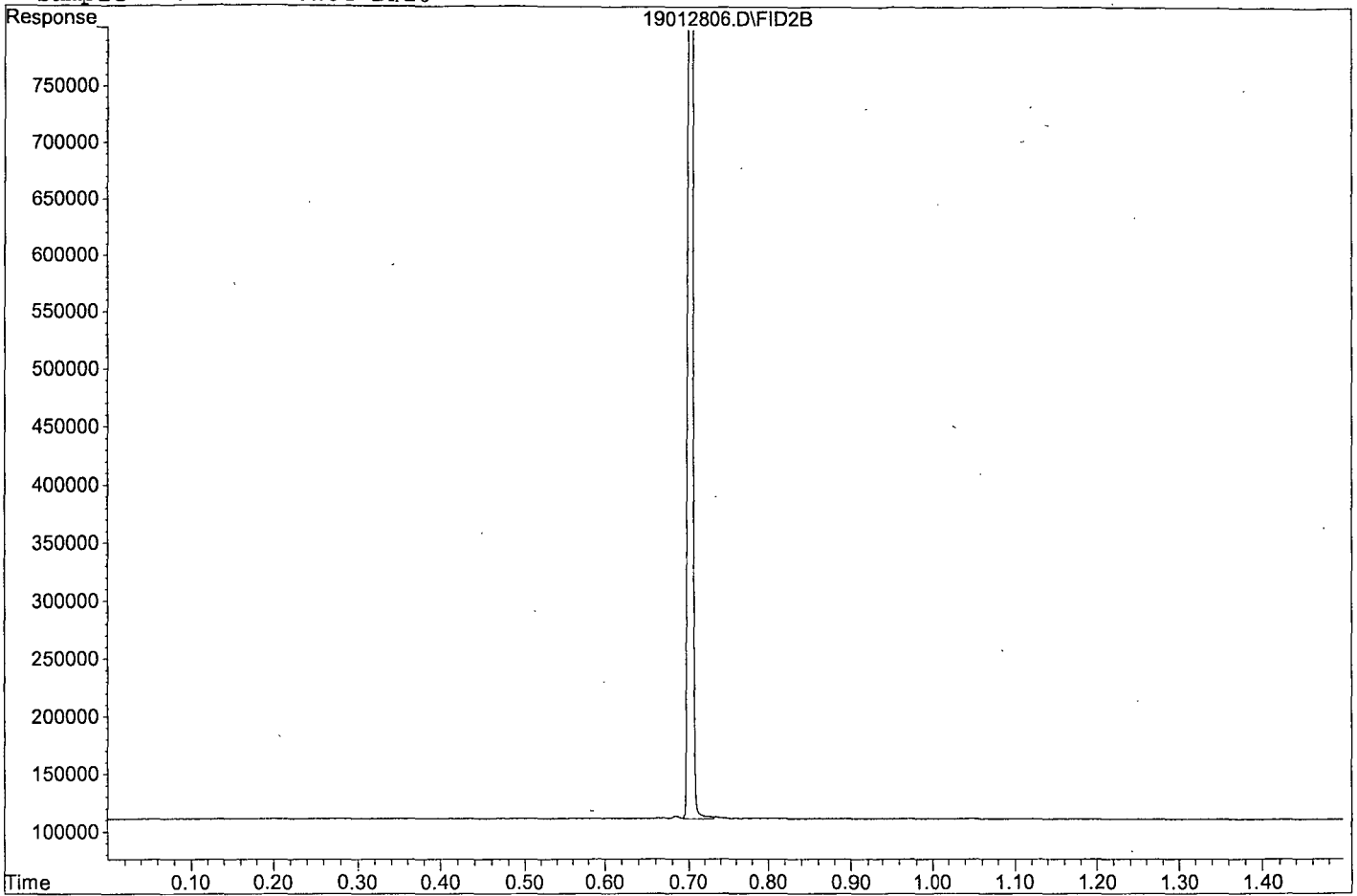
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1) ATM Methane	0.70	2263180	5025.839	ppb
Target Compounds				
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012806.D

Sample : AZ85520W04 DF10



Data File : G:\ROCKY\DATA\190120RS\19012807.D Vial: 8  
 Acq On : 28 Jan 19 10:41 Operator: cmm  
 Sample : AZ85522W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:45 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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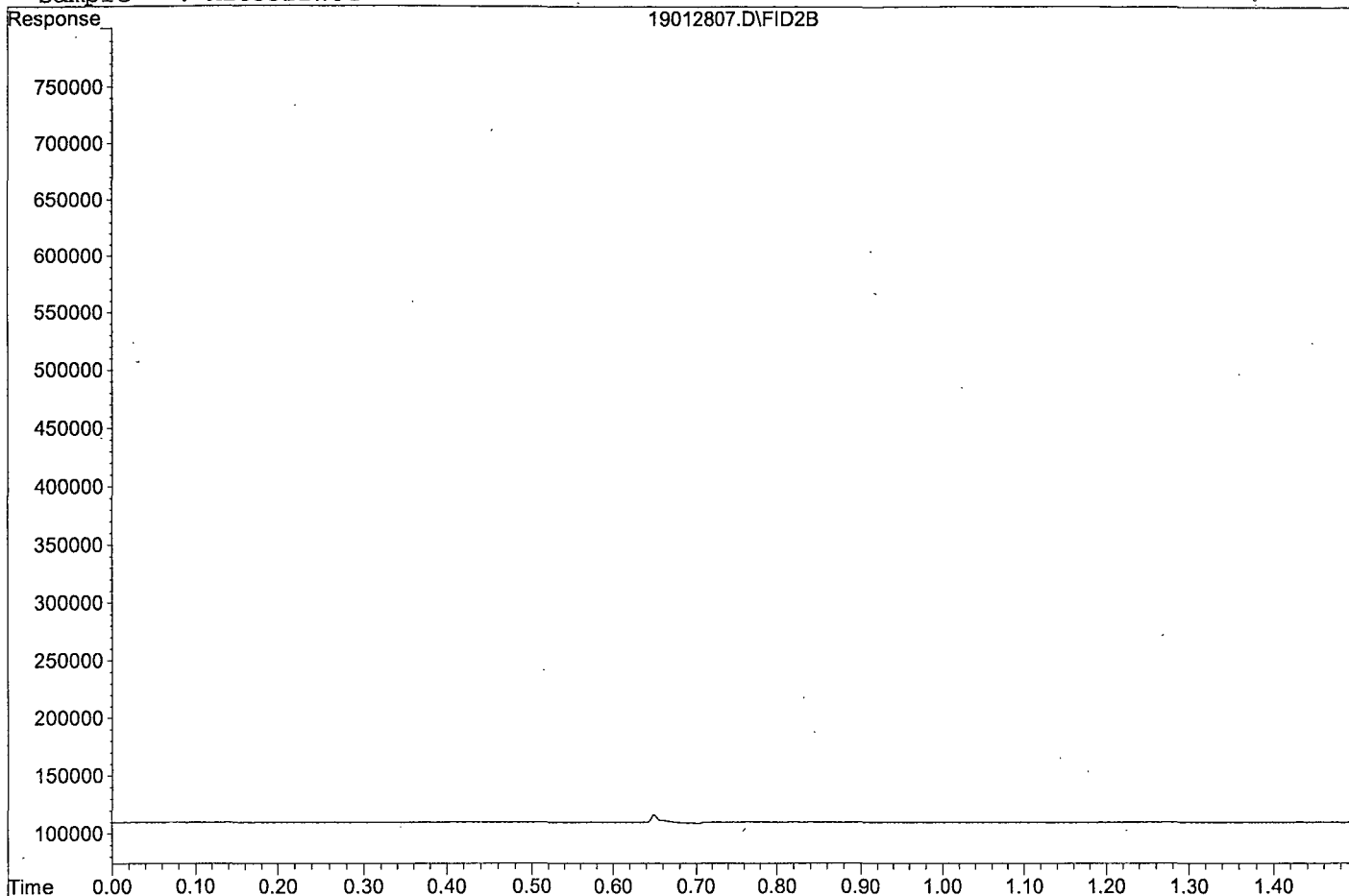
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012807.D

Sample : AZ85522W04



Data File : G:\ROCKY\DATA\190120RS\19012808.D Vial: 9  
 Acq On : 28 Jan 19 10:44 Operator: cmm  
 Sample : AZ85523W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:47 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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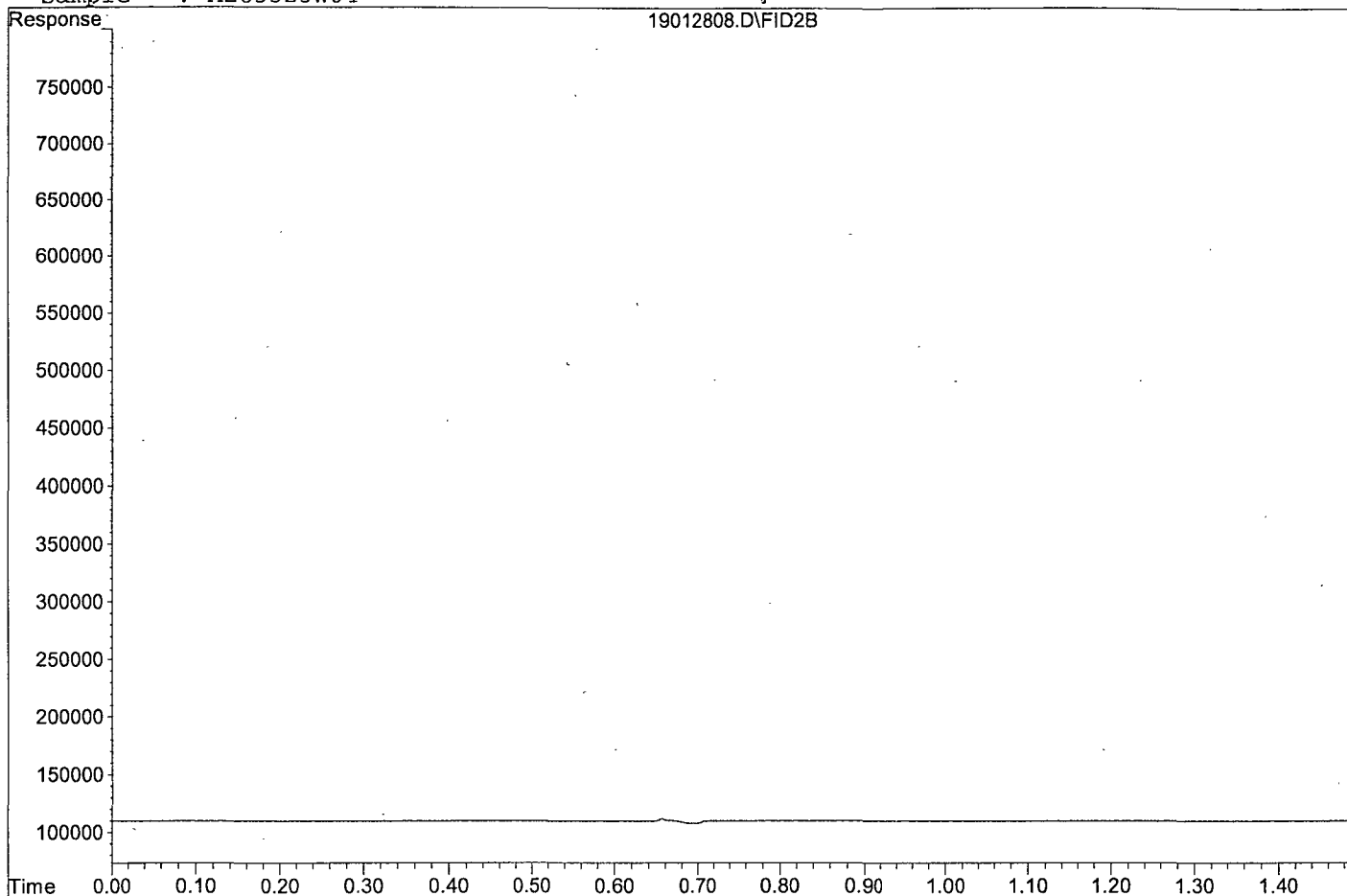
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012808.D

Sample : AZ85523W04



Quantitation Report (QT Reviewed)

Data File : G:\ROCKY\DATA\190120RS\19012809.D Vial: 10  
 Acq On : 28 Jan 19 10:47 Operator: cmm  
 Sample : AZ85524W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:50 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

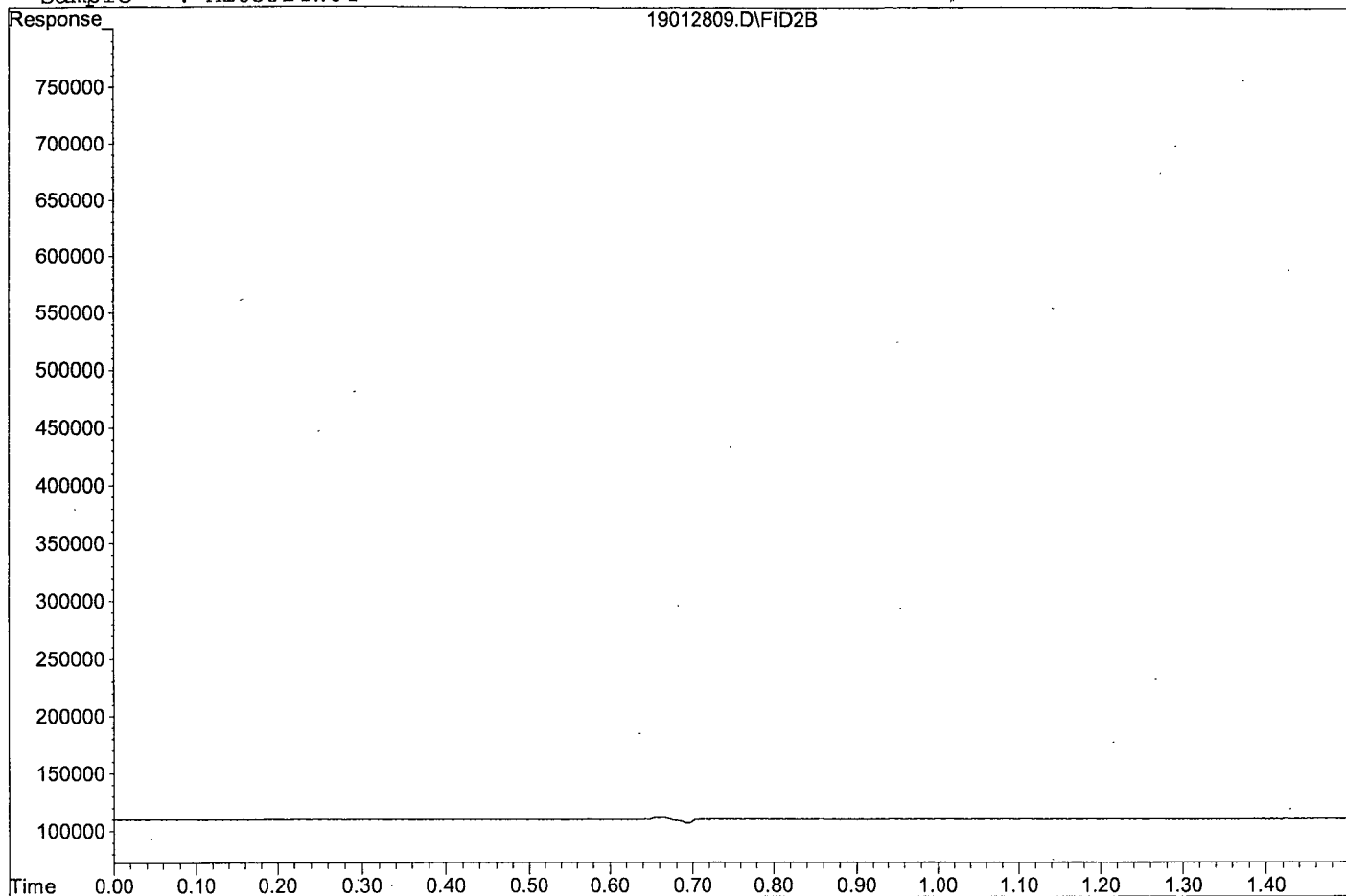
Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012809.D

Sample : AZ85524W04



Data File : G:\ROCKY\DATA\190120RS\19012810.D Vial: 11  
 Acq On : 28 Jan 19 10:49 Operator: cmm  
 Sample : AZ85525W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:52 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

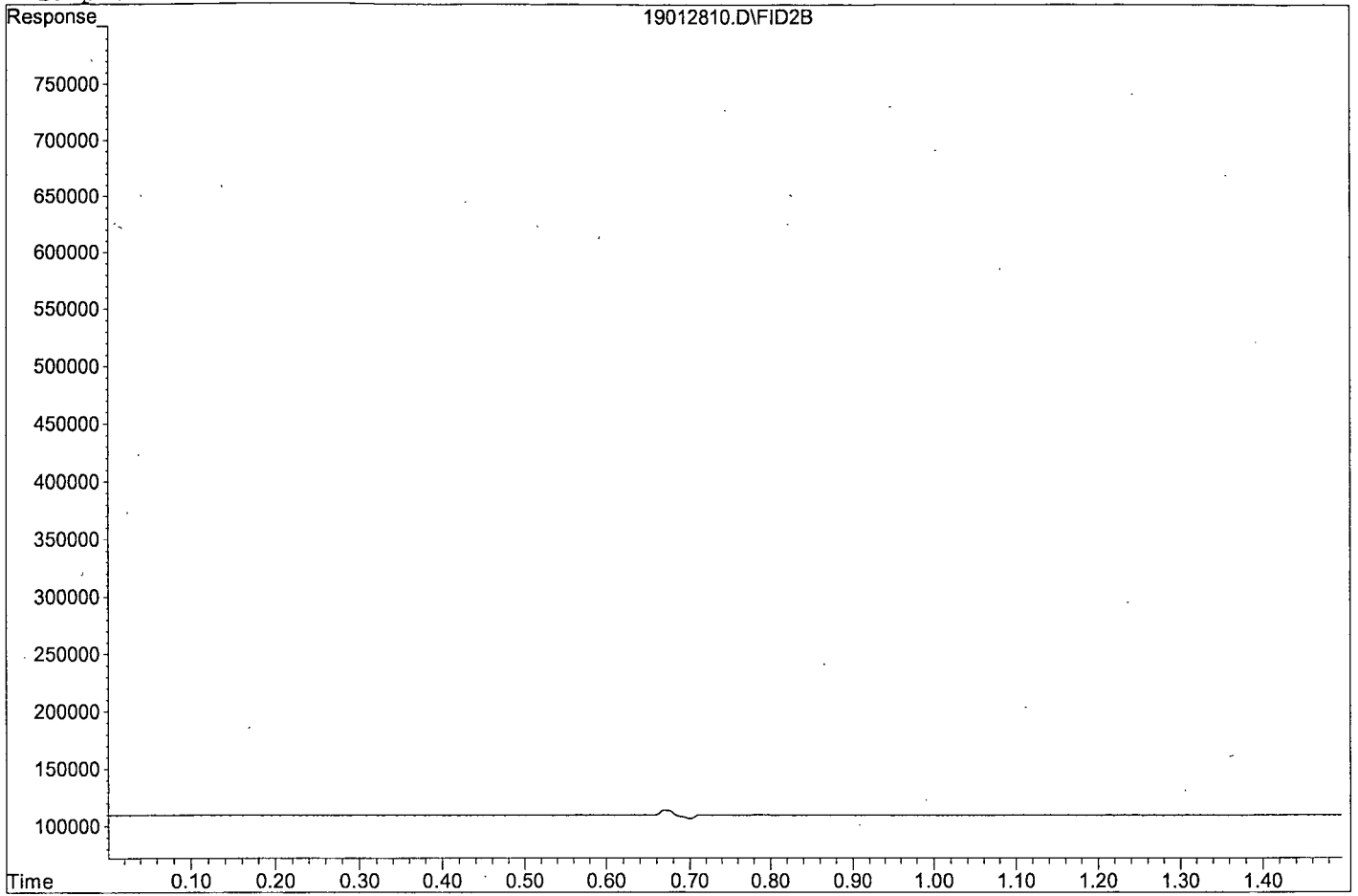
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012810.D

Sample : AZ85525W04



Data File : G:\ROCKY\DATA\190120RS\19012811.D Vial: 12  
 Acq On : 28 Jan 19 10:52 Operator: cmm  
 Sample : AZ85526W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:55 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

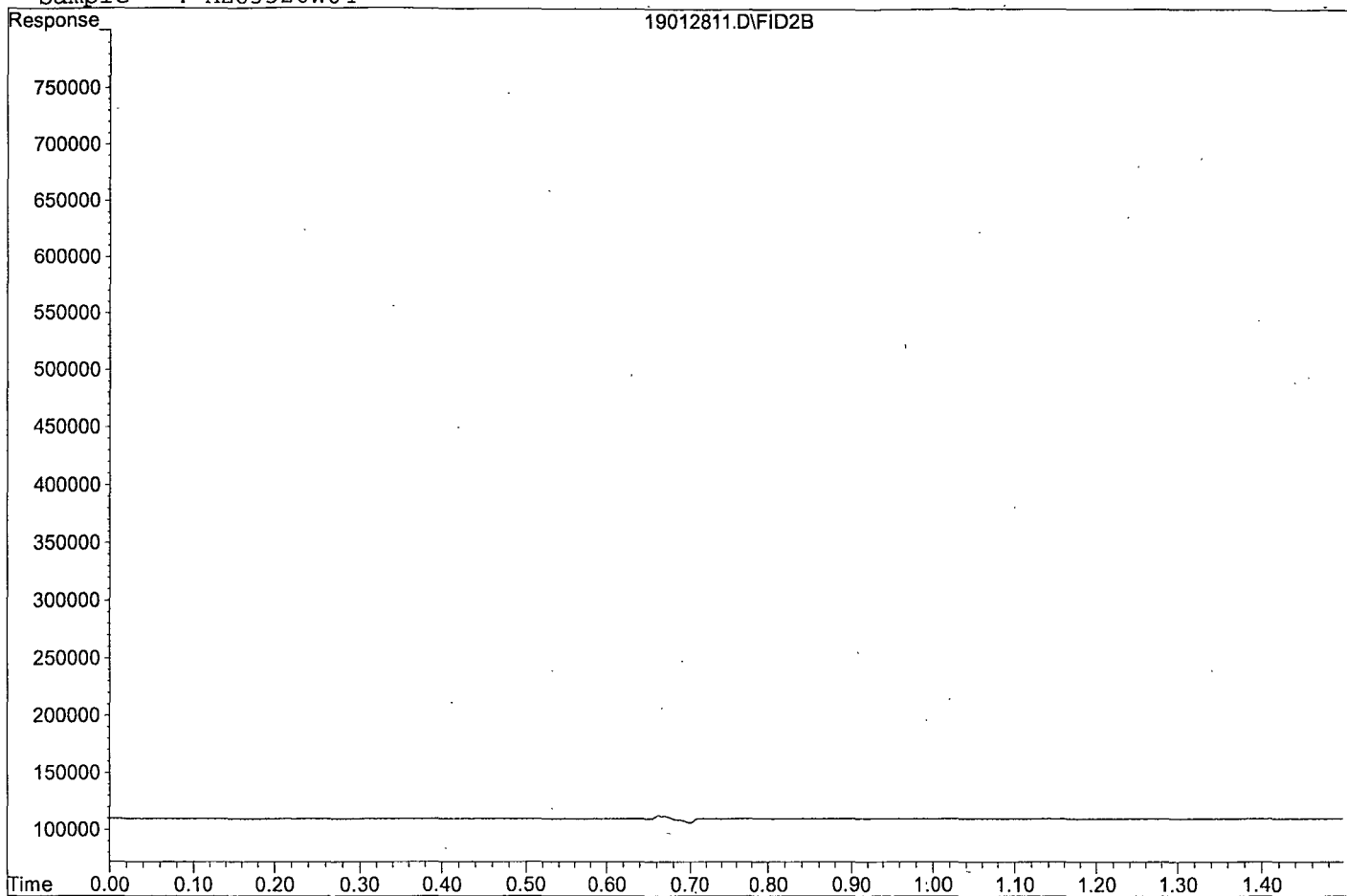
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012811.D

Sample : AZ85526W04



Data File : G:\ROCKY\DATA\190120RS\19012812.D Vial: 13  
 Acq On : 28 Jan 19 10:54 Operator: cmm  
 Sample : AZ85527W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:57 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

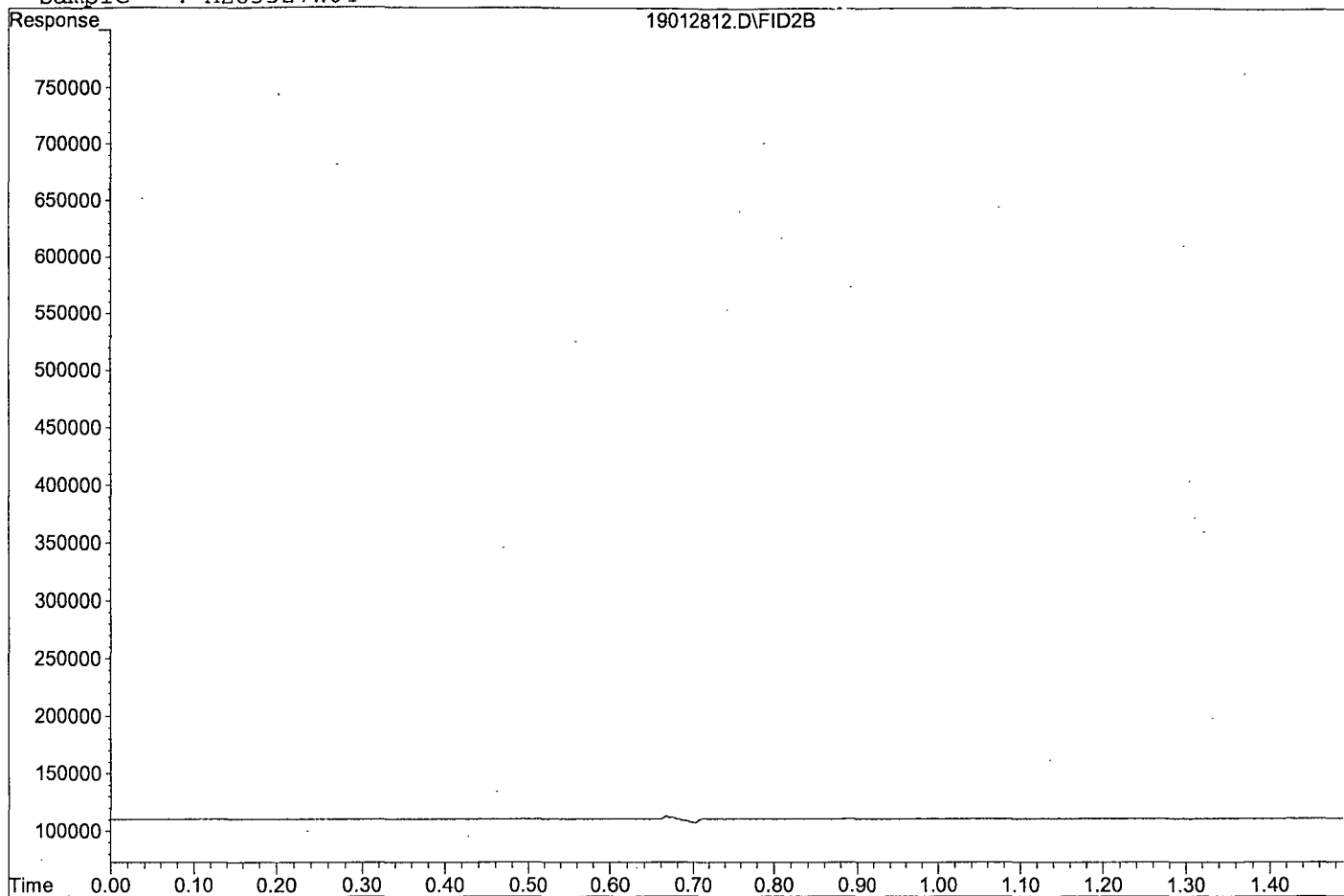
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012812.D

Sample : AZ85527W04



Data File : G:\ROCKY\DATA\190120RS\19012802.D Vial: 3  
 Acq On : 28 Jan 19 10:28 Operator: cmm  
 Sample : 190128A Blk Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:31 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:28:05 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

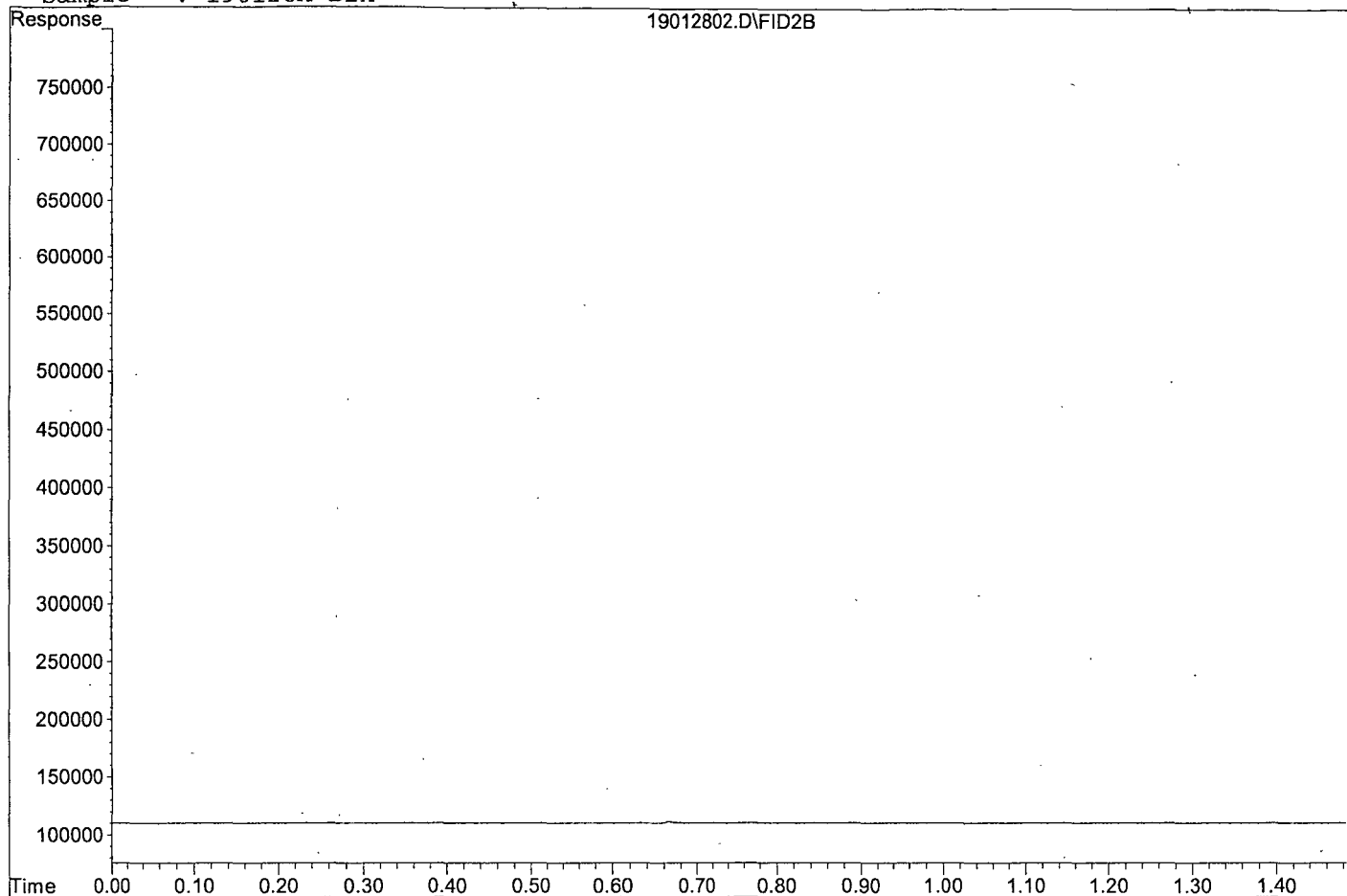
Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012802.D

Sample : 190128A Blk



Data File : G:\ROCKY\DATA\190120RS\19012800.D Vial: 1  
 Acq On : 28 Jan 19 10:22 Operator: cmm  
 Sample : 190128A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:24 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:24:37 2019  
 Response via : Multiple Level Calibration

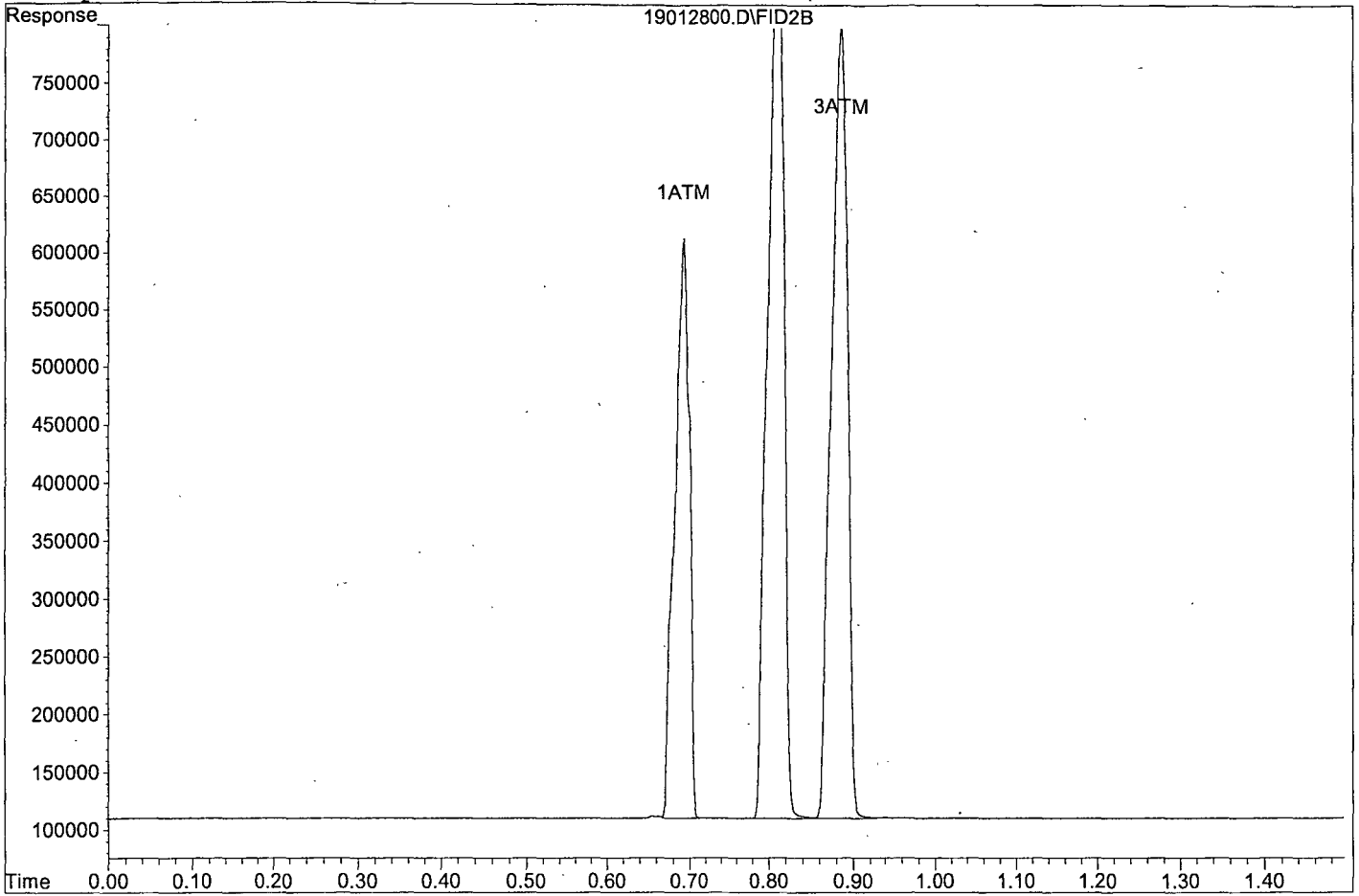
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.69	503374	97.452 ppb
2) ATM Ethane	0.81	798757	185.844 ppb
3) ATM Ethene	0.89	691542	174.745 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012800.D  
Sample : 190128A LCS/CCV RSK Std 5



Data File : G:\ROCKY\DATA\190120RS\19012801.D Vial: 2  
 Acq On : 28 Jan 19 10:25 Operator: cmm  
 Sample : 190128A LCSD RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:28 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:28:05 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

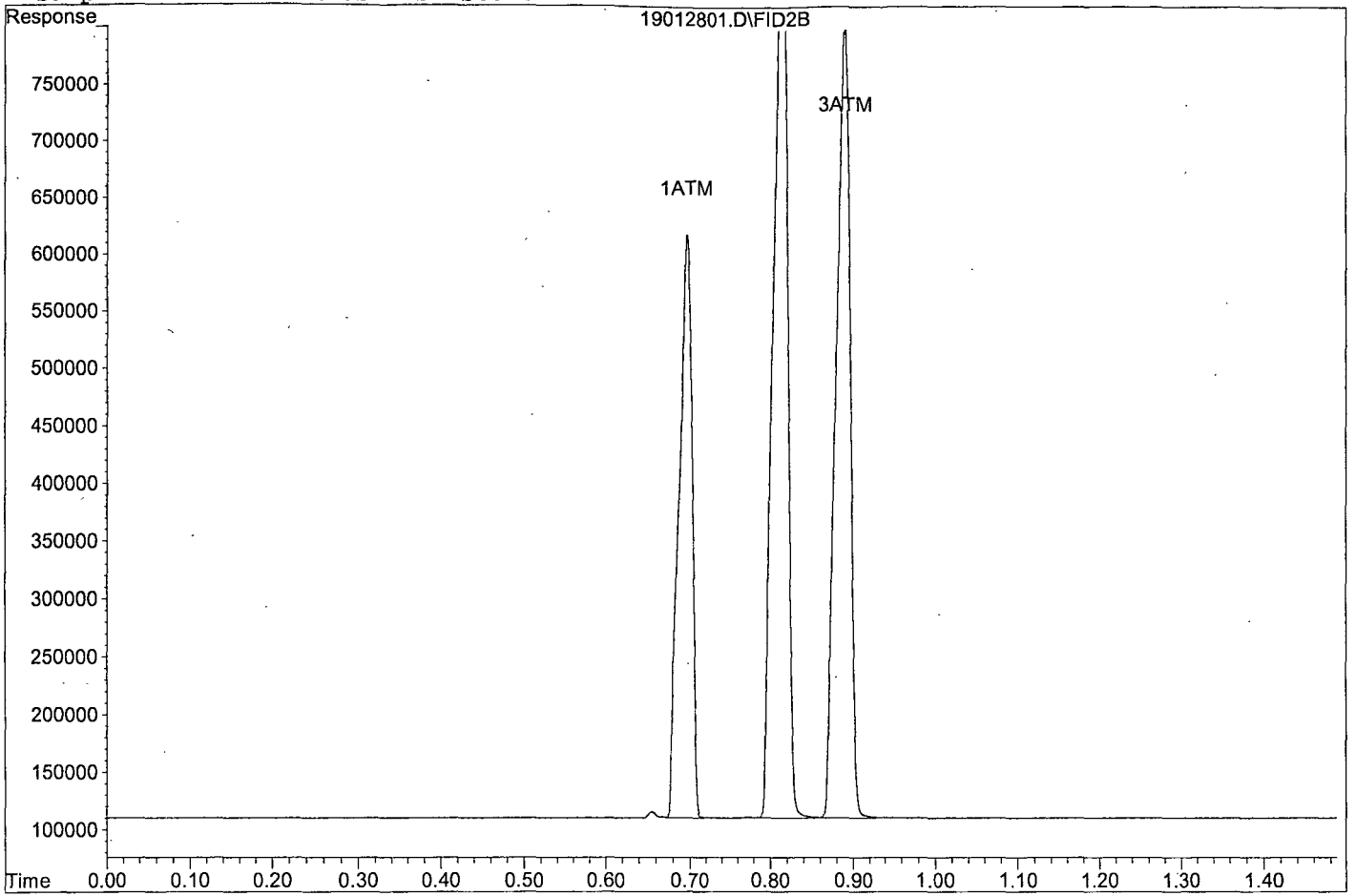
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.70	508083	98.536 ppb
2) ATM Ethane	0.81	805993	187.843 ppb
3) ATM Ethene	0.89	693879	175.449 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012801.D

Sample : 190128A LCSD RSK Std 5



**Primary Source Stock Standard 10,000ppmV**

Manufacturer Exp Date 6-19-18

RSK Gas Mix (Scott Specialty Gas) Cat.# 0104E40028`4, Lot # 170PLU5SPC06L-35410

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

**RSK Calibration Curve (prepared in 1.0 L Tedlar Bags at room temp)****Expires 02/24/18**

CMM 01/23/18

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC 06L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL

**Second Source Stock Standard 10,000ppmV**

Manufacturer Exp date 7-8-2017 (lot exp extension to 1/8/18)\*

RSK Gas Mix (Scott Specialty Gas) Cat.# 23452, Lot # 164PLU4SPC05L-34436

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

\*(verified with acceptable second source exp 6/19/18. OK per APPL QAU - sd)

**Second Source****Expires 02/23/18**

CMM 01/23/18

2.0mL of SS from tank into 980 mL Nitrogen

final conc: 13.3ug/L Methane, 25.0 ug/L Ethane, and 23.3 ug/L Ethene

**CCV/LCS/LCSD**

CMM 01/23/18

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

**AZ66793 MS/MSD**

CMM 01/23/18

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

## Injection Log

Directory: G:\ROCKYDATA\190120RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	19012000.D	1	RSK Std 1 01/20/19	125uL from RSK Std 3	20 Jan 19 11:58
2	2	19012001.D	1	RSK Std 2 01/20/19	250uL from RSK Std 3	20 Jan 19 12:02
3	3	19012002.D	1	RSK Std 3 01/20/19		20 Jan 19 12:04
4	4	19012003.D	1	RSK Std 4 01/20/19		20 Jan 19 12:07
5	6	19012005.D	1	RSK Std 5 01/20/19		20 Jan 19 12:12
6	8	19012007.D	1	RSK Std 6 01/20/19		20 Jan 19 12:17
7	9	19012008.D	1	RSK Std 7 01/20/19		20 Jan 19 12:20
8	11	19012010.D	1	SS RSK Std 5 01/20/19		20 Jan 19 12:39
9	1	19012800.D	1	190128A LCS/CCV RSK Std 5		28 Jan 19 10:22
10	2	19012801.D	1	190128A LCSD RSK Std 5		28 Jan 19 10:25
11	3	19012802.D	1	190128A Blk		28 Jan 19 10:28
12	4	19012803.D	1	AZ85519W04		28 Jan 19 10:31
13	5	19012804.D	1	AZ85520W04 E Methane		28 Jan 19 10:33
14	7	19012806.D	10	AZ85520W04 DF10		28 Jan 19 10:39
15	8	19012807.D	1	AZ85522W04		28 Jan 19 10:41
16	9	19012808.D	1	AZ85523W04		28 Jan 19 10:44
17	10	19012809.D	1	AZ85524W04		28 Jan 19 10:47
18	11	19012810.D	1	AZ85525W04		28 Jan 19 10:49
19	12	19012811.D	1	AZ85526W04		28 Jan 19 10:52
20	13	19012812.D	1	AZ85527W04		28 Jan 19 10:54
21	33	19012832.D	1	Ending CCV RSK Std 5 01/28/19		28 Jan 19 11:49

**INORGANIC ANALYSIS**  
**Calibration Data**





INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/15/18

Analyte	Calibration Verification									M
	True ICV	Found 12:31	%R(1)	True CCV1	Found 9:19	%R(1)	True CCV1	Found 9:24	%R(1)	
Ferrous Iron	3	3.15693	105	4	3.94680	98.7	4	3.95680	98.9	

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/23/19

Analyte	Calibration Verification									M
	True CCV1	Found 16:45	%R(1)	True CCV1	Found 16:51	%R(1)	True	Found	%R(1)	
Ferrous Iron	4	3.96680	99.2	4	3.97680	99.4				

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87932

SDG: 87932

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB	C	CCB	C	CCB	C	CCB	C	CCB	C	
	06/15/18 12:32		01/23/19 09:19		01/23/19 09:24		01/23/19 16:45		01/23/19 16:52		
Ferrous Iron	1.000	U	1.000	U	1.000	U	1.000	U	1.0000	U	

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC.

Contract: \_\_\_\_\_

ARF No: \_\_\_\_\_

SDG: \_\_\_\_\_

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/09/19

Analyte	Calibration Verification									M
	True ICV	Found 11:36	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
bromide	12.5	12.9616	104							
chloride	25	25.0432	100							
fluoride	5	4.8938	97.9							
Nitrate(NO3)	22.1	22.7510	103							
Nitrate(NO3)-N	5	5.1373	103							
Nitrite(NO2)	9.98	10.4092	104							
Nitrite(NO2)-N	3.04	3.1691	104							
phosphate	30.7	29.8203	97.1							
phosphate-p	10	9.7309	97.3							
sulfate	25	26.3264	105							

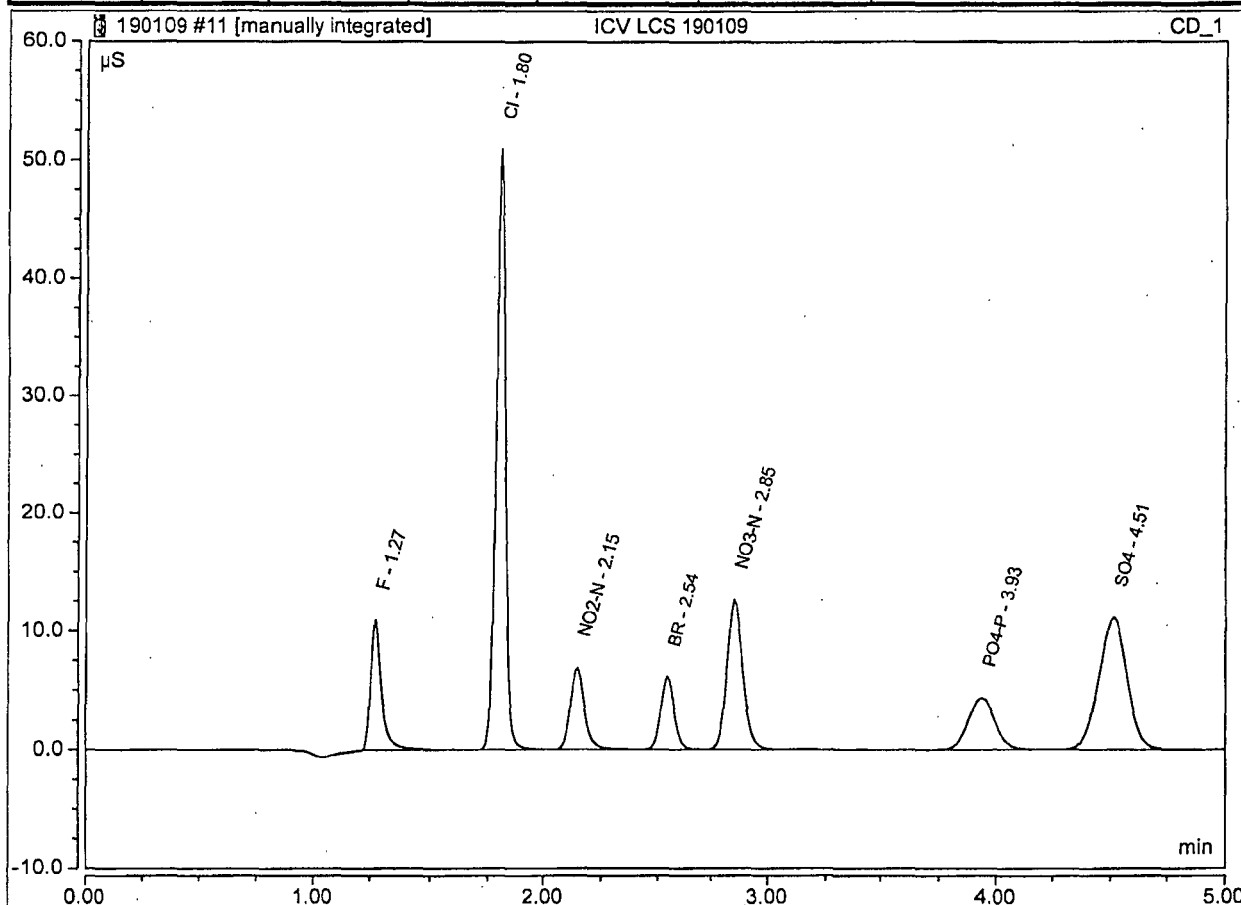
(1) Control Limits: 90-110

ILM02.0

**Peak Integration Report**

Sample Name:	ICV LCS 190109	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:36	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.575	10.921	4.8938
2	1.80	Cl	BMB	2.480	50.880	25.0432
3	2.15	NO2-N	BMB	0.483	6.857	3.1690
4	2.54	BR	BMB	0.439	6.091	12.9616
5	2.85	NO3-N	BMB	1.040	12.608	5.1373
6	3.93	PO4-P	BMB	0.591	4.327	9.7309
7	4.51	SO4	BMB	1.602	11.157	26.3264



F ml1 HH 190109, MM

Algorithm Check:

y = Peak Area

x = mg/L S04

$$y = 0.0609 \quad x + \quad 0.0000$$

$$y = 1.6023 \quad \text{therefor } x = 26.305 \text{ HH 190109}$$

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: \_\_\_\_\_

ARF No.: \_\_\_\_\_

SDG: \_\_\_\_\_

Preparation Blank Matrix (soil/water): water

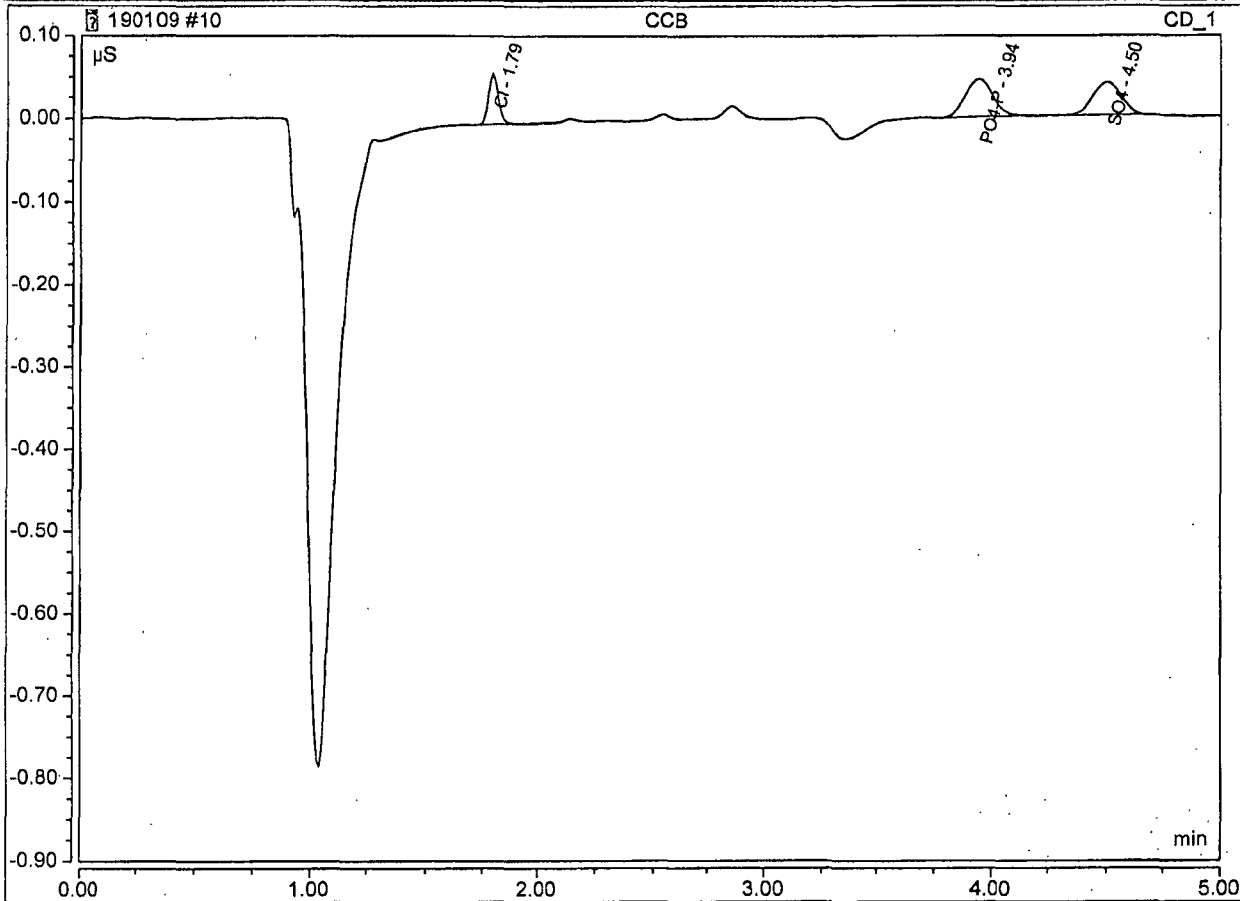
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/09/19 10:22	C	CCB 01/09/19 11:29	C		C		C		C	
bromide	.500	U	.500	U							
chloride	1.000	U	1.000	U							
fluoride	.100	U	.100	U							
Nitrate(NO3)	.500	U	.500	U							
Nitrate(NO3)-N	.200	U	.200	U							
Nitrite(NO2)	.300	U	.300	U							
Nitrite(NO2)-N	.100	U	.100	U							
phosphate	.600	U	2.400	*							*
phosphate-p	.200	U	.784	*							*
sulfate	1.000	U	.090	J							

Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:29	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.79	Cl	BMB	0.003	0.060	0.0311
2	3.94	PO4-P	BMB	0.006	0.045	0.7836
3	4.50	SO4	BMB	0.006	0.039	0.0904



A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/23/19

Analyte	Calibration Verification									M
	True CCV1	Found 9:37	%R(1)	True CCV1	Found 11:42	%R(1)	True CCV1	Found 13:55	%R(1)	
chloride	25	24.3400	97.4	25	25.6307	103	25	25.4260	102	
Nitrate(NO3)	22.1	22.8098	103	22.1	23.0025	104	22.1	22.7596	103	
sulfate	25	25.6874	103	25	25.9159	104	25	25.7344	103	

(1) Control Limits: 90-110

ILM02.0



## INITIAL AND CONTINUING CALIBRATION VERIFICATION

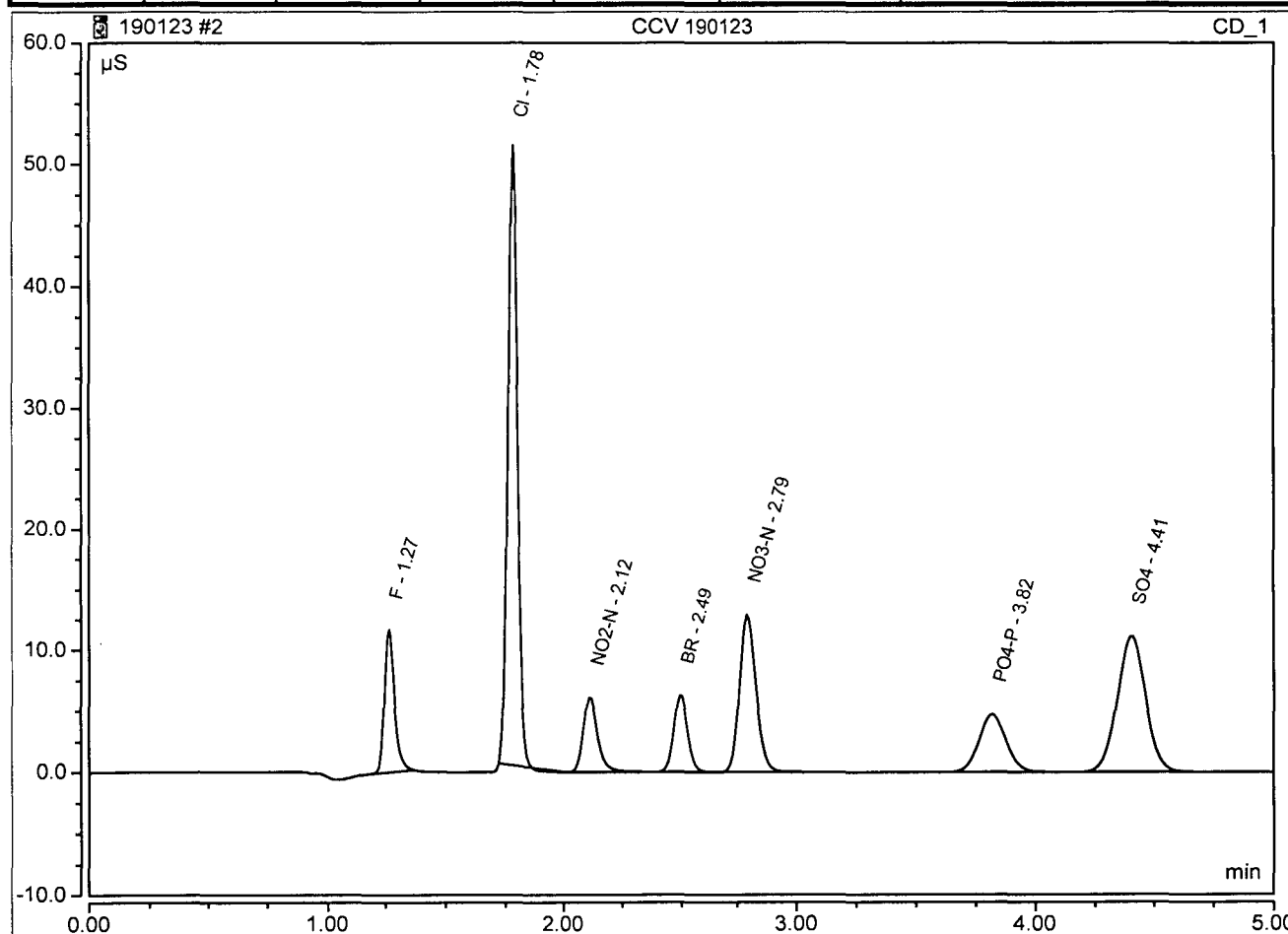
Lab Name: A.P.P.L. INC. Contract: AECOMARF No: 87932 SDG: 87932Initial Calibration Source: CPIContinuing Calibration Source: Environmental ExpressAnalysis Date: 01/23/19

Analyte	Calibration Verification									M
	True CCV1	Found 18:27	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
chloride	25	25.6598	103							
Nitrate(NO3)	22.1	23.0113	104							
sulfate	25	25.9415	104							

### Peak Integration Report

Sample Name:	CCV 190123	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 09:37	Run Time:	5.00

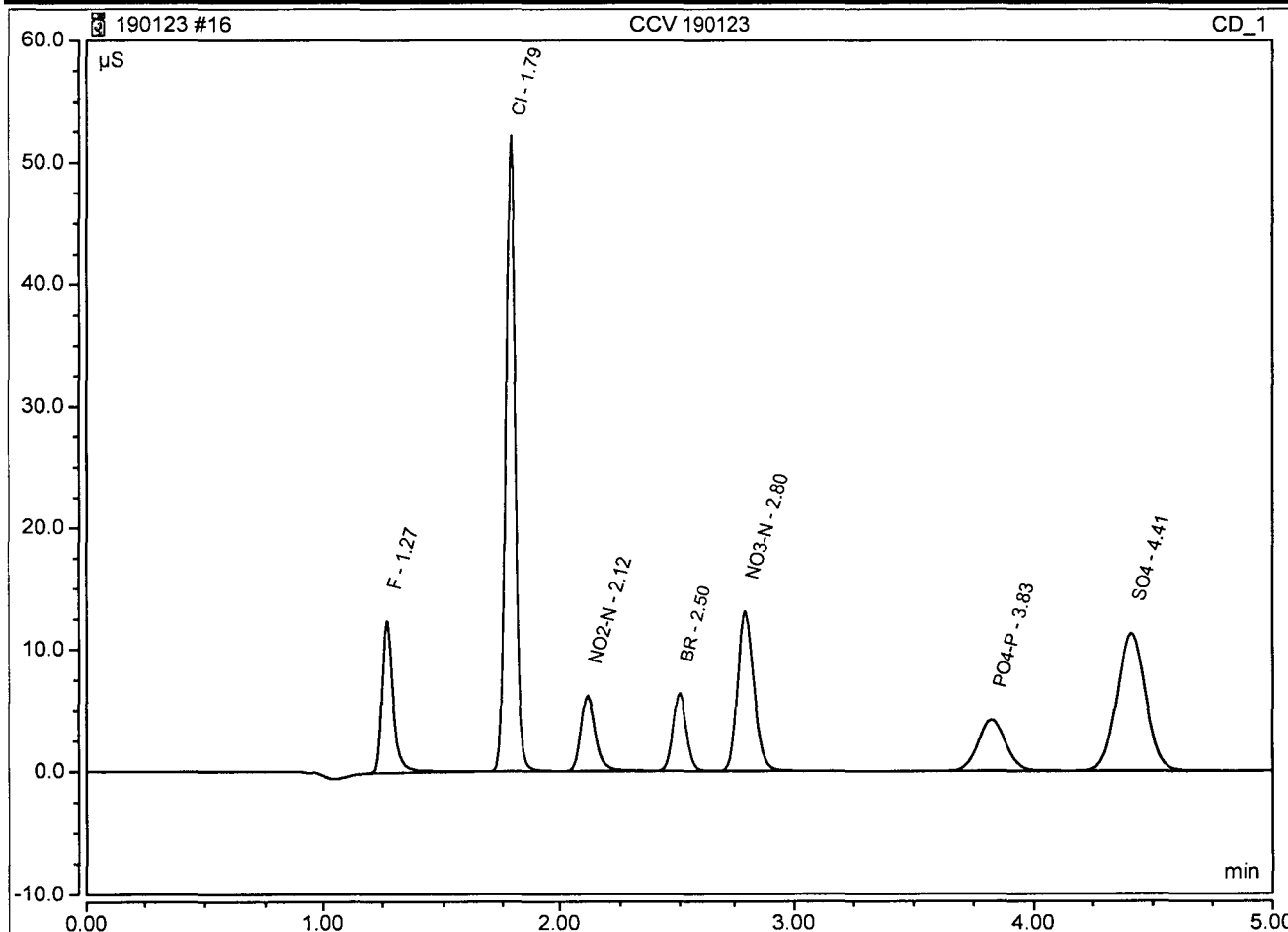
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S} \cdot \text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.27	F	BMB	0.581	11.652	4.9509
2	1.78	Cl	BMB	2.411	51.010	24.3401
3	2.12	NO <sub>2</sub> -N	BMB	0.434	6.112	2.8505
4	2.49	BR	BMB	0.446	6.306	13.1873
5	2.79	NO <sub>3</sub> -N	BMB	1.043	12.928	5.1506
6	3.82	PO <sub>4</sub> -P	BMB	0.628	4.718	10.2968
7	4.41	SO <sub>4</sub>	BMB	1.563	11.155	25.6875



### Peak Integration Report

Sample Name:	CCV 190123	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 11:42	Run Time:	5.00

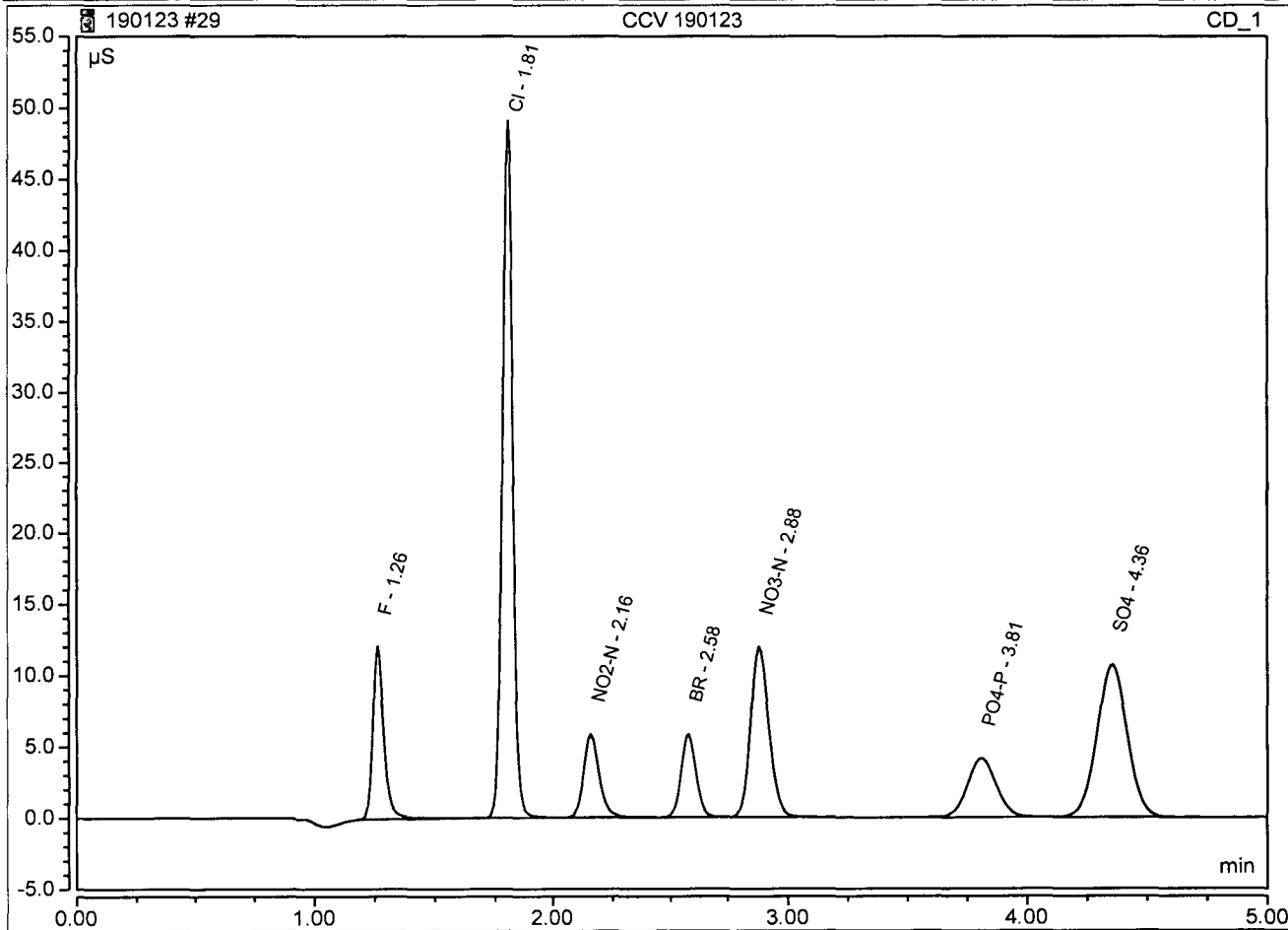
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.655	12.425	5.5769
2	1.79	Cl	BMB	2.539	52.118	25.6308
3	2.12	NO2-N	BMB	0.439	6.173	2.8789
4	2.50	BR	BMB	0.449	6.354	13.2659
5	2.80	NO3-N	BMB	1.052	13.055	5.1941
6	3.83	PO4-P	BMB	0.559	4.186	9.2478
7	4.41	SO4	BMB	1.577	11.237	25.9160



### Peak Integration Report

Sample Name:	CCV 190123	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 13:55	Run Time:	5.00

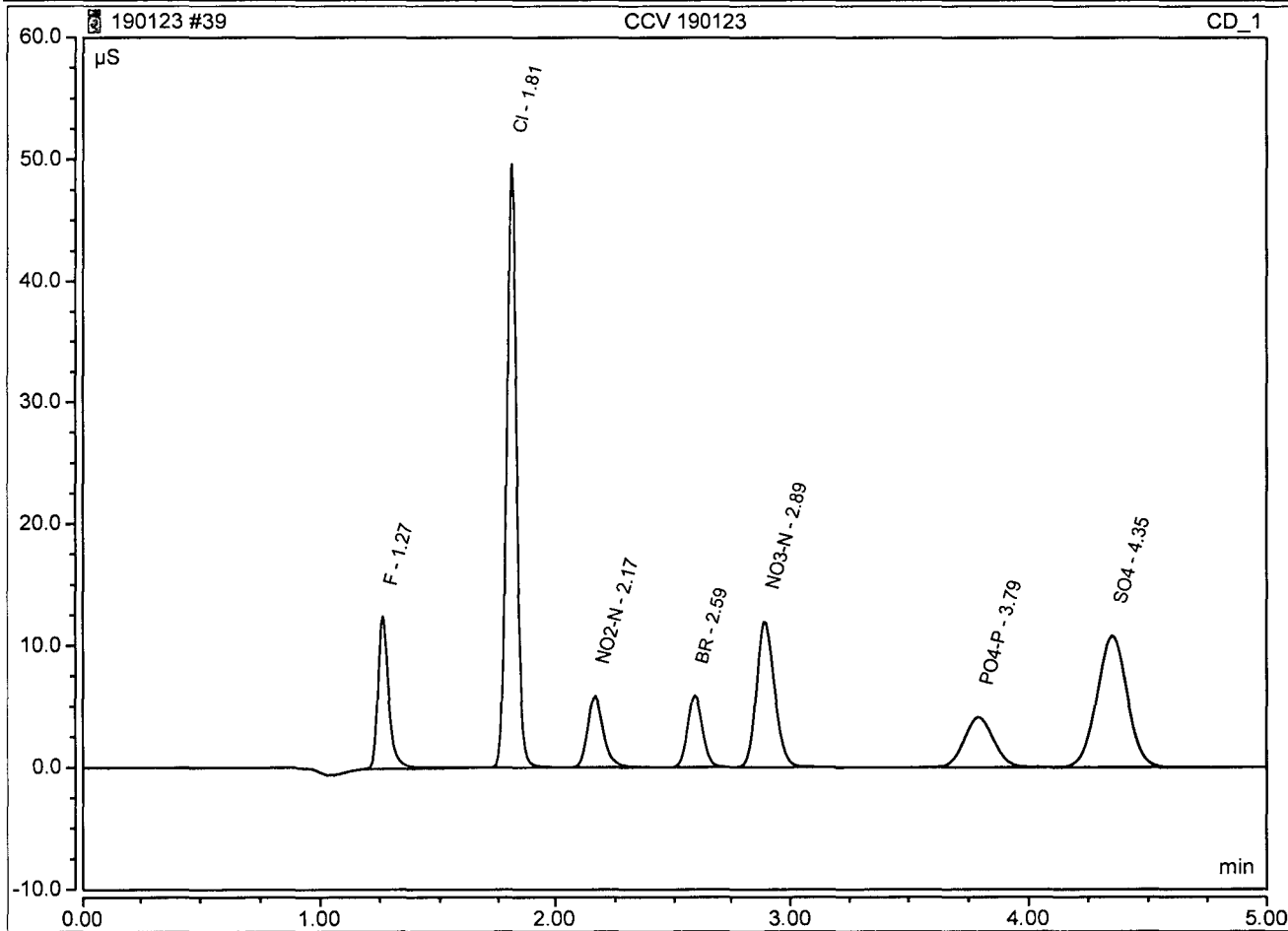
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.655	12.127	5.5826
2	1.81	Cl	BMB	2.518	49.078	25.4260
3	2.16	NO2-N	BMB	0.437	5.840	2.8682
4	2.58	BR	BMB	0.446	5.847	13.1721
5	2.88	NO3-N	BMB	1.041	11.947	5.1392
6	3.81	PO4-P	BMB	0.582	4.133	9.5944
7	4.36	SO4	BMB	1.566	10.710	25.7344



### Peak Integration Report

Sample Name:	CCV 190123	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 18:27	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.661	12.466	5.6311
2	1.81	Cl	BMB	2.541	49.620	25.6598
3	2.17	NO2-N	BMB	0.442	5.827	2.8993
4	2.59	BR	BMB	0.449	5.871	13.2537
5	2.89	NO3-N	BMB	1.052	11.976	5.1961
6	3.79	PO4-P	BMB	0.577	4.098	9.5189
7	4.35	SO4	BMB	1.579	10.758	25.9416



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87932

SDG: 87932

Preparation Blank Matrix (soil/water): water

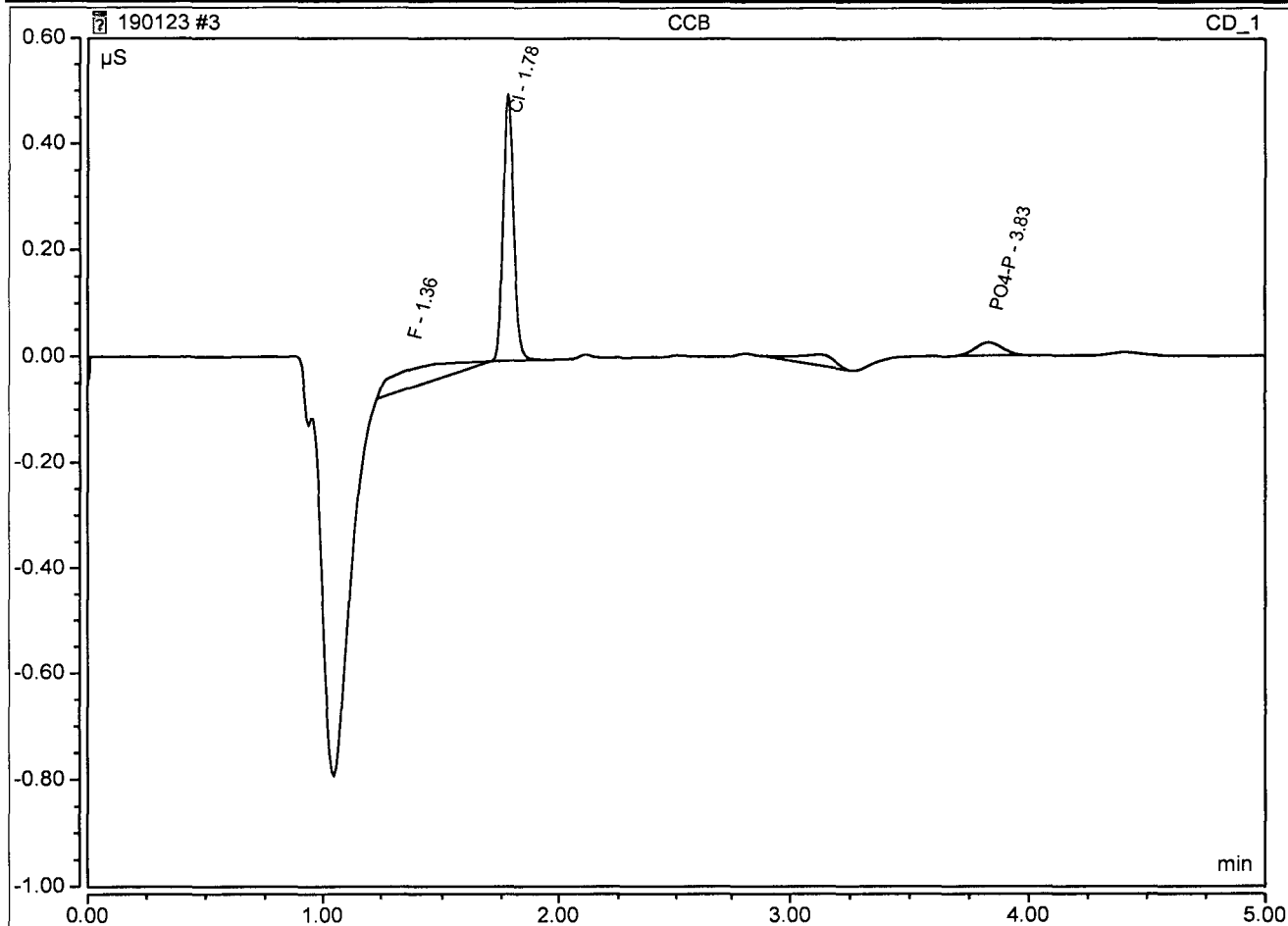
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/23/19 09:45	C	CCB 01/23/19 11:50	C	CCB 01/23/19 14:02	C	CCB 01/23/19 18:35	C		C	
chloride	.264	J	.266	J	.264	J	.293	J			
Nitrate(NO3)	.500	U	.500	U	.500	U	.500	U			
sulfate	1.000	U	1.000	U	1.000	U	1.000	U			

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 09:45	Run Time:	5.00

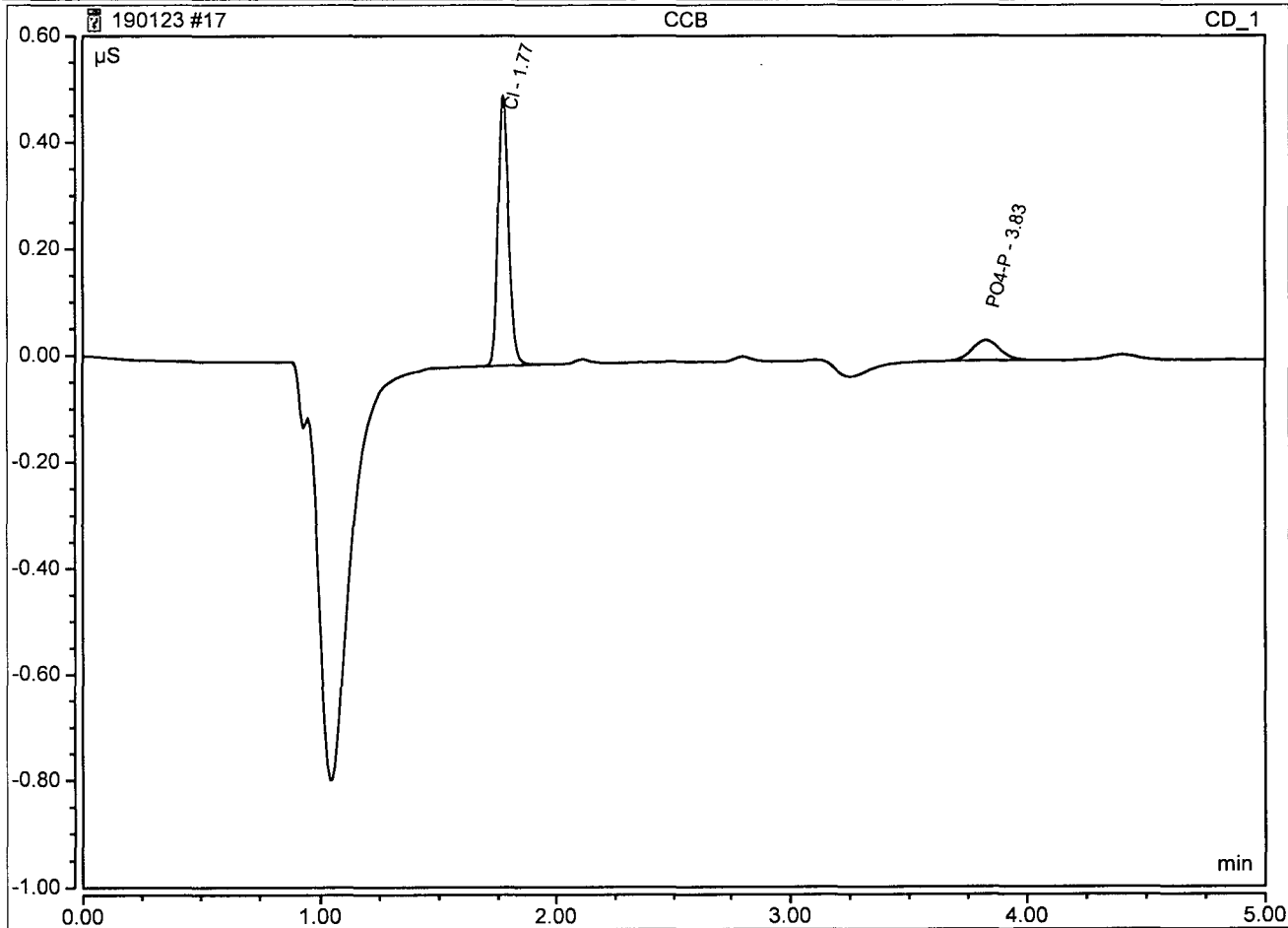
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.36	F	BMB	0.011	0.035	0.0905
2	1.78	Cl	BMB	0.026	0.501	0.2635
4	3.83	PO4-P	BMB	0.003	0.025	0.7378



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 11:50	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.77	Cl	BMB	0.026	0.506	0.2658
2	3.83	PO4-P	BMB	0.005	0.038	0.7667

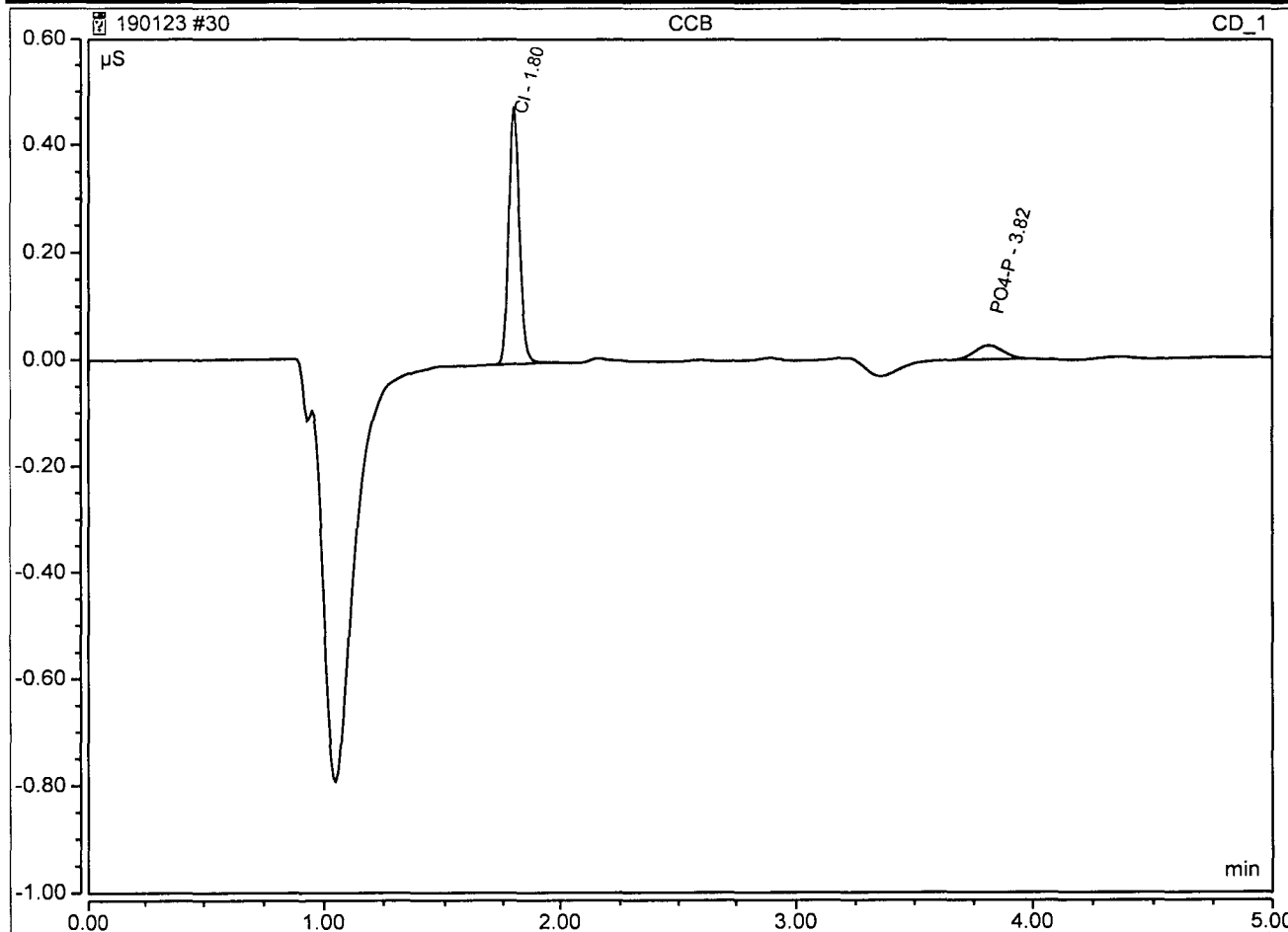




### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 14:02	Run Time:	5.00

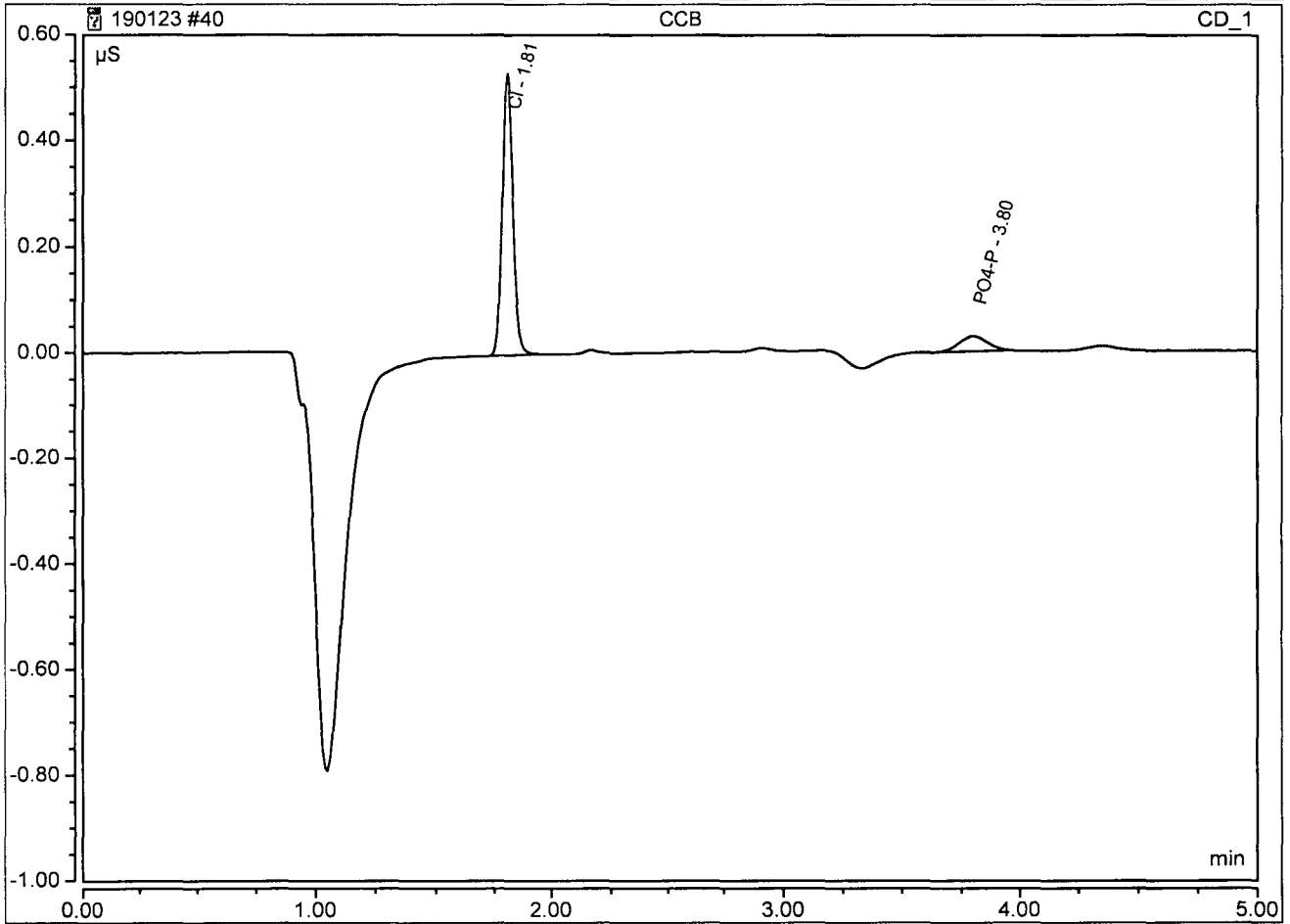
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.80	Cl	BMB	0.026	0.478	0.2643
2	3.82	PO4-P	BMB	0.004	0.026	0.7440



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 18:35	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.81	Cl	BMB	0.029	0.531	0.2928
2	3.80	PO4-P	BMB	0.004	0.029	0.7501



A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: \_\_\_\_\_

ARF No: \_\_\_\_\_ SDG: \_\_\_\_\_

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/24/19

Analyte	Calibration Verification									M
	True ICV	Found 13:12	%R(1)	True ICV	Found 13:20	%R(1)	True	Found	%R(1)	
bromide	12.5	12.8349	103	12.5	12.8652	103				
chloride	25	24.9773	99.9	25	25.0366	100				
fluoride	5	5.0197	100	5	4.9943	99.9				
Nitrate(NO3)	22.1	21.9822	99.5	22.1	22.0247	99.7				
Nitrate(NO3)-N	5	4.9637	99.3	5	4.9733	99.5				
Nitrite(NO2)	9.98	10.2443	103	9.98	10.2551	103				
Nitrite(NO2)-N	3.04	3.1189	103	3.04	3.1222	103				
phosphate	30.7	28.2065	91.9	30.7	28.7373	93.6				
phosphate-p	10	9.2043	92.0	10	9.3775	93.8				
sulfate	25	24.8282	99.3	25	24.8792	99.5				

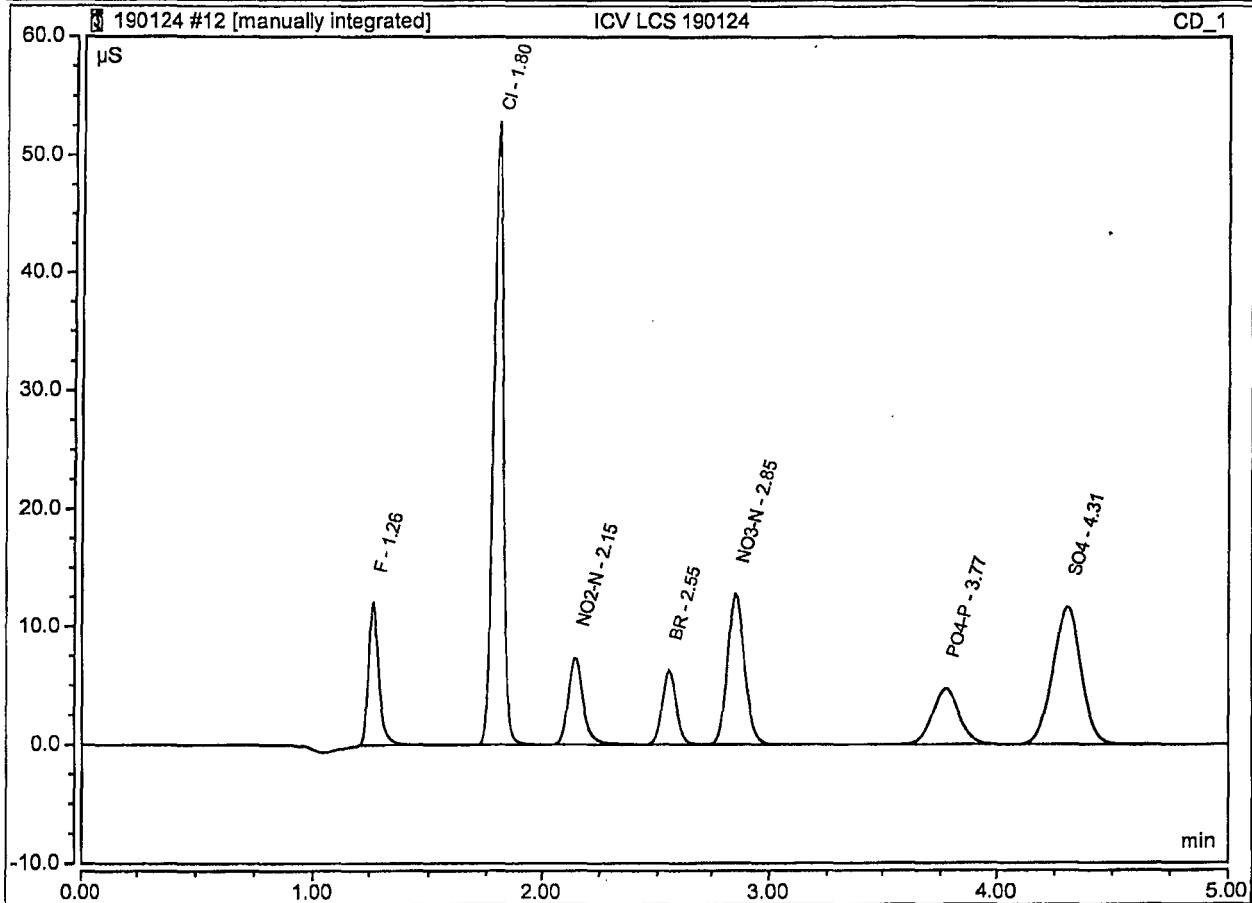
(1) Control Limits: 90-110

ILM02.0

**Peak Integration Report**

Sample Name:	ICV LCS 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:12	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.626	12.036	5.0197
2	1.80	Cl	BMB	2.660	52.786	24.9773
3	2.15	NO2-N	BMB	0.552	7.368	3.1189
4	2.55	BR	BMB	0.467	6.249	12.8349
5	2.85	NO3-N	BMB	1.088	12.728	4.9637
6	3.77	PO4-P	BMB	0.642	4.687	9.2043
7	4.31	SO4	BMB	1.650	11.613	24.8282



F mi1 HH 190128 MM

Algorithm Check:

y = Peak Area

x = mg/L S04

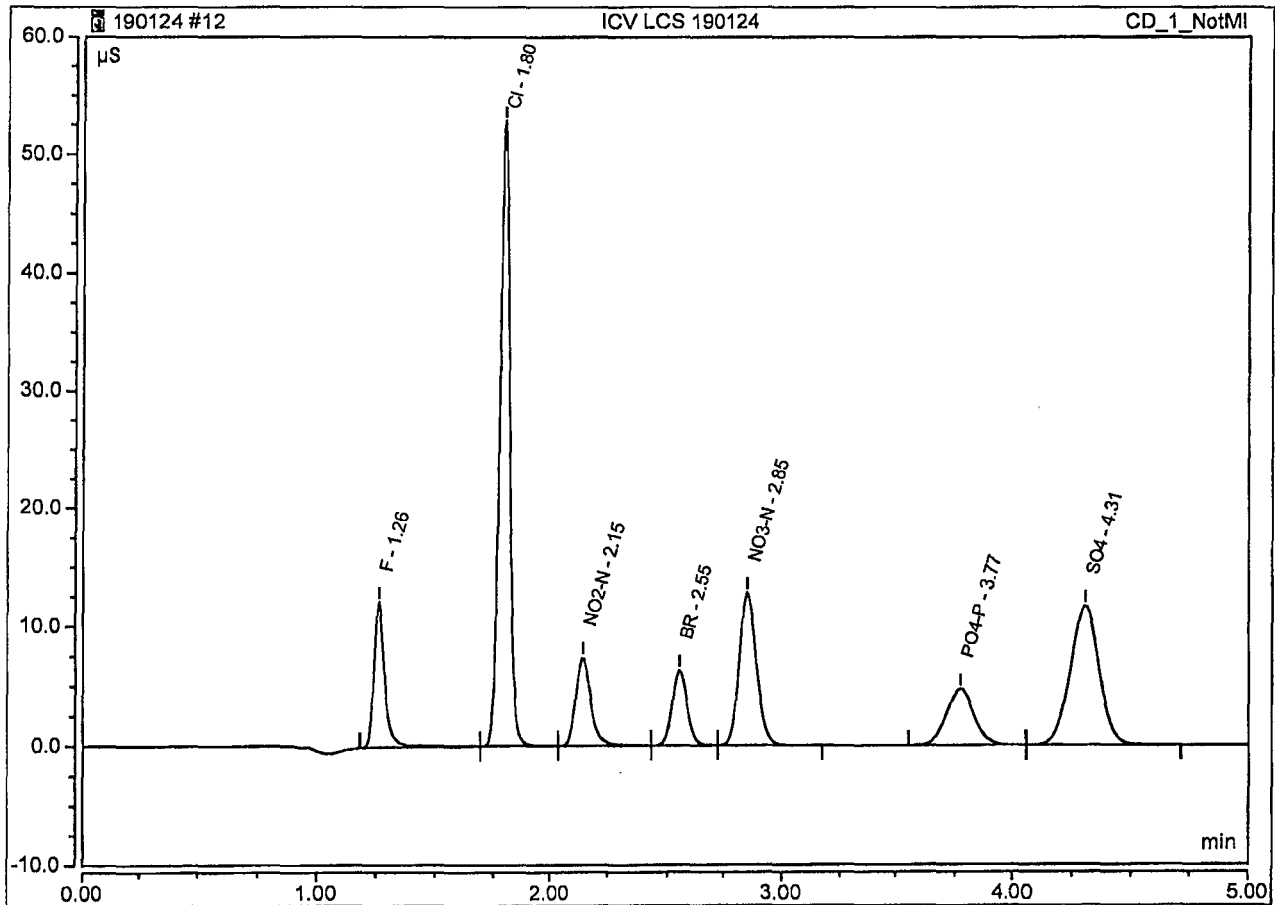
$$y = 0.0664 \quad x + \quad 0.0000$$

$$y = 1.6497 \quad \text{therefor } x = 24.85 \text{ HH 190129}$$

### Not Manipulated Peak Integration Report

Sample Name:	ICV LCS 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:12	Run Time:	5.00

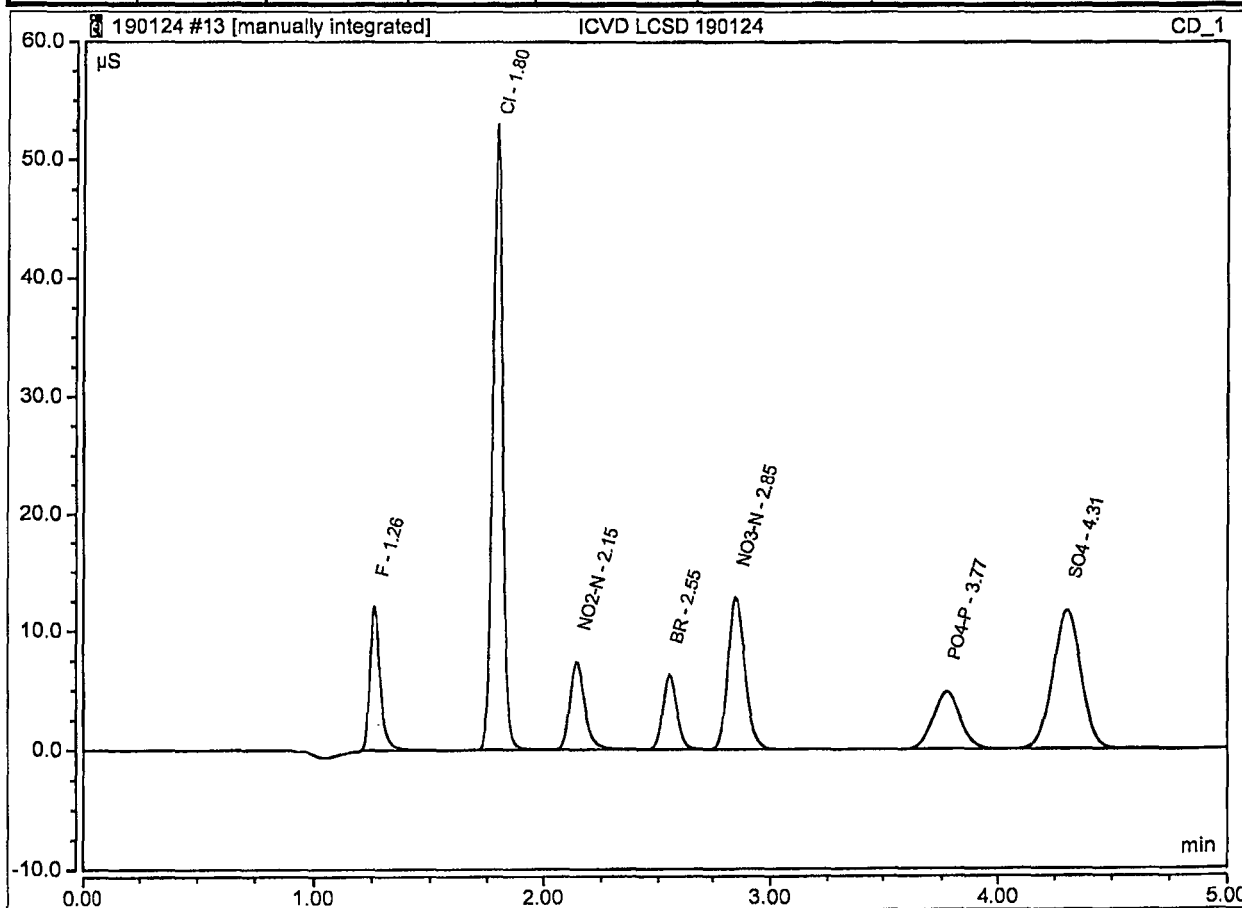
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.653	12.130	4.9830
2	1.80	Cl	BMB	2.660	52.786	24.9773
3	2.15	NO <sub>2</sub> -N	BMB	0.552	7.368	3.1189
4	2.55	BR	BMB	0.467	6.249	12.8349
5	2.85	NO <sub>3</sub> -N	BMB	1.088	12.728	4.9637
6	3.77	PO <sub>4</sub> -P	BMB	0.642	4.687	9.2043
7	4.31	SO <sub>4</sub>	BMB	1.650	11.613	24.8282



### Peak Integration Report

Sample Name:	ICVD LCSD 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:20	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.623	12.051	4.9943
2	1.80	Cl	BMB	2.666	52.924	25.0366
3	2.15	NO2-N	BMB	0.552	7.375	3.1222
4	2.55	BR	BMB	0.468	6.262	12.8652
5	2.85	NO3-N	BMB	1.090	12.755	4.9733
6	3.77	PO4-P	BMB	0.654	4.778	9.3775
7	4.31	SO4	BMB	1.653	11.628	24.8792

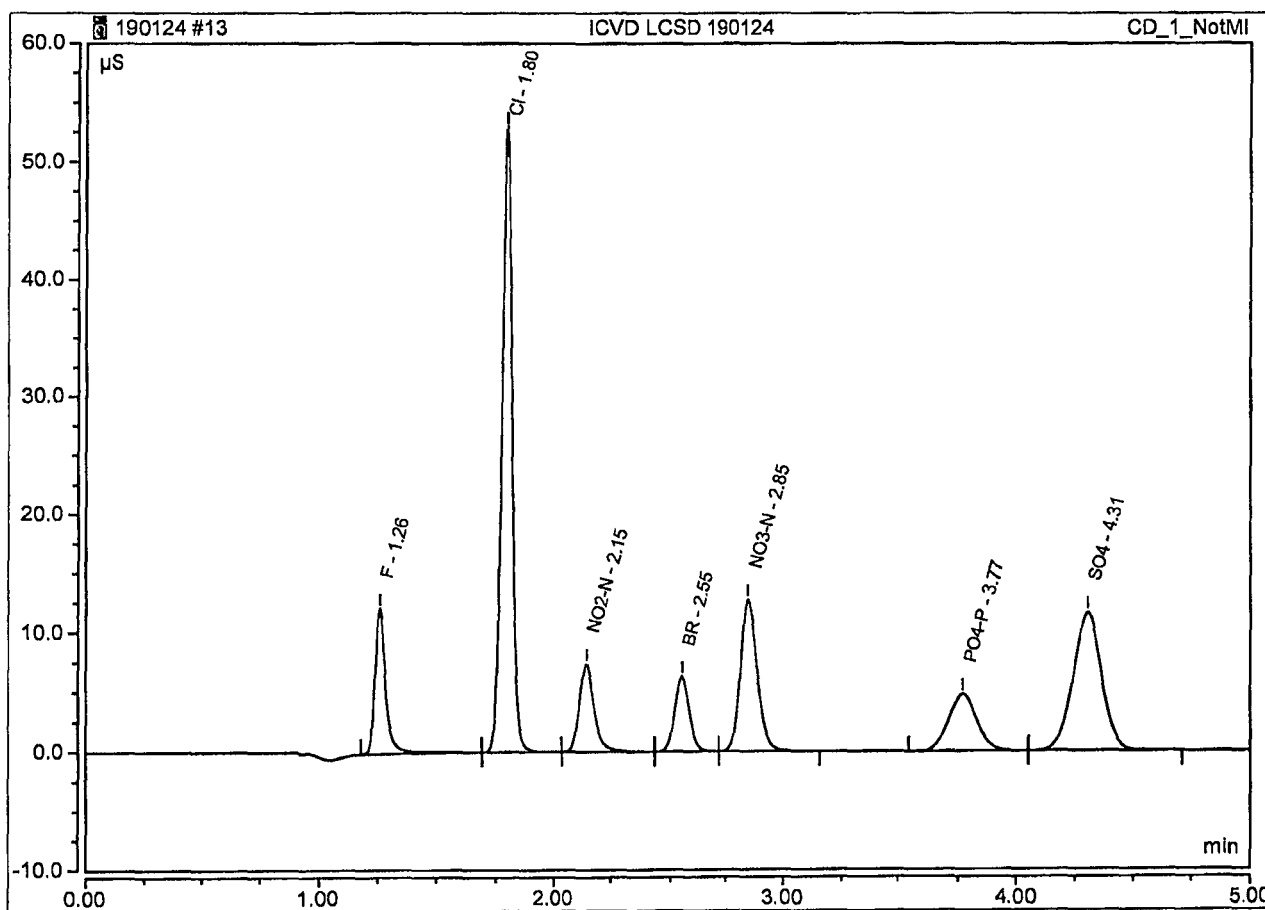


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	ICVD LCSD 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:20	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.26	F	BMB*	0.653	12.160	4.9894
2	1.80	Cl	BMB	2.666	52.924	25.0366
3	2.15	NO <sub>2</sub> -N	BMB	0.552	7.375	3.1222
4	2.55	BR	BMB	0.468	6.262	12.8652
5	2.85	NO <sub>3</sub> -N	BMB	1.090	12.755	4.9733
6	3.77	PO <sub>4</sub> -P	BMB	0.654	4.778	9.3775
7	4.31	SO <sub>4</sub>	BMB	1.653	11.628	24.8792



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: \_\_\_\_\_

ARF No.: \_\_\_\_\_

SDG: \_\_\_\_\_

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

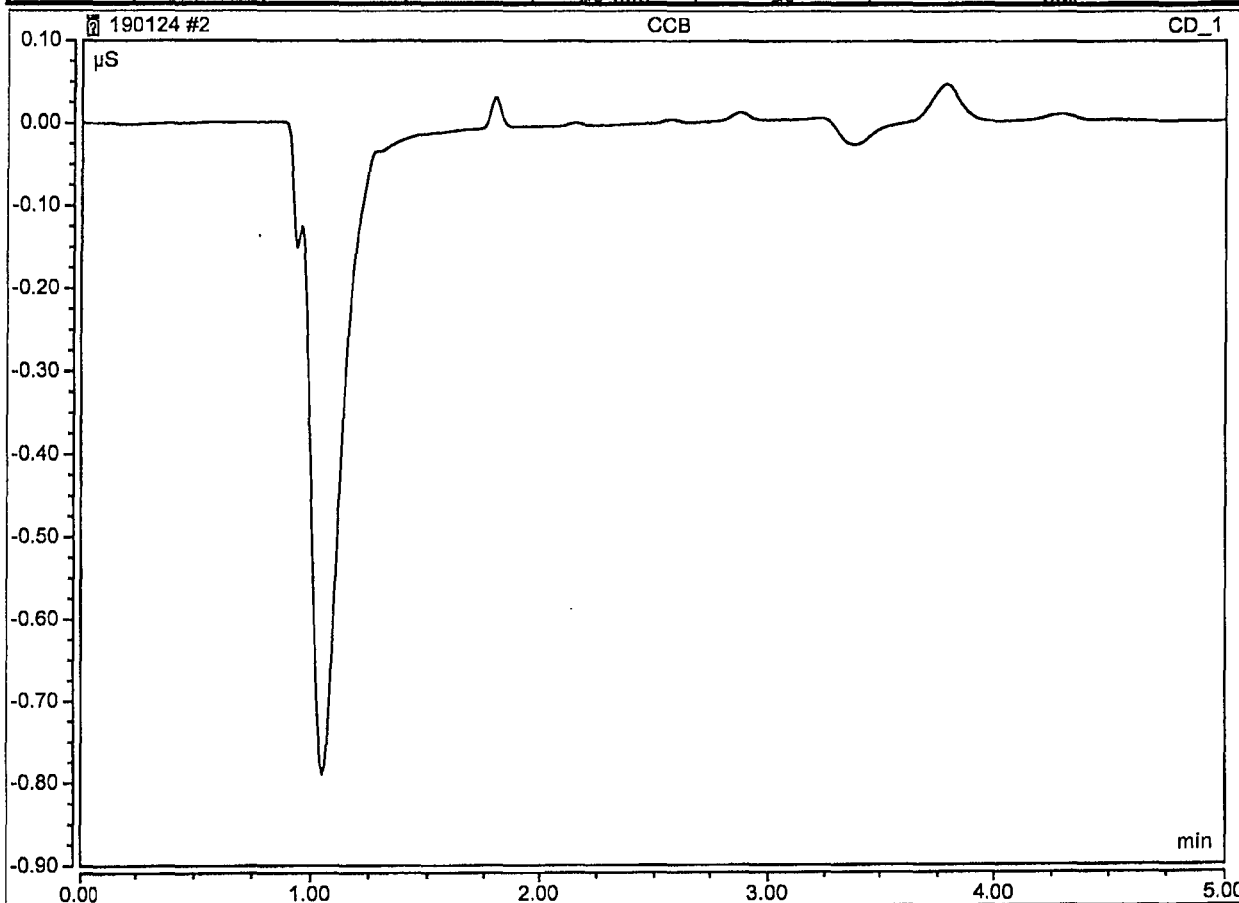
Analyte	Calibration Blanks										M
	CCB 01/24/19 11:58	C	CCB 01/24/19 13:05	C		C		C		C	
bromide	.500	U	.500	U							
chloride	1.000	U	1.000	U							
fluoride	.100	U	.100	U							
Nitrate(NO3)	.500	U	.500	U							
Nitrate(NO3)-N	.200	U	.200	U							
Nitrite(NO2)	.300	U	.300	U							
Nitrite(NO2)-N	.100	U	.100	U							
phosphate	.600	U	.316	J							
phosphate-p	.200	U	.103	J							
sulfate	1.000	U	1.000	U							



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 11:58	Run Time:	5.00

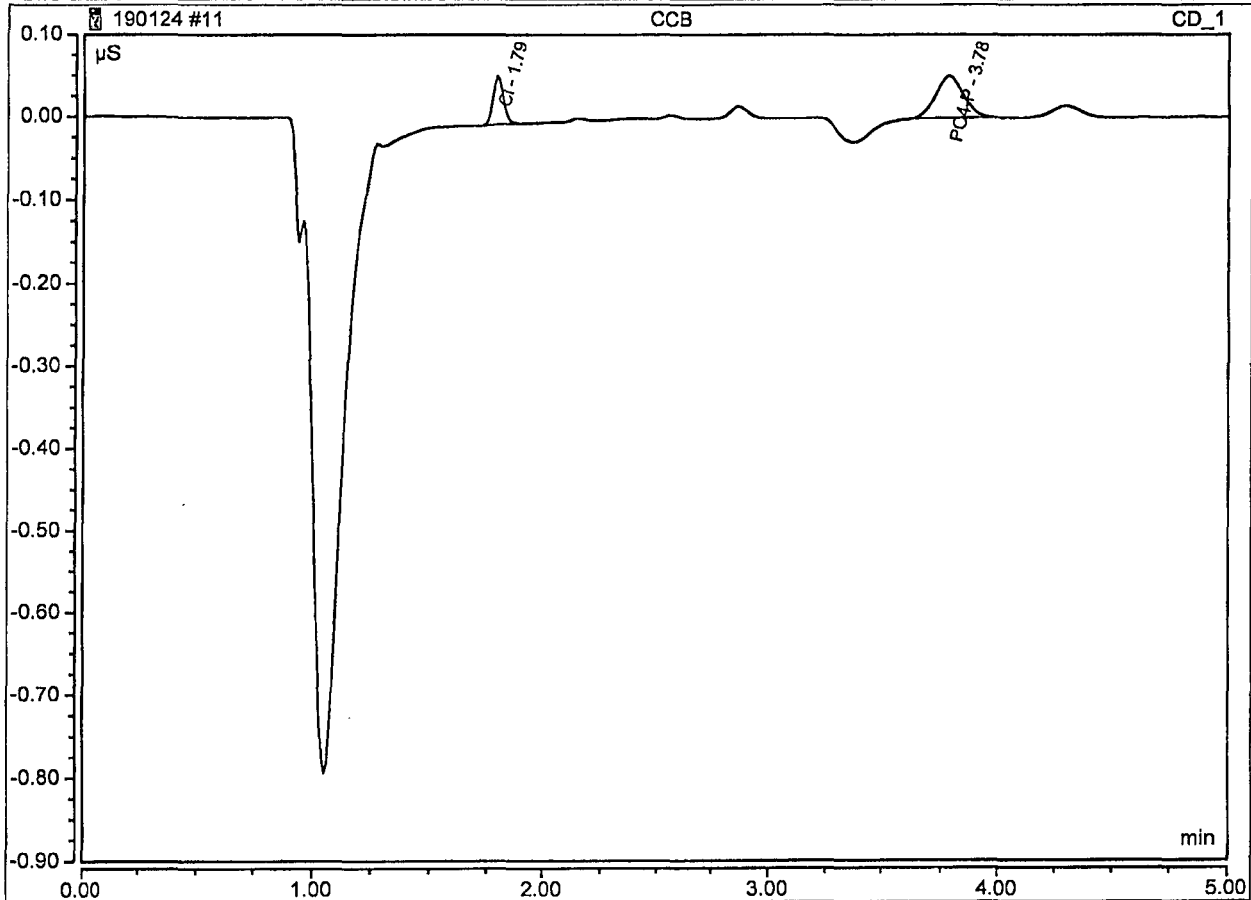
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
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### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:05	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.003	0.059	0.0294
2	3.78	PO4-P	BMB	0.007	0.051	0.1030



A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 9:55	%R(1)	True CCV1	Found 11:58	%R(1)	True CCV1	Found 12:45	%R(1)	
chloride	25	24.9271	99.7	25	25.0031	100	25	25.0596	100	
sulfate	25	25.0084	100	25	25.0883	100	25	25.1412	101	

(1) Control Limits: 90-110

ILM02.0

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 15:25	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
chloride	25	25.1431	101							
sulfate	25	25.1905	101							

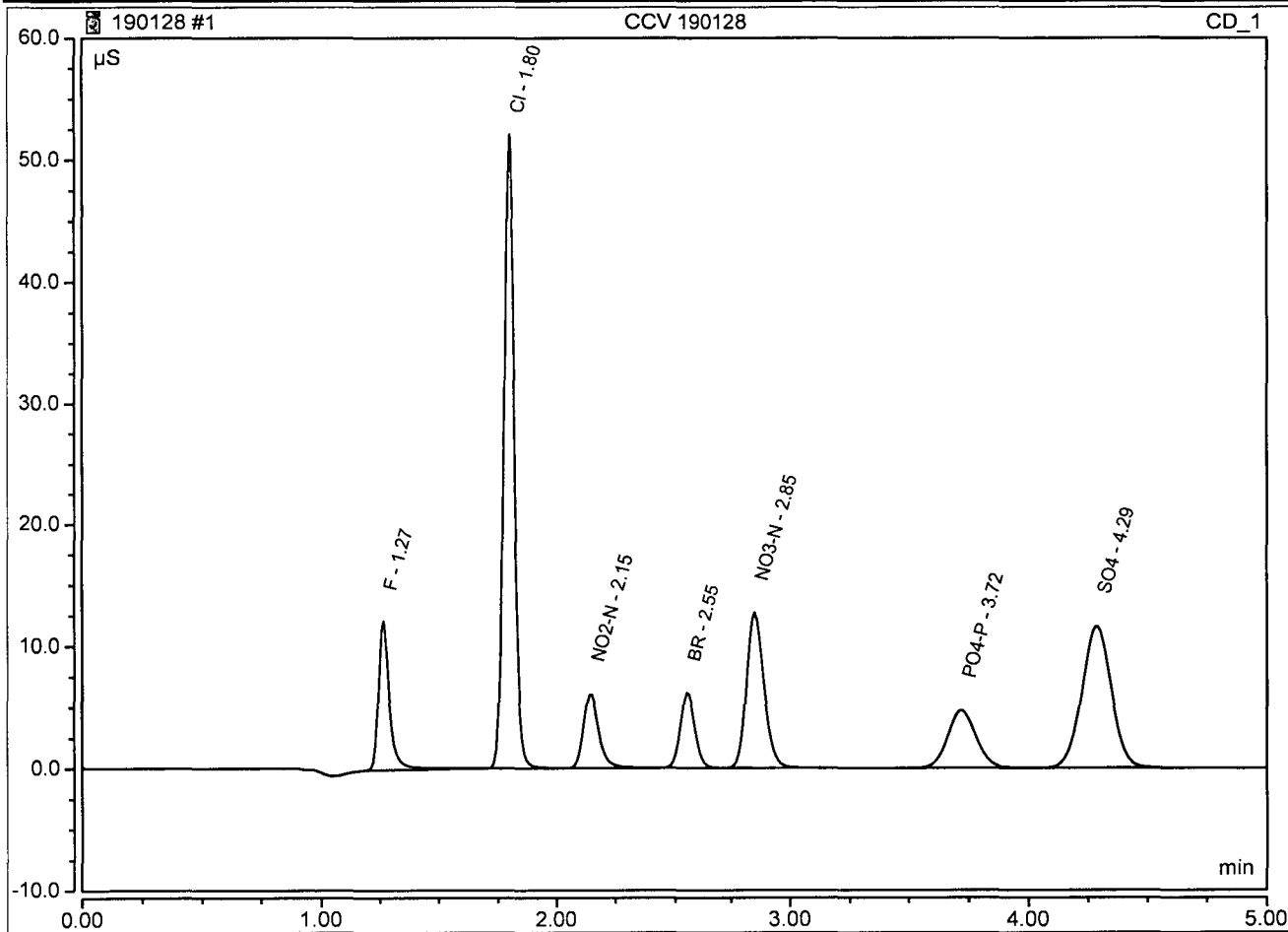
(1) Control Limits: 90-110

ILM02.0

### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 09:55	Run Time:	5.00

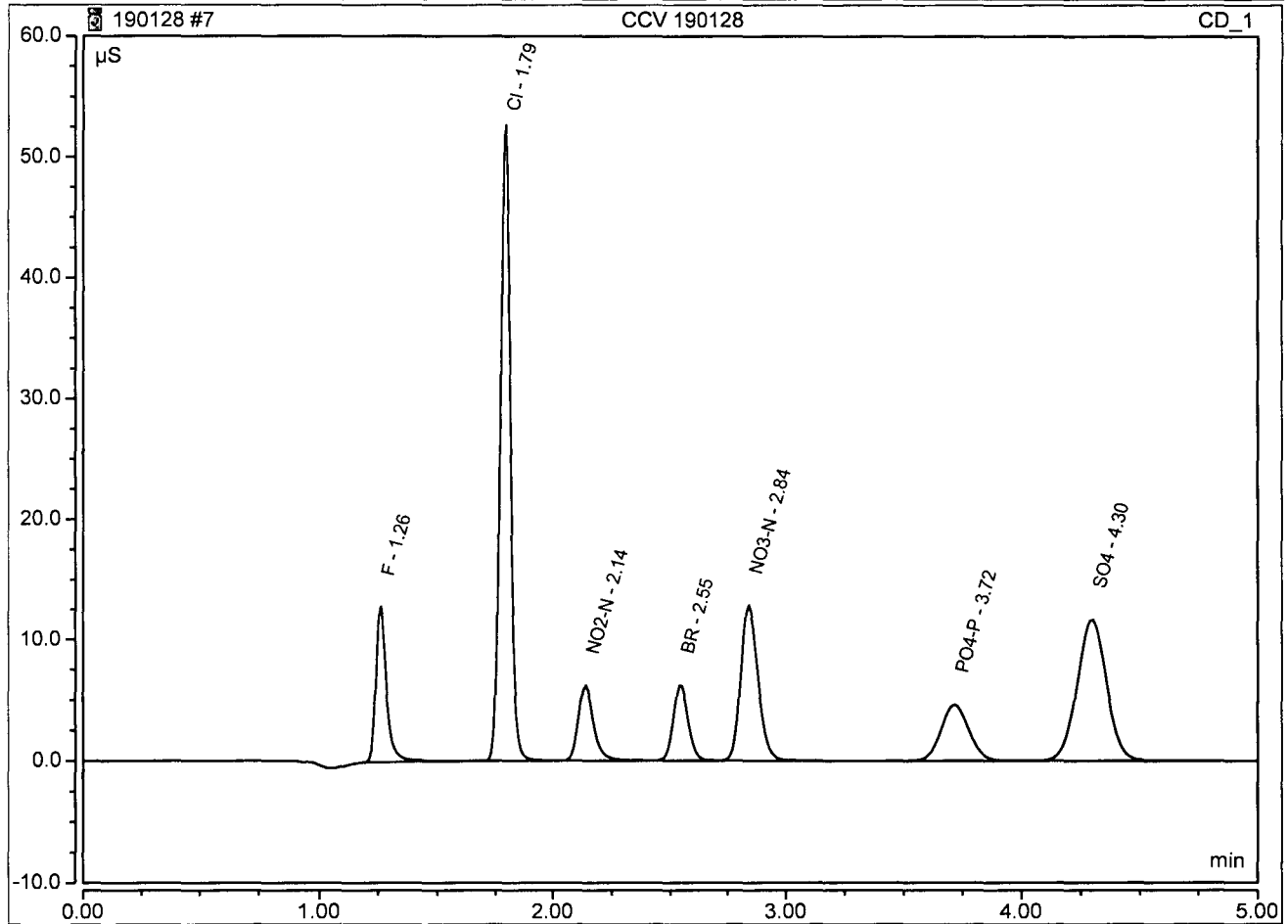
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.27	F	BMB	0.674	12.112	5.4036
2	1.80	Cl	BMB	2.654	52.046	24.9271
3	2.15	NO <sub>2</sub> -N	BMB	0.460	6.081	2.5985
4	2.55	BR	BMB	0.463	6.153	12.7223
5	2.85	NO <sub>3</sub> -N	BMB	1.094	12.679	4.9899
6	3.72	PO <sub>4</sub> -P	BMB	0.648	4.732	9.2976
7	4.29	SO <sub>4</sub>	BMB	1.662	11.599	25.0084



### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 11:58	Run Time:	5.00

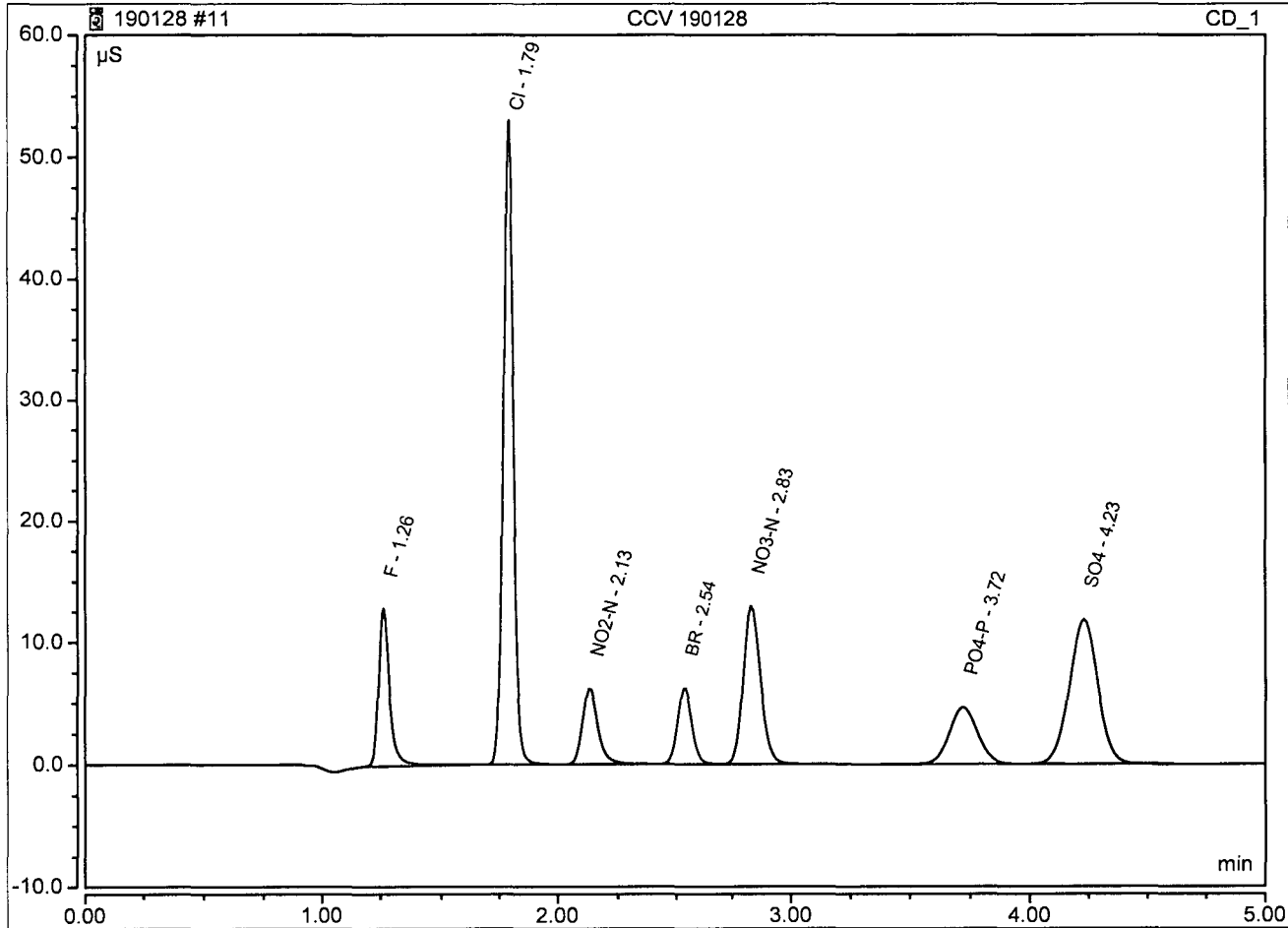
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.692	12.839	5.5497
2	1.79	Cl	BMB	2.662	52.652	25.0031
3	2.14	NO2-N	BMB	0.462	6.162	2.6129
4	2.55	BR	BMB	0.465	6.231	12.7697
5	2.84	NO3-N	BMB	1.099	12.830	5.0119
6	3.72	PO4-P	BMB	0.626	4.598	8.9852
7	4.30	SO4	BMB	1.667	11.651	25.0883



**Peak Integration Report**

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 12:45	Run Time:	5.00

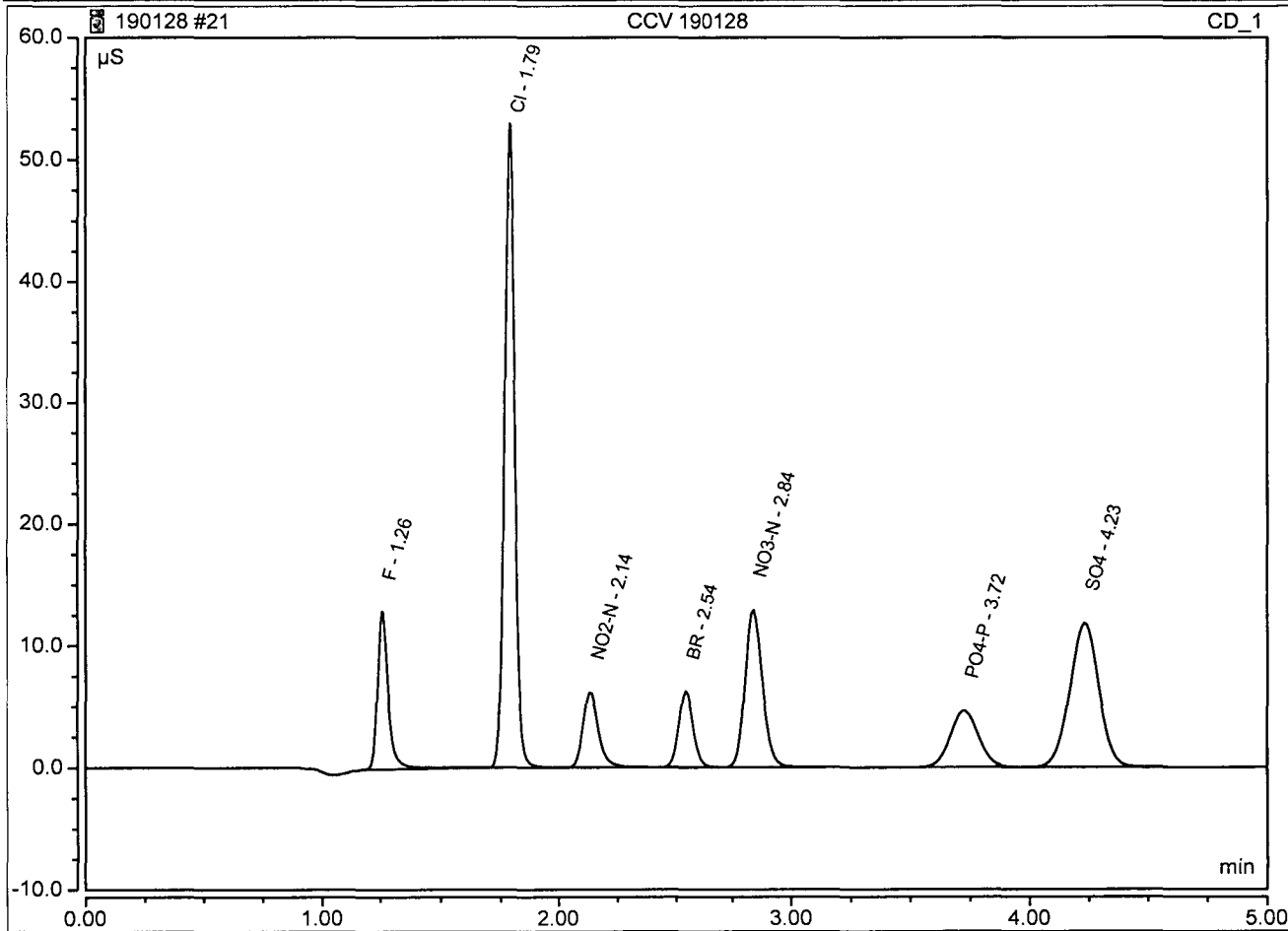
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.692	12.912	5.5471
2	1.79	Cl	BMB	2.668	52.972	25.0596
3	2.13	NO2-N	BMB	0.463	6.199	2.6172
4	2.54	BR	BMB	0.465	6.252	12.7704
5	2.83	NO3-N	BMB	1.098	12.964	5.0074
6	3.72	PO4-P	BMB	0.637	4.648	9.1403
7	4.23	SO4	BMB	1.670	11.825	25.1412



### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 15:25	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.691	12.937	5.5372
2	1.79	Cl	BMB	2.677	52.910	25.1431
3	2.14	NO2-N	BMB	0.464	6.185	2.6252
4	2.54	BR	BMB	0.466	6.232	12.8086
5	2.84	NO3-N	BMB	1.100	12.913	5.0185
6	3.72	PO4-P	BMB	0.638	4.629	9.1514
7	4.23	SO4	BMB	1.674	11.803	25.1905





A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87932

SDG: 87932

Preparation Blank Matrix (soil/water): water

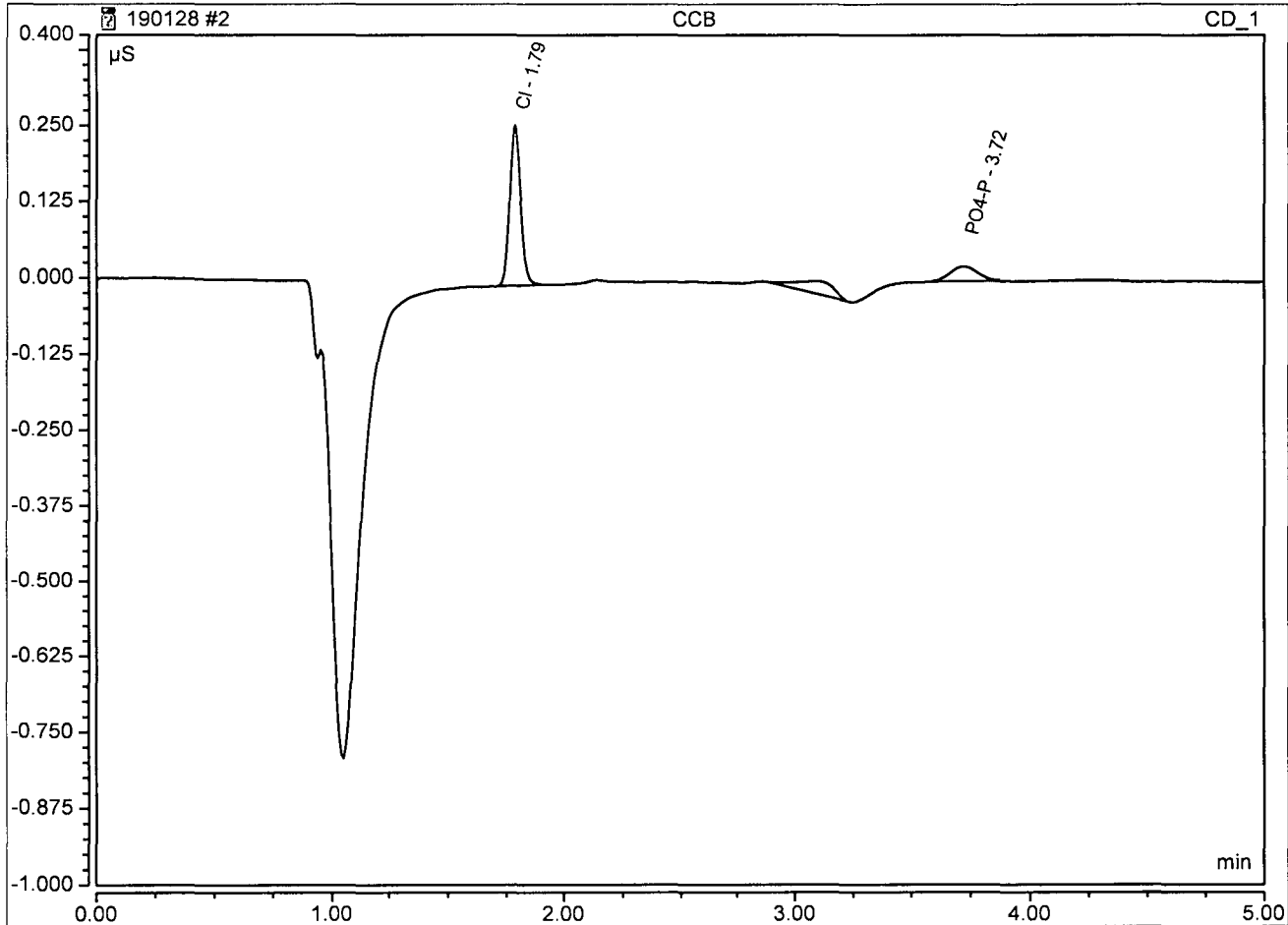
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/28/19 10:02	C	CCB 01/28/19 12:06	C	CCB 01/28/19 12:52	C	CCB 01/28/19 15:32	C		C	
chloride	.134	J	.134	J	.133	J	.145	J			
sulfate	1.000	U	1.000	U	1.000	U	1.000	U			

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 10:02	Run Time:	5.00

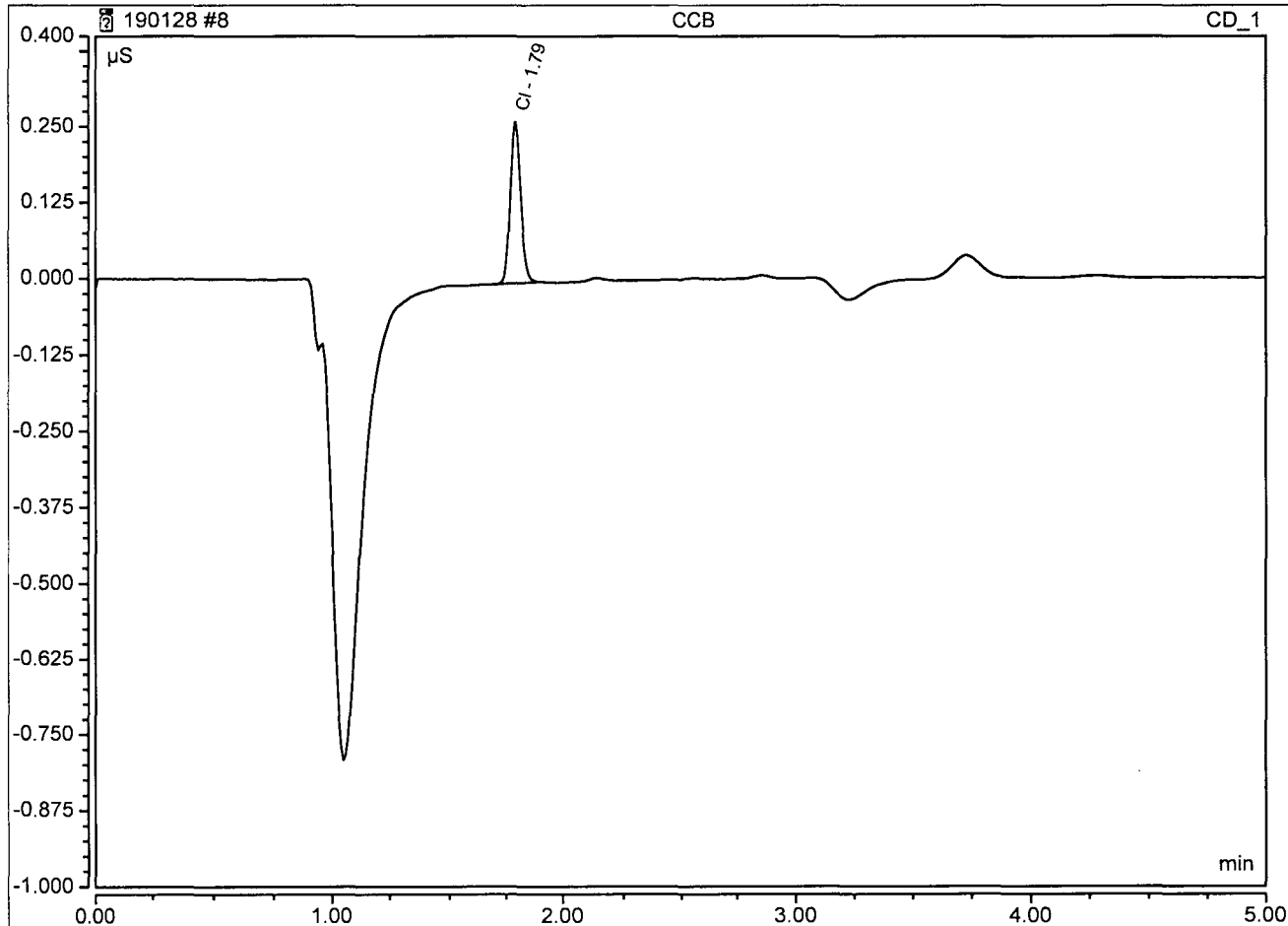
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.014	0.262	0.1339
3	3.72	PO4-P	BMB	0.003	0.024	0.0465



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 12:06	Run Time:	5.00

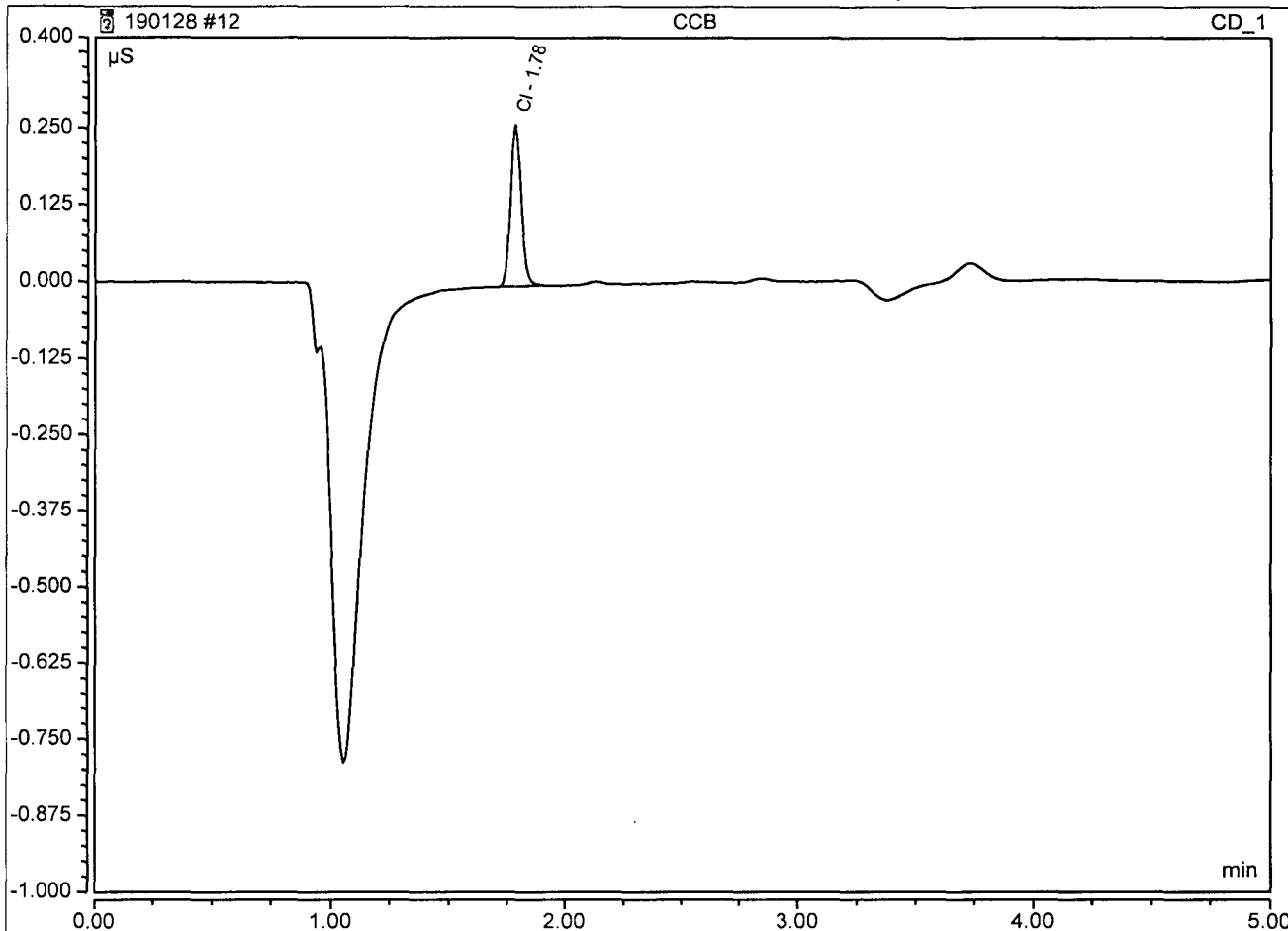
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.014	0.265	0.1339



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 12:52	Run Time:	5.00

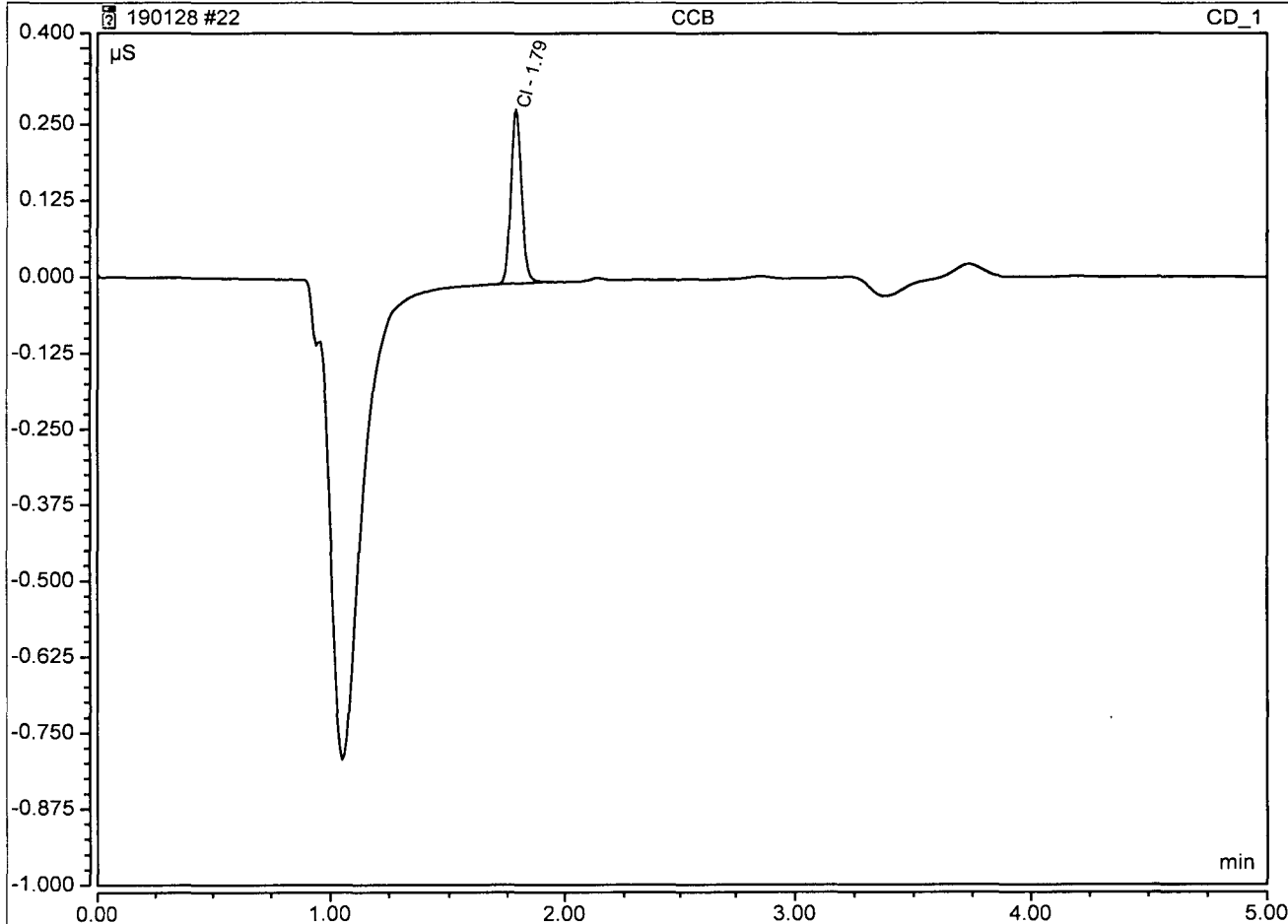
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.014	0.263	0.1327



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 15:32	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.015	0.284	0.1446



A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: O2si

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 16:33	%R(1)	True ICV	Found 16:37	%R(1)	True CCV1	Found 16:59	%R(1)	
TOXN	3	3.0152	101	3	3.0099	100	3	3.0892	103	

A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87932 SDG: 87932

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: O2si

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCVI	Found 17:19	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
TOXN	3	3.0464	102							

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87932

SDG: 87932

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/28/19 16:35	C	ICB 01/28/19 16:40	C	CCB 01/28/19 17:02	C	CCB 01/28/19 17:20	C		C	
TOXN	.100	U	.100	U	.100	U	.100	U			



APPL Inc  
2A  
Initial and Continuing Calibration Verification

Lab Name: APPL Inc  
 ARF No:  
 ICAL Source:  
 CCV Source:  
 Analysis Date: 02/11/19

Contract:  
 SDG:

Analyte	Calibration Verification									M
	True ICV	Found 20:02	%R (1)	True CCV	Found	%R (2)	True CCV	Found	%R (3)	
TOC	2.50	2.696	107.8							

APPL Inc  
3  
Blanks

Lab Name: APPL Inc  
 ARF No:  
 Prep Blank Matrix: water  
 Prep BlankUnits: mg/L

Contract:  
 SDG:

	Calibration Blanks												M
	ICB												
Analyte	2/11/19 19:31	C											
TOC	0.16	J											

**APPL Inc**  
**2A**  
**Initial and Continuing Calibration Verification**

**Lab Name:** APPL Inc  
**ARF No:** 87932  
**ICAL Source:**  
**CCV Source:**  
**Analysis Date:** 02/12/19

**Contract:** AECOM  
**SDG:** 87932

Analyte	Calibration Verification									M
	True CCV	Found 14:39	%R (1)	True CCV	Found 00:41	%R (2)	True CCV	Found 08:48	%R (3)	
TOC	2.50	2.731	109.2	2.50	2.718	108.7	2.50	2.658	106.3	

**APPL Inc**  
**2A**  
**Initial and Continuing Calibration Verification**

**Lab Name:** APPL Inc  
**ARF No:** 87932  
**ICAL Source:**  
**CCV Source:**  
**Analysis Date:** 02/13/19

**Contract:** AECOM  
**SDG:** 87932

Analyte	Calibration Verification									M
	True CCV	Found 21:23	%R (1)	True CCV	Found	%R (2)	True CCV	Found	%R (3)	
TOC	2.50	2.704	108.2							

**APPL Inc**  
**3**  
**Blanks**

**Lab Name:** APPL Inc  
**ARF No:** 87932  
**Prep Blank Matrix:** water  
**Prep BlankUnits:** mg/L

**Contract:** AECOM  
**SDG:** 87932

Analyte	Calibration Blanks												M
	CCB 2/12/19 15:13		CCB 2/13/19 01:16		CCB 2/13/19 09:23		CCB 2/13/19 21:58						
TOC	0.23	J	0.28	J	0.31	J	0.28	J					

### Calibration Batch Report

Sequence:	190109	Injection Volume:	25.00
Instrument Method:	Anions IM	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:22	Run Time:	5

Calibration Summary							
Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin	8.000	0.000	0.117	0.000	99.8298
Cl	Area	Lin	8.000	0.000	0.099	0.000	99.6172
NO2-N	Area	Lin	8.000	0.000	0.152	0.000	99.9520
BR	Area	Lin	8.000	0.000	0.034	0.000	99.9132
NO3-N	Area	Lin	8.000	0.000	0.202	0.000	99.7529
PO4-P	Area	Lin, WithOffset	8.000	-0.045	0.065	0.000	99.1021
SQ4	Area	Lin	8.000	0.000	0.061	0.000	99.8200

Injection Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	F	F	F	F
ical 1	1.270	0.0070	0.156	0.059
ical 2	1.268	0.0206	0.436	0.176
ical 3	1.267	0.0577	1.167	0.491
ical 4	1.265	0.1226	2.440	1.044
ical 5	1.268	0.2596	5.137	2.211
ical 6	1.272	0.7066	13.612	6.018
ical 7	1.277	1.0208	19.102	8.694
ical 8	1.280	1.4961	26.961	12.742

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	Cl	Cl	Cl	Cl
i cal 1	1.795	0.0320	0.615	0.323
i cal 2	1.795	0.0731	1.404	0.738
i cal 3	1.793	0.1854	3.595	1.872
i cal 4	1.792	0.3834	7.546	3.871
i cal 5	1.795	0.8185	16.468	8.264
i cal 6	1.800	2.3268	47.668	23.493
i cal 7	1.807	3.4196	69.566	34.526
i cal 8	1.812	5.1089	102.000	51.583

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO2-N	NO2-N	NO2-N	NO2-N
i cal 1	2.143	0.0056	0.083	0.037
i cal 2	2.143	0.0139	0.204	0.091
i cal 3	2.140	0.0352	0.511	0.231
i cal 4	2.140	0.0709	1.030	0.465
i cal 5	2.142	0.1446	2.087	0.949
i cal 6	2.143	0.3727	5.334	2.445
i cal 7	2.148	0.5294	7.525	3.473
i cal 8	2.150	0.7714	10.836	5.061

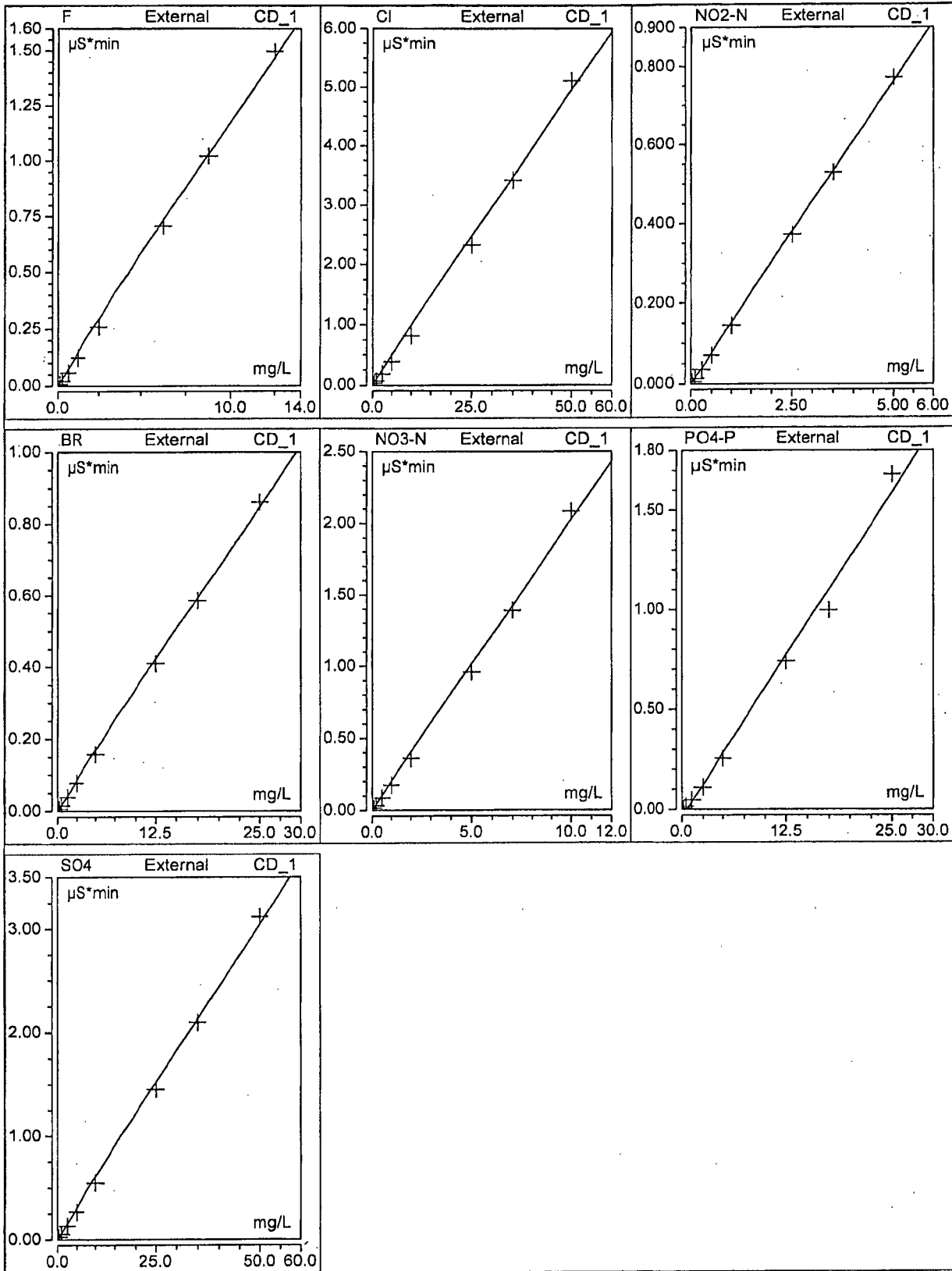
Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	BR	BR	BR	BR
i cal 1	2.542	0.0061	0.084	0.180
i cal 2	2.542	0.0154	0.210	0.454
i cal 3	2.538	0.0387	0.526	1.143
i cal 4	2.537	0.0779	1.060	2.301
i cal 5	2.538	0.1581	2.165	4.669
i cal 6	2.538	0.4099	5.692	12.109
i cal 7	2.542	0.5859	8.190	17.306
i cal 8	2.542	0.8607	12.140	25.424

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO3-N	NO3-N	NO3-N	NO3-N
i cal 1	2.858	0.0155	0.182	0.077
i cal 2	2.858	0.0343	0.404	0.170
i cal 3	2.855	0.0864	1.015	0.427
i cal 4	2.853	0.1752	2.065	0.865
i cal 5	2.853	0.3591	4.277	1.774
i cal 6	2.850	0.9601	11.656	4.742
i cal 7	2.850	1.3886	17.009	6.858
i cal 8	2.848	2.0838	25.490	10.291

Injection Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	PO4-P	PO4-P	PO4-P	PO4-P
i cal 1	3.940	0.0061	0.044	0.781
i cal 2	3.940	0.0157	0.112	0.929
i cal 3	3.938	0.0477	0.338	1.419
i cal 4	3.935	0.1106	0.791	2.381
i cal 5	3.935	0.2541	1.829	4.578
i cal 6	3.930	0.7401	5.452	12.020
i cal 7	3.930	0.9954	7.895	15.928
i cal 8	3.927	1.6804	12.720	26.415

Injection Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	SO4	SO4	SO4	SO4
i cal 1	4.500	0.0237	0.163	0.390
i cal 2	4.500	0.0532	0.360	0.875
i cal 3	4.498	0.1322	0.894	2.172
i cal 4	4.498	0.2678	1.815	4.399
i cal 5	4.503	0.5488	3.740	9.017
i cal 6	4.507	1.4533	10.090	23.877
i cal 7	4.515	2.0973	14.700	34.459
i cal 8	4.518	3.1172	22.054	51.216

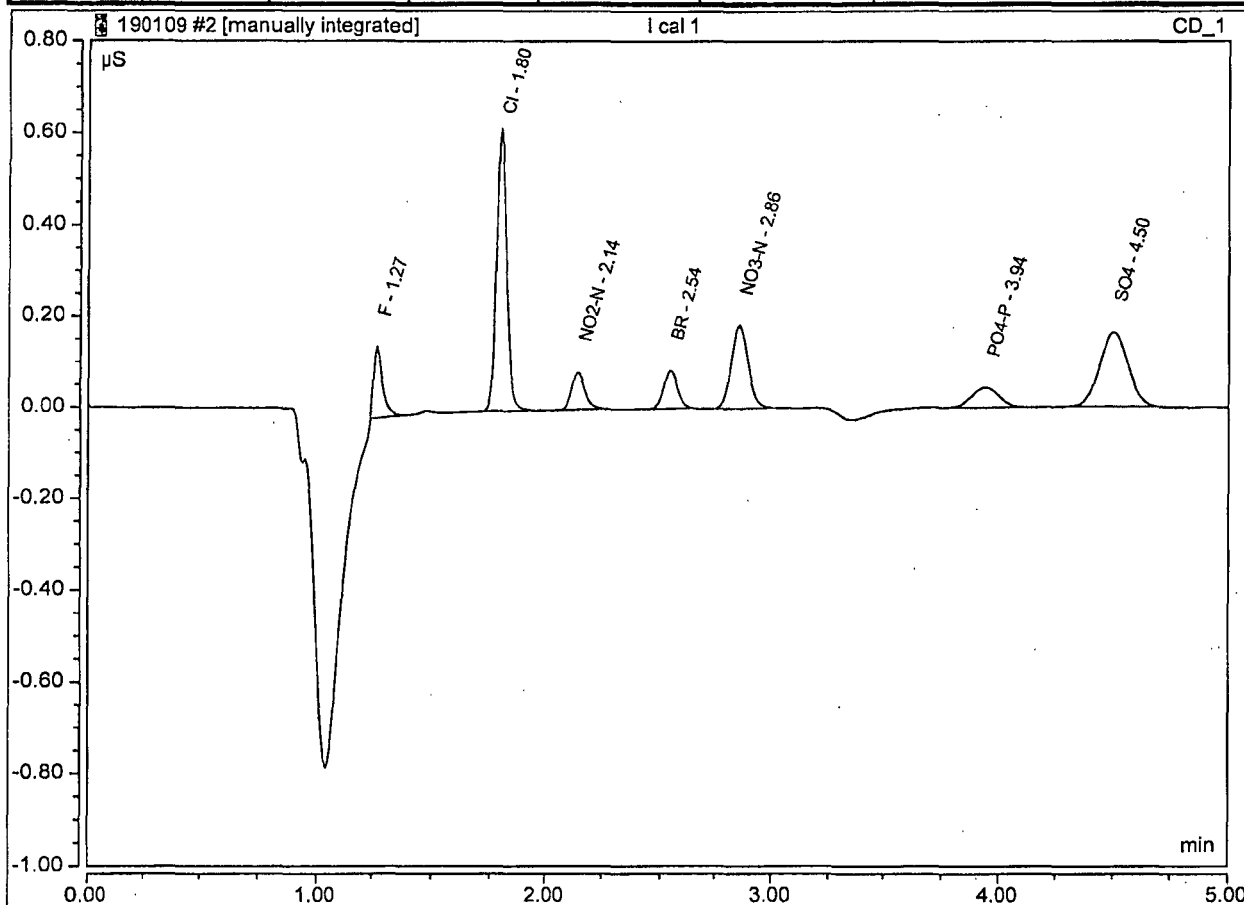




### Peak Integration Report

Sample Name:	i cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:30	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.27	F	BMB*	0.007	0.156	0.0595
2	1.80	Cl	BMB	0.032	0.615	0.3227
3	2.14	NO2-N	BMB	0.006	0.083	0.0365
4	2.54	BR	BMB	0.006	0.084	0.1796
5	2.86	NO3-N	BMB	0.015	0.182	0.0765
6	3.94	PO4-P	BMB*	0.006	0.044	0.7812
7	4.50	SO4	BMB	0.024	0.163	0.3901

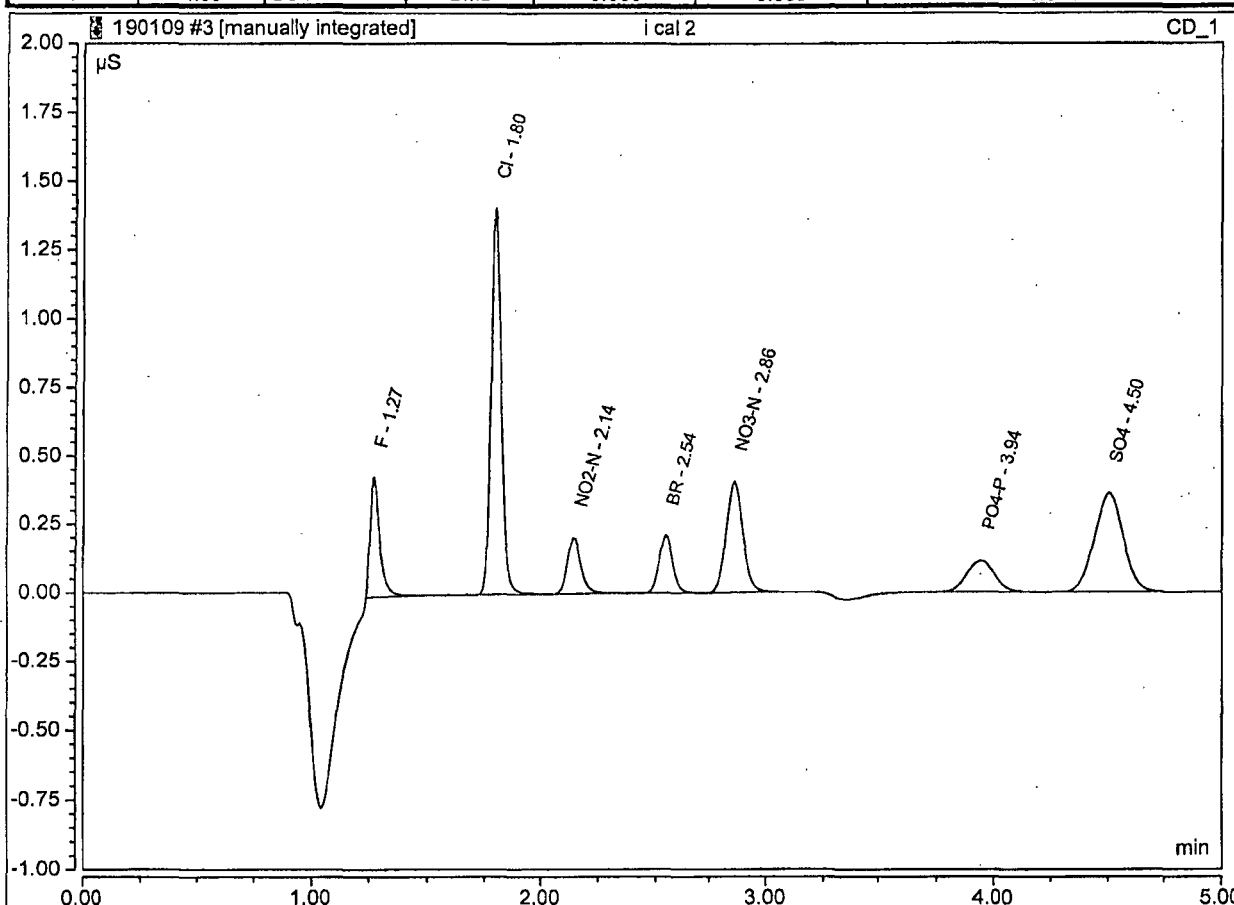


F mi1 PO4 mi5 HH 190109, MM

### Peak Integration Report

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:37	Run Time:	6.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.021	0.436	0.1757
2	1.80	Cl	BMB	0.073	1.404	0.7378
3	2.14	NO2-N	BMB	0.014	0.204	0.0915
4	2.54	BR	BMB	0.015	0.210	0.4542
5	2.86	NO3-N	BMB	0.034	0.404	0.1696
6	3.94	PO4-P	BMB	0.016	0.112	0.9287
7	4.50	SO4	BMB	0.053	0.360	0.8747

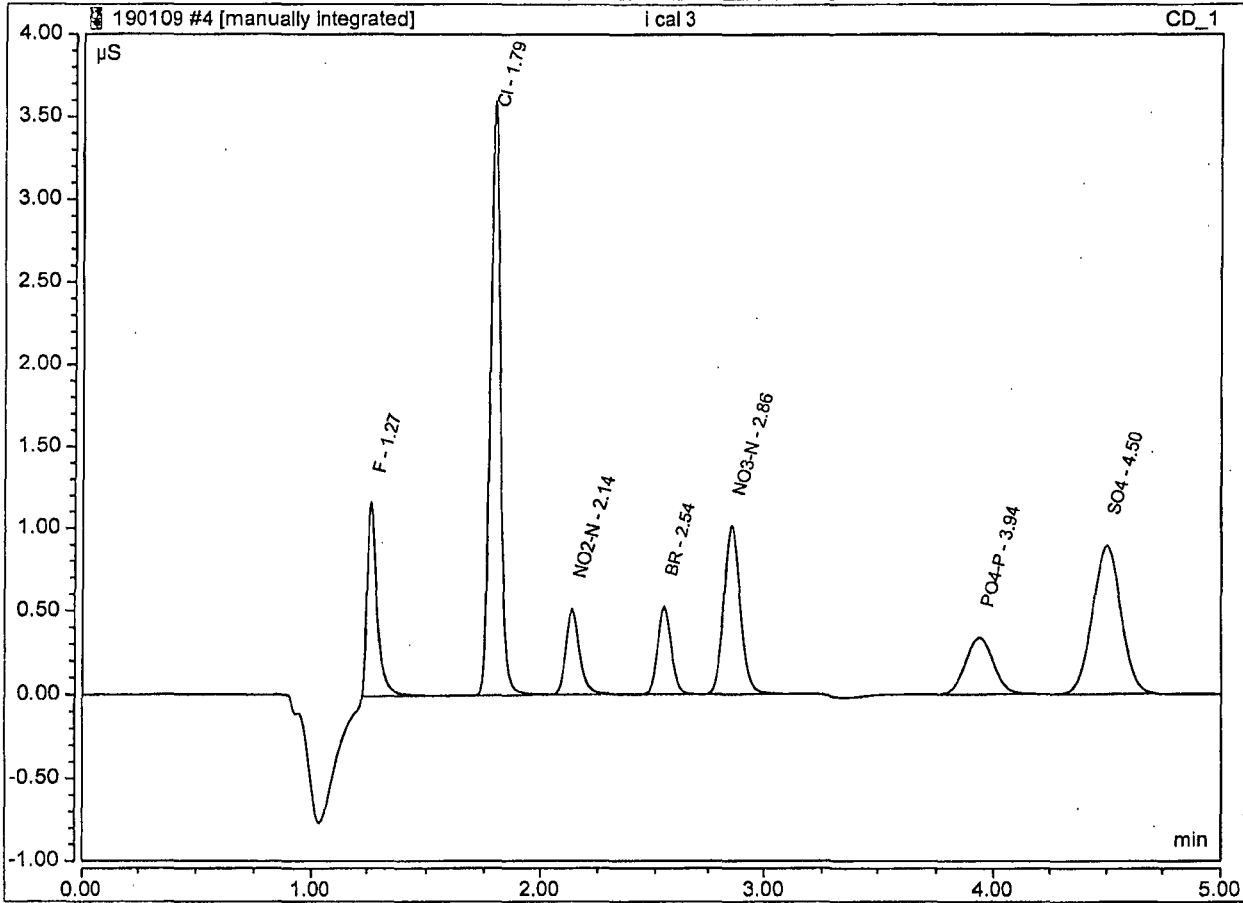


F mi1 HH 190109, MM

**Peak Integration Report**

Sample Name:	I cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:45	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.058	1.167	0.4910
2	1.79	Cl	BMB	0.185	3.595	1.8721
3	2.14	NO2-N	BMB	0.035	0.511	0.2307
4	2.54	BR	BMB	0.039	0.526	1.1431
5	2.86	NO3-N	BMB	0.086	1.015	0.4269
6	3.94	PO4-P	BMB	0.048	0.338	1.4187
7	4.50	SO4	BMB	0.132	0.894	2.1720

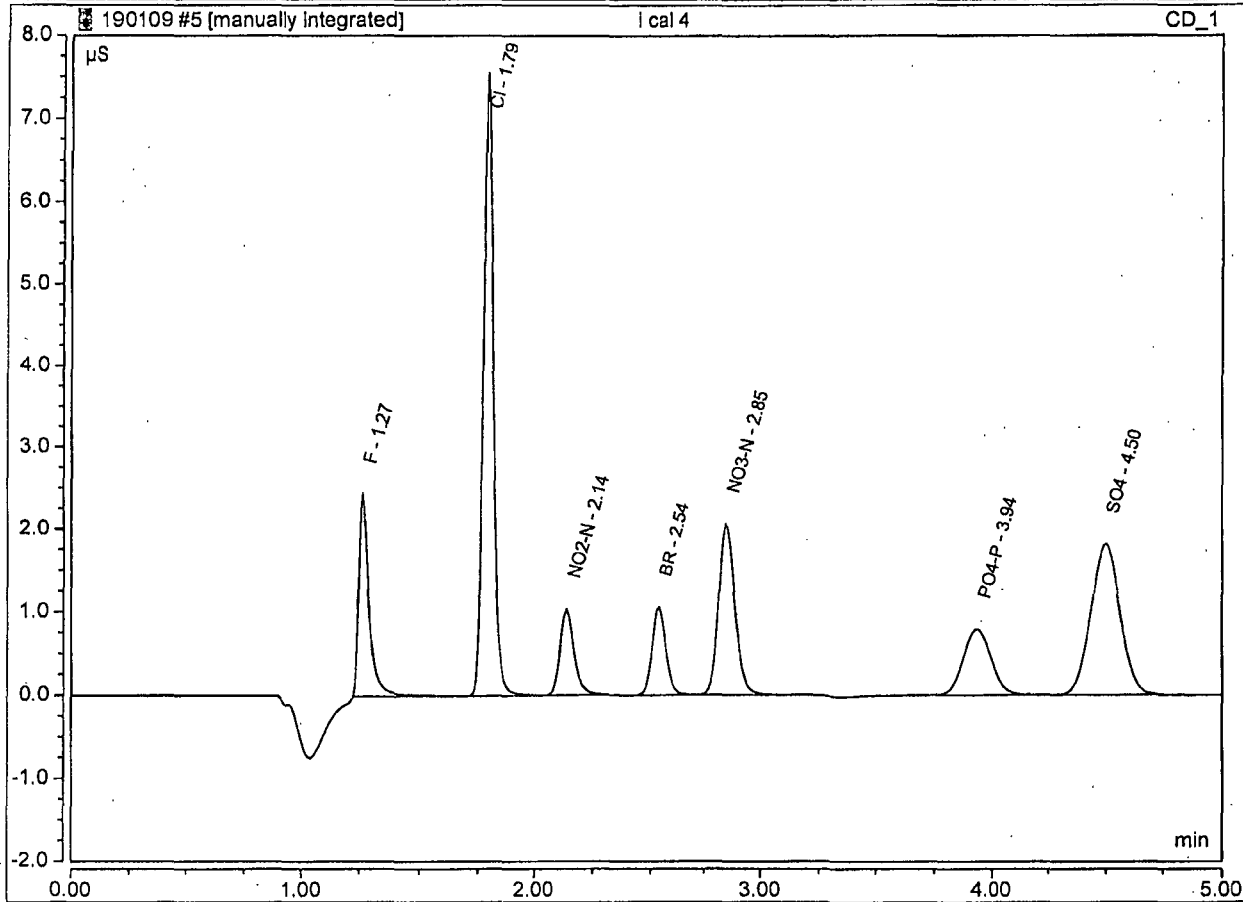


F mi1 HH 190109, MM

Peak Integration Report

Sample Name:	I cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:52	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.123	2.440	1.0438
2	1.79	Cl	BMB	0.383	7.546	3.8706
3	2.14	NO2-N	BMB	0.071	1.030	0.4654
4	2.54	BR	BMB	0.078	1.060	2.3006
5	2.85	NO3-N	BMB	0.175	2.065	0.8653
6	3.94	PO4-P	BMB	0.111	0.791	2.3810
7	4.50	SO4	BMB	0.268	1.815	4.3995

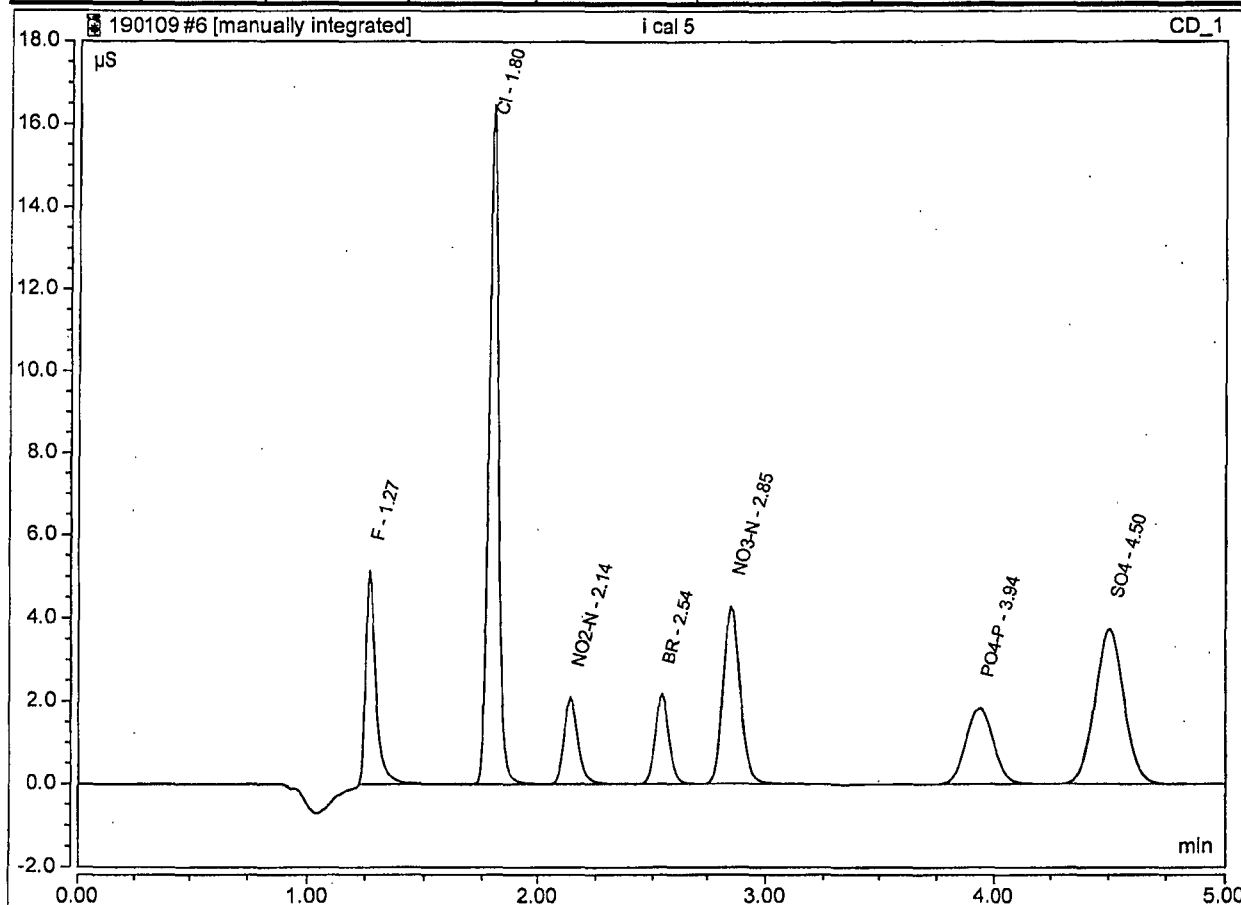


F mi1 HH 190109, MM

### Peak Integration Report

Sample Name:	I cal 5	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 10:59	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.260	5.137	2.2109
2	1.80	Cl	BMB	0.818	16.468	8.2637
3	2.14	NO2-N	BMB	0.145	2.087	0.9486
4	2.54	BR	BMB	0.158	2.165	4.6686
5	2.85	NO3-N	BMB	0.359	4.277	1.7736
6	3.94	PO4-P	BMB	0.254	1.829	4.5775
7	4.50	SO4	BMB	0.549	3.740	9.0170

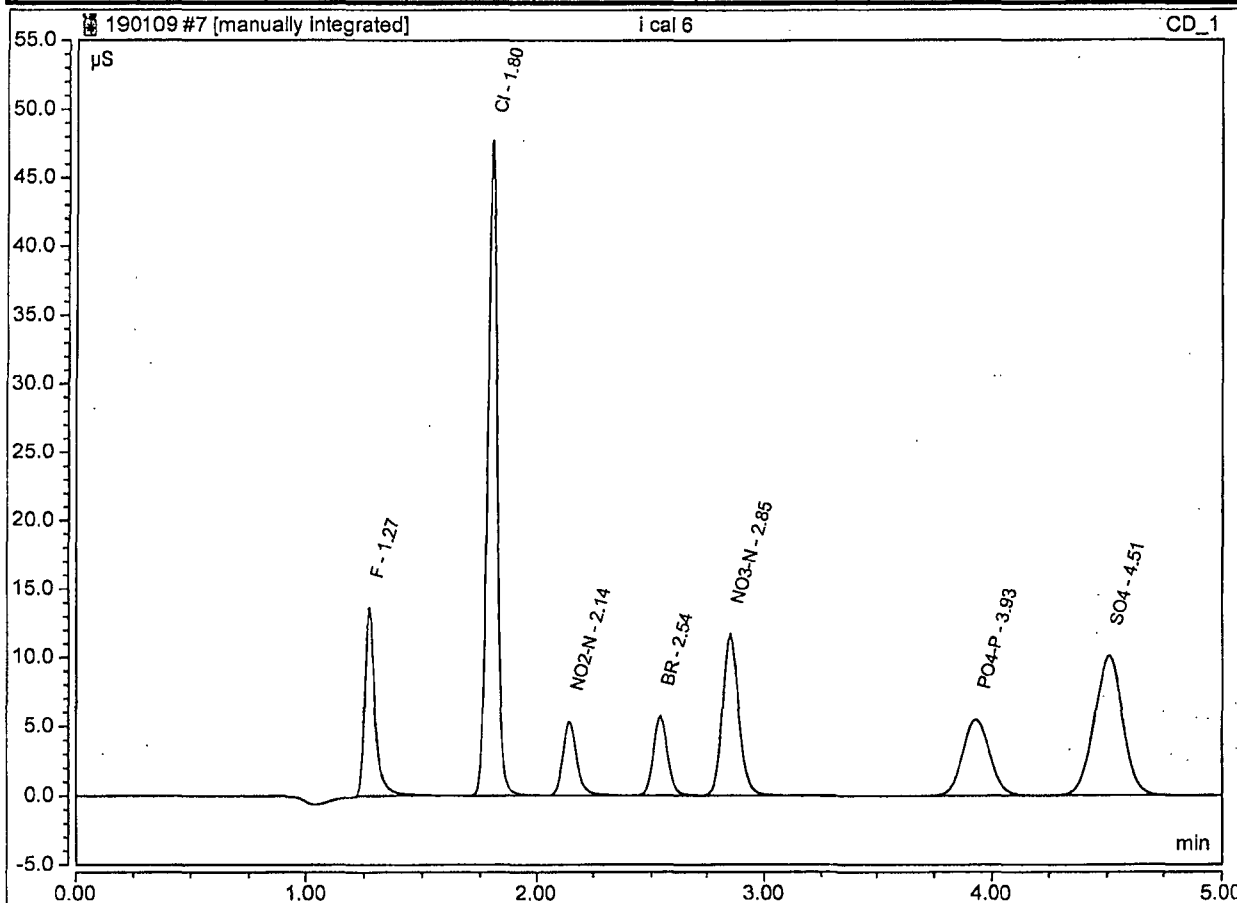


F m1 HH 190109, MM

Peak Integration Report

Sample Name:	i cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:07	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.707	13.612	6.0178
2	1.80	Cl	BMB	2.327	47.668	23.4932
3	2.14	NO2-N	BMB	0.373	5.334	2.4450
4	2.54	BR	BMB	0.410	5.692	12.1088
5	2.85	NO3-N	BMB	0.960	11.656	4.7417
6	3.93	PO4-P	BMB	0.740	5.452	12.0195
7	4.51	SO4	BMB	1.453	10.090	23.8773

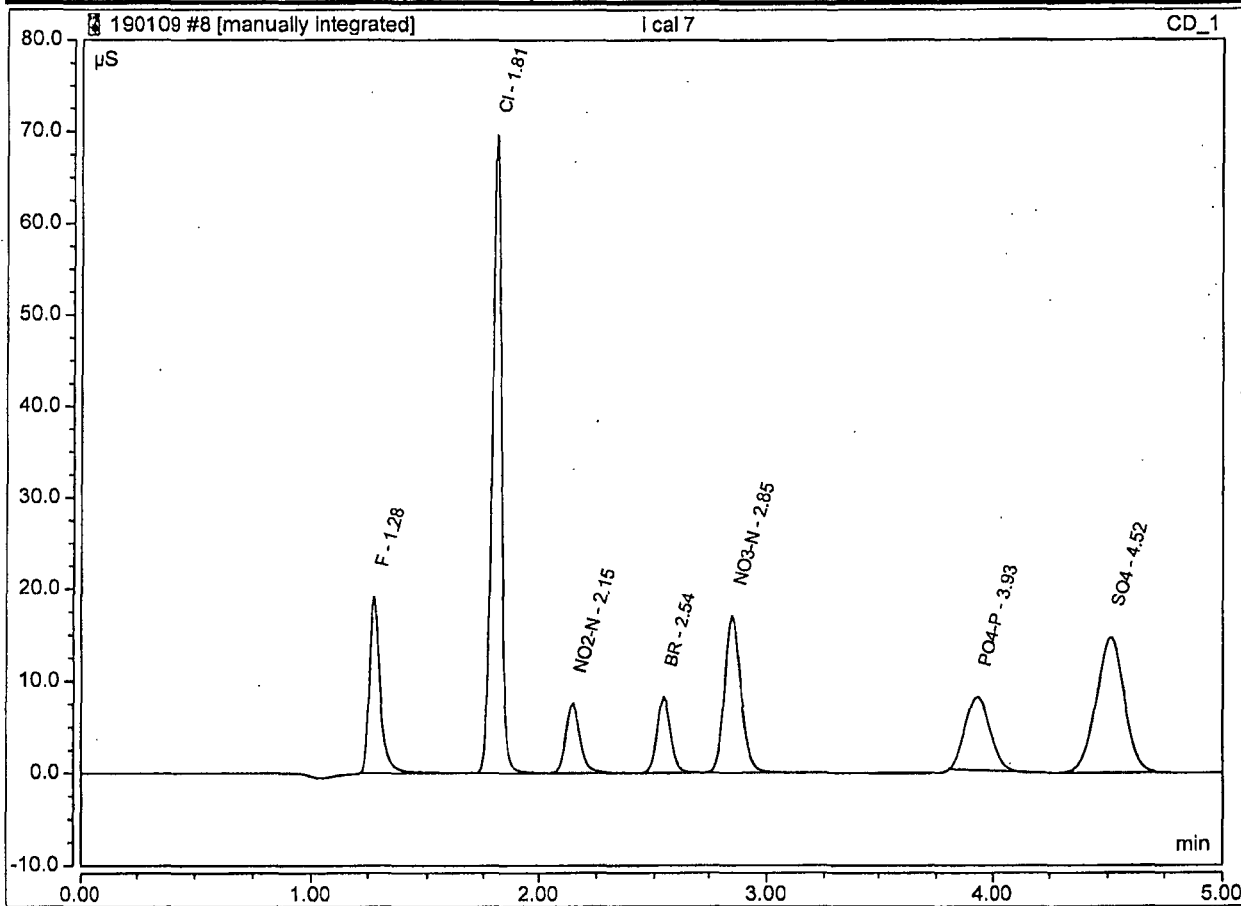


F mi1 HH 190109, MM

Peak Integration Report

Sample Name:	i cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:14	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.28	F	BMB*	1.021	19.102	8.6939
2	1.81	Cl	BMB	3.420	69.566	34.5262
3	2.15	NO2-N	BMB	0.529	7.525	3.4733
4	2.54	BR	BMB	0.586	8.190	17.3057
5	2.85	NO3-N	BMB	1.389	17.009	6.8583
6	3.93	PO4-P	BMB	0.995	7.895	15.9278
7	4.52	SO4	BMB	2.097	14.700	34.4589



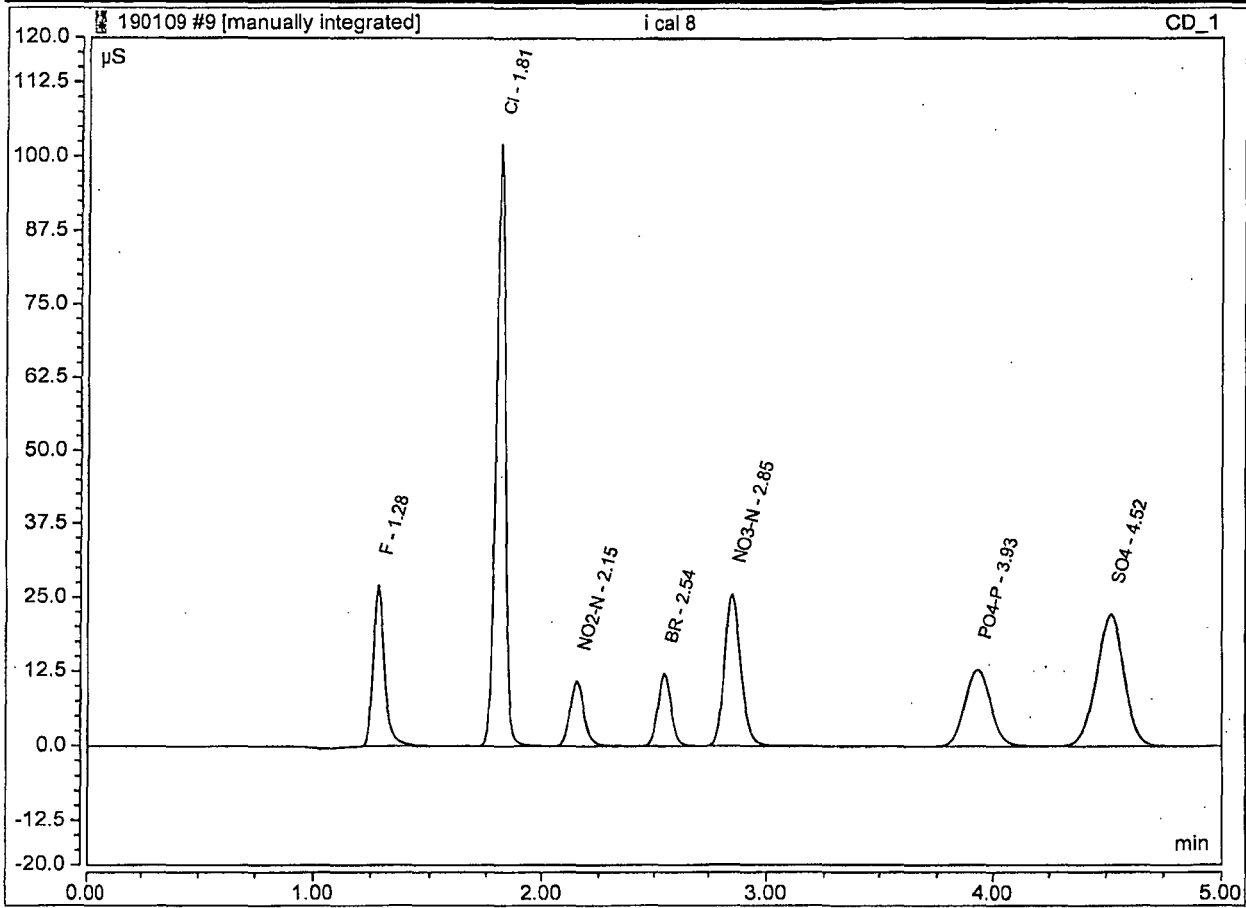
F mi1 HH 190109, MM



**Peak Integration Report**

Sample Name:	i cal 8	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	09-Jan-2019 / 11:22	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.28	F	BMB*	1.496	26.961	12.7423
2	1.81	Cl	BMB	5.109	102.000	51.5826
3	2.15	NO2-N	BMB	0.771	10.836	5.0611
4	2.54	BR	BMB	0.861	12.140	25.4243
5	2.85	NO3-N	BMB	2.084	25.490	10.2914
6	3.93	PO4-P	BMB	1.680	12.720	26.4155
7	4.52	SO4	BMB	3.117	22.054	51.2158



F mi1 HH 190109, MM

### Calibration Batch Report

Sequence:	190124	Injection Volume:	25.00
Instrument Method:	Anlons IM	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:57	Run Time:	5

Callibration Summary							
Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin, WithOffset, 1/A	8.000	-0.006	0.126	0.000	99.6784
Cl	Area	Lin	8.000	0.000	0.106	0.000	99.5874
NO2-N	Area	Lin	8.000	0.000	0.177	0.000	99.9482
BR	Area	Lin	8.000	0.000	0.036	0.000	99.8938
NO3-N	Area	Lin	8.000	0.000	0.219	0.000	99.7197
PO4-P	Area	Lin	8.000	0.000	0.070	0.000	99.1895
SO4	Area	Lin	8.000	0.000	0.066	0.000	99.7785

Injection Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	F	F	F	F
i cal 1	1.258	0.0078	0.177	0.110
i cal 2	1.263	0.0331	0.551	0.311
i cal 3	1.263	0.0600	1.273	0.525
i cal 4	1.260	0.1319	2.702	1.096
i cal 5	1.258	0.2788	5.622	2.263
i cal 6	1.267	0.7668	14.736	6.141
i cal 7	1.270	1.1062	20.788	8.837
i cal 8	1.272	1.6227	29.189	12.941

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	Cl	Cl	Cl	Cl
i cal 1	1.790	0.0388	0.720	0.364
i cal 2	1.790	0.1261	2.353	1.184
i cal 3	1.795	0.1988	3.728	1.867
i cal 4	1.792	0.4159	7.930	3.906
i cal 5	1.792	0.8761	17.063	8.228
i cal 6	1.798	2.4846	49.285	23.333
i cal 7	1.803	3.6782	72.562	34.542
i cal 8	1.807	5.4995	106.635	51.646

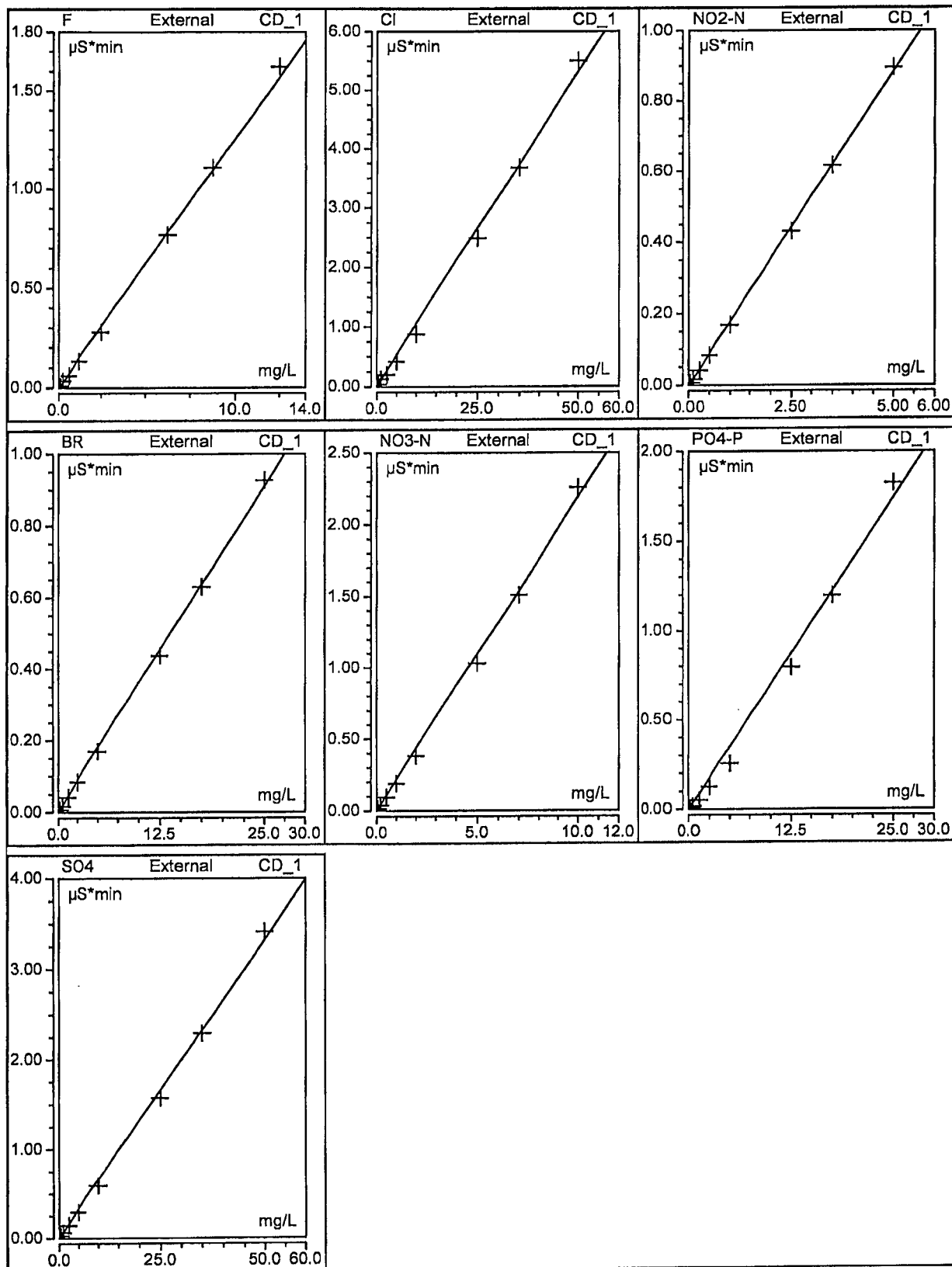
Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO2-N	NO2-N	NO2-N	NO2-N
i cal 1	2.143	0.0068	0.093	0.038
i cal 2	2.143	0.0168	0.228	0.095
i cal 3	2.148	0.0409	0.554	0.231
i cal 4	2.143	0.0830	1.119	0.469
i cal 5	2.143	0.1677	2.261	0.948
i cal 6	2.147	0.4302	5.768	2.433
i cal 7	2.150	0.6156	8.211	3.481
i cal 8	2.152	0.8951	11.797	5.061

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	BR	BR	BR	BR
i cal 1	2.558	0.0071	0.093	0.195
i cal 2	2.558	0.0171	0.224	0.470
i cal 3	2.562	0.0416	0.544	1.144
i cal 4	2.557	0.0838	1.099	2.304
i cal 5	2.555	0.1691	2.232	4.648
i cal 6	2.557	0.4375	5.850	12.024
i cal 7	2.557	0.6299	8.490	17.311
i cal 8	2.553	0.9266	12.598	25.466

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO3-N	NO3-N	NO3-N	NO3-N
i cal 1	2.867	0.0162	0.183	0.074
i cal 2	2.867	0.0392	0.446	0.179
i cal 3	2.868	0.0936	1.062	0.427
i cal 4	2.863	0.1896	2.162	0.865
i cal 5	2.858	0.3821	4.442	1.743
i cal 6	2.857	1.0311	12.086	4.704
i cal 7	2.855	1.5088	17.791	6.883
i cal 8	2.850	2.2578	26.658	10.299

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	PO4-P	PO4-P	PO4-P	PO4-P
ical 1	3.775	0.0077	0.055	0.111
ical 2	3.773	0.0176	0.121	0.252
ical 3	3.778	0.0508	0.355	0.729
ical 4	3.773	0.1246	0.850	1.788
ical 5	3.772	0.2545	1.894	3.651
ical 6	3.772	0.7954	5.814	11.410
ical 7	3.772	1.1958	8.858	17.153
ical 8	3.770	1.8237	13.683	26.161

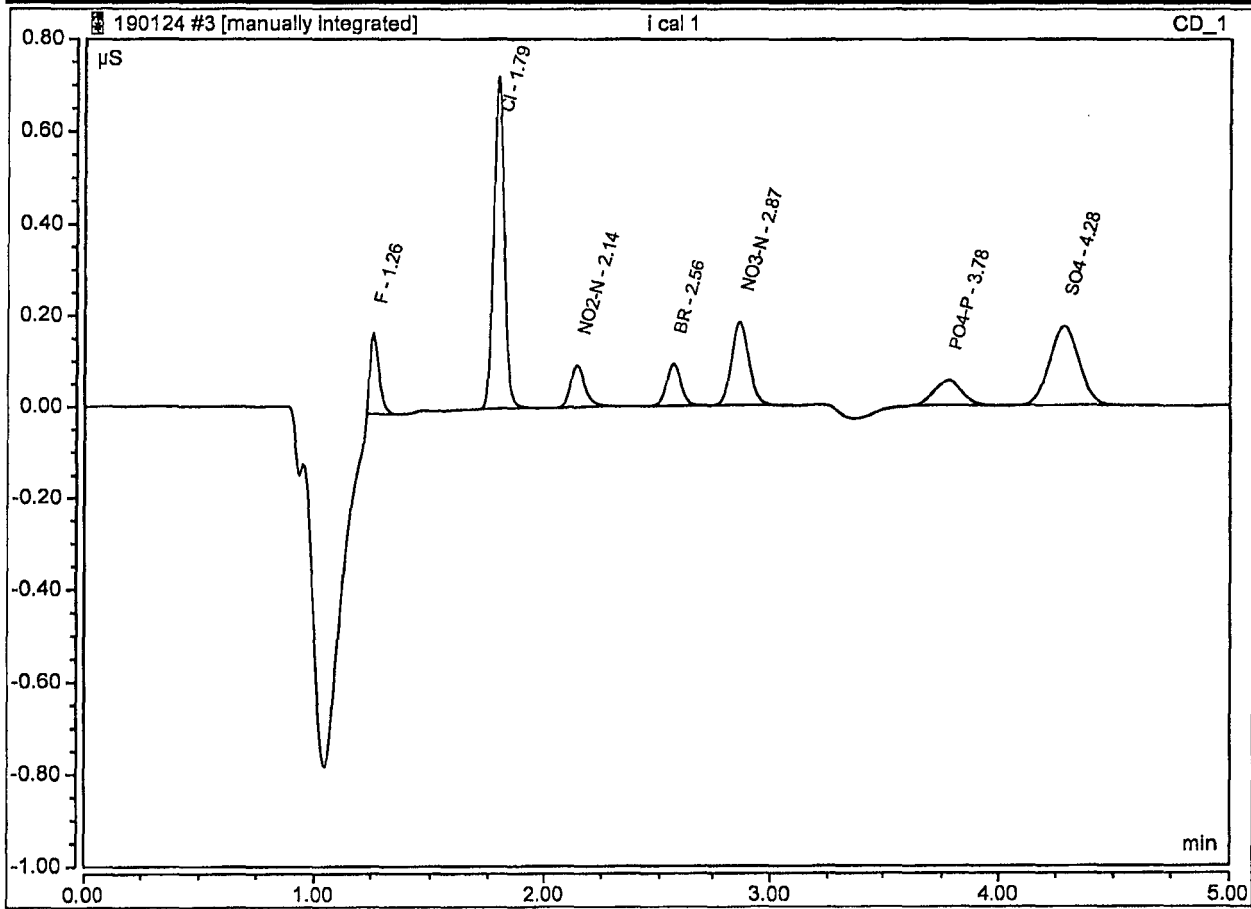
Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	SO4	SO4	SO4	SO4
ical 1	4.282	0.0258	0.174	0.388
ical 2	4.283	0.0616	0.417	0.927
ical 3	4.288	0.1444	0.976	2.174
ical 4	4.288	0.2937	1.996	4.421
ical 5	4.290	0.5930	4.065	8.925
ical 6	4.300	1.5710	10.997	23.643
ical 7	4.308	2.2902	16.201	34.468
ical 8	4.315	3.4113	24.358	51.341



Peak Integration Report

Sample Name:	i cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:06	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.008	0.177	0.1105
2	1.79	Cl	BMB	0.039	0.720	0.3640
3	2.14	NO2-N	BMB	0.007	0.093	0.0383
4	2.56	BR	BMB	0.007	0.093	0.1945
5	2.87	NO3-N	BMB	0.016	0.183	0.0739
6	3.78	PO4-P	BMB	0.008	0.055	0.1109
7	4.28	SO4	BMB	0.026	0.174	0.3876

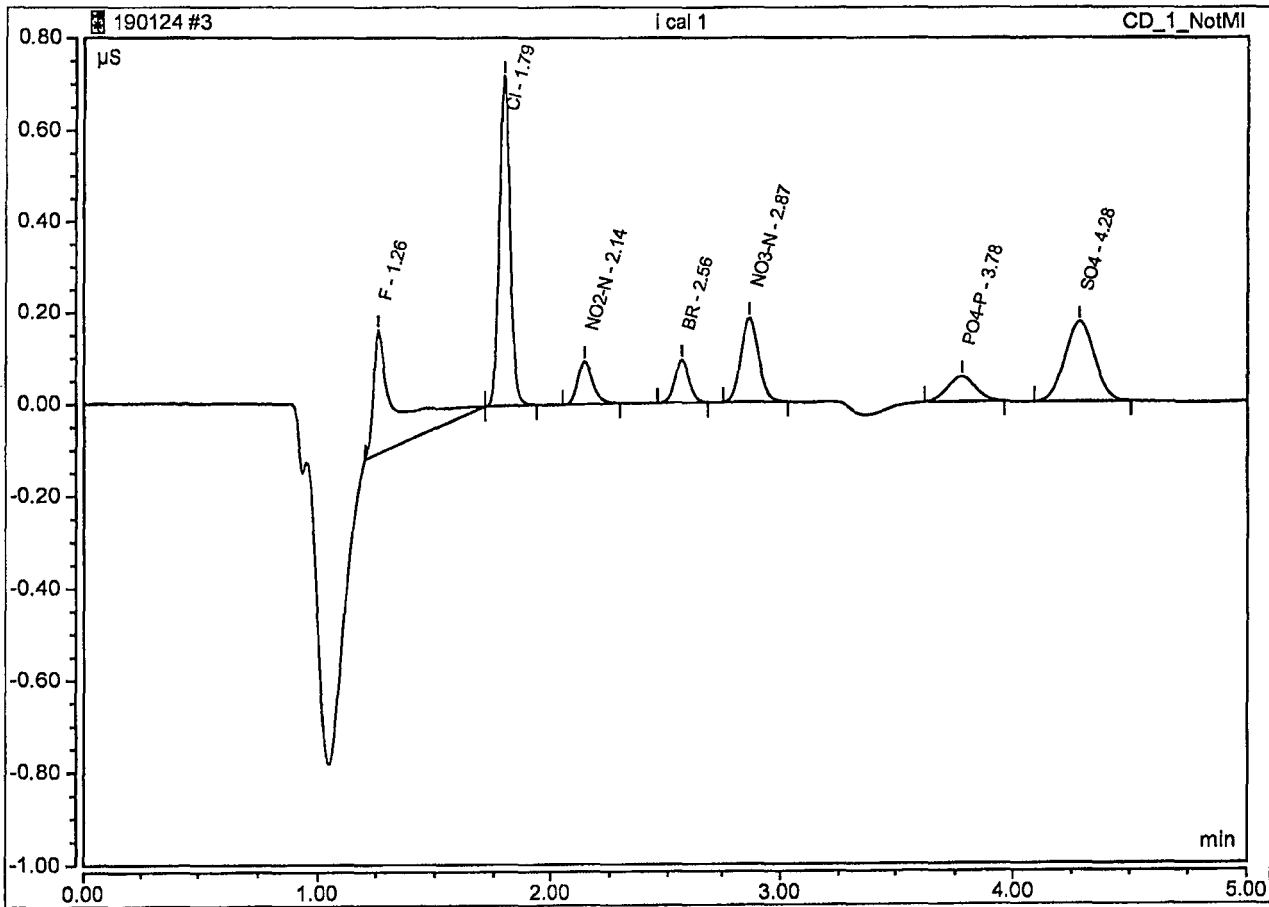


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	I cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:06	Run Time:	5.00

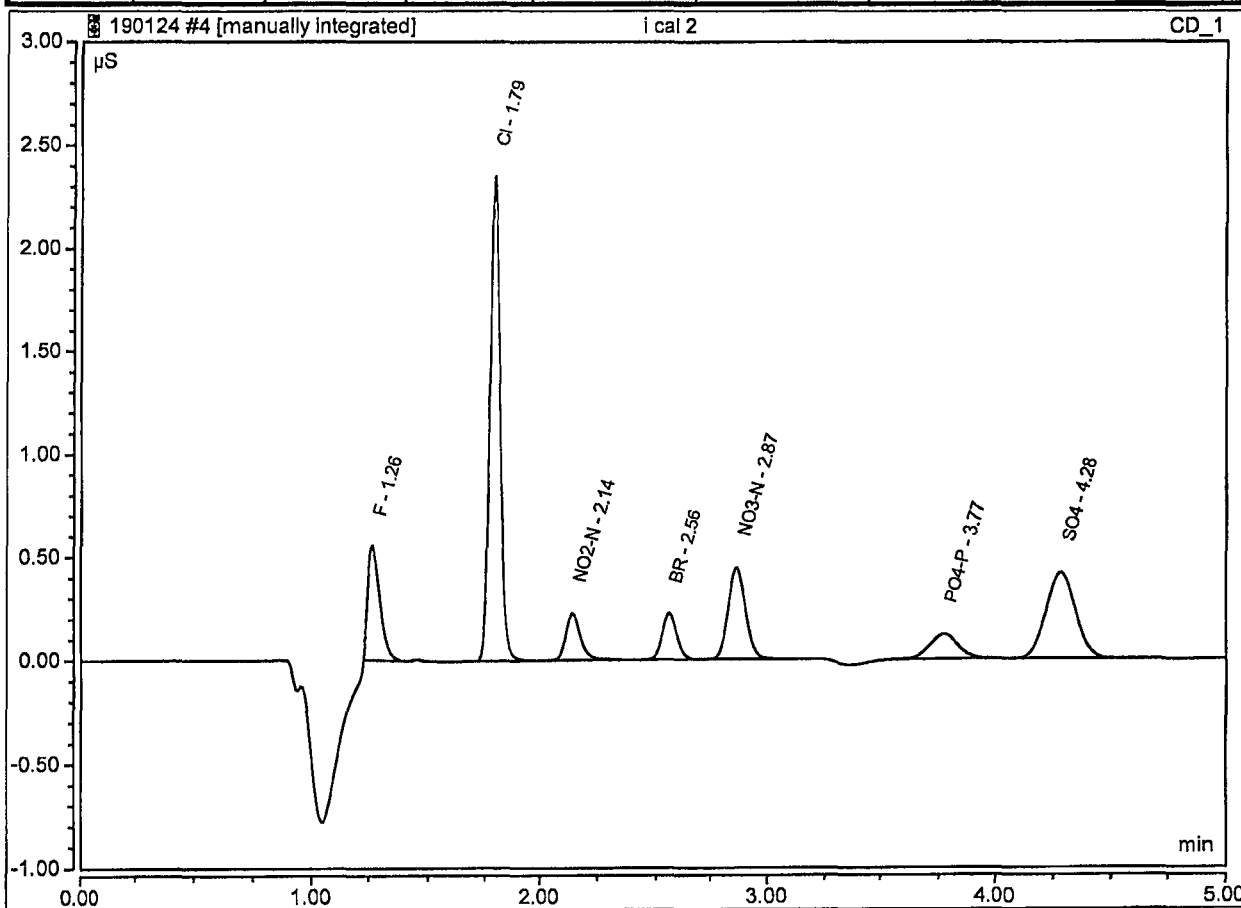
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.032	0.269	0.0900
2	1.79	Cl	BMB	0.039	0.720	0.3640
3	2.14	NO <sub>2</sub> -N	BMB	0.007	0.093	0.0383
4	2.56	BR	BMB	0.007	0.093	0.1945
5	2.87	NO <sub>3</sub> -N	BMB	0.016	0.183	0.0739
6	3.78	PO <sub>4</sub> -P	BMB	0.008	0.055	0.1109
7	4.28	SO <sub>4</sub>	BMB	0.026	0.174	0.3876



### Peak Integration Report

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:13	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.033	0.551	0.3114
2	1.79	Cl	BMB	0.126	2.353	1.1844
3	2.14	NO2-N	BMB	0.017	0.228	0.0951
4	2.56	BR	BMB	0.017	0.224	0.4697
5	2.87	NO3-N	BMB	0.039	0.446	0.1790
6	3.77	PO4-P	BMB	0.018	0.121	0.2519
7	4.28	SO4	BMB	0.062	0.417	0.9266



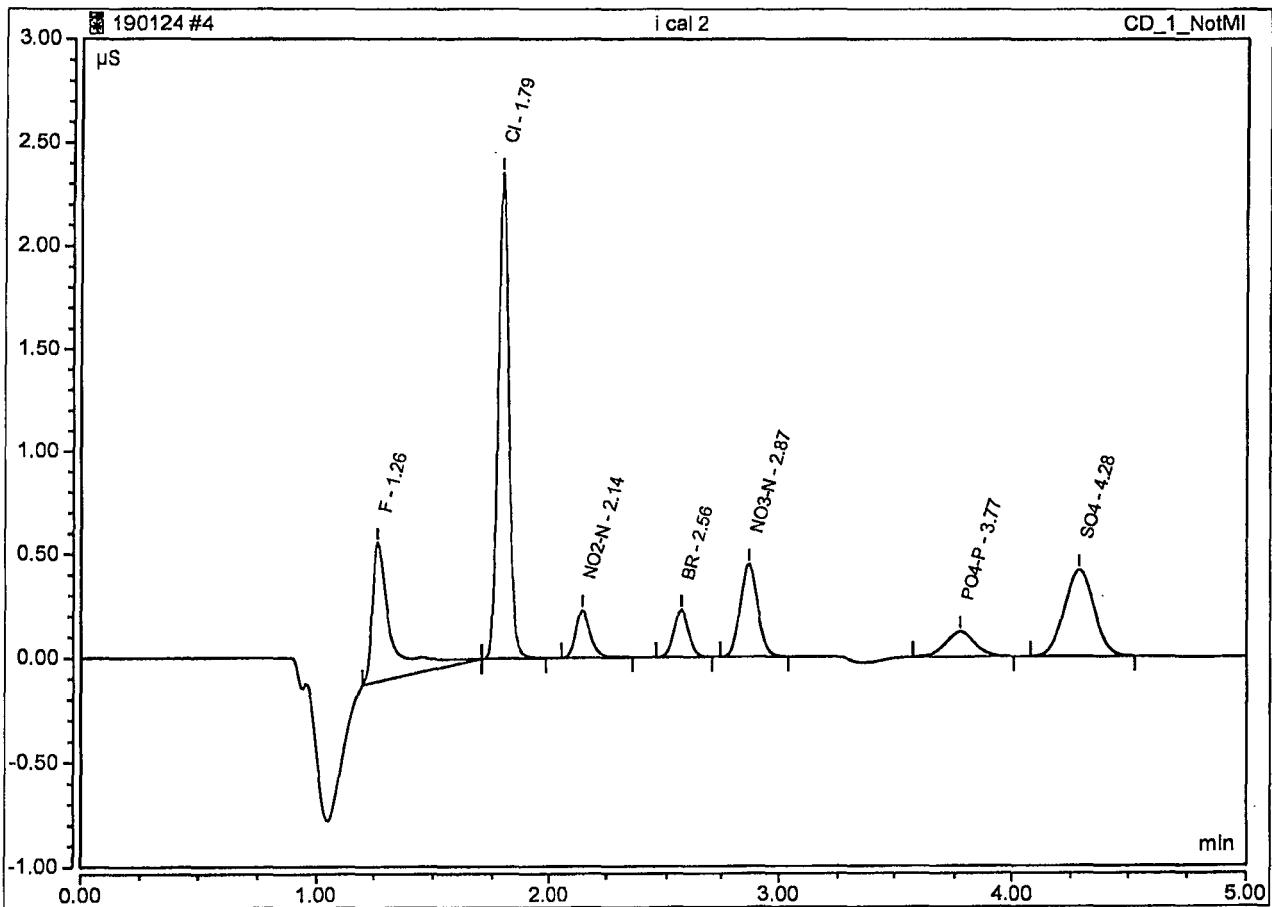
F mi1 HH 190128 MM



### Not Manipulated Peak Integration Report

Sample Name:	I cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:13	Run Time:	5.00

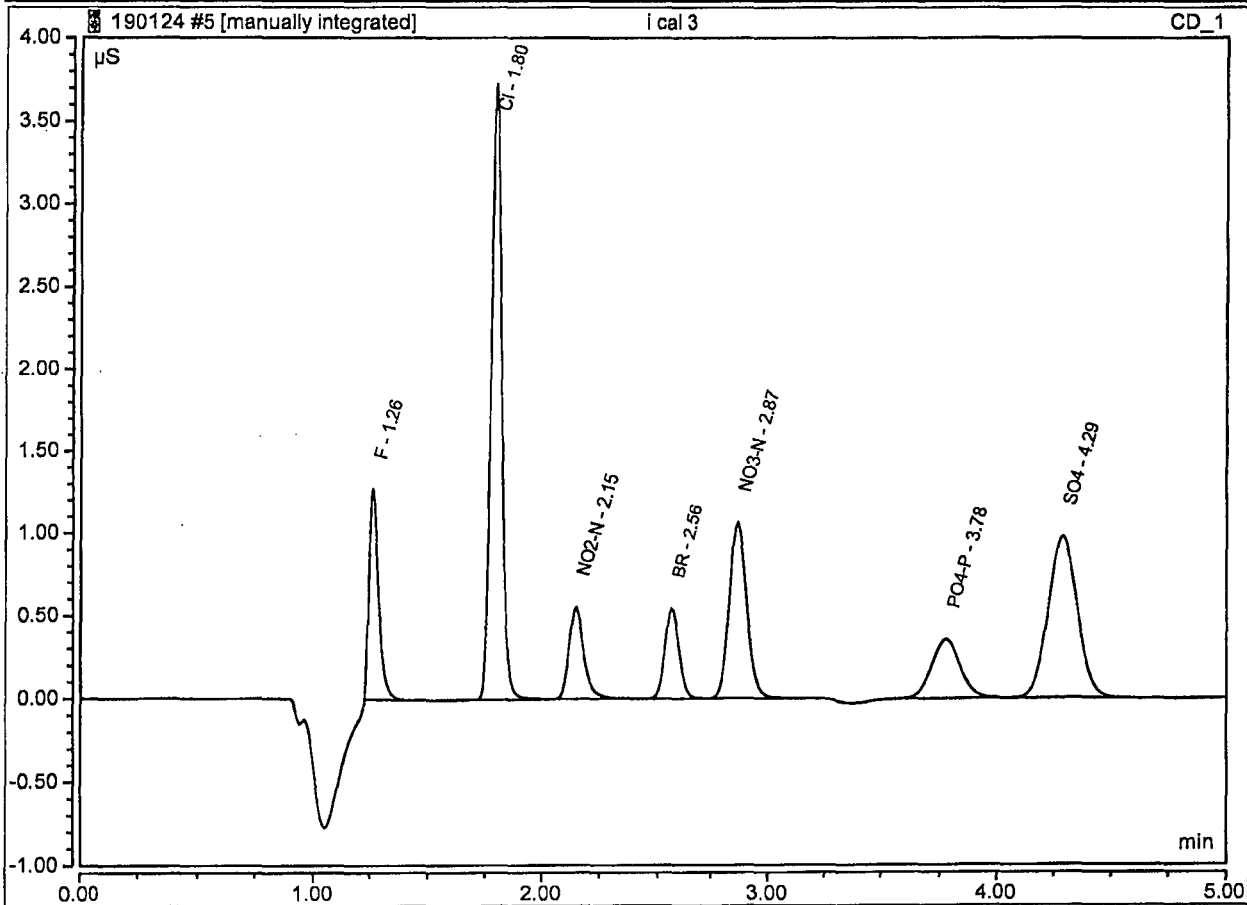
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.064	0.668	0.3399
2	1.79	Cl	BMB	0.126	2.353	1.1844
3	2.14	NO <sub>2</sub> -N	BMB	0.017	0.228	0.0951
4	2.56	BR	BMB	0.017	0.224	0.4697
5	2.87	NO <sub>3</sub> -N	BMB	0.039	0.446	0.1790
6	3.77	PO <sub>4</sub> -P	BMB	0.018	0.121	0.2519
7	4.28	SO <sub>4</sub>	BMB	0.062	0.417	0.9266



Peak Integration Report

Sample Name:	i cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:20	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.060	1.273	0.5246
2	1.80	Cl	BMB	0.199	3.728	1.8672
3	2.15	NO2-N	BMB	0.041	0.554	0.2311
4	2.56	BR	BMB	0.042	0.544	1.1439
5	2.87	NO3-N	BMB	0.094	1.062	0.4271
6	3.78	PO4-P	BMB	0.051	0.355	0.7288
7	4.29	SO4	BMB	0.144	0.976	2.1737

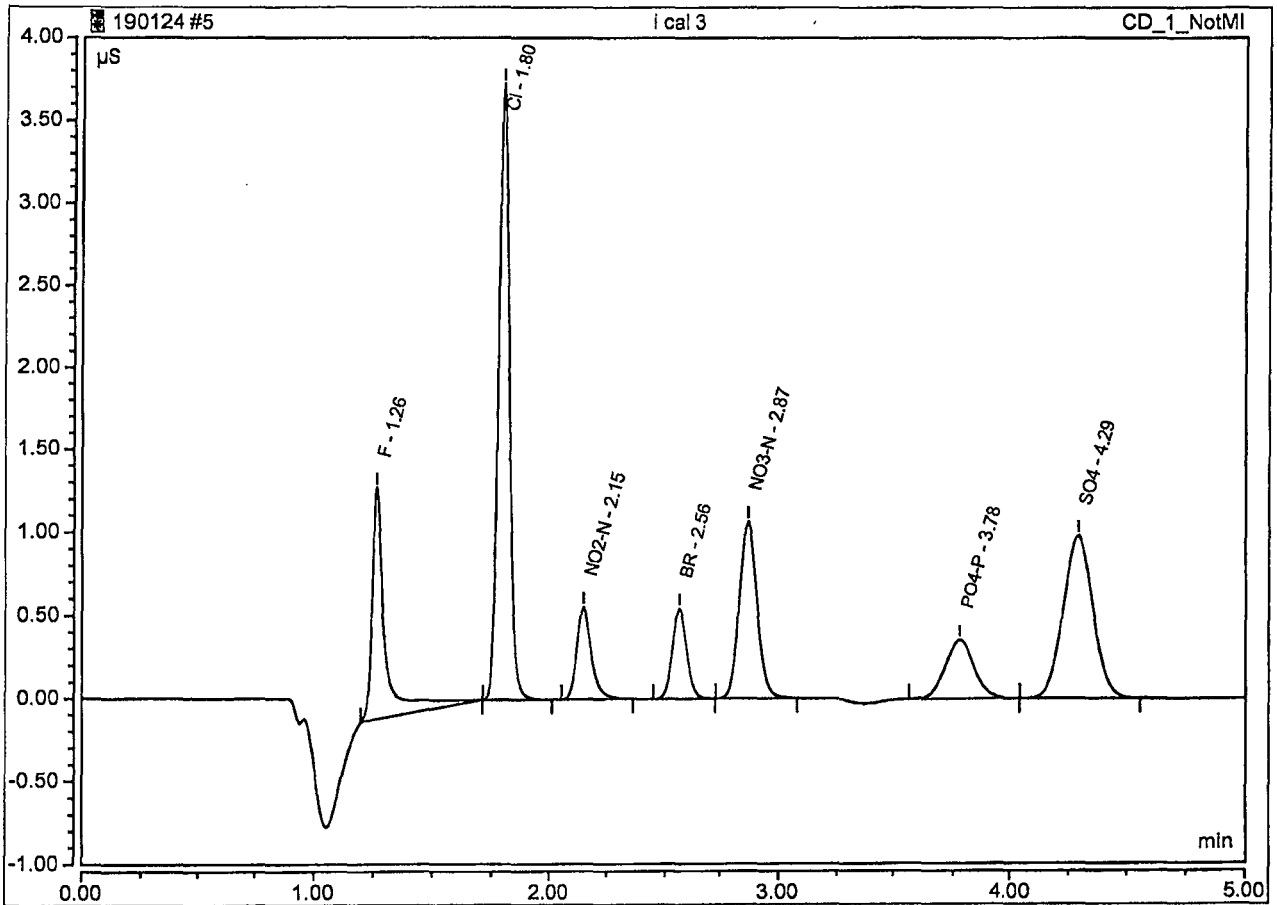


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	l cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:20	Run Time:	5.00

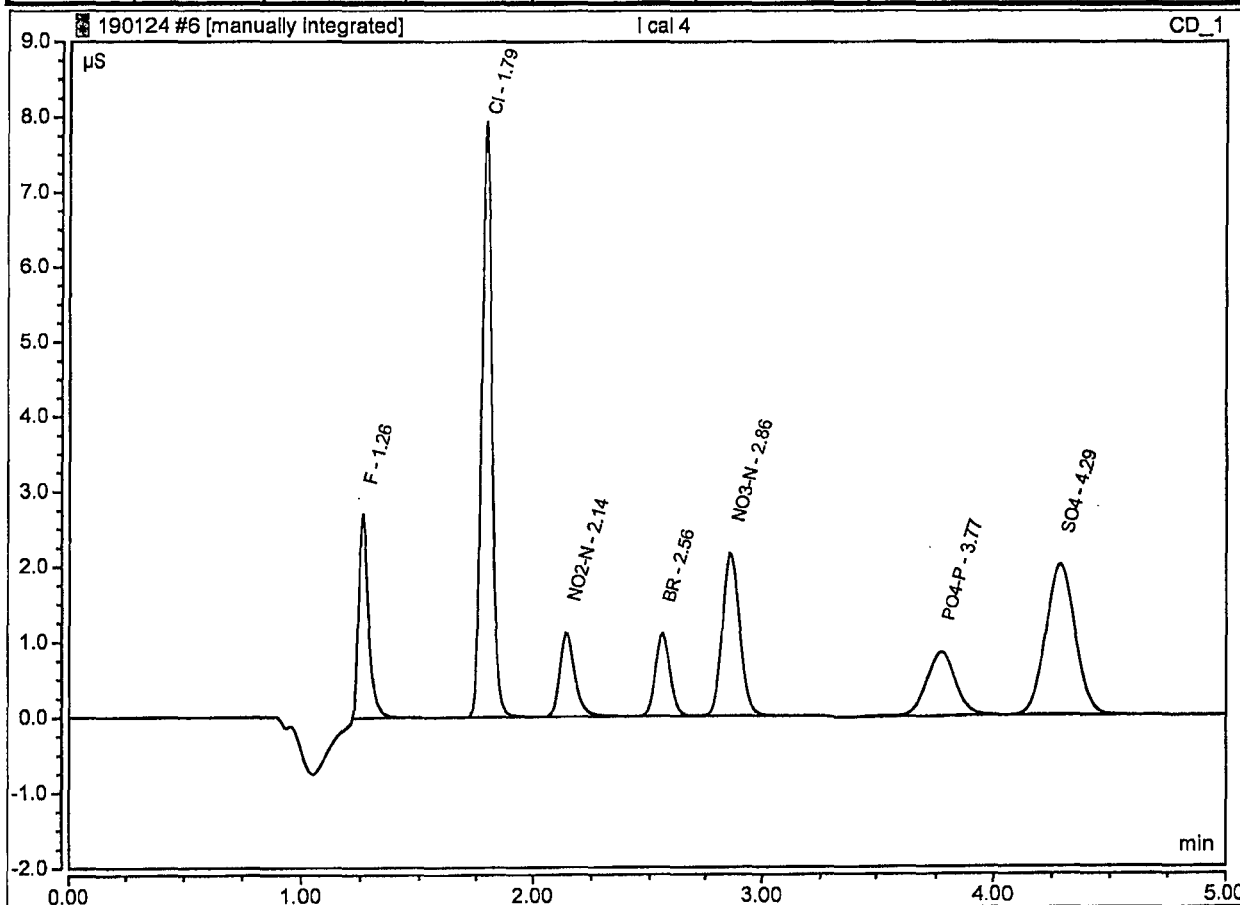
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.26	F	BMB*	0.091	1.392	0.5597
2	1.80	Cl	BMB	0.199	3.728	1.8672
3	2.15	NO2-N	BMB	0.041	0.554	0.2311
4	2.56	BR	BMB	0.042	0.544	1.1439
5	2.87	NO3-N	BMB	0.094	1.062	0.4271
6	3.78	PO4-P	BMB	0.051	0.355	0.7288
7	4.29	SO4	BMB	0.144	0.976	2.1737



### Peak Integration Report

Sample Name:	I cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:28	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.132	2.702	1.0962
2	1.79	Cl	BMB	0.416	7.930	3.9059
3	2.14	NO2-N	BMB	0.083	1.119	0.4691
4	2.56	BR	BMB	0.084	1.099	2.3038
5	2.86	NO3-N	BMB	0.190	2.162	0.8648
6	3.77	PO4-P	BMB	0.125	0.850	1.7878
7	4.29	SO4	BMB	0.294	1.996	4.4209

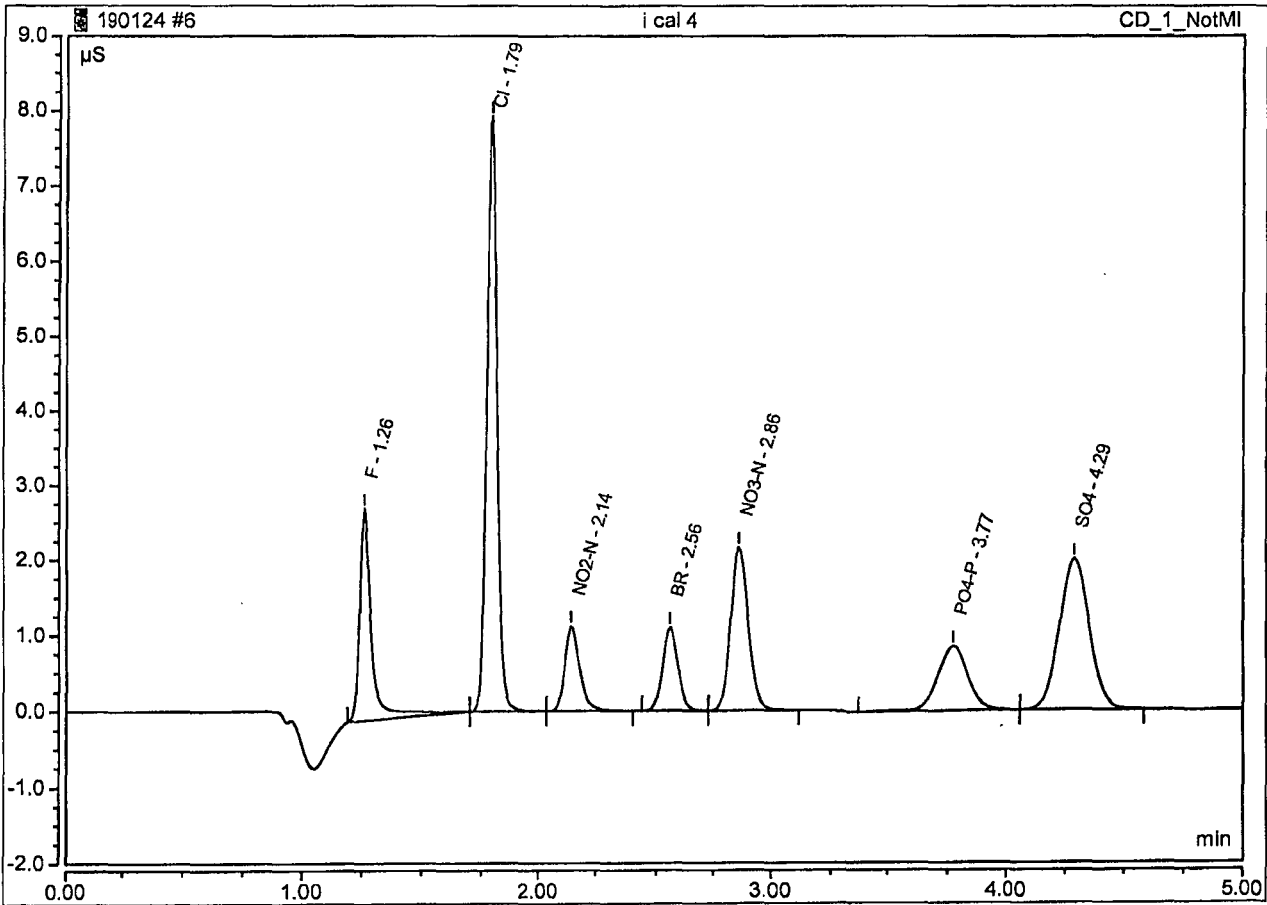


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	I cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:28	Run Time:	6.00

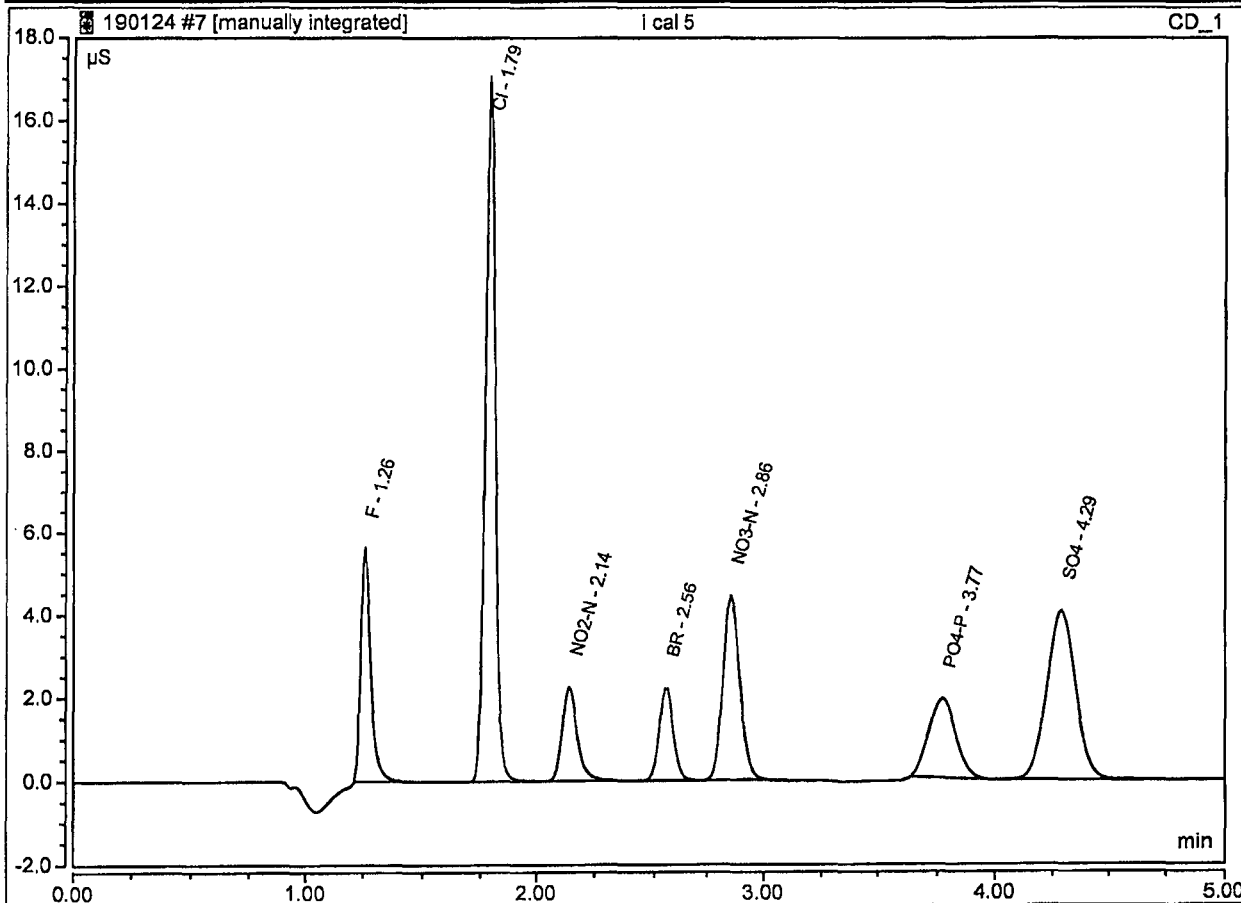
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.26	F	BMB*	0.164	2.815	1.1319
2	1.79	Cl	BMB	0.416	7.930	3.9059
3	2.14	NO <sub>2</sub> -N	BMB	0.083	1.119	0.4691
4	2.56	BR	BMB	0.084	1.099	2.3038
5	2.86	NO <sub>3</sub> -N	BMB	0.190	2.162	0.8648
6	3.77	PO <sub>4</sub> -P	BMB	0.125	0.850	1.7878
7	4.29	SO <sub>4</sub>	BMB	0.294	1.996	4.4209



Peak Integration Report

Sample Name:	i cal 5	Inj. Vol.:	25.00
Injection Type:	Callibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:35	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.279	5.622	2.2633
2	1.79	Cl	BMB	0.876	17.063	8.2279
3	2.14	NO2-N	BMB	0.168	2.261	0.9484
4	2.56	BR	BMB	0.169	2.232	4.6484
5	2.86	NO3-N	BMB	0.382	4.442	1.7432
6	3.77	PO4-P	BMB	0.255	1.894	3.6510
7	4.29	SO4	BMB	0.593	4.065	8.9251

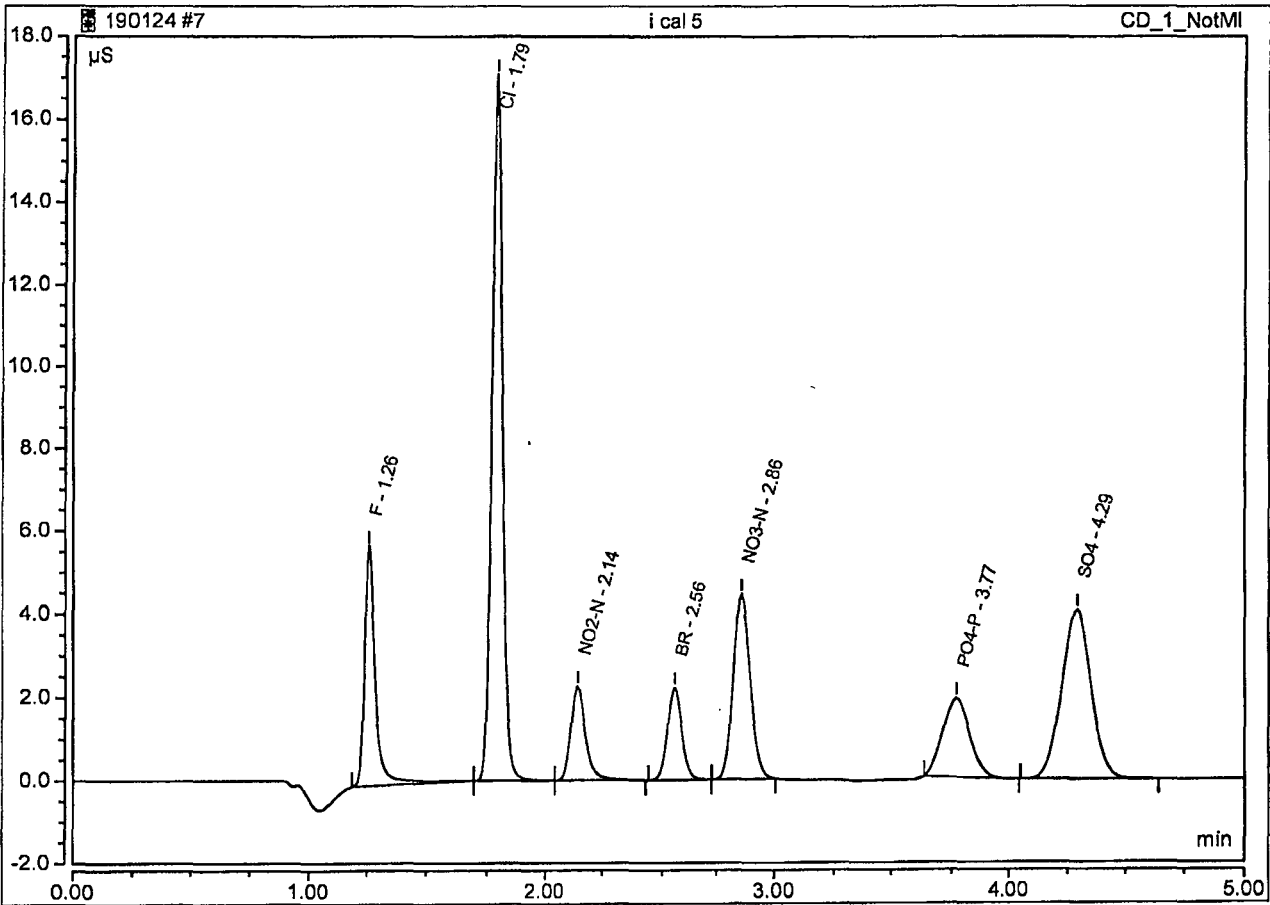


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	I cal 5	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:35	Run Time:	5.00

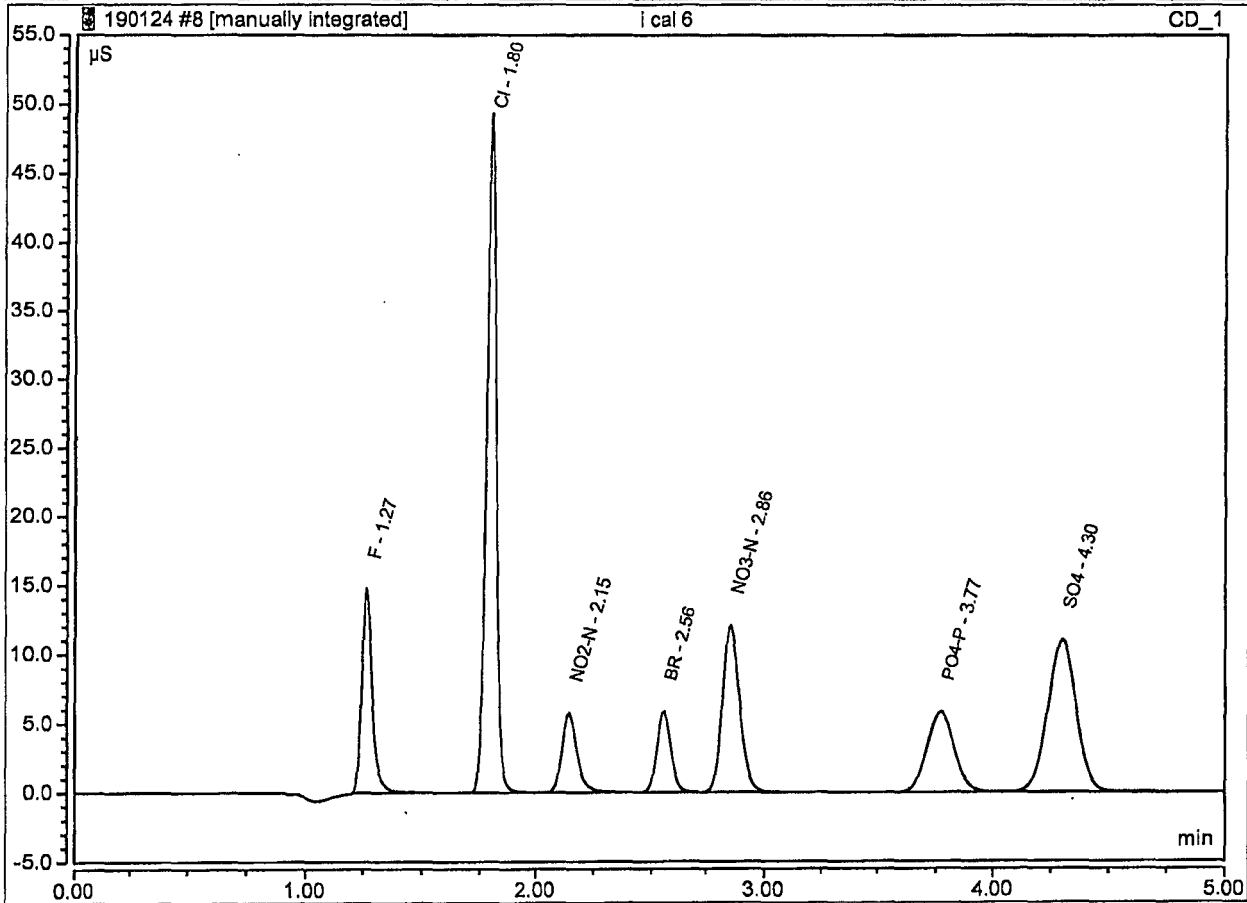
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.26	F	BMB*	0.313	5.748	2.3094
2	1.79	Cl	BMB	0.876	17.063	8.2279
3	2.14	NO <sub>2</sub> -N	BMB	0.168	2.261	0.9484
4	2.56	BR	BMB	0.169	2.232	4.6484
5	2.86	NO <sub>3</sub> -N	BMB	0.382	4.442	1.7432
6	3.77	PO <sub>4</sub> -P	BMB	0.255	1.894	3.6510
7	4.29	SO <sub>4</sub>	BMB	0.593	4.065	8.9251



Peak Integration Report

Sample Name:	i cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:43	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.767	14.736	6.1409
2	1.80	Cl	BMB	2.485	49.285	23.3335
3	2.15	NO2-N	BMB	0.430	5.768	2.4325
4	2.56	BR	BMB	0.437	5.850	12.0236
5	2.86	NO3-N	BMB	1.031	12.086	4.7035
6	3.77	PO4-P	BMB	0.795	5.814	11.4097
7	4.30	SO4	BMB	1.571	10.997	23.6433



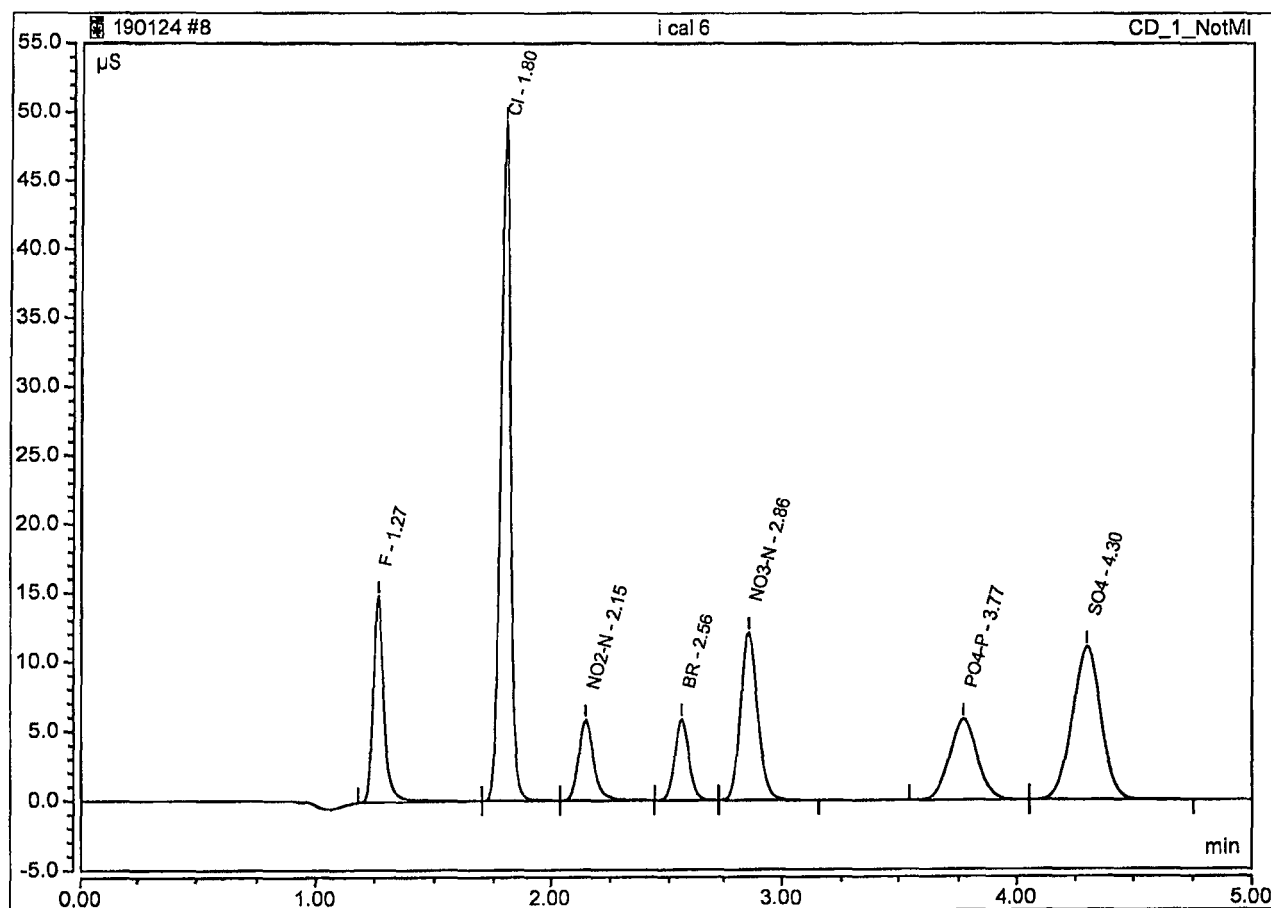
F mi1 HH 190128 MM



### Not Manipulated Peak Integration Report

Sample Name:	i cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:43	Run Time:	5.00

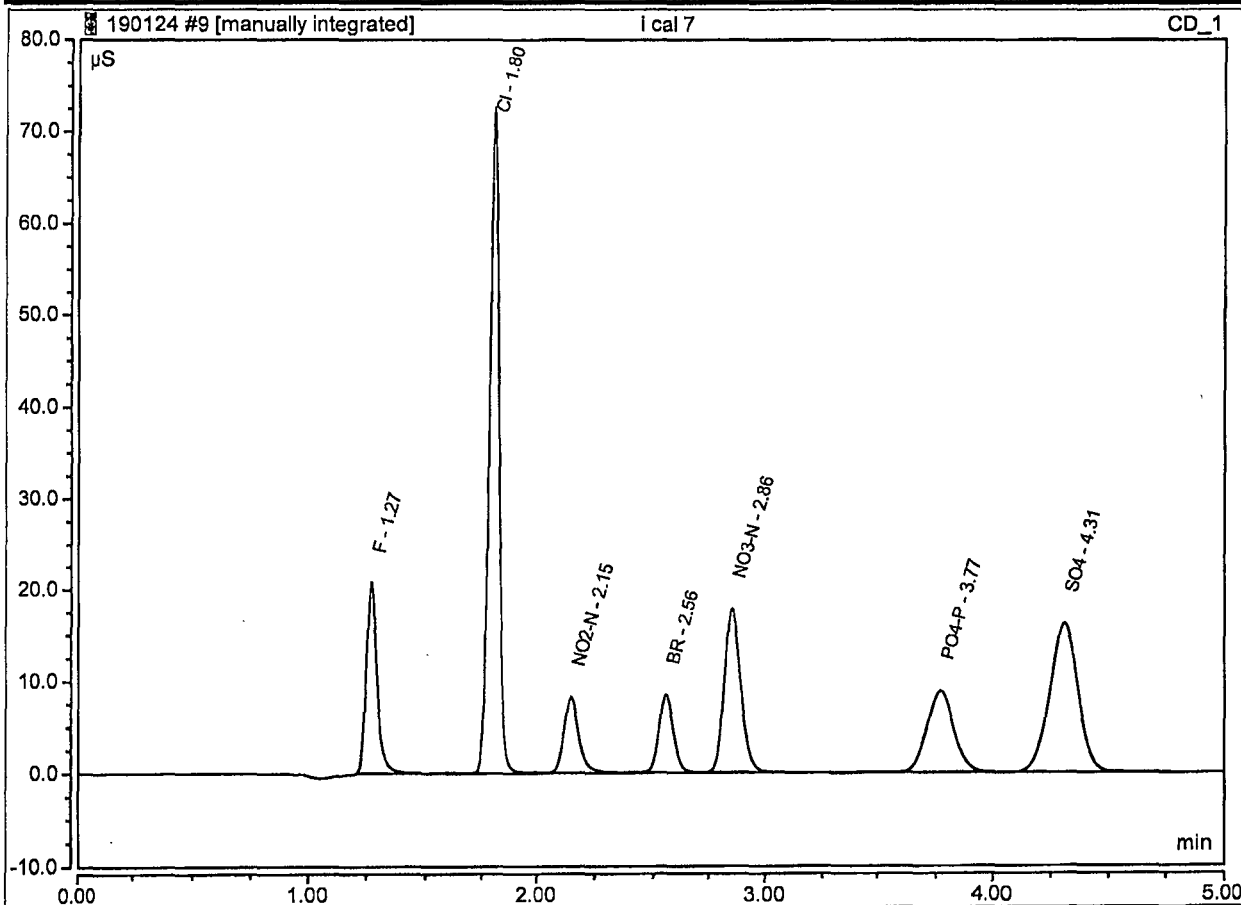
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.27	F	BMB*	0.797	14.841	6.1203
2	1.80	Cl	BMB	2.485	49.285	23.3335
3	2.15	NO2-N	BMB	0.430	5.768	2.4325
4	2.56	BR	BMB	0.437	5.850	12.0236
5	2.86	NO3-N	BMB	1.031	12.086	4.7035
6	3.77	PO4-P	BMB	0.795	5.814	11.4097
7	4.30	SO4	BMB	1.571	10.997	23.6433



Peak Integration Report

Sample Name:	I cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:50	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	1.106	20.788	8.8373
2	1.80	Cl	BMB	3.678	72.562	34.5418
3	2.15	NO2-N	BMB	0.616	8.211	3.4811
4	2.56	BR	BMB	0.630	8.490	17.3110
5	2.86	NO3-N	BMB	1.509	17.791	6.8826
6	3.77	PO4-P	BMB	1.196	8.858	17.1532
7	4.31	SO4	BMB	2.290	16.201	34.4680

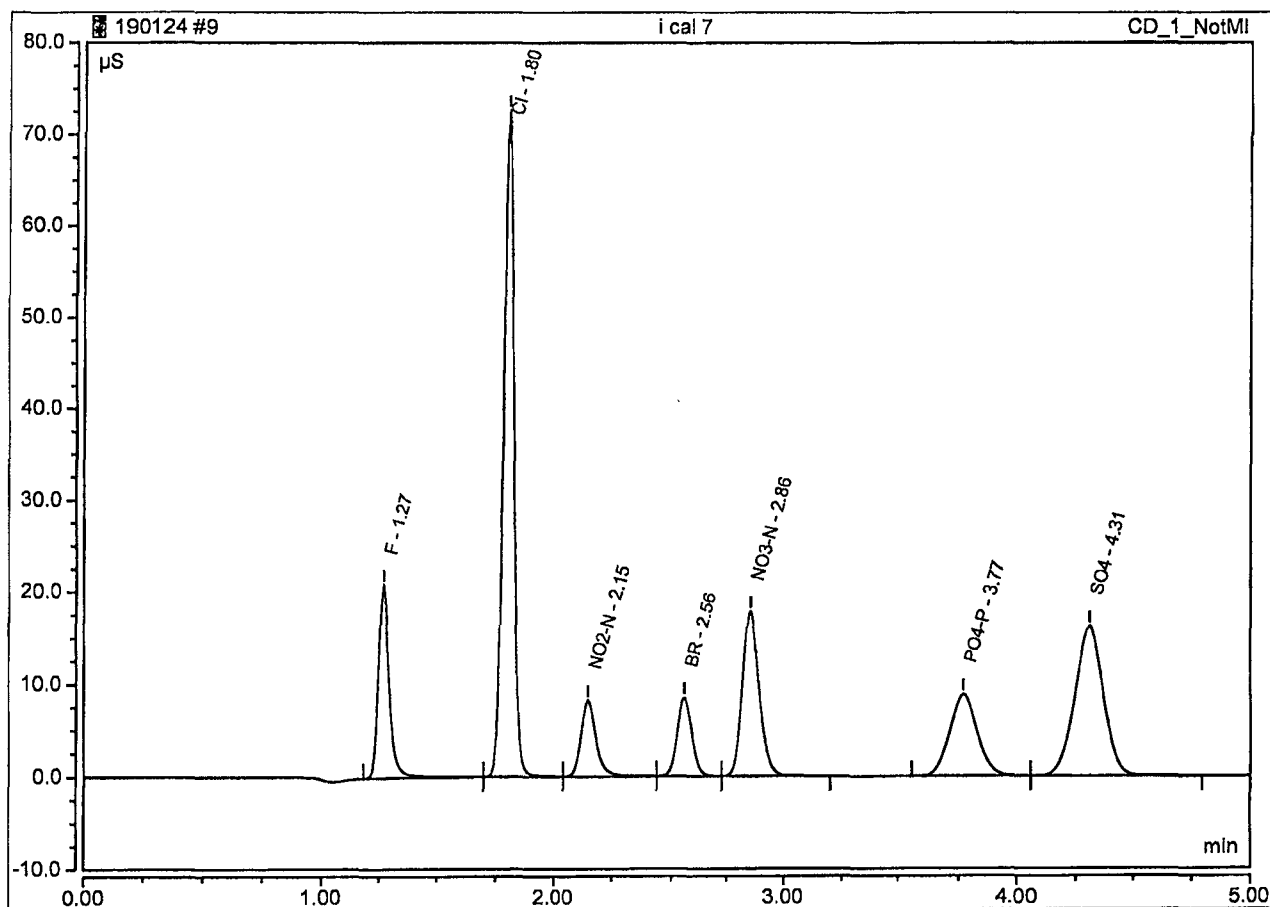


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	i cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:50	Run Time:	5.00

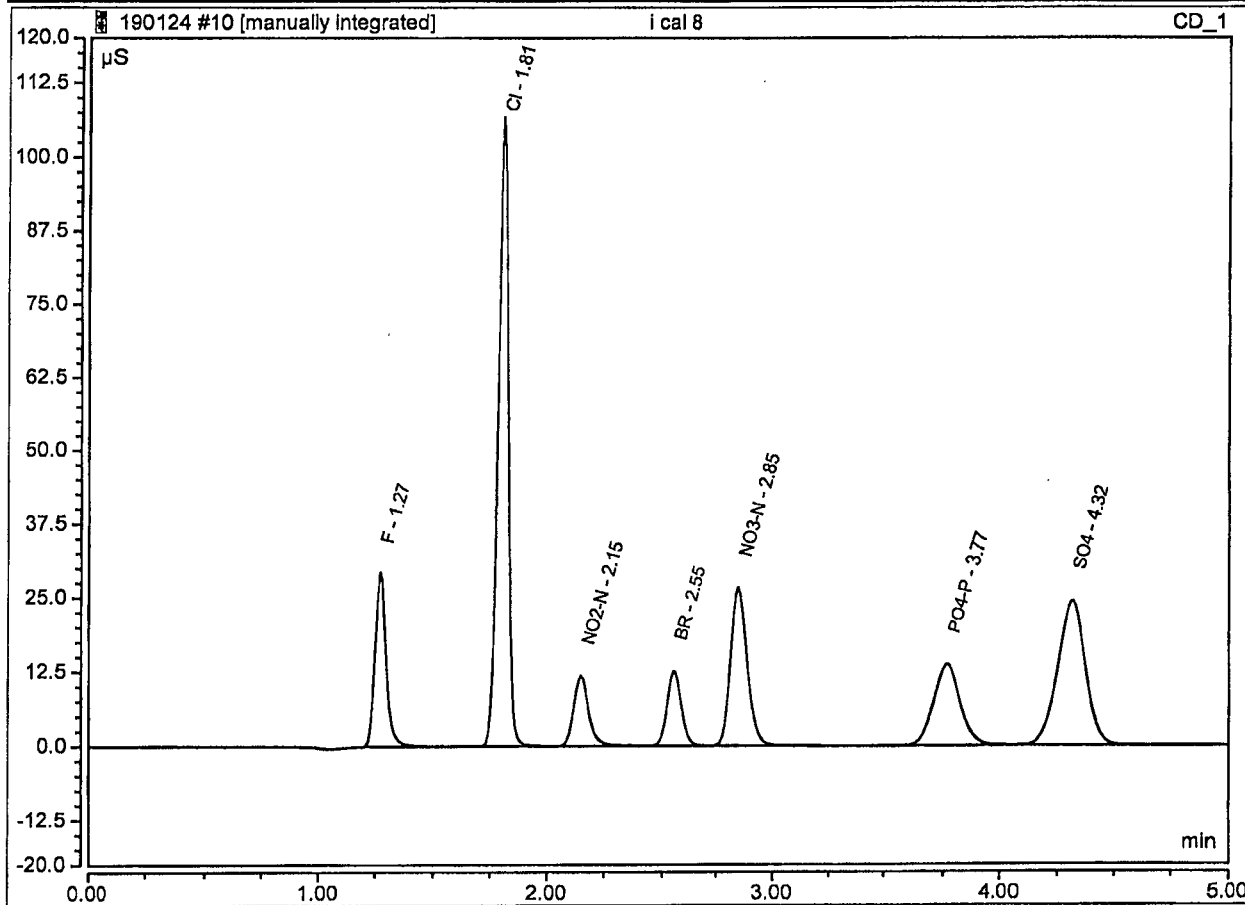
No.	Time min	Peak Name	Peak Type	Area uS*min	Height uS	Area uS*min
1	1.27	F	BMB*	1.139	20.900	8.8150
2	1.80	Cl	BMB	3.678	72.562	34.5418
3	2.15	NO2-N	BMB	0.616	8.211	3.4811
4	2.56	BR	BMB	0.830	8.490	17.3110
5	2.86	NO3-N	BMB	1.509	17.791	6.8826
6	3.77	PO4-P	BMB	1.196	8.858	17.1532
7	4.31	SO4	BMB	2.290	16.201	34.4680



Peak Integration Report

Sample Name:	l cal 8	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:57	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	1.623	29.189	12.9407
2	1.81	Cl	BMB	5.499	106.635	51.6461
3	2.15	NO2-N	BMB	0.895	11.797	5.0614
4	2.55	BR	BMB	0.927	12.598	25.4664
5	2.85	NO3-N	BMB	2.258	26.658	10.2994
6	3.77	PO4-P	BMB	1.824	13.683	26.1607
7	4.32	SO4	BMB	3.411	24.358	51.3415

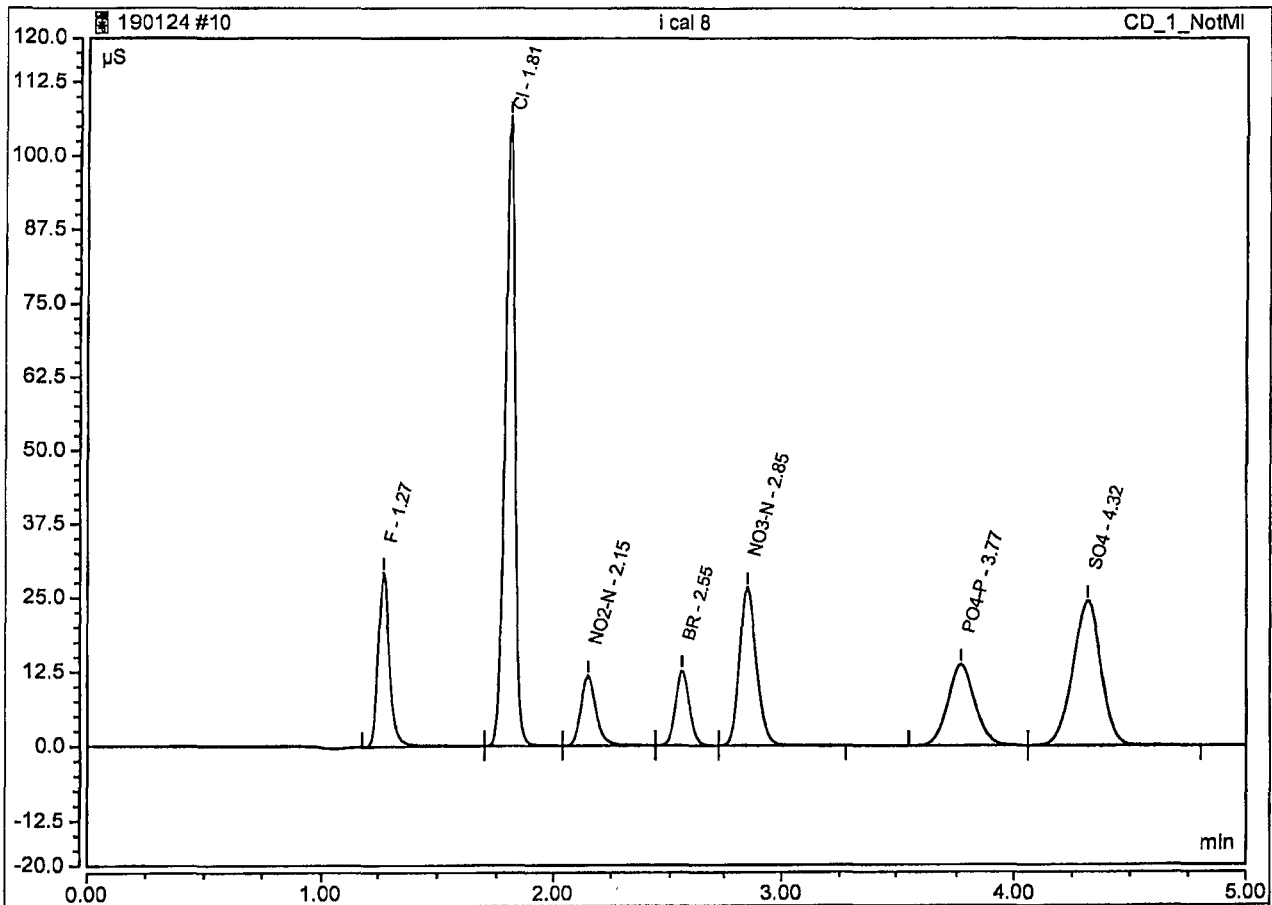


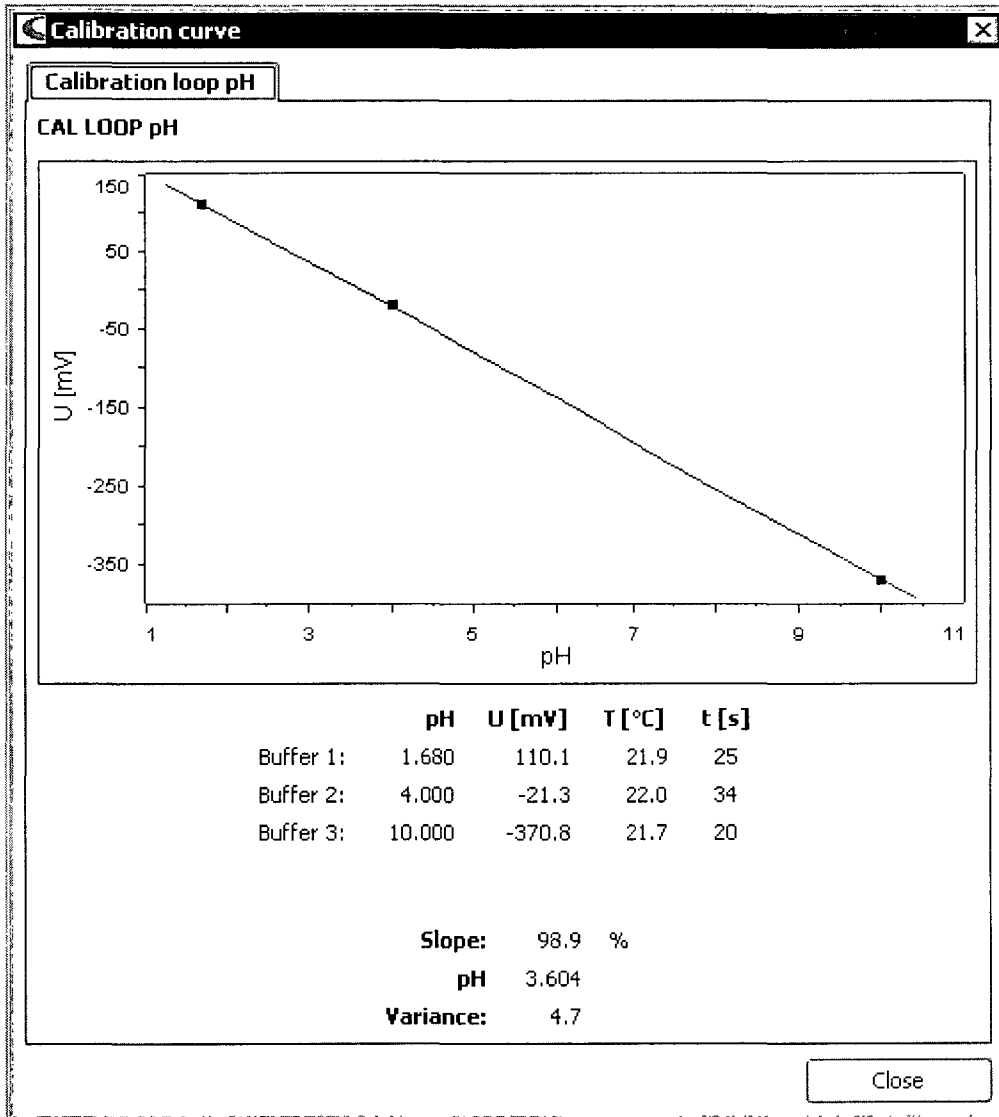
F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

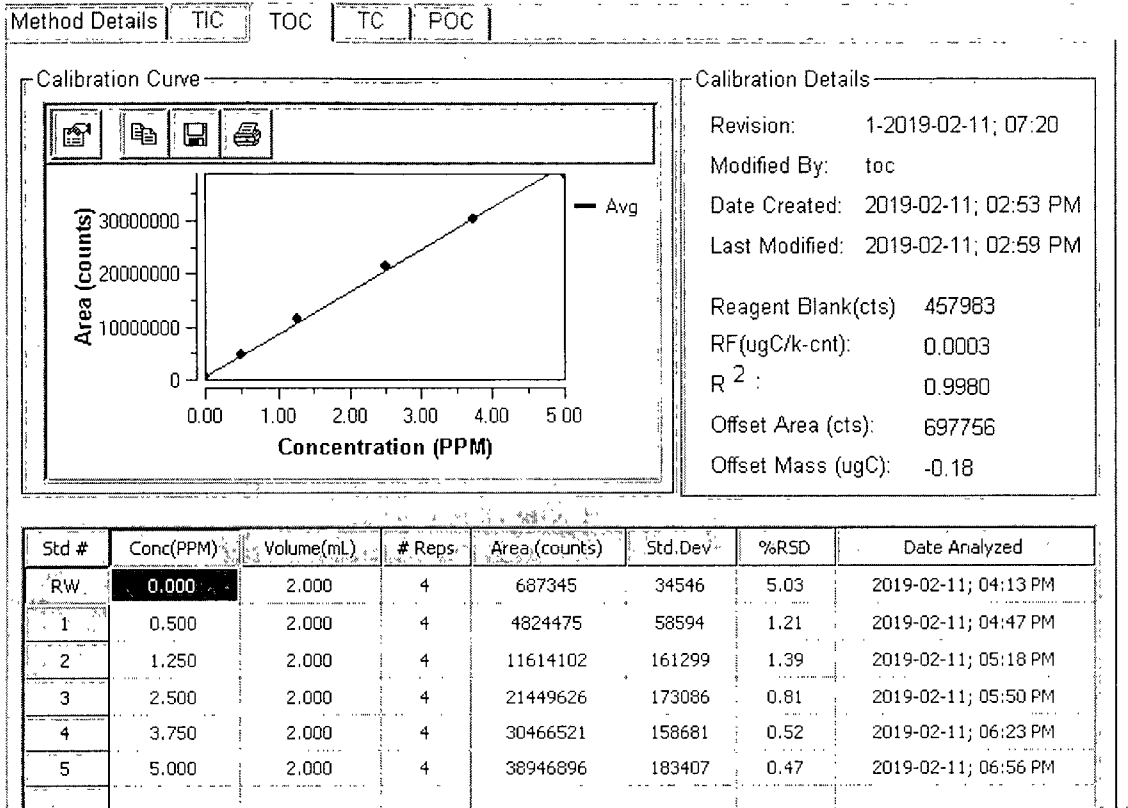
Sample Name:	i cal 8	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:57	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.27	F	BMB*	1.652	29.287	12.8588
2	1.81	Cl	BMB	5.499	106.635	51.6461
3	2.15	NO <sub>2</sub> -N	BMB	0.895	11.797	5.0614
4	2.55	BR	BMB	0.927	12.598	25.4664
5	2.85	NO <sub>3</sub> -N	BMB	2.258	26.658	10.2994
6	3.77	PO <sub>4</sub> -P	BMB	1.824	13.683	26.1607
7	4.32	SO <sub>4</sub>	BMB	3.411	24.358	51.3415





TicToc Calibration Curve 190211A





Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

**Sample Results Summary**

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
2	1	TOC-RW	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	687,345	0.000	0.000	34,546	5.03	
3	2	TOC-Std#1-0.500 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	4,824,475	1.000	0.500	58,594	1.21	
4	3	TOC-Std#2-1.250 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	11,614,102	2.500	1.250	161,299	1.39	
5	4	TOC-Std#3-2.500 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	21,449,626	5.000	2.500	173,086	0.81	
6	5	TOC-Std#4-3.750 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	30,466,521	7.500	3.750	158,681	0.52	
7	6	TOC-Std#5-5.000 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	38,946,896	10.000	5.000	183,407	0.47	
8	7	ICB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1 : 1	00000000	TOC	1,717,970	0.316	0.158	31,138	1.81	Pass
9	8	ICV Sugar	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Check_Stan	1 : 1	00000000	TOC	22,163,151	5.392	2.696	109,699	0.49	







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 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Sample Results

Spl #: 2 Sample ID: TOC-RW Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 1 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:13 pm	-	-	-	668,867	0.000	0.000
2	4:21 pm	-	-	-	739,036	0.000	0.000
3	4:28 pm	-	-	-	667,973	0.000	0.000
4	4:36 pm	-	-	-	673,502	0.000	0.000
Avg.		-	-	-	687,345	0.000	0.000
Std.Dev.							
% RSD.					5.03		

Spl #: 3 Sample ID: TOC-Std#1-0.500 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 2 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:47 pm	-	-	-	4,799,949	1.000	0.500
2	4:54 pm	-	-	-	4,769,063	1.000	0.500
3	5:02 pm	-	-	-	4,823,015	1.000	0.500
4	5:10 pm	-	-	-	4,905,872	1.000	0.500
Avg.		-	-	-	4,824,475	1.000	0.500
Std.Dev.							
% RSD.					1.21		





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 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: **TOC**  
 Date Approved: By:

Spl #: 4 Sample ID: TOC-Std#2-1.250 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 3 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:18 pm	-	-	-	11,514,099	2.500	1.250
2	5:26 pm	-	-	-	11,788,000	2.500	1.250
3	5:34 pm	-	-	-	11,444,716	2.500	1.250
4	5:42 pm	-	-	-	11,709,594	2.500	1.250
Avg.		-	-	-	11,614,102	2.500	1.250
Std.Dev.							
% RSD.					1.39		

Spl #: 5 Sample ID: TOC-Std#3-2.500 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 4 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:50 pm	-	-	-	21,654,245	5.000	2.500
2	5:58 pm	-	-	-	21,360,038	5.000	2.500
3	6:06 pm	-	-	-	21,521,272	5.000	2.500
4	6:15 pm	-	-	-	21,262,949	5.000	2.500
Avg.		-	-	-	21,449,626	5.000	2.500
Std.Dev.							
% RSD.					0.81		





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 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: *TOC*

Date Approved: By:

Spl #: 6 Sample ID: TOC-Std#4-3.750 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 5 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:23 pm	-	-	-	30,612,289	7.500	3.750
2	6:31 pm	-	-	-	30,309,053	7.500	3.750
3	6:39 pm	-	-	-	30,351,074	7.500	3.750
4	6:47 pm	-	-	-	30,593,670	7.500	3.750
Avg.		-	-	-	30,466,521	7.500	3.750
Std.Dev.							
% RSD.					0.52		

Spl #: 7 Sample ID: TOC-Std#5-5.000 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 6 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:56 pm	-	-	-	38,971,032	10.000	5.000
2	7:04 pm	-	-	-	38,706,906	10.000	5.000
3	7:12 pm	-	-	-	38,956,234	10.000	5.000
4	7:20 pm	-	-	-	39,153,413	10.000	5.000
Avg.		-	-	-	38,946,896	10.000	5.000
Std.Dev.							
% RSD.					0.47		



Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: *TOC*

Date Approved: By:

Spl #: 8 Sample ID: ICB Type: Sample Date: 02/11/2019 Status: Passed  
 Vial #: 7 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:31 pm	-	-	-	1,702,854	0.313	0.156
2	7:39 pm	-	-	-	1,725,871	0.318	0.159
3	7:46 pm	-	-	-	1,685,579	0.308	0.154
4	7:54 pm	-	-	-	1,757,576	0.326	0.163
Avg.		-	-	-	1,717,970	0.316	0.158
Std.Dev.							
% RSD.					1.81		

Spl #: 9 Sample ID: ICV Sugar Type: Check\_Stan Date: 02/11/2019 Status: Passed  
 Vial #: 8 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:02 pm	-	-	-	22,271,756	5.419	2.710
2	8:10 pm	-	-	-	22,113,536	5.379	2.690
3	8:18 pm	-	-	-	22,033,394	5.359	2.680
4	8:26 pm	-	-	-	22,233,919	5.409	2.705
Avg.		-	-	-	22,163,151	5.392	2.696
Std.Dev.							
% RSD.					0.49		

**INORGANIC ANALYSIS**  
**Raw Data**



Method SM3500Fe	Units mg/L	Ferrous Iron	Instrument: Genisis Spectrometer
Analyte Fe2+	QCG: 190123A		Wavelength: 510 nm
Analyst HH	Final Volume: 50mL		

Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/15/18	12:27	ICB	0.00	0.000	
06/15/18	12:27	Ical 1	1.00	0.099	98.7%
06/15/18	12:28	Ical 2	2.00	0.201	100.4%
06/15/18	12:28	Ical 3	4.00	0.396	98.9%
06/15/18	12:29	Ical 4	5.00	0.501	100.1%
06/15/18	12:30	Ical 5	10.00	1.000	100.0%
06/15/18	12:31	ICV	3.00	0.316	105.2%
06/15/18	12:32	ICB	0.00	0.000	

Slope	0.100015306	Algorithm Check:	Appl ID	Absorbance	Result
Intercept	0.000258661		190123 LCS	0.307	3.07
Coefficient of Determination	0.999973247		Result = (Absorbance-Raw Blk-Intercept)/ Slope		
		Test:	HH	1920129	3.07

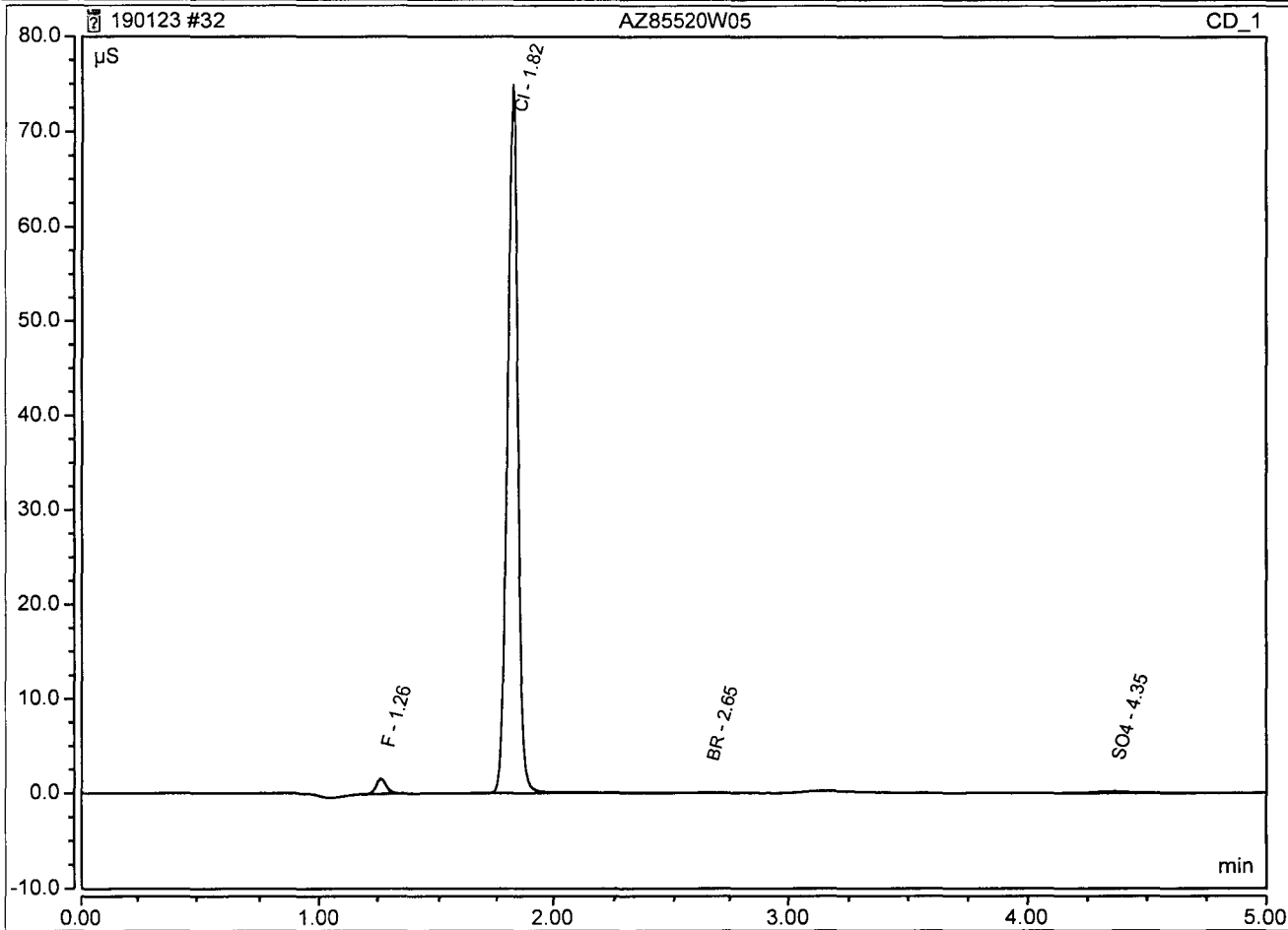
  

Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
01/23/19	9:19	CCV 4.0 190123	1	0.395	25mL		3.95	3.95	4.00	98.7%
01/23/19	9:19	CCB 190123	1	-0.001	25mL		-0.01	-0.01		
01/23/19	9:19	190123 LCS	1	0.307	25mL		3.07	3.07	3.00	102.2%
01/23/19	9:20	190123 LCSD	1	0.305	25mL		3.05	3.05	3.00	101.6%
01/23/19	9:20	AZ85493W18	1	0.017	25mL		0.17	0.17		
01/23/19	9:21	AZ85494W26	1	0.081	25mL		0.81	0.81		
01/23/19	9:22	AZ85495W12	1	0.063	25mL		0.63	0.63		
01/23/19	9:22	AZ85496W12	1	0.157	25mL		1.57	1.57		
01/23/19	9:22	AZ85497W12	1	0.120	25mL		1.20	1.20		
01/23/19	9:23	AZ85494W26 MS	1	0.389	25mL		3.89	3.89		
01/23/19	9:24	AZ85494W26 MSD	1	0.390	25mL		3.90	3.90		
01/23/19	9:24	CCV 4.0 190123	1	0.396	25mL		3.96	3.96	4.00	98.9%
01/23/19	9:24	CCB 190123	1	0.001	25mL		0.01	0.01		
01/23/19	16:45	CCV 4.0 190123	1	0.397	25mL		3.97	3.97	4.00	99.2%
01/23/19	16:45	CCB 190123	1	0.000	25mL		0.00	0.00		
01/23/19	16:47	AZ85523W07	1	0.011	25mL		0.11	0.11		
01/23/19	16:48	AZ85520W07	1	0.220	25mL		2.20	2.20		
01/23/19	16:49	AZ85527W07	1	0.006	25mL		0.06	0.06		
01/23/19	16:50	AZ85525W07	1	0.011	25mL		0.11	0.11		
01/23/19	16:51	CCV 4.0 190123	1	0.398	25mL		3.98	3.98	4.00	99.4%
01/23/19	16:52	CCB 190123	1	0.001	25mL		0.01	0.01		

### Peak Integration Report

Sample Name:	AZ85520W05	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 17:35	Run Time:	5.00

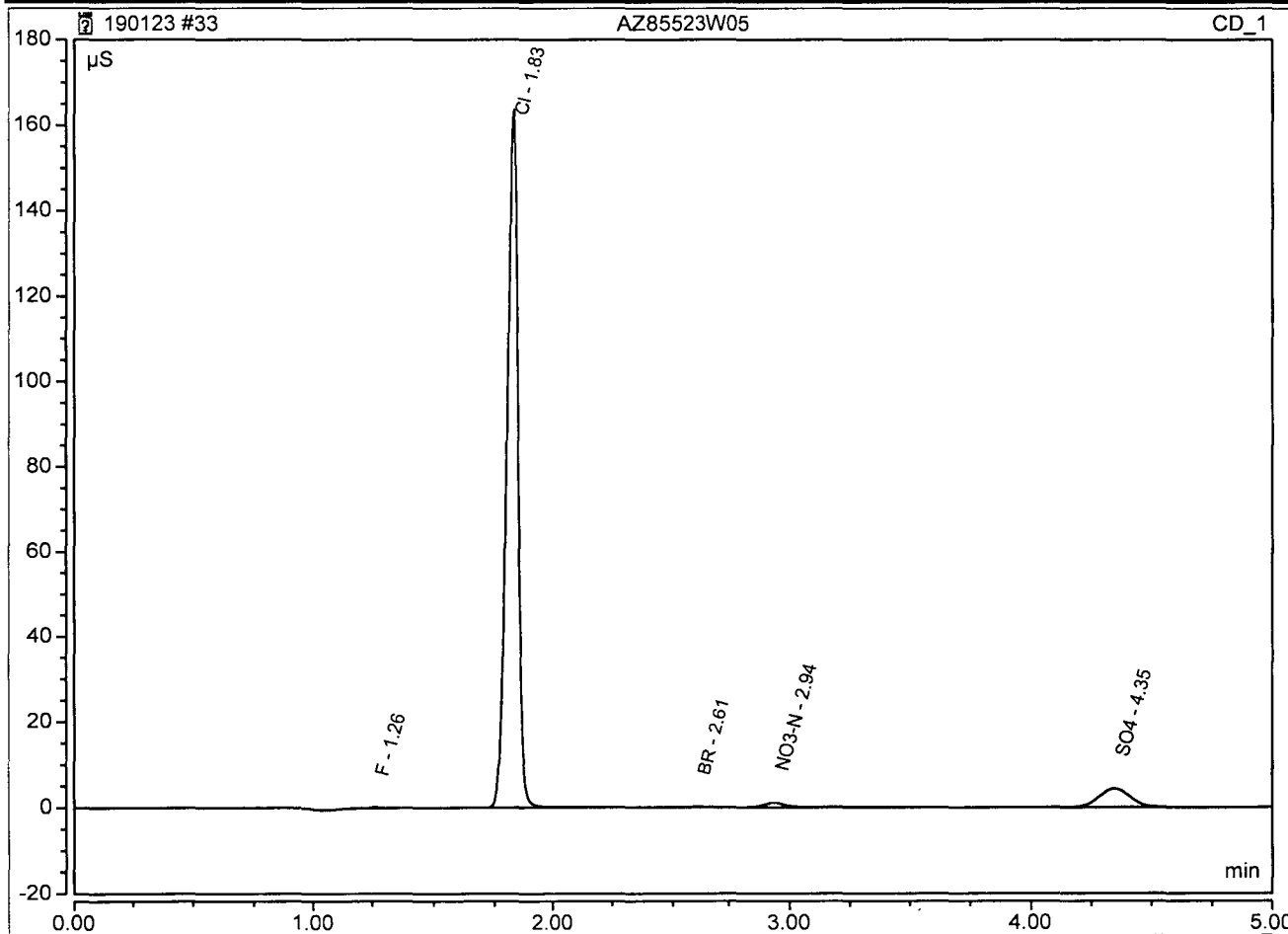
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.26	F	BMB	0.078	1.630	0.6663
2	1.82	Cl	BMB	4.160	74.899	42.0026
3	2.65	BR	BMB	0.004	0.056	0.1279
4	4.35	SO4	BMB	0.023	0.152	0.3810



### Peak Integration Report

Sample Name:	AZ85523W05	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 17:43	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.008	0.161	0.0653
2	1.83	Cl	BMB	8.961	163.594	90.4761
3	2.61	BR	BMB	0.009	0.112	0.2653
4	2.94	NO3-N	BMB	0.104	1.039	0.5146
6	4.35	SO4	BMB	0.644	4.320	10.5799

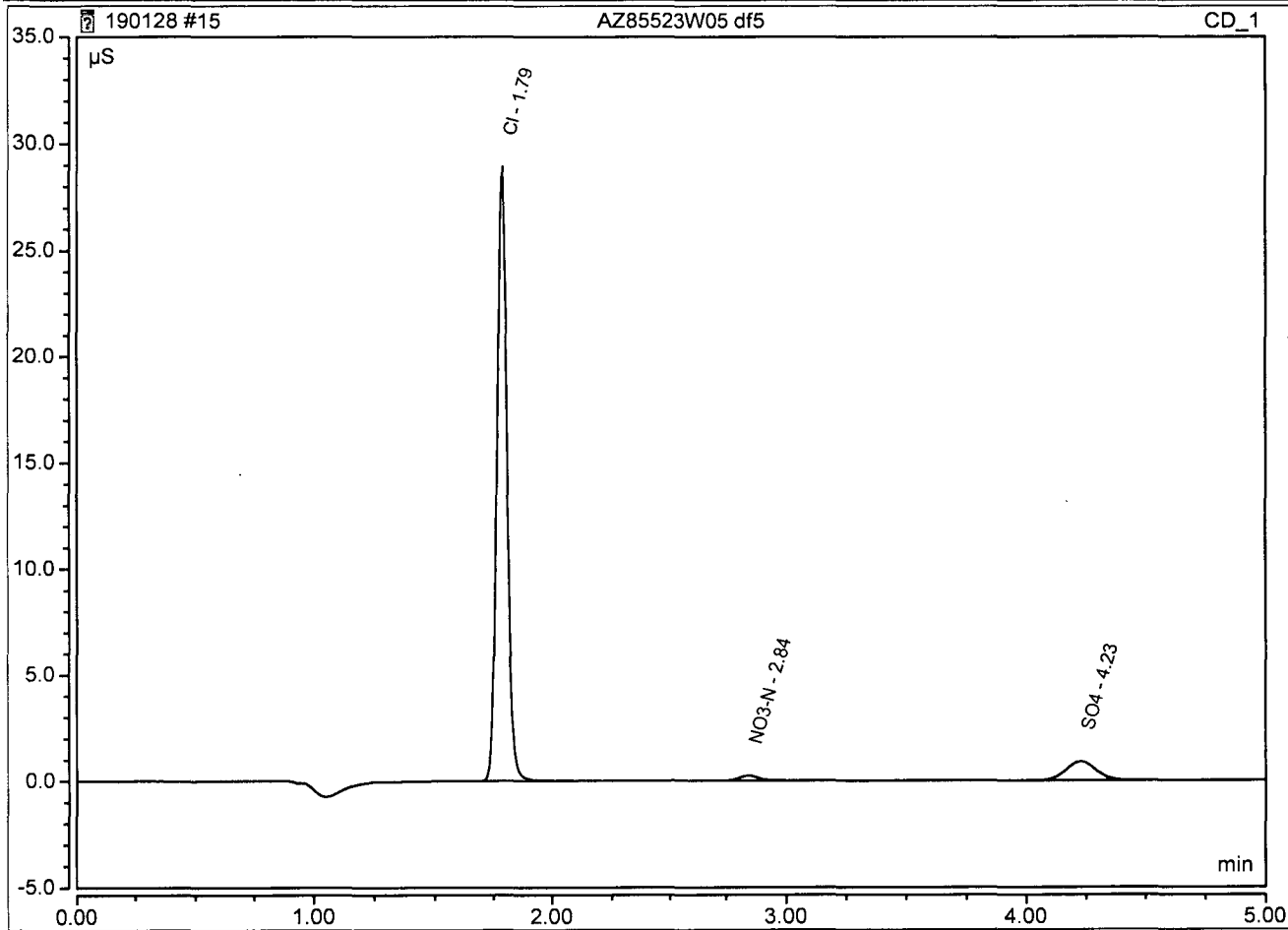




### Peak Integration Report

Sample Name:	AZ85523W05 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 14:41	Run Time:	5.00

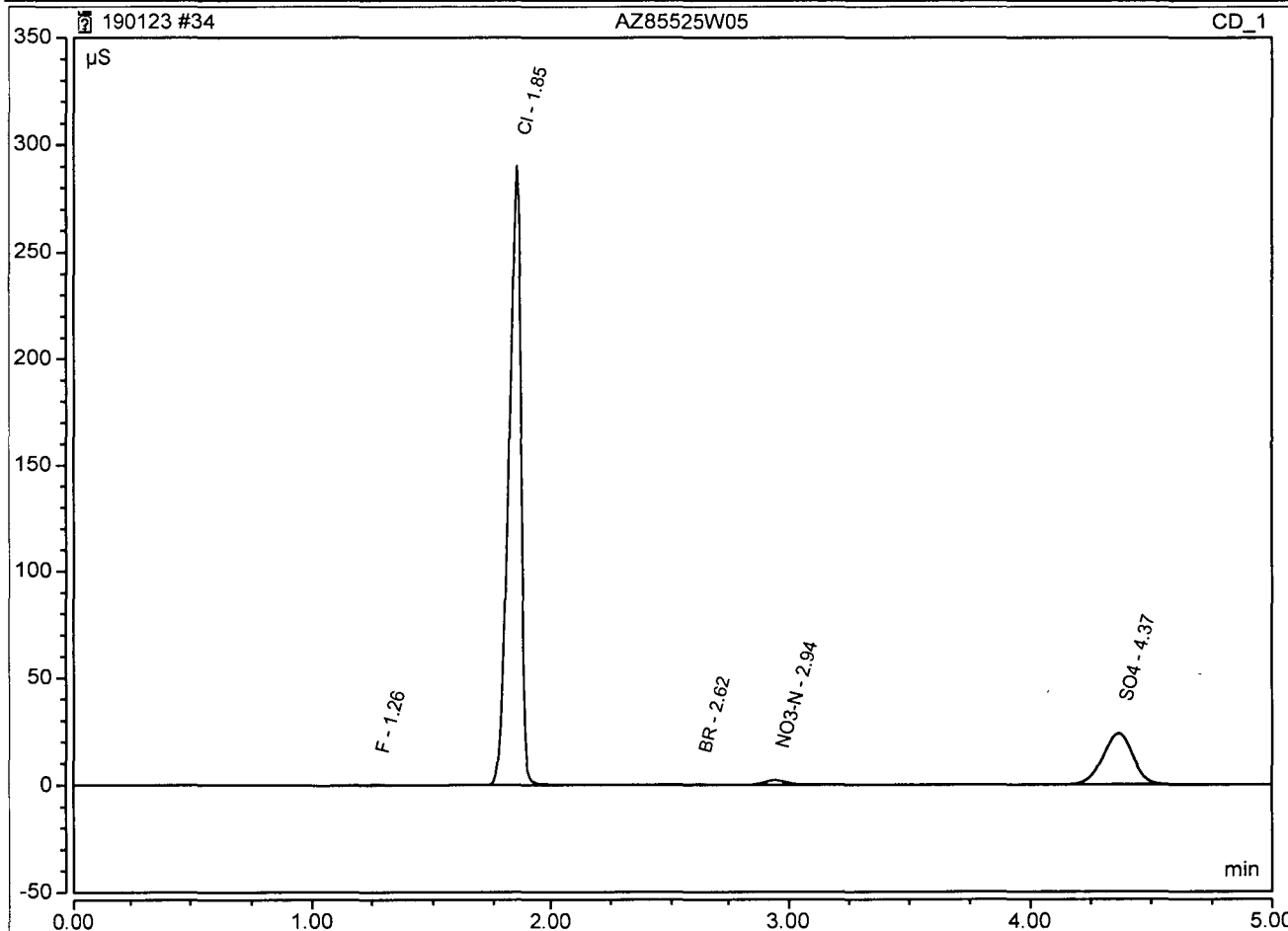
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	1.463	28.911	68.7025
2	2.84	NO3-N	BMB	0.021	0.240	0.4831
3	4.23	SO4	BMB	0.129	0.885	9.7073



### Peak Integration Report

Sample Name:	AZ85525W05	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 17:50	Run Time:	5.00

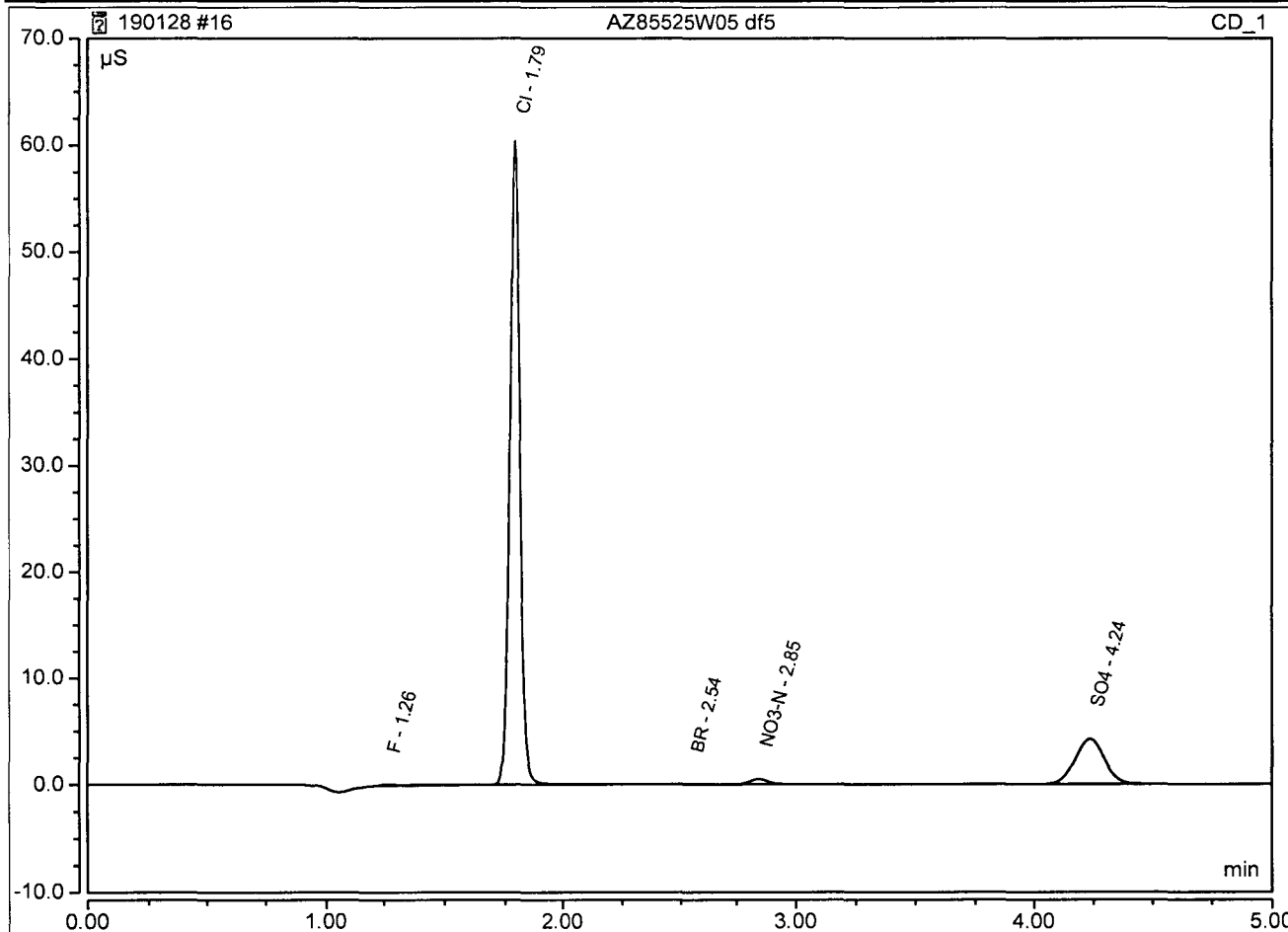
No.	Time (min)	Peak Name	Peak Type	Area (μS*min)	Height (μS)	Amount (mg/L)
1	1.26	F	BMB	0.022	0.440	0.1837
2	1.85	Cl	BMB	17.804	289.869	179.7589
3	2.62	BR	BMB	0.016	0.202	0.4791
4	2.94	NO3-N	BMB	0.215	2.132	1.0633
6	4.37	SO4	BMB	3.420	23.789	56.1894



**Peak Integration Report**

Sample Name:	AZ85525W05 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 14:48	Run Time:	5.00

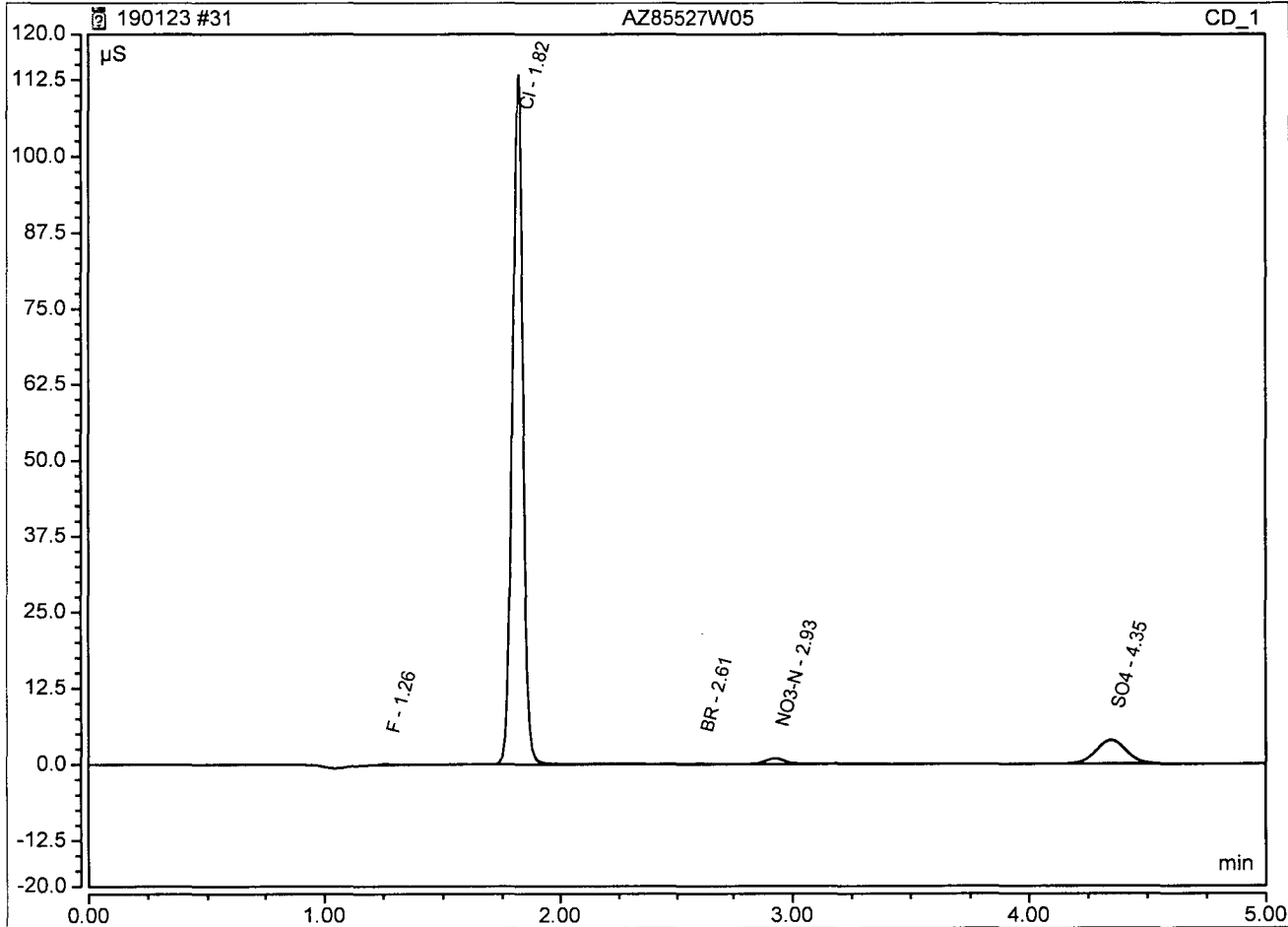
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.020	0.128	1.0317
2	1.79	Cl	BMB	3.036	60.352	142.5635
3	2.54	BR	BMB	0.003	0.044	0.4523
4	2.85	NO3-N	BMB	0.043	0.490	0.9839
5	4.24	SO4	BMB	0.608	4.238	45.7203



### Peak Integration Report

Sample Name:	AZ85527W05	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 17:28	Run Time:	5.00

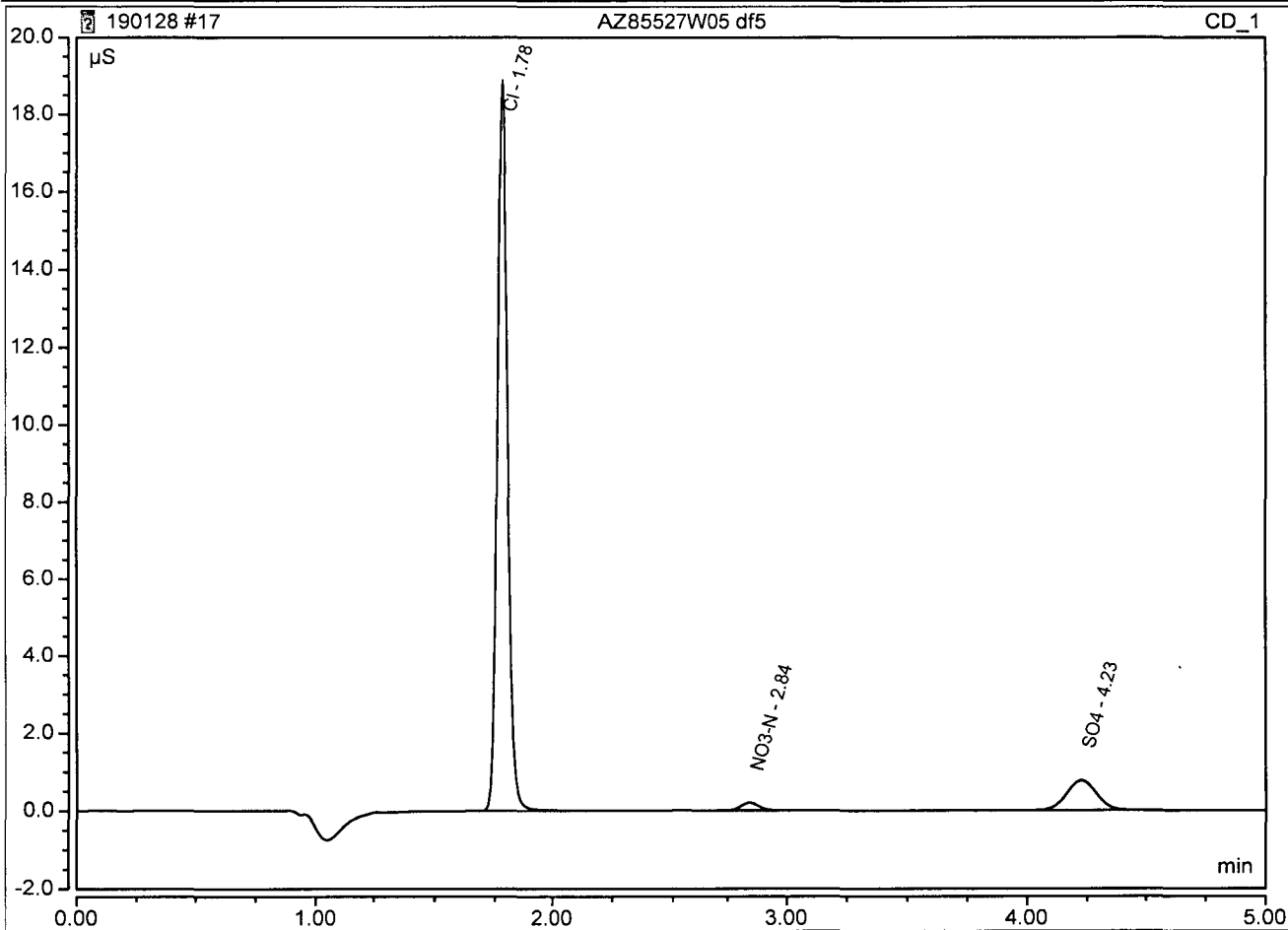
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S} \cdot \text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.26	F	BMB	0.007	0.146	0.0600
2	1.82	Cl	BMB	5.976	113.299	60.3412
3	2.61	BR	BMB	0.006	0.079	0.1849
4	2.93	NO3-N	BMB	0.090	0.927	0.4451
6	4.35	SO4	BMB	0.577	3.863	9.4742



### Peak Integration Report

Sample Name:	AZ85527W05 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 14:55	Run Time:	5.00

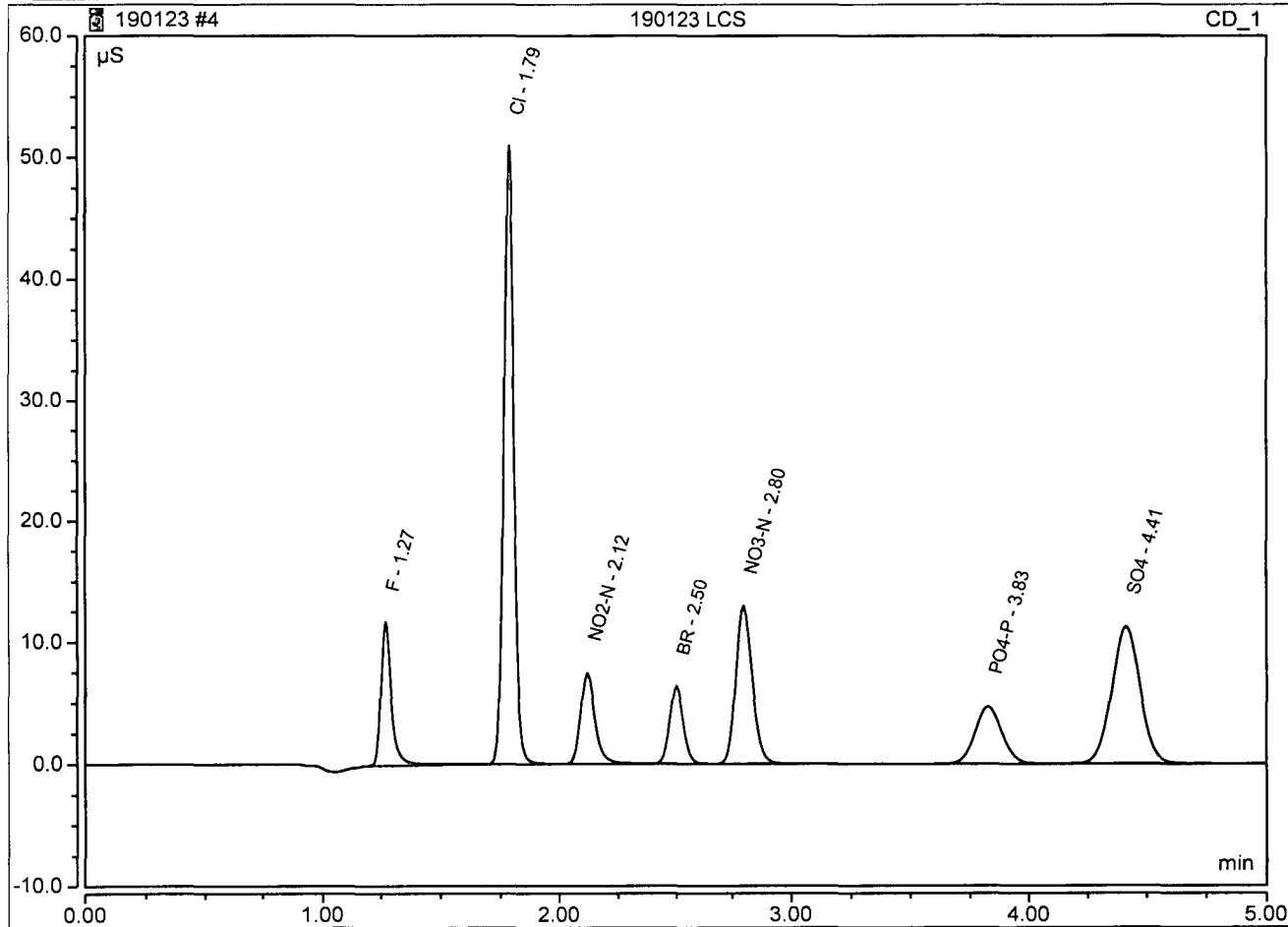
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.967	18.876	45.4091
2	2.84	NO <sub>3</sub> -N	BMB	0.018	0.204	0.4117
3	4.23	SO <sub>4</sub>	BMB	0.113	0.776	8.5117



**Peak Integration Report**

Sample Name:	190123 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 09:52	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.620	11.716	5.2821
2	1.79	Cl	BMB	2.486	50.909	25.0957
3	2.12	NO2-N	BMB	0.530	7.426	3.4797
4	2.50	BR	BMB	0.449	6.320	13.2547
5	2.80	NO3-N	BMB	1.049	12.930	5.1815
6	3.83	PO4-P	BMB	0.619	4.666	10.1682
7	4.41	SO4	BMB	1.571	11.226	25.8180



Algorithm Check:

y = Peak Area

x = mg/L S04

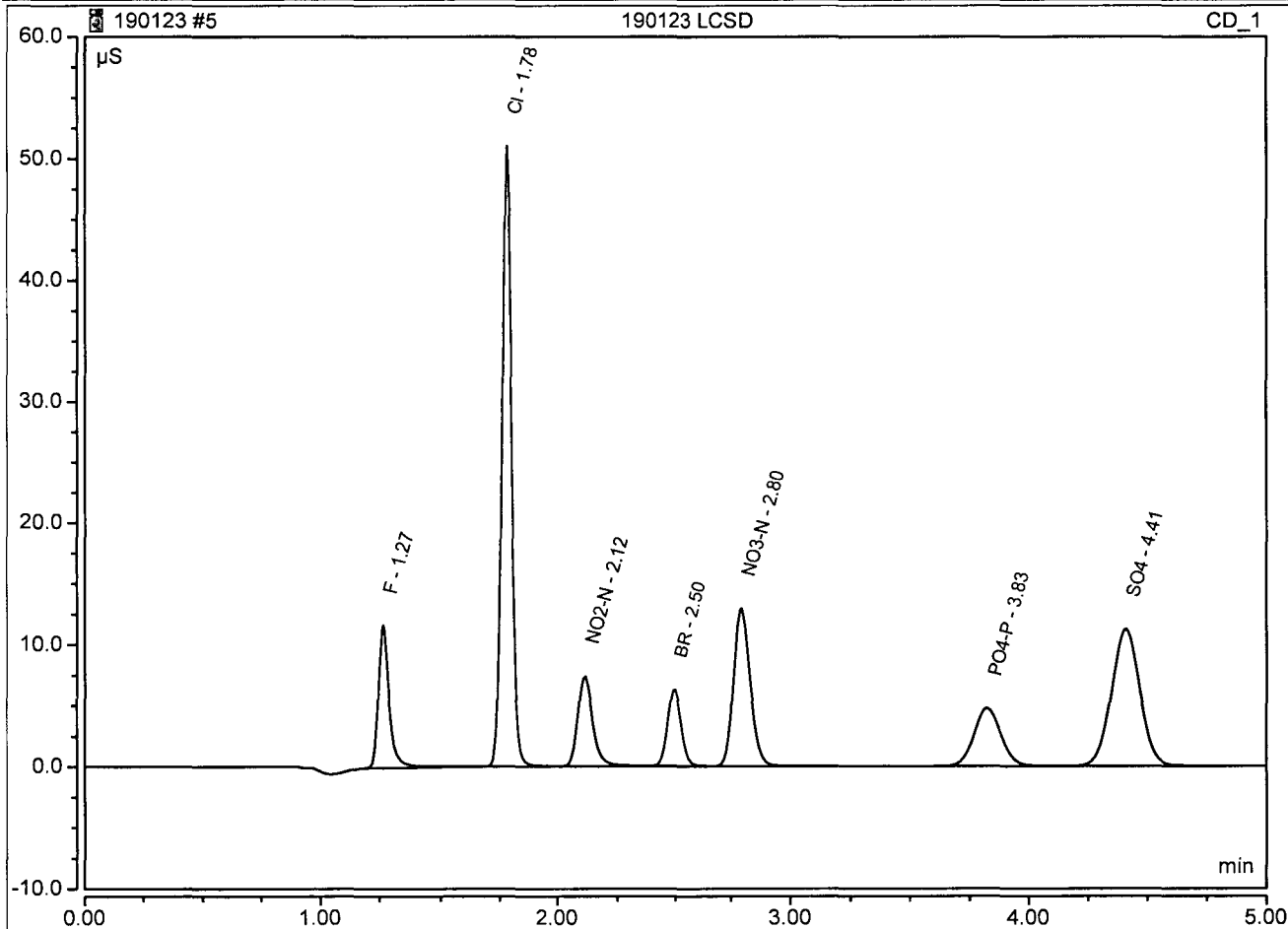
$$y = 0.0609 \quad x + \quad 0.0000$$

$$y = 1.5714 \quad \text{therefor } x = 25.80 \text{ HH } 190129$$

### Peak Integration Report

Sample Name:	190123 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	23-Jan-2019 / 10:00	Run Time:	5.00

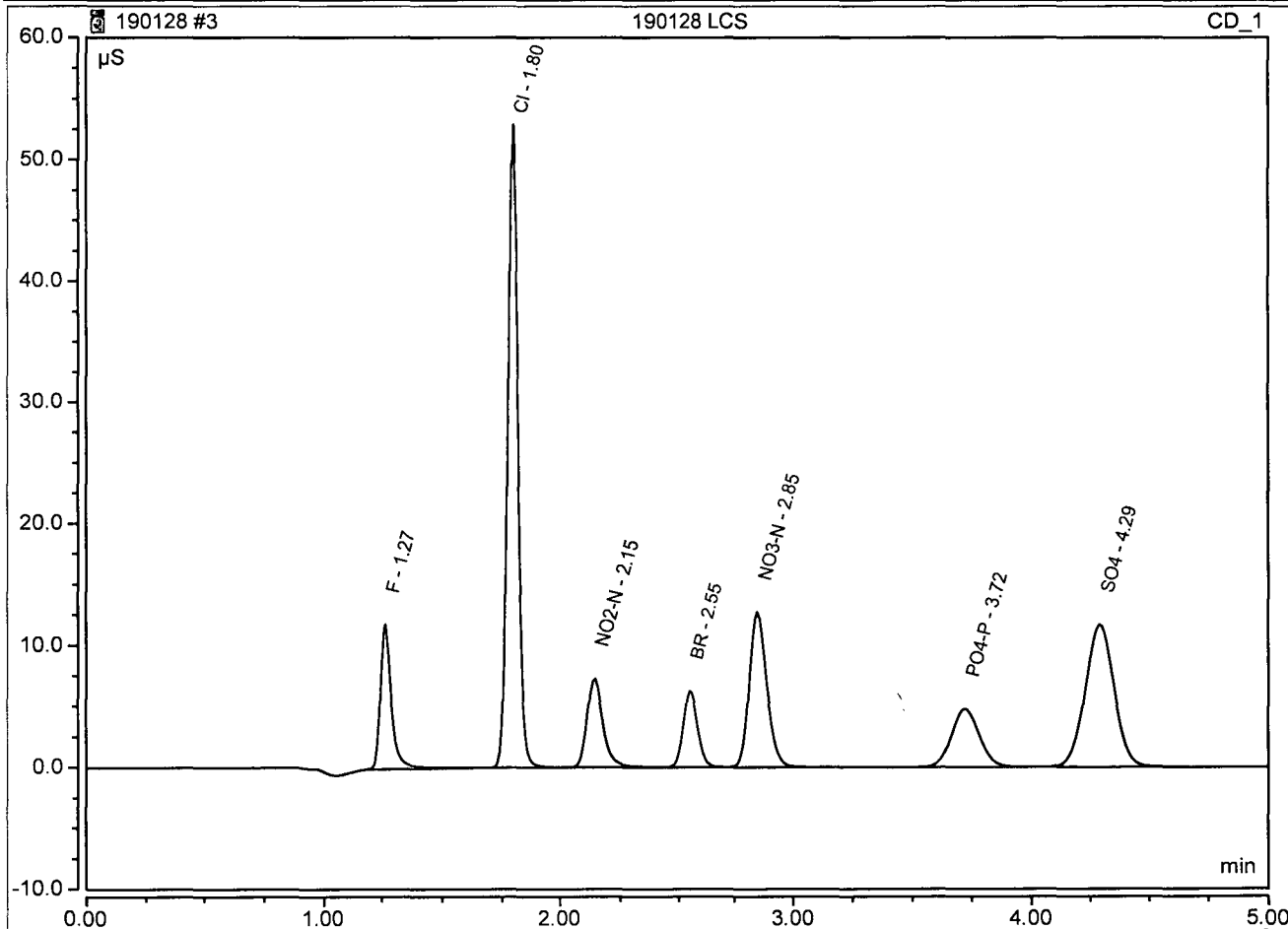
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.619	11.701	5.2731
2	1.78	Cl	BMB	2.491	51.037	25.1496
3	2.12	NO2-N	BMB	0.531	7.434	3.4853
4	2.50	BR	BMB	0.449	6.325	13.2701
5	2.80	NO3-N	BMB	1.051	12.945	5.1923
6	3.83	PO4-P	BMB	0.630	4.749	10.3344
7	4.41	SO4	BMB	1.572	11.236	25.8295



### Peak Integration Report

Sample Name:	190128 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 10:09	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.655	11.852	5.2552
2	1.80	Cl	BMB	2.693	52.886	25.2862
3	2.15	NO2-N	BMB	0.551	7.285	3.1178
4	2.55	BR	BMB	0.471	6.251	12.9383
5	2.85	NO3-N	BMB	1.098	12.700	5.0092
6	3.72	PO4-P	BMB	0.650	4.770	9.3232
7	4.29	SO4	BMB	1.666	11.683	25.0735



Algorithm Check:

y = Peak Area

x = mg/L S04

$$y = 0.0664 \quad x + \quad 0.0000$$

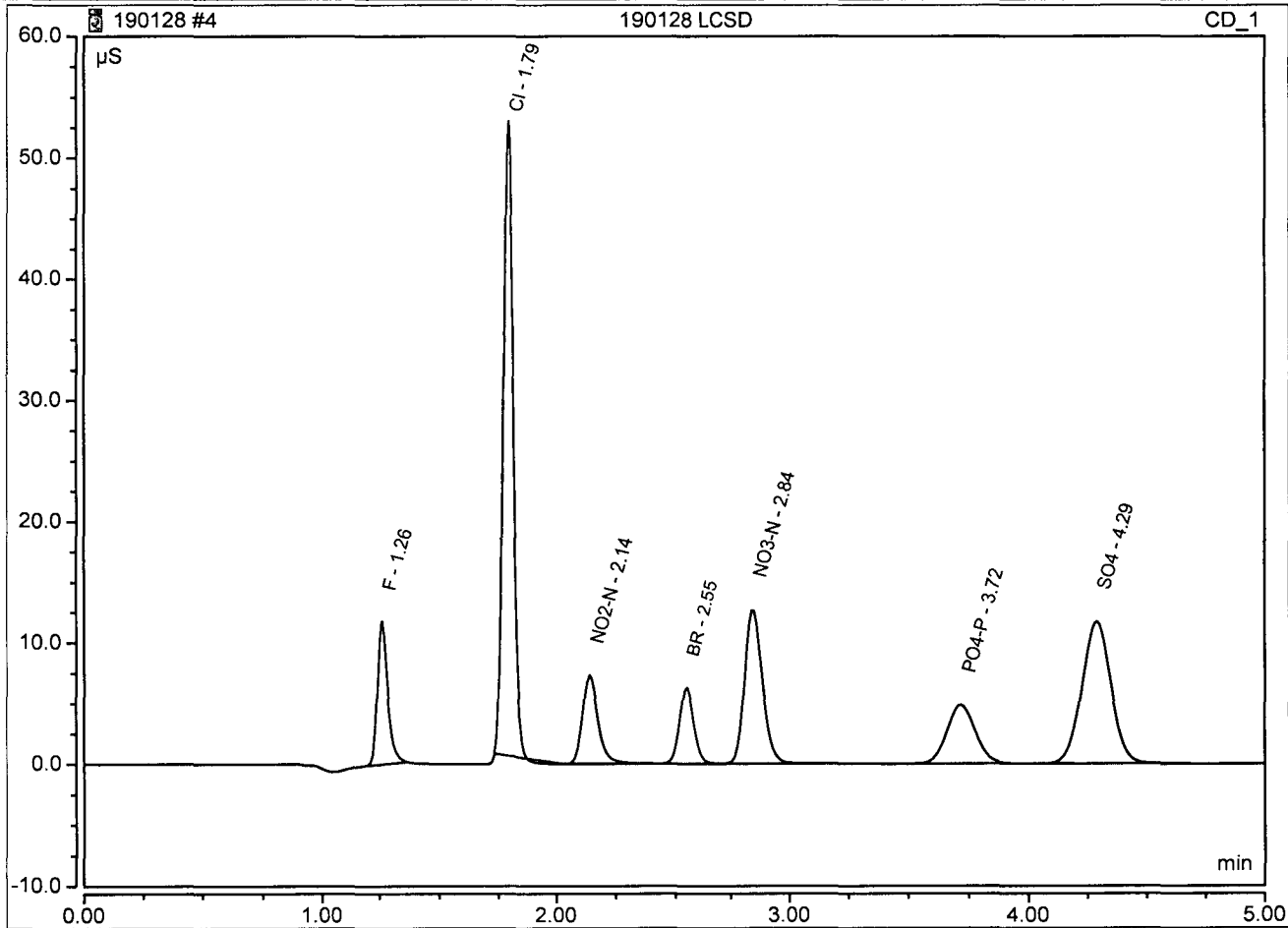
$$y = 1.6660 \quad \text{therefor } x = 25.09 \text{ HH } 190129$$



**Peak Integration Report**

Sample Name:	190128 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 10:17	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.26	F	BMB	0.605	11.764	4.8564
2	1.79	Cl	BMB	2.562	52.342	24.0600
3	2.14	NO <sub>2</sub> -N	BMB	0.552	7.302	3.1229
4	2.55	BR	BMB	0.471	6.264	12.9479
5	2.84	NO <sub>3</sub> -N	BMB	1.100	12.727	5.0166
6	3.72	PO <sub>4</sub> -P	BMB	0.660	4.853	9.4717
7	4.29	SO <sub>4</sub>	BMB	1.667	11.692	25.0949



12	U10	1 PPM NO3 TOXN	-0.0004	mg/L	0.006601	Ev	2019-01-28 15:36:50
	CCV	CCV .75	0.7939	mg/L	0.669575	Ev	2019-01-28 15:38:04
	CCB	CCB	-0.0021	mg/L	0.005204	Ev	2019-01-28 15:39:19
13	U11	AZ85418W07	-0.0059	mg/L	0.002034	Ev	2019-01-28 15:40:33
14	U12	AZ85420W07	-0.0051	mg/L	0.002676	Ev	2019-01-28 15:41:48
15	U13	AZ85520W06	-0.0051	mg/L	0.002701	Ev	2019-01-28 15:43:02
16	U14	AZ85523W06	-0.0053	mg/L	0.002525	Ev	2019-01-28 15:44:17
17	U15	AZ85525W06	-0.0055	mg/L	0.002361	Ev	2019-01-28 15:45:31
18	U16	AZ85527W06	-0.0059	mg/L	0.002084	Ev	2019-01-28 15:46:46
19	U17	AZ85562W20	-0.0050	mg/L	0.002790	Ev	2019-01-28 15:48:00
20	U18	AZ85562W20 MS	0.7589	mg/L	0.640323	Ev	2019-01-28 15:49:14
21	U19	AZ85562W20 MSD	0.7671	mg/L	0.647217	Ev	2019-01-28 15:50:27
22	U20	AZ85565W16	-0.0017	mg/L	0.005559	Ev	2019-01-28 15:51:42
	CCV	CCV .75	0.7851	mg/L	0.662205	Ev	2019-01-28 15:52:57
	CCB	CCB	-0.0012	mg/L	0.005991	Ev	2019-01-28 15:53:35
23	U21	AZ85567W16	-0.0041	mg/L	0.003534	Ev	2019-01-28 15:55:44
24	U22	AZ85569W16	-0.0036	mg/L	0.004002	Ev	2019-01-28 15:57:58
25	U23	AZ85643W20	-0.0050	mg/L	0.002777	Ev	2019-01-28 16:00:17
26	U24	AZ85646W16	-0.0022	mg/L	0.005115	Ev	2019-01-28 16:02:35
27	U25	AZ85653W16	-0.0057	mg/L	0.002235	Ev	2019-01-28 16:04:53
	CCV	CCV .75	0.7063	mg/L	0.596435	Ev	2019-01-28 16:07:12
	CCB	CCB	-0.0028	mg/L	0.004672	Ev	2019-01-28 16:09:25

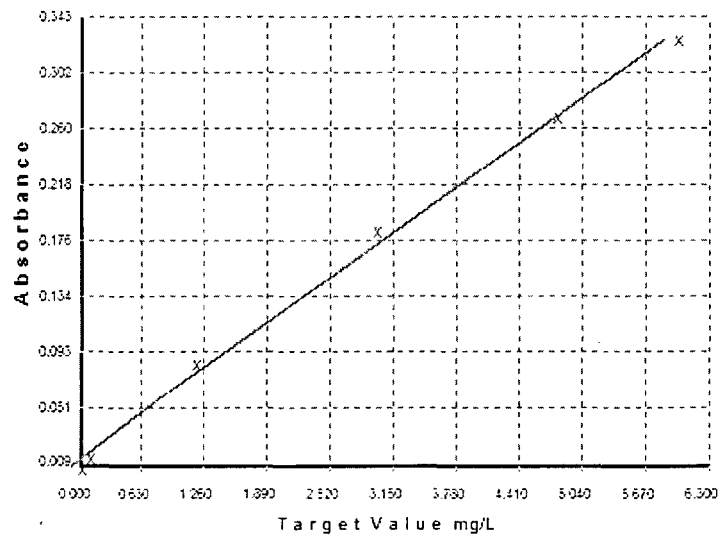
**TOXN**

**Calibration Chart**

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0089	-0.1257	0.0000	
S90	0.0168	0.0232	0.1000	-76.85
S91	0.0861	1.3311	1.2000	10.92
S92	0.1847	3.1931	3.0000	6.44
S93	0.2698	4.7990	4.8000	-0.02
S94	0.3270	5.8793	6.0000	-2.01
S0	0.0197	0.0772	0.0000	

Polynomial Order: 1  
 Correlation Coefficient: 0.9986  
 Carryover(%): 3.4  
 Calibration equation:  $y = bx + a$   
 y =: Concentration mg/L  
 x =: Measured absorbance  
 a =: -2.940597E-001  
 b =: 1.887621E+001  
 Date & Time: 2019-01-28 16:31:22

**Calibration Graph**



**Reagents**

<b>Name</b>	<b>Batch</b>	<b>Prepared By</b>	<b>Expiry Date</b>
NO3 W Buffer	Algorithm check	Joel	
Sulfa-NEDD	$y = 18.87621 \times 0.175034 - 0.2940597$	Joel	
	$y = 3.01$	EV	1/29/19

Cup Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
S1	Standard 1	0.0089			0.008922			Ev	2019-01-28 16:18:12
S90	Standard 90	0.0168			0.016805			Ev	2019-01-28 16:20:24
S91	Standard 91	0.0861			0.086095			Ev	2019-01-28 16:22:36
S92	Standard 92	0.1847			0.184738			Ev	2019-01-28 16:24:47
S93	Standard 93	0.2698			0.269813			Ev	2019-01-28 16:26:59
S94	Standard 94	0.3270			0.327046			Ev	2019-01-28 16:29:10
S0	Standard 0	0.0197			0.019666			Ev	2019-01-28 16:31:22
CCV	CCV	3.0152	mg/L		0.175315			Ev	2019-01-28 16:33:33
CCB	CCB	-0.1244	mg/L		0.008986			Ev	2019-01-28 16:35:45
4	U2 ✓ICV NO3 TOXN	3.0099	mg/L		0.175034			Ev	2019-01-28 16:37:56
5	U3 ICB NO2 NO3 TOXN	-0.0978	mg/L		0.010395			Ev	2019-01-28 16:40:08
6	U4 190128A BLK NO2 NO3 TOXN	-0.1119	mg/L		0.009651			Ev	2019-01-28 16:42:21
9	U7 190128A LCS NO3 TOXN	2.9894	mg/L		0.173948			Ev	2019-01-28 16:44:32
10	U8 190128A LCSD NO3 TOXN	3.0721	mg/L		0.178327			Ev	2019-01-28 16:46:43

12	U10	1 PPM NO3 TOXN	0.9478	mg/L	0.065792	Ev	2019-01-28 16:48:55
13	U11	AZ85418W07	0.7704	mg/L	0.056392	Ev	2019-01-28 16:51:06
14	U12	AZ85420W07	0.5308	mg/L	0.043700	Ev	2019-01-28 16:53:18
15	U13	AZ85520W06	-0.1087	mg/L	0.009818	Ev	2019-01-28 16:55:29
16	U14	AZ85523W06	0.4787	mg/L	0.040938	Ev	2019-01-28 16:57:40
	CCV	CCV	3.0892	mg/L	0.179234	Ev	2019-01-28 16:59:54
	CCB	CCB	-0.0918	mg/L	0.010715	Ev	2019-01-28 17:02:08
17	U15	AZ85525W06	1.1453	mg/L	0.076250	Ev	2019-01-28 17:04:22
18	U16	AZ85527W06	0.3767	mg/L	0.035535	Ev	2019-01-28 17:06:35
19	U17	AZ85562W20	0.5125	mg/L	0.042731	Ev	2019-01-28 17:08:49
20	U18	AZ85562W20 MS	4.1373	mg/L	0.234757	Ev	2019-01-28 17:11:02
21	U19	AZ85562W20 MSD	4.1137	mg/L	0.233511	Ev	2019-01-28 17:13:13
22	U20	AZ85565W16	-0.0707	mg/L	0.011834	Ev	2019-01-28 17:15:26
23	U21	AZ85567W16	1.6987	mg/L	0.105570	Ev	2019-01-28 17:16:04
24	U22	AZ85569W16	0.8856	mg/L	0.062496	Ev	2019-01-28 17:17:08
25	U23	AZ85643W20	0.5180	mg/L	0.043022	Ev	2019-01-28 17:18:05
26	U24	AZ85646W16	1.8067	mg/L	0.111293	Ev	2019-01-28 17:19:01
	CCV	CCV	3.0464	mg/L	0.176969	Ev	2019-01-28 17:19:57
	CCB	CCB	-0.0913	mg/L	0.010741	Ev	2019-01-28 17:20:54
27	U25	AZ85653W16	0.3759	mg/L	0.035494	Ev	2019-01-28 17:21:51
	CCV	CCV	2.9233	mg/L	0.170448	Ev	2019-01-28 17:22:47
	CCB	CCB	-0.1177	mg/L	0.009344	Ev	2019-01-28 17:23:44

## Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume				Total Alk	Unit	Sample Vol	N	Batch	Initials	
			(to 8.3)	(total)	OH	CO3							HCO3
AZ85527W05	2019-01-30 14:15:58 UTC-8	Alkalinity	0.000	1.548	0.00	0.00	62.85	62.85	mg/L	25 mL	0.0203	190130A	AR
AZ85525W05	2019-01-30 14:10:21 UTC-8	Alkalinity	0.000	2.246	0.00	0.00	91.19	91.19	mg/L	25 mL	0.0203	190130A	AR
AZ85523W05	2019-01-30 14:04:44 UTC-8	Alkalinity	0.000	1.846	0.00	0.00	74.95	74.95	mg/L	25 mL	0.0203	190130A	AR
AZ85520W05	2019-01-30 13:55:07 UTC-8	Alkalinity	0.000	4.682	0.00	0.00	190.09	190.09	mg/L	25 mL	0.0203	190130A	AR
190130A LCSD	2019-01-30 13:45:02 UTC-8	Alkalinity	0.000	5.926	0.00	0.00	240.60	240.60	mg/L	25 mL	0.0203	190130A	AR
190130A LCS	2019-01-30 13:35:25 UTC-8	Alkalinity	0.000	5.606	0.00	0.00	227.60	227.60	mg/L	25 mL	0.0203	190130A	AR
190130A BLK	2019-01-30 13:32:23 UTC-8	Alkalinity	0.000	0.038	0.00	0.00	1.54	1.54	mg/L	25 mL	0.0203	190130A	AR



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Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,752,251	5.461	2.731	910,696	4.19	
2	2	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	1,822,626	0.458	0.229	35,797	1.96	
13	13	AZ85520W15	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	31,520,022	7.798	3.899	231,958	0.74	Pass
15	15	AZ85523W24	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	5,826,741	1.348	0.674	147,171	2.53	Pass
17	17	AZ85525W20	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	7,758,967	1.833	0.917	124,148	1.60	Pass
19	19	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,652,866	5.436	2.718	190,255	0.88	
20	20	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	2,250,407	0.565	0.283	32,805	1.46	
21	21	AZ85527W18	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	4,846,961	1.102	0.551	44,637	0.92	Pass
34	34	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,173,836	5.316	2.658	461,598	2.18	
35	35	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	2,431,812	0.611	0.306	63,952	2.63	
2	4	190212A LCSD	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	17,255,653	4.332	2.166	175,980	1.02	
5	3	190212A LCS	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	17,306,132	4.345	2.172	159,928	0.92	
11	10	CCV 190212	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,546,495	5.409	2.704	129,277	0.60	
12	11	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	2,243,558	0.563	0.282	64,732	2.89	





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Sample Results

Spl #: 1 Sample ID : CCV Type : QC #1 Date: 02/12/2019 Status: Passed  
 Vial #: 1 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:39 pm	-	-	-	23,068,505	5.792	2.896
2	2:47 pm	-	-	-	21,654,646	5.437	2.718
3	2:55 pm	-	-	-	21,184,749	5.319	2.659
4	3:03 pm	-	-	-	21,101,104	5.298	2.649
Avg.		-	-	-	21,752,251	5.461	2.731
Std.Dev.							
% RSD.						4.19	

Spl #: 2 Sample ID : CCB Type : QC #1 Date: 02/12/2019 Status: Passed  
 Vial #: 2 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:13 pm	-	-	-	1,875,174	0.471	0.235
2	3:21 pm	-	-	-	1,815,522	0.456	0.228
3	3:29 pm	-	-	-	1,799,861	0.452	0.226
4	3:36 pm	-	-	-	1,799,947	0.452	0.226
Avg.		-	-	-	1,822,626	0.458	0.229
Std.Dev.							
% RSD.						1.96	





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Date Approved:

By:

Spl #: 13 Sample ID: AZ85520W15 Type: Sample Date: 02/12/2019 Status: Passed  
 Vial #: 13 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:27 pm	-	-	-	31,182,675	7.714	3.857
2	9:35 pm	-	-	-	31,572,651	7.812	3.906
3	9:43 pm	-	-	-	31,615,965	7.822	3.911
4	9:51 pm	-	-	-	31,708,794	7.846	3.923
Avg.		-	-	-	31,520,022	7.798	3.899
Std.Dev.							
% RSD.					0.74		

Spl #: 15 Sample ID: AZ85523W24 Type: Sample Date: 02/12/2019 Status: Passed  
 Vial #: 15 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:32 pm	-	-	-	5,919,983	1.371	0.686
2	10:40 pm	-	-	-	5,965,187	1.383	0.691
3	10:48 pm	-	-	-	5,782,581	1.337	0.668
4	10:56 pm	-	-	-	5,639,215	1.301	0.650
Avg.		-	-	-	5,826,741	1.348	0.674
Std.Dev.							
% RSD.					2.53		





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Spl #: 17 Sample ID : AZ85525W20 Type : Sample Date: 02/13/2019 Status: Passed  
 Vial #: 17 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:36 pm	-	-	-	7,623,341	1.799	0.900
2	11:44 pm	-	-	-	7,769,435	1.836	0.918
3	11:52 pm	-	-	-	7,921,300	1.874	0.937
4	12:00 am	-	-	-	7,721,790	1.824	0.912
Avg.		-	-	-	7,758,967	1.833	0.917
Std.Dev.							
% RSD.					1.60		

Spl #: 19 Sample ID : CCV Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 19 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:41 am	-	-	-	21,692,556	5.446	2.723
2	12:49 am	-	-	-	21,873,624	5.492	2.746
3	12:57 am	-	-	-	21,633,019	5.431	2.716
4	1:05 am	-	-	-	21,412,267	5.376	2.688
Avg.		-	-	-	21,652,866	5.436	2.718
Std.Dev.							
% RSD.					0.88		







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Date Prepared: 02/18/2019 By: *TOC*  
 Date Approved: By:

Spl #: 20 Sample ID: CCB Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 20 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:16 am	-	-	-	2,285,555	0.574	0.287
2	1:23 am	-	-	-	2,261,842	0.568	0.284
3	1:31 am	-	-	-	2,207,401	0.554	0.277
4	1:39 am	-	-	-	2,246,830	0.564	0.282
Avg.		-	-	-	2,250,407	0.565	0.283
Std.Dev.							
% RSD.					1.46		

Spl #: 21 Sample ID: AZ85527W18 Type: Sample Date: 02/13/2019 Status: Passed  
 Vial #: 21 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:50 am	-	-	-	4,888,175	1.112	0.556
2	1:58 am	-	-	-	4,796,324	1.089	0.545
3	2:05 am	-	-	-	4,822,773	1.096	0.548
4	2:13 am	-	-	-	4,880,571	1.110	0.555
Avg.		-	-	-	4,846,961	1.102	0.551
Std.Dev.							
% RSD.					0.92		





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Date Prepared: 02/18/2019 By: TOC  
 Date Approved: By:

Spl #: 34 Sample ID : CCV Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 34 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:48 am	-	-	-	21,613,624	5.426	2.713
2	8:56 am	-	-	-	21,531,430	5.406	2.703
3	9:04 am	-	-	-	20,771,851	5.215	2.608
4	9:12 am	-	-	-	20,778,437	5.217	2.608
Avg.		-	-	-	21,173,836	5.316	2.658
Std.Dev.							
% RSD.							2.18

Spl #: 35 Sample ID : CCB Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 35 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 am	-	-	-	2,426,350	0.609	0.305
2	9:31 am	-	-	-	2,523,661	0.634	0.317
3	9:39 am	-	-	-	2,394,622	0.601	0.301
4	9:46 am	-	-	-	2,382,614	0.598	0.299
Avg.		-	-	-	2,431,812	0.611	0.306
Std.Dev.							
% RSD.							2.63



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Date Prepared: 02/18/2019 By: TOC

Date Approved: By:

Spl #: 11 Sample ID : CCV 190212 Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 10 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 pm	-	-	-	21,570,741	5.415	2.708
2	9:31 pm	-	-	-	21,668,118	5.440	2.719
3	9:39 pm	-	-	-	21,583,376	5.419	2.709
4	9:47 pm	-	-	-	21,363,745	5.364	2.682
Avg.		-	-	-	21,546,495	5.409	2.704
Std.Dev.							
% RSD.					0.60		

Spl #: 12 Sample ID : CCB Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 11 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:58 pm	-	-	-	2,334,995	0.586	0.293
2	10:05 pm	-	-	-	2,221,045	0.558	0.279
3	10:13 pm	-	-	-	2,234,864	0.561	0.281
4	10:21 pm	-	-	-	2,183,327	0.548	0.274
Avg.		-	-	-	2,243,558	0.563	0.282
Std.Dev.							
% RSD.					2.89		



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Date Prepared: 02/18/2019 By: *TOC*

Date Approved: By:

Spl #: 2 Sample ID : 190212A LCSD Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 4 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:13 am	-	-	-	17,222,002	4.324	2.162
2	11:21 am	-	-	-	17,414,910	4.372	2.186
3	11:29 am	-	-	-	17,363,909	4.359	2.180
4	11:37 am	-	-	-	17,021,790	4.273	2.137
Avg.		-	-	-	17,255,653	4.332	2.166
Std.Dev.							
% RSD.					1.02		

Spl #: 5 Sample ID : 190212A LCS Type : QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 3 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:58 pm	-	-	-	17,229,597	4.326	2.163
2	1:06 pm	-	-	-	17,167,125	4.310	2.154
3	1:14 pm	-	-	-	17,532,901	4.402	2.201
4	1:22 pm	-	-	-	17,294,906	4.342	2.171
Avg.		-	-	-	17,306,132	4.345	2.172
Std.Dev.							
% RSD.					0.92		



Standard Prep							
Prep Date	Ferrous Iron Standards		Prep'd By (Initials)		HH		
Exp Date	06/15/18						
	06/15/19						
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.249	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV			Prep'd By (Initials)		HH		
Prep Date	See Injection Log						
Exp Date	24 Hours						
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	06/14/19	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	06/14/19	375uL	25mL	Deionized water	3mg/L
Ferrous Iron Calibration Curve			Prep'd By (Initials)		HH		
Prep Date	06/15/18						
Exp Date	06/16/18						
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T.Baker	0000184592	06/14/19	0	25mL	Deionized water	0mg/L
Ical 1	J.T.Baker	0000184592	06/14/19	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T.Baker	0000184592	06/14/19	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T.Baker	0000184592	06/14/19	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T.Baker	0000184592	06/14/19	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T.Baker	0000184592	06/14/19	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/14/19	0.375	25mL	Deionized water	3mg/L
Reagent Prep							
Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep		
Colorizer	0747C107	1,10-phenanthroline	na	0.199g	01/23/19		
		HCL conc	na	8drops			
Buffer	Z288018	Ammonia Acetate	na	249.3g	01/15/19		
	2018071399	Glacial Acetic Acid	06/27/20	700mL			

Anion Chromatography Working Standard									
Prep Date: 01/09/19									
Exp Date: 01/10/19									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H <sub>2</sub> O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H <sub>2</sub> O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H <sub>2</sub> O	o2si	062001-08-03	5000	10084781-1-39578	02/21/20	250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H <sub>2</sub> O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	250 µL	25 mL	Millipore Water	10
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-5372-39521	12/31/21	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve									
Prep Date: 01/09/19									
Exp Date: 01/10/19									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Conc. Range (ug/mL)
Ical2	Varries	ICal1	5.0-50.0	Prepared 01/09/19	01/10/19	400 µL	1000 µL	Millipore Water	0.08-0.40
Anion Chromatography Working Standard	Varries	ICal2	5.0-50.0	Prepared 01/09/19	01/10/19	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varries	ICal3	5.0-50.0	Prepared 01/09/19	01/10/19	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varries	ICal4	5.0-50.0	Prepared 01/09/19	01/10/19	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varries	ICal5	5.0-50.0	Prepared 01/09/19	01/10/19	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varries	ICal6	5.0-50.0	Prepared 01/09/19	01/10/19	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varries	ICal7	5.0-50.0	Prepared 01/09/19	01/10/19	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varries	ICal8	5.0-50.0	Prepared 01/09/19	01/10/19	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography LCS/ICV									
Prep Date: See injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Fluoride	Inorganic Ventures	ICF1	993-999	K-F652018-39801	10/23/19	62.5 µL	25 mL	Millipore Water	5
Nitrite	Inorganic Ventures	ICNO21	993-1001	M2-NOX660562-39802	10/23/19	250 µL	25 mL	Millipore Water	3.04
Chloride	Inorganic Ventures	ICCL1	995-1001	N2CL664868-39904	11/26/19	500 µL	25 mL	Millipore Water	20
O-Phosphate as P	Inorganic Ventures	IPPO41	1001-1009	M2-POX655826-39803	10/23/19	125 µL	25 mL	Millipore Water	10
Nitrate as N	Inorganic Ventures	ICNNO31	994-1002	N2-NOX667147-39510	10/23/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Bromide Standard	CPI International	4400-IC8M	1000	161681-8-39539	02/06/20	312.5 µL	25 mL	Millipore Water	12.5
Sulfate	Inorganic Ventures	ICSO41	998-1006	K2-SOX01111-38875	08/13/19	500 µL	25 mL	Millipore Water	20

Anion Chromatography CCV									
Prep Date: See injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H <sub>2</sub> O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H <sub>2</sub> O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	62.5 µL	25 mL	Millipore Water	2.5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H <sub>2</sub> O	o2si	062001-08-03	5000	10084781-1-39578	02/21/20	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H <sub>2</sub> O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	125 µL	25 mL	Millipore Water	5
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-5372-39521	12/31/21	312.5 µL	25 mL	Millipore Water	12.5
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	625 µL	25 mL	Millipore Water	25

Anion Chromatography Working Standard									
Prep Date: 01/24/19									
Exp Date: 01/25/19									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H <sub>2</sub> O	02sl	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H <sub>2</sub> O	02sl	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H <sub>2</sub> O	02sl	062001-08-03	5000	10084781-1-39578	02/21/20	250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H <sub>2</sub> O	02sl	062003-01-03	1000	880117-4-39577	02/21/20	250 µL	25 mL	Millipore Water	10
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-8372-39521	12/31/21	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve									
Prep Date: 01/24/19									
Exp Date: 01/25/19									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Conc. Range (ug/mL)
Ica12	Varries	ICal1	5.0-50.0	Prepared 01/24/19	01/25/19	400 µL	1000 µL	Millipore Water	0.08-0.40
Anion Chromatography Working Standard	Varries	ICal2	5.0-50.0	Prepared 01/24/19	01/25/19	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varries	ICal3	5.0-50.0	Prepared 01/24/19	01/25/19	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varries	ICal4	5.0-50.0	Prepared 01/24/19	01/25/19	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varries	ICal5	5.0-50.0	Prepared 01/24/19	01/25/19	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varries	ICal6	5.0-50.0	Prepared 01/24/19	01/25/19	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varries	ICal7	5.0-50.0	Prepared 01/24/19	01/25/19	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varries	ICal8	5.0-50.0	Prepared 01/24/19	01/25/19	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography LCS/ICV									
Prep Date: See Injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Fluoride	Inorganic Ventures	ICF1	993-999	K-F652018-39801	10/23/19	62.5 µL	25 mL	Millipore Water	5
Nitrite	Inorganic Ventures	ICNO21	993-1001	M2-NOX660562-39802	10/23/19	250 µL	25 mL	Millipore Water	3.04
Chloride	Inorganic Ventures	ICCL1	995-1001	NaCl.664868-39904	11/26/19	500 µL	25 mL	Millipore Water	20
O-Phosphate as P	Inorganic Ventures	IPPO41	1001-1009	M2-POX655826-39803	10/23/19	125 µL	25 mL	Millipore Water	10
Nitrate as N	Inorganic Ventures	ICNNO31	994-1002	N2-NOX667147-39510	10/23/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Bromide Standard	CPI International	4400-IC8M	1000	161681-8-39539	02/06/20	312.5 µL	25 mL	Millipore Water	12.5
Sulfate	Inorganic Ventures	ICSO41	998-1006	K2-SOX01111-38875	08/13/19	500 µL	25 mL	Millipore Water	20

Anion Chromatography CCV									
Prep Date: See Injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information					Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H <sub>2</sub> O	02sl	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H <sub>2</sub> O	02sl	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	62.5 µL	25 mL	Millipore Water	2.5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H <sub>2</sub> O	02sl	062001-08-03	5000	10084781-1-39578	02/21/20	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H <sub>2</sub> O	02sl	062003-01-03	1000	880117-4-39577	02/21/20	125 µL	25 mL	Millipore Water	5
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-8372-39521	12/31/21	312.5 µL	25 mL	Millipore Water	12.5
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	625 µL	25 mL	Millipore Water	25

## Nitrite

### High Point @ 1.5 mg/L

0.075 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24 - 38408 exp: 4/20/19  
50 mL DI Water

### CCV @ 0.75 mg/L

0.0375 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24-38408 exp: 4/20/19  
50 mL DI Water

### ICV/LCS @ 0.73 mg/L

0.12mL NO<sub>2</sub> Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>2</sub>

400 uL of High point and 200 uL of DI made directly into a sample cup

Prep 12/20/18  
Exp 12/27/18  
Initials BP

## Nitrate/TOXN

### High Point @ 6 mg/L

0.30 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### CCV @ 3.0 mg/L

0.15 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### ICV/LCS @ 3.0 mg/L

0.150 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>3</sub>

100 uL of High point and 500 uL of DI made directly into a sample cup

### MS @ 2.5 mg/L NO<sub>3</sub> and 0.73 mg/L NO<sub>2</sub>

0.125 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
and 0.12mL Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
Final volume 50 mL of sample

Prep 01/28/19  
Exp 2/4/19  
EV



**Tiamo Alkalinity Standard Prep**

Prep Date:

Exp Date:

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H2SO4)	J.T.Baker	NA	NA	167828	NA	NA	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.1N	167828	12/19/18	12/19/19	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.02N	167828	12/19/18	12/19/19	200mL	1L	DI	0.02N
Inorganic Spike(NaHCO3)	BDH	NA	NA	1575C510	10/18/18	08/14/20	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	1575C510	01/29/19	01/29/20	3.5g	500mL	DI	250mg/L
Standarizing Solution(NaCO3)	J.T.Baker	Normality	1N	178494	07/25/17	07/25/19	PURCHASED	NA	NA	NA

Name of Final Standard TOC Calibration Curve  
 Prep Date 02/11/19  
 Exp Date 03/11/19

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	20 uL	40 mL	DI Water	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	50 uL	40 mL	DI Water	1.25 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	100 uL	40 mL	DI Water	2.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	150 uL	40 mL	DI Water	3.75 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	200 uL	40 mL	DI Water	5 ppm

Name of Final Standard 1000 PPM ICV TOC Intermediate  
 Prep Date 02/11/19  
 Exp Date 02/11/20

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sugar	Millenia	814-293	42% Carbon	V298J-NA	NA	2.3831 g	1 L	DI Water	1003.45 ppm

Name of Final Standard ICV (TOC)  
 Prep Date 02/11/19  
 Exp Date 03/11/19

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	Prep: 2/11/19	03/11/19	100 uL	40mL	DI Water	2.5 ppm

Name of Final Standard CCV (TOC)  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	100 uL	40 mL	DI Water	2.5 ppm

Name of Final Standard TOC LCS/LCSD  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	CR-0328-37639	02/28/19	80 uL	40 mL	DI Water	2.0 ppm

Name of Final Standard TOC MS/MSD  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	CR-0328-37639	02/28/19	100 uL	40 mL	sample	2.5 ppm

# SM3500FeB Injection Log

Directory: I:\Spec Sheets\Ferrous Iron (Fe2)\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
13	23 Jan 2019	09:19	CCB 190123		190123A	1.
14	23 Jan 2019	09:19	CCV 4.0 190123		190123A	1.
12	23 Jan 2019	09:19	190123 LCS		190123A	1.
15	23 Jan 2019	09:20	190123 LCSD		190123A	1.
22	23 Jan 2019	09:24	CCV 4.0 190123		190123A	1.
24	23 Jan 2019	09:24	CCB 190123		190123A	1.
25	23 Jan 2019	16:45	CCV 4.0 190123		190123A	1.
26	23 Jan 2019	16:45	CCB 190123		190123A	1.
27	23 Jan 2019	16:47	AZ85523W07		190123A	1.
28	23 Jan 2019	16:48	AZ85520W07		190123A	1.
29	23 Jan 2019	16:49	AZ85527W07		190123A	1.
30	23 Jan 2019	16:50	AZ85525W07		190123A	1.
31	23 Jan 2019	16:51	CCV 4.0 190123		190123A	1.
32	23 Jan 2019	16:52	CCB 190123		190123A	1.
33	15 Jun 2018	12:27	Ical 1		190123A	1.
34	15 Jun 2018	12:27	ICB		190123A	1.
35	15 Jun 2018	12:28	Ical 2		190123A	1.
36	15 Jun 2018	12:28	Ical 3		190123A	1.
37	15 Jun 2018	12:29	Ical 4		190123A	1.
38	15 Jun 2018	12:30	Ical 5		190123A	1.
39	15 Jun 2018	12:31	ICV		190123A	1.
40	15 Jun 2018	12:32	ICB		190123A	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\Anions\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	09 Jan 2019	10:22	CCB		2019	1.
2	09 Jan 2019	10:30	i cal 1		2019	1.
3	09 Jan 2019	10:37	i cal 2		2019	1.
4	09 Jan 2019	10:45	i cal 3		2019	1.
5	09 Jan 2019	10:52	i cal 4		2019	1.
6	09 Jan 2019	10:59	i cal 5		2019	1.
7	09 Jan 2019	11:07	i cal 6		2019	1.
8	09 Jan 2019	11:14	i cal 7		2019	1.
9	09 Jan 2019	11:22	i cal 8		2019	1.
10	09 Jan 2019	11:29	CCB		2019	1.
11	09 Jan 2019	11:36	ICV LCS 190103		2019	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected	Sample Name	Misc Info	FileName	Multiplier
2	23 Jan 2019 09:37	CCV 190123		Anions	1.
3	23 Jan 2019 09:45	CCB		Anions	1.
4	23 Jan 2019 09:52	190123 LCS		Anions	1.
5	23 Jan 2019 10:00	190123 LCSD		Anions	1.
16	23 Jan 2019 11:42	CCV 190123		Anions	1.
17	23 Jan 2019 11:50	CCB		Anions	1.
29	23 Jan 2019 13:55	CCV 190123		Anions	1.
30	23 Jan 2019 14:02	CCB		Anions	1.
31	23 Jan 2019 17:28	AZ85527W05		Anions	1.
32	23 Jan 2019 17:35	AZ85520W05		Anions	1.
33	23 Jan 2019 17:43	AZ85523W05		Anions	1.
34	23 Jan 2019 17:50	AZ85525W05		Anions	1.
39	23 Jan 2019 18:27	CCV 190123		Anions	1.
40	23 Jan 2019 18:35	CCB		Anions	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
2	24 Jan 2019	11:58	CCB		Anions	1.
3	24 Jan 2019	12:06	i cal 1		Anions	1.
4	24 Jan 2019	12:13	i cal 2		Anions	1.
5	24 Jan 2019	12:20	i cal 3		Anions	1.
6	24 Jan 2019	12:28	i cal 4		Anions	1.
7	24 Jan 2019	12:35	i cal 5		Anions	1.
8	24 Jan 2019	12:43	i cal 6		Anions	1.
9	24 Jan 2019	12:50	i cal 7		Anions	1.
10	24 Jan 2019	12:57	i cal 8		Anions	1.
11	24 Jan 2019	13:05	CCB		Anions	1.
12	24 Jan 2019	13:12	ICV LCS 190124		Anions	1.
13	24 Jan 2019	13:20	ICVD LCSD 190124		Anions	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	28 Jan 2019	09:55	CCV 190128		Anions	1.
2	28 Jan 2019	10:02	CCB		Anions	1.
3	28 Jan 2019	10:09	190128 LCS		Anions	1.
4	28 Jan 2019	10:17	190128 LCSD		Anions	1.
7	28 Jan 2019	11:58	CCV 190128		Anions	1.
8	28 Jan 2019	12:06	CCB		Anions	1.
11	28 Jan 2019	12:45	CCV 190128		Anions	1.
12	28 Jan 2019	12:52	CCB		Anions	1.
15	28 Jan 2019	14:41	AZ85523W05 df5		Anions	5.
16	28 Jan 2019	14:48	AZ85525W05 df5		Anions	5.
17	28 Jan 2019	14:55	AZ85527W05 df5		Anions	5.
21	28 Jan 2019	15:25	CCV 190128		Anions	1.
22	28 Jan 2019	15:32	CCB		Anions	1.



# EPA 353.2 Injection Log

Directory: I:\EVE\Export\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	28 Jan 2019	16:18	Standard 1 TOXN/NO3		190128A TO	1.
2	28 Jan 2019	16:20	Standard 90 TOXN/NO3		190128A TO	1.
3	28 Jan 2019	16:22	Standard 91 TOXN/NO3		190128A TO	1.
4	28 Jan 2019	16:24	Standard 92 TOXN/NO3		190128A TO	1.
5	28 Jan 2019	16:26	Standard 93 TOXN/NO3		190128A TO	1.
6	28 Jan 2019	16:29	Standard 94 TOXN/NO3		190128A TO	1.
7	28 Jan 2019	16:31	Standard 0 TOXN/NO3		190128A TO	1.
8	28 Jan 2019	16:33	CCV TOXN/NO3		190128A TO	1.
9	28 Jan 2019	16:35	CCB TOXN/NO3		190128A TO	1.
10	28 Jan 2019	16:37	ICV NO3 TOXN		190128A TO	1.
11	28 Jan 2019	16:40	ICB NO2 NO3 TOXN		190128A TO	1.
12	28 Jan 2019	16:42	190128A BLK NO2 NO3 TOXN		190128A TO	1.
13	28 Jan 2019	16:44	190128A LCS NO3 TOXN		190128A TO	1.
14	28 Jan 2019	16:46	190128A LCSD NO3 TOXN		190128A TO	1.
18	28 Jan 2019	16:55	AZ85520W06 TOXN/NO3		190128A TO	1.
19	28 Jan 2019	16:57	AZ85523W06 TOXN/NO3		190128A TO	1.
20	28 Jan 2019	16:59	CCV TOXN/NO3		190128A TO	1.
21	28 Jan 2019	17:02	CCB TOXN/NO3		190128A TO	1.
22	28 Jan 2019	17:04	AZ85525W06 TOXN/NO3		190128A TO	1.
23	28 Jan 2019	17:06	AZ85527W06 TOXN/NO3		190128A TO	1.
32	28 Jan 2019	17:19	CCV TOXN/NO3		190128A TO	1.
33	28 Jan 2019	17:20	CCB TOXN/NO3		190128A TO	1.

# SM 2320B Injection Log

Directory: I:\Tiamo\EXPORT\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	30 Jan 2019	13:32	190130A BLK		190130A_AL	1.
2	30 Jan 2019	13:35	190130A LCS		190130A_AL	1.
3	30 Jan 2019	13:45	190130A LCSD		190130A_AL	1.
4	30 Jan 2019	13:55	AZ85520W05		190130A_AL	1.
5	30 Jan 2019	14:04	AZ85523W05		190130A_AL	1.
6	30 Jan 2019	14:10	AZ85525W05		190130A_AL	1.
7	30 Jan 2019	14:15	AZ85527W05		190130A_AL	1.

## 9060A Injection Log

Directory: OI Analytical - TOC Reporter - G949730077 - Wet Chemistry

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	11 Feb 2019	16:13	TOC-RW		190211A	1.
2	11 Feb 2019	16:47	TOC-Std#1-0.500 PPM		190211A	1.
3	11 Feb 2019	17:18	TOC-Std#2-1.250 PPM		190211A	1.
4	11 Feb 2019	17:50	TOC-Std#3-2.500 PPM		190211A	1.
5	11 Feb 2019	18:23	TOC-Std#4-3.750 PPM		190211A	1.
6	11 Feb 2019	18:56	TOC-Std#5-5.000 PPM		190211A	1.
7	11 Feb 2019	19:31	ICB		190211A	1.
8	11 Feb 2019	20:02	ICV Sugar		190211A	1.

## 9060A Injection Log

Directory: OI Analytical - TOC Reporter - G949730077 - Wet Chemistry

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	12 Feb 2019	14:39	CCV		190212A	1.
2	12 Feb 2019	15:13	CCB		190212A	1.
13	12 Feb 2019	21:27	AZ85520W15		190212A	1.
15	12 Feb 2019	22:32	AZ85523W24		190212A	1.
17	12 Feb 2019	23:36	AZ85525W20		190212A	1.
19	13 Feb 2019	0:41	CCV		190212A	1.
20	13 Feb 2019	1:16	CCB		190212A	1.
21	13 Feb 2019	1:50	AZ85527W18		190212A	1.
34	13 Feb 2019	8:48	CCV		190212A	1.
35	13 Feb 2019	9:23	CCB		190212A	1.
37	13 Feb 2019	11:13	190212A LCSD		190212A	1.
40	13 Feb 2019	12:58	190212A LCS		190212A	1.
52	13 Feb 2019	21:23	CCV		190213A	1.
53	13 Feb 2019	21:58	CCB		190213A	1.



908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

Certification Number: CA1312  
NELAP Certification number: CA00046  
DoD-ELAP Certificate number: 4064.01

## Data Validatable Report

February 18, 2019

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, Hawaii 96813

Attn: Margie Pascua

Title: Report of Data: Case 87940

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126  
Subcontract: 18S-22209-HI27

Dear Ms. Pascua:

Nine water samples were received January 24, 2019. Written results for the requested analyses are being provided on this February 18, 2019.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Paula McCartney, Laboratory Director  
APPL, Inc.

PM/lac  
Enclosure  
cc: File

Data Validation Package  
for  
60481245 CIV 0053 Red Hill Fuel Storage  
APPL SDG 87940

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# CASE NARRATIVE

# Case Narrative

ARF: 87940

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

## Sample Receipt Information:

Nine water samples were received January 24, 2019, at 2.0°C, 2.0°C, 2.0°C, 1.5°C, and 2.0°C. The sample group was assigned Analytical Request Form (ARF) number 87940.

## Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D SIM analysis, the samples were extracted according to EPA method 3520C.

For the EPA 8270D Phenol analysis, the samples were extracted according to EPA method 3520C. The samples were screened for Tentatively Identified Compounds (TICs).

For the APPL SOP ANA2MEE analysis, the samples were extracted according to EPA method 3535.

For the EPA 8260B VOC and Gasoline analyses, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the samples were allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 300.0, 353.2, 9060A, SM 2320B, and SM 3500FeB analyses, the sample was prepared according to the methods.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

## Analytical Exceptions, Deviations and Abnormalities.

**EPA 8270D SIM:** Two surrogates recovered above the limit in both samples and in one LCS. Corrective Action: The client was informed and approved reporting.

**EPA 8270D:** Three surrogates recovered above the upper control limit in sample ERH749. Corrective action: None, no target compounds were detected in the sample. The target analyte reported is not associated with these surrogates.

**EPA 8260B:** The surrogate Toluene-d8 recovered above the 112% upper control limit in one sample. Corrective action: None, no target analytes were detected in the sample.

In the 120125W LCS, Toluene recovered below the 80% lower control limit. Corrective action: The LCS was acceptable for Toluene. The client was notified.

In the MS/MSD performed on sample AZ85562 (ERH730), Toluene recovered below the lower control limits. Corrective action: the client was notified.



**Inorganics:** The samples were analyzed as soon as possible for ferrous iron and nitrate.

In the method blank, alkalinity and bicarbonate were detected above one-half the LOQ.

Corrective action: None, the concentration of alkalinity and bicarbonate in the samples exceeds the blank concentration by ten-fold or more.

**APPL Inc.**  
**Abbreviations and Flags**

<b>FLAG</b>	<b>DESCRIPTION</b>
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
87940	01/24/19	ERH729	AZ85561	01/23/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH729	AZ85561	01/23/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH729	AZ85561	01/23/19 8:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	SM3500FeB	Ferrous Iron
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87940	01/24/19	ERH730	AZ85562	01/23/19 9:10:00 AM	WATER	SW846 9060A	9060A TOC & DOC
87940	01/24/19	ERH731	AZ85563	01/23/19 9:10:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH731	AZ85563	01/23/19 9:10:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87940	01/24/19	ERH731	AZ85563	01/23/19 9:10:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87940	01/24/19	ERH731	AZ85563	01/23/19 9:10:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87940	01/24/19	ERH731	AZ85563	01/23/19 9:10:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH731	AZ85563	01/23/19 9:10:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87940	01/24/19	ERH735	AZ85564	01/22/19 8:30:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH735	AZ85564	01/22/19 8:30:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH735	AZ85564	01/22/19 8:30:00 AM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	SM3500FeB	Ferrous Iron
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 353.2	EPA 353.2 - WATER
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 8270D	EPA 8270D WATER
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ RE-EXTRACT
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87940	01/24/19	ERH736	AZ85565	01/22/19 12:10:00 PM	WATER	SW846 9060A	9060A TOC & DOC
87940	01/24/19	ERH740	AZ85566	01/22/19 2:30:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH740	AZ85566	01/22/19 2:30:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH740	AZ85566	01/22/19 2:30:00 PM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	SM3500FeB	Ferrous Iron
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 353.2	EPA 353.2 - WATER
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 8270D	EPA 8270D WATER
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH WATER L-L SGC
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87940	01/24/19	ERH741	AZ85567	01/22/19 3:15:00 PM	WATER	SW846 9060A	9060A TOC & DOC
87940	01/24/19	ERH748	AZ85568	01/23/19 11:23:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER

tbICOC\_APPLCaseNarrative


87940	01/24/19	ERH748	AZ85568	01/23/19 11:23:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH748	AZ85568	01/23/19 11:23:00 AM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	SM3500FeB	Ferrous Iron
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	RSK 175	METHANE BY RSK 175
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87940	01/24/19	ERH749	AZ85569	01/23/19 11:30:00 AM	WATER	SW846 9060A	9060A TOC & DOC

**SAMPLE RECORDS MANAGEMENT**  
**CHAIN OF CUSTODY,**  
**ARF, CRF, AND**  
**CLIENT COMMUNICATION**

# APPL - Analysis Request Form

87940

Client: AECOM  
 Address: 1001 Bishop Street, Suite 1600  
Honolulu, HI 96813  
 Attn: Margie Pascua  
 Phone: 808-356-5373 Fax: 808-523-8950  
 Job: 60571032 CV18F0126 Red Hill Fuel Storage  
 PO #: 18S-22209-HI27 PO# 102604  
 Chain of Custody (Y/N): Y # 012319  
 RAD Screen (Y/N): Y pH (Y/N): N  
 Turn Around Type: 1 WEEK

Received by: AAR   
 Date Received: 01/24/19 Time: 09:00  
 Delivered by: FEDEX  
 Shuttle Custody Seals (Y/N): Y Time Zone: -10  
 Chest Temp(s): 2.0X3,1.5X2°C  
 Color: VOA/K-PurYel  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Libby Cheesebor  
 QC Report Type: DVP4DOD/EQUIS/HI  
 Due Date: 01/31/19

**Comments:**

*PM: login and F1s to Margie.Pascua@aecom.com*  
*AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms (LOQ/LOD database/DL)*  
*8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.*  
*TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections*  
*CHANGE IN ARF: TPHD: AZ85565 re-extracted and reanalyzed per client request*  
*RSK: Methane only; 8011: EDB only; \$87DC53W5: report phenol + TICs; \$87DMEEW5: 2-MEE (LCS Spk 80ppb).*  
*TOC subbed out to ARI.*  
*FR: HC to LDC, 2 labeled CDs to Margie Pascua.*  
*EDD: AECOM EQUIS EDD 2.5.3 Red Hill 87DMEE->3535A to Margie.Pascua@aecom.com & jecklund@*



**Sample Distribution:**

**GC:** 5-\$87DC53W5, 5-\$87DMEEW5, 5-\$DOC53W5LIQ, 5-\$SIM53LIQ51, 1-\$DOC53W5LIQRX, 1-\$DOC53SGCW5LIQ  
**Extractions:** 5- LIQ003, 5- LIQ005SGC, 5- MWE2MEE, 1- LIQ005  
**VOA:** 9-\$86BTOTXDOD5W, 9-\$GASBL, 9-\$GRO86BW, 8-\$RSKMETH  
**Wetlab:** 4-\$232W(HCO3,CO3,ALK), 2-\$300W(NO3,CL,SO4), 2-\$300WD(CL,SO4), 4-\$35FE, 2-\$35OF, 4-\$TOCDOCW, 2-\$300W(CL,SO4), 2-\$35OF(NO3)

**Charges:**








**Invoice To:**

**ACCOUNTS PAYABLE**  
 1001 Bishop Street, Ste 1600  
 USAPImaging@aecom.com  
 mary.basano@aecom.com

Client ID	APPL ID	Sampled	Analyses Requested
1. ERH729	LCSD AZ85561W 	01/23/19 08:45	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
2. ERH730	MS/MSD/No WL/RSK AZ85562W 	01/23/19 09:10	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$300WD(CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O: SGC analysis if detections

APPL - Analysis Request Form

87940

- |           |     |   |                |   |
|-----------|-----|---|----------------|---|
| 3. ERH731 | LCS | AZ85563W<br>   | 01/23/19 09:10 | \$86BTOTXDOD5W, \$87DC53W5,<br>\$87DMEEW5, \$DOC53W5LIQ, \$GASBL,<br>\$GRO86BW, \$SIM53LIQ51 -- D&O: SGC<br>analysis if detections  |
| 4. ERH735 | LCS | AZ85564W<br>   | 01/22/19 08:30 | \$86BTOTXDOD5W, \$GASBL, \$GRO86BW,<br>\$RSKMETH  |
| 5. ERH736 | LCS | AZ85565W<br>   | 01/22/19 12:10 | \$232W(HCO3,CO3,ALK), \$300W(CL,SO4),<br>\$35FE, \$35OF(NO3), \$86BTOTXDOD5W,<br>\$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ,<br>\$DOC53W5LIQRX, \$GASBL, \$GRO86BW,<br>\$RSKMETH, \$SIM53LIQ51, \$TOCDOCW --<br>D&O: SGC analysis if detections     |
| 6. ERH740 | LCS | AZ85566W<br>   | 01/22/19 14:30 | \$86BTOTXDOD5W, \$GASBL, \$GRO86BW,<br>\$RSKMETH  |
| 7. ERH741 | LCS | AZ85567W<br>   | 01/22/19 15:15 | \$232W(HCO3,CO3,ALK), \$300W(CL,SO4),<br>\$35FE, \$35OF(NO3), \$86BTOTXDOD5W,<br>\$87DC53W5, \$87DMEEW5,<br>\$DOC53SGCW5LIQ, \$DOC53W5LIQ,<br>\$GASBL, \$GRO86BW, \$RSKMETH,<br>\$SIM53LIQ51, \$TOCDOCW -- D&O: SGC<br>analysis-if-detections |
| 8. ERH748 | LCS | AZ85568W<br>  | 01/23/19 11:23 | \$86BTOTXDOD5W, \$GASBL, \$GRO86BW,<br>\$RSKMETH  |
| 9. ERH749 | LCS | AZ85569W<br> | 01/23/19 11:30 | \$232W(HCO3,CO3,ALK),<br>\$300W(NO3,CL,SO4), \$300WD(CL,SO4),<br>\$35FE, \$35OF, \$86BTOTXDOD5W,<br>\$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ,<br>\$GASBL, \$GRO86BW, \$RSKMETH,<br>\$SIM53LIQ51, \$TOCDOCW -- D&O: SGC<br>analysis if detections  |

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

# APPL Sample Receipt Form

ARF# 87940

Sample	Container Type	Count	p
AZ85561	<sup>13</sup> VOAs - HCL	4	NA
AZ85562	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	8	NA
	<sup>17</sup> Amber Liter	15	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	6	NA
AZ85563	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85564	<sup>13</sup> VOAs - HCL	4	NA
AZ85565	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85566	<sup>13</sup> VOAs - HCL	4	NA
AZ85567	<sup>3</sup> PL 250mL	1	NA
	<del><sup>10</sup> PL 250mL - H2SO4</del>	<del>1</del>	<del>1.7</del>
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85568	<sup>13</sup> VOAs - HCL	4	NA
AZ85569	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA





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**CHAIN OF CUSTODY RECORD**

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C.O.C. 018

67910

Report to: <u>PLEASE PRINT</u>	Invoice to: <u>PLEASE PRINT</u>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number CV18F0126 / 60571032	Sampler (Print)	Analysis Requested/Method Number										Date Shipped: <u>1/23/19</u>																
		Matrix			No. of Containers	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, Ni, Ni+Fe	500.00 Total Al, Dissolved Silica	9060A TOC	Carrier: <u>FedEx</u>					
Aq	Sed.	Soil	Comments:																									
Sample Identification <u>ERH 731</u>	Location <u>RHMW8254-01 (copy 1)</u>	Date Collected <u>1/23/19</u>	Time Collected <u>09:10</u>	Time Zone <u>HST</u>	No. of Containers <u>7</u>	Aq <u>X</u>	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Total Ca, Mg, Mn, Ni, Ni+Fe	500.00 Total Al, Dissolved Silica	9060A TOC	<u>see other cooler for VGAS</u>		

Shuttle Temperature: <u>2.0, 2.0, 1.5, 2.0, 1.5</u>	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: <u>AECOM</u> <u>Morgen Donohue</u>	Date: <u>1/23/19</u> Time: <u>13:25</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by: <u>Morgen Donohue</u>	Date:	Time:	Received by:	Relinquished by:	Date: <u>1.24.19</u> Time: <u>0900</u>	Received at lab by:



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Report to: <b>PLEASE PRINT</b> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <b>PLEASE PRINT</b> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number CV18F0126 / 60571032		Sampler (Print)		Analysis Requested/Method Number												Date Shipped: <u>01/23/19</u>											
Purchase Order Number 102604		Sampler (Signature)		No. of Containers	Matrix			8260C BTEX,TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICS	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	5010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Solids	9060A TOC	Carrier: <u>FedEx</u>		
					Aq	Sed.	Soil																		Waybill No.:		Comments:
Sample Identification	Location	Date Collected	Time Collected	Time Zone																							
<u>ERH730</u>	<u>BHMW2254-01 (day 1)</u>	<u>1/23/19</u>	<u>0910</u>	<u>HST</u>	<u>8</u>	<u>X</u>				<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>												<u>See other cooler for UDAS</u> <u>MS/MSD: 5015, 5060, 8030</u> <u>9770544</u>	
<small>*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o &amp; PAHs need liquid-liquid extraction.</small>																											

Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____										Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)					
Relinquished by sampler: <u>AECOM</u>		Date	Time	Received by:		Relinquished by:		Date	Time	Received by:		Relinquished by:		Date	Time	Received at lab by:	
<u>Danielle Huang</u>		<u>1/23/19</u>	<u>1430</u>											<u>1-24-19</u>	<u>0900</u>		



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C.O.C. 015

Report to: PLEASE PRINT Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: PLEASE PRINT Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number		Sampler (Print)					Analysis Requested/Method Number													Date Shipped: <u>1/23/19</u>								
Purchase Order Number		Sampler (Signature)					No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3650/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3010 Lead, Cadmium, Manganese	304500 Lead & Dissolved Sulfate	3060A TOC/DOC	Carrier: <u>FedEx</u>
Sample Identification		Location	Date Collected	Time Collected	Time Zone	Aq		Sed.	Soil	Comments:																		
ERH729		<u>RHMW2254-01</u>	<u>1/23/19</u>	<u>08:45</u>	<u>HST</u>	<u>4</u>	<u>X</u>			<u>X</u>								<u>X</u>										
ERH730		<u>RHMW2254-01 (Day)</u>	<u>1/23/19</u>	<u>09:10</u>	<u>HST</u>	<u>26</u>	<u>X</u>			<u>X</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					<u>X</u>	<u>see other coolers</u> <u>MS/MS: 825, 8270, 8260, 8770 SW</u>
ERH731		<u>RHMW2254-01 (Day)</u>	<u>1/23/19</u>	<u>09:10</u>	<u>HST</u>	<u>4</u>	<u>X</u>			<u>X</u>																		<u>see other cooler</u>

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>AECOM</u> <u>Morgan Donohue</u>	Date: <u>1/23/19</u> Time: <u>13:15</u>	Received by:
Relinquished by: <u>Morgan Donohue</u>	Date: _____ Time: _____	Received at lab by: _____



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C.O.C. 004

Report to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
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Project Name/Number CV18F0126 / 60571032		Sampler (Print)			No. of Containers	Matrix			Analysis Requested/Method Number													Date Shipped: <u>1/23/19</u>					
Purchase Order Number 102604		Sampler (Signature)				Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, Ni	SM4600 Total & Dissolved Sulfate	9060A TOC	Waybill No.:	Comments:
Sample Identification	Location	Date Collected	Time Collected	Time Zone																							
ERH 740	RHMW03 - Trip Blank	1/22/19	1430	HST	4	X			X							X											
ERH 741	RHMW03	1/22/19	1515	HST	24	X			X		X	X	X	X	X	X	X	X	X	X				X			
<div style="font-size: 2em; font-family: cursive;">             [Handwritten Signature] 1/23/19           </div>																											

\*Analyze TPH w/SGT only if TPH-d/o detected.  
TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: AECOM <i>Danielle Huang</i>	Date: <u>1/23/19</u> Time: <u>1430</u> Received by:	Relinquished by: _____ Date: _____ Time: _____ Received by: _____
Relinquished by:	Date: _____ Time: _____ Received by: _____	Relinquished by: _____ Date: <u>1-24-19</u> Time: <u>0900</u> Received at lab by: <i>[Signature]</i>



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C.O.C. 008

Report to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Margie Pascua</u> Email: <u>margie.pascua@aecom.com</u>	Invoice to: <u>PLEASE PRINT</u> Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u> Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u> Attn: <u>Mary Basano</u> Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>
--	--

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number													Date Shipped: <u>1/23/19</u>									
		Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron		353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3070 Total Ca, Mg, Mn, Ni, Zn	SW-9000 Total & Dissolved Solids	9060A TOC/DOC	Carrier: <u>FedEx</u>	
Purchase Order Number	Sampler (Signature)	Aq	Sed.	Soil	No. of Containers	Comments:																		
Sample Identification	Location	Date Collected	Time Collected	Time Zone																				
ERH748	RHMWD7-Trip Blank	1/23/19	1123	HST	4	X																		
ERH749	RHMWD7	1/23/19	1130	HST	24	X																	no soil	

\*Analyze TPH w/SGT only if TPH-d/o detected.  
TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)				
Relinquished by sampler: AECOM <u>Danielle Huang</u>	Date: <u>1/23/19</u> Time: <u>1430</u>	Received by:	Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:	Relinquished by:	Date: <u>1-24-19</u> Time: <u>0900</u>	Received at lab by:



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C.O.C. **001**

Report to: <b>PLEASE PRINT</b>	Invoice to: <b>PLEASE PRINT</b>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number CV18F0126 / 60571032	Sampler (Print)					No. of Containers	Matrix			Analysis Requested/Method Number														Date Shipped: <u>1/23/19</u>													
	Sampler (Signature)						Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270S/M PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	9860A	1007	1008	Carrier: <u>FedEx</u>	Waybill No.:	Comments:						
Purchase Order Number 102604	Location	Date Collected	Time Collected	Time Zone																																	
	<u>ERH735</u>	<u>RHMW01-TB</u>	<u>1/22/19</u>	<u>08:30</u>	<u>HST</u>	<u>4</u>	<u>X</u>			<u>X</u>							<u>X</u>																				
	<u>ERH736</u>	<u>RHMW01</u>	<u>1/22/19</u>	<u>12:10</u>	<u>HST</u>	<u>20</u>	<u>X</u>			<u>X</u>	<u>X</u>	<u>X*</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	

\*Analyze TPH w/SGT only if TPH-d/o detected.  
TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____						Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)					
Relinquished by sampler: <u>AECOM</u>	Date	Time	Received by:			Relinquished by:	Date	Time	Received by:			
<u>Morgen Donohue</u>	<u>1/23/19</u>	<u>12:45</u>										
Relinquished by:	Date	Time	Received by:			Relinquished by:	Date	Time	Received at lab by:			
<u>Morgen Donohue</u>							<u>1-24-19</u>	<u>0900</u>	<u>[Signature]</u>			



APPL, Inc.  
908 N Temperance Ave  
Clovis, CA 93611  
www.applinc.com

**CHAIN OF CUSTODY RECORD**

Phone: (559) 275-2175  
Fax: (559) 275-4422  
coc@applinc.com

C.O.C. 017

Report to: <b>PLEASE PRINT</b>	Invoice to: <b>PLEASE PRINT</b>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number CV18F0126 / 60571032	Sampler (Print)				No. of Containers	Matrix			Analysis Requested/Method Number													Date Shipped: <u>01/23/19</u>					
	Sampler (Signature)					Aq	Sed.	Soil	8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	30.10 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	8060A TOC	Carrier: <u>FedEx</u>	Waybill No.:
Purchase Order Number 102604	Location	Date Collected	Time Collected	Time Zone																							
	<u>PHMW2251-01 (Dang's)</u>	<u>1/23/19</u>	<u>0910</u>	<u>HST</u>	<u>8</u>	<u>X</u>					<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>												<u>See other cooler for UDAs</u> <u>MS/MD: 8015, 8260, 8270, 8270, 8270, 8270</u>
<i>[Handwritten signature: DJL] 1/23/19</i>																											

Shuttle Temperature:	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other:	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>AECOM</u> <u>Danielle Huang</u>	Date: <u>1/23/19</u> Time: <u>1430</u>	Received by:
Relinquished by:	Date: Time:	Received at lab by: <u>[Signature]</u>

COOLER RECEIPT FORM

ARF: 87940

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 01/24/19

2) Coolers: Number of Coolers: 5

3) YES Were custody seals present and intact? How many? 10 Name/Date on seal? see below

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap popcorn foam X plastic bags other X wet ice dry ice no ice gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of certified NIST thermometer use R1

8) Cooler temp(s): In °C

1: 2.0°C x3 2: 1.5°C x2 3: 4: 5: 6: 7: 8: 9: 10: 11: 12:

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken li

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples?

If yes, the following were received with air bubbles:

Larger than a pea:

Smaller than a pea: AZ85561W01-4, AZ85564W01-4, AZ85566W01-4, AZ85568,69W01-4

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide >9?

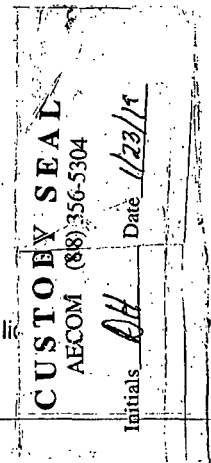
22) NO Were unpreserved VOA Vials received?

23) NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?

pH strip lot number: 90B2031

Lab notified if pH was not adequate:

Notes/Deficiencies:



Personnel receiving samples: ZG Second reviewer:

Personnel labeling samples: ZG

Project manager notified: AA, ZG Date/Time of notification 01/24/19

Name of client notified: Date/Time of notification



## **SAMPLE RESULTS**

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH730**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85562**

QCG: #DOC53-190125A-237016

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	114	60-142			%	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	109	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M  
Run #: 124054  
Instrument: Apollo  
Sequence: 190124  
Dilution Factor: 1  
Initials: DPO

Printed: 01/30/19 12:33:37 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940  
APPL ID: **AZ85563**  
QCG: #DOC53-190125A-237016

**Sample ID: ERH731**

Sample Collection Date: 01/23/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	116	60-142			%	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	110	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M
Run #: 124055
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 12:33:37 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH736**

Sample Collection Date: 01/22/19

ARF: 87940

**APPL ID: AZ85565**

QCG: #DOC53-190128A-237007

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/28/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	103	60-142			%	01/28/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	98.1	56-125			%	01/28/19	01/29/19

Quant Method: DOC0117.M  
Run #: 124070  
Instrument: Apollo  
Sequence: 190124  
Dilution Factor: 1  
Initials: DPO

Printed: 01/30/19 10:12:01 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

**EPA 8015B TPH LIQ-LIQ RE-EXTRACT**

AECOM  
 1001 Bishop Street, Suite 1600  
 Honolulu, HI 96813

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940

**Sample ID: ERH736**

**APPL ID: AZ85565**

Sample Collection Date: 01/22/19

QCG: #DOC53-190201A1-237355

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	02/01/19	02/04/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	02/01/19	02/04/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	98.3	60-142			%	02/01/19	02/04/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	94.4	56-125			%	02/01/19	02/04/19

Quant Method: DOC0117.M
Run #: 204006
Instrument: Apollo
Sequence: 190204
Dilution Factor: 1
Initials: DPO

*Printed: 02/11/19 11:36:17 AM  
 APPL-F1-SC-NoMC-REG MDLs-DOD*

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85567**

QCG: #DOC53-190128A-237007

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	380 ++	40.0	25.00	13.07	ug/L	01/28/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	310	40.0	40.00	5.54	ug/L	01/28/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	109	60-142			%	01/28/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	96.7	56-125			%	01/28/19	01/29/19

++(T3M) The analyst has noted that the chromatogram of this sample is mainly higher boiling hydrocarbons.

Quant Method: DOC0117.M
Run #: 124071
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 10:12:01 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH WATER L-L SGC

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85567**

QCG: #DOC53-190128A1-237114

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/28/19	02/01/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	02/01/19
EPA 8015B-eL	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	01/28/19	02/01/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	104	60-142			%	01/28/19	02/01/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	97.8	56-125			%	01/28/19	02/01/19

Quant Method: DOC0117.M
Run #: 201008
Instrument: Apollo
Sequence: 190201
Dilution Factor: 1
Initials: DPO

Printed: 02/01/19 2:13:28 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH749**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85569**

QCG: #DOC53-190125A-237016

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	111	60-142			%	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	103	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M
Run #: 124056
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 12:33:30 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH730**

Sample Collection Date: 01/23/19

ARF: 87940

**APPL ID: AZ85562**

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	99.2	39-114			%	01/30/19	02/01/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	95.1	58-120			%	01/30/19	02/01/19

Quant Method: L0122.M
Run #: 0122L091
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 02/04/19 12:14:50 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940

**Sample ID: ERH731**

**APPL ID: AZ85563**

Sample Collection Date: 01/23/19

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	92.5	39-114			%	01/30/19	02/01/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	98.4	58-120			%	01/30/19	02/01/19

Quant Method: L0122.M
Run #: 0122L092
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 02/04/19 12:14:50 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH736**

Sample Collection Date: 01/22/19

ARF: 87940

**APPL ID: AZ85565**

QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	134 #	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	127 #	58-120			%	01/28/19	01/30/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L059
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 02/04/19 12:14:50 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

ARF: 87940

**APPL ID: AZ85567**

QCG: #SIM53-190128A-237026

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	130 #	39-114			%	01/28/19	01/30/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	121 #	58-120			%	01/28/19	01/30/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L060
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 02/04/19 12:14:50 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH749**

Sample Collection Date: 01/23/19

ARF: 87940

**APPL ID: AZ85569**

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/04/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/04/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/04/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	116 #	39-114			%	01/30/19	02/04/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	63.2	58-120			%	01/30/19	02/04/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L108
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 02/04/19 12:44:20 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940  
APPL ID: **AZ85562**  
QCG: #87DC5-190130A-237158

**Sample ID: ERH730**  
Sample Collection Date: 01/23/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date	
EPA 8270D	HEXANEDIOIC ACID, DIOCTYL ESTER	13 T		TIC		TIC	ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U		5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	101		43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	89.2		44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	103		19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	106		44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	104		10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	87.3		50-134			%	01/30/19	02/01/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y103  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 02/09/19 7:37:20 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH731**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85563**  
QCG: #87DC5-190130A-237158

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIM	6.1 T				ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	88.7	43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	78.7	44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	81.6	19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	83.6	44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	81.2	10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	79.3	50-134			%	01/30/19	02/01/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M
Run #: 0124Y104
Instrument: Yoda
Sequence: Y190124
Dilution Factor: 1
Initials: AAB

Printed: 02/09/19 7:37:20 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH736**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85565**  
QCG: #87DC5-190128A-237041

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	66 T				ug/L	01/28/19	01/30/19
EPA 8270D	CYCLOTETRASILOXANE, OCTAMETHY	16 T				ug/L	01/28/19	01/30/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	91.6	43-140			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	79.2	44-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	68.3	19-119			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	72.1	44-120			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	63.1	10-115			%	01/28/19	01/30/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	78.6	50-134			%	01/28/19	01/30/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y063  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 02/09/19 7:37:20 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85567**

QCG: #87DC5-190128A-237041

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date	
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	56 T		TIC		TIC	ug/L	01/28/19	01/30/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19	
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	95.5	43-140			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	82.8	44-119			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	71.4	19-119			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	75.2	44-120			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: PHENOL-D6 (S)	66.2	10-115			%	01/28/19	01/30/19	
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	82.8	50-134			%	01/28/19	01/30/19	

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y064  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

Printed: 02/09/19 7:37:20 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940

**Sample ID: ERH749**

**APPL ID: AZ85569**

Sample Collection Date: 01/23/19

QCG: #87DC5-190130A-237158

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	88 T				ug/L	01/30/19	02/01/19
EPA 8270D	CYCLOPENTASILOXANE, DECAMETHY	16 T				ug/L	01/30/19	02/01/19
EPA 8270D	CYCLOTRISILOXANE, HEXAMETHYL-	140 T				ug/L	01/30/19	02/01/19
EPA 8270D	HEXANEDIOIC ACID, DIOCTYL ESTER	11 T				ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	249 #	43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	239 #	44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	69.6	19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	85.6	44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	41.0	10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	189 #	50-134			%	01/30/19	02/01/19

# = Recovery (or RPD) is outside QC limits.  
T = Tentatively identified compound.

Quant Method: Y0125NC.M
Run #: 0124Y105
Instrument: Yoda
Sequence: Y190124
Dilution Factor: 1
Initials: AAB

Printed: 02/09/19 7:37:20 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940  
APPL ID: **AZ85562**  
QCG: #87DME-190128A-237008

**Sample ID: ERH730**

Sample Collection Date: 01/23/19

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

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Quant Method: YMEE1128.M
Run #: 1128Y075
Instrument: Yoda
Sequence: Y181128M
Dilution Factor: 1
Initials: AAB

Printed: 01/30/19 10:51:18 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH731**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85563**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y076  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 10:51:18 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940  
APPL ID: **AZ85565**  
QCG: #87DME-190128A-237008

**Sample ID: ERH736**  
Sample Collection Date: 01/22/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M
Run #: 1128Y077
Instrument: Yoda
Sequence: Y181128M
Dilution Factor: 1
Initials: AAB

Printed: 01/30/19 10:51:18 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940  
APPL ID: **AZ85567**  
QCG: #87DME-190128A-237008

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

---

Quant Method: YMEE1128.M
Run #: 1128Y078
Instrument: Yoda
Sequence: Y181128M
Dilution Factor: 1
Initials: AAB

Printed: 01/30/19 10:51:18 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH749**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85569**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/30/19

Quant Method: YMEE1128.M  
Run #: 1128Y096  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 10:51:18 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH729**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85561**  
QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	112	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	93.3	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	110	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	105	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L15  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH730**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85562**

QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	110	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	90.8	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	108	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	101	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L16  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH731**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85563**  
QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	111	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	90.3	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	111	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	102	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L17  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH735**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85564**  
QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	111	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	94.7	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	113	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	107	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M
Run #: 0125L18
Instrument: Loki
Sequence: 190121
Dilution Factor: 1
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH736

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

APPL ID: AZ85565

QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	115	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	91.3	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	115	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	106	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L19  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940

Sample ID: ERH740

APPL ID: AZ85566

Sample Collection Date: 01/22/19

QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	108	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	86.9	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	109	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	98.4	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L20  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940

Sample ID: ERH741

APPL ID: AZ85567

Sample Collection Date: 01/22/19

QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	114	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	90.5	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	114	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	105	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L21  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH748**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85568**

QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	110	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	91.4	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	111	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	105	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M
Run #: 0125L22
Instrument: Loki
Sequence: 190121
Dilution Factor: 1
Initials: DG

*Printed: 01/31/19 1:26:25 PM*  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH749

Sample Collection Date: 01/23/19

ARF: 87940

APPL ID: AZ85569

QCG: #86BTO-190125AL-236885

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	116	81-118			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	92.9	85-114			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	118	80-119			%	01/25/19	01/25/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	109	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M
Run #: 0125L23
Instrument: Loki
Sequence: 190121
Dilution Factor: 1
Initials: DG

Printed: 01/31/19 1:26:25 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH729**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85561**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	93.3	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L15  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH730**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85562**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	90.8	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L16  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH731**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85563**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	90.3	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L17  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH735**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85564**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	94.7	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M
Run #: 0125L18
Instrument: Loki
Sequence: 190121
Dilution Factor: 1
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH736**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85565**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	91.3	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L19  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH740**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85566**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	86.9	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L20  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage  
**Sample ID: ERH741**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85567**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	90.5	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L21  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87940  
APPL ID: **AZ85568**  
QCG: #GRO86-190125AL1-23706

**Sample ID: ERH748**

Sample Collection Date: 01/23/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	91.4	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L22  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage  
**Sample ID: ERH749**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85569**  
QCG: #GRO86-190125AL1-23706

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	92.9	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L23  
Instrument: Loki  
Sequence: 190121  
Dilution Factor: 1  
Initials: DG

Printed: 01/31/19 2:08:14 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH729**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85561**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012813  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH730**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85562**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012814  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH735**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85564**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012817  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH736**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85565**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	200	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012816  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH740**  
Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85566**  
QCG: #RSKME-190128A-236920

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

---

Quant Method: RSK0120.M  
Run #: 19012818  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85567**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012819  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH748**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940  
**APPL ID: AZ85568**  
QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012820  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH749**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87940

**APPL ID: AZ85569**

QCG: #RSKME-190128A-236920

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012821  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:07:52 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH730**

Sample Collection Date: 01/23/19

**APPL ID: AZ85562**

ARF: 87940

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	108	5.0	1.00	0.40	mg/L	5	01/28/19	01/28/19
EPA 300.0	NITRATE	2.3	0.5	0.18	0.04	mg/L	1	01/24/19	01/24/19
EPA 300.0	SULFATE	15.7	1.0	0.20	0.09	mg/L	1	01/24/19	01/24/19
EPA 353.2	NITRATE-NITRITE-N	0.51	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	59.0	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	59.0	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/25/19	01/25/19
SW846 9060A	TOTAL ORGANIC CARBON	0.68 J	0.93	0.350	0.130	mg/L	1	02/13/19	02/13/19

J = Estimated value.

Printed: 02/17/19 9:35:33 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH736**

Sample Collection Date: 01/22/19

**APPL ID: AZ85565**

ARF: 87940

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	40.3	1.0	0.20	0.08	mg/L	1	01/24/19	01/24/19
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	1	01/24/19	01/24/19
EPA 300.0	SULFATE	4.5	1.0	0.20	0.09	mg/L	1	01/24/19	01/24/19
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	81.0	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	81.0	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/24/19	01/24/19
SW846 9060A	TOTAL ORGANIC CARBON	1.2	0.93	0.350	0.130	mg/L	1	02/13/19	02/13/19

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APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH741**

Sample Collection Date: 01/22/19

**APPL ID: AZ85567**

ARF: 87940

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	48.2	1.0	0.20	0.08	mg/L	1	01/25/19	01/25/19
EPA 300.0	NITRATE	6.2	0.5	0.18	0.04	mg/L	1	01/25/19	01/25/19
EPA 300.0	SULFATE	46.1	1.0	0.20	0.09	mg/L	1	01/25/19	01/25/19
EPA 353.2	NITRATE-NITRITE-N	1.7	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	266	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	266	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/25/19	01/25/19
SW846 9060A	TOTAL ORGANIC CARBON	1.8	0.93	0.350	0.130	mg/L	1	02/13/19	02/13/19

Printed: 02/17/19 9:35:33 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH749**

Sample Collection Date: 01/23/19

**APPL ID: AZ85569**

ARF: 87940

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	392	10.0	2.00	0.80	mg/L	10	01/28/19	01/28/19
EPA 300.0	SULFATE	60.9	10.0	2.00	0.90	mg/L	10	01/28/19	01/28/19
EPA 300.0	NITRATE	3.6	0.5	0.18	0.04	mg/L	1	01/25/19	01/25/19
EPA 353.2	NITRATE-NITRITE-N	0.89	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	104	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	104	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.40 J	1.0	0.32	0.16	mg/L	1	01/24/19	01/24/19
SW846 9060A	TOTAL ORGANIC CARBON	0.96	0.93	0.350	0.130	mg/L	1	02/13/19	02/13/19

J = Estimated value.

Printed: 02/17/19 9:35:33 AM

APPL-F1-SC-NoMC-REG MDLs

# QC FORMS

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190125A-BLK	Blank	60-142	114		56-125	109	
190125A-LCS	Lab Control Spike	60-142	109		56-125	110	
190125A-LCSD	Lab Control SpikeD	60-142	114		56-125	105	
AZ85562-MS	Matrix Spike	60-142	111		56-125	106	
AZ85562-MSD	Matrix SpikeD	60-142	103		56-125	98.4	
AZ85562	ERH730	60-142	114		56-125	109	
AZ85563	ERH731	60-142	116		56-125	110	
AZ85569	ERH749	60-142	111		56-125	103	

Comments: Batch: #DOC53-190125A

Printed: 01/30/19 12:34:09 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	60-142	107		56-125	92.1	
190128A-LCS	Lab Control Spike	60-142	97.5		56-125	95.7	
190128A-LCSD	Lab Control SpikeD	60-142	93.9		56-125	95.3	
AZ85565 .	ERH736	60-142	103		56-125	98.1	
AZ85567	ERH741	60-142	109		56-125	96.7	

Comments: Batch: #DOC53-190128A

Printed: 01/30/19 10:12:10 AM  
Form 2 & 8, Surrogate Recovery Summary



# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A1-BLK	Blank	0-1	0.0		60-142	99.6	
190128A1-LCS	Lab Control Spike	0-1	0.0		60-142	98.1	
190128A1-LCSD	Lab Control SpikeD	0-1	0.0		60-142	97.5	
AZ85567	ERH741	0-1	0.0		60-142	104	

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:13:35 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A1-BLK	Blank	56-125	98.6				
190128A1-LCS	Lab Control Spike	56-125	98.7				
190128A1-LCSD	Lab Control SpikeD	56-125	97.3				
AZ85567	ERH741	56-125	97.8				

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:13:35 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/04/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190201A1-BLK	Blank	60-142	60.2		56-125	94.2	
190201A1-LCS	Lab Control Spike	60-142	64.0		56-125	87.2	
190201A1-LCSD	Lab Control SpikeD	60-142	90.9		56-125	90.7	
AZ85565	ERH736	60-142	98.3		56-125	94.4	

Comments: Batch: #DOC53-190201A1

Printed: 02/11/19 11:36:27 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.  
Case No: 87940  
Matrix: WATER  
Blank ID: 190125A-BLK

SDG No: 87940  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Time Analyzed: 1220

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125A-BLK	Blank	124048	01/29/19 1220
190125A-LCS	Lab Control Spike	124049	01/29/19 1240
190125A-LCSD	Lab Control SpikeD	124050	01/29/19 1300
190125A-MS	Matrix Spike	124052	01/29/19 1340
190125A-MSD	Matrix SpikeD	124053	01/29/19 1400
AZ85562	ERH730	124054	01/29/19 1420
AZ85563	ERH731	124055	01/29/19 1440
AZ85569	ERH749	124056	01/29/19 1500

Comments: Batch: #DOC53-190125A

Printed: 01/30/19 12:33:50 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **190125W-85562 - 237016**  
Batch ID: #DOC53-190125A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
BLANK	SURROGATE: OCTACOSANE (S)	114	60-142			%	01/25/19	01/29/19
BLANK	SURROGATE: ORTHO-TERPHEN	109	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M  
Run #: 124048  
Instrument: Apollo  
Sequence: 190124  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 12:34:16 PM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190128A-BLK

Time Analyzed: 1820

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-BLK	Blank	124066	01/29/19 1820
190128A-LCS	Lab Control Spike	124067	01/29/19 1840
190128A-LCSD	Lab Control SpikeD	124068	01/29/19 1900
AZ85565	ERH736	124070	01/29/19 1940
AZ85567	ERH741	124071	01/29/19 2000

Comments: Batch: #DOC53-190128A

Printed: 01/30/19 10:12:05 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **190128W-85521 - 237007**  
Batch ID: #DOC53-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/28/19	01/29/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	01/29/19
BLANK	SURROGATE: OCTACOSANE (S)	107	60-142			%	01/28/19	01/29/19
BLANK	SURROGATE: ORTHO-TERPHEN	92.1	56-125			%	01/28/19	01/29/19

Quant Method: DOC0117.M  
Run #: 124066  
Instrument: Apollo  
Sequence: 190124  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 10:12:11 AM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190128A1-BLK

Time Analyzed: 1048

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A1-BLK	Blank	201004	02/01/19 1048
190128A1-LCS	Lab Control Spike	201005	02/01/19 1108
190128A1-LCSD	Lab Control SpikeD	201006	02/01/19 1128
AZ85567	ERH741	201008	02/01/19 1208

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:13:31 PM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8015B TPH WATER L-L SGC**

Blank Name/QCG: **190128W-85521 - 237114**  
Batch ID: #DOC53-190128A1

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/28/19	02/01/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/28/19	02/01/19
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	01/28/19	02/01/19
BLANK	SURROGATE: OCTACOSANE (S)	99.6	60-142			%	01/28/19	02/01/19
BLANK	SURROGATE: ORTHO-TERPHEN	98.6	56-125			%	01/28/19	02/01/19

Quant Method:DOC0117.M  
Run #:201004  
Instrument:Apollo  
Sequence:190201  
Initials:DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 02/01/19 2:13:37 PM

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/04/19

Matrix: WATER

Instrument: Apollo

Blank ID: 190201A1-BLK

Time Analyzed: 1133

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190201A1-BLK	Blank	204003	02/04/19 1133
190201A1-LCS	Lab Control Spike	204004	02/04/19 1153
190201A1-LCSD	Lab Control SpikeD	204005	02/04/19 1213
AZ85565	ERH736	204006	02/04/19 1233

Comments: Batch: #DOC53-190201A1

Printed: 02/11/19 11:36:20 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ RE-EXTRACT**

Blank Name/QCG: **190201W-85565 - 237355**  
Batch ID: #DOC53-190201A1

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	02/01/19	02/04/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	02/01/19	02/04/19
BLANK	SURROGATE: OCTACOSANE (S)	60.2	60-142			%	02/01/19	02/04/19
BLANK	SURROGATE: ORTHO-TERPHEN	94.2	56-125			%	02/01/19	02/04/19

Quant Method: DOC0117.M  
Run #: 204003  
Instrument: Apollo  
Sequence: 190204  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 02/11/19 11:36:28 AM

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190125A-LCS

Time Analyzed: 1240

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125A-BLK	Blank	124048	01/29/19 1220
190125A-LCS	Lab Control Spike	124049	01/29/19 1240
190125A-LCSD	Lab Control SpikeD	124050	01/29/19 1300
190125A-MS	Matrix Spike	124052	01/29/19 1340
190125A-MSD	Matrix SpikeD	124053	01/29/19 1400
AZ85562	ERH730	124054	01/29/19 1420
AZ85563	ERH731	124055	01/29/19 1440
AZ85569	ERH749	124056	01/29/19 1500

Comments: Batch: #DOC53-190125A

Printed: 01/30/19 12:33:47 PM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8015B TPH LIQ-LIQ

APPL ID: **190125W-85562 LCS - 237016**  
 Batch ID: #DOC53-190125A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1280	1260	102	101	36-132	1.6	30
OIL (C24-C40)	1250	1360	1210	109	96.8	41-113	11.7	30
SURROGATE: OCTACOSANE (S)	75.0	82.0	85.7	109	114	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	82.8	79.1	110	105	56-125		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Apollo	Apollo
Run :	124049	124050
Initials :	DPO	

**EPA 8015B-eL**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87940  
Matrix: WATER  
LCS ID: 190128A-LCS

SDG No: 87940  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Time Analyzed: 1840

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-BLK	Blank	124066	01/29/19 1820
190128A-LCS	Lab Control Spike	124067	01/29/19 1840
190128A-LCSD	Lab Control SpikeD	124068	01/29/19 1900
AZ85565	ERH736	124070	01/29/19 1940
AZ85567	ERH741	124071	01/29/19 2000

Comments: Batch: #DOC53-190128A

## Laboratory Control Spike Recoveries

### EPA 8015B TPH LIQ-LIQ

APPL ID: 190128W-85521 LCS - 237007  
 Batch ID: #DOC53-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1450	1510	116	121	36-132	4.1	30
OIL (C24-C40)	1250	1260	1280	101	102	41-113	1.6	30
<hr style="border-top: 1px dashed black;"/>								
SURROGATE: OCTACOSANE (S)	75.0	73.1	70.4	97.5	93.9	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	71.8	71.5	95.7	95.3	56-125		
<hr style="border-top: 1px dashed black;"/>								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Apollo	Apollo
Run :	124067	124068
Initials :	DPO	

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190128A1-LCS

Time Analyzed: 1108

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A1-BLK	Blank	201004	02/01/19 1048
190128A1-LCS	Lab Control Spike	201005	02/01/19 1108
190128A1-LCSD	Lab Control SpikeD	201006	02/01/19 1128
AZ85567	ERH741	201008	02/01/19 1208

Comments: Batch: #DOC53-190128A1

Printed: 02/01/19 2:13:30 PM  
Form 4, LCS Summary



## Laboratory Control Spike Recoveries

### EPA 8015B TPH WATER L-L SGC

APPL ID: 190128W-85521 LCS - 237114  
 Batch ID: #DOC53-190128A1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1440	1390	115	111	36-132	3.5	30
OIL (C24-C40)	1250	1230	1260	98.4	101	41-113	2.4	30
-----								
SURROGATE: (R) DECANOIC ACID (S)	10.00	0	0	0.0	0.0	0-1		
SURROGATE: OCTACOSANE (S)	75.0	73.6	73.1	98.1	97.5	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	74.0	73.0	98.7	97.3	56-125		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Apollo	Apollo
Run :	201005	201006
Initials :	DPO	

**EPA 8015B-eL**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87940  
Matrix: WATER  
LCS ID: 190201A1-LCS

SDG No: 87940  
Date Analyzed: 02/04/19  
Instrument: Apollo  
Time Analyzed: 1153

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190201A1-BLK	Blank	204003	02/04/19 1133
190201A1-LCS	Lab Control Spike	204004	02/04/19 1153
190201A1-LCSD	Lab Control SpikeD	204005	02/04/19 1213
AZ85565	ERH736	204006	02/04/19 1233

Comments: Batch: #DOC53-190201A1

**Laboratory Control Spike Recoveries**  
**EPA 8015B TPH LIQ-LIQ RE-EXTRACT**

APPL ID: 190201W-85565 LCS - 237355  
 Batch ID: #DOC53-190201A1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1120	1140	89.6	91.2	36-132	1.8	30
OIL (C24-C40)	1250	1320	1330	106	106	41-113	0.75	30
SURROGATE: OCTACOSANE (S)	75.0	48.0	68.2	64.0	90.9	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	65.4	68.0	87.2	90.7	56-125		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	02/01/19	02/01/19
Analysis Date :	02/04/19	02/04/19
Instrument :	Apollo	Apollo
Run :	204004	204005
Initials :	DPO	

# Matrix Spike Recoveries

## EPA 8015B TPH LIQ-LIQ

APPL ID: 190125W-85562 MS - 237016

Batch ID: #DOC53-190125A

Sample ID: AZ85562

Client ID: ERH730

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	ND	1240	1230	99.2	98.4	36-132	0.81	30
OIL (C24-C40)	1250	ND	1330	1280	106	102	41-113	3.8	30
SURROGATE: OCTACOSANE (S)	75.0	NA	82.9	77.2	111	103	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	NA	79.8	73.8	106	98.4	56-125		

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Apollo	Apollo
Run :	124052	124053
Initials :	DPO	

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APPL MSD SCII

# 8270D-SIM

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	39-114	94.6		58-120	94.5	
190128A-LCS	Lab Control Spike	39-114	116	*	58-120	134	*
190128A-LCSD	Lab Control SpikeD	39-114	107		58-120	112	
AZ85565	ERH736	39-114	134	#	58-120	127	#
AZ85567	ERH741	39-114	130	#	58-120	121	#

Comments: Batch: #SIM53-190128A

\* = Recovery outside of Control Limits on QC Sample.

# = Recovery outside of Control Limits on Sample.

Printed: 02/04/19 12:36:30 PM  
Form 2 & 8, Surrogate Recovery Summary

# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Linus

Blank ID: 190128A-BLK

Time Analyzed: 1346

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-BLK	Blank	0122L056	01/30/19 1346
190128A-LCS	Lab Control Spike	0122L057	01/30/19 1407
190128A-LCSD	Lab Control SpikeD	0122L058	01/30/19 1429
AZ85565	ERH736	0122L059	01/30/19 1452
AZ85567	ERH741	0122L060	01/30/19 1514

Comments: Batch: #SIM53-190128A

Printed: 02/04/19 12:36:24 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D SIM LIQ-LIQ**

Blank Name/QCG: **190128W-85520 - 237026**

Batch ID: #SIM53-190128A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/28/19	01/30/19
BLANK	SURROGATE: 2-METHYLNAPHT	94.6	39-114			%	01/28/19	01/30/19
BLANK	SURROGATE: FLUORANTHENE-	94.5	58-120			%	01/28/19	01/30/19

Quant Method:L0122.M  
Run #:0122L056  
Instrument:Linus  
Sequence:L190122  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 12:14:58 PM

# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Linus

Blank ID: 190130A-BLK

Time Analyzed: 1251

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	0122L084	02/01/19 1251
190130A-LCS	Lab Control Spike	0122L085	02/01/19 1313
190130A-LCSD	Lab Control SpikeD	0122L086	02/01/19 1335
190130A-MS	Matrix Spike	0122L089	02/01/19 1640
190130A-MSD	Matrix SpikeD	0122L090	02/01/19 1702
AZ85562	ERH730	0122L091	02/01/19 1724
AZ85563	ERH731	0122L092	02/01/19 1747
AZ85569	ERH749	0122L108	02/04/19 1158

Comments: Batch: #SIM53-190130A

Printed: 02/04/19 12:36:24 PM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8270D SIM LIQ-LIQ**

Blank Name/QCG: **190130W-85562 - 237166**  
Batch ID: #SIM53-190130A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
BLANK	SURROGATE: 2-METHYLNAPHT	101	39-114			%	01/30/19	02/01/19
BLANK	SURROGATE: FLUORANTHENE-	96.6	58-120			%	01/30/19	02/01/19

Quant Method:L0122.M  
Run #:0122L084  
Instrument:Linus  
Sequence:L190122  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 12:14:58 PM

# 8270D-SIM

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Linus

LCS ID: 190128A-LCS

Time Analyzed: 1407

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-BLK	Blank	0122L056	01/30/19 1346
190128A-LCS	Lab Control Spike	0122L057	01/30/19 1407
190128A-LCSD	Lab Control SpikeD	0122L058	01/30/19 1429
AZ85565	ERH736	0122L059	01/30/19 1452
AZ85567	ERH741	0122L060	01/30/19 1514

Comments: Batch: #SIM53-190128A

Printed: 02/04/19 12:36:19 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8270D SIM LIQ-LIQ**

APPL ID: 190128W-85520 LCS - 237026  
 Batch ID: #SIM53-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	6.15	5.53	98.4	88.5	41-115	10.6	20
2-METHYLNAPHTHALENE	6.25	6.21	5.67	99.4	90.7	39-114	9.1	20
NAPHTHALENE	6.25	6.12	5.39	97.9	86.2	43-114	12.7	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	7.25	6.68	116 #	107	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	8.35	7.01	134 #	112	58-120		

# = Recovery is outside QC limits.

Comments:

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0122.M	L0122.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Linus	Linus
Run :	0122L057	0122L058
Initials :	AAB	

# 8270D-SIM

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Linus

LCS ID: 190130A-LCS

Time Analyzed: 1313

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	0122L084	02/01/19 1251
190130A-LCS	Lab Control Spike	0122L085	02/01/19 1313
190130A-LCSD	Lab Control SpikeD	0122L086	02/01/19 1335
190130A-MS	Matrix Spike	0122L089	02/01/19 1640
190130A-MSD	Matrix SpikeD	0122L090	02/01/19 1702
AZ85562	ERH730	0122L091	02/01/19 1724
AZ85563	ERH731	0122L092	02/01/19 1747
AZ85569	ERH749	0122L108	02/04/19 1158

Comments: Batch: #SIM53-190130A

Printed: 02/04/19 12:36:19 PM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8270D SIM LIQ-LIQ

APPL ID: 190130W-85562 LCS - 237166  
 Batch ID: #SIM53-190130A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	6.34	6.29	101	101	41-115	0.79	20
2-METHYLNAPHTHALENE	6.25	6.28	6.45	100	103	39-114	2.7	20
NAPHTHALENE	6.25	6.00	6.17	96.0	98.7	43-114	2.8	20
-----								
SURROGATE: 2-METHYLNAPHTHALEN	6.25	6.85	6.98	110	112	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	5.85	6.10	93.6	97.6	58-120		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0122.M	L0122.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Linus	Linus
Run :	0122L085	0122L086
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D SIM LIQ-LIQ

APPL ID: 190130W-85562 MS - 237166  
 Batch ID: #SIM53-190130A  
 Sample ID: AZ85562  
 Client ID: ERH730

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	ND	4.58	5.68	73.3	90.9	41-115	21.4 #	20
2-METHYLNAPHTHALENE	6.25	ND	4.64	5.76	74.2	92.2	39-114	21.5 #	20
NAPHTHALENE	6.25	ND	4.42	5.47	70.7	87.5	43-114	21.2 #	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	NA	4.95	6.35	79.2	102	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	NA	5.36	6.71	85.8	107	58-120		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

	Primary	SPK	DUP
Quant Method :	L0122.M	L0122.M	L0122.M
Extraction Date :	01/30/19	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19	02/01/19
Instrument :	Linus	Linus	Linus
Run :	0122L089	0122L089	0122L090
Initials :	AAB		

Printed: 02/04/19 12:15:17 PM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0122L002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Linus  
Time Analyzed: 9:21

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.1 SIM 01/18/19	0122L003.D	01/22/19 9:37
2		0.2 SIM 01/18/19	0122L004.D	01/22/19 9:59
3		0.5 SIM 01/18/19	0122L005.D	01/22/19 10:21
4		1 SIM 01/18/19	0122L006.D	01/22/19 10:43
5		5 SIM 01/18/19	0122L007.D	01/22/19 11:30
6		10 SIM 01/18/19	0122L008.D	01/22/19 11:53
7		50 SIM 01/18/19	0122L009.D	01/22/19 12:15
8		100 SIM 01/18/19	0122L010.D	01/22/19 12:37
9		SS SIM 01/18/19	0122L011.D	01/22/19 12:59
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80% of mass 198	<u>52.3</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.8</u>
127 10 - 80% of mass 198	<u>58.6</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>22.8</u>
365 1 - 100% of mass 198	<u>3.3</u>
441 0.01 - 24% of mass 442	<u>16.7</u>
442 50 - 150% of mass 198	<u>68.2</u>
443 15 - 24% of mass 442	<u>19.2</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87940  
Matrix: Water  
ID: 0122L036.D

SDG No: 87940  
Date Analyzed: 01/30/19  
Instrument: Linus  
Time Analyzed: 6:19

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 01/18/19	0122L037.D	01/30/19 6:36
2	Blank	190128A BLK 1/800	0122L056.D	01/30/19 13:46
3	Lab Control Spike	190128A LCS-2 1/800	0122L057.D	01/30/19 14:07
4	Lab Control SpikeD	190128A LCSD-2 1/800	0122L058.D	01/30/19 14:29
5	ERH736	AZ85565W22 1/800	0122L059.D	01/30/19 14:52
6	ERH741	AZ85567W22 1/800	0122L060.D	01/30/19 15:14
7		5 SIM 01/18/19	0122L062.D	01/30/19 15:59
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80% of mass 198	<u>52.9</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>56.0</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.6</u>
275 10 - 60% of mass 198	<u>21.3</u>
365 1 - 100% of mass 198	<u>2.9</u>
441 0.01 - 24% of mass 442	<u>17.5</u>
442 50 - 150% of mass 198	<u>66.5</u>
443 15 - 24% of mass 442	<u>18.4</u>



Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87940  
Matrix: Water  
ID: 0122L105.D

SDG No: 87940  
Date Analyzed: 02/04/19  
Instrument: Linus  
Time Analyzed: 8:40

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	5 SIM 01/18/19 (2)	0122L106.D	02/04/19 8:56
2 ERH749	AZ85569W22 1/800	0122L108.D	02/04/19 11:58
3	5 SIM 01/18/19 (2)	0122L115.D	02/04/19 14:55
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80% of mass 198	<u>50.2</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.8</u>
127 10 - 80% of mass 198	<u>57.1</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.4</u>
275 10 - 60% of mass 198	<u>21.2</u>
365 1 - 100% of mass 198	<u>2.9</u>
441 0.01 - 24% of mass 442	<u>17.1</u>
442 50 - 150% of mass 198	<u>64.7</u>
443 15 - 24% of mass 442	<u>20.0</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0122L080.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 02/01/19  
 Instrument: Linus  
 Time Analyzed: 8:11

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 01/18/19	0122L081.D	02/01/19 8:27
2	Blank	190130A BIK 1/800	0122L084.D	02/01/19 12:51
3	Lab Control Spike	190130A LCS-1 1/800	0122L085.D	02/01/19 13:13
4	Lab Control SpikeD	190130A LCSD-1 1/800	0122L086.D	02/01/19 13:35
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e	
51 9.95 - 80% of mass 198	<u>49.6</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.6</u>
127 10 - 80% of mass 198	<u>53.4</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.8</u>
275 10 - 60% of mass 198	<u>21.5</u>
365 1 - 100% of mass 198	<u>2.7</u>
441 0.01 - 24% of mass 442	<u>17.2</u>
442 50 - 150% of mass 198	<u>70.5</u>
443 15 - 24% of mass 442	<u>19.0</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87940  
Matrix: Water  
ID: 0122L087.D

SDG No: 87940  
Date Analyzed: 02/01/19  
Instrument: Linus  
Time Analyzed: 15:16

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 01/18/19	0122L088.D	02/01/19 15:32
2		AZ85562W37 MS-2 1/80	0122L089.D	02/01/19 16:40
3		AZ85562W38 MSD-2 1/8	0122L090.D	02/01/19 17:02
4	ERH730	AZ85562W36 1/800	0122L091.D	02/01/19 17:24
5	ERH731	AZ85563W10 1/809	0122L092.D	02/01/19 17:47
6		5 SIM 01/18/19 (1)	0122L103.D	02/01/19 21:52
7				
8				
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14				
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17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80% of mass 198	57.2
68 0 - 2.05% of mass 69	0.0
70 0 - 2% of mass 69	0.6
127 10 - 80% of mass 198	59.3
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.6
275 10 - 60% of mass 198	20.9
365 1 - 100% of mass 198	2.7
441 0.01 - 24% of mass 442	17.4
442 50 - 150% of mass 198	61.4
443 15 - 24% of mass 442	21.1

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0122L037.D Date Analyzed: 01/30/19  
 Instrument ID: Linus Time Analyzed: 6:36  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Naphthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	19859		4.05		8550		6.07	
	UPPER LIMIT	39718		4.22		17100		6.24	
	LOWER LIMIT	9930		3.88		4275		5.90	
	SAMPLE NO.								
01	190128A BLK 1/800	19493		4.05		9066		6.07	
02	190128A LCS-2 1/800	13343		4.05		5524		6.07	
03	190128A LCSD-2 1/800	17209		4.05		7101		6.07	
04	AZ85565W22 1/800	13461		4.05		6239		6.07	
05	AZ85567W22 1/800	15222		4.05		6679		6.07	
06	5 SIM 01/18/19	28957		4.05		12989		6.07	
07									
08									
09									
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21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 0122L081.D Date Analyzed: 1 Feb 19 8:27  
 Instrument ID: Linus Time Analyzed: 1 Feb 19 8:27  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	20177		4.03		9030		6.06	
	UPPER LIMIT	40354		4.20		18060		6.23	
	LOWER LIMIT	10089		3.86		4515		5.89	
	SAMPLE NO.								
01	190130A Blk 1/800	17323		4.03		8262		6.06	
02	190130A LCS-1 1/800	16459		4.03		8259		6.06	
03	190130A LCSD-1 1/800	15802		4.03		7807		6.06	
04	5 SIM 01/18/19	21775		4.03		9726		6.06	
05									
06									
07									
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0122L088.D Date Analyzed: 1 Feb 19 15:32  
 Instrument ID: Linus Time Analyzed: 1 Feb 19 15:32  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	21775	4.03	9726	6.06	19119	7.79
UPPER LIMIT	43550	4.20	19452	6.23	38238	7.96
LOWER LIMIT	10888	3.86	4863	5.89	9560	7.62
SAMPLE NO.						
01 AZ85562W37 MS-2 1/80	23644	4.03	10428	6.06	20056	7.79
02 AZ85562W38 MSD-2 1/80	19925	4.03	9048	6.06	17842	7.79
03 AZ85562W36 1/800	21746	4.03	9958	6.06	20079	7.79
04 AZ85563W10 1/809	21021	4.03	9016	6.06	17750	7.80
05 5 SIM 01/18/19 (1)	38045	4.05	16950	6.06	33136	7.79
06						
07						
08						
09						
10						
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22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0122L106.D Date Analyzed: 4 Feb 19 8:56  
 Instrument ID: Linus Time Analyzed: 4 Feb 19 8:56  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD		20547		4.03		9330		6.06	
UPPER LIMIT		41094		4.20		18660		6.23	
LOWER LIMIT		10274		3.86		4665		5.89	
SAMPLE NO.									
01	AZ85569W22 1/800	14555		4.03		2744 *		6.06	
02	5 SIM 01/18/19 (2)	21365		4.03		9449		6.06	
03									
04									
05									
06									
07									
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20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	43-140	110		44-119	96.9	
190128A-LCS	Lab Control Spike	43-140	106		44-119	92.0	
190128A-LCSD	Lab Control SpikeD	43-140	102		44-119	88.0	
AZ85565	ERH736	43-140	91.6		44-119	79.2	
AZ85567	ERH741	43-140	95.5		44-119	82.8	

Comments: Batch: #87DC5-190128A

Printed: 02/04/19 11:09:42 AM  
Form 2 & 8, Surrogate Recovery Summary



# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	19-119	102		44-120	106	
190128A-LCS	Lab Control Spike	19-119	94.0		44-120	96.8	
190128A-LCSD	Lab Control SpikeD	19-119	94.0		44-120	92.0	
AZ85565	ERH736	19-119	68.3		44-120	72.1	
AZ85567	ERH741	19-119	71.4		44-120	75.2	

Comments: Batch: #87DC5-190128A

Printed: 02/04/19 11:09:42 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190128A-BLK	Blank	10-115	99.2		50-134	94.0	
190128A-LCS	Lab Control Spike	10-115	94.4		50-134	90.4	
190128A-LCSD	Lab Control Spiked	10-115	93.6		50-134	89.6	
AZ85565	ERH736	10-115	63.1		50-134	78.6	
AZ85567	ERH741	10-115	66.2		50-134	82.8	

Comments: Batch: #87DC5-190128A

Printed: 02/04/19 11:09:42 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	19-119	91.1		44-120	97.8	
190130A-LCS	Lab Control Spike	19-119	72.0		44-120	75.5	
190130A-LCSD	Lab Control SpikeD	19-119	73.6		44-120	77.5	
AZ85562-MS	Matrix Spike	19-119	86.0		44-120	85.6	
AZ85562-MSD	Matrix SpikeD	19-119	65.2		44-120	69.9	
AZ85562	ERH730	19-119	103		44-120	106	
AZ85563	ERH731	19-119	81.6		44-120	83.6	
AZ85569	ERH749	19-119	69.6		44-120	85.6	

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 11:02:46 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	43-140	115		44-119	103	
190130A-LCS	Lab Control Spike	43-140	92.8		44-119	77.8	
190130A-LCSD	Lab Control SpikeD	43-140	95.2		44-119	80.8	
AZ85562-MS	Matrix Spike	43-140	89.6		44-119	77.4	
AZ85562-MSD	Matrix SpikeD	43-140	84.4		44-119	73.8	
AZ85562	ERH730	43-140	101		44-119	89.2	
AZ85563	ERH731	43-140	88.7		44-119	78.7	
AZ85569	ERH749	43-140	249	#	44-119	239	#

Comments: Batch: #87DC5-190130A

# = Recovery outside of Control Limits on Sample.

Printed: 02/04/19 11:02:46 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	10-115	88.0		50-134	107	
190130A-LCS	Lab Control Spike	10-115	70.8		50-134	80.8	
190130A-LCSD	Lab Control SpikeD	10-115	73.2		50-134	86.4	
AZ85562-MS	Matrix Spike	10-115	86.0		50-134	72.0	
AZ85562-MSD	Matrix SpikeD	10-115	64.8		50-134	73.0	
AZ85562	ERH730	10-115	104		50-134	87.3	
AZ85563	ERH731	10-115	81.2		50-134	79.3	
AZ85569	ERH749	10-115	41.0		50-134	189	#

Comments: Batch: #87DC5-190130A

# = Recovery outside of Control Limits on Sample.

Printed: 02/04/19 11:02:46 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190128A-BLK

Time Analyzed: 1456

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	0124Y055	01/30/19 1456
190128A-LCS	Lab Control Spike	0124Y056	01/30/19 1524
190128A-LCSD	Lab Control SpikeD	0124Y057	01/30/19 1552
AZ85565	ERH736	0124Y063	01/30/19 1839
AZ85567	ERH741	0124Y064	01/30/19 1907

Comments: Batch: #87DC5-190128A

Printed: 02/04/19 11:09:26 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D WATER**

Blank Name/QCG: **190128W-85520 - 237041**  
Batch ID: #87DC5-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/28/19	01/30/19
BLANK	SURROGATE: 2,4,6-TRIBROMOP	110	43-140			%	01/28/19	01/30/19
BLANK	SURROGATE: 2-FLUORBIPHENY	96.9	44-119			%	01/28/19	01/30/19
BLANK	SURROGATE: 2-FLUOROPHENO	102	19-119			%	01/28/19	01/30/19
BLANK	SURROGATE: NITROBENZENE-	106	44-120			%	01/28/19	01/30/19
BLANK	SURROGATE: PHENOL-D6 (S)	99.2	10-115			%	01/28/19	01/30/19
BLANK	SURROGATE: TERPHENYL-D14 (	94.0	50-134			%	01/28/19	01/30/19

Quant Method: Y0125NC.M  
Run #: 0124Y055  
Instrument: Yoda  
Sequence: Y190124  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 11:13:04 AM

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190130A-BLK

Time Analyzed: 1619

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190130A-BLK	Blank	0124Y098	02/01/19 1619
190130A-LCS	Lab Control Spike	0124Y099	02/01/19 1647
190130A-LCSD	Lab Control SpikeD	0124Y100	02/01/19 1714
190130A-MS	Matrix Spike	0124Y101	02/01/19 1742
190130A-MSD	Matrix SpikeD	0124Y102	02/01/19 1810
AZ85562	ERH730	0124Y103	02/01/19 1838
AZ85563	ERH731	0124Y104	02/01/19 1906
AZ85569	ERH749	0124Y105	02/01/19 1934

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 11:02:08 AM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8270D WATER**

Blank Name/QCG: **190130W-85562 - 237158**  
Batch ID: #87DC5-190130A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
BLANK	SURROGATE: 2,4,6-TRIBROMOP	115	43-140			%	01/30/19	02/01/19
BLANK	SURROGATE: 2-FLUORBIPHENY	103	44-119			%	01/30/19	02/01/19
BLANK	SURROGATE: 2-FLUOROPHENO	91.1	19-119			%	01/30/19	02/01/19
BLANK	SURROGATE: NITROBENZENE-	97.8	44-120			%	01/30/19	02/01/19
BLANK	SURROGATE: PHENOL-D6 (S)	88.0	10-115			%	01/30/19	02/01/19
BLANK	SURROGATE: TERPHENYL-D14 (	107	50-134			%	01/30/19	02/01/19

Quant Method: Y0125NC.M  
Run #: 0124Y098  
Instrument: Yoda  
Sequence: Y190124  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 11:02:55 AM

**EPA 8270D**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190128A-LCS

Time Analyzed: 1524

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-BLK	Blank	0124Y055	01/30/19 1456
190128A-LCS	Lab Control Spike	0124Y056	01/30/19 1524
190128A-LCSD	Lab Control SpikeD	0124Y057	01/30/19 1552
AZ85565	ERH736	0124Y063	01/30/19 1839
AZ85567	ERH741	0124Y064	01/30/19 1907

Comments: Batch: #87DC5-190128A

## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: 190128W-85520 LCS - 237041  
 Batch ID: #87DC5-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	55.8	55.8	89.3	89.3	10-115	0.0	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	266	256	106	102	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	115	110	92.0	88.0	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	235	235	94.0	94.0	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	121	115	96.8	92.0	44-120		
SURROGATE: PHENOL-D6 (S)	250	236	234	94.4	93.6	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	113	112	90.4	89.6	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Yoda	Yoda
Run :	0124Y056	0124Y057
Initials :	AAB	

# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190130A-LCS

Time Analyzed: 1647

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190130A-BLK	Blank	0124Y098	02/01/19 1619
190130A-LCS	Lab Control Spike	0124Y099	02/01/19 1647
190130A-LCSD	Lab Control SpikeD	0124Y100	02/01/19 1714
190130A-MS	Matrix Spike	0124Y101	02/01/19 1742
190130A-MSD	Matrix SpikeD	0124Y102	02/01/19 1810
AZ85562	ERH730	0124Y103	02/01/19 1838
AZ85563	ERH731	0124Y104	02/01/19 1906
AZ85569	ERH749	0124Y105	02/01/19 1934

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 11:01:57 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: **190130W-85562 LCS - 237158**  
 Batch ID: #87DC5-190130A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	37.4	38.7	59.8	61.9	10-115	3.4	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	232	238	92.8	95.2	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	97.3	101	77.8	80.8	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	180	184	72.0	73.6	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	94.4	96.9	75.5	77.5	44-120		
SURROGATE: PHENOL-D6 (S)	250	177	183	70.8	73.2	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	101	108	80.8	86.4	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	0124Y099	0124Y100
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D WATER

APPL ID: 190130W-85562 MS - 237158  
 Batch ID: #87DC5-190130A  
 Sample ID: AZ85562  
 Client ID: ERH730

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	ND	48.1	36.6	77.0	58.6	10-115	27.2 #	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	NA	224	211	89.6	84.4	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	NA	96.7	92.3	77.4	73.8	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	NA	215	163	86.0	65.2	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	NA	107	87.4	85.6	69.9	44-120		
SURROGATE: PHENOL-D6 (S)	250	NA	215	162	86.0	64.8	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	NA	90.0	91.2	72.0	73.0	50-134		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	0124Y101	0124Y102
Initials :	AAB	

Printed: 02/04/19 11:02:18 AM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Soil  
ID: 0124Y014.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Yoda  
Time Analyzed: 7:05

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/mL 8270 01/24/	0124Y015.D	01/25/19 7:20
2	4ug/mL 8270 01/24/1	0124Y016.D	01/25/19 9:53
3	5ug/mL 8270 01/24/1	0124Y017.D	01/25/19 10:21
4	10ug/mL 8270 01/24/	0124Y018.D	01/25/19 10:49
5	40ug/mL 8270 01/24/	0124Y020.D	01/25/19 11:44
6	60ug/mL 8270 01/24/	0124Y021.D	01/25/19 12:11
7	80ug/mL 8270 01/24/	0124Y022.D	01/25/19 12:39
8	100ug/mL 8270 01/24	0124Y023.D	01/25/19 13:07
9			
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20			
21			
22			

m/e

51 10 - 80% of mass 198	<u>38.0</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.2</u>
127 10 - 80% of mass 198	<u>52.7</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>26.4</u>
365 1 - 100% of mass 198	<u>3.2</u>
441 0.01 - 24% of mass 442	<u>16.3</u>
442 50 - 150% of mass 198	<u>96.4</u>
443 17 - 23% of mass 442	<u>19.1</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Soil  
ID: 0124Y030.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Time Analyzed: 11:49

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	20ug/mL 8270 01/24/	0124Y033.D	01/28/19 13:36
2	SS-8270 01/24/19	0124Y034.D	01/28/19 14:11
3			
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20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	36.7
68 0 - 2% of mass 69	0.0
70 0 - 2% of mass 69	0.5
127 10 - 80% of mass 198	51.8
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.7
275 10 - 60% of mass 198	26.6
365 1 - 100% of mass 198	3.4
441 0.01 - 24% of mass 442	10.6
442 50 - 150% of mass 198	104.5
443 15 - 24% of mass 442	19.5



Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87940  
 Matrix: Water  
 ID: 0124Y053.D

SDG No: 87940  
 Date Analyzed: 01/30/19  
 Instrument: Yoda  
 Time Analyzed: 7:56

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/mL 8270 01/24/	0124Y054.D	01/30/19 14:28
2	Blank	190128A BLK 1/800	0124Y055.D	01/30/19 14:56
3	Lab Control Spike	190128A LCS-1 1/800	0124Y056.D	01/30/19 15:24
4	Lab Control Spiked	190128A LCSD-1 1/800	0124Y057.D	01/30/19 15:52
5	ERH736	AZ85565W22 1/800	0124Y063.D	01/30/19 18:39
6	ERH741	AZ85567W22 1/800	0124Y064.D	01/30/19 19:07
7		50ug/mL 8270 01/24/	0124Y065.D	01/30/19 19:35
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20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	38.3
68 0 - 2% of mass 69	0.0
70 0 - 2% of mass 69	0.4
127 10 - 80% of mass 198	52.6
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 197.95	100.0
199 5 - 9% of mass 198	7.0
275 10 - 60% of mass 198	25.0
365 1 - 100% of mass 198	2.9
441 0.01 - 24% of mass 442	12.7
442 50 - 150% of mass 197.95	91.4
443 15 - 24% of mass 442	18.4

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 87940  
 Matrix: Water  
 ID: 0124Y094.D

SDG No: 87940  
 Date Analyzed: 02/01/19  
 Instrument: Yoda  
 Time Analyzed: 13:23

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/mL 8270 01/24/	0124Y095.D	02/01/19 13:38
2	Blank	190130A Blk 1/800	0124Y098.D
3	Lab Control Spike	190130A LCS-1 1/800	0124Y099.D
4	Lab Control Spiked	190130A LCSD-1 1/800	0124Y100.D
5		AZ85562W31 MS-1 1/80	0124Y101.D
6		AZ85562W33 MSD-1 1/8	0124Y102.D
7	ERH730	AZ85562W36 1/800	0124Y103.D
8	ERH731	AZ85563W10 1/800	0124Y104.D
9	ERH749	AZ85569W22 1/800	0124Y105.D
10	50ug/mL 8270 01/24/	0124Y115.D	02/02/19 0:12
11			
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19			
20			
21			
22			

m/e	
51	9.95 - 80.04% of mass 198
68	0 - 2% of mass 69
70	0 - 2% of mass 69
127	10 - 80% of mass 198
197	0 - 2% of mass 198
198	100 - 100% of mass 198
199	5 - 9% of mass 198
275	10 - 60% of mass 198
365	1 - 100% of mass 198
441	0.01 - 24% of mass 442
442	50 - 150% of mass 198
443	15 - 24% of mass 442

<u>33.4</u>
<u>0.0</u>
<u>0.6</u>
<u>49.6</u>
<u>0.0</u>
<u>100.0</u>
<u>6.7</u>
<u>28.3</u>
<u>3.4</u>
<u>16.1</u>
<u>115.1</u>
<u>18.9</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0124Y054.D Date Analyzed: 01/30/19  
 Instrument ID: Yoda Time Analyzed: 14:28  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Naphthalene-D8(IS)		Acenaphthene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	482742		5.46		2108170		6.90	
	UPPER LIMIT	965484		5.63		4216340		7.07	
	LOWER LIMIT	241371		5.29		1054085		6.73	
	SAMPLE NO.								
01	190128A BLK 1/800	397504		5.47		1702990		6.90	
02	190128A LCS-1 1/800	457917		5.47		1909310		6.91	
03	190128A LCSD-1 1/800	451272		5.47		1964860		6.90	
04	AZ85565W22 1/800	571164		5.47		2341410		6.91	
05	AZ85567W22 1/800	552229		5.47		2274100		6.90	
06	50ug/mL 8270 01/24/19	457117		5.47		1949790		6.90	
07									
08									
09									
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22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0124Y054.D Date Analyzed: 01/30/19  
 Instrument ID: Yoda Time Analyzed: 14:28  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)		
	AREA	#	RT	#	AREA	#	RT
12 HOUR STD	2236670		10.66		1992380		13.76
UPPER LIMIT	4473340		10.83		3984760		13.93
LOWER LIMIT	1118335		10.49		996190		13.59
SAMPLE NO.							
01	190128A BLK 1/800	2087360	10.66		1877560		13.75
02	190128A LCS-1 1/800	2176920	10.66		1926870		13.76
03	190128A LCSD-1 1/800	2164130	10.66		1894710		13.75
04	AZ85565W22 1/800	2253850	10.66		1995170		13.75
05	AZ85567W22 1/800	2223150	10.66		1934700		13.75
06	50ug/mL 8270 01/24/19	2075610	10.66		1848020		13.76
07							
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0124Y095.D Date Analyzed: 1 Feb 19 13:38  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 13:38  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Naphthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		416513	5.46	1765190	6.90	989986	8.92
UPPER LIMIT		833026	5.63	3530380	7.07	1979972	9.09
LOWER LIMIT		208257	5.29	882595	6.73	494993	8.75
SAMPLE NO.							
01	190130A Bik 1/800	407906	5.46	1730020	6.90	912178	8.92
02	190130A LCS-1 1/800	511564	5.47	2139040	6.91	1151770	8.92
03	190130A LCSD-1 1/800	493547	5.47	2051250	6.91	1092290	8.92
04	AZ85562W31 MS-1 1/800	418588	5.47	1926790	6.91	1188480	8.92
05	AZ85562W33 MSD-1 1/800	559694	5.47	2393200	6.91	1271030	8.92
06	AZ85562W36 1/800	383183	5.46	1713930	6.90	1126370	8.92
07	AZ85563W10 1/800	478515	5.47	2087910	6.90	1239250	8.92
08	AZ85569W22 1/800	490033	5.47	2023520	6.90	392953 *	8.92
09	50ug/mL 8270 01/24/19	496552	5.47	2165400	6.90	1244880	8.92
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AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0124Y095.D Date Analyzed: 1 Feb 19 13:38  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 13:38  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)			
	AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD	1903140		10.66		1732950		13.75	
UPPER LIMIT	3806280		10.83		3465900		13.92	
LOWER LIMIT	951570		10.49		866475		13.58	
SAMPLE NO.								
01	190130A Blk 1/800	1761480	10.66		1559810		13.75	1513970
02	190130A LCS-1 1/800	2179020	10.66		1955930		13.76	1751730
03	190130A LCSD-1 1/800	2061300	10.66		1805530		13.76	1080610
04	AZ85562W31 MS-1 1/800	2326560	10.66		2071460		13.76	2011030
05	AZ85562W33 MSD-1 1/800	2377170	10.66		2141740		13.76	2110060
06	AZ85562W36 1/800	2250250	10.66		2022740		13.75	1950870
07	AZ85563W10 1/800	2410370	10.66		2124760		13.75	2087390
08	AZ85569W22 1/800	1729260	10.66		780105 *		13.75	5118 *
09	50ug/mL 8270 01/24/19	2389880	10.66		2082070		13.76	2039770
10								
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22								

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190128A-BLK

Time Analyzed: 2036

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-MS	Matrix Spike	1128Y073	01/29/19 1529
190128A-MSD	Matrix SpikeD	1128Y074	01/29/19 1552
AZ85562	ERH730	1128Y075	01/29/19 1616
AZ85563	ERH731	1128Y076	01/29/19 1640
AZ85565	ERH736	1128Y077	01/29/19 1703
AZ85567	ERH741	1128Y078	01/29/19 1727
190128A-BLK	Blank	1128Y086	01/29/19 2036
AZ85569	ERH749	1128Y096	01/30/19 0941
190128A-LCS	Lab Control Spike	1128Y102	02/01/19 0956
190128A-LCSD	Lab Control SpikeD	1128Y103	02/01/19 1019

Comments: Batch: #87DME-190128A

Printed: 02/04/19 11:54:26 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D MODIFIED WATER**

Blank Name/QCG: **190128W-85562 - 237008**  
Batch ID: #87DME-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method:YMEE1128.M  
Run #: 1128Y086  
Instrument:Yoda  
Sequence:Y181128M  
Initials:AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 10:51:22 AM



**EPA 8270D**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190128A-LCS

Time Analyzed: 0956

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-MS	Matrix Spike	1128Y073	01/29/19 1529
190128A-MSD	Matrix SpikeD	1128Y074	01/29/19 1552
AZ85562	ERH730	1128Y075	01/29/19 1616
AZ85563	ERH731	1128Y076	01/29/19 1640
AZ85565	ERH736	1128Y077	01/29/19 1703
AZ85567	ERH741	1128Y078	01/29/19 1727
190128A-BLK	Blank	1128Y086	01/29/19 2036
AZ85569	ERH749	1128Y096	01/30/19 0941
190128A-LCS	Lab Control Spike	1128Y102	02/01/19 0956
190128A-LCSD	Lab Control SpikeD	1128Y103	02/01/19 1019

Comments: Batch: #87DME-190128A

**Laboratory Control Spike Recoveries**  
**EPA 8270D MODIFIED WATER**

APPL ID: 190128W-85562 LCS - 237008  
 Batch ID: #87DME-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	88.7	58.5	111	73.1	30-130	41.0 #	20

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	1128Y102	1128Y103
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D MODIFIED WATER

APPL ID: 190128W-85562 MS - 237008  
 Batch ID: #87DME-190128A  
 Sample ID: AZ85562  
 Client ID: ERH730

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	ND	73.1	77.2	91.4	96.5	30-130	5.5	20

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Yoda	Yoda
Run :	1128Y073	1128Y074
Initials :	AAB	

Printed: 01/30/19 10:51:07 AM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1128Y002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 11/28/18  
Instrument: Yoda  
Time Analyzed: 7:30

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/ml MEE 08/01/18	1128Y004.D	11/28/18 8:08
2	100ug/ml MEE 08/01/1	1128Y005.D	11/28/18 8:32
3	200ug/ml MEE 08/01/1	1128Y006.D	11/28/18 8:55
4	400ug/ml MEE 08/01/1	1128Y007.D	11/28/18 9:19
5	600ug/ml MEE 08/01/1	1128Y008.D	11/28/18 9:43
6	800ug/ml MEE 08/01/1	1128Y009.D	11/28/18 10:06
7	1000ug/ml MEE 08/01/	1128Y010.D	11/28/18 10:30
8	500ug/ml MEE 08/01/1	1128Y012.D	11/28/18 11:17
9	SS ug/ml MEE 08/01/1	1128Y014.D	11/28/18 12:26
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19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	37.6
68 0 - 2.04% of mass 69	0.0
70 0 - 2.04% of mass 69	0.4
127 10 - 80% of mass 198	49.3
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.6
275 10 - 60% of mass 198	27.6
365 1 - 100% of mass 198	3.7
441 0.01 - 24% of mass 442	15.6
442 50 - 150% of mass 198	104.9
443 15 - 24% of mass 442	19.5

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87940  
Matrix: Water  
ID: 1128Y056.D

SDG No: 87940  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Time Analyzed: 8:36

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/mL mee 12/12/1	1128Y057.D	01/29/19 8:51
2		AZ85562W26 MS-1 2/50	1128Y073.D	01/29/19 15:29
3		AZ85562W25 MSD-1 2/5	1128Y074.D	01/29/19 15:52
4	ERH730	AZ85562W24 2/500	1128Y075.D	01/29/19 16:16
5	ERH731	AZ85563W05 2/500	1128Y076.D	01/29/19 16:40
6	ERH736	AZ85565W19 2/500	1128Y077.D	01/29/19 17:03
7	ERH741	AZ85567W19 2/500	1128Y078.D	01/29/19 17:27
8	Blank	190128A BLK 2/500	1128Y086.D	01/29/19 20:36
9		500ug/ml MEE 12/19/1	1128Y088.D	01/29/19 21:24
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	35.4
68 0 - 2.04% of mass 69	0.0
70 0 - 2.04% of mass 69	0.6
127 10 - 80% of mass 198	50.5
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.9
275 10 - 60% of mass 198	26.7
365 1 - 100% of mass 198	3.4
441 0.01 - 24% of mass 442	16.9
442 50 - 150% of mass 198	103.1
443 15 - 24% of mass 442	19.9

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87940  
Matrix: Water  
ID: 1128Y093.D

SDG No: 87940  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Time Analyzed: 7:56

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	500ug/ml MEE 12/19/1	1128Y094.D	01/30/19 8:52
2	ERH749	AZ85569W19 2/500	01/30/19 9:41
3	500ug/ml MEE 12/19/1	1128Y098.D	01/30/19 11:16
4			
5			
6			
7			
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11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>38.3</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.4</u>
127 10 - 80% of mass 198	<u>52.6</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 197.95	<u>100.0</u>
199 5 - 9% of mass 198	<u>7.0</u>
275 10 - 60% of mass 198	<u>25.0</u>
365 1 - 100% of mass 198	<u>2.9</u>
441 0.01 - 24% of mass 442	<u>12.7</u>
442 50 - 150% of mass 197.95	<u>91.4</u>
443 15 - 24% of mass 442	<u>18.4</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1128Y100.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 02/01/19  
 Instrument: Yoda  
 Time Analyzed: 9:17

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/ml MEE 12/19/1	1128Y101.D	02/01/19 9:32
2	Lab Control Spike	190128A LCS-1 2/500	1128Y102.D	02/01/19 9:56
3	Lab Control SpikeD	190128A LCSD-1 2/500	1128Y103.D	02/01/19 10:19
4		500ug/ml MEE 12/19/1	1128Y104.D	02/01/19 10:44
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80.04% of mass 198	<u>34.6</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>49.0</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>27.4</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>10.5</u>
442 50 - 150% of mass 198	<u>105.3</u>
443 15 - 24% of mass 442	<u>18.8</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 1128Y057.D Date Analyzed: 01/29/19  
 Instrument ID: Yoda Time Analyzed: 8:51  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		614573	5.22	2630250	6.65	1440510	8.67
UPPER LIMIT		1229146	5.39	5260500	6.82	2881020	8.84
LOWER LIMIT		307287	5.05	1315125	6.48	720255	8.50
SAMPLE NO.							
01	AZ85562W26 MS-1 2/50	386171	5.23	1608490	6.66	868323	8.67
02	AZ85562W25 MSD-1 2/	348349	5.24	1414780	6.66	877453	8.67
03	AZ85562W24 2/500	467815	5.24	1901400	6.65	997037	8.67
04	AZ85563W05 2/500	375546	5.24	1547150	6.65	796285	8.67
05	AZ85565W19 2/500	412590	5.24	1675950	6.65	953136	8.67
06	AZ85567W19 2/500	409113	5.24	1667330	6.66	944567	8.67
07	190128A BLK 2/500	429029	5.25	1804760	6.66	894647	8.67
08	500ug/ml MEE 12/19/18	611145	5.23	2644720	6.66	1462930	8.67
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 1128Y094.D Date Analyzed: 01/30/19  
 Instrument ID: Yoda Time Analyzed: 8:52  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	518699		5.23		2104680		6.65	
	UPPER LIMIT	1037398		5.40		4209360		6.82	
	LOWER LIMIT	259350		5.06		1052340		6.48	
	SAMPLE NO.								
01	AZ85569W19 2/500	337996		5.25		1498810		6.66	
02	500ug/ml MEE 12/19/18	504597		5.24		2027190		6.66	
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 1128Y101.D Date Analyzed: 1 Feb 19 9:32  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 9:32  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	468889		5.24		1873590		6.65	
	UPPER LIMIT	937778		5.41		3747180		6.82	
	LOWER LIMIT	234445		5.07		936795		6.48	
	SAMPLE NO.								
01	190128A LCS-1 2/500	307091		5.24		1402120		6.66	
02	190128A LCSD-1 2/500	403357		5.23		1743270		6.66	
03	500ug/ml MEE 12/19/18	464116		5.25		1879800		6.65	
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190125AL-BLK	Blank	81-118	118		85-114	93.6	
190125AL-LCS	Lab Control Spike	81-118	117		85-114	97.6	
190125AL-LCSD	Lab Control SpikeD	81-118	114		85-114	94.0	
AZ85561	ERH729	81-118	112		85-114	93.3	
AZ85562	ERH730	81-118	110		85-114	90.8	
AZ85563	ERH731	81-118	111		85-114	90.3	
AZ85564	ERH735	81-118	111		85-114	94.7	
AZ85565	ERH736	81-118	115		85-114	91.3	
AZ85566	ERH740	81-118	108		85-114	86.9	
AZ85567	ERH741	81-118	114		85-114	90.5	
AZ85568	ERH748	81-118	110		85-114	91.4	
AZ85569	ERH749	81-118	116		85-114	92.9	
AZ85562-MS	Matrix Spike	81-118	110		85-114	90.4	
AZ85562-MSD	Matrix SpikeD	81-118	110		85-114	95.6	

Comments: Batch: #86BTO-190125AL

Printed: 01/31/19 1:26:04 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190125AL-BLK	Blank	80-119	117		89-112	104	
190125AL-LCS	Lab Control Spike	80-119	116		89-112	106	
190125AL-LCSD	Lab Control SpikeD	80-119	110		89-112	106	
AZ85561	ERH729	80-119	110		89-112	105	
AZ85562	ERH730	80-119	108		89-112	101	
AZ85563	ERH731	80-119	111		89-112	102	
AZ85564	ERH735	80-119	113		89-112	107	
AZ85565	ERH736	80-119	115		89-112	106	
AZ85566	ERH740	80-119	109		89-112	98.4	
AZ85567	ERH741	80-119	114		89-112	105	
AZ85568	ERH748	80-119	111		89-112	105	
AZ85569	ERH749	80-119	118		89-112	109	
AZ85562-MS	Matrix Spike	80-119	109		89-112	107	
AZ85562-MSD	Matrix SpikeD	80-119	107		89-112	116	*

Comments: Batch: #86BTO-190125AL

\* = Recovery outside of Control Limits on QC Sample.

Printed: 01/31/19 1:26:04 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

LCS ID: 190125AL-LCS

Time Analyzed: 1356

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125AL-BLK	Blank	0125L04	01/25/19 1008
190125AL-LCS	Lab Control Spike	0125L12	01/25/19 1356
190125AL-LCSD	Lab Control SpikeD	0125L13	01/25/19 1425
AZ85561	ERH729	0125L15	01/25/19 1522
AZ85562	ERH730	0125L16	01/25/19 1551
AZ85563	ERH731	0125L17	01/25/19 1619
AZ85564	ERH735	0125L18	01/25/19 1648
AZ85565	ERH736	0125L19	01/25/19 1717
AZ85566	ERH740	0125L20	01/25/19 1745
AZ85567	ERH741	0125L21	01/25/19 1814
AZ85568	ERH748	0125L22	01/25/19 1842
AZ85569	ERH749	0125L23	01/25/19 1911
190125AL-MS	Matrix Spike	0125L24	01/25/19 1940
190125AL-MSD	Matrix SpikeD	0125L25	01/25/19 2008

Comments: Batch: #86BTO-190125AL

Printed: 01/31/19 1:25:59 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: 190125W-85562 LCS - 236885  
 Batch ID: #86BTO-190125AL

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	11.1	10.5	111	105	79-120	5.6	20
ETHYLBENZENE	10.00	10.0	9.70	100	97.0	79-121	3.0	20
TOLUENE	10.00	8.26	7.89	82.6	78.9 #	80-121	4.6	20
XYLENES (TOTAL)	30.0	29.5	28.9	98.3	96.3	79-121	2.1	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	29.3	28.5	117	114	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.4	23.5	97.6	94.0	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	29.0	27.6	116	110	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	26.4	26.4	106	106	89-112		
-----								

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	L0121W.M	L0121W.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Loki	Loki
Run :	0125L12	0125L13
Initials :	DG	

**Matrix Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: 190125W-85562 MS - 236885  
Batch ID: #86BTO-190125AL  
Sample ID: AZ85562  
Client ID: ERH730

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	ND	9.26	9.00	92.6	90.0	79-120	2.8	20
ETHYLBENZENE	10.00	ND	8.66	8.51	86.6	85.1	79-121	1.7	20
TOLUENE	10.00	ND	6.98	7.00	69.8 #	70.0 #	80-121	0.29	20
XYLENES (TOTAL)	30.0	ND	23.7	24.4	79.0	81.3	79-121	2.9	20
-----									
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	NA	27.5	27.6	110	110	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	22.6	23.9	90.4	95.6	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	NA	27.2	26.8	109	107	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	NA	26.7	29.1	107	116 #	89-112		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	L0121W.M	L0121W.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Loki	Loki
Run :	0125L24	0125L25
Initials :	DG	

Printed: 01/31/19 1:26:18 PM  
APPL MSD SCII

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

Blank ID: 190125AL-BLK

Time Analyzed: 1008

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125AL-BLK	Blank	0125L04	01/25/19 1008
190125AL-LCS	Lab Control Spike	0125L12	01/25/19 1356
190125AL-LCSD	Lab Control SpikeD	0125L13	01/25/19 1425
AZ85561	ERH729	0125L15	01/25/19 1522
AZ85562	ERH730	0125L16	01/25/19 1551
AZ85563	ERH731	0125L17	01/25/19 1619
AZ85564	ERH735	0125L18	01/25/19 1648
AZ85565	ERH736	0125L19	01/25/19 1717
AZ85566	ERH740	0125L20	01/25/19 1745
AZ85567	ERH741	0125L21	01/25/19 1814
AZ85568	ERH748	0125L22	01/25/19 1842
AZ85569	ERH749	0125L23	01/25/19 1911
190125AL-MS	Matrix Spike	0125L24	01/25/19 1940
190125AL-MSD	Matrix SpikeD	0125L25	01/25/19 2008

Comments: Batch: #86BTO-190125AL

Printed: 01/31/19 1:26:01 PM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **190125W-85562 - 236885**  
Batch ID: #86BTO-190125AL

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/25/19	01/25/19
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/25/19	01/25/19
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/25/19	01/25/19
BLANK	SURROGATE: 1,2-DICHLOROET	118	81-118			%	01/25/19	01/25/19
BLANK	SURROGATE: 4-BROMOFLUORO	93.6	85-114			%	01/25/19	01/25/19
BLANK	SURROGATE: DIBROMOFLUOR	117	80-119			%	01/25/19	01/25/19
BLANK	SURROGATE: TOLUENE-D8 (S)	104	89-112			%	01/25/19	01/25/19

Quant Method: L0121W.M  
Run #: 0125L04  
Instrument: Loki  
Sequence: 190121  
Initials: DG

GC SC-Blank-REG MDLs-DOD  
Printed: 01/31/19 1:26:27 PM

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0121L01.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Time Analyzed: 15:04

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 1/21	0121L07.D	01/21/19 17:50
2	0.5ug/L VOC STD 1/21	0121L08.D	01/21/19 18:18
3	1.0ug/L VOC STD 1/21	0121L09.D	01/21/19 18:47
4	2.0ug/L VOC STD 1/21	0121L10.D	01/21/19 19:16
5	5.0ug/L VOC STD 1/21	0121L11.D	01/21/19 19:44
6	10ug/L VOC STD 1/21/	0121L12.D	01/21/19 20:13
7	20ug/L VOC STD 1/21/	0121L13.D	01/21/19 20:41
8	40ug/L VOC STD 1/21/	0121L14.D	01/21/19 21:10
9	50ug/L VOC STD 1/21/	0121L15.D	01/21/19 21:38
10	100ug/L VOC STD 1/21	0121L16.D	01/21/19 22:07
11	(SS)10ug/L VOC STD 1	0121L19.D	01/21/19 23:32
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	17.6
75 30 - 60% of mass 95	49.8
95 100 - 100% of mass 95	100.0
96 5 - 9% of mass 95	6.5
173 0 - 2% of mass 174	1.0
174 50 - 100% of mass 95	97.7
175 5 - 9% of mass 174	8.0
176 94.95 - 101% of mass 174	98.3
177 5 - 9% of mass 176	7.2

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87940  
Matrix: Water  
ID: 0125L01.D

SDG No: 87940  
Date Analyzed: 01/25/19  
Instrument: Loki  
Time Analyzed: 8:49

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		190125A CCV 10ug/L	0125L02.D
2	Blank	190125A BIK	0125L04.D
3	Lab Control Spike	190125A LCS 10ug/L	0125L12.D
4	Lab Control SpikeD	190125A LCSD 10ug/L	0125L13.D
5	ERH729	AZ85561W01	0125L15.D
6	ERH730	AZ85562W01	0125L16.D
7	ERH731	AZ85563W01	0125L17.D
8	ERH735	AZ85564W01	0125L18.D
9	ERH736	AZ85565W01	0125L19.D
10	ERH740	AZ85566W01	0125L20.D
11	ERH741	AZ85567W01	0125L21.D
12	ERH748	AZ85568W01	0125L22.D
13	ERH749	AZ85569W01	0125L23.D
14		AZ85562W234 MS 10ug/	0125L24.D
15		AZ85562W234 MSD 10ug	0125L25.D
16		Ending CCV 10ug/L 1/	0125L28.D
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>20.2</u>
75 30 - 60% of mass 95	<u>51.1</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>7.1</u>
173 0 - 2% of mass 174	<u>1.5</u>
174 50 - 100% of mass 95	<u>93.9</u>
175 5 - 9% of mass 174	<u>8.0</u>
176 94.95 - 101% of mass 174	<u>98.1</u>
177 5 - 9% of mass 176	<u>7.8</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 0121L12.D Date Analyzed: 01/21/19  
 Instrument ID: Loki Time Analyzed: 20:13  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)			
		AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD		368896		6.50		312384		9.97	
UPPER LIMIT		737792		6.67		624768		10.14	
LOWER LIMIT		184448		6.33		156192		9.80	
SAMPLE NO.									
01	(SS)10ug/L VOC STD 1	352704		6.50		315584		9.97	
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87940  
 Lab File ID (Standard): 0125L02.D Date Analyzed: 01/25/19  
 Instrument ID: Loki Time Analyzed: 9:11  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	317696	6.50	239488	9.97	118256	12.54
UPPER LIMIT	635392	6.67	478976	10.14	236512	12.71
LOWER LIMIT	158848	6.33	119744	9.80	59128	12.37
SAMPLE NO.						
01 190125A Blk	344704	6.50	247040	9.97	121128	12.53
02 190125A LCS 10ug/L	366144	6.50	247104	9.97	131968	12.54
03 190125A LCSD 10ug/L	382464	6.50	250944	9.97	132352	12.54
04 AZ85561W01	376448	6.50	241536	9.97	123744	12.53
05 AZ85562W01	380608	6.50	246400	9.97	124416	12.54
06 AZ85563W01	370304	6.50	242752	9.97	120472	12.54
07 AZ85564W01	369024	6.50	230272	9.97	113144	12.54
08 AZ85565W01	352704	6.50	230144	9.97	120976	12.53
09 AZ85566W01	381376	6.50	249344	9.97	128984	12.54
10 AZ85567W01	354816	6.50	229184	9.97	116376	12.53
11 AZ85568W01	368640	6.50	236608	9.97	121904	12.54
12 AZ85569W01	352512	6.50	225088	9.97	111120	12.54
13 AZ85562W234 MS 10ug	391744	6.50	249152	9.97	123800	12.53
14 AZ85562W234 MSD 10	398464	6.50	241472	9.97	128936	12.54
15 Ending CCV 10ug/L 1/25	386752	6.50	234560	9.97	122696	12.54
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)			Limits	Result	Qualifier
		Limits	Result	Qualifier			
190125AL1-BLK	Blank	85-114	93.6				
190125AL1-LCS	Lab Control Spike	85-114	97.2				
190125AL1-LCSD	Lab Control SpikeD	85-114	98.0				
AZ85561	ERH729	85-114	93.3				
AZ85562	ERH730	85-114	90.8				
AZ85563	ERH731	85-114	90.3				
AZ85564	ERH735	85-114	94.7				
AZ85565	ERH736	85-114	91.3				
AZ85566	ERH740	85-114	86.9				
AZ85567	ERH741	85-114	90.5				
AZ85568	ERH748	85-114	91.4				
AZ85569	ERH749	85-114	92.9				
AZ85562-MS	Matrix Spike	85-114	88.8				
AZ85562-MSD	Matrix SpikeD	85-114	94.4				

Comments: Batch: #GRO86-190125AL

Printed: 01/31/19 2:08:06 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

Blank ID: 190125AL1-BLK

Time Analyzed: 1009

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190125AL1-BLK	Blank	0125L04	01/25/19 1009
190125AL1-LCS	Lab Control Spike	0125L10	01/25/19 1300
190125AL1-LCSD	Lab Control SpikeD	0125L11	01/25/19 1329
AZ85561	ERH729	0125L15	01/25/19 1522
AZ85562	ERH730	0125L16	01/25/19 1551
AZ85563	ERH731	0125L17	01/25/19 1619
AZ85564	ERH735	0125L18	01/25/19 1648
AZ85565	ERH736	0125L19	01/25/19 1717
AZ85566	ERH740	0125L20	01/25/19 1745
AZ85567	ERH741	0125L21	01/25/19 1814
AZ85568	ERH748	0125L22	01/25/19 1842
AZ85569	ERH749	0125L23	01/25/19 1911
190125AL1-MS	Matrix Spike	0125L26	01/25/19 2037
190125AL1-MSD	Matrix SpikeD	0125L27	01/25/19 2105

Comments: Batch: #GRO86-190125AL

Printed: 01/31/19 2:08:04 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **190125W-85562 - 237064**

Batch ID: #GRO86-190125AL1

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/25/19	01/25/19
BLANK	SURROGATE: 4-BROMOFLUORO	93.6	85-114			%	01/25/19	01/25/19

Quant Method: L0121SUR.M  
Run #: 0125L04  
Instrument: Loki  
Sequence: 190121  
Initials: DG

GC SC-Blank-REG MDLs-DOD  
Printed: 01/31/19 2:08:16 PM



# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Loki

LCS ID: 190125AL1-LCS

Time Analyzed: 1300

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125AL1-BLK	Blank	0125L04	01/25/19 1009
190125AL1-LCS	Lab Control Spike	0125L10	01/25/19 1300
190125AL1-LCSD	Lab Control SpikeD	0125L11	01/25/19 1329
AZ85561	ERH729	0125L15	01/25/19 1522
AZ85562	ERH730	0125L16	01/25/19 1551
AZ85563	ERH731	0125L17	01/25/19 1619
AZ85564	ERH735	0125L18	01/25/19 1648
AZ85565	ERH736	0125L19	01/25/19 1717
AZ85566	ERH740	0125L20	01/25/19 1745
AZ85567	ERH741	0125L21	01/25/19 1814
AZ85568	ERH748	0125L22	01/25/19 1842
AZ85569	ERH749	0125L23	01/25/19 1911
190125AL1-MS	Matrix Spike	0125L26	01/25/19 2037
190125AL1-MSD	Matrix SpikeD	0125L27	01/25/19 2105

Comments: Batch: #GRO86-190125AL

Printed: 01/31/19 2:08:01 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8260B GRO WATER**

APPL ID: **190125W-85562 LCS - 237064**  
 Batch ID: #GRO86-190125AL1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	303	318	101	106	78-122	4.8	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.3	24.5	97.2	98.0	85-114		

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0121SUR.M	L0121SUR.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Loki	Loki
Run :	0125L10	0125L11
Initials :	DG	

# Matrix Spike Recoveries

## EPA 8260B GRO WATER

APPL ID: 190125W-85562 MS - 237064  
 Batch ID: #GRO86-190125AL1  
 Sample ID: AZ85562  
 Client ID: ERH730

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	ND	257	290	85.7	96.7	78-122	12.1	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	22.2	23.6	88.8	94.4	85-114		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0121SUR.M	L0121SUR.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/25/19	01/25/19
Instrument :	Loki	Loki
Run :	0125L26	0125L27
Initials :	DG	

Printed: 01/31/19 2:08:08 PM  
 APPL MSD SCII

# RSK 175

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Rocky

Blank ID: 190128A-BLK

Time Analyzed: 1028

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-LCS	Lab Control Spike	19012800	01/28/19 1022
190128A-LCSD	Lab Control SpikeD	19012801	01/28/19 1025
190128A-BLK	Blank	19012802	01/28/19 1028
AZ85561	ERH729	19012813	01/28/19 1056
AZ85562	ERH730	19012814	01/28/19 1101
AZ85565	ERH736	19012816	01/28/19 1105
AZ85564	ERH735	19012817	01/28/19 1112
AZ85566	ERH740	19012818	01/28/19 1114
AZ85567	ERH741	19012819	01/28/19 1117
AZ85568	ERH748	19012820	01/28/19 1119
AZ85569	ERH749	19012821	01/28/19 1121

Comments: Batch: #RSKME-190128A

Printed: 01/28/19 12:07:43 PM  
Form 4, Blank Summary

**Method Blank**  
**METHANE**

Blank Name/QCG: **190128W-85519 - 236920**  
Batch ID: #RSKME-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method:RSK0120.M  
Run #: 19012802  
Instrument:Rocky  
Sequence:190120  
Initials:CMO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 12:07:55 PM

# RSK 175

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Rocky

LCS ID: 190128A-LCS

Time Analyzed: 1022

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A-LCS	Lab Control Spike	19012800	01/28/19 1022
190128A-LCSD	Lab Control SpikeD	19012801	01/28/19 1025
190128A-BLK	Blank	19012802	01/28/19 1028
AZ85561	ERH729	19012813	01/28/19 1056
AZ85562	ERH730	19012814	01/28/19 1101
AZ85565	ERH736	19012816	01/28/19 1105
AZ85564	ERH735	19012817	01/28/19 1112
AZ85566	ERH740	19012818	01/28/19 1114
AZ85567	ERH741	19012819	01/28/19 1117
AZ85568	ERH748	19012820	01/28/19 1119
AZ85569	ERH749	19012821	01/28/19 1121

Comments: Batch: #RSKME-190128A

Printed: 01/28/19 12:07:39 PM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## METHANE

APPL ID: 190128W-85519 LCS - 236920  
 Batch ID: #RSKME-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	97.5	98.5	117	118	72-125	1.0	30

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	RSK0120.M	RSK0120.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Rocky	Rocky
Run :	19012800	19012801
Initials :	CMO	

# SM3500FeB

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/24/19

Matrix: WATER

Instrument: Manual Spec

Blank ID: 190124A-BLK

Time Analyzed: 0827

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190124A-BLK	Blank	11	01/24/19 0827
190124A-LCS	Lab Control Spike	13	01/24/19 0828
190124A-LCSD	Lab Control SpikeD	14	01/24/19 0829
AZ85569	ERH749	29	01/24/19 1802
AZ85565	ERH736	30	01/24/19 1802

Comments: Batch: #35FE-190124A

Printed: 02/17/19 9:35:36 AM  
Form 4, Blank Summary



# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	01/24/19	01/24/19	#35FE-190124A-AZ85558

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# SM3500FeB

Form 4

## Blank Summary

Lab Name: APPL, Inc.  
Case No: 87940  
Matrix: WATER  
Blank ID: 190125A-BLK

SDG No: 87940  
Date Analyzed: 01/25/19  
Instrument: Manual Spec  
Time Analyzed: 0921

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190125A-BLK	Blank	2	01/25/19 0921
AZ85562	ERH730	21	01/25/19 1248
AZ85567	ERH741	23	01/25/19 1249
190125A-LCS	Lab Control Spike	3	01/25/19 0922
190125A-LCSD	Lab Control SpikeD	4	01/25/19 0923

Comments: Batch: #35FE-190125A

Printed: 02/17/19 9:35:36 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	01/25/19	01/25/19	#35FE-190125A-AZ85562

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/24/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190124A-BLK

Time Analyzed: 1305

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190124A-BLK	Blank	11	01/24/19 1305
190124A-LCS	Lab Control Spike	12	01/24/19 1312
190124A-LCSD	Lab Control SpikeD	13	01/24/19 1320
AZ85565	ERH736	42	01/24/19 1826
AZ85562	ERH730	43	01/24/19 1833

Comments: Batch: #300W-190124A

Printed: 02/17/19 9:35:35 AM

Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.20 U	1.0	0.20	0.08	mg/L	01/24/19	01/24/19	#300W-190124A-AZ85562
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	01/24/19	01/24/19	#300W-190124A-AZ85562
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/24/19	01/24/19	#300W-190124A-AZ85562

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190125A1-BLK

Time Analyzed: 2007

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85569	ERH749	33	01/25/19 1823
AZ85567	ERH741	45	01/25/19 1952
190125A1-BLK	Blank	47	01/25/19 2007
190125A1-LCS	Lab Control Spike	48	01/25/19 2014
190125A1-LCSD	Lab Control SpikeD	49	01/25/19 2022

Comments: Batch: #300W-190125A1

Printed: 02/17/19 9:35:35 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.15 J	1.0	0.20	0.08	mg/L	01/25/19	01/25/19	#300W-190125A1-AZ85567
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	01/25/19	01/25/19	#300W-190125A1-AZ85567
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/25/19	01/25/19	#300W-190125A1-AZ85567

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190128A2-BLK

Time Analyzed: 1002

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
AZ85562	ERH730	19	01/28/19 1510
190128A2-BLK	Blank	2	01/28/19 1002
AZ85569	ERH749	20	01/28/19 1518
190128A2-LCS	Lab Control Spike	3	01/28/19 1009
190128A2-LCSD	Lab Control SpikeD	4	01/28/19 1017

Comments: Batch: #300WD-190128A2

Printed: 02/17/19 9:35:36 AM  
Form 4, Blank Summary



# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.13 J	1.0	0.20	0.08	mg/L	01/28/19	01/28/19	#300WD-190128A2-AZ85562
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/28/19	01/28/19	#300WD-190128A2-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# EPA 353.2

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

Blank ID: 190128A-BLK

Time Analyzed: 1642

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85562	ERH730	24	01/28/19 1708
AZ85565	ERH736	27	01/28/19 1715
AZ85567	ERH741	28	01/28/19 1716
AZ85569	ERH749	29	01/28/19 1717

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:35:36 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	01/28/19	01/28/19	#35OF-190128A-AZ85562

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# SM 2320B

Form 4

## Blank Summary

Lab Name: APPL, Inc. SDG No: 87940  
Case No: 87940 Date Analyzed: 01/30/19  
Matrix: WATER Instrument: Tiamo  
Blank ID: 190130A-BLK Time Analyzed: 1332

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	1	01/30/19 1332
AZ85565	ERH736	12	01/30/19 1454
AZ85567	ERH741	13	01/30/19 1500
AZ85569	ERH749	14	01/30/19 1511
190130A-LCS	Lab Control Spike	2	01/30/19 1335
190130A-LCSD	Lab Control SpikeD	3	01/30/19 1345
AZ85562	ERH730	8	01/30/19 1421

Comments: Batch: #232W-190130A

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS CA	1.5 J	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	CARBONATE AS CACO	1.70 U	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	TOTAL ALKALINITY AS	1.5 J	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# SW846 9060A

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/12/19

Matrix: WATER

Instrument: Manual

Blank ID: 190212A-BLK

Time Analyzed: 1513

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85569	ERH749		02/13/19 0607
190212A-BLK	Blank		02/12/19 1513
190212A-LCS	Lab Control Spike		02/13/19 1258
190212A-LCSD	Lab Control SpikeD		02/13/19 1113
AZ85562	ERH730		02/13/19 0254
AZ85565	ERH736		02/13/19 0358
AZ85567	ERH741		02/13/19 0502

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:35:36 AM

Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SW846 90	TOTAL ORGANIC CAR	0.23 J	0.93	0.350	0.130	mg/L	02/12/19	02/12/19	CDOCW-190212A-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:35:38 AM

# SM3500FeB

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/24/19

Matrix: WATER

Instrument: Manual Spec

LCS ID: 190124A-LCS

Time Analyzed: 0828

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190124A-BLK	Blank	11	01/24/19 0827
190124A-LCS	Lab Control Spike	13	01/24/19 0828
190124A-LCSD	Lab Control SpikeD	14	01/24/19 0829
AZ85569	ERH749	29	01/24/19 1802
AZ85565	ERH736	30	01/24/19 1802

Comments: Batch: #35FE-190124A

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary



## Laboratory Control Spike Recoveries

### WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.07	3.07	102	102	0.0	20	80-120	01/24/19	01/24/19	01/24/19	01/24/19	#35FE-190124A-AZ85558

Comments: \_\_\_\_\_

# SM3500FeB

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Manual Spec

LCS ID: 190125A-LCS

Time Analyzed: 0922

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190125A-BLK	Blank	2	01/25/19 0921
AZ85562	ERH730	21	01/25/19 1248
AZ85567	ERH741	23	01/25/19 1249
190125A-LCS	Lab Control Spike	3	01/25/19 0922
190125A-LCSD	Lab Control SpikeD	4	01/25/19 0923

Comments: Batch: #35FE-190125A

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.10	3.09	103	103	0.32	20	80-120	01/25/19	01/25/19	01/25/19	01/25/19	#35FE-190125A-AZ85562

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/24/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190124A-LCS

Time Analyzed: 1312

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190124A-BLK	Blank	11	01/24/19 1305
190124A-LCS	Lab Control Spike	12	01/24/19 1312
190124A-LCSD	Lab Control SpikeD	13	01/24/19 1320
AZ85565	ERH736	42	01/24/19 1826
AZ85562	ERH730	43	01/24/19 1833

Comments: Batch: #300W-190124A

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	25.0	25.0	100	100	0.0	20	90-110	01/24/19	01/24/19	01/24/19	01/24/19	#300W-190124A-AZ85562
EPA 300.0	NITRATE	22.1	22.0	22.0	99.5	99.5	0.0	20	90-110	01/24/19	01/24/19	01/24/19	01/24/19	#300W-190124A-AZ85562
EPA 300.0	SULFATE	25.0	24.8	24.9	99.2	99.6	0.40	20	90-110	01/24/19	01/24/19	01/24/19	01/24/19	#300W-190124A-AZ85562

Comments:

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# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190125A1-LCS

Time Analyzed: 2014

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85569	ERH749	33	01/25/19 1823
AZ85567	ERH741	45	01/25/19 1952
190125A1-BLK	Blank	47	01/25/19 2007
190125A1-LCS	Lab Control Spike	48	01/25/19 2014
190125A1-LCSD	Lab Control SpikeD	49	01/25/19 2022

Comments: Batch: #300W-190125A1

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	25.4	25.4	102	102	0.0	20	90-110	01/25/19	01/25/19	01/25/19	01/25/19	#300W-190125A1-AZ8556
EPA 300.0	NITRATE	22.1	22.2	22.3	100	101	0.45	20	90-110	01/25/19	01/25/19	01/25/19	01/25/19	#300W-190125A1-AZ8556
EPA 300.0	SULFATE	25.0	25.2	25.2	101	101	0.0	20	90-110	01/25/19	01/25/19	01/25/19	01/25/19	#300W-190125A1-AZ8556

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190128A2-LCS

Time Analyzed: 1009

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85562	ERH730	19	01/28/19 1510
190128A2-BLK	Blank	2	01/28/19 1002
AZ85569	ERH749	20	01/28/19 1518
190128A2-LCS	Lab Control Spike	3	01/28/19 1009
190128A2-LCSD	Lab Control SpikeD	4	01/28/19 1017

Comments: Batch: #300WD-190128A2

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary



# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	25.3	24.1	101	96.4	4.9	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#300WD-190128A2-AZ855
EPA 300.0	SULFATE	25.0	25.1	25.1	100	100	0.0	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#300WD-190128A2-AZ855

Comments: \_\_\_\_\_

# EPA 353.2

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

LCS ID: 190128A-LCS

Time Analyzed: 1644

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85562	ERH730	24	01/28/19 1708
AZ85565	ERH736	27	01/28/19 1715
AZ85567	ERH741	28	01/28/19 1716
AZ85569	ERH749	29	01/28/19 1717

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE-N	3.00	2.99	3.07	99.7	102	2.6	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#35OF-190128A-AZ85562

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# SM 2320B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Tiamo

LCS ID: 190130A-LCS

Time Analyzed: 1335

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	1	01/30/19 1332
AZ85565	ERH736	12	01/30/19 1454
AZ85567	ERH741	13	01/30/19 1500
AZ85569	ERH749	14	01/30/19 1511
190130A-LCS	Lab Control Spike	2	01/30/19 1335
190130A-LCSD	Lab Control SpikeD	3	01/30/19 1345
AZ85562	ERH730	8	01/30/19 1421

Comments: Batch: #232W-190130A

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM 2320B	BICARBONATE AS CaCO3	250	228	241	91.2	96.4	5.5	20	90-110	01/30/19	01/30/19	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	TOTAL ALKALINITY AS CA	250	228	241	91.2	96.4	5.5	20	90-110	01/30/19	01/30/19	01/30/19	01/30/19	#232W-190130A-AZ85562

Comments: \_\_\_\_\_

# SW846 9060A

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87940

Case No: 87940

Date Analyzed: 02/13/19

Matrix: WATER

Instrument: Manual

LCS ID: 190212A-LCS

Time Analyzed: 1258

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85569	ERH749		02/13/19 0607
190212A-BLK	Blank		02/12/19 1513
190212A-LCS	Lab Control Spike		02/13/19 1258
190212A-LCSD	Lab Control SpikeD		02/13/19 1113
AZ85562	ERH730		02/13/19 0254
AZ85565	ERH736		02/13/19 0358
AZ85567	ERH741		02/13/19 0502

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:35:41 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SW846 90	TOTAL ORGANIC CARBO	2.00	2.17	2.17	109	109	0.0	20	90-110	02/13/19	02/13/19	02/13/19	02/13/19	#TOCDOCW-190212A-AZ8

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**ORGANICS**  
**Calibration Data**



TPH Extractables  
DOC0117

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/17/19  
Instrument: Apollo

Initials: \_\_\_\_\_

117002.D 117003.D 117004.D 117005.D 117006.D 117007.D

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r <sup>2</sup>	Q
1	HATM	Diesel (C10-C24)	1247225	1163187	1209913	1221573	1152277	1133164					1187890	3.8	HATM		
2	HBTM	Motor Oil (C24-C40)	1046830	917795	948443	920306	882639	861594					929601	7.0	HBTM		
3	SC	Decanoic Acid(S)	648675	1095549	1090928	1053315	1004335	1065935					993123	17	SC		
4	SA	Ortho-Terphenyl(S)	2315091	2079412	2039254	2009486	1862079	1811493					2019469	8.8	SA		
5	SA	Octacosane(S)	2056338	1855545	1881468	1912913	1840710	1711226					1876367	6.0	SA		
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1.225349

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814017.D Vial: 17  
Acq On : 8-14-18 16:56:27 Operator: DP  
Sample : Decanoic Acid - 1 8/13/18 Inst : Apollo  
Misc : Mix(C) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Fri Aug 17 13:46:05 2018  
Response via : Multiple Level Calibration

Volume Inj. : 2UL  
Signal Phase : DB-5  
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

3) SC Decanoic Acid(S)	5.08f	3892047	1.959 ppb
Surrogate Spike 24.000	Recovery	=	8.16%

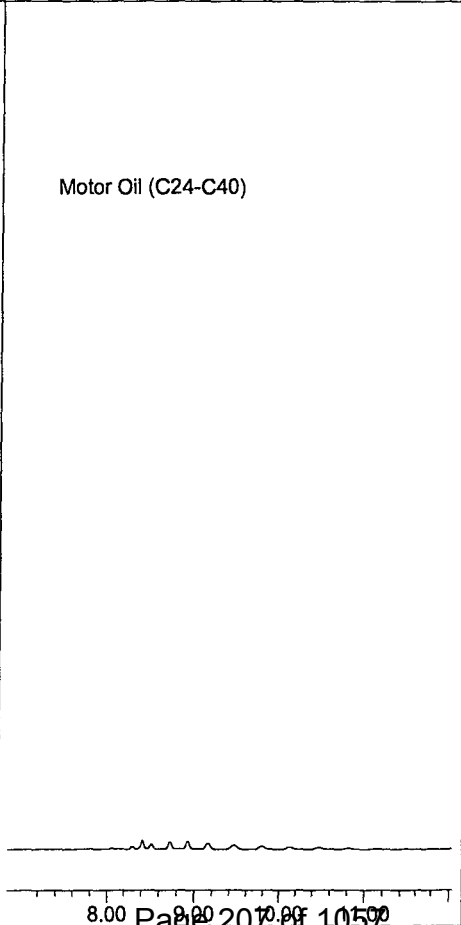
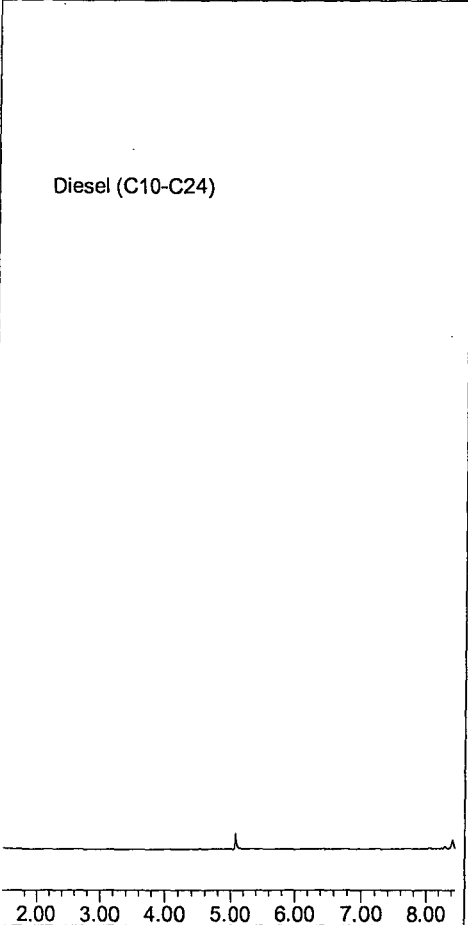
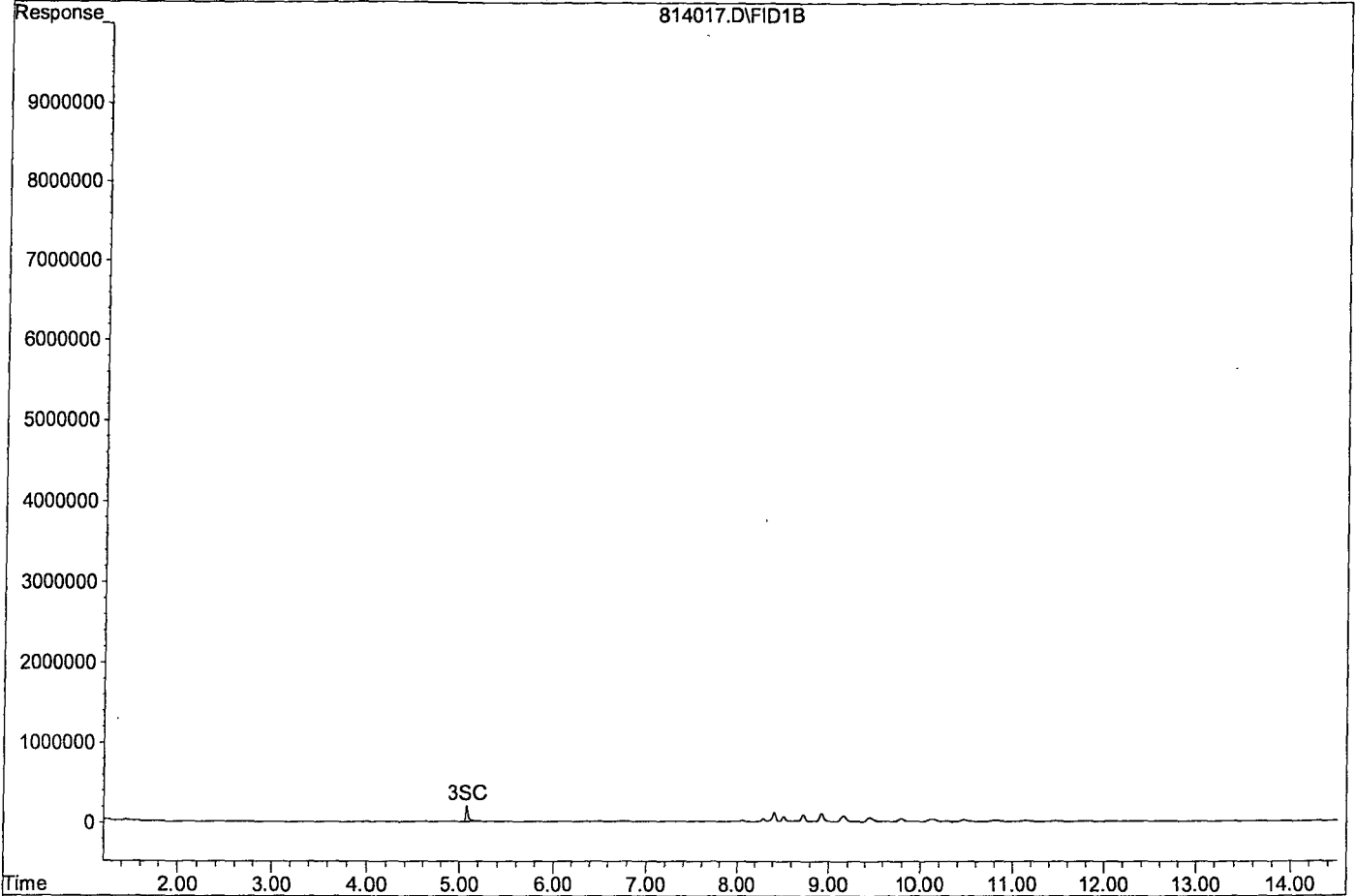
Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814017.D

Sample : Decanoic Acid - 1 8/13/18

814017.D\FID1B



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814018.D Vial: 18  
 Acq On : 8-14-18 17:15:48 Operator: DP  
 Sample : Decanoic Acid - 2 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

3) SC Decanoic Acid(S)	5.10	13146585	6.619 ppb
Surrogate Spike 24.000		Recovery =	27.58%

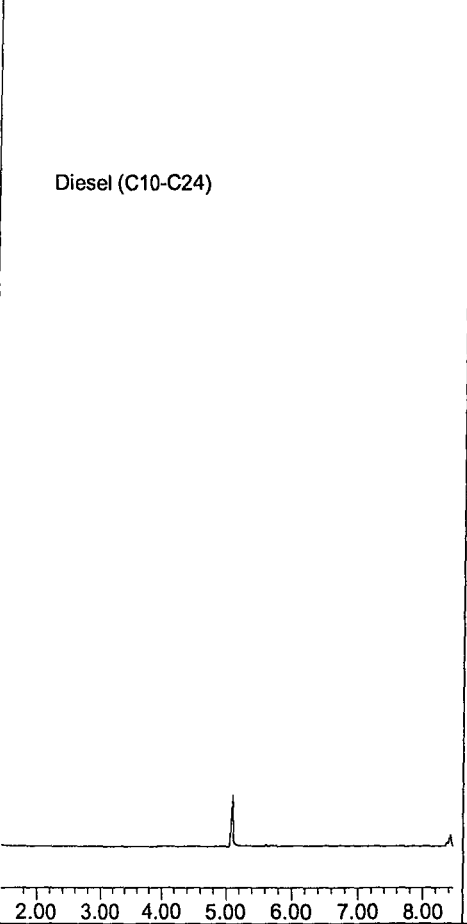
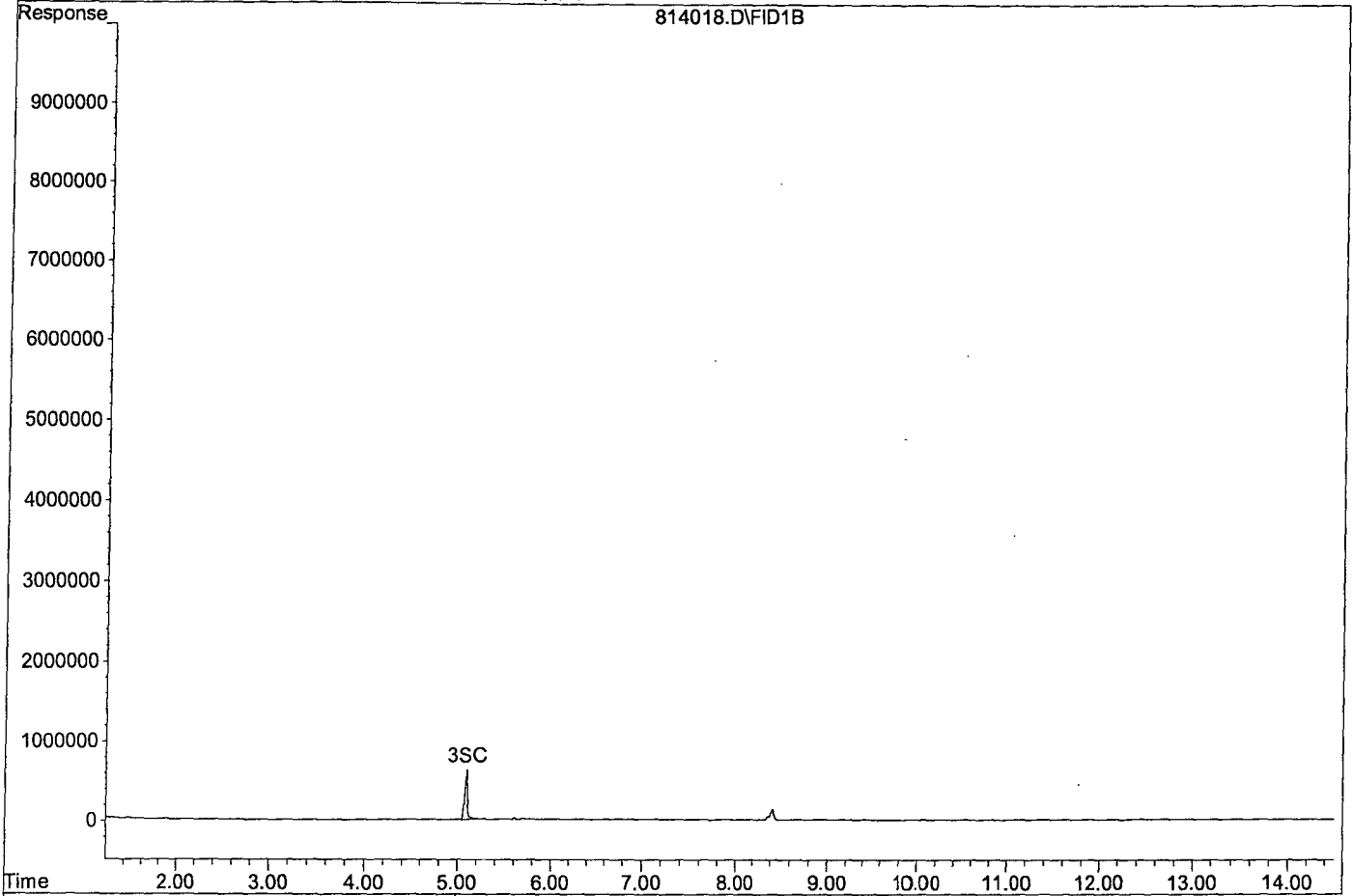
Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814018.D

Sample : Decanoic Acid - 2 8/13/18

814018.D\FID1B



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814019.D Vial: 19  
 Acq On : 8-14-18 17:35:59 Operator: DP  
 Sample : Decanoic Acid - 3 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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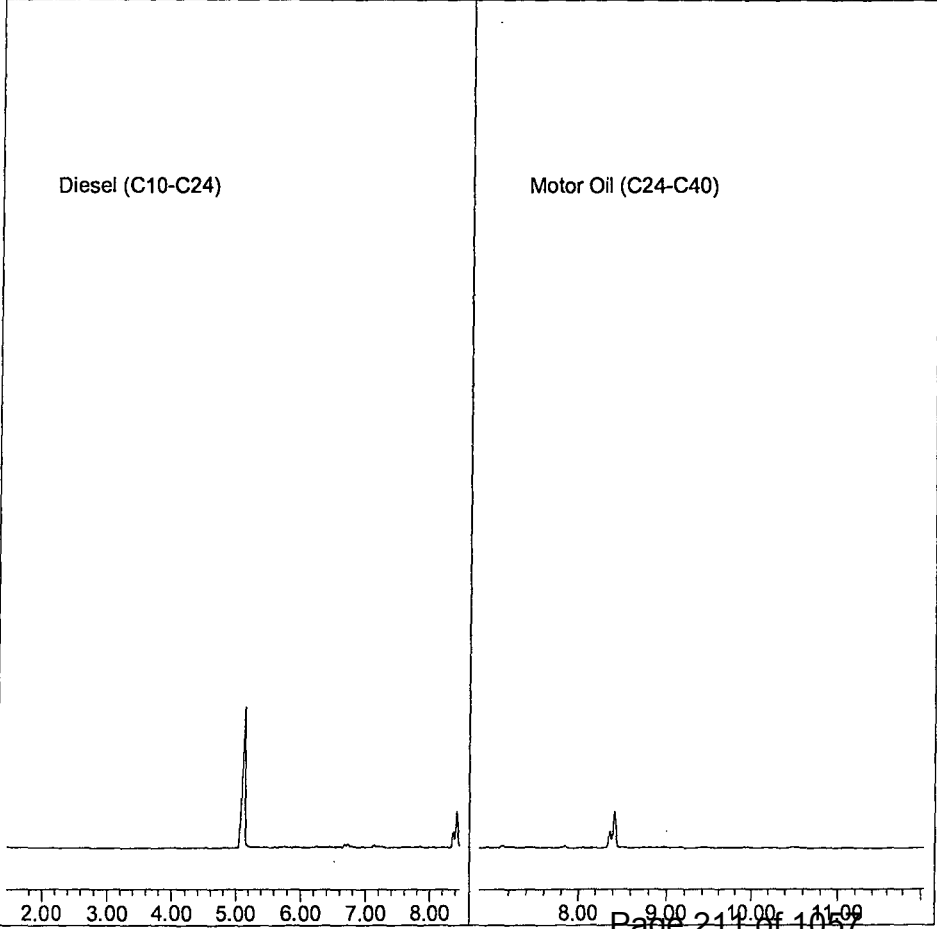
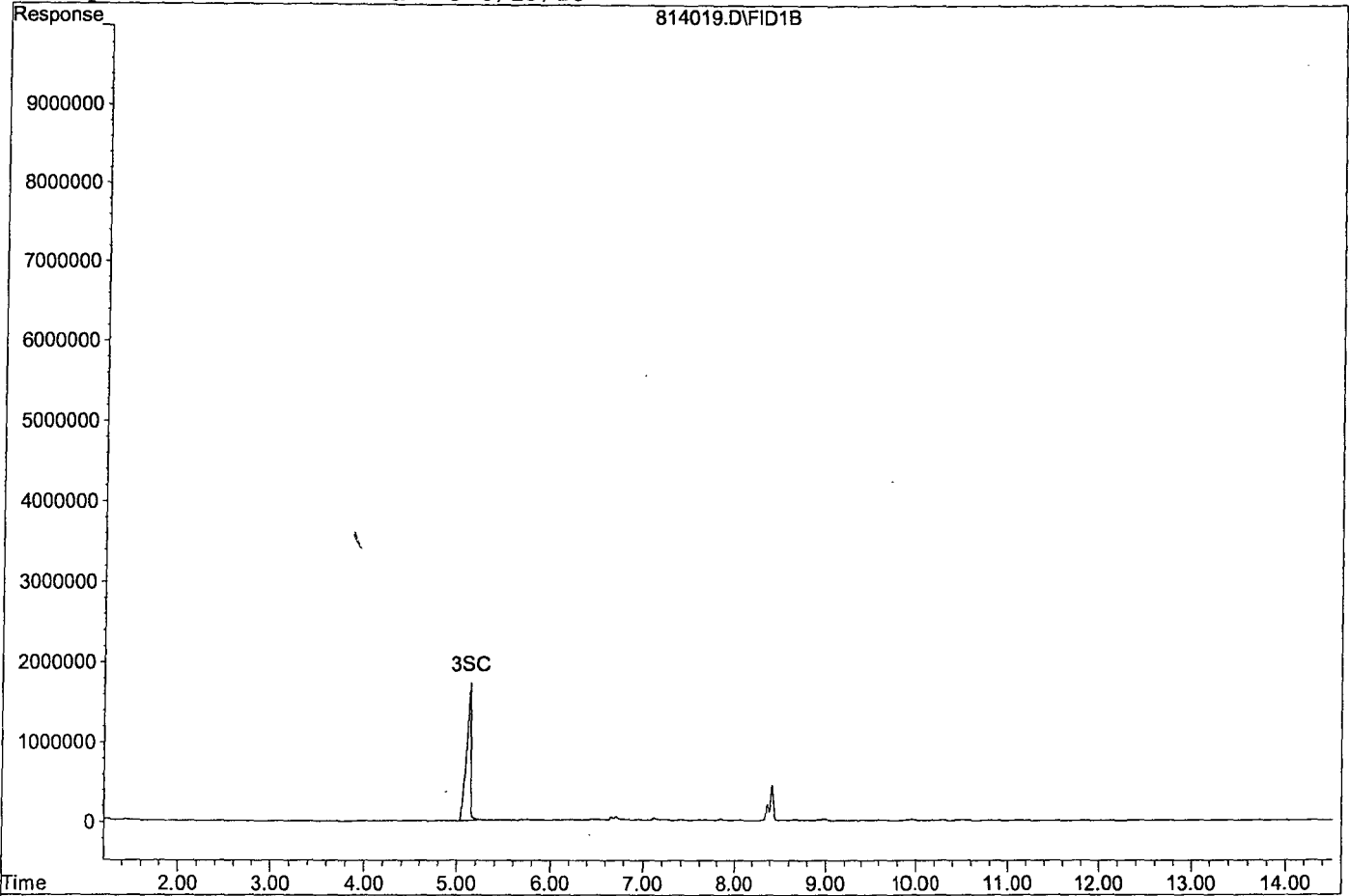
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.14	52364534	26.364 ppb
Surrogate Spike 24.000		Recovery =	109.85%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814019.D

Sample : Decanoic Acid - 3 8/13/18



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814020.D Vial: 20  
Acq On : 8-14-18 17:56:16 Operator: DP  
Sample : Decanoic Acid - 4 8/13/18 Inst : Apollo  
Misc : Mix(C) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Fri Aug 17 13:46:05 2018  
Response via : Multiple Level Calibration

Volume Inj. : 2UL  
Signal Phase : DB-5  
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.15	75838654	38.182 ppb
Surrogate Spike 24.000		Recovery =	159.09%

Target Compounds

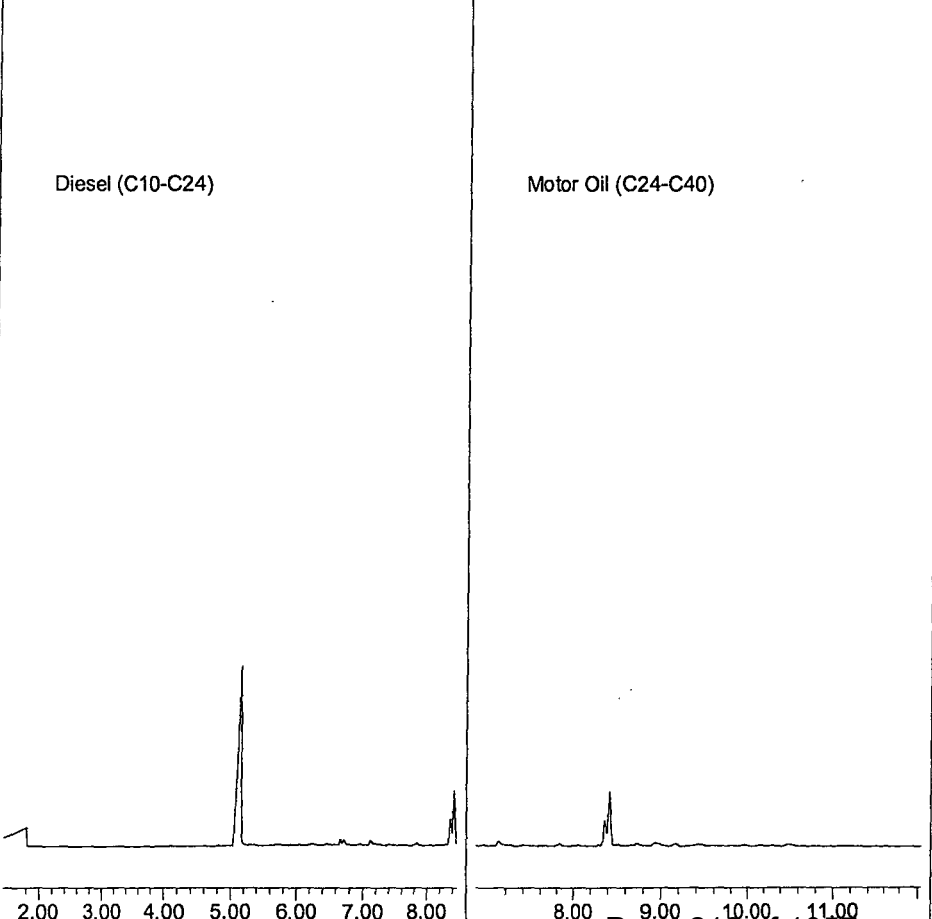
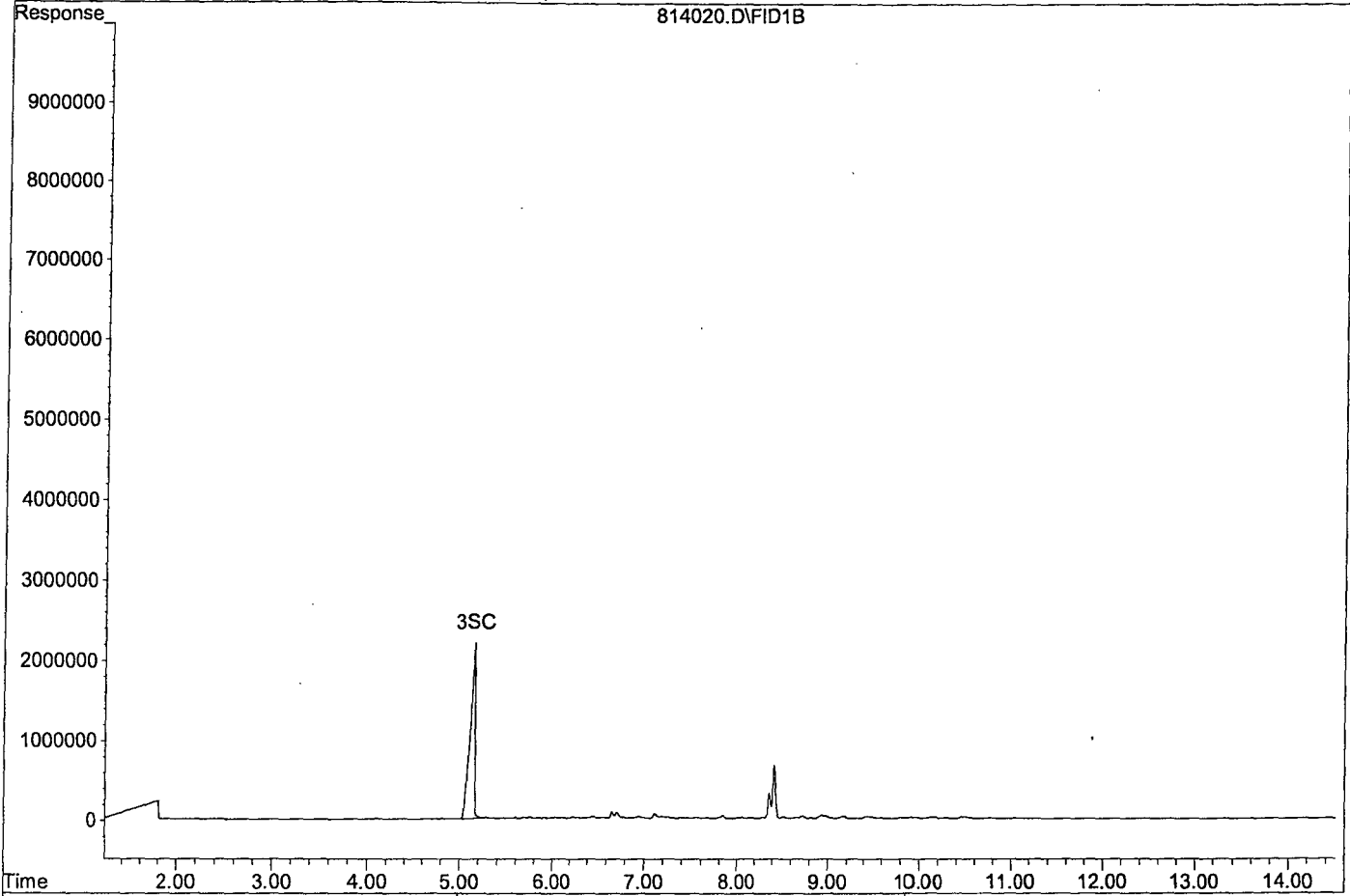


Quantitation Report

Data File: G:\APOLLO\DATA\180814\814020.D

Sample : Decanoic Acid - 4 8/13/18

814020.D\FID1B



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\180814\814021.D Vial: 21  
 Acq On : 8-14-18 18:16:22 Operator: DP  
 Sample : Decanoic Acid - 5 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

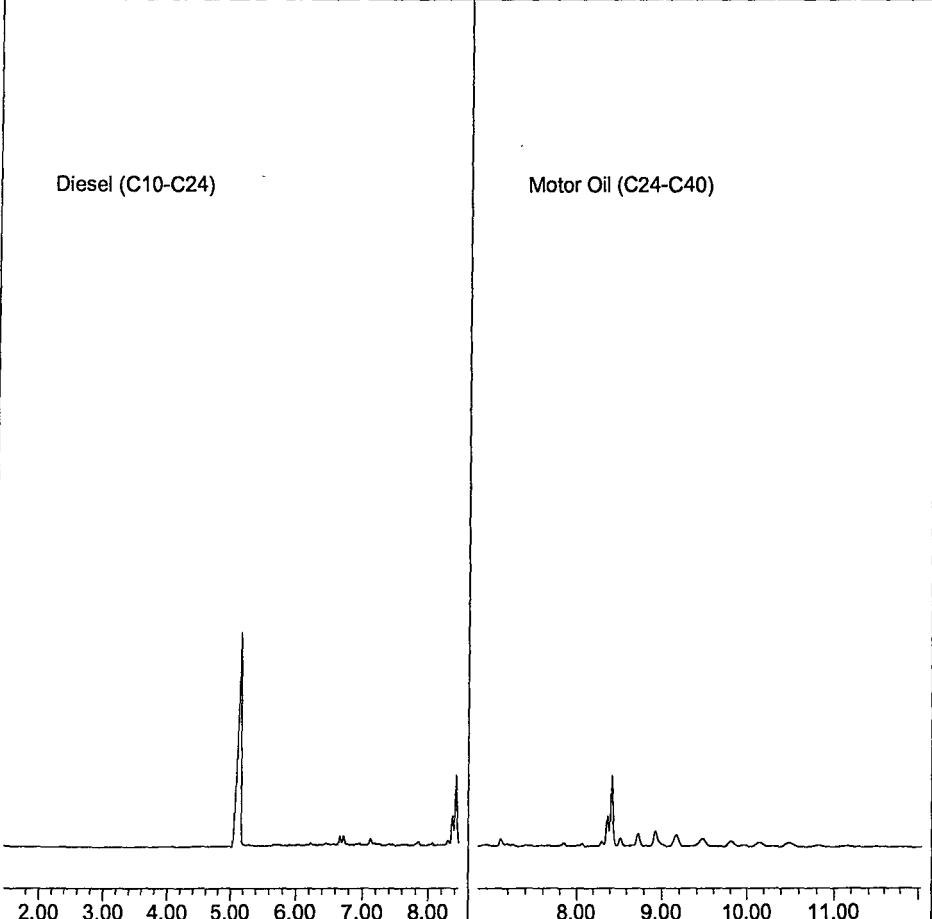
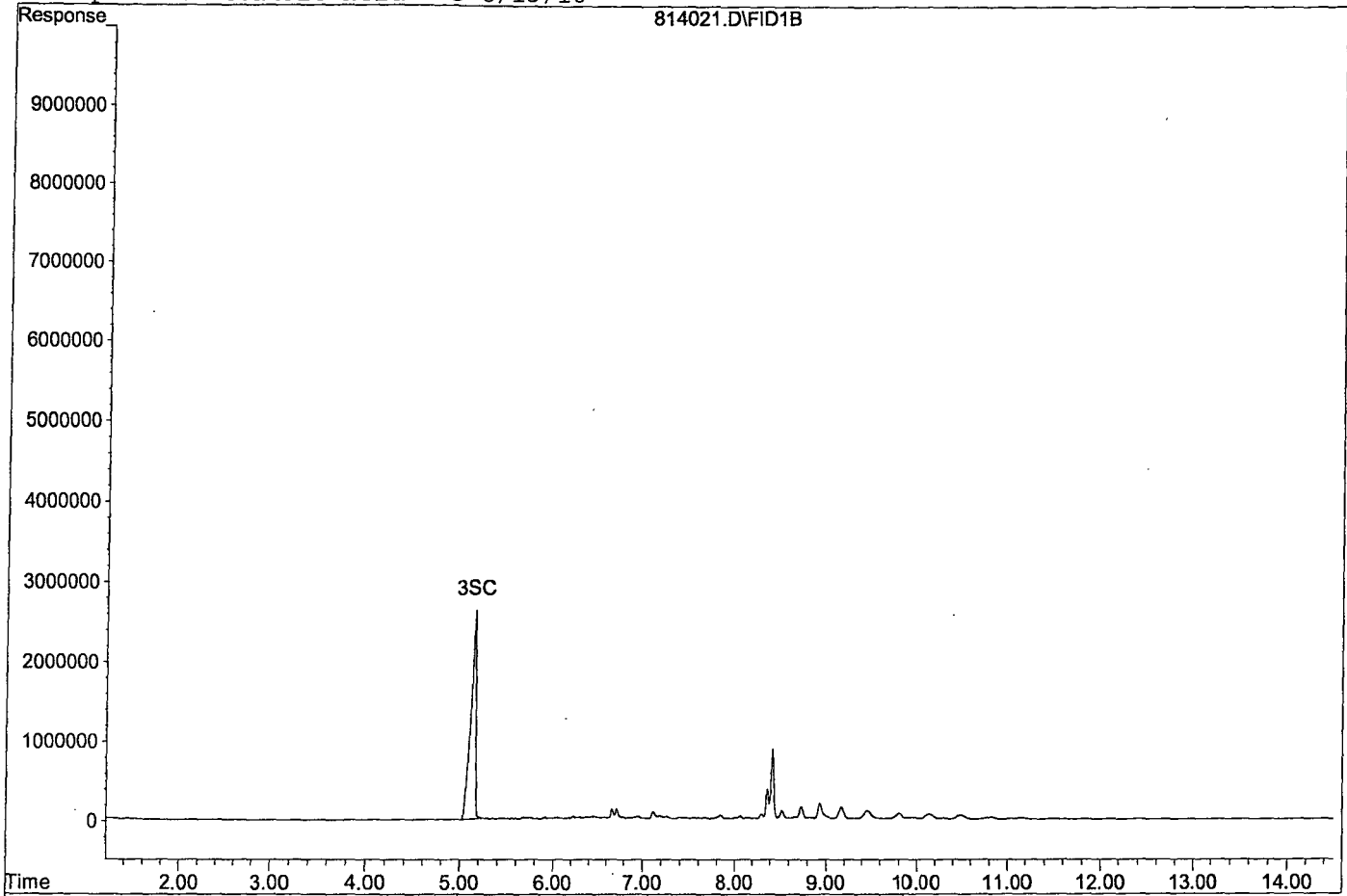
3) SC Decanoic Acid(S)	5.17	96416189	48.542 ppb
Surrogate Spike 24.000		Recovery =	202.26%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814021.D

Sample : Decanoic Acid - 5 8/13/18



Data File : G:\APOLLO\DATA\180814\814022.D Vial: 22  
 Acq On : 8-14-18 18:36:30 Operator: DP  
 Sample : Decanoic Acid - 6 8/13/18 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Aug 16 14:27 2018 Quant Results File: DOC0814.RES

Method : G:\APOLLO\DATA\180814\DOC0814.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Fri Aug 17 13:46:05 2018  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

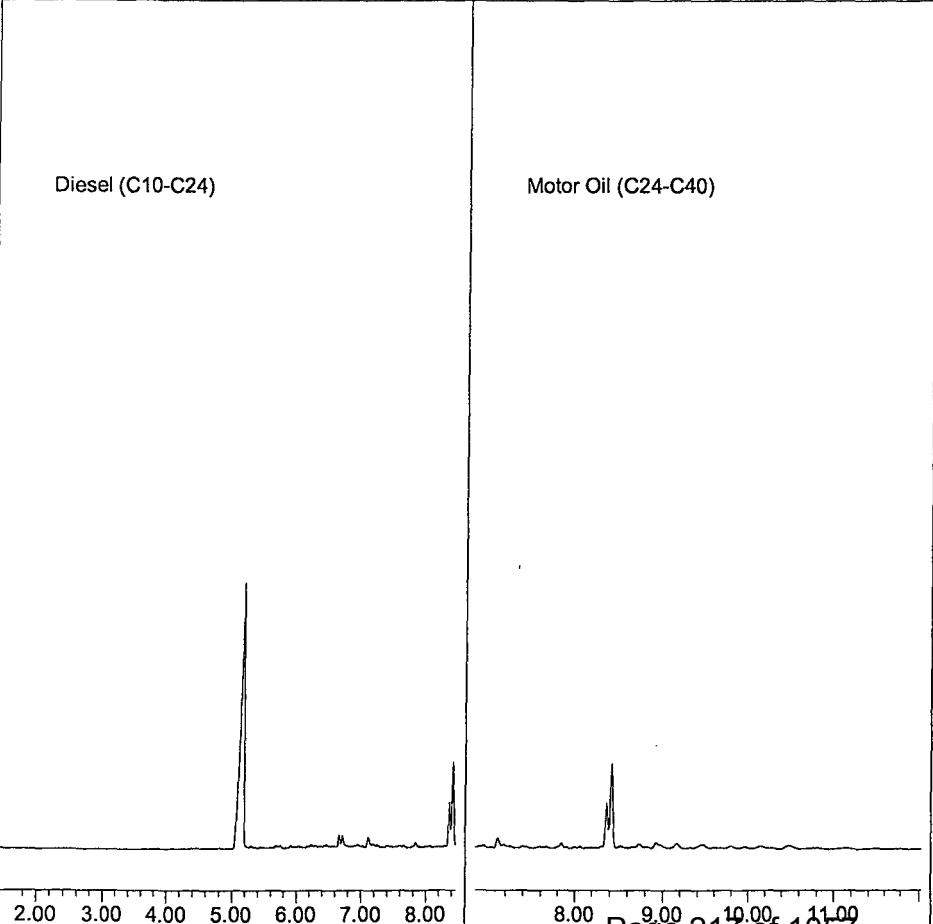
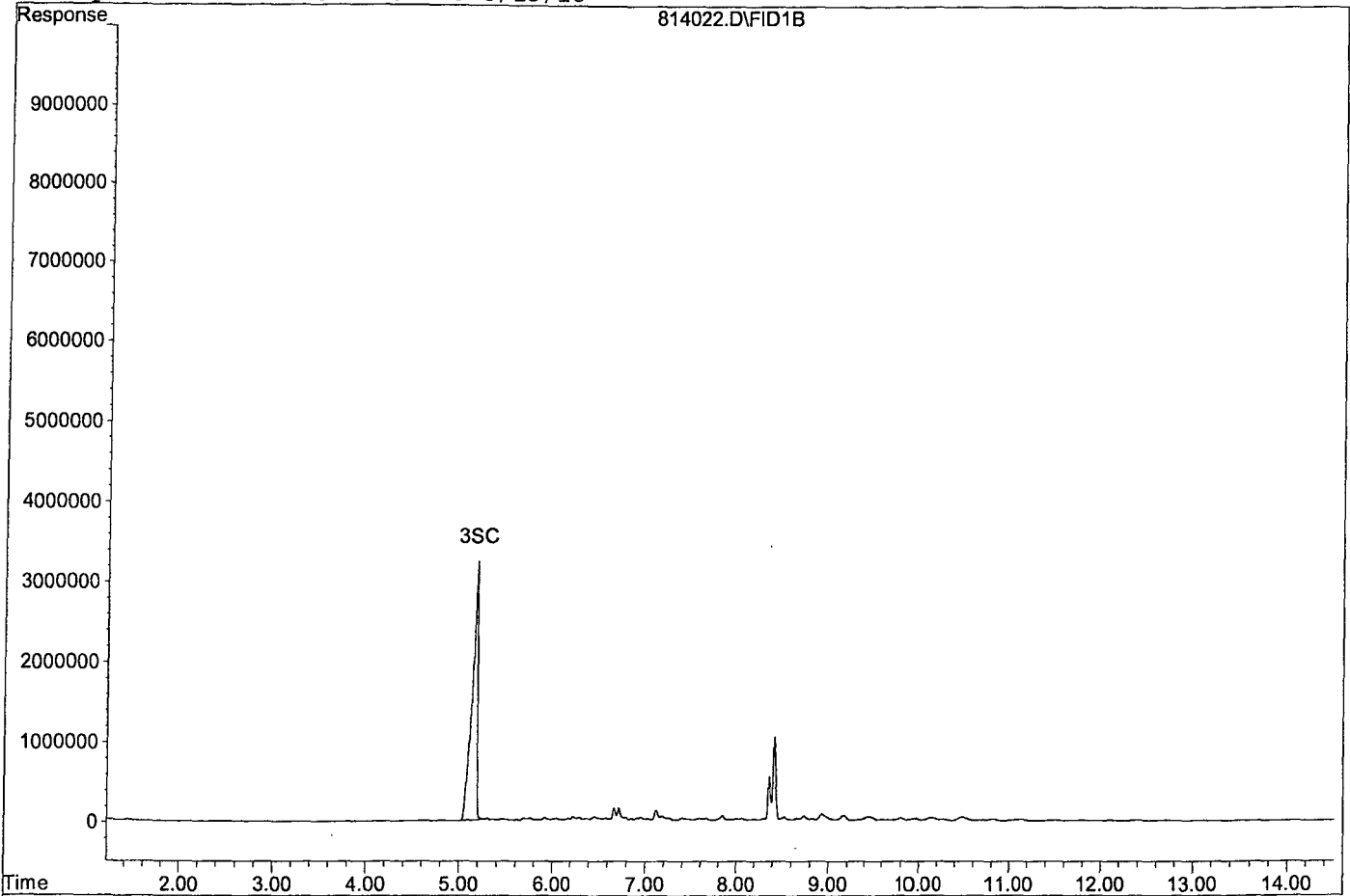
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.18	127912154	64.399 ppb
Surrogate Spike 24.000		Recovery =	268.33%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\180814\814022.D

Sample : Decanoic Acid - 6 8/13/18

814022.D\FID1B



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117002.D Vial: 2  
 Acq On : 1-17-19 16:38:28 Operator: DP  
 Sample : Diesel / Motor Oil - 1 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

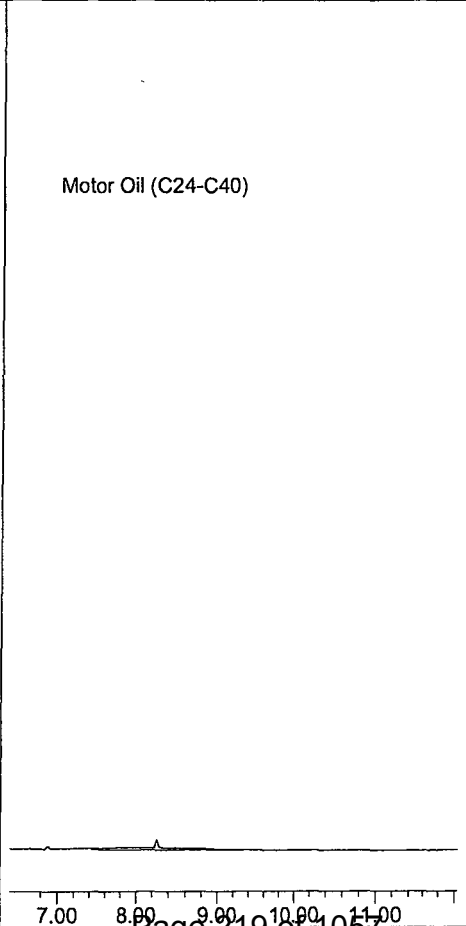
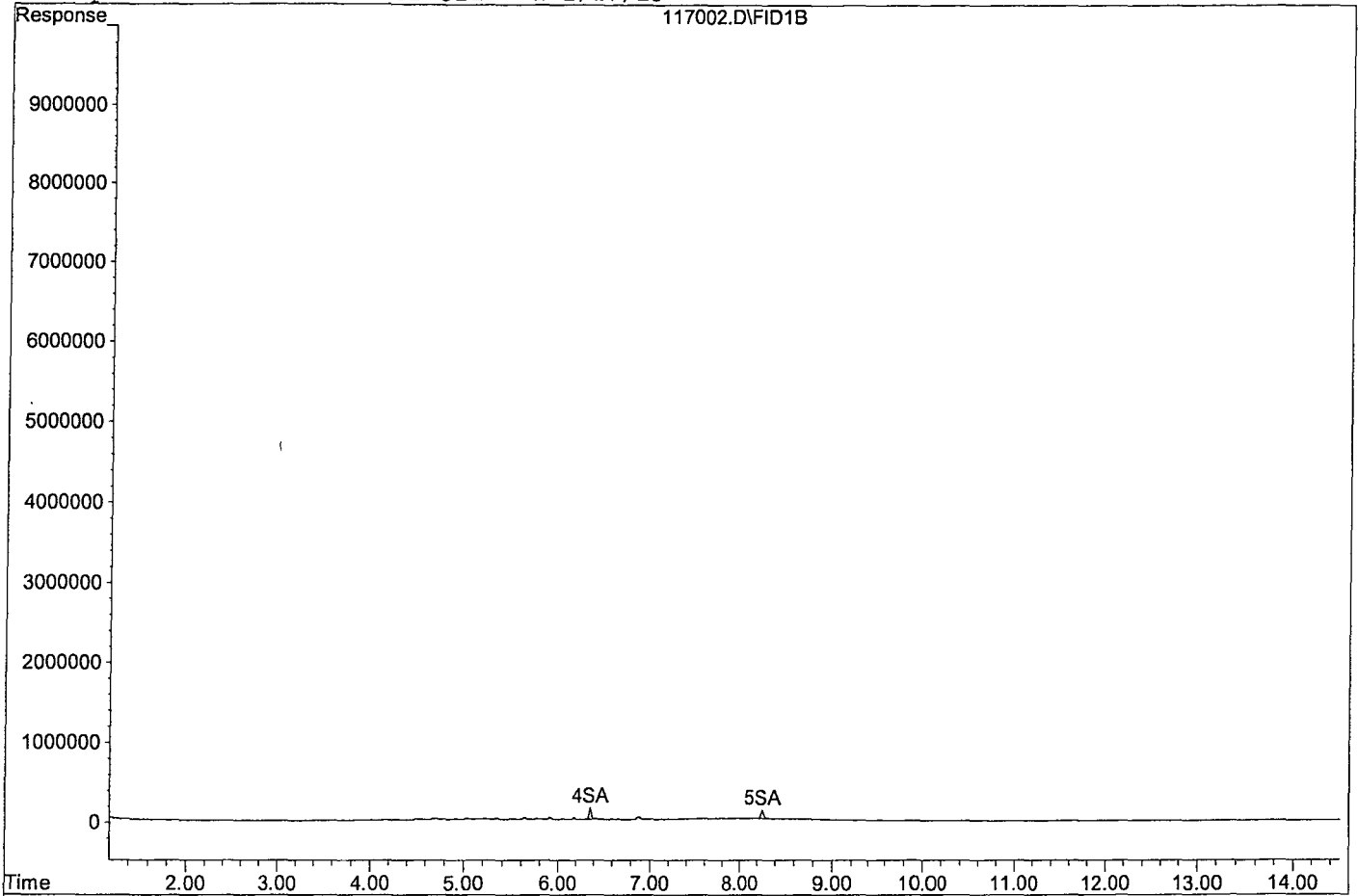
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	2315091	0.573 ppb
Surrogate Spike 30.000		Recovery =	1.91%
5) SA Octacosane(S)	8.26	2056338	0.548 ppb
Surrogate Spike 30.000		Recovery =	1.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	24944497	10.500 ppb
2) HBTM Motor Oil (C24-C40)	9.23	20936598	11.261 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117002.D

Sample : Diesel / Motor Oil - 1 1/17/19

117002.D\FID1B



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117003.D Vial: 3  
 Acq On : 1-17-19 16:58:29 Operator: DP  
 Sample : Diesel / Motor Oil - 2 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	10397059	2.574 ppb
Surrogate Spike 30.000		Recovery =	8.58%
5) SA Octacosane(S)	8.26	9277725	2.472 ppb
Surrogate Spike 30.000		Recovery =	8.24%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	116318686	48.960 ppb
2) HBTM Motor Oil (C24-C40)	9.23	91779450	49.365 ppb

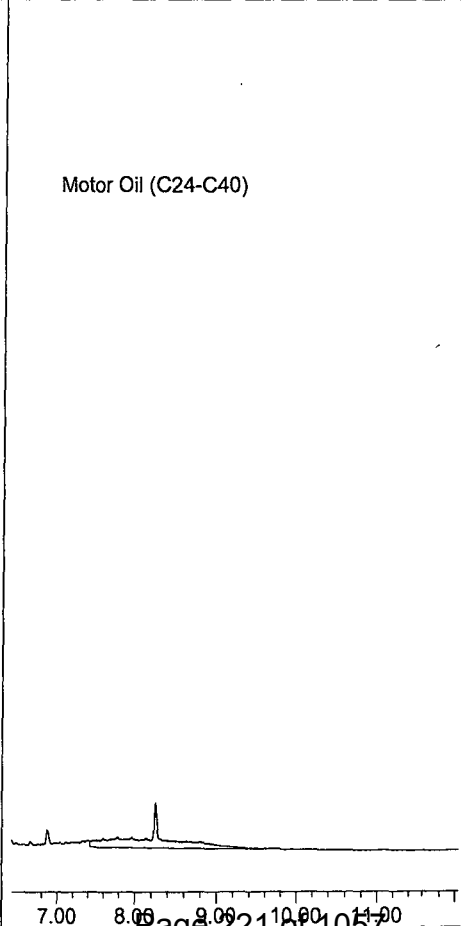
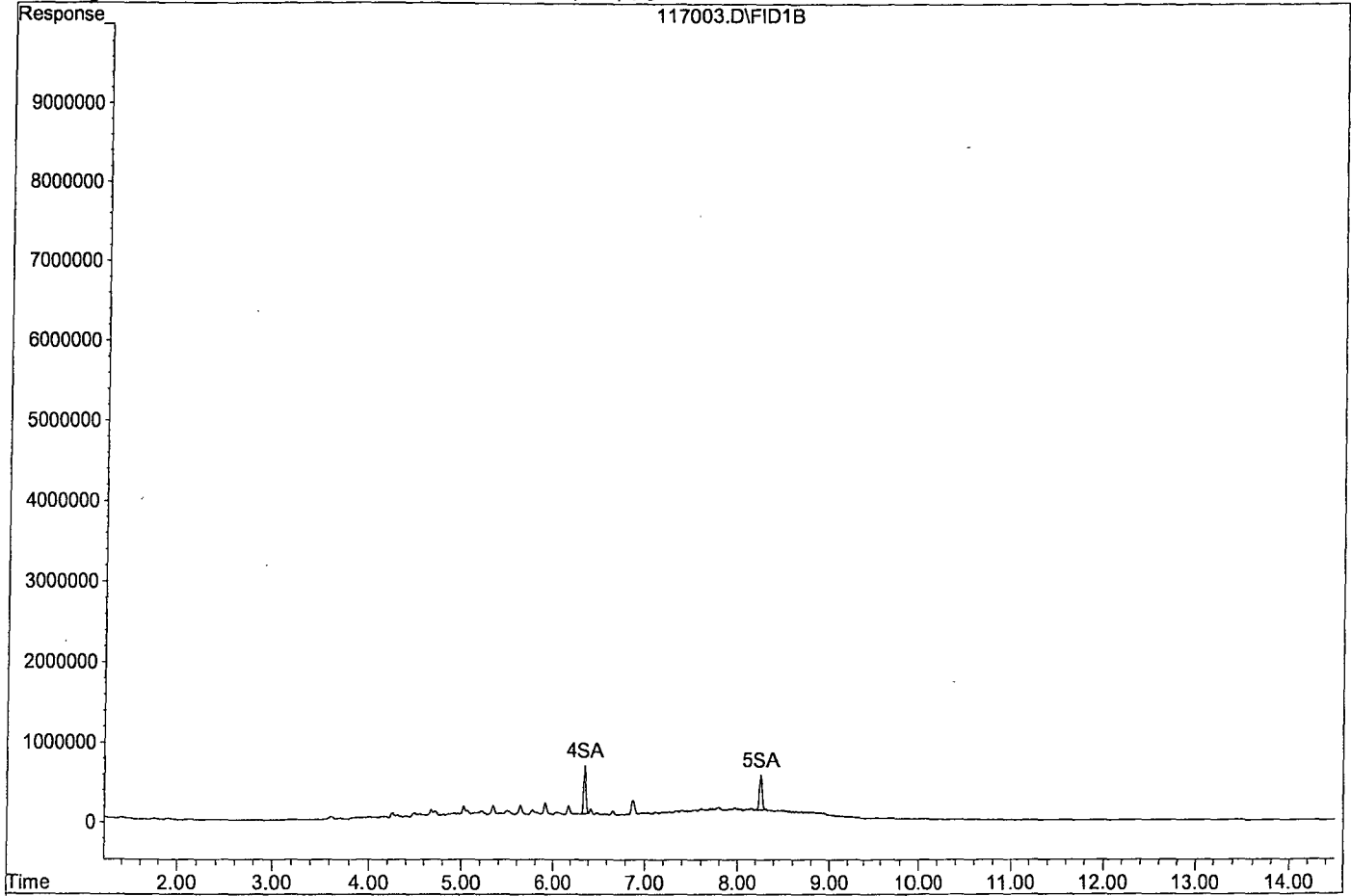


Quantitation Report

Data File: G:\APOLLO\DATA\190117\117003.D

Sample : Diesel / Motor Oil - 2 1/17/19

117003.D\FID1B



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117004.D Vial: 4  
 Acq On : 1-17-19 17:17:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.36	50981338	12.622 ppb
Surrogate Spike 30.000		Recovery =	42.07%
5) SA Octacosane(S)	8.26	47036708	12.534 ppb
Surrogate Spike 30.000		Recovery =	41.78%

Target Compounds

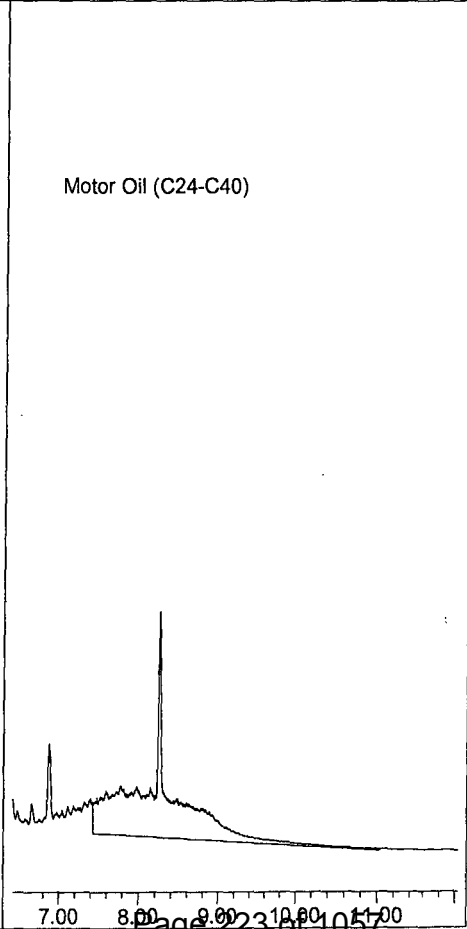
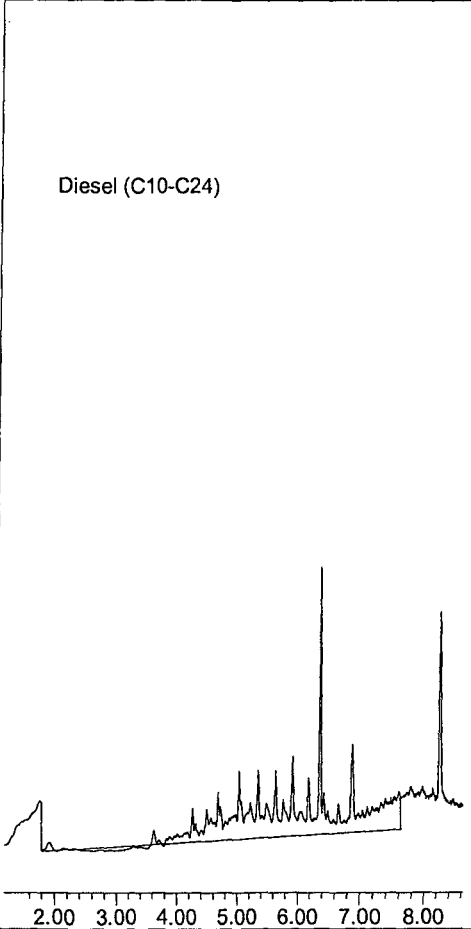
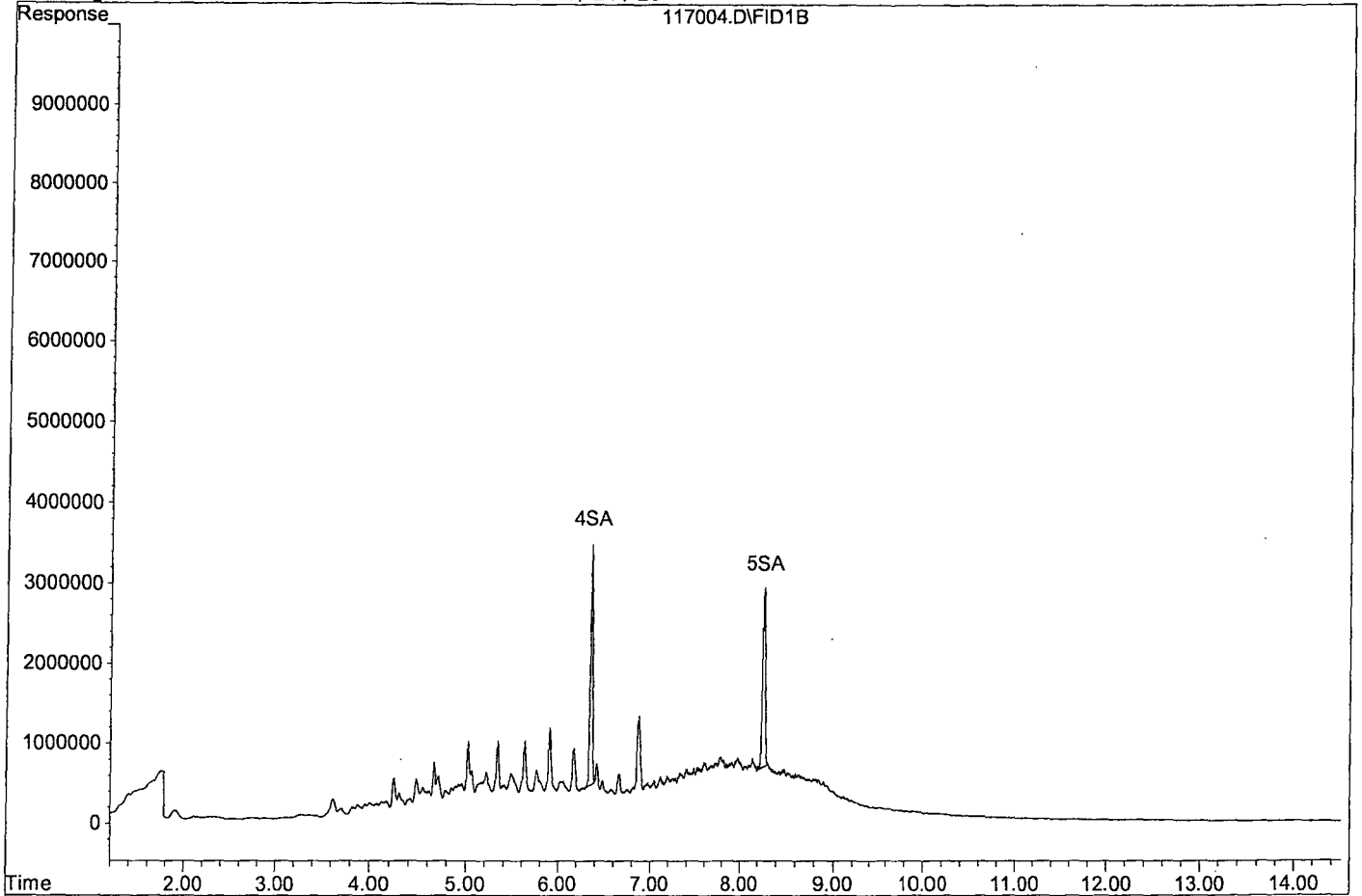
1) HATM Diesel (C10-C24)	4.71	604956690	254.635 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474221646	255.067 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117004.D

Sample : Diesel / Motor Oil - 3 1/17/19

117004.D\FID1B



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117005.D Vial: 5  
 Acq On : 1-17-19 17:37:44 Operator: DP  
 Sample : Diesel / Motor Oil - 4 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

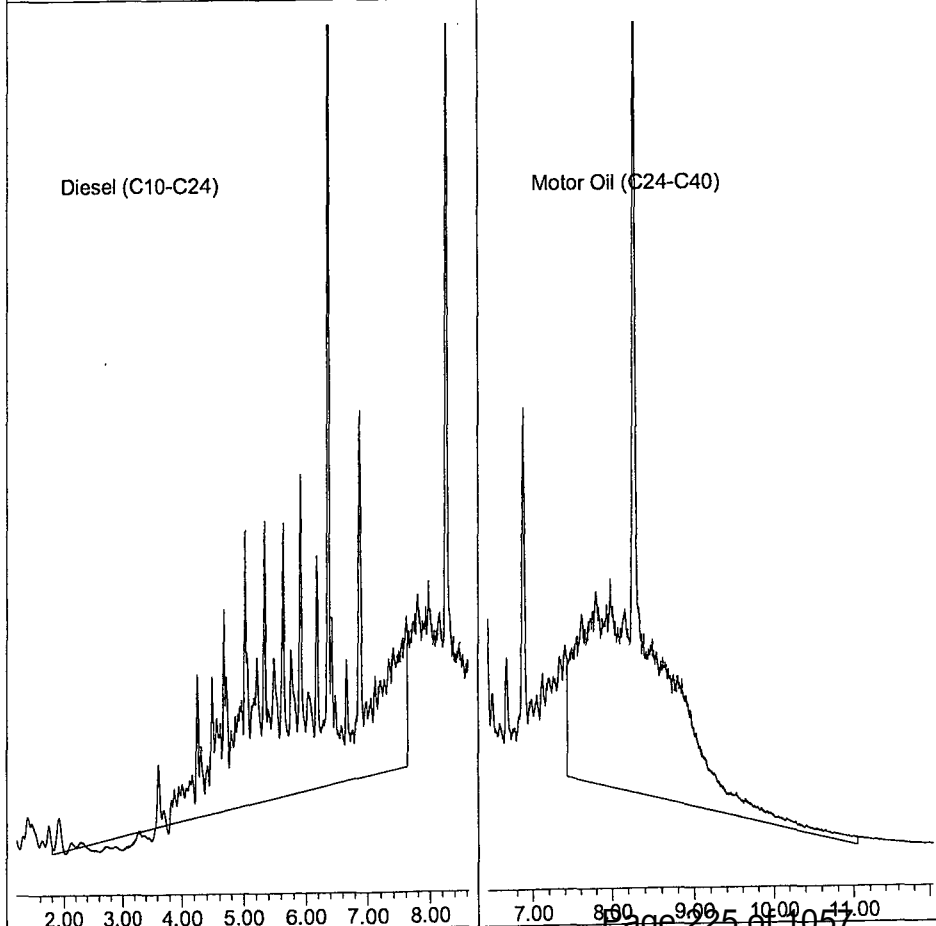
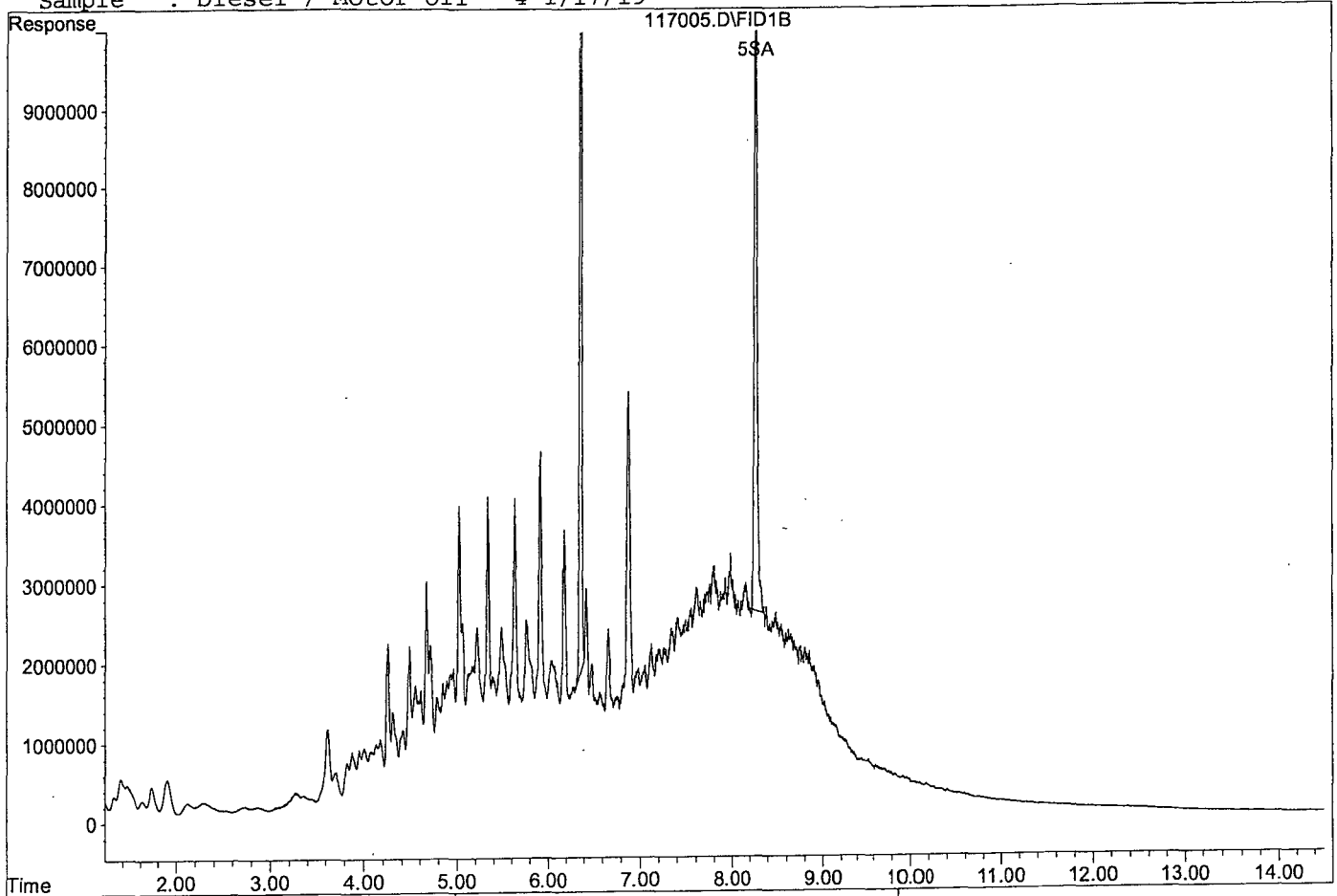
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	200948587	49.753 ppb
Surrogate Spike 30.000		Recovery =	165.84%
5) SA Octacosane(S)	8.27	191291289	50.974 ppb
Surrogate Spike 30.000		Recovery =	169.91%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	2443146618	1028.356 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1840612778	990.001 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117005.D

Sample : Diesel / Motor Oil - 4 1/17/19



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117006.D Vial: 6  
 Acq On : 1-17-19 17:57:32 Operator: DP  
 Sample : Diesel / Motor Oil - 5 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

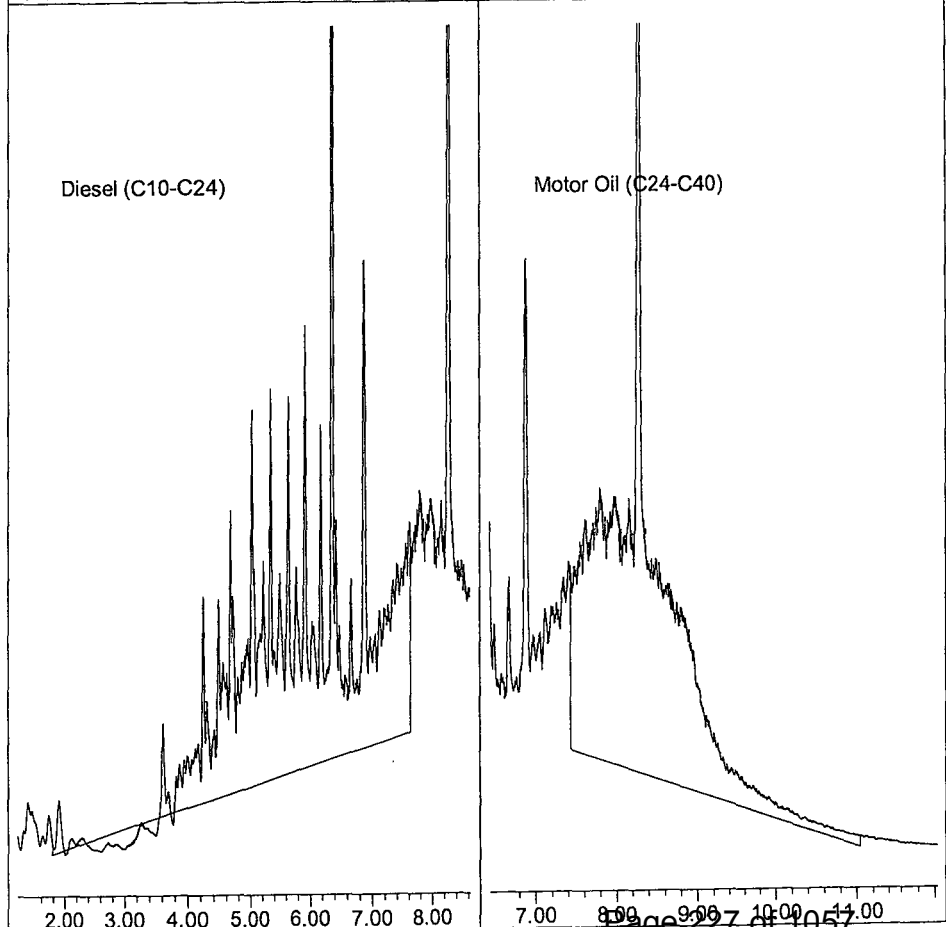
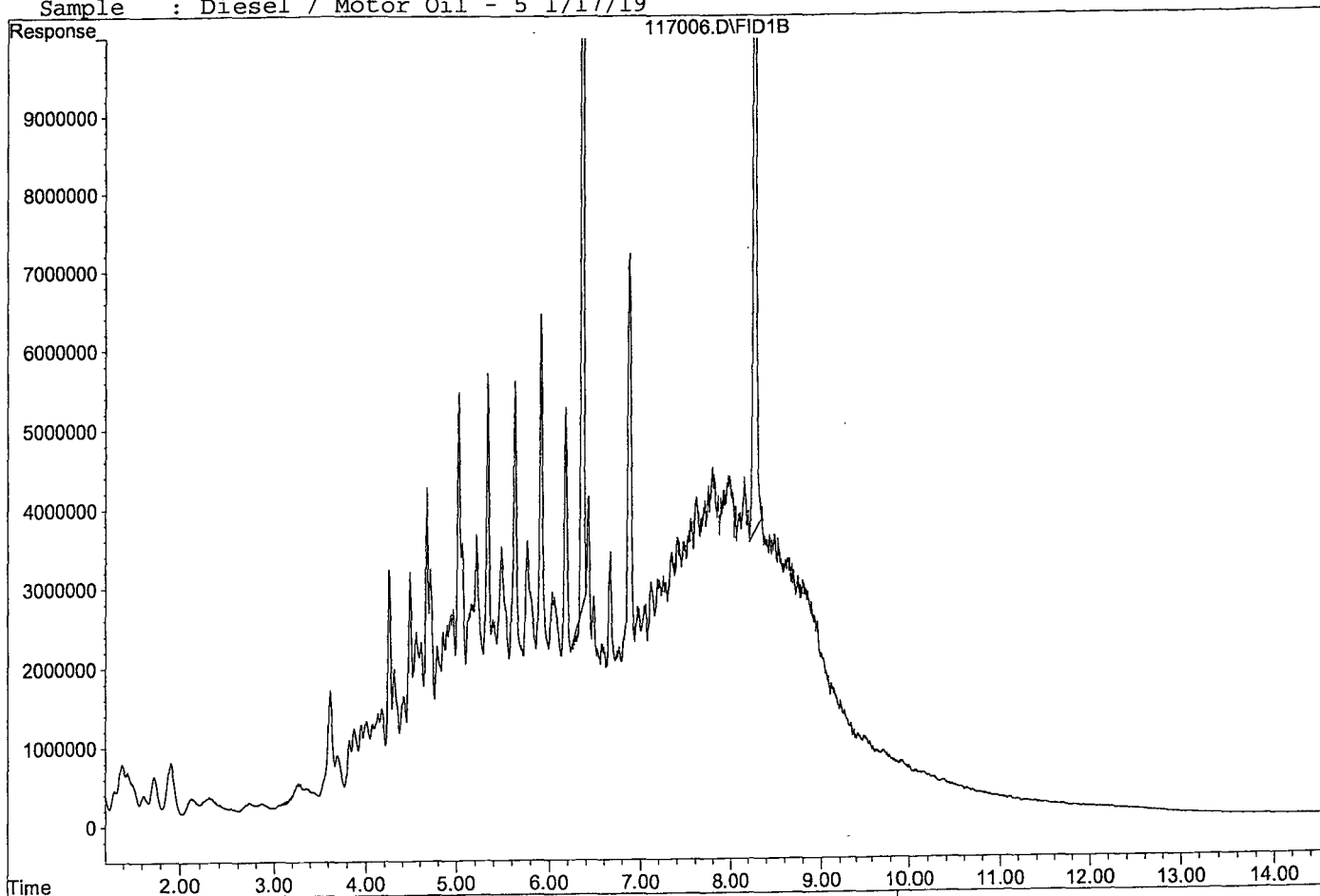
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	279311894	69.155 ppb
Surrogate Spike 30.000		Recovery =	230.52%
5) SA Octacosane(S)	8.28	276106552	73.575 ppb
Surrogate Spike 30.000		Recovery =	245.25%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	3456829820	1455.030 ppb
2) HBTM Motor Oil (C24-C40)	9.23	2647918269	1424.223 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117006.D

Sample : Diesel / Motor Oil - 5 1/17/19



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117007.D Vial: 7  
 Acq On : 1-17-19 18:17:22 Operator: DP  
 Sample : Diesel / Motor Oil - 6 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

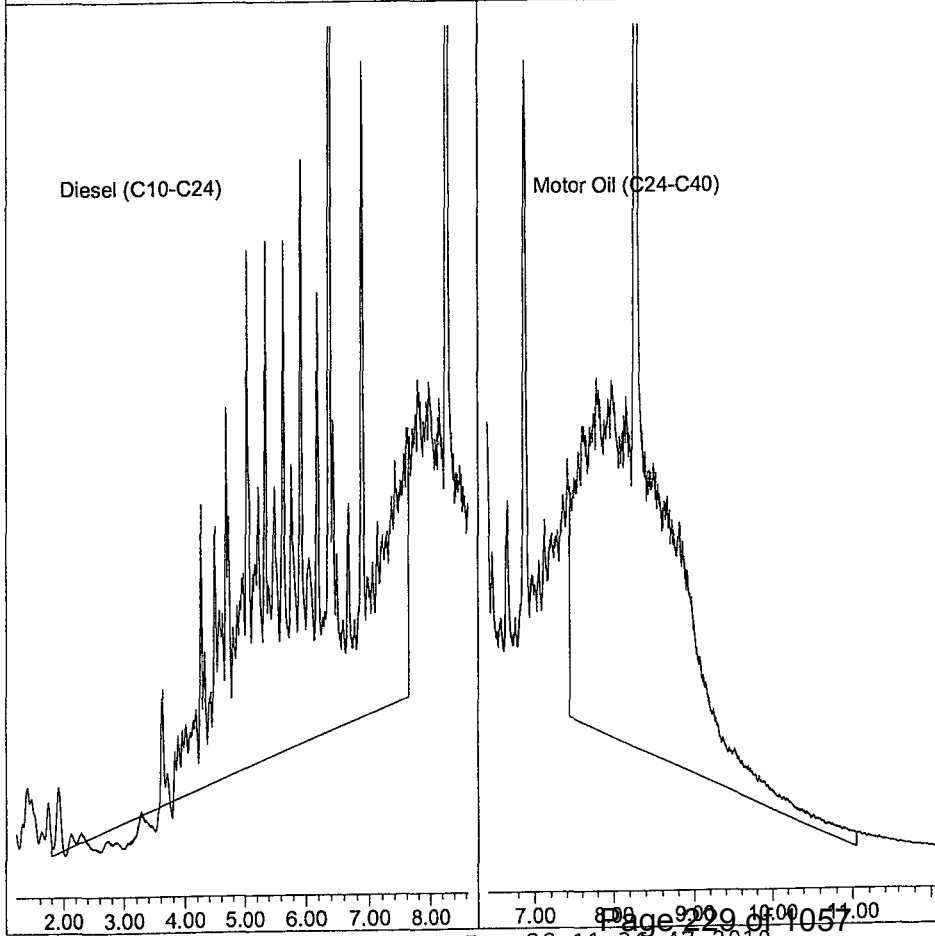
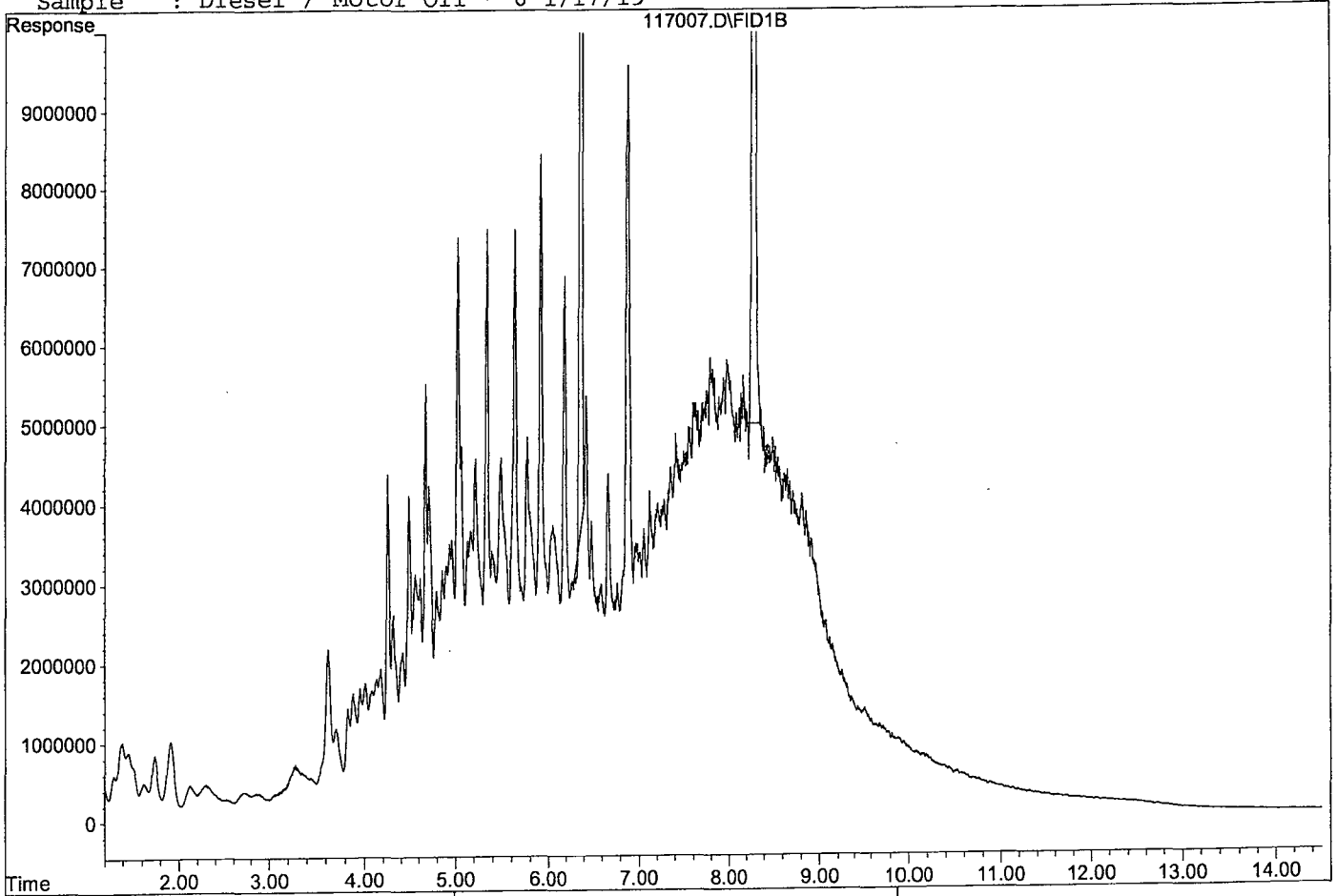
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	362298697	89.701 ppb
Surrogate Spike 30.000		Recovery =	299.00%
5) SA Octacosane(S)	8.29	342245296	91.199 ppb
Surrogate Spike 30.000		Recovery =	304.00%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	4532654243	1907.860 ppb
2) HBTM Motor Oil (C24-C40)	9.23	3446375794	1853.685 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190117\117007.D

Sample : Diesel / Motor Oil - 6 1/17/19



TPH Extractables  
DOC0117

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/17/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 117008.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1199930	1.0	HATM
2	HBTM	Motor Oil (C24-C40)	929601	923236	0.68	HBTM
3						
4						
5						
6						
7						
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36						
37						
38						
39						
40		Average			0.8	

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117008.D Vial: 8  
 Acq On : 1-17-19 18:37:21 Operator: DP  
 Sample : Diesel / Motor Oil - SS 1/15/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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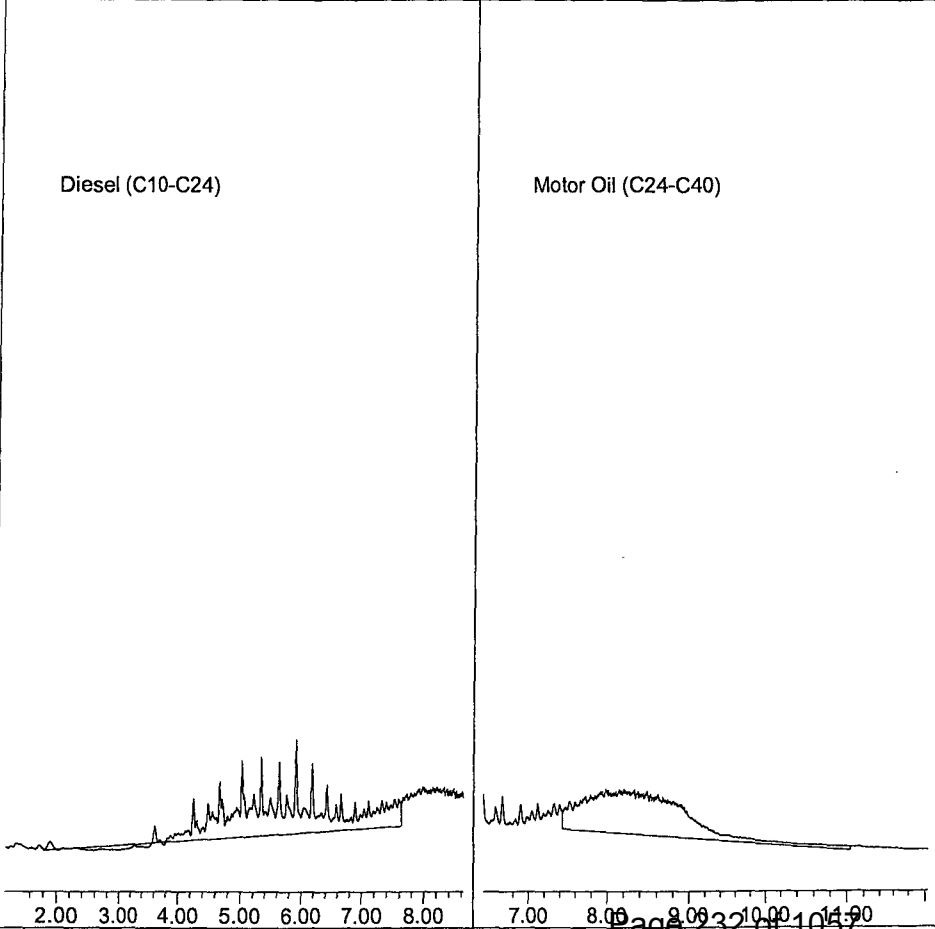
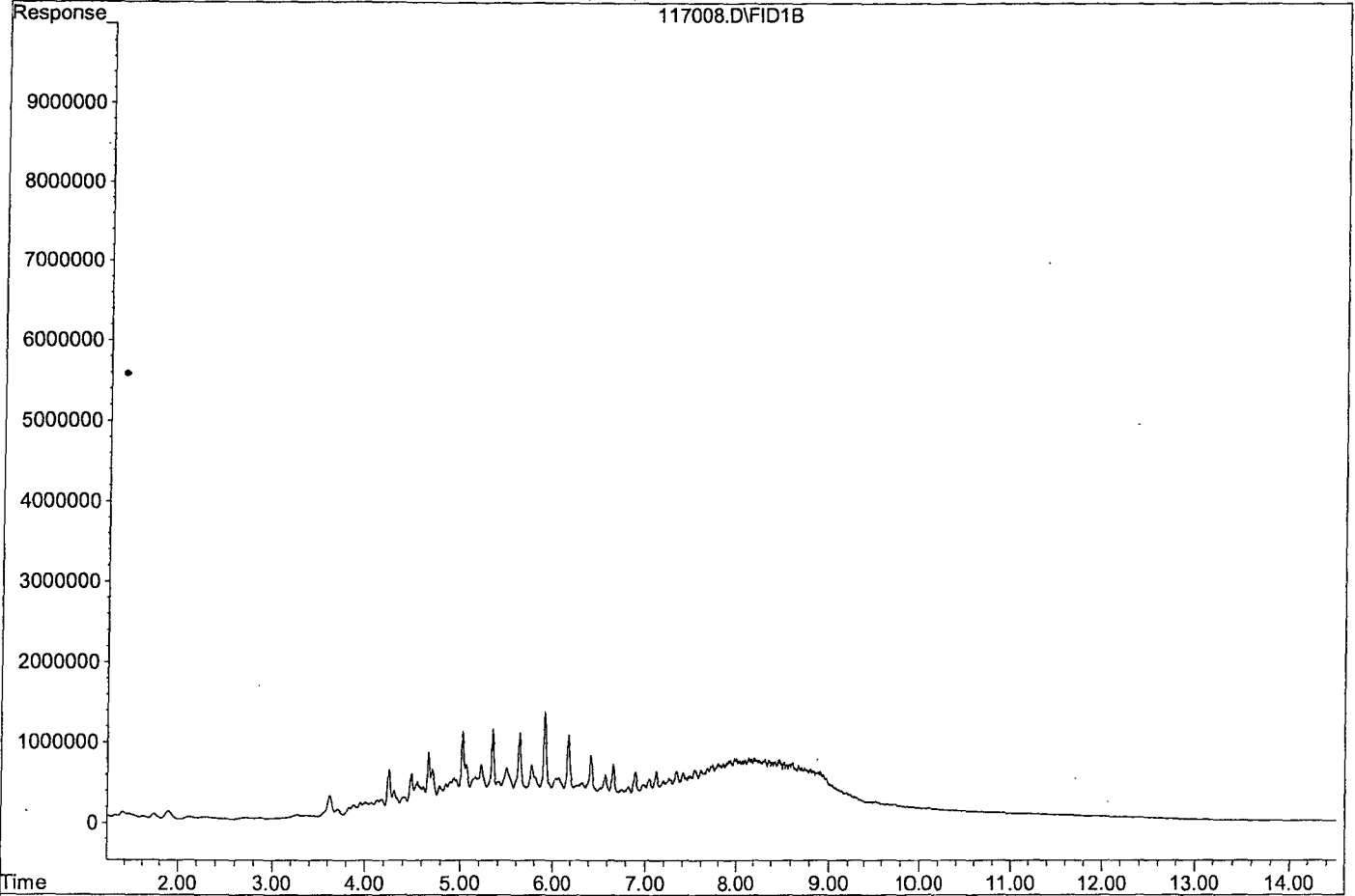
System Monitoring Compounds

Target Compounds

1) HATM Diesel (C10-C24)	4.71	599966004	252.534 ppb
2) HBTM Motor Oil (C24-C40)	9.23	461617841	248.288 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117008.D  
Sample : Diesel / Motor Oil - SS 1/15/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124047.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1146170	3.5	HATM
2	HBTM Motor Oil (C24-C40)	929601	925343	0.46	HBTM
3	SA Ortho-Terphenyl(S)	2019470	1942960	3.8	SA
4	SA Octacosane(S)	1876370	1969020	4.9	SA
5					
6					
7					
8					
9					
10					
11					
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36					
37					
38					
39					
40	Average			3.2	

Data File : G:\APOLLO\DATA\190124\124047.D Vial: 47  
 Acq On : 1-29-19 12:00:52 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 31 11:21 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

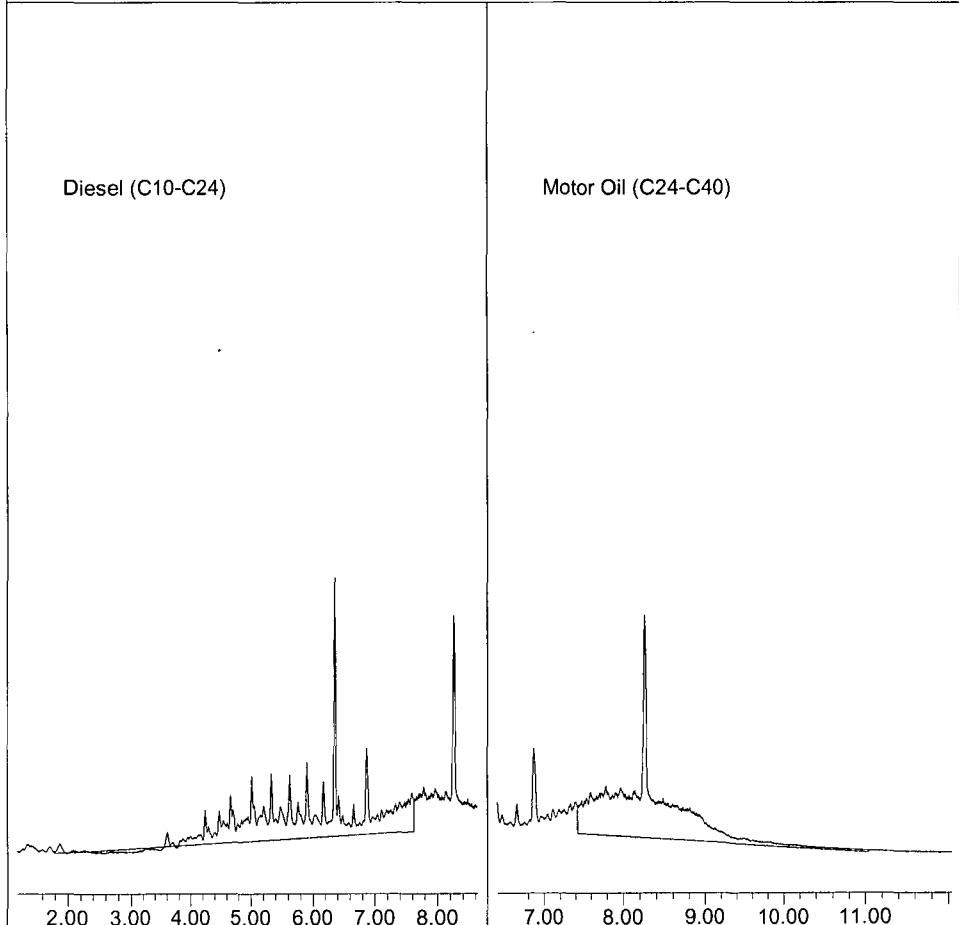
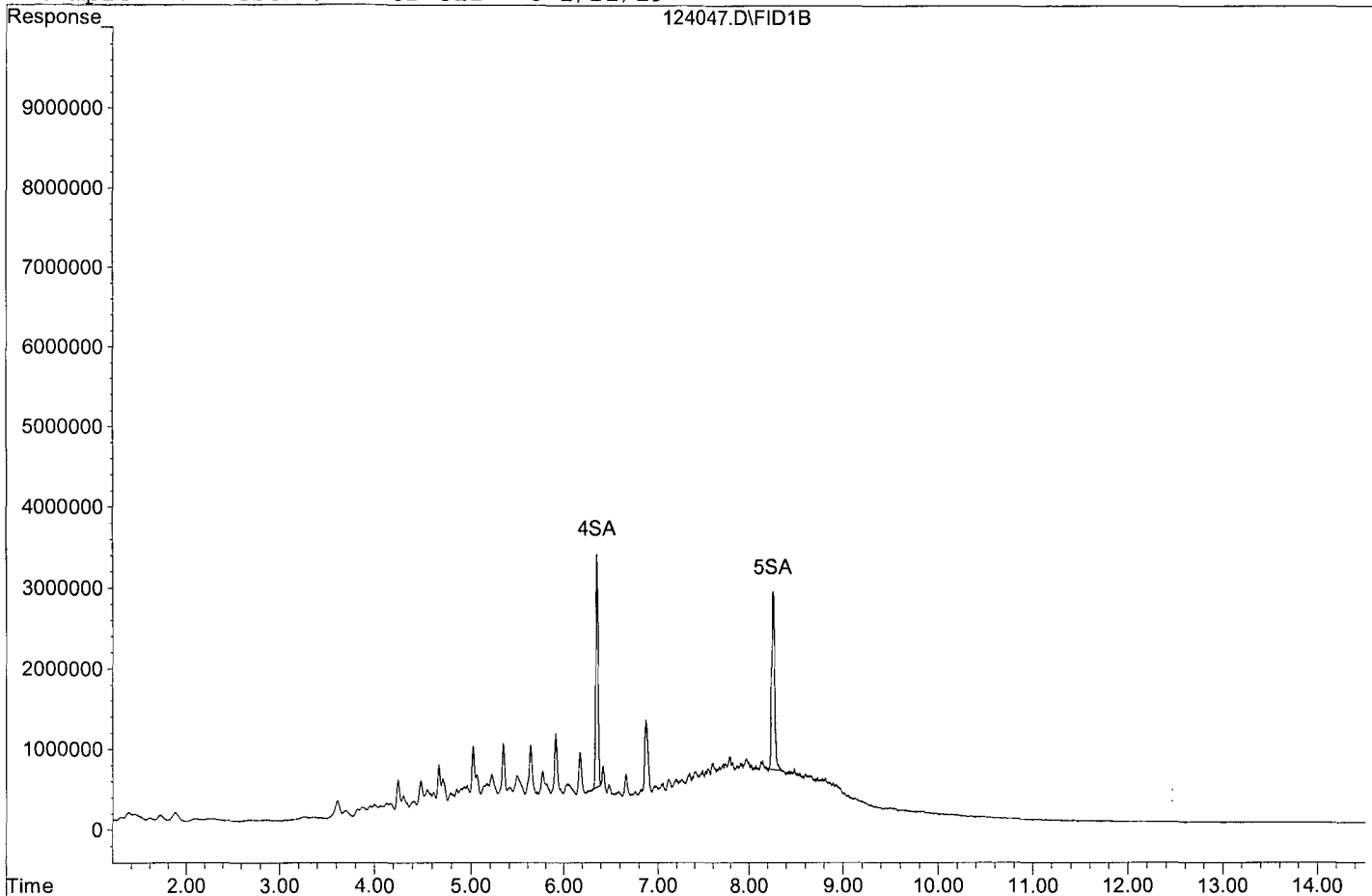
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	48573960	12.026 ppb
Surrogate Spike 30.000		Recovery =	40.09%
5) SA Octacosane(S)	8.26	49225551	13.117 ppb
Surrogate Spike 30.000		Recovery =	43.72%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	573084647	241.220 ppb
2) HBTM Motor Oil (C24-C40)	9.23	462671393	248.855 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124047.D

Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124061.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1163780	2.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	949337	2.1	HBTM
3	SA Ortho-Terphenyl(S)	2019470	2002670	0.83	SA
4	SA Octacosane(S)	1876370	1970950	5.0	SA
5					
6					
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8					
9					
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32					
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35					
36					
37					
38					
39					
40	Average			2.5	



Data File : G:\APOLLO\DATA\190124\124061.D Vial: 61  
 Acq On : 1-29-19 16:41:00 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

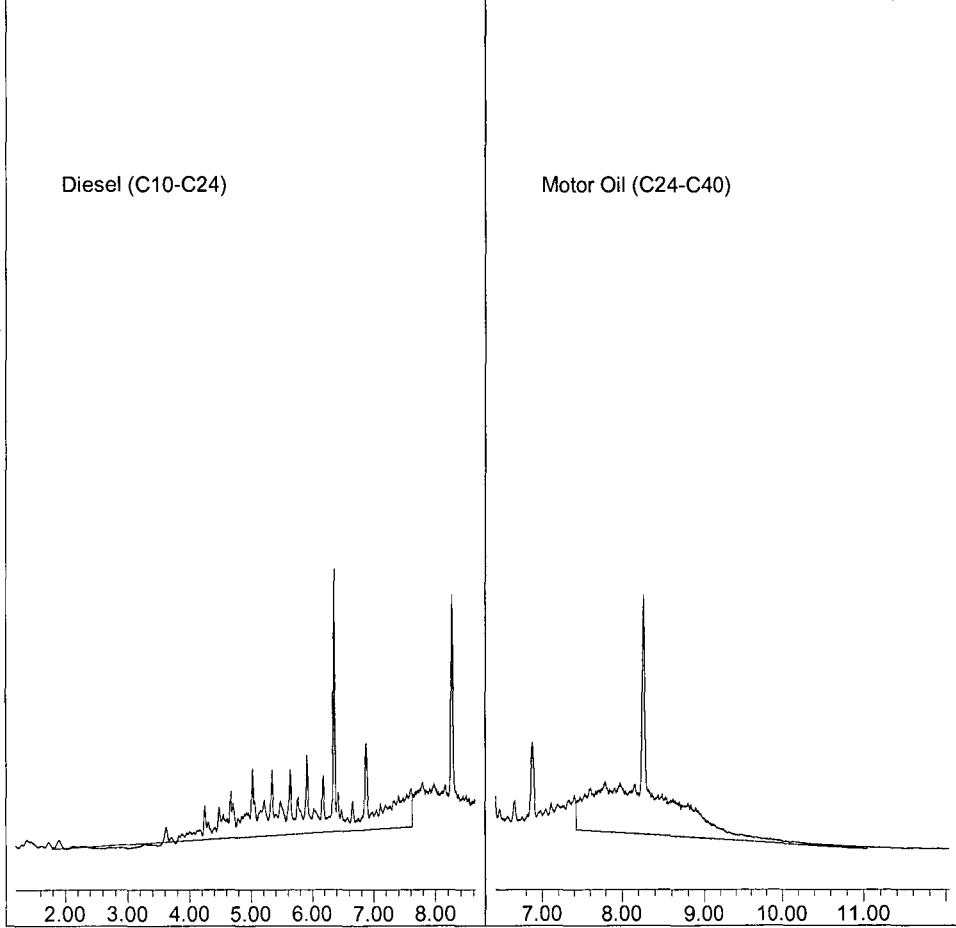
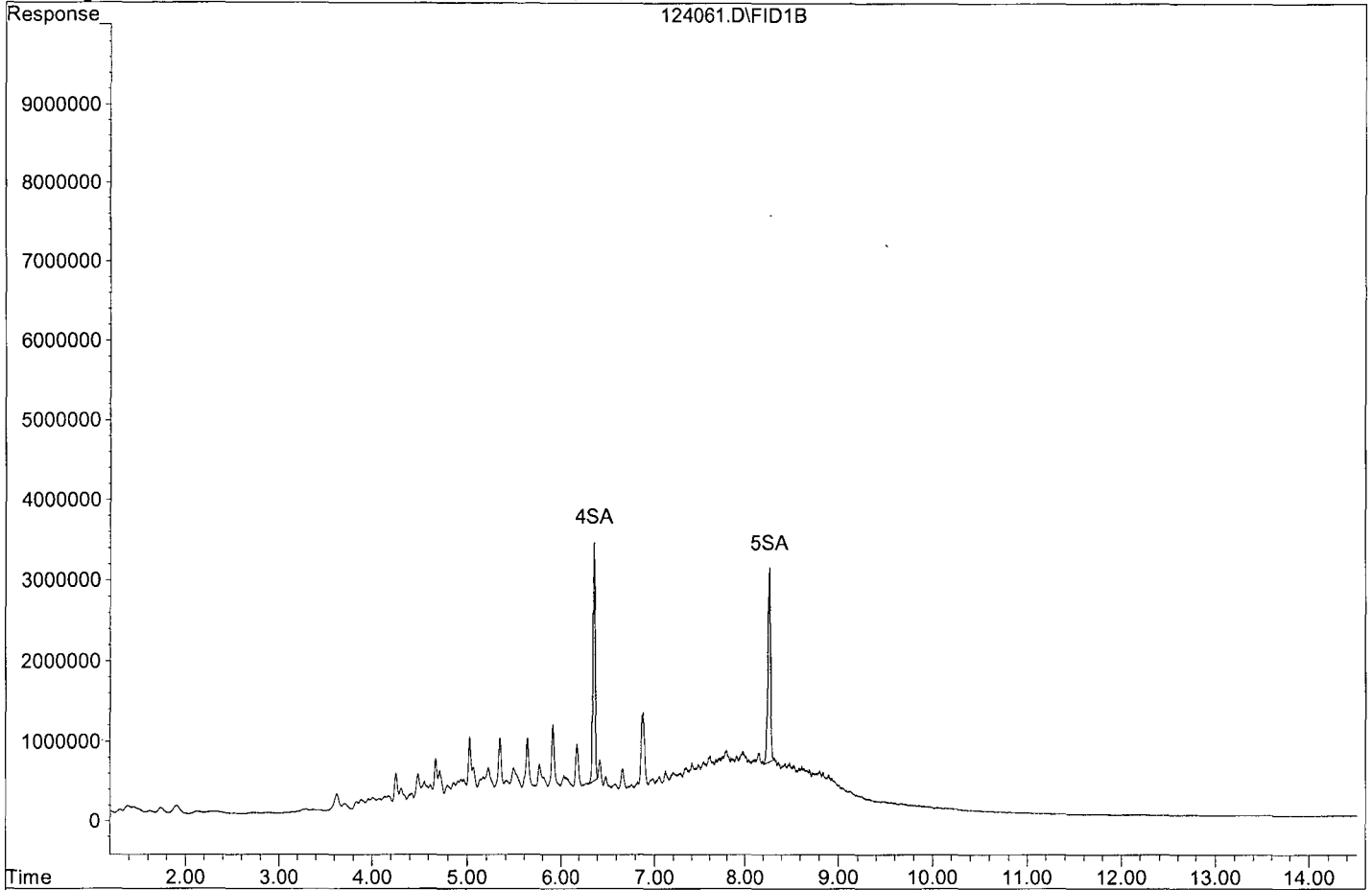
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50066851	12.396 ppb
Surrogate Spike 30.000		Recovery =	41.32%
5) SA Octacosane(S)	8.26	49273687	13.130 ppb
Surrogate Spike 30.000		Recovery =	43.77%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	581891783	244.927 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474668635	255.308 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124061.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124072.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1217280	2.5	HATM
2	HBTM Motor Oil (C24-C40)	929601	967645	4.1	HBTM
3	SA Ortho-Terphenyl(S)	2019470	2082790	3.1	SA
4	SA Octacosane(S)	1876370	1842740	1.8	SA
5					
6					
7					
8					
9					
10					
11					
12					
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14					
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31					
32					
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34					
35					
36					
37					
38					
39					
40	Average			2.9	

Data File : G:\APOLLO\DATA\190124\124072.D Vial: 72  
 Acq On : 1-29-19 20:19:55 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 30 9:58 2019 Quant Results File: DOC0117.RES

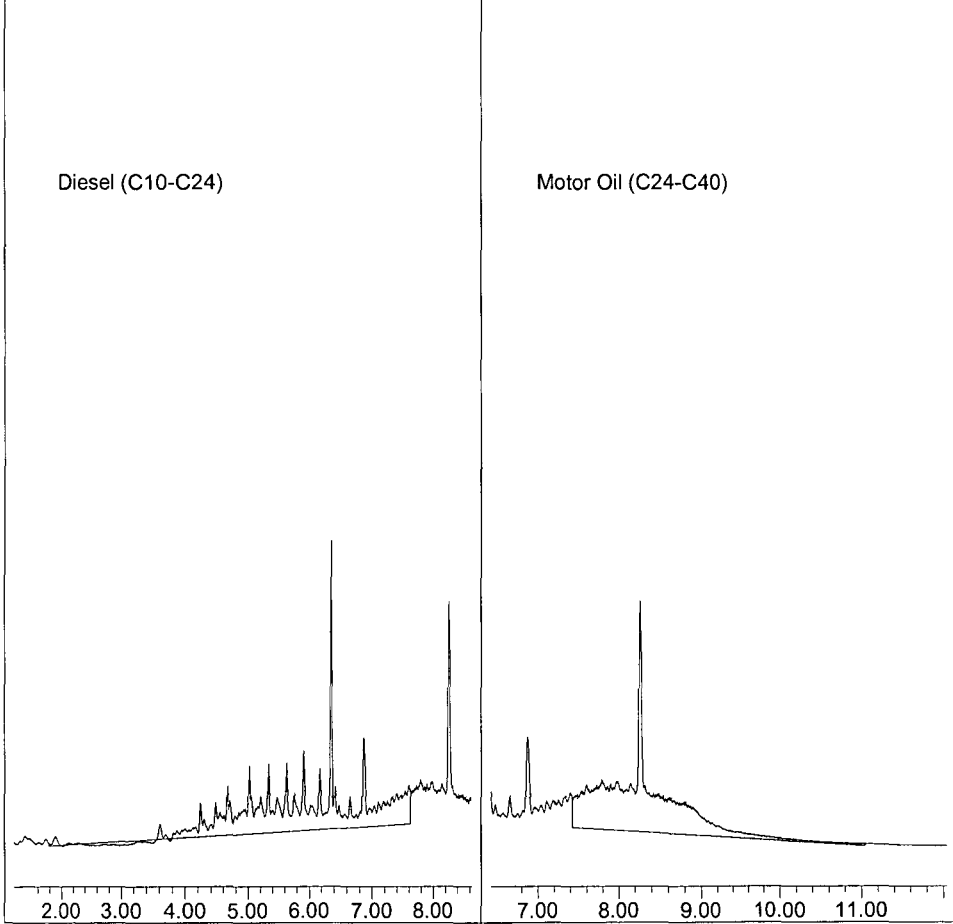
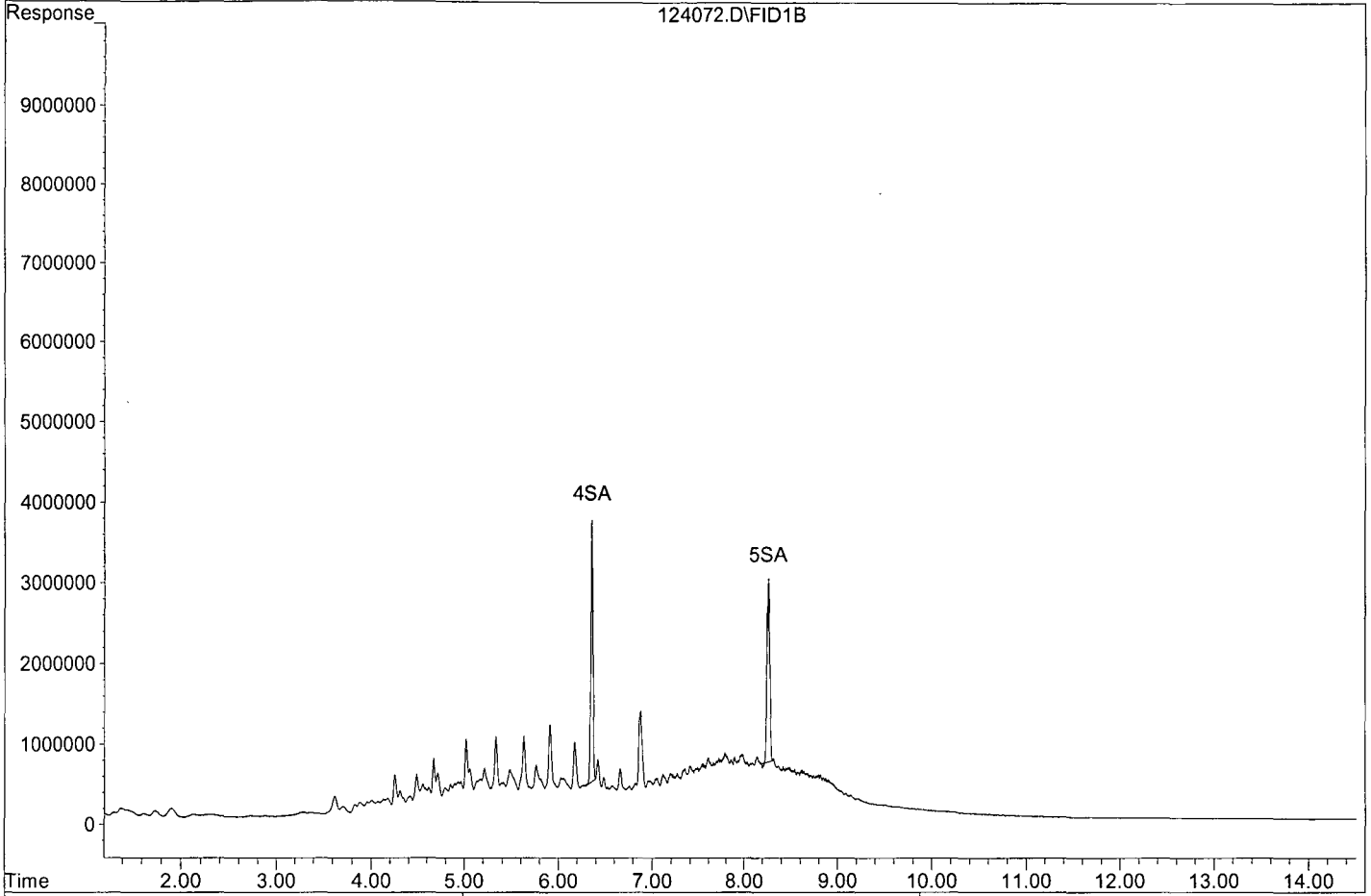
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	52069794	12.892 ppb
Surrogate Spike 30.000		Recovery =	42.97%
5) SA Octacosane(S)	8.26	46068587	12.276 ppb
Surrogate Spike 30.000		Recovery =	40.92%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	608639669	256.185 ppb
2) HBTM Motor Oil (C24-C40)	9.23	483822490	260.231 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124072.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 02/01/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 201002.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1159300	2.4	HATM
2	HBTM Motor Oil (C24-C40)	929601	956797	2.9	HBTM
3	SA Ortho-Terphenyl(S)	2019470	1952230	3.3	SA
4	SA Octacosane(S)	1876370	1973610	5.2	SA
5					
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7					
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35					
36					
37					
38					
39					
40	Average			3.5	

Data File : G:\APOLLO\DATA\190201\201002.D Vial: 2  
 Acq On : 2-1-19 10:08:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 10:18 2019 Quant Results File: DOC0117.RES

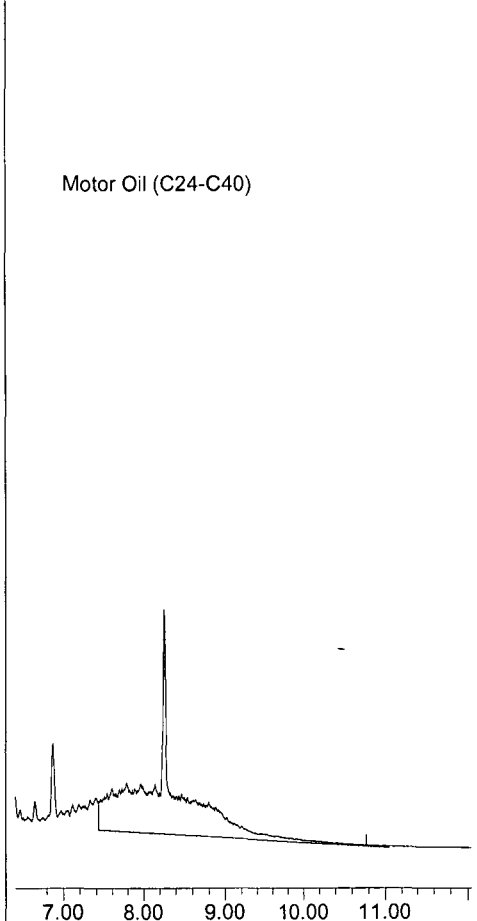
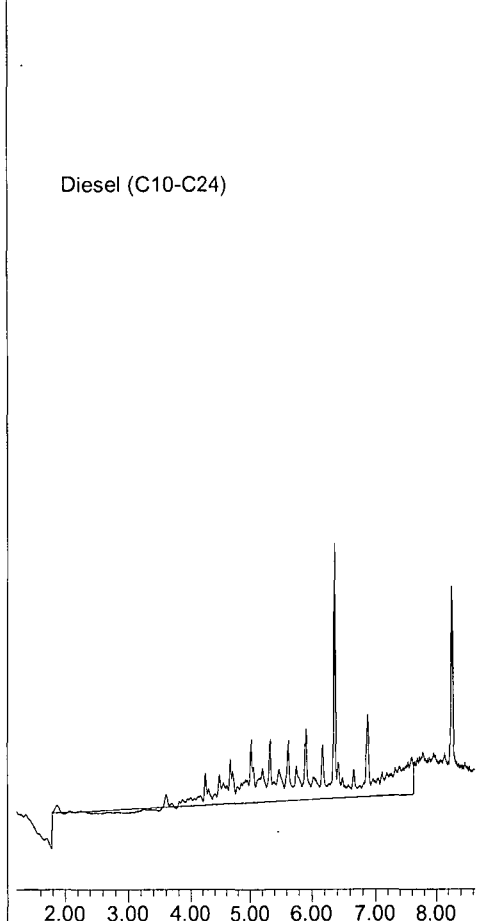
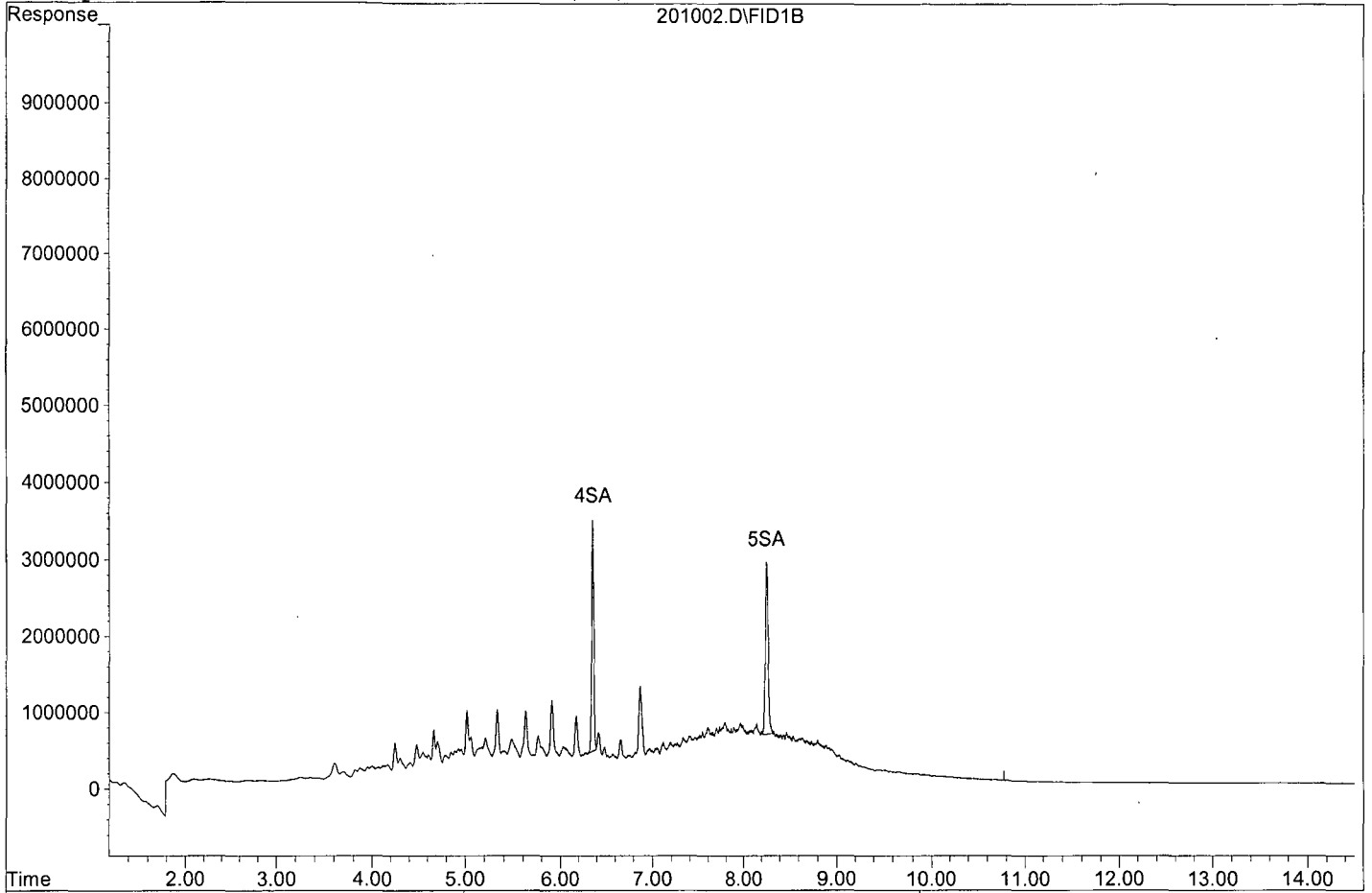
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	48805769	12.084 ppb
Surrogate Spike 30.000		Recovery =	40.28%
5) SA Octacosane(S)	8.26	49340235	13.148 ppb
Surrogate Spike 30.000		Recovery =	43.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	579650789	243.983 ppb
2) HBTM Motor Oil (C24-C40)	9.23	478398393	257.314 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201002.D  
Sample : Diesel / Motor Oil - 3 1/21/19





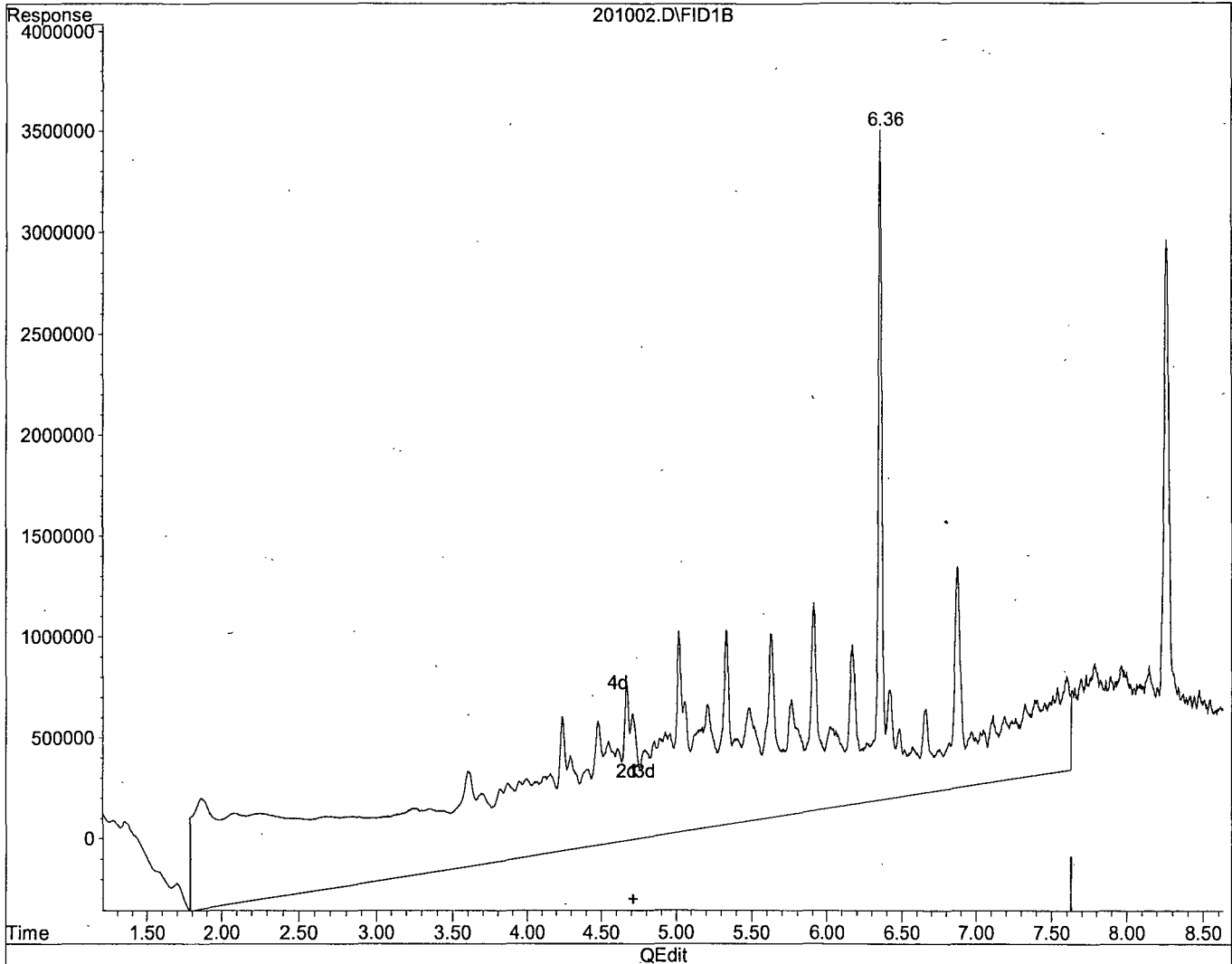
Quantitation Report

Data File : G:\APOLLO\DATA\190201\201002.D  
Acq On : 2-1-19 10:08:50  
Sample : Diesel / Motor Oil - 3 1/21/19  
Misc : water  
IntFile : events.e  
Quant Time: Feb 1 10:17 2019

Vial: 2  
Operator: DP  
Inst : Apollo  
Multiplr: 1.00

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 561.899ppb m

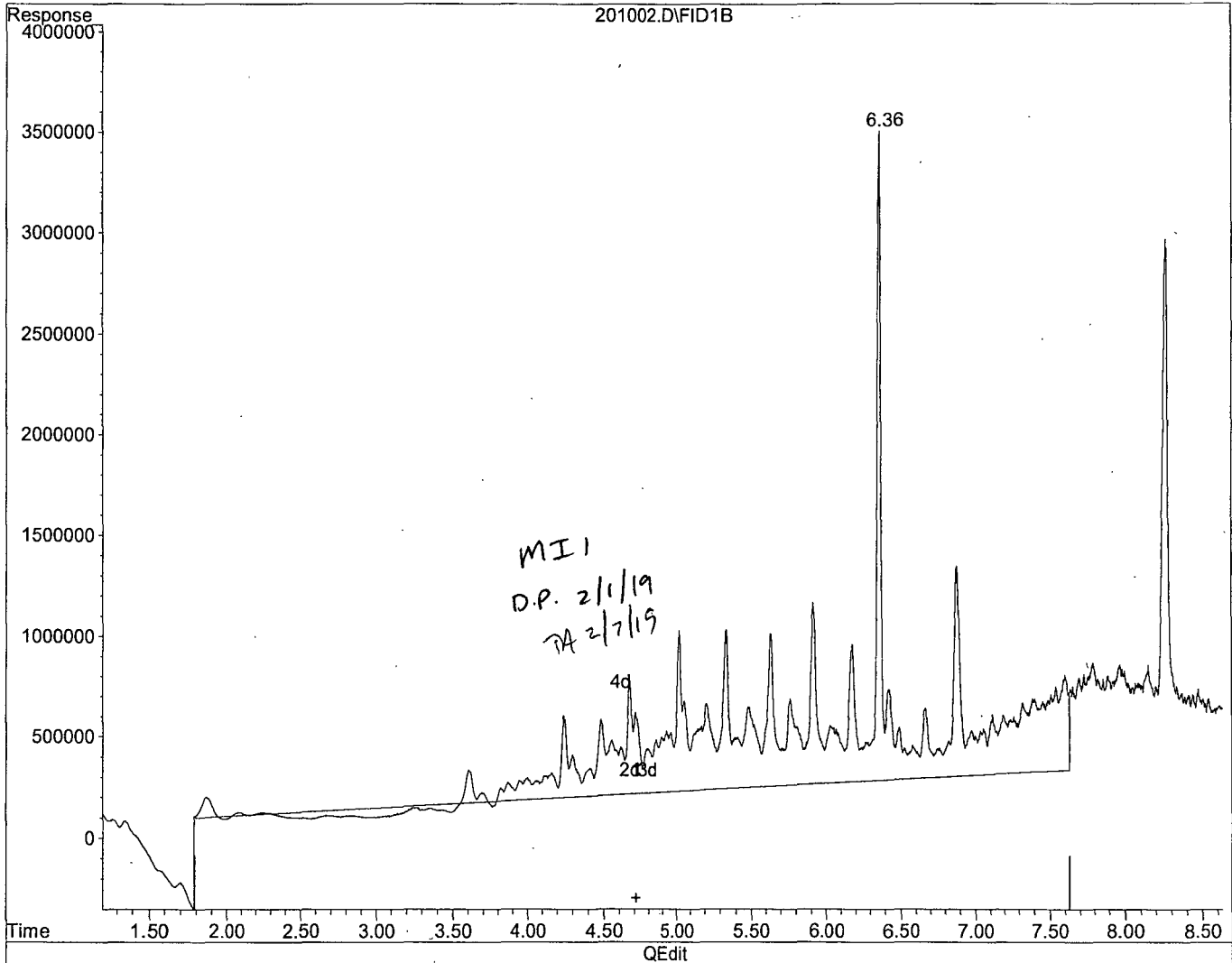
response 1334947779

(+) = Expected Retention Time

Quantitation Report

Data File : G:\APOLLO\DATA\190201\201002.D Vial: 2  
Acq On : 2-1-19 10:08:50 Operator: DP  
Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
Misc : water Multiplr: 1.00  
IntFile : events.e  
Quant Time: Feb 1 10:17 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190201\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 243.983ppb m  
response 579650789

Data File : G:\APOLLO\DATA\190201\201003.D Vial: 3  
 Acq On : 2-1-19 10:28:46 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 10:59 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

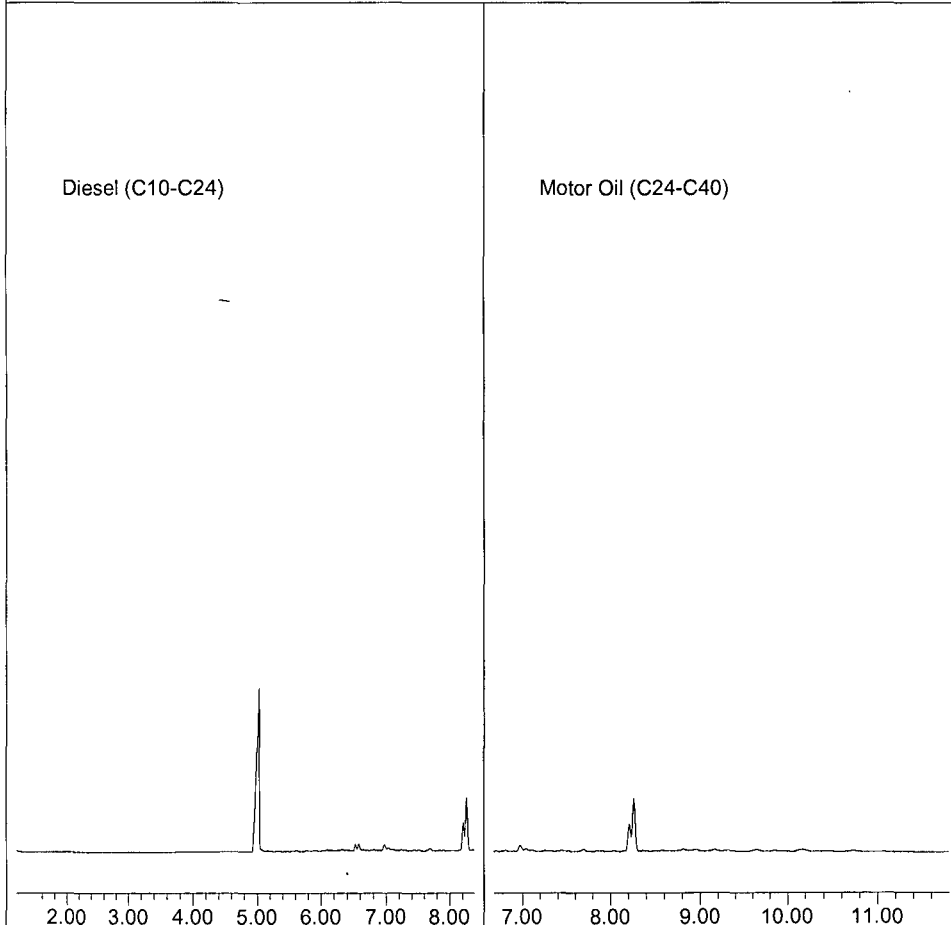
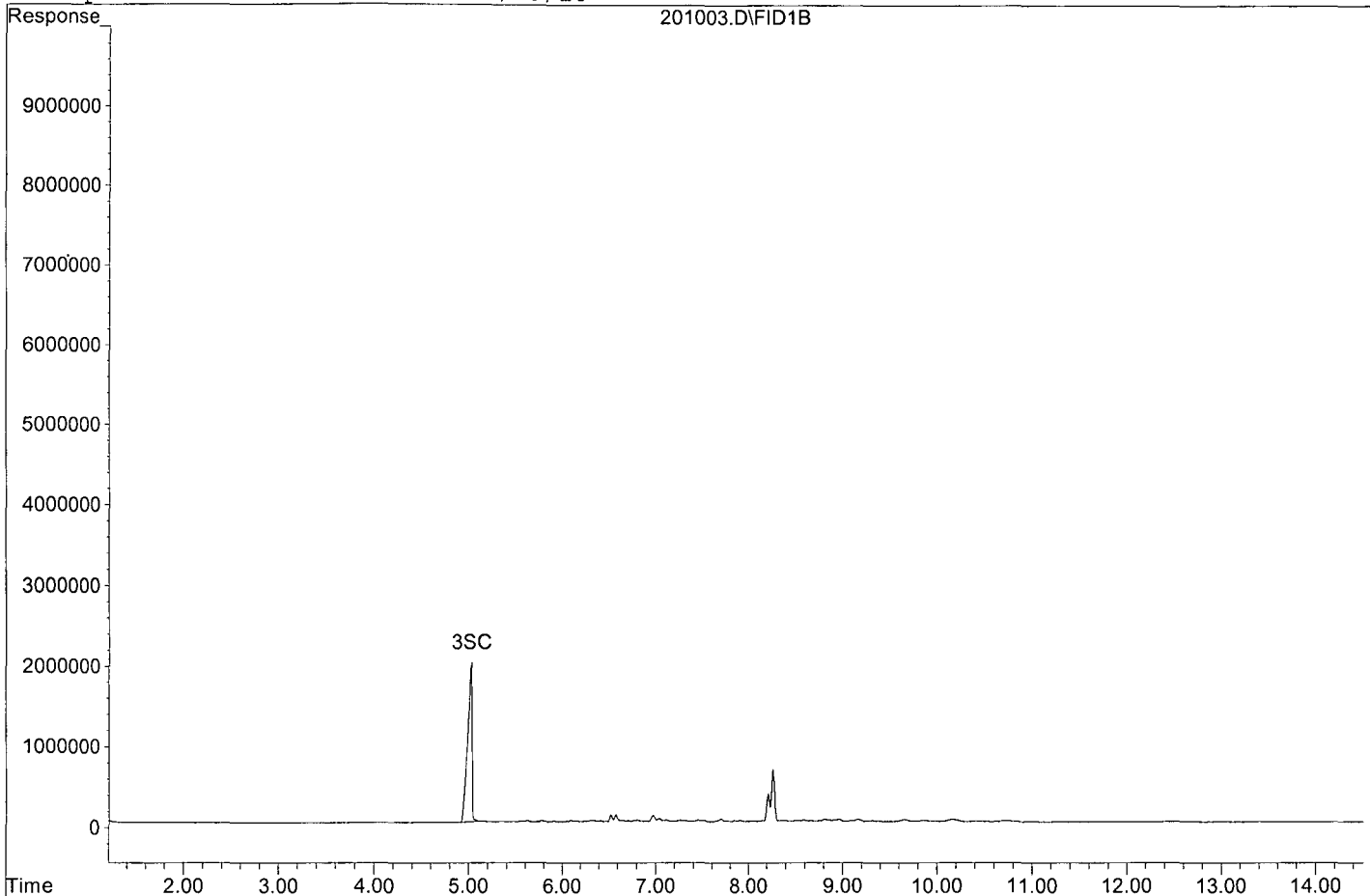
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.03	62782446	31.609 ppb
Surrogate Spike 24.000	Recovery	=	131.70%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201003.D

Sample : Decanoic Acid - 3 8/23/18



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 02/01/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 201019.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1121110	5.6	HATM
2	HBTM Motor Oil (C24-C40)	929601	933910	0.46	HBTM
3	SA Ortho-Terphenyl(S)	2019470	1970040	2.4	SA
4	SA Octacosane(S)	1876370	1985560	5.8	SA
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39					
40	Average			3.6	

Data File : G:\APOLLO\DATA\190201\201019.D Vial: 19  
 Acq On : 2-1-19 15:55:38 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 16:03 2019 Quant Results File: DOC0117.RES

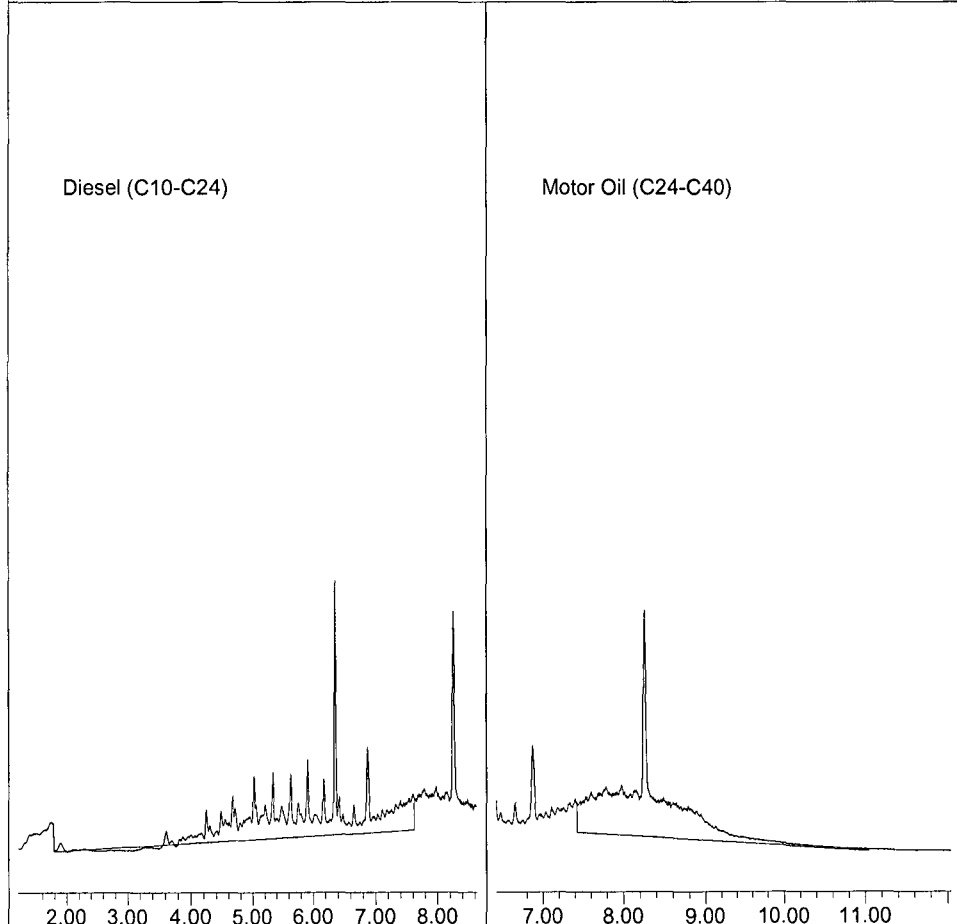
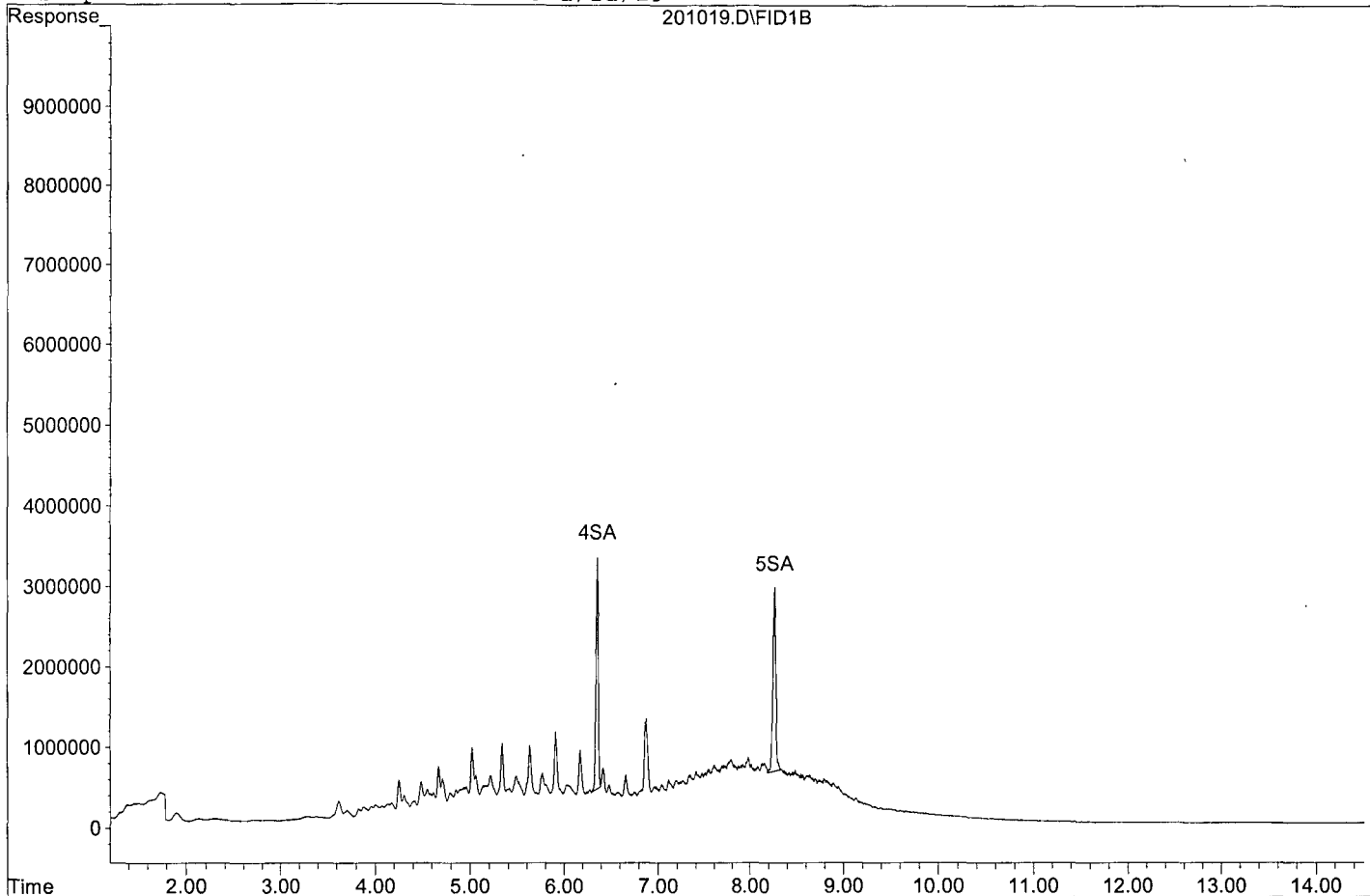
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	49250953	12.194 ppb
Surrogate Spike 30.000		Recovery =	40.65%
5) SA Octacosane(S)	8.26	49639090	13.227 ppb
Surrogate Spike 30.000		Recovery =	44.09%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	560556794	235.946 ppb
2) HBTM Motor Oil (C24-C40)	9.23	466955084	251.159 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201019.D  
Sample : Diesel / Motor Oil - 3 1/21/19



Data File : G:\APOLLO\DATA\190201\201020.D Vial: 20  
 Acq On : 2-1-19 16:15:43 Operator: DP  
 Sample : Decanoic Acid - 3 8/23/18 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 1 16:24 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

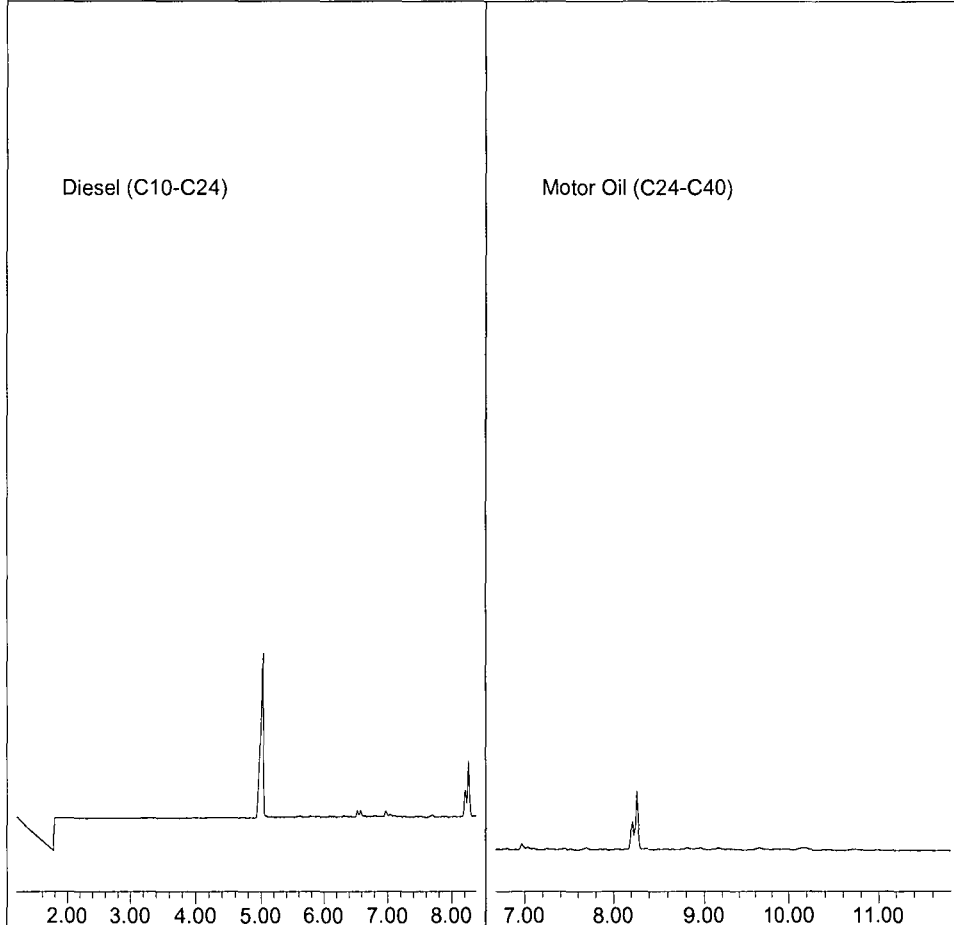
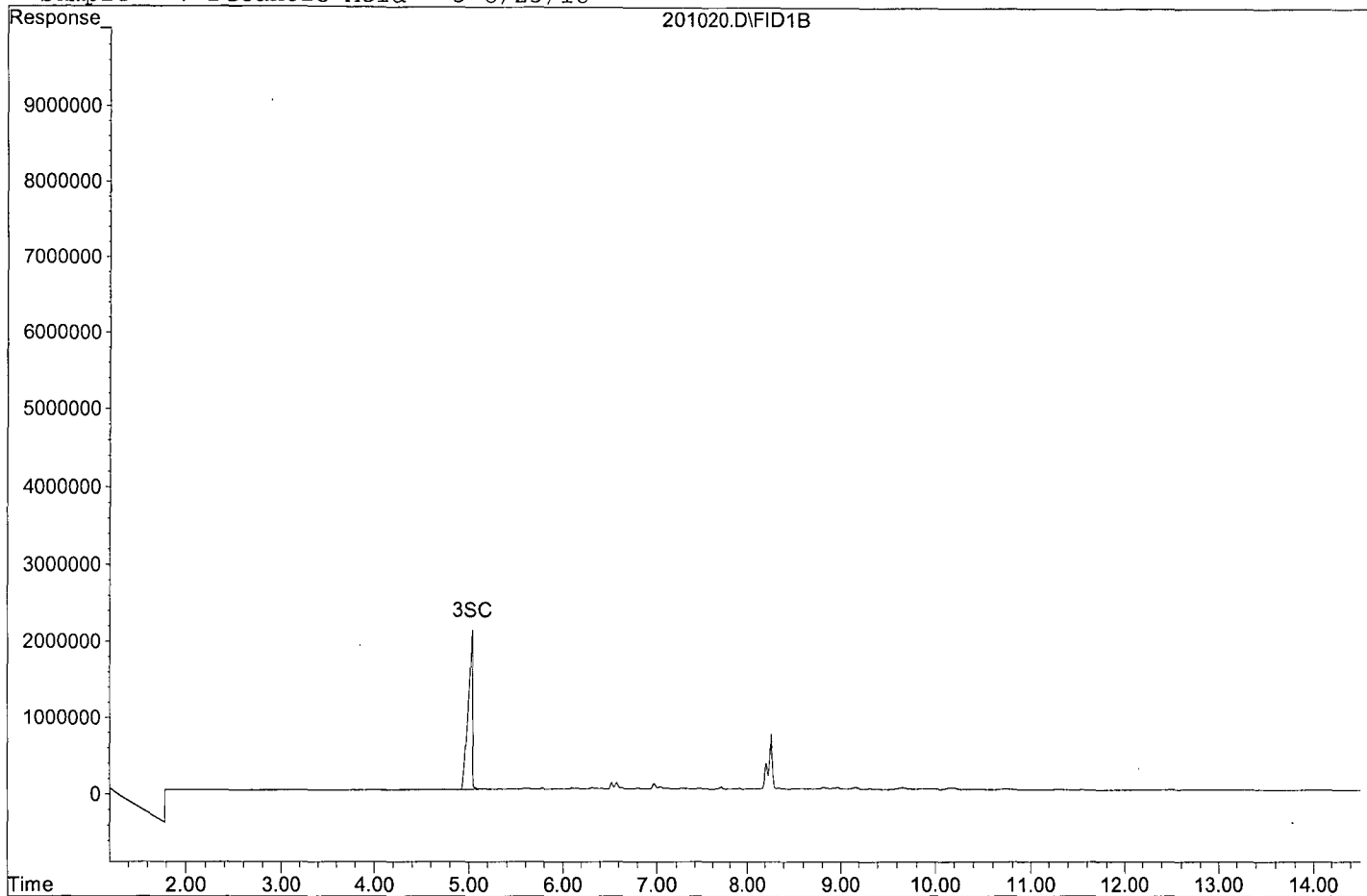
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SC Decanoic Acid(S)	5.03	64249129	32.347 ppb
Surrogate Spike 24.000	Recovery	=	134.78%

Target Compounds



Data File: G:\APOLLO\DATA\190201\201020.D

Sample : Decanoic Acid - 3 8/23/18



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 02/04/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 204002.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1161660	2.2	HATM
2	HBTM	Motor Oil (C24-C40)	929601	940980	1.2	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	1999460	0.99	SA
4	SA	Octacosane(S)	1876370	1946540	3.7	SA
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39						
40		Average			2.0	

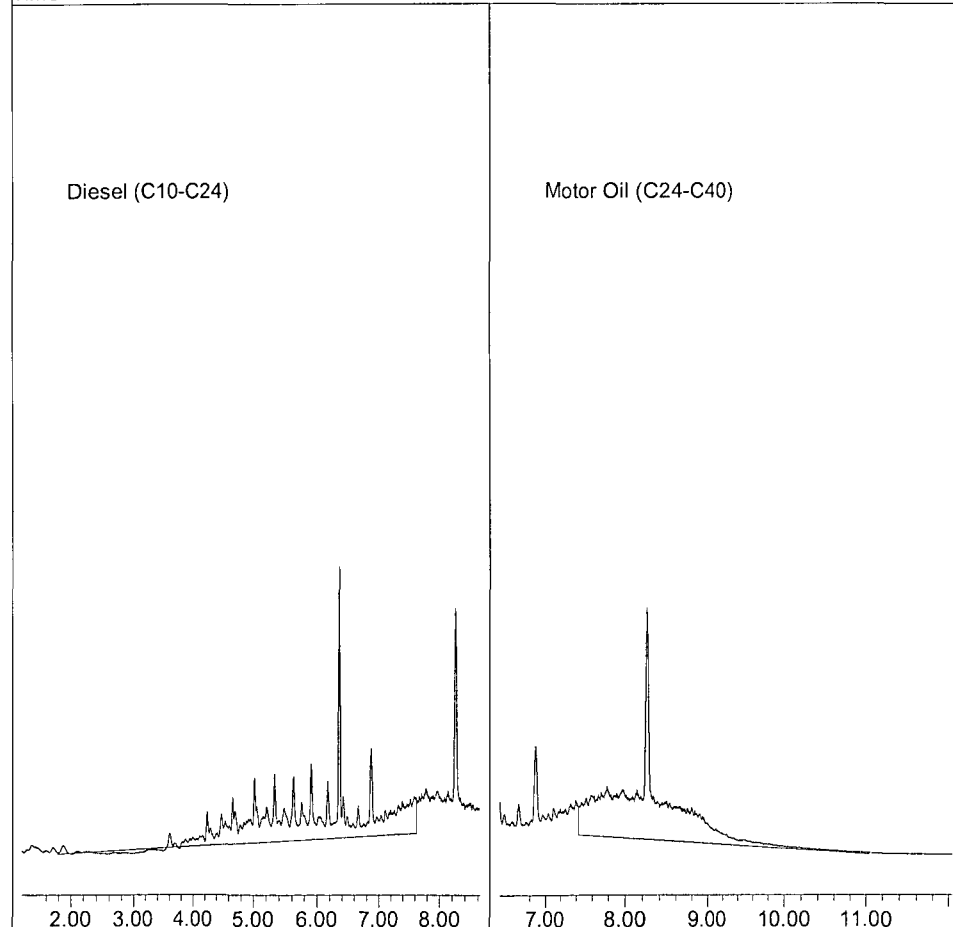
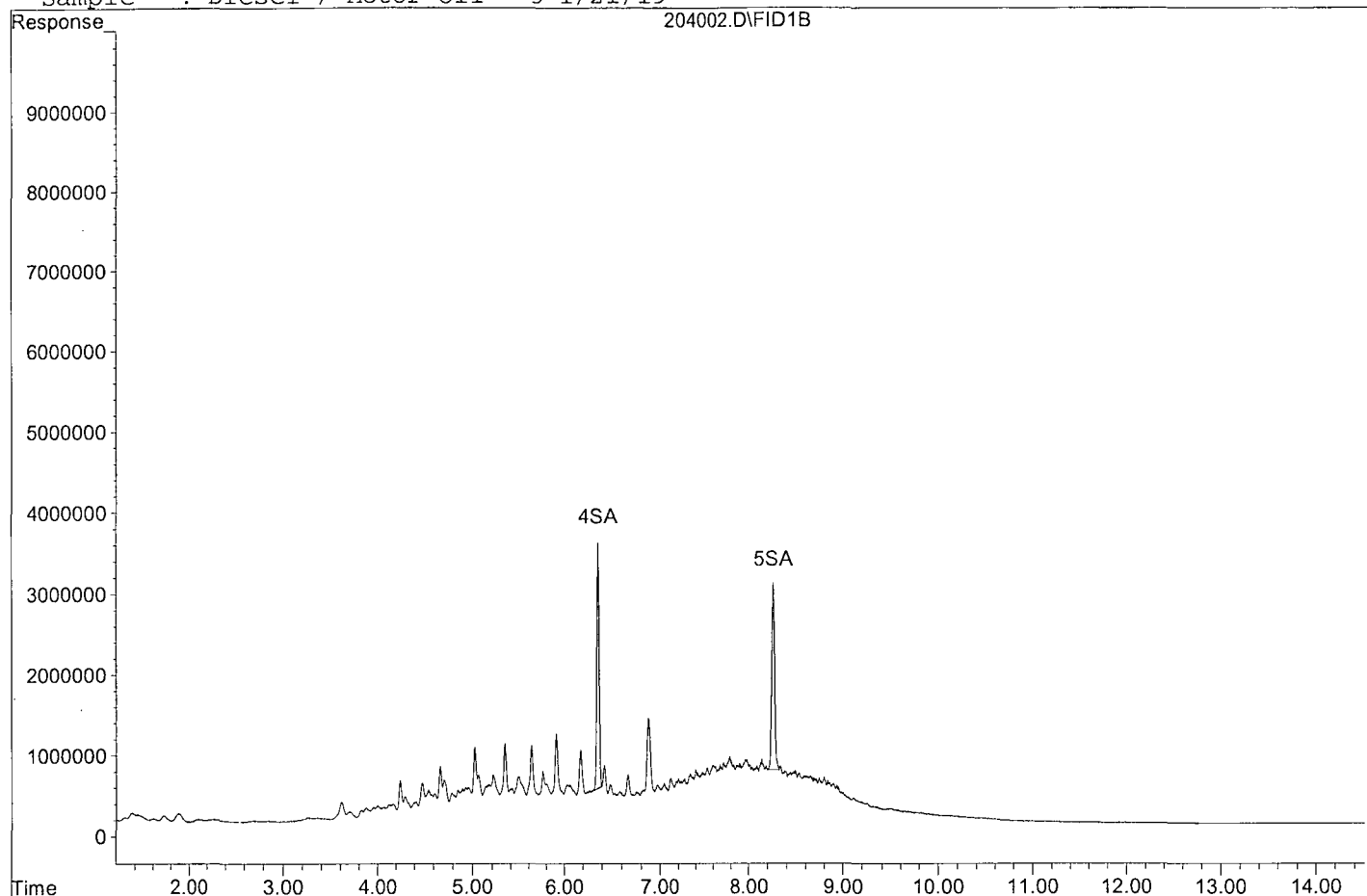
Data File : G:\APOLLO\DATA\190204\204002.D Vial: 2  
 Acq On : 2-4-19 11:13:52 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 4 11:23 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	49986595	12.376 ppb
Surrogate Spike 30.000		Recovery =	41.25%
5) SA Octacosane(S)	8.26	48663446	12.967 ppb
Surrogate Spike 30.000		Recovery =	43.22%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	580831934	244.481 ppb
2) HBTM Motor Oil (C24-C40)	9.23	470490176	253.060 ppb

Data File: G:\APOLLO\DATA\190204\204002.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 02/04/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 204017.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1196320	0.71	HATM
2	HBTM	Motor Oil (C24-C40)	929601	965643	3.9	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	2073900	2.7	SA
4	SA	Octacosane(S)	1876370	1937910	3.3	SA
5						
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37						
38						
39						
40		Average			2.7	

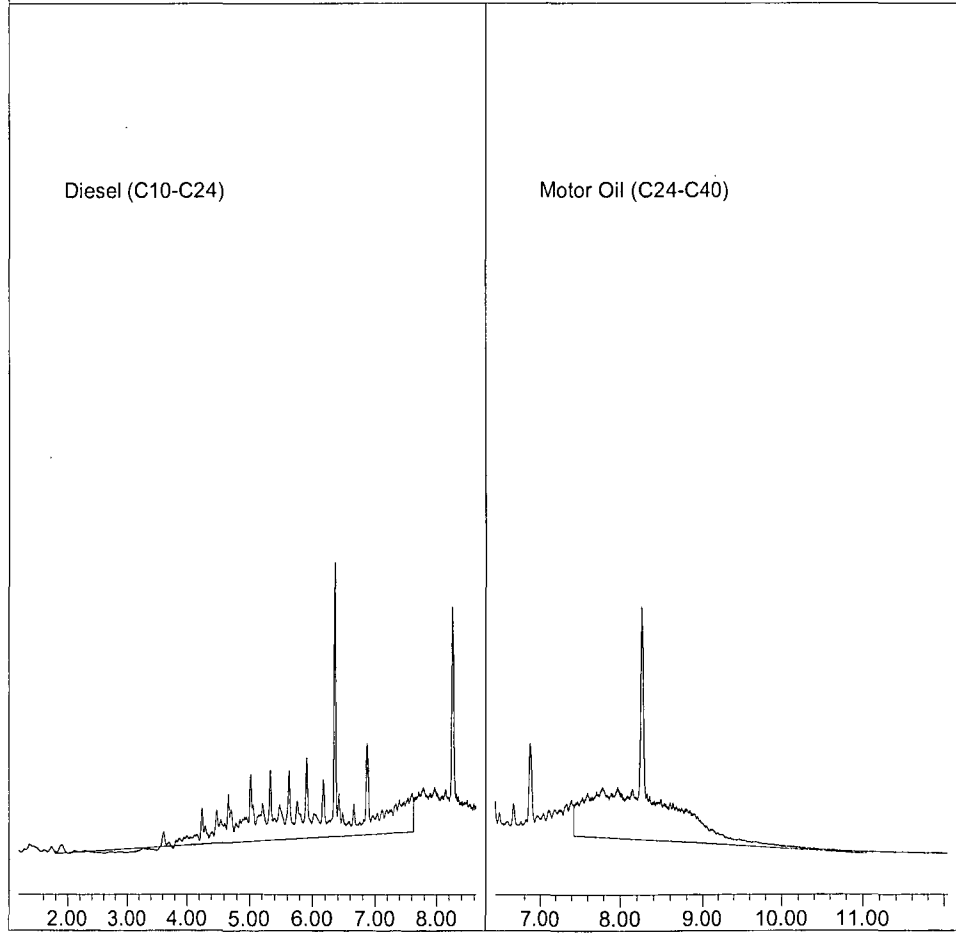
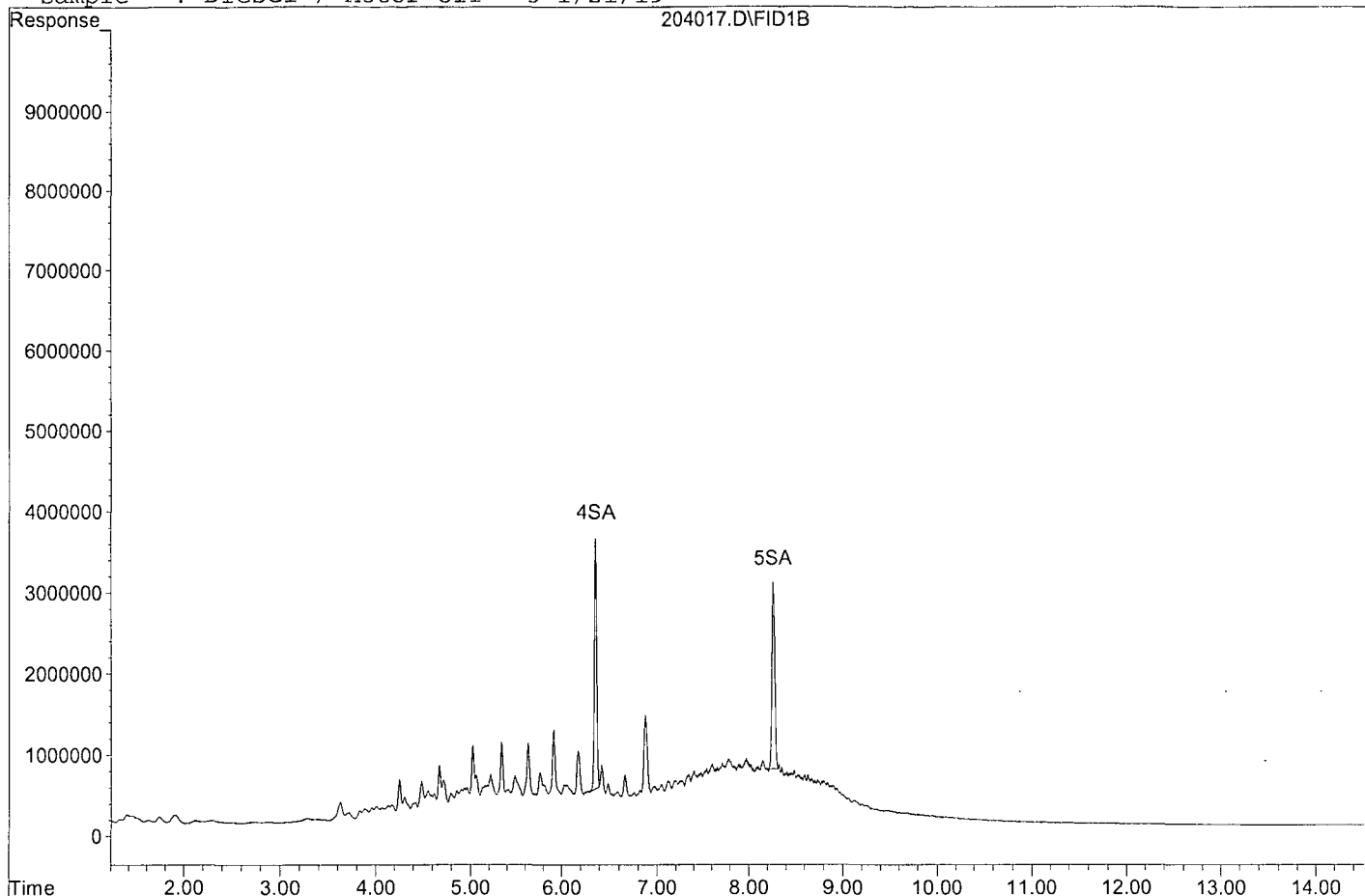
Data File : G:\APOLLO\DATA\190204\204017.D Vial: 17  
 Acq On : 2-4-19 16:14:01 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Feb 4 16:20 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	51847549	12.837 ppb
Surrogate Spike 30.000		Recovery =	42.79%
5) SA Octacosane(S)	8.26	48447757	12.910 ppb
Surrogate Spike 30.000		Recovery =	43.03%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	598157607	251.773 ppb
2) HBTM Motor Oil (C24-C40)	9.23	482821726	259.693 ppb

Data File: G:\APOLLO\DATA\190204\204017.D  
Sample : Diesel / Motor Oil - 3 1/21/19



**ORGANICS**  
**Raw Data**



Data File : G:\APOLLO\DATA\190124\124054.D Vial: 54  
 Acq On : 1-29-19 14:20:30 Operator: DP  
 Sample : AZ85562W34 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:21 2019 Quant Results File: DOC0117.RES

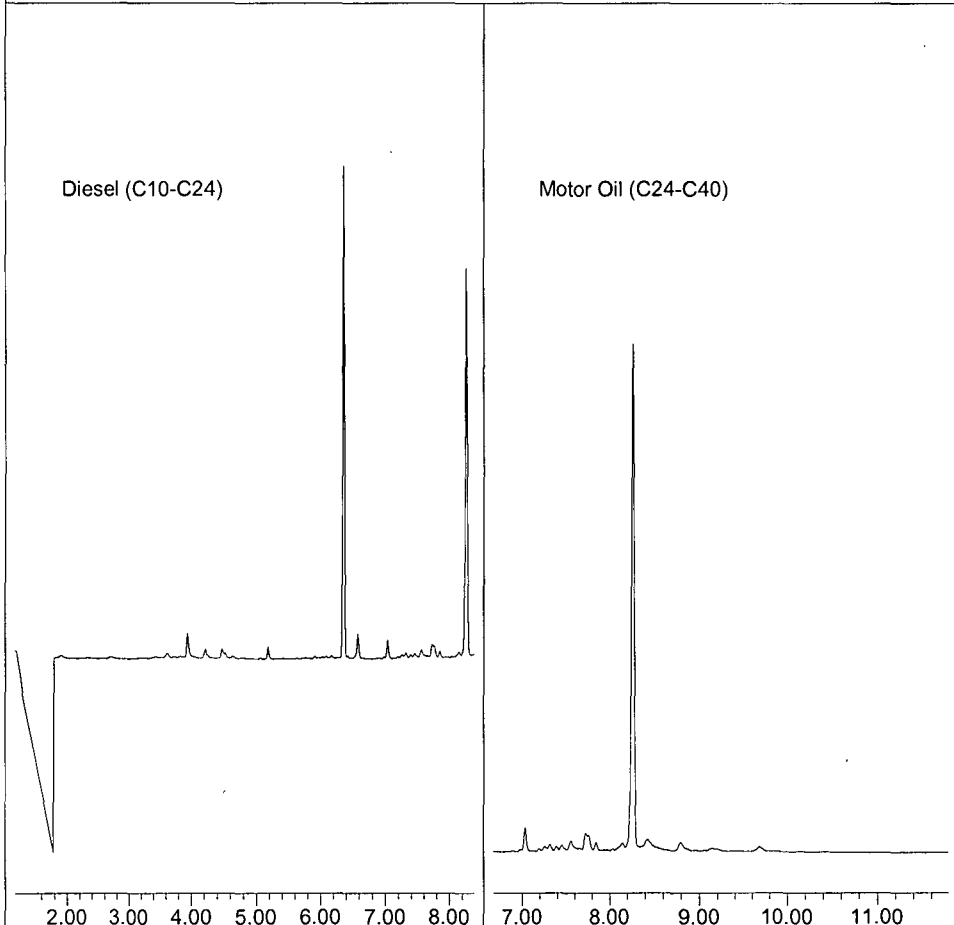
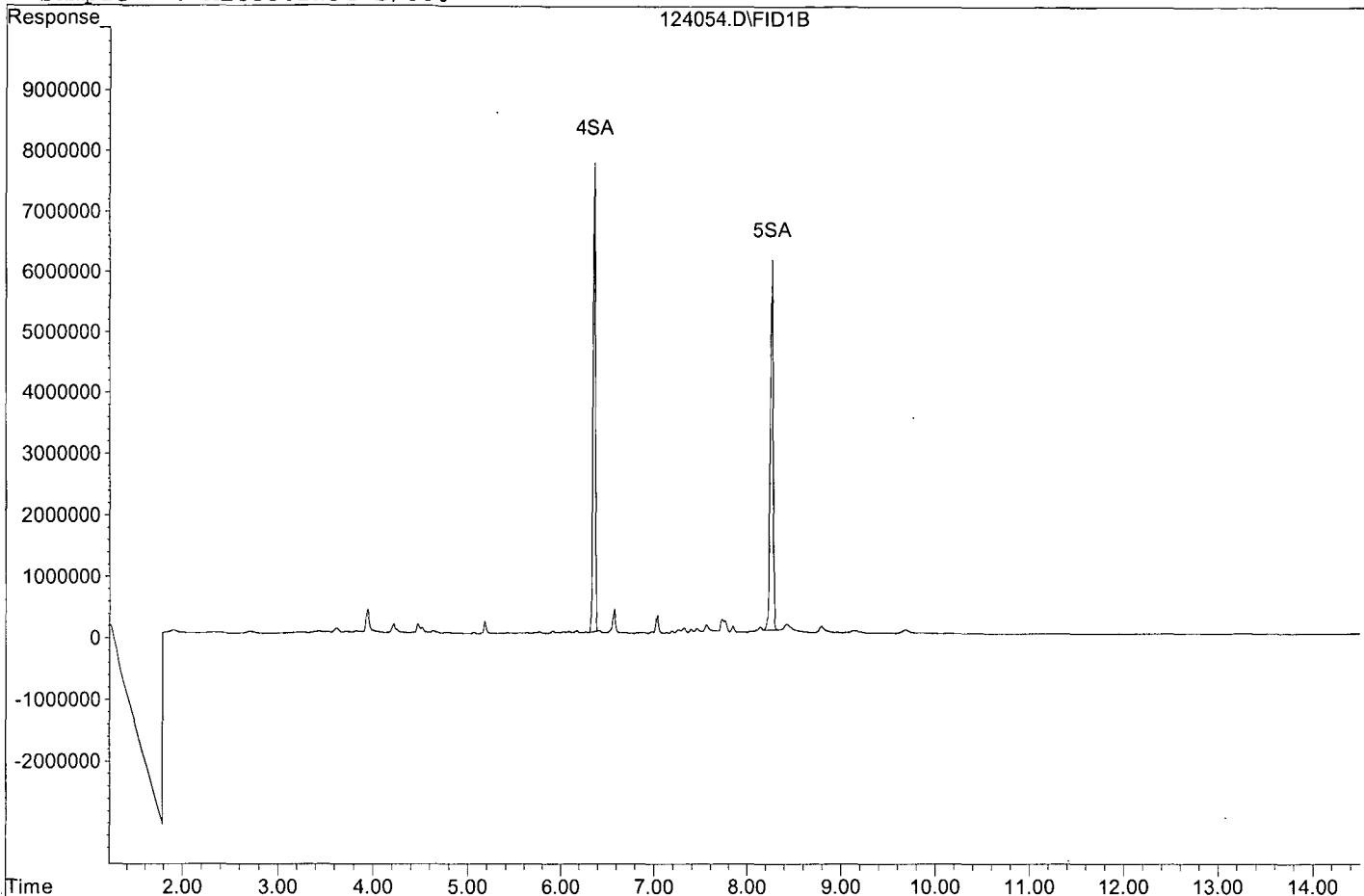
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	131800414	81.581 ppb
Surrogate Spike 75.000		Recovery =	108.77%
5) SA Octacosane(S)	8.26	128802020	85.805 ppb
Surrogate Spike 75.000		Recovery =	114.41%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124054.D  
Sample : AZ85562W34 2/800



Data File : G:\APOLLO\DATA\190124\124055.D Vial: 55  
 Acq On : 1-29-19 14:40:43 Operator: DP  
 Sample : AZ85563W07 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:21 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

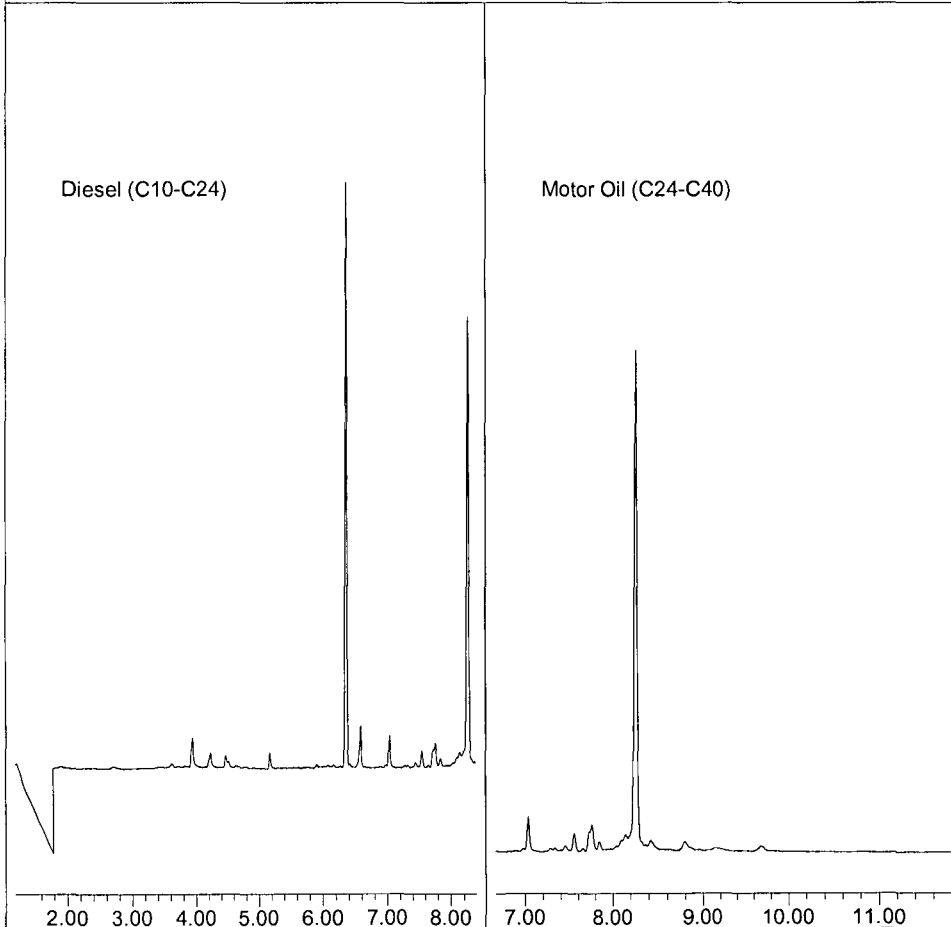
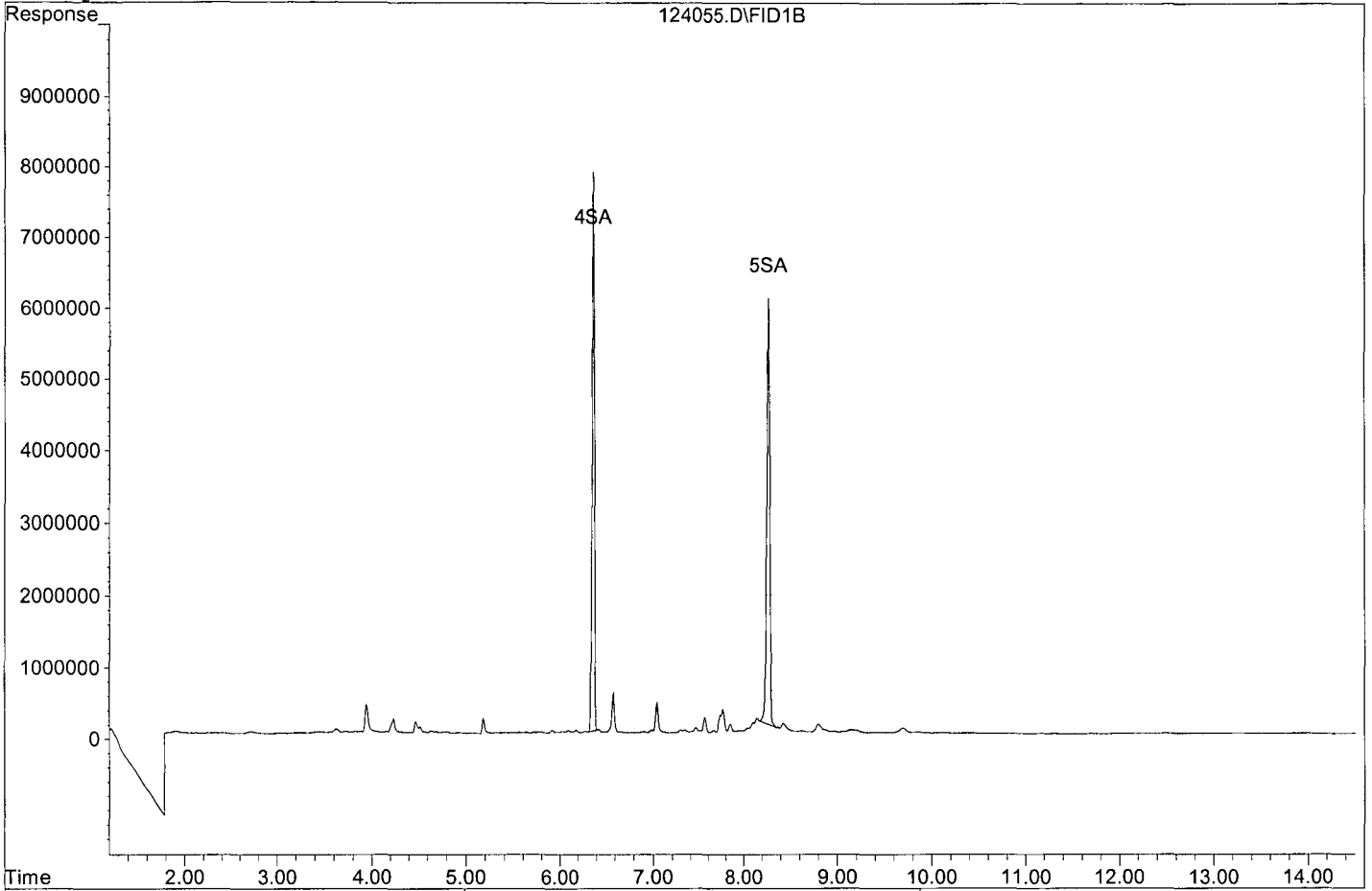
4) SA Ortho-Terphenyl(S)	6.36	133151010	82.417 ppb
Surrogate Spike 75.000		Recovery =	109.89%
5) SA Octacosane(S)	8.26	130158583	86.709 ppb
Surrogate Spike 75.000		Recovery =	115.61%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124055.D

Sample : AZ85563W07 2/800



Data File : G:\APOLLO\DATA\190124\124070.D Vial: 70  
 Acq On : 1-29-19 19:40:49 Operator: DP  
 Sample : AZ85565W24 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 10:00 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

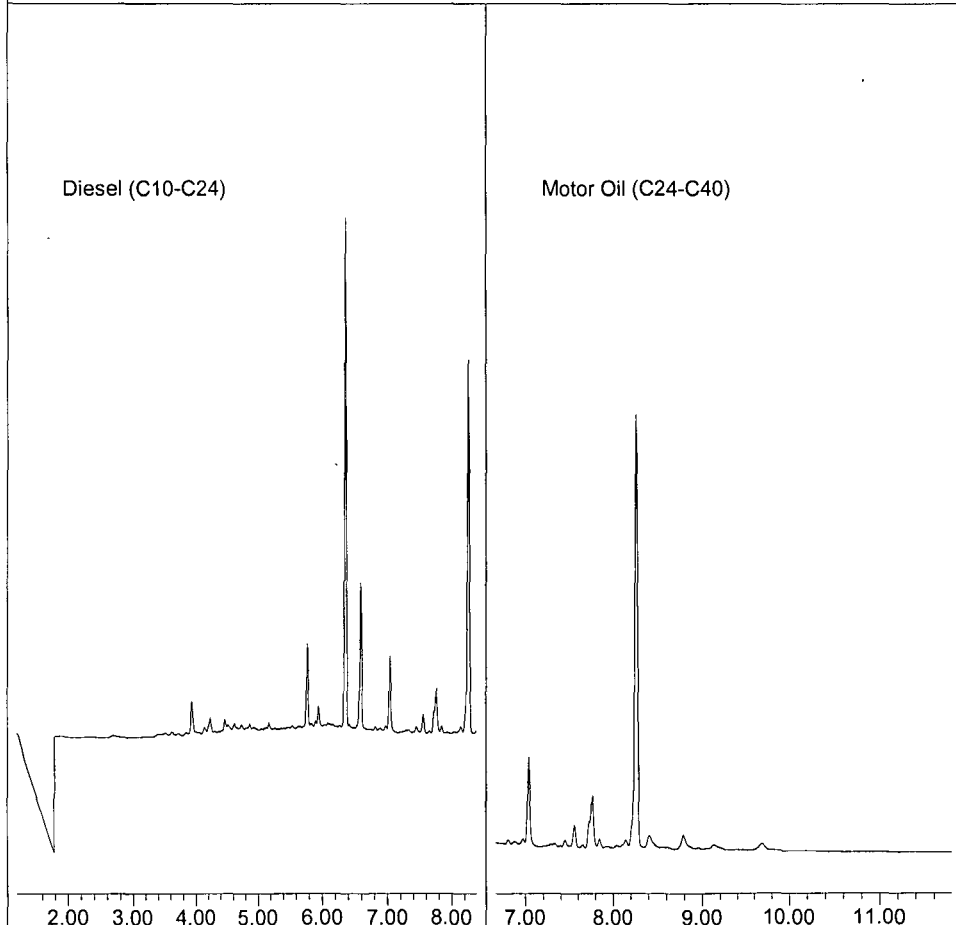
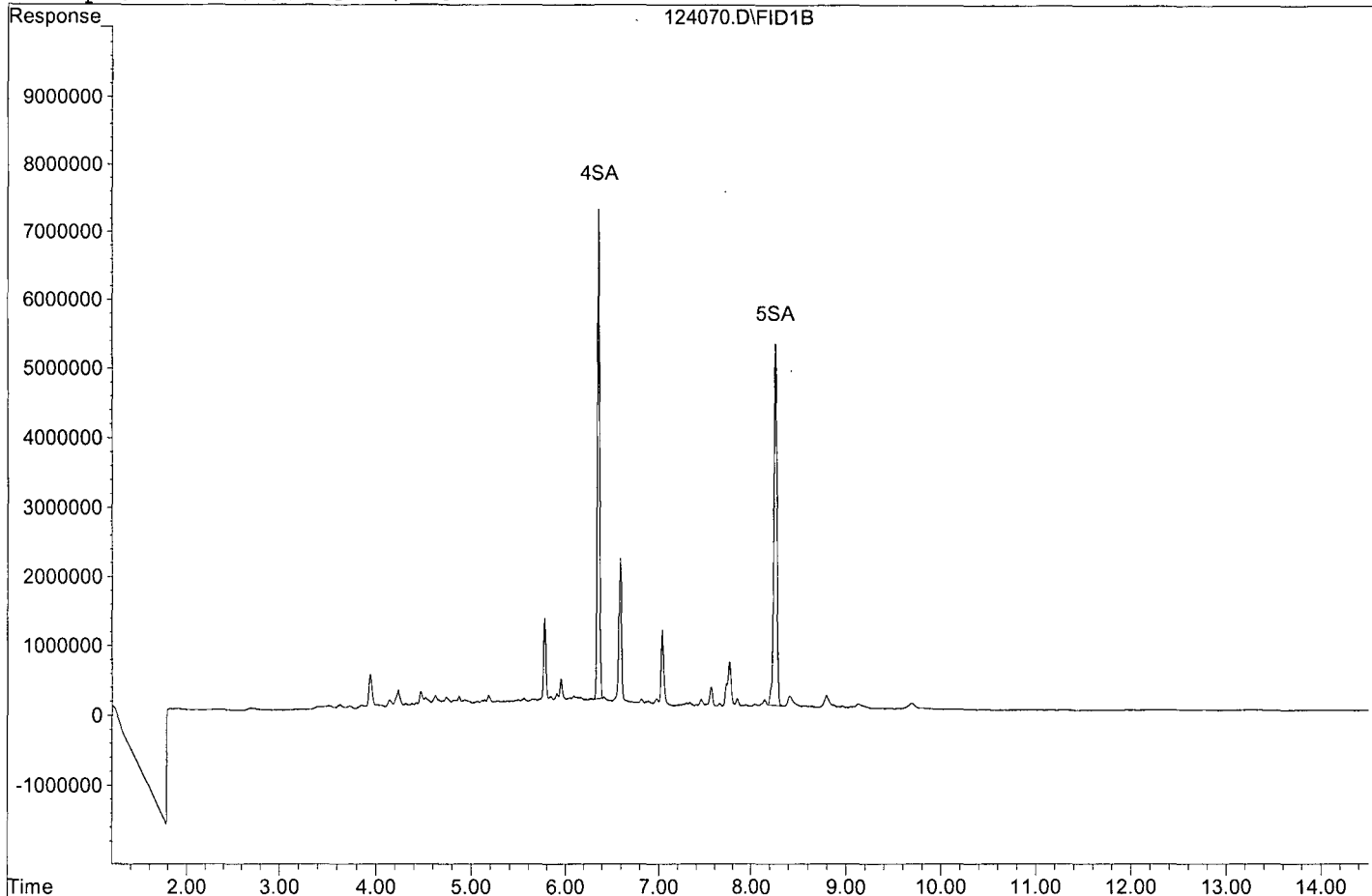
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	118918105	73.607 ppb
Surrogate Spike 75.000		Recovery =	98.14%
5) SA Octacosane(S)	8.26	116145368	77.374 ppb
Surrogate Spike 75.000		Recovery =	103.17%

Target Compounds

Data File: G:\APOLLO\DATA\190124\124070.D

Sample : AZ85565W24 2/800



Data File : G:\APOLLO\DATA\190204\204006.D Vial: 6  
 Acq On : 2-4-19 12:33:09 Operator: DP  
 Sample : AZ85565W23 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 11 11:27 2019 Quant Results File: DOC0117.RES

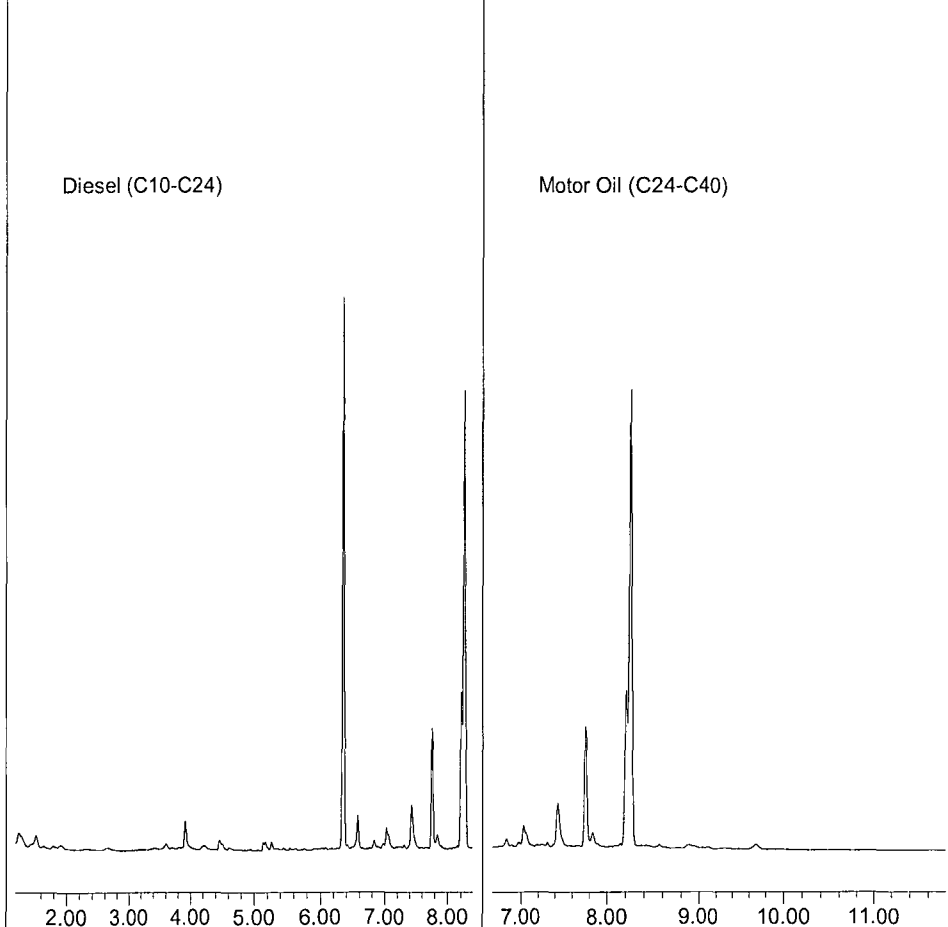
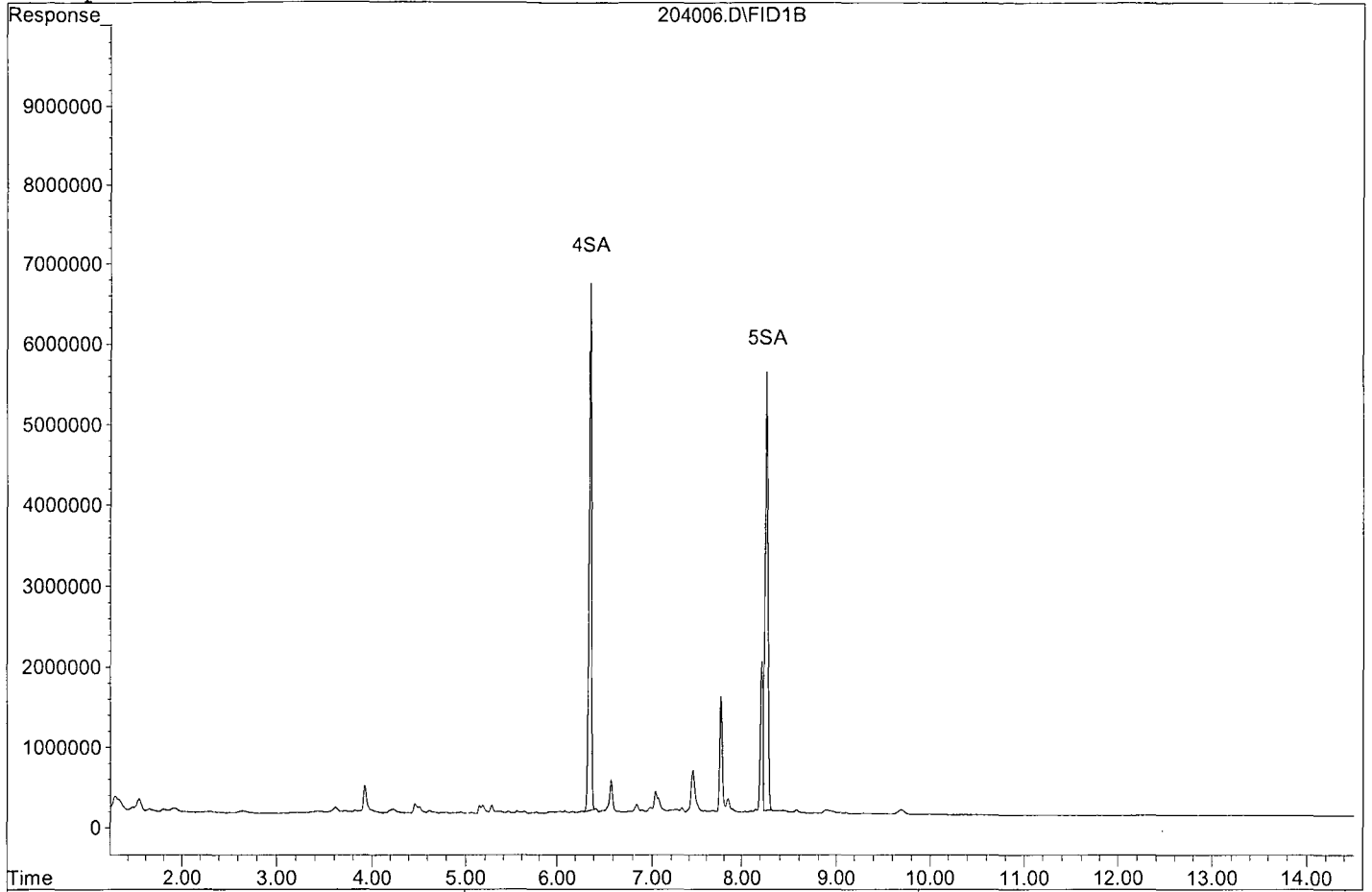
Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	114373835	70.794 ppb
Surrogate Spike 75.000		Recovery =	94.39%
5) SA Octacosane(S)	8.26	110679867	73.733 ppb m
Surrogate Spike 75.000		Recovery =	98.31%

Target Compounds

Data File: G:\APOLLO\DATA\190204\204006.D  
Sample : AZ85565W23 2/800





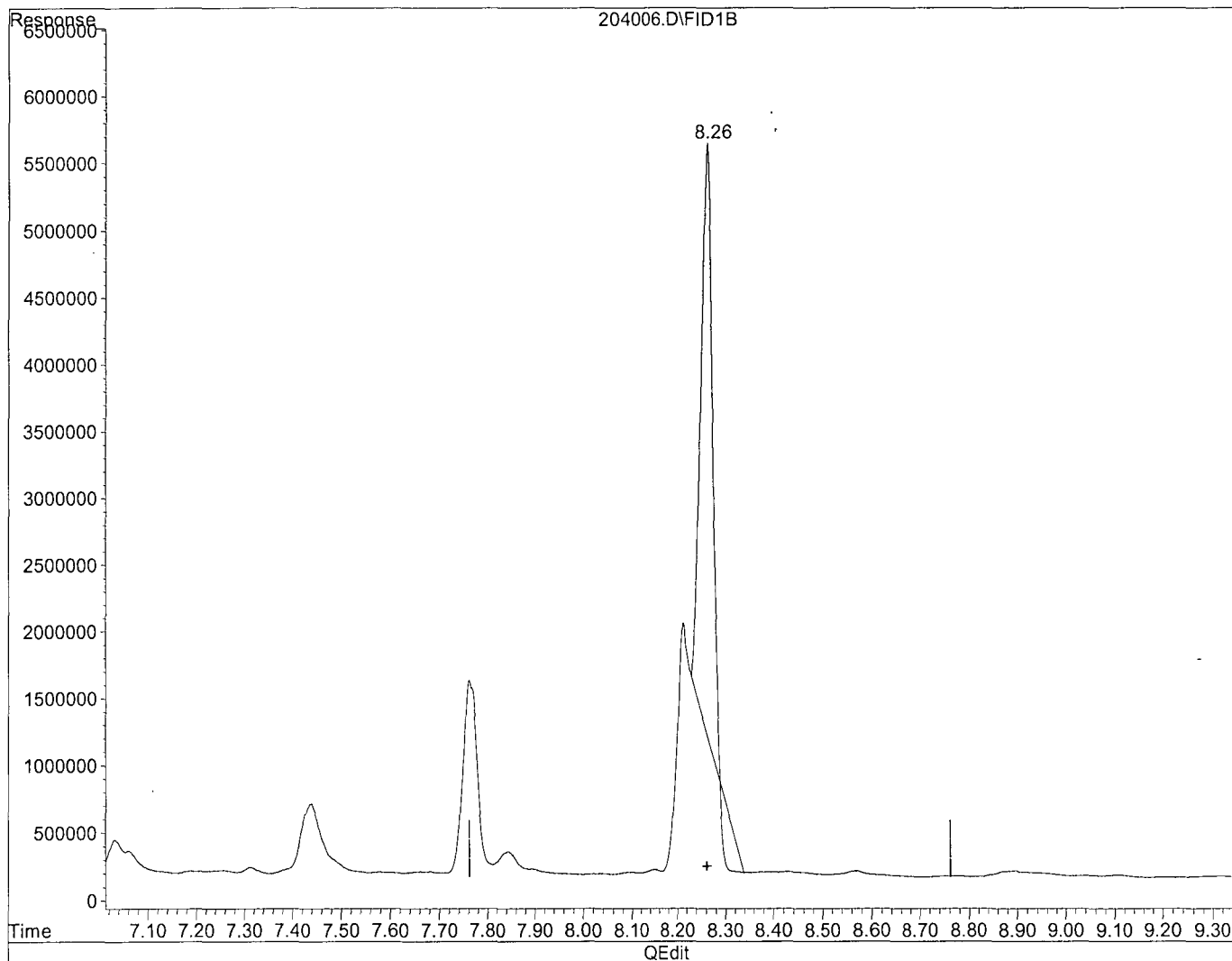
Quantitation Report

Data File : G:\APOLLO\DATA\190204\204006.D  
Acq On : 2-4-19 12:33:09  
Sample : AZ85565W23 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Feb 11 11:27 2019

Vial: 6  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(5) Octacosane(S) (SA)

8.26min 43.064ppb

response 64642368

(+) = Expected Retention Time

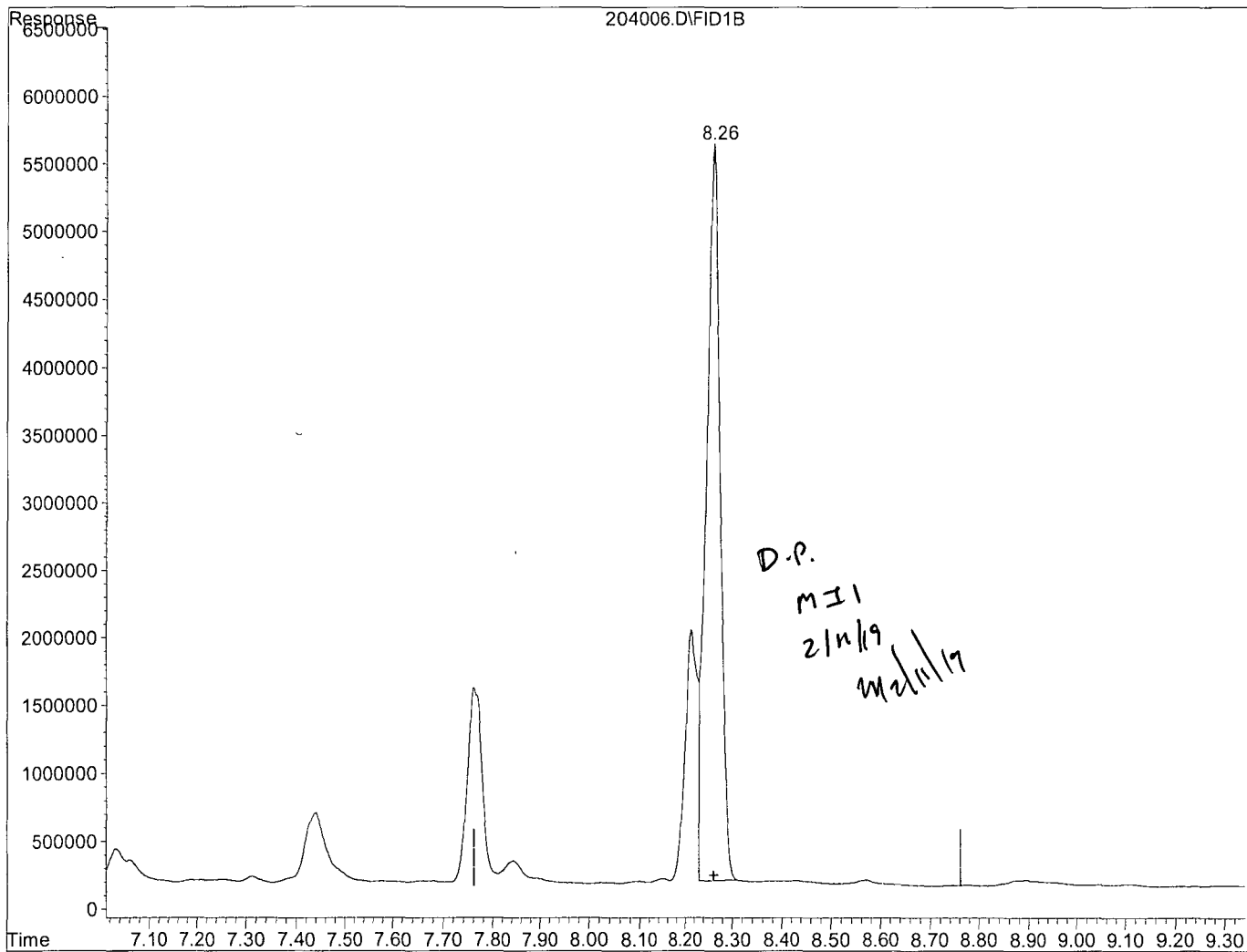
Quantitation Report

Data File : G:\APOLLO\DATA\190204\204006.D  
Acq On : 2-4-19 12:33:09  
Sample : AZ85565W23 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Feb 11 11:27 2019

Vial: 6  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



Time	Response
7.10	~400,000
7.45	~700,000
7.75	~1,600,000
8.20	~2,000,000
8.26	~5,600,000
8.75	~600,000

(5) Octacosane(S) (SA)  
8.26min 73.733ppb m  
response 110679867

Data File : G:\APOLLO\DATA\190124\124071.D Vial: 71  
 Acq On : 1-29-19 20:00:05 Operator: DP  
 Sample : AZ85567W21 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 10:01 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

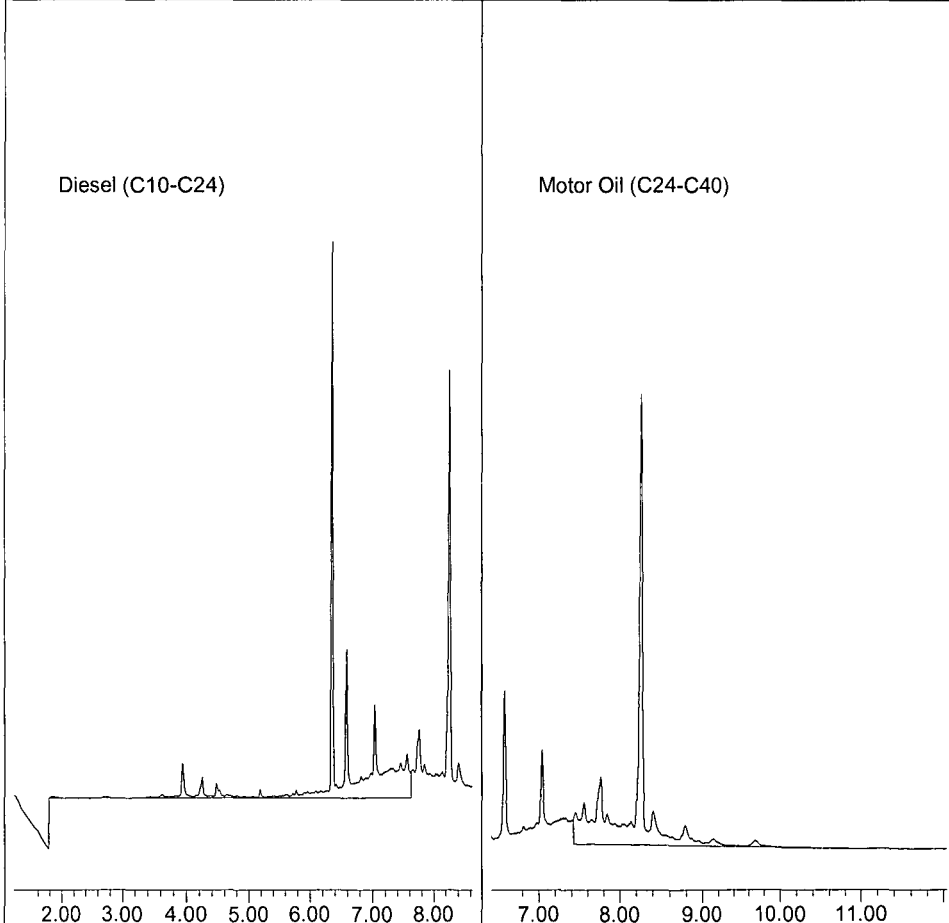
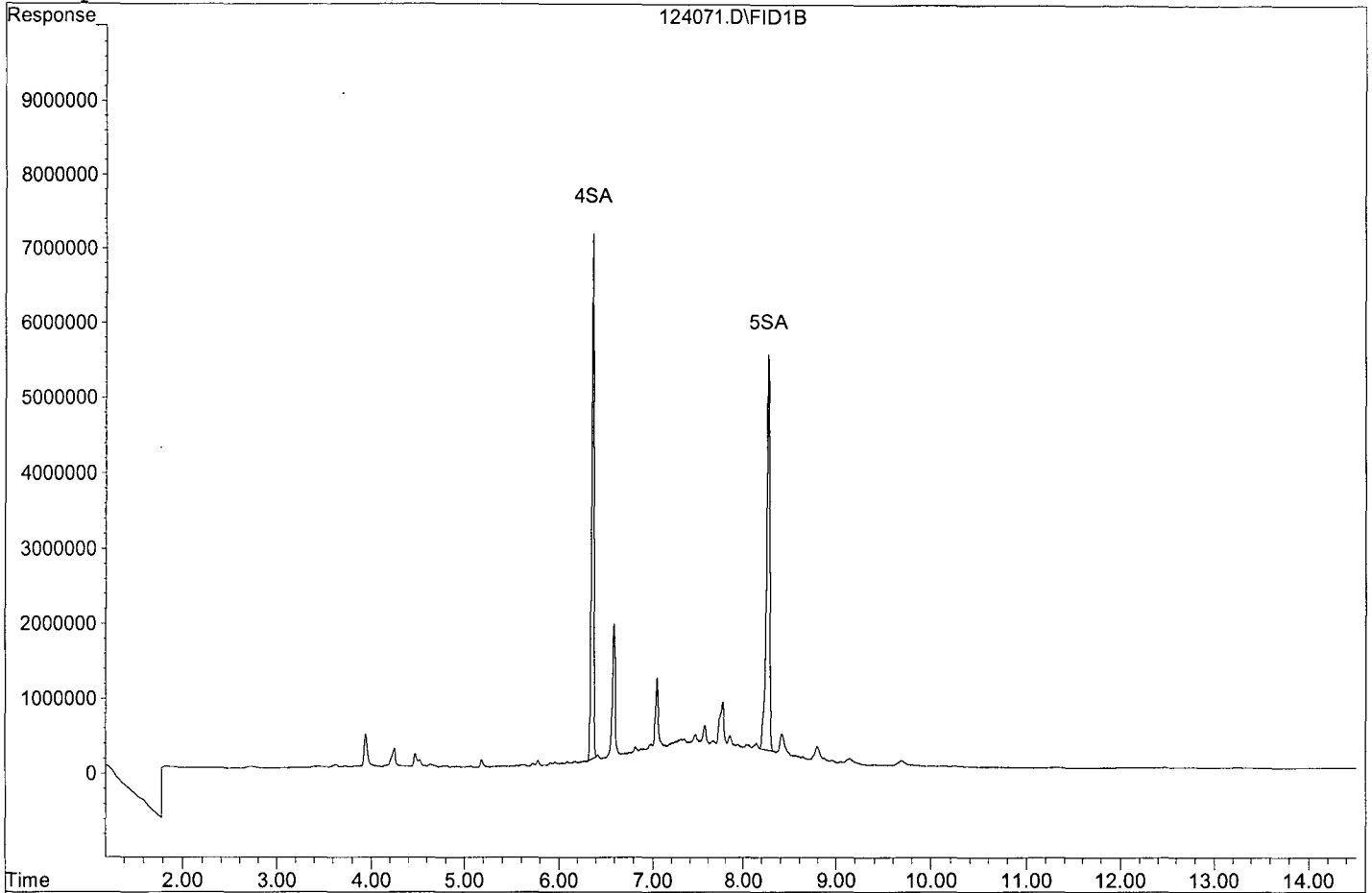
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	117183119	72.533 ppb
Surrogate Spike 75.000		Recovery =	96.71%
5) SA Octacosane(S)	8.26	123266400	82.118 ppb
Surrogate Spike 75.000		Recovery =	109.49%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	357724944	376.429 ppb
2) HBTM Motor Oil (C24-C40)	9.23	233042636	313.364 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124071.D

Sample : AZ85567W21 2/800



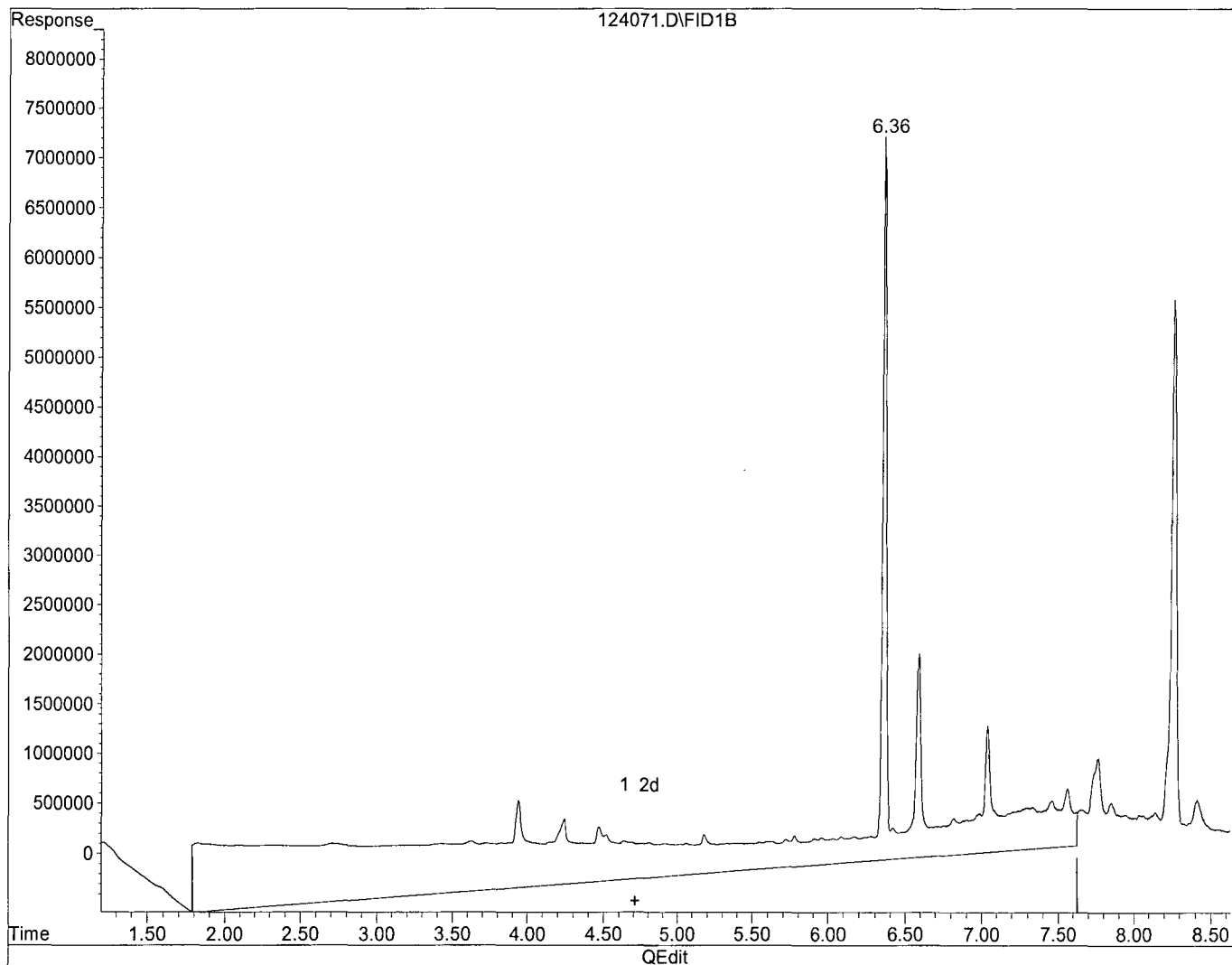
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124071.D  
Acq On : 1-29-19 20:00:05  
Sample : AZ85567W21 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 10:00 2019

Vial: 71  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1569.216ppb m  
response 1491244409

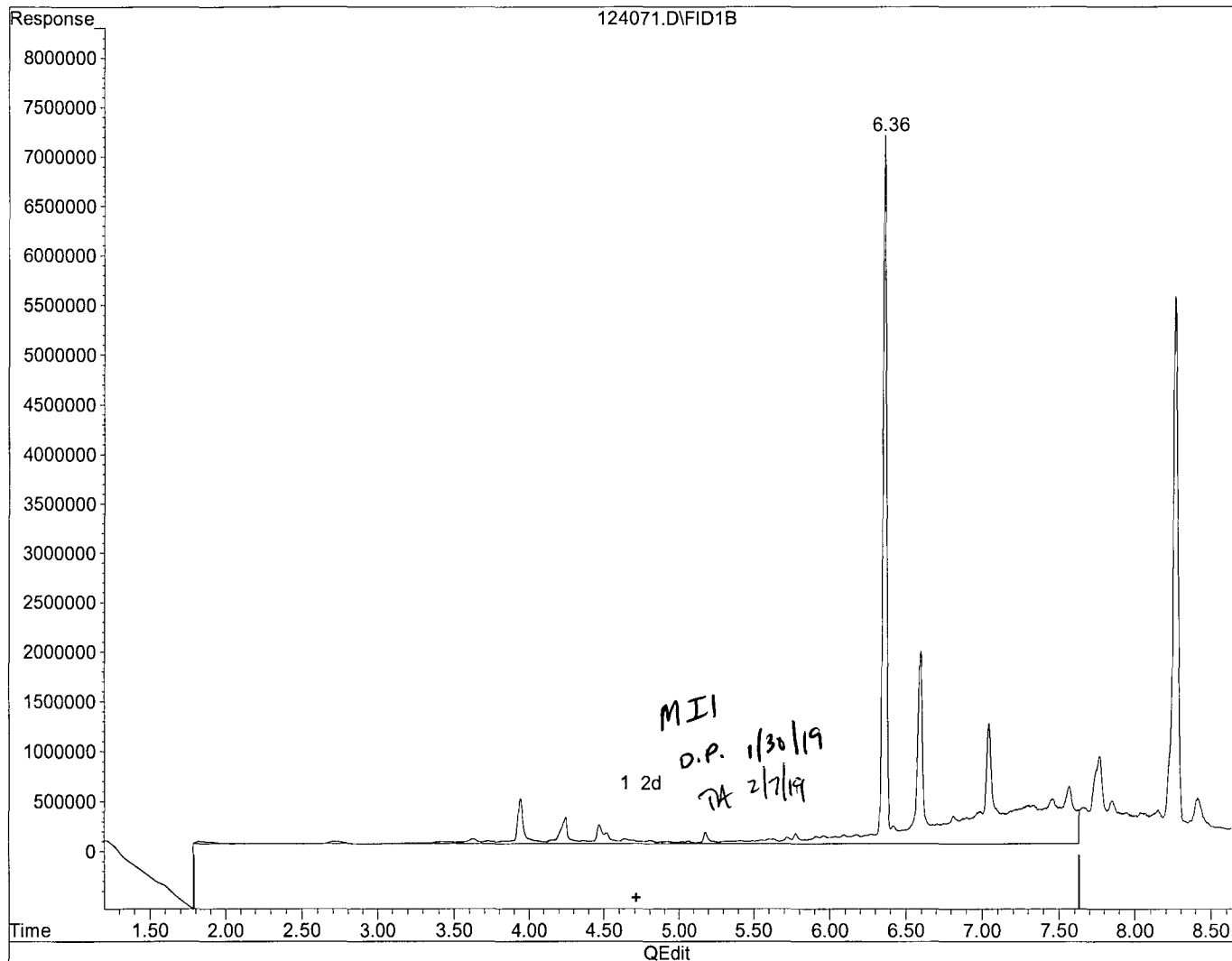
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124071.D  
Acq On : 1-29-19 20:00:05  
Sample : AZ85567W21 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 10:00 2019

Vial: 71  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 376.429ppb m  
response 357724944

Data File : G:\APOLLO\DATA\190201\201008.D Vial: 8  
 Acq On : 2-1-19 12:08:15 Operator: DP  
 Sample : AZ85567W21 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 12:33 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

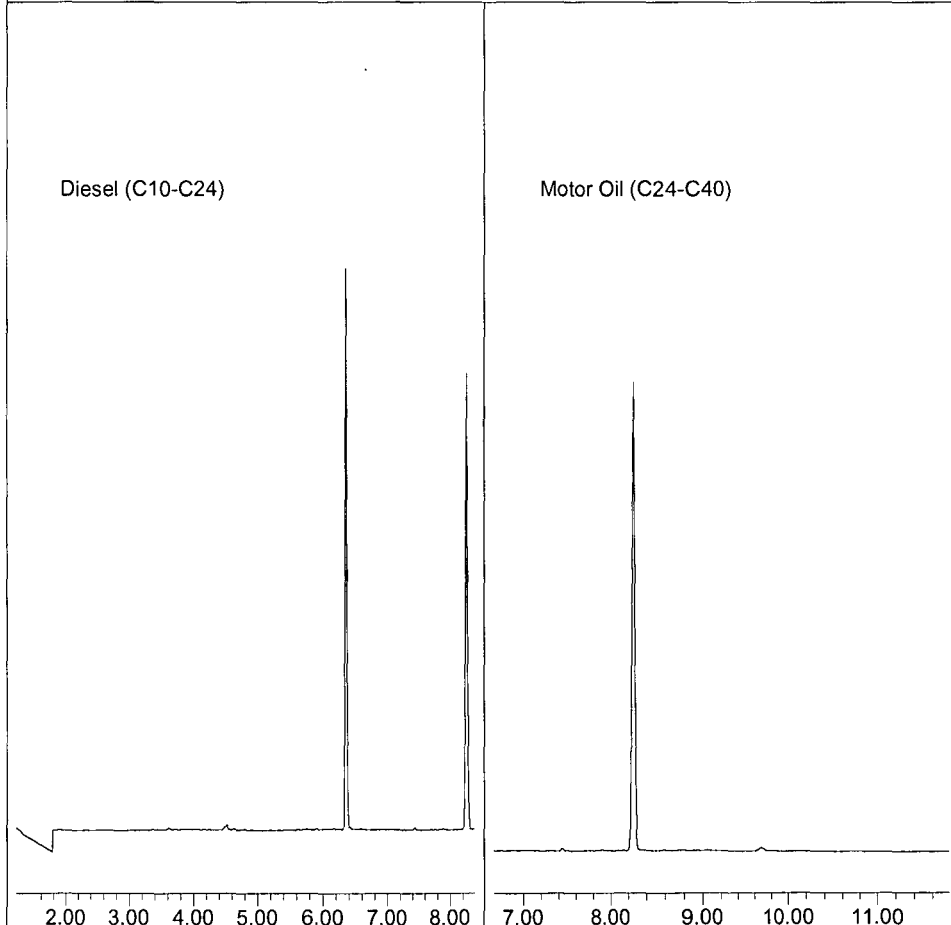
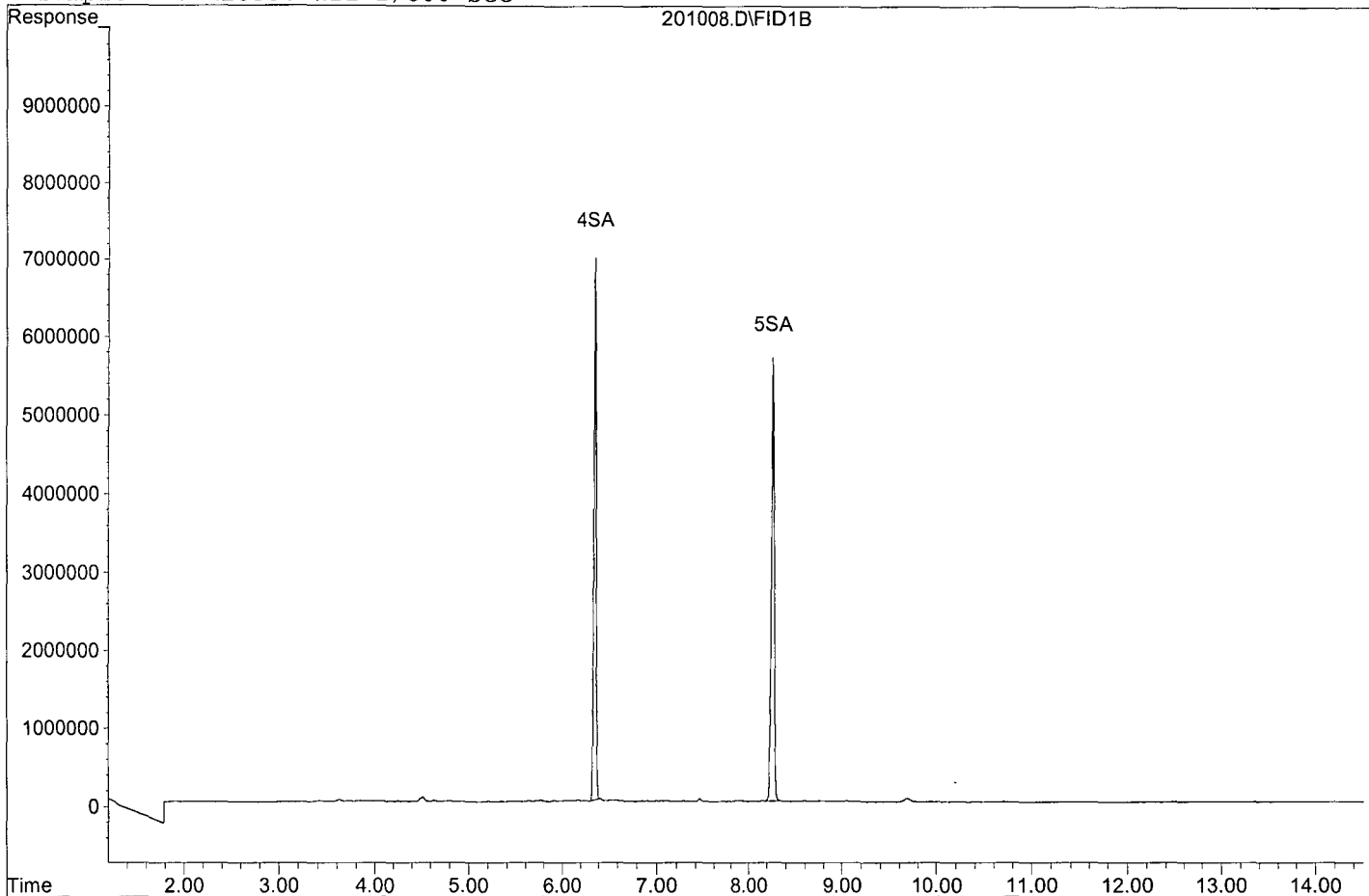
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	118472438	73.331 ppb
Surrogate Spike 75.000		Recovery =	97.77%
5) SA Octacosane(S)	8.26	116630032	77.697 ppb
Surrogate Spike 75.000		Recovery =	103.60%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201008.D

Sample : AZ85567W21 2/800 SGC





Data File : G:\APOLLO\DATA\190124\124056.D Vial: 56  
 Acq On : 1-29-19 15:00:56 Operator: DP  
 Sample : AZ85569W20 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:21 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

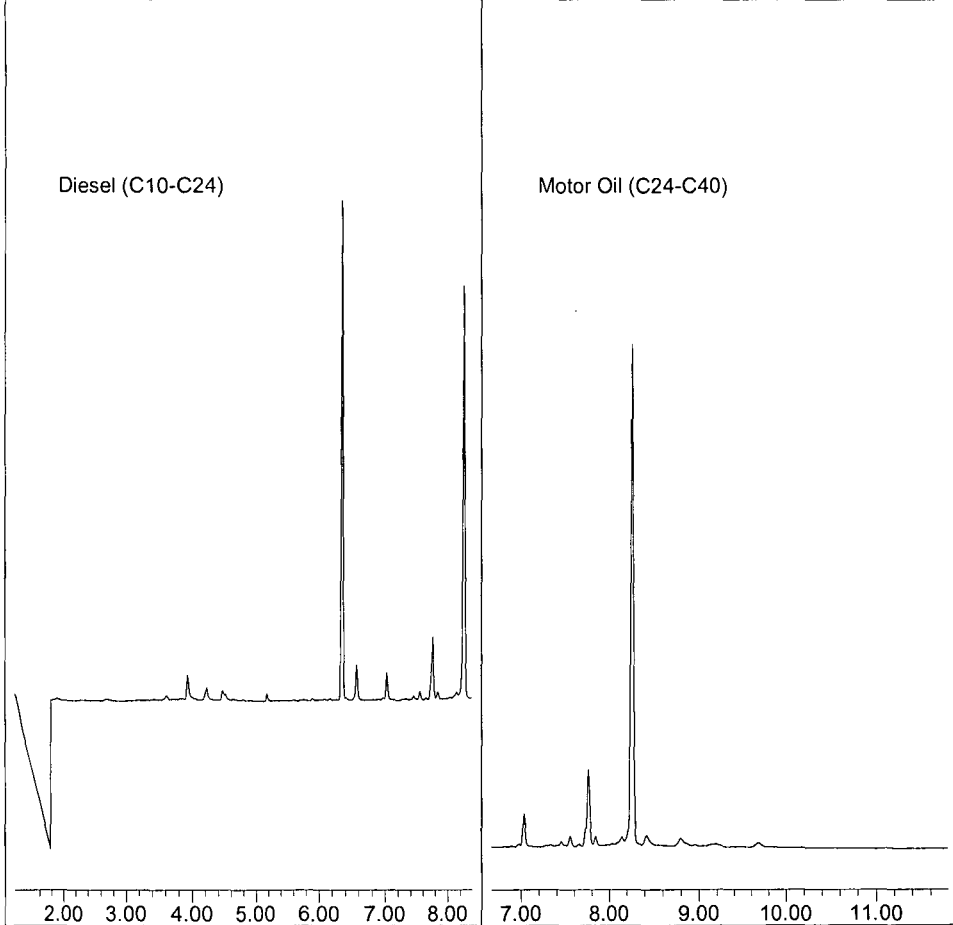
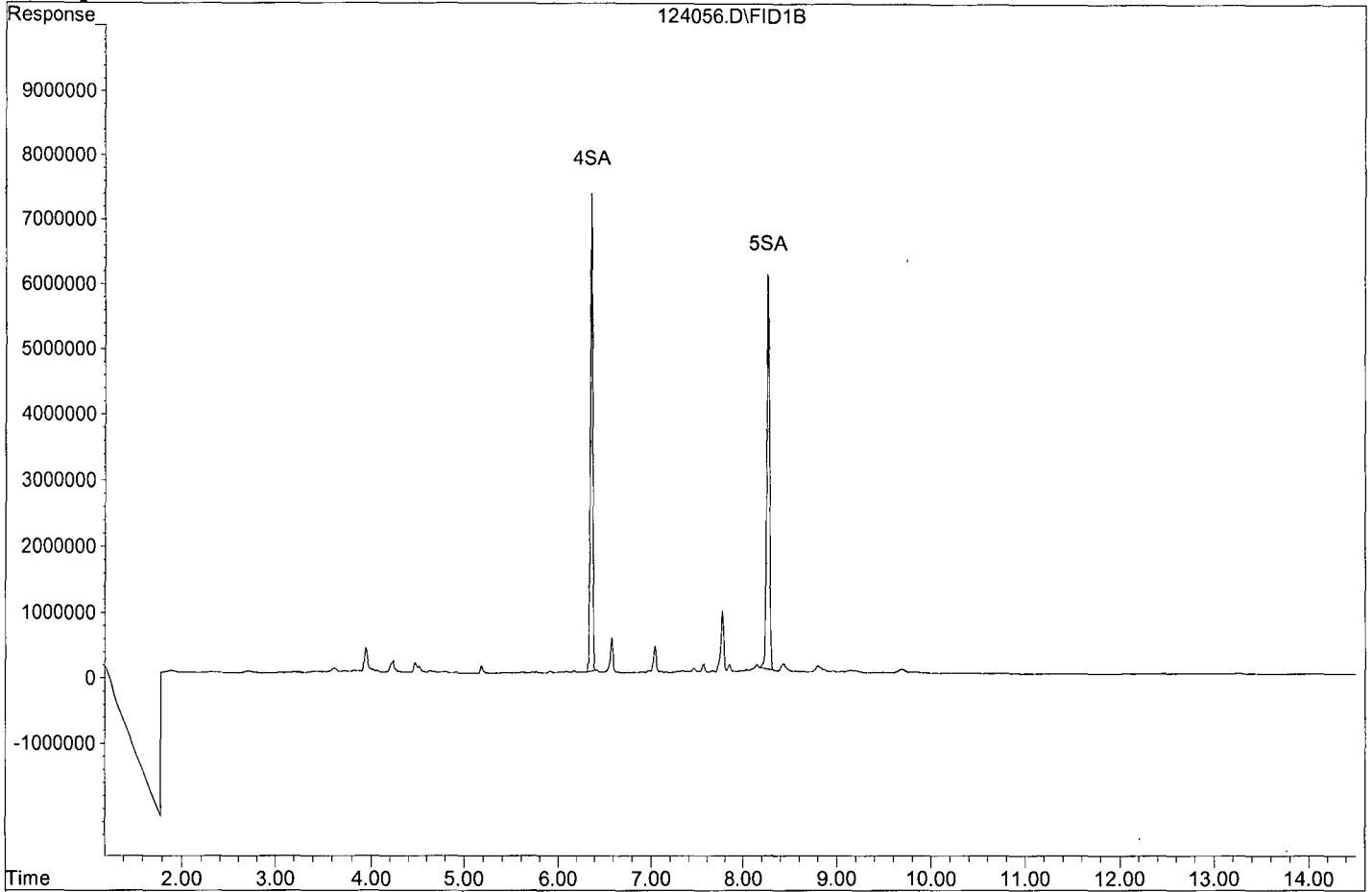
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	124813385	77.256 ppb
Surrogate Spike 75.000		Recovery =	103.01%
5) SA Octacosane(S)	8.26	124583371	82.995 ppb
Surrogate Spike 75.000		Recovery =	110.66%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124056.D

Sample : AZ85569W20 2/800



Data File : G:\APOLLO\DATA\190124\124048.D Vial: 48  
 Acq On : 1-29-19 12:20:41 Operator: DP  
 Sample : 190125A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:19 2019 Quant Results File: DOC0117.RES

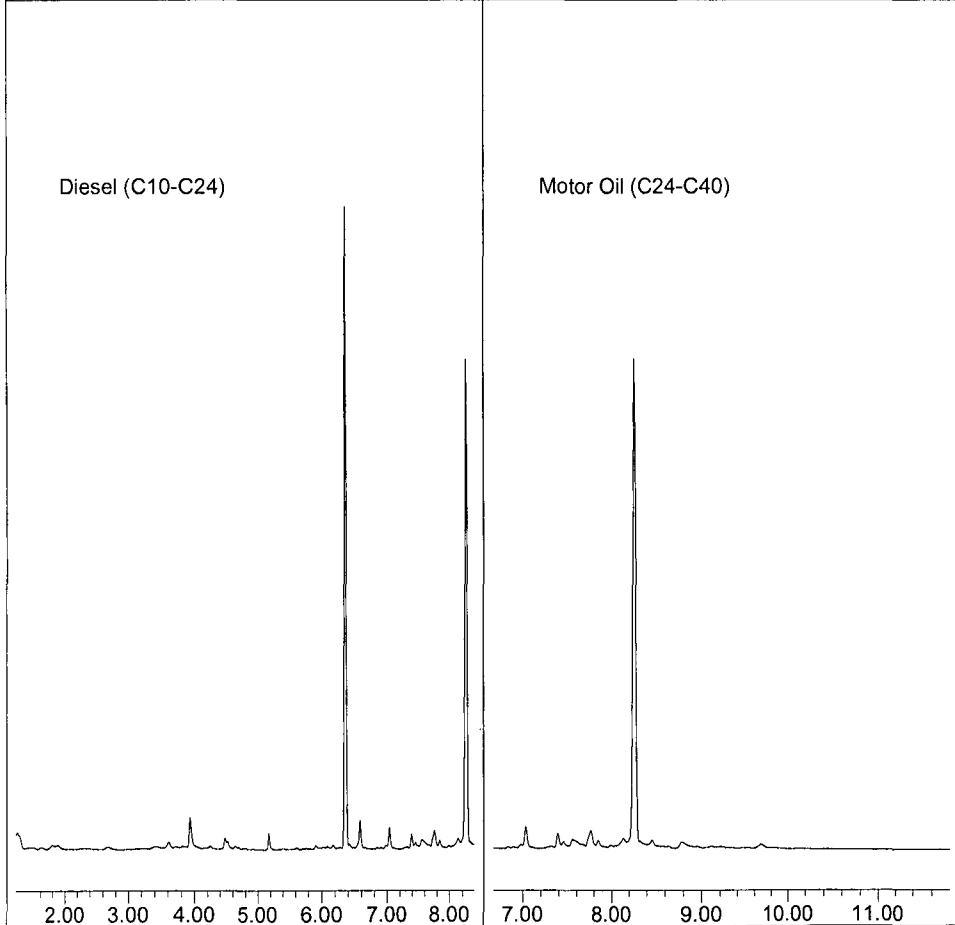
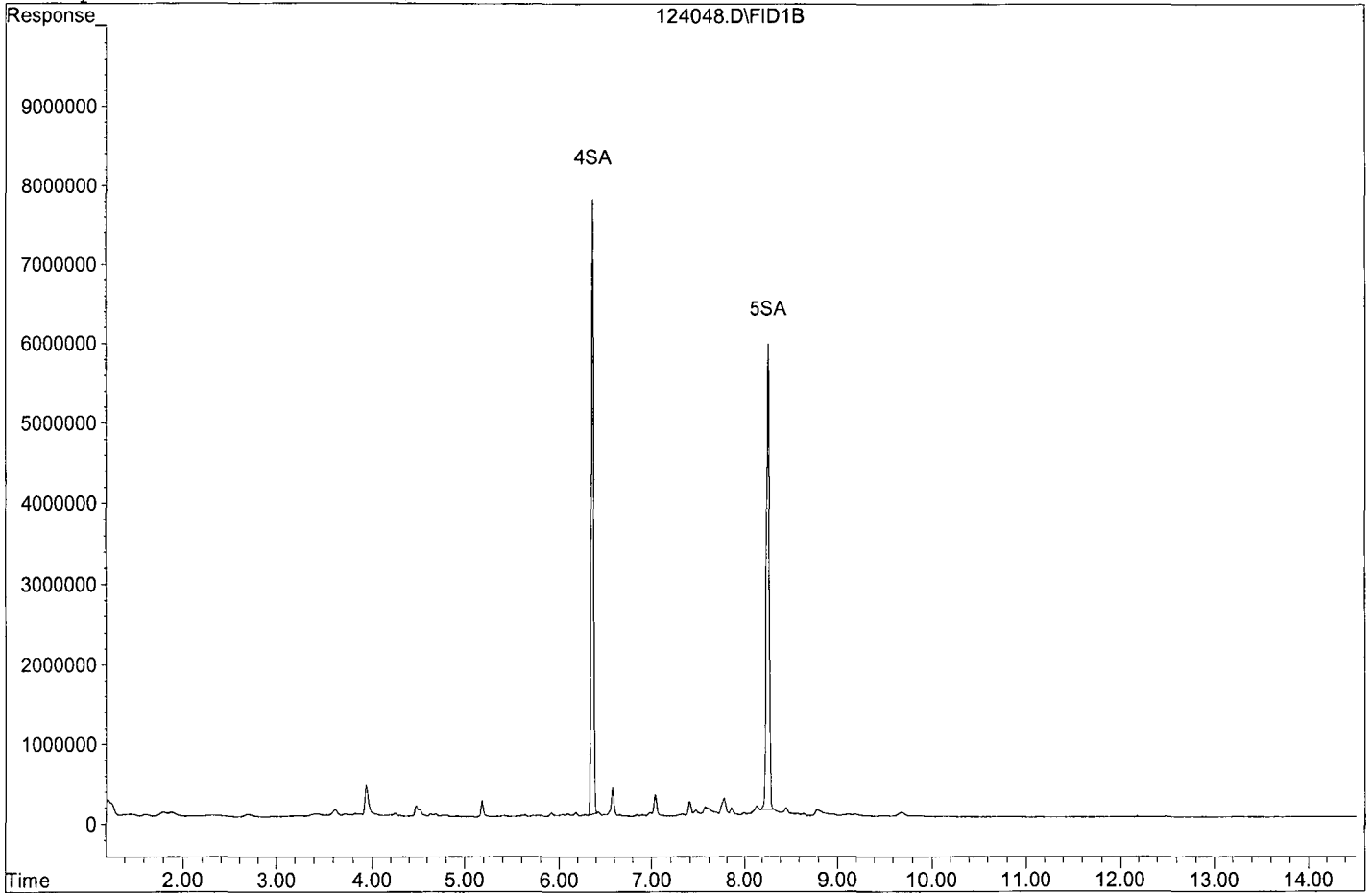
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	132662086	82.114 ppb
Surrogate Spike 75.000		Recovery =	109.49%
5) SA Octacosane(S)	8.26	127800848	85.138 ppb
Surrogate Spike 75.000		Recovery =	113.52%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124048.D  
Sample : 190125A BLK 2/800



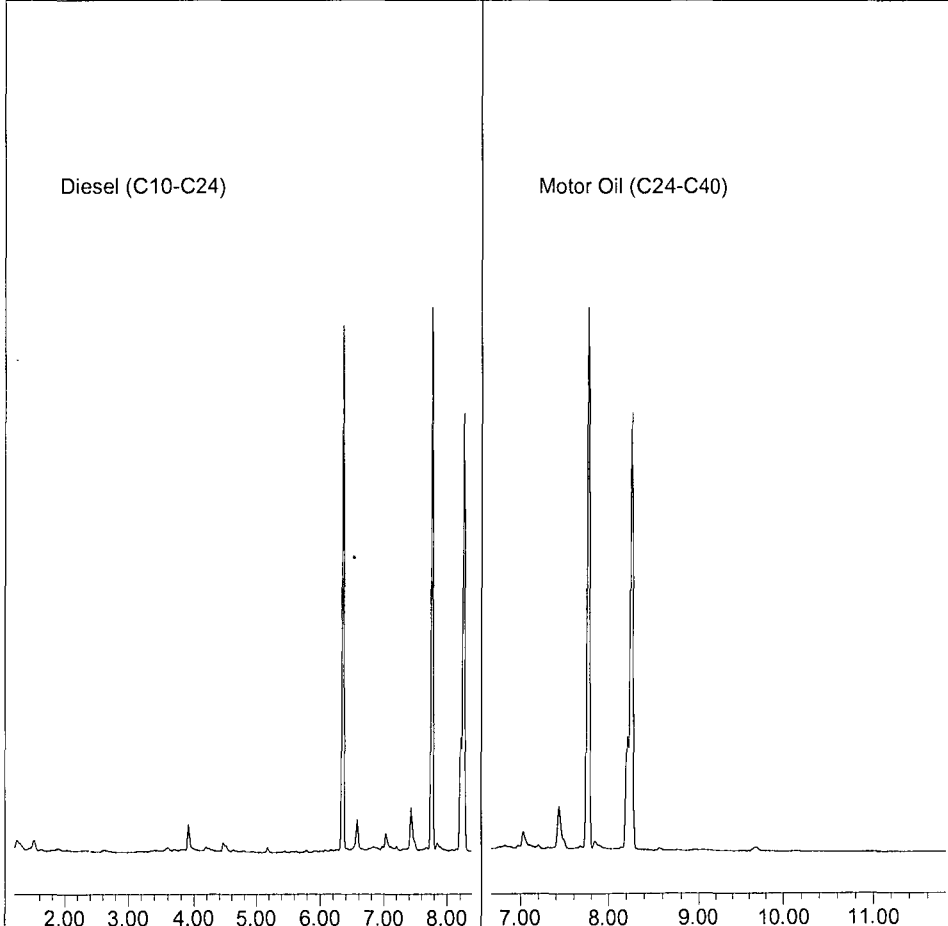
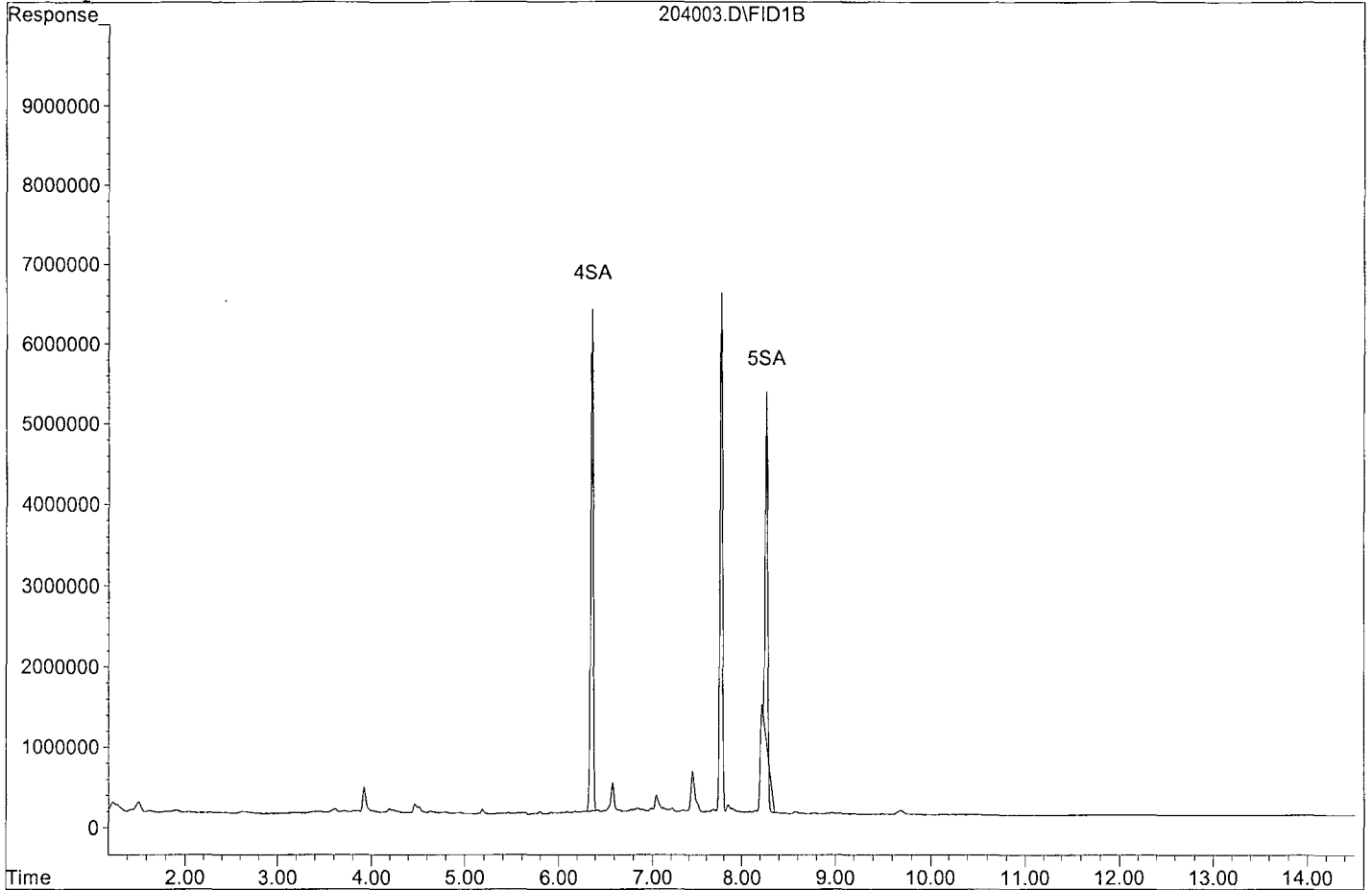
Data File : G:\APOLLO\DATA\190204\204003.D Vial: 3  
 Acq On : 2-4-19 11:33:49 Operator: DP  
 Sample : 190201A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 11 11:28 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	114102303	70.626 ppb
Surrogate Spike 75.000		Recovery =	94.17%
5) SA Octacosane(S)	8.26	67750293	45.134 ppb
Surrogate Spike 75.000		Recovery =	60.18%
Target Compounds			

Data File: G:\APOLLO\DATA\190204\204003.D  
Sample : 190201A BLK 2/800



Data File : G:\APOLLO\DATA\190124\124066.D Vial: 66  
 Acq On : 1-29-19 18:20:50 Operator: DP  
 Sample : 190128A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 9:59 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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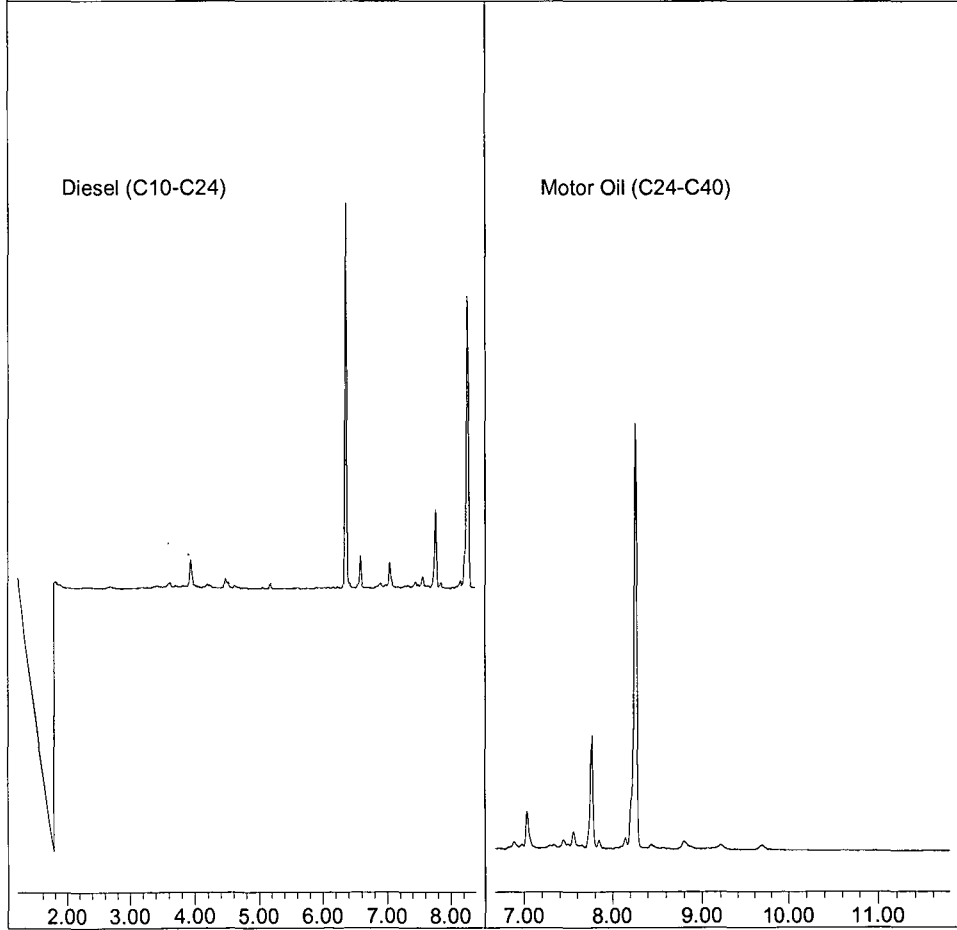
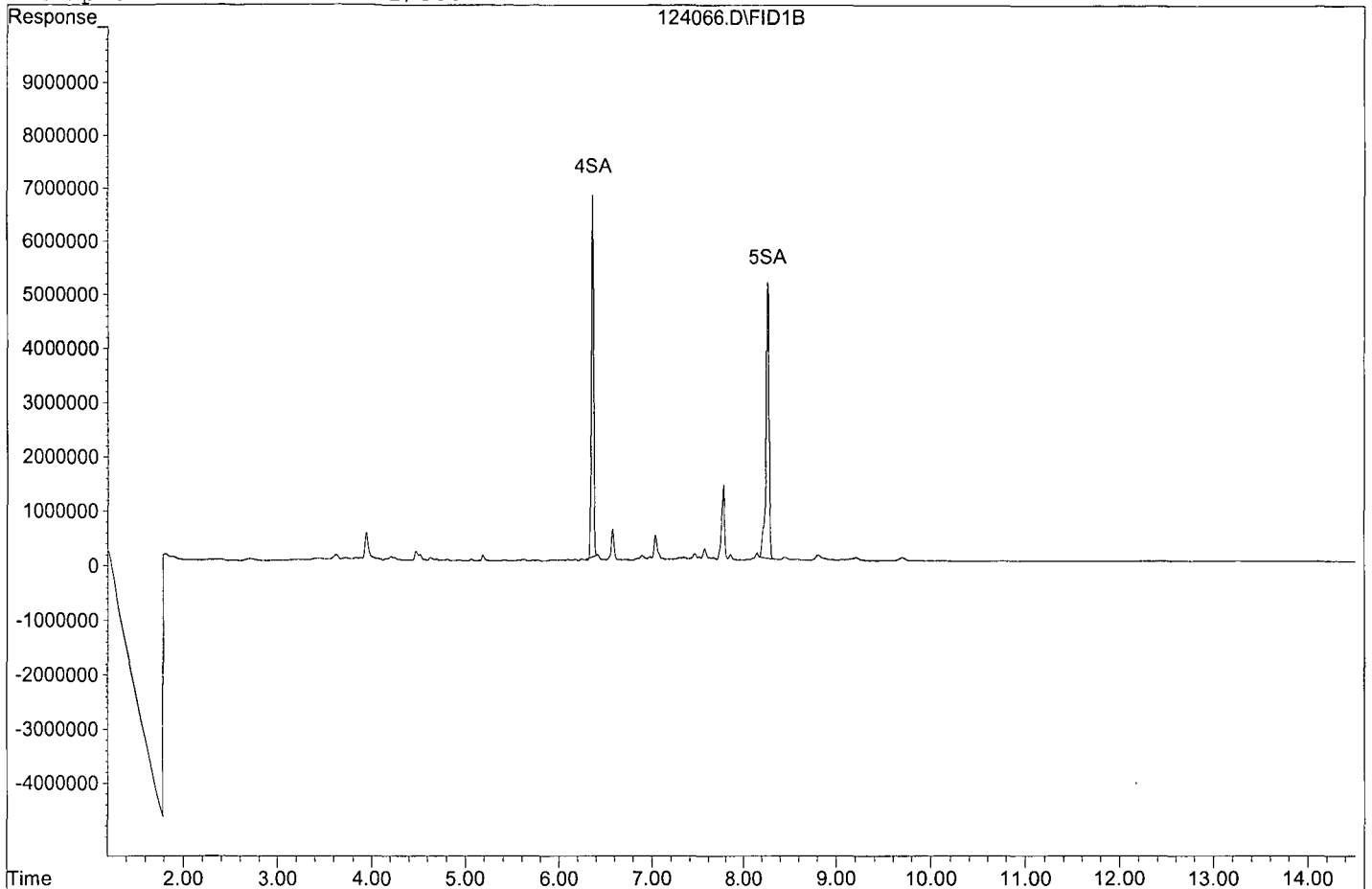
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	111635960	69.100 ppb
Surrogate Spike 75.000		Recovery =	92.13%
5) SA Octacosane(S)	8.26	120365980	80.186 ppb
Surrogate Spike 75.000		Recovery =	106.91%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124066.D

Sample : 190128A BLK 2/800





Data File : G:\APOLLO\DATA\190201\201004.D Vial: 4  
 Acq On : 2-1-19 10:48:41 Operator: DP  
 Sample : 190128A BLK 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 11:00 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

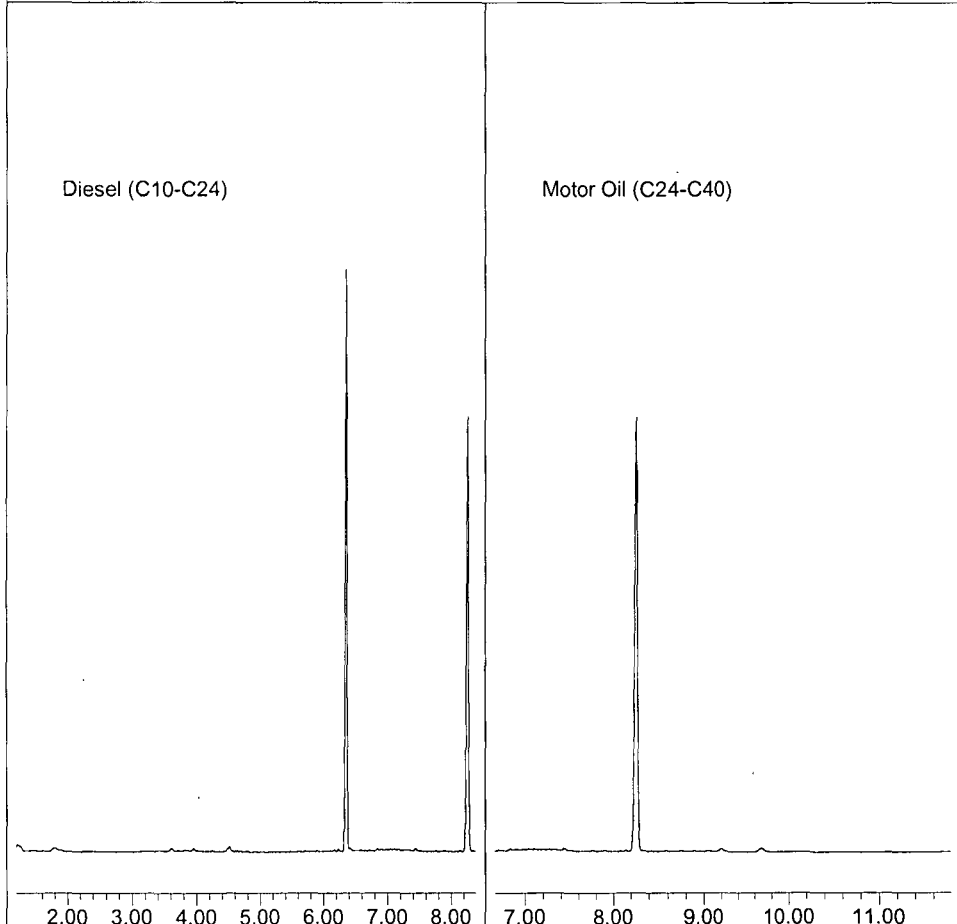
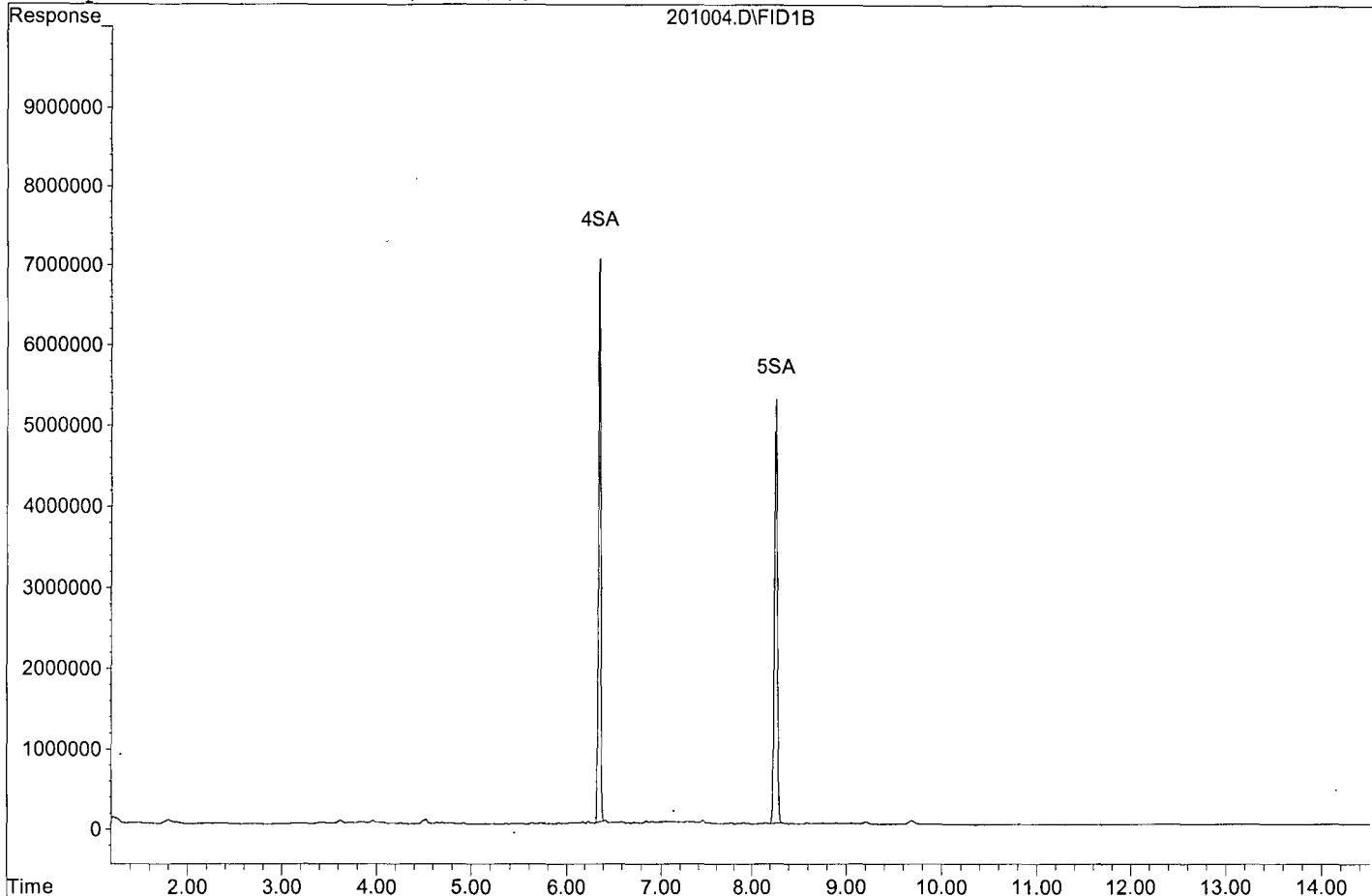
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	119427425	73.923 ppb
Surrogate Spike 75.000		Recovery =	98.56%
5) SA Octacosane(S)	8.26	112135443	74.703 ppb
Surrogate Spike 75.000		Recovery =	99.60%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201004.D

Sample : 190128A BLK 2/800 SGC



Data File : G:\APOLLO\DATA\190124\124049.D Vial: 49  
 Acq On : 1-29-19 12:40:39 Operator: DP  
 Sample : 190125A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:20 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

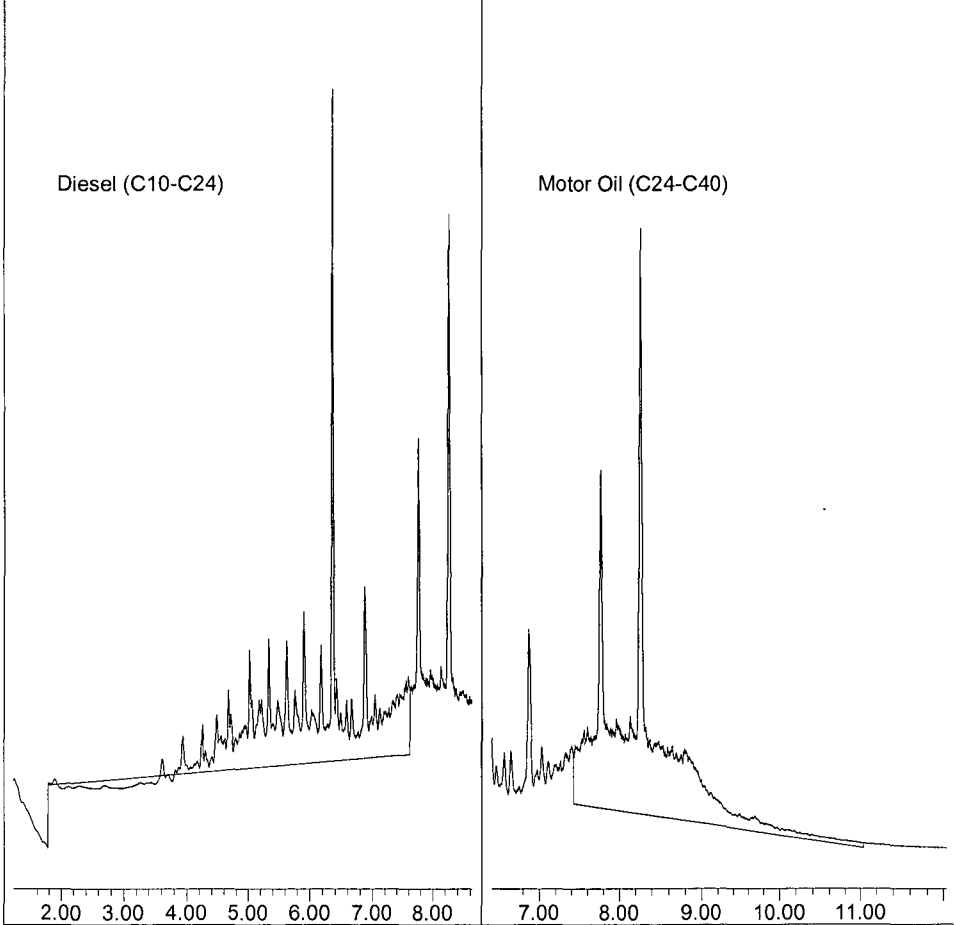
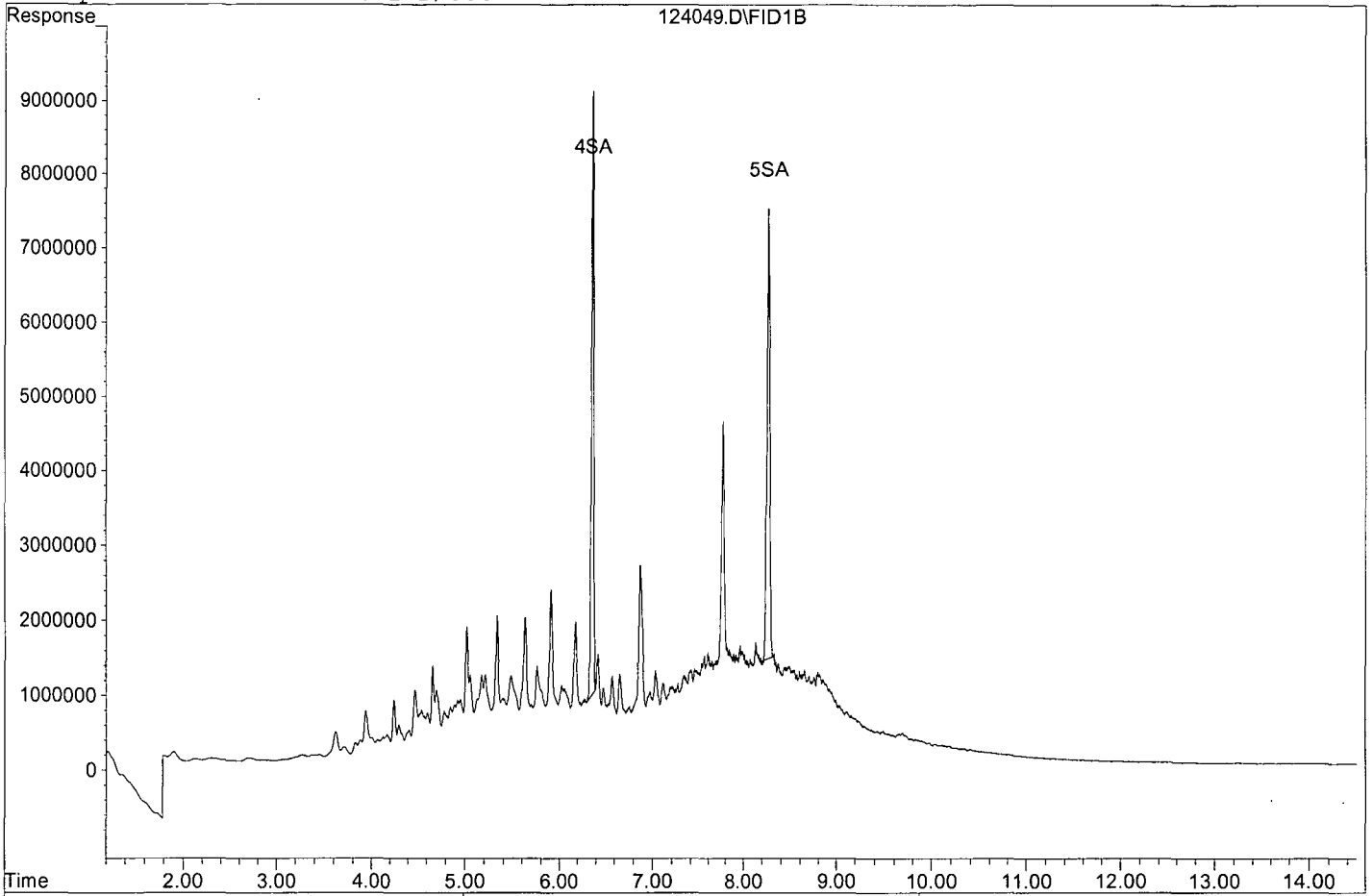
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	133850361	82.850 ppb
Surrogate Spike 75.000		Recovery =	110.47%
5) SA Octacosane(S)	8.27	123081483	81.995 ppb
Surrogate Spike 75.000		Recovery =	109.33%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1215668990	1279.232 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1008036562	1355.469 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124049.D

Sample : 190125A LCS-1 2/800



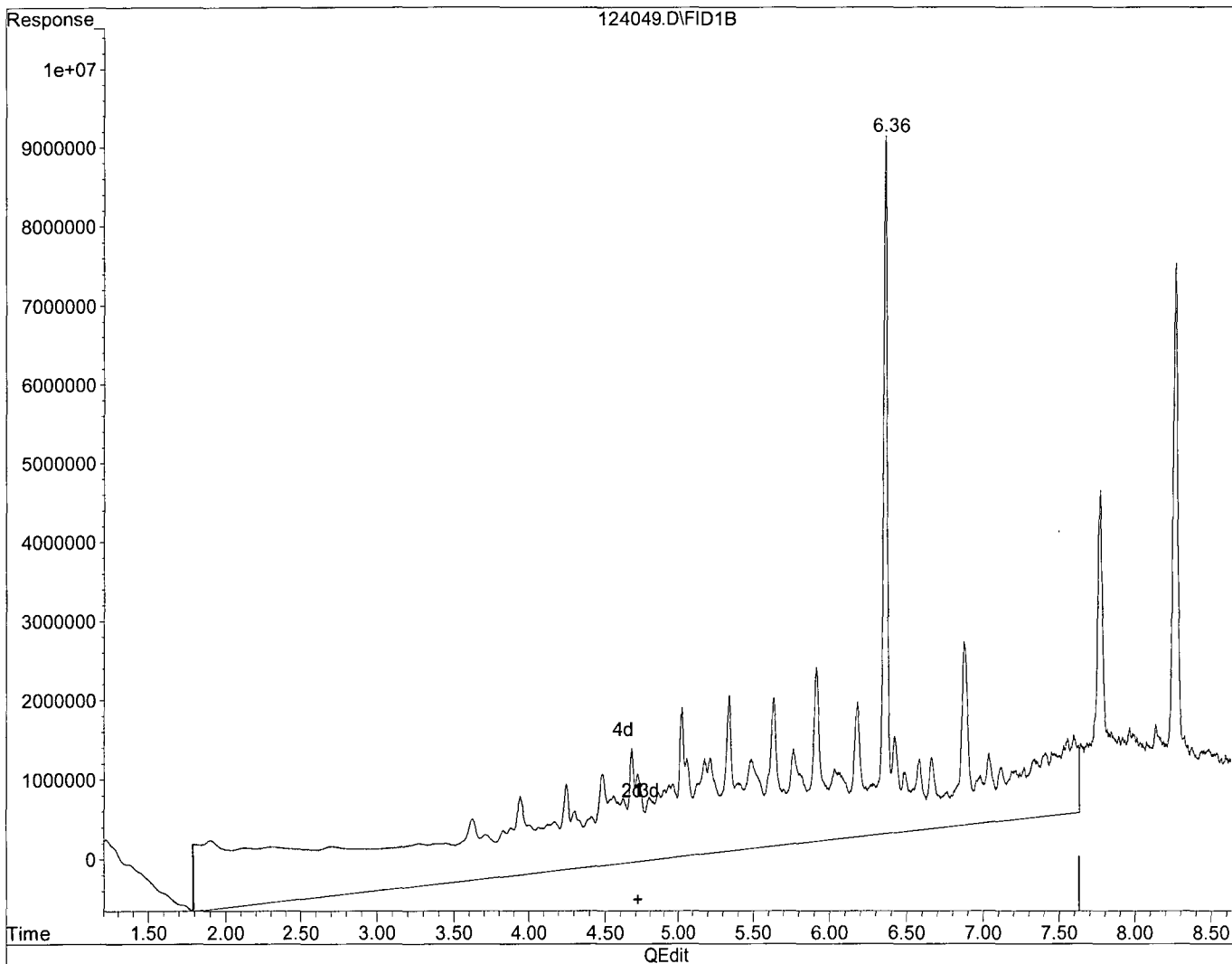
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124049.D  
Acq On : 1-29-19 12:40:39  
Sample : 190125A LCS-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:19 2019

Vial: 49  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 2643.085ppb m

response 2511754816

(+) = Expected Retention Time

124049.D DOC0117.M

Wed Jan 30 12:19:56 2019

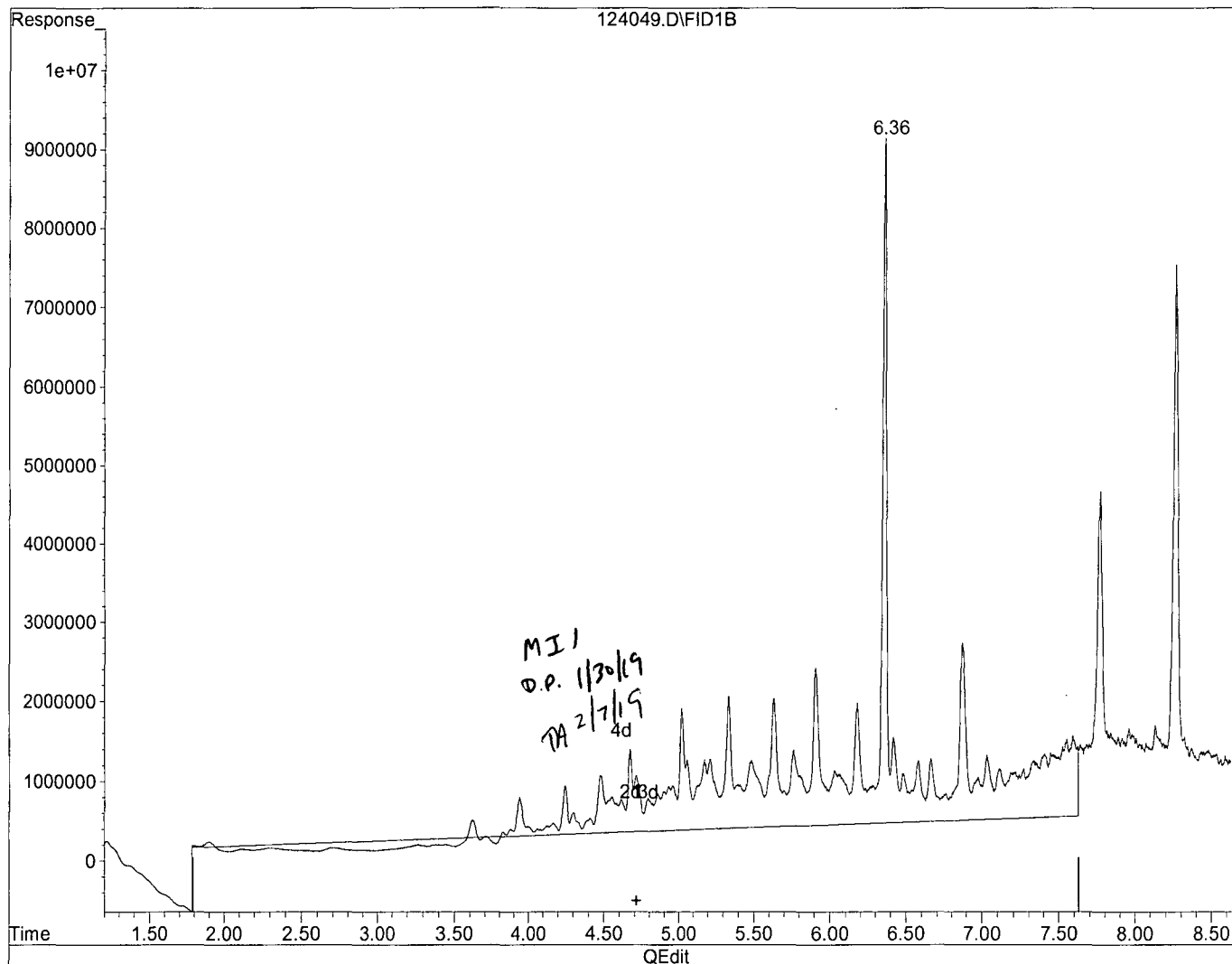
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124049.D  
Acq On : 1-29-19 12:40:39  
Sample : 190125A LCS-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:19 2019

Vial: 49  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 1279.232ppb m

response 1215668990

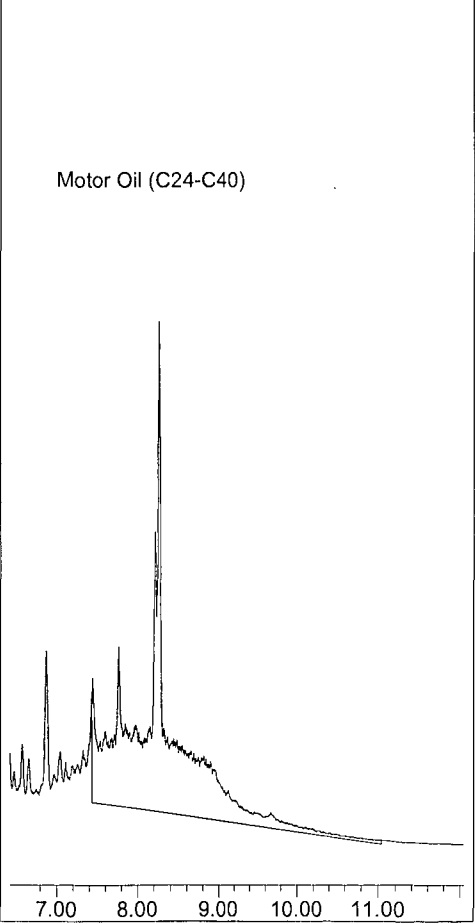
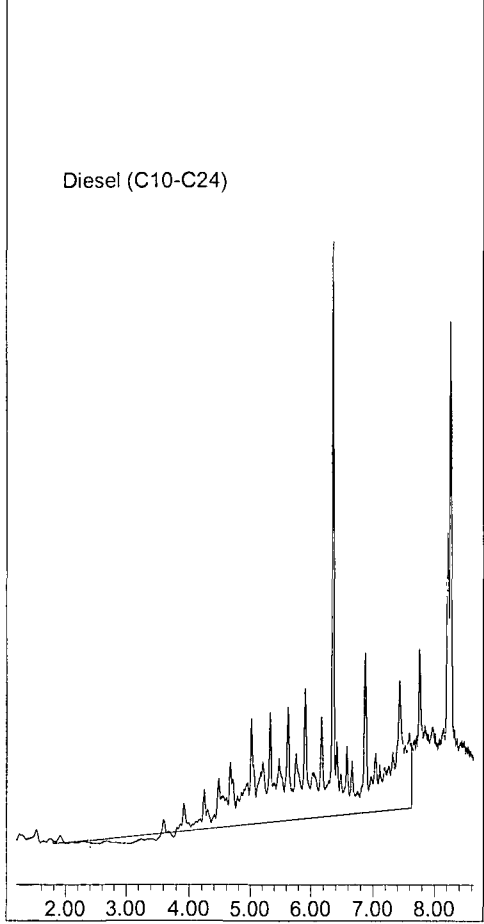
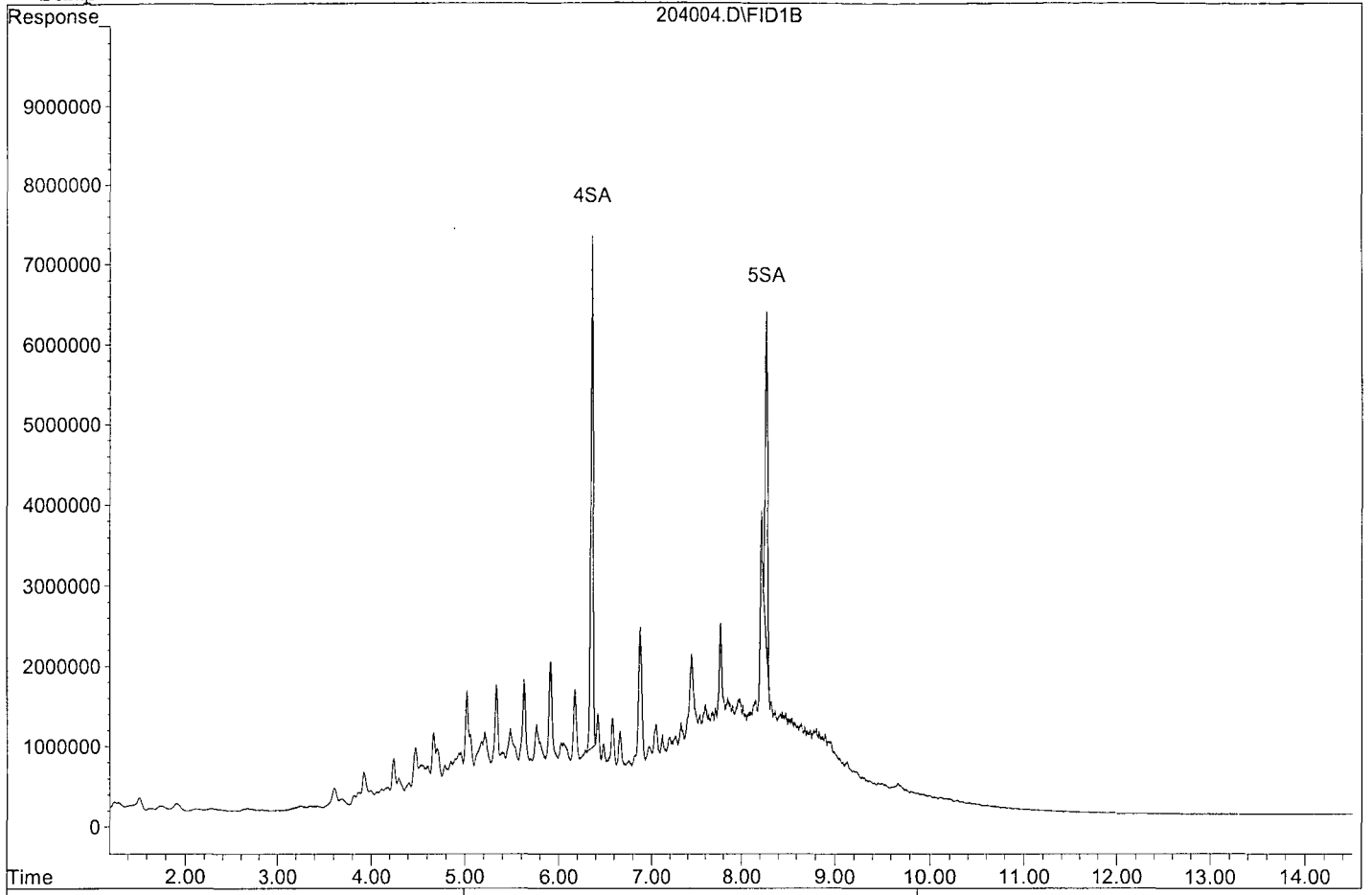
Data File : G:\APOLLO\DATA\190204\204004.D Vial: 4  
 Acq On : 2-4-19 11:53:49 Operator: DP  
 Sample : 190201A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 11 11:28 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	105721576	65.439 ppb
Surrogate Spike 75.000		Recovery =	87.25%
5) SA Octacosane(S)	8.26	72124156	48.048 ppb
Surrogate Spike 75.000		Recovery =	64.06%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1063564616	1119.174 ppb
2) HBTM Motor Oil (C24-C40)	9.23	981875755	1320.292 ppb

Data File: G:\APOLLO\DATA\190204\204004.D  
Sample : 190201A LCS-1 2/800





Data File : G:\APOLLO\DATA\190124\124067.D Vial: 67  
 Acq On : 1-29-19 18:40:52 Operator: DP  
 Sample : 190128A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 9:59 2019 Quant Results File: DOC0117.RES

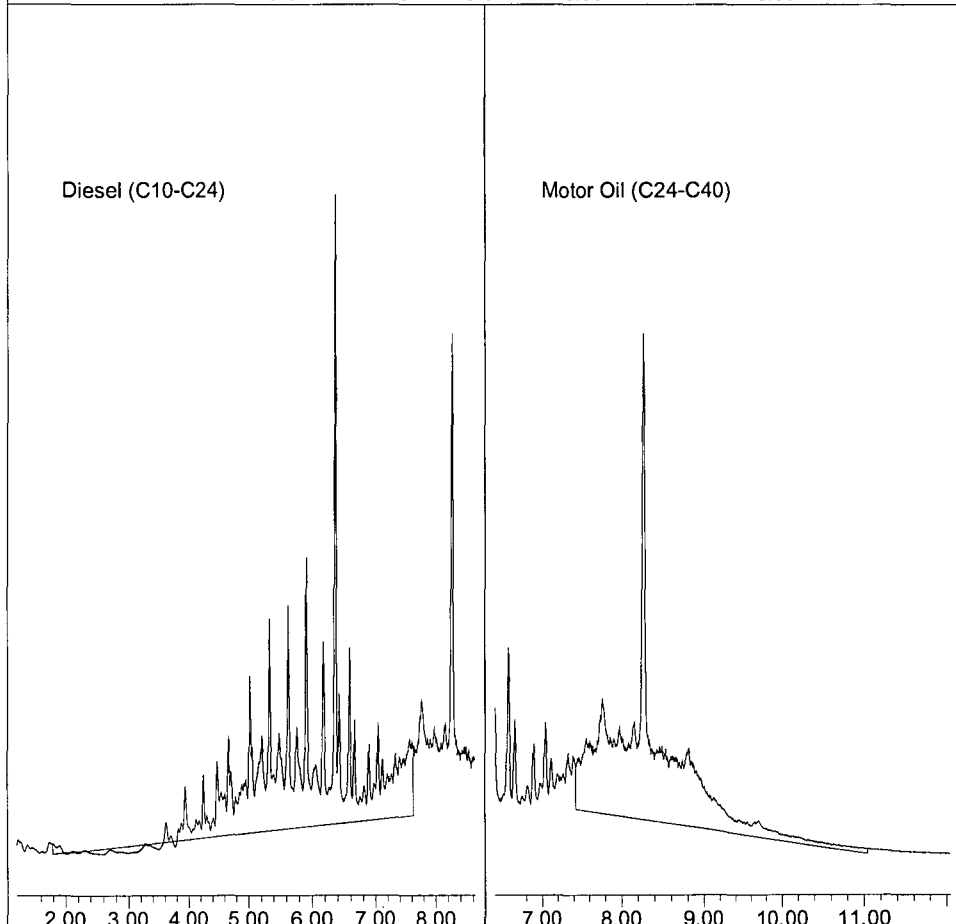
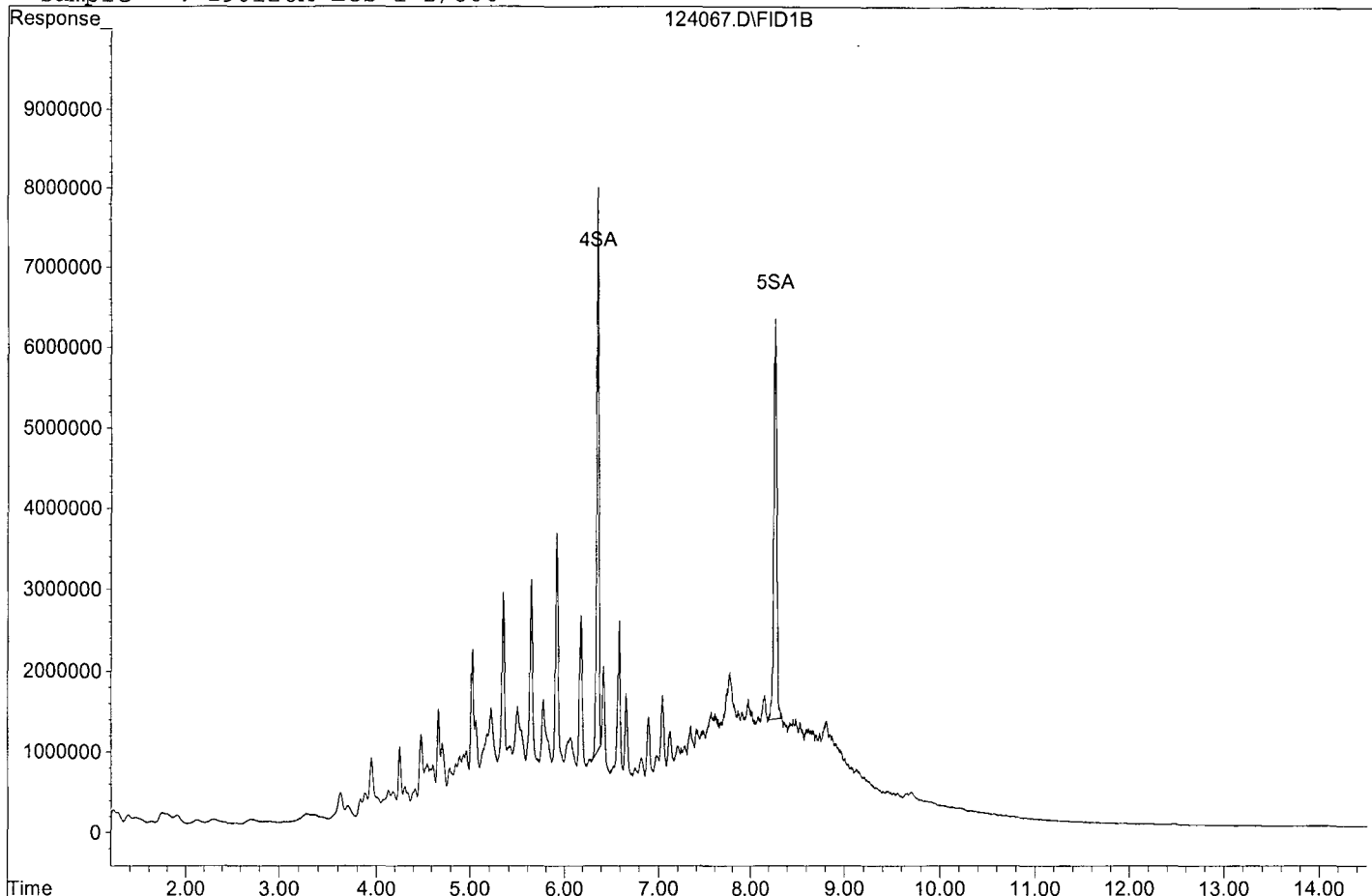
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	115997983	71.800 ppb
Surrogate Spike 75.000		Recovery =	95.73%
5) SA Octacosane(S)	8.27	109685379	73.070 ppb
Surrogate Spike 75.000		Recovery =	97.43%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1377893970	1449.939 ppb
2) HBTM Motor Oil (C24-C40)	9.23	935078567	1257.365 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124067.D  
Sample : 190128A LCS-1 2/800



Data File : G:\APOLLO\DATA\190201\201005.D Vial: 5  
 Acq On : 2-1-19 11:08:34 Operator: DP  
 Sample : 190128A LCS-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 11:27 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

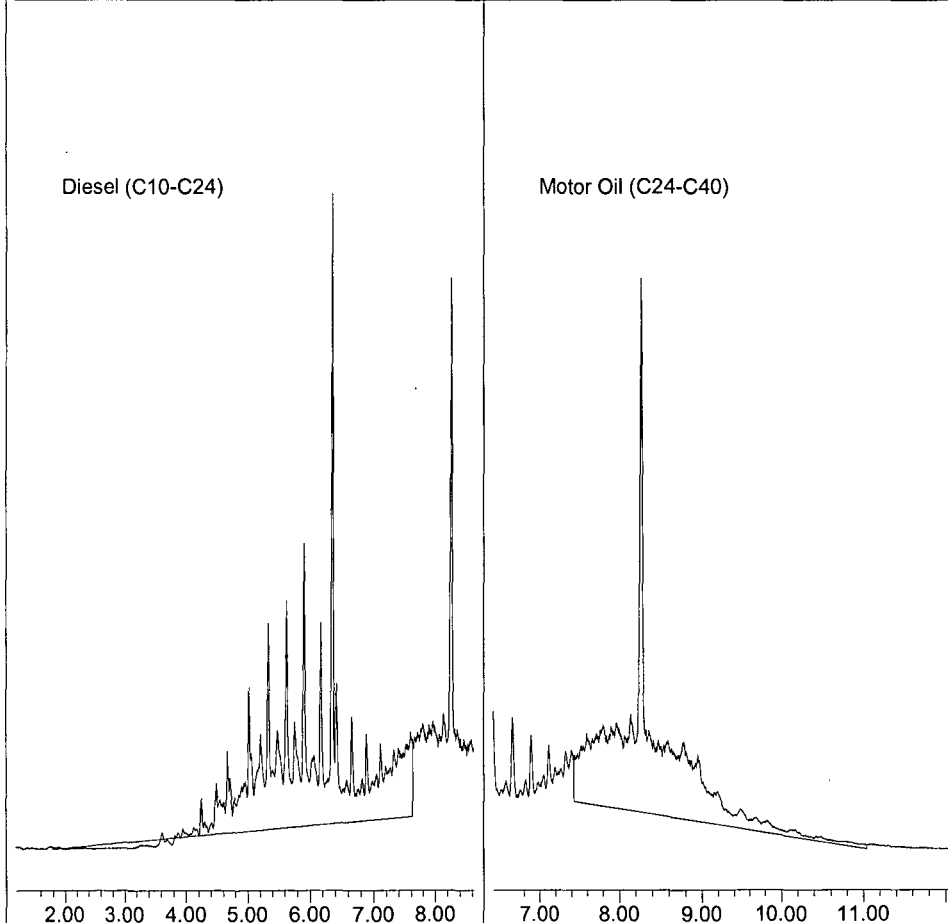
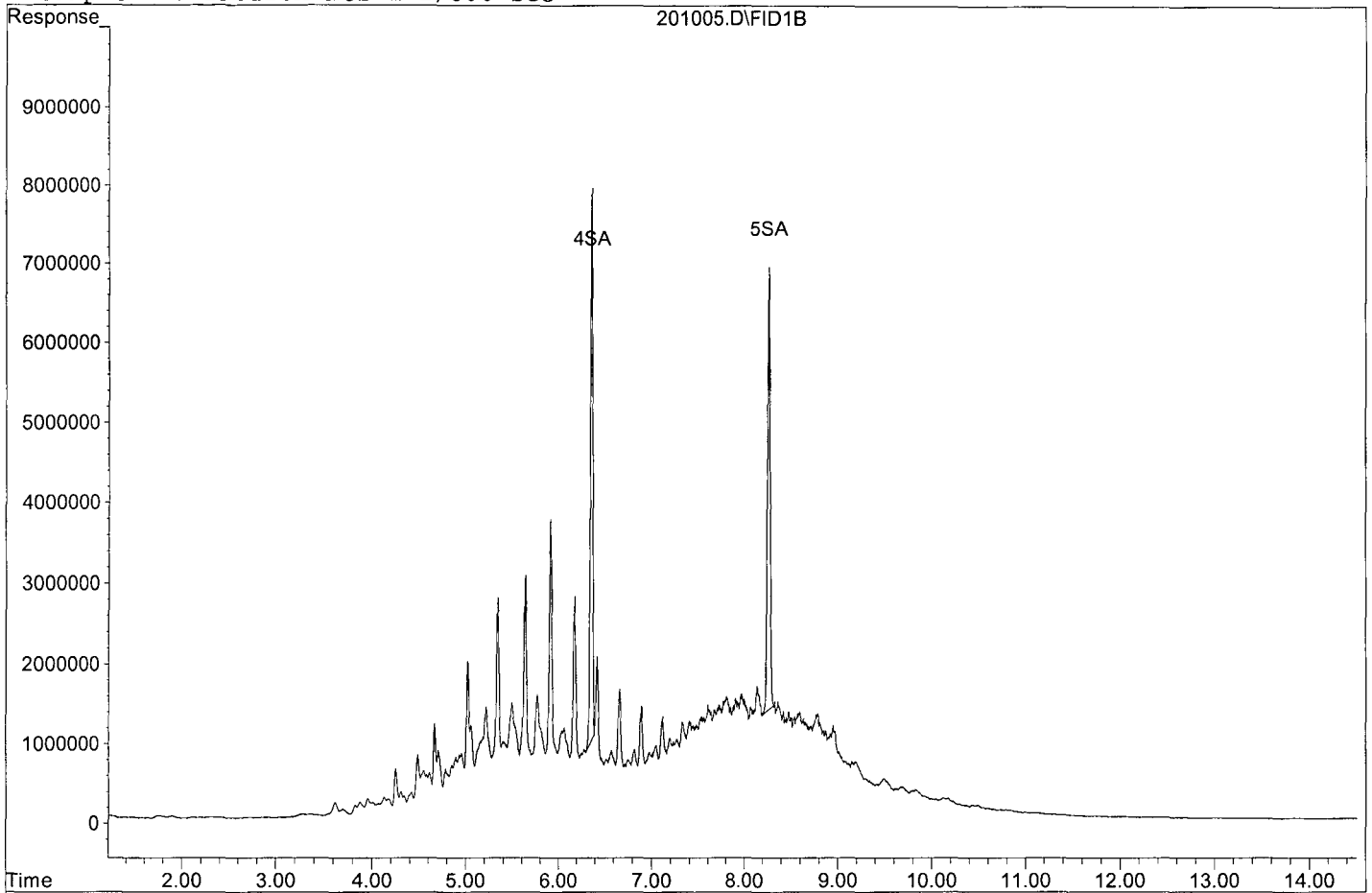
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	119540186	73.992 ppb
Surrogate Spike 75.000		Recovery =	98.66%
5) SA Octacosane(S)	8.27	110413476	73.555 ppb
Surrogate Spike 75.000		Recovery =	98.07%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1364434098	1435.775 ppb
2) HBTM Motor Oil (C24-C40)	9.23	912862913	1227.493 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201005.D

Sample : 190128A LCS-1 2/800 SGC



Data File : G:\APOLLO\DATA\190124\124050.D Vial: 50  
 Acq On : 1-29-19 13:00:39 Operator: DP  
 Sample : 190125A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:20 2019 Quant Results File: DOC0117.RES

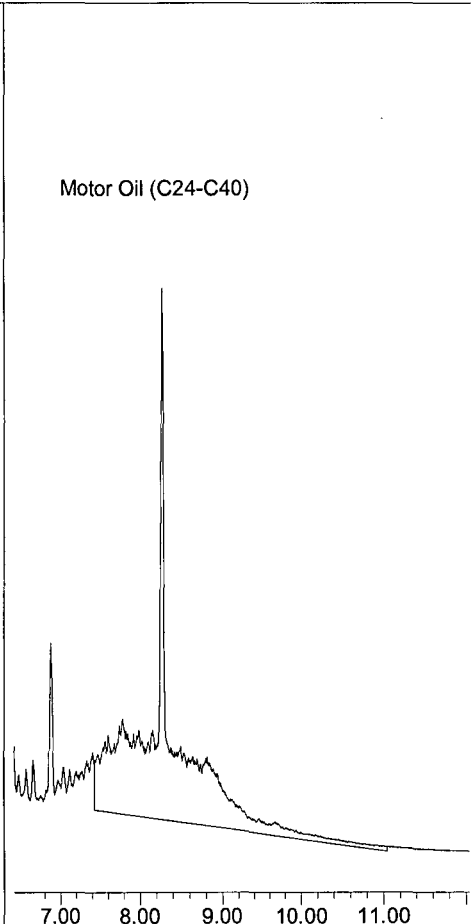
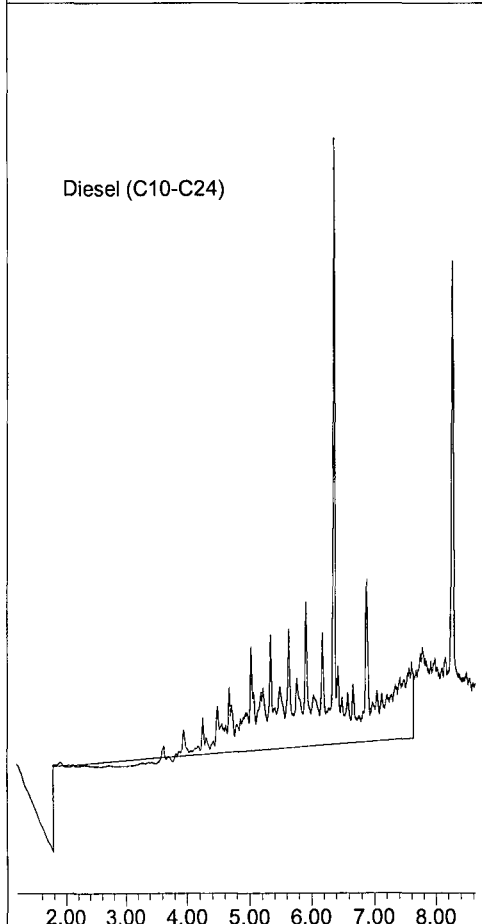
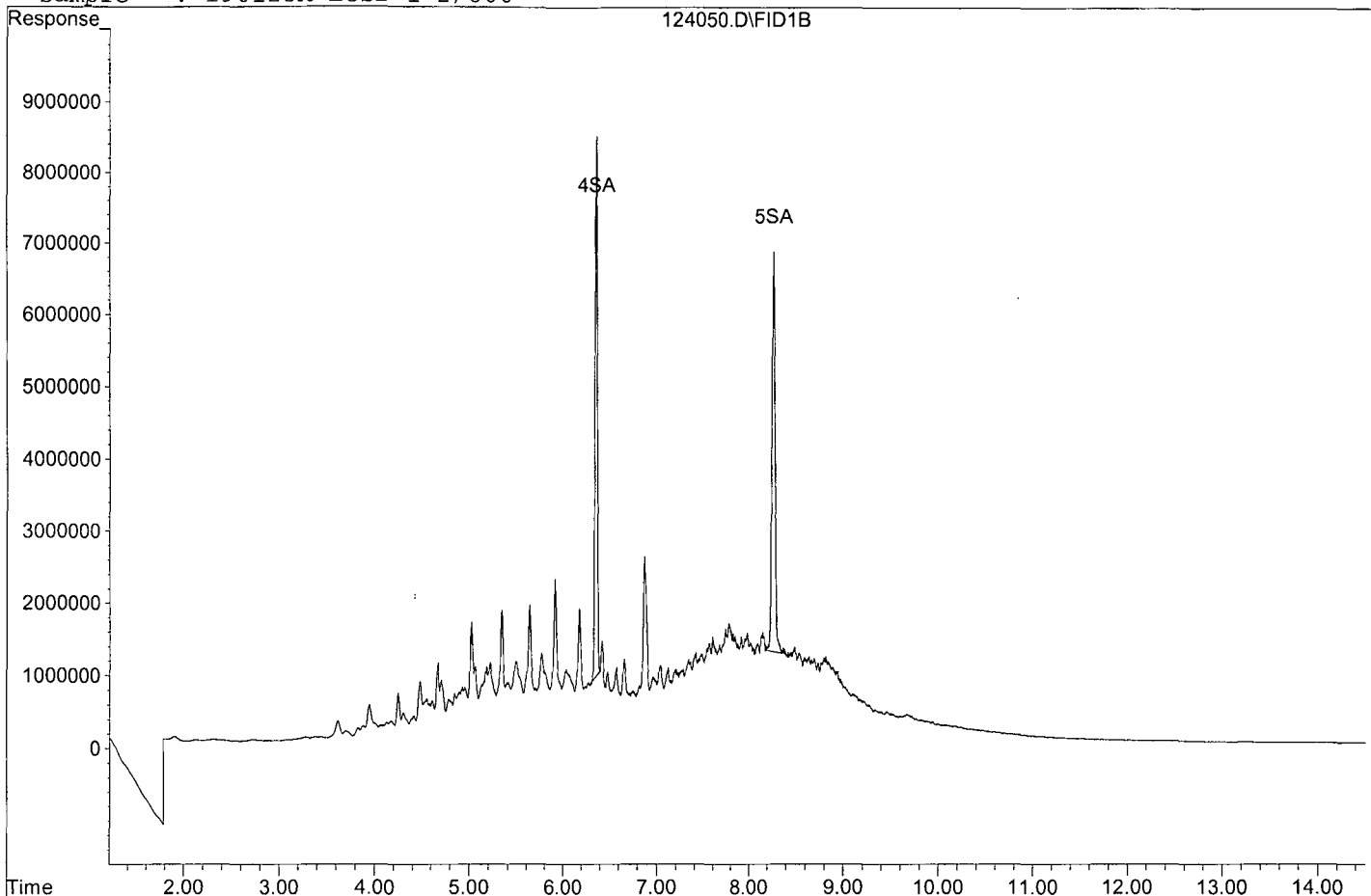
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	127828135	79.122 ppb
Surrogate Spike 75.000		Recovery =	105.50%
5) SA Octacosane(S)	8.27	128702555	85.739 ppb
Surrogate Spike 75.000		Recovery =	114.32%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1199134001	1261.832 ppb
2) HBTM Motor Oil (C24-C40)	9.23	900347664	1210.664 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124050.D  
Sample : 190125A LCSD-1 2/800



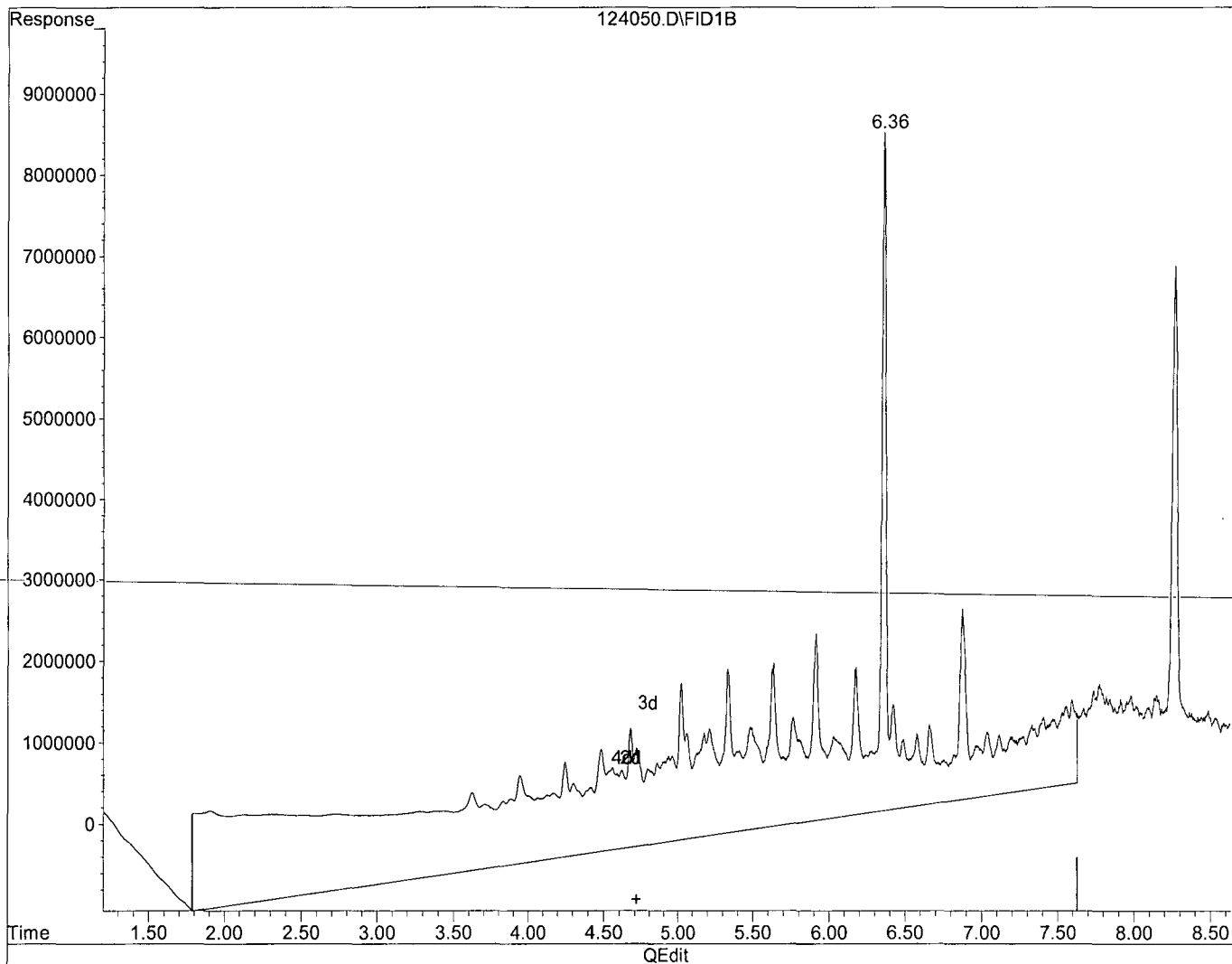
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124050.D  
Acq On : 1-29-19 13:00:39  
Sample : 190125A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:20 2019

Vial: 50  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 3313.909ppb m

response 3149247211

(+) = Expected Retention Time

124050.D DOC0117.M

Wed Jan 30 12:20:19 2019

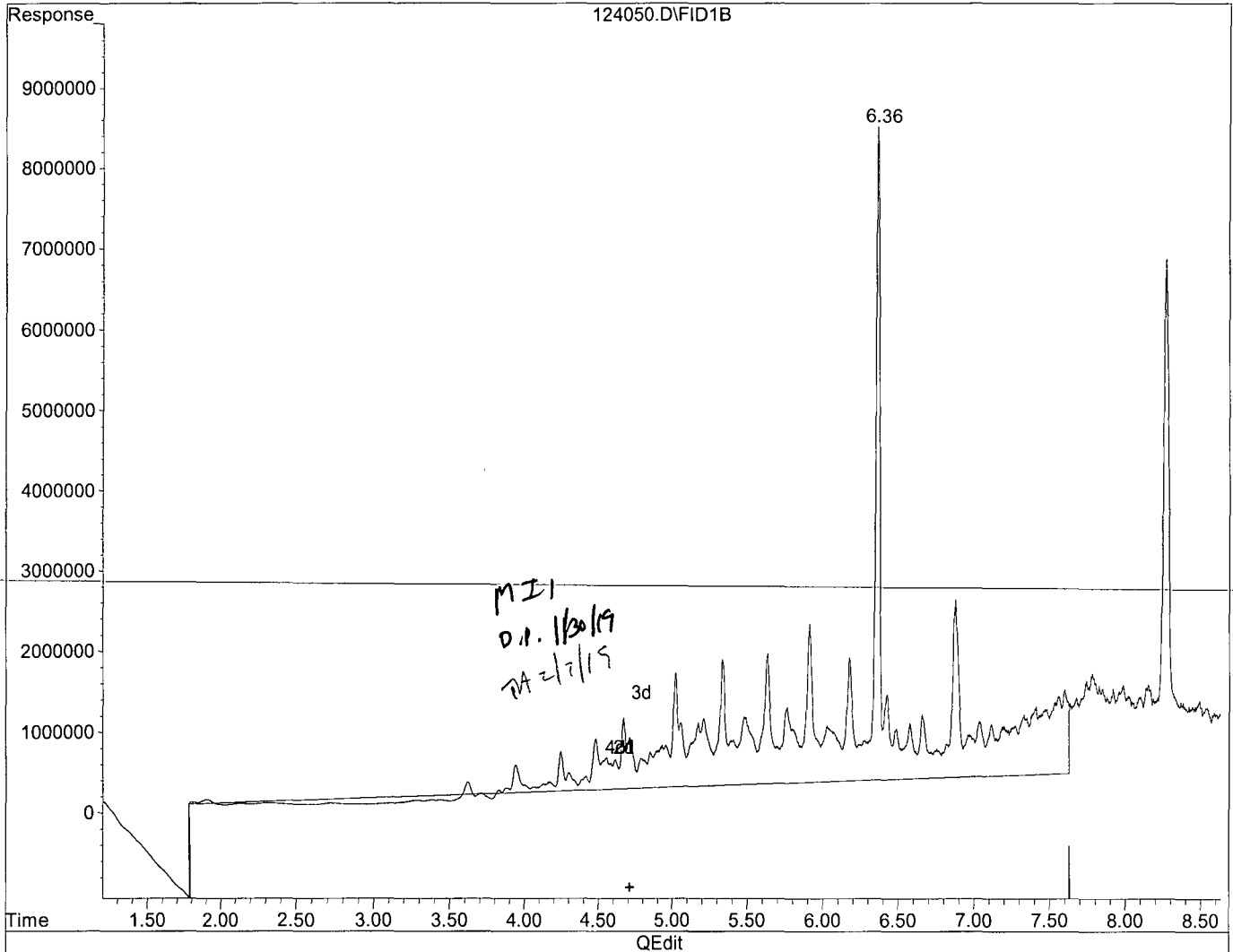
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124050.D  
Acq On : 1-29-19 13:00:39  
Sample : 190125A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:20 2019

Vial: 50  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1261.832ppb m  
response 1199134001



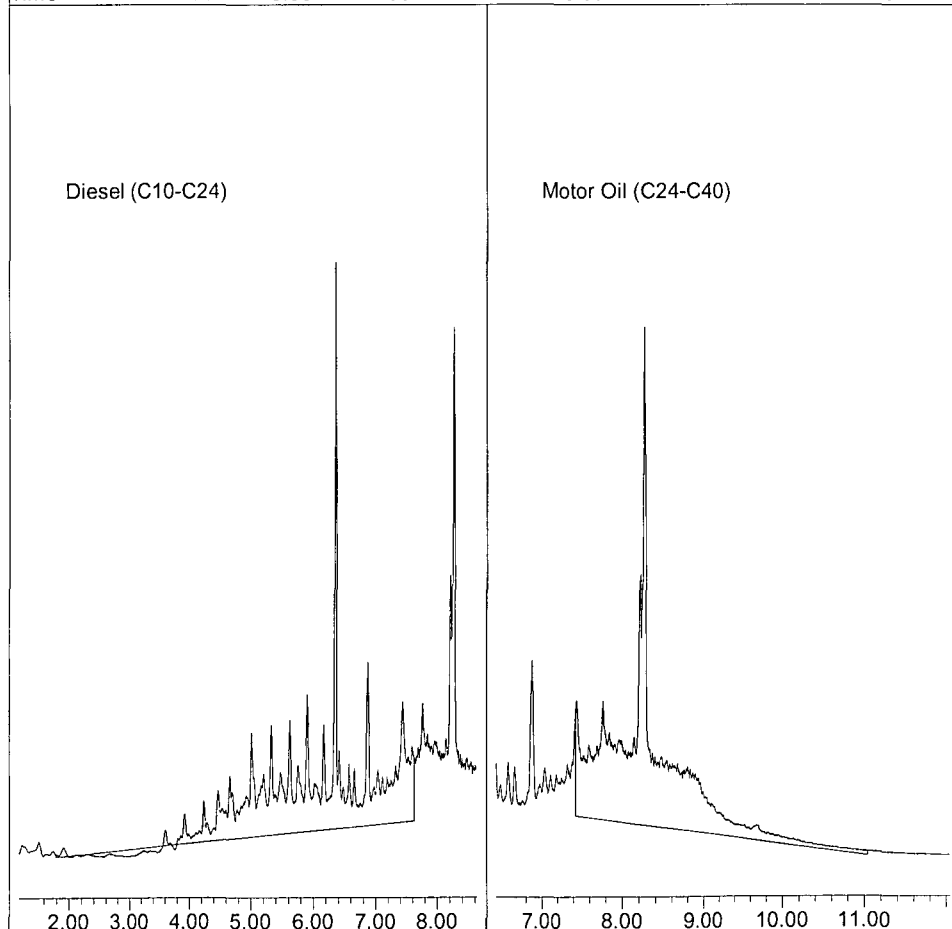
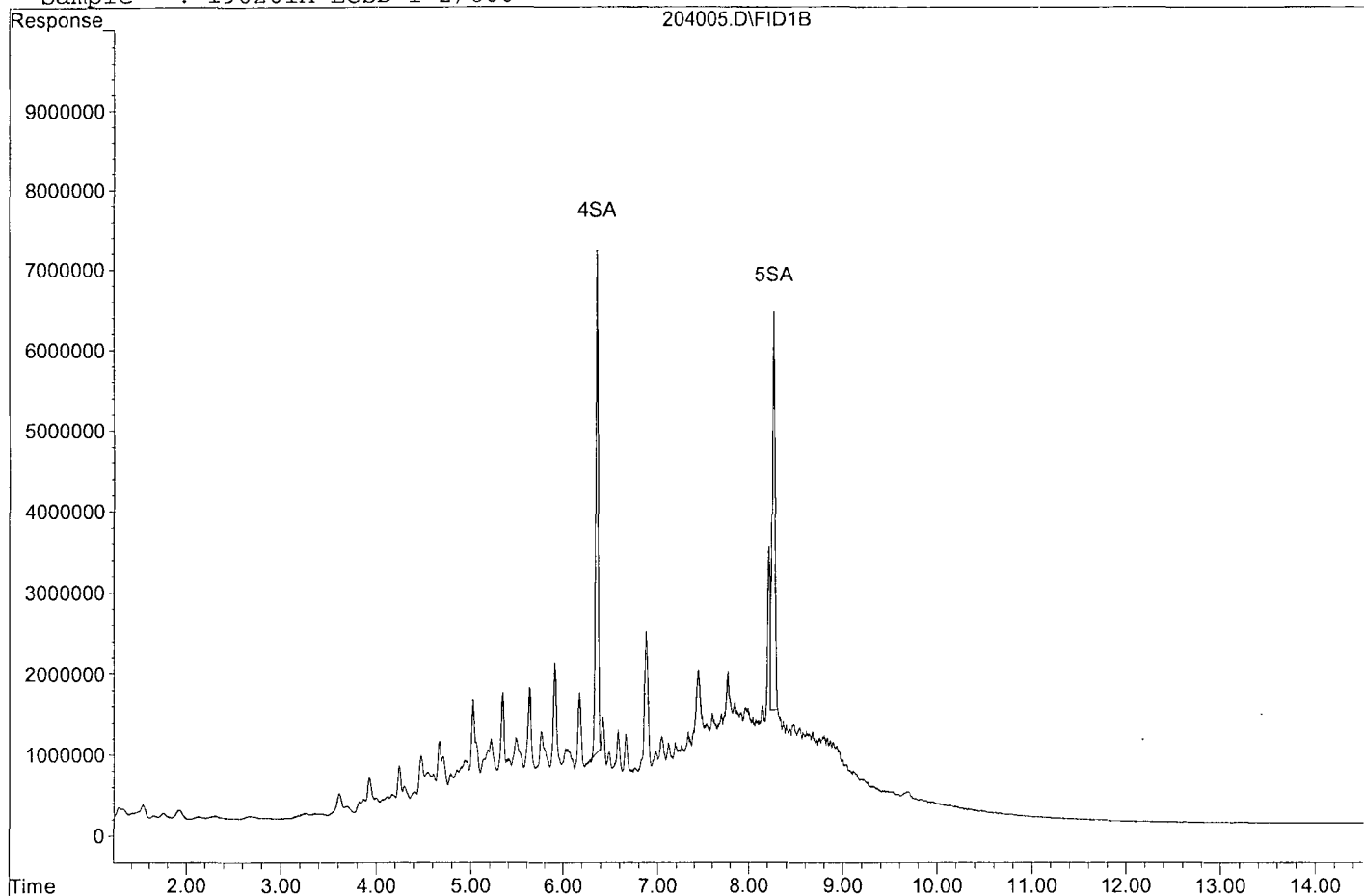
Data File : G:\APOLLO\DATA\190204\204005.D Vial: 5  
 Acq On : 2-4-19 12:13:09 Operator: DP  
 Sample : 190201A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 11 11:28 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	109799326	67.963 ppb
Surrogate Spike 75.000		Recovery =	90.62%
5) SA Octacosane(S)	8.27	102422656	68.232 ppb m
Surrogate Spike 75.000		Recovery =	90.98%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1086169994	1142.962 ppb
2) HBTM Motor Oil (C24-C40)	9.23	986747890	1326.843 ppb

Data File: G:\APOLLO\DATA\190204\204005.D  
Sample : 190201A LCSD-1 2/800



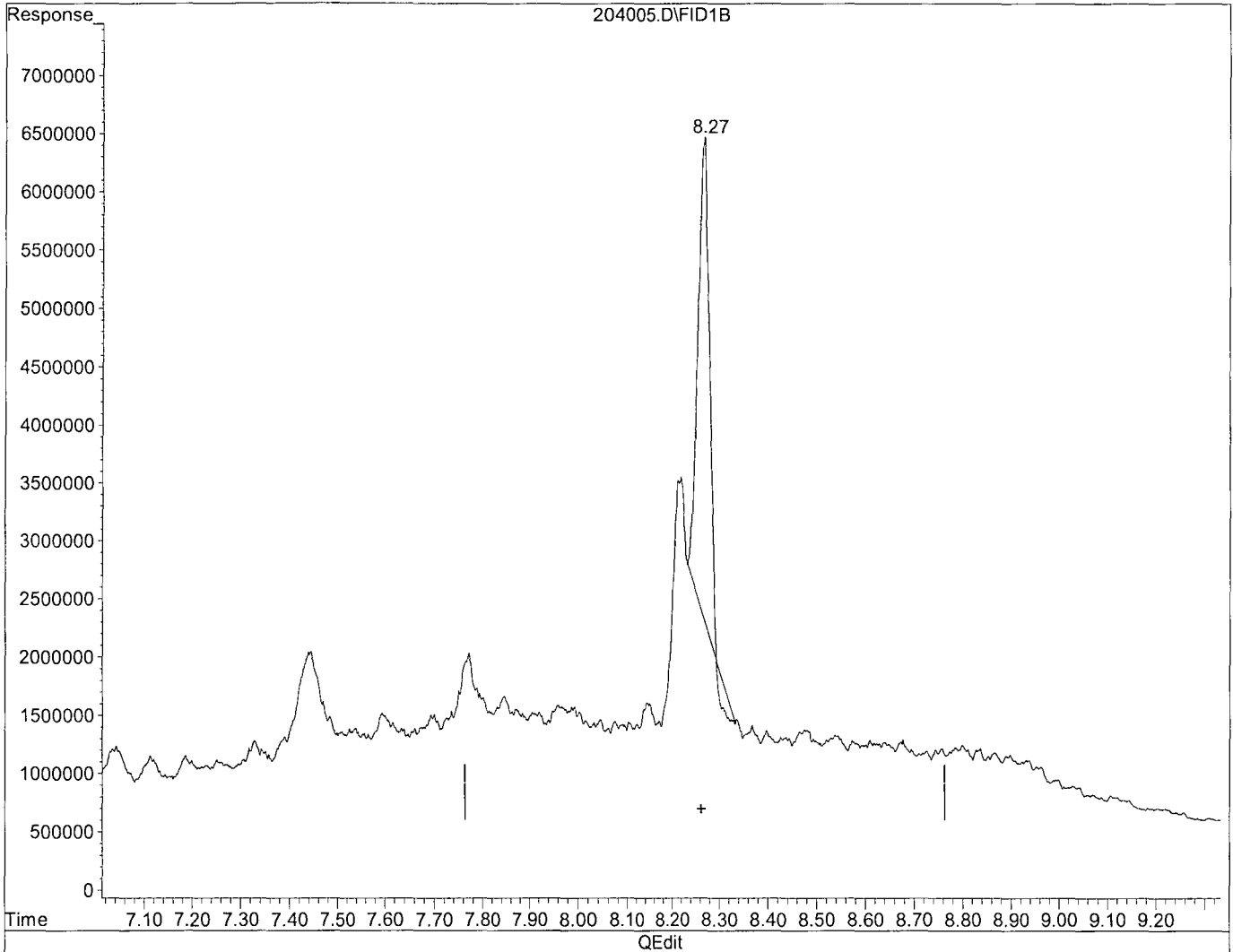
Quantitation Report

Data File : G:\APOLLO\DATA\190204\204005.D  
Acq On : 2-4-19 12:13:09  
Sample : 190201A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Feb 11 11:28 2019

Vial: 5  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(5) Octacosane(S) (SA)  
8.26min 44.011ppb  
response 66064160

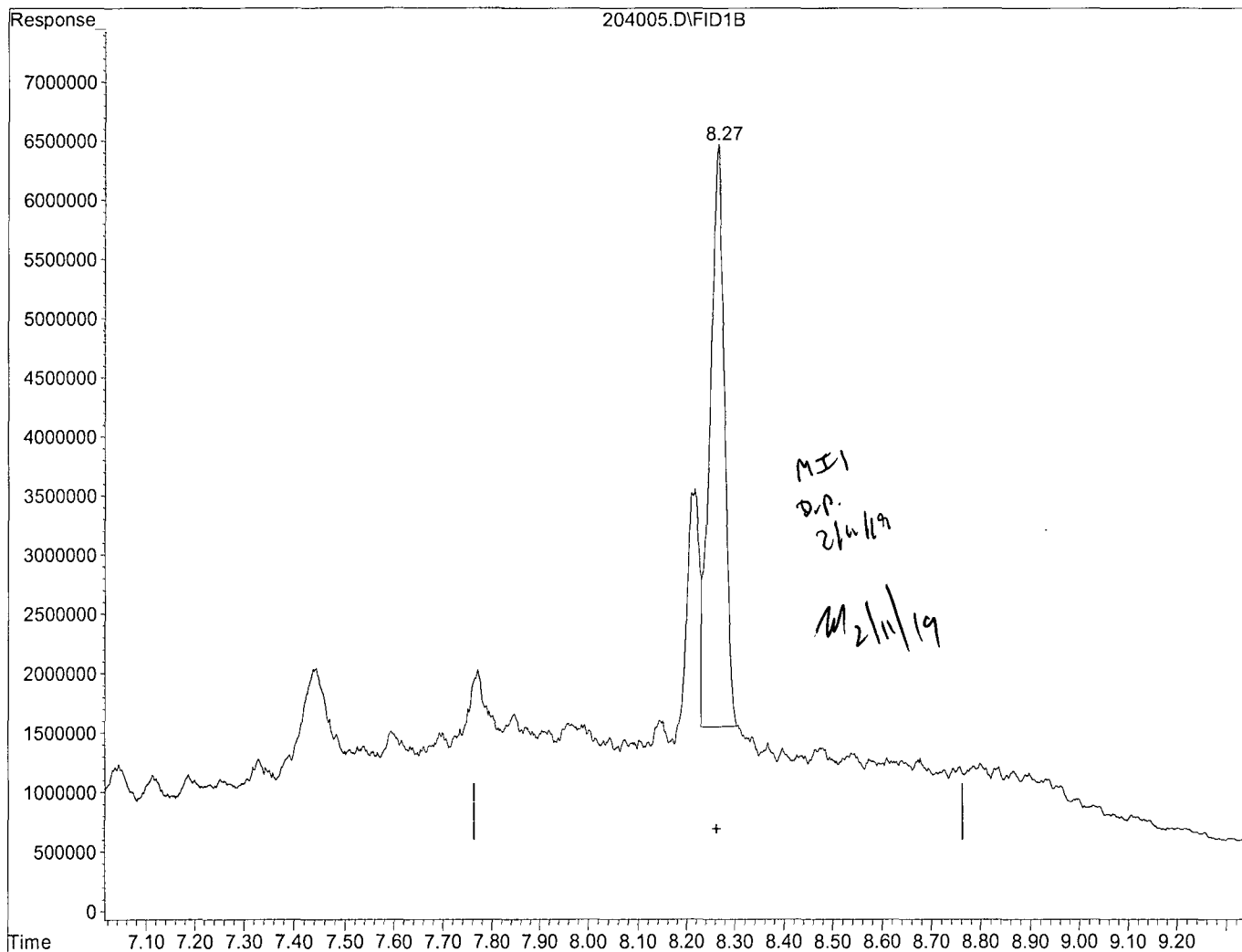
Quantitation Report

Data File : G:\APOLLO\DATA\190204\204005.D  
Acq On : 2-4-19 12:13:09  
Sample : 190201A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Feb 11 11:28 2019

Vial: 5  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190204\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(5) Octacosane(S) (SA)

8.27min 68.232ppb m

response 102422656

(+) = Expected Retention Time

Data File : G:\APOLLO\DATA\190124\124068.D Vial: 68  
 Acq On : 1-29-19 19:00:50 Operator: DP  
 Sample : 190128A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 10:00 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

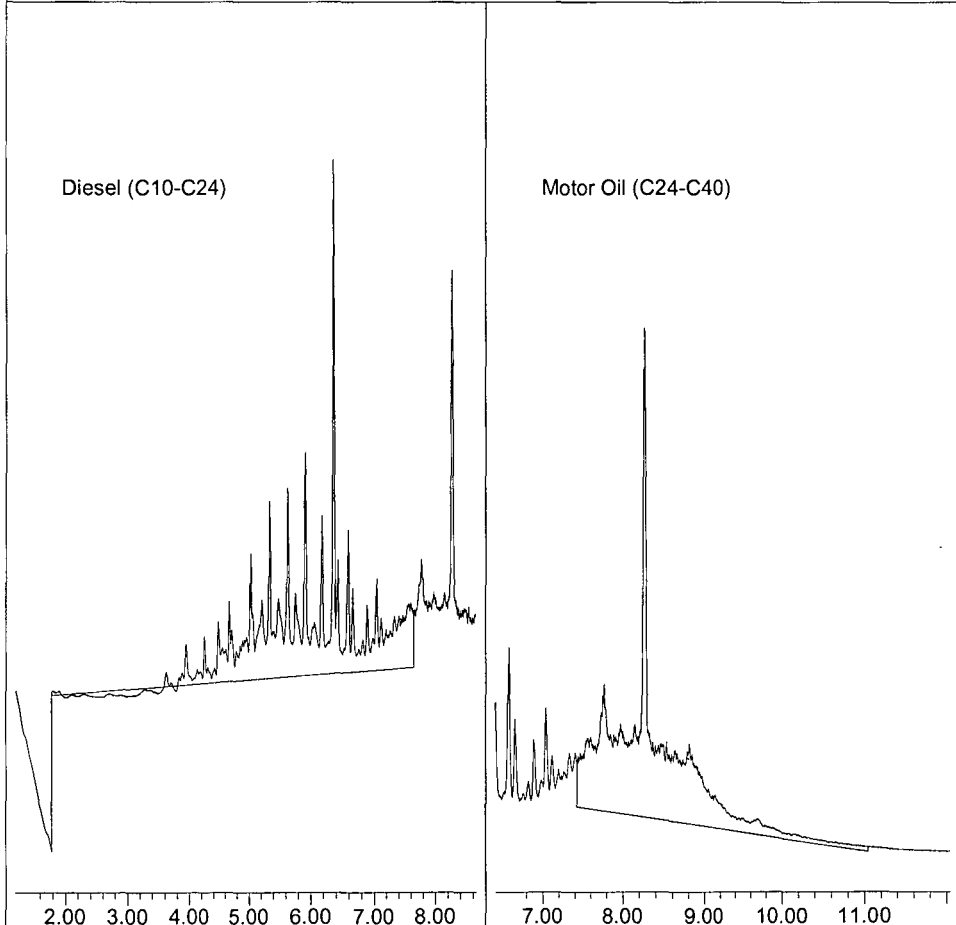
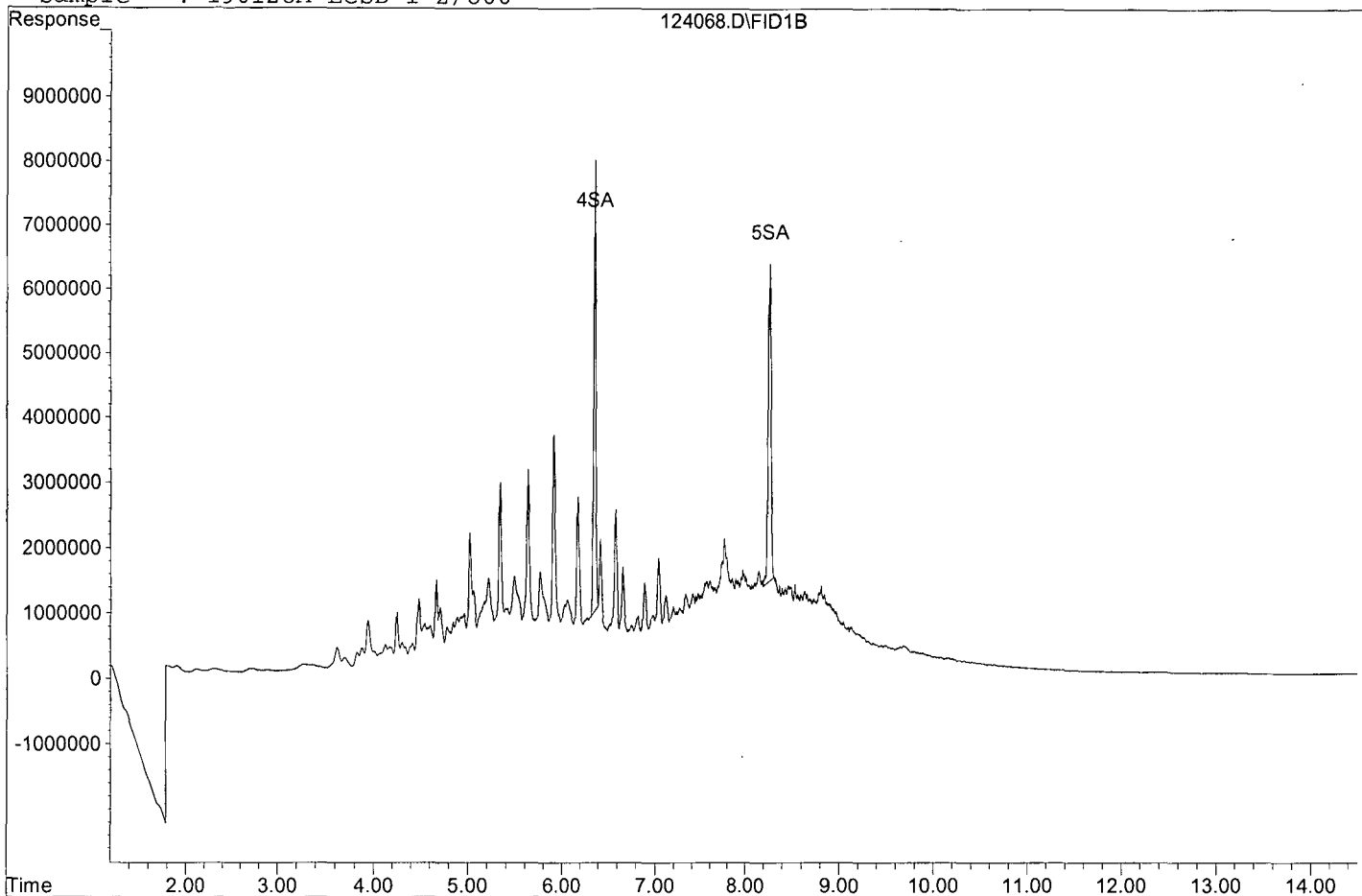
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	115433307	71.450 ppb
Surrogate Spike 75.000		Recovery =	95.27%
5) SA Octacosane(S)	8.27	105728166	70.434 ppb
Surrogate Spike 75.000		Recovery =	93.91%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1431606334	1506.460 ppb
2) HBTM Motor Oil (C24-C40)	9.23	950564304	1278.188 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124068.D

Sample : 190128A LCSD-1 2/800



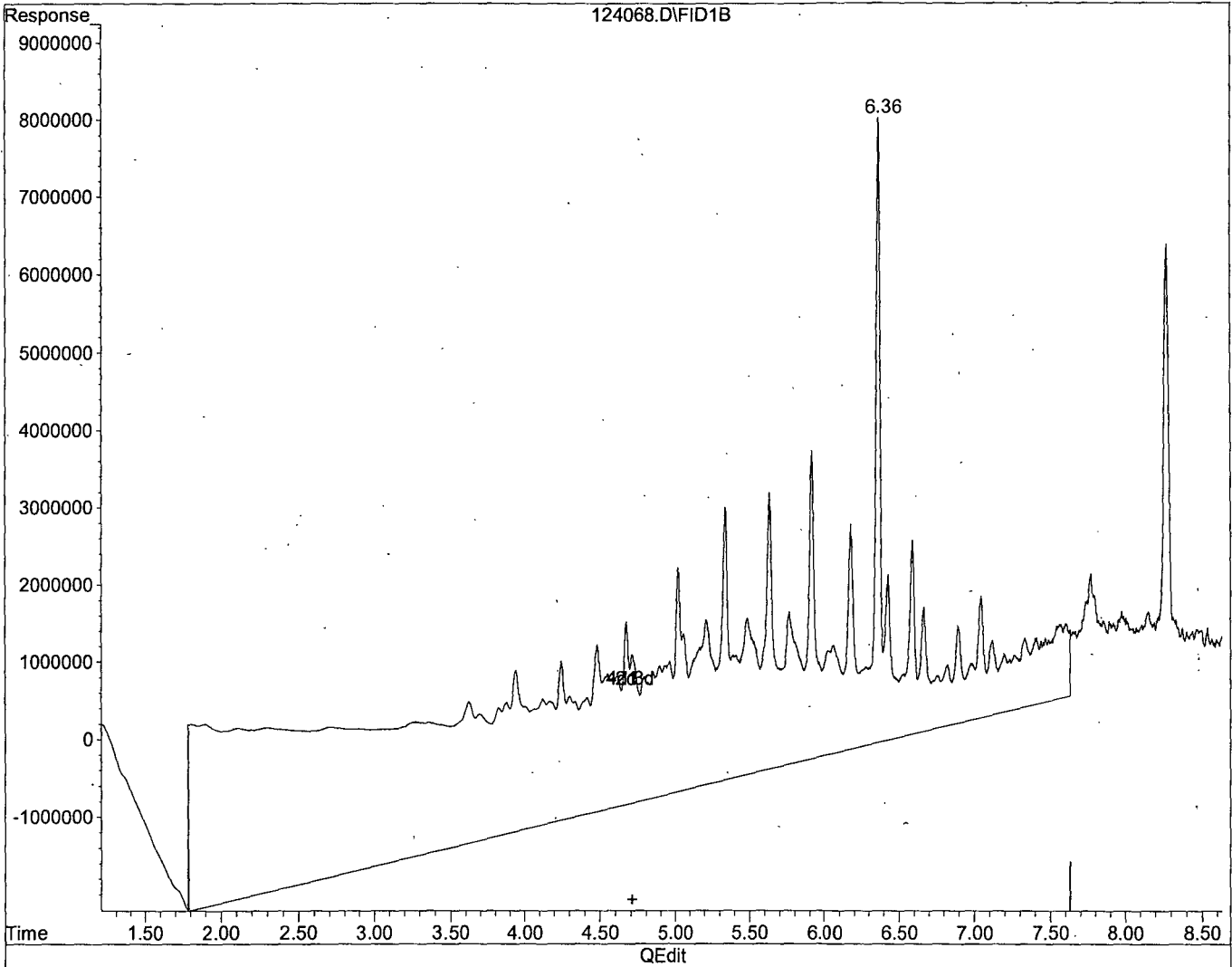
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124068.D  
Acq On : 1-29-19 19:00:50  
Sample : 190128A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 9:59 2019

Vial: 68  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



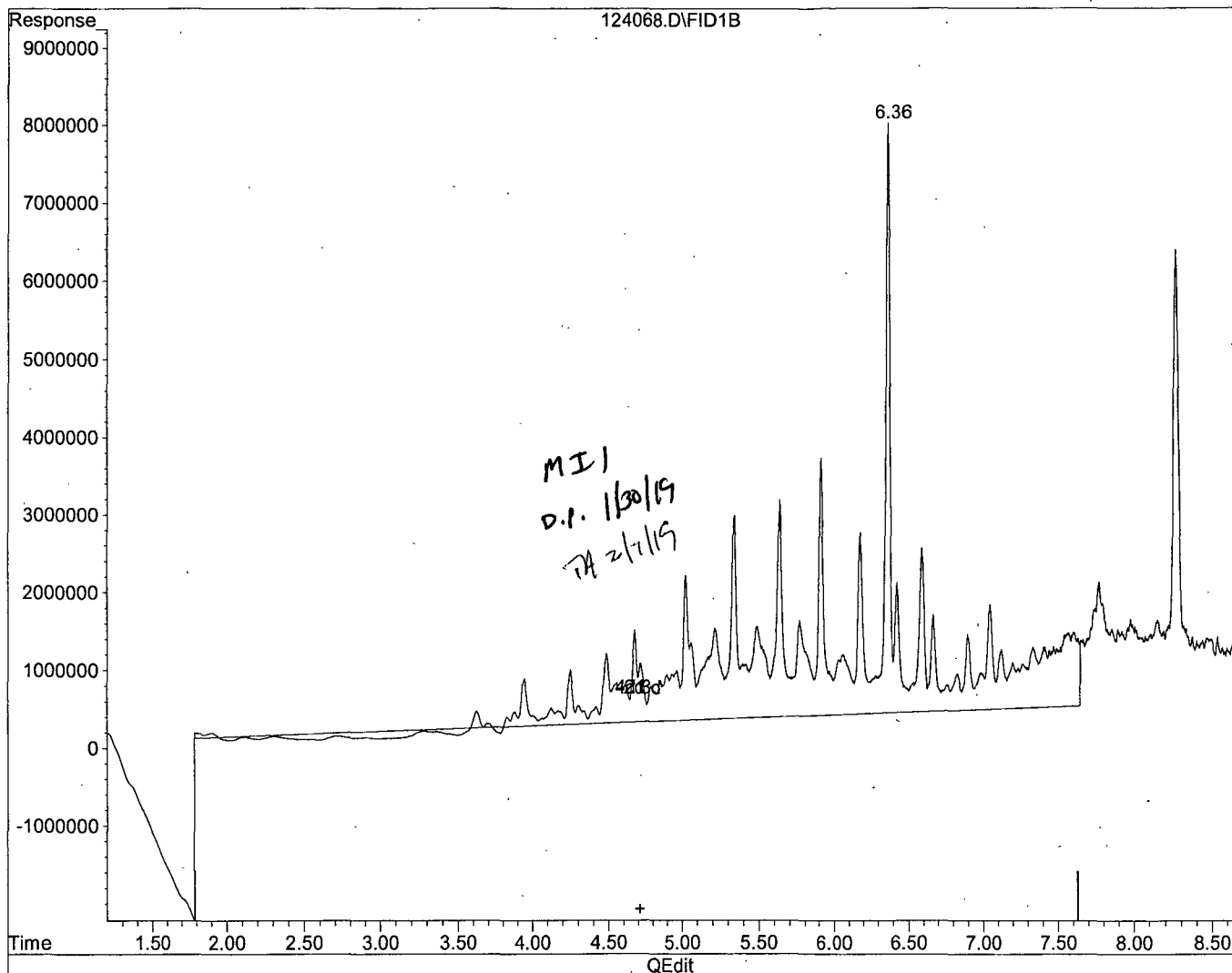
(1) Diesel (C10-C24) (HATM)

4.71min 5731.343ppb m

response 5446562897

Data File : G:\APOLLO\DATA\190124\124068.D Vial: 68  
Acq On : 1-29-19 19:00:50 Operator: DP  
Sample : 190128A LCSD-1 2/800 Inst : Apollo  
Misc : water Multiplr: 2.50  
IntFile : events.e  
Quant Time: Jan 30 9:59 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1506.460ppb m  
response 1431606334



Data File : G:\APOLLO\DATA\190201\201006.D Vial: 6  
 Acq On : 2-1-19 11:28:41 Operator: DP  
 Sample : 190128A LCSD-1 2/800 SGC Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Feb 1 11:36 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

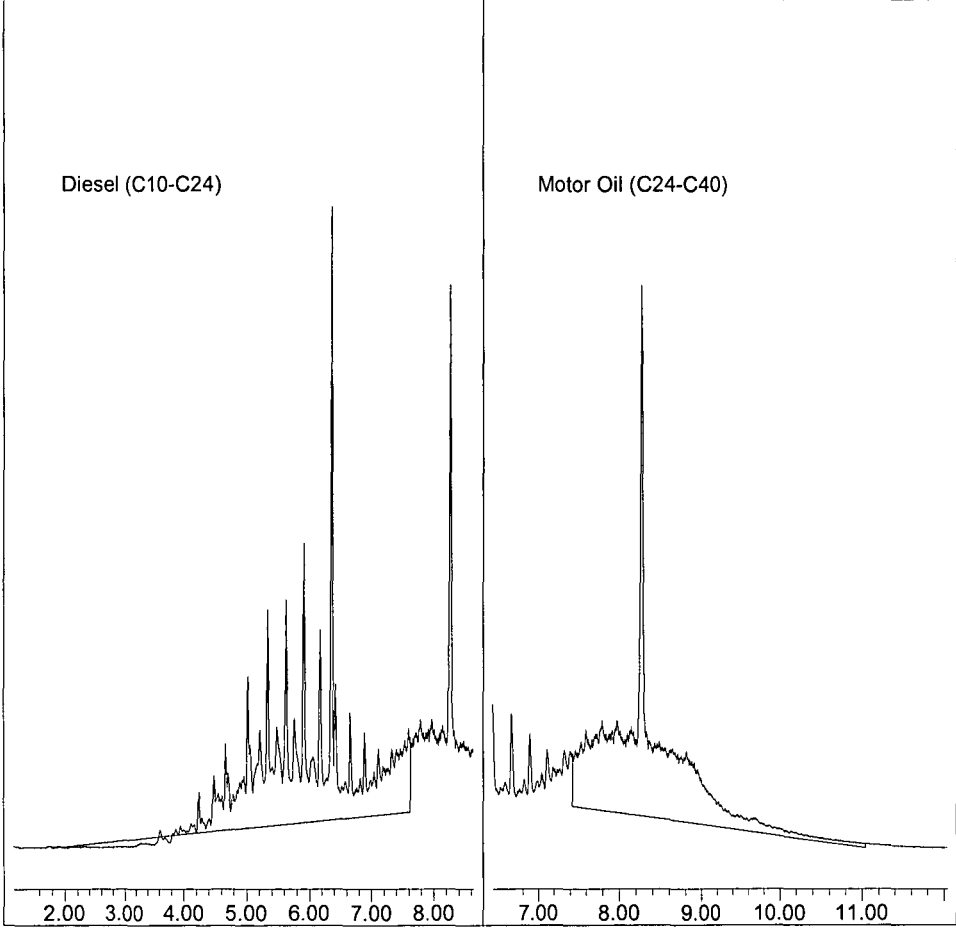
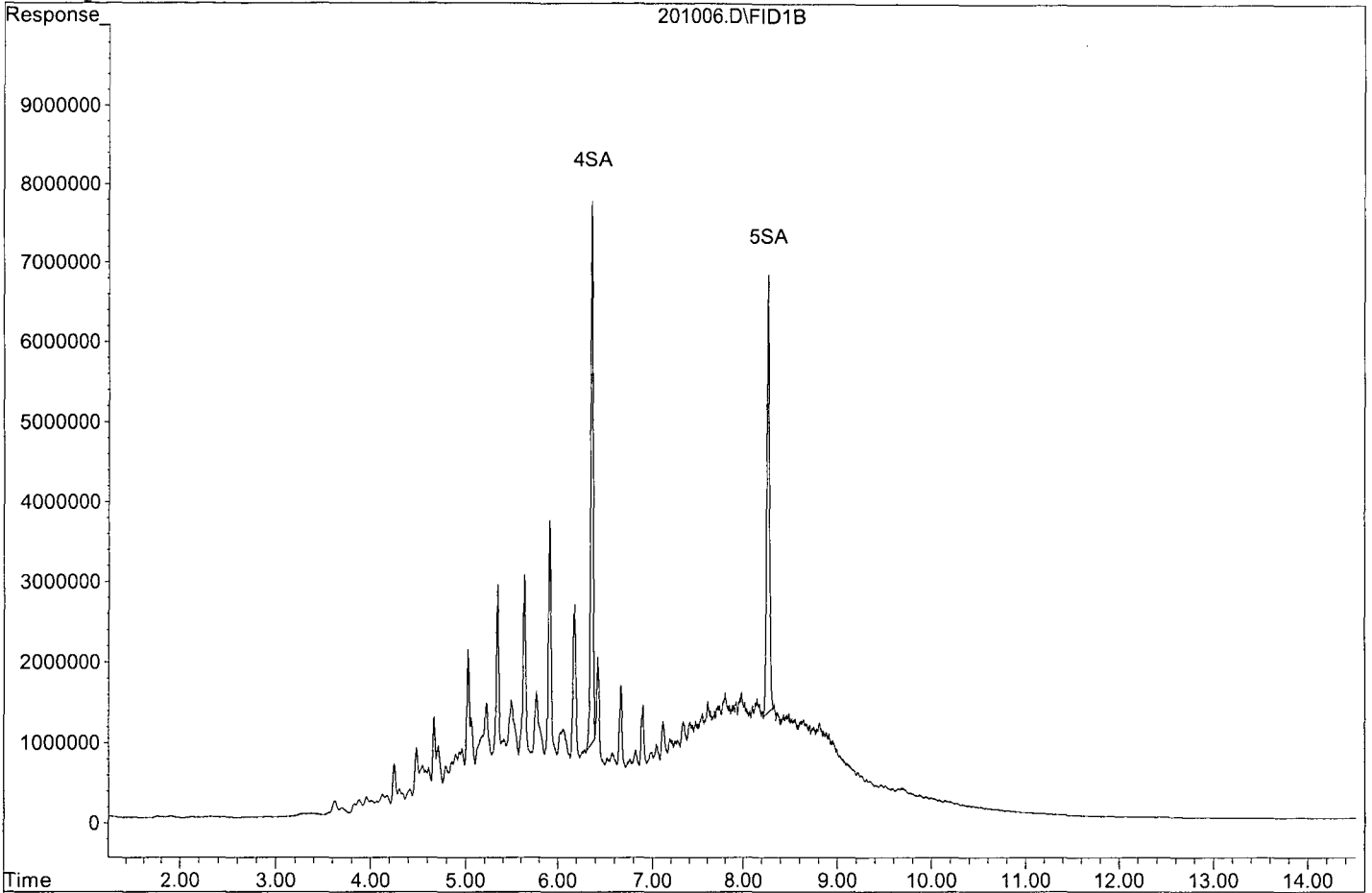
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	117997390	73.037 ppb
Surrogate Spike 75.000		Recovery =	97.38%
5) SA Octacosane(S)	8.27	109746892	73.111 ppb
Surrogate Spike 75.000		Recovery =	97.48%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1325560768	1394.869 ppb
2) HBTM Motor Oil (C24-C40)	9.23	934442387	1256.510 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190201\201006.D

Sample : 190128A LCSD-1 2/800 SGC



Data File : G:\APOLLO\DATA\190124\124052.D Vial: 52  
 Acq On : 1-29-19 13:40:11 Operator: DP  
 Sample : AZ85562W39 MS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:21 2019 Quant Results File: DOC0117.RES

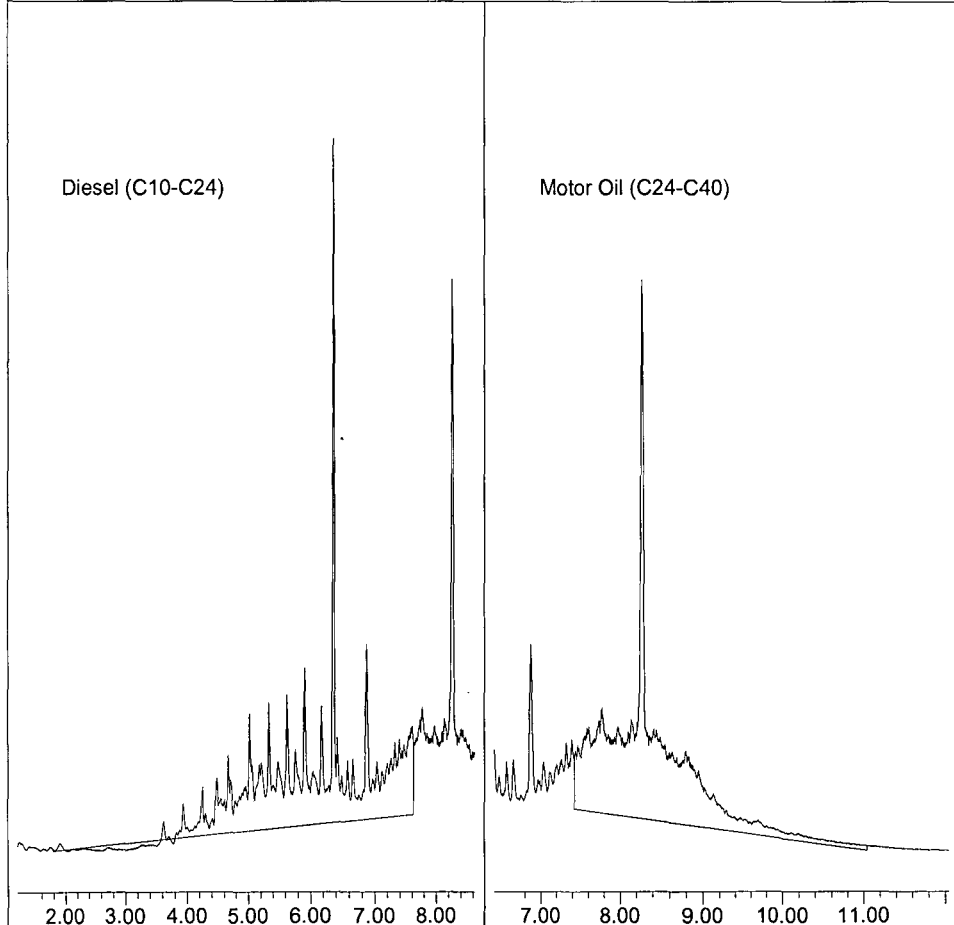
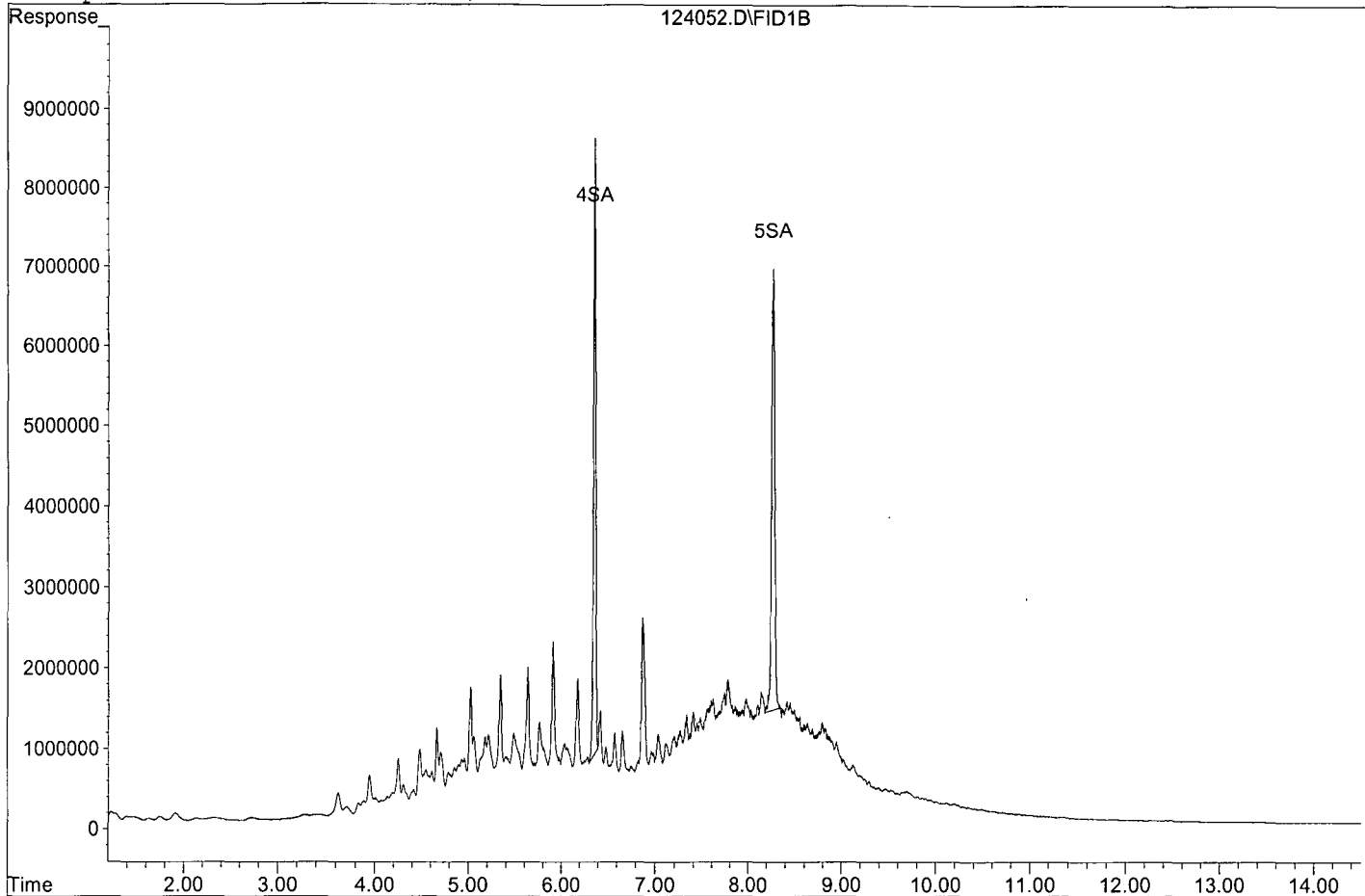
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	129001792	79.849 ppb
Surrogate Spike 75.000		Recovery =	106.47%
5) SA Octacosane(S)	8.27	124375153	82.856 ppb
Surrogate Spike 75.000		Recovery =	110.47%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1177475934	1239.042 ppb
2) HBTM Motor Oil (C24-C40)	9.23	988616662	1329.356 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124052.D  
Sample : AZ85562W39 MS-1 2/800



Data File : G:\APOLLO\DATA\190124\124053.D Vial: 53  
 Acq On : 1-29-19 14:00:21 Operator: DP  
 Sample : AZ85562W40 MSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:21 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

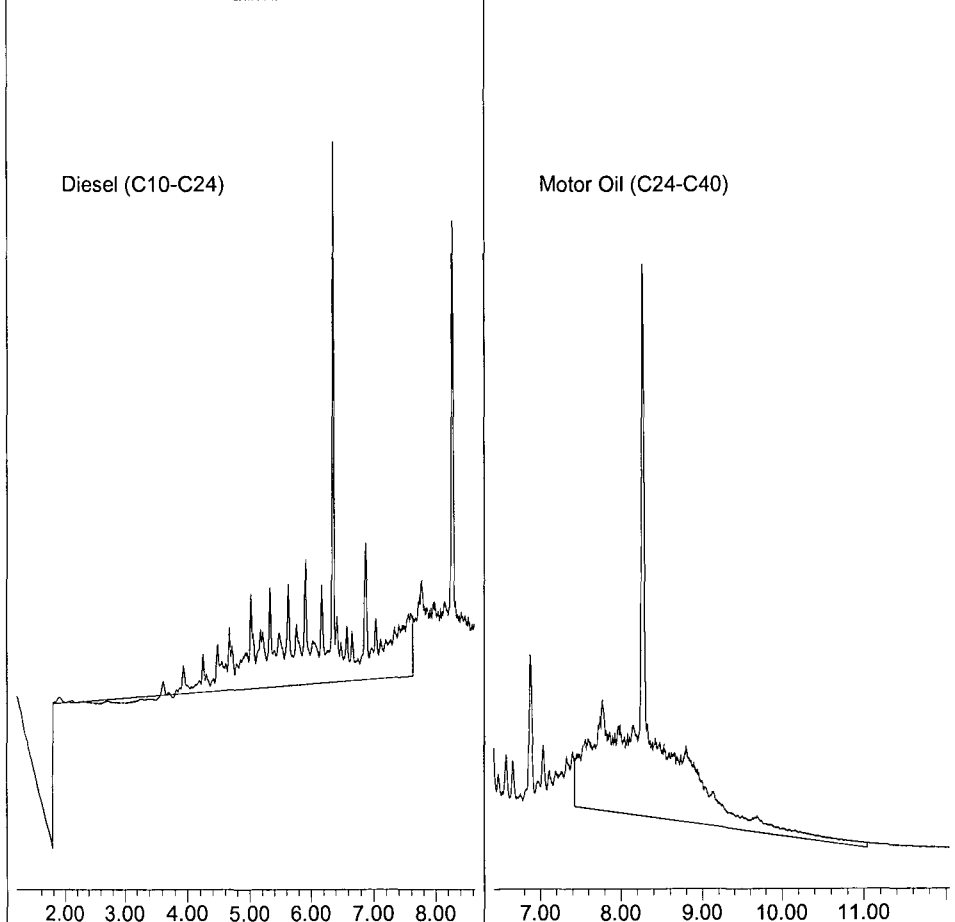
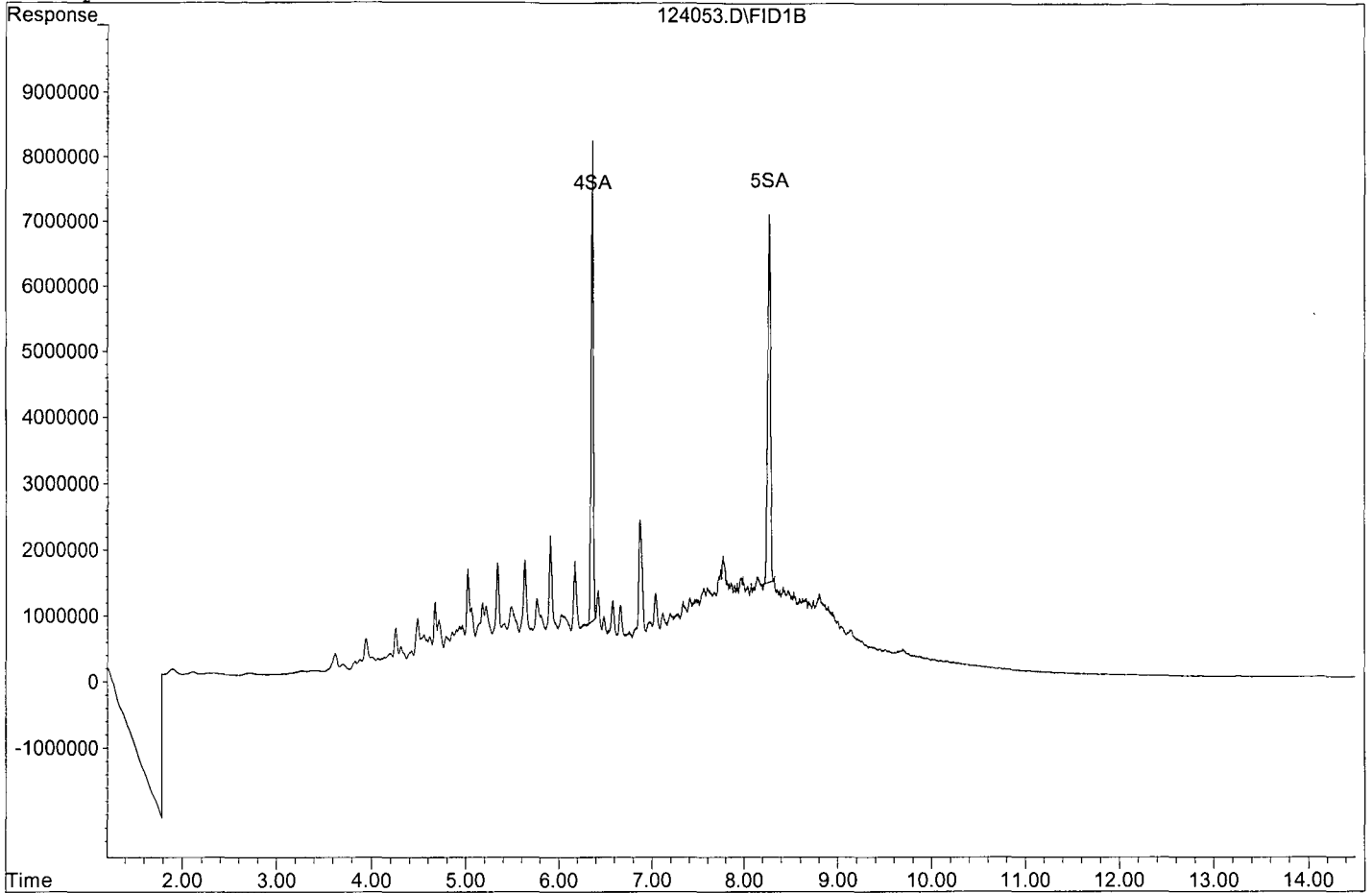
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	119238448	73.806 ppb
Surrogate Spike 75.000		Recovery =	98.41%
5) SA Octacosane(S)	8.27	115922365	77.225 ppb
Surrogate Spike 75.000		Recovery =	102.97%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1166441502	1227.430 ppb
2) HBTM Motor Oil (C24-C40)	9.23	951942070	1280.041 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124053.D

Sample : AZ85562W40 MSD-1 2/800



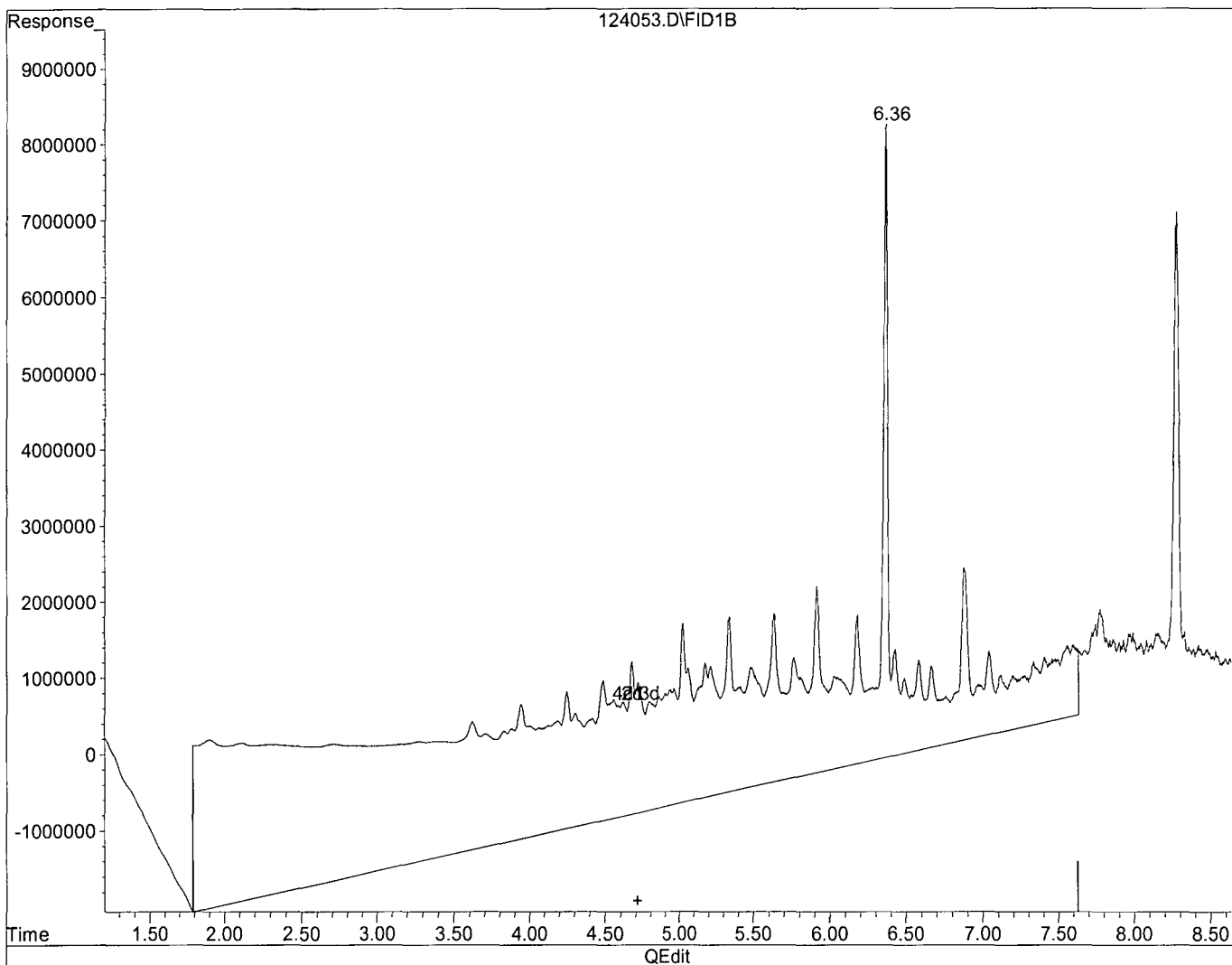
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124053.D  
Acq On : 1-29-19 14:00:21  
Sample : AZ85562W40 MSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:21 2019

Vial: 53  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 5119.076ppb m

response 4864718442

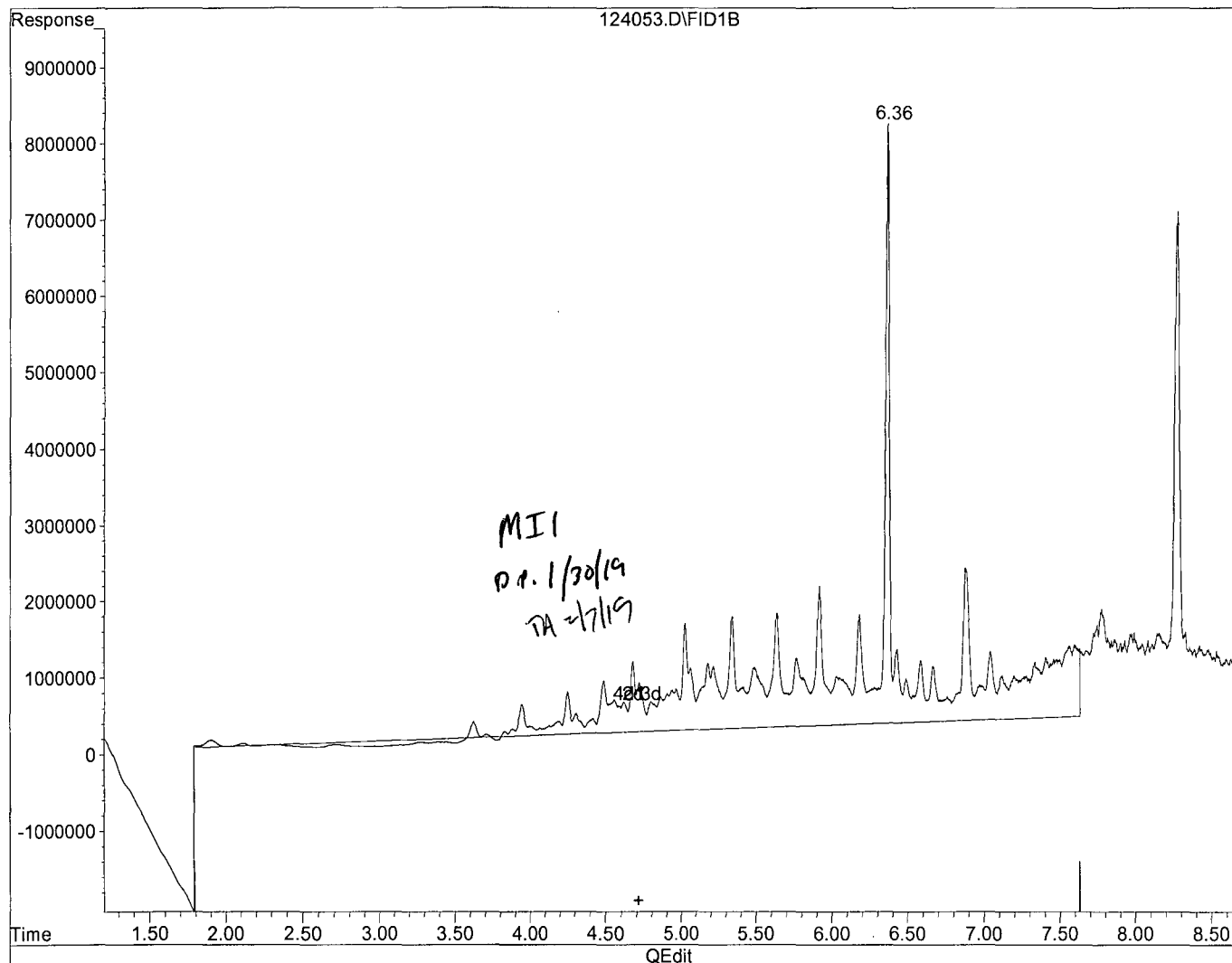
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124053.D  
Acq On : 1-29-19 14:00:21  
Sample : AZ85562W40 MSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:21 2019

Vial: 53  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 1227.430ppb m

response 1166441502

(+) = Expected Retention Time



**Diesel / Motor Oil Calibration Standard**  
 Prepared: 01/15/19  
 Expires: 01/15/20  
 Methylene Chloride Lot No. 56278  
 Prepared By (Initials): DP

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0135614-39409	01/15/20	03/31/25	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	A0135245-39351	01/15/20	03/31/25	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	CL12572-39691	08/13/19	06/30/23	1666uL			100

**Diesel / Motor Oil Second Source (SS)**  
 Prepared: 01/15/19  
 Expires: 01/15/20  
 Methylene Chloride Lot No. 56278  
 Prepared By (Initials): DP

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2 Second Source	O2SI	G34-011598-03	50,000	G34-319187-38958	08/02/19	09/29/21	50uL	10mL	MC	250
Motor Oil Second Source	O2SI	116390-02-SS	50,000	301142-37652	07/13/19	03/05/22	50uL			

**Diesel / Motor Oil Calibration Curve**  
 Prepared: 01/17/19  
 Expires: 07/17/19  
 Methylene Chloride Lot No. 56278  
 Prepared By (Initials): DP

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 1	2,000	Prepared 01/17/19	01/15/20	N/A	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 2	2,000	Prepared 01/17/19	01/15/20	N/A	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 3	2,000	Prepared 01/17/19	01/15/20	N/A	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 4	2,000	Prepared 01/17/19	01/15/20	N/A	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 5	2,000	Prepared 01/17/19	01/15/20	N/A	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 6	2,000	Prepared 01/17/19	01/15/20	N/A	100uL	100uL	N/A	2,000

**Diesel / Motor Oil CCV**  
 Prepared: 01/21/19  
 Expires: 07/22/19  
 Methylene Chloride Lot No. 56278  
 Prepared By (Initials): DP

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil STD	APPL	Diesel / Motor Oil CCV	2,000	Prepared 01/15/19	01/15/20	N/A	1250uL	10mL	MC	250

**Motor Oil Spike**

Prepared: 11/15/18

Prepared By (Initials): DP

Expires: 11/15/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Motor Oil Composite	Restek	31464	50,000	A0135245-39352	11/15/19	03/31/25	N/A	N/A	N/A	50,000

**Diesel Spike**

Prepared: 12/11/18

Prepared By (Initials): DP

Expires: 12/11/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Absolute	51046	50,000	111715-39355	12/11/19	11/17/20	N/A	N/A	N/A	50,000

THC Surrogate										
Prepared: 11/21/18					Prepared By (Initials): DP					
Expires: 10/18/19										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	CL12572-39687	10/18/19	06/30/23	N/A	N/A	N/A	600

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH- 3520C w/SGC	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ005SGC	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 1-25-19 EXP 1-25-20				
Spiked ID 2	Motor Oil Spike 12-20-18 EXP 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/28/19 15:30			
Spiked ID 8		Ext. End Time:		01/29/19 9:30 , 01/29/19 11:30			
		GC Requires Extract By:		01/30/19 0:00			
pH1	2	01/28/19 1:50:00 PM		Water Bath Temp Criteria		35,35,35 °	
pH2							
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 190128A Blk				0.100	1	800	2	2	01/28/19 14:15	
					equip	E-HP11 E-WB1				
2 190128A LCS-1		0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	
					equip	E-HP10 E-WB2				
3 190128A LCSD-1		0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	
					equip	E-HP9 E-WB3				
4 AZ85521	AZ85521W11			0.100	1	800	2	2	01/28/19 14:15	87932
					equip	E-HP7 E-WB1				
5 AZ85565	AZ85565W24			0.100	1	800	2	2	01/28/19 14:15	87940
					equip	E-HP6 E-WB2				
6 AZ85567	AZ85567W21			0.100	1	800	2	2	01/28/19 14:15	87940
					equip	E-HP4 E-WB3				

Kyr 1/29/19



Solvent and Lot#	
1+1 HCL (5mLs)	11-19-18
PH Strips	HC 849161
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 2:00:56 PM

Reviewed By: *Kyr* Page 321 of 1037 Date 1/29/19

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190125A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 1-25-19 exp 1-25-20	Surrogate ID 1	THC Surrogate 12-17-18 exp 12-17-19				
Spiked ID 2	Motor Oil Spike 12-20-18 exp 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: YES					
Spiked ID 7		Ext. Start Time: 01/25/19 14:40					
Spiked ID 8		Ext. End Time: 01/26/19 10:07 <i>01/29/19 07:45</i>					
		GC Requires Extract By: 01/31/19 0:00					
pH1	2	01/25/19 1:20:00 PM	Water Bath Temp Criteria	35,35,35 °			
pH2							
pH3							

Spiked By: DL

Date 01/25/19

Witnessed By: FM

Date 01/25/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 190125A Blk				0.100	1	800	2	2	01/25/19 13:30	
					equip	E-HP51 E-WB1				
2 190125A LCS-1		0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	
					equip	E-HP50 E-WB2				
3 190125A LCSD-1		0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	
					equip	E-HP49 E-WB2				
4 AZ85560	AZ85560W23			0.100	1	800	2	2	01/25/19 13:30	87935
					equip	E-HP48 E-WB3				
5 AZ85562 MS-1	AZ85562W39	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP47 E-WB2				
6 AZ85562 MSD-1	AZ85562W40	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP25 E-WB2				
7 AZ85562	AZ85562W34			0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP26 E-WB1				
8 AZ85563	AZ85563W07			0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP27 E-WB2				
9 AZ85569	AZ85569W20			0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP28 E-WB3				
10 AZ85617	AZ85617W08			0.100	1	800	2	2	01/25/19 13:30	87950
					equip	E-HP29 E-WB1				
11 AZ85623	AZ85623W17			0.100	1	800	2	2	01/25/19 13:30	87950
					equip	E-HP30 E-WB2				
12 AZ85643 MS-1	AZ85643W41	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP16 E-WB2				
13 AZ85643 MSD-1	AZ85643W42	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP15 E-WB2				
14 AZ85643	AZ85643W40			0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP17 E-WB3				
15 AZ85644	AZ85644W11			0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP14 E-WB1				
16 AZ85646	AZ85646W24			0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP13 E-WB2				

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:02:06 PM

Reviewed By: *Ky* Date *1/29/19*  
 Page 322 of 1057  
 Ext\_ID 61609

# Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	190125A	Extraction Method	LIQ005	Units	mL
Spiked ID 1	Diesel Spike 1-25-19 exp 1-25-20	Surrogate ID 1	THC Surrogate 12-17-18 exp 12-17-19				
Spiked ID 2	Motor Oil Spike 12-20-18 exp 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		YES			
Spiked ID 7		Ext. Start Time:		01/25/19 14:40			
Spiked ID 8		Ext. End Time:		01/26/19 10:07 <i>01/29/19 07:45</i>			
		GC Requires Extract By:		01/31/19 0:00			
pH1	2	01/25/19 1:20:00 PM		Water Bath Temp Criteria		35,35,35 °	
pH2							
pH3							

Spiked By: DL

Date 01/25/19

Witnessed By: FM

Date 01/25/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17 AZ85653	AZ85653W24			0.100	1	800	2	2	01/25/19 13:30	87956
						equip	E-HP12 E-WB3			

*1/29/19*

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:02:06 PM

Reviewed By: *KY* Date *1/29/19*  
 Page 323 of 1057  
 EXT\_ID 61609

# Organic Extraction Worksheet







<b>Method</b>	Continuous Liq/Liq TPH- 3520C w/SGC	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ005SGC	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 12-11-18 EXP 12-11-19	Surrogate ID 1	THC Surrogate 1-25-19 EXP 1-25-20				
Spiked ID 2	Motor Oil Spike 12-20-18 EXP 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/28/19 15:30			
Spiked ID 8		Ext. End Time:		01/29/19 9:30			
		GC Requires Extract By:		01/30/19 0:00			
		pH1	2	01/28/19 1:50:00 PM		Water Bath Temp Criteria 35,35,35 °	
		pH2					
		pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190128A Blk			0.100	1	800	2	2	01/28/19 14:15	*
					equip	E-HP11 E-WB1				
2	190128A LCS-1	0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	*
					equip	E-HP10 E-WB2				
3	190128A LCSD-1	0.020	1,2	0.100	1	800	2	2	01/28/19 14:15	*
					equip	E-HP9 E-WB3				
4	AZ85521 AZ85521W11			0.100	1	800	2	2	01/28/19 14:15	87932 *
					equip	E-HP7 E-WB1				
5	AZ85565 AZ85565W24			0.100	1	800	2	2	01/28/19 14:15	87940
					equip	E-HP6 E-WB2				
6	AZ85567 AZ85567W21			0.100	1	800	2	2	01/28/19 14:15	87940 *
					equip	E-HP4 E-WB3				

Ker 1/31/19

Solvent and Lot#	
1+1 HCL (5mLs)	11-19-18
PH Strips	HC 849161
Filter Paper	400148
B. Sodium Sulfate	2018110573
Silica Gel (*)	021111q

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 2:00:56 PM

Reviewed By: *Ker* Date 1/31/19



# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190201A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 1-25-19 EXP 1-25-20	Surrogate ID 1	THC Surrogate 1-25-19 EXP 1-25-20				
Spiked ID 2	Motor Oil Spike 12-20-18 EXP 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		02/01/19 13:30			
Spiked ID 8		Ext. End Time:		02/02/19 9:00			
				<b>GC Requires Extract By:</b>		02/06/19 0:00	
pH1		2	02/01/19 1:25:00 PM		Water Bath Temp Criteria		35,35,35 °
pH2							
pH3							

Spiked By: DL

Date 02/01/19

Witnessed By: CFM

Date 02/01/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190201A Blk			0.100	1	800	2	2	02/01/19 13:30	
						equip	e-hp51 E-WB1			
2	190201A LCS-1	0.020	1,2	0.100	1	800	2	2	02/01/19 13:30	
						equip	e-hp50 E-WB2			
3	190201A LCSD-1	0.020	1,2	0.100	1	800	2	2	02/01/19 13:30	
						equip	E-HP49 E-WB3			
4	AZ85565 AZ85565W23			0.100	1	800	2	2	02/01/19 13:30	87940 RX
						equip	E-HP48 E-WB1			
5	AZ85700 AZ85700W15			0.100	1	800	2	2	02/01/19 13:30	87969
						equip	E-HP47 E-WB2			
6	AZ85704 AZ85704W28			0.100	1	800	2	2	02/01/19 13:30	87969
						equip	E-HP25 E-WB3			
7	AZ85705 AZ85705W22			0.100	1	800	2	2	02/01/19 13:30	87969
						equip	E-HP26 E-WB1			
8	AZ85754 AZ85754W21			0.100	1	800	2	2	02/01/19 13:30	87981
						equip	E-HP27 E-WB2			
9	AZ85763 AZ85763W09			0.100	1	800	2	2	02/01/19 13:30	87986
						equip	E-HP28 E-WB3			
10	AZ85764 AZ85764W08			0.100	1	800	2	2	02/01/19 13:30	87986
						equip	E-HP29 E-WB1			
11	AZ85766 AZ85766W22			0.100	1	800	2	2	02/01/19 13:30	87986
						equip	E-HP30 E-WB2			
12	AZ85802 AZ85802W13			0.100	1	800	2	2	02/01/19 13:30	87995
						equip	E-HP17 E-WB3			
13	AZ85803 AZ85803W16			0.100	1	800	2	2	02/01/19 13:30	87995
						equip	E-HP16 E-WB1			
14	AZ85804 AZ85804W16			0.100	1	800	2	2	02/01/19 13:30	87995
						equip	E-HP15 E-WB2			

Solvent and Lot#	
I+1 HCL	11-19-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	17H095210

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	JP
Date	2/3/19
Time	2:50
Refrigerator	Richard T

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/04/19 12:15:48 PM

Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

## Injection Log

Directory: G:\APOLLO\DATA\180814\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
17	814017.D	1	Decanoic Acid - 1 8/13/18	Mix(C)	8-14-18 16:56:27
18	814018.D	1	Decanoic Acid - 2 8/13/18	Mix(C)	8-14-18 17:15:48
19	814019.D	1	Decanoic Acid - 3 8/13/18	Mix(C)	8-14-18 17:35:59
20	814020.D	1	Decanoic Acid - 4 8/13/18	Mix(C)	8-14-18 17:56:16
21	814021.D	1	Decanoic Acid - 5 8/13/18	Mix(C)	8-14-18 18:16:22
22	814022.D	1	Decanoic Acid - 6 8/13/18	Mix(C)	8-14-18 18:36:30
2	117002.D	1	Diesel / Motor Oil - 1 1/17/19	water	1-17-19 16:38:28
3	117003.D	1	Diesel / Motor Oil - 2 1/17/19	water	1-17-19 16:58:29
4	117004.D	1	Diesel / Motor Oil - 3 1/17/19	water	1-17-19 17:17:50
5	117005.D	1	Diesel / Motor Oil - 4 1/17/19	water	1-17-19 17:37:44
6	117006.D	1	Diesel / Motor Oil - 5 1/17/19	water	1-17-19 17:57:32
7	117007.D	1	Diesel / Motor Oil - 6 1/17/19	water	1-17-19 18:17:22
8	117008.D	1	Diesel / Motor Oil - SS 1/15/19	water	1-17-19 18:37:21
47	124047.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 12:00:52
48	124048.D	2.5	190125A BLK 2/800	water	1-29-19 12:20:41
49	124049.D	2.5	190125A LCS-1 2/800	water	1-29-19 12:40:39
50	124050.D	2.5	190125A LCSD-1 2/800	water	1-29-19 13:00:39
52	124052.D	2.5	AZ85562W39 MS-1 2/800	water	1-29-19 13:40:11
53	124053.D	2.5	AZ85562W40 MSD-1 2/800	water	1-29-19 14:00:21
54	124054.D	2.5	AZ85562W34 2/800	water	1-29-19 14:20:30
55	124055.D	2.5	AZ85563W07 2/800	water	1-29-19 14:40:43
56	124056.D	2.5	AZ85569W20 2/800	water	1-29-19 15:00:56
61	124061.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 16:41:00
66	124066.D	2.5	190128A BLK 2/800	water	1-29-19 18:20:50
67	124067.D	2.5	190128A LCS-1 2/800	water	1-29-19 18:40:52
68	124068.D	2.5	190128A LCSD-1 2/800	water	1-29-19 19:00:50
70	124070.D	2.5	AZ85565W24 2/800	water	1-29-19 19:40:49
71	124071.D	2.5	AZ85567W21 2/800	water	1-29-19 20:00:05
72	124072.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 20:19:55
2	201002.D	1	Diesel / Motor Oil - 3 1/21/19	water	2-1-19 10:08:50
3	201003.D	1	Decanoic Acid - 3 8/23/18	water	2-1-19 10:28:46
4	201004.D	2.5	190128A BLK 2/800 SGC	water	2-1-19 10:48:41
5	201005.D	2.5	190128A LCS-1 2/800 SGC	water	2-1-19 11:08:34
6	201006.D	2.5	190128A LCSD-1 2/800 SGC	water	2-1-19 11:28:41
8	201008.D	2.5	AZ85567W21 2/800 SGC	water	2-1-19 12:08:15
19	201019.D	1	Diesel / Motor Oil - 3 1/21/19	water	2-1-19 15:55:38
20	201020.D	1	Decanoic Acid - 3 8/23/18	water	2-1-19 16:15:43
2	204002.D	1	Diesel / Motor Oil - 3 1/21/19	water	2-4-19 11:13:52
3	204003.D	2.5	190201A BLK 2/800	water	2-4-19 11:33:49
4	204004.D	2.5	190201A LCS-1 2/800	water	2-4-19 11:53:49
5	204005.D	2.5	190201A LCSD-1 2/800	water	2-4-19 12:13:09
6	204006.D	2.5	AZ85565W23 2/800	water	2-4-19 12:33:09
17	204017.D	1	Diesel / Motor Oil - 3 1/21/19	water	2-4-19 16:14:01

**ORGANICS**  
**Calibration Data**

PAH by GCMS SIM  
EPA 8270 SIM

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No:

Case No: \_\_\_\_\_

Initial Cal. Date: 01/22/19

Matrix: \_\_\_\_\_

Instrument: Linus

Initials: \_\_\_\_\_

0122L003.D 0122L004.D 0122L005.D 0122L006.D 0122L007.D 0122L008.D 0122L009.D 0122L010.D

	Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD	Type	r^2	Q	MRF
1	I Naphthalene-D8(IS)																
2	S Surrogate Recovery (NBZ)	0.5368	0.4662	0.3581	0.3806	0.4597	0.4513	0.4398	0.4353			0.44	12	S			
3	TM Naphthalene	1.501	1.326	1.089	1.286	1.383	1.355	1.095	1.039			1.3	13	TM			0.700
4	S 2-Methylnaphthalene-D10 (2M)	1.165	1.119	0.8912	1.140	1.265	1.295	1.170	1.119			1.1	11	S			
5	TM 2-Methylnaphthalene	0.8415	0.7811	0.6384	0.7893	0.8609	0.8572	0.6703	0.6454			0.76	13	TM			0.400
6	TM 1-Methylnaphthalene	0.9488	0.7945	0.6729	0.8072	0.8294	0.8268	0.6596	0.6061			0.77	15	TM			
7	I Acenaphthene-D10(IS)																
8	S Surrogate Recovery (FBP)	2.032	1.654	1.457	1.744	1.923	1.928	1.728	1.675			1.8	10	S			
9	TM Acenaphthylene	6.283	5.718	4.707	5.612	6.305	6.346	5.135	4.672			5.6	12	TM			0.900
10	*TM Acenaphthene	1.920	1.700	1.428	1.705	1.810	1.782	1.400	1.360			1.6	13	*TM			0.900
11	TM Fluorene	2.106	1.923	1.607	1.975	2.155	2.142	1.716	1.657			1.9	12	TM			0.900
12	I Phenanthrene-D10(IS)																
13	TM Phenanthrene	1.596	1.429	1.206	1.461	1.584	1.571	1.261	1.133			1.4	13	TM			0.700
14	TM Anthracene	1.546	1.378	1.157	1.401	1.639	1.579	1.259	1.212			1.4	13	TM			0.700
15	S Fluoranthene-D10 (FRT)	1.960	1.740	1.370	1.644	1.947	1.964	1.702	1.672			1.7	12	S			
16	*TM Fluoranthene	2.487	2.295	1.834	2.252	2.506	2.476	1.900	1.837			2.2	14	*TM			0.600
17	I Chrysene-D12(IS)																
18	TM Pyrene	1.754	1.558	1.296	1.539	1.745	1.699	1.421	1.348			1.5	12	TM			0.600
19	S Surrogate Recovery (TPH)	0.8778	0.8099	0.6667	0.7580	0.8727	0.8657	0.8359	0.7712			0.81	9.0	S			
20	TM Benz (a) anthracene	1.671	1.359	1.076	1.304	1.538	1.509	1.341	1.262			1.4	13	TM			0.800
21	TM Chrysene	1.479	1.472	1.188	1.390	1.453	1.388	1.153	1.067			1.3	12	TM			0.700
22	TM Indeno (1,2,3-cd) pyrene	1.529	1.415	1.156	1.393	1.490	1.490	1.274	1.181			1.4	11	TM			0.500
23	I Perylene-D12(IS)																
24	TM Benzo (b) fluoranthene	1.433	1.243	1.096	1.291	1.531	1.603	1.305	1.301			1.4	12	TM			0.700
25	TM Benzo (k) fluoranthene	1.579	1.319	1.194	1.327	1.553	1.453	1.299	1.266			1.4	10	TM			0.700
26	*TM Benzo (a) pyrene	1.308	1.224	1.092	1.285	1.456	1.489	1.256	1.223			1.3	10.0	*TM			0.700
27	TM Dibenz (a,h) anthracene	1.354	1.225	1.012	1.231	1.275	1.310	1.060	1.044			1.2	11	TM			0.400
28	TM Benzo (g,h,i) perylene	1.377	1.229	1.021	1.247	1.271	1.322	1.097	1.043			1.2	11	TM			0.500
29																	
30																	
31																	
32																	
33																	
34																	
35																	

Data File : M:\LINUS\DATA\L190122\0122L003.D Vial: 3  
 Acq On : 22 Jan 19 9:37 Operator: MA  
 Sample : 0.1 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 09:56:33 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	15835	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7110	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13830	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20163	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19644	2.50000	ppb	-0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	170	0.04555	ppb	0.00
Spiked Amount	5.000		Recovery	=	0.920%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	369	0.03991	ppb	-0.01
Spiked Amount	5.000		Recovery	=	0.800%	
8) Surrogate Recovery (FBP)	5.31	172	289	0.04745	ppb	-0.01
Spiked Amount	5.000		Recovery	=	0.940%	
15) Fluoranthene-D10 (FRT)	9.20	212	542	0.04079	ppb	0.00
Spiked Amount	5.000		Recovery	=	0.820%	
19) Surrogate Recovery (TPH)	9.67	244	354	0.04542	ppb	-0.01
Spiked Amount	5.000		Recovery	=	0.900%	
Target Compounds						
3) Naphthalene	4.06	128	951	0.12746	ppb	99
5) 2-Methylnaphthalene	4.88	142	533	0.11867	ppb	97
6) 1-Methylnaphthalene	4.99	142	601	0.13228	ppb	97
9) Acenaphthylene	5.92	152	1787	0.11640	ppb	98
10) Acenaphthene	6.11	154	546	0.12405	ppb	92
11) Fluorene	6.72	166	599	0.11841	ppb	93
13) Phenanthrene	7.83	178	883	0.11967	ppb	98
14) Anthracene	7.89	178	855	0.11674	ppb	99
16) Fluoranthene	9.22	202	1376	0.11919	ppb	98
18) Pyrene	9.48	202	1415	0.12511	ppb	# 89
20) Benz (a) anthracene	10.89	228	1348	0.13332	ppb	96
21) Chrysene	10.95	228	1193	0.12015	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.83	276	1233	0.11749	ppb	# 82
24) Benzo (b) fluoranthene	12.66	252	1126	0.11931	ppb	98
25) Benzo (k) fluoranthene	12.71	252	1241	0.11008	ppb	96
26) Benzo (a) pyrene	13.22	252	1028	0.11184	ppb	98
27) Dibenz (a,h) anthracene	14.85	278	1064	0.12449	ppb	94
28) Benzo (g,h,i) perylene	15.18	276	1082	0.12500	ppb	96

Quantitation Report

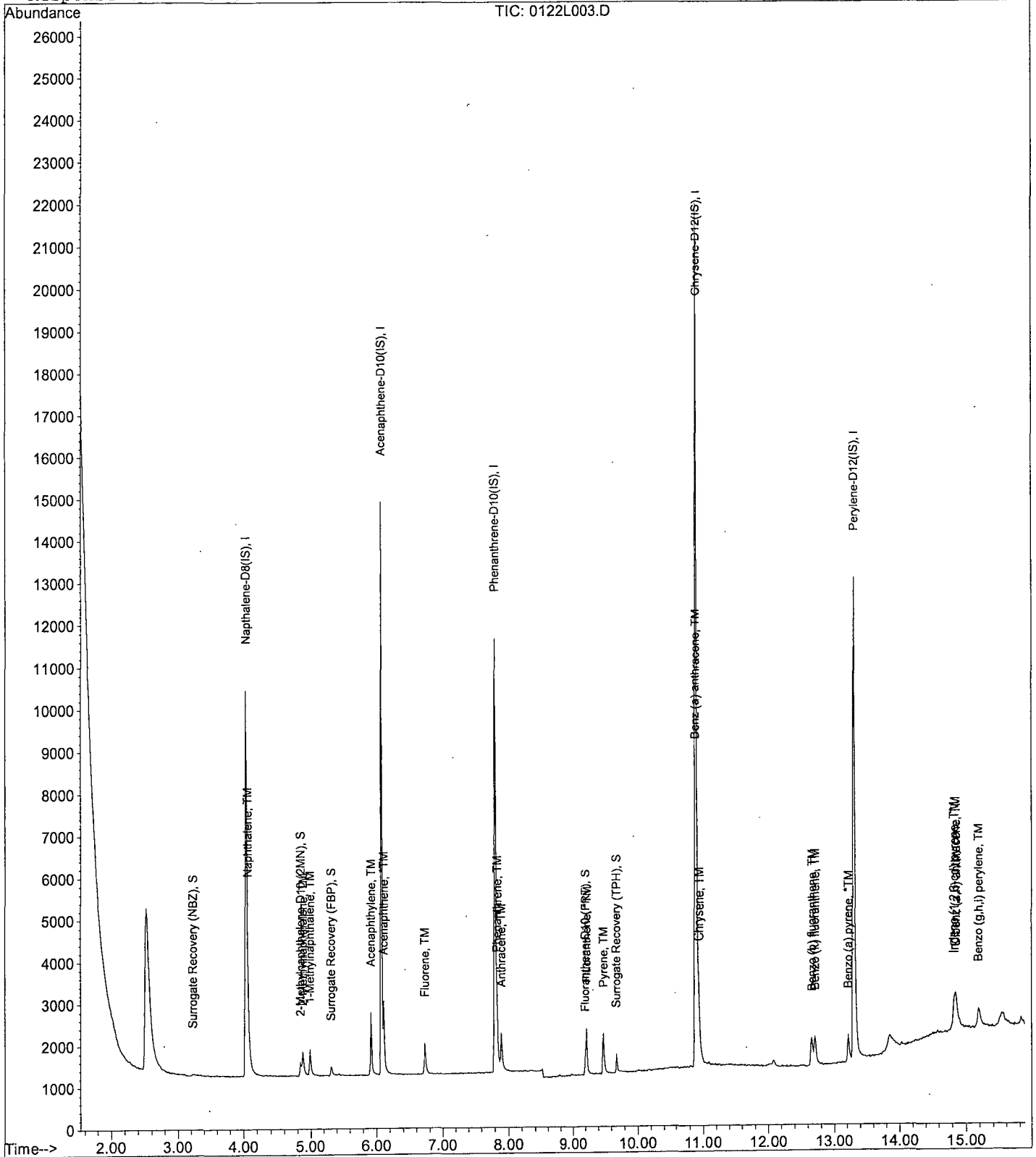
Data File : M:\LINUS\DATA\L190122\0122L003.D  
Acq On : 22 Jan 19 9:37  
Sample : 0.1 SIM 01/18/19  
Misc :

Vial: 3  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L004.D  
 Acq On : 22 Jan 19 9:59  
 Sample : 0.2 SIM 01/18/19  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	18660	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8631	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	16928	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	24788	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	24016	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.24	82	348	0.07912	ppb	0.01
Spiked Amount	5.000		Recovery	=	1.580%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	835	0.07663	ppb	-0.01
Spiked Amount	5.000		Recovery	=	1.540%	
8) Surrogate Recovery (FBP)	5.31	172	571	0.07723	ppb	-0.01
Spiked Amount	5.000		Recovery	=	1.540%	
15) Fluoranthene-D10 (FRT)	9.20	212	1178	0.07243	ppb	0.00
Spiked Amount	5.000		Recovery	=	1.440%	
19) Surrogate Recovery (TPH)	9.67	244	803	0.08381	ppb	0.00
Spiked Amount	5.000		Recovery	=	1.680%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	1979	0.22509	ppb	99
5) 2-Methylnaphthalene	4.88	142	1166	0.22030	ppb	99
6) 1-Methylnaphthalene	4.99	142	1186	0.22151	ppb	97
9) Acenaphthylene	5.92	152	3948	0.21185	ppb	99
10) Acenaphthene	6.11	154	1174	0.21972	ppb	98
11) Fluorene	6.72	166	1328	0.21626	ppb	100
13) Phenanthrene	7.83	178	1935	0.21425	ppb	99
14) Anthracene	7.89	178	1866	0.20815	ppb	99
16) Fluoranthene	9.22	202	3108	0.21994	ppb	97
18) Pyrene	9.47	202	3089	0.22216	ppb	99
20) Benz (a) anthracene	10.89	228	2695	0.21680	ppb	98
21) Chrysene	10.95	228	2920	0.23921	ppb	96
22) Indeno (1,2,3-cd) pyrene	14.82	276	2806	0.21749	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	2388	0.20696	ppb	# 98
25) Benzo (k) fluoranthene	12.71	252	2534	0.18385	ppb	99
26) Benzo (a) pyrene	13.22	252	2352	0.20930	ppb	97
27) Dibenz (a,h) anthracene	14.85	278	2354	0.22529	ppb	94
28) Benzo (g,h,i) perylene	15.19	276	2362	0.22319	ppb	95

Quantitation Report

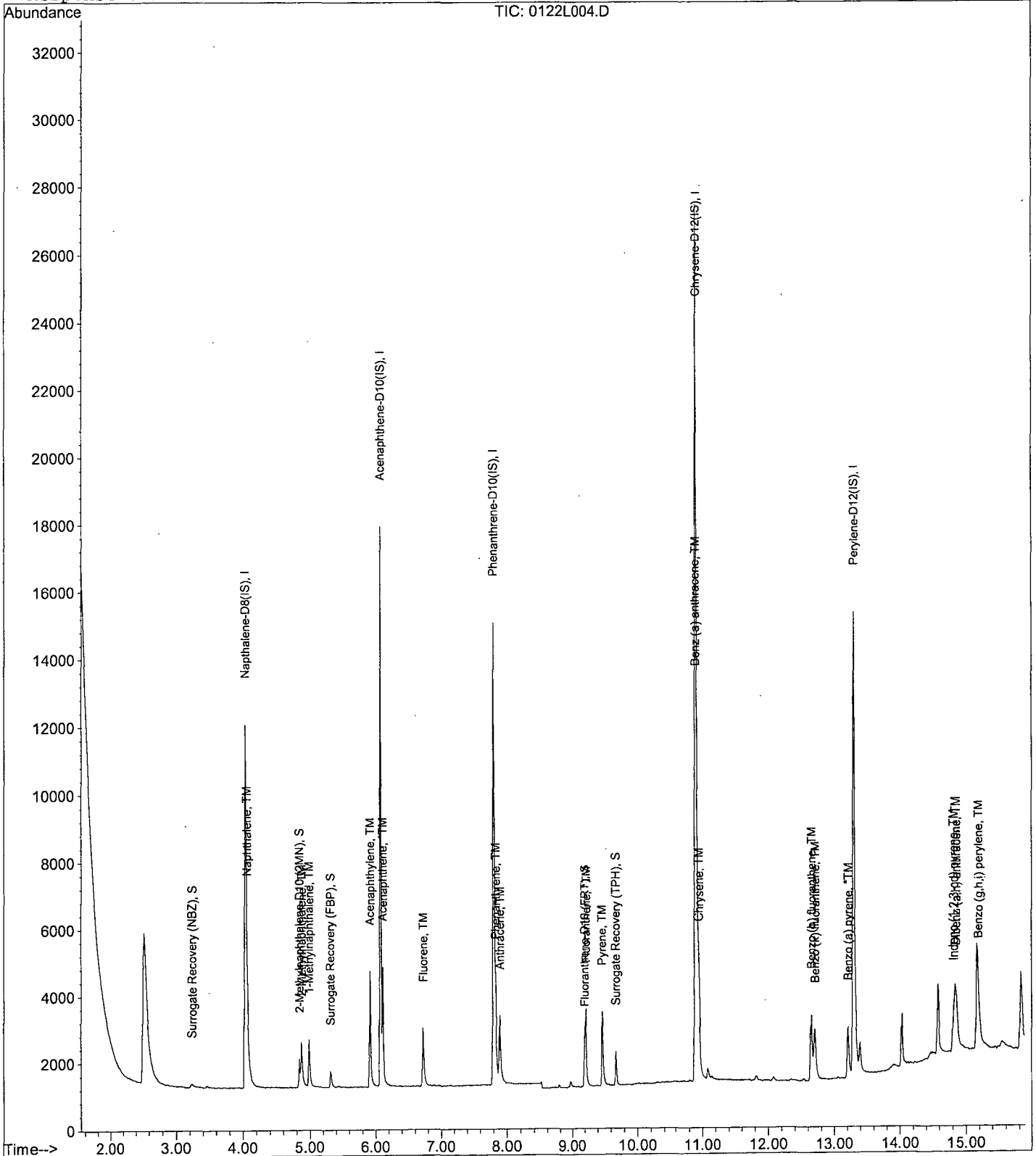
Data File : M:\LINUS\DATA\L190122\0122L004.D  
Acq On : 22 Jan 19 9:59  
Sample : 0.2 SIM 01/18/19  
Misc :

Vial: 4  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





Data File : M:\LINUS\DATA\L190122\0122L005.D  
 Acq On : 22 Jan 19 10:21  
 Sample : 0.5 SIM 01/18/19  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	19378	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8194	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15631	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	22574	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	21122	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	694	0.15194	ppb	0.00
Spiked Amount 5.000			Recovery =	3.040%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	1727	0.15263	ppb	-0.01
Spiked Amount 5.000			Recovery =	3.060%		
8) Surrogate Recovery (FBP)	5.31	172	1194	0.17011	ppb	-0.01
Spiked Amount 5.000			Recovery =	3.400%		
15) Fluoranthene-D10 (FRT)	9.18	212	2141	0.14256	ppb	-0.01
Spiked Amount 5.000			Recovery =	2.860%		
19) Surrogate Recovery (TPH)	9.67	244	1505	0.17248	ppb	0.00
Spiked Amount 5.000			Recovery =	3.440%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	4220	0.46220	ppb	99
5) 2-Methylnaphthalene	4.88	142	2474	0.45012	ppb	100
6) 1-Methylnaphthalene	4.99	142	2608	0.46906	ppb	95
9) Acenaphthylene	5.92	152	7714	0.43600	ppb	98
10) Acenaphthene	6.11	154	2341	0.46149	ppb	95
11) Fluorene	6.72	166	2634	0.45181	ppb	100
13) Phenanthrene	7.83	178	3771	0.45218	ppb	98
14) Anthracene	7.89	178	3618	0.43707	ppb	99
16) Fluoranthene	9.21	202	5733	0.43937	ppb	# 89
18) Pyrene	9.47	202	5849	0.46191	ppb	93
20) Benz (a) anthracene	10.89	228	4857	0.42905	ppb	98
21) Chrysene	10.93	228	5362	0.48235	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.82	276	5219	0.44419	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	4632	0.45644	ppb	98
25) Benzo (k) fluoranthene	12.70	252	5045	0.41618	ppb	98
26) Benzo (a) pyrene	13.22	252	4615	0.46695	ppb	99
27) Dibenz (a,h) anthracene	14.84	278	4275	0.46520	ppb	95
28) Benzo (g,h,i) perylene	15.17	276	4311	0.46317	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

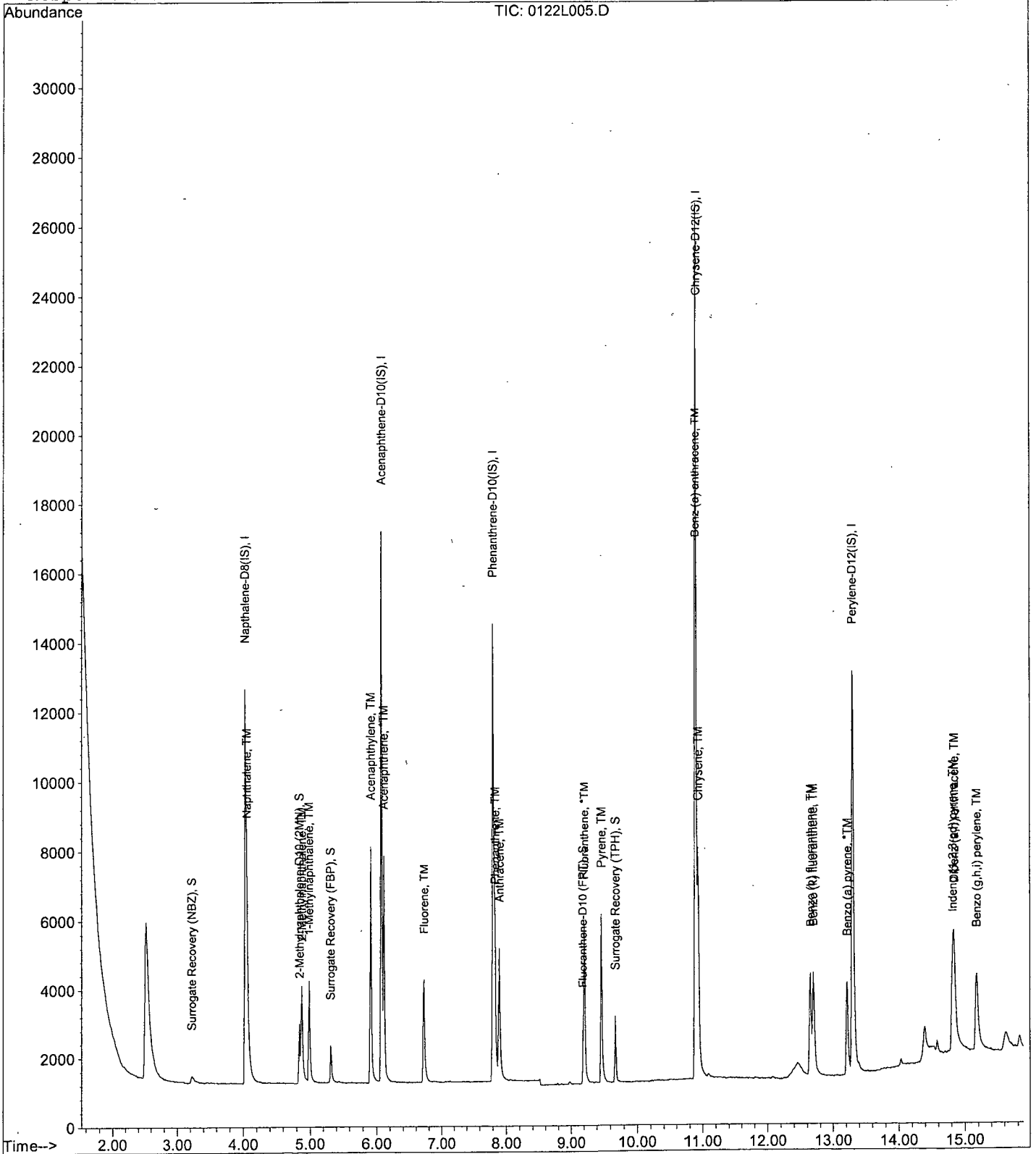
Data File : M:\LINUS\DATA\L190122\0122L005.D  
Acq On : 22 Jan 19 10:21  
Sample : 0.5 SIM 01/18/19  
Misc :

Vial: 5  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L006.D  
 Acq On : 22 Jan 19 10:43  
 Sample : 1 SIM 01/18/19  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	17997	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8238	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	16224	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	23806	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	22387	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	1370	0.32296	ppb	0.00
Spiked Amount	5.000		Recovery	=	6.460%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	4102	0.39034	ppb	-0.01
Spiked Amount	5.000		Recovery	=	7.800%	
8) Surrogate Recovery (FBP)	5.31	172	2874	0.40727	ppb	-0.01
Spiked Amount	5.000		Recovery	=	8.140%	
15) Fluoranthene-D10 (FRT)	9.18	212	5335	0.34225	ppb	-0.01
Spiked Amount	5.000		Recovery	=	6.840%	
19) Surrogate Recovery (TPH)	9.67	244	3609	0.39220	ppb	0.00
Spiked Amount	5.000		Recovery	=	7.840%	
Target Compounds						
3) Naphthalene	4.06	128	9261	1.09215	ppb	Qvalue 99
5) 2-Methylnaphthalene	4.88	142	5682	1.11310	ppb	97
6) 1-Methylnaphthalene	4.99	142	5811	1.12533	ppb	96
9) Acenaphthylene	5.92	152	18493	1.03965	ppb	99
10) Acenaphthene	6.11	154	5619	1.10178	ppb	98
11) Fluorene	6.71	166	6507	1.11018	ppb	96
13) Phenanthrene	7.83	178	9481	1.09531	ppb	97
14) Anthracene	7.89	178	9094	1.05845	ppb	99
16) Fluoranthene	9.21	202	14616	1.07921	ppb	# 93
18) Pyrene	9.47	202	14652	1.09722	ppb	90
20) Benz (a) anthracene	10.89	228	12417	1.04011	ppb	99
21) Chrysene	10.93	228	13234	1.12887	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.80	276	13263	1.07040	ppb	# 88
24) Benzo (b) fluoranthene	12.64	252	11564	1.07514	ppb	# 98
25) Benzo (k) fluoranthene	12.70	252	11886	0.92512	ppb	98
26) Benzo (a) pyrene	13.21	252	11511	1.09889	ppb	99
27) Dibenz (a,h) anthracene	14.83	278	11022	1.13162	ppb	99
28) Benzo (g,h,i) perylene	15.16	276	11170	1.13229	ppb	95

Quantitation Report

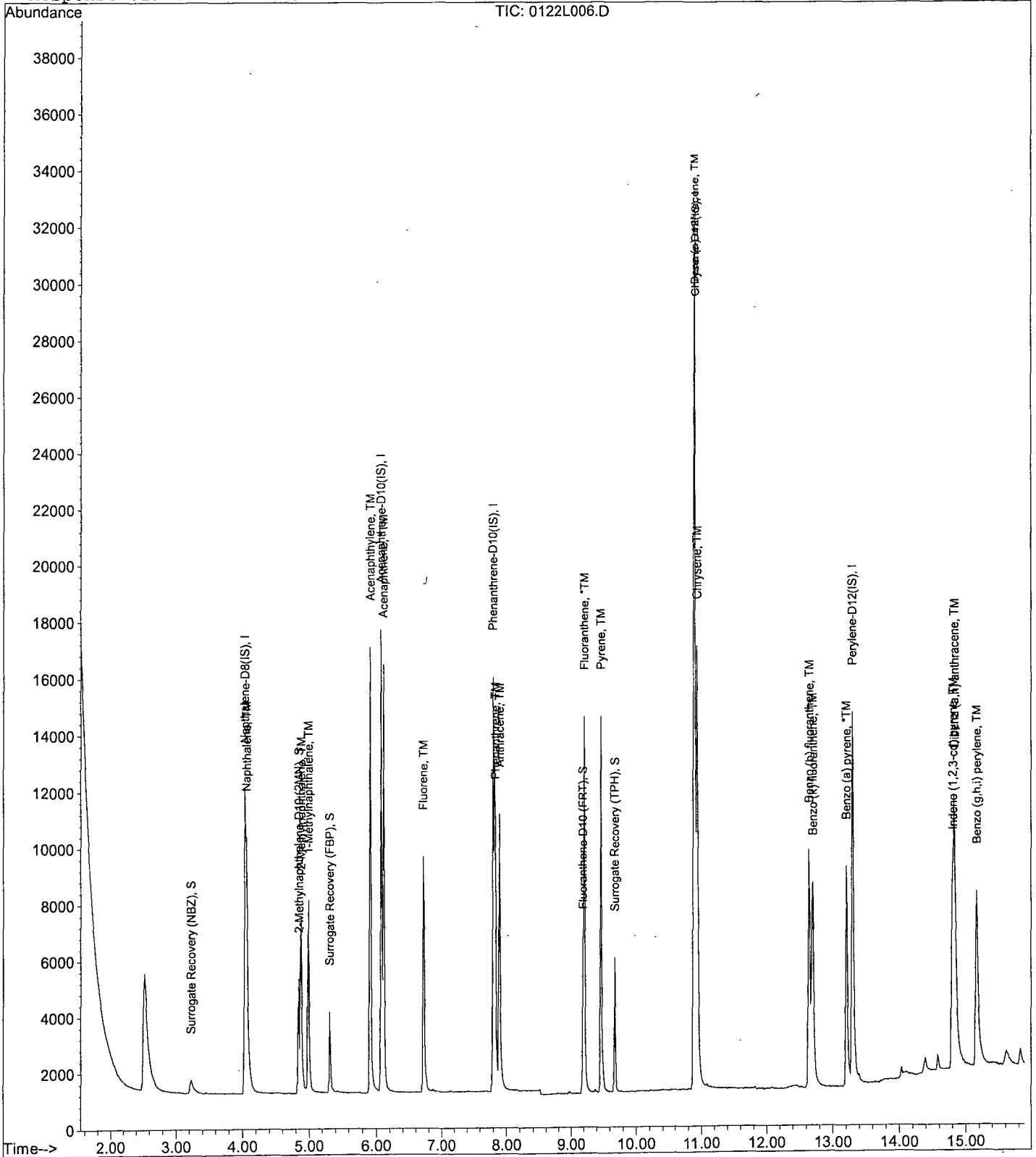
Data File : M:\LINUS\DATA\L190122\L0122L006.D  
Acq On : 22 Jan 19 10:43  
Sample : 1 SIM 01/18/19  
Misc :

Vial: 6  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L007.D Vial: 7  
 Acq On : 22 Jan 19 11:30 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 12:47 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:16 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8(IS)	4.03	136	16548	2.50000	ppb	-0.01
7) Acenaphthene-D10(IS)	6.07	164	7268	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	13995	2.50000	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	19950	2.50000	ppb	-0.02
23) Perylene-D12(IS)	13.30	264	19225	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	7607	2.60121	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	52.020%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	20941	2.75267	ppb	-0.02
Spiked Amount	5.000					
Recovery				=	55.060%	
8) Surrogate Recovery (FBP)	5.31	172	13978	2.69964	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	54.000%	
15) Fluoranthene-D10 (FRT)	9.18	212	27245	2.76398	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	55.280%	
19) Surrogate Recovery (TPH)	9.67	244	17410	2.68552	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	53.720%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	45784	5.47796	ppb	100
5) 2-Methylnaphthalene	4.87	142	28493	5.66542	ppb	100
6) 1-Methylnaphthalene	4.97	142	27451	5.39862	ppb	100
9) Acenaphthylene	5.90	152	91655	5.61140	ppb	100
10) Acenaphthene	6.11	154	26309	5.54466	ppb	100
11) Fluorene	6.71	166	31330	5.66322	ppb	100
13) Phenanthrene	7.82	178	44335	5.57391	ppb	100
14) Anthracene	7.88	178	45862	5.88051	ppb	100
16) Fluoranthene	9.21	202	70142	5.71546	ppb	100
18) Pyrene	9.46	202	69644	5.66416	ppb	100
20) Benz (a) anthracene	10.89	228	61372	5.59012	ppb	100
21) Chrysene	10.93	228	57972	5.50231	ppb	100
22) Indeno (1,2,3-cd) pyrene	14.79	276	59462	5.44362	ppb	100
24) Benzo (b) fluoranthene	12.64	252	58876	5.66105	ppb	100
25) Benzo (k) fluoranthene	12.68	252	59717	5.64321	ppb	100
26) Benzo (a) pyrene	13.21	252	55980	5.65364	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	49007	5.37458	ppb	100
28) Benzo (g,h,i) perylene	15.15	276	48865	5.30011	ppb	100

Quantitation Report

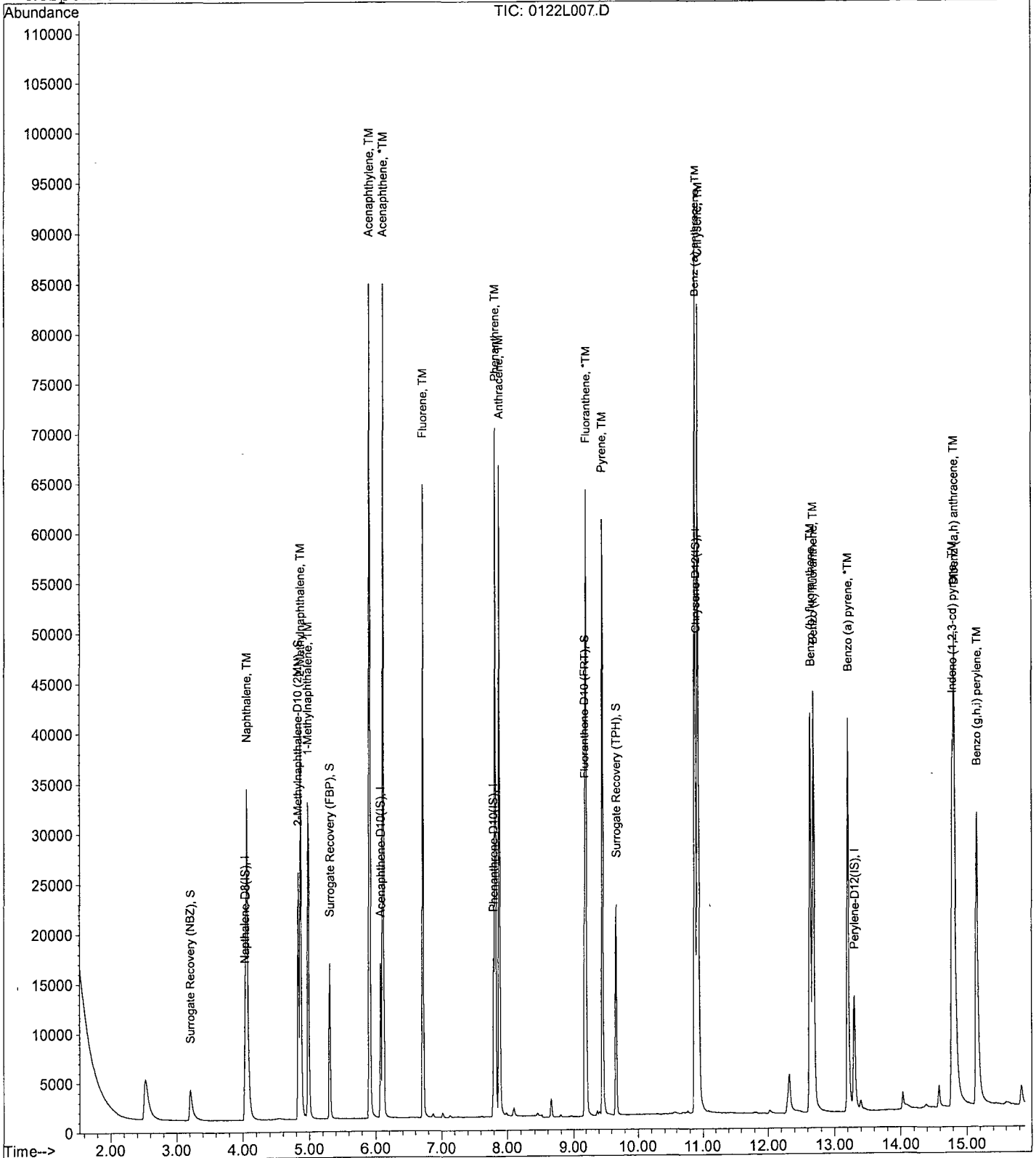
Data File : M:\LINUS\DATA\L190122\0122L007.D  
Acq On : 22 Jan 19 11:30  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 7  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:47 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 5 11:09 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16401	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7199	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13870	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20037	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18684	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.20	82	14805	5.85339	ppb	-0.02
Spiked Amount 5.000			Recovery =	117.060%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	42463	6.47148	ppb	-0.02
Spiked Amount 5.000			Recovery =	129.420%		
8) Surrogate Recovery (FBP)	5.31	172	27763	6.17375	ppb	-0.01
Spiked Amount 5.000			Recovery =	123.480%		
15) Fluoranthene-D10 (FRT)	9.18	212	54468	6.35262	ppb	-0.01
Spiked Amount 5.000			Recovery =	127.060%		
19) Surrogate Recovery (TPH)	9.66	244	34694	6.13619	ppb	-0.02
Spiked Amount 5.000			Recovery =	122.720%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	88896	11.85448	ppb	100
5) 2-Methylnaphthalene	4.87	142	56236	12.48160	ppb	100
6) 1-Methylnaphthalene	4.97	142	54242	11.87753	ppb	100
9) Acenaphthylene	5.90	152	182742	12.55338	ppb	99
10) Acenaphthene	6.11	154	51321	12.04426	ppb	98
11) Fluorene	6.71	166	61684	12.48808	ppb	99
13) Phenanthrene	7.82	178	87145	12.24258	ppb	100
14) Anthracene	7.88	178	87619	12.57174	ppb	100
16) Fluoranthene	9.21	202	137396	12.46906	ppb	97
18) Pyrene	9.46	202	136155	12.26524	ppb	96
20) Benz (a) anthracene	10.89	228	120980	12.29858	ppb	100
21) Chrysene	10.93	228	111248	11.62149	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	119439	12.13320	ppb #	84
24) Benzo (b) fluoranthene	12.63	252	119776	13.26251	ppb #	97
25) Benzo (k) fluoranthene	12.68	252	108622m	11.78686	ppb	99
26) Benzo (a) pyrene	13.20	252	111267	12.95931	ppb #	97
27) Dibenz (a,h) anthracene	14.82	278	97893	12.25147	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	98835	12.27085	ppb #	94

Quantitation Report

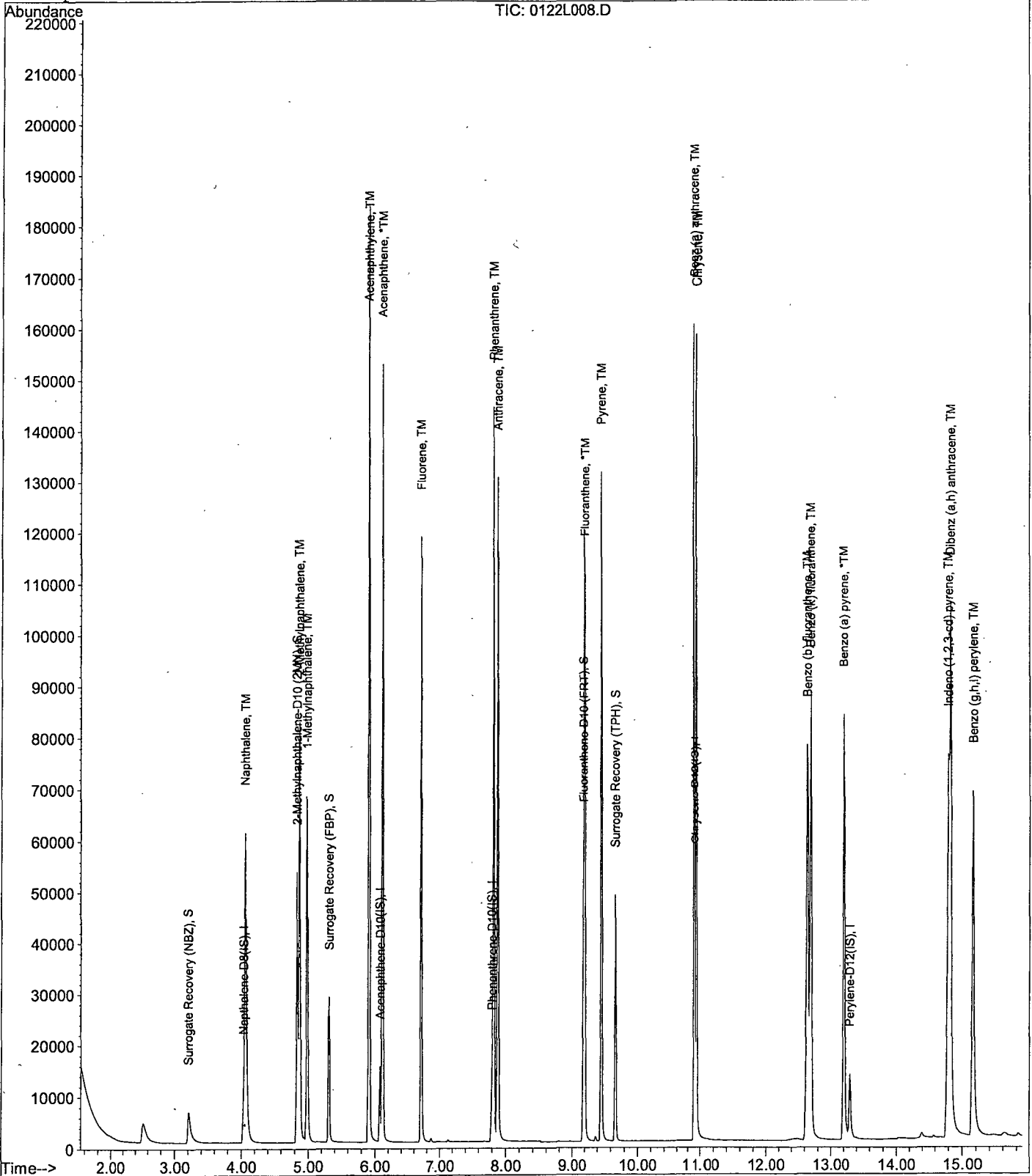
Data File : M:\LINUS\DATA\L190122\0122L008.D  
Acq On : 22 Jan 19 11:53  
Sample : 10 SIM 01/18/19  
Misc :

Vial: 8  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 5 11:09 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration

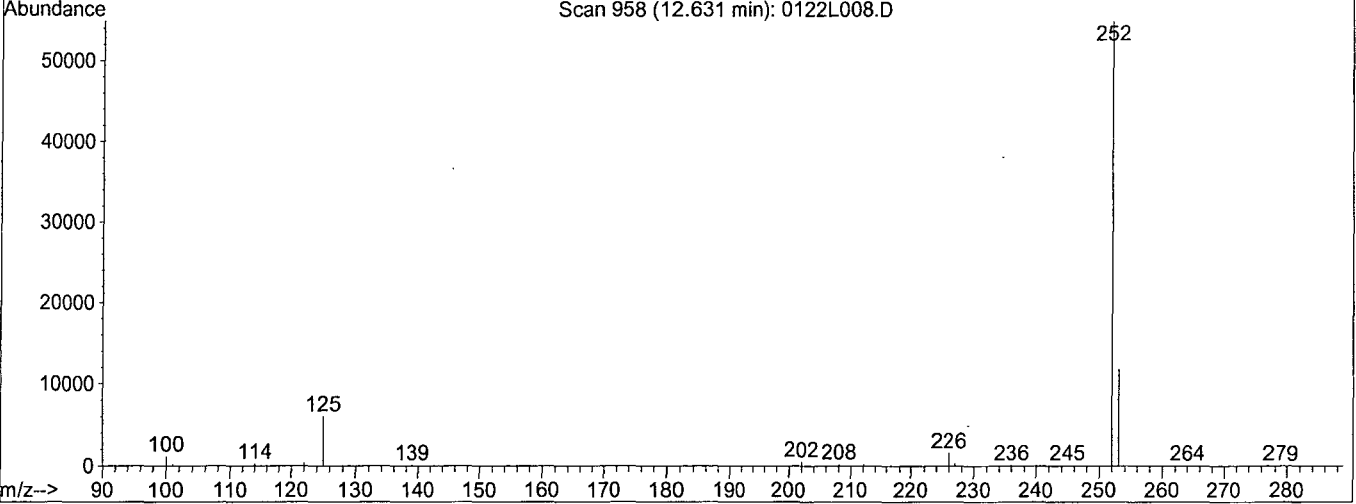
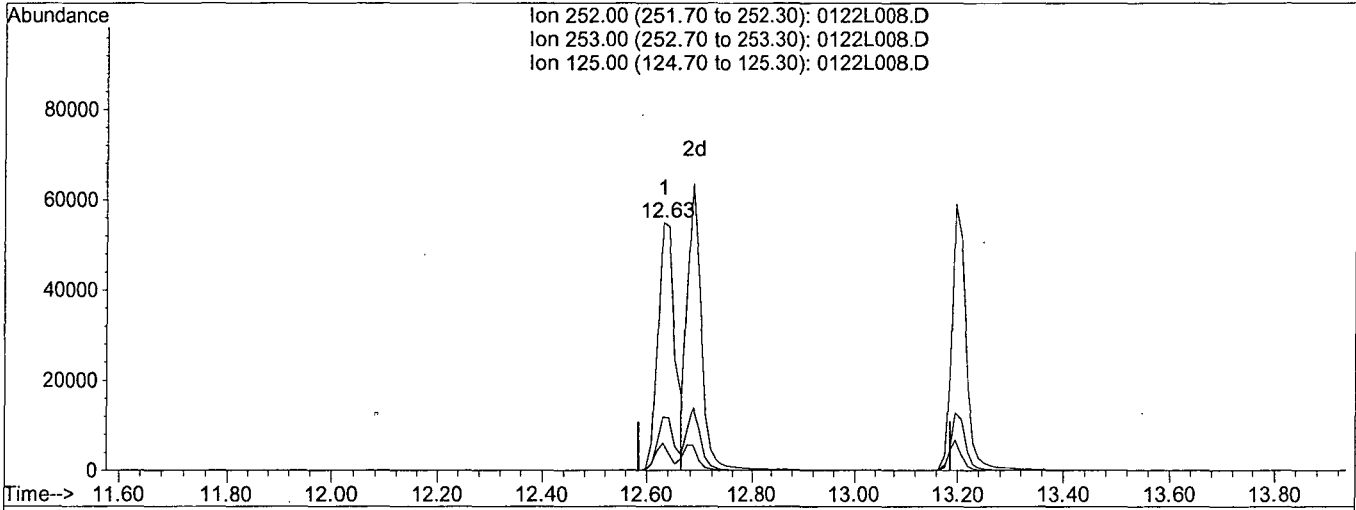




Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L008.D Vial: 8  
 Acq On : 22 Jan 19 11:53 Operator: MA  
 Sample : 10 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 22 12:48 2019 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Multiple Level Calibration



TIC: 0122L008.D

(25) Benzo (k) fluoranthene (TM)

12.63min 12.9969ppb

response 119773

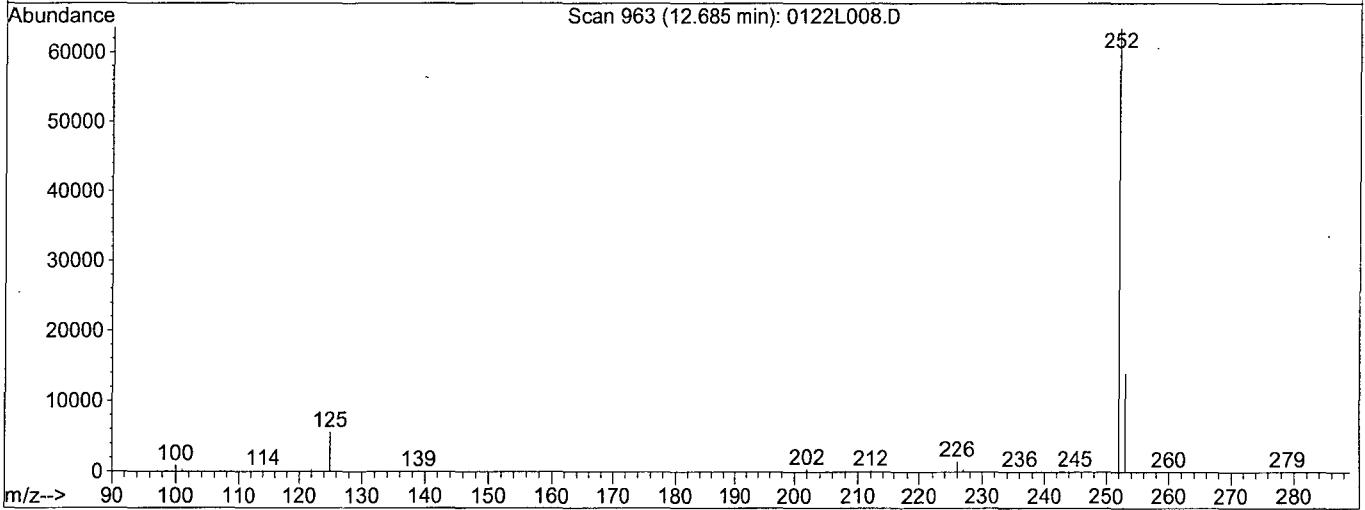
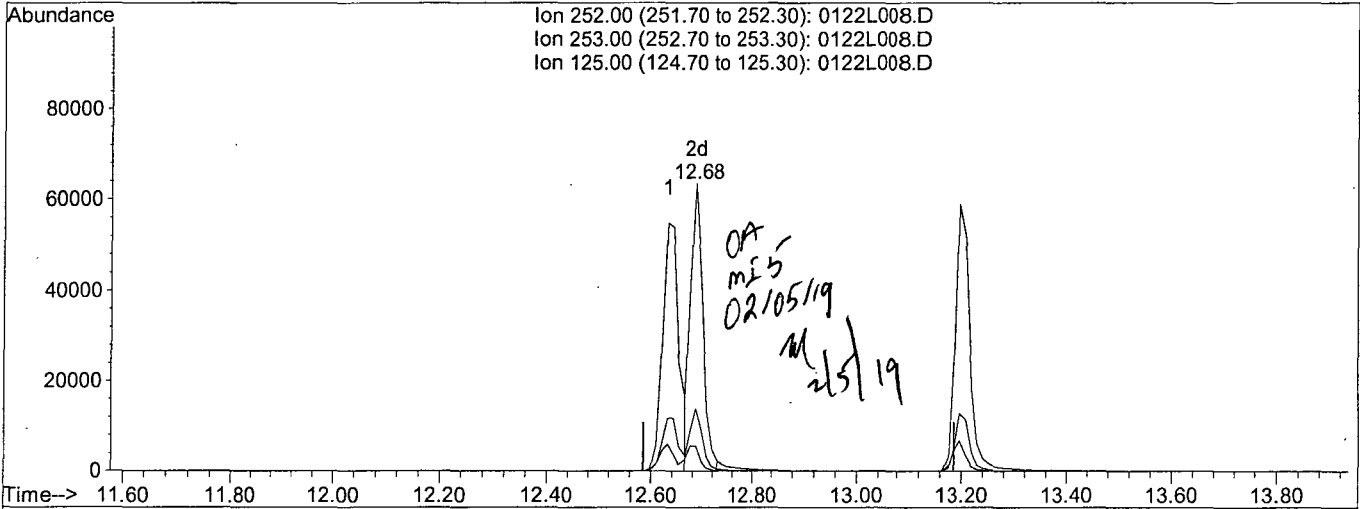
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.45
125.00	9.60	10.98
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :  
 Quant Time: Feb 5 11:09 2019

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Multiple Level Calibration



TIC: 0122L008.D

(25) Benzo (k) fluoranthene (TM)

12.68min 11.7869ppb m

response 108622

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.90
125.00	9.60	8.79
0.00	0.00	0.00

Data File : M:\LINUS\DATA\L190122\0122L009.D  
 Acq On : 22 Jan 19 12:15  
 Sample : 50 SIM 01/18/19  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:48:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16882	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7435	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14943	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.91	240	19605	2.50000	ppb	-0.01
23) Perylene-D12 (IS)	13.29	264	18780	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.20	82	74252	28.52027	ppb	-0.02
Spiked Amount	5.000					
Recovery					= 570.400%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	197601	29.25691	ppb	-0.02
Spiked Amount	5.000					
Recovery					= 585.140%	
8) Surrogate Recovery (FBP)	5.31	172	128459	27.65911	ppb	-0.01
Spiked Amount	5.000					
Recovery					= 553.180%	
15) Fluoranthene-D10 (FRT)	9.18	212	254396	27.53979	ppb	-0.01
Spiked Amount	5.000					
Recovery					= 550.800%	
19) Surrogate Recovery (TPH)	9.67	244	163882	29.62386	ppb	-0.01
Spiked Amount	5.000					
Recovery					= 592.480%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	369785	47.90669	ppb	100
5) 2-Methylnaphthalene	4.87	142	226326	48.80191	ppb	99
6) 1-Methylnaphthalene	4.99	142	222700	47.37585	ppb	94
9) Acenaphthylene	5.92	152	763610	50.79081	ppb	97
10) Acenaphthene	6.11	154	208204	47.31133	ppb	95
11) Fluorene	6.71	166	255227	50.03119	ppb	97
13) Phenanthrene	7.83	178	376921	49.14954	ppb	98
14) Anthracene	7.89	178	376399	50.12843	ppb	99
16) Fluoranthene	9.21	202	567787	47.82815	ppb	# 84
18) Pyrene	9.47	202	556994	51.28126	ppb	99
20) Benz (a) anthracene	10.90	228	525902	54.64017	ppb	100
21) Chrysene	10.95	228	451974	48.25575	ppb	# 98
22) Indeno (1,2,3-cd) pyrene	14.82	276	499473	51.85698	ppb	# 90
24) Benzo (b) fluoranthene	12.65	252	490265	54.00836	ppb	100
25) Benzo (k) fluoranthene	12.72	252	488050	50.37199	ppb	100
26) Benzo (a) pyrene	13.22	252	471645	54.65189	ppb	99
27) Dibenz (a,h) anthracene	14.85	278	398222	49.58336	ppb	# 94
28) Benzo (g,h,i) perylene	15.17	276	411886	50.87625	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

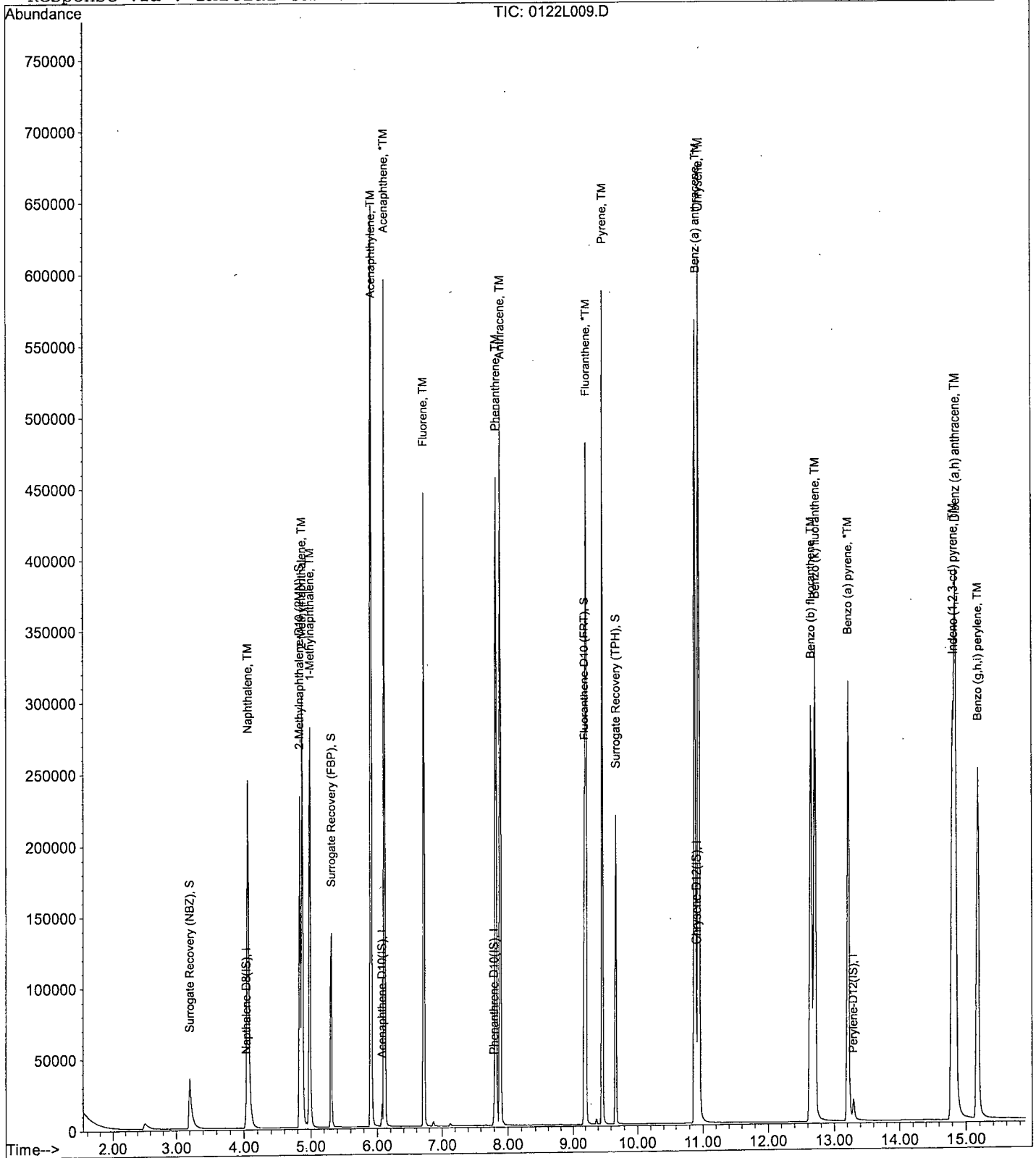
Data File : M:\LINUS\DATA\L190122\0122L009.D  
Acq On : 22 Jan 19 12:15  
Sample : 50 SIM 01/18/19  
Misc :

Vial: 9  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L010.D Vial: 10  
 Acq On : 22 Jan 19 12:37 Operator: MA  
 Sample : 100 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 13:02 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16509	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7340	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14625	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.92	240	19570	2.50000	ppb	0.00
23) Perylene-D12 (IS)	13.30	264	18015	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.20	82	143716	49.35106	ppb	-0.02
Spiked Amount 5.000				Recovery = 987.020%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	369507	48.84651	ppb	-0.02
Spiked Amount 5.000				Recovery = 976.940%		
8) Surrogate Recovery (FBP)	5.31	172	245947	47.38619	ppb	-0.01
Spiked Amount 5.000				Recovery = 947.720%		
15) Fluoranthene-D10 (FRT)	9.20	212	489050	47.77794	ppb	0.00
Spiked Amount 5.000				Recovery = 955.560%		
19) Surrogate Recovery (TPH)	9.67	244	301836	47.76577	ppb	-0.01
Spiked Amount 5.000				Recovery = 955.320%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	686154	82.50506	ppb	99
5) 2-Methylnaphthalene	4.88	142	426189	84.86301	ppb	97
6) 1-Methylnaphthalene	4.99	142	400215	78.89615	ppb	96
9) Acenaphthylene	5.92	152	1371750	83.47032	ppb	99
10) Acenaphthene	6.12	154	399394	83.03305	ppb	99
11) Fluorene	6.72	166	486427	86.73013	ppb	99
13) Phenanthrene	7.83	178	662559	80.60560	ppb	99
14) Anthracene	7.91	178	708940	86.78483	ppb	98
16) Fluoranthene	9.23	202	1074355	83.53801	ppb #	93
18) Pyrene	9.48	202	1055051	87.24305	ppb	94
20) Benz (a) anthracene	10.91	228	987627	91.25364	ppb	99
21) Chrysene	10.97	228	835356	80.61549	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.86	276	924286	86.44058	ppb #	71
24) Benzo (b) fluoranthene	12.67	252	937424	96.32808	ppb #	97
25) Benzo (k) fluoranthene	12.74	252	912491	92.99727	ppb	100
26) Benzo (a) pyrene	13.25	252	880967	94.64847	ppb #	96
27) Dibenz (a,h) anthracene	14.88	278	752245	87.80959	ppb #	88
28) Benzo (g,h,i) perylene	15.21	276	751231	86.81489	ppb #	92

Quantitation Report

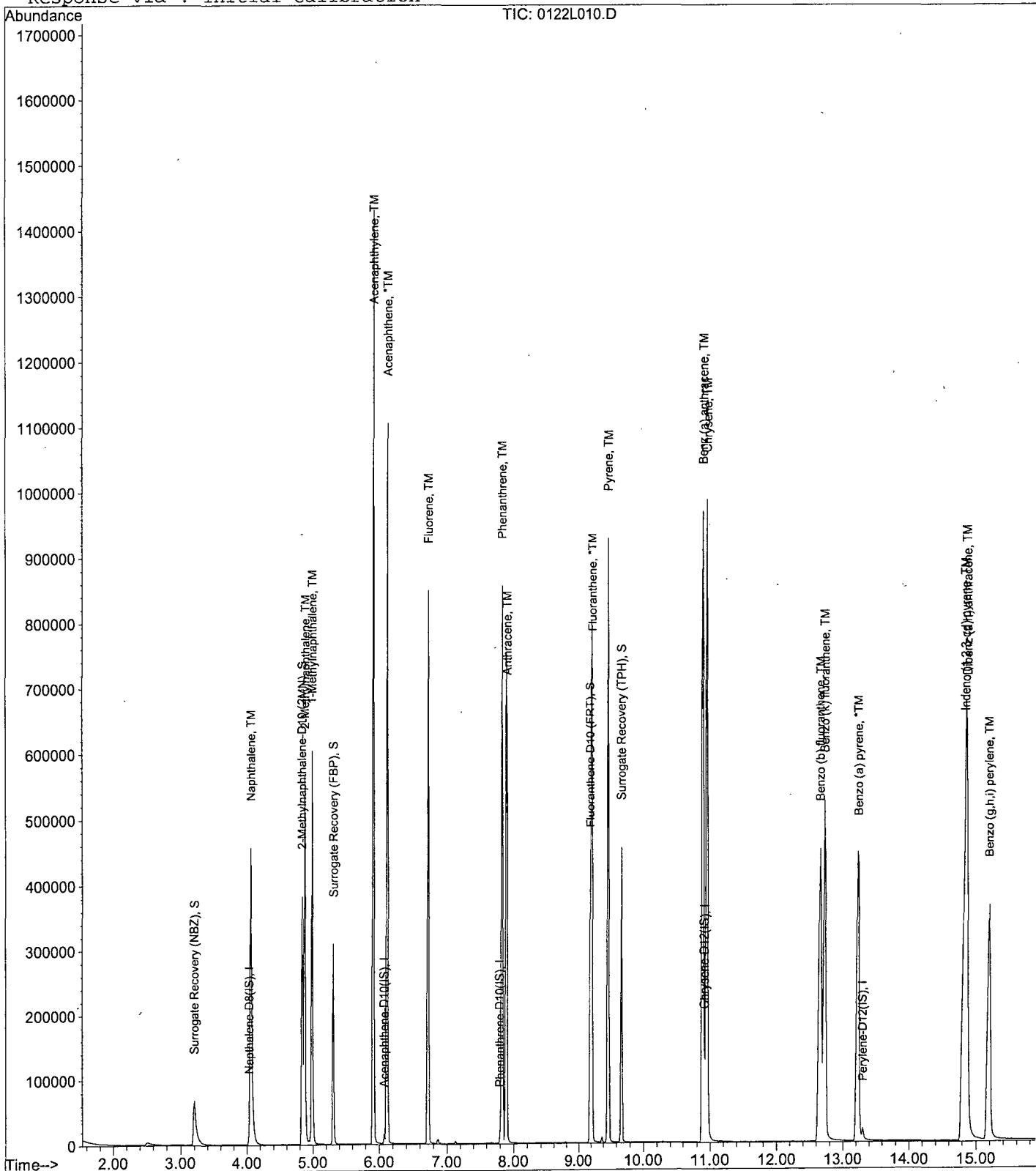
Data File : M:\LINUS\DATA\L190122\0122L010.D  
Acq On : 22 Jan 19 12:37  
Sample : 100 SIM 01/18/19  
Misc :

Vial: 10  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 13:02 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/22/19

Matrix: \_\_\_\_\_

Instrument: Linus

Initial Cal. Date: 01/22/19

Data File: 0122L011.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Naphthalene	1.259	1.319	4.7	TM
2	TM	2-Methylnaphthalene	0.7605	0.8383	10	TM
3	TM	1-Methylnaphthalene	0.7682	0.8611	12	TM
4	TM	Acenaphthylene	5.597	6.034	7.8	TM
5	*TM	Acenaphthene	1.638	1.715	4.7	*TM
6	TM	Fluorene	1.910	2.087	9.2	TM
7	TM	Phenanthrene	1.405	1.525	8.5	TM
8	TM	Anthracene	1.396	1.436	2.8	TM
9	*TM	Fluoranthene	2.198	2.322	5.6	*TM
10	TM	Pyrene	1.545	1.638	6.0	TM
11	TM	Benz (a) anthracene	1.383	1.444	4.5	TM
12	TM	Chrysene	1.324	1.416	6.9	TM
13	TM	Indeno (1,2,3-cd) pyrene	1.366	1.426	4.4	TM
14	TM	Benzo (b) fluoranthene	1.350	1.445	7.0	TM
15	TM	Benzo (k) fluoranthene	1.374	1.606	17	TM
16	*TM	Benzo (a) pyrene	1.292	1.370	6.1	*TM
17	TM	Dibenz (a,h) anthracene	1.189	1.313	10	TM
18	TM	Benzo (g,h,i) perylene	1.201	1.300	8.3	TM
19						
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39						
40						

Average

7.5

Data File : M:\LINUS\DATA\L190122\0122L011.D Vial: 11.  
 Acq On : 22 Jan 19 12:59 Operator: MA  
 Sample : SS SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 5 14:36 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	15442	2.50	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	6948	2.50	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13744	2.50	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19942	2.50	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18334	2.50	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
4) 2-Methylnaphthalene-D10 (2)	0.00	152	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
8) Surrogate Recovery (FBP)	0.00	172	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
15) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
19) Surrogate Recovery (TPH)	0.00	244	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	40738	5.24	ppb	100
5) 2-Methylnaphthalene	4.87	142	25890	5.51	ppb	97
6) 1-Methylnaphthalene	4.99	142	26593	5.60	ppb	94
9) Acenaphthylene	5.90	152	83849	5.39	ppb	100
10) Acenaphthene	6.11	154	23838	5.24	ppb	100
11) Fluorene	6.71	166	28998	5.46	ppb	99
13) Phenanthrene	7.82	178	41914	5.43	ppb	99
14) Anthracene	7.88	178	39465	5.14	ppb	99
16) Fluoranthene	9.21	202	63819	5.28	ppb	100
18) Pyrene	9.46	202	65311	5.30	ppb	97
20) Benz (a) anthracene	10.88	228	57608	5.22	ppb	96
21) Chrysene	10.93	228	56462	5.35	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	56868	5.22	ppb	# 91
24) Benzo (b) fluoranthene	12.63	252	52976	5.35	ppb	99
25) Benzo (k) fluoranthene	12.68	252	58877	5.84	ppb	# 96
26) Benzo (a) pyrene	13.20	252	50232	5.30	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	48137	5.52	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	47680	5.41	ppb	95

(#) = qualifier out of range (m) = manual integration



Quantitation Report

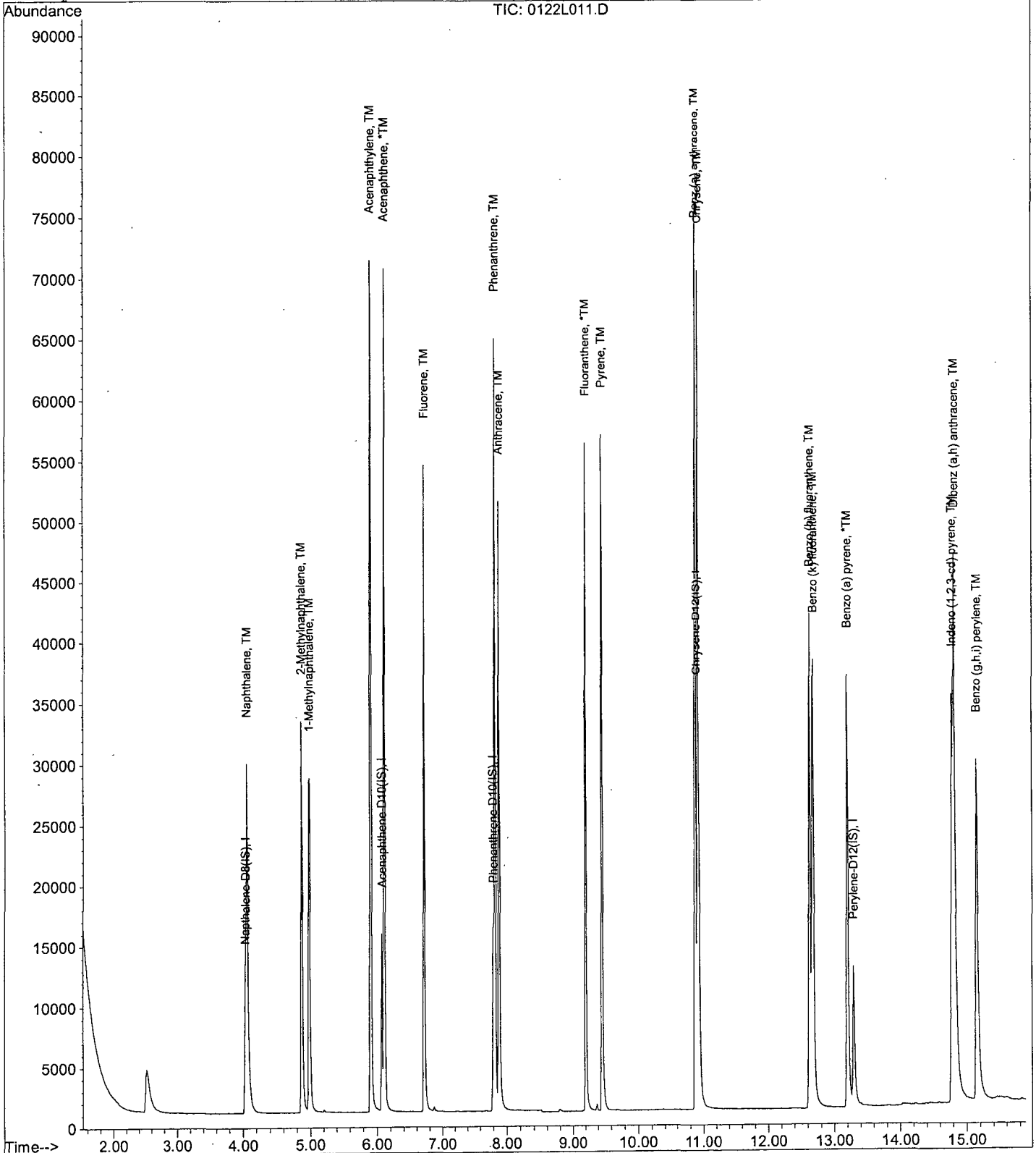
Data File : M:\LINUS\DATA\L190122\0122L011.D  
Acq On : 22 Jan 19 12:59  
Sample : SS SIM 01/18/19  
Misc :

Vial: 11  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 5 14:36 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L037.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4497	2.0	S
3	TM	Naphthalene	1.259	1.293	2.7	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.302	14	S
5	TM	2-Methylnaphthalene	0.7605	0.8062	6.0	TM
6	TM	1-Methylnaphthalene	0.7682	0.7986	4.0	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	2.085	18	S
9	TM	Acenaphthylene	5.597	6.311	13	TM
10	*TM	Acenaphthene	1.638	1.715	4.7	*TM
11	TM	Fluorene	1.910	2.151	13	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.450	3.2	TM
14	TM	Anthracene	1.396	1.487	6.5	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.985	13	S
16	*TM	Fluoranthene	2.198	2.284	3.9	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.666	7.8	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.8998	11	S
20	TM	Benz (a) anthracene	1.383	1.403	1.4	TM
21	TM	Chrysene	1.324	1.364	3.0	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.528	12	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.426	5.6	TM
25	TM	Benzo (k) fluoranthene	1.393	1.408	1.1	TM
26	*TM	Benzo (a) pyrene	1.292	1.323	2.4	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.217	2.3	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.213	1.0	TM
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Average

6.6

Data File : M:\LINUS\DATA\L190122\0122L037.D  
 Acq On : 30 Jan 19 6:36  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 37  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 30 7:02 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	19859	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	8550	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	17827	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	24656	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	25628	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.24	82	8930	2.54921	ppb	0.01
Spiked Amount	5.000		Recovery	=	50.980%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	25853	2.84109	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.820%	
8) Surrogate Recovery (FBP)	5.31	172	17827	2.94862	ppb	-0.01
Spiked Amount	5.000		Recovery	=	58.980%	
15) Fluoranthene-D10 (FRT)	9.17	212	35392	2.83659	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.740%	
19) Surrogate Recovery (TPH)	9.66	244	22185	2.78659	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.740%	
Target Compounds						
3) Naphthalene	4.07	128	51352	5.13310	ppb	100
5) 2-Methylnaphthalene	4.87	142	32020	5.30031	ppb	98
6) 1-Methylnaphthalene	4.97	142	31720	5.19827	ppb	100
9) Acenaphthylene	5.90	152	107919	5.63748	ppb	99
10) Acenaphthene	6.11	154	29329	5.23452	ppb	96
11) Fluorene	6.71	166	36786	5.63073	ppb	98
13) Phenanthrene	7.82	178	51696	5.15959	ppb	98
14) Anthracene	7.88	178	53002	5.32285	ppb	99
16) Fluoranthene	9.20	202	81433	5.19463	ppb	# 94
18) Pyrene	9.46	202	82132	5.39061	ppb	# 90
20) Benz (a) anthracene	10.88	228	69160	5.07201	ppb	99
21) Chrysene	10.92	228	67249	5.15111	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	75324	5.59130	ppb	92
24) Benzo (b) fluoranthene	12.62	252	73091	5.27959	ppb	# 96
25) Benzo (k) fluoranthene	12.67	252	72152	5.05393	ppb	98
26) Benzo (a) pyrene	13.20	252	67797	5.12017	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	62355	5.11651	ppb	94
28) Benzo (g,h,i) perylene	15.14	276	62194	5.05230	ppb	97

Quantitation Report

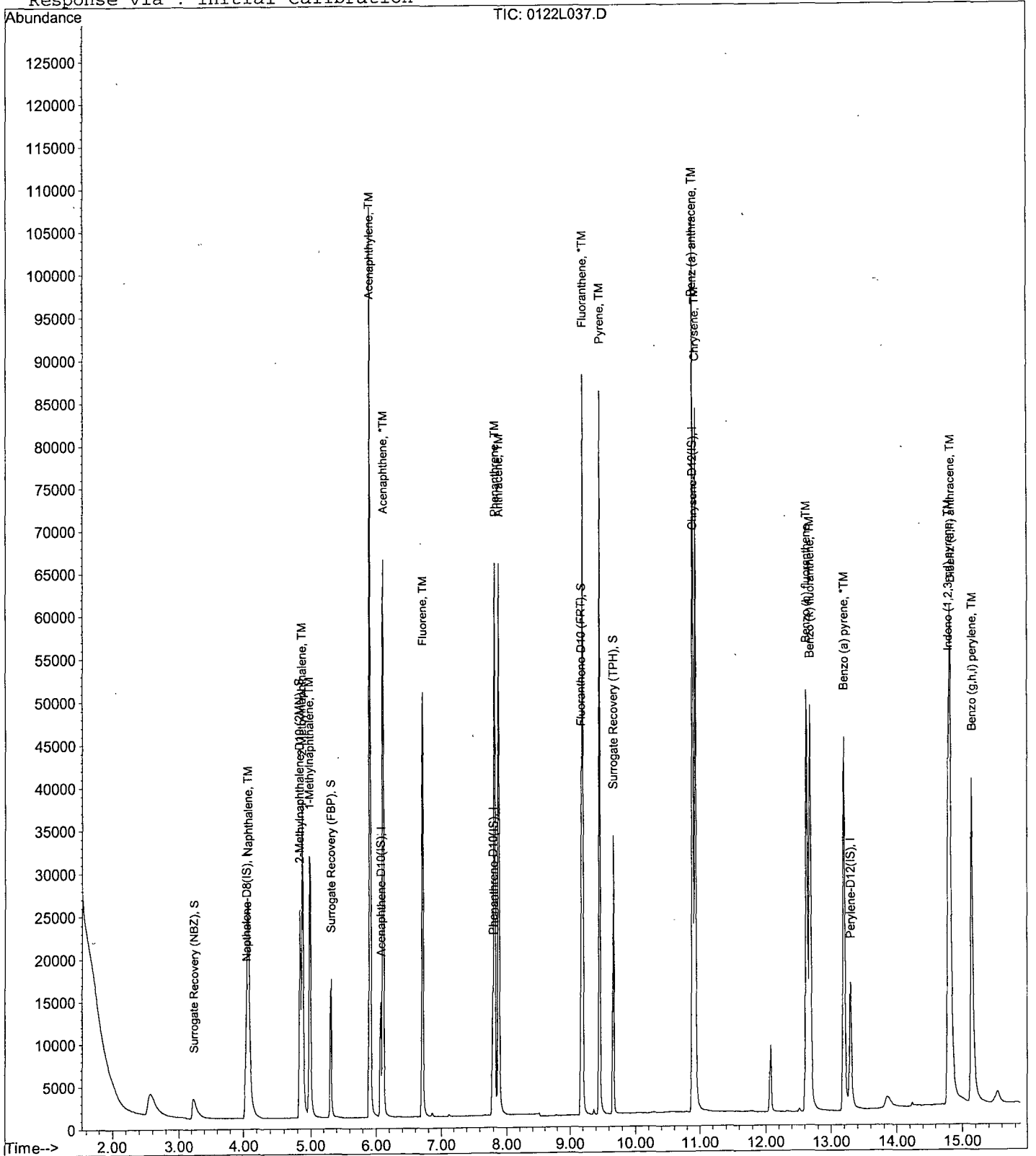
Data File : M:\LINUS\DATA\L190122\0122L037.D  
Acq On : 30 Jan 19 6:36  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 37  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 30 7:02 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L062.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4459	1.1	S
3	TM	Naphthalene	1.259	1.375	9.2	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.302	14	S
5	TM	2-Methylnaphthalene	0.7605	0.8624	13	TM
6	TM	1-Methylnaphthalene	0.7682	0.8556	11	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.811	2.5	S
9	TM	Acenaphthylene	5.597	6.274	12	TM
10	*TM	Acenaphthene	1.638	1.855	13	*TM
11	TM	Fluorene	1.910	2.118	11	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.609	14	TM
14	TM	Anthracene	1.396	1.698	22	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.831	4.6	S
16	*TM	Fluoranthene	2.198	2.315	5.3	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.765	14	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9081	12	S
20	TM	Benz (a) anthracene	1.383	1.526	10	TM
21	TM	Chrysene	1.324	1.513	14	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.670	22	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.530	13	TM
25	TM	Benzo (k) fluoranthene	1.393	1.670	20	TM
26	*TM	Benzo (a) pyrene	1.292	1.508	17	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.360	14	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.327	10	TM
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Average

12.1

Data File : M:\LINUS\DATA\L190122\0122L062.D Vial: 62  
 Acq On : 30 Jan 19 15:59 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 31 5:57 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	4.05	136	28957	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	12989	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	24307	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	32029	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	32359	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.25	82	12911	2.52766	ppb	0.02
Spiked Amount	5.000		Recovery	=	50.560%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	37711	2.84214	ppb	-0.01
Spiked Amount	5.000		Recovery	=	56.840%	
8) Surrogate Recovery (FBP)	5.31	172	23528	2.56163	ppb	-0.01
Spiked Amount	5.000		Recovery	=	51.240%	
15) Fluoranthene-D10 (FRT)	9.17	212	44501	2.61582	ppb	-0.02
Spiked Amount	5.000		Recovery	=	52.320%	
19) Surrogate Recovery (TPH)	9.66	244	29084	2.81221	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.240%	
Target Compounds						
3) Naphthalene	4.07	128	79658	5.46079	ppb	100
5) 2-Methylnaphthalene	4.88	142	49943	5.66967	ppb	99
6) 1-Methylnaphthalene	4.99	142	49549	5.56884	ppb	96
9) Acenaphthylene	5.90	152	162989	5.60449	ppb	99
10) Acenaphthene	6.11	154	48184	5.66073	ppb	95
11) Fluorene	6.71	166	55023	5.54392	ppb	97
13) Phenanthrene	7.82	178	78202	5.72431	ppb	99
14) Anthracene	7.88	178	82555	6.08054	ppb	99
16) Fluoranthene	9.20	202	112524	5.26436	ppb	# 89
18) Pyrene	9.46	202	113043	5.71148	ppb	96
20) Benz (a) anthracene	10.88	228	97745	5.51822	ppb	97
21) Chrysene	10.93	228	96888	5.71300	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.78	276	106987	6.11350	ppb	# 78
24) Benzo (b) fluoranthene	12.63	252	99046	5.66621	ppb	# 98
25) Benzo (k) fluoranthene	12.68	252	108052	5.99423	ppb	97
26) Benzo (a) pyrene	13.20	252	97598	5.83760	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	88022	5.72022	ppb	98
28) Benzo (g,h,i) perylene	15.15	276	85859	5.52390	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

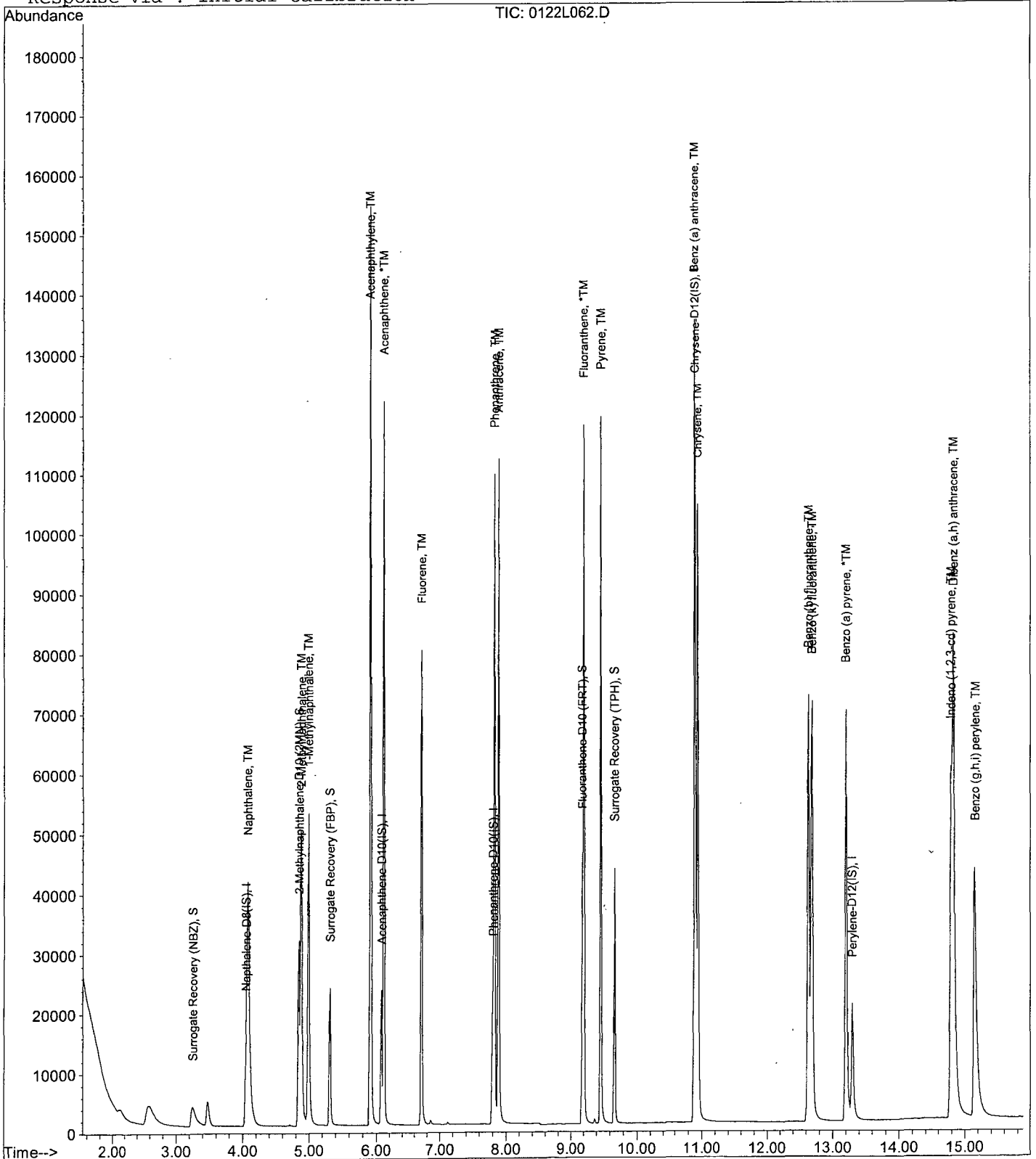
Data File : M:\LINUS\DATA\L190122\0122L062.D  
Acq On : 30 Jan 19 15:59  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 62  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 31 5:57 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 8:27  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L081.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4573	3.7	S
3	TM	Naphthalene	1.259	1.291	2.5	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.315	15	S
5	TM	2-Methylnaphthalene	0.7605	0.8228	8.2	TM
6	TM	1-Methylnaphthalene	0.7682	0.7912	3.0	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.931	9.2	S
9	TM	Acenaphthylene	5.597	5.943	6.2	TM
10	*TM	Acenaphthene	1.638	1.698	3.7	*TM
11	TM	Fluorene	1.910	2.027	6.1	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.418	0.92	TM
14	TM	Anthracene	1.396	1.511	8.2	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.994	14	S
16	*TM	Fluoranthene	2.198	2.303	4.8	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.597	3.3	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9075	12	S
20	TM	Benz (a) anthracene	1.383	1.436	3.9	TM
21	TM	Chrysene	1.324	1.370	3.5	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.482	8.5	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.426	5.6	TM
25	TM	Benzo (k) fluoranthene	1.393	1.322	5.1	TM
26	*TM	Benzo (a) pyrene	1.292	1.321	2.2	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.239	4.2	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.219	1.5	TM
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Average

5.9



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L081.D  
 Acq On : 1 Feb 19 8:27  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 81  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 1 8:49 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	4.03	136	20177	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9030	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17612	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	25878	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	25566	2.50000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
2) Surrogate Recovery (NBZ)	3.22	82	9226	2.59220	ppb	0.00
Spiked Amount 5.000			Recovery =	51.840%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	26528	2.86932	ppb	-0.02
Spiked Amount 5.000			Recovery =	57.380%		
8) Surrogate Recovery (FBP)	5.30	172	17433	2.73018	ppb	-0.02
Spiked Amount 5.000			Recovery =	54.600%		
15) Fluoranthene-D10 (FRT)	9.17	212	35111	2.84842	ppb	-0.02
Spiked Amount 5.000			Recovery =	56.960%		
19) Surrogate Recovery (TPH)	9.66	244	23485	2.81058	ppb	-0.02
Spiked Amount 5.000			Recovery =	56.220%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	52106	5.12638	ppb	100
5) 2-Methylnaphthalene	4.87	142	33205	5.40983	ppb	98
6) 1-Methylnaphthalene	4.97	142	31928	5.14989	ppb	97
9) Acenaphthylene	5.90	152	107329	5.30863	ppb	98
10) Acenaphthene	6.10	154	30673	5.18339	ppb	96
11) Fluorene	6.70	166	36613	5.30635	ppb	98
13) Phenanthrene	7.81	178	49948	5.04598	ppb	100
14) Anthracene	7.87	178	53216	5.40958	ppb	99
16) Fluoranthene	9.20	202	81124	5.23809	ppb	97
18) Pyrene	9.46	202	82634	5.16745	ppb	# 87
20) Benz (a) anthracene	10.88	228	74323	5.19327	ppb	99
21) Chrysene	10.92	228	70892	5.17374	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	76692	5.42402	ppb	93
24) Benzo (b) fluoranthene	12.62	252	72896	5.27827	ppb	# 97
25) Benzo (k) fluoranthene	12.67	252	67599	4.74649	ppb	98
26) Benzo (a) pyrene	13.18	252	67523	5.11184	ppb	# 95
27) Dibenz (a,h) anthracene	14.82	278	63351	5.21084	ppb	95
28) Benzo (g,h,i) perylene	15.14	276	62311	5.07408	ppb	95

Quantitation Report

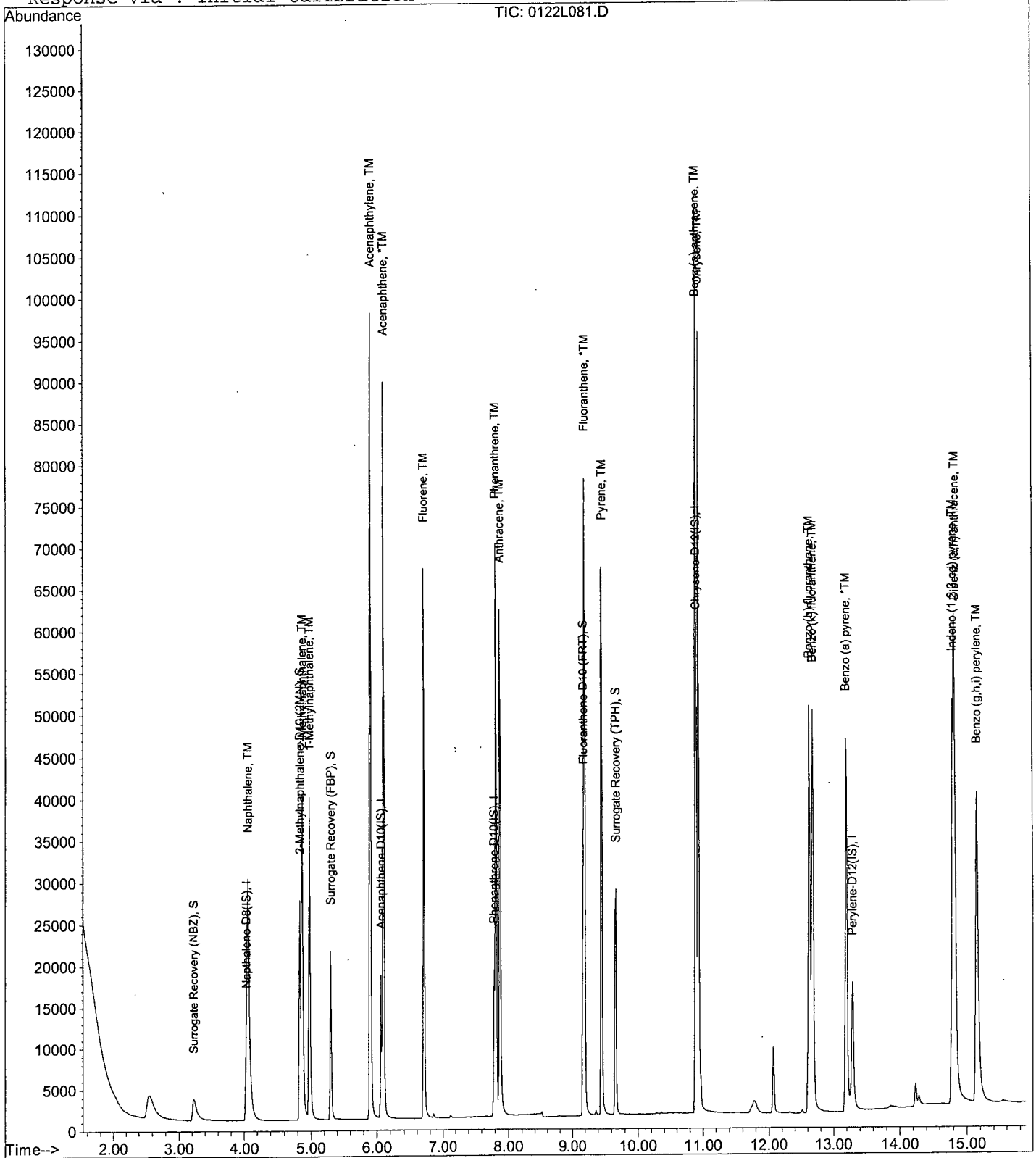
Data File : M:\LINUS\DATA\L190122\0122L081.D  
Acq On : 1 Feb 19 8:27  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 81  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 1 8:49 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 15:32  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L088.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4542	3.0	S
3	TM	Naphthalene	1.259	1.289	2.4	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.290	13	S
5	TM	2-Methylnaphthalene	0.7605	0.8008	5.3	TM
6	TM	1-Methylnaphthalene	0.7682	0.7962	3.7	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.882	6.5	S
9	TM	Acenaphthylene	5.597	5.686	1.6	TM
10	*TM	Acenaphthene	1.638	1.668	1.8	*TM
11	TM	Fluorene	1.910	2.015	5.5	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.449	3.1	TM
14	TM	Anthracene	1.396	1.475	5.6	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.942	11	S
16	*TM	Fluoranthene	2.198	2.313	5.2	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.573	1.8	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.8808	9.1	S
20	TM	Benz (a) anthracene	1.383	1.375	0.56	TM
21	TM	Chrysene	1.324	1.361	2.8	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.392	1.9	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.523	13	TM
25	TM	Benzo (k) fluoranthene	1.393	1.530	9.9	TM
26	*TM	Benzo (a) pyrene	1.292	1.447	12	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.288	8.4	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.278	6.4	TM
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38						
39						
40						

Average

5.8

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L088.D Vial: 88  
 Acq On : 1 Feb 19 15:32 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 4 7:44 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	21775	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9726	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	19119	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	28633	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	25493	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	9891	2.57510	ppb	0.00
Spiked Amount	5.000		Recovery	=	51.500%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	28096	2.81590	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.320%	
8) Surrogate Recovery (FBP)	5.30	172	18308	2.66203	ppb	-0.02
Spiked Amount	5.000		Recovery	=	53.240%	
15) Fluoranthene-D10 (FRT)	9.17	212	37127	2.77456	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.500%	
19) Surrogate Recovery (TPH)	9.66	244	25220	2.72781	ppb	-0.02
Spiked Amount	5.000		Recovery	=	54.560%	
Target Compounds						
						Qvalue
3) Naphthalene	4.06	128	56145	5.11838	ppb	99
5) 2-Methylnaphthalene	4.87	142	34877	5.26524	ppb	99
6) 1-Methylnaphthalene	4.97	142	34676	5.18268	ppb	98
9) Acenaphthylene	5.90	152	110599	5.07891	ppb	98
10) Acenaphthene	6.10	154	32437	5.08923	ppb	94
11) Fluorene	6.70	166	39186	5.27285	ppb	95
13) Phenanthrene	7.81	178	55414	5.15693	ppb	99
14) Anthracene	7.88	178	56392	5.28059	ppb	98
16) Fluoranthene	9.20	202	88448	5.26084	ppb	94
18) Pyrene	9.46	202	90091	5.09170	ppb	# 90
20) Benz (a) anthracene	10.88	228	78735	4.97221	ppb	100
21) Chrysene	10.92	228	77950	5.14147	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	79693	5.09396	ppb	# 83
24) Benzo (b) fluoranthene	12.62	252	77665	5.63969	ppb	# 97
25) Benzo (k) fluoranthene	12.67	252	78025	5.49425	ppb	98
26) Benzo (a) pyrene	13.20	252	73793	5.60251	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	65681	5.41796	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	65153	5.32070	ppb	# 92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

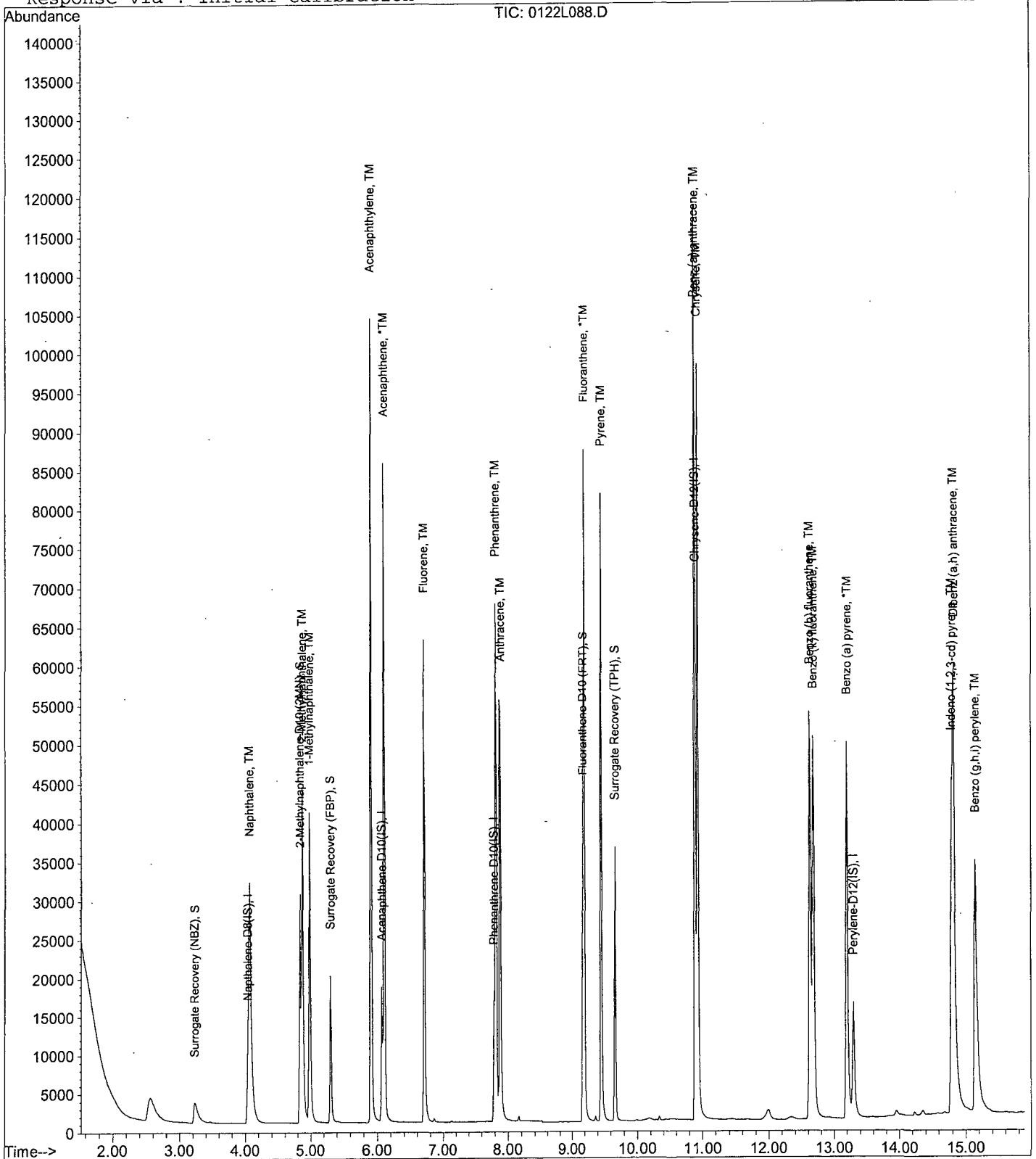
Data File : M:\LINUS\DATA\L190122\0122L088.D  
Acq On : 1 Feb 19 15:32  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 88  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 4 7:44 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 21:52  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L103.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4879	11	S
3	TM	Naphthalene	1.259	1.388	10	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.311	14	S
5	TM	2-Methylnaphthalene	0.7605	0.8733	15	TM
6	TM	1-Methylnaphthalene	0.7682	0.8473	10	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.961	11	S
9	TM	Acenaphthylene	5.597	6.443	15	TM
10	*TM	Acenaphthene	1.638	1.807	10	*TM
11	TM	Fluorene	1.910	2.234	17	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.577	12	TM
14	TM	Anthracene	1.396	1.666	19	TM
15	S	Fluoranthene-D10 (FRT)	1.750	2.004	15	S
16	*TM	Fluoranthene	2.198	2.496	14	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.769	15	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9048	12	S
20	TM	Benz (a) anthracene	1.383	1.543	12	TM
21	TM	Chrysene	1.324	1.471	11	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.488	8.9	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.644	22	TM
25	TM	Benzo (k) fluoranthene	1.393	1.529	9.8	TM
26	*TM	Benzo (a) pyrene	1.292	1.518	18	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.290	8.5	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.264	5.3	TM
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Average

12.8

Data File : M:\LINUS\DATA\L190122\0122L103.D Vial: 3  
 Acq On : 1 Feb 19 21:52 Operator: MA  
 Sample : 5 SIM 01/18/19 (1) Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 4 7:45 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	38045	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.06	164	16950	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	33136	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	47162	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	45173	2.50000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.24	82	18563	2.76607	ppb	0.01
Spiked Amount	5.000			Recovery =	55.320%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	49889	2.86180	ppb	-0.02
Spiked Amount	5.000			Recovery =	57.240%	
8) Surrogate Recovery (FBP)	5.30	172	33232	2.77264	ppb	-0.02
Spiked Amount	5.000			Recovery =	55.460%	
15) Fluoranthene-D10 (FRT)	9.17	212	66402	2.86320	ppb	-0.02
Spiked Amount	5.000			Recovery =	57.260%	
19) Surrogate Recovery (TPH)	9.66	244	42674	2.80226	ppb	-0.02
Spiked Amount	5.000			Recovery =	56.040%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	105598	5.50983	ppb	100
5) 2-Methylnaphthalene	4.87	142	66449	5.74153	ppb	100
6) 1-Methylnaphthalene	4.97	142	64469	5.51489	ppb	98
9) Acenaphthylene	5.90	152	218428	5.75562	ppb	98
10) Acenaphthene	6.10	154	61253	5.51446	ppb	95
11) Fluorene	6.70	166	75735	5.84757	ppb	97
13) Phenanthrene	7.81	178	104524	5.61245	ppb	99
14) Anthracene	7.87	178	110387	5.96414	ppb	99
16) Fluoranthene	9.20	202	165412	5.67674	ppb	97
18) Pyrene	9.46	202	166878	5.72605	ppb	# 87
20) Benz (a) anthracene	10.88	228	145497	5.57840	ppb	100
21) Chrysene	10.92	228	138783	5.55753	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	140367	5.44722	ppb	91
24) Benzo (b) fluoranthene	12.62	252	148498	6.08545	ppb	# 97
25) Benzo (k) fluoranthene	12.67	252	138144	5.48970	ppb	98
26) Benzo (a) pyrene	13.20	252	137146	5.87614	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	116521	5.42428	ppb	94
28) Benzo (g,h,i) perylene	15.14	276	114213	5.26371	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

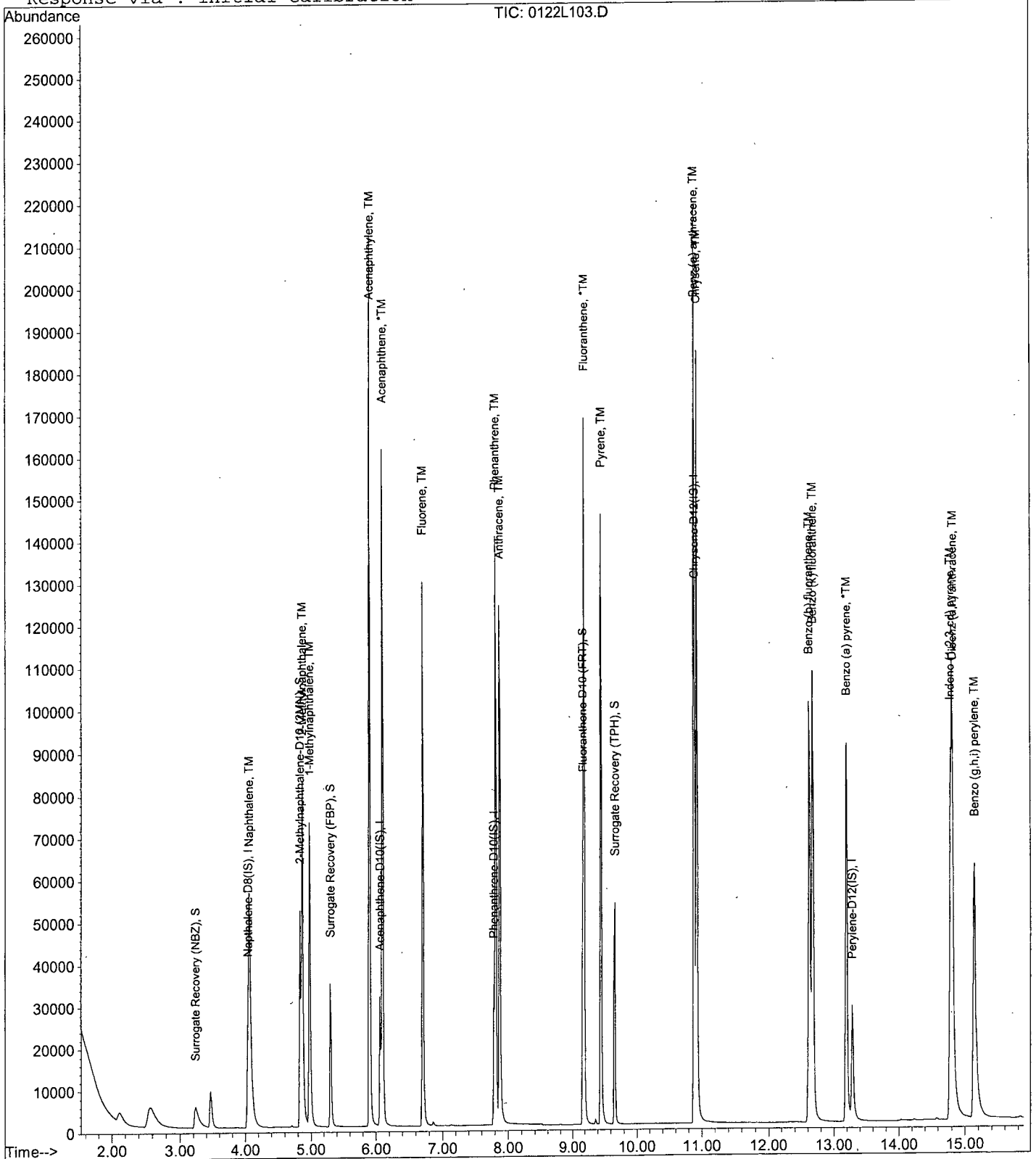
Data File : M:\LINUS\DATA\L190122\0122L103.D  
Acq On : 1 Feb 19 21:52  
Sample : 5 SIM 01/18/19 (1)  
Misc :

Vial: 3  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 4 7:45 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 4 Feb 19 8:56  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L106.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4584	3.9	S
3	TM	Naphthalene	1.259	1.299	3.1	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.296	13	S
5	TM	2-Methylnaphthalene	0.7605	0.8062	6.0	TM
6	TM	1-Methylnaphthalene	0.7682	0.8121	5.7	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.883	6.5	S
9	TM	Acenaphthylene	5.597	5.907	5.5	TM
10	*TM	Acenaphthene	1.638	1.657	1.1	*TM
11	TM	Fluorene	1.910	2.028	6.2	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.466	4.3	TM
14	TM	Anthracene	1.396	1.507	7.9	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.962	12	S
16	*TM	Fluoranthene	2.198	2.228	1.3	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.590	2.9	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.8910	10	S
20	TM	Benz (a) anthracene	1.383	1.400	1.3	TM
21	TM	Chrysene	1.324	1.345	1.6	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.491	9.1	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.338	0.95	TM
25	TM	Benzo (k) fluoranthene	1.393	1.553	12	TM
26	*TM	Benzo (a) pyrene	1.292	1.354	4.8	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.283	8.0	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.234	2.8	TM
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Average

5.7

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L106.D  
 Acq On : 4 Feb 19 8:56  
 Sample : 5 SIM 01/18/19 (2)  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 4 9:26 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.03	136	20547	2.50000	ppb	-0.01
7) Acenaphthene-D10(IS)	6.06	164	9330	2.50000	ppb	-0.02
12) Phenanthrene-D10(IS)	7.79	188	18578	2.50000	ppb	-0.02
17) Chrysene-D12(IS)	10.89	240	27043	2.50000	ppb	-0.03
23) Perylene-D12(IS)	13.28	264	26045	2.50000	ppb	-0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	9418	2.59850	ppb	0.00
Spiked Amount	5.000		Recovery	=	51.960%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	26639	2.82944	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.580%	
8) Surrogate Recovery (FBP)	5.30	172	17566	2.66255	ppb	-0.02
Spiked Amount	5.000		Recovery	=	53.260%	
15) Fluoranthene-D10 (FRT)	9.17	212	36454	2.80360	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.080%	
19) Surrogate Recovery (TPH)	9.66	244	24096	2.75948	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.180%	
Target Compounds						
3) Napthalene	4.06	128	53375	5.15667	ppb	Qvalue 100
5) 2-Methylnaphthalene	4.87	142	33130	5.30042	ppb	98
6) 1-Methylnaphthalene	4.97	142	33373	5.28603	ppb	97
9) Acenaphthylene	5.90	152	110225	5.27657	ppb	98
10) Acenaphthene	6.10	154	30921	5.05728	ppb	99
11) Fluorene	6.70	166	37839	5.30770	ppb	99
13) Phenanthrene	7.81	178	54474	5.21707	ppb	100
14) Anthracene	7.87	178	55991	5.39572	ppb	99
16) Fluoranthene	9.20	202	82781	5.06715	ppb	99
18) Pyrene	9.46	202	85971	5.14453	ppb	# 87
20) Benz (a) anthracene	10.88	228	75745	5.06462	ppb	99
21) Chrysene	10.92	228	72752	5.08075	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	80618	5.45606	ppb	93
24) Benzo (b) fluoranthene	12.62	252	69681	4.95269	ppb	99
25) Benzo (k) fluoranthene	12.67	252	80904	5.57624	ppb	97
26) Benzo (a) pyrene	13.20	252	70529	5.24121	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	66857	5.39808	ppb	95
28) Benzo (g,h,i) perylene	15.14	276	64284	5.13847	ppb	95

Quantitation Report

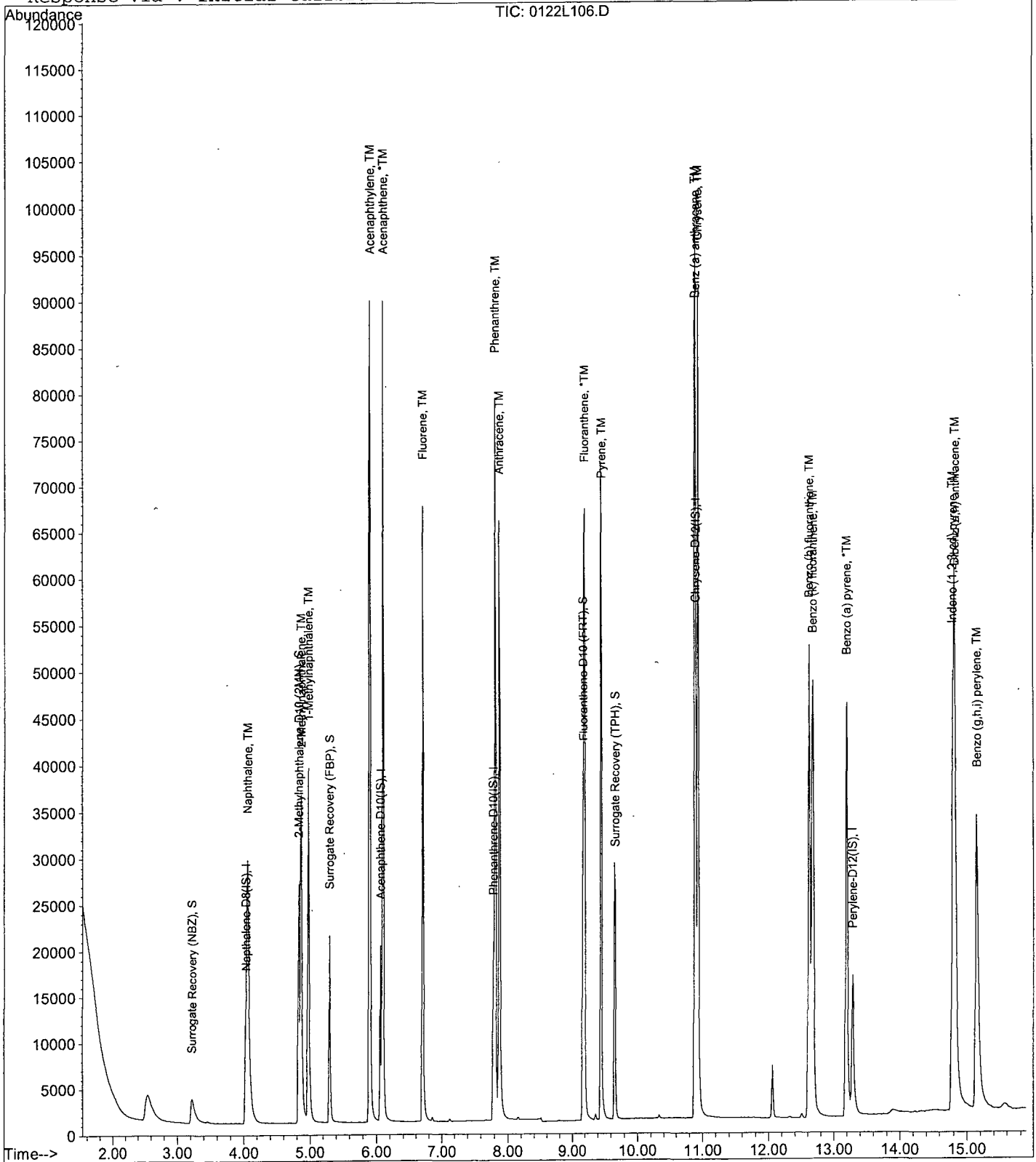
Data File : M:\LINUS\DATA\L190122\0122L106.D  
 Acq On : 4 Feb 19 8:56  
 Sample : 5 SIM 01/18/19 (2)  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 4 9:26 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTI Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 4 Feb 19 14:55  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L115.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4223	4.2	S
3	TM	Naphthalene	1.259	1.289	2.3	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.262	10	S
5	TM	2-Methylnaphthalene	0.7605	0.7833	3.0	TM
6	TM	1-Methylnaphthalene	0.7682	0.7905	2.9	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.853	4.8	S
9	TM	Acenaphthylene	5.597	5.663	1.2	TM
10	*TM	Acenaphthene	1.638	1.703	4.0	*TM
11	TM	Fluorene	1.910	1.986	3.9	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.448	3.0	TM
14	TM	Anthracene	1.396	1.459	4.5	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.897	8.4	S
16	*TM	Fluoranthene	2.198	2.282	3.8	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.488	3.7	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.8387	3.9	S
20	TM	Benz (a) anthracene	1.383	1.355	2.0	TM
21	TM	Chrysene	1.324	1.368	3.3	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.357	0.64	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.336	1.0	TM
25	TM	Benzo (k) fluoranthene	1.393	1.607	15	TM
26	*TM	Benzo (a) pyrene	1.292	1.382	7.0	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.237	4.1	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.188	1.0	TM
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Average

4.2

Data File : M:\LINUS\DATA\L190122\0122L115.D Vial: 15  
 Acq On : 4 Feb 19 14:55 Operator: MA  
 Sample : 5 SIM 01/18/19 (2) Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 4 15:25 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	21365	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9449	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	18422	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	27198	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	24840	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	9022	2.39393	ppb	0.00
Spiked Amount	5.000		Recovery	=	47.880%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	26962	2.75411	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.080%	
8) Surrogate Recovery (FBP)	5.30	172	17509	2.62049	ppb	-0.02
Spiked Amount	5.000		Recovery	=	52.400%	
15) Fluoranthene-D10 (FRT)	9.17	212	34951	2.71077	ppb	-0.02
Spiked Amount	5.000		Recovery	=	54.220%	
19) Surrogate Recovery (TPH)	9.66	244	22810	2.59732	ppb	-0.02
Spiked Amount	5.000		Recovery	=	51.940%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Napthalene	4.06	128	55058	5.11561	ppb	100
5) 2-Methylnaphthalene	4.87	142	33469	5.14964	ppb	97
6) 1-Methylnaphthalene	4.97	142	33776	5.14504	ppb	97
9) Acenaphthylene	5.90	152	107024	5.05881	ppb	98
10) Acenaphthene	6.10	154	32184	5.19756	ppb	98
11) Fluorene	6.70	166	37525	5.19737	ppb	98
13) Phenanthrene	7.81	178	53332	5.15095	ppb	100
14) Anthracene	7.88	178	53765	5.22508	ppb	99
16) Fluoranthene	9.20	202	84091	5.19093	ppb	95
18) Pyrene	9.46	202	80918	4.81456	ppb	# 88
20) Benz (a) anthracene	10.88	228	73702	4.89994	ppb	100
21) Chrysene	10.92	228	74406	5.16665	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	73825	4.96785	ppb	# 88
24) Benzo (b) fluoranthene	12.62	252	66393	4.94791	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	79828	5.76898	ppb	98
26) Benzo (a) pyrene	13.20	252	68643	5.34851	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	61467	5.20364	ppb	97
28) Benzo (g,h,i) perylene	15.14	276	59039	4.94814	ppb	# 94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

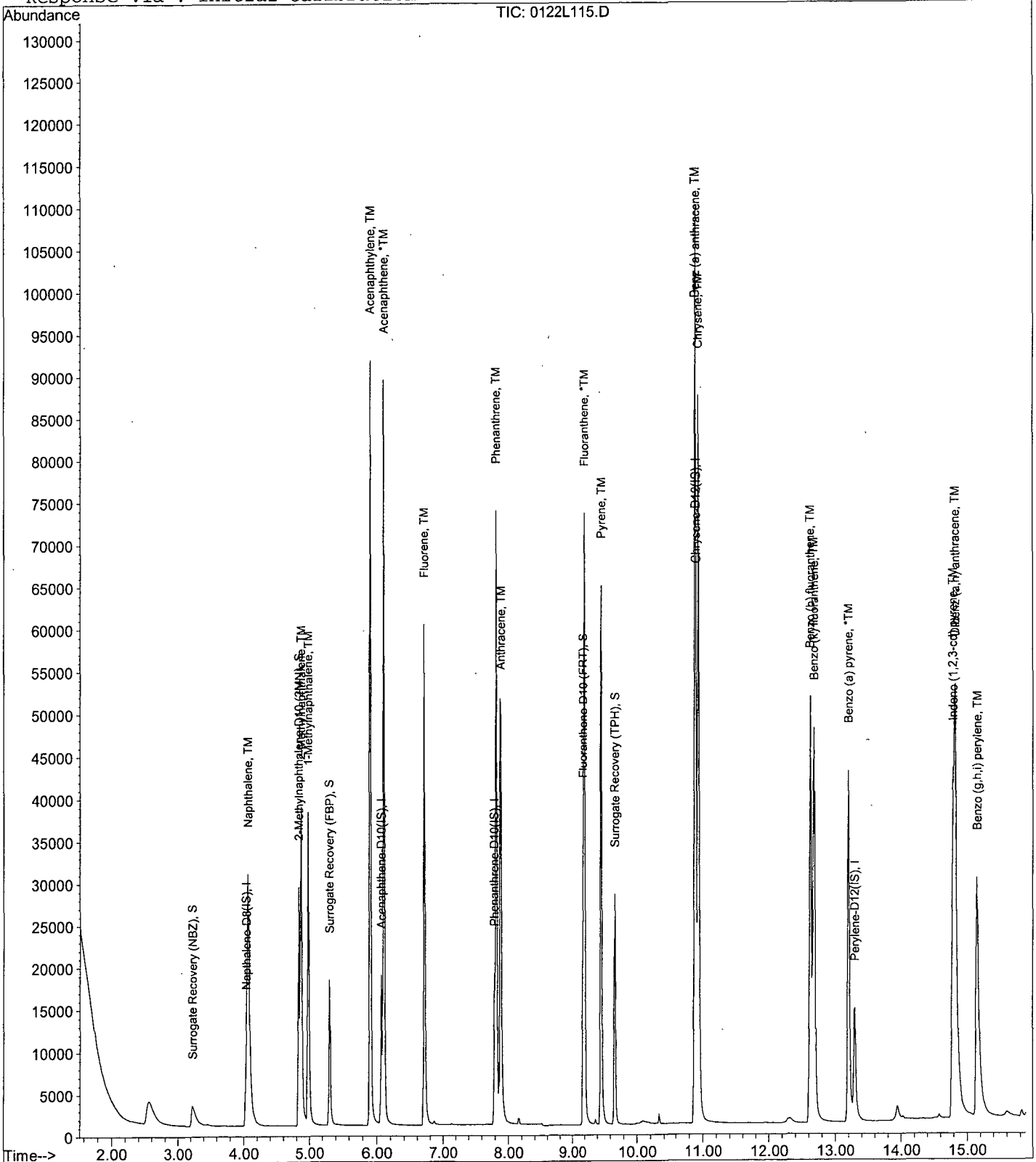
Data File : M:\LINUS\DATA\L190122\0122L115.D  
Acq On : 4 Feb 19 14:55  
Sample : 5 SIM 01/18/19 (2)  
Misc :

Vial: 15  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 4 15:25 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\LINUS\DATA\L190122\0122L091.D Vial: 91  
 Acq On : 1 Feb 19 17:24 Operator: MA  
 Sample : AZ85562W36 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:43 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	21746	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9958	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	20079	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	29197	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	28131	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	365619	119.1438	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1906.304%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	49397	6.1967	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 99.152%	
8) Surrogate Recovery (FBP)	5.30	172	596818	105.9464	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 1695.136%	
15) Fluoranthene-D10 (FRT)	9.17	212	66797	5.9415	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 95.056%	
19) Surrogate Recovery (TPH)	9.67	244	749934	99.4332	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1590.928%	

Target Compounds Qvalue



Quantitation Report

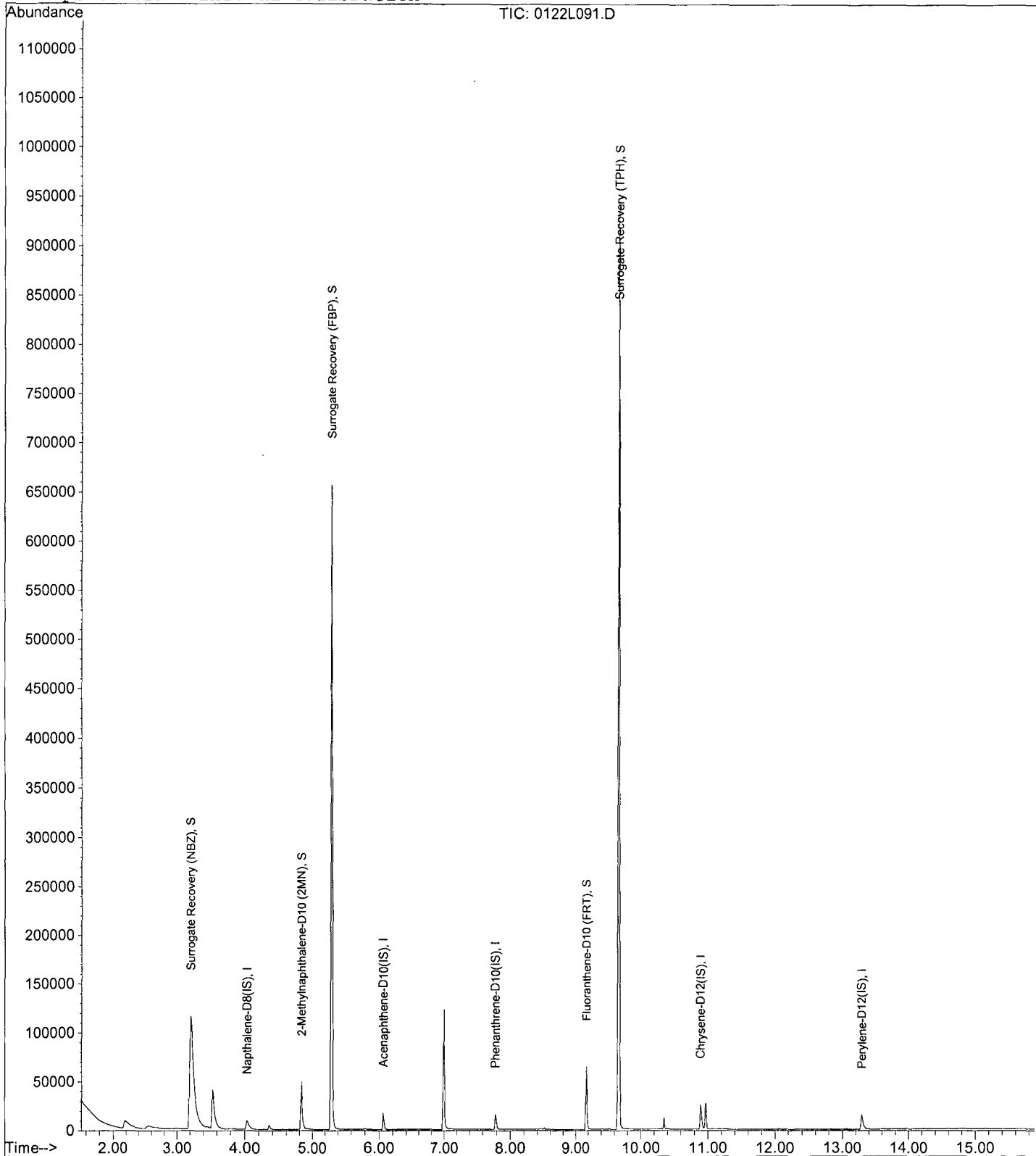
Data File : M:\LINUS\DATA\L190122\0122L091.D  
Acq On : 1 Feb 19 17:24  
Sample : AZ85562W36 1/800  
Misc :

Vial: 91  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:43 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L092.D Vial: 92  
 Acq On : 1 Feb 19 17:47 Operator: MA  
 Sample : AZ85563W10 1/809 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:44 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	21021	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9016	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.80	188	17750	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	25234	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	24970	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	335939	113.2476	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1811.968%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	44561	5.7829	ppb	-0.02
Spiked Amount	6.250		Recovery	= 92.528%		
8) Surrogate Recovery (FBP)	5.30	172	537627	105.4104	ppb	-0.02
Spiked Amount	6.250		Recovery	= 1686.560%		
15) Fluoranthene-D10 (FRT)	9.17	212	61129	6.1508	ppb	-0.02
Spiked Amount	6.250		Recovery	= 98.416%		
19) Surrogate Recovery (TPH)	9.67	244	675457	103.6235	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1657.968%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

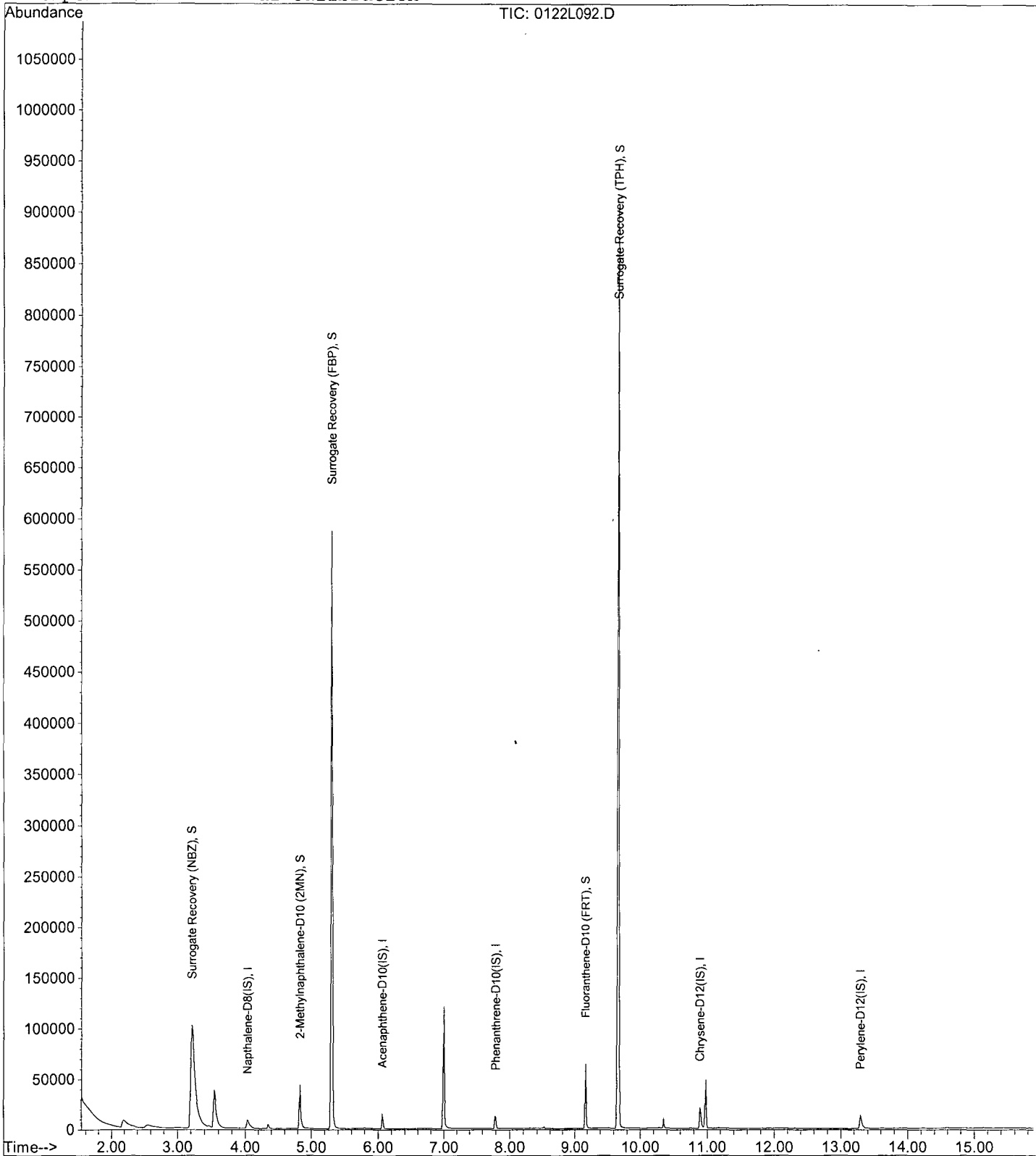
Data File : M:\LINUS\DATA\L190122\0122L092.D  
Acq On : 1 Feb 19 17:47  
Sample : AZ85563W10 1/809  
Misc :

Vial: 92  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:44 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L059.D Vial: 59  
 Acq On : 30 Jan 19 14:52 Operator: MA  
 Sample : AZ85565W22 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:12 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	13461	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	6239	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	12715	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	17403	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.32	264	6286	2.5000	ppb	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	291281	153.3405	ppb	0.00
Spiked Amount	6.250		Recovery	= 2453.456%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	41362	8.3824	ppb	-0.02
Spiked Amount	6.250		Recovery	= 134.112%		
8) Surrogate Recovery (FBP)	5.31	172	498604	141.2723	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2260.352%		
15) Fluoranthene-D10 (FRT)	9.17	212	56421	7.9251	ppb	-0.02
Spiked Amount	6.250		Recovery	= 126.800%		
19) Surrogate Recovery (TPH)	9.67	244	607441	135.1222	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2161.952%		

Target Compounds Qvalue

Quantitation Report

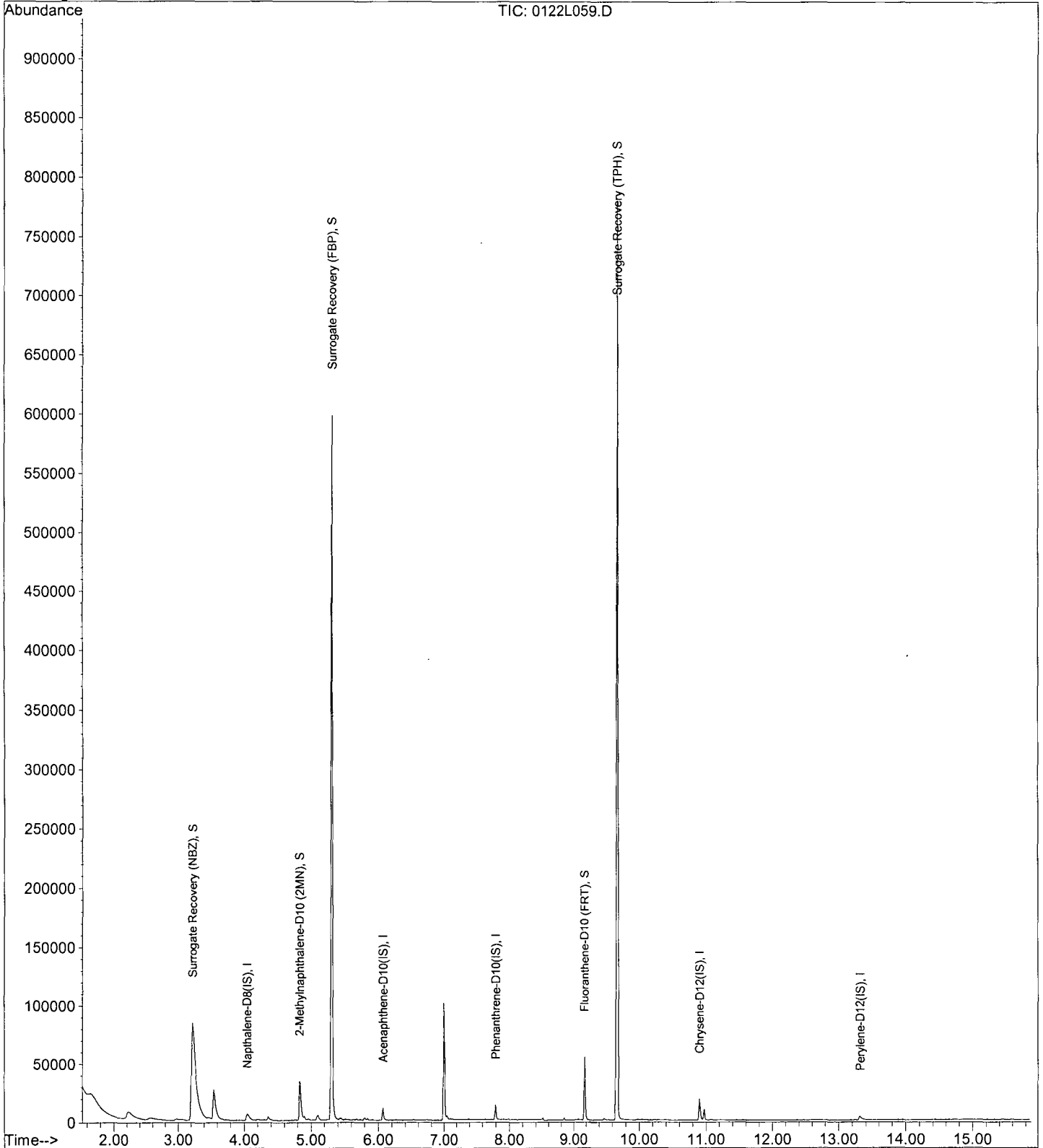
Data File : M:\LINUS\DATA\L190122\0122L059.D  
Acq On : 30 Jan 19 14:52  
Sample : AZ85565W22 1/800  
Misc :

Vial: 59  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 31 6:12 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L060.D Vial: 60  
 Acq On : 30 Jan 19 15:14 Operator: MA  
 Sample : AZ85567W22 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:13 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	15222	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	6679	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13641	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	18043	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.32	264	9156	2.5000	ppb	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	310983	144.7728	ppb	0.00
Spiked Amount	6.250		Recovery	= 2316.368%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	45509	8.1558	ppb	-0.02
Spiked Amount	6.250		Recovery	= 130.496%		
8) Surrogate Recovery (FBP)	5.31	172	502186	132.9136	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2126.624%		
15) Fluoranthene-D10 (FRT)	9.17	212	57655	7.5487	ppb	-0.02
Spiked Amount	6.250		Recovery	= 120.784%		
19) Surrogate Recovery (TPH)	9.67	244	638225	136.9341	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2190.944%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

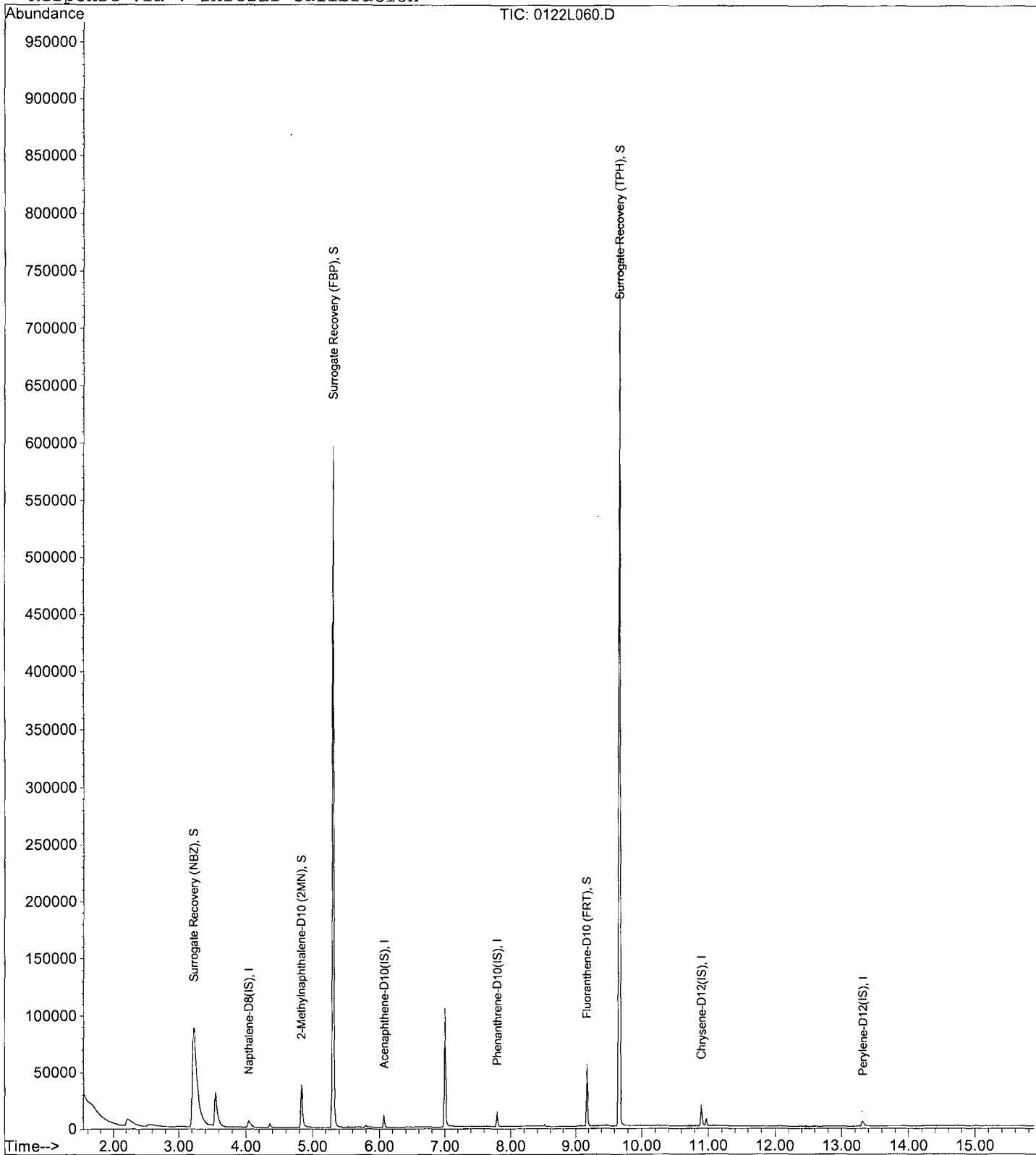
Data File : M:\LINUS\DATA\L190122\0122L060.D  
Acq On : 30 Jan 19 15:14  
Sample : AZ85567W22 1/800  
Misc :

Vial: 60  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 31 6:13 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L108.D Vial: 8  
 Acq On : 4 Feb 19 11:58 Operator: MA  
 Sample : AZ85569W22 1/800 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 4 12:38 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	14555	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	2744	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	11935	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.90	240	5782	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.35	264	168	2.5000	ppb	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	312978	121.9028	ppb	-0.01
Spiked Amount	5.000		Recovery	= 2438.060%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	38640	5.7937	ppb	-0.02
Spiked Amount	5.000		Recovery	= 115.880%		
8) Surrogate Recovery (FBP)	5.30	172	504120	259.8102	ppb	-0.02
Spiked Amount	5.000		Recovery	= 5196.200%		
15) Fluoranthene-D10 (FRT)	9.17	212	26411	3.1618	ppb	-0.02
Spiked Amount	5.000		Recovery	= 63.240%		
19) Surrogate Recovery (TPH)	9.67	244	603471	323.2324	ppb	-0.01
Spiked Amount	5.000		Recovery	= 6464.640%		

Target Compounds Qvalue



Quantitation Report

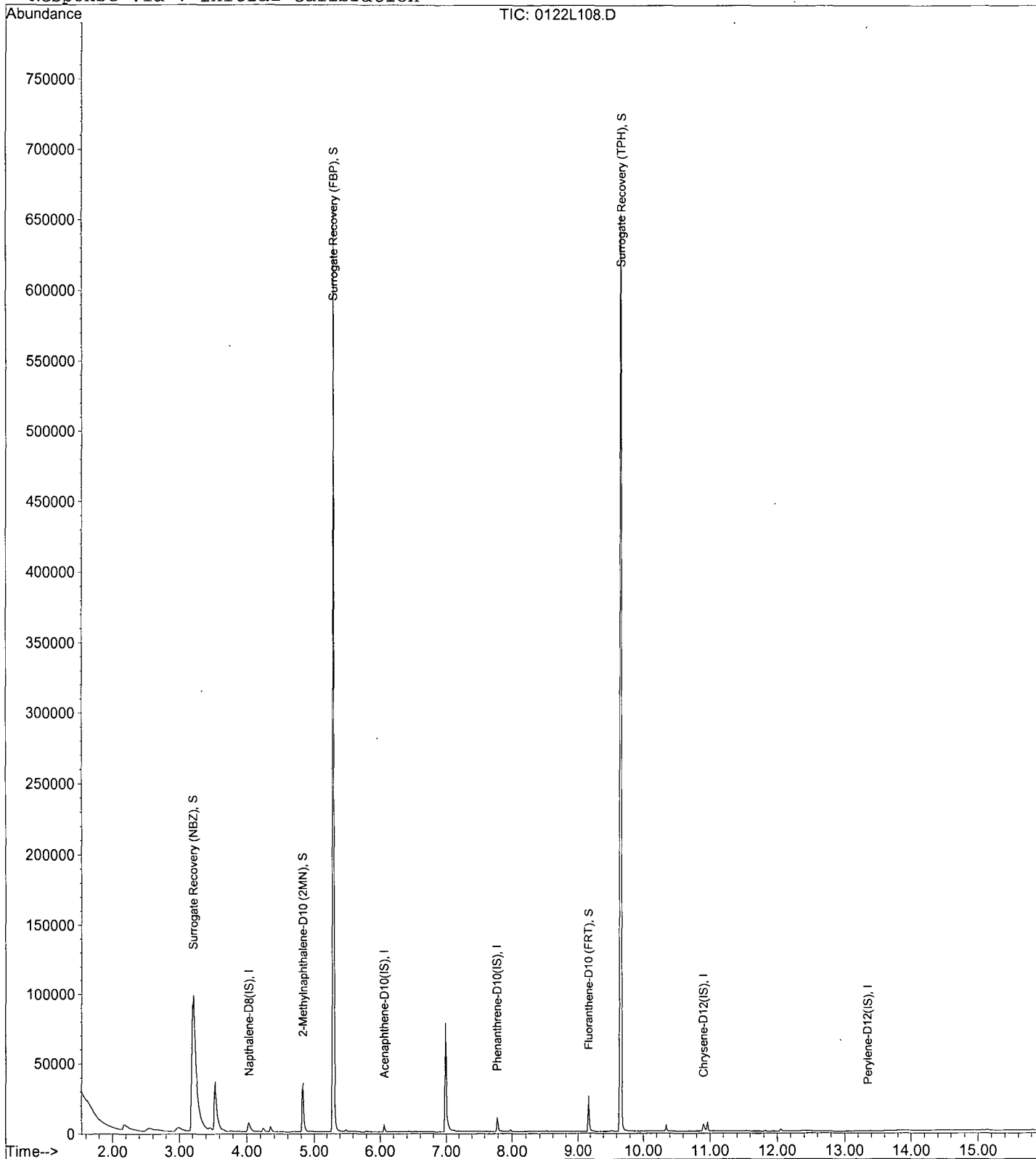
Data File : M:\LINUS\DATA\L190122\0122L108.D  
Acq On : 4 Feb 19 11:58  
Sample : AZ85569W22 1/800  
Misc :

Vial: 8  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 4 12:38 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L056.D Vial: 56  
 Acq On : 30 Jan 19 13:46 Operator: MA  
 Sample : 190128A BLK 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 14:03 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.05	136	19493	2.5000	ppb	0.00
7) Acenaphthene-D10(IS)	6.07	164	9066	2.5000	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	17925	2.5000	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	24268	2.5000	ppb	-0.02
23) Perylene-D12(IS)	13.29	264	24237	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	305288	110.9822	ppb	0.00
Spiked Amount	6.250		Recovery	= 1775.712%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	42235	5.9107	ppb	-0.01
Spiked Amount	6.250		Recovery	= 94.576%		
8) Surrogate Recovery (FBP)	5.31	172	510301	99.5009	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1592.016%		
15) Fluoranthene-D10 (FRT)	9.17	212	59280	5.9065	ppb	-0.02
Spiked Amount	6.250		Recovery	= 94.496%		
19) Surrogate Recovery (TPH)	9.67	244	615268	98.1470	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1570.352%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

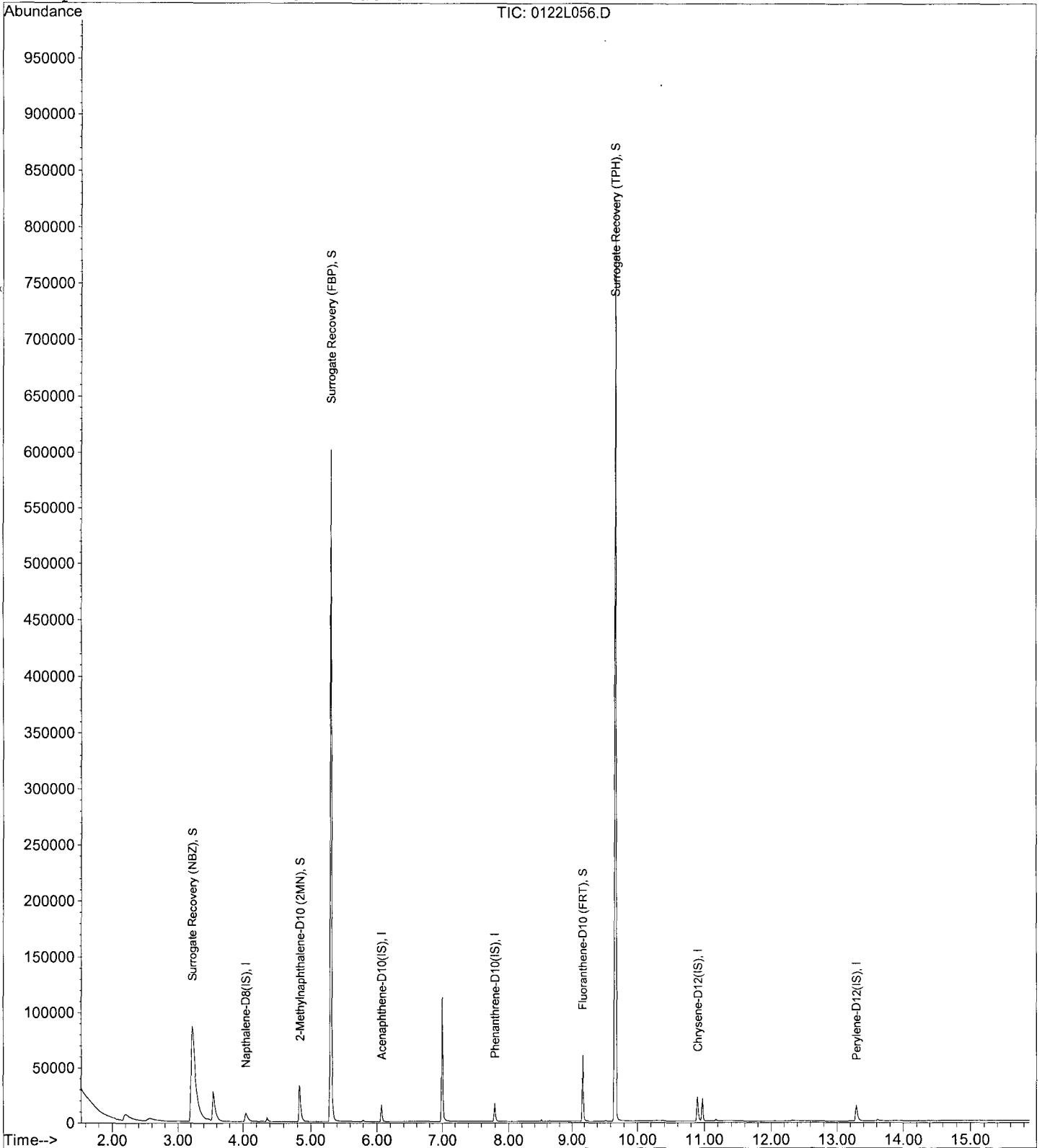
Data File : M:\LINUS\DATA\L190122\0122L056.D  
Acq On : 30 Jan 19 13:46  
Sample : 190128A BLK 1/800  
Misc :

Vial: 56  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 14:03 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L084.D Vial: 84  
 Acq On : 1 Feb 19 12:51 Operator: MA  
 Sample : 190130A Blk 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:42 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	17323	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	8262	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17139	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.90	240	25466	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	25914	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	312855	127.9800	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2047.680%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	40076	6.3111	ppb	-0.02
Spiked Amount	6.250		Recovery	= 100.976%		
8) Surrogate Recovery (FBP)	5.30	172	489127	104.6533	ppb	-0.02
Spiked Amount	6.250		Recovery	= 1674.448%		
15) Fluoranthene-D10 (FRT)	9.17	212	57927	6.0364	ppb	-0.02
Spiked Amount	6.250		Recovery	= 96.576%		
19) Surrogate Recovery (TPH)	9.67	244	642238	97.6297	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1562.080%		

Target Compounds Qvalue

Quantitation Report

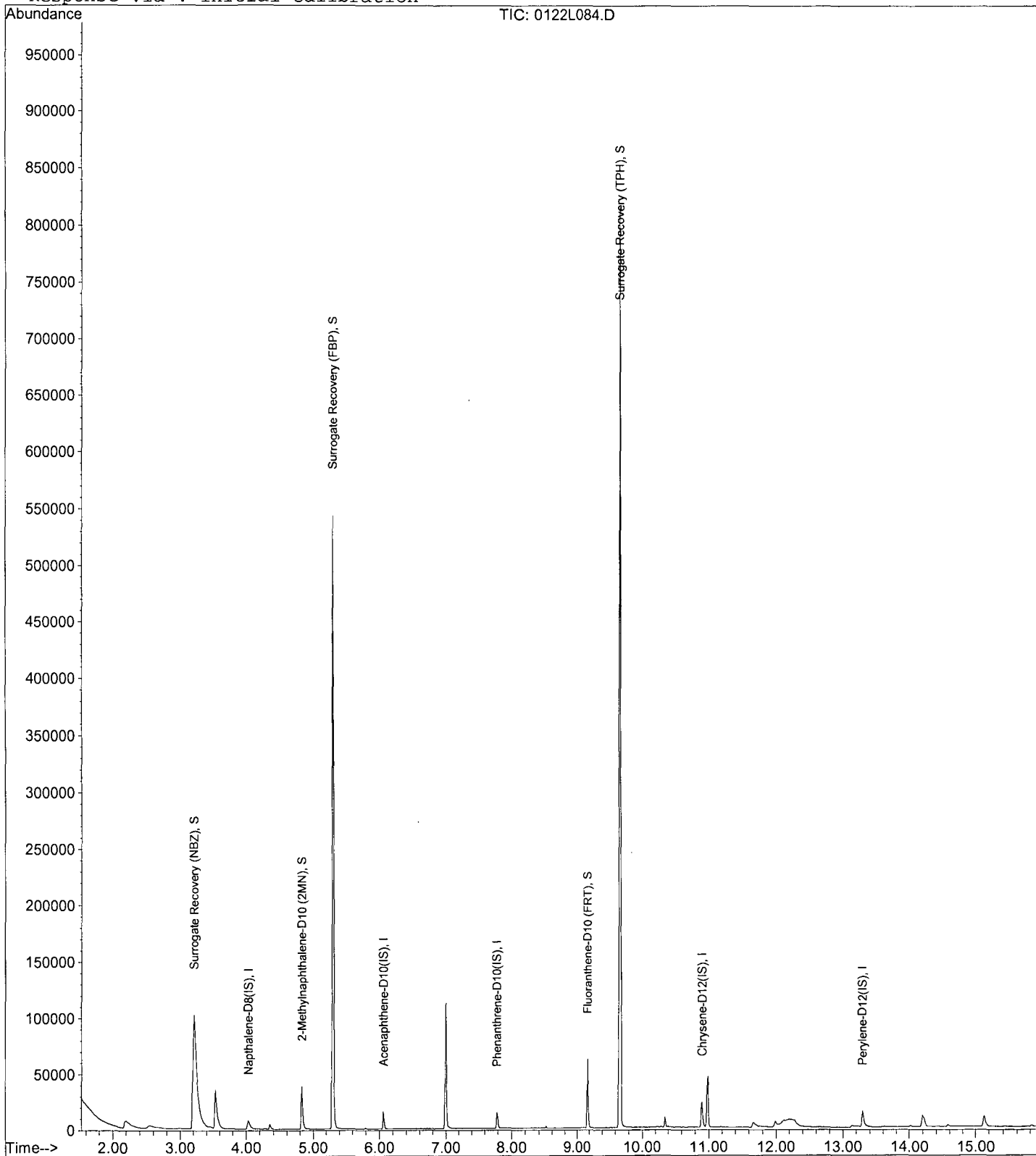
Data File : M:\LINUS\DATA\L190122\0122L084.D  
Acq On : 1 Feb 19 12:51  
Sample : 190130A Blk 1/800  
Misc :

Vial: 84  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:42 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L085.D Vial: 85  
 Acq On : 1 Feb 19 13:13 Operator: MA  
 Sample : 190130A LCS-1 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
1) Naphthalene-D8 (IS)	4.03	136	16459	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	8259	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17794	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	24439	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	25760	2.5000	ppb	-0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.26	82	1778	0.7655	ppb	0.04
Spiked Amount 6.250			Recovery	=	12.256%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	41327	6.8497	ppb	-0.02
Spiked Amount 6.250			Recovery	=	109.600%	
8) Surrogate Recovery (FBP)	5.30	172	2375	0.5083	ppb	-0.02
Spiked Amount 6.250			Recovery	=	8.128%	
15) Fluoranthene-D10 (FRT)	9.17	212	58272	5.8488	ppb	-0.02
Spiked Amount 6.250			Recovery	=	93.584%	
19) Surrogate Recovery (TPH)	9.66	244	4144	0.6564	ppb	-0.02
Spiked Amount 6.250			Recovery	=	10.496%	
Target Compounds						Qvalue
3) Naphthalene	4.06	128	39797	5.9998	ppb	100
5) 2-Methylnaphthalene	4.87	142	25160	6.2814	ppb	99
6) 1-Methylnaphthalene	4.97	142	25642	6.3378	ppb	98
9) Acenaphthylene	5.90	152	81066	5.4799	ppb	98
10) Acenaphthene	6.10	154	24708	5.7064	ppb	97
11) Fluorene	6.70	166	30752	6.0912	ppb	99
13) Phenanthrene	7.81	178	43853	5.4812	ppb	100
14) Anthracene	7.87	178	40981	5.1541	ppb	99
16) Fluoranthene	9.20	202	66502	5.3126	ppb	98
18) Pyrene	9.46	202	67214	5.5633	ppb	# 88
20) Benz (a) anthracene	10.88	228	55062	5.0924	ppb	99
21) Chrysene	10.92	228	56489	5.4567	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	60946	5.7052	ppb	# 88
24) Benzo (b) fluoranthene	12.62	252	53557	4.8110	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	60543	5.2738	ppb	97
26) Benzo (a) pyrene	13.20	252	49207	4.6215	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	51432	5.2482	ppb	96
28) Benzo (g,h,i) perylene	15.14	276	47649	4.8136	ppb	# 93

Quantitation Report

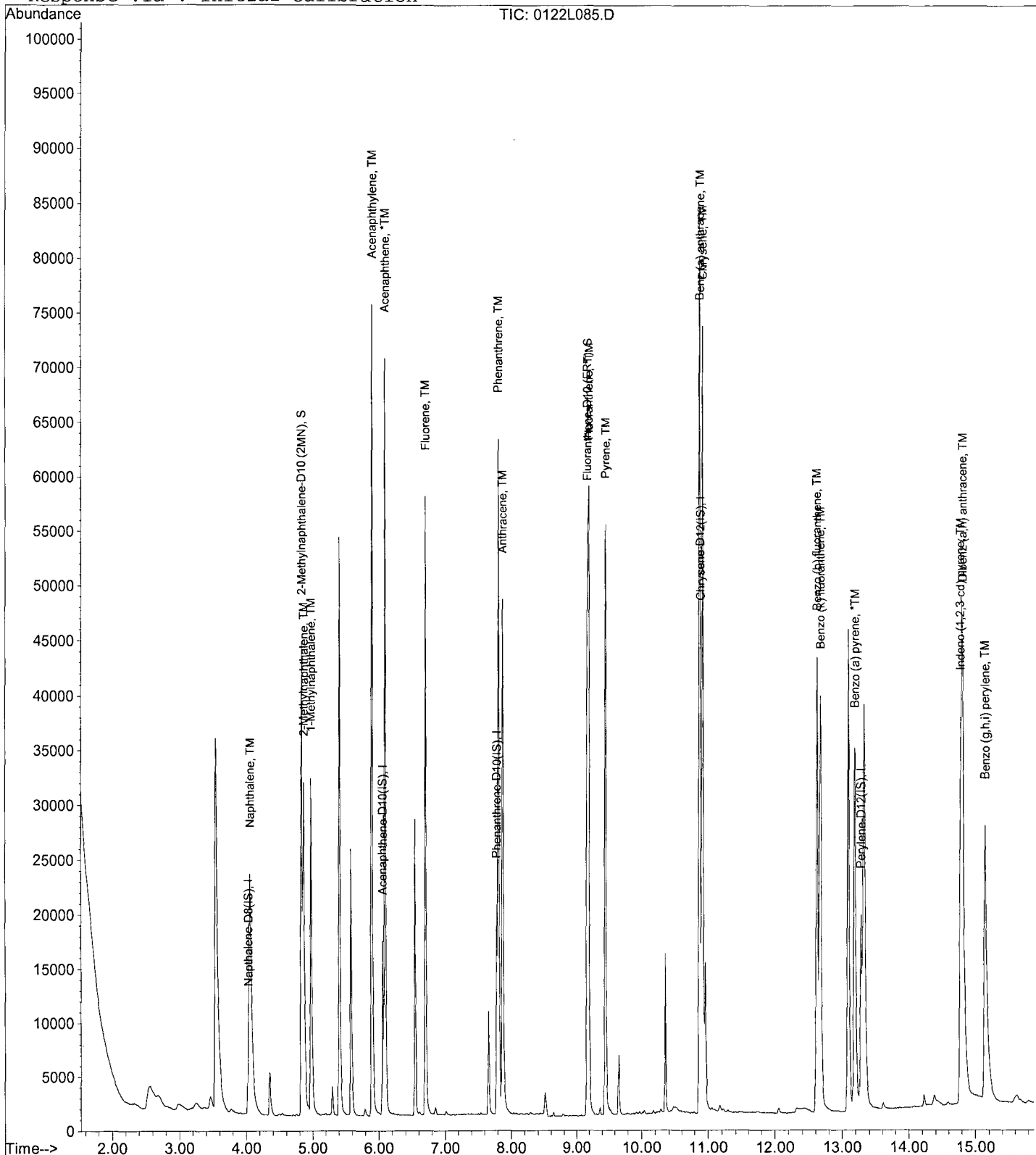
Data File : M:\LINUS\DATA\L190122\0122L085.D  
Acq On : 1 Feb 19 13:13  
Sample : 190130A LCS-1 1/800  
Misc :

Vial: 85  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L057.D Vial: 57  
 Acq On : 30 Jan 19 14:07 Operator: MA  
 Sample : 190128A LCS-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 30 14:24 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
1) Napthalene-D8 (IS)	4.05	136	13343	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	5524	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	10530	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	16261	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	8811	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.27	82	518	0.2751	ppb	0.05
Spiked Amount 6.250			Recovery =	4.400%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	35462	7.2502	ppb	-0.01
Spiked Amount 6.250			Recovery =	116.000%		
8) Surrogate Recovery (FBP)	5.31	172	345	0.1104	ppb	-0.01
Spiked Amount 6.250			Recovery =	1.760%		
15) Fluoranthene-D10 (FRT)	9.17	212	49216	8.3475	ppb	-0.02
Spiked Amount 6.250			Recovery =	133.568%		
19) Surrogate Recovery (TPH)	9.67	244	592	0.1409	ppb	-0.01
Spiked Amount 6.250			Recovery =	2.256%		
Target Compounds						Qvalue
3) Naphthalene	4.07	128	32899	6.1181	ppb	100
5) 2-Methylnaphthalene	4.88	142	20151	6.2057	ppb	98
6) 1-Methylnaphthalene	4.99	142	20182	6.1532	ppb	96
9) Acenaphthylene	5.90	152	40975	4.1412	ppb	99
10) Acenaphthene	6.11	154	18069	6.2393	ppb	96
11) Fluorene	6.71	166	21431	6.3467	ppb	100
13) Phenanthrene	7.82	178	31512	6.6557	ppb	98
14) Anthracene	7.88	178	25023	5.3180	ppb	99
16) Fluoranthene	9.20	202	53261	7.1899	ppb	# 92
18) Pyrene	9.46	202	49469	6.1538	ppb	94
20) Benz (a) anthracene	10.88	228	41857	5.8181	ppb	98
21) Chrysene	10.92	228	47238	6.8579	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	42858	6.0297	ppb	# 80
24) Benzo (b) fluoranthene	12.63	252	42795	11.2390	ppb	99
25) Benzo (k) fluoranthene	12.67	252	45834	11.6726	ppb	99
26) Benzo (a) pyrene	13.20	252	31629	8.6848	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	37199	11.0977	ppb	98
28) Benzo (g,h,i) perylene	15.15	276	34784	10.2735	ppb	97

(#) = qualifier out of range (m) = manual integration



Quantitation Report

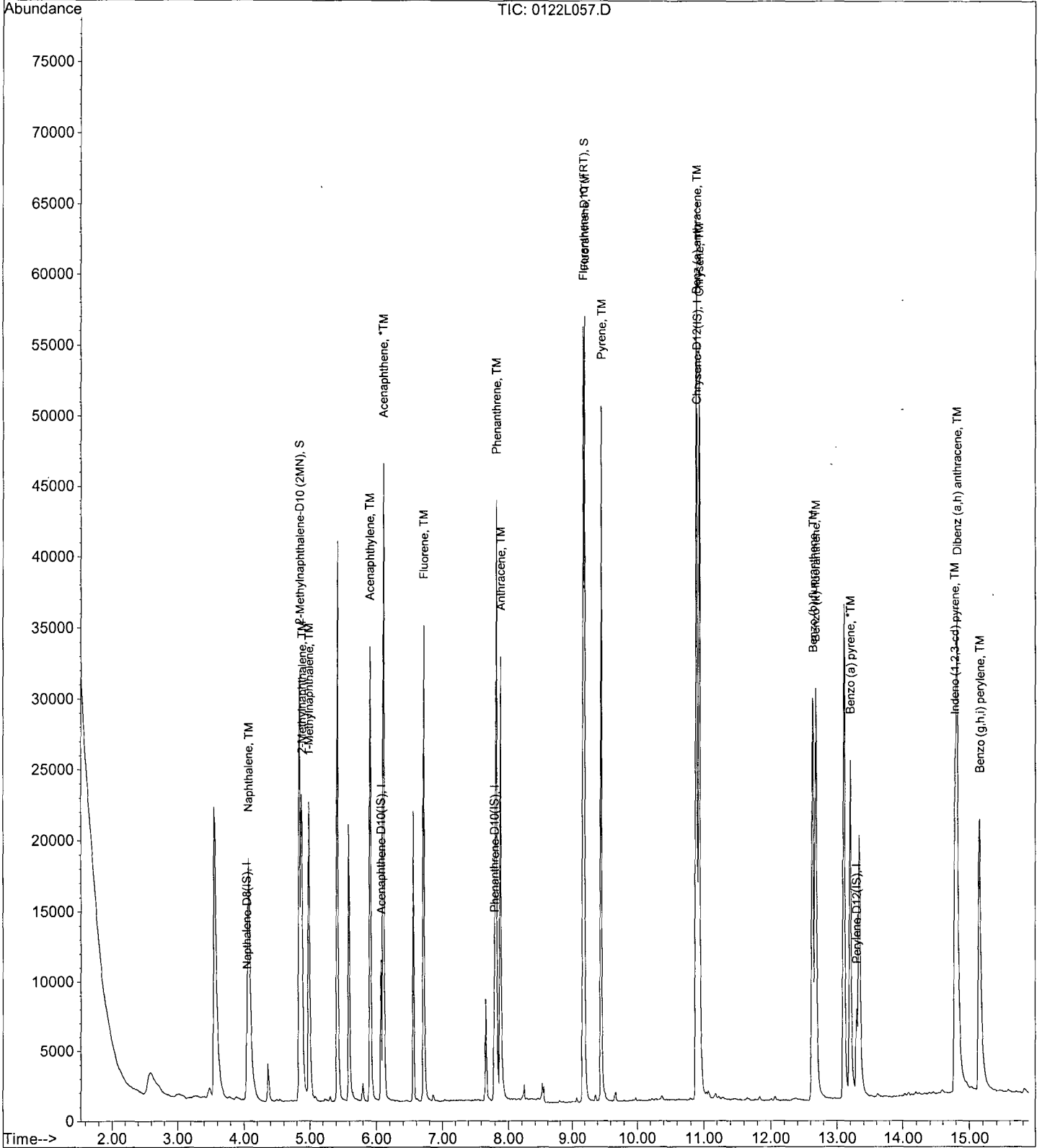
Data File : M:\LINUS\DATA\L190122\0122L057.D  
Acq On : 30 Jan 19 14:07  
Sample : 190128A LCS-2 1/800  
Misc :

Vial: 57  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 30 14:24 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L058.D Vial: 58  
 Acq On : 30 Jan 19 14:29 Operator: MA  
 Sample : 190128A LCSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:05 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	17209	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.07	164	7101	2.5000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15358	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.89	240	20683	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	8214	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.27	82	528	0.2174	ppb	0.05
Spiked Amount 6.250			Recovery =	3.472%		
4) 2-Methylnaphthalene-D10 (2)	4.84	152	42122	6.6772	ppb	-0.01
Spiked Amount 6.250			Recovery =	106.832%		
8) Surrogate Recovery (FBP)	5.29	172	28	0.0070	ppb	-0.04
Spiked Amount 6.250			Recovery =	0.112%		
15) Fluoranthene-D10 (FRT)	9.17	212	60272	7.0091	ppb	-0.02
Spiked Amount 6.250			Recovery =	112.144%		
19) Surrogate Recovery (TPH)	9.67	244	139	0.0260	ppb	-0.01
Spiked Amount 6.250			Recovery =	0.416%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.07	128	37370	5.3884	ppb	100
5) 2-Methylnaphthalene	4.88	142	23763	5.6740	ppb	97
6) 1-Methylnaphthalene	4.99	142	23397	5.5309	ppb	96
9) Acenaphthylene	5.90	152	49168	3.8657	ppb	100
10) Acenaphthene	6.11	154	21682	5.8242	ppb	96
11) Fluorene	6.71	166	27708	6.3833	ppb	99
13) Phenanthrene	7.82	178	41608	6.0254	ppb	98
14) Anthracene	7.88	178	33445	4.8735	ppb	99
16) Fluoranthene	9.20	202	64929	6.0096	ppb	# 89
18) Pyrene	9.46	202	57962	5.6688	ppb	93
20) Benz (a) anthracene	10.88	228	49110	5.3668	ppb	98
21) Chrysene	10.93	228	55454	6.3295	ppb	97
22) Indeno (1,2,3-cd) pyrene	14.79	276	49586	5.4848	ppb	# 81
24) Benzo (b) fluoranthene	12.63	252	52825	14.8815	ppb	# 98
25) Benzo (k) fluoranthene	12.68	252	56618	15.4670	ppb	97
26) Benzo (a) pyrene	13.20	252	37265	10.9760	ppb	# 96
27) Dibenz (a,h) anthracene	14.83	278	42644	13.6468	ppb	96
28) Benzo (g,h,i) perylene	15.16	276	39208	12.4218	ppb	# 93

Quantitation Report

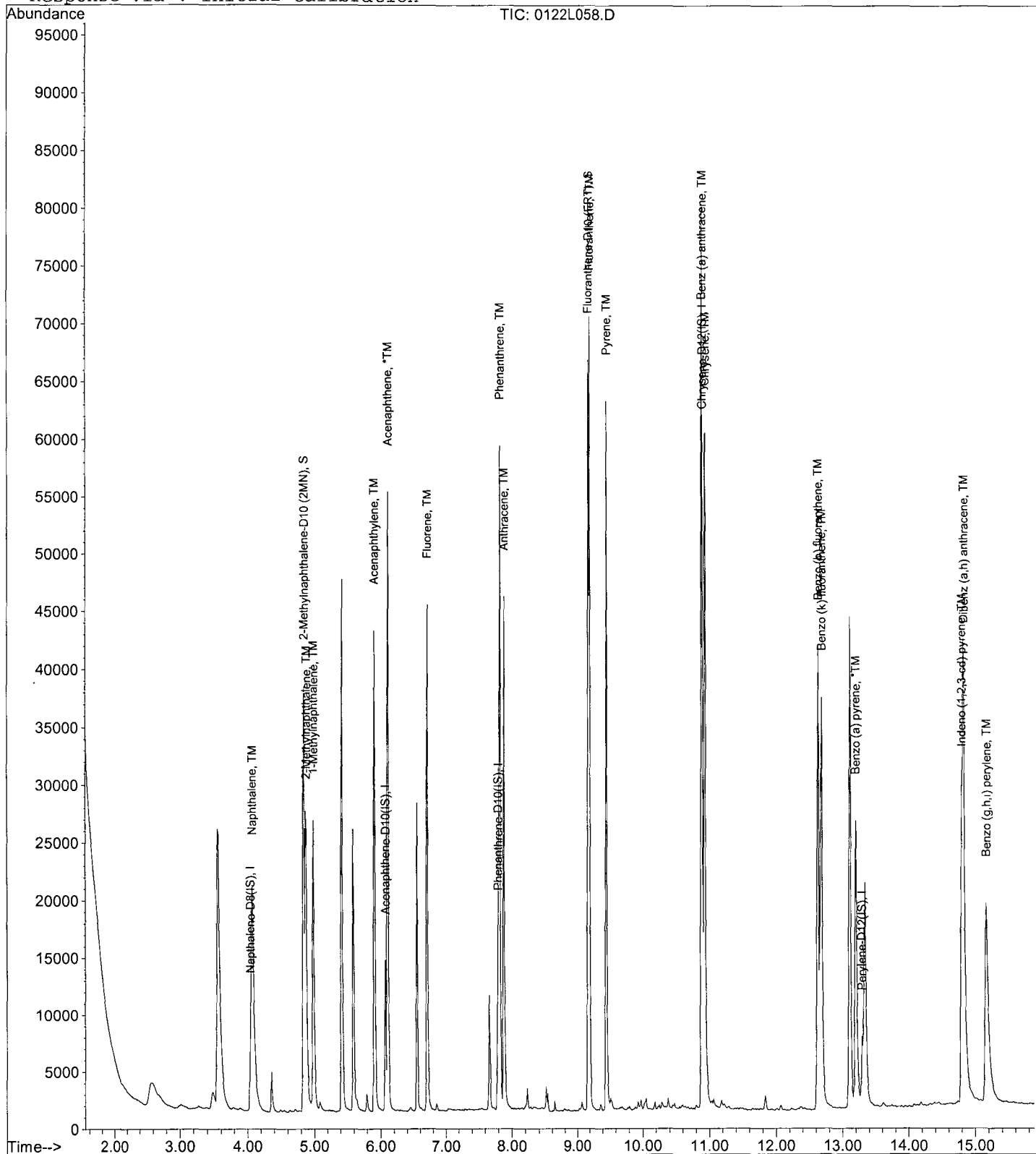
Data File : M:\LINUS\DATA\L190122\0122L058.D  
Acq On : 30 Jan 19 14:29  
Sample : 190128A LCSD-2 1/800  
Misc :

Vial: 58  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Jan 31 6:05 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L086.D Vial: 86  
 Acq On : 1 Feb 19 13:35 Operator: MA  
 Sample : 190130A LCSD-1 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	15802	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	7807	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	18324	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	27968	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	18922	2.5000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.18	82	83	0.0372	ppb	-0.05
Spiked Amount 6.250			Recovery =	0.592%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	40405	6.9753	ppb	-0.02
Spiked Amount 6.250			Recovery =	111.600%		
8) Surrogate Recovery (FBP)	5.31	172	161	0.0365	ppb	-0.01
Spiked Amount 6.250			Recovery =	0.576%		
15) Fluoranthene-D10 (FRT)	9.17	212	62606	6.1020	ppb	-0.02
Spiked Amount 6.250			Recovery =	97.632%		
19) Surrogate Recovery (TPH)	9.66	244	466	0.0645	ppb	-0.02
Spiked Amount 6.250			Recovery =	1.040%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	39274	6.1671	ppb	99
5) 2-Methylnaphthalene	4.87	142	24821	6.4544	ppb	99
6) 1-Methylnaphthalene	4.97	142	24419	6.2865	ppb	99
9) Acenaphthylene	5.90	152	63800	4.5625	ppb	98
10) Acenaphthene	6.10	154	23273	5.6862	ppb	96
11) Fluorene	6.70	166	28225	5.9144	ppb	97
13) Phenanthrene	7.81	178	43609	5.2930	ppb	100
14) Anthracene	7.88	178	35694	4.3593	ppb	98
16) Fluoranthene	9.20	202	71790	5.5691	ppb	96
18) Pyrene	9.46	202	68927	4.9852	ppb	# 88
20) Benz (a) anthracene	10.88	228	59490	4.8077	ppb	100
21) Chrysene	10.92	228	63547	5.3639	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	61599	5.0388	ppb	89
24) Benzo (b) fluoranthene	12.62	252	57204	6.9955	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	65278	7.7411	ppb	97
26) Benzo (a) pyrene	13.20	252	45046	5.7595	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	51947	7.2164	ppb	97
28) Benzo (g,h,i) perylene	15.14	276	48450	6.6633	ppb	# 92

Quantitation Report

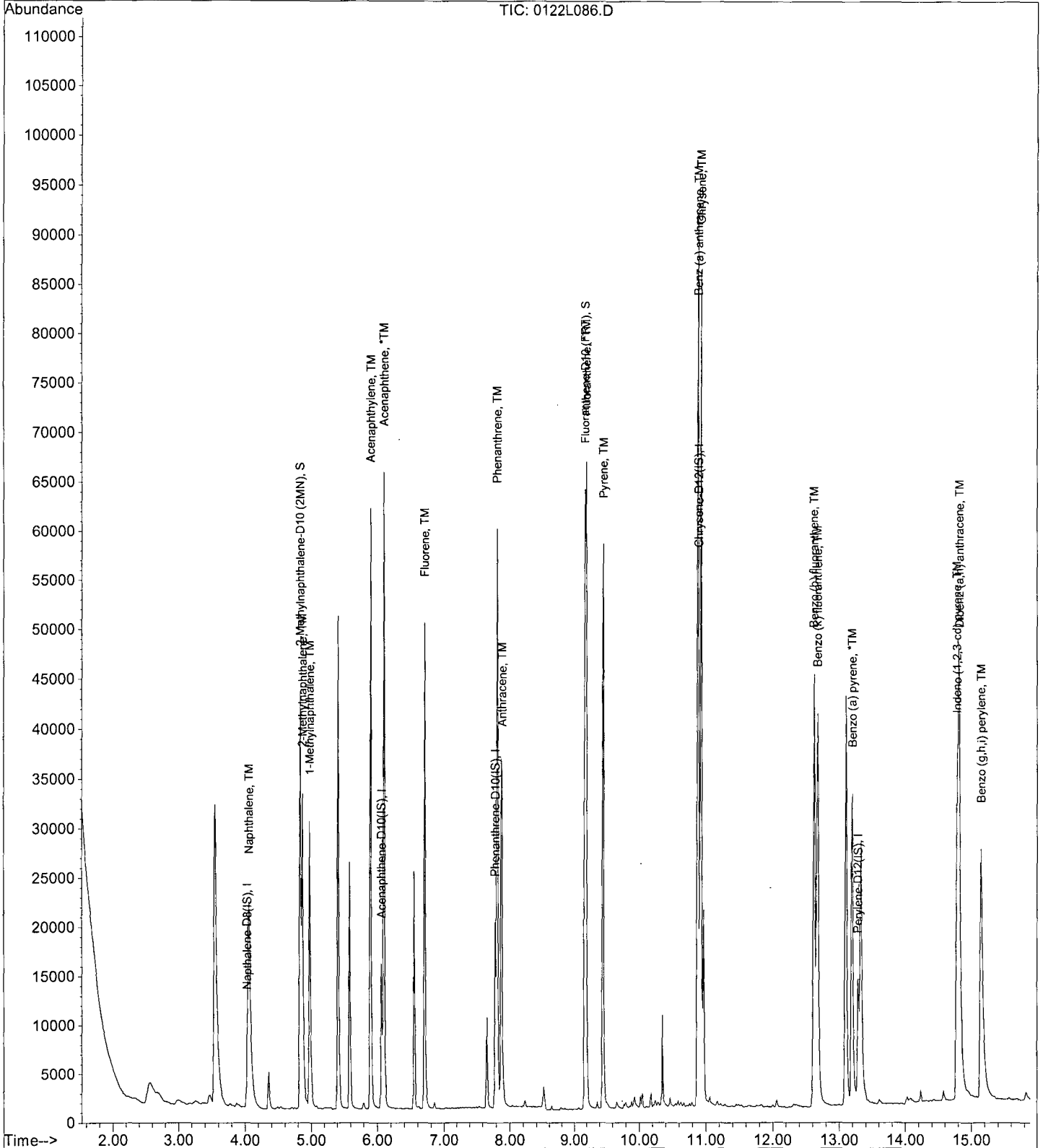
Data File : M:\LINUS\DATA\L190122\0122L086.D  
Acq On : 1 Feb 19 13:35  
Sample : 190130A LCSD-1 1/800  
Misc :

Vial: 86  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L089.D Vial: 89  
 Acq On : 1 Feb 19 16:40 Operator: MA  
 Sample : AZ85562W37 MS-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	23644	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	10428	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	20056	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	28974	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	27291	2.5000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.26	82	804	0.2410	ppb	0.04
Spiked Amount 6.250			Recovery =	3.856%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	42901	4.9498	ppb	-0.02
Spiked Amount 6.250			Recovery =	79.200%		
8) Surrogate Recovery (FBP)	5.30	172	44	0.0075	ppb	-0.02
Spiked Amount 6.250			Recovery =	0.112%		
15) Fluoranthene-D10 (FRT)	9.17	212	60165	5.3577	ppb	-0.02
Spiked Amount 6.250			Recovery =	85.728%		
19) Surrogate Recovery (TPH)	9.67	244	557	0.0744	ppb	0.00
Spiked Amount 6.250			Recovery =	1.184%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	42153	4.4238	ppb	100
5) 2-Methylnaphthalene	4.87	142	26671	4.6352	ppb	97
6) 1-Methylnaphthalene	4.97	142	26598	4.5764	ppb	97
9) Acenaphthylene	5.90	152	85088	4.5554	ppb	98
10) Acenaphthene	6.10	154	24957	4.5651	ppb	95
11) Fluorene	6.70	166	30712	4.8180	ppb	95
13) Phenanthrene	7.82	178	46219	5.1253	ppb	97
14) Anthracene	7.88	178	41196	4.5968	ppb	99
16) Fluoranthene	9.20	202	70693	5.0104	ppb	96
18) Pyrene	9.46	202	71531	4.9939	ppb	# 89
20) Benz (a) anthracene	10.88	228	60860	4.7477	ppb	99
21) Chrysene	10.92	228	63475	5.1718	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.79	276	60809	4.8014	ppb	# 89
24) Benzo (b) fluoranthene	12.63	252	58791	4.9849	ppb	98
25) Benzo (k) fluoranthene	12.67	252	61820	5.0829	ppb	99
26) Benzo (a) pyrene	13.20	252	49928	4.4261	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	50484	4.8625	ppb	98
28) Benzo (g,h,i) perylene	15.15	276	49641	4.7335	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

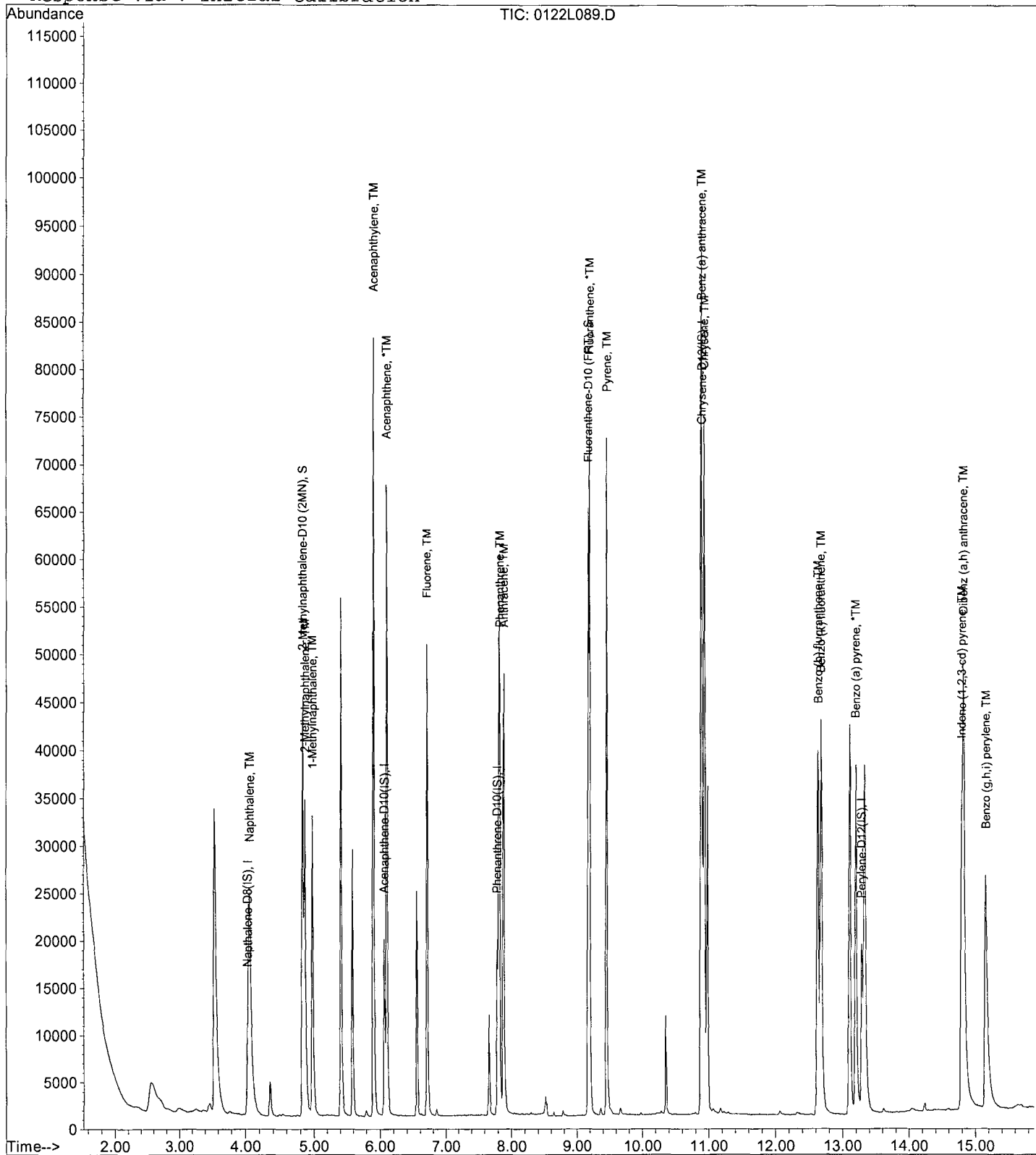
Data File : M:\LINUS\DATA\L190122\0122L089.D  
Acq On : 1 Feb 19 16:40  
Sample : AZ85562W37 MS-2 1/800  
Misc :

Vial: 89  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L090.D Vial: 90  
 Acq On : 1 Feb 19 17:02 Operator: MA  
 Sample : AZ85562W38 MSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	19925	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9048	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17842	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	26816	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	26155	2.5000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.26	82	1019	0.3624	ppb	0.04
Spiked Amount	6.250					
Recovery				=	5.792%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	46389	6.3512	ppb	-0.02
Spiked Amount	6.250					
Recovery				=	101.616%	
8) Surrogate Recovery (FBP)	5.31	172	16	0.0031	ppb	-0.01
Spiked Amount	6.250					
Recovery				=	0.048%	
15) Fluoranthene-D10 (FRT)	9.17	212	67019	6.7086	ppb	-0.02
Spiked Amount	6.250					
Recovery				=	107.344%	
19) Surrogate Recovery (TPH)	9.66	244	176	0.0254	ppb	-0.02
Spiked Amount	6.250					
Recovery				=	0.400%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	43936	5.4716	ppb	99
5) 2-Methylnaphthalene	4.87	142	27920	5.7579	ppb	100
6) 1-Methylnaphthalene	4.97	142	27805	5.6770	ppb	98
9) Acenaphthylene	5.90	152	90982	5.6139	ppb	98
10) Acenaphthene	6.10	154	27170	5.7279	ppb	98
11) Fluorene	6.70	166	33278	6.0168	ppb	97
13) Phenanthrene	7.81	178	49530	6.1741	ppb	100
14) Anthracene	7.87	178	47366	5.9411	ppb	99
16) Fluoranthene	9.20	202	77091	6.1419	ppb	99
18) Pyrene	9.46	202	77863	5.8735	ppb	# 86
20) Benz (a) anthracene	10.88	228	70011	5.9011	ppb	100
21) Chrysene	10.92	228	71940	6.3332	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	71917	6.1355	ppb	89
24) Benzo (b) fluoranthene	12.62	252	66890	5.9179	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	74165	6.3628	ppb	97
26) Benzo (a) pyrene	13.18	252	57960	5.3613	ppb	# 95
27) Dibenz (a,h) anthracene	14.82	278	58953	5.9249	ppb	97
28) Benzo (g,h,i) perylene	15.14	276	58456	5.8162	ppb	# 93

(#) = qualifier out of range (m) = manual integration



Quantitation Report

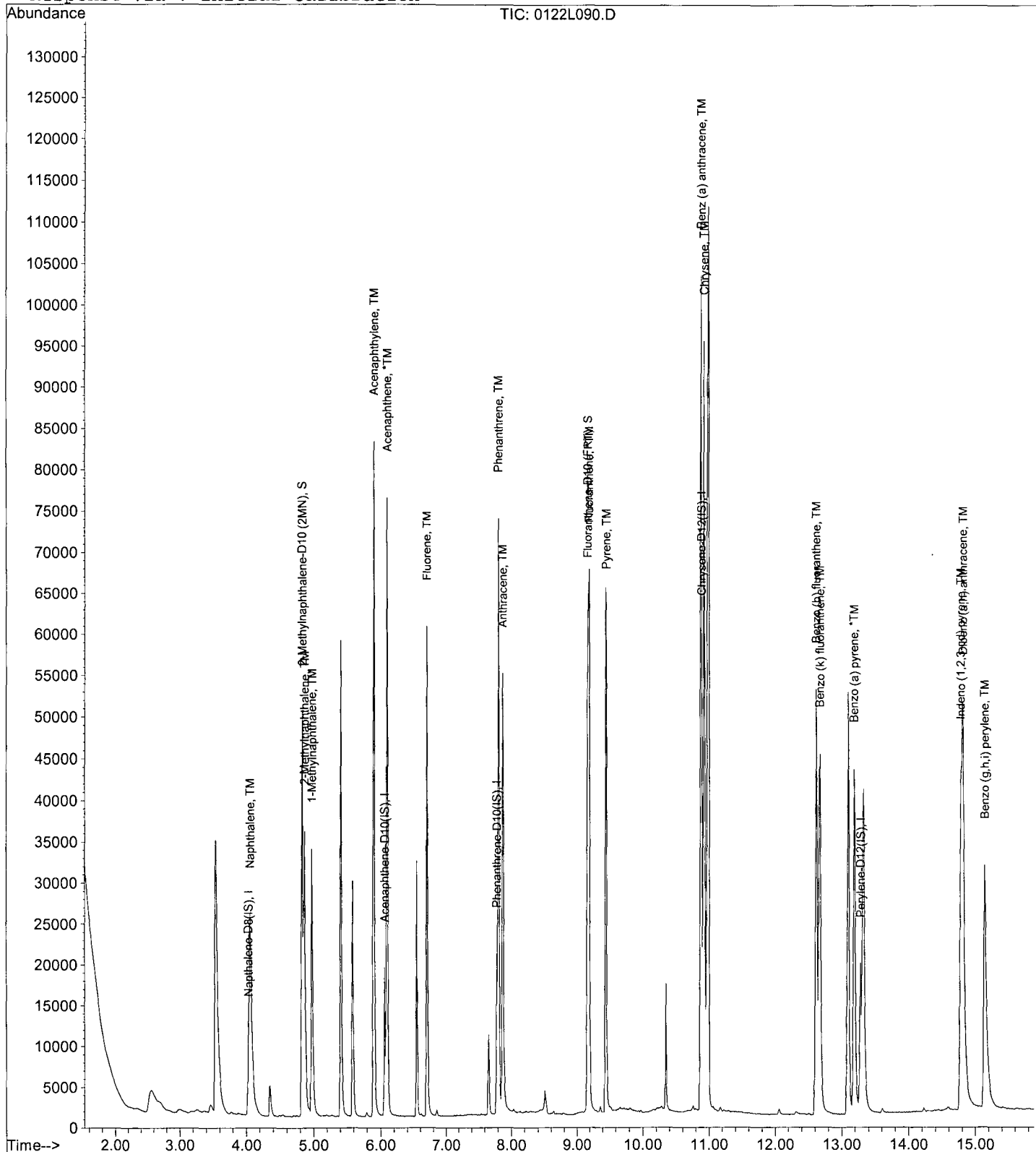
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Acq On : 1 Feb 19 17:02  
Sample : AZ85562W38 MSD-2 1/800  
Misc :

Vial: 90  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

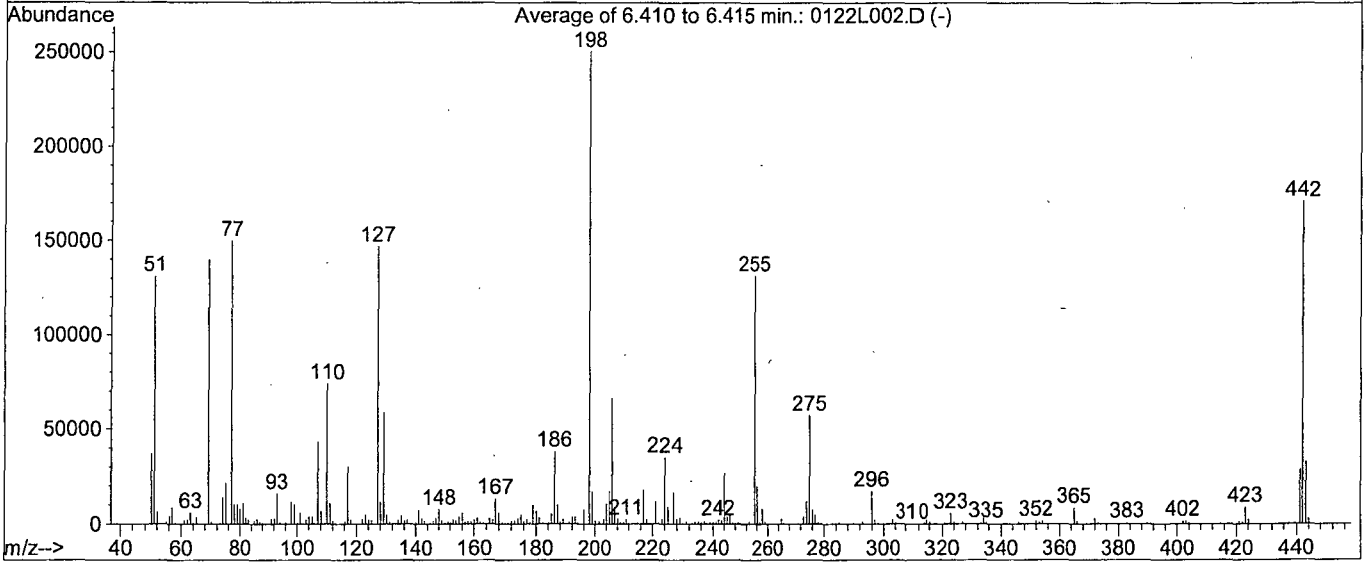
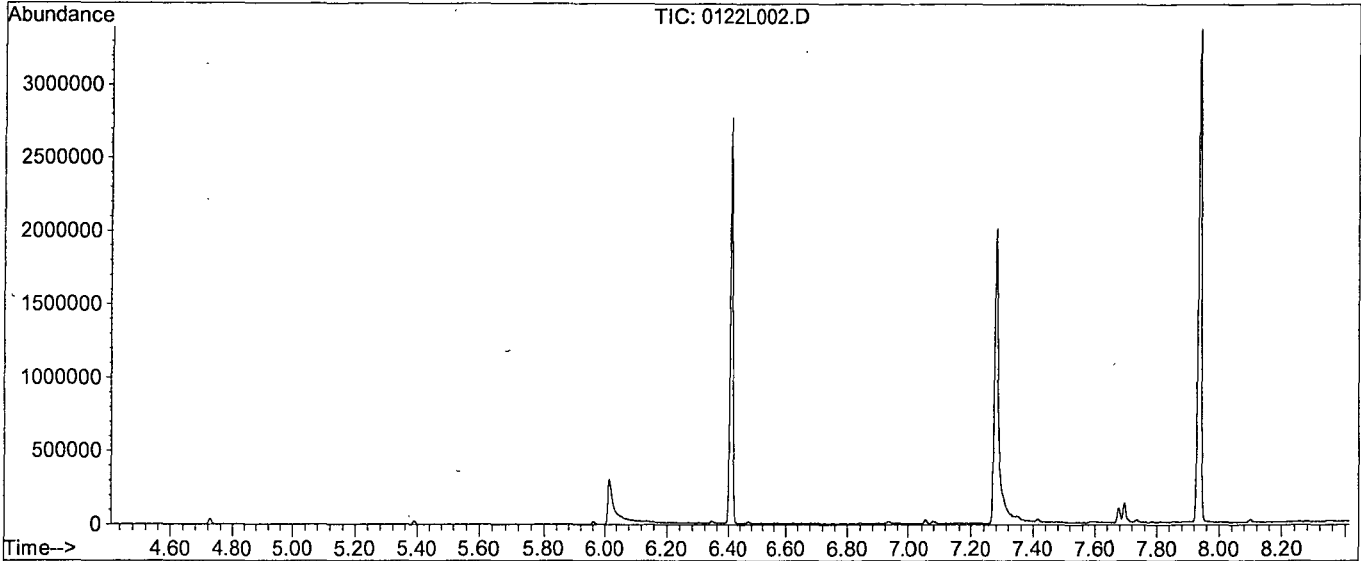
Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L002.D  
 Acq On : 22 Jan 19 9:21  
 Sample : SV Tune 10/11/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0115.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1536, 1537, 1538; Background Corrected with Scan 1526

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	52.3	131012	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.8	1098	PASS
127	198	10	80	58.6	146811	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	250517	PASS
199	198	5	9	6.7	16904	PASS
275	198	10	60	22.8	57021	PASS
365	198	1	100	3.3	8323	PASS
441	442	0.01	24	16.7	28459	PASS
442	198	50	150	68.2	170773	PASS
443	442	15	24	19.2	32747	PASS

Data File Name: 0122L002.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 22 Jan 2019 09:21  
Method File: DFTPP2.M  
Sample Name: SV Tune 10/11/18  
Vial Number: 2  
Instrument Name: Linus

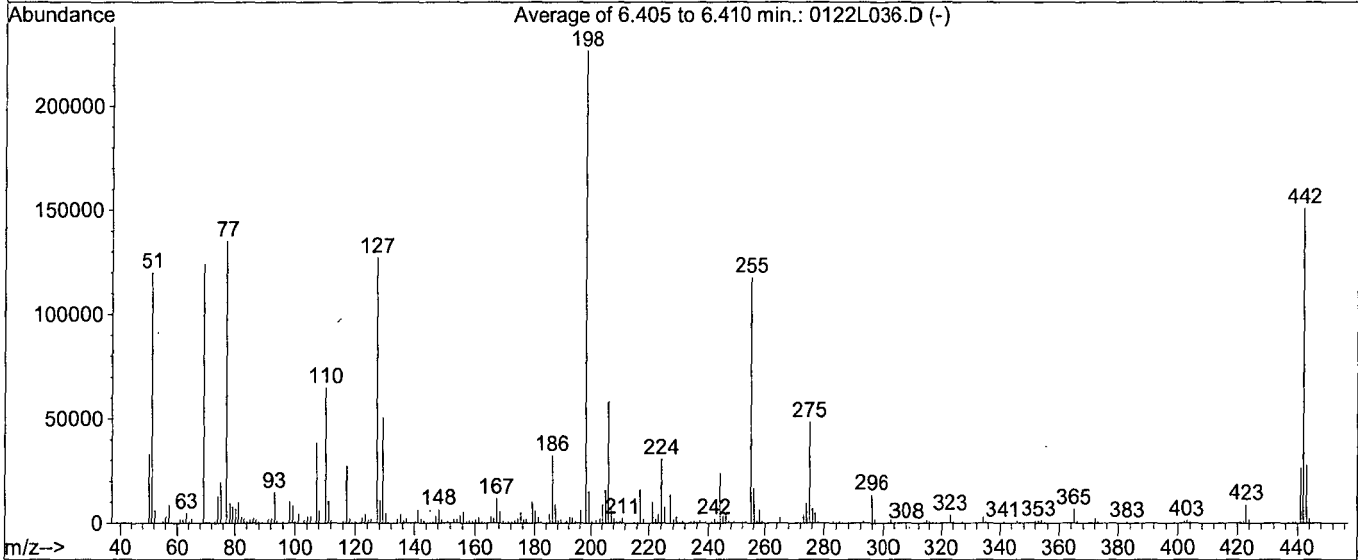
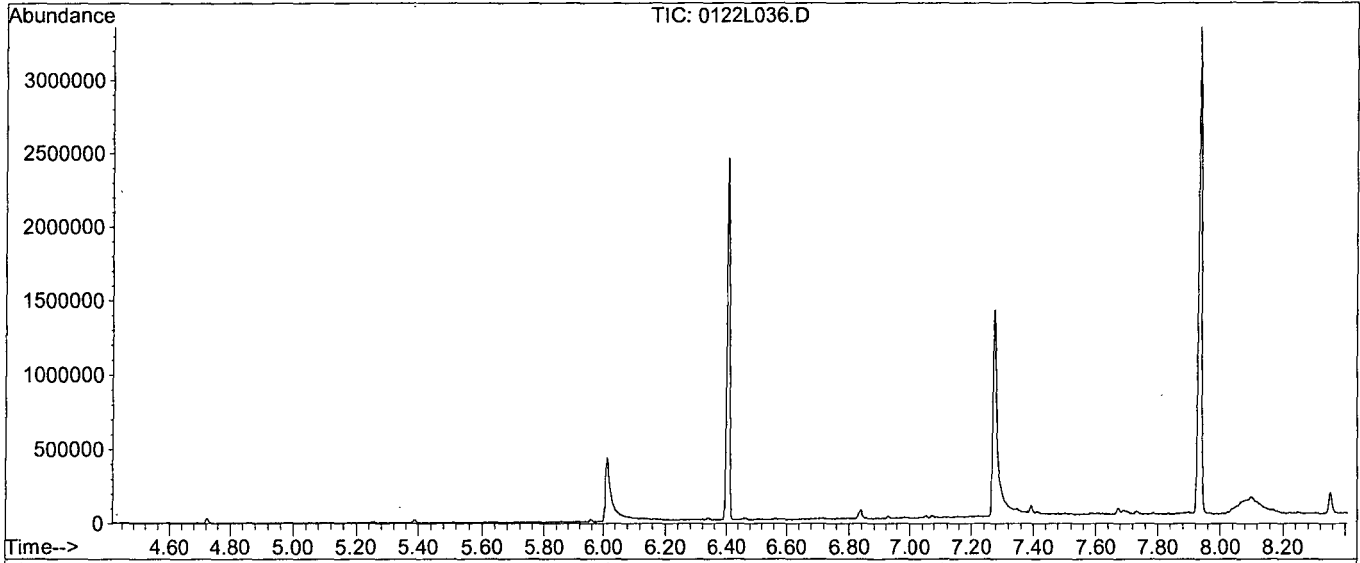
#	Name	Ret Time	Target Response
1)	DDT	7.95	23063100
2)	DDD	7.71	1029070
3)	DDE	7.88	0

Breakdown 4.27

Data File : M:\LINUS\DATA\L190122\0122L036.D  
 Acq On : 30 Jan 19 6:19  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 36  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	52.9	119923	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	338	PASS
127	198	10	80	56.0	127067	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	226816	PASS
199	198	5	9	6.6	15063	PASS
275	198	10	60	21.3	48307	PASS
365	198	1	100	2.9	6619	PASS
441	442	0.01	24	17.5	26315	PASS
442	198	50	150	66.5	150784	PASS
443	442	15	24	18.4	27739	PASS

Data File Name: 0122L036.D  
Data File Path: M:\LINUS\DATA\L190122\  
Operator: MA  
Date Acquired: 30 Jan 2019 06:19  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 36  
Instrument Name: Linus

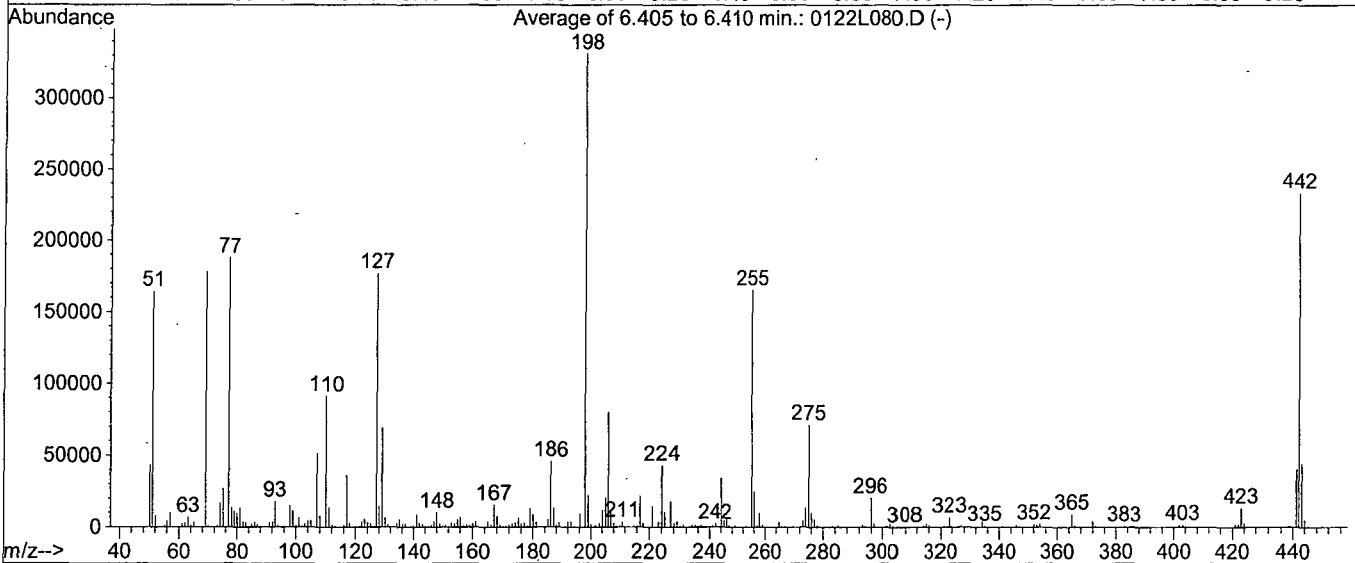
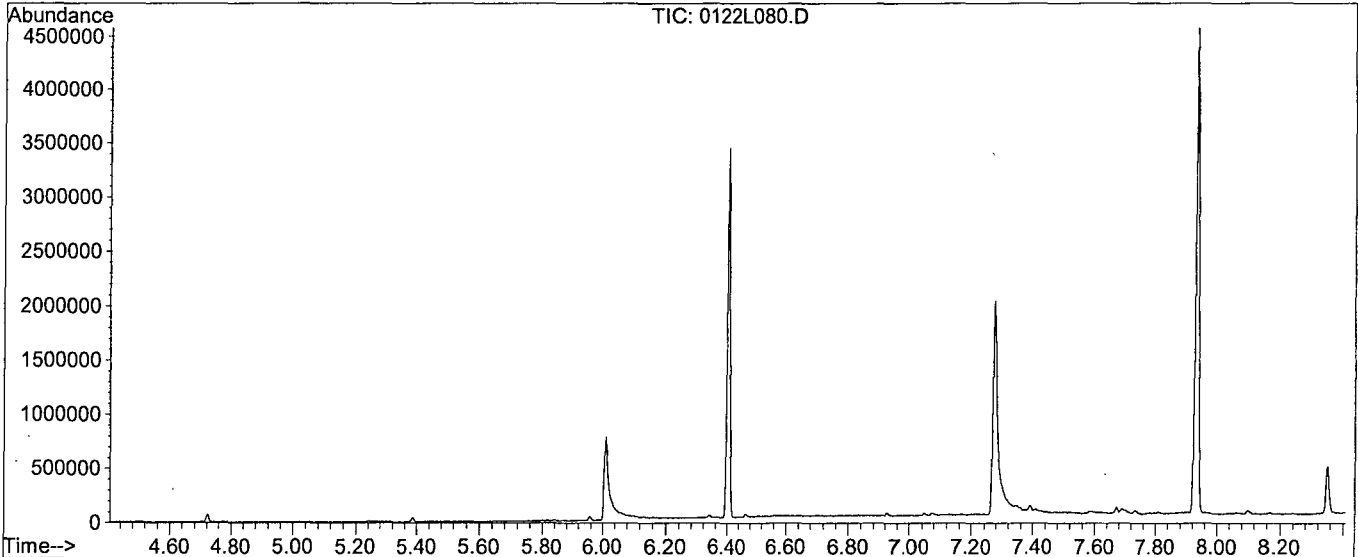
#	Name	Ret Time	Target Response
1)	DDT	7.95	22632300
2)	DDD	7.71	428978
3)	DDE	7.88	0

Breakdown 1.86

Data File : M:\LINUS\DATA\L190122\0122L080.D  
 Acq On : 1 Feb 19 8:11  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 80  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1524

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	49.6	164376	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1000	PASS
127	198	10	80	53.4	176853	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	331477	PASS
199	198	5	9	6.8	22400	PASS
275	198	10	60	21.5	71360	PASS
365	198	1	100	2.7	9004	PASS
441	442	0.01	24	17.2	40272	PASS
442	198	50	150	70.5	233792	PASS
443	442	15	24	19.0	44421	PASS

M:\LINUS\DATA\190122\0122L080.D

Data File Name: 0122L080.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 1 Feb 19 8:11  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 80  
Instrument Name: Linus

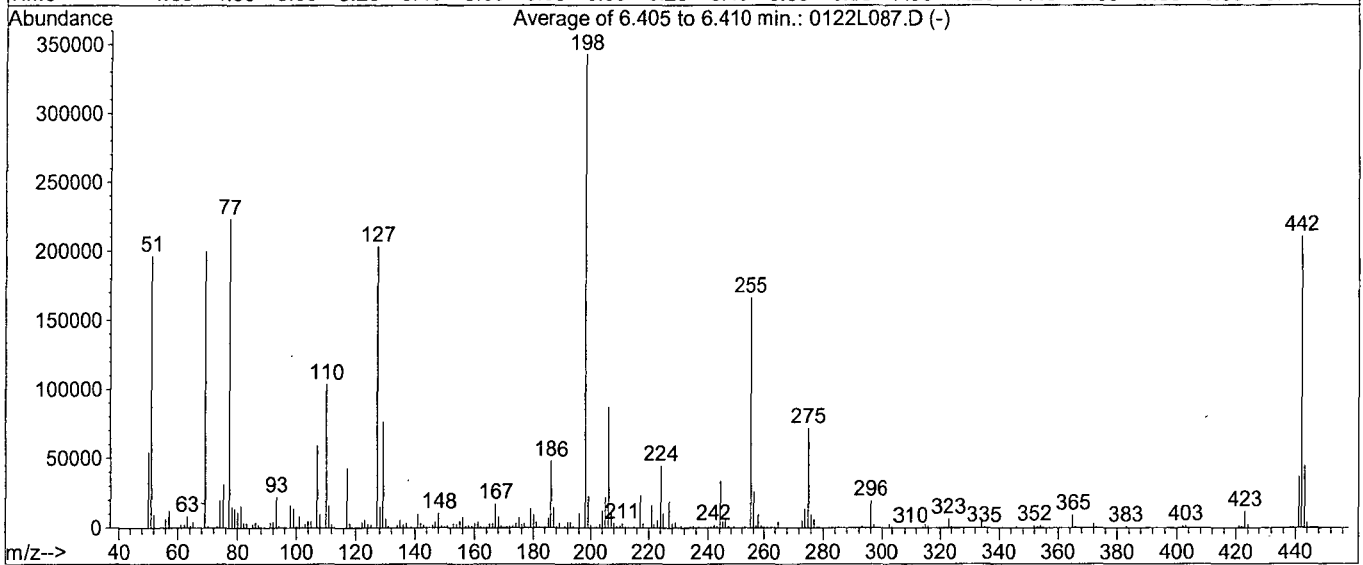
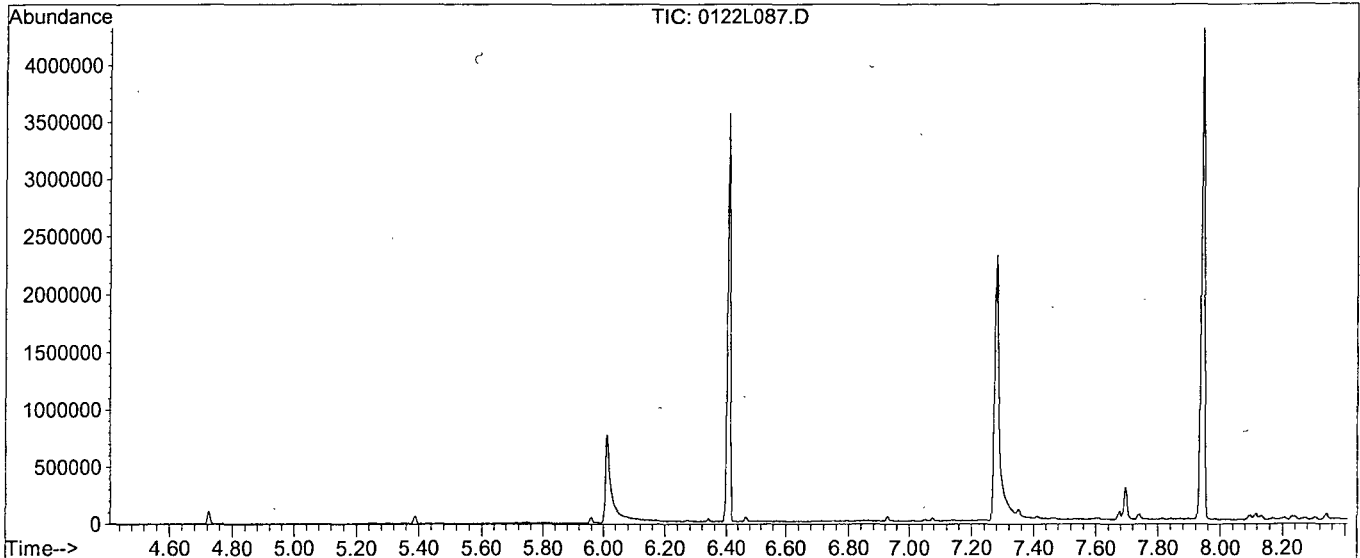
#	Name	Ret Time	Target Response
1)	DDT	7.95	32986500
2)	DDD	7.71	332068
3)	DDE	7.88	0

Breakdown 1.00

Data File : M:\LINUS\DATA\L190122\0122L087.D  
 Acq On : 1 Feb 19 15:16  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 87  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	57.2	196269	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1294	PASS
127	198	10	80	59.3	203264	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	342976	PASS
199	198	5	9	6.6	22656	PASS
275	198	10	60	20.9	71704	PASS
365	198	1	100	2.7	9369	PASS
441	442	0.01	24	17.4	36651	PASS
442	198	50	150	61.4	210624	PASS
443	442	15	24	21.1	44469	PASS



M:\LINUS\DATA\190122\0122L087.D

Data File Name: 0122L087.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 1 Feb 19 15:16  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 87  
Instrument Name: Linus

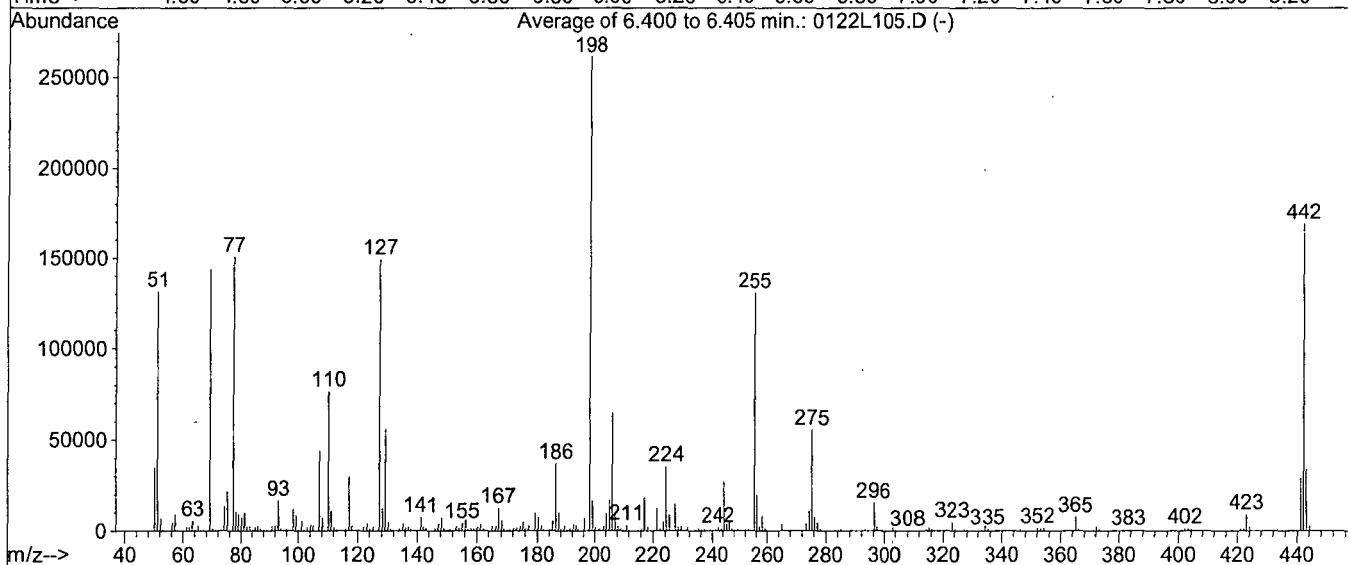
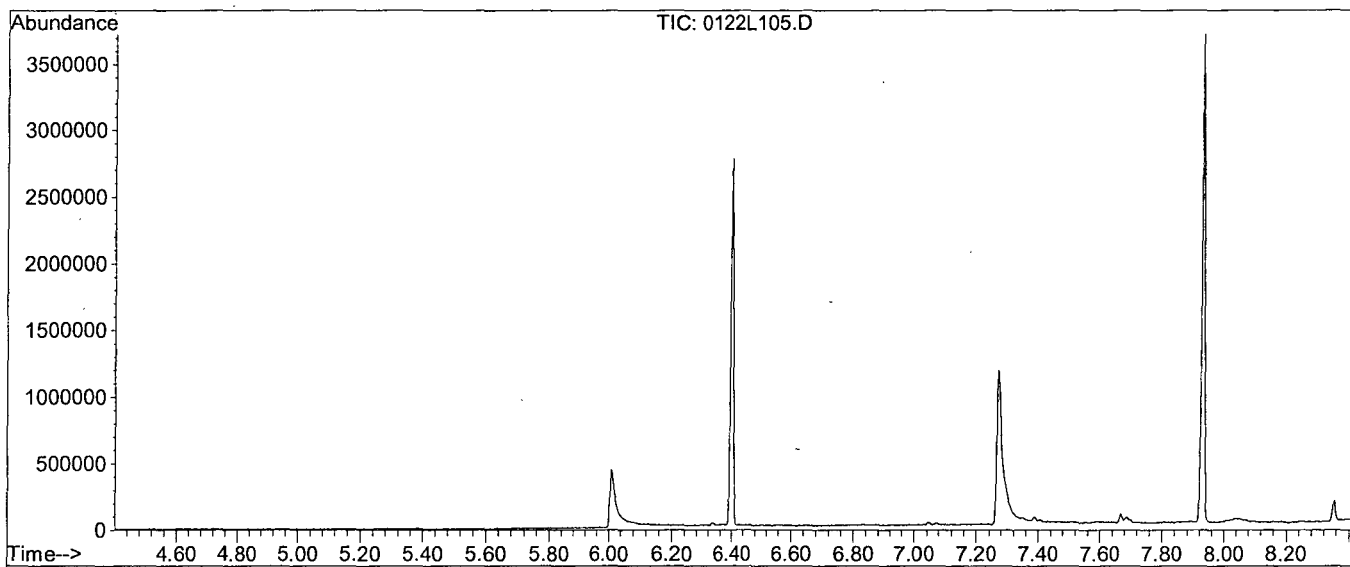
#	Name	Ret Time	Target Response
1)	DDT	7.95	31175900
2)	DDD	7.71	2186160
3)	DDE	7.88	0

Breakdown 6.55

Data File : M:\LINUS\DATA\L190122\0122L105.D  
 Acq On : 4 Feb 19 8:40  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1532, 1533, 1534; Background Corrected with Scan 1523

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	50.2	131244	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.8	1080	PASS
127	198	10	80	57.1	149325	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	261589	PASS
199	198	5	9	6.4	16702	PASS
275	198	10	60	21.2	55421	PASS
365	198	1	100	2.9	7661	PASS
441	442	0.01	24	17.1	28944	PASS
442	198	50	150	64.7	169173	PASS
443	442	15	24	20.0	33797	PASS

Data File Name: 0122L105.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 4 Feb 19 8:40  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 5  
Instrument Name: Linus

#	Name	Ret Time	Target Response
1)	DDT	7.95	23433500
2)	DDD	7.71	509221
3)	DDE	7.88	0

Breakdown 2.13

Name of Final Standard SIM Curve  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	200uL	MC 56258 190 uL	5.0 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	100 uL	MC 56258 90 uL	10 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200	CL13117-40078	12/28/19	25 uL	100uL	MC 56258 50 uL	50 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	25 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	50 uL	100uL	na	100 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	50 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL

Name of Final Standard 8270 PAH SIM Second Source  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	CL13121 - 40082	12/28/19	5 uL	200uL	MC 56258 195uL	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL	*	*	2.5ug/mL

Name of  
Final  
Standard 8270 SIM PAH Internal Standard  
Prep Date 11/06/18  
Exp Date 11/06/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	A0130603-38560	11/06/19	350 uL	5,600 uL	MC-56258 5,250 uL	125 ug/mL

Name of  
Final  
Standard PAH SIM Spike (Ampules)  
Prep Date 12/17/18  
Exp Date 12/17/19

Prep'd By (Initials) OA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01	200 ug/mL	353450-39730	12/17/19	1 mL	1 mL	NA	200ug/mL

Name of  
Final  
Standard

SIM Surrogate

Prep'd By (Initials)

GA

Prep Date 01/24/19

Exp Date 06/07/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0131716 - 38554 A0137718 - 39318	06/07/19 01/24/20	1250 uL	25 mL	Acetone #1017171	100 ug/mL

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190130A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20	Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		yes			
Spiked ID 7		Ext. Start Time:		01/30/19 16:15, 01/31/19 13:00			
Spiked ID 8		Ext. End Time:		01/31/19 10:30, 01/31/19 07:05, 02/01/19 11:20			
		GC Requires Extract By:		01/31/19 0:00			
pH1	2	01/30/19 1:40:00 PM		Water Bath Temp Criteria		73,75 °C	
pH2	14	01/31/19 12:30:00 PM					
pH3							

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
1	190130A Blk			1,0.050	1,2	800	1	2/1	01/30/19 13:30		
					equip	e-wb5 E-HP51					
2	190130A LCS-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30		
					equip	e-wb5 E-HP50					
3	190130A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30		
					equip	e-wb5 E-HP49					
4	190130A LCSD-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30		
					equip	e-wb5 E-HP48					
5	190130A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30		
					equip	e-wb5 E-HP47					
6	AZ85562 MS-1	AZ85562W31	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87940
					equip	e-wb5 E-HP25					
7	AZ85562 MSD-1	AZ85562W33	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87940
					equip	e-wb5 E-HP26					
8	AZ85562 MS-2	AZ85562W37	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87940
					equip	e-wb5 E-HP27					
9	AZ85562 MSD-2	AZ85562W38	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87940
					equip	E-WB5 E-HP28					
10	AZ85562	AZ85562W36		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
					equip	e-wb5 E-HP29					
11	AZ85563	AZ85563W10		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
					equip	E-WB5 E-HP30					
12	AZ85569	AZ85569W22		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
					equip	E-WB5 E-HP17					
13	AZ85643 MS-1	AZ85643W33	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP16					
14	AZ85643 MSD-1	AZ85643W34	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP15					
15	AZ85643 MS-2	AZ85643W35	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP14					
16	AZ85643 MSD-2	AZ85643W30	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP13					

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	02/01/19
Time	11:31
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: Page 411 of 1057 Date 2/1/19

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190130A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20	Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: yes					
Spiked ID 7		Ext. Start Time:	01/30/19 16:15	01/31/19 13:00			
Spiked ID 8		Ext. End Time:	01/31/19 10:30	02/01/19 07:05, 02/01/19 11:20			
		GC Requires Extract By:	01/31/19 0:00				
pH1	2	01/30/19 1:40:00 PM	Water Bath Temp Criteria		73,75 °C		
pH2	14	01/31/19 12:30:00 PM					
pH3							

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85643 AZ85643W32			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP12				
18	AZ85644 AZ85644W07			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP11				
19	AZ85646 AZ85646W21			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP10				
20	AZ85653 AZ85653W20			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP9				
21	AZ85763 AZ85763W10			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP7				
22	AZ85764 AZ85764W10			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP6				
23	AZ85766 AZ85766W24			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP4				

*KG 2/4/19*

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *Page 412 of 1057* Date *2/4/19*



# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	190128A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19			Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19		
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19			Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19		
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19			Surrogate ID 3			
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19			Surrogate ID 4			
Spiked ID 5				Surrogate ID 5			
Spiked ID 6				Sufficient Vol for Matrix QC: NO			
Spiked ID 7				Ext. Start Time:	01/28/19 15:30, 01/29/19 11:15		
Spiked ID 8				Ext. End Time:	01/29/19 10:00, 01/30/19 06:30, 01/30/19 11:00		
				GC Requires Extract By:	01/31/19 0:00		
		pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria	75,77 °C	
		pH2	14	1/29/19 10:30:00 AM			
		pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190128A Blk			1,0.050	1,2	800	1	2/1	01/28/19 14:20	
2	190128A LCS-1	0.250	1	1	1	800	1	2/1	01/28/19 14:20	
3	190128A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
4	190128A LCS-3	0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
5	190128A LCSD-1	0.250	1	1	1	800	1	2/1	01/28/19 14:20	
6	190128A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
7	190128A LCSD-3	0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
8	AZ85404 AZ85404W33			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87916
9	AZ85493 AZ85493W24			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87929
10	AZ85520 AZ85520W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
11	AZ85521 AZ85521W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
12	AZ85523 AZ85523W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
13	AZ85525 AZ85525W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
14	AZ85527 AZ85527W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
15	AZ85560 AZ85560W20			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87935
16	AZ85565 AZ85565W22			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87940

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
I+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	01/30/19
Time	12:50
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *[Signature]*

Date 2/1/19

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C		Extraction Set	190128A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19		Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19		Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19		Surrogate ID 3					
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19		Surrogate ID 4					
Spiked ID 5			Surrogate ID 5					
Spiked ID 6			Sufficient Vol for Matrix QC:		NO			
Spiked ID 7			Ext. Start Time:		01/28/19 15:30, 01/28/19 11:15			
Spiked ID 8			Ext. End Time:		01/29/19 10:00, 01/29/19 00:30, 01/30/19 11:00			
			GC Requires Extract By:		01/31/19 0:00			
			pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria 75,77 °C		
			pH2	14	1/29/19 10:30:00 AM			
			pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85567	AZ85567W22		1,0.050	1,2	800	1	2/1	01/28/19 14:20	87940
						equip		E-HP12 E-WB5		

Ker 21/19

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *KY*

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Date 2/1/19

Ext\_ID

61593

## Injection Log

Directory: M:\LINUS\DATA\190122\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	0122L002.D	1	SV Tune 10/11/18		22 Jan 19 9:21
3	0122L003.D	1	0.1 SIM 01/18/19		22 Jan 19 9:37
4	0122L004.D	1	0.2 SIM 01/18/19		22 Jan 19 9:59
5	0122L005.D	1	0.5 SIM 01/18/19		22 Jan 19 10:21
6	0122L006.D	1	1 SIM 01/18/19		22 Jan 19 10:43
7	0122L007.D	1	5 SIM 01/18/19		22 Jan 19 11:30
8	0122L008.D	1	10 SIM 01/18/19		22 Jan 19 11:53
9	0122L009.D	1	50 SIM 01/18/19		22 Jan 19 12:15
10	0122L010.D	1	100 SIM 01/18/19		22 Jan 19 12:37
11	0122L011.D	1	SS SIM 01/18/19		22 Jan 19 12:59
36	0122L036.D	1	SV TUNE 11/10/18		30 Jan 19 6:19
37	0122L037.D	1	5 SIM 01/18/19		30 Jan 19 6:36
56	0122L056.D	1.25	190128A BLK 1/800		30 Jan 19 13:46
57	0122L057.D	1.25	190128A LCS-2 1/800		30 Jan 19 14:07
58	0122L058.D	1.25	190128A LCSD-2 1/800		30 Jan 19 14:29
59	0122L059.D	1.25	AZ85565W22 1/800		30 Jan 19 14:52
60	0122L060.D	1.25	AZ85567W22 1/800		30 Jan 19 15:14
62	0122L062.D	1	5 SIM 01/18/19		30 Jan 19 15:59
80	0122L080.D	1	SV TUNE 11/10/18		1 Feb 19 8:11
81	0122L081.D	1	5 SIM 01/18/19		1 Feb 19 8:27
84	0122L084.D	1.25	190130A Blk 1/800		1 Feb 19 12:51
85	0122L085.D	1.25	190130A LCS-1 1/800		1 Feb 19 13:13
86	0122L086.D	1.25	190130A LCSD-1 1/800		1 Feb 19 13:35
87	0122L087.D	1.25	SV TUNE 11/10/18		1 Feb 19 15:16
88	0122L088.D	1.25	5 SIM 01/18/19		1 Feb 19 15:32
89	0122L089.D	1.25	AZ85562W37 MS-2 1/800		1 Feb 19 16:40
90	0122L090.D	1.25	AZ85562W38 MSD-2 1/800		1 Feb 19 17:02
91	0122L091.D	1.25	AZ85562W36 1/800		1 Feb 19 17:24
92	0122L092.D	1.25	AZ85563W10 1/809		1 Feb 19 17:47
3	0122L103.D	1.25	5 SIM 01/18/19 (1)		1 Feb 19 21:52
5	0122L105.D	1	SV TUNE 11/10/18		4 Feb 19 8:40
6	0122L106.D	1	5 SIM 01/18/19 (2)		4 Feb 19 8:56
8	0122L108.D	1	AZ85569W22 1/800		4 Feb 19 11:58
15	0122L115.D	1	5 SIM 01/18/19 (2)		4 Feb 19 14:55

**ORGANICS**  
**Calibration Data**

## Semi-Volatile Analysis by GC-MS

EPA 8270

## Form 6

## Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/25/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initials: \_\_\_\_\_

0124Y016.D

0124Y017.D

0124Y018.D

0124Y033.D

0124Y020.D

0124Y015.D

0124Y021.D

0124Y022.D

0124Y023.D

	Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type	r^2	Q	MRF	
1	I 1,4-dichlorobenzene-D4(IS)	ISTD																
2	1,4-Dioxane		0.2010	0.2484	0.1994	0.2178	0.2503	0.2439	0.1987	0.2300		0.22	10					
3	TM n-Nitrosodimethylamine		0.3036	0.3464	0.3472	0.3686	0.3760	0.3802	0.3692	0.4098		0.36	8.6	TM				
4	TM Pyridine		0.6226	0.9649	0.9041	0.8601	0.9985	0.9071	0.8936	0.9876		0.89	13	TM				
5	S 2-Fluorophenol (S)		1.464	1.647	1.696	1.931	1.714	1.935	1.978	1.907		1.8	10	S				
6	S Phenol-D6 (S)		1.955	2.290	2.260	2.539	2.267	2.507	2.532	2.442		2.3	8.5	S				
7	*TM Phenol		2.309	3.261	3.084	3.089	3.172	3.085	3.021	3.188		3.0	9.9	*TM			0.800	
8	TM Aniline		2.291	3.413	3.293	3.218	3.311	3.249	3.188	3.375		3.2	11	TM				
9	TM Bis (2-chloroethyl) ether		1.107	1.513	1.402	1.404	1.463	1.392	1.379	1.490		1.4	9.0	TM			0.700	
10	TM 2-Chlorophenol		1.663	2.317	2.143	2.142	2.214	2.152	2.142	2.311		2.1	9.6	TM			0.800	
11	TM 1,3-DCB		1.862	2.463	2.257	2.276	2.341	2.265	2.278	2.432		2.3	8.1	TM				
12	*TM 1,4-DCB		1.940	2.591	2.299	2.299	2.379	2.314	2.289	2.459		2.3	8.0	*TM				
13	TM Benzyl alcohol		0.9641	1.383	1.344	1.346	1.411	1.369	1.373	1.455		1.3	11	TM				
14	TM 1,2-DCB		1.768	2.340	2.165	2.152	2.212	2.150	2.136	2.280		2.2	7.9	TM				
15	TM 2-Methylphenol		1.393	1.915	1.834	1.841	1.908	1.859	1.837	1.986		1.8	9.9	TM			0.700	
16	TM Bis (2-chloroisopropyl) ether		1.751	2.355	2.130	2.076	2.164	2.068	2.037	2.161		2.1	8.1	TM			0.010	
17	TM Acetophenone		2.287	3.133	2.851	2.790	2.854	2.733	2.701	2.853		2.8	8.5	TM			0.010	
18	TM 3&4-Methylphenol		1.687	2.384	2.207	2.169	2.236	2.161	2.120	2.247		2.2	9.5	TM			0.600	
19	**TM n-Nitrosodi-n-propylamine		1.290	1.739	1.600	1.552	1.616	1.548	1.528	1.628		1.6	8.2	**TM			0.500	
20	TM Hexachloroethane		0.6787	0.9014	0.8397	0.8456	0.8839	0.8545	0.8606	0.9193		0.85	8.7	TM			0.300	
21	I Naphthalene-D8(IS)	ISTD																
22	S Nitrobenzene-D5(S)		0.4172	0.4561	0.4585	0.5041	0.4742	0.4998	0.5077	0.4929		0.48	6.5	S				
23	TM Nitrobenzene		0.4469	0.5751	0.5371	0.5310	0.5810	0.5343	0.5232	0.5564		0.54	7.8	TM			0.200	
24	TM Isophorone		0.7599	0.9777	0.9504	0.9246	1.023	0.9350	0.9196	0.9841		0.93	8.4	TM			0.400	
25	*TM 2-Nitrophenol		0.1948	0.2706	0.2673	0.2678	0.2879	0.2720	0.2649	0.2844		0.26	11	*TM			0.100	
26	TM 2,4-Dimethylphenol		0.3309	0.4574	0.4473	0.4439	0.4880	0.4322	0.4209	0.4700		0.44	11	TM			0.200	
27	TM Benzoic acid			0.2515	0.3383	0.3387	0.3922	0.3729	0.3299	0.3663		0.34	13	TM				
28	TM Bis (2-chloroethoxy) methane		0.4805	0.6305	0.5898	0.5703	0.6237	0.5769	0.5647	0.5992		0.58	8.0	TM			0.300	
29	*TM 2,4-Dichlorophenol		0.2454	0.3924	0.3797	0.3834	0.4214	0.3911	0.3838	0.4066		0.38	14	*TM			0.200	
30	TM 1,2,4-Trichlorobenzene		0.3572	0.4552	0.4197	0.4116	0.4453	0.4123	0.4080	0.4301		0.42	7.1	TM				
31	TM 3,4-Dimethylphenol		0.4569	0.6144	0.5866	0.5901	0.6511	0.6054	0.5866	0.6284		0.59	9.9	TM				
32	TM Naphthalene		1.224	1.541	1.429	1.405	1.534	1.409	1.372	1.442		1.4	7.0	TM			0.700	
33	TM 4-Chloroaniline		0.4196	0.5900	0.5787	0.5395	0.5729	0.5252	0.4856	0.4901		0.53	11	TM			0.010	
34	TM 2,6-Dichlorophenol		0.2964	0.3976	0.3779	0.3724	0.4050	0.3739	0.3662	0.3853		0.37	8.9	TM				
35	TM Hexachloropropene		0.1833	0.2513	0.2596	0.2564	0.2830	0.2654	0.2601	0.2772		0.25	12	TM				

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q
36	*TM	Hexachlorobutadiene		0.1855	0.2329	0.2183	0.2157	0.2306	0.2159	0.2133	0.2276		0.22	6.9	*TM		0.010
37	TM	Caprolactum			0.1761	0.1918	0.1813	0.2044	0.1887	0.1842	0.1967		0.19	5.1	TM		0.010
38	*TM	4-Chloro-3-methylphenol		0.3189	0.4315	0.4287	0.4246	0.4671	0.4341	0.4259	0.4540		0.42	11	*TM		0.200
39	TM	2-Methylnaphthalene		0.7750	0.9767	0.9344	0.9063	0.9850	0.9230	0.8855	0.9371		0.92	7.2	TM		0.400
40	TM	1-Methylnaphthalene		0.7978	0.9910	0.9253	0.9071	0.9825	0.9103	0.8816	0.9236		0.91	6.6	TM		
41	I	Acenaphthene-D10(IS)	ISTD														
42	**TML	Hexachlorocyclopentadiene		0.0268	0.0999	0.2275	0.2530	0.3014	0.2855	0.2979			0.21	51	**TML	0.996	0.050
43	TM	1,2,4,5-Tetrachlorobenzene		0.5955	0.6952	0.6554	0.6773	0.7402	0.6738	0.6303	0.7074		0.67	6.7	TM		0.010
44	*TM	2,4,6-Trichlorophenol		0.3002	0.4102	0.4294	0.4630	0.5087	0.4583	0.4386	0.5003		0.44	15	*TM		0.200
45	TM	2,4,5-Trichlorophenol		0.4330	0.5116	0.4827	0.4976	0.5457	0.4923	0.4709	0.5287		0.50	7.1	TM		0.200
46	S	2-Fluorobiphenyl(S)		1.625	1.611	1.507	1.734	1.604	1.650	1.614	1.613		1.6	3.8	S		
47	TM	1,1'-Biphenyl		1.781	2.065	1.968	2.025	2.175	1.951	1.867	2.049		2.0	6.2	TM		0.010
48	TM	2-Chloronaphthalene		1.378	1.590	1.494	1.548	1.646	1.481	1.423	1.571		1.5	5.9	TM		0.800
49	TM	2-Nitroaniline		0.3769	0.4826	0.4917	0.5116	0.5641	0.4985	0.4806	0.5374		0.49	11	TM		0.010
50	TM	Dimethyl phthalate		1.529	1.833	1.788	1.826	1.980	1.784	1.703	1.879		1.8	7.4	TM		0.010
51	TM	2,6-DNT		0.2877	0.3968	0.4059	0.4128	0.4512	0.4131	0.3984	0.4457		0.40	13	TM		0.200
52	TM	Acenaphthylene		2.072	2.461	2.402	2.474	2.659	2.394	2.275	2.504		2.4	7.2	TM		0.900
53	TM	3-Nitroaniline		0.3376	0.4515	0.4701	0.4800	0.5102	0.4646	0.4380	0.4849		0.45	11	TM		0.010
54	*TM	Acenaphthene		1.424	1.620	1.539	1.584	1.710	1.526	1.442	1.616		1.6	6.1	*TM		0.900
55	**TML	2,4-Dinitrophenol			0.0858	0.1951	0.1966	0.2219	0.2297	0.2173			0.19	28	**TML	0.993	0.010
56	**TM	4-Nitrophenol			0.2666	0.2169	0.2453	0.3062	0.2859	0.2836	0.3294		0.28	14	**TM		0.010
57	TM	Dibenzofuran		2.016	2.307	2.196	2.232	2.383	2.132	2.013	2.186		2.2	5.9	TM		0.800
58	TM	2,4-DNT		0.3898	0.5315	0.5442	0.5489	0.5964	0.5400	0.5147	0.5706		0.53	12	TM		0.200
59	TM	2,3,4,6-Tetrachlorophenol		0.2834	0.3521	0.3620	0.3746	0.4076	0.3725	0.3622	0.4018		0.36	10	TM		0.010
60	TM	Diethyl phthalate		1.482	1.741	1.704	1.730	1.874	1.675	1.580	1.784		1.7	7.1	TM		0.010
61	TM	4-Chlorophenyl phenyl ether		0.7891	0.9079	0.8509	0.8738	0.9244	0.8287	0.7845	0.8542		0.85	5.9	TM		0.400
62	TM	Fluorene		1.610	1.844	1.765	1.800	1.920	1.706	1.609	1.746		1.7	6.2	TM		0.900
63	TM	4-Nitroaniline		0.3704	0.4711	0.4796	0.4923	0.5304	0.4469	0.4228	0.4690		0.46	10	TM		0.010
64	S	2,4,6-Tribromophenol(S)		0.1476	0.1571	0.1526	0.1804	0.1668	0.1735	0.1716	0.1759		0.17	7.2	S		
65	I	Phenanthrene-D10(IS)	ISTD														
66	TM	4,6-Dinitro-2-methylphenol			0.1285	0.1724	0.1795	0.1979	0.1866	0.1812	0.2048		0.18	14	TM		0.010
67	TM	Diphenyl amine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161		0.71	6.3	TM		
68	*TM	n-Nitrosodiphenylamine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161		0.71	6.3	*TM		0.010
69	TM	1,2-Diphenylhydrazine		0.8393	0.9626	0.9494	0.9785	1.077	0.9618	1.037	1.152		0.99	9.5	TM		
70	TM	4-Bromophenyl phenyl ether		0.2070	0.2339	0.2359	0.2466	0.2634	0.2451	0.2263	0.2537		0.24	7.3	TM		0.100

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q
71	TM	Hexachlorobenzene		0.1973	0.2291	0.2190	0.2309	0.2483	0.2277	0.2140	0.2412		0.23	7.1	TM		0.100
72	TM	Atrazine		0.1931	0.2446	0.2396	0.2514	0.2738	0.2448	0.2302	0.2596		0.24	9.8	TM		0.010
73	*TM	Pentachlorophenol			0.1082	0.1268	0.1398	0.1629	0.1475	0.1404	0.1642		0.14	14	*TM		0.050
74	TM	Phenanthrene		1.216	1.392	1.334	1.397	1.499	1.346	1.245	1.387		1.4	6.7	TM		0.700
75	TM	Anthracene		1.230	1.425	1.366	1.438	1.535	1.381	1.283	1.421		1.4	6.8	TM		0.700
76	TM	Carbazol		1.112	1.272	1.251	1.292	1.398	1.257	1.168	1.316		1.3	7.0	TM		0.010
77	TM	Di-n-butylphthalate		1.241	1.480	1.498	1.545	1.690	1.484	1.399	1.543		1.5	8.7	TM		0.010
78	*TM	Fluoranthene		1.277	1.487	1.454	1.489	1.613	1.457	1.344	1.491		1.5	7.0	*TM		0.600
79	I	Chrysene-D12(IS)	ISTD														
80	TM	Benzidine		0.3273	0.5090	0.5365	0.5127	0.5486	0.5087	0.4832	0.5314		0.49	14	TM		
81	TM	Pyrene		1.510	1.711	1.686	1.730	1.876	1.674	1.614	1.782		1.7	6.4	TM		0.600
82	S	Terphenyl-D14(S)		0.9724	0.9816	0.9517	1.100	1.010	1.044	1.040	1.063		1.0	4.9	S		
83	TM	Butyl benzylphthalate		0.5931	0.7238	0.7708	0.7869	0.8621	0.7758	0.7515	0.8250		0.76	11	TM		0.010
84	TM	3,3'-Dichlorobenzidine		0.3876	0.5178	0.5500	0.5455	0.5955	0.5299	0.4962	0.5426		0.52	12	TM		0.010
85	TM	Benz (a) anthracene		1.338	1.486	1.435	1.485	1.664	1.484	1.400	1.553		1.5	6.6	TM		0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.9337	1.069	1.068	1.077	1.217	1.043	0.9862	1.080		1.1	7.7	TM		0.010
87	TM	Chrysene		1.282	1.463	1.453	1.480	1.548	1.436	1.382	1.540		1.4	6.0	TM		0.700
88	*TM	Di-n-octylphthalate		1.339	1.676	1.828	1.873	2.078	1.835	1.774	1.976		1.8	12	*TM		0.010
89	I	Perylene-D12(IS)	ISTD														
90	TM	Benzo (b) fluoranthene		1.259	1.442	1.425	1.498	1.752	1.503	1.399	1.733		1.5	11	TM		0.700
91	TM	Benzo (k) fluoranthene		1.297	1.493	1.470	1.545	1.505	1.401	1.398	1.435		1.4	5.4	TM		0.700
92	*TM	Benzo (a) pyrene	1.270	1.120	1.343	1.345	1.434	1.536	1.372	1.315	1.496		1.4	9.1	*TM		0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.143	1.345	1.386	1.461	1.580	1.400	1.349	1.536		1.4	9.6	TM		0.500
94	TM	Dibenz (a,h) anthracene	1.164	1.060	1.244	1.258	1.335	1.437	1.271	1.222	1.399		1.3	9.2	TM		0.400
95	TM	Benzo (g,h,i) perylene		1.023	1.195	1.224	1.286	1.399	1.232	1.201	1.362		1.2	9.3	TM		0.500
96																	
97																	
98																	
99																	
100																	
101																	
102																	
103																	
104																	
105																	

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y016.D  
 Acq On : 25 Jan 19 9:53  
 Sample : 4ug/mL 8270 01/24/19  
 Misc :

Vial: 16  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:15 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	441679	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1882270	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1025541	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1966994	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1763281	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1696541	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	0.00	112	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
6) Phenol-D6 (S)	0.00	99	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5 (S)	0.00	82	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
46) 2-Fluorobiphenyl (S)	0.00	172	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
64) 2,4,6-Tribromophenol (S)	0.00	330	0d	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
82) Terphenyl-D14 (S)	0.00	244	0d	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
92) Benzo (a) pyrene	15.55	252	215402	4.01854	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	197436	3.98872	ppb	99

(#) = qualifier out of range (m) = manual integration



Quantitation Report

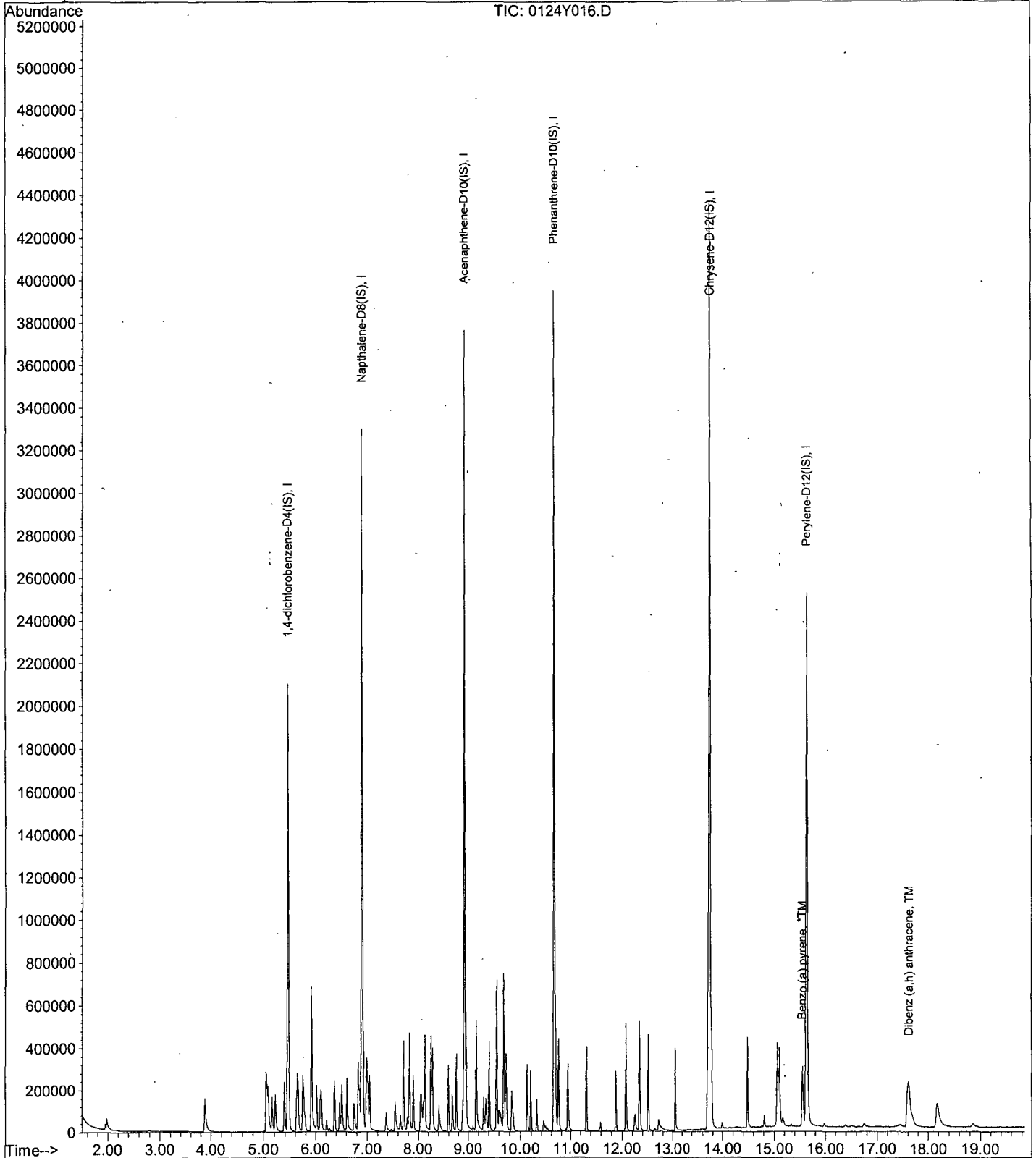
Data File : M:\YODA\DATA\Y190124\0124Y016.D  
Acq On : 25 Jan 19 9:53  
Sample : 4ug/mL 8270 01/24/19  
Misc :

Vial: 16  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:15 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	433806	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1862853	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1024206	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1955322	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1777036	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1697848	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	158780	9.11528	ppb	0.01
Spiked Amount 200.000			Recovery =	4.558%		
6) Phenol-D6 (S)	5.05	99	211993	9.21070	ppb	0.00
Spiked Amount 200.000			Recovery =	4.606%		
22) Nitrobenzene-D5 (S)	6.09	82	97141	4.70950	ppb	0.00
Spiked Amount 100.000			Recovery =	4.710%		
46) 2-Fluorobiphenyl (S)	8.13	172	208026	4.99771	ppb	0.00
Spiked Amount 100.000			Recovery =	4.998%		
64) 2,4,6-Tribromophenol (S)	9.85	330	37804	8.79031	ppb	0.00
Spiked Amount 200.000			Recovery =	4.395%		
82) Terphenyl-D14 (S)	12.52	244	215993	4.65872	ppb	0.00
Spiked Amount 100.000			Recovery =	4.659%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	1090	0.57680		91
3) n-Nitrosodimethylamine	1.95	42	16461	5.13857	ppb	94
4) Pyridine	1.98	79	33762	4.24827	ppb	96
7) Phenol	5.07	94	125184	4.49703	ppb	97
8) Aniline	5.09	93	124237	6.74291	ppb	94
9) Bis (2-chloroethyl) ether	5.16	63	60048	4.34169	ppb	97
10) 2-Chlorophenol	5.23	128	90184	4.67937	ppb	94
11) 1,3-DCB	5.40	146	100957	5.05261	ppb	99
12) 1,4-DCB	5.48	146	105192	5.19009	ppb	99
13) Benzyl alcohol	5.63	108	52278	4.28441	ppb	96
14) 1,2-DCB	5.65	146	95867	5.05812	ppb	99
15) 2-Methylphenol	5.75	107	75528	4.80831	ppb	98
16) Bis (2-chloroisopropyl) et	5.77	45	94938	4.14003	ppb	97
17) Acetophenone	5.91	105	124039	4.96640	ppb	91
18) 3&4-Methylphenol	5.92	107	182967	9.37874	ppb	99
19) n-Nitrosodi-n-propylamine	5.91	70	69974	4.72570	ppb	99
20) Hexachloroethane	6.03	117	36804	4.73413	ppb	96
23) Nitrobenzene	6.11	77	104065	4.95234	ppb	96
24) Isophorone	6.37	82	176946	4.71645	ppb	95
25) 2-Nitrophenol	6.47	139	45356	4.84831	ppb	99
26) 2,4-Dimethylphenol	6.51	122	77050	4.47597	ppb	99
27) Benzoic acid	6.62	105	28927	2.75298	ppb	92
28) Bis (2-chloroethoxy) metha	6.62	93	111881	4.76503	ppb	99
29) 2,4-Dichlorophenol	6.75	162	57137	3.93210	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	83169	5.27706	ppb	96
31) 3,4-Dimethylphenol	6.85	107	106384	4.64367	ppb	97
32) Napthalene	6.93	128	285107	5.16052	ppb	99
33) 4-Chloroaniline	6.99	127	97717	4.63173	ppb	99
34) 2,6-Dichlorophenol	7.00	162	69020	4.84772	ppb	95
35) Hexachloropropene	7.02	213	42691	4.62772	ppb	97
36) Hexachlorobutadiene	7.05	225	43193	5.21952	ppb	97
37) Caprolactum	7.47	55	1195	0.15005	ppb #	36

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	74252	4.55952	ppb	97
39) 2-Methylnaphthalene	7.72	142	180460	5.14530	ppb	99
40) 1-Methylnaphthalene	7.83	142	185768	5.28579	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	3428	5.53579	ppb	88
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	76235	4.71955	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	38434	3.61995	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	55433	4.84840	ppb	97
47) 1,1'-Biphenyl	8.25	154	227953	4.84265	ppb	98
48) 2-Chloronaphthalene	8.28	162	176377	4.92611	ppb	94
49) 2-Nitroaniline	8.40	65	48257	4.02083	ppb	95
50) Dimethyl phthalate	8.60	163	195702	4.76078	ppb	100
51) 2,6-DNT	8.68	165	36830	4.30328	ppb	91
52) Acenaphthylene	8.76	152	265238	4.76003	ppb	97
53) 3-Nitroaniline	8.89	138	43223	4.19099	ppb	97
54) Acenaphthene	8.96	154	182254	4.96067	ppb	99
55) 2,4-Dinitrophenol	9.06	184	658	8.05478	ppb	# 33
56) 4-Nitrophenol	9.15	65	23069	3.17827	ppb	80
57) Dibenzofuran	9.16	168	258059	5.10906	ppb	97
58) 2,4-DNT	9.15	165	49898	4.40819	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	36282	4.29569	ppb	96
60) Diethyl phthalate	9.41	149	189707	4.80021	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	101023	5.14228	ppb	91
62) Fluorene	9.56	166	206121	5.05430	ppb	100
63) 4-Nitroaniline	9.61	138	47426	4.61367	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	17537	2.42073	ppb	96
67) Diphenyl amine	9.69	169	314635	9.52215	ppb	100
68) n-Nitrosodiphenylamine	9.69	169	314635	9.52215	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	205129	4.13217	ppb	97
70) 4-Bromophenyl phenyl ether	10.13	248	50606	4.40498	ppb	89
71) Hexachlorobenzene	10.19	284	48221	4.39067	ppb	91
72) Atrazine	10.32	200	23603	2.09887	ppb	99
73) Pentachlorophenol	10.45	266	16395	2.42031	ppb	95
74) Phenanthrene	10.69	178	297175	4.81234	ppb	100
75) Anthracene	10.74	178	300675	4.74183	ppb	99
76) Carbazol	10.94	167	271825	4.72407	ppb	98
77) Di-n-butylphthalate	11.32	149	303348	4.49966	ppb	99
78) Fluoranthene	12.08	202	312240	4.72269	ppb	98
80) Benzidine	12.25	184	72705	5.45225	ppb	97
81) Pyrene	12.35	202	335405	4.91780	ppb	98
83) Butyl benzylphthalate	13.07	149	131736	4.51371	ppb	90
84) 3,3'-Dichlorobenzidine	13.71	252	86100	4.42832	ppb	98
85) Bis (a) anthracene	13.74	228	297279	5.01836	ppb	98
86) Bis (2-ethylhexyl) phthala	13.72	149	207396	5.26210	ppb	# 95
87) Chrysene	13.78	228	284704	4.80830	ppb	99
88) Di-n-octylphthalate	14.48	149	297371	4.40999	ppb	98
90) Benzo (b) fluoranthene	15.07	252	267244	4.53531	ppb	99
91) Benzo (k) fluoranthene	15.11	252	275294	4.84812	ppb	99
92) Benzo (a) pyrene	15.55	252	237730	4.44308	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.59	276	242506	4.50565	ppb	96
94) Dibenz (a,h) anthracene	17.61	278	224895	4.56524	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	217110	4.50340	ppb	97

Quantitation Report

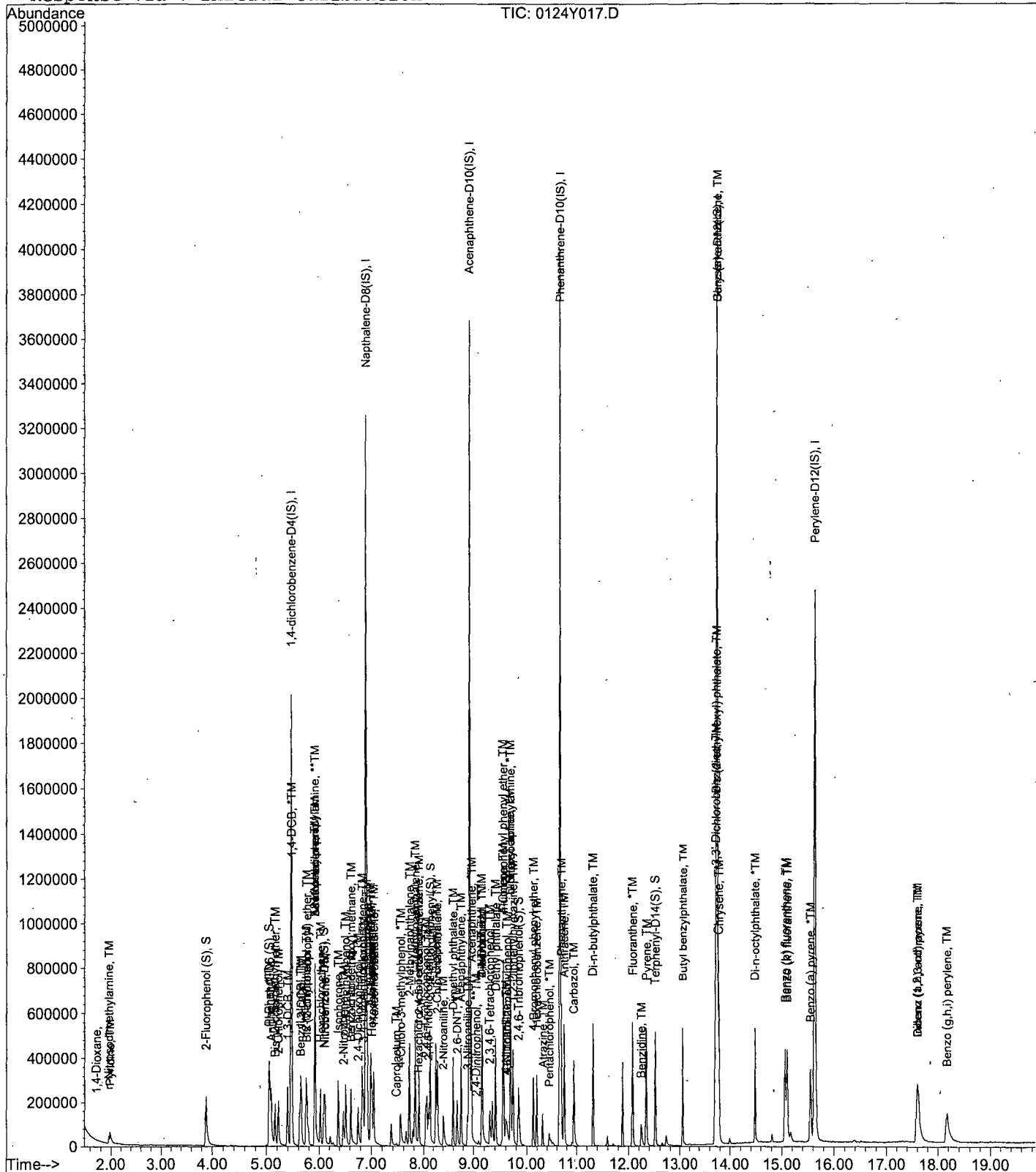
Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	384341	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1739801	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1039183	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2028761	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1850112	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1783876	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	316592	20.53949	ppb	0.00
Spiked Amount 200.000			Recovery =	10.270%		
6) Phenol-D6 (S)	5.05	99	440013	21.66685	ppb	0.00
Spiked Amount 200.000			Recovery =	10.834%		
22) Nitrobenzene-D5 (S)	6.09	82	198391	10.26779	ppb	0.00
Spiked Amount 100.000			Recovery =	10.268%		
46) 2-Fluorobiphenyl (S)	8.13	172	418518	9.97848	ppb	0.00
Spiked Amount 100.000			Recovery =	9.978%		
64) 2,4,6-Tribromophenol (S)	9.85	330	81639	18.82269	ppb	0.00
Spiked Amount 200.000			Recovery =	9.412%		
82) Terphenyl-D14 (S)	12.51	244	454030	9.47395	ppb	0.00
Spiked Amount 100.000			Recovery =	9.474%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	2387	1.43229		93
3) n-Nitrosodimethylamine	1.95	42	33282	11.82047	ppb	93
4) Pyridine	1.97	79	92711	13.48027	ppb	95
7) Phenol	5.06	94	313314	12.97943	ppb	100
8) Aniline	5.09	93	327926	17.05779	ppb	98
9) Bis (2-chloroethyl) ether	5.16	63	145392	12.15860	ppb	96
10) 2-Chlorophenol	5.22	128	222632	13.20506	ppb	99
11) 1,3-DCB	5.39	146	236649	13.46726	ppb	99
12) 1,4-DCB	5.48	146	248996	13.95093	ppb	98
13) Benzyl alcohol	5.62	108	132840	12.48051	ppb	95
14) 1,2-DCB	5.65	146	224867	13.49664	ppb	96
15) 2-Methylphenol	5.75	107	183959	13.32530	ppb	97
16) Bis (2-chloroisopropyl) et	5.76	45	226279	11.57309	ppb	99
17) Acetophenone	5.92	105	301056	13.80954	ppb	87
18) 3&4-Methylphenol	5.91	107	458174	26.98121	ppb	95
19) n-Nitrosodi-n-propylamine	5.91	70	167080	12.97727	ppb	99
20) Hexachloroethane	6.02	117	86615	12.72916	ppb	96
23) Nitrobenzene	6.11	77	250149	12.87562	ppb	94
24) Isophorone	6.38	82	425236	12.32322	ppb	99
25) 2-Nitrophenol	6.47	139	117688	13.32620	ppb	99
26) 2,4-Dimethylphenol	6.51	122	198936	12.56466	ppb	99
27) Benzoic acid	6.63	105	109400	11.81149	ppb	95
28) Bis (2-chloroethoxy) metha	6.62	93	274235	12.76702	ppb	99
29) 2,4-Dichlorophenol	6.75	162	170664	12.99975	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	197991	13.52465	ppb	100
31) 3,4-Dimethylphenol	6.85	107	267251	12.69235	ppb	98
32) Naphthalene	6.92	128	670423	13.15159	ppb	99
33) 4-Chloroaniline	6.99	127	256609	13.35270	ppb	98
34) 2,6-Dichlorophenol	7.00	162	172928	13.15852	ppb	99
35) Hexachloropropene	7.02	213	109295	12.68217	ppb	99
36) Hexachlorobutadiene	7.05	225	101284	13.21557	ppb	99
37) Caprolactum	7.38	55	76598	11.82877	ppb	96

Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	187678	12.50412	ppb	99
39) 2-Methylnaphthalene	7.71	142	424829	13.07207	ppb	100
40) 1-Methylnaphthalene	7.82	142	431022	13.18742	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	25947	8.64993	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	180614	11.32970	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	106564	10.25727	ppb	98
45) 2,4,5-Trichlorophenol	8.09	196	132923	11.57256	ppb	94
47) 1,1'-Biphenyl	8.25	154	536521	11.49396	ppb	99
48) 2-Chloronaphthalene	8.28	162	413165	11.62515	ppb	98
49) 2-Nitroaniline	8.40	65	125367	10.51312	ppb	96
50) Dimethyl phthalate	8.60	163	476215	11.65010	ppb	99
51) 2,6-DNT	8.68	165	103086	11.85231	ppb	85
52) Acenaphthylene	8.76	152	639384	11.52284	ppb	100
53) 3-Nitroaniline	8.88	138	117306	11.40934	ppb	90
54) Acenaphthene	8.96	154	420910	11.54206	ppb	100
55) 2,4-Dinitrophenol	9.02	184	22288	11.33622	ppb	96
56) 4-Nitrophenol	9.15	65	69255	9.85262	ppb	81
57) Dibenzofuran	9.16	168	599251	11.90622	ppb	99
58) 2,4-DNT	9.15	165	138090	11.98503	ppb	92
59) 2,3,4,6-Tetrachlorophenol	9.31	232	91483	10.74912	ppb	99
60) Diethyl phthalate	9.41	149	452309	11.51698	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	235880	12.01438	ppb	96
62) Fluorene	9.56	166	479043	11.78218	ppb	100
63) 4-Nitroaniline	9.60	138	122396	11.95160	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.63	198	65167	9.35947	ppb	97
67) Diphenyl amine	9.69	169	744703	22.27867	ppb	99
68) n-Nitrosodiphenylamine	9.69	169	744703	22.27867	ppb	99
69) 1,2-Diphenylhydrazine	9.74	77	488203	9.83872	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	118641	10.25921	ppb	97
71) Hexachlorobenzene	10.19	284	116191	10.54252	ppb	# 85
72) Atrazine	10.31	200	62029	5.43603	ppb	98
73) Pentachlorophenol	10.44	266	54861	8.42679	ppb	94
74) Phenanthrene	10.68	178	705975	11.26347	ppb	98
75) Anthracene	10.75	178	722528	11.20099	ppb	99
76) Carbazol	10.93	167	645327	11.02334	ppb	98
77) Di-n-butylphthalate	11.32	149	750554	10.93554	ppb	99
78) Fluoranthene	12.08	202	754194	11.20916	ppb	99
80) Benzidine	12.24	184	235410	13.07671	ppb	99
81) Pyrene	12.35	202	791563	11.29349	ppb	100
83) Butyl benzylphthalate	13.08	149	334771	11.08547	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	239496	12.05618	ppb	99
85) Benz (a) anthracene	13.74	228	687210	11.28964	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	494589	11.99644	ppb	99
87) Chrysene	13.78	228	676758	11.17616	ppb	99
88) Di-n-octylphthalate	14.48	149	775210	11.06033	ppb	95
90) Benzo (b) fluoranthene	15.07	252	643284	10.74979	ppb	100
91) Benzo (k) fluoranthene	15.10	252	665843	11.43139	ppb	98
92) Benzo (a) pyrene	15.55	252	599150	10.90497	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	599788	10.86003	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	554735	10.91790	ppb	97
95) Benzo (g,h,i) perylene	18.16	276	532716	10.75641	ppb	99

Quantitation Report

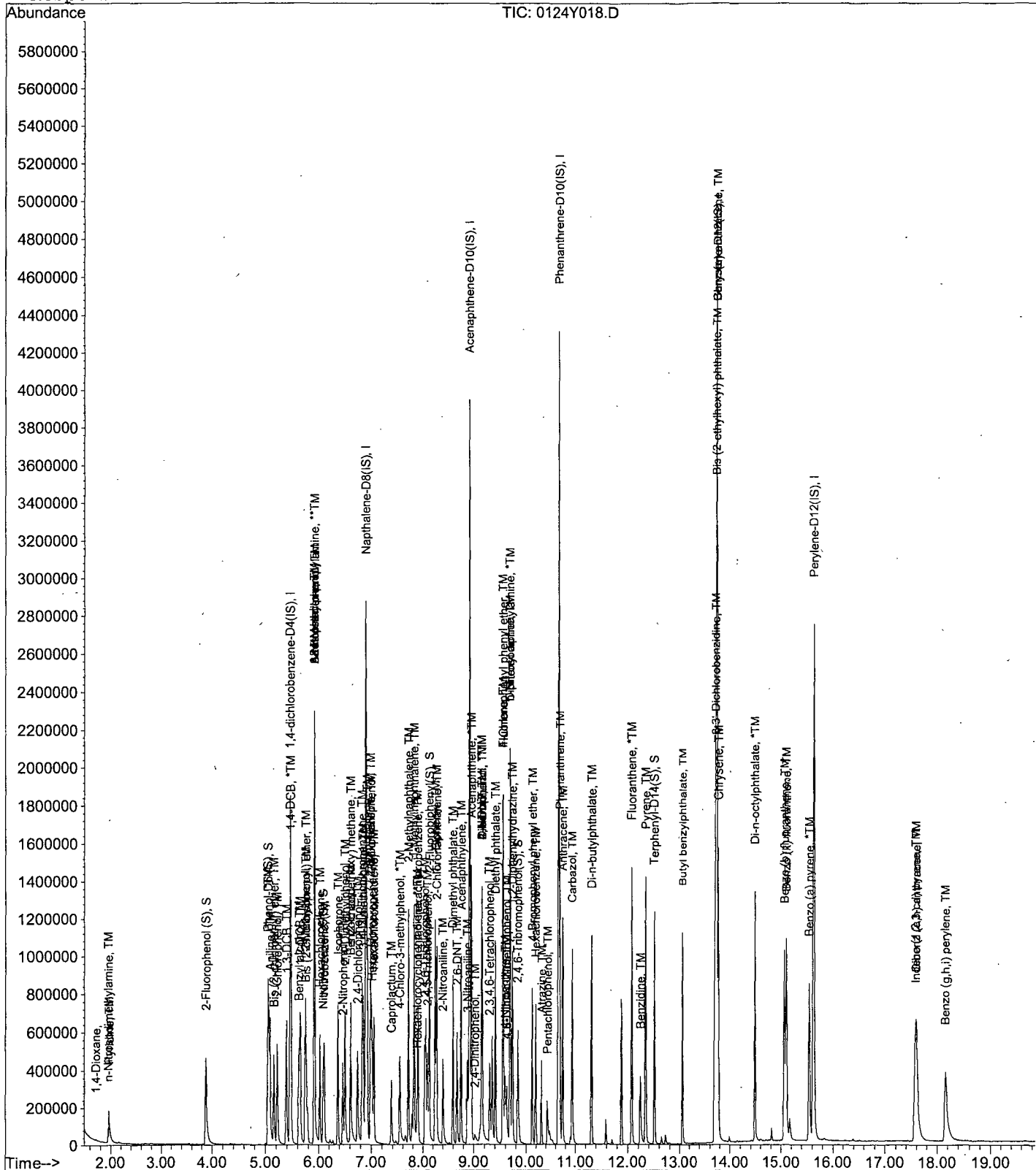
Data File : M:\YODA\DATA\Y190124\0124Y018.D  
Acq On : 25 Jan 19 10:49  
Sample : 10ug/mL 8270 01/24/19  
Misc :

Vial: 18  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y033.D Vial: 33  
 Acq On : 28 Jan 19 13:36 Operator: MA  
 Sample : 20ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 28 13:50 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	636350	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2822233	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1682401	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	3270571	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2912554	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	2895614	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
5) 2-Fluorophenol (S)	3.89	112	1079558	38.19181	ppb	0.02
Spiked Amount	200.000		Recovery	=	19.096%	
6) Phenol-D6 (S)	5.06	99	1438233	38.70168	ppb	0.00
Spiked Amount	200.000		Recovery	=	19.351%	
22) Nitrobenzene-D5 (S)	6.10	82	647018	19.21156	ppb	0.00
Spiked Amount	100.000		Recovery	=	19.212%	
46) 2-Fluorobiphenyl (S)	8.13	172	1267437	18.31256	ppb	0.00
Spiked Amount	100.000		Recovery	=	18.313%	
64) 2,4,6-Tribromophenol (S)	9.85	330	256663	36.47674	ppb	0.00
Spiked Amount	200.000		Recovery	=	18.239%	
82) Terphenyl-D14 (S)	12.51	244	1385929	18.53138	ppb	0.00
Spiked Amount	100.000		Recovery	=	18.531%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	6343	1.78753		40
3) n-Nitrosodimethylamine	1.97	42	110467	19.65117	ppb	99
4) Pyridine	1.99	79	287660	20.82293	ppb	98
7) Phenol	5.07	94	981147	21.01690	ppb	96
8) Aniline	5.10	93	1047674	21.82394	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	446038	20.68812	ppb	94
10) 2-Chlorophenol	5.23	128	681991	20.66769	ppb	97
11) 1,3-DCB	5.39	146	718229	20.40878	ppb	98
12) 1,4-DCB	5.49	146	731607	20.35996	ppb	98
13) Benzyl alcohol	5.62	108	427502	20.86251	ppb	100
14) 1,2-DCB	5.65	146	688805	20.68155	ppb	98
15) 2-Methylphenol	5.75	107	583589	20.77993	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	677853	20.93213	ppb	98
17) Acetophenone	5.92	105	907012	21.16813	ppb	96
18) 3&4-Methylphenol	5.92	107	1404575	42.32633	ppb	100
19) n-Nitrosodi-n-propylamine	5.91	70	508956	21.09969	ppb	96
20) Hexachloroethane	6.02	117	267187	20.37551	ppb	91
23) Nitrobenzene	6.12	77	757965	20.48330	ppb	100
24) Isophorone	6.38	82	1341118	20.81504	ppb	96
25) 2-Nitrophenol	6.47	139	377174	20.80099	ppb	97
26) 2,4-Dimethylphenol	6.52	122	631247	21.01422	ppb	97
27) Benzoic acid	6.64	105	477365	20.56102	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	832246	20.80697	ppb	99
29) 2,4-Dichlorophenol	6.75	162	535793	20.69550	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	592289	20.55579	ppb	99
31) 3,4-Dimethylphenol	6.85	107	827785	20.40945	ppb	99
32) Napthalene	6.92	128	2017143	20.57394	ppb	100
33) 4-Chloroaniline	6.99	127	816613	23.12180	ppb	99
34) 2,6-Dichlorophenol	7.00	162	533260	20.81659	ppb	99
35) Hexachloropropene	7.02	213	366301	20.91040	ppb	100
36) Hexachlorobutadiene	7.05	225	307988	20.51106	ppb	99
37) Caprolactum	7.40	55	270633	20.95717	ppb	97

(#) = qualifier out of range (m) = manual integration



Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	605008	20.75534	ppb	99
39) 2-Methylnaphthalene	7.71	142	1318606	20.92289	ppb	99
40) 1-Methylnaphthalene	7.83	142	1305773	20.69797	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	191376	21.57080	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	551349	19.64363	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	361209	19.89672	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	406036	19.63299	ppb	96
47) 1,1'-Biphenyl	8.25	154	1655511	19.99468	ppb	99
48) 2-Chloronaphthalene	8.28	162	1256537	19.88748	ppb	98
49) 2-Nitroaniline	8.40	65	413623	20.12430	ppb	94
50) Dimethyl phthalate	8.60	163	1504216	20.21148	ppb	100
51) 2,6-DNT	8.68	165	341441	20.51423	ppb	# 80
52) Acenaphthylene	8.76	152	2020333	20.16825	ppb	100
53) 3-Nitroaniline	8.88	138	395406	21.11807	ppb	90
54) Acenaphthene	8.96	154	1294988	19.94266	ppb	99
55) 2,4-Dinitrophenol	9.01	184	164125	22.39567	ppb	93
56) 4-Nitrophenol	9.09	65	182439	16.32491	ppb	99
57) Dibenzofuran	9.16	168	1847609	20.28865	ppb	99
58) 2,4-DNT	9.15	165	457778	20.84223	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.31	232	304485	20.10263	ppb	97
60) Diethyl phthalate	9.42	149	1433219	20.26618	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	715742	20.13953	ppb	98
62) Fluorene	9.56	166	1484736	20.34866	ppb	99
63) 4-Nitroaniline	9.60	138	403406	21.13706	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.63	198	281851	19.79880	ppb	90
67) Diphenyl amine	9.70	169	2288686	39.99363	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2288686	39.99363	ppb	100
69) 1,2-Diphenylhydrazine.	9.74	77	1552599	19.28814	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	385777	20.00697	ppb	96
71) Hexachlorobenzene	10.19	284	358181	19.60977	ppb	# 82
72) Atrazine	10.31	200	195866	10.00458	ppb	98
73) Pentachlorophenol	10.43	266	207382	18.32753	ppb	99
74) Phenanthrene	10.68	178	2181956	19.92184	ppb	99
75) Anthracene	10.75	178	2233354	19.89161	ppb	100
76) Carbazol	10.94	167	2046080	20.08647	ppb	97
77) Di-n-butylphthalate	11.32	149	2449042	20.43049	ppb	100
78) Fluoranthene	12.08	202	2378299	20.22733	ppb	99
80) Benzidine	12.23	184	781270	23.13756	ppb	99
81) Pyrene	12.35	202	2455450	20.10623	ppb	100
83) Butyl benzylphthalate	13.07	149	1122474	20.60463	ppb	86
84) 3,3'-Dichlorobenzidine	13.70	252	800909	22.00303	ppb	# 96
85) Benz (a) anthracene	13.74	228	2089802	19.61471	ppb	100
86) Bis (2-ethylhexyl) phthala	13.72	149	1554697	20.44048	ppb	# 94
87) Chrysene	13.79	228	2116115	20.36358	ppb	99
88) Di-n-octylphthalate	14.48	149	2662183	20.67607	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2063545	19.14984	ppb	99
91) Benzo (k) fluoranthene	15.10	252	2127884	20.66410	ppb	99
92) Benzo (a) pyrene	15.55	252	1946711	20.00326	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	2006323	20.06100	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	1821992	20.10773	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	1772162	20.01866	ppb	100

Quantitation Report

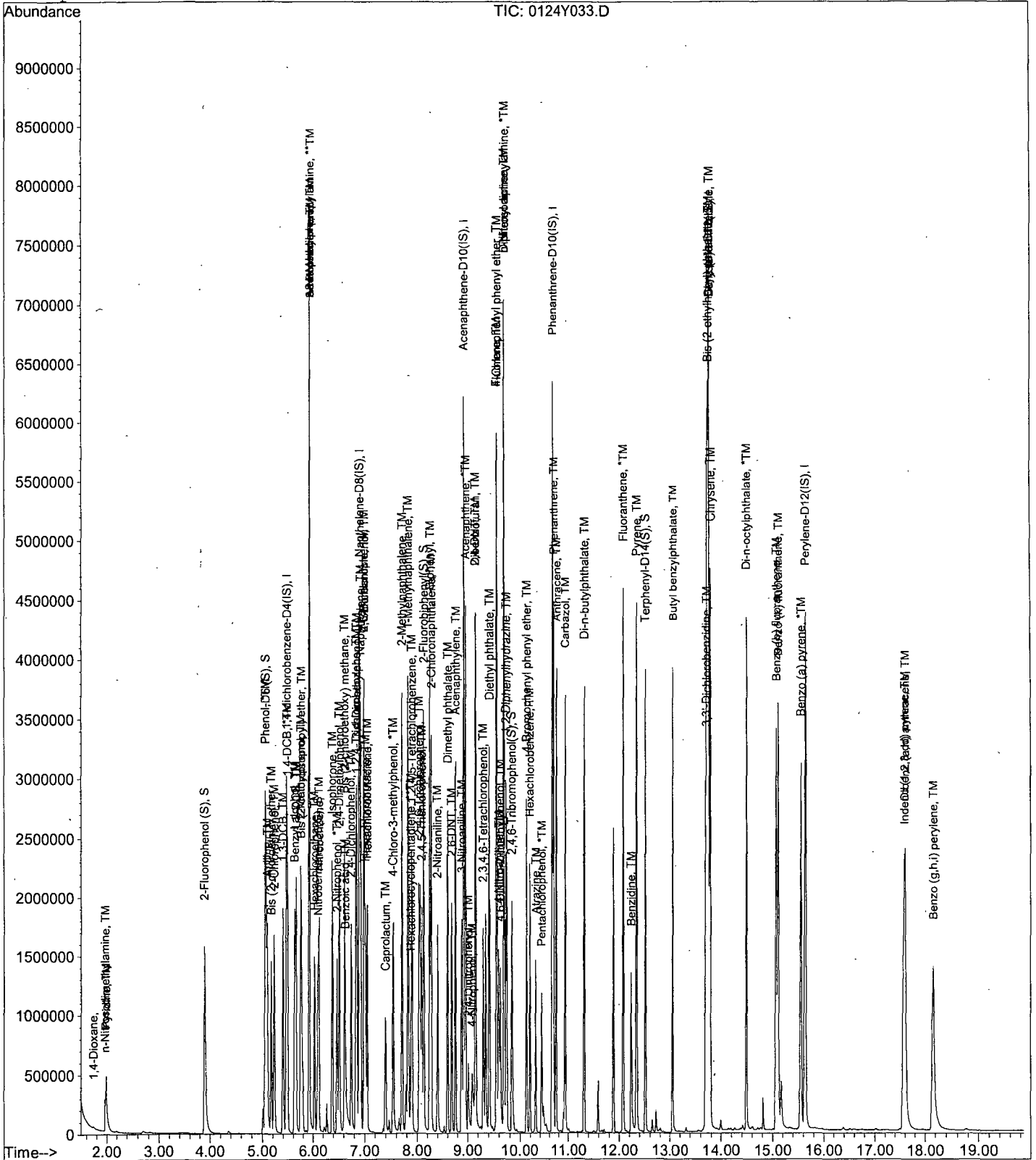
Data File : M:\YODA\DATA\Y190124\0124Y033.D  
Acq On : 28 Jan 19 13:36  
Sample : 20ug/mL 8270 01/24/19  
Misc :

Vial: 33  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y020.D  
 Acq On : 25 Jan 19 11:44  
 Sample : 40ug/mL 8270 01/24/19  
 Misc :

Vial: 20  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	408392	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1826097	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1029111	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1952804	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1752683	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1690710	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.87	112	1576988	96.03480	ppb	0.00
Spiked Amount	200.000		Recovery	=	48.018%	
6) Phenol-D6 (S)	5.05	99	2074169	95.72002	ppb	0.00
Spiked Amount	200.000		Recovery	=	47.860%	
22) Nitrobenzene-D5 (S)	6.09	82	920567	45.10467	ppb	0.00
Spiked Amount	100.000		Recovery	=	45.105%	
46) 2-Fluorobiphenyl (S)	8.13	172	1784780	43.52172	ppb	0.00
Spiked Amount	100.000		Recovery	=	43.522%	
64) 2,4,6-Tribromophenol (S)	9.85	330	371290	88.61400	ppb	0.00
Spiked Amount	200.000		Recovery	=	44.307%	
82) Terphenyl-D14 (S)	12.51	244	1928566	43.95301	ppb	0.00
Spiked Amount	100.000		Recovery	=	43.953%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.71	58	8893	4.60032		85
3) n-Nitrosodimethylamine	1.94	42	150528	46.74232	ppb	96
4) Pyridine	1.96	79	351271	44.18707	ppb	100
7) Phenol	5.07	94	1261343	46.82655	ppb	96
8) Aniline	5.09	93	1314100	62.04190	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	573382	43.98308	ppb	99
10) 2-Chlorophenol	5.22	128	874660	46.11987	ppb	100
11) 1,3-DCB	5.39	146	929323	46.62662	ppb	99
12) 1,4-DCB	5.48	146	938789	46.00154	ppb	99
13) Benzyl alcohol	5.63	108	549797	46.45135	ppb	96
14) 1,2-DCB	5.64	146	878821	46.40937	ppb	99
15) 2-Methylphenol	5.75	107	751943	47.78444	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	847848	41.05298	ppb	100
17) Acetophenone	5.92	105	1139391	46.49578	ppb	97
18) 3&4-Methylphenol	5.92	107	1771636	93.15009	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	633950	44.61799	ppb	99
20) Hexachloroethane	6.03	117	345343	45.34081	ppb	97
23) Nitrobenzene	6.12	77	969667	44.81490	ppb	99
24) Isophorone	6.38	82	1688334	44.66263	ppb	96
25) 2-Nitrophenol	6.47	139	489091	48.03698	ppb	100
26) 2,4-Dimethylphenol	6.52	122	810674	46.22740	ppb	98
27) Benzoic acid	6.65	105	618515	56.35463	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1041352	44.18621	ppb	99
29) 2,4-Dichlorophenol	6.75	162	700142	47.67577	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	751549	45.52085	ppb	98
31) 3,4-Dimethylphenol	6.85	107	1077521	46.09716	ppb	98
32) Naphthalene	6.93	128	2565227	45.16039	ppb	100
33) 4-Chloroaniline	6.99	127	985263	45.18327	ppb	99
34) 2,6-Dichlorophenol	7.00	162	680077	46.24222	ppb	99
35) Hexachloropropene	7.02	213	468255	47.83385	ppb	99
36) Hexachlorobutadiene	7.06	225	393866	45.81648	ppb	98
37) Caprolactum	7.42	55	331158	48.21368	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y020.D  
 Acq On : 25 Jan 19 11:44  
 Sample : 40ug/mL 8270 01/24/19  
 Misc :

Vial: 20  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	775271	46.64409	ppb	99
39) 2-Methylnaphthalene	7.71	142	1654926	45.58868	ppb	100
40) 1-Methylnaphthalene	7.83	142	1656365	45.28050	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	260385	37.52819	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	697052	43.25958	ppb	99
44) 2,4,6-Trichlorophenol	8.04	196	476510	46.12089	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	512115	43.18820	ppb	98
47) 1,1'-Biphenyl	8.25	154	2083441	44.06097	ppb	99
48) 2-Chloronaphthalene	8.28	162	1593407	44.06701	ppb	98
49) 2-Nitroaniline	8.40	65	526512	44.12615	ppb	97
50) Dimethyl phthalate	8.61	163	1878647	44.85122	ppb	100
51) 2,6-DNT	8.69	165	424850	46.29368	ppb	96
52) Acenaphthylene	8.76	152	2546320	45.04805	ppb	100
53) 3-Nitroaniline	8.88	138	493983	46.59969	ppb	93
54) Acenaphthene	8.96	154	1629656	44.02788	ppb	100
55) 2,4-Dinitrophenol	9.01	184	202328	49.83992	ppb	94
56) 4-Nitrophenol	9.09	65	252473	37.36787	ppb	99
57) Dibenzofuran	9.16	168	2296507	44.72552	ppb	99
58) 2,4-DNT	9.15	165	564838	46.45799	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	385457	44.53544	ppb	97
60) Diethyl phthalate	9.42	149	1780276	44.67228	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	899275	44.93476	ppb	95
62) Fluorene	9.56	166	1851974	44.77181	ppb	100
63) 4-Nitroaniline	9.60	138	506599	47.29416	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	350459	51.16538	ppb	92
67) Diphenyl amine	9.70	169	2815867	86.66649	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2815867	86.66649	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1910724	40.62544	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	481519	43.40023	ppb	96
71) Hexachlorobenzene	10.20	284	450841	42.81056	ppb	97
72) Atrazine	10.31	200	245469	21.89136	ppb	98
73) Pentachlorophenol	10.43	266	273044	44.84102	ppb	99
74) Phenanthrene	10.69	178	2727361	44.43391	ppb	99
75) Anthracene	10.75	178	2807769	44.55359	ppb	100
76) Carbazol	10.94	167	2523384	44.09131	ppb	97
77) Di-n-butylphthalate	11.33	149	3017620	44.85844	ppb	100
78) Fluoranthene	12.08	202	2906835	43.98185	ppb	100
80) Benzidine	12.24	184	898587	45.75595	ppb	99
81) Pyrene	12.35	202	3031839	44.58907	ppb	100
83) Butyl benzylphthalate	13.08	149	1379263	46.39175	ppb	97
84) 3,3'-Dichlorobenzidine	13.70	252	956135	47.45949	ppb	# 98
85) Bis (a) anthracene	13.74	228	2602250	44.02477	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	1887612	45.82238	ppb	# 95
87) Chrysene	13.79	228	2593818	44.52277	ppb	100
88) Di-n-octylphthalate	14.48	149	3283408	47.07623	ppb	# 94
90) Benzo (b) fluoranthene	15.07	252	2532432	43.64482	ppb	98
91) Benzo (k) fluoranthene	15.10	252	2611986	46.58763	ppb	98
92) Benzo (a) pyrene	15.55	252	2424047	45.72107	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2469600	46.03273	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2257333	45.81781	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2175059	45.42992	ppb	99

Quantitation Report

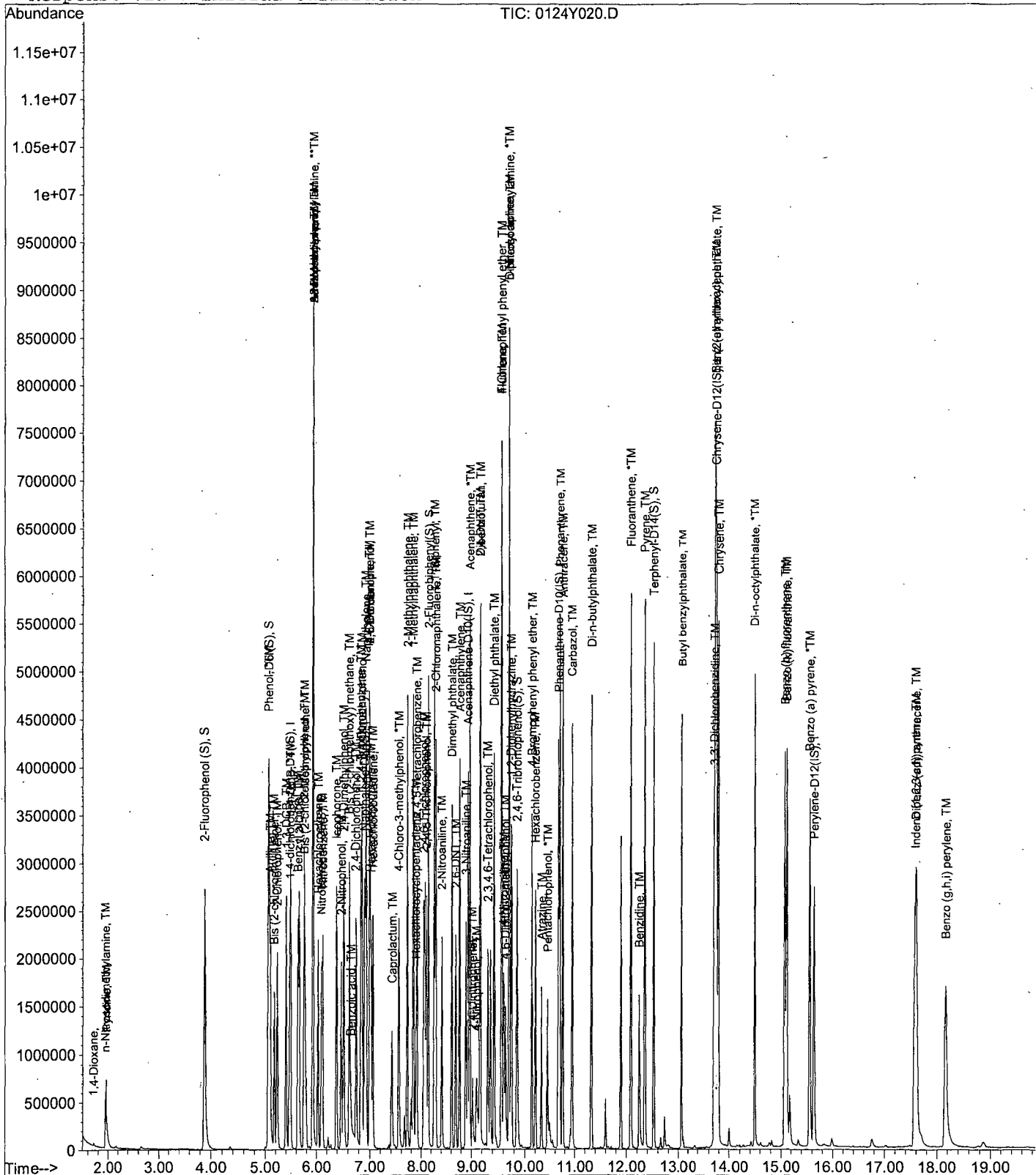
Data File : M:\YODA\DATA\Y190124\0124Y020.D  
Acq On : 25 Jan 19 11:44  
Sample : 40ug/mL 8270 01/24/19  
Misc :

Vial: 20  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y015.D Vial: 15  
 Acq On : 25 Jan 19 7:20 Operator: MA  
 Sample : 50ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 10:13 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	414061	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1774388	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1005371	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1908764	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1698051	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1677536	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.87	112	1774474	106.72722	ppb	0.00
Spiked Amount 200.000			Recovery =	53.363%		
6) Phenol-D6 (S)	5.05	99	2346261	106.80179	ppb	0.00
Spiked Amount 200.000			Recovery =	53.401%		
22) Nitrobenzene-D5 (S)	6.09	82	1051841	53.53683	ppb	0.00
Spiked Amount 100.000			Recovery =	53.537%		
46) 2-Fluorobiphenyl (S)	8.13	172	2016382	49.35001	ppb	0.00
Spiked Amount 100.000			Recovery =	49.350%		
64) 2,4,6-Tribromophenol (S)	9.85	330	419249	99.31143	ppb	0.00
Spiked Amount 200.000			Recovery =	49.656%		
82) Terphenyl-D14 (S)	12.51	244	2143936	48.39314	ppb	0.00
Spiked Amount 100.000			Recovery =	48.393%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	12955	7.18240		100
3) n-Nitrosodimethylamine	1.94	42	194605	63.64599	ppb	100
4) Pyridine	1.96	79	516800	68.12982	ppb	100
7) Phenol	5.07	94	1641696	61.78760	ppb	100
8) Aniline	5.09	93	1713521	82.39935	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	757200	57.35908	ppb	100
10) 2-Chlorophenol	5.22	128	1145751	62.28435	ppb	100
11) 1,3-DCB	5.39	146	1211613	63.52942	ppb	100
12) 1,4-DCB	5.48	146	1231153	63.64076	ppb	100
13) Benzyl alcohol	5.63	108	730277	62.70332	ppb	100
14) 1,2-DCB	5.64	146	1145010	63.29364	ppb	100
15) 2-Methylphenol	5.75	107	987729	65.88002	ppb	100
16) Bis (2-chloroisopropyl) et	5.77	45	1119934	51.16664	ppb	100
17) Acetophenone	5.92	105	1477135	61.96329	ppb	100
18) 3&4-Methylphenol	5.92	107	2314803	124.31319	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	836205	59.16615	ppb	100
20) Hexachloroethane	6.03	117	457500	61.65493	ppb	100
23) Nitrobenzene	6.12	77	1288575	64.37919	ppb	100
24) Isophorone	6.39	82	2269915	63.52050	ppb	100
25) 2-Nitrophenol	6.47	139	638487	71.65350	ppb	100
26) 2,4-Dimethylphenol	6.52	122	1082343	66.00996	ppb	100
27) Benzoic acid	6.66	105	869869	86.91271	ppb	100
28) Bis (2-chloroethoxy) metha	6.62	93	1383448	61.85884	ppb	100
29) 2,4-Dichlorophenol	6.75	162	934592	67.52420	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	987733	65.79606	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1444182	66.18149	ppb	100
32) Napthalene	6.93	128	3403361	64.67306	ppb	100
33) 4-Chloroaniline	6.99	127	1270710	63.23385	ppb	100
34) 2,6-Dichlorophenol	7.00	162	898322	66.24065	ppb	100
35) Hexachloropropene	7.02	213	627626	71.42681	ppb	100
36) Hexachlorobutadiene	7.06	225	511358	64.87426	ppb	100
37) Caprolactum	7.43	55	453404	59.77045	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y015.D  
 Acq On : 25 Jan 19 7:20  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1035975	66.78669	ppb	100
39) 2-Methylnaphthalene	7.71	142	2184777	65.39842	ppb	100
40) 1-Methylnaphthalene	7.83	142	2179083	65.09430	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	378734	51.68775	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	930158	58.66291	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	639238	61.33524	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	685751	61.10232	ppb	100
47) 1,1'-Biphenyl	8.25	154	2732730	59.14192	ppb	100
48) 2-Chloronaphthalene	8.28	162	2068546	58.85563	ppb	100
49) 2-Nitroaniline	8.40	65	708868	60.17019	ppb	100
50) Dimethyl phthalate	8.61	163	2488618	61.67396	ppb	100
51) 2,6-DNT	8.69	165	567043	67.49549	ppb	100
52) Acenaphthylene	8.76	152	3341916	61.09854	ppb	100
53) 3-Nitroaniline	8.88	138	641142	63.33110	ppb	100
54) Acenaphthene	8.96	154	2149307	59.59678	ppb	100
55) 2,4-Dinitrophenol	9.01	184	278852	68.71932	ppb	100
56) 4-Nitrophenol	9.09	65	384761	54.00246	ppb	100
57) Dibenzofuran	9.16	168	2994672	60.39932	ppb	100
58) 2,4-DNT	9.15	165	749501	67.45448	ppb	100
59) 2,3,4,6-Tetrachlorophenol	9.31	232	512262	61.78663	ppb	100
60) Diethyl phthalate	9.42	149	2355039	60.70661	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1161750	60.24333	ppb	100
62) Fluorene	9.56	166	2412535	60.26614	ppb	100
63) 4-Nitroaniline	9.61	138	666535	66.05633	ppb	100
66) 4,6-Dinitro-2-methylphenol	9.64	198	472238	66.77560	ppb	100
67) Diphenyl amine	9.70	169	3715091	115.17640	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3715091	115.17640	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2569030	53.01351	ppb	100
70) 4-Bromophenyl phenyl ether	10.13	248	628479	56.04009	ppb	100
71) Hexachlorobenzene	10.20	284	592346	55.25050	ppb	100
72) Atrazine	10.32	200	326684	29.75859	ppb	100
73) Pentachlorophenol	10.43	266	388571	58.76203	ppb	100
74) Phenanthrene	10.69	178	3576095	59.32245	ppb	100
75) Anthracene	10.75	178	3661605	59.15429	ppb	100
76) Carbazol	10.95	167	3335622	59.38406	ppb	100
77) Di-n-butylphthalate	11.33	149	4032317	61.27161	ppb	100
78) Fluoranthene	12.08	202	3849484	59.64433	ppb	100
80) Benzidine	12.24	184	1164345	61.38179	ppb	100
81) Pyrene	12.35	202	3982978	61.11597	ppb	100
83) Butyl benzylphthalate	13.08	149	1829888	65.61444	ppb	100
84) 3,3'-Dichlorobenzidine	13.71	252	1264021	68.03546	ppb	100
85) Benz (a) anthracene	13.74	228	3532562	62.40700	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2582639	68.57527	ppb	100
87) Chrysene	13.79	228	3286756	58.09122	ppb	100
88) Di-n-octylphthalate	14.49	149	4410272	68.44635	ppb	100
90) Benzo (b) fluoranthene	15.08	252	3673387	63.09472	ppb	100
91) Benzo (k) fluoranthene	15.11	252	3156080	56.25376	ppb	100
92) Benzo (a) pyrene	15.55	252	3221278	60.77698	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3312285	62.28582	ppb	100
94) Dibenz (a,h) anthracene	17.61	278	3013495	61.57009	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2934416	61.60401	ppb	100

Quantitation Report

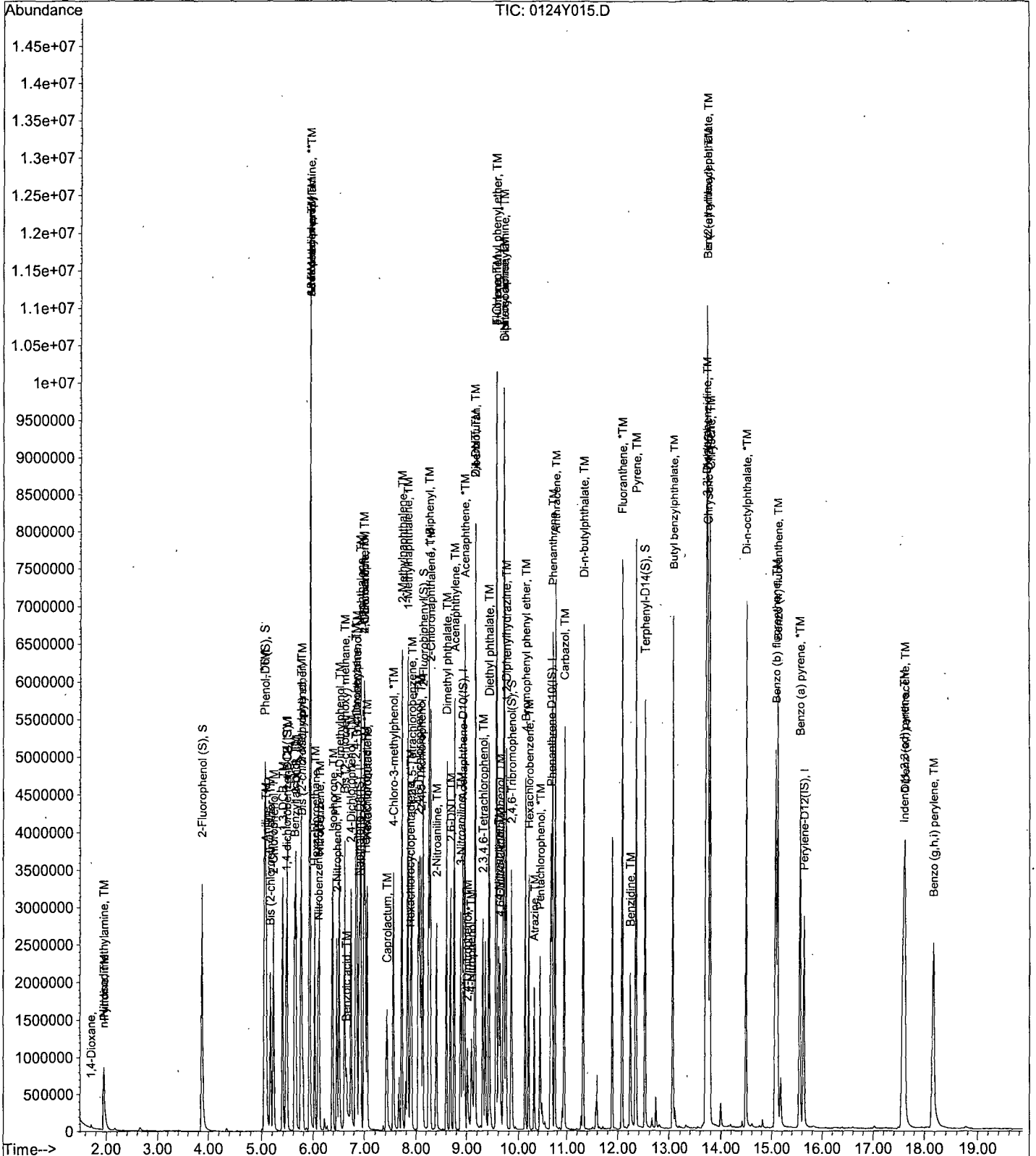
Data File : M:\YODA\DATA\Y190124\0124Y015.D  
Acq On : 25 Jan 19 7:20  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 15  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	411492	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1847622	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1087788	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2043698	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1825170	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1822854	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.88	112	2388786	139.91173	ppb	0.00
Spiked Amount 200.000			Recovery =	69.956%		
6) Phenol-D6 (S)	5.06	99	3094929	137.28392	ppb	0.00
Spiked Amount 200.000			Recovery =	68.642%		
22) Nitrobenzene-D5 (S)	6.10	82	1385267	65.82130	ppb	0.00
Spiked Amount 100.000			Recovery =	65.821%		
46) 2-Fluorobiphenyl (S)	8.14	172	2691759	61.53111	ppb	0.00
Spiked Amount 100.000			Recovery =	61.531%		
64) 2,4,6-Tribromophenol (S)	9.86	330	566249	127.04869	ppb	0.00
Spiked Amount 200.000			Recovery =	63.525%		
82) Terphenyl-D14 (S)	12.51	244	2859499	61.98232	ppb	0.00
Spiked Amount 100.000			Recovery =	61.982%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15055	7.35395		98
3) n-Nitrosodimethylamine	1.94	42	234687	69.57953	ppb	92
4) Pyridine	1.96	79	559879	67.49718	ppb	99
7) Phenol	5.08	94	1903943	67.69059	ppb	90
8) Aniline	5.09	93	2005258	97.05679	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	859457	63.95748	ppb	96
10) 2-Chlorophenol	5.23	128	1328278	67.03092	ppb	95
11) 1,3-DCB	5.39	146	1398342	66.86645	ppb	99
12) 1,4-DCB	5.48	146	1428123	66.71691	ppb	99
13) Benzyl alcohol	5.62	108	844806	68.44766	ppb	99
14) 1,2-DCB	5.65	146	1327093	66.81074	ppb	97
15) 2-Methylphenol	5.75	107	1147188	69.20556	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1276374	60.79362	ppb	# 93
17) Acetophenone	5.92	105	1686876	65.70510	ppb	96
18) 3&4-Methylphenol	5.93	107	2667787	134.04591	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	955387	64.70552	ppb	97
20) Hexachloroethane	6.02	117	527414	66.49643	ppb	92
23) Nitrobenzene	6.12	77	1480669	65.69034	ppb	96
24) Isophorone	6.39	82	2591162	65.95824	ppb	97
25) 2-Nitrophenol	6.47	139	753885	70.14750	ppb	95
26) 2,4-Dimethylphenol	6.52	122	1197903	65.32117	ppb	99
27) Benzoic acid	6.67	105	1033459	86.56029	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1598772	65.35066	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1084013	70.36616	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	1142665	66.06580	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1677901	68.69908	ppb	97
32) Naphthalene	6.92	128	3904346	65.86913	ppb	100
33) 4-Chloroaniline	7.00	127	1455527	64.54043	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1036115	67.19592	ppb	98
35) Hexachloropropene	7.02	213	735631	71.37657	ppb	99
36) Hexachlorobutadiene	7.05	225	598218	66.49856	ppb	99
37) Caprolactum	7.43	55	523076	73.96100	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan'19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1202951	69.24052	ppb	95
39) 2-Methylnaphthalene	7.71	142	2558030	67.41383	ppb	99
40) 1-Methylnaphthalene	7.83	142	2522812	65.98369	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	465849	58.92991	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1099351	63.54491	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	747759	67.19329	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	803269	63.02165	ppb	94
47) 1,1'-Biphenyl	8.25	154	3182683	62.55468	ppb	99
48) 2-Chloronaphthalene	8.28	162	2416128	62.03380	ppb	99
49) 2-Nitroaniline	8.41	65	813392	63.67971	ppb	88
50) Dimethyl phthalate	8.60	163	2911438	64.28604	ppb	99
51) 2,6-DNT	8.69	165	674079	67.65007	ppb	89
52) Acenaphthylene	8.76	152	3906723	63.98517	ppb	100
53) 3-Nitroaniline	8.89	138	758104	66.12012	ppb	90
54) Acenaphthene	8.97	154	2490018	62.43796	ppb	100
55) 2,4-Dinitrophenol	9.02	184	374823	82.05906	ppb	89
56) 4-Nitrophenol	9.09	65	466498	66.71350	ppb	98
57) Dibenzofuran	9.16	168	3479456	62.68371	ppb	98
58) 2,4-DNT	9.16	165	881163	66.74748	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	607779	65.40593	ppb	96
60) Diethyl phthalate	9.43	149	2733586	63.51185	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.56	204	1352119	62.49603	ppb	90
62) Fluorene	9.57	166	2782910	62.35255	ppb	100
63) 4-Nitroaniline	9.62	138	729227	62.72259	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.64	198	571889	76.48129	ppb	91
67) Diphenyl amine	9.71	169	4324107	125.43365	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	4324107	125.43365	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2948425	59.57822	ppb	96
70) 4-Bromophenyl phenyl ether	10.13	248	751419	64.07488	ppb	96
71) Hexachlorobenzene	10.20	284	698037	62.77685	ppb	93
72) Atrazine	10.32	200	375225	31.55538	ppb	99
73) Pentachlorophenol	10.43	266	452076	70.41952	ppb	98
74) Phenanthrene	10.69	178	4126819	63.01664	ppb	100
75) Anthracene	10.75	178	4232567	62.94612	ppb	100
76) Carbazol	10.94	167	3854357	63.29312	ppb	98
77) Di-n-butylphthalate	11.32	149	4548380	63.48597	ppb	99
78) Fluoranthene	12.08	202	4467332	63.49679	ppb	98
80) Benzidine	12.24	184	1392654	66.15707	ppb	97
81) Pyrene	12.35	202	4582066	63.30843	ppb	100
83) Butyl benzylphthalate	13.08	149	2123881	66.71496	ppb	97
84) 3,3'-Dichlorobenzidine	13.71	252	1450726	67.29146	ppb	99
85) Benz (a) anthracene	13.74	228	4063341	64.69439	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2855356	64.56887	ppb	98
87) Chrysene	13.78	228	3930215	63.46061	ppb	100
88) Di-n-octylphthalate	14.49	149	5023122	67.13574	ppb	98
90) Benzo (b) fluoranthene	15.08	252	4110006	64.78398	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3831221	62.41409	ppb	98
92) Benzo (a) pyrene	15.56	252	3751562	64.72168	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.58	276	3829234	65.10334	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	3476233	64.50384	ppb	98
95) Benzo (g,h,i) perylene	18.18	276	3368865	64.36887	ppb	99

Quantitation Report

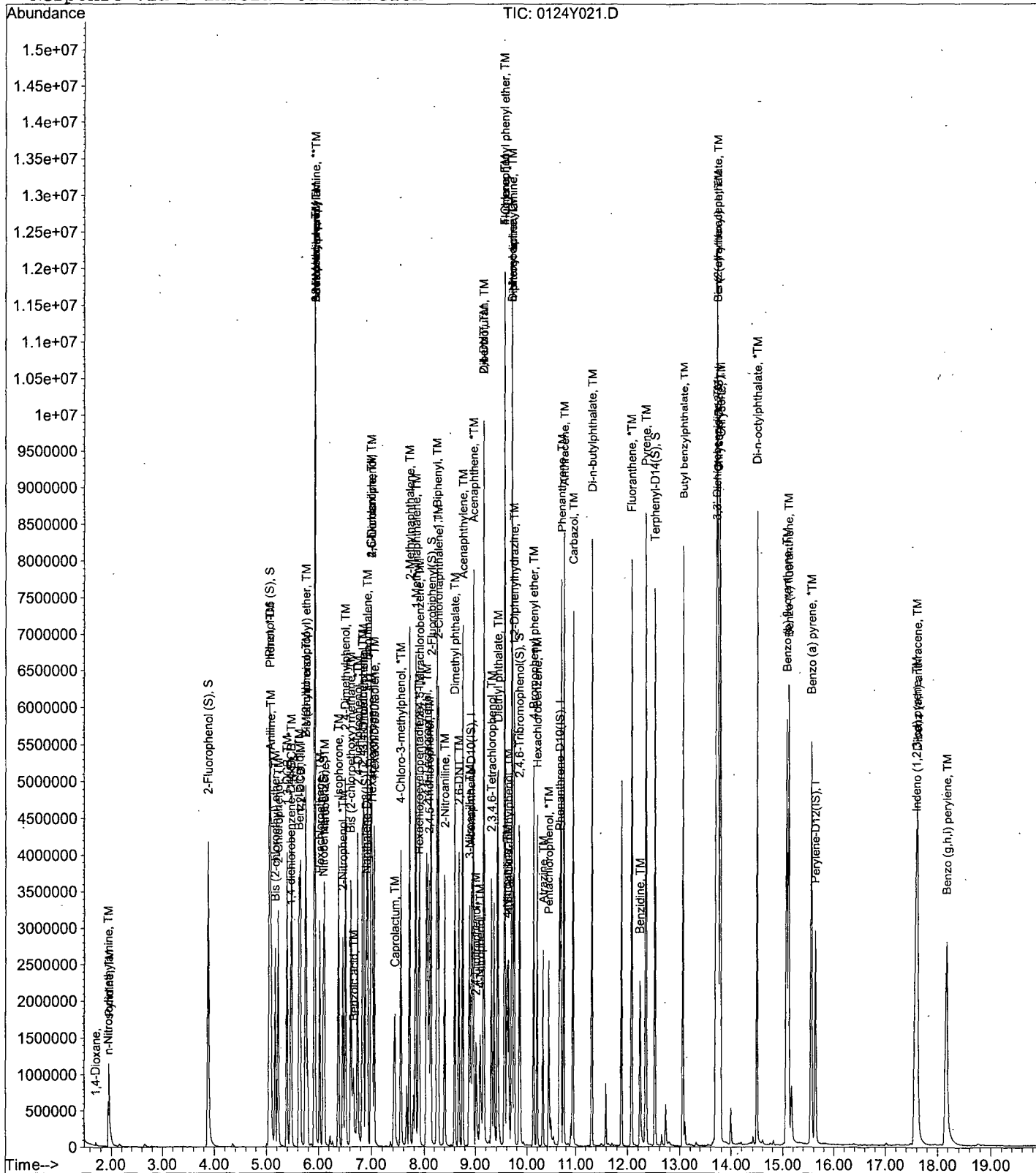
Data File : M:\YODA\DATA\Y190124\0124Y021.D  
Acq On : 25 Jan 19 12:11  
Sample : 60ug/mL 8270 01/24/19  
Misc :

Vial: 21  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y022.D  
 Acq On : 25 Jan 19 12:39  
 Sample : 80ug/mL 8270 01/24/19  
 Misc :

Vial: 22  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	390377	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1776812	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1059625	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2046360	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1763849	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1771022	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	3088976	185.47310	ppb	0.00
Spiked Amount	200.000		Recovery	=	92.737%	
6) Phenol-D6 (S)	5.06	99	3953802	179.89705	ppb	0.00
Spiked Amount	200.000		Recovery	=	89.949%	
22) Nitrobenzene-D5 (S)	6.10	82	1804113	87.68532	ppb	0.00
Spiked Amount	100.000		Recovery	=	87.685%	
46) 2-Fluorobiphenyl (S)	8.14	172	3420176	79.89967	ppb	0.00
Spiked Amount	100.000		Recovery	=	79.900%	
64) 2,4,6-Tribromophenol (S)	9.86	330	727255	167.25732	ppb	0.00
Spiked Amount	200.000		Recovery	=	83.629%	
82) Terphenyl-D14 (S)	12.52	244	3667120	82.00033	ppb	0.00
Spiked Amount	100.000		Recovery	=	82.000%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15511	7.51444		72
3) n-Nitrosodimethylamine	1.94	42	288229	86.04170	ppb	89
4) Pyridine	1.96	79	697679	84.73709	ppb	100
7) Phenol	5.08	94	2358274	85.23173	ppb	91
8) Aniline	5.10	93	2489180	119.40676	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	1076644	82.53804	ppb	95
10) 2-Chlorophenol	5.23	128	1672258	85.80938	ppb	97
11) 1,3-DCB	5.39	146	1778320	86.15822	ppb	98
12) 1,4-DCB	5.49	146	1787289	84.50692	ppb	98
13) Benzyl alcohol	5.63	108	1072292	88.46892	ppb	94
14) 1,2-DCB	5.65	146	1667744	85.09298	ppb	97
15) 2-Methylphenol	5.75	107	1433948	87.27826	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1590546	79.05994	ppb	# 86
17) Acetophenone	5.93	105	2108764	83.42297	ppb	97
18) 3&4-Methylphenol	5.93	107	3310187	168.84789	ppb	100
19) n-Nitrosodi-n-propylamine	5.93	70	1192858	82.57022	ppb	99
20) Hexachloroethane	6.02	117	671891	86.23765	ppb	90
23) Nitrobenzene	6.13	77	1859324	83.03849	ppb	97
24) Isophorone	6.39	82	3268065	83.85452	ppb	99
25) 2-Nitrophenol	6.48	139	941527	87.24439	ppb	94
26) 2,4-Dimethylphenol	6.52	122	1495864	82.27582	ppb	98
27) Benzoic acid	6.69	105	1172491	94.71906	ppb	98
28) Bis (2-chloroethoxy) metha	6.63	93	2006734	82.81745	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1363953	88.32544	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1449991	84.05610	ppb	97
31) 3,4-Dimethylphenol	6.86	107	2084631	85.46152	ppb	98
32) Naphthalene	6.93	128	4875097	82.59448	ppb	100
33) 4-Chloroaniline	7.00	127	1725667	77.69143	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1301355	84.49556	ppb	98
35) Hexachloropropene	7.02	213	924461	89.22651	ppb	99
36) Hexachlorobutadiene	7.05	225	757876	84.43582	ppb	98
37) Caprolactum	7.44	55	654459	93.87552	ppb	100

Data File : M:\YODA\DATA\Y190124\0124Y022.D Vial: 22  
 Acq On : 25 Jan 19 12:39 Operator: MA  
 Sample : 80ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1513654	87.06098	ppb	100
39) 2-Methylnaphthalene	7.71	142	3146756	82.97836	ppb	99
40) 1-Methylnaphthalene	7.83	142	3133044	82.22878	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	631254	78.79714	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1335660	77.68918	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	929432	83.85905	ppb	97
45) 2,4,5-Trichlorophenol	8.10	196	997882	78.83150	ppb	97
47) 1,1'-Biphenyl	8.26	154	3955801	78.21989	ppb	98
48) 2-Chloronaphthalene	8.29	162	3015805	77.95661	ppb	98
49) 2-Nitroaniline	8.41	65	1018616	80.87427	ppb	92
50) Dimethyl phthalate	8.61	163	3609843	79.88493	ppb	99
51) 2,6-DNT	8.70	165	844260	84.43330	ppb	91
52) Acenaphthylene	8.76	152	4822141	79.16164	ppb	100
53) 3-Nitroaniline	8.89	138	928189	81.28531	ppb	94
54) Acenaphthene	8.97	154	3056253	77.17140	ppb	100
55) 2,4-Dinitrophenol	9.02	184	460548	96.14185	ppb	91
56) 4-Nitrophenol	9.10	65	601091	88.48440	ppb	95
57) Dibenzofuran	9.16	168	4265758	77.08443	ppb	97
58) 2,4-DNT	9.16	165	1090701	82.46328	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	767671	83.24367	ppb	95
60) Diethyl phthalate	9.43	149	3348639	78.15623	ppb	100
61) 4-Chlorophenyl phenyl ether	9.56	204	1662617	77.15444	ppb	93
62) Fluorene	9.57	166	3410866	76.86824	ppb	100
63) 4-Nitroaniline	9.62	138	896039	77.75631	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	741553	95.23484	ppb	99
67) Diphenyl amine	9.71	169	5296492	150.79364	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	5296492	150.79364	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	4242116	84.81525	ppb	94
70) 4-Bromophenyl phenyl ether	10.14	248	926151	77.57348	ppb	88
71) Hexachlorobenzene	10.20	284	875905	77.71894	ppb	91
72) Atrazine	10.32	200	471083	38.93444	ppb	98
73) Pentachlorophenol	10.44	266	574673	88.00062	ppb	97
74) Phenanthrene	10.69	178	5093537	76.13277	ppb	100
75) Anthracene	10.75	178	5251660	76.54085	ppb	100
76) Carbazol	10.94	167	4781015	76.94485	ppb	98
77) Di-n-butylphthalate	11.32	149	5725493	78.34953	ppb	99
78) Fluoranthene	12.09	202	5499034	76.51468	ppb	97
80) Benzidine	12.24	184	1704671	73.49542	ppb	97
81) Pyrene	12.35	202	5693688	79.55389	ppb	99
83) Butyl benzylphthalate	13.08	149	2651101	83.69807	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	1750394	81.51398	ppb	98
85) Benz (a) anthracene	13.75	228	4939935	79.29669	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	3478919	78.91435	ppb	98
87) Chrysene	13.79	228	4874253	79.65689	ppb	99
88) Di-n-octylphthalate	14.49	149	6257268	83.98293	ppb	97
90) Benzo (b) fluoranthene	15.07	252	4954951	78.33436	ppb	99
91) Benzo (k) fluoranthene	15.12	252	4952396	81.94906	ppb	99
92) Benzo (a) pyrene	15.56	252	4659102	81.23823	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.59	276	4779081	81.77579	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	4328036	81.09588	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	4252951	81.97289	ppb	99

Quantitation Report

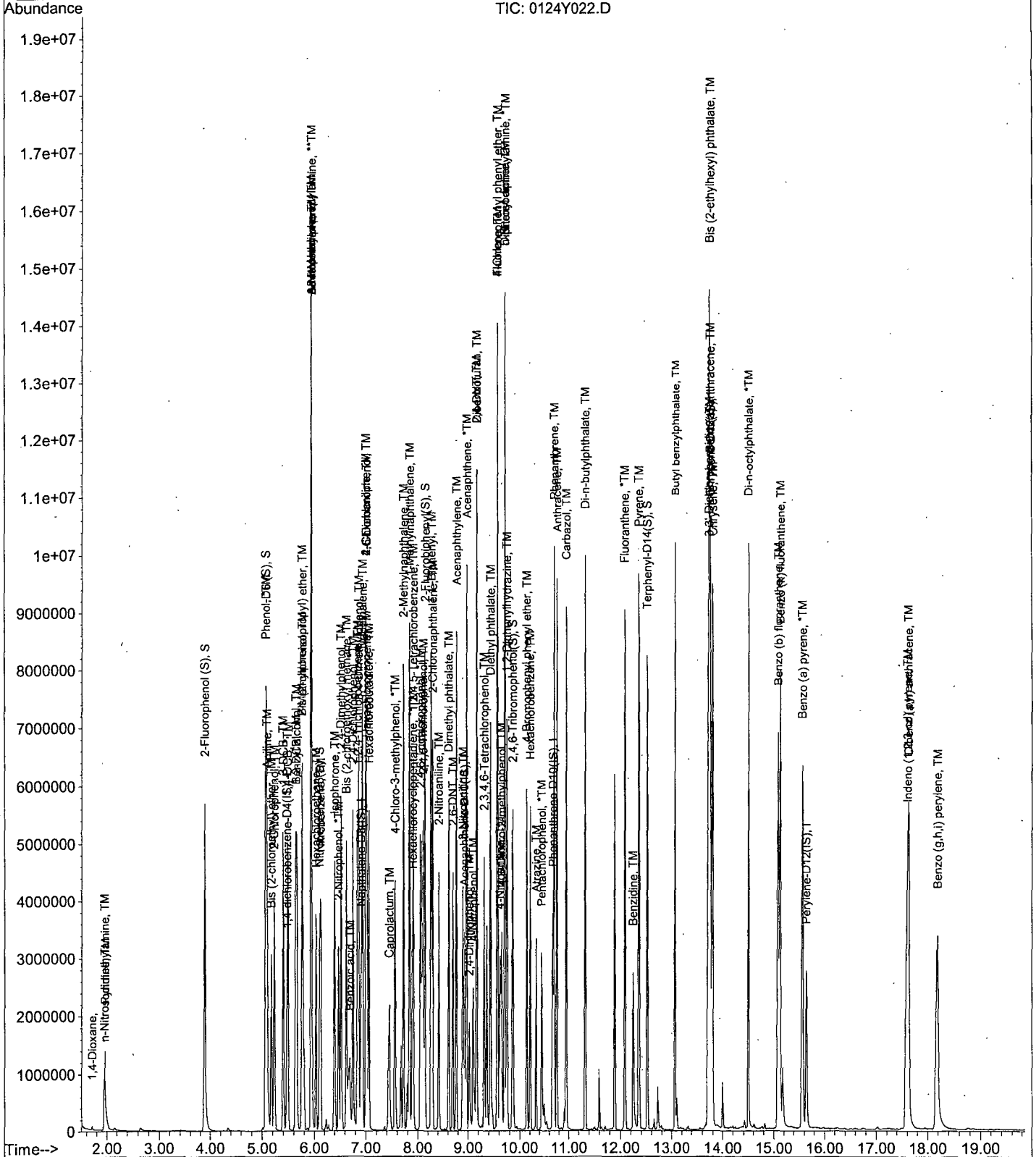
Data File : M:\YODA\DATA\Y190124\0124Y022.D  
Acq On : 25 Jan 19 12:39  
Sample : 80ug/mL 8270 01/24/19  
Misc :

Vial: 22  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	369028	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1684122	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	958383	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	1833191	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1593355	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1574038	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	3517772	218.05743	ppb	0.00
Spiked Amount	200.000					
				Recovery	= 109.029%	
6) Phenol-D6 (S)	5.07	99	4506620	212.13191	ppb	0.02
Spiked Amount	200.000					
				Recovery	= 106.066%	
22) Nitrobenzene-D5 (S)	6.10	82	2075102	104.76853	ppb	0.00
Spiked Amount	100.000					
				Recovery	= 104.769%	
46) 2-Fluorobiphenyl (S)	8.14	172	3864993	99.49368	ppb	0.00
Spiked Amount	100.000					
				Recovery	= 99.494%	
64) 2,4,6-Tribromophenol (S)	9.86	330	843089	213.66568	ppb	0.00
Spiked Amount	200.000					
				Recovery	= 106.833%	
82) Terphenyl-D14 (S)	12.52	244	4235562	104.75775	ppb	0.00
Spiked Amount	100.000					
				Recovery	= 104.758%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	21223	10.61042		85
3) n-Nitrosodimethylamine	1.95	42	378062	115.37176	ppb	78
4) Pyridine	1.96	79	911139	113.60957	ppb	98
7) Phenol	5.09	94	2940939	109.44414	ppb	# 75
8) Aniline	5.10	93	3113942	135.46800	ppb	96
9) Bis (2-chloroethyl) ether	5.17	63	1375041	109.91033	ppb	98
10) 2-Chlorophenol	5.23	128	2131761	112.54263	ppb	98
11) 1,3-DCB	5.39	146	2244057	111.37429	ppb	98
12) 1,4-DCB	5.49	146	2268718	110.04841	ppb	98
13) Benzyl alcohol	5.63	108	1342620	113.91313	ppb	99
14) 1,2-DCB	5.65	146	2103625	110.13676	ppb	98
15) 2-Methylphenol	5.75	107	1832669	113.94939	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1993329	104.61607	ppb	# 76
17) Acetophenone	5.93	105	2632203	106.93049	ppb	90
18) 3&4-Methylphenol	5.94	107	4146604	217.27081	ppb	97
19) n-Nitrosodi-n-propylamine	5.93	70	1501508	107.49302	ppb	98
20) Hexachloroethane	6.02	117	848109	112.09751	ppb	89
23) Nitrobenzene	6.13	77	2342621	107.56140	ppb	100
24) Isophorone	6.40	82	4143509	109.37870	ppb	97
25) 2-Nitrophenol	6.48	139	1197455	113.03844	ppb	96
26) 2,4-Dimethylphenol	6.53	122	1978968	112.13683	ppb	99
27) Benzoic acid	6.70	105	1542045	125.57459	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2522989	107.22198	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1711713	112.94899	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	1811029	107.19704	ppb	98
31) 3,4-Dimethylphenol	6.86	107	2645726	110.94561	ppb	100
32) Napthalene	6.93	128	6069171	105.32980	ppb	100
33) 4-Chloroaniline	7.00	127	2063322	96.10560	ppb	99
34) 2,6-Dichlorophenol	7.01	162	1622155	107.64178	ppb	99
35) Hexachloropropene	7.02	213	1167286	114.53420	ppb	100
36) Hexachlorobutadiene	7.05	225	958401	109.07716	ppb	98
37) Caprolactum	7.45	55	828168	123.09343	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1911489	112.23315	ppb	98
39) 2-Methylnaphthalene	7.72	142	3945297	106.48229	ppb	99
40) 1-Methylnaphthalene	7.83	142	3888604	104.67399	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	861901	114.64271	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1694943	107.65840	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	1198737	117.92398	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	1266846	108.97004	ppb	98
47) 1,1'-Biphenyl	8.26	154	4909140	105.71606	ppb	98
48) 2-Chloronaphthalene	8.29	162	3763364	106.06503	ppb	99
49) 2-Nitroaniline	8.41	65	1287497	111.93280	ppb	96
50) Dimethyl phthalate	8.61	163	4502449	108.28243	ppb	100
51) 2,6-DNT	8.70	165	1067927	115.60401	ppb	100
52) Acenaphthylene	8.76	152	6000220	107.15505	ppb	100
53) 3-Nitroaniline	8.89	138	1161704	110.46197	ppb	96
54) Acenaphthene	8.97	154	3871991	106.71414	ppb	100
55) 2,4-Dinitrophenol	9.02	184	628043	130.63629	ppb	97
56) 4-Nitrophenol	9.10	65	789110	129.35218	ppb	99
57) Dibenzofuran	9.17	168	5237511	103.01684	ppb	99
58) 2,4-DNT	9.17	165	1367064	111.91777	ppb	85
59) 2,3,4,6-Tetrachlorophenol	9.31	232	962675	113.66677	ppb	94
60) Diethyl phthalate	9.43	149	4275410	108.65157	ppb	99
61) 4-Chlorophenyl phenyl ether	9.56	204	2046659	103.16033	ppb	94
62) Fluorene	9.57	166	4183100	102.50265	ppb	100
63) 4-Nitroaniline	9.63	138	1123718	105.55637	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.65	198	938503	131.25620	ppb	94
67) Diphenyl amine	9.72	169	6563877	207.51246	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	6563877	207.51246	ppb	99
69) 1,2-Diphenylhydrazine	9.75	77	5281854	118.32410	ppb	91
70) 4-Bromophenyl phenyl ether	10.14	248	1162593	108.52969	ppb	93
71) Hexachlorobenzene	10.20	284	1105478	109.26263	ppb	# 85
72) Atrazine	10.33	200	594812	54.68055	ppb	99
73) Pentachlorophenol	10.44	266	752725	128.44553	ppb	98
74) Phenanthrene	10.69	178	6357117	105.02352	ppb	100
75) Anthracene	10.76	178	6513717	105.00530	ppb	99
76) Carbazol	10.94	167	6031129	107.43352	ppb	97
77) Di-n-butylphthalate	11.32	149	7069564	106.85870	ppb	98
78) Fluoranthene	12.09	202	6831981	105.11853	ppb	99
80) Benzidine	12.24	184	2116848	105.65380	ppb	98
81) Pyrene	12.36	202	7097992	108.08786	ppb	100
83) Butyl benzylphthalate	13.08	149	3286296	112.53736	ppb	91
84) 3,3'-Dichlorobenzidine	13.71	252	2161447	108.82542	ppb	# 97
85) Benz (a) anthracene	13.75	228	6187037	108.12217	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	4303302	105.70566	ppb	97
87) Chrysene	13.79	228	6136199	109.64013	ppb	99
88) Di-n-octylphthalate	14.49	149	7872322	114.69387	ppb	96
90) Benzo (b) fluoranthene	15.08	252	6819800	120.21812	ppb	99
91) Benzo (k) fluoranthene	15.12	252	5648056	102.19151	ppb	99
92) Benzo (a) pyrene	15.57	252	5887626	113.66648	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.59	276	6044154	114.14032	ppb	99
94) Dibenzo (a,h) anthracene	17.63	278	5506458	114.28713	ppb	100
95) Benzo (g,h,i) perylene	18.19	276	5357774	114.13819	ppb	100



Quantitation Report

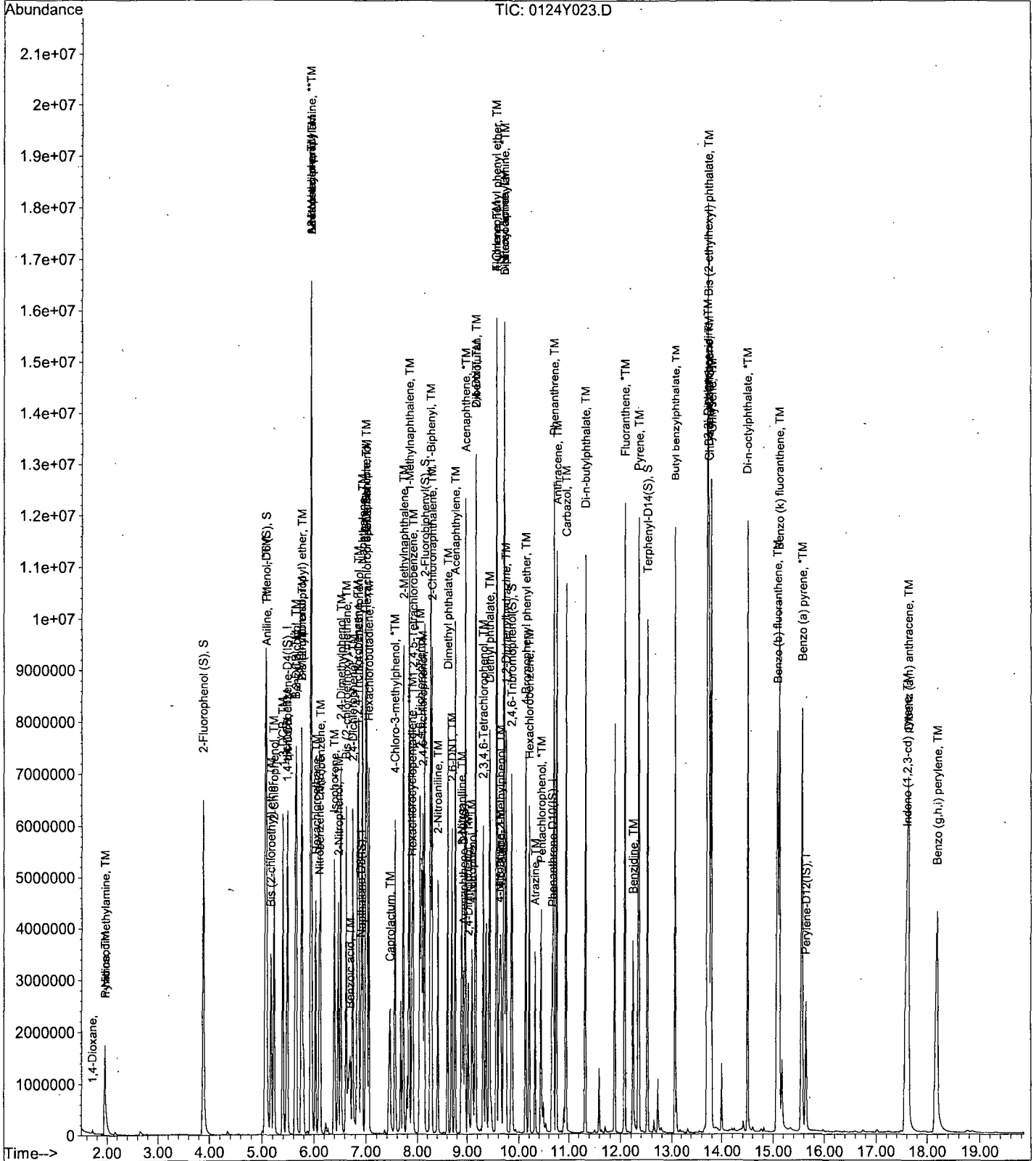
Data File : M:\YODA\DATA\Y190124\0124Y023.D  
Acq On : 25 Jan 19 13:07  
Sample : 100ug/mL 8270 01/24/19  
Misc :

Vial: 23  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
1		1,4-Dioxane	0.2237	0.2222	0.68	
2	TM	n-Nitrosodimethylamine	0.3626	0.3593	0.90	TM
3	TM	Pyridine	0.8923	0.9235	3.5	TM
4	*TM	Phenol	3.026	2.969	1.9	*TM
5	TM	Aniline	3.167	3.000	5.3	TM
6	TM	Bis (2-chloroethyl) ether	1.394	1.327	4.8	TM
7	TM	2-Chlorophenol	2.135	2.080	2.6	TM
8	TM	1,3-DCB	2.272	2.228	1.9	TM
9	*TM	1,4-DCB	2.321	2.241	3.5	*TM
10	TM	Benzyl alcohol	1.331	1.255	5.7	TM
11	TM	1,2-DCB	2.150	2.089	2.9	TM
12	TM	2-Methylphenol	1.822	1.746	4.2	TM
13	TM	Bis (2-chloroisopropyl) ether	2.093	1.968	6.0	TM
14	TM	Acetophenone	2.775	2.579	7.1	TM
15	TM	3&4-Methylphenol	2.152	2.049	4.8	TM
16	**TM	n-Nitrosodi-n-propylamine	1.563	1.452	7.1	**TM
17	TM	Hexachloroethane	0.8480	0.8171	3.6	TM
18	TM	Nitrobenzene	0.5356	0.5518	3.0	TM
19	TM	Isophorone	0.9343	0.9637	3.1	TM
20	*TM	2-Nitrophenol	0.2637	0.2706	2.6	*TM
21	TM	2,4-Dimethylphenol	0.4363	0.4511	3.4	TM
22	TM	Benzoic acid	0.3414	0.3692	8.2	TM
23	TM	Bis (2-chloroethoxy) methane	0.5794	0.5715	1.4	TM
24	*TM	2,4-Dichlorophenol	0.3755	0.3920	4.4	*TM
25	TM	1,2,4-Trichlorobenzene	0.4174	0.4207	0.78	TM
26	TM	3,4-Dimethylphenol	0.5899	0.6009	1.9	TM
27	TM	Naphthalene	1.420	1.398	1.5	TM
28	TM	4-Chloroaniline	0.5252	0.5196	1.1	TM
29	TM	2,6-Dichlorophenol	0.3718	0.3779	1.6	TM
30	TM	Hexachloropropene	0.2546	0.2632	3.4	TM
31	*TM	Hexachlorobutadiene	0.2175	0.2221	2.1	*TM
32	TM	Caprolactum	0.1890	0.1906	0.85	TM
33	*TM	4-Chloro-3-methylphenol	0.4231	0.4348	2.8	*TM
34	TM	2-Methylnaphthalene	0.9154	0.8857	3.2	TM
35	TM	1-Methylnaphthalene	0.9149	0.9061	0.96	TM
36	**TML	Hexachlorocyclopentadiene	0.2131	0.3252	53	**TML 13
37	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.7344	9.3	TM
38	*TM	2,4,6-Trichlorophenol	0.4386	0.5022	15	*TM
39	TM	2,4,5-Trichlorophenol	0.4953	0.5390	8.8	TM
40	TM	1,1'-Biphenyl	1.985	2.208	11	TM

Average

5.2

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2-Chloronaphthalene	1.516	1.702	12	TM
42	TM	2-Nitroaniline	0.4929	0.5434	10	TM
43	TM	Dimethyl phthalate	1.790	1.944	8.6	TM
44	TM	2,6-DNT	0.4015	0.4696	17	TM
45	TM	Acenaphthylene	2.405	2.664	11	TM
46	TM	3-Nitroaniline	0.4546	0.4922	8.3	TM
47	*TM	Acenaphthene	1.558	1.693	8.7	*TM
48	**TML	2,4-Dinitrophenol	0.1911	0.2391	25	**TML 10
49	**TM	4-Nitrophenol	0.2763	0.2845	3.0	**TM
50	TM	Dibenzofuran	2.183	2.306	5.6	TM
51	TM	2,4-DNT	0.5295	0.6234	18	TM
52	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.4330	19	TM
53	TM	Diethyl phthalate	1.696	1.855	9.4	TM
54	TM	4-Chlorophenyl phenyl ether	0.8517	0.9262	8.7	TM
55	TM	Fluorene	1.750	1.915	9.4	TM
56	TM	4-Nitroaniline	0.4603	0.5193	13	TM
57	TM	4,6-Dinitro-2-methylphenol	0.1787	0.2120	19	TM
58	TM	Diphenyl amine	0.7057	0.7914	12	TM
59	*TM	n-Nitrosodiphenylamine	0.7057	0.7914	12	*TM
60	TM	1,2-Diphenylhydrazine	0.9947	1.099	10	TM
61	TM	4-Bromophenyl phenyl ether	0.2390	0.2673	12	TM
62	TM	Hexachlorobenzene	0.2259	0.2560	13	TM
63	TM	Atrazine	0.2421	0.2663	10.0	TM
64	*TM	Pentachlorophenol	0.1414	0.1559	10	*TM
65	TM	Phenanthrene	1.352	1.515	12	TM
66	TM	Anthracene	1.385	1.525	10	TM
67	TM	Carbazol	1.258	1.450	15	TM
68	TM	Di-n-butylphthalate	1.485	1.684	13	TM
69	*TM	Fluoranthene	1.452	1.629	12	*TM
70	TM	Benzidine	0.4947	0.5317	7.5	TM
71	TM	Pyrene	1.698	1.882	11	TM
72	TM	Butyl benzylphthalate	0.7611	0.8756	15	TM
73	TM	3,3'-Dichlorobenzidine	0.5206	0.6069	17	TM
74	TM	Benz (a) anthracene	1.481	1.633	10	TM
75	TM	Bis (2-ethylhexyl) phthalate	1.059	1.175	11	TM
76	TM	Chrysene	1.448	1.604	11	TM
77	*TM	Di-n-octylphthalate	1.797	2.065	15	*TM
78	TM	Benzo (b) fluoranthene	1.501	1.609	7.2	TM
79	TM	Benzo (k) fluoranthene	1.443	1.462	1.3	TM
80	*TM	Benzo (a) pyrene	1.359	1.566	15	*TM

Average

11.7

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Indeno (1,2,3-cd) pyrene	1.400	1.669	19	TM
82	TM	Dibenz (a,h) anthracene	1.266	1.452	15	TM
83	TM	Benzo (g,h,i) perylene	1.240	1.331	7.4	TM
84						
85						
86						
87						
88						
89						
90						
91						
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118						
119						
120		Average			13.8	

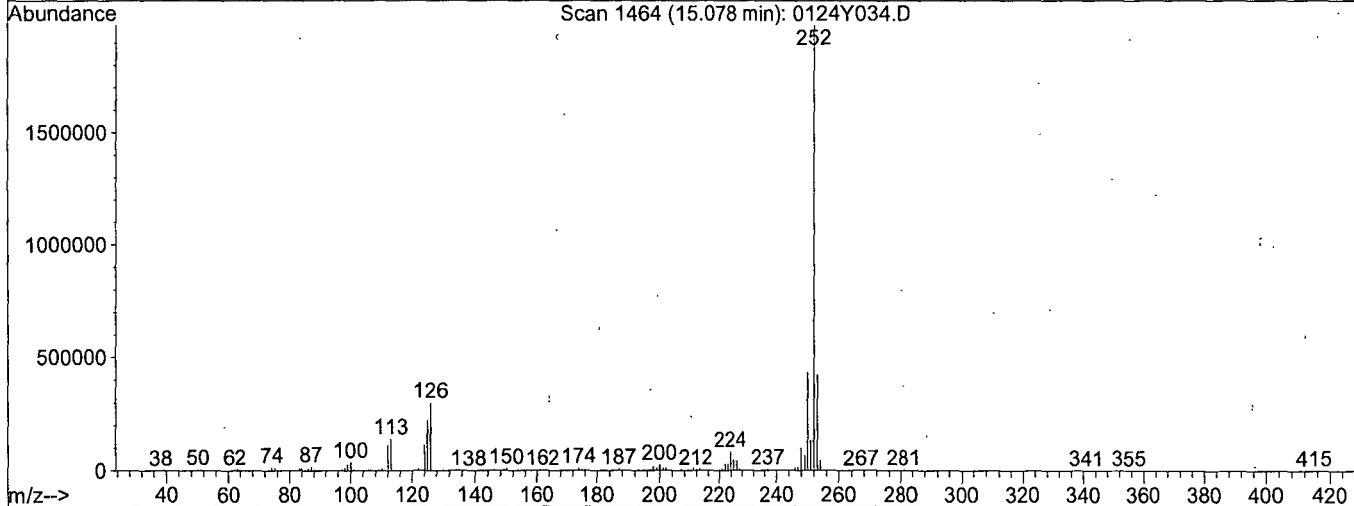
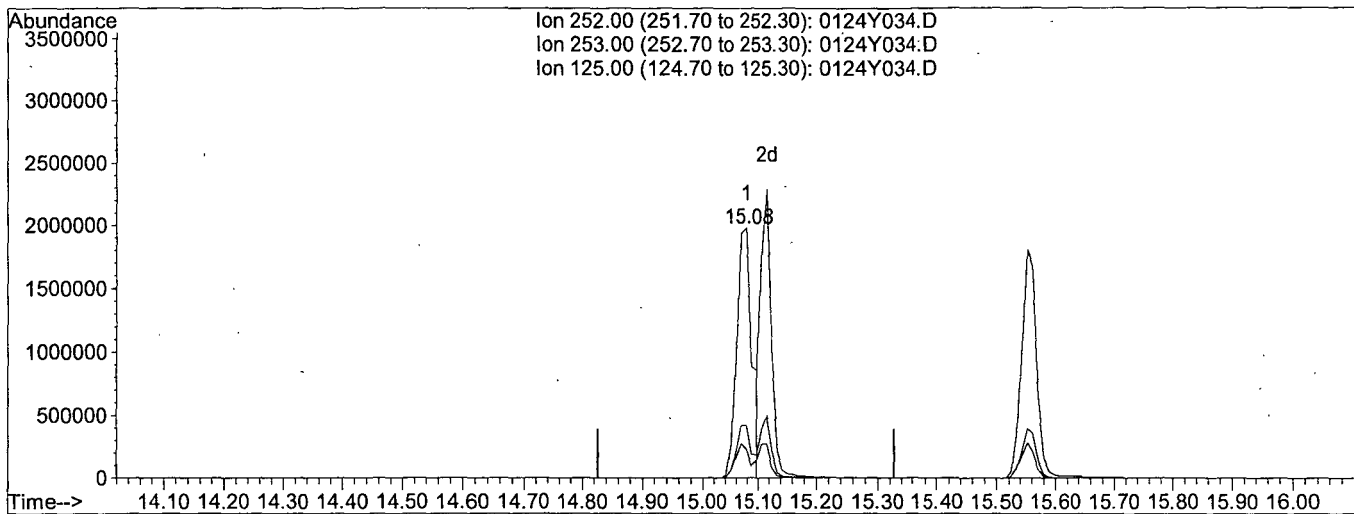
Average

13.8

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D Vial: 34  
 Acq On : 28 Jan 19 14:11 Operator: MA  
 Sample : SS-8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 28 15:00 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 61.5896ppb

response 3871985

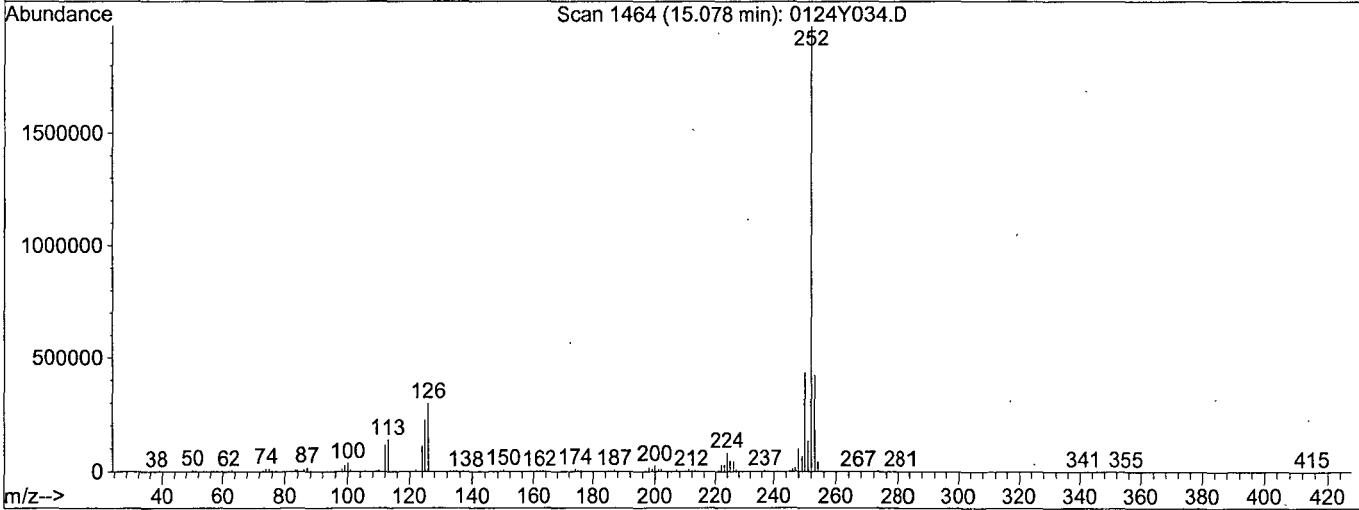
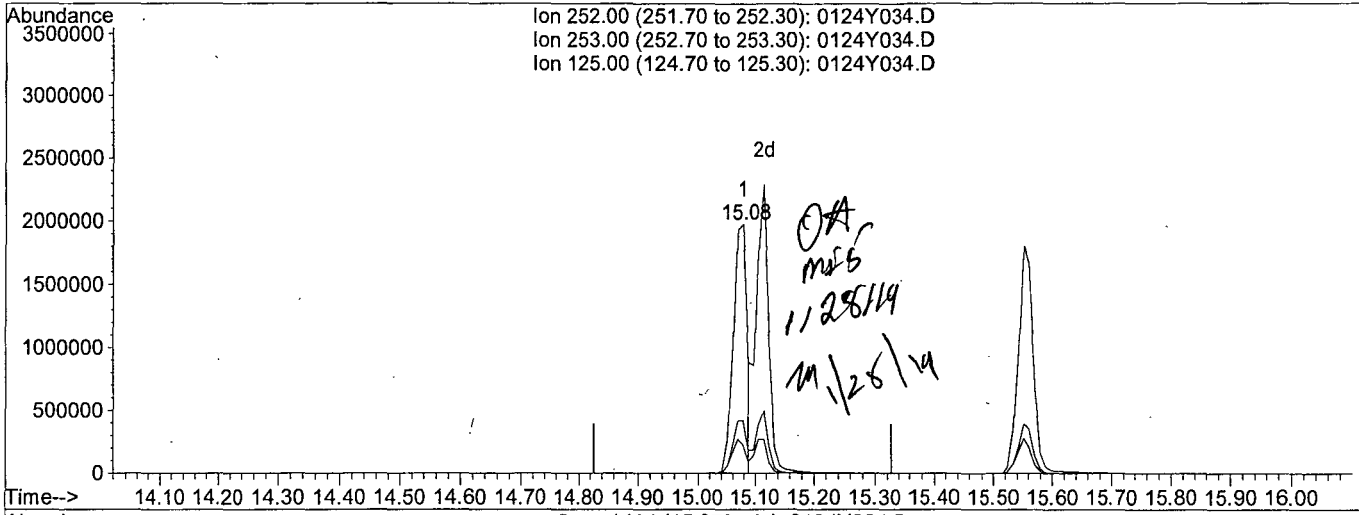
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :  
 Quant Time: Jan 28 15:00 2019

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 53.5898ppb m

response 3369057

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	458368	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1938809	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1014849	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1912266	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1708227	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1674833	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	0.00	112	0	0.00000	ppb	
Spiked Amount	200.000		Recovery	=	0.000%	
6) Phenol-D6 (S)	0.00	99	0	0.00000	ppb	
Spiked Amount	200.000		Recovery	=	0.000%	
22) Nitrobenzene-D5 (S)	6.03	82	108224	4.68761	ppb	-0.06
Spiked Amount	100.000		Recovery	=	4.688%	
46) 2-Fluorobiphenyl (S)	8.13	172	213	0.00518	ppb	0.00
Spiked Amount	100.000		Recovery	=	0.005%	
64) 2,4,6-Tribromophenol (S)	0.00	330	0	0.00000	ppb	
Spiked Amount	200.000		Recovery	=	0.000%	
82) Terphenyl-D14 (S)	12.52	244	770	0.01767	ppb	0.00
Spiked Amount	100.000		Recovery	=	0.018%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	12729	4.96599		86
3) n-Nitrosodimethylamine	1.96	42	205883	49.54778	ppb	87
4) Pyridine	1.98	79	529141	51.74874	ppb	96
7) Phenol	5.07	94	1701203	49.06389	ppb	94
8) Aniline	5.09	93	1718990	47.36392	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	760366	47.60321	ppb	91
10) 2-Chlorophenol	5.23	128	1191637	48.69709	ppb	96
11) 1,3-DCB	5.40	146	1276386	49.03029	ppb	99
12) 1,4-DCB	5.49	146	1283777	48.26248	ppb	97
13) Benzyl alcohol	5.63	108	718943	47.15114	ppb	97
14) 1,2-DCB	5.66	146	1196773	48.56573	ppb	97
15) 2-Methylphenol	5.75	107	1000280	47.91957	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1127555	47.01882	ppb	100
17) Acetophenone	5.92	105	1477412	46.45588	ppb	99
18) 3&4-Methylphenol	5.92	107	2347562	95.21848	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	832033	46.46922	ppb	99
20) Hexachloroethane	6.03	117	468170	48.18007	ppb	95
23) Nitrobenzene	6.12	77	1337322	51.51079	ppb	100
24) Isophorone	6.39	82	2335484	51.57041	ppb	100
25) 2-Nitrophenol	6.47	139	655816	51.30629	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1093253	51.69152	ppb	97
27) Benzoic acid	6.66	105	894833	54.07578	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1384922	49.31027	ppb	100
29) 2,4-Dichlorophenol	6.74	162	949905	52.19556	ppb	95
30) 1,2,4-Trichlorobenzene	6.83	180	1019586	50.39201	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1456405	50.93263	ppb	100
32) Napthalene	6.93	128	3388497	49.24639	ppb	100
33) 4-Chloroaniline	6.99	127	1259364	49.47066	ppb	99
34) 2,6-Dichlorophenol	7.00	162	915959	50.82211	ppb	99
35) Hexachloropropene	7.02	213	637825	51.69508	ppb	99
36) Hexachlorobutadiene	7.05	225	538197	51.06295	ppb	97
37) Caprolactum	7.42	55	462035	50.42547	ppb	98

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1053821	51.38731	ppb	99
39) 2-Methylnaphthalene	7.72	142	2146475	48.37837	ppb	99
40) 1-Methylnaphthalene	7.83	142	2195869	49.51781	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	412511	56.53516	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	931572	54.64934	ppb	97
44) 2,4,6-Trichlorophenol	8.04	196	637106	57.25617	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	683790	54.41270	ppb	97
47) 1,1'-Biphenyl	8.25	154	2800863	55.61888	ppb	99
48) 2-Chloronaphthalene	8.28	162	2159211	56.12559	ppb	98
49) 2-Nitroaniline	8.40	65	689275	55.11518	ppb	97
50) Dimethyl phthalate	8.61	163	2465503	54.27961	ppb	100
51) 2,6-DNT	8.69	165	595747	58.49045	ppb	97
52) Acenaphthylene	8.77	152	3379049	55.37197	ppb	99
53) 3-Nitroaniline	8.89	138	624378	54.13436	ppb	95
54) Acenaphthene	8.96	154	2148281	54.35989	ppb	99
55) 2,4-Dinitrophenol	9.02	184	303263	55.09102	ppb	93
56) 4-Nitrophenol	9.09	65	360931	51.49458	ppb	96
57) Dibenzofuran	9.16	168	2924995	52.81029	ppb	100
58) 2,4-DNT	9.16	165	790761	58.86232	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	549310	59.39518	ppb	96
60) Diethyl phthalate	9.42	149	2353679	54.68973	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1174961	54.37478	ppb	96
62) Fluorene	9.56	166	2428778	54.70594	ppb	100
63) 4-Nitroaniline	9.61	138	658803	56.41060	ppb	93
66) 4,6-Dinitro-2-methylphenol	9.64	198	506716	59.32023	ppb	96
67) Diphenyl amine	9.70	169	3783179	112.13803	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3783179	112.13803	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2626496	55.23523	ppb	88
70) 4-Bromophenyl phenyl ether	10.13	248	638862	55.91557	ppb	97
71) Hexachlorobenzene	10.20	284	611901	56.65132	ppb	# 82
72) Atrazine	10.32	200	318295	27.49651	ppb	97
73) Pentachlorophenol	10.44	266	372770	55.14520	ppb	98
74) Phenanthrene	10.69	178	3621712	56.03684	ppb	99
75) Anthracene	10.75	178	3644386	55.05050	ppb	100
76) Carbazol	10.94	167	3465221	57.59909	ppb	97
77) Di-n-butylphthalate	11.33	149	4025120	56.70186	ppb	100
78) Fluoranthene	12.08	202	3892862	56.09809	ppb	100
80) Benzidine	12.24	184	1135359	53.74461	ppb	99
81) Pyrene	12.35	202	4018707	55.42232	ppb	100
83) Butyl benzylphthalate	13.08	149	1869616	57.51923	ppb	95
84) 3,3'-Dichlorobenzidine	13.71	252	1295998	58.28828	ppb	98
85) Benz (a) anthracene	13.74	228	3486147	55.12946	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2508599	55.45746	ppb	# 94
87) Chrysene	13.79	228	3424994	55.38630	ppb	99
88) Di-n-octylphthalate	14.48	149	4408873	57.43934	ppb	# 94
90) Benzo (b) fluoranthene	15.08	252	3369057m	53.58981	ppb	99
91) Benzo (k) fluoranthene	15.12	252	3061298	50.66483	ppb	100
92) Benzo (a) pyrene	15.55	252	3279011	57.62317	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3494580	59.61887	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	3040489	57.37576	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2787424	53.67772	ppb	99



Quantitation Report

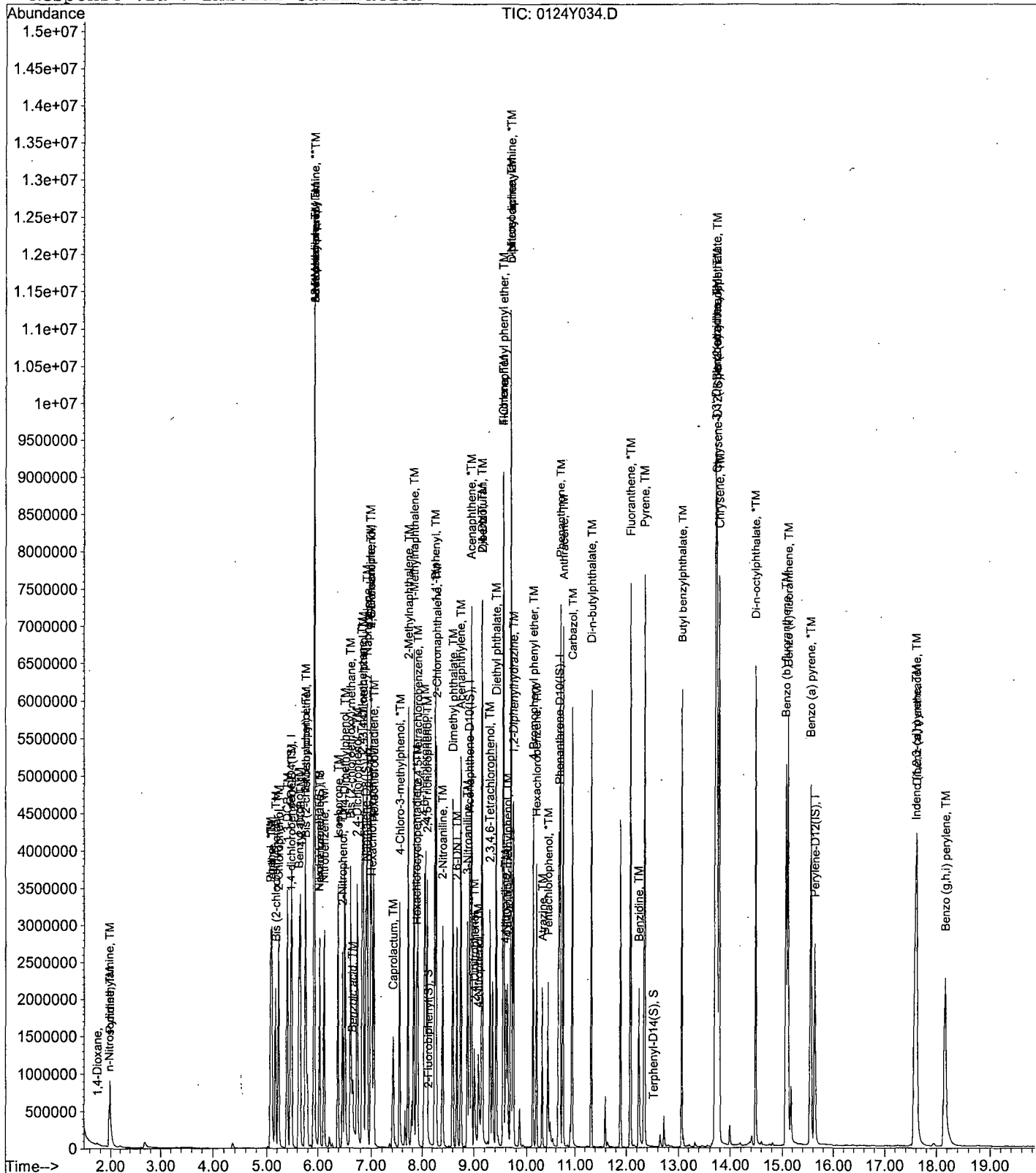
Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y054.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2162	3.3	
3	TM	n-Nitrosodimethylamine	0.3626	0.3612	0.40	TM
4	TM	Pyridine	0.8923	0.9569	7.2	TM
5	S	2-Fluorophenol (S)	1.784	1.906	6.8	S
6	S	Phenol-D6 (S)	2.349	2.463	4.9	S
7	*TM	Phenol	3.026	2.954	2.4	*TM
8	TM	Aniline	3.167	3.090	2.5	TM
9	TM	Bis (2-chloroethyl) ether	1.394	1.368	1.8	TM
10	TM	2-Chlorophenol	2.135	2.052	3.9	TM
11	TM	1,3-DCB	2.272	2.171	4.4	TM
12	*TM	1,4-DCB	2.321	2.189	5.7	*TM
13	TM	Benzyl alcohol	1.331	1.300	2.3	TM
14	TM	1,2-DCB	2.150	2.058	4.3	TM
15	TM	2-Methylphenol	1.822	1.767	3.0	TM
16	TM	Bis (2-chloroisopropyl) ether	2.093	2.128	1.7	TM
17	TM	Acetophenone	2.775	2.594	6.5	TM
18	TM	3&4-Methylphenol	2.152	2.063	4.1	TM
19	**TM	n-Nitrosodi-n-propylamine	1.563	1.477	5.5	**TM
20	TM	Hexachloroethane	0.8480	0.7906	6.8	TM
21	I	Napthalene-D8(IS)	ISTD			I
22	S	Nitrobenzene-D5(S)	0.4763	0.4858	2.0	S
23	TM	Nitrobenzene	0.5356	0.5073	5.3	TM
24	TM	Isophorone	0.9343	0.9148	2.1	TM
25	*TM	2-Nitrophenol	0.2637	0.2439	7.5	*TM
26	TM	2,4-Dimethylphenol	0.4363	0.4305	1.3	TM
27	TM	Benzoic acid	0.3414	0.3216	5.8	TM
28	TM	Bis (2-chloroethoxy) methane	0.5794	0.5627	2.9	TM
29	*TM	2,4-Dichlorophenol	0.3755	0.3756	0.03	*TM
30	TM	1,2,4-Trichlorobenzene	0.4174	0.4046	3.1	TM
31	TM	3,4-Dimethylphenol	0.5899	0.5737	2.7	TM
32	TM	Napthalene	1.420	1.367	3.7	TM
33	TM	4-Chloroaniline	0.5252	0.5161	1.7	TM
34	TM	2,6-Dichlorophenol	0.3718	0.3617	2.7	TM
35	TM	Hexachloropropene	0.2546	0.2406	5.5	TM
36	*TM	Hexachlorobutadiene	0.2175	0.2094	3.7	*TM
37	TM	Caprolactum	0.1890	0.1857	1.7	TM
38	*TM	4-Chloro-3-methylphenol	0.4231	0.4104	3.0	*TM
39	TM	2-Methylnapthalene	0.9154	0.8873	3.1	TM
40	TM	1-Methylnapthalene	0.9149	0.8766	4.2	TM
Average					3.7	

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y054.D

		Compound	MEAN	CCRF	%D	%Drift	
41	I	Acenaphthene-D10(IS)	ISTD				I
42	**TML	Hexachlorocyclopentadiene	0.2131	0.2507	18	**TML	10
43	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6821	1.5	TM	
44	*TM	2,4,6-Trichlorophenol	0.4386	0.4542	3.6	*TM	
45	TM	2,4,5-Trichlorophenol	0.4953	0.4959	0.12	TM	
46	S	2-Fluorobiphenyl(S)	1.620	1.714	5.8	S	
47	TM	1,1'-Biphenyl	1.985	1.989	0.19	TM	
48	TM	2-Chloronaphthalene	1.516	1.515	0.12	TM	
49	TM	2-Nitroaniline	0.4929	0.4855	1.5	TM	
50	TM	Dimethyl phthalate	1.790	1.772	1.0	TM	
51	TM	2,6-DNT	0.4015	0.4029	0.36	TM	
52	TM	Acenaphthylene	2.405	2.409	0.15	TM	
53	TM	3-Nitroaniline	0.4546	0.4604	1.3	TM	
54	*TM	Acenaphthene	1.558	1.540	1.1	*TM	
55	**TML	2,4-Dinitrophenol	0.1911	0.1579	17	**TML	24 *NT
56	**TM	4-Nitrophenol	0.2763	0.2394	13	**TM	
57	TM	Dibenzofuran	2.183	2.134	2.2	TM	
58	TM	2,4-DNT	0.5295	0.5262	0.62	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3703	1.6	TM	
60	TM	Diethyl phthalate	1.696	1.628	4.0	TM	
61	TM	4-Chlorophenyl phenyl ether	0.8517	0.8355	1.9	TM	
62	TM	Fluorene	1.750	1.721	1.7	TM	
63	TM	4-Nitroaniline	0.4603	0.4749	3.2	TM	
64	S	2,4,6-Tribromophenol(S)	0.1657	0.1823	10	S	
65	I	Phenanthrene-D10(IS)	ISTD				I
66	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1645	7.9	TM	
67	TM	Diphenyl amine	0.7057	0.6971	1.2	TM	
68	*TM	n-Nitrosodiphenylamine	0.7057	0.6971	1.2	*TM	
69	TM	1,2-Diphenylhydrazine	0.9947	0.9419	5.3	TM	
70	TM	4-Bromophenyl phenyl ether	0.2390	0.2470	3.3	TM	
71	TM	Hexachlorobenzene	0.2259	0.2311	2.3	TM	
72	TM	Atrazine	0.2421	0.2422	0.03	TM	
73	*TM	Pentachlorophenol	0.1414	0.1506	6.5	*TM	
74	TM	Phenanthrene	1.352	1.341	0.79	TM	
75	TM	Anthracene	1.385	1.371	1.0	TM	
76	TM	Carbazol	1.258	1.265	0.56	TM	
77	TM	Di-n-butylphthalate	1.485	1.501	1.1	TM	
78	*TM	Fluoranthene	1.452	1.445	0.46	*TM	
79	I	Chrysene-D12(IS)	ISTD				I
80	TM	Benzidine	0.4947	0.4440	10	TM	
Average					3.6		

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y054.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.698	1.689	0.51	TM
82	S	Terphenyl-D14(S)	1.020	1.079	5.7	S
83	TM	Butyl benzylphthalate	0.7611	0.7608	0.04	TM
84	TM	3,3'-Dichlorobenzidine	0.5206	0.5395	3.6	TM
85	TM	Benz (a) anthracene	1.481	1.470	0.75	TM
86	TM	Bis (2-ethylhexyl) phthalate	1.059	1.055	0.37	TM
87	TM	Chrysene	1.448	1.418	2.1	TM
88	*TM	Di-n-octylphthalate	1.797	1.808	0.62	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.501	1.524	1.5	TM
91	TM	Benzo (k) fluoranthene	1.443	1.393	3.4	TM
92	*TM	Benzo (a) pyrene	1.359	1.374	1.1	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.400	1.405	0.39	TM
94	TM	Dibenz (a,h) anthracene	1.266	1.276	0.85	TM
95	TM	Benzo (g,h,i) perylene	1.240	1.242	0.18	TM
96						
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118						
119						
120						

Average

1.5

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y054.D  
 Acq On : 30 Jan 19 14:28  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 54  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:43 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	482742	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2108172	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1179923	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2236673	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1992380	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1987707	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	2299686	106.80630	ppb	0.02
Spiked Amount				200.000		
			Recovery	=	53.403%	
6) Phenol-D6 (S)	5.06	99	2973052	104.87249	ppb	0.00
Spiked Amount				200.000		
			Recovery	=	52.436%	
22) Nitrobenzene-D5 (S)	6.10	82	1280062	50.99037	ppb	0.00
Spiked Amount				100.000		
			Recovery	=	50.990%	
46) 2-Fluorobiphenyl (S)	8.13	172	2527825	52.90612	ppb	0.00
Spiked Amount				100.000		
			Recovery	=	52.906%	
64) 2,4,6-Tribromophenol (S)	9.85	330	537844	110.04080	ppb	0.00
Spiked Amount				200.000		
			Recovery	=	55.020%	
82) Terphenyl-D14 (S)	12.51	244	2686468	52.85521	ppb	0.00
Spiked Amount				100.000		
			Recovery	=	52.855%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	13049	4.83379		71
3) n-Nitrosodimethylamine	1.97	42	217939	49.80098	ppb	98
4) Pyridine	1.99	79	577395	53.61677	ppb	96
7) Phenol	5.07	94	1782379	48.80959	ppb	97
8) Aniline	5.10	93	1864291	48.77387	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	825712	49.08416	ppb	96
10) 2-Chlorophenol	5.22	128	1238096	48.04106	ppb	98
11) 1,3-DCB	5.39	146	1310032	47.78191	ppb	98
12) 1,4-DCB	5.48	146	1321130	47.15902	ppb	97
13) Benzyl alcohol	5.62	108	784529	48.85466	ppb	98
14) 1,2-DCB	5.65	146	1241901	47.85246	ppb	97
15) 2-Methylphenol	5.74	107	1066079	48.49309	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1284134	50.84445	ppb	97
17) Acetophenone	5.92	105	1565042	46.72661	ppb	99
18) 3&4-Methylphenol	5.92	107	2489894	95.89241	ppb	100
19) n-Nitrosodi-n-propylamine	5.92	70	891215	47.26139	ppb	99
20) Hexachloroethane	6.02	117	477093	46.61934	ppb	96
23) Nitrobenzene	6.12	77	1336889	47.35726	ppb	100
24) Isophorone	6.39	82	2410748	48.95584	ppb	100
25) 2-Nitrophenol	6.47	139	642768	46.24575	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1134431	49.32938	ppb	97
27) Benzoic acid	6.66	105	847365	47.09343	ppb	97
28) Bis (2-chloroethoxy) metha	6.62	93	1482861	48.55584	ppb	100
29) 2,4-Dichlorophenol	6.75	162	989731	50.01491	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	1066115	48.45860	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1511882	48.62513	ppb	98
32) Napthalene	6.92	128	3602118	48.14533	ppb	100
33) 4-Chloroaniline	6.99	127	1359929	49.12942	ppb	99
34) 2,6-Dichlorophenol	7.00	162	953279	48.64359	ppb	99
35) Hexachloropropene	7.02	213	633922	47.25116	ppb	100
36) Hexachlorobutadiene	7.05	225	551942	48.16006	ppb	99
37) Caprolactum	7.42	55	489462	49.12732	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y054.D  
 Acq On : 30 Jan 19 14:28  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 54  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:43 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1081621	48.50574	ppb	99
39) 2-Methylnaphthalene	7.71	142	2338139	48.46460	ppb	99
40) 1-Methylnaphthalene	7.82	142	2309987	47.90640	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	369830	44.94482	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1006055	50.76191	ppb	99
44) 2,4,6-Trichlorophenol	8.04	196	669937	51.78361	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	731438	50.06138	ppb	98
47) 1,1'-Biphenyl	8.25	154	2932919	50.09314	ppb	100
48) 2-Chloronaphthalene	8.28	162	2233742	49.93978	ppb	98
49) 2-Nitroaniline	8.40	65	716093	49.24883	ppb	99
50) Dimethyl phthalate	8.60	163	2613284	49.48408	ppb	100
51) 2,6-DNT	8.69	165	594244	50.18058	ppb	97
52) Acenaphthylene	8.76	152	3552884	50.07538	ppb	99
53) 3-Nitroaniline	8.88	138	678986	50.63304	ppb	96
54) Acenaphthene	8.96	154	2271371	49.43373	ppb	100
55) 2,4-Dinitrophenol	9.01	184	232818	38.07236	ppb	99
56) 4-Nitrophenol	9.09	65	353132	43.33334	ppb	98
57) Dibenzofuran	9.16	168	3147981	48.88474	ppb	98
58) 2,4-DNT	9.15	165	776149	49.69183	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	546166	50.79326	ppb	97
60) Diethyl phthalate	9.42	149	2400600	47.97623	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1232303	49.05003	ppb	96
62) Fluorene	9.56	166	2537647	49.16156	ppb	100
63) 4-Nitroaniline	9.61	138	700400	51.58210	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.63	198	459859	46.02658	ppb	100
67) Diphenyl amine	9.70	169	3898233	98.78924	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3898233	98.78924	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2633443	47.34882	ppb	98
70) 4-Bromophenyl phenyl ether	10.13	248	690564	51.67440	ppb	96
71) Hexachlorobenzene	10.20	284	646253	51.15373	ppb	95
72) Atrazine	10.32	200	338602	25.00823	ppb	98
73) Pentachlorophenol	10.43	266	421088	53.25808	ppb	98
74) Phenanthrene	10.68	178	3750055	49.60702	ppb	99
75) Anthracene	10.75	178	3832327	49.49317	ppb	100
76) Carbazol	10.94	167	3537940	50.27835	ppb	99
77) Di-n-butylphthalate	11.32	149	4197394	50.55266	ppb	99
78) Fluoranthene	12.08	202	4039698	49.77070	ppb	98
80) Benzidine	12.23	184	1105719	44.87659	ppb	99
81) Pyrene	12.35	202	4206921	49.74347	ppb	99
83) Butyl benzylphthalate	13.08	149	1894800	49.98013	ppb	99
84) 3,3'-Dichlorobenzidine	13.71	252	1343503	51.80706	ppb	98
85) Benz (a) anthracene	13.74	228	3660034	49.62455	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2628309	49.81711	ppb	100
87) Chrysene	13.78	228	3532219	48.97377	ppb	100
88) Di-n-octylphthalate	14.49	149	4503859	50.30834	ppb	100
90) Benzo (b) fluoranthene	15.07	252	3785379	50.73438	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3462132	48.27961	ppb	99
92) Benzo (a) pyrene	15.55	252	3413289	50.54131	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3491909	50.19620	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	3171178	50.42255	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	3086896	50.08783	ppb	99

Quantitation Report

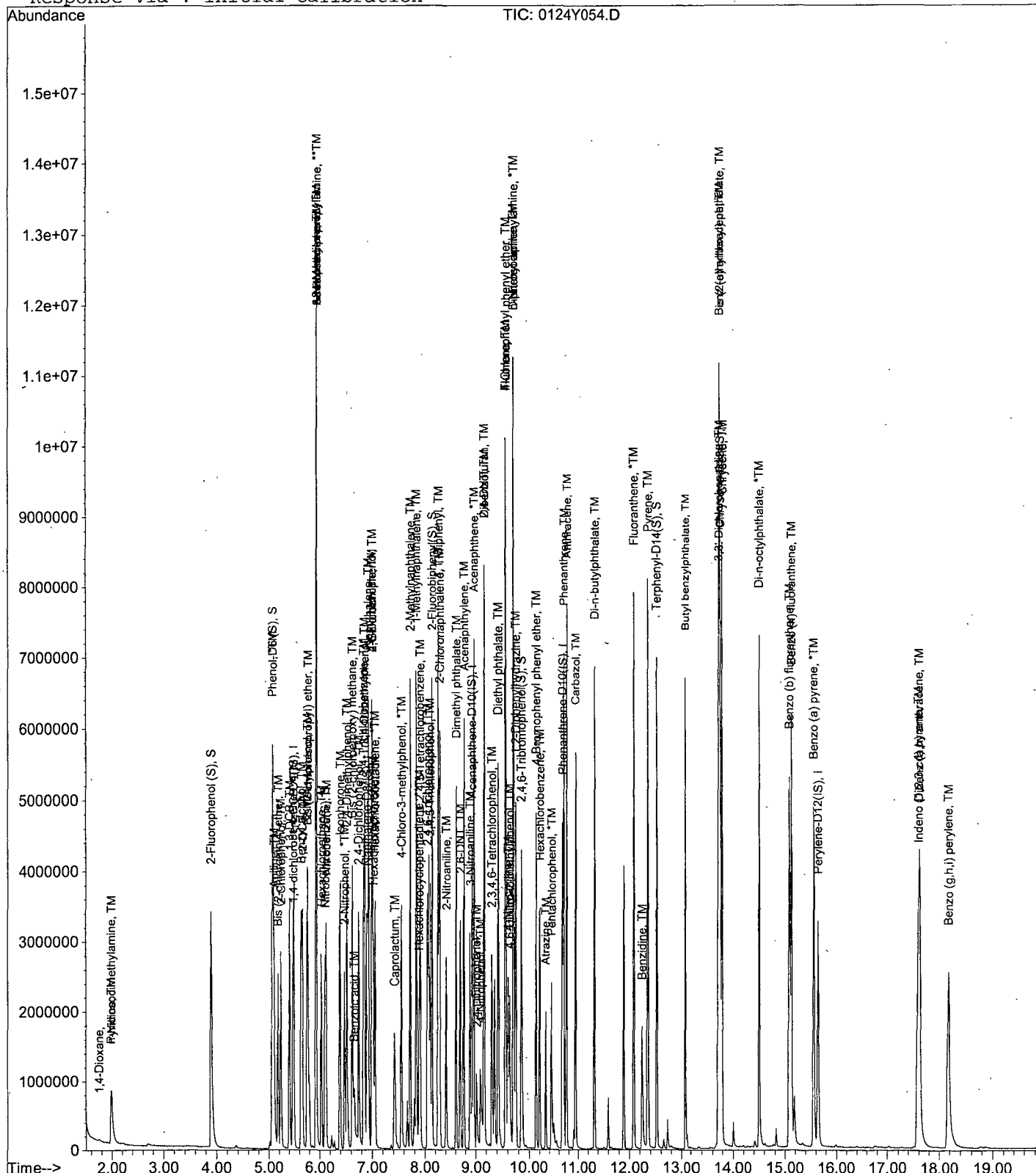
Data File : M:\YODA\DATA\Y190124\0124Y054.D  
Acq On : 30 Jan 19 14:28  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 54  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 31 5:43 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270.

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y065.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2165	3.2	
3	TM	n-Nitrosodimethylamine	0.3626	0.3718	2.5	TM
4	S	2-Fluorophenol (S)	1.784	1.861	4.3	S
5	S	Phenol-D6 (S)	2.349	2.422	3.1	S
6	*TM	Phenol	3.026	2.767	8.5	*TM
7	TM	Aniline	3.167	2.059	35	TM
8	TM	Bis (2-chloroethyl) ether	1.394	1.330	4.6	TM
9	TM	2-Chlorophenol	2.135	2.022	5.3	TM
10	TM	1,3-DCB	2.272	2.148	5.5	TM
11	*TM	1,4-DCB	2.321	2.158	7.0	*TM
12	TM	Benzyl alcohol	1.331	0.8004	40	TM
13	TM	1,2-DCB	2.150	2.015	6.3	TM
14	TM	2-Methylphenol	1.822	1.690	7.2	TM
15	TM	Bis (2-chloroisopropyl) ether	2.093	1.966	6.1	TM
16	TM	Acetophenone	2.775	2.613	5.8	TM
17	TM	3&4-Methylphenol	2.152	2.016	6.3	TM
18	**TM	n-Nitrosodi-n-propylamine	1.563	1.466	6.1	**TM
19	TM	Hexachloroethane	0.8480	0.7888	7.0	TM
20	I	Napthalene-D8(IS)	ISTD			I
21	S	Nitrobenzene-D5(S)	0.4763	0.4994	4.8	S
22	TM	Nitrobenzene	0.5356	0.5171	3.5	TM
23	TM	Isophorone	0.9343	0.9212	1.4	TM
24	*TM	2-Nitrophenol	0.2637	0.2552	3.2	*TM
25	TM	2,4-Dimethylphenol	0.4363	0.4103	6.0	TM
26	TM	Benzoic acid	0.3414	0.2504	27	TM
27	TM	Bis (2-chloroethoxy) methane	0.5794	0.5621	3.0	TM
28	*TM	2,4-Dichlorophenol	0.3755	0.3791	0.97	*TM
29	TM	1,2,4-Trichlorobenzene	0.4174	0.4074	2.4	TM
30	TM	3,4-Dimethylphenol	0.5899	0.5649	4.2	TM
31	TM	Napthalene	1.420	1.379	2.9	TM
32	TM	4-Chloroaniline	0.5252	0.4301	18	TM
33	TM	2,6-Dichlorophenol	0.3718	0.3738	0.54	TM
34	TM	Hexachloropropene	0.2546	0.2524	0.84	TM
35	*TM	Hexachlorobutadiene	0.2175	0.2114	2.8	*TM
36	TM	Caprolactum	0.1890	0.1829	3.2	TM
37	*TM	4-Chloro-3-methylphenol	0.4231	0.3894	8.0	*TM
38	TM	2-Methylnapthalene	0.9154	0.8905	2.7	TM
39	TM	1-Methylnapthalene	0.9149	0.8815	3.6	TM
40	I	Acenaphthene-D10(IS)	ISTD			I

Average

7.1



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y065.D

		Compound	MEAN	CCRF	%D	%Drift
41	**TML	Hexachlorocyclopentadiene	0.2131	0.2988	40	**TML 4.8
42	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6730	0.16	TM
43	*TM	2,4,6-Trichlorophenol	0.4386	0.4578	4.4	*TM
44	TM	2,4,5-Trichlorophenol	0.4953	0.4855	2.0	TM
45	S	2-Fluorobiphenyl(S)	1.620	1.721	6.3	S
46	TM	1,1'-Biphenyl	1.985	1.998	0.68	TM
47	TM	2-Chloronaphthalene	1.516	1.526	0.65	TM
48	TM	2-Nitroaniline	0.4929	0.4986	1.1	TM
49	TM	Dimethyl phthalate	1.790	1.805	0.83	TM
50	TM	2,6-DNT	0.4015	0.4130	2.9	TM
51	TM	Acenaphthylene	2.405	2.411	0.24	TM
52	TM	3-Nitroaniline	0.4546	0.4390	3.4	TM
53	*TM	Acenaphthene	1.558	1.556	0.11	*TM
54	**TML	2,4-Dinitrophenol	0.1911	0.1627	15	**TML 22
55	**TM	4-Nitrophenol	0.2763	0.2257	18	**TM
56	TM	Dibenzofuran	2.183	2.180	0.16	TM
57	TM	2,4-DNT	0.5295	0.5379	1.6	TM
58	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3526	3.3	TM
59	TM	Diethyl phthalate	1.696	1.695	0.07	TM
60	TM	4-Chlorophenyl phenyl ether	0.8517	0.8553	0.42	TM
61	TM	Fluorene	1.750	1.768	1.0	TM
62	TM	4-Nitroaniline	0.4603	0.4491	2.4	TM
63	S	2,4,6-Tribromophenol(S)	0.1657	0.1805	8.9	S
64	I	Phenanthrene-D10(IS)	ISTD			I
65	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1626	9.0	TM
66	TM	Diphenyl amine	0.7057	0.7132	1.1	TM
67	*TM	n-Nitrosodiphenylamine	0.7057	0.7132	1.1	*TM
68	TM	1,2-Diphenylhydrazine	0.9947	0.9670	2.8	TM
69	TM	4-Bromophenyl phenyl ether	0.2390	0.2439	2.1	TM
70	TM	Hexachlorobenzene	0.2259	0.2309	2.2	TM
71	TM	Atrazine	0.2421	0.1066	56	TM *NT
72	*TM	Pentachlorophenol	0.1414	0.1179	17	*TM
73	TM	Phenanthrene	1.352	1.371	1.4	TM
74	TM	Anthracene	1.385	1.393	0.61	TM
75	TM	Carbazol	1.258	1.285	2.1	TM
76	TM	Di-n-butylphthalate	1.485	1.509	1.6	TM
77	*TM	Fluoranthene	1.452	1.465	0.90	*TM
78	I	Chrysene-D12(IS)	ISTD			I
79	TM	Benzidine	0.4947	0.1733	65	TM *NT
80	TM	Pyrene	1.698	1.696	0.12	TM
Average					7.3	

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/30/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y065.D

		Compound	MEAN	CCRF	%D	%Drift
81	S	Terphenyl-D14(S)	1.020	1.077	5.5	S
82	TM	Butyl benzylphthalate	0.7611	0.7853	3.2	TM
83	TM	3,3'-Dichlorobenzidine	0.5206	0.4741	8.9	TM
84	TM	Benz (a) anthracene	1.481	1.477	0.28	TM
85	TM	Bis (2-ethylhexyl) phthalate	1.059	1.057	0.22	TM
86	TM	Chrysene	1.448	1.416	2.2	TM
87	*TM	Di-n-octylphthalate	1.797	1.842	2.5	*TM
88	I	Perylene-D12(IS)	ISTD			I
89	TM	Benzo (b) fluoranthene	1.501	1.584	5.5	TM
90	TM	Benzo (k) fluoranthene	1.443	1.399	3.1	TM
91	*TM	Benzo (a) pyrene	1.359	1.414	4.1	*TM
92	TM	Indeno (1,2,3-cd) pyrene	1.400	1.432	2.3	TM
93	TM	Dibenz (a,h) anthracene	1.266	1.311	3.6	TM
94	TM	Benzo (g,h,i) perylene	1.240	1.231	0.71	TM
95						
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119						
120						

Average

3.2

Data File : M:\YODA\DATA\Y190124\0124Y065.D Vial: 65  
 Acq On : 30 Jan 19 19:35 Operator: MA  
 Sample : 50ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 31 5:45 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	457117	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1949789	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1099019	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2075607	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1848016	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1779909	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.92	112	2126777	104.31289	ppb	0.05
Spiked Amount 200.000			Recovery =	52.157%		
6) Phenol-D6 (S)	5.08	99	2768232	103.12151	ppb	0.03
Spiked Amount 200.000			Recovery =	51.561%		
22) Nitrobenzene-D5 (S)	6.10	82	1217037	52.41787	ppb	0.00
Spiked Amount 100.000			Recovery =	52.418%		
46) 2-Fluorobiphenyl (S)	8.14	172	2364825	53.13814	ppb	0.00
Spiked Amount 100.000			Recovery =	53.138%		
64) 2,4,6-Tribromophenol (S)	9.86	330	495997	108.94942	ppb	0.00
Spiked Amount 200.000			Recovery =	54.475%		
82) Terphenyl-D14 (S)	12.51	244	2487667	52.76729	ppb	0.00
Spiked Amount 100.000			Recovery =	52.767%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.74	58	12369	4.83875		# 22
3) n-Nitrosodimethylamine	1.98	42	212441	51.26595	ppb	93
7) Phenol	5.09	94	1581276	45.72992	ppb	95
8) Aniline	5.17	93	1176567	32.50707	ppb	# 97
9) Bis (2-chloroethyl) ether	5.17	63	759881	47.70304	ppb	97
10) 2-Chlorophenol	5.24	128	1155144	47.33497	ppb	99
11) 1,3-DCB	5.40	146	1227284	47.27313	ppb	99
12) 1,4-DCB	5.48	146	1232879	46.47586	ppb	100
13) Benzyl alcohol	5.64	108	457318	30.07481	ppb	95
14) 1,2-DCB	5.65	146	1151143	46.84188	ppb	99
15) 2-Methylphenol	5.77	107	965575	46.38358	ppb	95
16) Bis (2-chloroisopropyl) et	5.77	45	1123147	46.96318	ppb	# 60
17) Acetophenone	5.93	105	1493125	47.07845	ppb	86
18) 3&4-Methylphenol	5.94	107	2303727	93.69623	ppb	99
19) n-Nitrosodi-n-propylamine	5.93	70	837915	46.92580	ppb	98
20) Hexachloroethane	6.03	117	450726	46.51183	ppb	94
23) Nitrobenzene	6.12	77	1260395	48.27433	ppb	97
24) Isophorone	6.38	82	2245259	49.29893	ppb	96
25) 2-Nitrophenol	6.48	139	622049	48.39055	ppb	95
26) 2,4-Dimethylphenol	6.52	122	999940	47.01322	ppb	99
27) Benzoic acid	6.67	105	610226	36.66899	ppb	100
28) Bis (2-chloroethoxy) metha	6.63	93	1369927	48.50170	ppb	99
29) 2,4-Dichlorophenol	6.76	162	923933	50.48255	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	992942	48.79880	ppb	99
31) 3,4-Dimethylphenol	6.87	107	1376879	47.88033	ppb	97
32) Napthalene	6.93	128	3359823	48.55468	ppb	100
33) 4-Chloroaniline	7.13	127	1048321	40.94851	ppb	98
34) 2,6-Dichlorophenol	7.00	162	911147	50.27042	ppb	99
35) Hexachloropropene	7.02	213	615212	49.58153	ppb	99
36) Hexachlorobutadiene	7.05	225	515184	48.60426	ppb	99
37) Caprolactum	7.43	55	445789	48.37844	ppb	99
38) 4-Chloro-3-methylphenol	7.56	107	949070	46.01874	ppb	99

Data File : M:\YODA\DATA\Y190124\0124Y065.D  
 Acq On : 30 Jan 19 19:35  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 65  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:45 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) 2-Methylnaphthalene	7.71	142	2170366	48.64136	ppb	99
40) 1-Methylnaphthalene	7.83	142	2148490	48.17656	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	410432	52.42144	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	924494	50.08051	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	628941	52.19354	ppb	98
45) 2,4,5-Trichlorophenol	8.11	196	667016	49.01285	ppb	96
47) 1,1'-Biphenyl	8.25	154	2745304	50.34045	ppb	99
48) 2-Chloronaphthalene	8.28	162	2096544	50.32295	ppb	99
49) 2-Nitroaniline	8.41	65	684941	50.57409	ppb	94
50) Dimethyl phthalate	8.60	163	2479958	50.41639	ppb	99
51) 2,6-DNT	8.69	165	567379	51.43901	ppb	90
52) Acenaphthylene	8.76	152	3312306	50.12128	ppb	100
53) 3-Nitroaniline	8.90	138	603112	48.28582	ppb	96
54) Acenaphthene	8.97	154	2137500	49.94475	ppb	99
55) 2,4-Dinitrophenol	9.02	184	223533	39.09119	ppb	93
56) 4-Nitrophenol	9.16	65	310110	40.85539	ppb	83
57) Dibenzofuran	9.16	168	2994352	49.92206	ppb	96
58) 2,4-DNT	9.16	165	738907	50.78999	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	484344	48.35973	ppb	97
60) Diethyl phthalate	9.42	149	2328714	49.96558	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	1174928	50.20899	ppb	89
62) Fluorene	9.56	166	2429119	50.52330	ppb	99
63) 4-Nitroaniline	9.62	138	616973	48.78289	ppb	96
66) 4,6-Dinitro-2-methylphenol	9.63	198	421826	45.49616	ppb	97
67) Diphenyl amine	9.71	169	3700879	101.06577	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	3700879	101.06577	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2508871	48.60947	ppb	97
70) 4-Bromophenyl phenyl ether	10.13	248	632892	51.03387	ppb	96
71) Hexachlorobenzene	10.20	284	598955	51.08887	ppb	98
72) Atrazine	10.33	200	138313	11.00814	ppb	99
73) Pentachlorophenol	10.44	266	305935	41.69645	ppb	98
74) Phenanthrene	10.69	178	3555823	50.68775	ppb	99
75) Anthracene	10.75	178	3614825	50.30688	ppb	100
76) Carbazol	10.94	167	3334447	51.06363	ppb	97
77) Di-n-butylphthalate	11.32	149	3914410	50.80284	ppb	99
78) Fluoranthene	12.08	202	3800053	50.45124	ppb	98
80) Benzidine	12.33	184	400387	17.51949	ppb	99
81) Pyrene	12.34	202	3917366	49.93814	ppb	100
83) Butyl benzylphthalate	13.08	149	1813997	51.58662	ppb	99
84) 3,3'-Dichlorobenzidine	13.71	252	1095293	45.53518	ppb	98
85) Benz (a) anthracene	13.74	228	3410816	49.85815	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2441486	49.89107	ppb	99
87) Chrysene	13.78	228	3271023	48.89517	ppb	99
88) Di-n-octylphthalate	14.49	149	4255131	51.24301	ppb	100
90) Benzo (b) fluoranthene	15.07	252	3524406	52.75134	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3112482	48.47095	ppb	99
92) Benzo (a) pyrene	15.56	252	3146576	52.03148	ppb	96
93) Indeno (1,2,3-cd) pyrene	17.57	276	3185113	51.13136	ppb	97
94) Dibenz (a,h) anthracene	17.61	278	2916608	51.78891	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2739743	49.64489	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

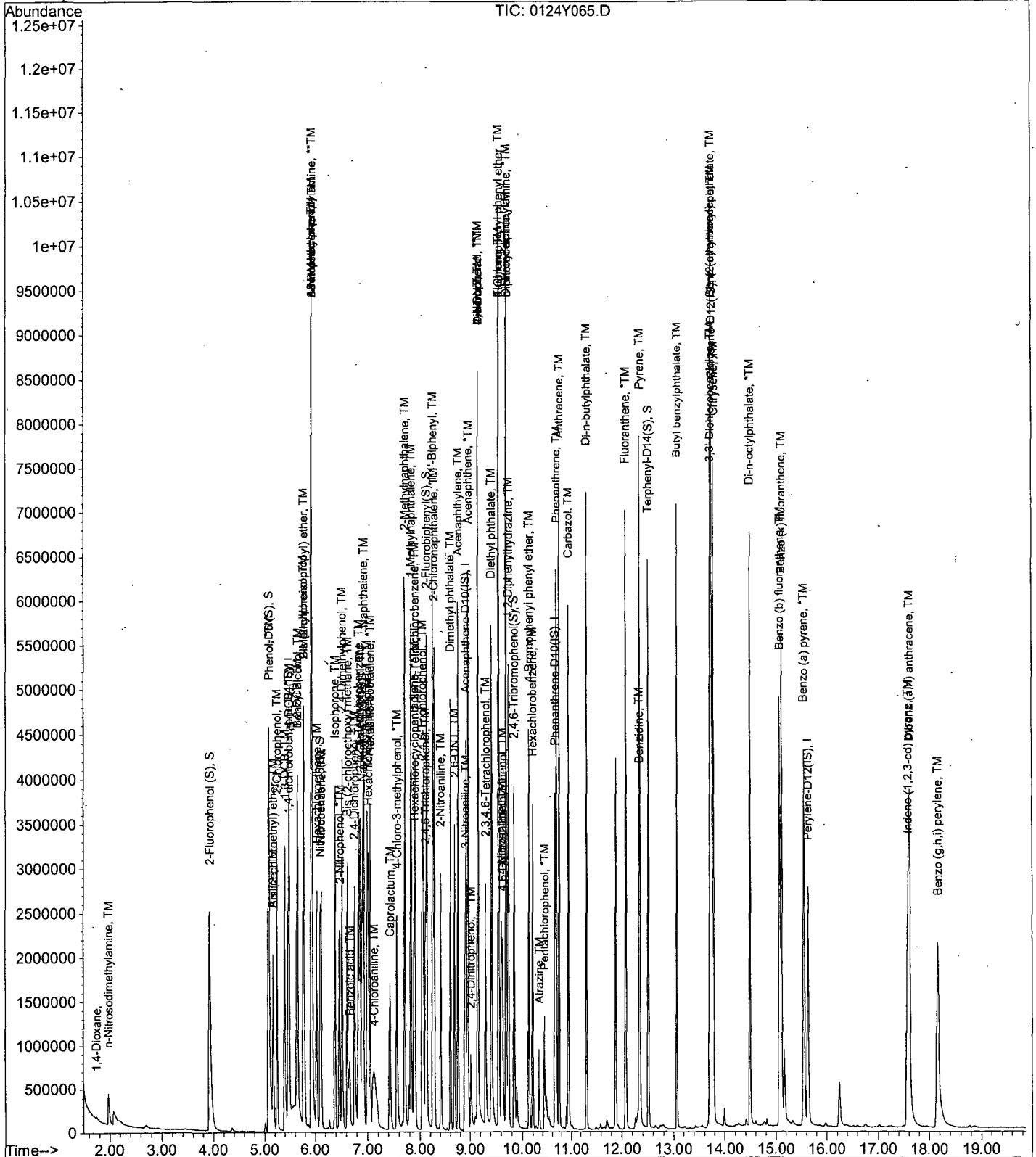
Data File : M:\YODA\DATA\Y190124\0124Y065.D  
 Acq On : 30 Jan 19 19:35  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 65  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 31 5:45 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 13:38  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y095.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2209	1.2	
3	TM	n-Nitrosodimethylamine	0.3626	0.3720	2.6	TM
4	TM	Pyridine	0.8923	1.031	16	TM
5	S	2-Fluorophenol (S)	1.784	1.792	0.46	S
6	S	Phenol-D6 (S)	2.349	2.313	1.5	S
7	*TM	Phenol	3.026	2.780	8.1	*TM
8	TM	Aniline	3.167	2.699	15	TM
9	TM	Bis (2-chloroethyl) ether	1.394	1.293	7.2	TM
10	TM	2-Chlorophenol	2.135	1.963	8.1	TM
11	TM	1,3-DCB	2.272	2.084	8.3	TM
12	*TM	1,4-DCB	2.321	2.114	8.9	*TM
13	TM	Benzyl alcohol	1.331	1.178	11	TM
14	TM	1,2-DCB	2.150	1.980	7.9	TM
15	TM	2-Methylphenol	1.822	1.683	7.6	TM
16	TM	Bis (2-chloroisopropyl) ether	2.093	1.951	6.8	TM
17	TM	Acetophenone	2.775	2.567	7.5	TM
18	TM	3&4-Methylphenol	2.152	2.012	6.5	TM
19	**TM	n-Nitrosodi-n-propylamine	1.563	1.434	8.2	**TM
20	TM	Hexachloroethane	0.8480	0.7802	8.0	TM
21	I	Napthalene-D8(IS)	ISTD			I
22	S	Nitrobenzene-D5(S)	0.4763	0.4906	3.0	S
23	TM	Nitrobenzene	0.5356	0.5160	3.7	TM
24	TM	Isophorone	0.9343	0.9110	2.5	TM
25	*TM	2-Nitrophenol	0.2637	0.2601	1.4	*TM
26	TM	2,4-Dimethylphenol	0.4363	0.4057	7.0	TM
27	TM	Benzoic acid	0.3414	0.3049	11	TM
28	TM	Bis (2-chloroethoxy) methane	0.5794	0.5580	3.7	TM
29	*TM	2,4-Dichlorophenol	0.3755	0.3778	0.62	*TM
30	TM	1,2,4-Trichlorobenzene	0.4174	0.4026	3.5	TM
31	TM	3,4-Dimethylphenol	0.5899	0.5719	3.1	TM
32	TM	Naphthalene	1.420	1.370	3.5	TM
33	TM	4-Chloroaniline	0.5252	0.4916	6.4	TM
34	TM	2,6-Dichlorophenol	0.3718	0.3683	0.94	TM
35	TM	Hexachloropropene	0.2546	0.2552	0.24	TM
36	*TM	Hexachlorobutadiene	0.2175	0.2086	4.1	*TM
37	TM	Caprolactum	0.1890	0.1847	2.3	TM
38	*TM	4-Chloro-3-methylphenol	0.4231	0.4128	2.4	*TM
39	TM	2-Methylnaphthalene	0.9154	0.8858	3.2	TM
40	TM	1-Methylnaphthalene	0.9149	0.8771	4.1	TM

Average

5.5

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 13:38  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y095.D

		Compound	MEAN	CCRF	%D	%Drift	
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TML	Hexachlorocyclopentadiene	0.2131	0.2830	33	**TML	0.07
43	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6704	0.22	TM	
44	*TM	2,4,6-Trichlorophenol	0.4386	0.4570	4.2	*TM	
45	TM	2,4,5-Trichlorophenol	0.4953	0.4948	0.10	TM	
46	S	2-Fluorobiphenyl(S)	1.620	1.705	5.2	S	
47	TM	1,1'-Biphenyl	1.985	1.994	0.47	TM	
48	TM	2-Chloronaphthalene	1.516	1.509	0.49	TM	
49	TM	2-Nitroaniline	0.4929	0.5029	2.0	TM	
50	TM	Dimethyl phthalate	1.790	1.792	0.12	TM	
51	TM	2,6-DNT	0.4015	0.4109	2.3	TM	
52	TM	Acenaphthylene	2.405	2.407	0.07	TM	
53	TM	3-Nitroaniline	0.4546	0.4664	2.6	TM	
54	*TM	Acenaphthene	1.558	1.551	0.44	*TM	
55	**TML	2,4-Dinitrophenol	0.1911	0.2258	18	**TML	4.6
56	**TM	4-Nitrophenol	0.2763	0.1942	30	**TM	*NT
57	TM	Dibenzofuran	2.183	2.158	1.1	TM	
58	TM	2,4-DNT	0.5295	0.5533	4.5	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3660	0.42	TM	
60	TM	Diethyl phthalate	1.696	1.695	0.06	TM	
61	TM	4-Chlorophenyl phenyl ether	0.8517	0.8508	0.11	TM	
62	TM	Fluorene	1.750	1.760	0.58	TM	
63	TM	4-Nitroaniline	0.4603	0.4705	2.2	TM	
64	S	2,4,6-Tribromophenol(S)	0.1657	0.1803	8.8	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1877	5.1	TM	
67	TM	Diphenyl amine	0.7057	0.7091	0.49	TM	
68	*TM	n-Nitrosodiphenylamine	0.7057	0.7091	0.49	*TM	
69	TM	1,2-Diphenylhydrazine	0.9947	0.9454	5.0	TM	
70	TM	4-Bromophenyl phenyl ether	0.2390	0.2425	1.5	TM	
71	TM	Hexachlorobenzene	0.2259	0.2297	1.7	TM	
72	TM	Atrazine	0.2421	0.2358	2.6	TM	
73	*TM	Pentachlorophenol	0.1414	0.1339	5.3	*TM	
74	TM	Phenanthrene	1.352	1.343	0.68	TM	
75	TM	Anthracene	1.385	1.390	0.38	TM	
76	TM	Carbazol	1.258	1.278	1.6	TM	
77	TM	Di-n-butylphthalate	1.485	1.515	2.0	TM	
78	*TM	Fluoranthene	1.452	1.454	0.19	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TM	Benzidine	0.4947	0.4849	2.0	TM	

Average

3.9

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 13:38  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y095.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.698	1.657	2.4	TM
82	S	Terphenyl-D14(S)	1.020	1.045	2.4	S
83	TM	Butyl benzylphthalate	0.7611	0.7725	1.5	TM
84	TM	3,3'-Dichlorobenzidine	0.5206	0.5306	1.9	TM
85	TM	Benz (a) anthracene	1.481	1.446	2.4	TM
86	TM	Bis (2-ethylhexyl) phthalate	1.059	1.066	0.67	TM
87	TM	Chrysene	1.448	1.435	0.88	TM
88	*TM	Di-n-octylphthalate	1.797	1.858	3.4	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.501	1.440	4.1	TM
91	TM	Benzo (k) fluoranthene	1.443	1.509	4.6	TM
92	*TM	Benzo (a) pyrene	1.359	1.392	2.5	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.400	1.430	2.2	TM
94	TM	Dibenz (a,h) anthracene	1.266	1.315	3.9	TM
95	TM	Benzo (g,h,i) perylene	1.240	1.257	1.4	TM
96						
97						
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118						
119						
120						

Average

2.4



Data File : M:\YODA\DATA\Y190124\0124Y095.D  
 Acq On : 1 Feb 19 13:38  
 Sample : 50ug/mL 8270 01/24/19 (2)  
 Misc :

Vial: 95  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 1 15:05 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	416513	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1765187	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	989986	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1903135	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1732954	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1699588	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	1866351	100.46347	ppb	0.02
Spiked Amount 200.000			Recovery =	50.232%		
6) Phenol-D6 (S)	5.06	99	2408819	98.48039	ppb	0.00
Spiked Amount 200.000			Recovery =	49.240%		
22) Nitrobenzene-D5 (S)	6.09	82	1082507	51.49952	ppb	0.00
Spiked Amount 100.000			Recovery =	51.500%		
46) 2-Fluorobiphenyl (S)	8.13	172	2109374	52.61833	ppb	0.00
Spiked Amount 100.000			Recovery =	52.618%		
64) 2,4,6-Tribromophenol (S)	9.85	330	446193	108.80398	ppb	0.00
Spiked Amount 200.000			Recovery =	54.402%		
82) Terphenyl-D14 (S)	12.51	244	2263200	51.19343	ppb	0.00
Spiked Amount 100.000			Recovery =	51.193%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	11503	4.93865		60
3) n-Nitrosodimethylamine	1.96	42	193677	51.29411	ppb	99
4) Pyridine	1.98	79	536650	57.75708	ppb	96
7) Phenol	5.08	94	1447328	45.93657	ppb	99
8) Aniline	5.10	93	1405363	42.61363	ppb	97
9) Bis (2-chloroethyl) ether	5.17	63	673360	46.39238	ppb	93
10) 2-Chlorophenol	5.23	128	1022251	45.97294	ppb	100
11) 1,3-DCB	5.39	146	1085148	45.87300	ppb	99
12) 1,4-DCB	5.48	146	1100589	45.53349	ppb	99
13) Benzyl alcohol	5.63	108	613099	44.25008	ppb	99
14) 1,2-DCB	5.65	146	1030895	46.03819	ppb	97
15) 2-Methylphenol	5.76	107	876033	46.18463	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1015766	46.61368	ppb	# 87
17) Acetophenone	5.92	105	1336572	46.25058	ppb	94
18) 3&4-Methylphenol	5.92	107	2095562	93.53850	ppb	97
19) n-Nitrosodi-n-propylamine	5.92	70	746500	45.88179	ppb	99
20) Hexachloroethane	6.02	117	406192	46.00245	ppb	97
23) Nitrobenzene	6.12	77	1138613	48.17066	ppb	99
24) Isophorone	6.39	82	2009997	48.74874	ppb	100
25) 2-Nitrophenol	6.47	139	573912	49.31491	ppb	100
26) 2,4-Dimethylphenol	6.52	122	895186	46.48964	ppb	100
27) Benzoic acid	6.67	105	672786	44.65623	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1231247	48.15059	ppb	100
29) 2,4-Dichlorophenol	6.75	162	833572	50.30843	ppb	97
30) 1,2,4-Trichlorobenzene	6.83	180	888396	48.22683	ppb	98
31) 3,4-Dimethylphenol	6.86	107	1261977	48.47409	ppb	96
32) Napthalene	6.93	128	3021964	48.23928	ppb	100
33) 4-Chloroaniline	6.99	127	1084636	46.79772	ppb	100
34) 2,6-Dichlorophenol	7.00	162	812740	49.53049	ppb	100
35) Hexachloropropene	7.02	213	563006	50.11930	ppb	99
36) Hexachlorobutadiene	7.05	225	460313	47.96916	ppb	98
37) Caprolactum	7.42	55	407450	48.84203	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y095.D  
 Acq On : 1 Feb 19 13:38  
 Sample : 50ug/mL 8270 01/24/19 (2)  
 Misc :

Vial: 95  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 1 15:05 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	910751	48.77901	ppb	92
39) 2-Methylnaphthalene	7.71	142	1954588	48.38658	ppb	100
40) 1-Methylnaphthalene	7.83	142	1935279	47.93391	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	350201	49.96612	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	829608	49.89003	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	565523	52.09946	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	612312	49.94852	ppb	92
47) 1,1'-Biphenyl	8.25	154	2467653	50.23274	ppb	99
48) 2-Chloronaphthalene	8.28	162	1867270	49.75599	ppb	98
49) 2-Nitroaniline	8.40	65	622307	51.01005	ppb	99
50) Dimethyl phthalate	8.61	163	2218072	50.05865	ppb	100
51) 2,6-DNT	8.69	165	508461	51.17445	ppb	96
52) Acenaphthylene	8.76	152	2978532	50.03457	ppb	100
53) 3-Nitroaniline	8.88	138	577157	51.29698	ppb	99
54) Acenaphthene	8.96	154	1919008	49.77791	ppb	99
55) 2,4-Dinitrophenol	9.01	184	279393	52.30683	ppb	96
56) 4-Nitrophenol	9.10	65	240322	35.14822	ppb	98
57) Dibenzofuran	9.16	168	2670488	49.42611	ppb	99
58) 2,4-DNT	9.15	165	684648	52.24345	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	452976	50.20896	ppb	98
60) Diethyl phthalate	9.42	149	2097804	49.96845	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1052819	49.94593	ppb	96
62) Fluorene	9.56	166	2178111	50.29202	ppb	100
63) 4-Nitroaniline	9.61	138	582188	51.10234	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	446569	52.52977	ppb	94
67) Diphenyl amine	9.70	169	3373858	100.48507	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3373858	100.48507	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2249004	47.52349	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	576912	50.73574	ppb	93
71) Hexachlorobenzene	10.19	284	546516	50.84058	ppb	# 84
72) Atrazine	10.32	200	280456	24.34396	ppb	98
73) Pentachlorophenol	10.43	266	318609	47.35911	ppb	98
74) Phenanthrene	10.69	178	3194281	49.66055	ppb	99
75) Anthracene	10.75	178	3306605	50.18777	ppb	100
76) Carbazol	10.94	167	3041157	50.79281	ppb	97
77) Di-n-butylphthalate	11.33	149	3604642	51.02222	ppb	99
78) Fluoranthene	12.08	202	3459621	50.09407	ppb	99
80) Benzidine	12.24	184	1050459	49.01617	ppb	99
81) Pyrene	12.35	202	3588704	48.78592	ppb	100
83) Butyl benzylphthalate	13.08	149	1673326	50.74576	ppb	92
84) 3,3'-Dichlorobenzidine	13.71	252	1149363	50.95569	ppb	99
85) Benz (a) anthracene	13.74	228	3131477	48.81416	ppb	100
86) Bis (2-ethylhexyl) phthala	13.72	149	2309791	50.33383	ppb	# 95
87) Chrysene	13.79	228	3109036	49.55949	ppb	99
88) Di-n-octylphthalate	14.49	149	4024370	51.68188	ppb	97
90) Benzo (b) fluoranthene	15.07	252	3058636	47.94348	ppb	98
91) Benzo (k) fluoranthene	15.11	252	3205338	52.27603	ppb	99
92) Benzo (a) pyrene	15.55	252	2958102	51.22657	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	3038490	51.08277	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2792680	51.93188	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2671288	50.69202	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

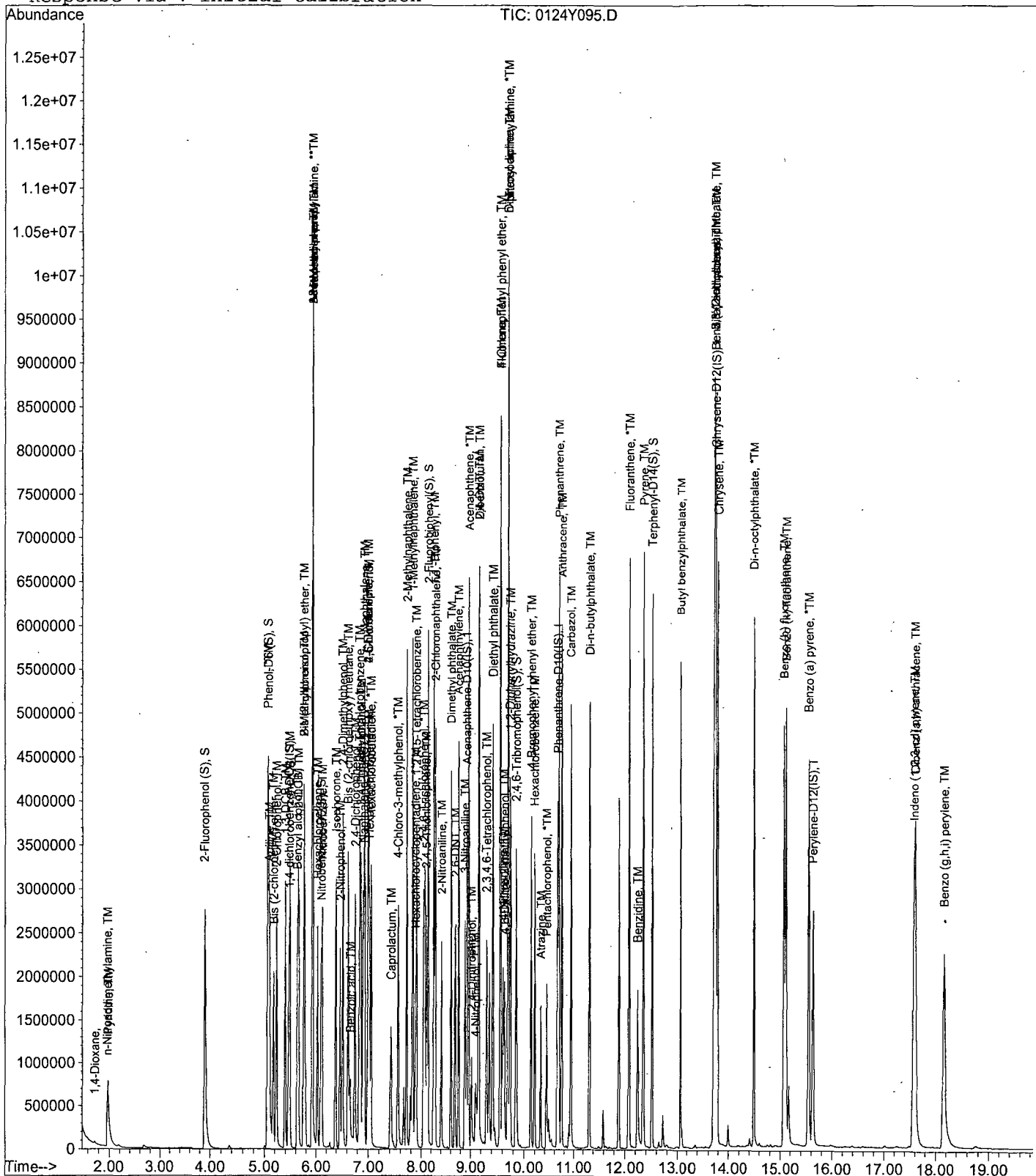
Data File : M:\YODA\DATA\Y190124\0124Y095.D  
Acq On : 1 Feb 19 13:38  
Sample : 50ug/mL 8270 01/24/19 (2)  
Misc :

Vial: 95  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 15:05 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 2 Feb 19 00:12  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y115.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2534	13	
3	TM	n-Nitrosodimethylamine	0.3626	0.4030	11	TM
4	S	2-Fluorophenol (S)	1.784	1.885	5.7	S
5	S	Phenol-D6 (S)	2.349	2.434	3.6	S
6	*TM	Phenol	3.026	2.790	7.8	*TM
7	TM	Aniline	3.167	2.084	34	TM
8	TM	Bis (2-chloroethyl) ether	1.394	1.343	3.6	TM
9	TM	2-Chlorophenol	2.135	2.048	4.1	TM
10	TM	1,3-DCB	2.272	2.135	6.0	TM
11	*TM	1,4-DCB	2.321	2.174	6.3	*TM
12	TM	Benzyl alcohol	1.331	0.2334	82	TM
13	TM	1,2-DCB	2.150	2.030	5.6	TM
14	TM	2-Methylphenol	1.822	1.733	4.8	TM
15	TM	Bis (2-chloroisopropyl) ether	2.093	1.958	6.4	TM
16	TM	Acetophenone	2.775	2.710	2.3	TM
17	TM	3&4-Methylphenol	2.152	2.040	5.2	TM
18	**TM	n-Nitrosodi-n-propylamine	1.563	1.502	3.9	**TM
19	TM	Hexachloroethane	0.8480	0.7996	5.7	TM
20	I	Napthalene-D8(IS)	ISTD			I
21	S	Nitrobenzene-D5(S)	0.4763	0.5129	7.7	S
22	TM	Nitrobenzene	0.5356	0.5287	1.3	TM
23	TM	Isophorone	0.9343	0.9293	0.53	TM
24	*TM	2-Nitrophenol	0.2637	0.2659	0.82	*TM
25	TM	2,4-Dimethylphenol	0.4363	0.4136	5.2	TM
26	TM	Benzoic acid	0.3414	0.2348	31	TM
27	TM	Bis (2-chloroethoxy) methane	0.5794	0.5611	3.2	TM
28	*TM	2,4-Dichlorophenol	0.3755	0.3835	2.1	*TM
29	TM	1,2,4-Trichlorobenzene	0.4174	0.4092	2.0	TM
30	TM	3,4-Dimethylphenol	0.5899	0.5666	4.0	TM
31	TM	Napthalene	1.420	1.383	2.6	TM
32	TM	4-Chloroaniline	0.5252	0.4340	17	TM
33	TM	2,6-Dichlorophenol	0.3718	0.3762	1.2	TM
34	TM	Hexachloropropene	0.2546	0.2671	4.9	TM
35	*TM	Hexachlorobutadiene	0.2175	0.2152	1.0	*TM
36	TM	Caprolactum	0.1890	0.1858	1.7	TM
37	*TM	4-Chloro-3-methylphenol	0.4231	0.3917	7.4	*TM
38	TM	2-Methylnapthalene	0.9154	0.8970	2.0	TM
39	TM	1-Methylnapthalene	0.9149	0.8942	2.3	TM
40	I	Acenaphthene-D10(IS)	ISTD			I

\*NT

Average

8.4

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 2 Feb 19 00:12  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y115.D

		Compound	MEAN	CCRF	%D		%Drift
41	**TML	Hexachlorocyclopentadiene	0.2131	0.3195	50	**TML	11
42	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6625	1.4	TM	
43	*TM	2,4,6-Trichlorophenol	0.4386	0.4644	5.9	*TM	
44	TM	2,4,5-Trichlorophenol	0.4953	0.4680	5.5	TM	
45	S	2-Fluorobiphenyl(S)	1.620	1.697	4.8	S	
46	TM	1,1'-Biphenyl	1.985	1.984	0.03	TM	
47	TM	2-Chloronaphthalene	1.516	1.505	0.73	TM	
48	TM	2-Nitroaniline	0.4929	0.5002	1.5	TM	
49	TM	Dimethyl phthalate	1.790	1.789	0.05	TM	
50	TM	2,6-DNT	0.4015	0.4163	3.7	TM	
51	TM	Acenaphthylene	2.405	2.405	0.00	TM	
52	TM	3-Nitroaniline	0.4546	0.4516	0.66	TM	
53	*TM	Acenaphthene	1.558	1.531	1.7	*TM	
54	**TML	2,4-Dinitrophenol	0.1911	0.2189	15	**TML	1.7
55	**TM	4-Nitrophenol	0.2763	0.1051	62	**TM	*NT
56	TM	Dibenzofuran	2.183	2.150	1.5	TM	
57	TM	2,4-DNT	0.5295	0.5501	3.9	TM	
58	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3495	4.1	TM	
59	TM	Diethyl phthalate	1.696	1.716	1.1	TM	
60	TM	4-Chlorophenyl phenyl ether	0.8517	0.8507	0.11	TM	
61	TM	Fluorene	1.750	1.758	0.48	TM	
62	TM	4-Nitroaniline	0.4603	0.4473	2.8	TM	
63	S	2,4,6-Tribromophenol(S)	0.1657	0.1827	10	S	
64	I	Phenanthrene-D10(IS)	ISTD			I	
65	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1870	4.7	TM	
66	TM	Diphenyl amine	0.7057	0.7079	0.32	TM	
67	*TM	n-Nitrosodiphenylamine	0.7057	0.7079	0.32	*TM	
68	TM	1,2-Diphenylhydrazine	0.9947	1.095	10	TM	
69	TM	4-Bromophenyl phenyl ether	0.2390	0.2472	3.4	TM	
70	TM	Hexachlorobenzene	0.2259	0.2289	1.3	TM	
71	TM	Atrazine	0.2421	0.1943	20	TM	
72	*TM	Pentachlorophenol	0.1414	0.1121	21	*TM	
73	TM	Phenanthrene	1.352	1.338	1.1	TM	
74	TM	Anthracene	1.385	1.386	0.11	TM	
75	TM	Carbazol	1.258	1.244	1.2	TM	
76	TM	Di-n-butylphthalate	1.485	1.504	1.3	TM	
77	*TM	Fluoranthene	1.452	1.443	0.61	*TM	
78	I	Chrysene-D12(IS)	ISTD			I	
79	TM	Benzidine	0.4947	0.1453	71	TM	*NT
80	TM	Pyrene	1.698	1.718	1.2	TM	

Average

8.3

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 2 Feb 19 00:12  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y115.D

		Compound	MEAN	CCRF	%D	%Drift
81	S	Terphenyl-D14(S)	1.020	1.100	7.8	S
82	TM	Butyl benzylphthalate	0.7611	0.8046	5.7	TM
83	TM	3,3'-Dichlorobenzidine	0.5206	0.5087	2.3	TM
84	TM	Benz (a) anthracene	1.481	1.491	0.72	TM
85	TM	Bis (2-ethylhexyl) phthalate	1.059	1.092	3.1	TM
86	TM	Chrysene	1.448	1.447	0.05	TM
87	*TM	Di-n-octylphthalate	1.797	1.901	5.8	*TM
88	I	Perylene-D12(IS)	ISTD			I
89	TM	Benzo (b) fluoranthene	1.501	1.512	0.72	TM
90	TM	Benzo (k) fluoranthene	1.443	1.448	0.33	TM
91	*TM	Benzo (a) pyrene	1.359	1.397	2.8	*TM
92	TM	Indeno (1,2,3-cd) pyrene	1.400	1.404	0.27	TM
93	TM	Dibenz (a,h) anthracene	1.266	1.286	1.6	TM
94	TM	Benzo (g,h,i) perylene	1.240	1.217	1.8	TM
95						
96						
97						
98						
99						
100						
101						
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115						
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117						
118						
119						
120						

Average

2.5

Data File : M:\YODA\DATA\Y190124\0124Y115.D  
 Acq On : 2 Feb 19 00:12  
 Sample : 50ug/mL 8270 01/24/19 (1)  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 4 7:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	496552	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2165400	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1244881	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2389876	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2082073	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	2039768	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.92	112	2340360	105.67234	ppb	0.05
Spiked Amount 200.000			Recovery =	52.836%		
6) Phenol-D6 (S)	5.09	99	3020946	103.59824	ppb	0.03
Spiked Amount 200.000			Recovery =	51.799%		
22) Nitrobenzene-D5 (S)	6.10	82	1388367	53.84301	ppb	0.00
Spiked Amount 100.000			Recovery =	53.843%		
46) 2-Fluorobiphenyl (S)	8.14	172	2640473	52.38012	ppb	0.00
Spiked Amount 100.000			Recovery =	52.380%		
64) 2,4,6-Tribromophenol (S)	9.86	330	568606	110.26424	ppb	0.00
Spiked Amount 200.000			Recovery =	55.132%		
82) Terphenyl-D14 (S)	12.51	244	2863298	53.90746	ppb	0.00
Spiked Amount 100.000			Recovery =	53.907%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	15731	5.66523		91
3) n-Nitrosodimethylamine	1.97	42	250163	55.57460	ppb	98
7) Phenol	5.09	94	1731537	46.09854	ppb	100
8) Aniline	5.17	93	1293796	32.90710	ppb	# 97
9) Bis (2-chloroethyl) ether	5.17	63	833755	48.18386	ppb	95
10) 2-Chlorophenol	5.24	128	1270872	47.94136	ppb	99
11) 1,3-DCB	5.40	146	1325432	46.99909	ppb	99
12) 1,4-DCB	5.48	146	1349672	46.83795	ppb	100
13) Benzyl alcohol	5.64	108	144860	8.76992	ppb	97
14) 1,2-DCB	5.65	146	1259804	47.19225	ppb	99
15) 2-Methylphenol	5.77	107	1075819	47.57514	ppb	94
16) Bis (2-chloroisopropyl) et	5.76	45	1215615	46.79286	ppb	# 85
17) Acetophenone	5.93	105	1682335	48.83162	ppb	75
18) 3&4-Methylphenol	5.94	107	2531933	94.79948	ppb	98
19) n-Nitrosodi-n-propylamine	5.93	70	931988	48.04903	ppb	98
20) Hexachloroethane	6.03	117	496330	47.15025	ppb	89
23) Nitrobenzene	6.13	77	1431134	49.35594	ppb	99
24) Isophorone	6.39	82	2515476	49.73255	ppb	99
25) 2-Nitrophenol	6.48	139	719682	50.41109	ppb	96
26) 2,4-Dimethylphenol	6.52	122	1119550	47.39571	ppb	99
27) Benzoic acid	6.69	105	635436	34.38187	ppb	97
28) Bis (2-chloroethoxy) metha	6.63	93	1518874	48.42066	ppb	99
29) 2,4-Dichlorophenol	6.76	162	1038130	51.07425	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	1107676	49.01708	ppb	99
31) 3,4-Dimethylphenol	6.87	107	1533738	48.02440	ppb	98
32) Naphthalene	6.93	128	3743822	48.71687	ppb	99
33) 4-Chloroaniline	7.11	127	1174805	41.31988	ppb	99
34) 2,6-Dichlorophenol	7.00	162	1018309	50.58865	ppb	98
35) Hexachloropropene	7.02	213	722872	52.45731	ppb	99
36) Hexachlorobutadiene	7.05	225	582560	49.48826	ppb	99
37) Caprolactum	7.45	55	503008	49.15264	ppb	99
38) 4-Chloro-3-methylphenol	7.56	107	1060137	46.28582	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y115.D  
 Acq On : 2 Feb 19 00:12  
 Sample : 50ug/mL 8270 01/24/19 (1)  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 4 7:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) 2-Methylnaphthalene	7.71	142	2428021	48.99759	ppb	100
40) 1-Methylnaphthalene	7.83	142	2420244	48.86648	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	497218	55.65502	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1030920	49.30228	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	722719	52.94850	ppb	100
45) 2,4,5-Trichlorophenol	8.11	196	728244	47.24197	ppb	100
47) 1,1'-Biphenyl	8.25	154	3087683	49.98465	ppb	99
48) 2-Chloronaphthalene	8.28	162	2342284	49.63397	ppb	99
49) 2-Nitroaniline	8.42	65	778396	50.74028	ppb	82
50) Dimethyl phthalate	8.60	163	2784470	49.97436	ppb	99
51) 2,6-DNT	8.69	165	647823	51.85052	ppb	# 80
52) Acenaphthylene	8.76	152	3742987	50.00200	ppb	100
53) 3-Nitroaniline	8.90	138	702707	49.66761	ppb	87
54) Acenaphthene	8.97	154	2381834	49.13292	ppb	99
55) 2,4-Dinitrophenol	9.02	184	340648	50.86832	ppb	96
56) 4-Nitrophenol	9.13	65	163535	19.02049	ppb	95
57) Dibenzofuran	9.16	168	3346328	49.25332	ppb	95
58) 2,4-DNT	9.16	165	856085	51.94965	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	543842	47.93801	ppb	95
60) Diethyl phthalate	9.43	149	2669927	50.57450	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.56	204	1323801	49.94251	ppb	90
62) Fluorene	9.56	166	2736135	50.24095	ppb	100
63) 4-Nitroaniline	9.62	138	696033	48.58571	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.64	198	558646	52.32965	ppb	94
67) Diphenyl amine	9.71	169	4229730	100.31863	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	4229730	100.31863	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	3271061	55.04286	ppb	96
70) 4-Bromophenyl phenyl ether	10.13	248	738392	51.71132	ppb	96
71) Hexachlorobenzene	10.20	284	683765	50.65341	ppb	96
72) Atrazine	10.33	200	290170	20.05733	ppb	99
73) Pentachlorophenol	10.44	266	334871	39.63850	ppb	98
74) Phenanthrene	10.69	178	3995650	49.46751	ppb	99
75) Anthracene	10.75	178	4141165	50.05326	ppb	99
76) Carbazol	10.94	167	3716019	49.42374	ppb	97
77) Di-n-butylphthalate	11.32	149	4492693	50.64052	ppb	99
78) Fluoranthene	12.08	202	4309982	49.69669	ppb	98
80) Benzidine	12.24	184	378134	14.68578	ppb	99
81) Pyrene	12.34	202	4471510	50.59437	ppb	99
83) Butyl benzylphthalate	13.08	149	2093953	52.85392	ppb	98
84) 3,3'-Dichlorobenzidine	13.71	252	1324044	48.85724	ppb	97
85) Benz (a) anthracene	13.74	228	3881347	50.35819	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2841101	51.53058	ppb	98
87) Chrysene	13.78	228	3766636	49.97419	ppb	100
88) Di-n-octylphthalate	14.49	149	4947258	52.88056	ppb	99
90) Benzo (b) fluoranthene	15.07	252	3855956	50.36127	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3691472	50.16390	ppb	98
92) Benzo (a) pyrene	15.56	252	3561169	51.38515	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.58	276	3578985	50.13481	ppb	97
94) Dibenz (a,h) anthracene	17.62	278	3277771	50.78721	ppb	97
95) Benzo (g,h,i) perylene	18.17	276	3104199	49.08303	ppb	98

(#) = qualifier out of range (m) = manual integration



Quantitation Report

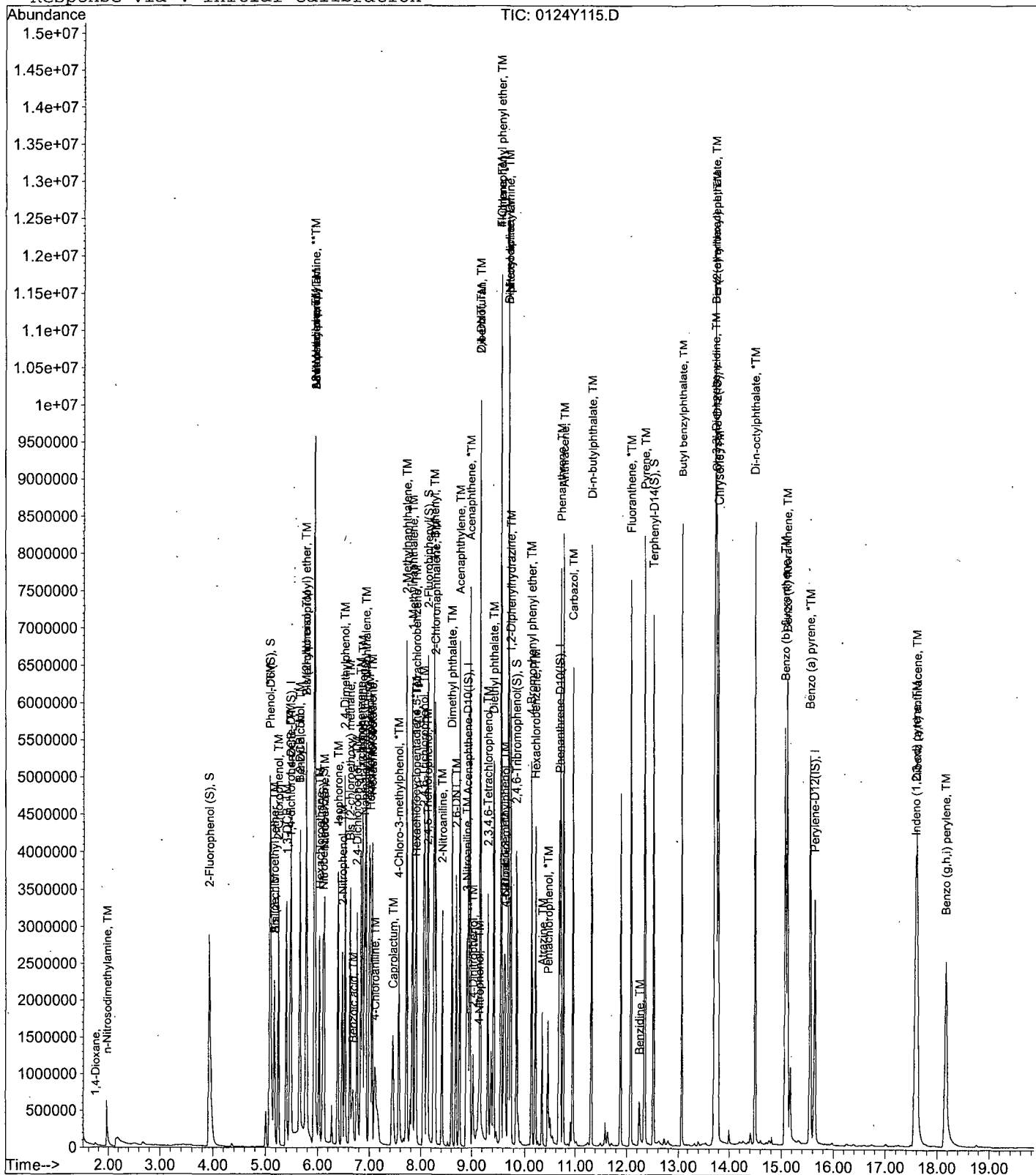
Data File : M:\YODA\DATA\Y190124\0124Y115.D  
Acq On : 2 Feb 19 00:12  
Sample : 50ug/mL 8270 01/24/19 (1)  
Misc :

Vial: 15  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 4 7:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y190124\0124Y103.D Vial: 3  
 Acq On : 1 Feb 19 18:38 Operator: MA  
 Sample : AZ85562W36 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 10:47 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	383183	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1713930	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1126374	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2250254	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	2022735	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1950865	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.90	112	3526937	257.9556	ppb	0.03
Spiked Amount 250.000			Recovery =	103.182%		
6) Phenol-D6 (S)	5.06	99	4675285	259.7084	ppb	0.00
Spiked Amount 250.000			Recovery =	103.883%		
22) Nitrobenzene-D5 (S)	6.09	82	2154814	131.9745	ppb	0.00
Spiked Amount 125.000			Recovery =	105.579%		
46) 2-Fluorobiphenyl (S)	8.13	172	4066191	111.4366	ppb	0.00
Spiked Amount 125.000			Recovery =	89.150%		
64) 2,4,6-Tribromophenol (S)	9.85	330	942366	252.4632	ppb	0.00
Spiked Amount 250.000			Recovery =	100.985%		
82) Terphenyl-D14 (S)	12.51	244	4506761	109.1726	ppb	0.00
Spiked Amount 125.000			Recovery =	87.338%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

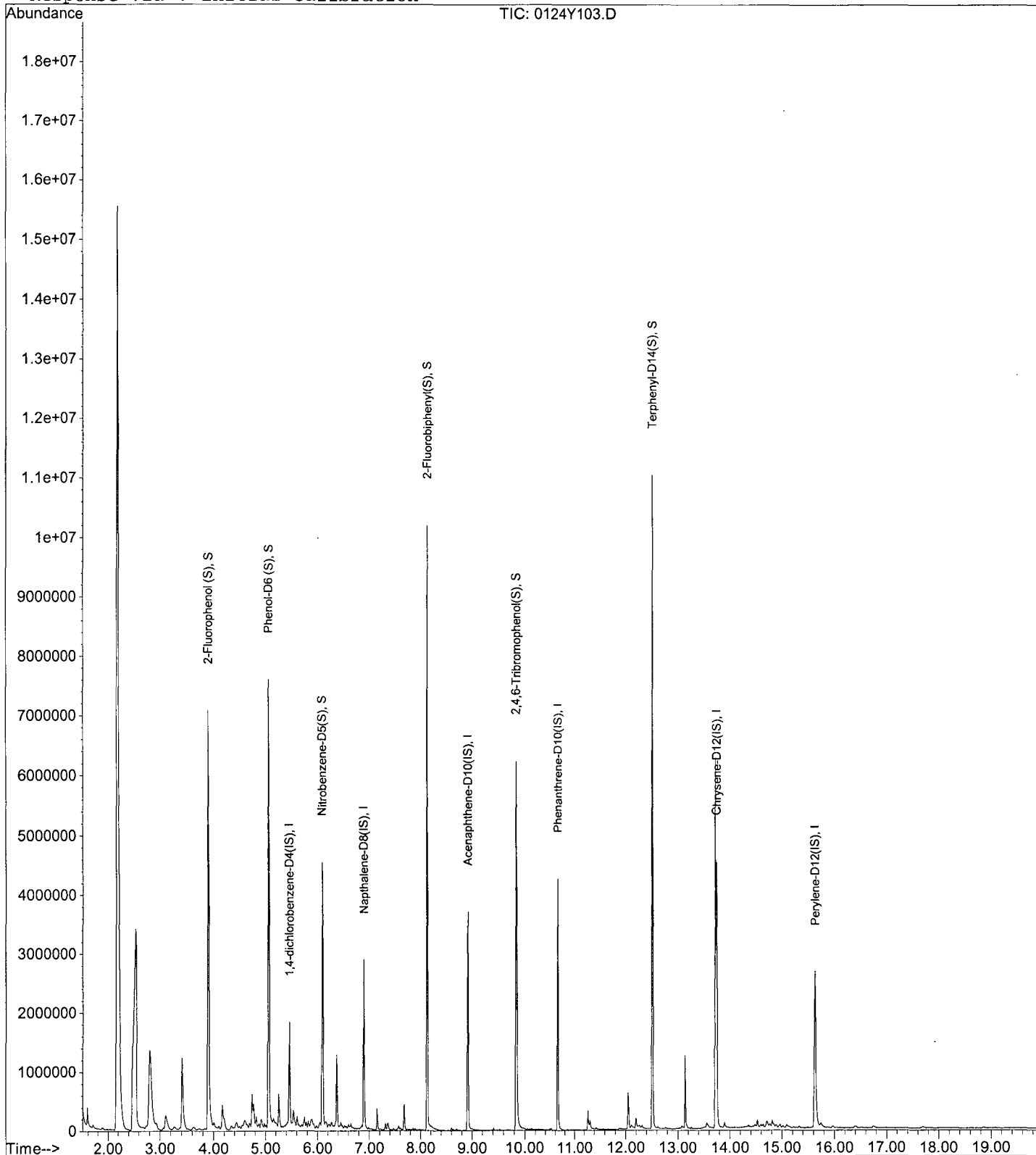
Data File : M:\YODA\DATA\Y190124\0124Y103.D  
Acq On : 1 Feb 19 18:38  
Sample : AZ85562W36 1/800  
Misc :

Vial: 3  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:47 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 18:38  
Data File: M:\YODA\DATA\Y190124\0124Y103.D  
Name: AZ85562W36 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hexanedioic acid, di	13.14	12.6	ppb	1388990	ISTD05	13.75	5515180	40.0
0124Y103.D Y0125NC.M			Sat Feb 09 07:24:24 2019					

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y103.D  
 Acq On : 1 Feb 19 18:38  
 Sample : AZ85562W36 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 3  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

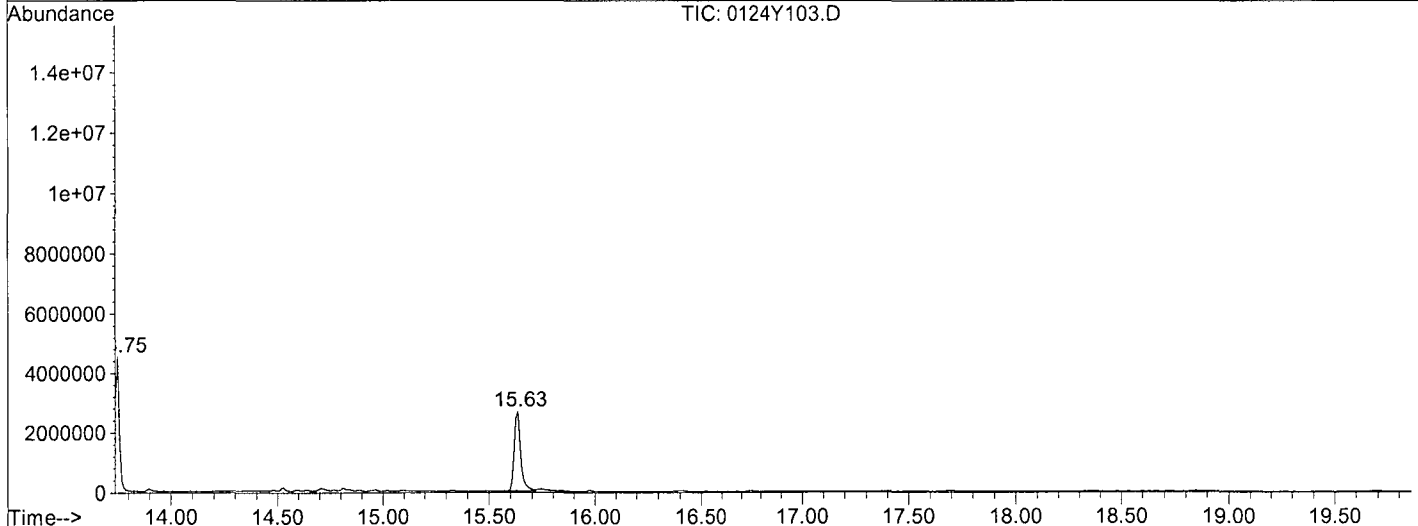
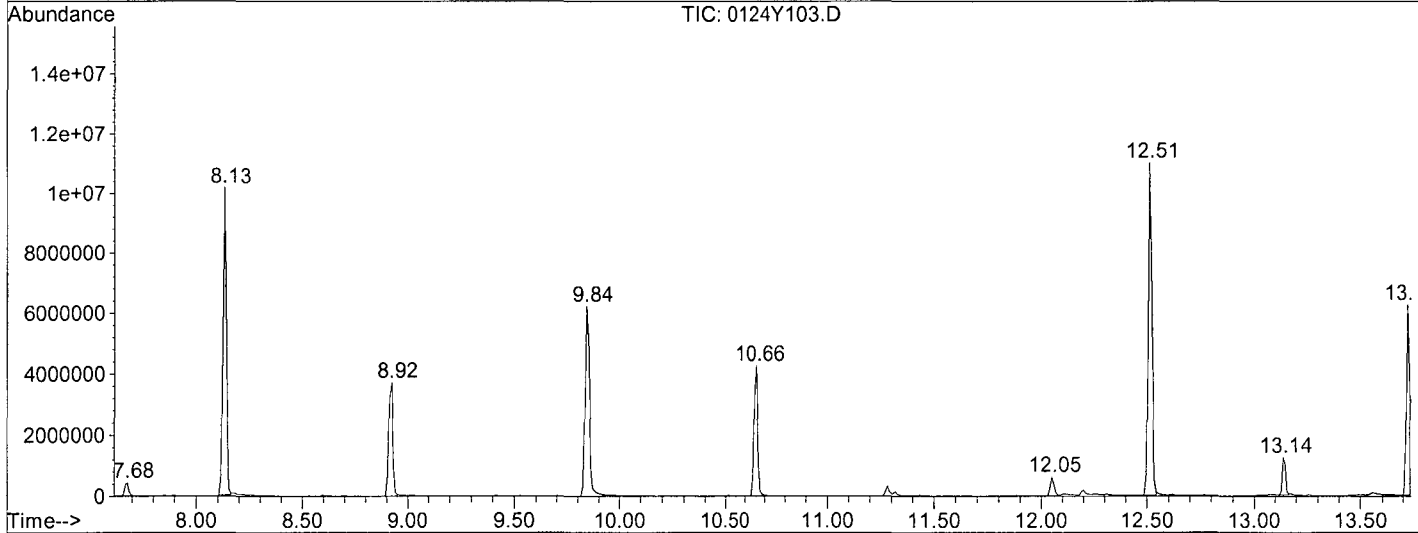
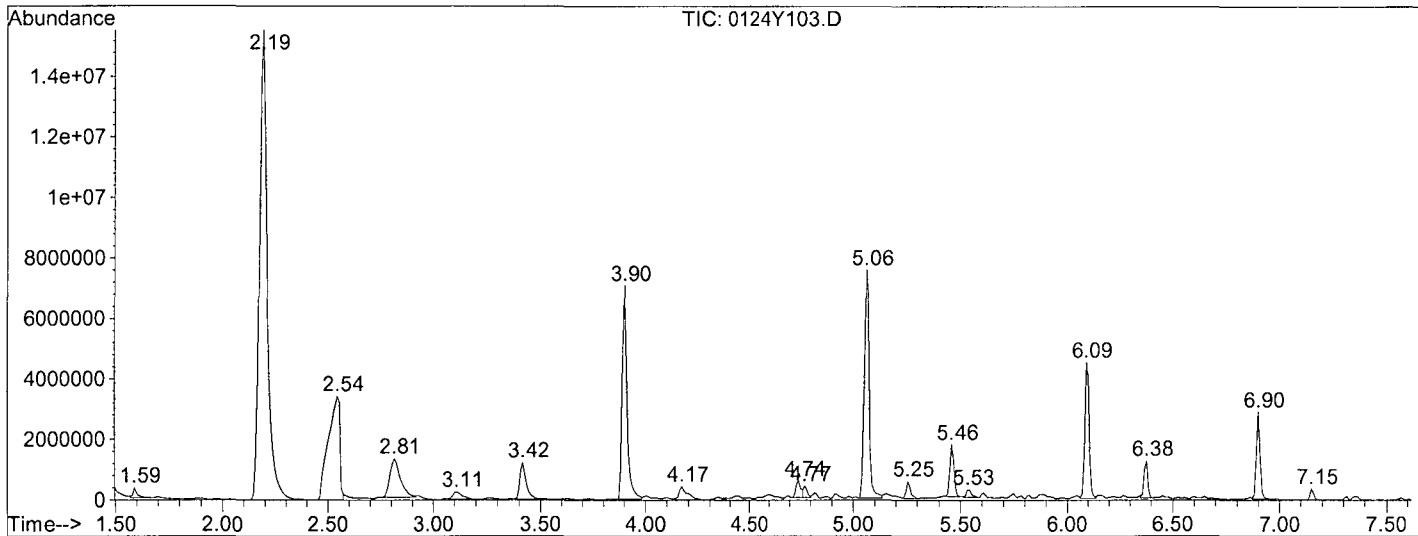
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.588	9	11	20	rVB	330682	2237910	470488	1.17%	0.284%
2	2.191	69	76	104	rVB	15529900	44533077	40163399	100.00%	24.237%
3	2.544	104	114	117	rBV	3406411	14712739	12812816	31.90%	7.732%
4	2.813	136	143	154	rBV	1276288	6992119	4446429	11.07%	2.683%
5	3.110	171	175	186	rVB3	239989	2786404	752471	1.87%	0.454%
6	3.417	204	208	218	rVB	1192416	4308542	2391178	5.95%	1.443%
7	3.900	256	260	269	rBV	7051202	13258873	11527449	28.70%	6.956%
8	4.169	284	289	302	rVB2	424432	3437500	1105227	2.75%	0.667%
9	4.744	348	351	353	rBV	543548	1869378	961516	2.39%	0.580%
10	4.772	353	354	357	rVV2	381190	1415600	436926	1.09%	0.264%
11	5.060	382	385	393	rBV	7545143	15276171	11772043	29.31%	7.104%
12	5.255	404	406	411	rVB	562359	2153013	801427	2.00%	0.484%
13	5.459	425	428	432	rVV	1705442	3507438	2280657	5.68%	1.376%
14	5.533	434	436	441	rVB	254098	1512021	420816	1.05%	0.254%
15	6.090	493	496	501	rVV	4493107	7934838	6539120	16.28%	3.946%
16	6.378	524	527	530	rVB	1216157	2419476	1418911	3.53%	0.856%
17	6.898	580	583	591	rVB	2868557	5255220	3454023	8.60%	2.084%
18	7.149	608	610	616	rBV	357346	1544826	414544	1.03%	0.250%
19	7.678	664	667	672	rBV	428135	1704013	594139	1.48%	0.359%
20	8.133	713	716	719	rBV	10157368	12883709	11066333	27.55%	6.678%
21	8.922	797	801	804	rBV	3710137	5778252	4896630	12.19%	2.955%
22	9.841	897	900	912	rBV	6218082	11815711	8832341	21.99%	5.330%
23	10.658	984	988	991	rBV	4264406	6438321	5561929	13.85%	3.356%
24	12.050	1135	1138	1142	rBV	612754	1650646	749958	1.87%	0.453%
25	12.515	1184	1188	1191	rBV	11008116	14210047	13294182	33.10%	8.023%
26	13.137	1253	1255	1258	rBV	1224506	2207769	1388994	3.46%	0.838%
27	13.721	1315	1318	1319	rBV	6243059	6731755	6149919	15.31%	3.711%
28	13.749	1319	1321	1329	rVB	4496579	15758530	5515180	13.73%	3.328%
29	15.634	1519	1524	1533	rBV	2651901	7443593	5489590	13.67%	3.313%

Sum of corrected areas: 165708635

0124Y103.D Y0125NC.M Sat Feb 09 07:24:22 2019

File : M:\YODA\DATA\Y190124\0124Y103.D  
Operator : MA  
Acquired : 1 Feb 19 18:38 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85562W36 1/800  
Misc Info :  
Vial Number: 3  
Quant File :Y0125NC.RES (RTE Integrator)



Data File : M:\YODA\DATA\Y190124\0124Y103.D  
 Acq On : 1 Feb 19 18:38  
 Sample : AZ85562W36 1/800  
 Misc :

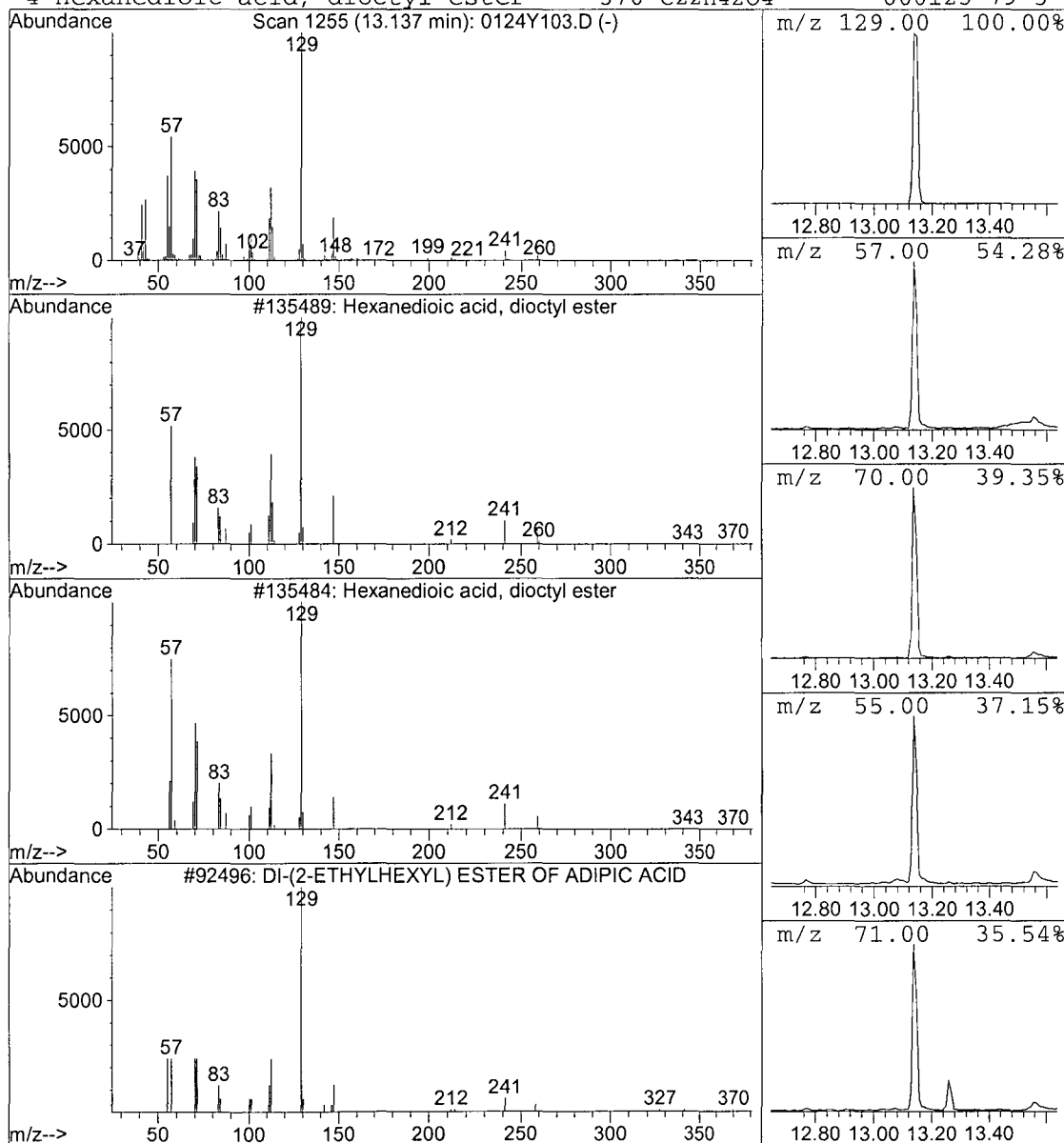
Vial: 3  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Hexanedioic acid, dioctyl este Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.14	12.59 ppb	1388990	Chrysene-D12 (IS)	13.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	91
2			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	90
3			DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	78
4			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	64





Data File : M:\YODA\DATA\Y190124\0124Y104.D Vial: 4  
 Acq On : 1 Feb 19 19:06 Operator: MA  
 Sample : AZ85563W10 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 10:46 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	478515	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2087906	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1239251	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2410368	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	2124759	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	2087385	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.90	112	3483082	203.9960	ppb	0.03
Spiked Amount 250.000			Recovery =	81.598%		
6) Phenol-D6 (S)	5.07	99	4565399	203.0801	ppb	0.02
Spiked Amount 250.000			Recovery =	81.232%		
22) Nitrobenzene-D5 (S)	6.10	82	2078775	104.5129	ppb	0.00
Spiked Amount 125.000			Recovery =	83.610%		
46) 2-Fluorobiphenyl (S)	8.13	172	3950619	98.4076	ppb	0.00
Spiked Amount 125.000			Recovery =	78.726%		
64) 2,4,6-Tribromophenol (S)	9.85	330	911000	221.8300	ppb	0.00
Spiked Amount 250.000			Recovery =	88.732%		
82) Terphenyl-D14 (S)	12.52	244	4298181	99.1205	ppb	0.00
Spiked Amount 125.000			Recovery =	79.296%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

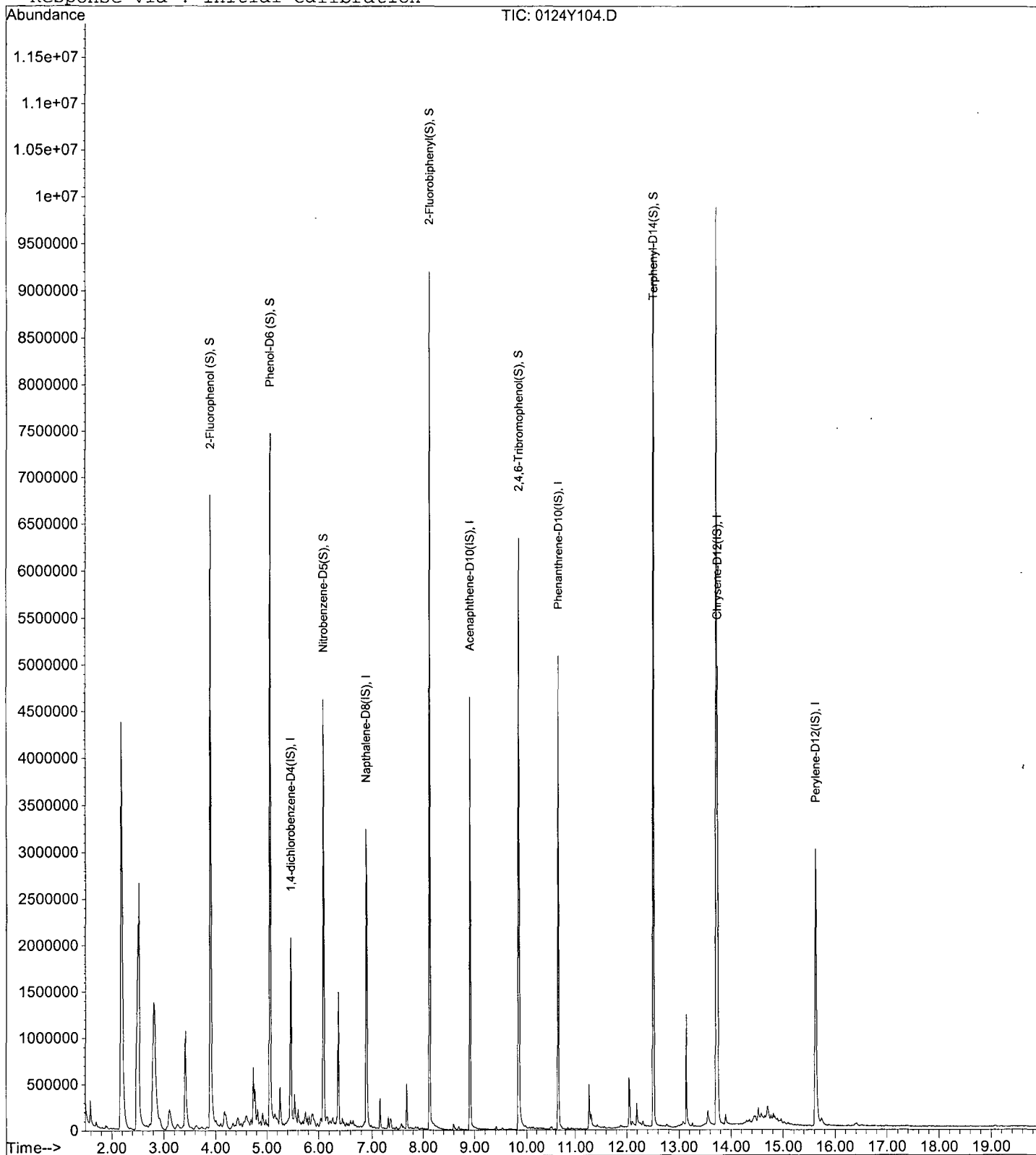
Data File : M:\YODA\DATA\Y190124\0124Y104.D  
Acq On : 1 Feb 19 19:06  
Sample : AZ85563W10 1/800  
Misc :

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:46 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 1 Feb 19 19:06  
Data File: M:\YODA\DATA\Y190124\0124Y104.D  
Name: AZ85563W10 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
[1,1'-Biphenyl]-4,4'	12.05	6.1	ppb	722172	ISTD04	10.66	5906610	40.0
0124Y104.D Y0125NC.M		Sat Feb 09 07:26:44		2019				

## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y104.D  
 Acq On : 1 Feb 19 19:06  
 Sample : AZ85563W10 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

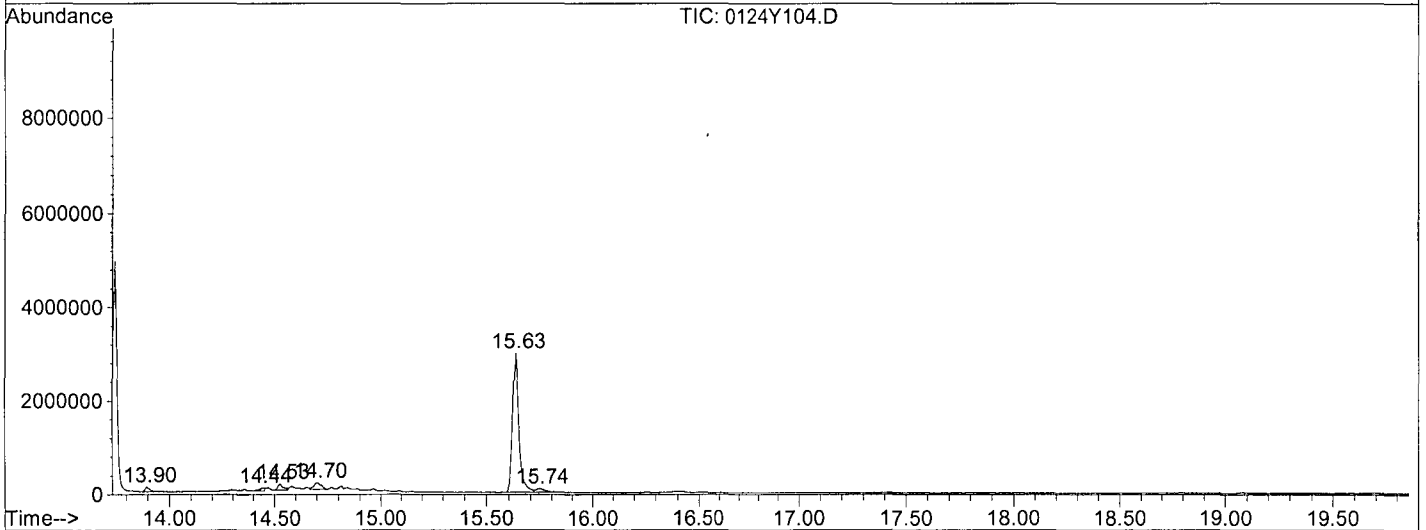
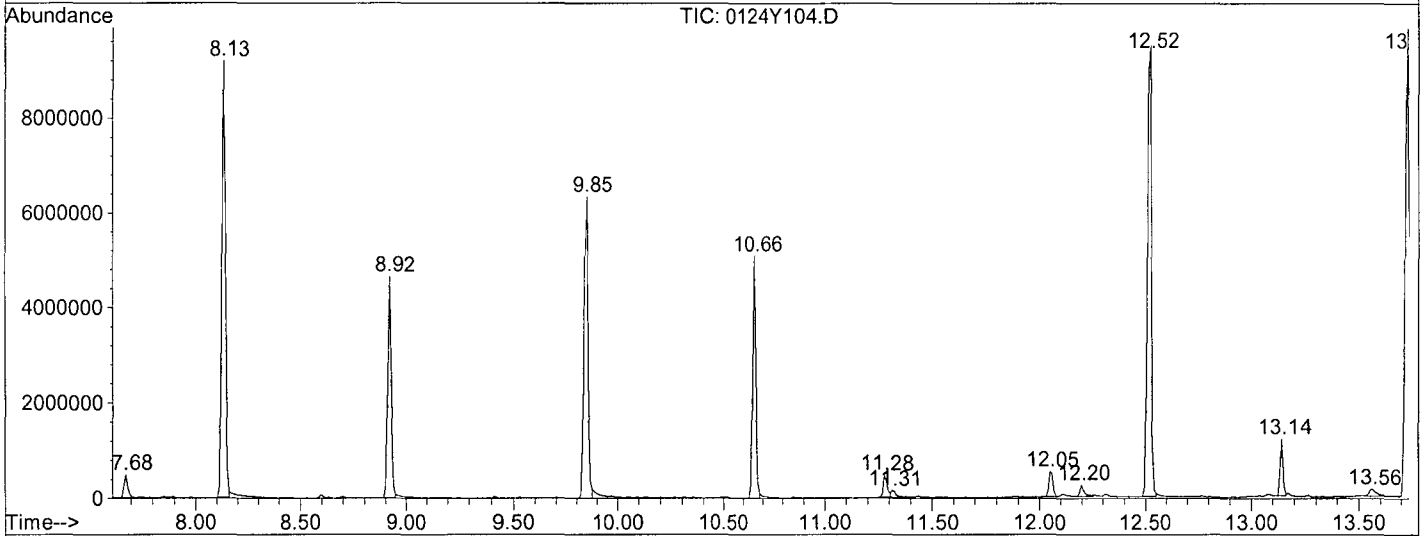
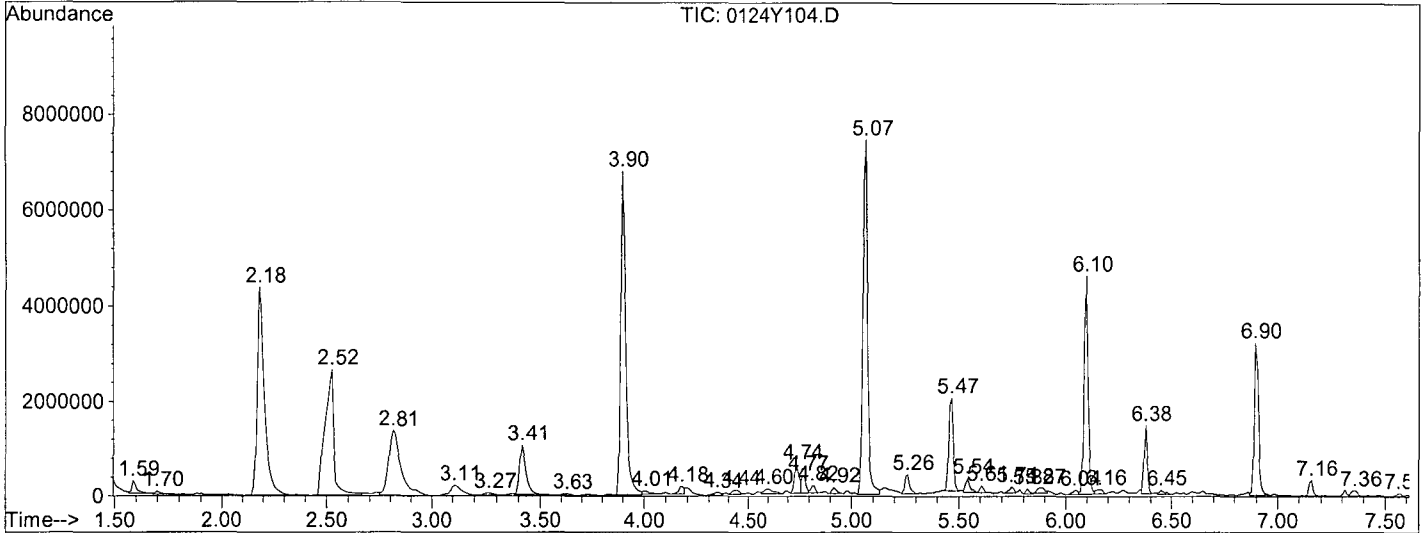
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.586	9	11	21	rVB	272911	2001112	421172	3.30%	0.305%
2	1.697	21	23	34	rVB	68181	1716637	145503	1.14%	0.105%
3	2.180	70	75	92	rBV	4368720	13054401	10612614	83.22%	7.676%
4	2.523	104	112	127	rBV	2653716	10331176	7789640	61.08%	5.635%
5	2.811	136	143	167	rVB2	1368709	9450058	5673555	44.49%	4.104%
6	3.108	167	175	186	rBV2	216660	2860850	825623	6.47%	0.597%
7	3.266	186	192	199	rBV3	47498	1574969	161395	1.27%	0.117%
8	3.415	204	208	218	rVB	1037131	3803907	2144929	16.82%	1.552%
9	3.628	225	231	237	rBV3	37785	1422659	131260	1.03%	0.095%
10	3.897	256	260	270	rBV	6779478	13040616	11455918	89.83%	8.286%
11	4.009	270	272	279	rVB2	66376	1330558	142409	1.12%	0.103%
12	4.176	285	290	291	rBV3	163017	1011403	302963	2.38%	0.219%
13	4.343	302	308	311	rBV2	62250	1139353	160096	1.26%	0.116%
14	4.436	314	318	322	rVV4	87483	1218769	240561	1.89%	0.174%
15	4.603	332	336	343	rVB6	102337	1765416	331490	2.60%	0.240%
16	4.742	348	351	353	rVV	612398	1704940	972208	7.62%	0.703%
17	4.770	353	354	357	rVV	374026	1405592	501437	3.93%	0.363%
18	4.816	357	359	362	rVB2	155231	940116	235679	1.85%	0.170%
19	4.919	367	370	375	rBV2	131175	1162303	206728	1.62%	0.150%
20	5.067	382	386	393	rBV	7434070	13769228	11541414	90.50%	8.348%
21	5.262	404	407	412	rVB2	407684	1817179	656946	5.15%	0.475%
22	5.466	425	429	433	rVV	1956324	3995096	2847879	22.33%	2.060%
23	5.541	435	437	442	rVB	302231	1672342	431206	3.38%	0.312%
24	5.605	442	444	447	rVB	145360	901480	181202	1.42%	0.131%
25	5.745	455	459	461	rBV4	132817	952069	207617	1.63%	0.150%
26	5.819	465	467	470	rBV	109689	797951	140942	1.11%	0.102%
27	5.875	470	473	477	rBV2	111997	1189929	296746	2.33%	0.215%
28	6.042	487	491	493	rBV2	89773	878650	175749	1.38%	0.127%
29	6.098	493	497	501	rVV	4575746	7275624	6210818	48.70%	4.493%
30	6.163	501	504	507	rVB3	79964	1041148	191047	1.50%	0.138%
31	6.376	525	527	530	rVV	1436593	2923366	1496492	11.73%	1.082%
32	6.450	533	535	541	rVB2	86633	1167426	157547	1.24%	0.114%
33	6.896	580	583	591	rVB	3207521	5695897	4271955	33.50%	3.090%
34	7.156	608	611	616	rBV	327418	1352786	429420	3.37%	0.311%
35	7.360	630	633	637	rVB	105938	1090936	216266	1.70%	0.156%
36	7.564	649	655	658	rBV3	61910	1090400	132556	1.04%	0.096%
37	7.676	664	667	672	rBV	484785	1489625	590629	4.63%	0.427%
38	8.131	713	716	719	rBV	9178316	11852142	10813569	84.79%	7.822%
39	8.920	798	801	804	rBV	4639778	6385314	5343253	41.90%	3.865%
40	9.848	897	901	904	rBV	6340764	9242058	8360210	65.56%	6.047%
41	10.656	985	988	991	rBV	5083404	6975870	5906605	46.32%	4.272%
42	11.278	1052	1055	1058	rBV2	477893	1275221	631172	4.95%	0.457%
43	11.315	1058	1059	1069	rVB	145292	1903539	247984	1.94%	0.179%
44	12.048	1135	1138	1142	rBV	532103	5371172	5.66%	0.522%	
45	12.197	1152	1154	1160	rBV2	240404	1416633	346471	2.72%	0.251%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y104.D  
Operator : MA  
Acquired : 1 Feb 19 19:06 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85563W10 1/800  
Misc Info :  
Vial Number: 4  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y104.D  
 Acq On : 1 Feb 19 19:06  
 Sample : AZ85563W10 1/800  
 Misc :

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

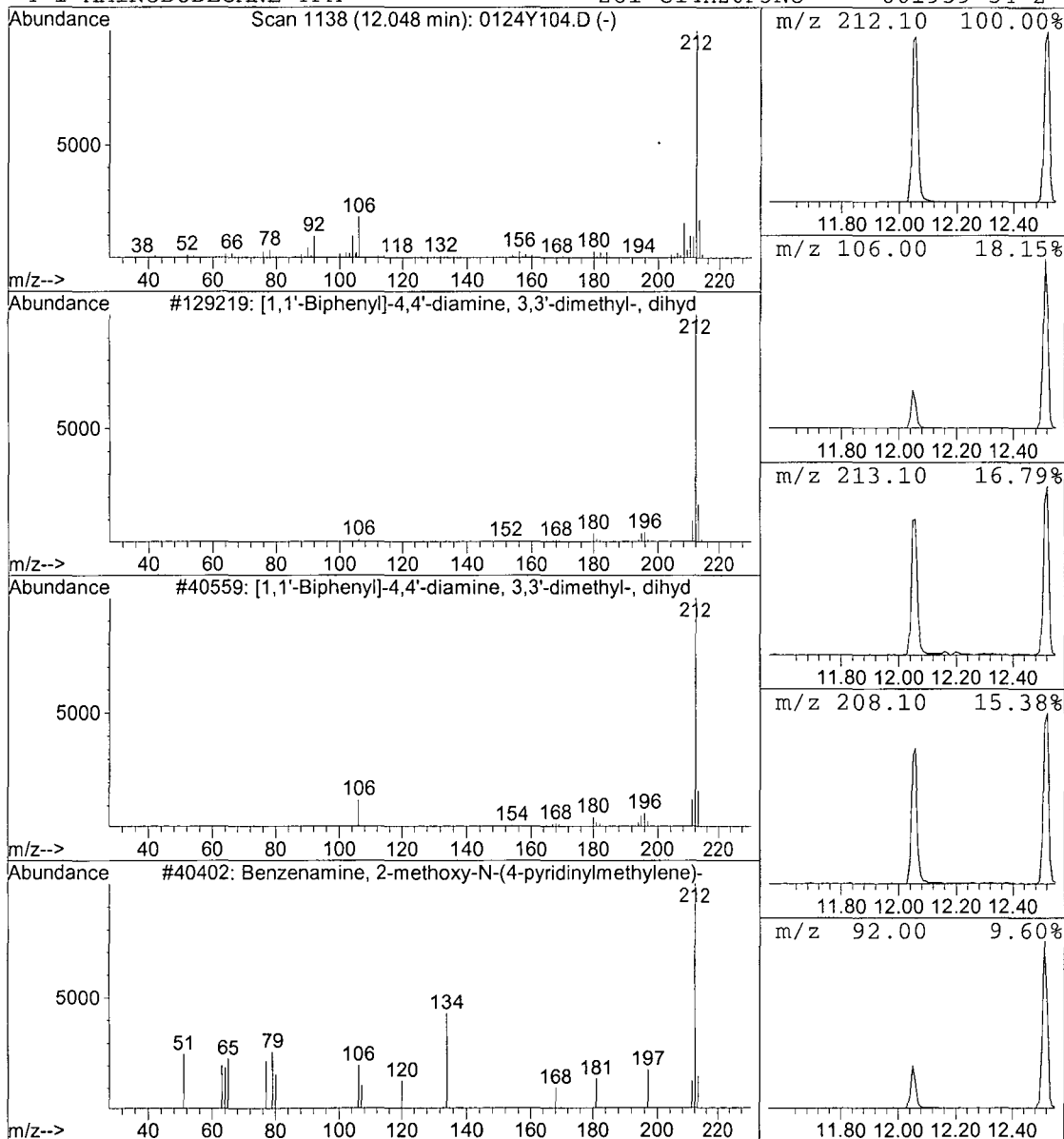
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 [1,1'-Biphenyl]-4,4'-diamine, Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.05	6.11 ppb	722172	Phenanthrene-D10 (IS)	10.66

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-	212	C14H16N2	000612-82-8	64
2		[1,1'-Biphenyl]-4,4'-diamine, 3,3'-	212	C14H16N2	000119-93-7	50
3		Benzenamine, 2-methoxy-N-(4-pyridin	212	C13H12N2O	041855-68-9	50
4		1-AMINODODECANE TFA	281	C14H26F3NO	001959-54-2	49



Data File : M:\YODA\DATA\Y190124\0124Y063.D Vial: 63  
 Acq On : 30 Jan 19 18:39 Operator: MA  
 Sample : AZ85565W22 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:19 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	571164	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2341406	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1135152	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2253847	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1995168	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	874284	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.92	112	3480139	170.7612	ppb	0.04
Spiked Amount 250.000			Recovery =	68.304%		
6) Phenol-D6 (S)	5.07	99	4231742	157.7039	ppb	0.02
Spiked Amount 250.000			Recovery =	63.082%		
22) Nitrobenzene-D5 (S)	6.10	82	2010662	90.1437	ppb	0.00
Spiked Amount 125.000			Recovery =	72.115%		
46) 2-Fluorobiphenyl (S)	8.13	172	3641121	99.0156	ppb	0.00
Spiked Amount 125.000			Recovery =	79.213%		
64) 2,4,6-Tribromophenol (S)	9.85	330	861509	229.0166	ppb	0.00
Spiked Amount 250.000			Recovery =	91.607%		
82) Terphenyl-D14 (S)	12.52	244	3999306	98.2185	ppb	0.00
Spiked Amount 125.000			Recovery =	78.575%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

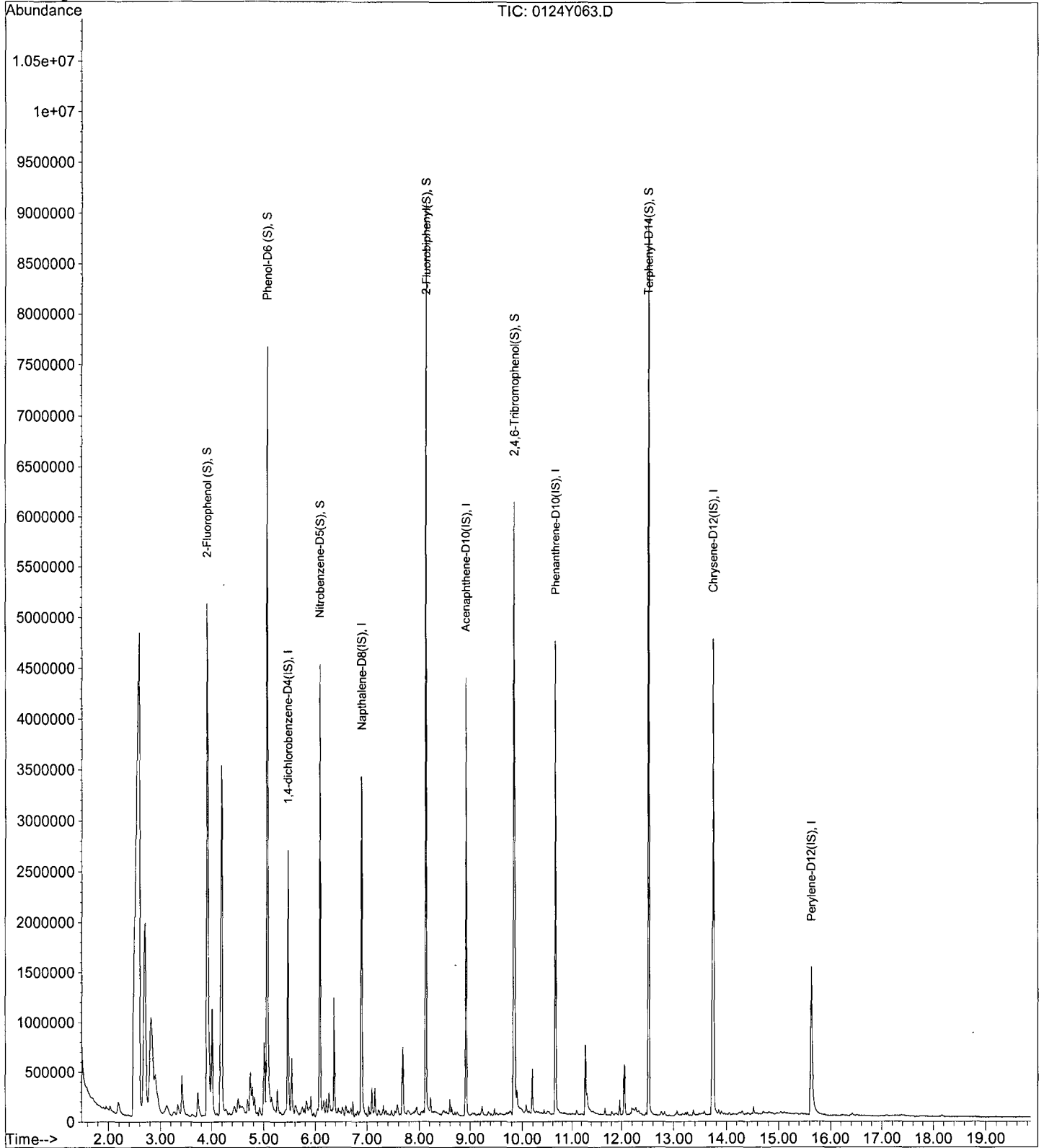
Data File : M:\YODA\DATA\Y190124\0124Y063.D  
Acq On : 30 Jan 19 18:39  
Sample : AZ85565W22 1/800  
Misc :

Vial: 63  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:19 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Tentatively Identified Compound (LSC) summary

Operator ID: MA      Date Acquired: 30 Jan 19 18:39  
 Data File: M:\YODA\DATA\Y190124\0124Y063.D  
 Name: AZ85565W22 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.71	66.4	ppb	4874750	ISTD01	5.47	3670250	40.0
Cyclotetrasiloxane,	5.01	16.3	ppb	1194320	ISTD01	5.47	3670250	40.0

0124Y063.D Y0125NC.M Sat Feb 09 07:10:22 2019

## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y063.D  
 Acq On : 30 Jan 19 18:39  
 Sample : AZ85565W22 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 63  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

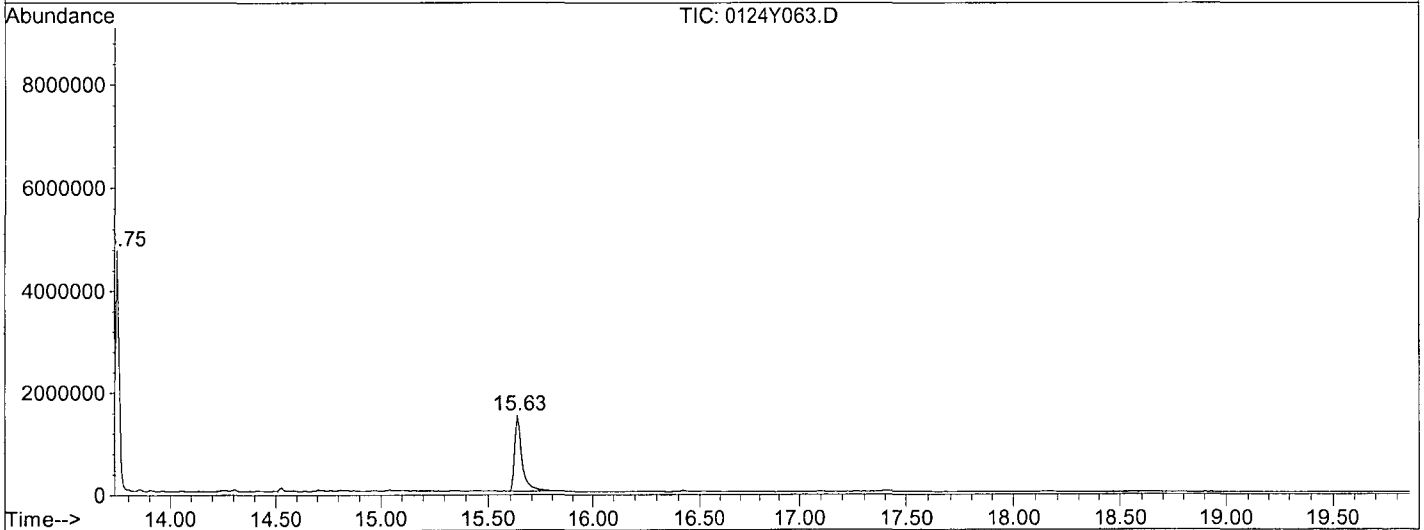
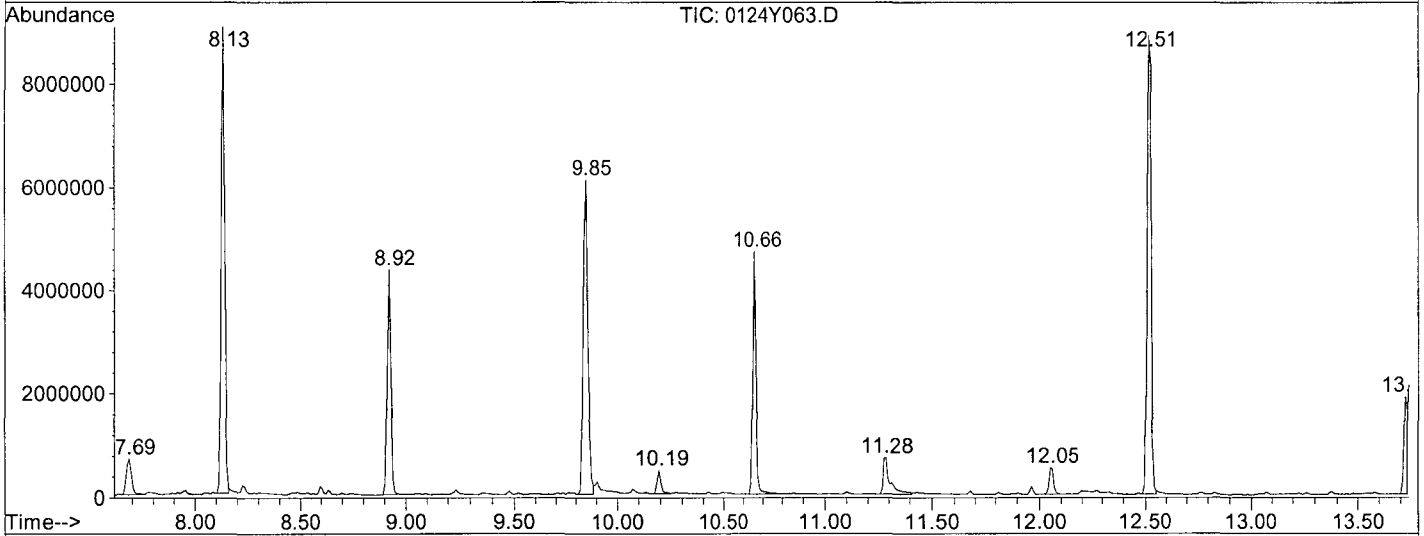
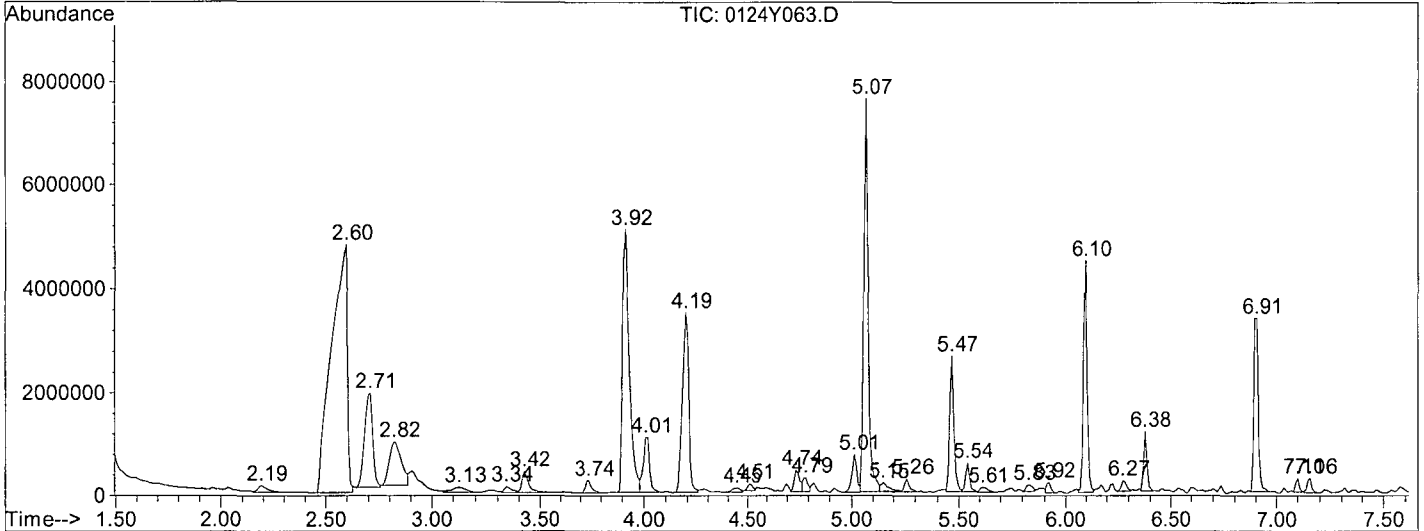
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.189	72	76	91	rVB	132303	5163342	429558	1.74%	0.292%
2	2.598	104	120	123	rBV	4784317	29290080	24749078	100.00%	16.817%
3	2.709	125	132	137	rBV	1834357	8240435	4874745	19.70%	3.312%
4	2.821	137	144	151	rBV	850546	7270131	3396124	13.72%	2.308%
5	3.127	169	177	187	rVB3	97193	4874934	444249	1.80%	0.302%
6	3.341	197	200	206	rVV	114563	2472483	280098	1.13%	0.190%
7	3.424	206	209	226	rVB	410289	6108588	924296	3.73%	0.628%
8	3.740	237	243	250	rBV	240480	3628311	550546	2.22%	0.374%
9	3.916	258	262	269	rBV	5072897	14097017	11259689	45.50%	7.651%
10	4.009	269	272	280	rVB	1064802	5729682	2043440	8.26%	1.389%
11	4.195	286	292	298	rBV	3475302	10144282	7218304	29.17%	4.905%
12	4.445	311	319	322	rBV4	85745	2920571	257826	1.04%	0.175%
13	4.510	322	326	329	rBV3	136178	1994651	254851	1.03%	0.173%
14	4.742	348	351	354	rVV	413056	2298959	770111	3.11%	0.523%
15	4.789	354	356	358	rVV2	266314	1685880	417554	1.69%	0.284%
16	5.012	375	380	383	rBV2	729088	3154945	1194321	4.83%	0.812%
17	5.067	383	386	393	rVV	7597123	17332092	11440839	46.23%	7.774%
18	5.151	393	395	404	rVV3	170022	3540660	453877	1.83%	0.308%
19	5.262	404	407	412	rVB2	247432	2422172	392059	1.58%	0.266%
20	5.466	426	429	434	rVV	2627158	6472849	3670246	14.83%	2.494%
21	5.541	434	437	442	rVB	559072	2828543	745927	3.01%	0.507%
22	5.615	442	445	452	rVB6	93955	2776923	270743	1.09%	0.184%
23	5.828	465	468	471	rBV3	128251	1781133	271997	1.10%	0.185%
24	5.921	476	478	481	rVB	197013	1703259	262993	1.06%	0.179%
25	6.098	493	497	501	rVV	4472084	7857384	5813403	23.49%	3.950%
26	6.274	513	516	520	rBV3	202721	2090838	338937	1.37%	0.230%
27	6.376	525	527	531	rVB	1151671	3274299	1199443	4.85%	0.815%
28	6.905	580	584	592	rVB	3357507	7947749	4916058	19.86%	3.340%
29	7.100	603	605	607	rVV	264578	1450480	290507	1.17%	0.197%
30	7.156	608	611	616	rVB	275648	2396036	382610	1.55%	0.260%
31	7.685	664	668	676	rVV2	679178	4166664	1180945	4.77%	0.802%
32	8.131	713	716	719	rBV	9013152	11975070	10196992	41.20%	6.929%
33	8.920	798	801	805	rBV	4335112	7135077	5049896	20.40%	3.431%
34	9.848	897	901	905	rBV2	6082181	11681168	9542281	38.56%	6.484%
35	10.192	935	938	944	rBV	444158	2779604	543235	2.19%	0.369%
36	10.656	985	988	1005	rBV	4690952	11479805	5646545	22.82%	3.837%
37	11.278	1052	1055	1069	rBV2	700838	5736204	1637372	6.62%	1.113%
38	12.048	1131	1138	1144	rBV	505931	3881934	752301	3.04%	0.511%
39	12.513	1185	1188	1192	rBV	8873546	13775877	11771311	47.56%	7.999%
40	13.719	1315	1318	1319	rBV	1873042	3047536	2076062	8.39%	1.411%
41	13.747	1319	1321	1330	rVB	4713786	15555268	5681491	22.96%	3.861%
42	15.632	1520	1524	1544	rBV2	1488367	9611813	3573494	14.44%	2.428%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y063.D  
Operator : MA  
Acquired : 30 Jan 19 18:39 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85565W22 1/800  
Misc Info :  
Vial Number: 63  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y063.D  
 Acq On : 30 Jan 19 18:39  
 Sample : AZ85565W22 1/800  
 Misc :

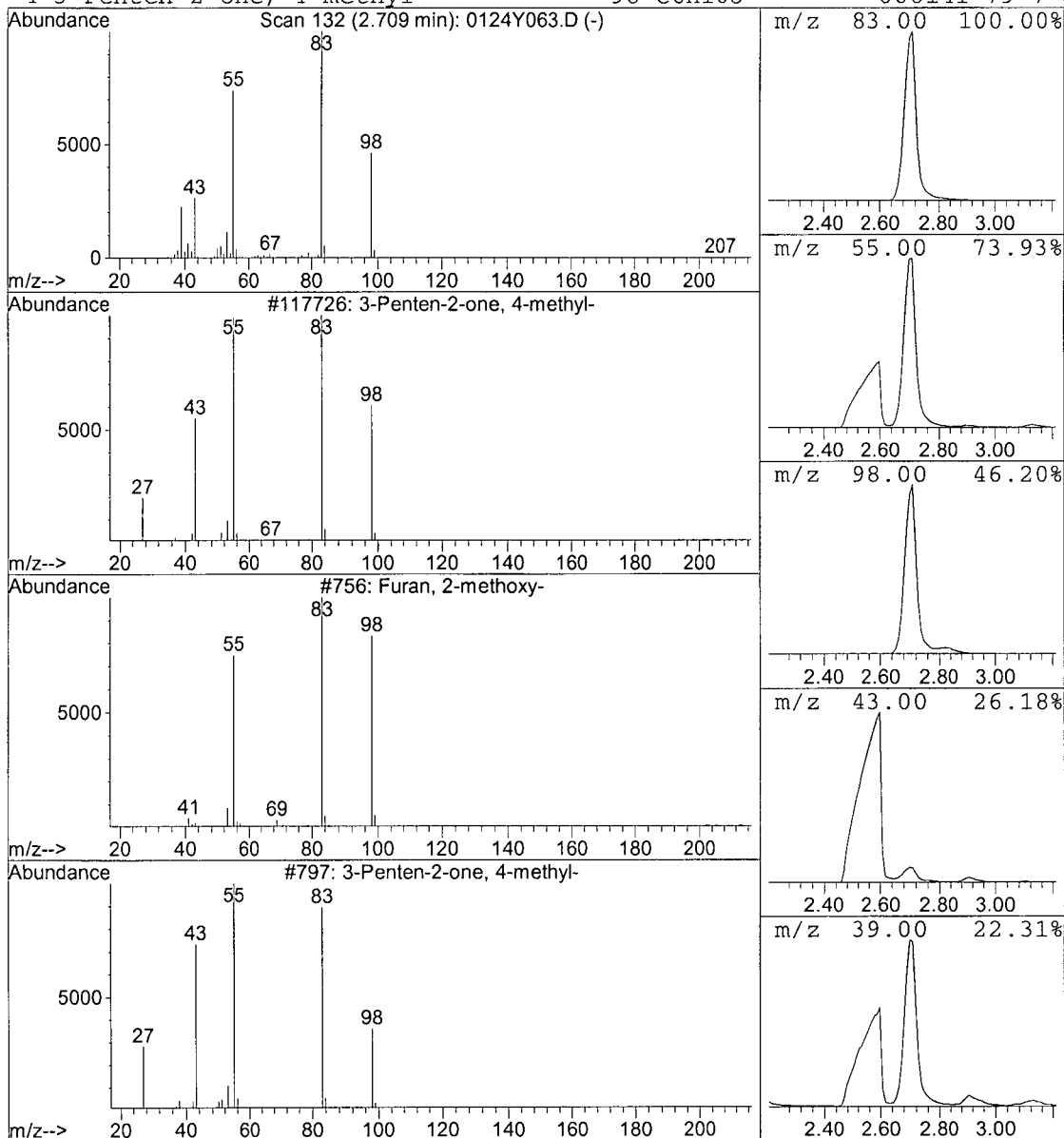
Vial: 63  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.71	66.41 ppb	4874750	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		Furan, 2-methoxy-	98	C5H6O2	025414-22-6	83
3		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	83
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	80



Data File : M:\YODA\DATA\Y190124\0124Y063.D  
 Acq On : 30 Jan 19 18:39  
 Sample : AZ85565W22 1/800  
 Misc :

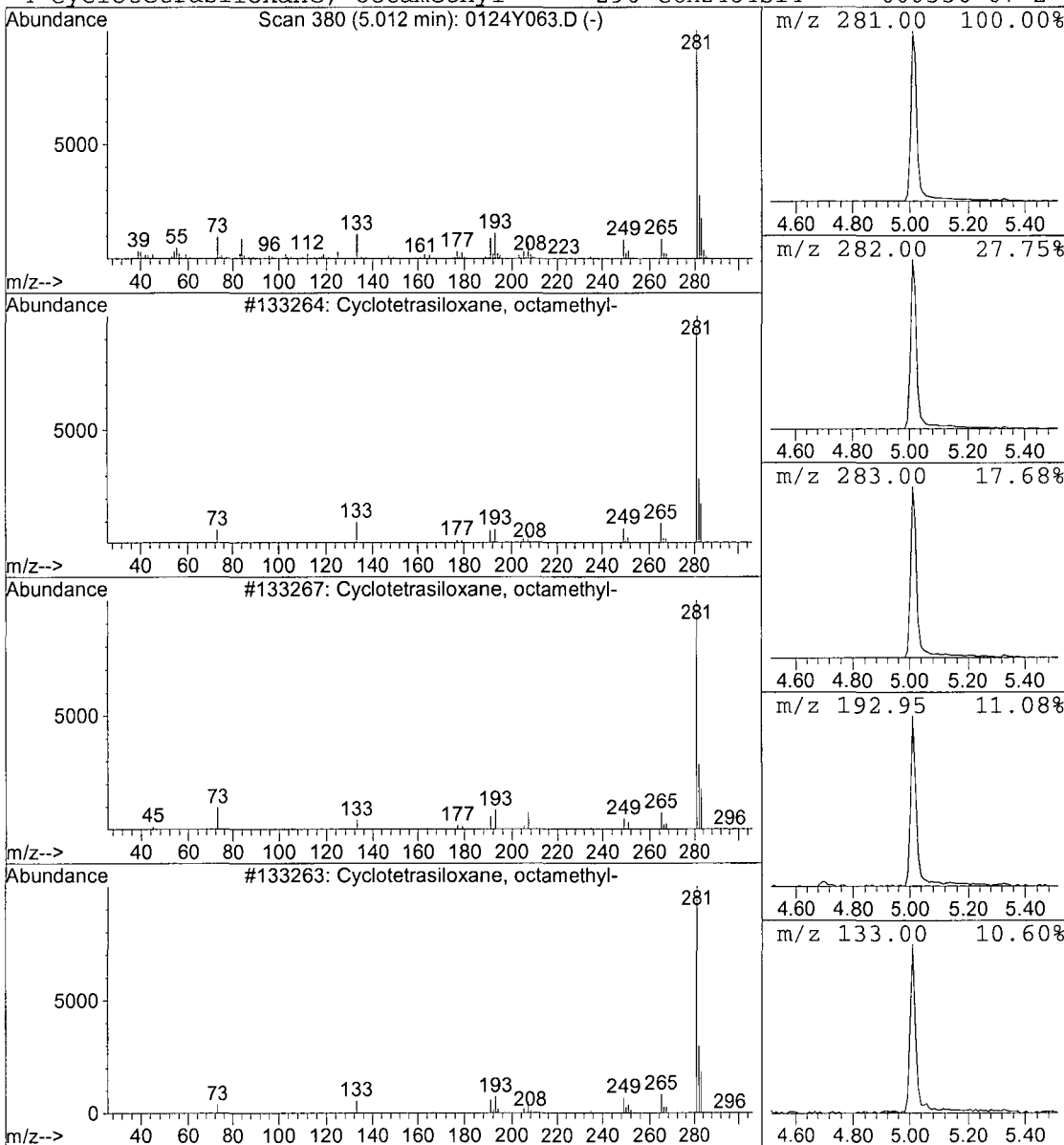
Vial: 63  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Cyclotetrasiloxane, octamethyl Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.01	16.27 ppb	1194320	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
3			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
4			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	80



Data File : M:\YODA\DATA\Y190124\0124Y064.D Vial: 64  
 Acq On : 30 Jan 19 19:07 Operator: MA  
 Sample : AZ85567W22 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Jan 31 6:18 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	552229	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2274100	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1105212	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2223152	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1934701	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	853072	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.91	112	3515694	178.4207	ppb	0.04
Spiked Amount 250.000			Recovery =	71.368%		
6) Phenol-D6 (S)	5.07	99	4292988	165.4720	ppb	0.02
Spiked Amount 250.000			Recovery =	66.189%		
22) Nitrobenzene-D5 (S)	6.10	82	2036050	93.9836	ppb	0.00
Spiked Amount 125.000			Recovery =	75.187%		
46) 2-Fluorobiphenyl (S)	8.13	172	3707841	103.5614	ppb	0.00
Spiked Amount 125.000			Recovery =	82.849%		
64) 2,4,6-Tribromophenol (S)	9.85	330	874126	238.6654	ppb	0.00
Spiked Amount 250.000			Recovery =	95.466%		
82) Terphenyl-D14 (S)	12.51	244	4086178	103.4884	ppb	0.00
Spiked Amount 125.000			Recovery =	82.790%		

Target Compounds Qvalue

Quantitation Report

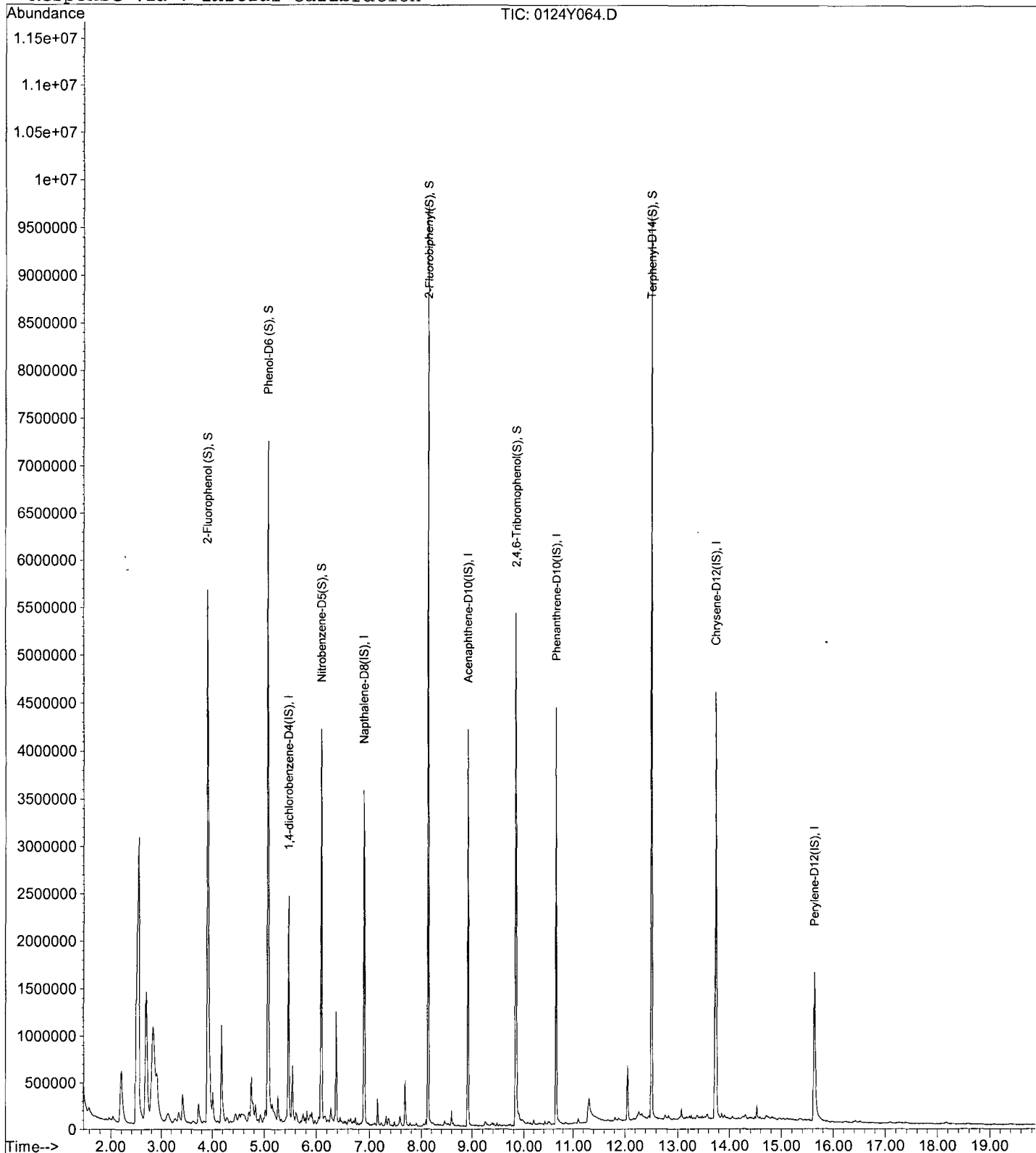
Data File : M:\YODA\DATA\Y190124\0124Y064.D  
Acq On : 30 Jan 19 19:07  
Sample : AZ85567W22 1/800  
Misc :

Vial: 64  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:18 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 30 Jan 19 19:07  
Data File: M:\YODA\DATA\Y190124\0124Y064.D  
Name: AZ85567W22 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.69	56.5	ppb	3726280	ISTD01	5.47	3299540	40.0
0124Y064.D Y0125NC.M			Sat Feb 09	07:12:17	2019			



## LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y064.D  
 Acq On : 30 Jan 19 19:07  
 Sample : AZ85567W22 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 64  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

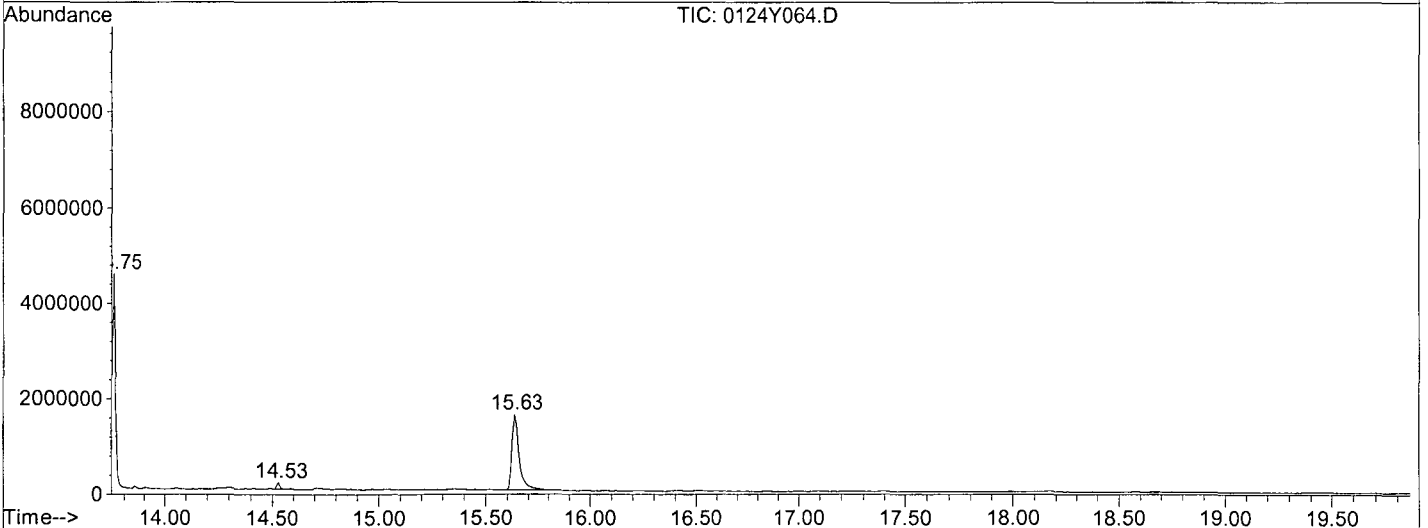
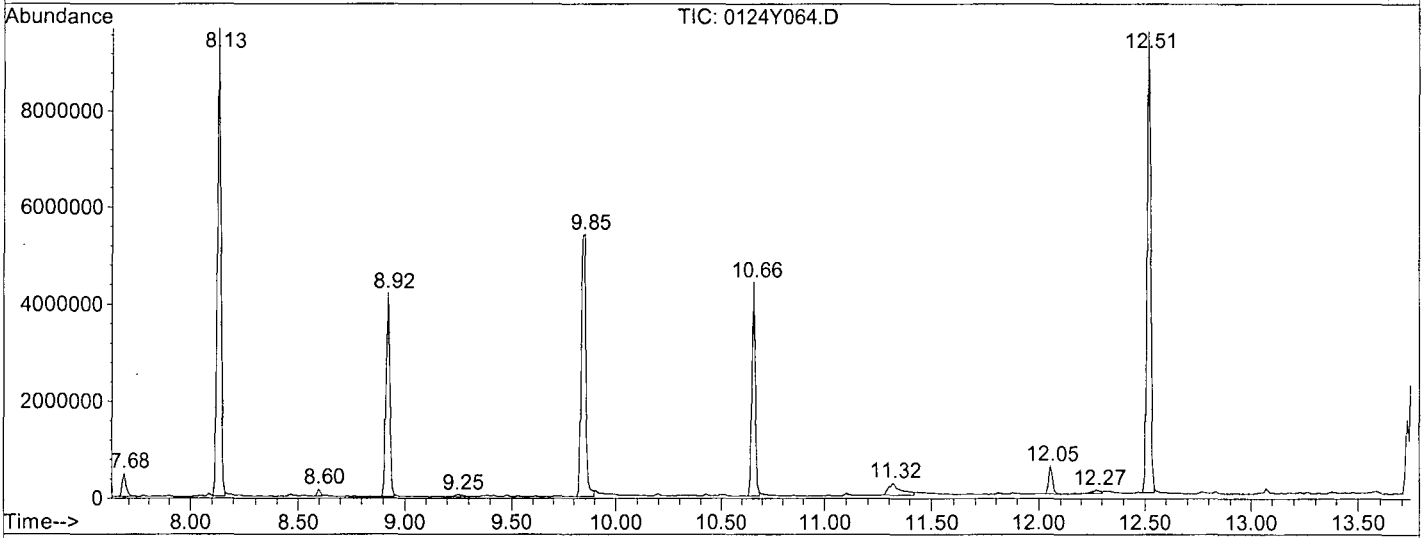
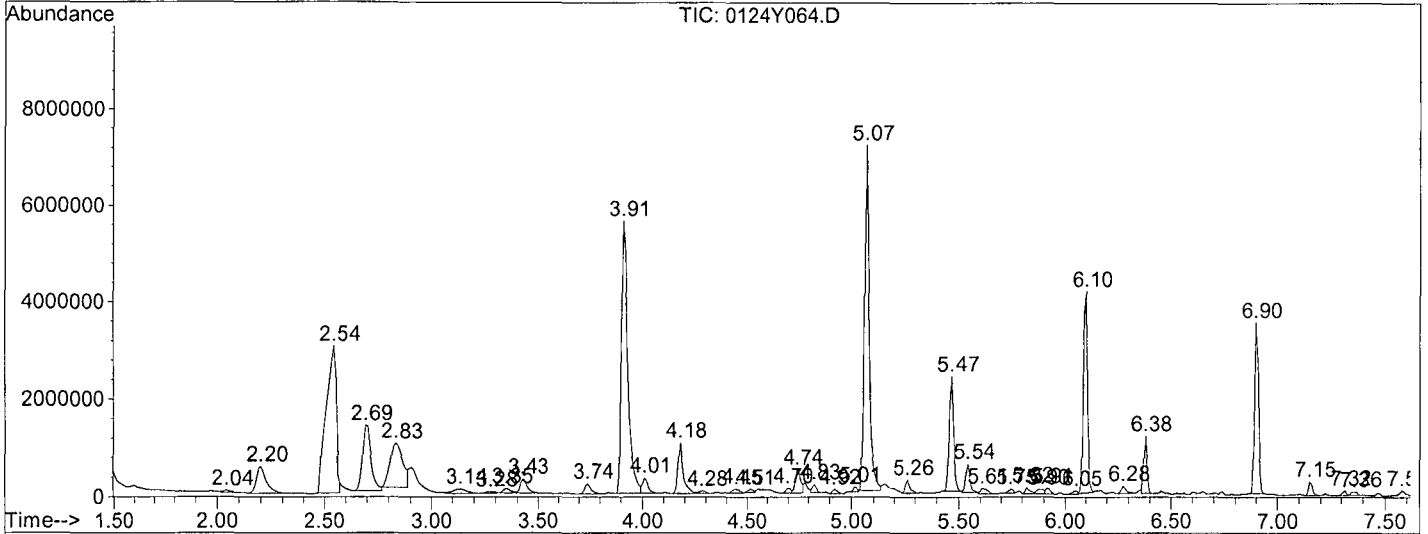
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.043	57	60	68	rVB	54481	2104876	126961	1.06%	0.104%
2	2.201	71	77	92	rVB	551221	5470588	1788526	14.91%	1.469%
3	2.544	105	114	117	rBV	3018556	12099199	10016275	83.51%	8.228%
4	2.693	124	130	138	rBV	1345298	6342315	3726281	31.07%	3.061%
5	2.832	138	145	151	rBV	902776	6601324	3786621	31.57%	3.110%
6	3.138	170	178	187	rVB2	99026	3450266	435824	3.63%	0.358%
7	3.278	188	193	197	rVV2	39315	1678478	120280	1.00%	0.099%
8	3.352	197	201	206	rVV	104071	1863740	272235	2.27%	0.224%
9	3.426	206	209	218	rVB	294662	2958857	664201	5.54%	0.546%
10	3.742	238	243	250	rBV	213299	2525135	485118	4.04%	0.398%
11	3.909	258	261	270	rBV	5610503	14924139	11565897	96.43%	9.501%
12	4.011	270	272	280	rVB	318676	2828322	559850	4.67%	0.460%
13	4.178	286	290	298	rBV	1041591	3867819	1782692	14.86%	1.464%
14	4.280	298	301	305	rVB	55132	1372535	126881	1.06%	0.104%
15	4.447	314	319	323	rBV4	80630	1814083	228694	1.91%	0.188%
16	4.512	323	326	329	rBV3	62140	1226095	131276	1.09%	0.108%
17	4.698	343	346	348	rBV2	99830	1052855	171614	1.43%	0.141%
18	4.744	348	351	354	rVV	475044	2026167	881564	7.35%	0.724%
19	4.828	358	360	363	rVB	175315	1293511	243531	2.03%	0.200%
20	4.921	368	370	375	rVB2	90067	1436774	150096	1.25%	0.123%
21	5.014	378	380	382	rBV	94236	875083	128108	1.07%	0.105%
22	5.069	382	386	393	rBV	7126732	13021146	10870554	90.63%	8.929%
23	5.264	404	407	412	rVB2	275206	1931638	443410	3.70%	0.364%
24	5.469	425	429	433	rVV	2348111	4835770	3299537	27.51%	2.710%
25	5.543	434	437	442	rVB	585841	2361441	785160	6.55%	0.645%
26	5.608	442	444	452	rVB3	115548	2113809	271167	2.26%	0.223%
27	5.747	455	459	461	rBV3	89633	1180112	146679	1.22%	0.120%
28	5.821	465	467	471	rBV2	134019	1303825	211802	1.77%	0.174%
29	5.896	471	475	476	rVV3	88761	1144996	206019	1.72%	0.169%
30	5.914	476	477	481	rVB2	122620	1171881	165288	1.38%	0.136%
31	6.053	487	492	493	rBV2	77122	1173315	158291	1.32%	0.130%
32	6.100	493	497	501	rVV	4128987	7302344	5798997	48.35%	4.763%
33	6.276	513	516	522	rBV2	154461	1843267	262550	2.19%	0.216%
34	6.378	525	527	530	rVB	1172314	2907538	1225860	10.22%	1.007%
35	6.898	580	583	587	rBV	3509132	5643813	4357396	36.33%	3.579%
36	7.149	608	610	615	rBV	286223	1585222	367309	3.06%	0.302%
37	7.316	622	628	630	rBV2	102462	1429176	133868	1.12%	0.110%
38	7.362	630	633	636	rVV	69211	1192346	139527	1.16%	0.115%
39	7.576	648	656	664	rBV3	103639	2796938	226998	1.89%	0.186%
40	7.678	664	667	672	rBV2	487018	2038391	668750	5.58%	0.549%
41	8.133	713	716	719	rBV	9685262	12196787	10622608	88.56%	8.726%
42	8.597	763	766	768	rBV	154735	982963	167445	1.40%	0.138%
43	8.922	797	801	804	rBV	4195318	6106519	4974394	41.47%	4.086%
44	9.247	830	836	847	rBV4	45618	5043334	5043334	1.45%	0.142%
45	9.850	897	901	906	rBV	5403842	9909720	8144202	67.90%	6.690%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y064.D  
Operator : MA  
Acquired : 30 Jan 19 19:07 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85567W22 1/800  
Misc Info :  
Vial Number: 64  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y064.D  
 Acq On : 30 Jan 19 19:07  
 Sample : AZ85567W22 1/800  
 Misc :

Vial: 64  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

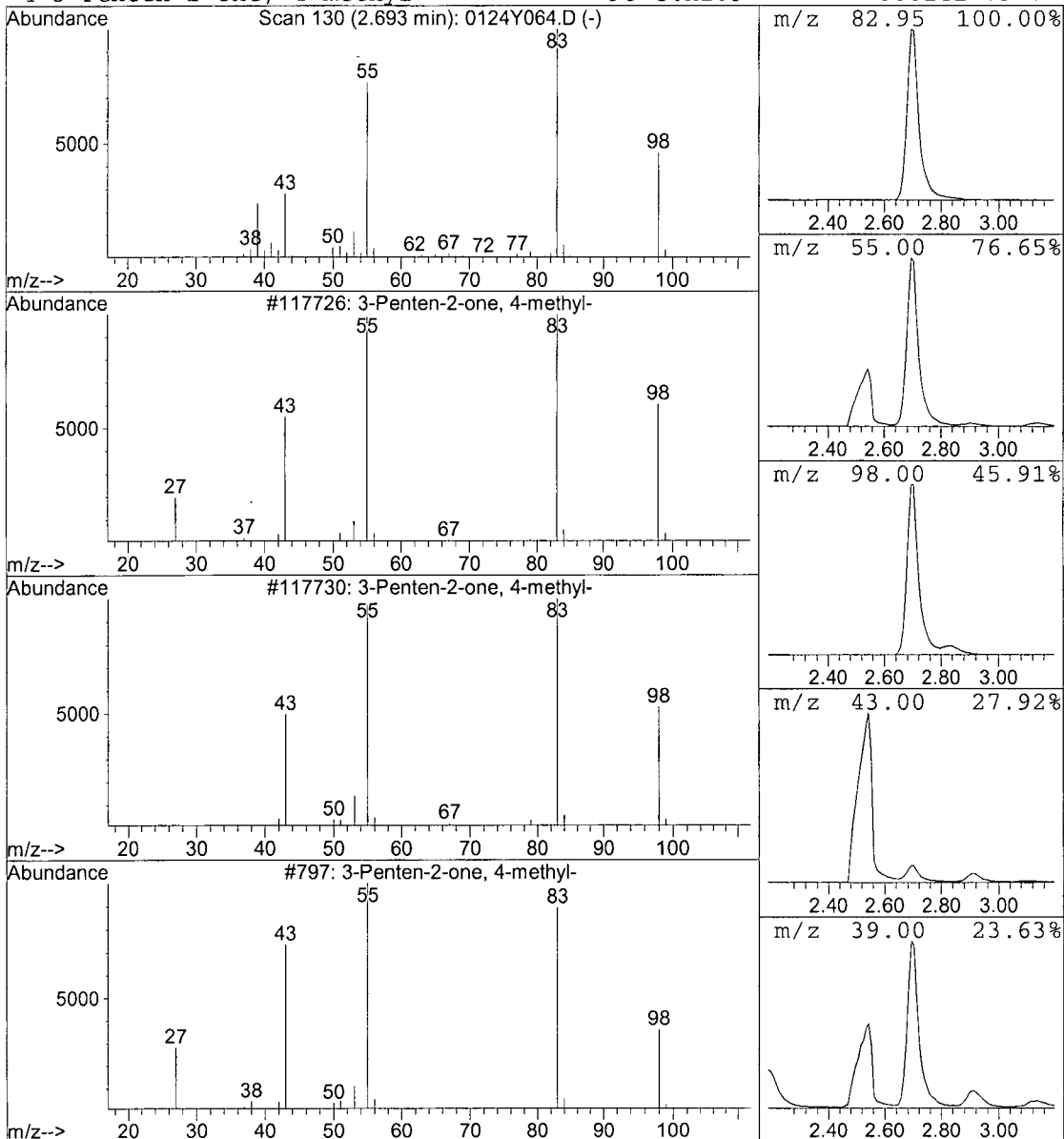
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.69	56.47 ppb	3726280	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	83
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	80



Data File : M:\YODA\DATA\Y190124\0124Y105.D  
 Acq On : 1 Feb 19 19:34  
 Sample : AZ85569W22 1/800  
 Misc :

Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 10:45 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	490033	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2023522	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	392953	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1729258	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	780105	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.67	264	5118	40.0000	ppb	0.04

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3042985	174.0315	ppb	0.03
Spiked Amount 250.000			Recovery =	69.613%		
6) Phenol-D6 (S)	5.06	99	2360150	102.5176	ppb	0.00
Spiked Amount 250.000			Recovery =	41.007%		
22) Nitrobenzene-D5 (S)	6.10	82	2063466	107.0441	ppb	0.00
Spiked Amount 125.000			Recovery =	85.635%		
46) 2-Fluorobiphenyl (S)	8.13	172	3804387	298.8592	ppb	0.00
Spiked Amount 125.000			Recovery =	239.087%		
64) 2,4,6-Tribromophenol (S)	9.85	330	811583	623.2373	ppb	0.00
Spiked Amount 250.000			Recovery =	249.295%		
82) Terphenyl-D14 (S)	12.51	244	3761164	236.2422	ppb	0.00
Spiked Amount 125.000			Recovery =	188.994%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

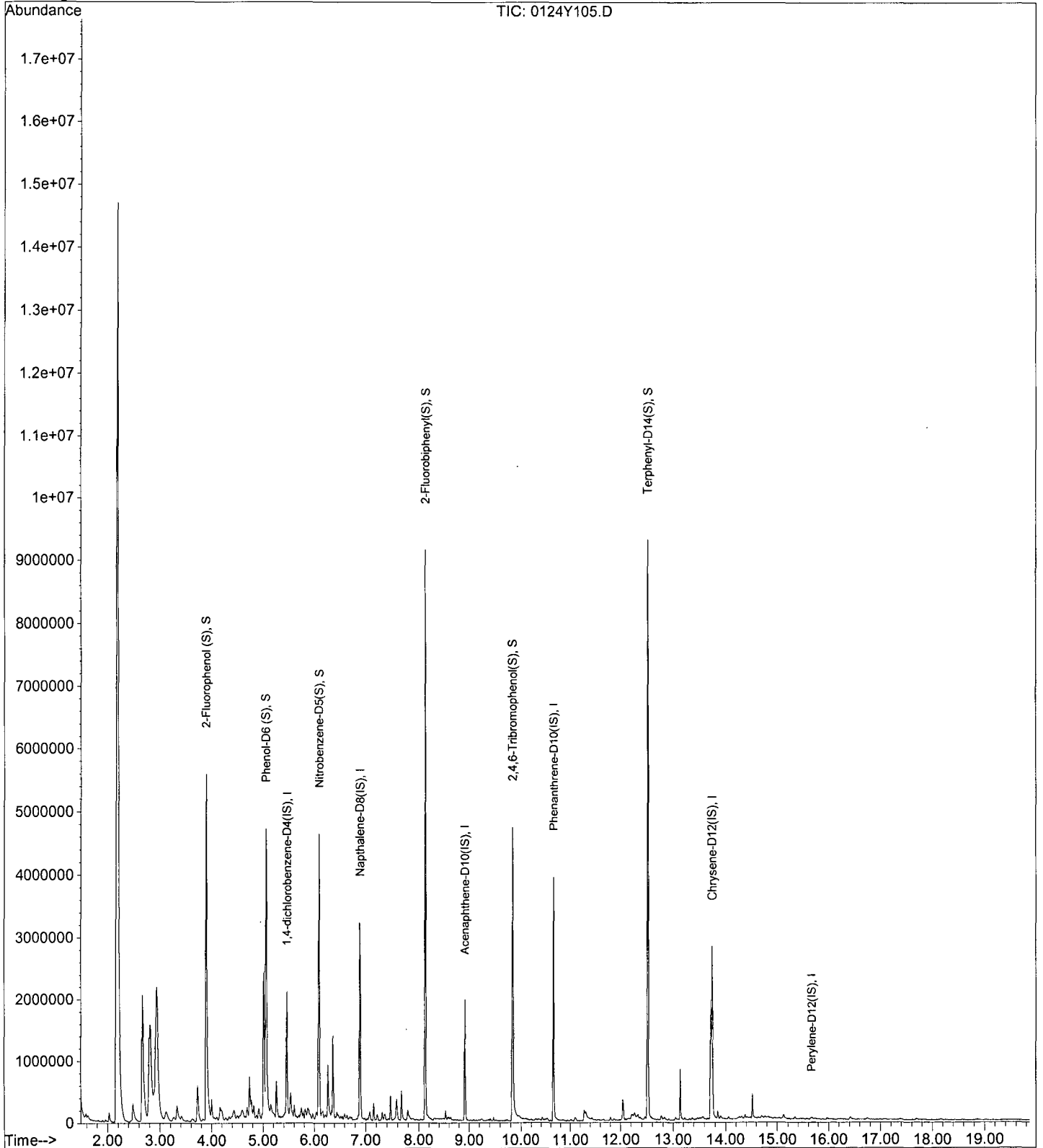
Data File : M:\YODA\DATA\Y190124\0124Y105.D  
Acq On : 1 Feb 19 19:34  
Sample : AZ85569W22 1/800  
Misc :

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:45 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 19:34  
 Data File: M:\YODA\DATA\Y190124\0124Y105.D  
 Name: AZ85569W22 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.67	87.9	ppb	5158000	ISTD01	5.47	2933170	40.0
Cyclotrisiloxane, he	2.94	135.1	ppb	7923970	ISTD01	5.47	2933170	40.0
Cyclopentasiloxane,	6.27	16.0	ppb	1246410	ISTD02	6.90	3903490	40.0
Hexanedioic acid, di	13.14	10.8	ppb	814241	ISTD05	13.75	3768110	40.0

0124Y105.D Y0125NC.M Sat Feb 09 07:29:27 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y105.D  
 Acq On : 1 Feb 19 19:34  
 Sample : AZ85569W22 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

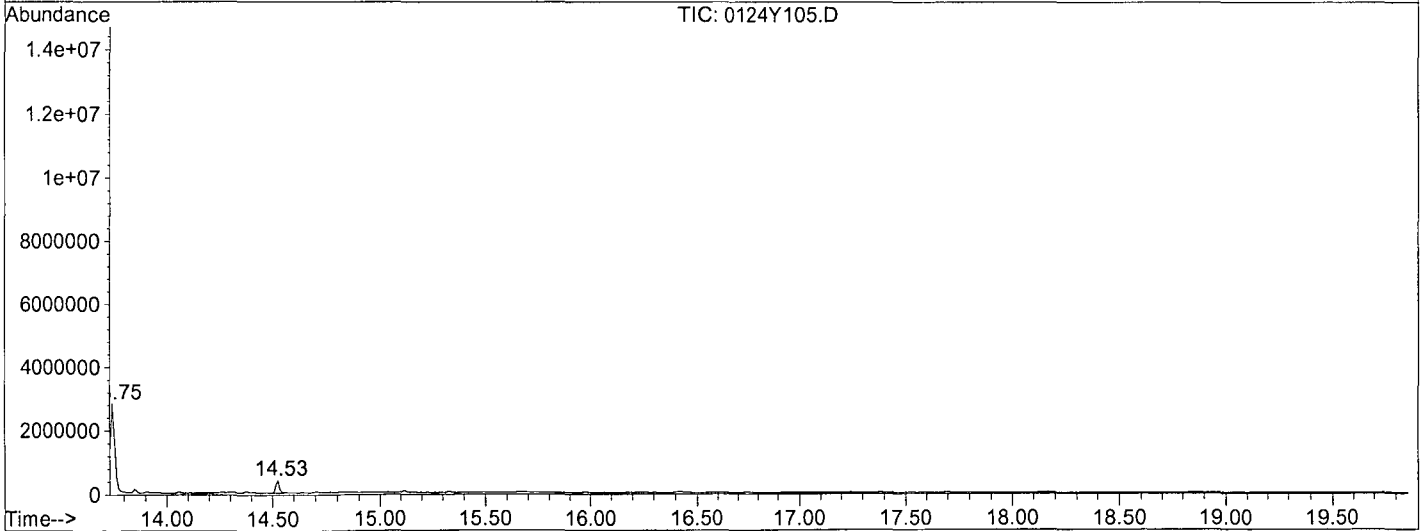
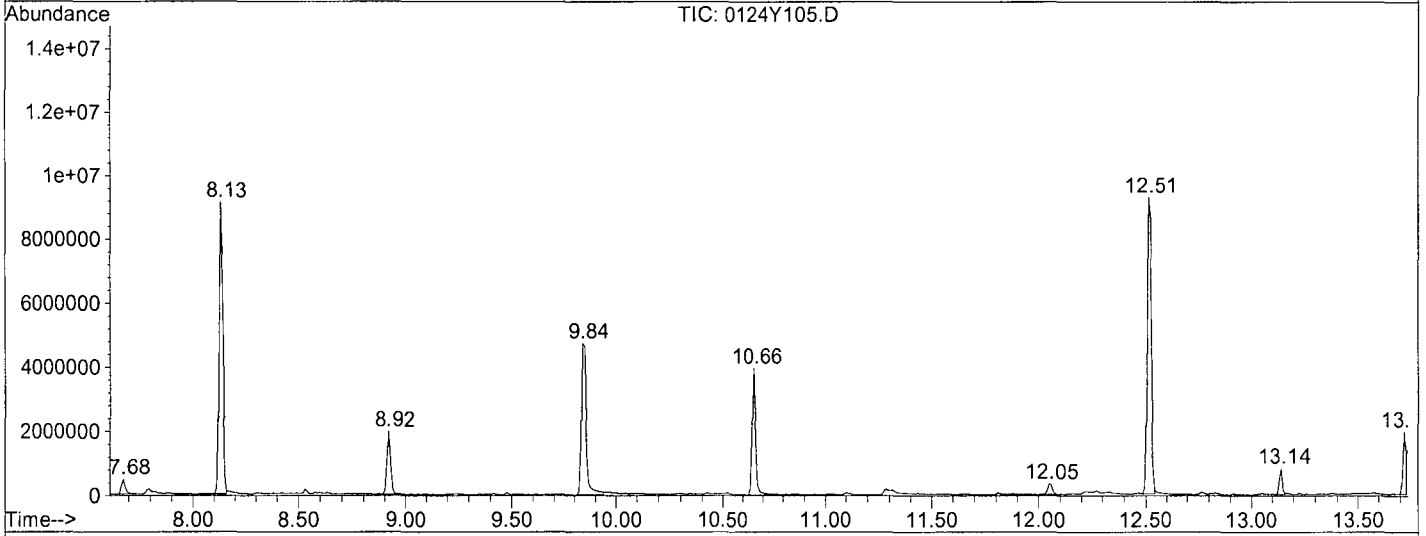
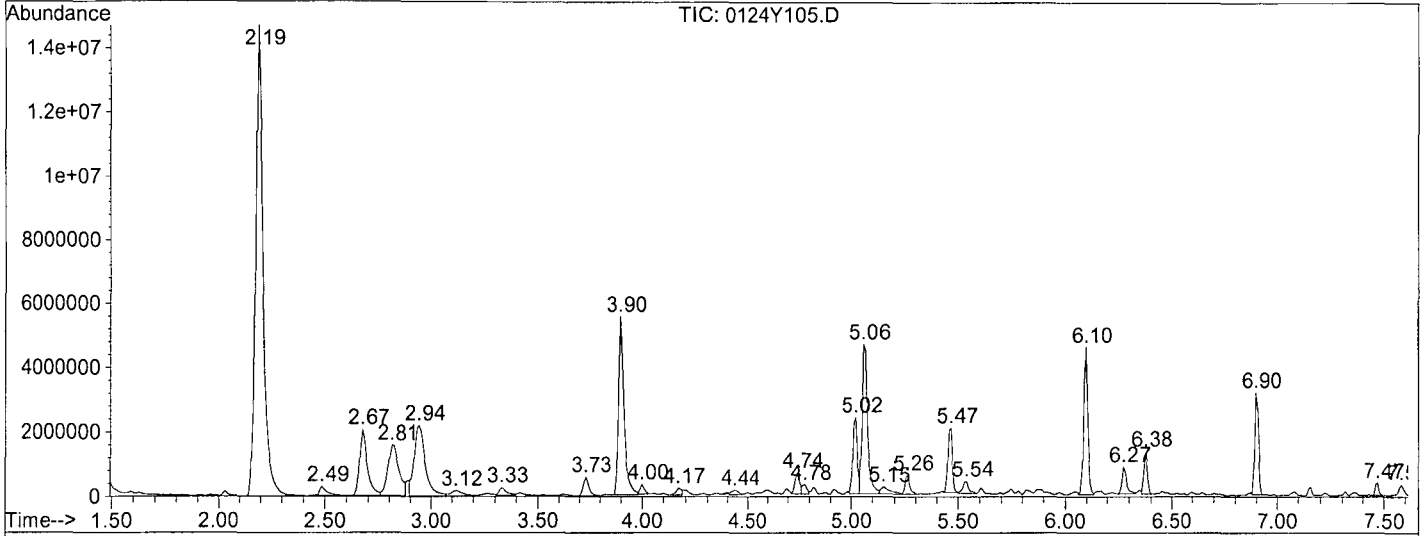
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.189	70	76	100	rBV	14679606	41064313	36438299	100.00%	24.676%
2	2.486	105	108	122	rVV	288913	3150603	667746	1.83%	0.452%
3	2.672	122	128	137	rVV	2041564	7264257	5157999	14.16%	3.493%
4	2.811	137	143	150	rVV	1562177	8021033	5768861	15.83%	3.907%
5	2.941	152	157	171	rVV	2170686	13384685	7923973	21.75%	5.366%
6	3.118	171	176	186	rVV2	155683	2880210	580793	1.59%	0.393%
7	3.331	196	199	206	rVV	248399	2165390	595728	1.63%	0.403%
8	3.730	237	242	249	rBV	576421	2802101	1103245	3.03%	0.747%
9	3.898	256	260	269	rBV	5543829	11978610	10039575	27.55%	6.799%
10	4.000	269	271	275	rVB	301752	1557052	408637	1.12%	0.277%
11	4.167	285	289	291	rBV3	207425	1294706	389046	1.07%	0.263%
12	4.436	310	318	322	rBV4	135546	2228359	403878	1.11%	0.274%
13	4.742	348	351	353	rVV	650371	1888988	984522	2.70%	0.667%
14	4.779	353	355	357	rVV2	285107	1375291	442212	1.21%	0.299%
15	5.021	378	381	383	rVV	2365964	5104996	3572125	9.80%	2.419%
16	5.058	383	385	393	rVV	4643233	14549192	8098528	22.23%	5.484%
17	5.151	393	395	404	rVV2	221518	2869002	636783	1.75%	0.431%
18	5.262	404	407	412	rVB2	592231	2454680	930710	2.55%	0.630%
19	5.466	425	429	433	rVV	1979211	4385881	2933172	8.05%	1.986%
20	5.541	433	437	442	rVB2	379213	2376491	728808	2.00%	0.494%
21	6.098	493	497	501	rVV	4567923	7695354	6333407	17.38%	4.289%
22	6.274	513	516	522	rBV	837219	2741596	1246406	3.42%	0.844%
23	6.376	525	527	530	rVB	1322841	2926160	1366170	3.75%	0.925%
24	6.896	581	583	587	rVB	3159505	6203659	3903494	10.71%	2.643%
25	7.472	642	645	648	rVB2	386575	1404775	485095	1.33%	0.329%
26	7.583	650	657	664	rVB3	334717	2674511	619375	1.70%	0.419%
27	7.676	664	667	675	rBV	471056	2286989	624330	1.71%	0.423%
28	8.131	713	716	719	rBV	9109072	11913998	10693570	29.35%	7.242%
29	8.920	798	801	810	rVB	1955333	4463077	2346934	6.44%	1.589%
30	9.839	897	900	911	rBV	4717014	10017159	7584468	20.81%	5.136%
31	10.656	985	988	1003	rBV	3935730	8410822	4860560	13.34%	3.292%
32	12.048	1132	1138	1143	rBV	329798	2091375	517171	1.42%	0.350%
33	12.513	1185	1188	1191	rBV	9262697	13514925	12233886	33.57%	8.285%
34	13.144	1253	1256	1258	rBV	814600	1575950	814241	2.23%	0.551%
35	13.719	1315	1318	1319	rBV	1933893	2582314	1980773	5.44%	1.341%
36	13.747	1319	1321	1330	rVB	2787806	9857120	3768112	10.34%	2.552%
37	14.527	1402	1405	1408	rBV	388759	1457019	486671	1.34%	0.330%

Sum of corrected areas: 147669303

0124Y105.D Y0125NC.M Sat Feb 09 07:29:21 2019

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y105.D  
Operator : MA  
Acquired : 1 Feb 19 19:34 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85569W22 1/800  
Misc Info :  
Vial Number: 5  
Quant File :Y0125NC.RES (RTE Integrator)





Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y105.D  
 Acq On : 1 Feb 19 19:34  
 Sample : AZ85569W22 1/800  
 Misc :

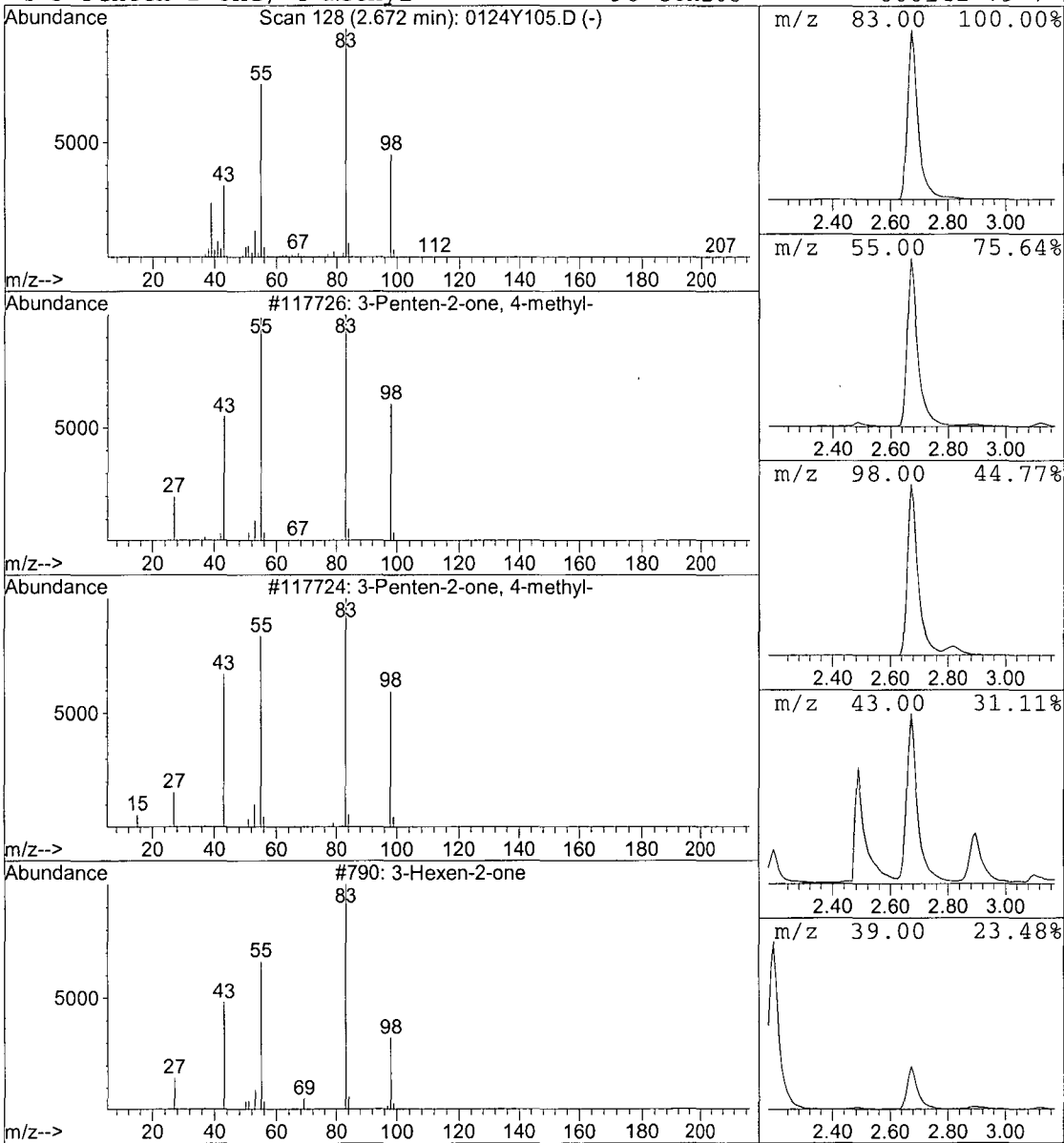
Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.67	87.93 ppb	5158000	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3		3-Hexen-2-one	98	C6H10O	000763-93-9	91
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y105.D  
 Acq On : 1 Feb 19 19:34  
 Sample : AZ85569W22 1/800  
 Misc :

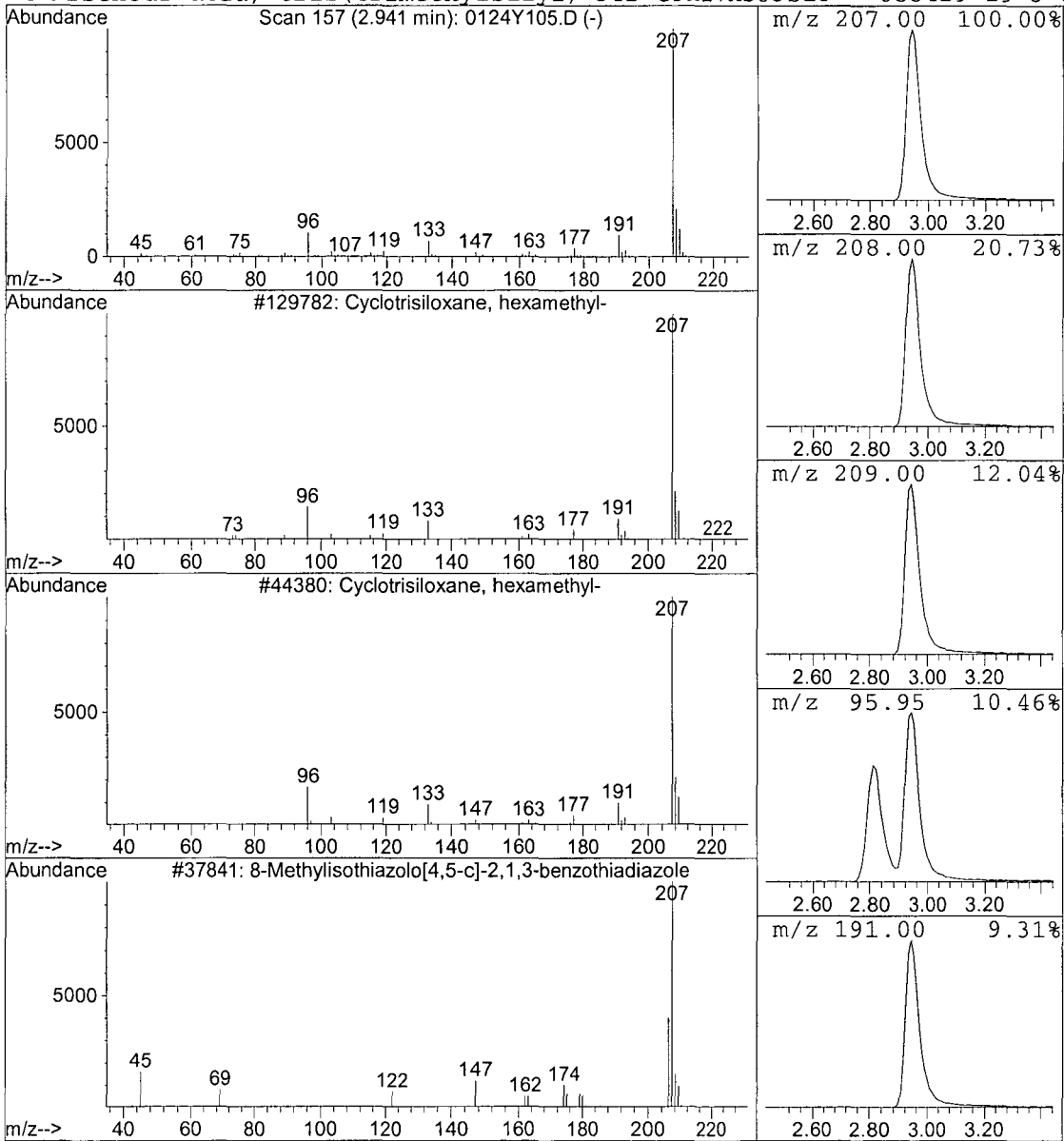
Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Cyclotrisiloxane, hexamethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.94	135.08 ppb	7923970	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2		Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
3		8-Methylisothiazolo[4,5-c]-2,1,3-be	207	C8H5N3S2	074801-78-8	64
4		Arsenous acid, tris(trimethylsilyl)	342	C9H27AsO3Si3	055429-29-3	56



Data File : M:\YODA\DATA\Y190124\0124Y105.D  
 Acq On : 1 Feb 19 19:34  
 Sample : AZ85569W22 1/800  
 Misc :

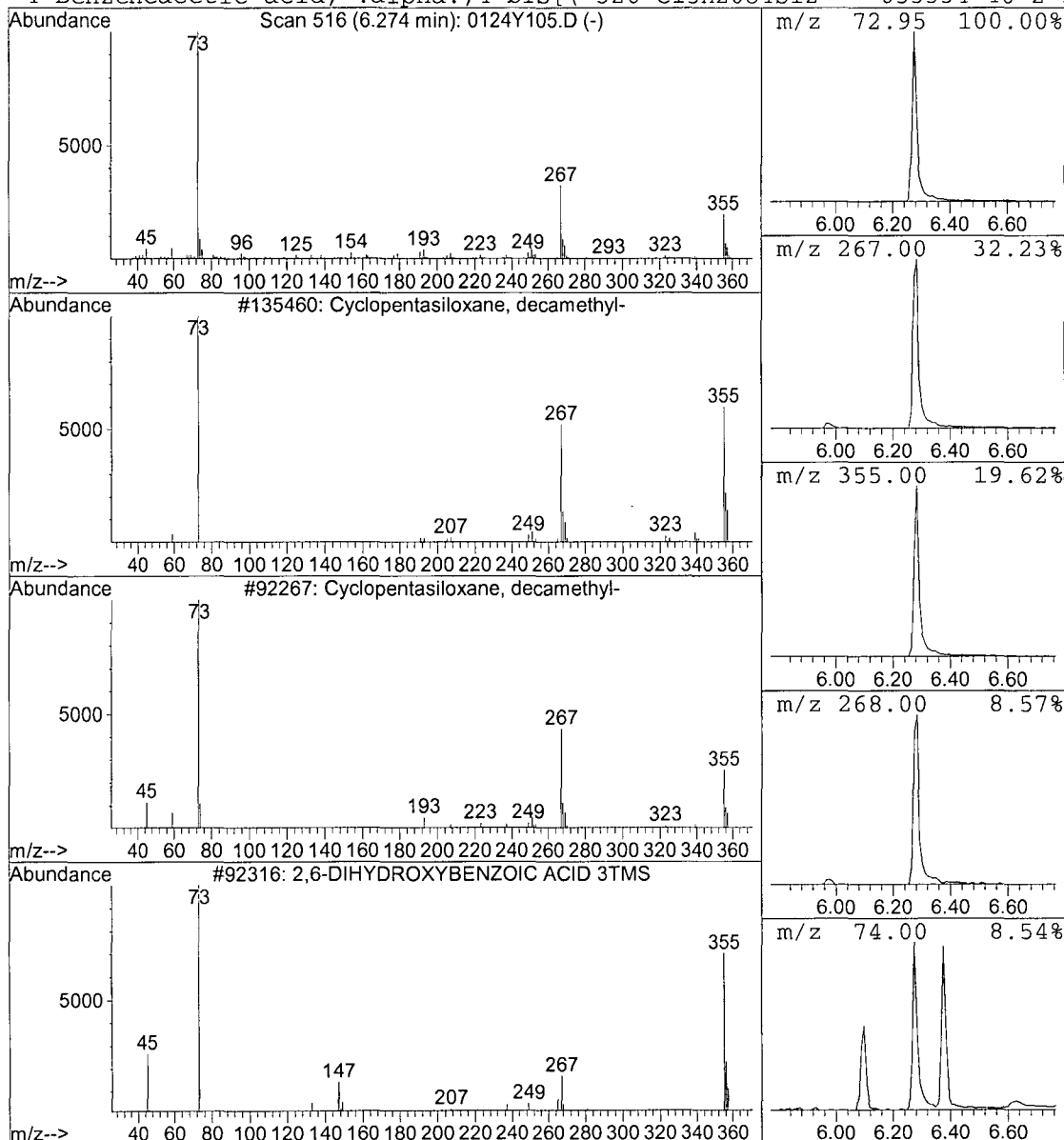
Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Cyclopentasiloxane, decamethyl Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.27	15.97 ppb	1246410	Napthalene-D8 (IS)	6.90

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopentasiloxane, decamethyl-	370	C10H30O5Si5	000541-02-6	90
2		Cyclopentasiloxane, decamethyl-	370	C10H30O5Si5	000541-02-6	87
3		2,6-DIHYDROXYBENZOIC ACID 3TMS	370	C16H30O4Si3	003782-85-2	40
4		Benzeneacetic acid, .alpha., 4-bis[(	326	C15H26O4Si2	055334-40-2	37



Data File : M:\YODA\DATA\Y190124\0124Y105.D  
 Acq On : 1 Feb 19 19:34  
 Sample : AZ85569W22 1/800  
 Misc :

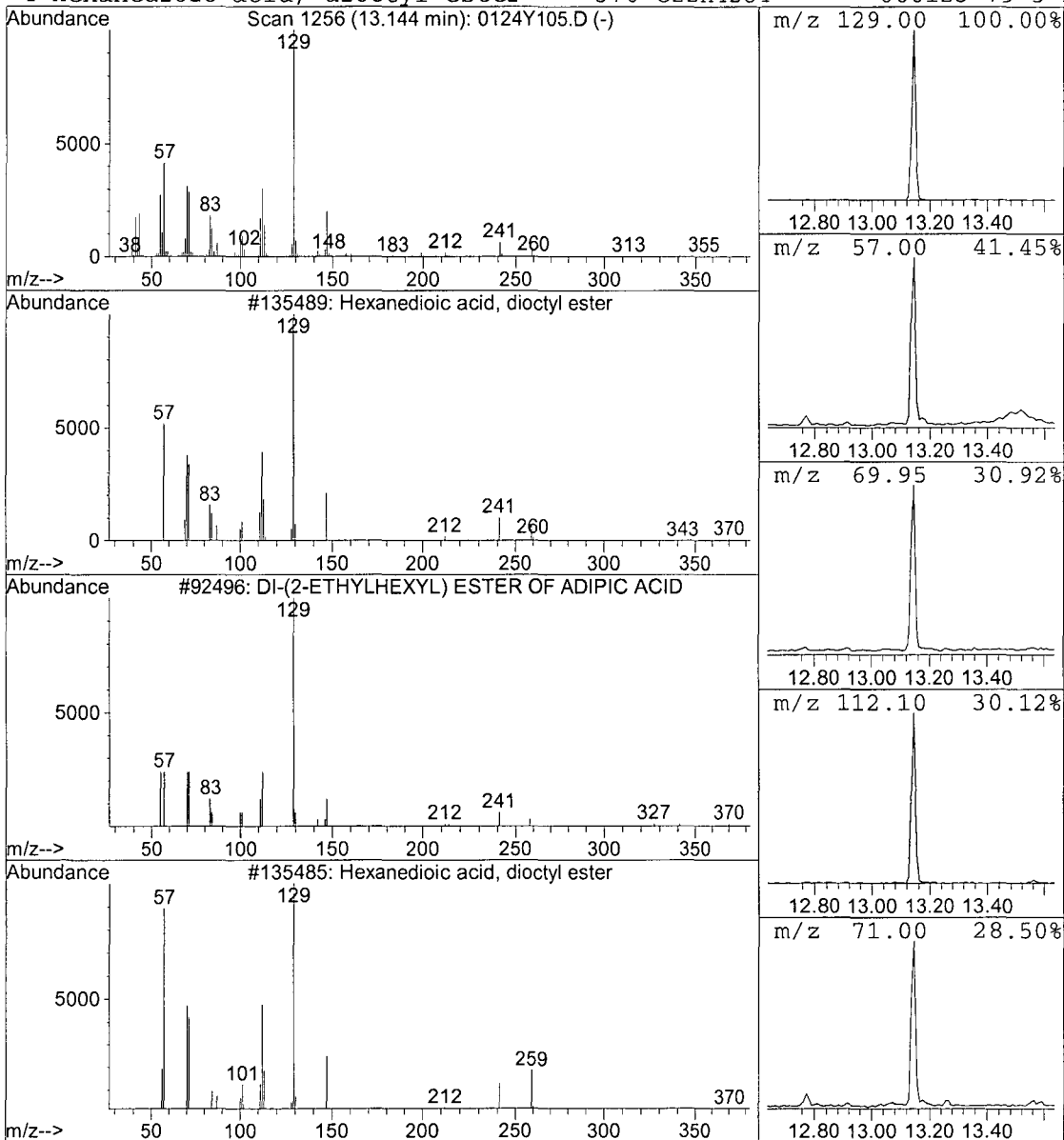
Vial: 5  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Hexanedioic acid, dioctyl este Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.14	10.80 ppb	814241	Chrysene-D12(IS)	13.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	91
2			DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	86
3			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	58
4			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	53



Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 7 13:47 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	397504	40.00	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1702989	40.00	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1043237	40.00	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2087360	40.00	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1877559	40.00	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1713751	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3634101	256.22	ppb	0.03
Spiked Amount 250.000						
						Recovery = 102.487%
6) Phenol-D6 (S)	5.06	99	4629772	247.91	ppb	0.00
Spiked Amount 250.000						
						Recovery = 99.166%
22) Nitrobenzene-D5 (S)	6.10	82	2150874	132.58	ppb	0.00
Spiked Amount 125.000						
						Recovery = 106.063%
46) 2-Fluorobiphenyl (S)	8.13	172	4091841	121.08	ppb	0.00
Spiked Amount 125.000						
						Recovery = 96.861%
64) 2,4,6-Tribromophenol (S)	9.85	330	952080	275.39	ppb	0.00
Spiked Amount 250.000						
						Recovery = 110.157%
82) Terphenyl-D14 (S)	12.52	244	4503683	117.53	ppb	0.00
Spiked Amount 125.000						
						Recovery = 94.027%

Target Compounds

Qvalue

Quantitation Report

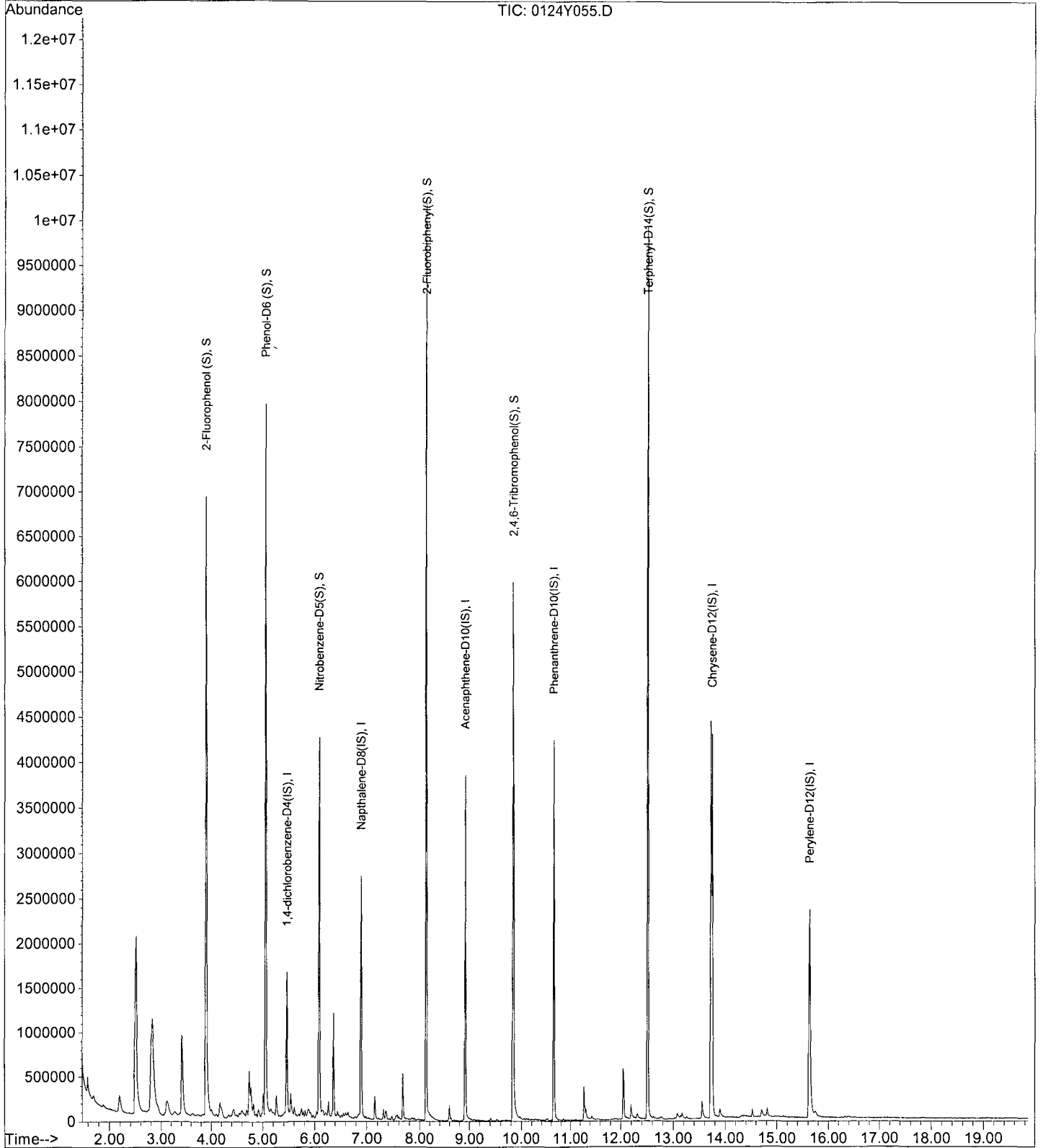
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Acq On : 30 Jan 19 14:56  
Sample : 190128A BLK 1/800  
Misc :

Vial: 55  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 7 13:47 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 30 Jan 19 14:56  
 Data File: M:\YODA\DATA\Y190124\0124Y055.D  
 Name: 190128A BLK 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.19	12.6	ppb	589519	ISTD01	5.47	2340150	40.0
Ethene, tetrachloro-	2.82	105.1	ppb	4921080	ISTD01	5.47	2340150	40.0
Butanedioic acid, di	5.54	7.2	ppb	334891	ISTD01	5.47	2340150	40.0
Pentanedioic acid, d	6.38	17.4	ppb	1179470	ISTD02	6.90	3385010	40.0
Hexanedioic acid, di	7.16	5.2	ppb	355228	ISTD02	6.90	3385010	40.0

0124Y055.D Y0125NC.M Sat Feb 09 07:06:46 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

Title : EPA 8270C

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.002

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

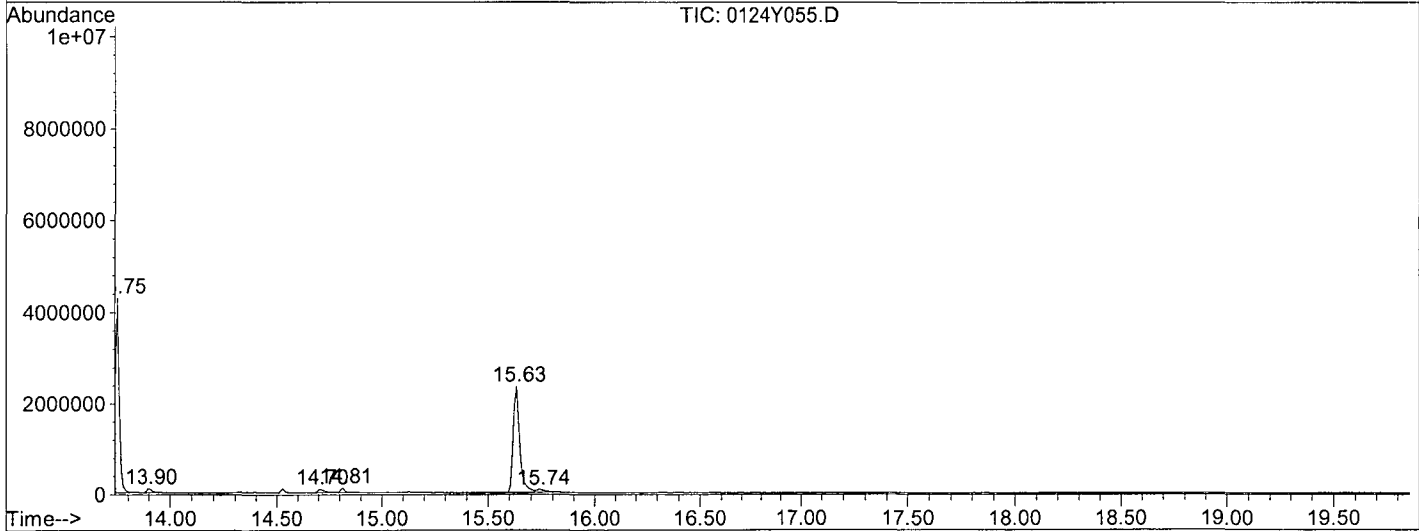
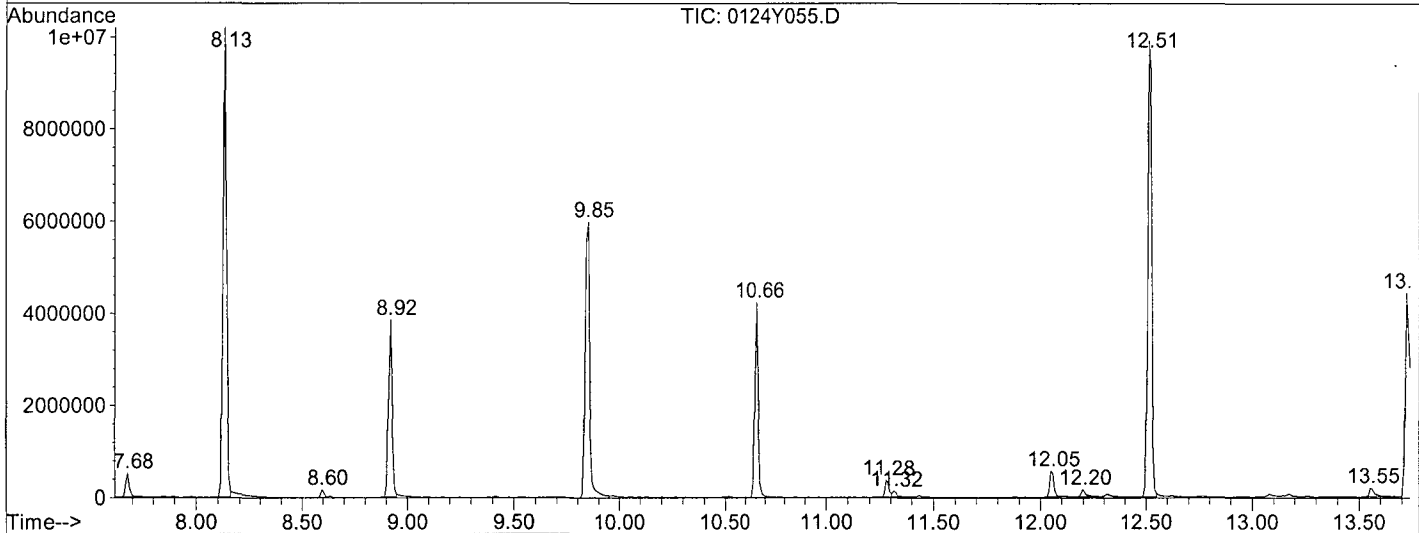
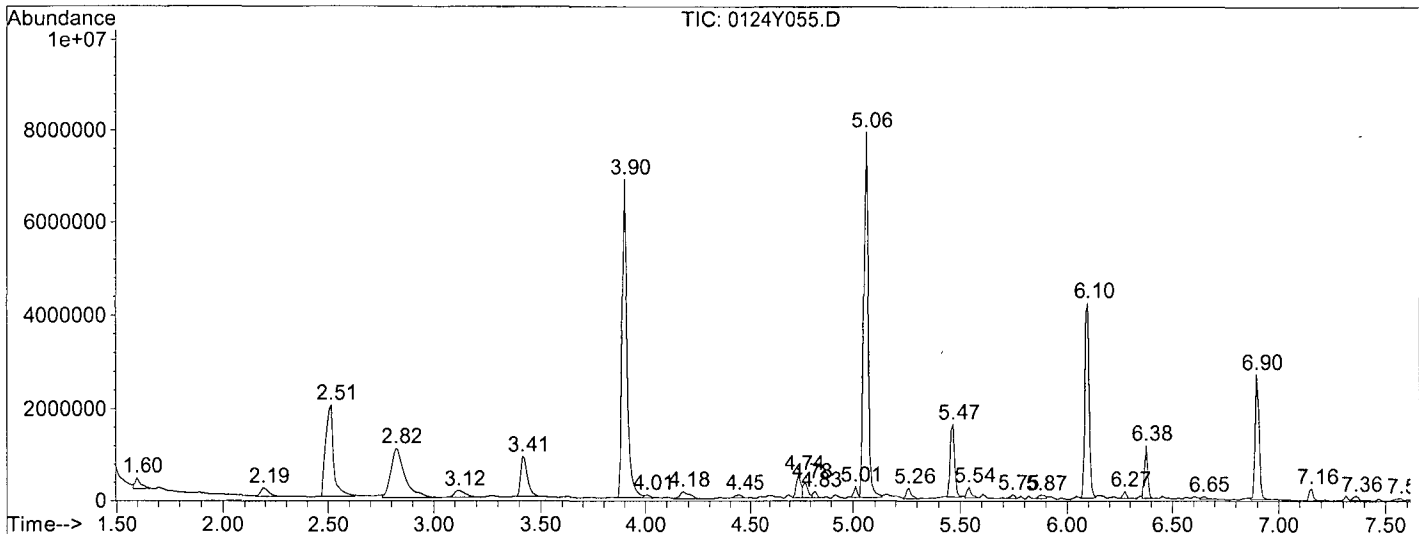
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.595	10	12	21	rVB	244742	4005139	477234	3.60%	0.413%
2	2.189	72	76	91	rVB	198231	5350218	589519	4.45%	0.510%
3	2.514	105	111	123	rBV	1993347	9653895	5270167	39.80%	4.556%
4	2.821	137	144	166	rVB2	1079332	12284789	4921081	37.17%	4.254%
5	3.118	169	176	187	rVV2	153873	4894034	609754	4.61%	0.527%
6	3.415	205	208	219	rVB	879434	5568712	1915746	14.47%	1.656%
7	3.898	256	260	270	rBV	6868153	15021221	11636016	87.88%	10.059%
8	4.009	270	272	279	rVB2	68715	2399535	134649	1.02%	0.116%
9	4.176	285	290	303	rVB2	169468	4753137	547019	4.13%	0.473%
10	4.445	314	319	323	rBV3	73527	2326181	192002	1.45%	0.166%
11	4.742	348	351	353	rVV	496091	2084021	816183	6.16%	0.706%
12	4.780	353	355	358	rVV2	317358	2128152	523021	3.95%	0.452%
13	4.826	358	360	363	rVB	131293	1514252	172878	1.31%	0.149%
14	5.012	378	380	382	rVB	238804	1317760	242688	1.83%	0.210%
15	5.058	382	385	393	rBV	7894577	16711167	11184754	84.48%	9.669%
16	5.262	404	407	412	rVB2	233632	2351407	392625	2.97%	0.339%
17	5.466	425	429	433	rBV	1579265	4322940	2340146	17.67%	2.023%
18	5.541	435	437	442	rVB	234992	2283150	334891	2.53%	0.289%
19	5.745	455	459	461	rBV4	87593	1540933	137604	1.04%	0.119%
20	5.875	469	473	476	rBV3	75606	1807198	181800	1.37%	0.157%
21	6.098	493	497	501	rVV	4203789	8035774	6048964	45.69%	5.229%
22	6.274	513	516	519	rVB	159089	1611585	187791	1.42%	0.162%
23	6.376	525	527	531	rVB	1151956	3448303	1179466	8.91%	1.020%
24	6.646	554	556	564	rVB2	60560	2487210	134812	1.02%	0.117%
25	6.896	580	583	591	rVB	2708465	6049818	3385005	25.57%	2.926%
26	7.156	608	611	616	rBV	256158	2175266	355228	2.68%	0.307%
27	7.360	630	633	638	rVB	91153	2055140	175891	1.33%	0.152%
28	7.574	648	656	658	rBV2	53556	2345072	149350	1.13%	0.129%
29	7.676	664	667	671	rBV	512356	2223201	621836	4.70%	0.538%
30	8.131	713	716	719	rBV	10177355	12913469	11093093	83.78%	9.589%
31	8.595	763	766	769	rBV	165635	1508582	192783	1.46%	0.167%
32	8.920	797	801	804	rBV	3837486	6028104	4472738	33.78%	3.866%
33	9.848	897	901	912	rBV	5980203	12401422	8791135	66.40%	7.599%
34	10.656	985	988	1001	rBV	4230032	9928189	5204673	39.31%	4.499%
35	11.278	1052	1055	1058	rBV2	368946	1826391	511667	3.86%	0.442%
36	11.315	1058	1059	1070	rVB	122026	3249305	190092	1.44%	0.164%
37	12.048	1135	1138	1143	rBV	561916	2550617	770202	5.82%	0.666%
38	12.197	1151	1154	1164	rBV	159336	3173936	272545	2.06%	0.236%
39	12.513	1185	1188	1192	rBV	9898061	15247345	13240309	100.00%	11.446%
40	13.552	1297	1300	1311	rBV2	190041	3494334	344669	2.60%	0.298%
41	13.720	1315	1318	1320	rBV	4423061	7271072	6134355	46.33%	5.303%
42	13.747	1320	1321	1329	rVB	4258862	16778641	4029767	30.44%	3.484%
43	13.896	1334	1337	1343	rBV2	88635	2234978	173001	1.31%	0.150%
44	14.704	1421	1424	1433	rBV2	76512	5516397	173397	1.48%	0.169%
45	14.815	1433	1436	1446	rVB	98985	3215338	172503	1.30%	0.149%



LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y055.D  
Operator : MA  
Acquired : 30 Jan 19 14:56 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: 190128A BLK 1/800  
Misc Info :  
Vial Number: 55  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

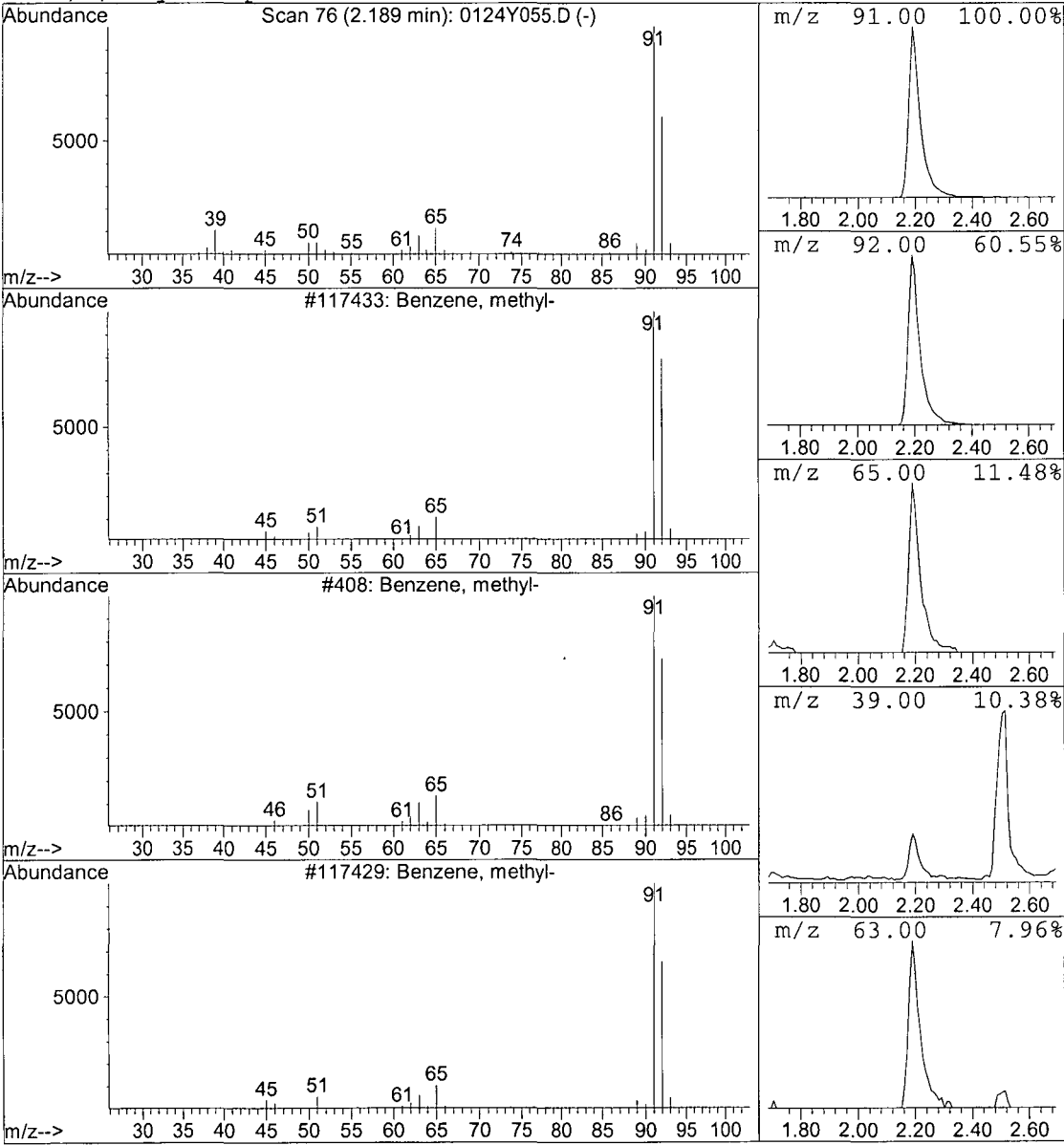
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzene, methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.19	12.60 ppb	589519	1,4-dichlorobenzene-D4 (IS)	5.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	91
2	Benzene, methyl-	92	C7H8	000108-88-3	91
3	Benzene, methyl-	92	C7H8	000108-88-3	91
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

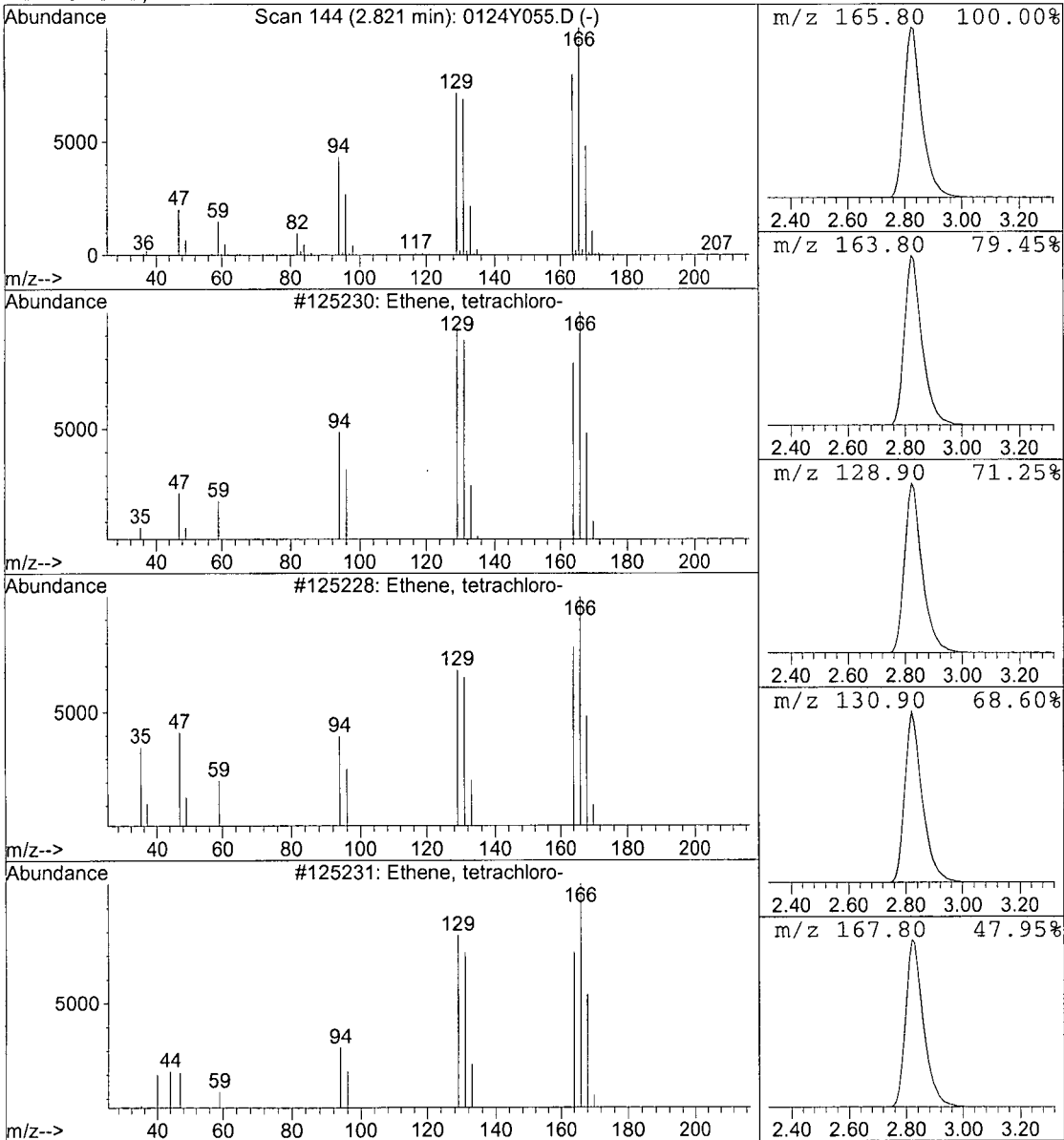
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Ethene, tetrachloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	105.15 ppb	4921080	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
3		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	96
4		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

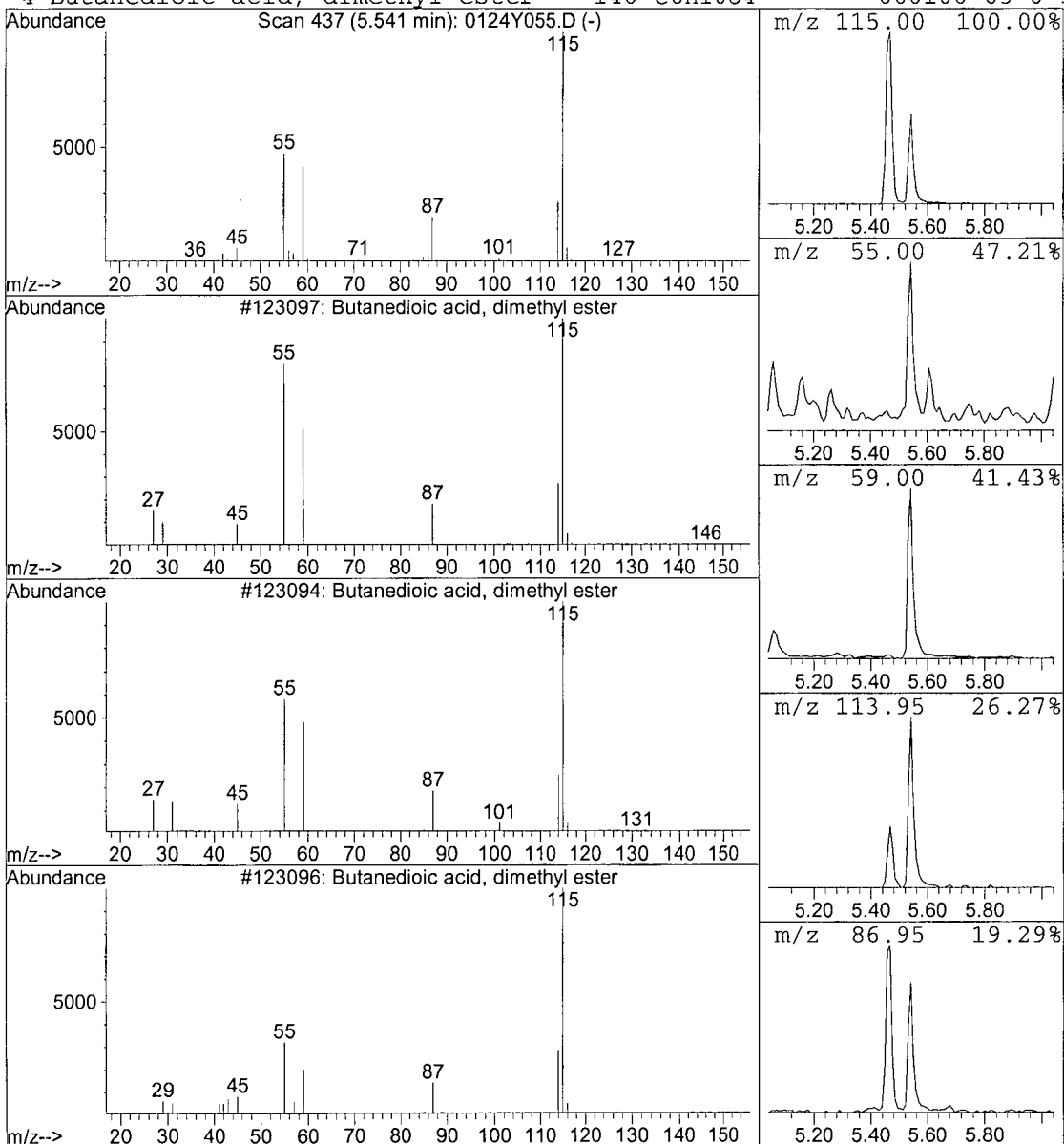
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Butanedioic acid, dimethyl est Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.54	7.16 ppb	334891	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
2			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
3			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	59
4			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	56



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

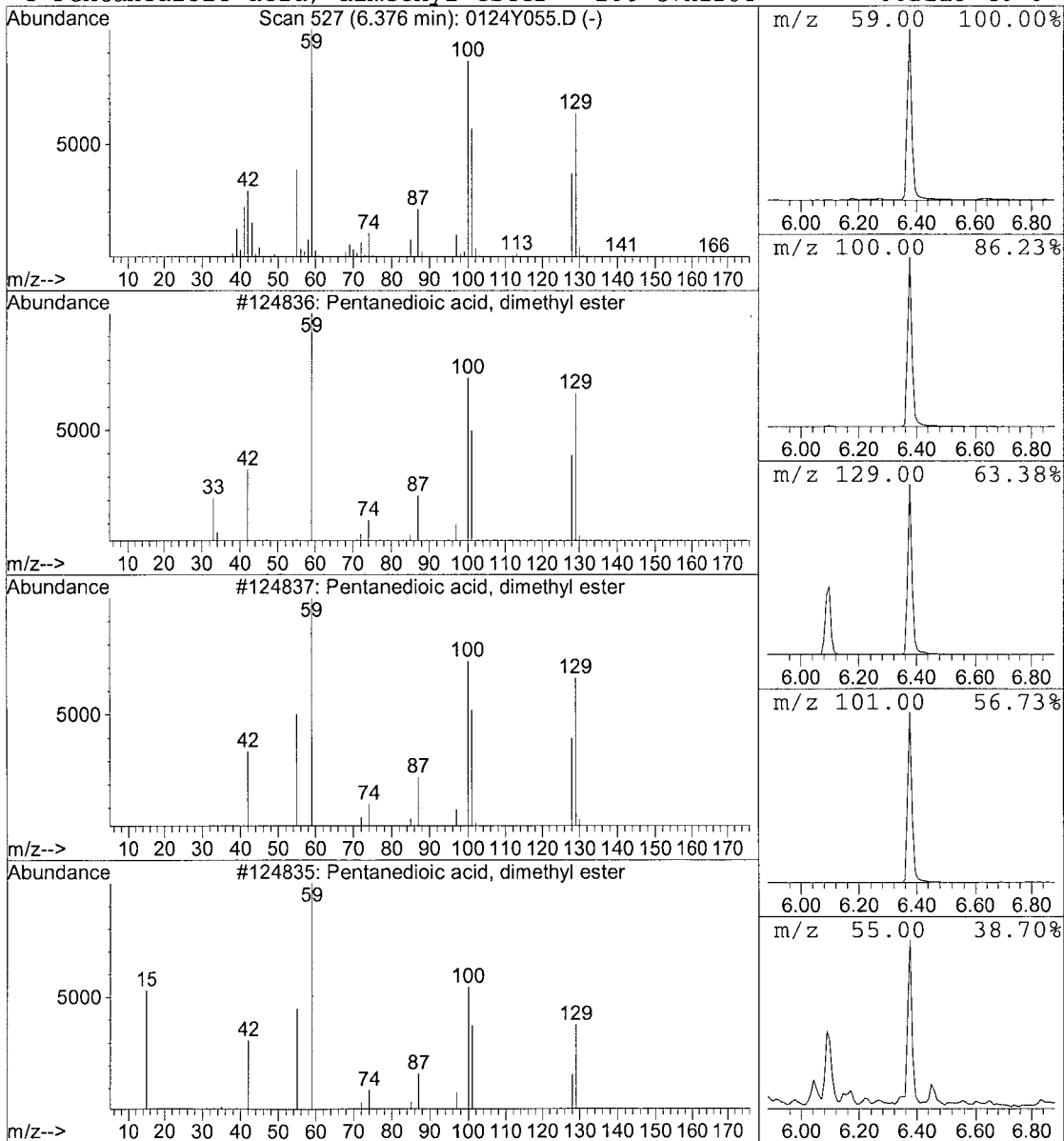
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Pentanedioic acid, dimethyl es Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.38	17.42 ppb	1179470	Napthalene-D8(IS)	6.90

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	83
3		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
4		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78



Data File : M:\YODA\DATA\Y190124\0124Y055.D  
 Acq On : 30 Jan 19 14:56  
 Sample : 190128A BLK 1/800  
 Misc :

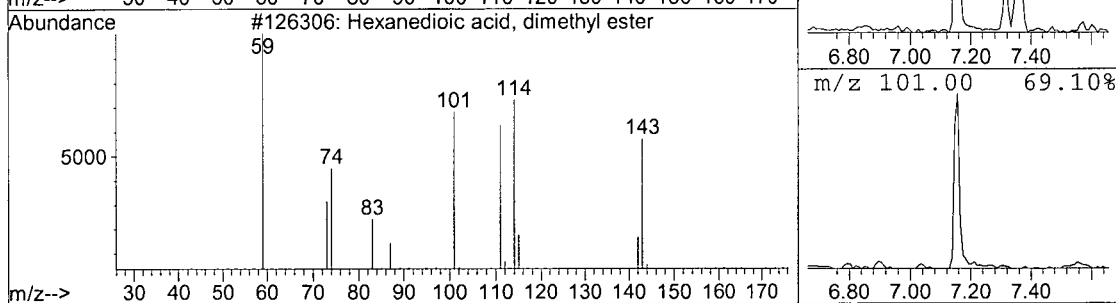
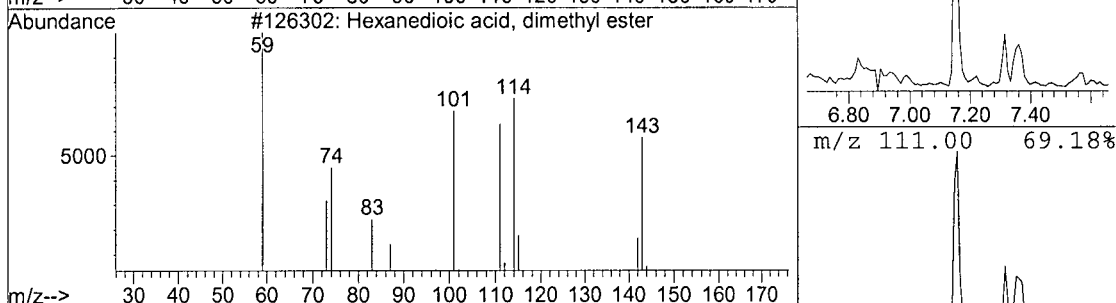
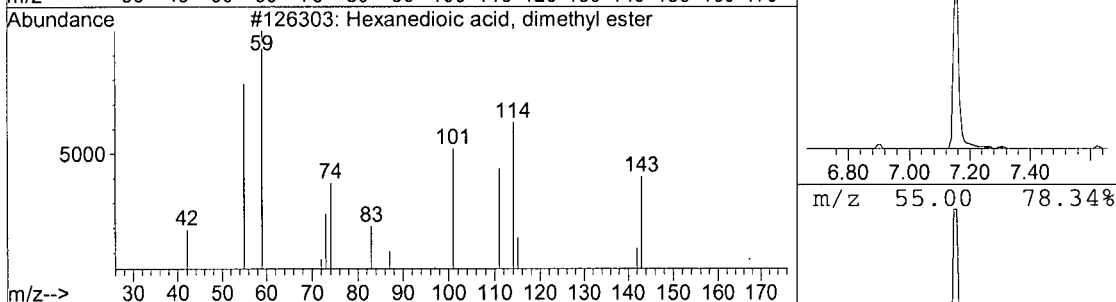
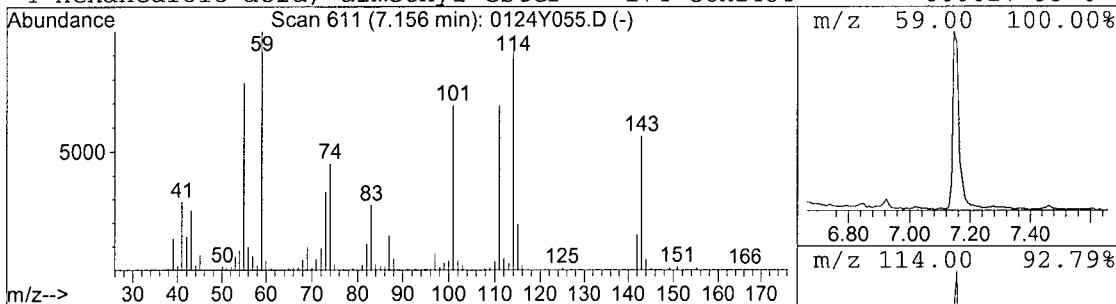
Vial: 55  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 5 Hexanedioic acid, dimethyl est Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.16	5.25 ppb	355228	Napthalene-D8 (IS)	6.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
2	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
3	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
4	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91



Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 10:48 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	407906	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1730017	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	912178	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1761484	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1559813	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1513972	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	3313768	227.6750	ppb	0.02
Spiked Amount	250.000		Recovery	=	91.070%	
6) Phenol-D6 (S)	5.06	99	4218189	220.1152	ppb	0.00
Spiked Amount	250.000		Recovery	=	88.046%	
22) Nitrobenzene-D5 (S)	6.09	82	2015717	122.3073	ppb	0.00
Spiked Amount	125.000		Recovery	=	97.846%	
46) 2-Fluorobiphenyl (S)	8.13	172	3786452	128.1373	ppb	0.00
Spiked Amount	125.000		Recovery	=	102.510%	
64) 2,4,6-Tribromophenol (S)	9.85	330	872148	288.5172	ppb	0.00
Spiked Amount	250.000		Recovery	=	115.407%	
82) Terphenyl-D14 (S)	12.51	244	4243389	133.2995	ppb	0.00
Spiked Amount	125.000		Recovery	=	106.640%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

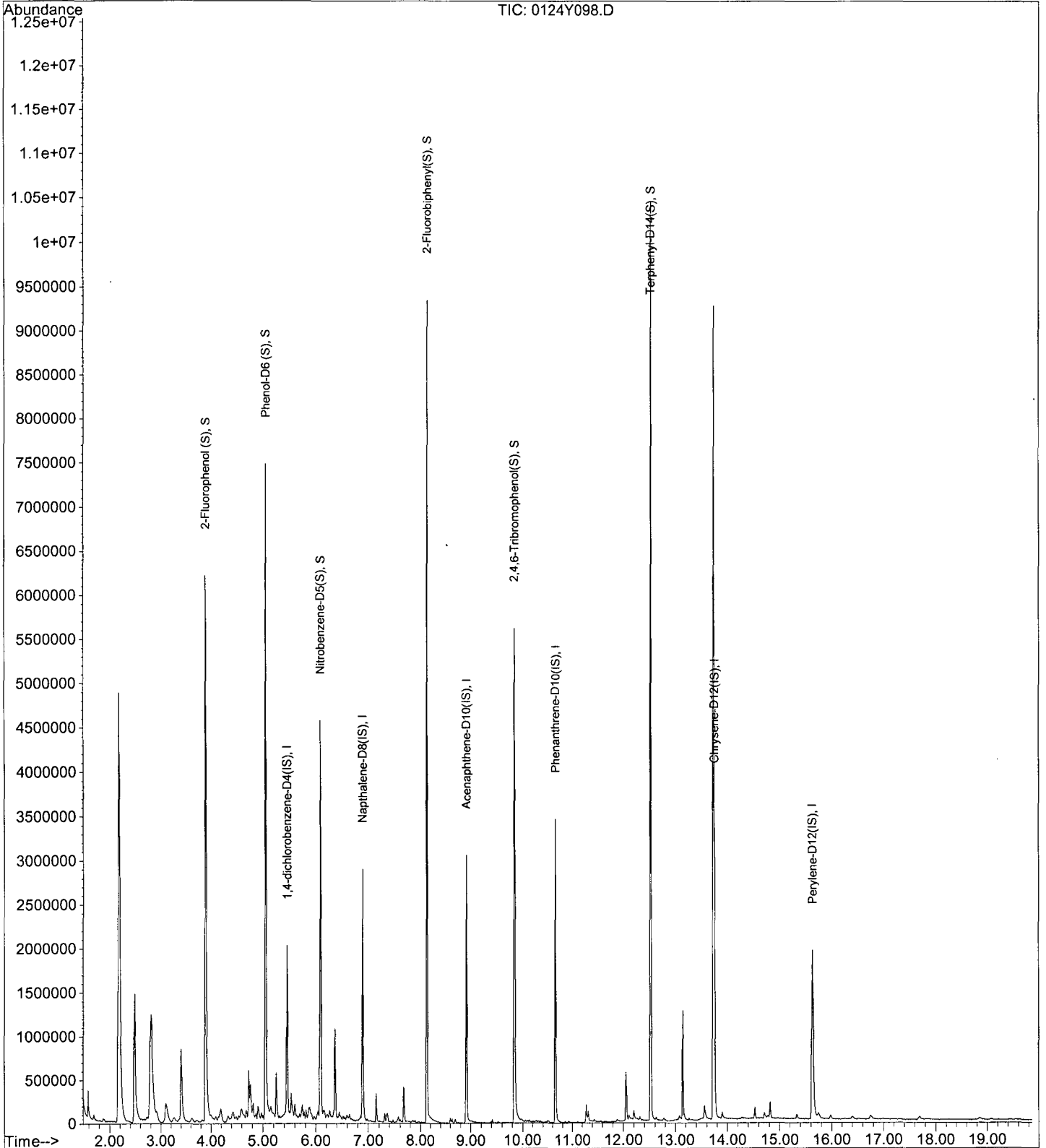
Data File : M:\YODA\DATA\Y190124\0124Y098.D  
Acq On : 1 Feb 19 16:19  
Sample : 190130A Blk 1/800  
Misc :

Vial: 98  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:48 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 16:19  
 Data File: M:\YODA\DATA\Y190124\0124Y098.D  
 Name: 190130A Blk 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.18	218.0	ppb	11425600	ISTD01	5.46	2620080	40.0
Ethene, tetrachloro-	2.80	84.6	ppb	4431650	ISTD01	5.46	2620080	40.0
Butanedioic acid, di	5.53	7.7	ppb	401962	ISTD01	5.46	2620080	40.0
Pentanedioic acid, d	6.37	18.4	ppb	1289090	ISTD02	6.90	3509310	40.0
Hexanedioic acid, di	7.15	5.3	ppb	369644	ISTD02	6.90	3509310	40.0

0124Y098.D Y0125NC.M Sat Feb 09 07:21:40 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

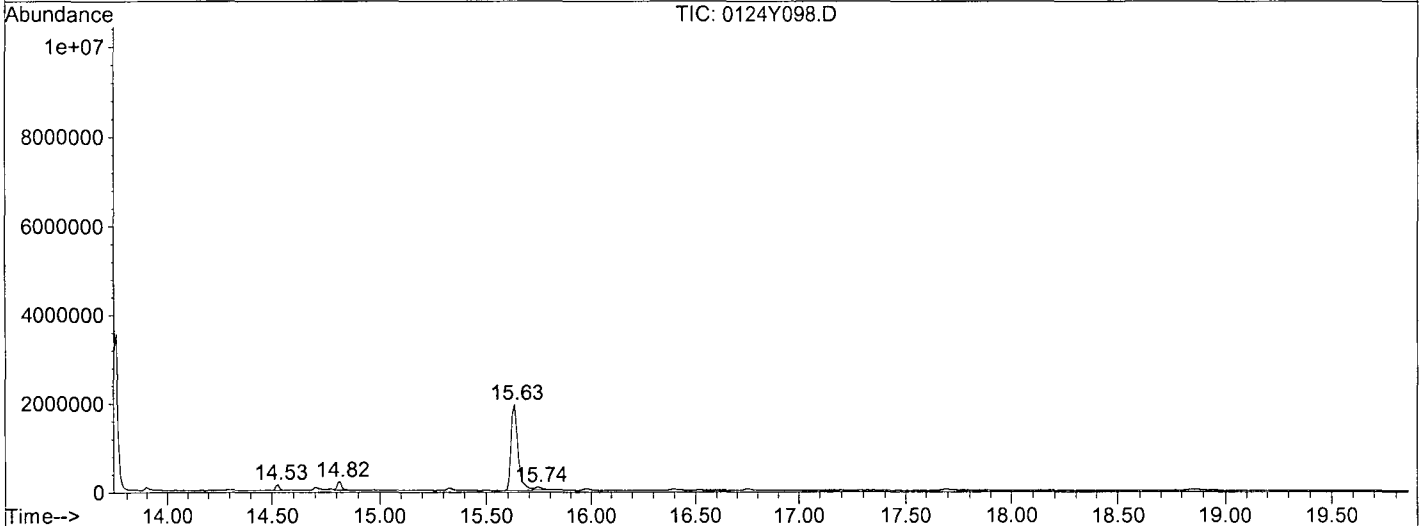
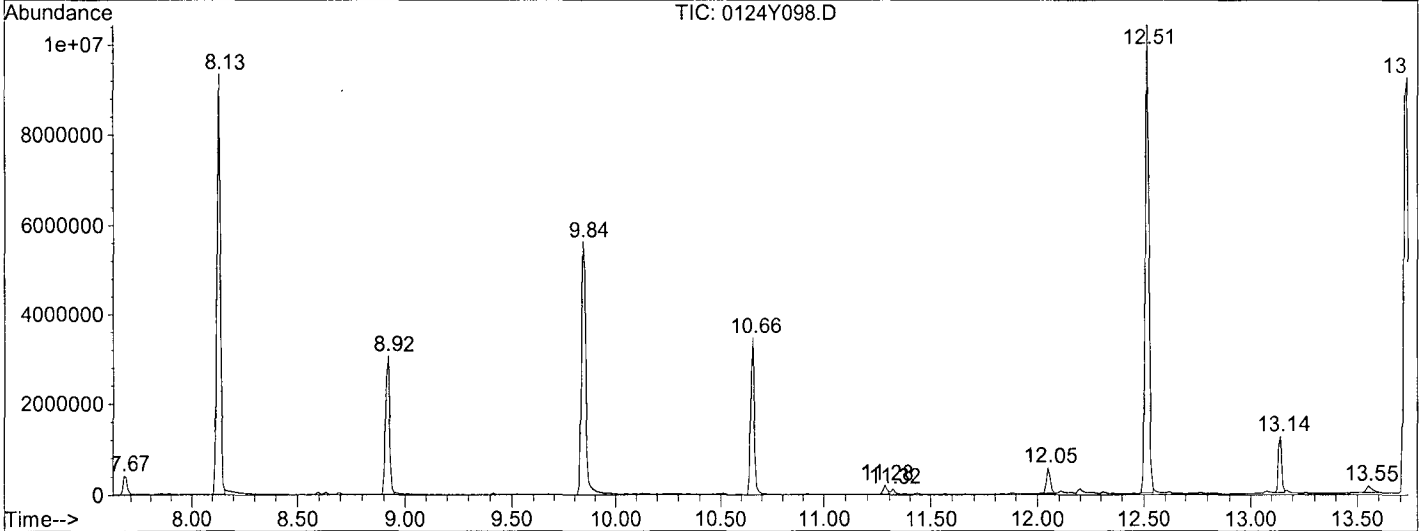
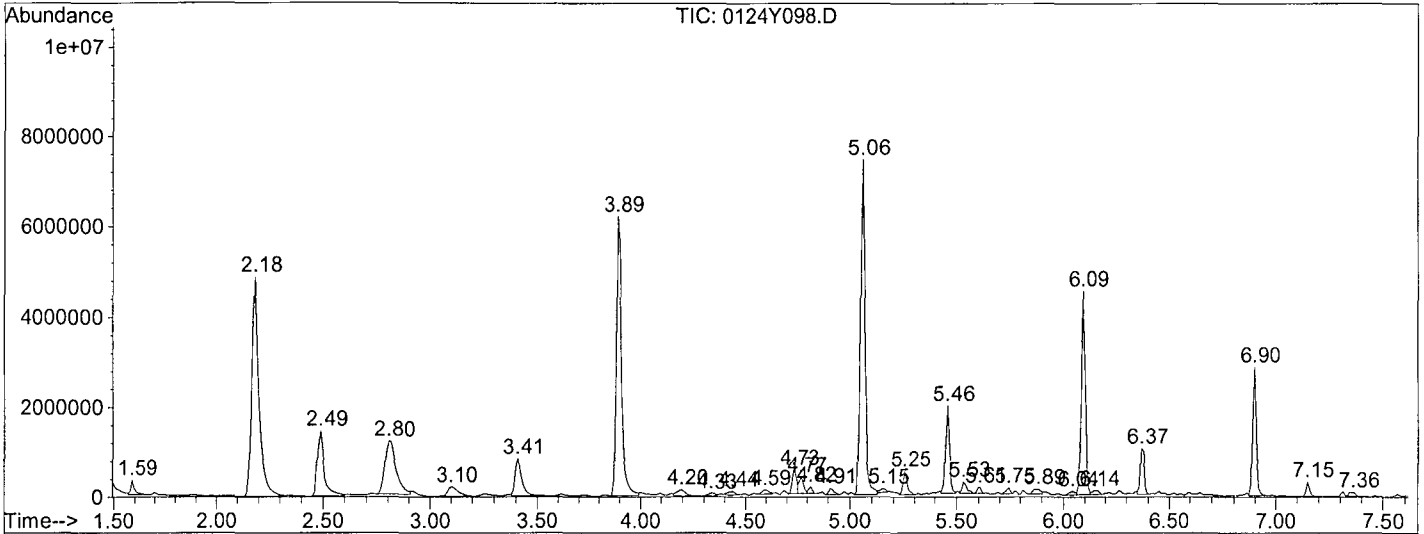
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.587	9	11	20	rVB	327810	1914866	424902	2.67%	0.335%
2	2.181	69	75	91	rBV	4869307	13705170	11425577	71.84%	8.997%
3	2.487	104	108	120	rBV	1464366	5364796	3347431	21.05%	2.636%
4	2.803	136	142	153	rBV	1192201	6493373	4431654	27.87%	3.490%
5	3.100	167	174	186	rBV3	213372	2718907	774626	4.87%	0.610%
6	3.406	204	207	217	rVB	822735	3626605	1759672	11.06%	1.386%
7	3.889	256	259	270	rBV	6192385	13820287	10930960	68.73%	8.607%
8	4.195	288	292	301	rVB2	153588	2029265	420148	2.64%	0.331%
9	4.335	301	307	310	rBV	69919	1102551	180838	1.14%	0.142%
10	4.437	313	318	321	rVV4	79010	1116371	203579	1.28%	0.160%
11	4.595	331	335	339	rBV2	95704	1197788	240463	1.51%	0.189%
12	4.734	347	350	352	rVV	539736	1426445	809329	5.09%	0.637%
13	4.771	352	354	357	rVV2	374096	1577308	579569	3.64%	0.456%
14	4.817	357	359	362	rVB2	156971	952629	194528	1.22%	0.153%
15	4.910	367	369	374	rBV2	146445	1163001	258751	1.63%	0.204%
16	5.059	381	385	392	rBV	7441081	12102047	10653140	66.99%	8.388%
17	5.152	392	395	398	rVB2	83225	993115	171167	1.08%	0.135%
18	5.254	403	406	411	rVB	525628	1748404	759179	4.77%	0.598%
19	5.458	425	428	432	rVV	1954165	3876593	2620081	16.48%	2.063%
20	5.532	434	436	441	rVV	264169	1397605	401962	2.53%	0.317%
21	5.607	441	444	446	rVV	137354	828702	189887	1.19%	0.150%
22	5.746	455	459	461	rBV3	146062	966410	223838	1.41%	0.176%
23	5.885	469	474	476	rBV3	123403	1142036	309024	1.94%	0.243%
24	6.043	486	491	493	rBV	93474	962968	184390	1.16%	0.145%
25	6.089	493	496	500	rVV	4521994	7406600	6077860	38.22%	4.786%
26	6.145	500	502	506	rVB4	90406	990829	209194	1.32%	0.165%
27	6.368	524	526	530	rVB	1021558	2259706	1289087	8.11%	1.015%
28	6.897	580	583	590	rVB	2872179	5264757	3509310	22.07%	2.763%
29	7.148	608	610	615	rBV	323835	1257448	369644	2.32%	0.291%
30	7.361	629	633	636	rVB2	94111	928606	187316	1.18%	0.147%
31	7.667	664	666	671	rBV	399097	1431262	571618	3.59%	0.450%
32	8.132	712	716	719	rBV	9334728	11185498	10438905	65.64%	8.220%
33	8.921	797	801	804	rBV	3054563	4724547	3995069	25.12%	3.146%
34	9.840	897	900	912	rBV2	5617378	10538591	8258336	51.93%	6.503%
35	10.657	984	988	1006	rBV	3462155	6685263	4451138	27.99%	3.505%
36	11.279	1052	1055	1057	rBV	198296	755203	247442	1.56%	0.195%
37	11.316	1057	1059	1069	rVB	121100	1583767	181280	1.14%	0.143%
38	12.049	1135	1138	1142	rBV	555150	1437005	687040	4.32%	0.541%
39	12.513	1185	1188	1191	rBV	10410879	13722632	12440161	78.22%	9.796%
40	13.145	1253	1256	1258	rBV	1244092	2071486	1430467	8.99%	1.126%
41	13.553	1297	1300	1315	rVB2	153646	2424654	326633	2.05%	0.257%
42	13.730	1315	1319	1329	rBV2	9237465	17617520	15903204	100.00%	12.522%
43	14.528	1402	1405	1408	rBV	129638	852679	164543	1.03%	0.130%
44	14.816	1433	1436	1446	rVB	192035	5266639	164543	1.89%	0.237%
45	15.633	1519	1524	1533	rBV	1936832	5881367	4286473	26.95%	3.375%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y098.D  
Operator : MA  
Acquired : 1 Feb 19 16:19 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: 190130A Blk 1/800  
Misc Info :  
Vial Number: 98  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

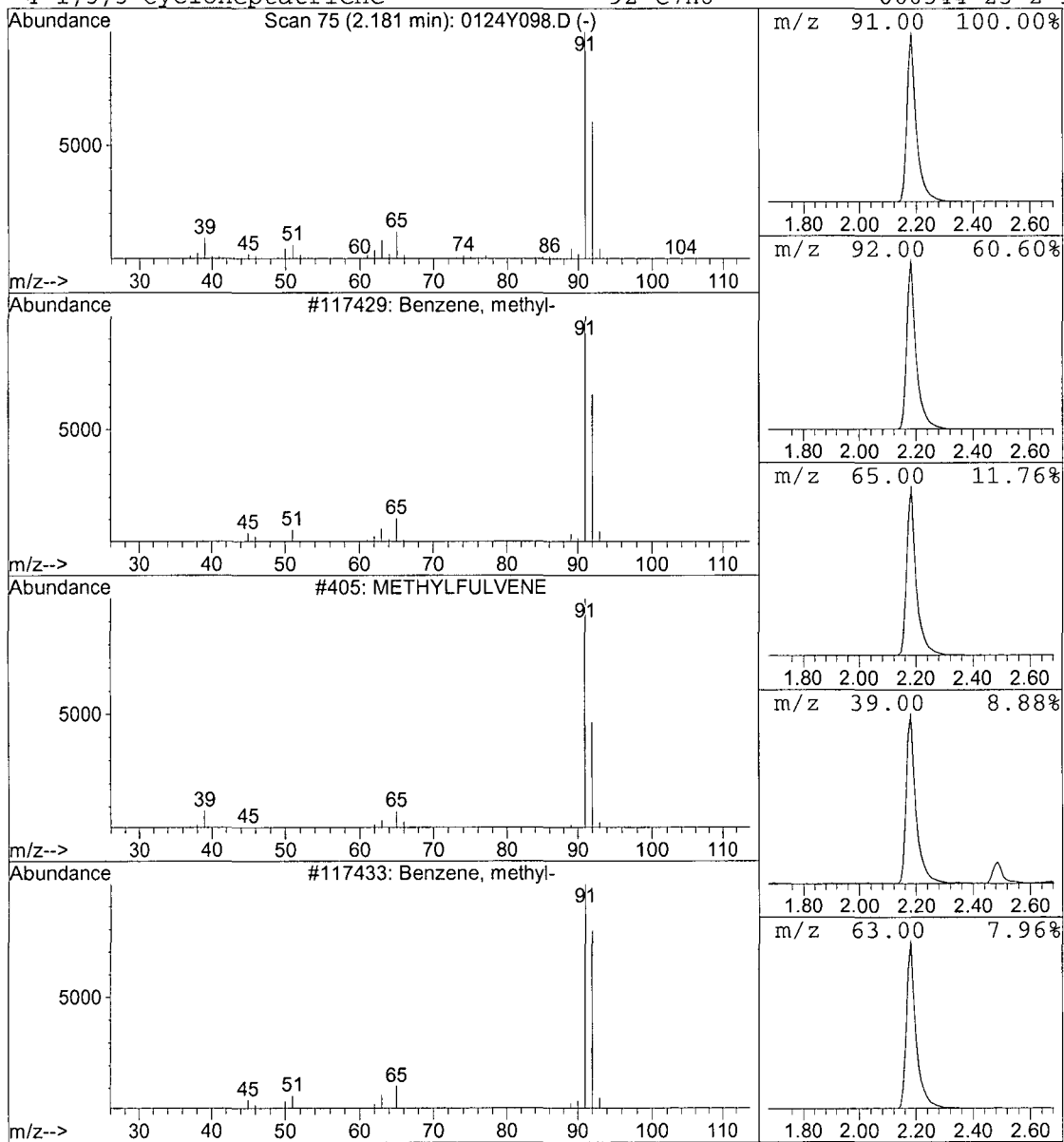
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.18	218.04 ppb	11425600	1,4-dichlorobenzene-D4 (IS)	5.46

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	94
2	METHYLFULVENE	92	C7H8	000000-00-0	91
3	Benzene, methyl-	92	C7H8	000108-88-3	91
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

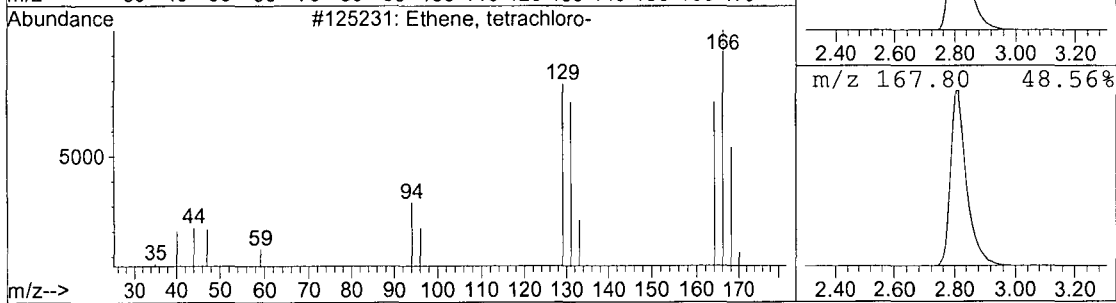
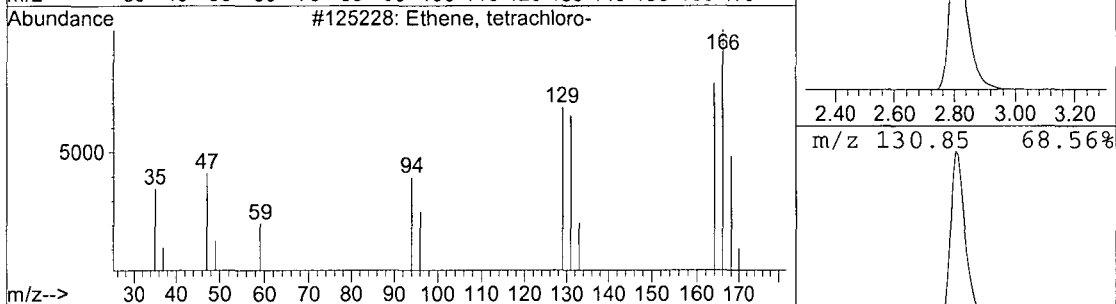
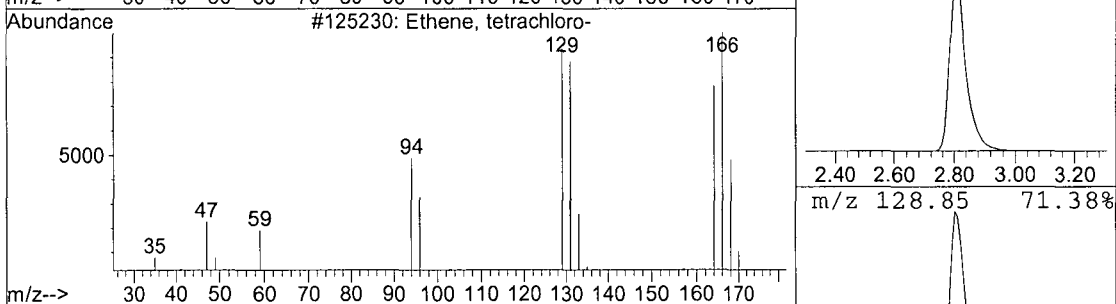
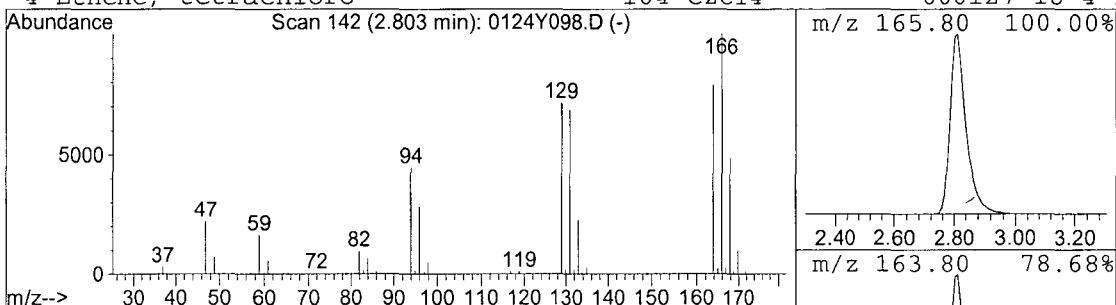
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Ethene, tetrachloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.80	84.57 ppb	4431650	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
3		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	95
4		Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94



Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

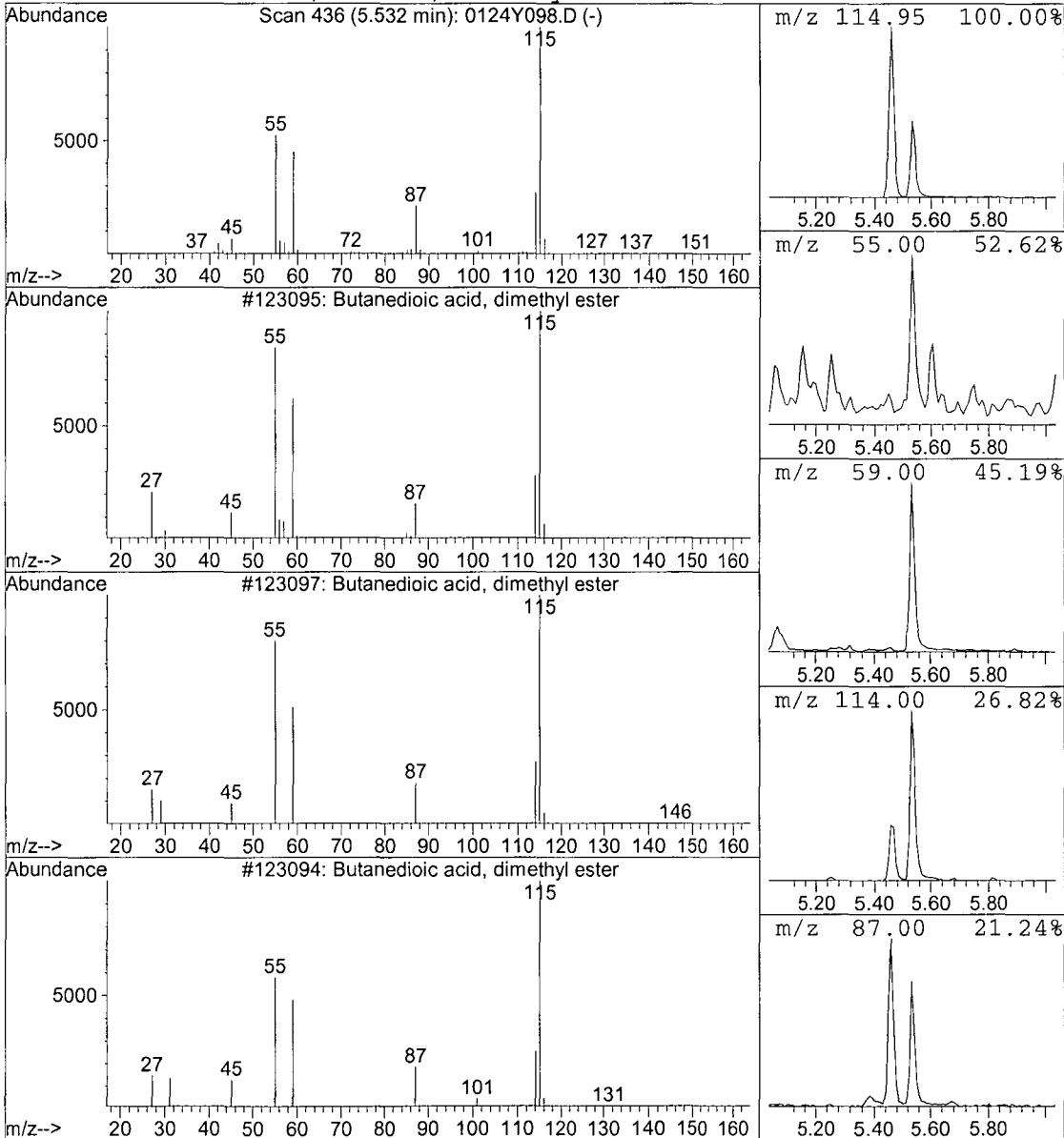
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Butanedioic acid, dimethyl est Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.53	7.67 ppb	401962	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
2		Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
3		Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	74
4		Pentanedioic acid, 2-oxo-, dimethyl	174	C7H10O5	013192-04-6	64



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

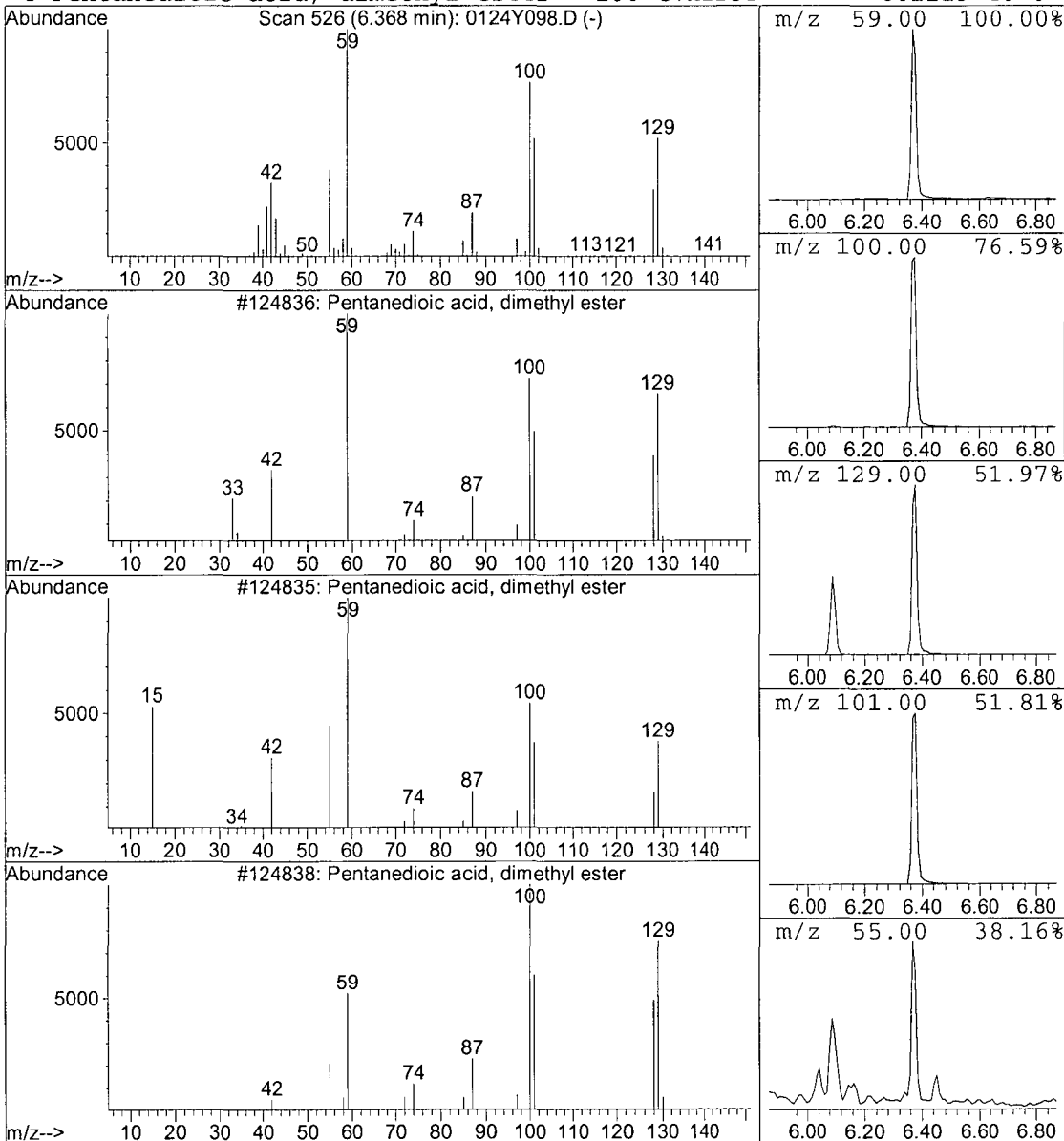
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Pentanedioic acid, dimethyl es Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.37	18.37 ppb	1289090	Napthalene-D8(IS)	6.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
3	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	58
4	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	50



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

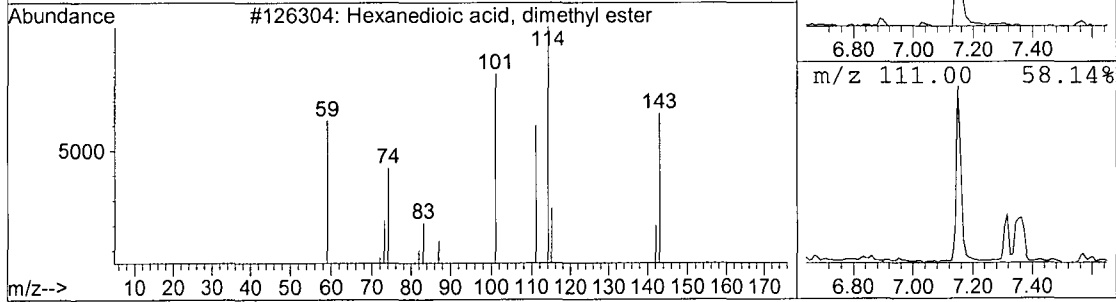
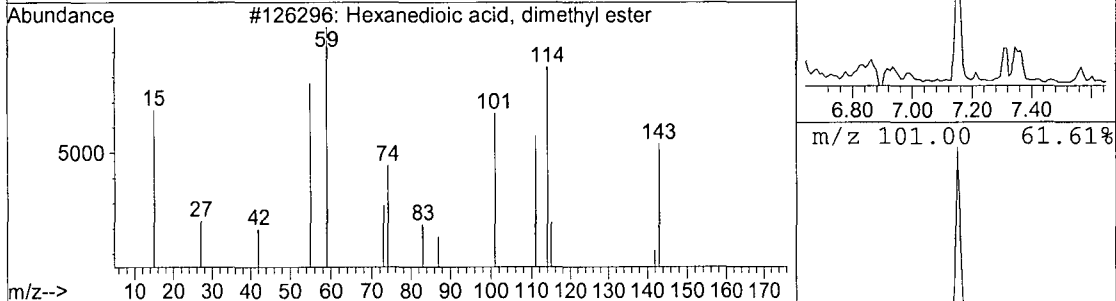
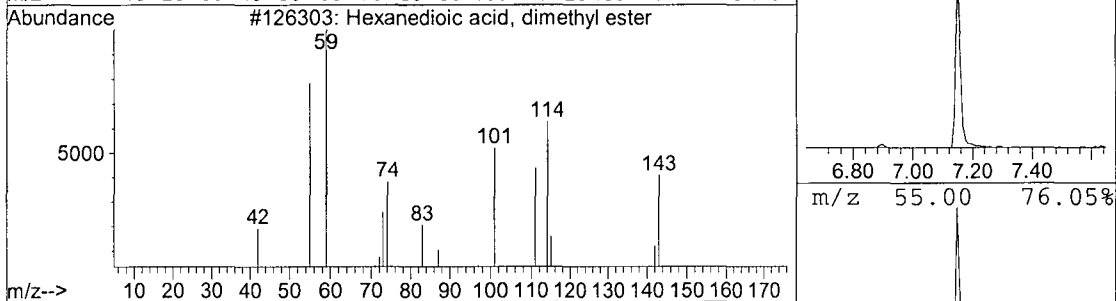
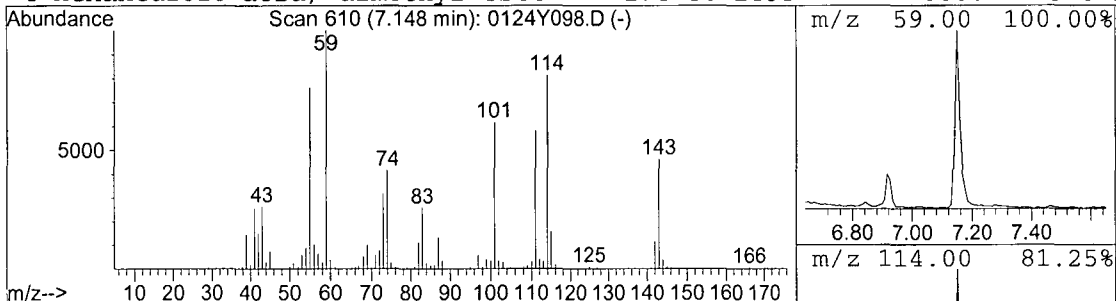
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 5 Hexanedioic acid, dimethyl est Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.15	5.27 ppb	369644	Napthalene-D8(IS)	6.90

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
2		Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
3		Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	90
4		Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	90





Data File : M:\YODA\DATA\Y190124\0124Y056.D  
 Acq On : 30 Jan 19 15:24  
 Sample : 190128A LCS-1 1/800  
 Misc :

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	457917	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1909311	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1115986	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2176917	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1926866	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1886148	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.91	112	3839495	234.9853	ppb	0.04
Spiked Amount	250.000		Recovery	=	93.994%	
6) Phenol-D6 (S)	5.07	99	5066404	235.5034	ppb	0.02
Spiked Amount	250.000		Recovery	=	94.201%	
22) Nitrobenzene-D5 (S)	6.10	82	2202037	121.0657	ppb	0.00
Spiked Amount	125.000		Recovery	=	96.853%	
46) 2-Fluorobiphenyl (S)	8.14	172	4168086	115.2924	ppb	0.00
Spiked Amount	125.000		Recovery	=	92.234%	
64) 2,4,6-Tribromophenol (S)	9.86	330	981990	265.5274	ppb	0.00
Spiked Amount	250.000		Recovery	=	106.211%	
82) Terphenyl-D14 (S)	12.52	244	4458092	113.3668	ppb	0.00
Spiked Amount	125.000		Recovery	=	90.694%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.73	58	14437	7.0474		93
3) n-Nitrosodimethylamine	1.97	42	184665	55.6065	ppb	100
4) Pyridine	1.99	79	302405	37.0045	ppb	97
7) Phenol	5.09	94	1547482	55.8430	ppb	92
8) Aniline	5.10	93	1257162	43.3414	ppb	90
9) Bis (2-chloroethyl) ether	5.18	63	736144	57.6652	ppb	89
10) 2-Chlorophenol	5.23	128	1113811	56.9519	ppb	95
11) 1,3-DCB	5.40	146	928696	44.6368	ppb	98
12) 1,4-DCB	5.49	146	967220	45.4970	ppb	99
13) Benzyl alcohol	5.63	108	721516	59.2081	ppb	93
14) 1,2-DCB	5.65	146	933306	47.3892	ppb	98
15) 2-Methylphenol	5.75	107	966760	57.9492	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1125661	58.7326	ppb	# 85
17) Acetophenone	5.92	105	1441455	56.7124	ppb	100
18) 3&4-Methylphenol	5.93	107	2272780	115.3451	ppb	97
19) n-Nitrosodi-n-propylamine	5.92	70	814411	56.9123	ppb	98
20) Hexachloroethane	6.03	117	304393	39.1955	ppb	90
23) Nitrobenzene	6.12	77	1252632	61.2427	ppb	95
24) Isophorone	6.39	82	2221079	62.2524	ppb	99
25) 2-Nitrophenol	6.47	139	612881	60.8602	ppb	96
26) 2,4-Dimethylphenol	6.52	122	957734	57.4794	ppb	99
27) Benzoic acid	6.66	105	804469	61.7076	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1366308	61.7489	ppb	99
29) 2,4-Dichlorophenol	6.75	162	914907	63.8115	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	819212	51.3928	ppb	99
31) 3,4-Dimethylphenol	6.85	107	1397590	62.0386	ppb	100
32) Napthalene	6.92	128	3074441	56.7155	ppb	100
33) 4-Chloroaniline	6.99	127	593178	29.5767	ppb	98
34) 2,6-Dichlorophenol	7.00	162	892518	62.8582	ppb	100
35) Hexachloropropene	7.02	213	375862	38.6674	ppb	100
36) Hexachlorobutadiene	7.05	225	359286	43.2686	ppb	98
37) Caprolactum	7.42	55	437379	60.5901	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y056.D  
 Acq On : 30 Jan 19 15:24  
 Sample : 190128A LCS-1 1/800  
 Misc :

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1013986	62.7609	ppb	95
39) 2-Methylnaphthalene	7.71	142	2014074	57.6195	ppb	98
40) 1-Methylnaphthalene	7.82	142	2016171	57.7100	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	127085	25.1061	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	847158	56.4918	ppb	100
44) 2,4,6-Trichlorophenol	8.05	196	625017	63.8492	ppb	97
45) 2,4,5-Trichlorophenol	8.09	196	675383	61.0914	ppb	100
47) 1,1'-Biphenyl	8.25	154	2591109	58.4883	ppb	99
48) 2-Chloronaphthalene	8.28	162	1998743	59.0576	ppb	99
49) 2-Nitroaniline	8.40	65	670967	60.9863	ppb	99
50) Dimethyl phthalate	8.60	163	2548088	63.7673	ppb	100
51) 2,6-DNT	8.69	165	561886	62.7082	ppb	99
52) Acenaphthylene	8.76	152	3168066	59.0123	ppb	99
53) 3-Nitroaniline	8.88	138	321517	31.6871	ppb	92
54) Acenaphthene	8.96	154	2049821	58.9598	ppb	100
55) 2,4-Dinitrophenol	9.01	184	284288	59.6251	ppb	96
56) 4-Nitrophenol	9.09	65	346705	56.2277	ppb	98
57) Dibenzofuran	9.16	168	2939102	60.3199	ppb	98
58) 2,4-DNT	9.15	165	745341	63.0667	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.31	232	513043	63.0580	ppb	97
60) Diethyl phthalate	9.42	149	2314469	61.1312	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1139756	59.9568	ppb	97
62) Fluorene	9.56	166	2353058	60.2465	ppb	100
63) 4-Nitroaniline	9.61	138	567570	55.2430	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.64	198	451912	58.0910	ppb	99
67) Diphenyl amine	9.70	169	3539990	115.2165	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3539990	115.2165	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2483913	57.3578	ppb	99
70) 4-Bromophenyl phenyl ether	10.13	248	634614	60.9890	ppb	97
71) Hexachlorobenzene	10.20	284	602971	61.2974	ppb	97
72) Atrazine	10.32	200	266377	25.2674	ppb	98
73) Pentachlorophenol	10.43	266	398288	64.6965	ppb	99
74) Phenanthrene	10.68	178	3475307	59.0431	ppb	100
75) Anthracene	10.75	178	3513193	58.2714	ppb	100
76) Carbazol	10.94	167	3246831	59.2599	ppb	100
77) Di-n-butylphthalate	11.32	149	3938060	60.9140	ppb	100
78) Fluoranthene	12.08	202	3745495	59.2659	ppb	99
80) Benzidine	12.25	184	28148	1.4766	ppb	# 86
81) Pyrene	12.35	202	3877241	59.2550	ppb	100
83) Butyl benzylphthalate	13.08	149	1785374	60.8687	ppb	98
84) 3,3'-Dichlorobenzidine	13.71	252	527194	26.2755	ppb	98
85) Benz (a) anthracene	13.74	228	3350543	58.7161	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2491980	61.0488	ppb	100
87) Chrysene	13.78	228	3233196	57.9400	ppb	99
88) Di-n-octylphthalate	14.49	149	4316393	62.3170	ppb	100
90) Benzo (b) fluoranthene	15.08	252	3606168	63.6686	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3013217	55.3525	ppb	99
92) Benzo (a) pyrene	15.55	252	3079916	60.0757	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3195892	60.5183	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	2918560	61.1307	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2807537	60.0098	ppb	99

(#) = qualifier out of range (m) = manual integration

0124Y056.D Y0125NC.M

Mon Feb 04 14:04:02 2019

Quantitation Report

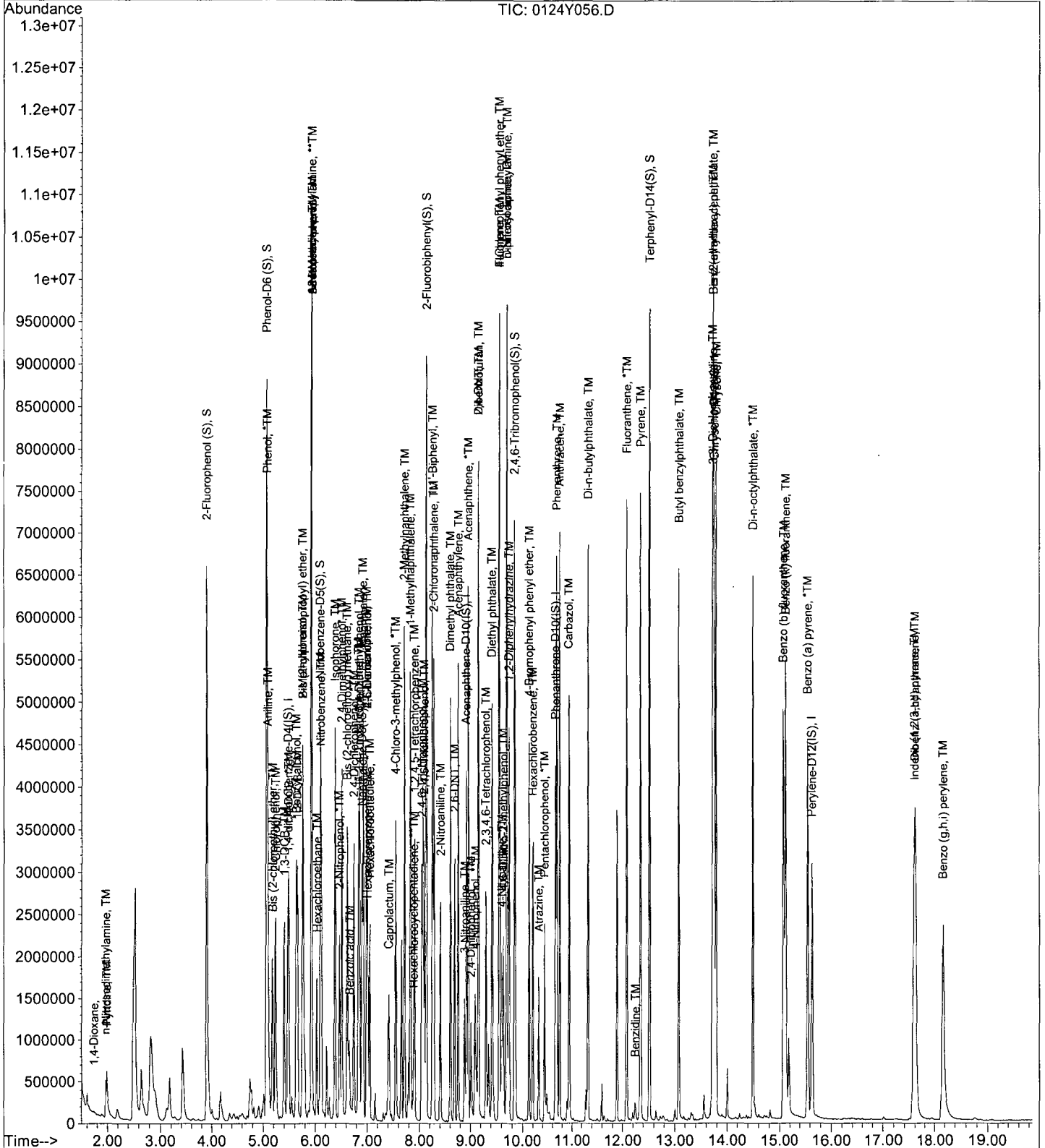
Data File : M:\YODA\DATA\Y190124\0124Y056.D  
Acq On : 30 Jan 19 15:24  
Sample : 190128A LCS-1 1/800  
Misc :

Vial: 56  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y099.D  
 Acq On : 1 Feb 19 16:47  
 Sample : 190130A LCS-1 1/800  
 Misc :

Vial: 99  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	511564	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2139035	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1151768	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2179017	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1955925	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1751725	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3288190	180.1401	ppb	0.03
Spiked Amount 250.000			Recovery =	72.056%		
6) Phenol-D6 (S)	5.07	99	4263766	177.4098	ppb	0.02
Spiked Amount 250.000			Recovery =	70.964%		
22) Nitrobenzene-D5 (S)	6.10	82	1924266	94.4323	ppb	0.00
Spiked Amount 125.000			Recovery =	75.546%		
46) 2-Fluorobiphenyl (S)	8.13	172	3628655	97.2531	ppb	0.00
Spiked Amount 125.000			Recovery =	77.802%		
64) 2,4,6-Tribromophenol (S)	9.85	330	884858	231.8300	ppb	0.00
Spiked Amount 250.000			Recovery =	92.732%		
82) Terphenyl-D14 (S)	12.51	244	4036942	101.1320	ppb	0.00
Spiked Amount 125.000			Recovery =	80.906%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.73	58	8926	3.9003		86
3) n-Nitrosodimethylamine	1.97	42	166776	44.9533	ppb	92
4) Pyridine	1.98	79	244483	26.7794	ppb	94
7) Phenol	5.09	94	1156545	37.3588	ppb	95
8) Aniline	5.10	93	332915	10.2738	ppb	92
9) Bis (2-chloroethyl) ether	5.17	63	565317	39.6397	ppb	96
10) 2-Chlorophenol	5.23	128	865654	39.6212	ppb	93
11) 1,3-DCB	5.39	146	870665	37.4591	ppb	98
12) 1,4-DCB	5.48	146	895606	37.7104	ppb	99
13) Benzyl alcohol	5.63	108	517224	37.9928	ppb	95
14) 1,2-DCB	5.65	146	843354	38.3312	ppb	97
15) 2-Methylphenol	5.75	107	744554	39.9495	ppb	97
16) Bis (2-chloroisopropyl) et	5.76	45	850362	39.7157	ppb	# 82
17) Acetophenone	5.92	105	1151712	40.5609	ppb	91
18) 3&4-Methylphenol	5.93	107	1803081	81.9113	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	642726	40.2045	ppb	98
20) Hexachloroethane	6.02	117	313270	36.1083	ppb	91
23) Nitrobenzene	6.12	77	998050	43.5554	ppb	94
24) Isophorone	6.39	82	1743555	43.6201	ppb	100
25) 2-Nitrophenol	6.47	139	489802	43.4146	ppb	95
26) 2,4-Dimethylphenol	6.52	122	770183	41.2591	ppb	99
27) Benzoic acid	6.65	105	624376	42.7498	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1023795	41.3002	ppb	99
29) 2,4-Dichlorophenol	6.75	162	715223	44.5269	ppb	97
30) 1,2,4-Trichlorobenzene	6.83	180	731427	40.9577	ppb	100
31) 3,4-Dimethylphenol	6.86	107	1123068	44.4987	ppb	96
32) Napthalene	6.92	128	2563041	42.2036	ppb	100
33) 4-Chloroaniline	7.00	127	54129	2.4091	ppb	# 79
34) 2,6-Dichlorophenol	7.00	162	707972	44.5061	ppb	99
35) Hexachloropropene	7.02	213	240044	22.0427	ppb	99
36) Hexachlorobutadiene	7.05	225	339042	36.4456	ppb	100
37) Caprolactum	7.42	55	351878	43.5105	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y099.D  
 Acq On : 1 Feb 19 16:47  
 Sample : 190130A LCS-1 1/800  
 Misc :

Vial: 99  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	796812	44.0222	ppb	100
39) 2-Methylnaphthalene	7.71	142	1632764	41.6942	ppb	100
40) 1-Methylnaphthalene	7.82	142	1700322	43.4424	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	44201	13.3494	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	705697	45.5967	ppb	100
44) 2,4,6-Trichlorophenol	8.05	196	503885	49.8756	ppb	97
45) 2,4,5-Trichlorophenol	8.09	196	540864	47.4037	ppb	98
47) 1,1'-Biphenyl	8.25	154	2156073	47.1564	ppb	99
48) 2-Chloronaphthalene	8.28	162	1622025	46.4376	ppb	98
49) 2-Nitroaniline	8.41	65	490469	43.1953	ppb	82
50) Dimethyl phthalate	8.60	163	1974674	47.8821	ppb	100
51) 2,6-DNT	8.69	165	457140	49.4332	ppb	98
52) Acenaphthylene	8.76	152	2514250	45.3785	ppb	100
53) 3-Nitroaniline	8.88	138	97549	9.3153	ppb	97
54) Acenaphthene	8.96	154	1659506	46.2501	ppb	100
55) 2,4-Dinitrophenol	9.01	184	252616	52.2036	ppb	96
56) 4-Nitrophenol	9.11	65	398193	62.5716	ppb	98
57) Dibenzofuran	9.16	168	2349848	46.7283	ppb	99
58) 2,4-DNT	9.15	165	602488	49.3955	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	415041	49.4278	ppb	97
60) Diethyl phthalate	9.42	149	1855924	47.4969	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	905193	46.1383	ppb	98
62) Fluorene	9.56	166	1922102	47.6837	ppb	99
63) 4-Nitroaniline	9.60	138	280770	26.4790	ppb	92
66) 4,6-Dinitro-2-methylphenol	9.63	198	392246	50.3726	ppb	91
67) Diphenyl amine	9.70	169	1829817	59.4979	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	1829817	59.4979	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1724614	39.7859	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	501482	48.1481	ppb	96
71) Hexachlorobenzene	10.20	284	480235	48.7731	ppb	96
72) Atrazine	10.32	200	59209	5.6109	ppb	98
73) Pentachlorophenol	10.43	266	303972	49.3285	ppb	99
74) Phenanthrene	10.68	178	2867863	48.6761	ppb	99
75) Anthracene	10.75	178	2829108	46.8796	ppb	100
76) Carbazol	10.93	167	2354197	42.9265	ppb	97
77) Di-n-butylphthalate	11.32	149	3286530	50.7871	ppb	99
78) Fluoranthene	12.08	202	3090833	48.8599	ppb	99
80) Benzidine	12.26	184	2978	0.1539	ppb	# 34
81) Pyrene	12.35	202	3162679	47.6164	ppb	99
83) Butyl benzylphthalate	13.08	149	1441016	48.3986	ppb	95
84) 3,3'-Dichlorobenzidine	13.71	252	20074	0.9856	ppb	# 97
85) Benz (a) anthracene	13.74	228	2732171	47.1682	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2363753	57.0472	ppb	99
87) Chrysene	13.78	228	2724979	48.1071	ppb	99
88) Di-n-octylphthalate	14.48	149	3559778	50.6300	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2627365	49.9471	ppb	97
91) Benzo (k) fluoranthene	15.11	252	2762990	54.6507	ppb	98
92) Benzo (a) pyrene	15.55	252	2346180	49.2755	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2617585	53.3710	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	2397031	54.0598	ppb	97
95) Benzo (g,h,i) perylene	18.17	276	2200071	50.6341	ppb	98

(#) = qualifier out of range (m) = manual integration

0124Y099.D Y0125NC.M

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Quantitation Report

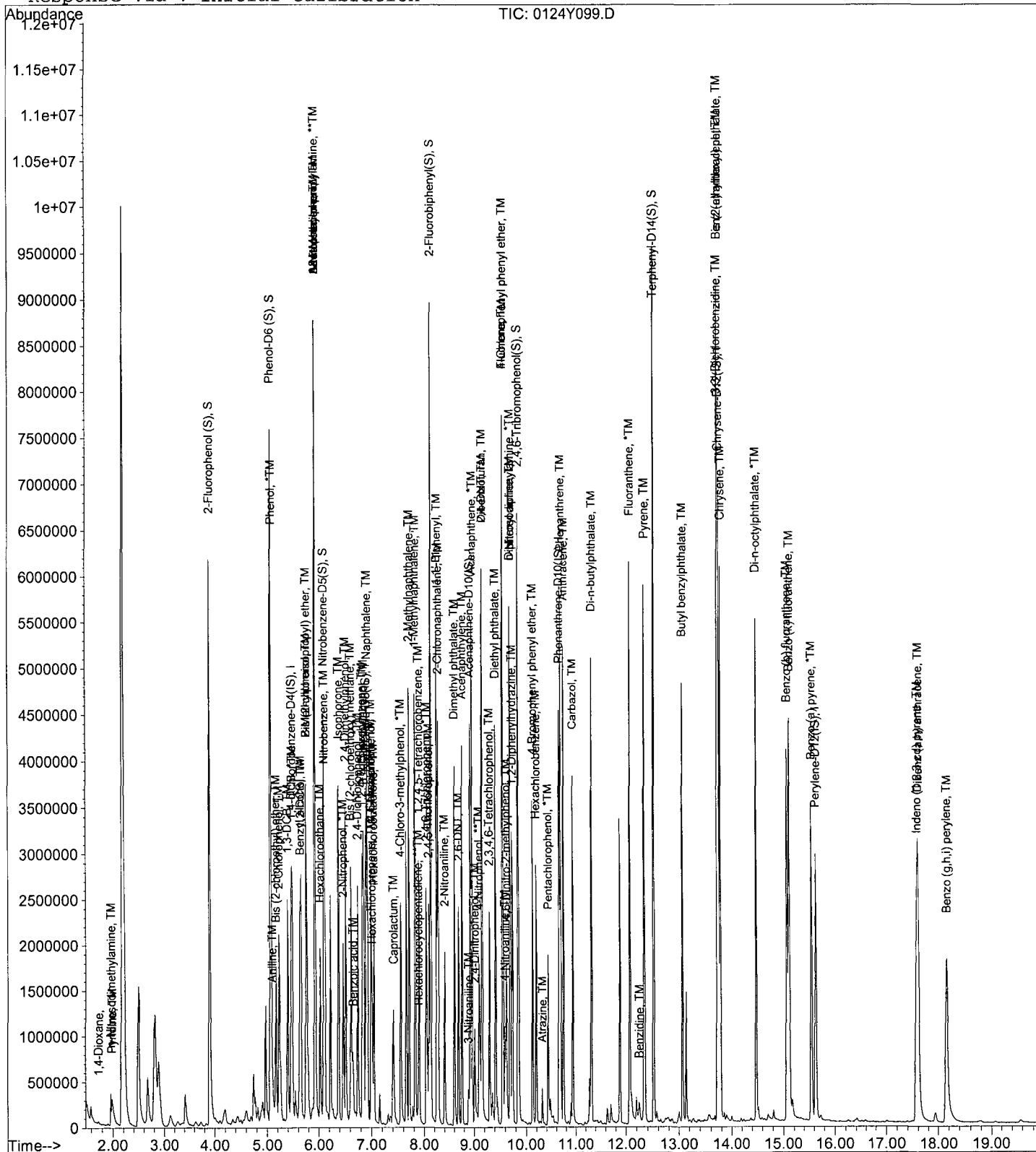
Data File : M:\YODA\DATA\Y190124\0124Y099.D  
Acq On : 1 Feb 19 16:47  
Sample : 190130A LCS-1 1/800  
Misc :

Vial: 99  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y057.D  
 Acq On : 30 Jan 19 15:52  
 Sample : 190128A LCSD-1 1/800  
 Misc :

Vial: 57  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	451272	40.0000	ppb	0.01
21) Napthalene-D8 (IS)	6.90	136	1964856	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1129757	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2164133	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1894709	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1817504	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.91	112	3777995	234.6261	ppb	0.04
Spiked Amount	250.000		Recovery	=	93.850%	
6) Phenol-D6 (S)	5.07	99	4962251	234.0585	ppb	0.02
Spiked Amount	250.000		Recovery	=	93.624%	
22) Nitrobenzene-D5 (S)	6.10	82	2147309	114.7194	ppb	0.01
Spiked Amount	125.000		Recovery	=	91.775%	
46) 2-Fluorobiphenyl (S)	8.13	172	4028255	110.0663	ppb	0.00
Spiked Amount	125.000		Recovery	=	88.053%	
64) 2,4,6-Tribromophenol (S)	9.85	330	957479	255.7439	ppb	0.00
Spiked Amount	250.000		Recovery	=	102.298%	
82) Terphenyl-D14 (S)	12.52	244	4315870	111.6128	ppb	0.00
Spiked Amount	125.000		Recovery	=	89.290%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.70	58	487	0.2412		79
3) n-Nitrosodimethylamine	1.97	42	181386	55.4234	ppb	99
4) Pyridine	1.99	79	369217	45.8454	ppb	98
7) Phenol	5.08	94	1523095	55.7723	ppb	96
8) Aniline	5.10	93	1342714	46.9725	ppb	97
9) Bis (2-chloroethyl) ether	5.17	63	709782	56.4189	ppb	97
10) 2-Chlorophenol	5.23	128	1084762	56.2833	ppb	99
11) 1,3-DCB	5.40	146	950579	46.3614	ppb	98
12) 1,4-DCB	5.49	146	979018	46.7301	ppb	98
13) Benzyl alcohol	5.63	108	710403	59.1546	ppb	99
14) 1,2-DCB	5.66	146	959277	49.4252	ppb	97
15) 2-Methylphenol	5.76	107	939699	57.1565	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1094917	57.9697	ppb	93
17) Acetophenone	5.92	105	1399529	55.8736	ppb	99
18) 3&4-Methylphenol	5.92	107	2219746	114.3124	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	795789	56.4298	ppb	99
20) Hexachloroethane	6.03	117	304365	39.7690	ppb	94
23) Nitrobenzene	6.12	77	1230905	58.4791	ppb	97
24) Isophorone	6.39	82	2173466	59.1958	ppb	100
25) 2-Nitrophenol	6.47	139	597603	57.6654	ppb	98
26) 2,4-Dimethylphenol	6.52	122	966587	56.3708	ppb	97
27) Benzoic acid	6.67	105	800128	59.6396	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1330177	58.4165	ppb	100
29) 2,4-Dichlorophenol	6.75	162	889456	60.2826	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	830909	50.6530	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1346605	58.0856	ppb	99
32) Napthalene	6.93	128	3049777	54.6701	ppb	100
33) 4-Chloroaniline	6.99	127	586728	28.4281	ppb	99
34) 2,6-Dichlorophenol	7.00	162	862667	59.0383	ppb	98
35) Hexachloropropene	7.02	213	363387	36.3272	ppb	100
36) Hexachlorobutadiene	7.06	225	367185	42.9698	ppb	100
37) Caprolactum	7.42	55	429624	57.8333	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y057.D  
 Acq On : 30 Jan 19 15:52  
 Sample : 190128A LCSD-1 1/800  
 Misc :

Vial: 57  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	984160	59.1928	ppb	100
39) 2-Methylnaphthalene	7.72	142	1981736	55.0916	ppb	100
40) 1-Methylnaphthalene	7.83	142	1982061	55.1298	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	127453	24.9407	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	824564	54.3149	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	619124	62.4762	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	654731	58.5015	ppb	97
47) 1,1'-Biphenyl	8.25	154	2557086	57.0167	ppb	99
48) 2-Chloronaphthalene	8.28	162	1968101	57.4433	ppb	98
49) 2-Nitroaniline	8.40	65	651653	58.5088	ppb	96
50) Dimethyl phthalate	8.61	163	2454790	60.6837	ppb	100
51) 2,6-DNT	8.69	165	550935	60.7365	ppb	95
52) Acenaphthylene	8.76	152	3088993	56.8380	ppb	100
53) 3-Nitroaniline	8.89	138	509426	49.5944	ppb	92
54) Acenaphthene	8.96	154	2007969	57.0520	ppb	100
55) 2,4-Dinitrophenol	9.02	184	291240	60.2639	ppb	92
56) 4-Nitrophenol	9.09	65	351317	56.2811	ppb	97
57) Dibenzofuran	9.16	168	2839573	57.5669	ppb	98
58) 2,4-DNT	9.15	165	715783	59.8274	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.30	232	502125	60.9638	ppb	94
60) Diethyl phthalate	9.42	149	2241581	58.4843	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1096417	56.9739	ppb	95
62) Fluorene	9.56	166	2265701	57.3028	ppb	100
63) 4-Nitroaniline	9.61	138	604493	58.1196	ppb	91
66) 4,6-Dinitro-2-methylphenol	9.64	198	448466	57.9885	ppb	92
67) Diphenyl amine	9.70	169	3478049	113.8692	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3478049	113.8692	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2411075	56.0047	ppb	91
70) 4-Bromophenyl phenyl ether	10.13	248	611083	59.0745	ppb	93
71) Hexachlorobenzene	10.19	284	582449	59.5609	ppb	# 85
72) Atrazine	10.32	200	274693	26.2102	ppb	98
73) Pentachlorophenol	10.44	266	388554	63.4881	ppb	98
74) Phenanthrene	10.69	178	3348552	57.2257	ppb	99
75) Anthracene	10.75	178	3376487	56.3347	ppb	100
76) Carbazol	10.94	167	3196135	58.6792	ppb	98
77) Di-n-butylphthalate	11.33	149	3841738	59.7751	ppb	99
78) Fluoranthene	12.08	202	3606239	57.3995	ppb	100
80) Benzidine	12.25	184	153562	8.1922	ppb	97
81) Pyrene	12.35	202	3745697	58.2162	ppb	99
83) Butyl benzylphthalate	13.07	149	1790993	62.0966	ppb	88
84) 3,3'-Dichlorobenzidine	13.70	252	496092	25.1450	ppb	# 98
85) Benz (a) anthracene	13.74	228	3161229	56.3387	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2680834	66.7900	ppb	# 94
87) Chrysene	13.79	228	3225716	58.7871	ppb	99
88) Di-n-octylphthalate	14.48	149	4239125	62.2402	ppb	95
90) Benzo (b) fluoranthene	15.07	252	3149375	57.7038	ppb	98
91) Benzo (k) fluoranthene	15.11	252	3242326	61.8107	ppb	98
92) Benzo (a) pyrene	15.55	252	2969448	60.1085	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	3083312	60.5916	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2810267	61.0856	ppb	98
95) Benzo (g,h,i) perylene	18.17	276	2737074	60.7133	ppb	98

(#) = qualifier out of range (m) = manual integration

0124Y057.D Y0125NC.M Mon Feb 04 14:04:05 2019



Quantitation Report

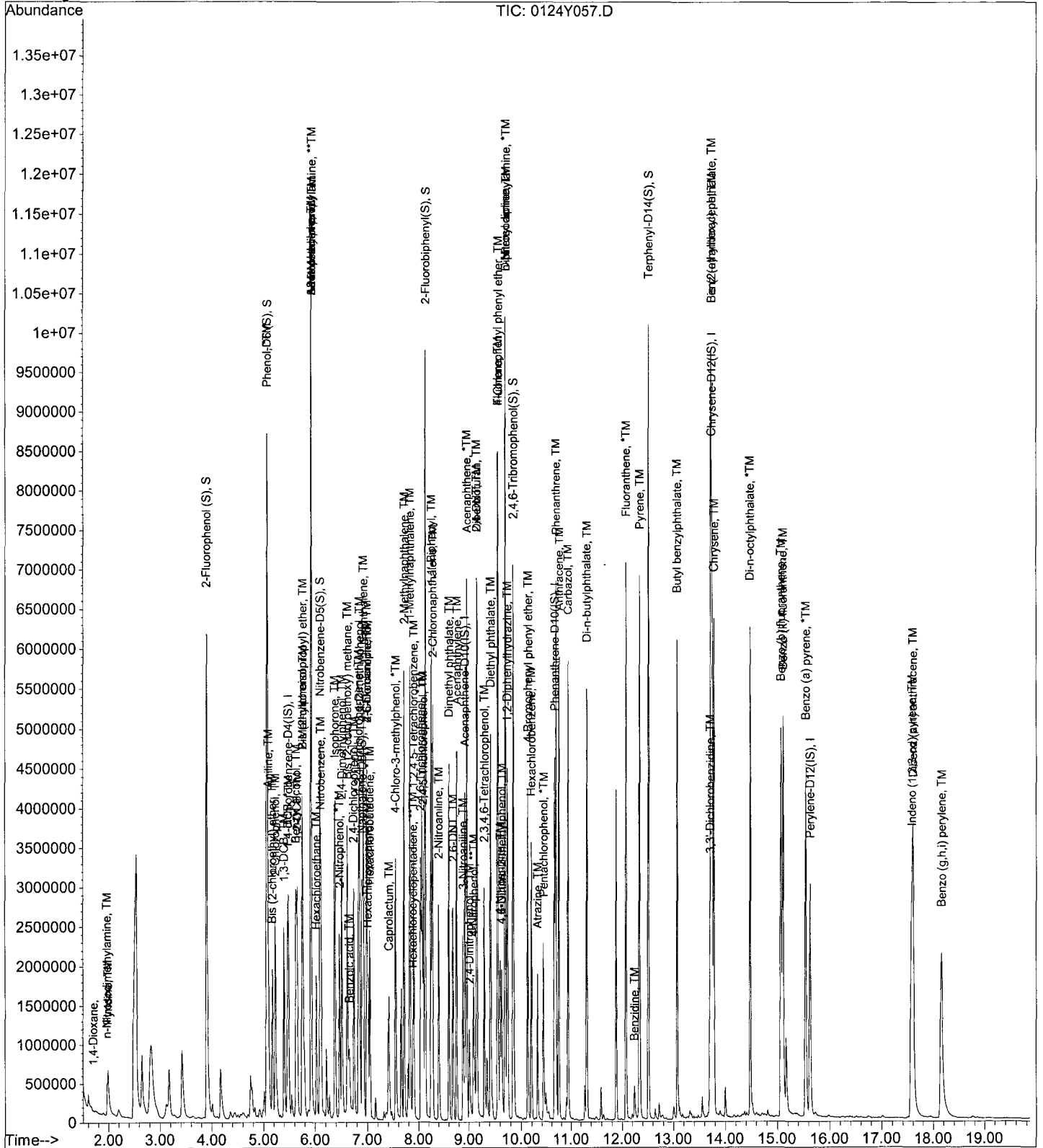
Data File : M:\YODA\DATA\Y190124\0124Y057.D  
Acq On : 30 Jan 19 15:52  
Sample : 190128A LCSD-1 1/800  
Misc :

Vial: 57  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Jan 31 6:00 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y100.D  
 Acq On : 1 Feb 19 17:14  
 Sample : 190130A LCSD-1 1/800  
 Misc :

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	Qion	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	493547	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2051252	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1092291	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2061300	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1805530	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1080606	40.0000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.90	112	3234387	183.6610	ppb	0.03
Spiked Amount	250.000		Recovery	=	73.464%	
6) Phenol-D6 (S)	5.07	99	4238109	182.7796	ppb	0.02
Spiked Amount	250.000		Recovery	=	73.112%	
22) Nitrobenzene-D5 (S)	6.10	82	1894411	96.9457	ppb	0.00
Spiked Amount	125.000		Recovery	=	77.557%	
46) 2-Fluorobiphenyl (S)	8.13	172	3591262	101.4919	ppb	0.00
Spiked Amount	125.000		Recovery	=	81.194%	
64) 2,4,6-Tribromophenol (S)	9.85	330	861720	238.0614	ppb	0.00
Spiked Amount	250.000		Recovery	=	95.224%	
82) Terphenyl-D14 (S)	12.51	244	3976305	107.9104	ppb	0.00
Spiked Amount	125.000		Recovery	=	86.328%	
Target Compounds						
2) 1,4-Dioxane	1.73	58	8491	3.8456		Qvalue 83
3) n-Nitrosodimethylamine	1.96	42	170423	47.6132	ppb	82
4) Pyridine	1.99	79	207376	23.5441	ppb	99
7) Phenol	5.09	94	1155581	38.6903	ppb	93
8) Aniline	5.10	93	253738	8.1163	ppb	# 82
9) Bis (2-chloroethyl) ether	5.17	63	566223	41.1526	ppb	97
10) 2-Chlorophenol	5.23	128	870498	41.2974	ppb	94
11) 1,3-DCB	5.39	146	874621	39.0030	ppb	97
12) 1,4-DCB	5.49	146	899568	39.2600	ppb	98
13) Benzyl alcohol	5.62	108	434721	33.0982	ppb	96
14) 1,2-DCB	5.65	146	844111	39.7661	ppb	97
15) 2-Methylphenol	5.75	107	751838	41.8130	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	844286	40.8714	ppb	# 80
17) Acetophenone	5.92	105	1146614	41.8555	ppb	92
18) 3&4-Methylphenol	5.93	107	1781751	83.8971	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	642044	41.6280	ppb	100
20) Hexachloroethane	6.02	117	314071	37.5221	ppb	92
23) Nitrobenzene	6.12	77	1007080	45.8302	ppb	95
24) Isophorone	6.39	82	1730489	45.1459	ppb	99
25) 2-Nitrophenol	6.47	139	498337	46.0615	ppb	97
26) 2,4-Dimethylphenol	6.52	122	770161	43.0235	ppb	99
27) Benzoic acid	6.66	105	593253	42.3572	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	891780	37.5142	ppb	99
29) 2,4-Dichlorophenol	6.75	162	709073	46.0331	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	737765	43.0806	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1096400	45.3011	ppb	97
32) Napthalene	6.92	128	2551166	43.8058	ppb	100
33) 4-Chloroaniline	7.00	127	61751	2.8659	ppb	# 80
34) 2,6-Dichlorophenol	7.00	162	700728	45.9359	ppb	99
35) Hexachloropropene	7.02	213	236859	22.6811	ppb	99
36) Hexachlorobutadiene	7.05	225	339719	38.0812	ppb	99
37) Caprolactum	7.42	55	357477	46.0945	ppb	97

(#) = qualifier out of range (m) = manual integration

0124Y100.D Y0125NC.M

Mon Feb 04 14:04:12 2019

Data File : M:\YODA\DATA\Y190124\0124Y100.D  
 Acq On : 1 Feb 19 17:14  
 Sample : 190130A LCSD-1 1/800  
 Misc :

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	789729	45.4981	ppb	99
39) 2-Methylnaphthalene	7.71	142	1624576	43.2605	ppb	99
40) 1-Methylnaphthalene	7.82	142	1681039	44.7877	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	59047	15.7912	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	701750	47.8106	ppb	97
44) 2,4,6-Trichlorophenol	8.05	196	501960	52.3905	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	547158	50.5666	ppb	97
47) 1,1'-Biphenyl	8.25	154	2174397	50.1467	ppb	99
48) 2-Chloronaphthalene	8.28	162	1615091	48.7569	ppb	99
49) 2-Nitroaniline	8.41	65	431722	40.0918	ppb	80
50) Dimethyl phthalate	8.60	163	1985676	50.7706	ppb	100
51) 2,6-DNT	8.69	165	450958	51.4200	ppb	97
52) Acenaphthylene	8.76	152	2459051	46.7990	ppb	100
53) 3-Nitroaniline	8.88	138	101032	10.1732	ppb	97
54) Acenaphthene	8.96	154	1637282	48.1154	ppb	100
55) 2,4-Dinitrophenol	9.01	184	259574	56.0415	ppb	96
56) 4-Nitrophenol	9.11	65	384211	63.6620	ppb	99
57) Dibenzofuran	9.16	168	2312398	48.4874	ppb	100
58) 2,4-DNT	9.15	165	605503	52.3458	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	411218	51.6391	ppb	98
60) Diethyl phthalate	9.42	149	1846939	49.8407	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	899471	48.3431	ppb	97
62) Fluorene	9.56	166	1907513	49.8985	ppb	99
63) 4-Nitroaniline	9.60	138	195914	19.4825	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.63	198	393009	53.3529	ppb	87
67) Diphenyl amine	9.70	169	860248	29.5690	ppb	99
68) n-Nitrosodiphenylamine	9.70	169	860248	29.5690	ppb	99
69) 1,2-Diphenylhydrazine	9.74	77	1390112	33.9005	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	498782	50.6237	ppb	96
71) Hexachlorobenzene	10.20	284	480506	51.5875	ppb	95
72) Atrazine	10.32	200	9109	0.9125	ppb	96
73) Pentachlorophenol	10.43	266	298630	51.2292	ppb	100
74) Phenanthrene	10.68	178	2783224	49.9373	ppb	100
75) Anthracene	10.75	178	2776667	48.6382	ppb	100
76) Carbazol	10.93	167	1052830	20.2936	ppb	98
77) Di-n-butylphthalate	11.32	149	3211726	52.4655	ppb	100
78) Fluoranthene	12.08	202	3038828	50.7811	ppb	99
80) Benzidine	12.22	184	146	0.0082	ppb	# 1
81) Pyrene	12.35	202	3073658	50.1308	ppb	100
83) Butyl benzylphthalate	13.08	149	1516885	55.1905	ppb	97
84) 3,3'-Dichlorobenzidine	13.71	252	1959	0.1042	ppb	# 62
85) Benz (a) anthracene	13.74	228	2627669	49.1428	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2817272	73.6560	ppb	99
87) Chrysene	13.78	228	2688027	51.4076	ppb	99
88) Di-n-octylphthalate	14.48	149	3547271	54.6546	ppb	# 94
90) Benzo (b) fluoranthene	15.07	252	2576910	79.4122	ppb	98
91) Benzo (k) fluoranthene	15.11	252	2695133	86.4162	ppb	98
92) Benzo (a) pyrene	15.55	252	2160572	73.5592	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2489216	82.2745	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2301117	84.1275	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	2065261	77.0513	ppb	99

(#) = qualifier out of range (m) = manual integration

0124Y100.D Y0125NC.M

Mon Feb 04 14:04:13 2019

Quantitation Report

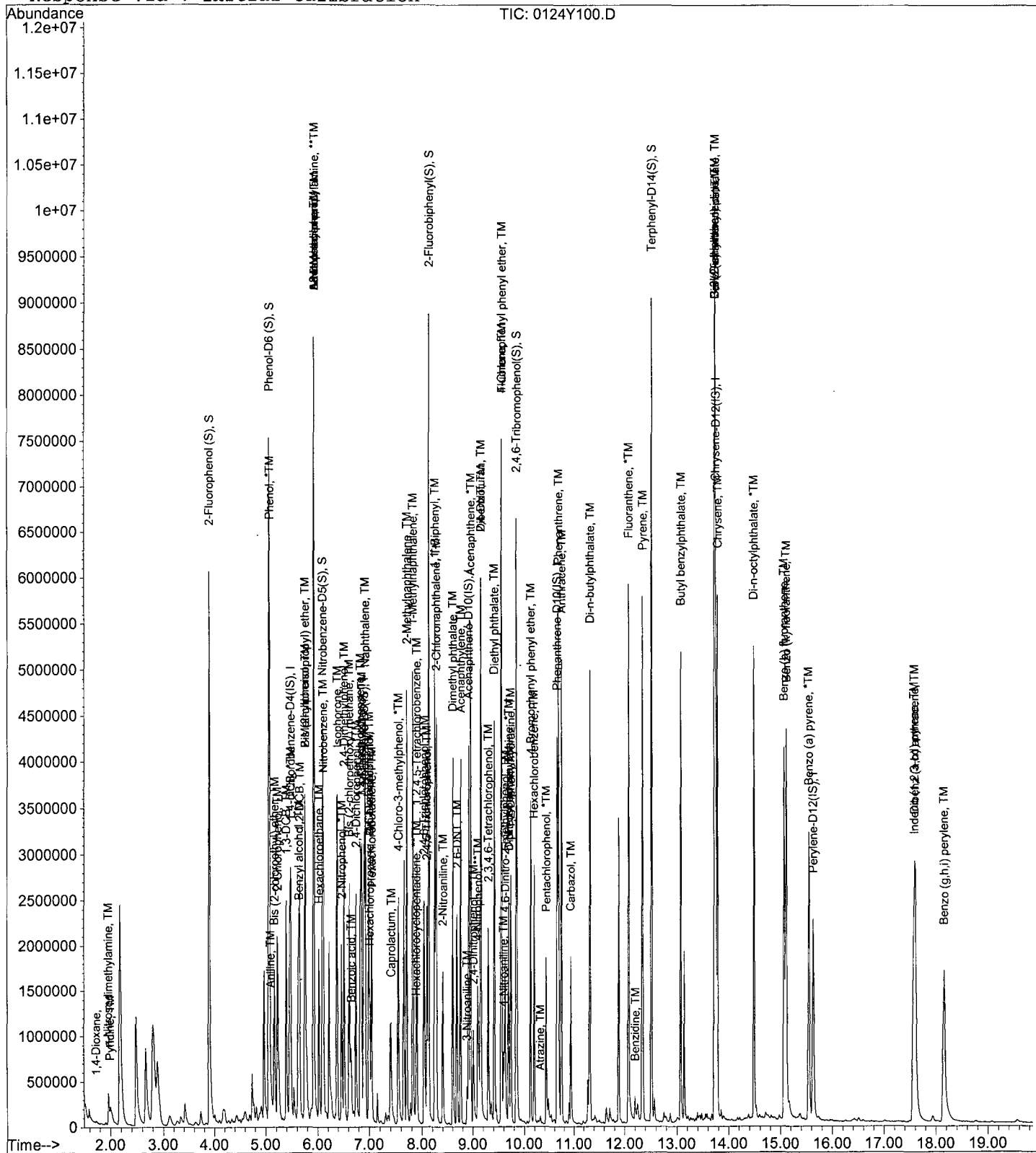
Data File : M:\YODA\DATA\Y190124\0124Y100.D  
Acq On : 1 Feb 19 17:14  
Sample : 190130A LCSD-1 1/800  
Misc :

Vial: 100  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y101.D  
 Acq On : 1 Feb 19 17:42  
 Sample : AZ85562W31 MS-1 1/800  
 Misc :

Vial: 1  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	418588	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1926786	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1188475	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2326561	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2071460	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	2011026	40.0000	ppb	0.00

## System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3204526	214.5510	ppb	0.03
Spiked Amount	250.000		Recovery	=	85.820%	
6) Phenol-D6 (S)	5.07	99	4220368	214.6089	ppb	0.02
Spiked Amount	250.000		Recovery	=	85.844%	
22) Nitrobenzene-D5 (S)	6.10	82	1967442	107.1869	ppb	0.00
Spiked Amount	125.000		Recovery	=	85.750%	
46) 2-Fluorobiphenyl (S)	8.13	172	3723851	96.7219	ppb	0.00
Spiked Amount	125.000		Recovery	=	77.378%	
64) 2,4,6-Tribromophenol (S)	9.85	330	881016	223.6943	ppb	0.00
Spiked Amount	250.000		Recovery	=	89.478%	
82) Terphenyl-D14 (S)	12.51	244	3805378	90.0139	ppb	0.00
Spiked Amount	125.000		Recovery	=	72.011%	

## Target Compounds

						Qvalue
2) 1,4-Dioxane	1.74	58	9898	5.2856		89
3) n-Nitrosodimethylamine	1.96	42	178542	58.8141	ppb	88
4) Pyridine	1.98	79	348274	46.6216	ppb	96
7) Phenol	5.09	94	1218925	48.1194	ppb	# 83
8) Aniline	5.10	93	1259239	47.4919	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	589197	50.4907	ppb	96
10) 2-Chlorophenol	5.24	128	881245	49.2939	ppb	94
11) 1,3-DCB	5.39	146	908519	47.7699	ppb	98
12) 1,4-DCB	5.49	146	925154	47.6071	ppb	98
13) Benzyl alcohol	5.63	108	536255	48.1401	ppb	94
14) 1,2-DCB	5.65	146	877465	48.7400	ppb	97
15) 2-Methylphenol	5.76	107	756824	49.6277	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	878636	50.1511	ppb	# 83
17) Acetophenone	5.92	105	1191302	51.2742	ppb	93
18) 3&4-Methylphenol	5.93	107	1819358	101.0090	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	674839	51.5896	ppb	99
20) Hexachloroethane	6.02	117	320328	45.1228	ppb	93
23) Nitrobenzene	6.12	77	1041431	50.4550	ppb	95
24) Isophorone	6.39	82	1826725	50.7351	ppb	100
25) 2-Nitrophenol	6.47	139	514674	50.6445	ppb	96
26) 2,4-Dimethylphenol	6.52	122	661759	39.3559	ppb	99
27) Benzoic acid	6.65	105	455629	34.6325	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1084584	48.5721	ppb	99
29) 2,4-Dichlorophenol	6.75	162	737169	50.9486	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	762660	47.4111	ppb	98
31) 3,4-Dimethylphenol	6.86	107	1109584	48.8074	ppb	97
32) Napthalene	6.92	128	2653715	48.5102	ppb	100
33) 4-Chloroaniline	6.99	127	615684	30.4205	ppb	98
34) 2,6-Dichlorophenol	7.00	162	706758	49.3241	ppb	99
35) Hexachloropropene	7.02	213	223506	22.7850	ppb	99
36) Hexachlorobutadiene	7.05	225	344059	41.0591	ppb	97
37) Caprolactum	7.42	55	375092	51.4902	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y101.D  
 Acq On : 1 Feb 19 17:42  
 Sample : AZ85562W31 MS-1 1/800  
 Misc :

Vial: 1  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	813515	49.8961	ppb	93
39) 2-Methylnaphthalene	7.71	142	1699245	48.1718	ppb	99
40) 1-Methylnaphthalene	7.83	142	1770764	50.2258	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	118774	22.9356	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	728513	45.6170	ppb	97
44) 2,4,6-Trichlorophenol	8.04	196	508340	48.7625	ppb	100
45) 2,4,5-Trichlorophenol	8.09	196	538503	45.7390	ppb	99
47) 1,1'-Biphenyl	8.25	154	2243666	47.5565	ppb	99
48) 2-Chloronaphthalene	8.28	162	1665628	46.2131	ppb	98
49) 2-Nitroaniline	8.40	65	546119	46.6109	ppb	99
50) Dimethyl phthalate	8.61	163	2030606	47.7176	ppb	100
51) 2,6-DNT	8.69	165	472411	49.5068	ppb	96
52) Acenaphthylene	8.76	152	2648784	46.3301	ppb	100
53) 3-Nitroaniline	8.88	138	491380	45.4741	ppb	96
54) Acenaphthene	8.96	154	1713798	46.2880	ppb	100
55) 2,4-Dinitrophenol	9.01	184	242827	49.0578	ppb	100
56) 4-Nitrophenol	9.11	65	366919	55.8765	ppb	96
57) Dibenzofuran	9.16	168	2432607	46.8799	ppb	99
58) 2,4-DNT	9.15	165	624136	49.5898	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	419641	48.4321	ppb	96
60) Diethyl phthalate	9.42	149	1916155	47.5237	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	932625	46.0683	ppb	97
62) Fluorene	9.56	166	1973036	47.4355	ppb	99
63) 4-Nitroaniline	9.61	138	454955	41.5810	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.64	198	400416	48.1608	ppb	96
67) Diphenyl amine	9.70	169	2851051	86.8250	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2851051	86.8250	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2060401	44.5179	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	520097	46.7686	ppb	94
71) Hexachlorobenzene	10.20	284	494502	47.0371	ppb	96
72) Atrazine	10.32	200	266398	23.6441	ppb	98
73) Pentachlorophenol	10.43	266	286309	43.5157	ppb	97
74) Phenanthrene	10.68	178	2901578	46.1252	ppb	99
75) Anthracene	10.75	178	2930875	45.4860	ppb	100
76) Carbazol	10.94	167	2769755	47.3010	ppb	100
77) Di-n-butylphthalate	11.33	149	3354408	48.5488	ppb	99
78) Fluoranthene	12.08	202	3125902	46.2805	ppb	99
80) Benzidine	12.24	184	175039	8.5411	ppb	99
81) Pyrene	12.35	202	3245809	46.1424	ppb	100
83) Butyl benzylphthalate	13.08	149	1500960	47.6002	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	605995	28.0947	ppb	100
85) Benz (a) anthracene	13.74	228	2743600	44.7237	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2703983	61.6186	ppb	100
87) Chrysene	13.79	228	2791276	46.5291	ppb	99
88) Di-n-octylphthalate	14.48	149	3612473	48.5138	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2717888	45.0059	ppb	98
91) Benzo (k) fluoranthene	15.11	252	2787541	48.0271	ppb	99
92) Benzo (a) pyrene	15.55	252	2475047	45.2795	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	2662057	47.2792	ppb	98
94) Dibenz (a,h) anthracene	17.60	278	2406383	47.2730	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	2256592	45.2385	ppb	99

(#) = qualifier out of range (m) = manual integration

0124Y101.D Y0125NC.M

Mon Feb 04 14:04:17 2019

Quantitation Report

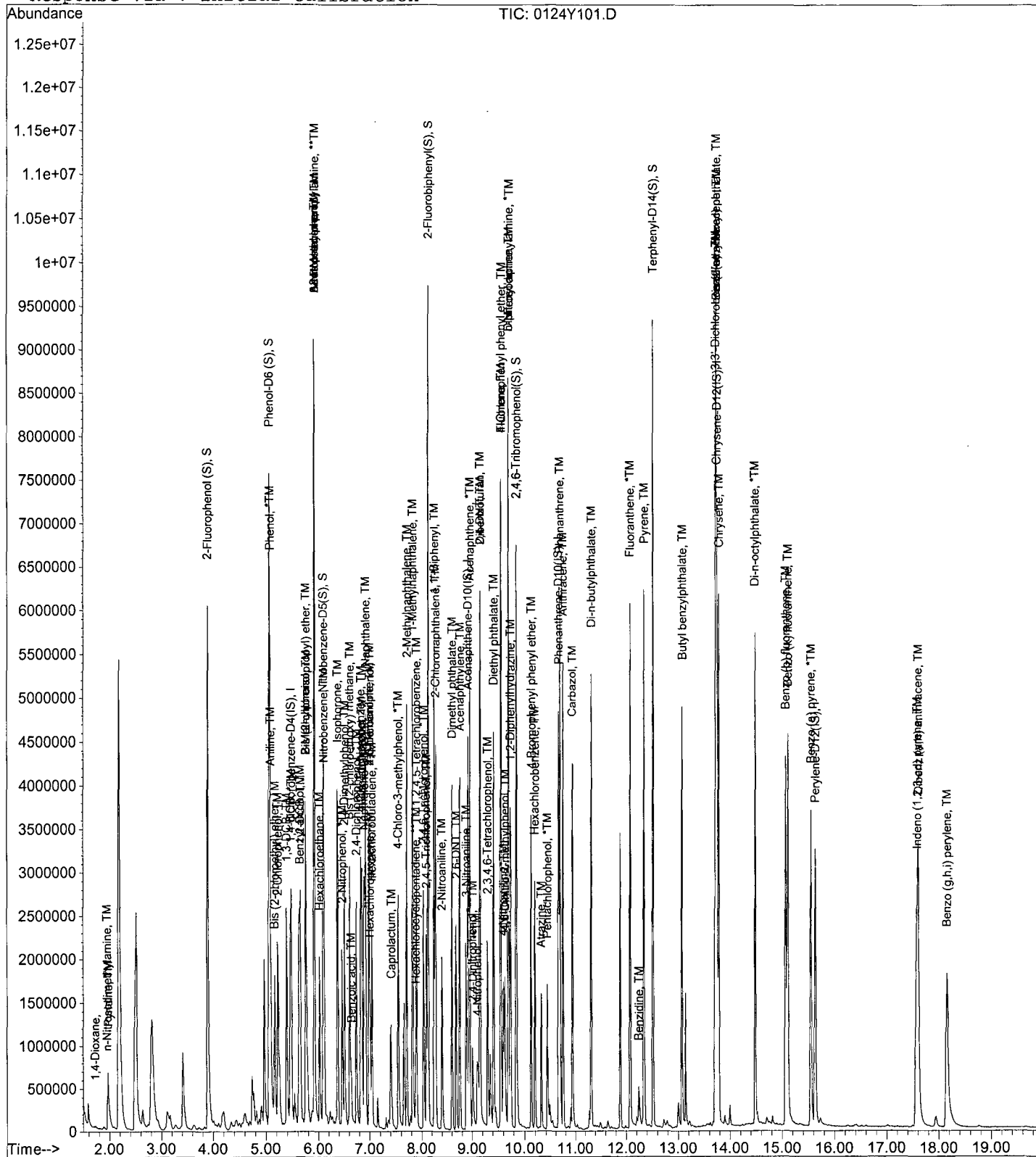
Data File : M:\YODA\DATA\Y190124\0124Y101.D  
Acq On : 1 Feb 19 17:42  
Sample : AZ85562W31 MS-1 1/800  
Misc :

Vial: 1  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y102.D  
 Acq On : 1 Feb 19 18:10  
 Sample : AZ85562W33 MSD-1 1/800  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	559694	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2393203	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1271031	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2377174	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2141741	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	2110062	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3252625	162.8684	ppb	0.03
Spiked Amount	250.000		Recovery	=	65.147%	
6) Phenol-D6 (S)	5.07	99	4271919	162.4638	ppb	0.02
Spiked Amount	250.000		Recovery	=	64.986%	
22) Nitrobenzene-D5 (S)	6.10	82	1992469	87.3947	ppb	0.00
Spiked Amount	125.000		Recovery	=	69.916%	
46) 2-Fluorobiphenyl (S)	8.13	172	3802284	92.3445	ppb	0.00
Spiked Amount	125.000		Recovery	=	73.875%	
64) 2,4,6-Tribromophenol (S)	9.85	330	890021	211.3028	ppb	0.00
Spiked Amount	250.000		Recovery	=	84.521%	
82) Terphenyl-D14 (S)	12.51	244	3985638	91.1841	ppb	0.00
Spiked Amount	125.000		Recovery	=	72.947%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.73	58	9912	3.9586		67
3) n-Nitrosodimethylamine	1.98	42	177256	43.6695	ppb	93
4) Pyridine	1.99	79	310737	31.1096	ppb	97
7) Phenol	5.09	94	1240193	36.6158	ppb	87
8) Aniline	5.10	93	1227836	34.6329	ppb	90
9) Bis (2-chloroethyl) ether	5.17	63	595923	38.1924	ppb	97
10) 2-Chlorophenol	5.23	128	896684	37.5122	ppb	93
11) 1,3-DCB	5.39	146	924760	36.3651	ppb	96
12) 1,4-DCB	5.49	146	942617	36.2768	ppb	99
13) Benzyl alcohol	5.63	108	552125	37.0688	ppb	96
14) 1,2-DCB	5.65	146	889428	36.9490	ppb	98
15) 2-Methylphenol	5.75	107	770096	37.7668	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	890598	38.0180	ppb	# 79
17) Acetophenone	5.92	105	1218670	39.2282	ppb	92
18) 3&4-Methylphenol	5.93	107	1854349	76.9962	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	678082	38.7686	ppb	98
20) Hexachloroethane	6.02	117	333249	35.1080	ppb	91
23) Nitrobenzene	6.12	77	1053611	41.0968	ppb	95
24) Isophorone	6.39	82	1840834	41.1627	ppb	100
25) 2-Nitrophenol	6.47	139	524742	41.5719	ppb	96
26) 2,4-Dimethylphenol	6.52	122	712905	34.1347	ppb	100
27) Benzoic acid	6.66	105	587845	35.9740	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1108766	39.9777	ppb	99
29) 2,4-Dichlorophenol	6.75	162	751070	41.7926	ppb	97
30) 1,2,4-Trichlorobenzene	6.83	180	774151	38.7462	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1152712	40.8226	ppb	96
32) Napthalene	6.92	128	2684316	39.5063	ppb	100
33) 4-Chloroaniline	6.99	127	564111	22.4402	ppb	97
34) 2,6-Dichlorophenol	7.00	162	729960	41.0149	ppb	99
35) Hexachloropropene	7.02	213	220927	18.1327	ppb	99
36) Hexachlorobutadiene	7.05	225	351646	33.7859	ppb	99
37) Caprolactum	7.42	55	363947	40.2234	ppb	99

(#) = qualifier out of range (m) = manual integration



Data File : M:\YODA\DATA\Y190124\0124Y102.D  
 Acq On : 1 Feb 19 18:10  
 Sample : AZ85562W33 MSD-1 1/800  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	828368	40.9051	ppb	92
39) 2-Methylnaphthalene	7.71	142	1726425	39.4038	ppb	99
40) 1-Methylnaphthalene	7.82	142	1777086	40.5816	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	105394	20.2856	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	736272	43.1084	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	522366	46.8534	ppb	98
45) 2,4,5-Trichlorophenol	8.09	196	558246	44.3362	ppb	98
47) 1,1'-Biphenyl	8.25	154	2270424	44.9979	ppb	99
48) 2-Chloronaphthalene	8.28	162	1704133	44.2104	ppb	99
49) 2-Nitroaniline	8.41	65	561101	44.7791	ppb	82
50) Dimethyl phthalate	8.60	163	2048273	45.0064	ppb	99
51) 2,6-DNT	8.69	165	481397	47.1717	ppb	98
52) Acenaphthylene	8.76	152	2677822	43.7958	ppb	100
53) 3-Nitroaniline	8.88	138	493094	42.6688	ppb	98
54) Acenaphthene	8.96	154	1730818	43.7113	ppb	100
55) 2,4-Dinitrophenol	9.01	184	256828	48.5852	ppb	99
56) 4-Nitrophenol	9.11	65	383257	54.5736	ppb	100
57) Dibenzofuran	9.16	168	2439412	43.9576	ppb	99
58) 2,4-DNT	9.15	165	634370	47.1292	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	425698	45.9400	ppb	98
60) Diethyl phthalate	9.42	149	1915375	44.4189	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	947362	43.7568	ppb	97
62) Fluorene	9.56	166	2008576	45.1534	ppb	99
63) 4-Nitroaniline	9.61	138	474322	40.5353	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.64	198	408152	48.0460	ppb	96
67) Diphenyl amine	9.70	169	2895077	86.2886	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2895077	86.2886	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2083664	44.0620	ppb	89
70) 4-Bromophenyl phenyl ether	10.13	248	521976	45.9382	ppb	96
71) Hexachlorobenzene	10.20	284	498463	46.4044	ppb	96
72) Atrazine	10.32	200	263863	22.9205	ppb	98
73) Pentachlorophenol	10.43	266	294720	43.8403	ppb	99
74) Phenanthrene	10.68	178	2937263	45.6983	ppb	99
75) Anthracene	10.75	178	2977007	45.2183	ppb	100
76) Carbazol	10.93	167	2785060	46.5497	ppb	97
77) Di-n-butylphthalate	11.32	149	3386717	47.9728	ppb	100
78) Fluoranthene	12.08	202	3172067	45.9641	ppb	100
80) Benzidine	12.24	184	121971	5.7563	ppb	98
81) Pyrene	12.35	202	3314719	45.5757	ppb	100
83) Butyl benzylphthalate	13.08	149	1531394	46.9717	ppb	96
84) 3,3'-Dichlorobenzidine	13.71	252	536292	24.0473	ppb	99
85) Benz (a) anthracene	13.74	228	2806491	44.2477	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2863934	63.1219	ppb	99
87) Chrysene	13.78	228	2833730	45.6867	ppb	99
88) Di-n-octylphthalate	14.48	149	3675845	47.7450	ppb	# 94
90) Benzo (b) fluoranthene	15.07	252	2763318	43.6105	ppb	98
91) Benzo (k) fluoranthene	15.11	252	2871817	47.1568	ppb	99
92) Benzo (a) pyrene	15.55	252	2517898	43.9014	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	2764442	46.7932	ppb	97
94) Dibenz (a,h) anthracene	17.60	278	2490210	46.6238	ppb	100
95) Benzo (g,h,i) perylene	18.16	276	2301470	43.9727	ppb	99

(#) = qualifier out of range (m) = manual integration

0124Y102.D Y0125NC.M Mon Feb 04 14:04:20 2019

Quantitation Report

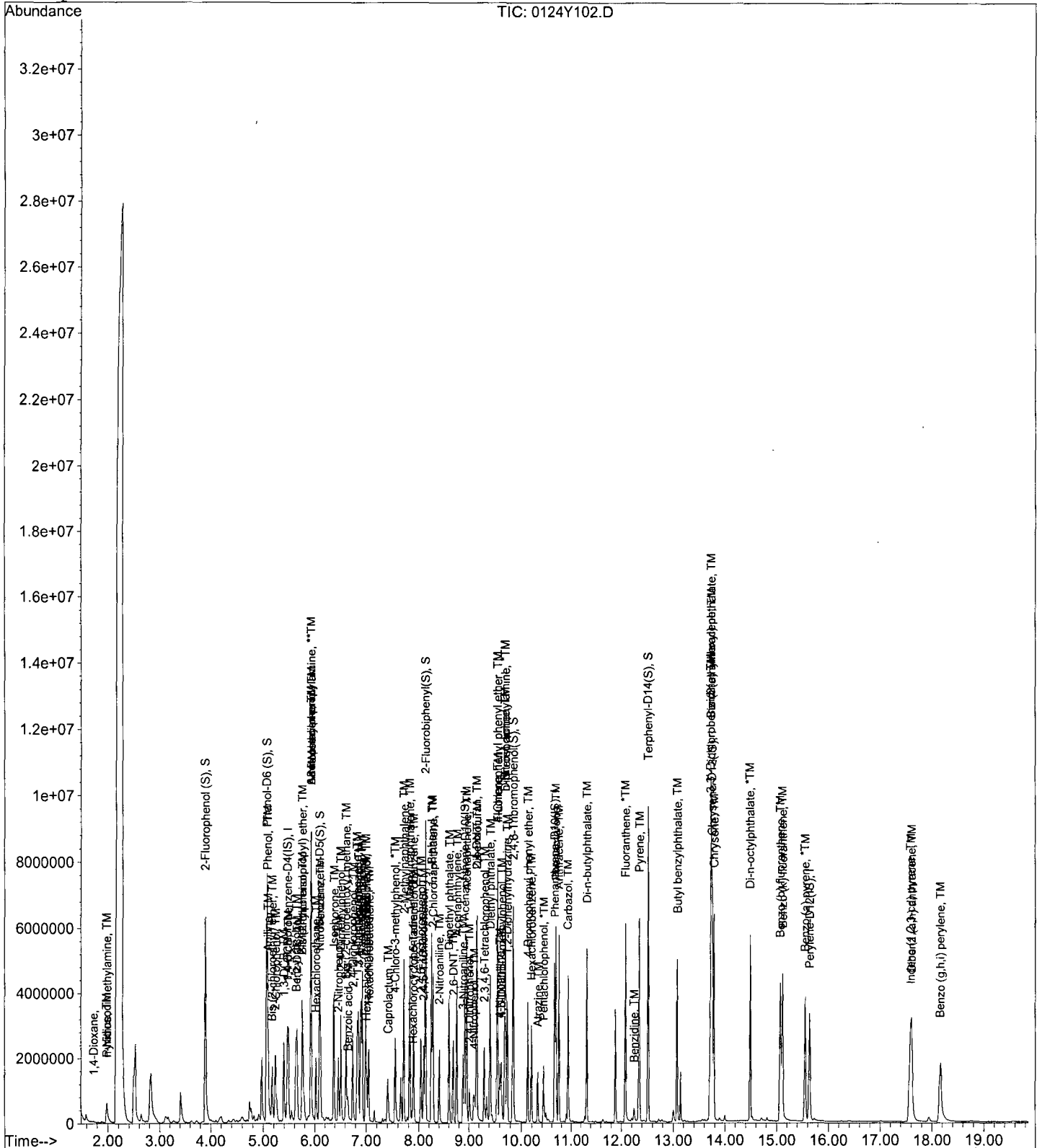
Data File : M:\YODA\DATA\Y190124\0124Y102.D  
Acq On : 1 Feb 19 18:10  
Sample : AZ85562W33 MSD-1 1/800  
Misc :

Vial: 2  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

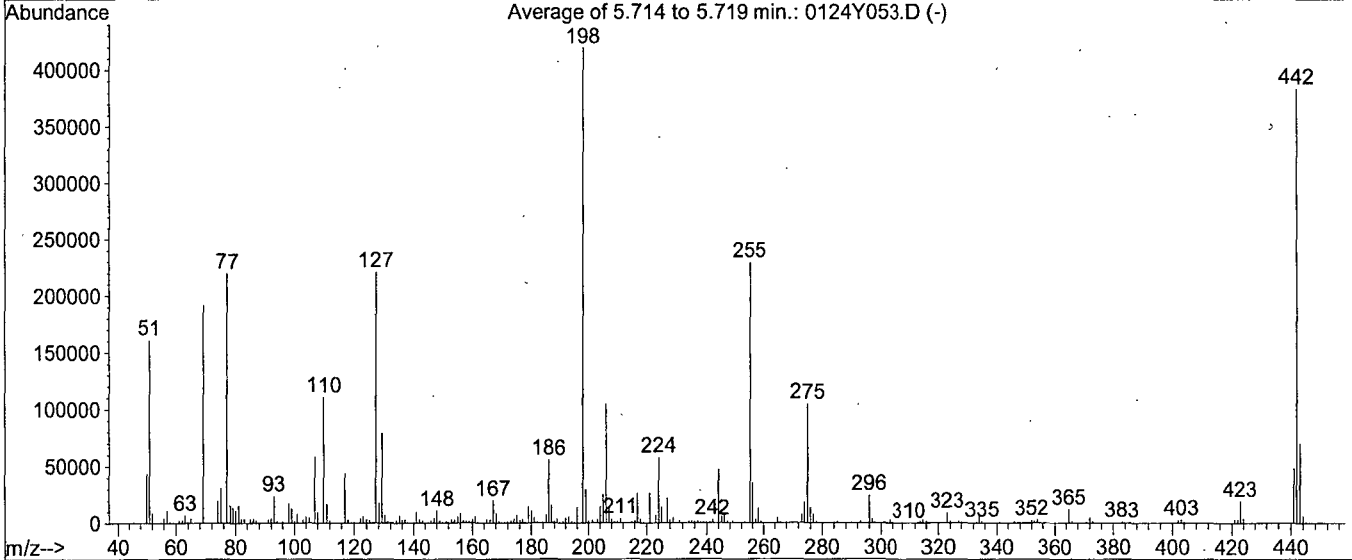
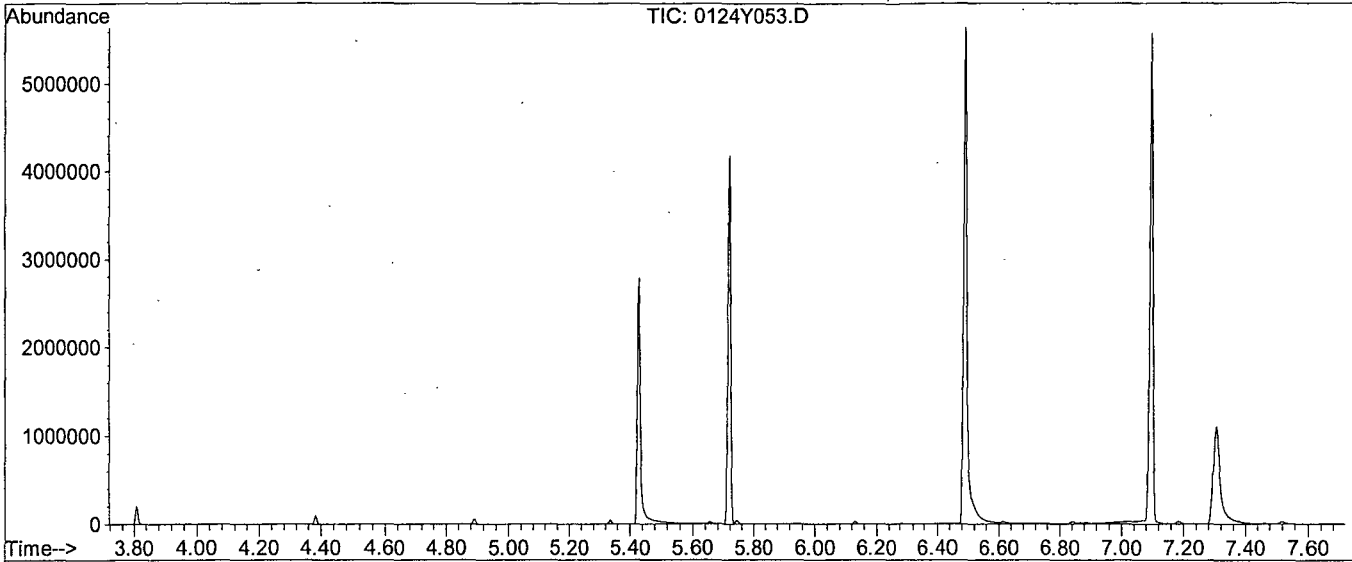
Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y053.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 852, 853, 854; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.3	160992	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	701	PASS
127	198	10	80	52.6	220885	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	419925	PASS
199	198	5	9	7.0	29411	PASS
275	198	10	60	25.0	104971	PASS
365	198	1	100	2.9	12350	PASS
441	442	0.01	24	12.7	48587	PASS
442	198	50	150	91.4	384021	PASS
443	442	15	24	18.4	70520	PASS

Data File Name: 0124Y053.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 30 Jan 2019 07:56  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 93  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	40517600
2)	DDD	6.83	245385
3)	DDE	6.98	0

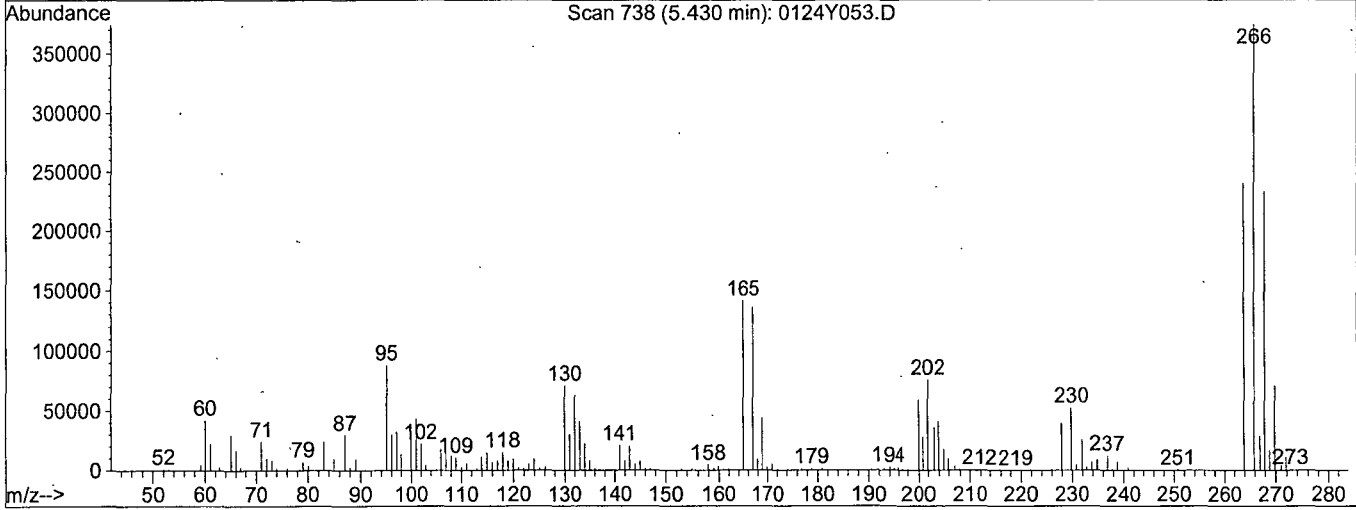
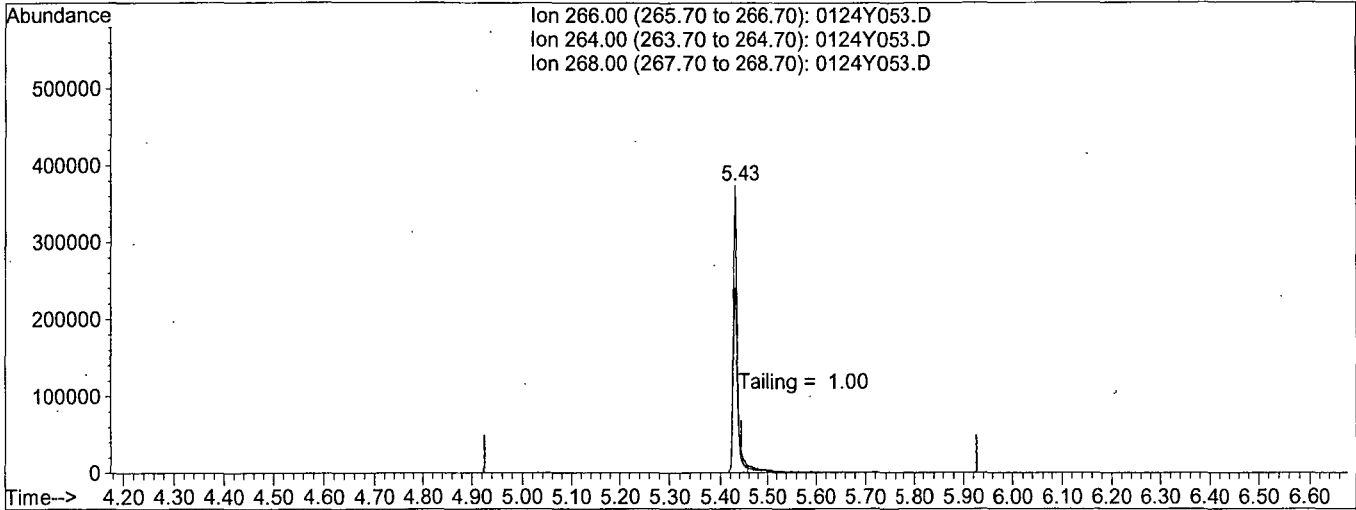
Breakdown 0.60

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y053.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 31 5:55 2019

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y053.D

(5) Pentachlorophenol

5.43min 0.0000

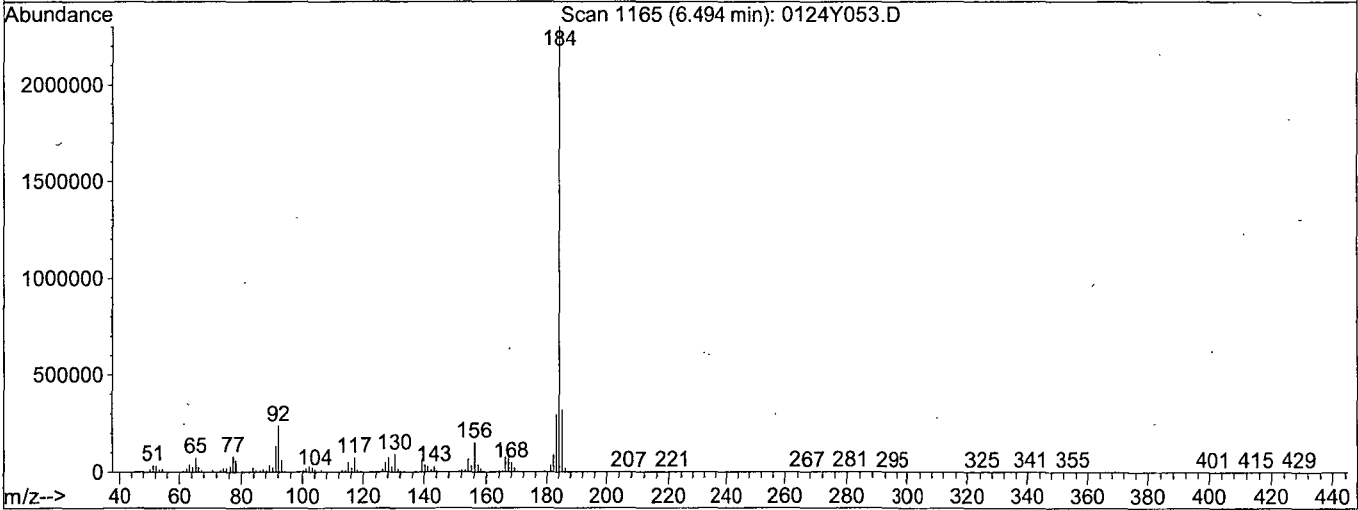
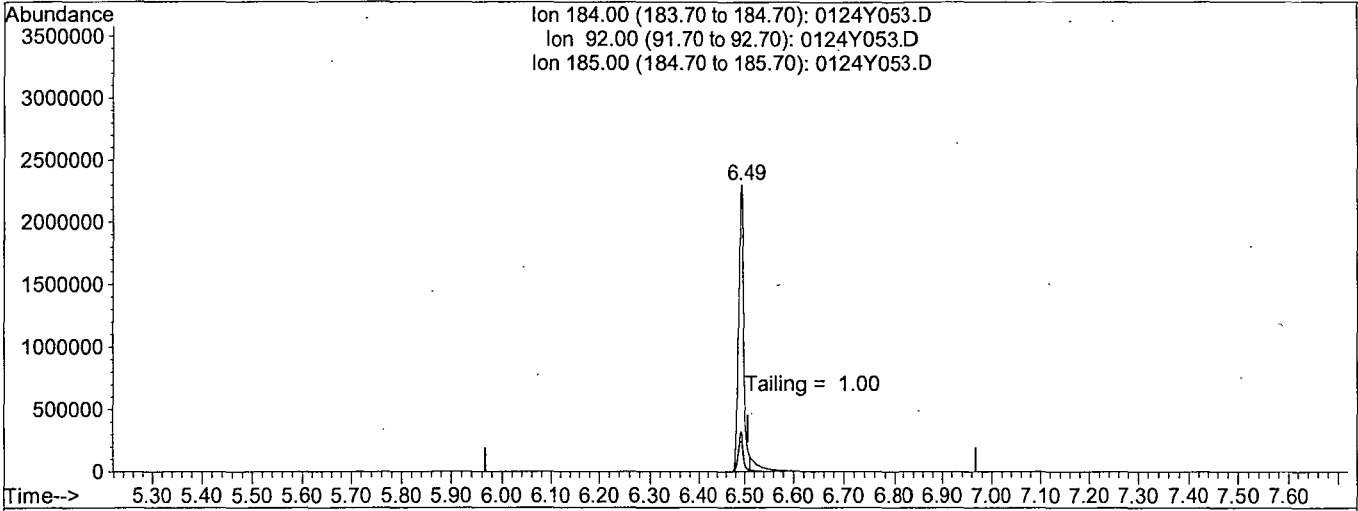
response 2388849

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	63.78
268.00	62.10	64.30
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y053.D Vial: 93  
 Acq On : 30 Jan 19 7:56 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Jan 31 5:55 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y053.D

(6) Benzidine

6.49min: 0.0000

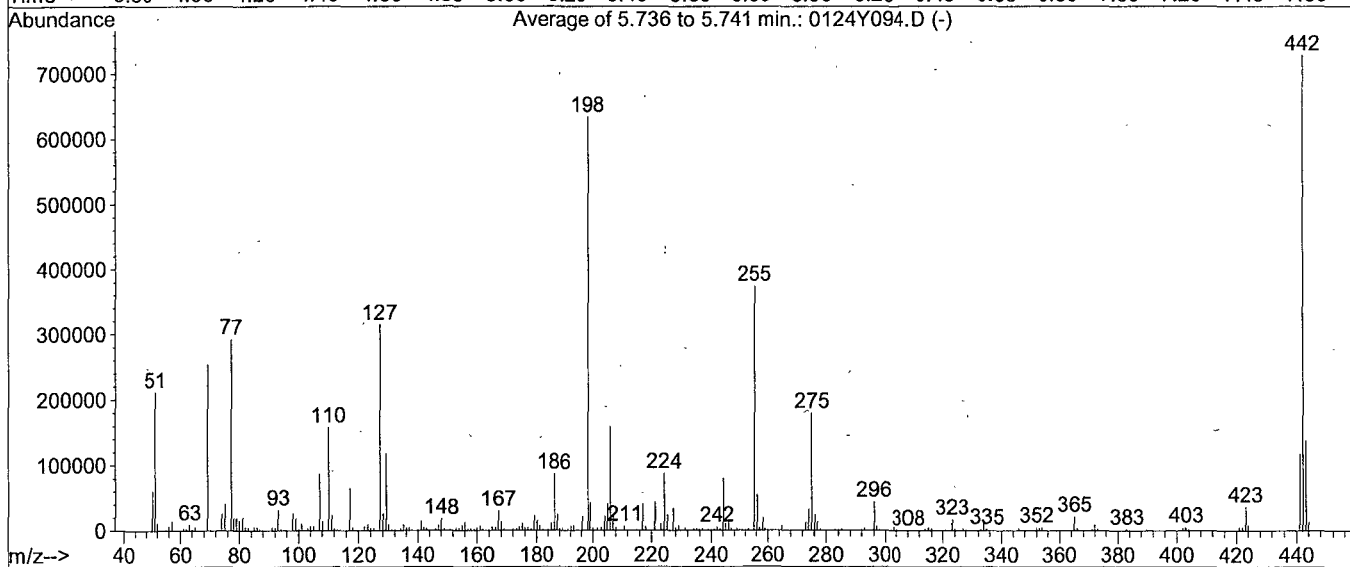
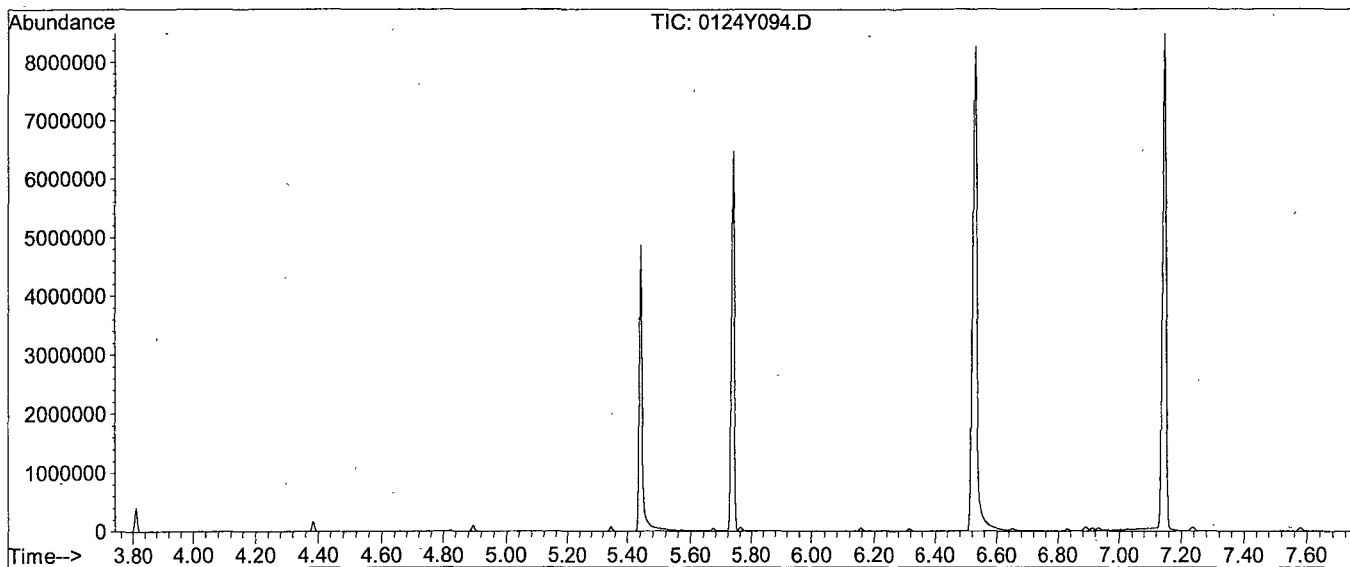
response 19654115

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.99
185.00	13.80	14.04
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y094.D  
 Acq On : 1 Feb 19 13:23  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 861, 862, 863; Background Corrected with Scan 852

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.4	211611	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1438	PASS
127	198	10	80	49.6	314795	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	634197	PASS
199	198	5	9	6.7	42336	PASS
275	198	10	60	28.3	179563	PASS
365	198	1	100	3.4	21411	PASS
441	442	0.01	24	16.1	117525	PASS
442	198	50	150	115.1	729813	PASS
443	442	15	24	18.9	138091	PASS

Data File Name: 0124Y094.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 1 Feb 19 13:23  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 94  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	69891300
2)	DDD	6.83	352986
3)	DDE	6.98	46709

Breakdown 0.57

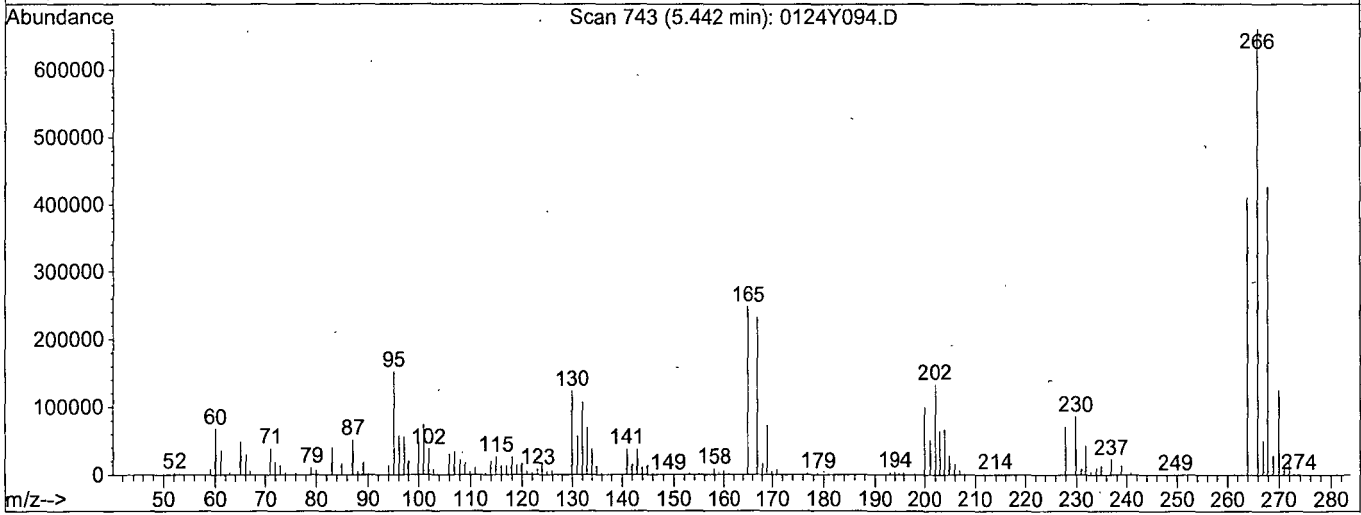
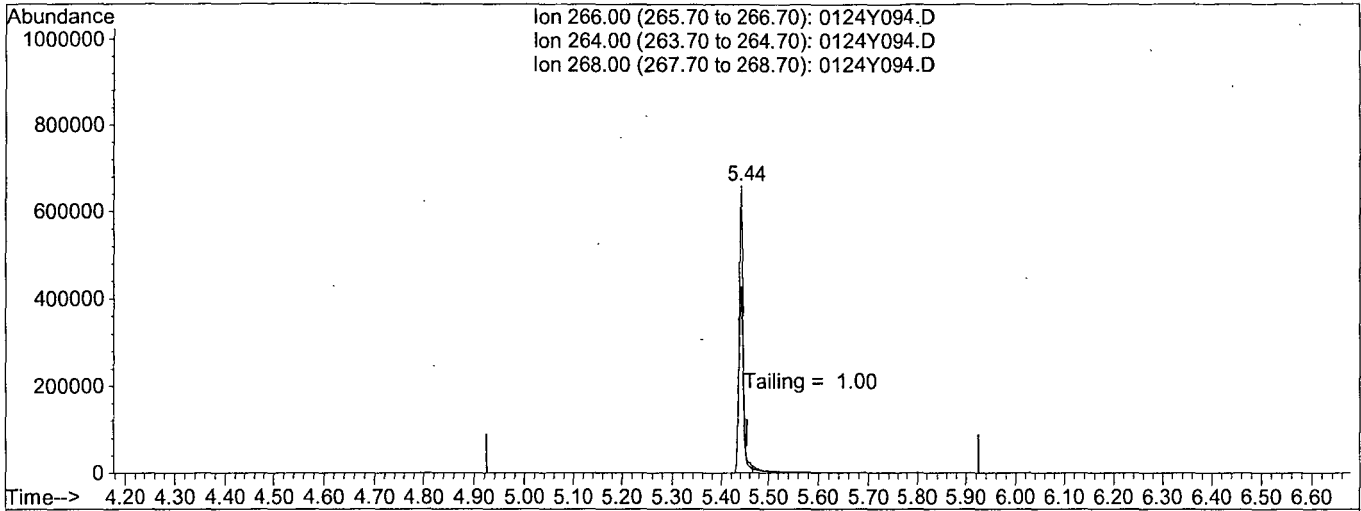


Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y094.D  
 Acq On : 1 Feb 19 13:23  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Feb 4 7:31 2019

Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y094.D

(5) Pentachlorophenol

5.44min 0.0000

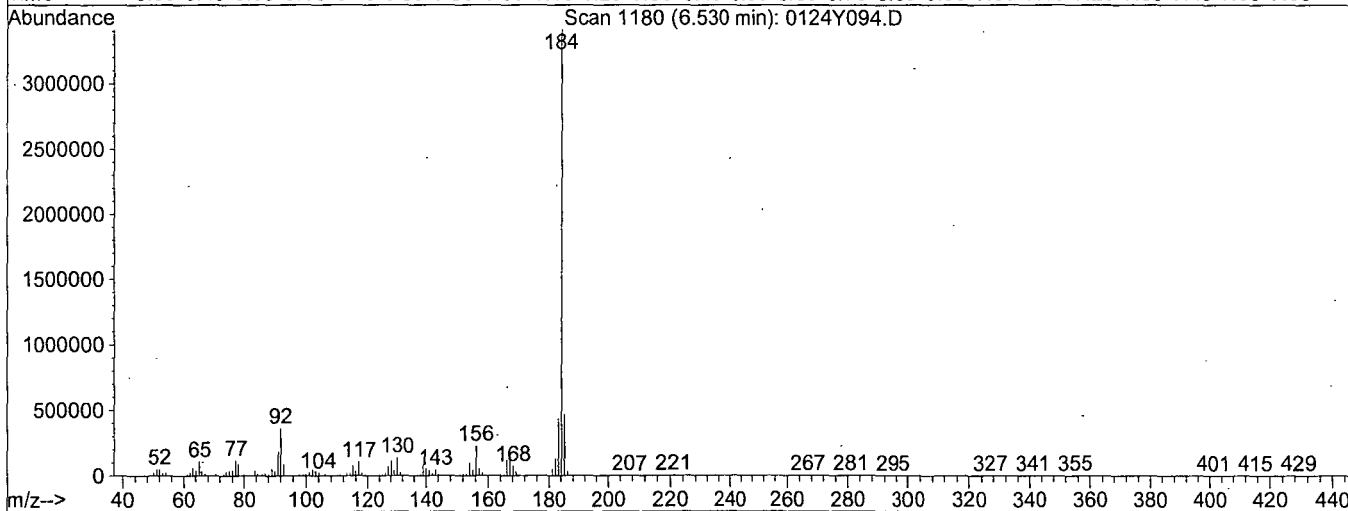
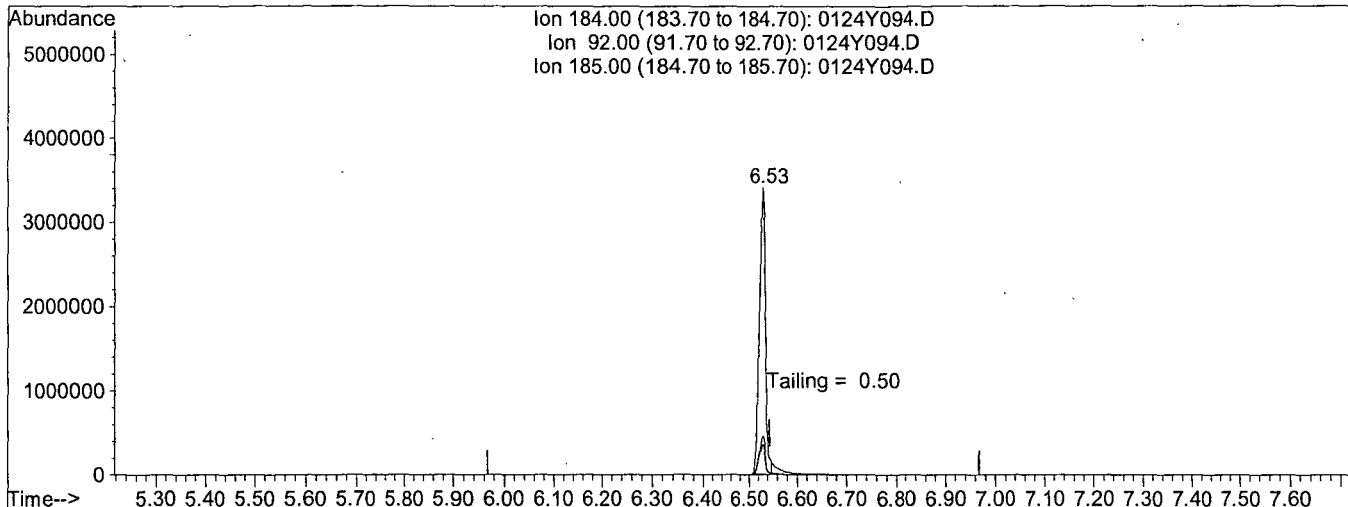
response 4102610

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	65.22
268.00	62.10	65.52
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y094.D Vial: 94  
 Acq On : 1 Feb 19 13:23 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Feb 4 7:31 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y094.D

(6) Benzidine

6.53min 0.0000

response 32338105

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.42
185.00	13.80	13.69
0.00	0.00	0.00

Name of Final Standard  
Prep Date  
Exp Date

8270 Full Scan Standard Curve

Prep'd By (Initials)

OA

01/23/19

09/17/19

Initial Standard Information	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	4 uL	200uL	MC 56258-192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	4 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	10 uL	100uL	MC 56258 80 uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	10 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	20 uL	100uL	MC 56258 60 uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	20 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	200 uL	MC 56258 100 uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	30 uL	100uL	MC 56258 40 uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	30 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	40 uL	100uL	MC 56258 20 uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	40 uL			

SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL			

Name of Final Standard 8270 Full Scan Second Source Prep'd By (Initials) OA  
 Prep Date 11/15/18  
 Exp Date 04/19/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	04/19/18	04/19/19	50 uL	200uL	MC 56258.150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL			

Name of Final Standard 8270 Full Scan Spike  
 Prep Date 11/09/18  
 Exp Date 10/20/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
10001	Absolute	10001	2000	051018-39433	11/09/19	1.0 mL	20 mL	NA	2000 ug/mL
10002	Absolute	10002	2000	051018-39437	11/09/19	1.0 mL	*	*	2000 ug/mL
10004	Absolute	10004	2000	071618-39441	11/09/19	1.0 mL	*	*	2000 ug/mL
10005	Absolute	10005	2000	032018-39609	11/09/19	1.0 mL	*	*	2000 ug/mL
10006	Absolute	10006	2000	071318-39447	11/09/19	1.0 mL	*	*	2000 ug/mL
10007	Absolute	10007	2000	080116-39614	11/09/19	1.0 mL	*	*	2000 ug/mL
10018	Absolute	10018	2000	062718-39452	11/09/19	1.0 mL	*	*	2000 ug/mL
70023	Absolute	70023	1000	020818-39457	11/09/19	1.0 mL	*	*	1000 ug/mL
82705	Absolute	82705	2000	081418-39618	11/09/19	1.0 mL	*	*	2000 ug/mL
94552	Absolute	94552	various	102017-39621	10/20/19	1.0 mL	*	*	various

Name of Final Standard 8270 Surrogate 200/400 ppm Prep'd By (Initials) GA  
 Prep Date 10/17/18  
 Exp Date 09/27/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352-39395	10/17/19	200 uL	5 mL	MC 56258	400 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243-39166	09/27/19	200 uL			200 ug/mL

Name of  
 Final  
 Standard 8270 Internal Standard (Ampule)

Prep'd By (Initials)

OA

Prep Date 01/16/19

Exp Date 01/16/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatil e Internal Standard	Restek	31206	2mg/mL	A0138585-39544	01/16/20	1 mL	1 mL	NA	2mg/mL

Name of  
Final  
Standard

**8270 SS STOCK**

Prep'd By (Initials)

**OA**

Prep Date **04/19/18**

Exp Date **04/19/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
	Absolute	10001	2000	G34-081717-38180	04/19/19	1.0 mL	10 mL	NA	2000 ug/mL
	Absolute	10002	2000	G34-020217-38183	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10004	2000	010815-38624	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10005	2000	041317-37803	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10006	2000	011718-38826	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10007	2000	020515-38628	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10018	2000	G34-030216-38198	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	70023	1000	013118-38829	04/19/19	1.0 mL	*	*	1000 ug/mL
	Absolute	82705	2000	090617-38831	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	94552	various	013118-38824	04/19/19	1.0 mL	*	*	various



Name of  
 Final **8270 Surrogate 100/200**  
 Standard **ppm**

Prep'd By (Initials) **GA**

Prep Date **11/06/18**

Exp Date **09/27/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Allquot from Stock	Final Volume	Final Solvent+ Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352 - 39395	10/17/19	5.0 mL	250 mL	Acetone #030817A	200 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243 - 39166 & A0140132 - 39545	09/27/19 11/06/19	5.0 mL	250 mL	*	100 ug/mL

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19	Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19	Surrogate ID 3					
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19	Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		01/28/19 15:30, 01/29/19 11:15			
Spiked ID 8		Ext. End Time:		01/29/19 10:00, 01/30/19 06:30, 01/30/19 11:00			
		GC Requires Extract By:		01/31/19 0:00			
pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria		75.77 °C		
pH2	14	1/29/19 10:30:00 AM					
pH3							

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190128A Bk			1,0.050	1,2	800	1	2/1	01/28/19 14:20	
					equip	E-HP51 E-WB6				
2	190128A LCS-1	0.250	1	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP50 E-WB6				
3	190128A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
					equip	E-HP49 E-WB6				
4	190128A LCS-3	0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP48 E-WB6				
5	190128A LCSD-1	0.250	1	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP47 E-WB6				
6	190128A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/28/19 14:20	
					equip	E-HP25 E-WB6				
7	190128A LCSD-3	0.250,0.225	3,4	1	1	800	1	2/1	01/28/19 14:20	
					equip	E-HP26 E-WB6				
8	AZ85404 AZ85404W33			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87916
					equip	E-HP27 E-WB6				
9	AZ85493 AZ85493W24			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87929
					equip	E-HP28 E-WB6				
10	AZ85520 AZ85520W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP29 E-WB6				
11	AZ85521 AZ85521W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP30 E-WB6				
12	AZ85523 AZ85523W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP17 E-WB6				
13	AZ85525 AZ85525W11			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP16 E-WB6				
14	AZ85527 AZ85527W10			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87932
					equip	E-HP15 E-WB5				
15	AZ85560 AZ85560W20			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87935
					equip	E-HP14 E-WB5				
16	AZ85565 AZ85565W22			1,0.050	1,2	800	1	2/1	01/28/19 14:20	87940
					equip	E-HP13 E-WB5				

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
I+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	01/30/19
Time	12:50
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *ky*

Date: 2/1/19  
Page 566 of 1037/119

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C		Extraction Set	190128A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 11-20-18 EXP 10-20-19		Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 12-17-18 EXP 12-17-19		Surrogate ID 2	SIM Surrogate 12-14-18 EXO 12-14-19				
Spiked ID 3	DMTHX SPK 200ug/mL 1-23-19 exp 7-23-19		Surrogate ID 3					
Spiked ID 4	HEXACHLOROPHENE AMPLUE 1-23-18 EXP 1-23-19		Surrogate ID 4					
Spiked ID 5			Surrogate ID 5					
Spiked ID 6			Sufficient Vol for Matrix QC:		NO			
Spiked ID 7			Ext. Start Time:		01/28/19 15:30, 01/28/19 11:15			
Spiked ID 8			Ext. End Time:		01/29/19 10:00, 01/29/19 00:30, 01/30/19 11:00			
			GC Requires Extract By:		01/31/19 0:00			
			pH1	2	01/28/19 2:30:00 PM	Water Bath Temp Criteria 75.77 °C		
			pH2	14	1/29/19 10:30:00 AM			
			pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: YL

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85567	AZ85567W22		1.0.050	1,2	800	1	2/1	01/28/19 14:20	87940
						equip	E-HP12 E-WB5			

Ker 21/19

Solvent and Lot#	
PH Strips	hc 849161
Dichloromethane (DCM)	18g194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:37:18 PM

Reviewed By: *Ker* Date: *21/19*  
 Page 567 of 1057  
 Ext\_ID 61593

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190130A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20	Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		yes			
Spiked ID 7		Ext. Start Time:		01/30/19 16:15, <i>01/31/19 13:00</i>			
Spiked ID 8		Ext. End Time:		01/31/19 10:30, <i>01/31/19 07:05, 01/31/19 11:20</i>			
		GC Requires Extract By:		01/31/19 0:00			
pH1	2	01/30/19 1:40:00 PM	Water Bath Temp Criteria		73,75 °C		
pH2	14	01/31/19 12:30:00 PM					
pH3							

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
1	190130A Blk			1,0.050	1,2	800	1	2/1	01/30/19 13:30		
						equip e-wb5 E-HP51					
2	190130A LCS-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30		
						equip e-wb5 E-HP50					
3	190130A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30		
						equip e-wb5 E-HP49					
4	190130A LCSD-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30		
						equip e-wb5 E-HP48					
5	190130A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30		
						equip e-wb5 E-HP47					
6	AZ85562 MS-1	AZ85562W31	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87940
						equip e-wb5 E-HP25					
7	AZ85562 MSD-1	AZ85562W33	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87940
						equip e-wb5 E-HP26					
8	AZ85562 MS-2	AZ85562W37	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87940
						equip e-wb5 E-HP27					
9	AZ85562 MSD-2	AZ85562W38	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87940
						equip E-WB5 E-HP28					
10	AZ85562	AZ85562W36		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
						equip e-wb5 E-HP29					
11	AZ85563	AZ85563W10		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
						equip E-WB5 E-HP30					
12	AZ85569	AZ85569W22		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
						equip E-WB5 E-HP17					
13	AZ85643 MS-1	AZ85643W33	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87956
						equip E-WB6 E-HP16					
14	AZ85643 MSD-1	AZ85643W34	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87956
						equip E-WB6 E-HP15					
15	AZ85643 MS-2	AZ85643W35	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87956
						equip E-WB6 E-HP14					
16	AZ85643 MSD-2	AZ85643W30	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87956
						equip E-WB6 E-HP13					

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	02/01/19
Time	11:31
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *KY* Date: *2/1/19*  
 Page 568 of 1057  
 Ext\_ID: 61640

# Organic Extraction Worksheet








Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	190130A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20	Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: yes					
Spiked ID 7		Ext. Start Time: 01/30/19 16:15		01/31/19 13:00			
Spiked ID 8		Ext. End Time: 01/31/19 10:30		02/01/19 07:05, 02/01/19 11:20			
GC Requires Extract By:				01/31/19 0:00			
pH1	2	01/30/19 1:40:00 PM		Water Bath Temp Criteria 73,75 °C			
pH2	14	1/31/19 12:30:00 PM					
pH3							

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85643 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
						equip	E-WB6 E-HP12			
18	AZ85644 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
						equip	E-WB6 E-HP11			
19	AZ85646 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
						equip	E-WB6 E-HP10			
20	AZ85653 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
						equip	E-WB6 E-HP9			
21	AZ85763 			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
						equip	E-WB6 E-HP7			
22	AZ85764 			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
						equip	E-WB6 E-HP6			
23	AZ85766 			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
						equip	E-WB6 E-HP4			

*Handwritten:* KCF 2/14/19

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *KCF*

Date *2/14/19*

## Injection Log

Directory: M:\YODA\DATA\Y190124\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
14	0124Y014.D	1	SV TUNE 11/10/18		25 Jan 19 7:05
15	0124Y015.D	1	50ug/mL 8270 01/24/19		25 Jan 19 7:20
16	0124Y016.D	1	4ug/mL 8270 01/24/19		25 Jan 19 9:53
17	0124Y017.D	1	5ug/mL 8270 01/24/19		25 Jan 19 10:21
18	0124Y018.D	1	10ug/mL 8270 01/24/19		25 Jan 19 10:49
20	0124Y020.D	1	40ug/mL 8270 01/24/19		25 Jan 19 11:44
21	0124Y021.D	1	60ug/mL 8270 01/24/19		25 Jan 19 12:11
22	0124Y022.D	1	80ug/mL 8270 01/24/19		25 Jan 19 12:39
23	0124Y023.D	1	100ug/mL 8270 01/24/19		25 Jan 19 13:07
30	0124Y030.D	1	SV TUNE 11/10/18		28 Jan 19 11:49
33	0124Y033.D	1	20ug/mL 8270 01/24/19		28 Jan 19 13:36
34	0124Y034.D	1	SS-8270 01/24/19		28 Jan 19 14:11
93	0124Y053.D	1	SV TUNE 11/10/18		30 Jan 19 7:56
54	0124Y054.D	1	50ug/mL 8270 01/24/19		30 Jan 19 14:28
55	0124Y055.D	1.25	190128A BLK 1/800		30 Jan 19 14:56
56	0124Y056.D	1.25	190128A LCS-1 1/800		30 Jan 19 15:24
57	0124Y057.D	1.25	190128A LCSD-1 1/800		30 Jan 19 15:52
63	0124Y063.D	1.25	AZ85565W22 1/800		30 Jan 19 18:39
64	0124Y064.D	1.25	AZ85567W22 1/800		30 Jan 19 19:07
65	0124Y065.D	1	50ug/mL 8270 01/24/19		30 Jan 19 19:35
94	0124Y094.D	1	SV TUNE 11/10/18		1 Feb 19 13:23
95	0124Y095.D	1	50ug/mL 8270 01/24/19 (2)		1 Feb 19 13:38
98	0124Y098.D	1.25	190130A Blk 1/800		1 Feb 19 16:19
99	0124Y099.D	1.25	190130A LCS-1 1/800		1 Feb 19 16:47
100	0124Y100.D	1.25	190130A LCSD-1 1/800		1 Feb 19 17:14
1	0124Y101.D	1.25	AZ85562W31 MS-1 1/800		1 Feb 19 17:42
2	0124Y102.D	1.25	AZ85562W33 MSD-1 1/800		1 Feb 19 18:10
3	0124Y103.D	1.25	AZ85562W36 1/800		1 Feb 19 18:38
4	0124Y104.D	1.25	AZ85563W10 1/800		1 Feb 19 19:06
5	0124Y105.D	1.25	AZ85569W22 1/800		1 Feb 19 19:34
15	0124Y115.D	1.25	50ug/mL 8270 01/24/19 (1)		2 Feb 19 00:12

**ORGANICS**  
**Calibration Data**

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 11/28/18  
Instrument: Yoda

Initials: \_\_\_\_\_

1128Y004.D 1128Y005.D 1128Y006.D 1128Y007.D 1128Y012.D 1128Y008.D 1128Y009.D 1128Y010.D

	Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r^2	Q	MRF
1	I 1,4-dichlorobenzene-D4(IS)																
2	TM 2-(2-Methoxyethoxy)ethanol	0.2305	0.2453	0.2498	0.2070	0.2284	0.2415	0.2719	0.2475			0.24	7.9	TM			
3	I Napthalene-D8(IS)																
4	I Acenaphthene-D10(IS)																
5	I Phenanthrene-D10(IS)																
6	I Chrysene-D12(IS)																
7	I Perylene-D12(IS)																
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
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34																	
35																	



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y004.D Vial: 4  
 Acq On : 28 Nov 18 8:08 Operator: MA  
 Sample : 50ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	846679	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3808187	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1917814	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3593004	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3055748	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3109829	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	243946	76.98478	ppb	99

Quantitation Report

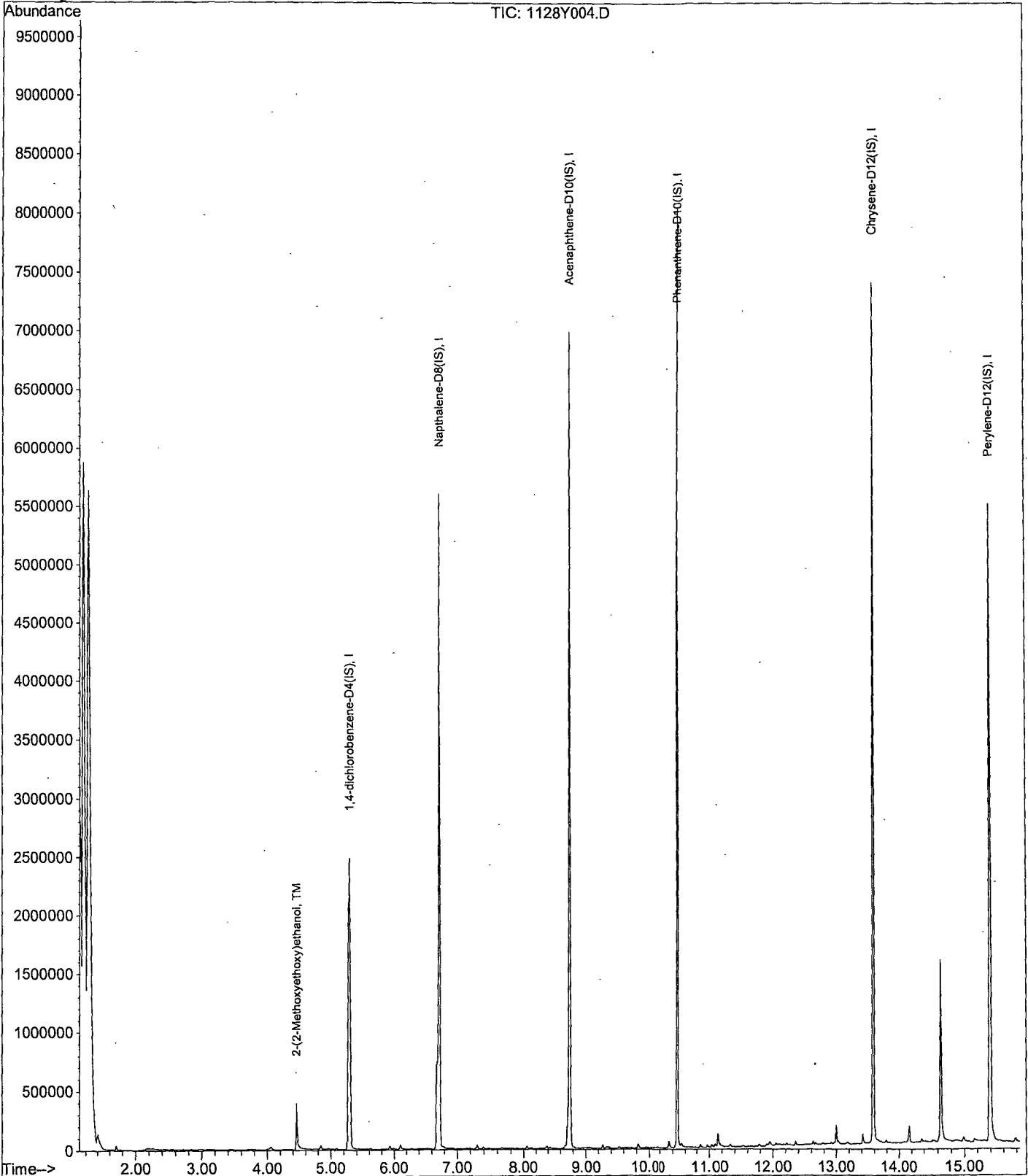
Data File : M:\YODA\DATA\Y181128M\1128Y004.D  
Acq On : 28 Nov 18 8:08  
Sample : 50ug/ml MEE 08/01/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y005.D Vial: 5  
 Acq On : 28 Nov 18 8:32 Operator: MA  
 Sample : 100ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	833525	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3655933	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1870603	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3472767	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	2784977	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2713194	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.47	45	511054	121.26713	ppb	99

Quantitation Report

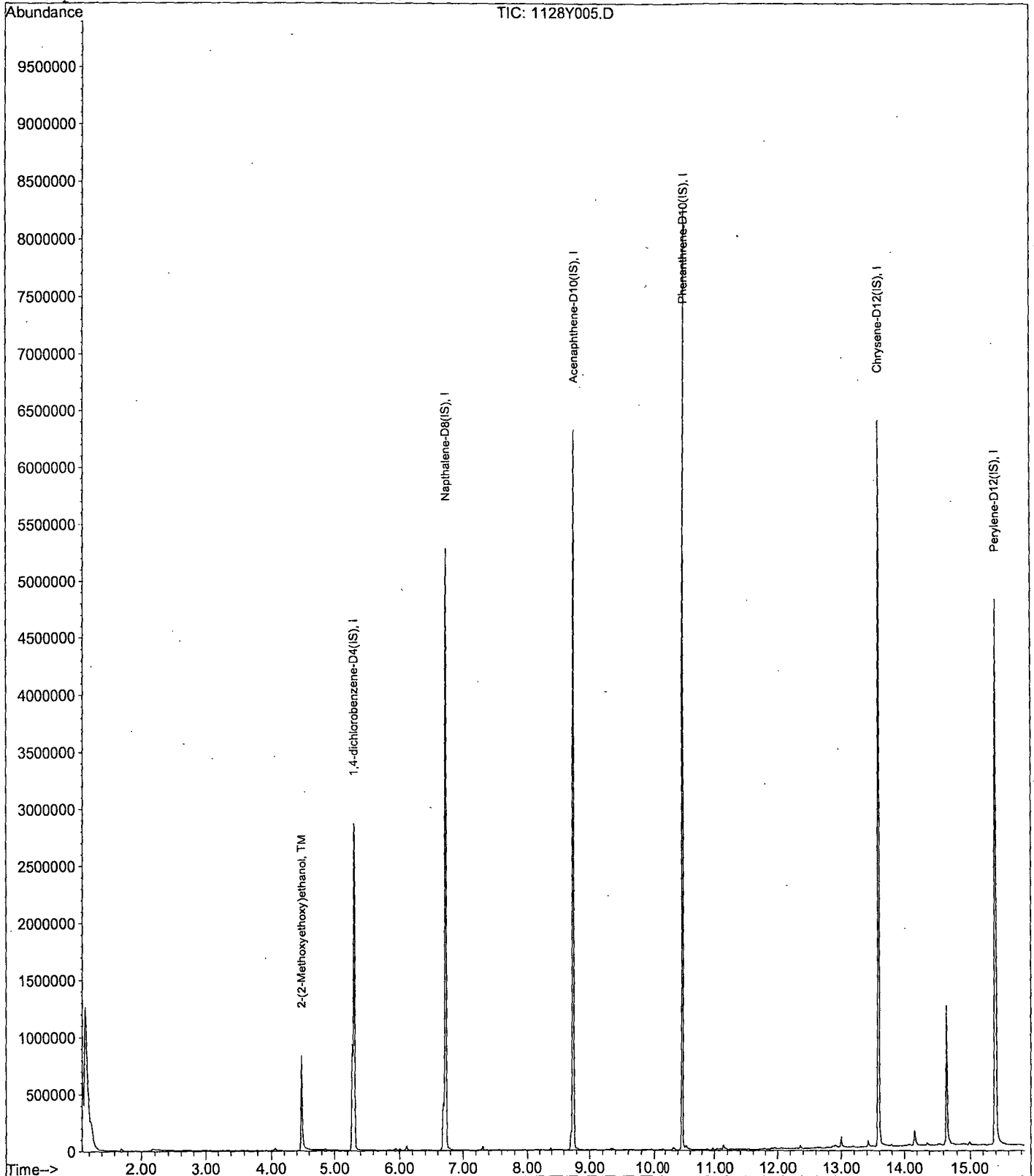
Data File : M:\YODA\DATA\Y181128M\1128Y005.D  
Acq On : 28 Nov 18 8:32  
Sample : 100ug/ml MEE 08/01/18  
Misc : soil

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y006.D Vial: 6  
 Acq On : 28 Nov 18 8:55 Operator: MA  
 Sample : 200ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	906220	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4175598	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2128971	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3974569	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3488549	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3293123	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1131710	207.88279	ppb	99

Quantitation Report

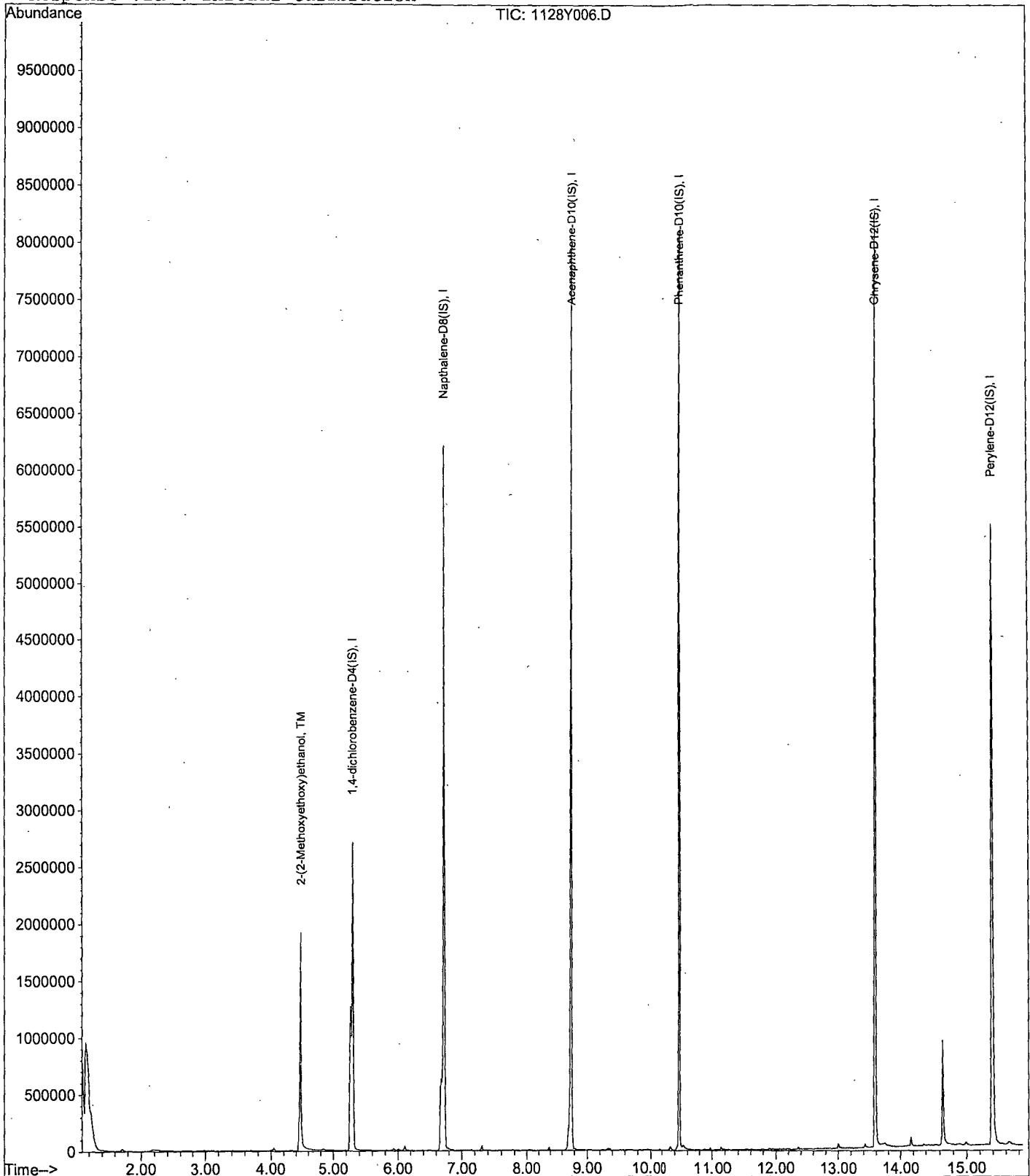
Data File : M:\YODA\DATA\Y181128M\1128Y006.D  
Acq On : 28 Nov 18 8:55  
Sample : 200ug/ml MEE 08/01/18  
Misc : soil

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y007.D Vial: 7  
 Acq On : 28 Nov 18 9:19 Operator: MA  
 Sample : 400ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:31 2018 Quant. Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	948008	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4475913	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2298421	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	4282330	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3776629	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3748965	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	1962520	319.79035	ppb	100

Quantitation Report

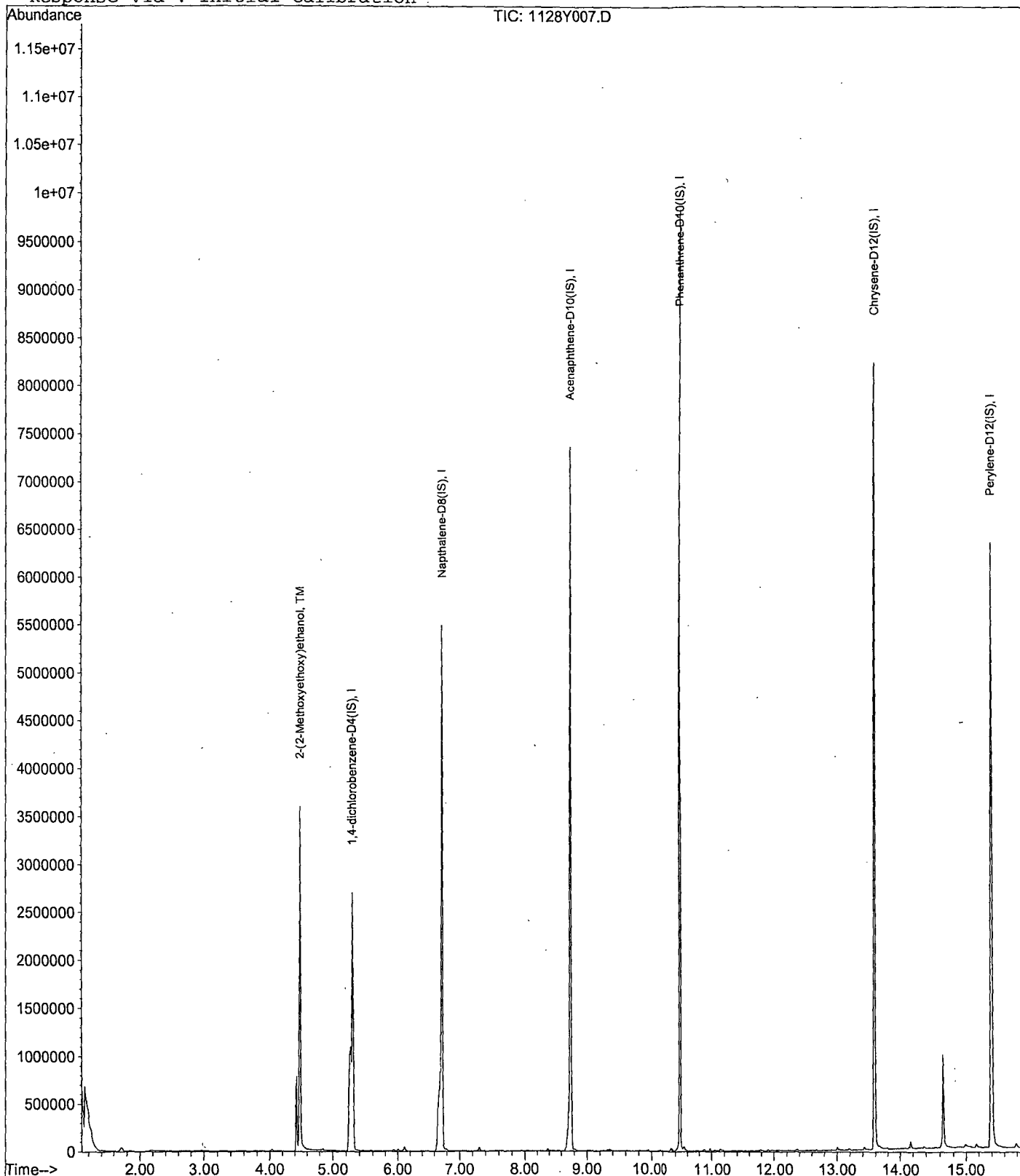
Data File : M:\YODA\DATA\Y181128M\1128Y007.D  
Acq On : 28 Nov 18 9:19  
Sample : 400ug/ml MEE 08/01/18  
Misc : soil

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:31 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y012.D Vial: 12  
 Acq On : 28 Nov 18 11:17 Operator: MA  
 Sample : 500ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:25 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 09:56:17.2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	830482	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3639618	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1806558	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3340149	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	2995047	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2844171	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2370937	400.21340	ppb	100

Quantitation Report

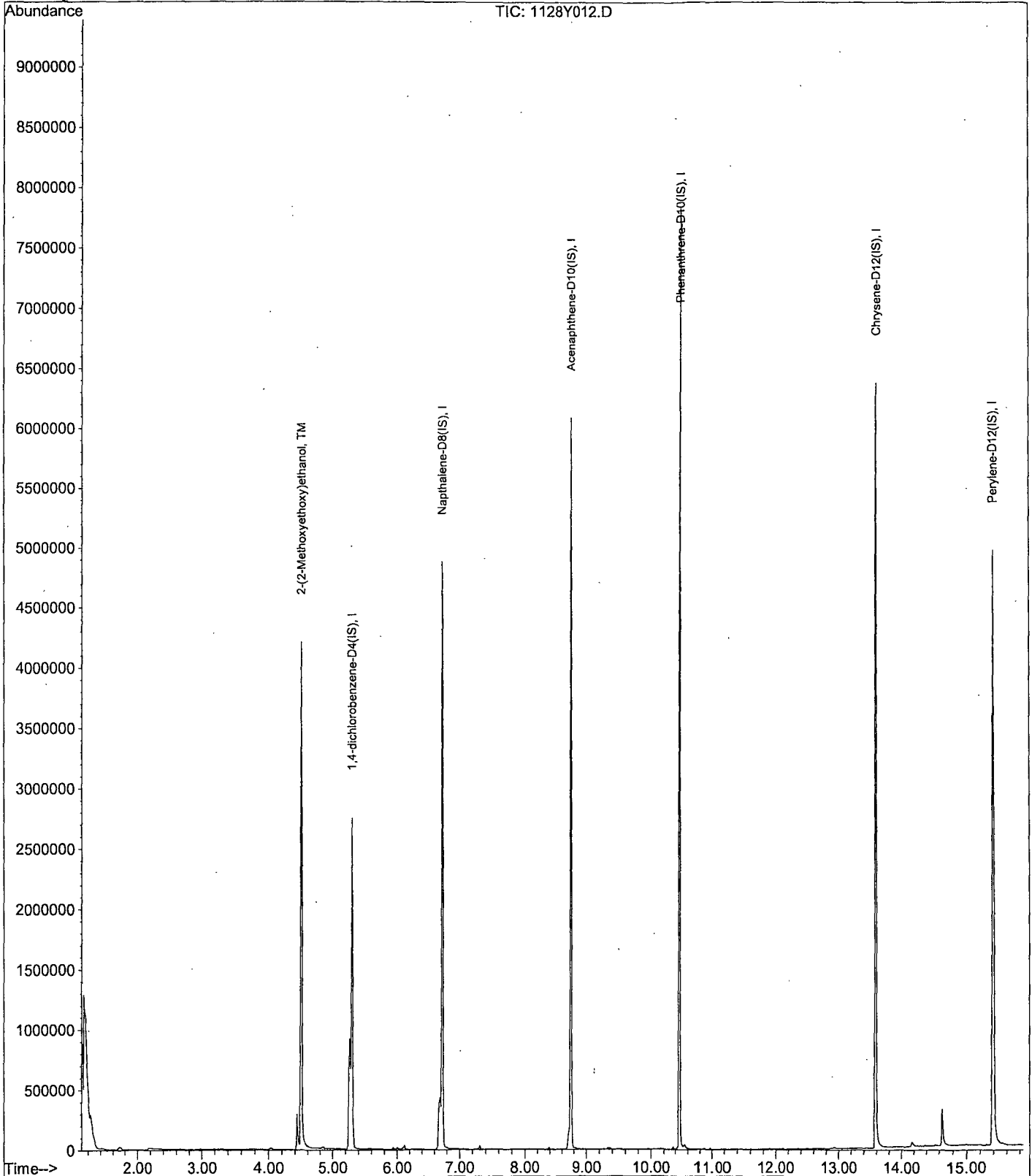
Data File : M:\YODA\DATA\Y181128M\1128Y012.D  
Acq On : 28 Nov 18 11:17  
Sample : 500ug/ml MEE 08/01/18  
Misc : soil

Vial: 12  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:25 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y008.D Vial: 8  
 Acq On : 28 Nov 18 9:43 Operator: MA  
 Sample : 600ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	856651m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3531920	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2073085	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3859845	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3489580	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3140389	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.50	45	3103564	483.70926	ppb	100

Quantitation Report

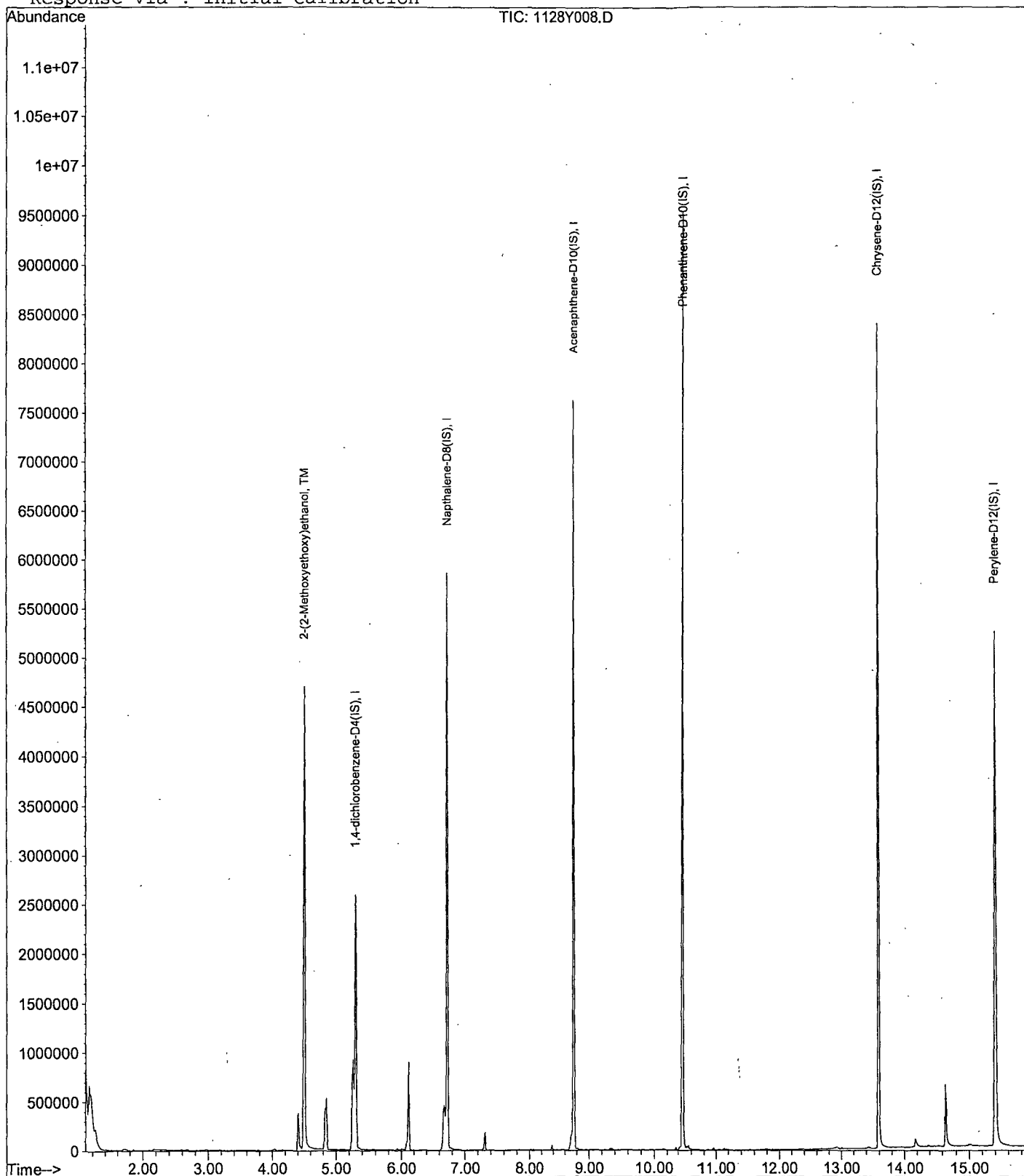
Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
Acq On : 28 Nov 18 9:43  
Sample : 600ug/ml MEE 08/01/18  
Misc : soil

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

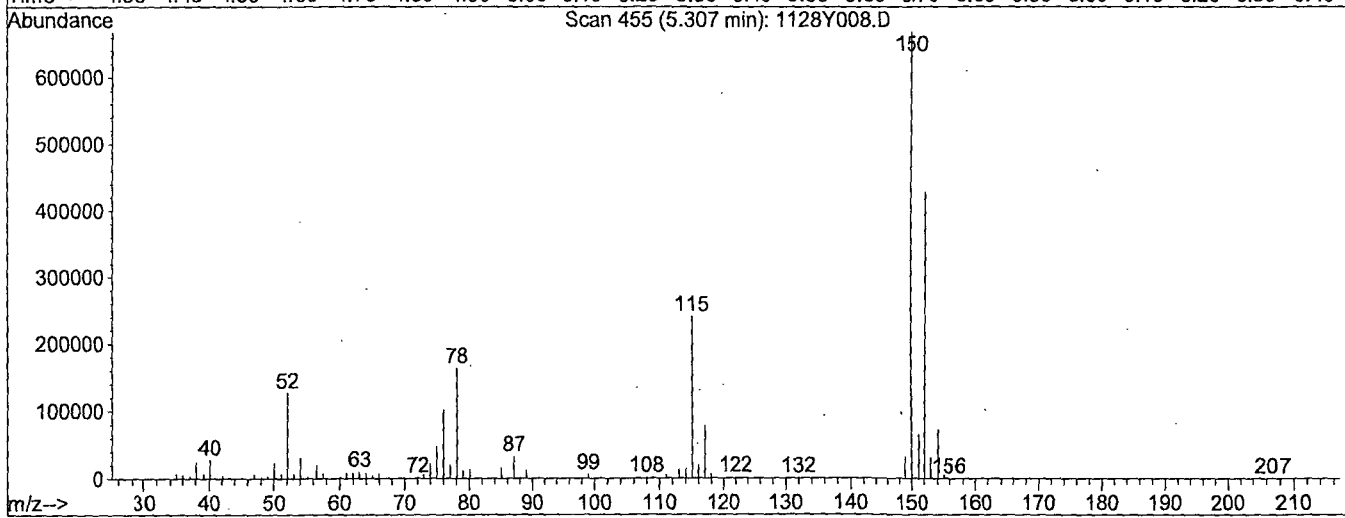
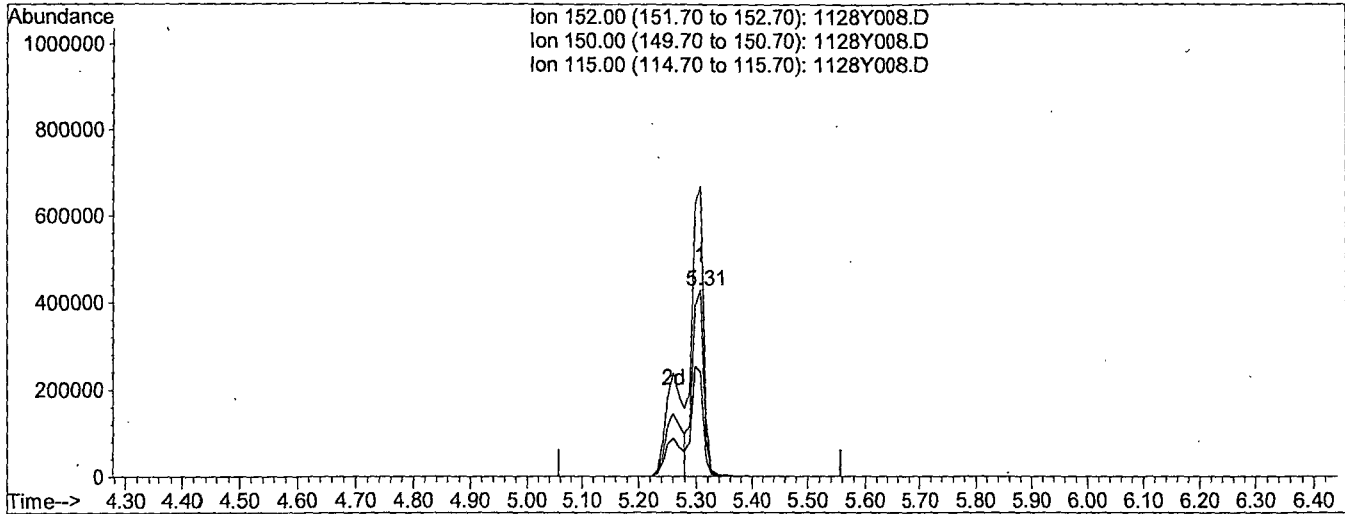


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.31min 40.0000ppb

response 580797

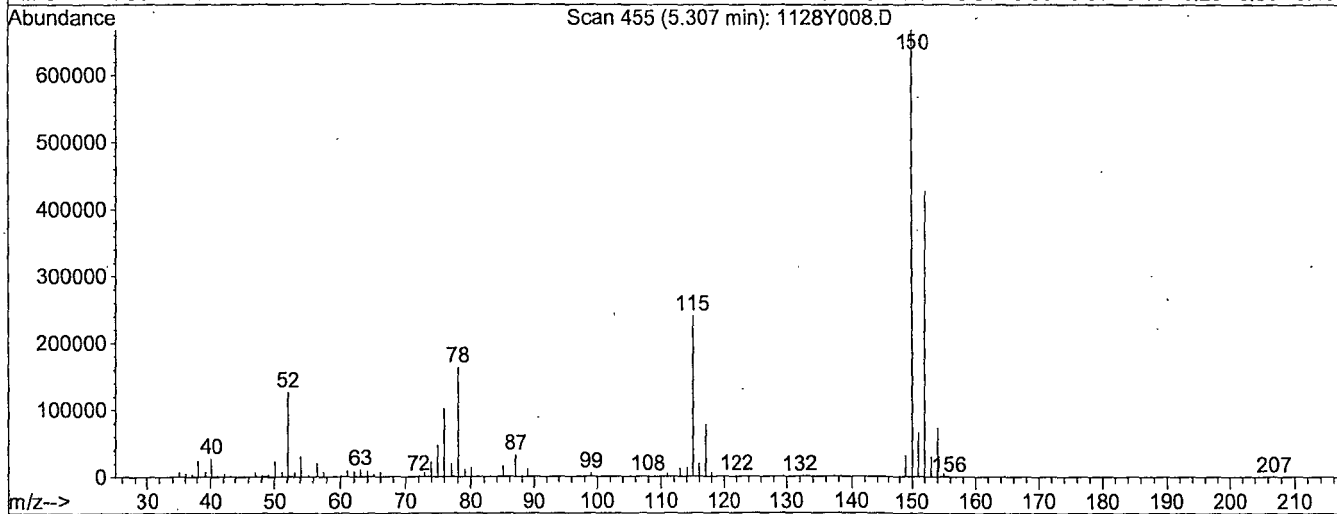
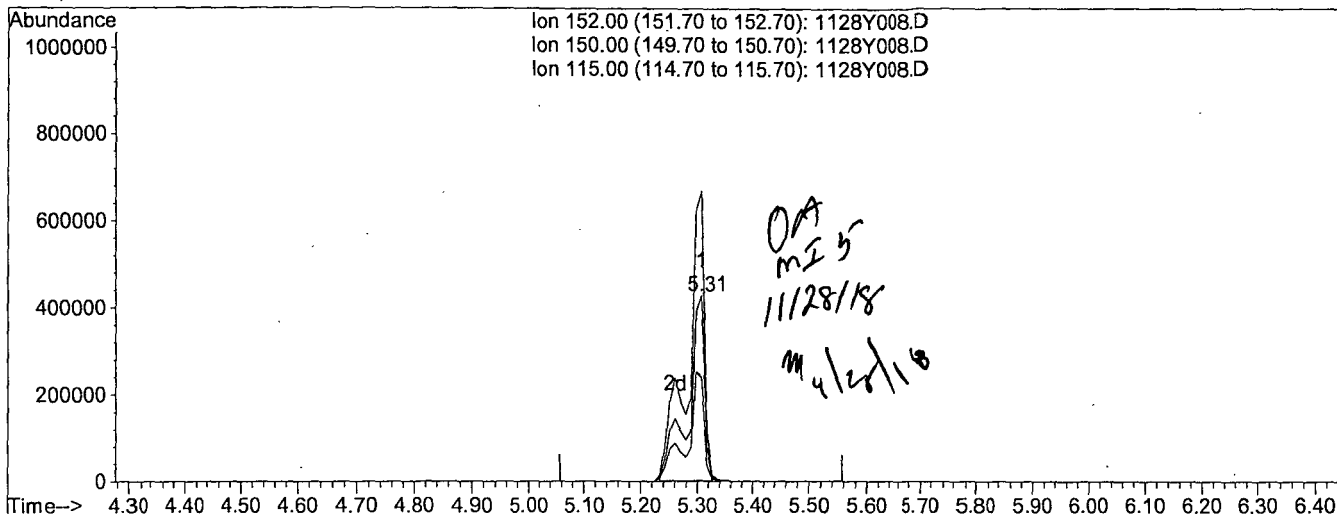
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.26
115.00	56.30	56.24
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.31min 40.0000ppb m

response 856651

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.25
115.00	56.30	56.26
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y009.D Vial: 9  
 Acq On : 28 Nov 18 10:06 Operator: MA  
 Sample : 800ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	785528m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3646286	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2099263	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3938984	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3411642	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2743638	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.52	45	4272210	778.75542	ppb	98

Quantitation Report

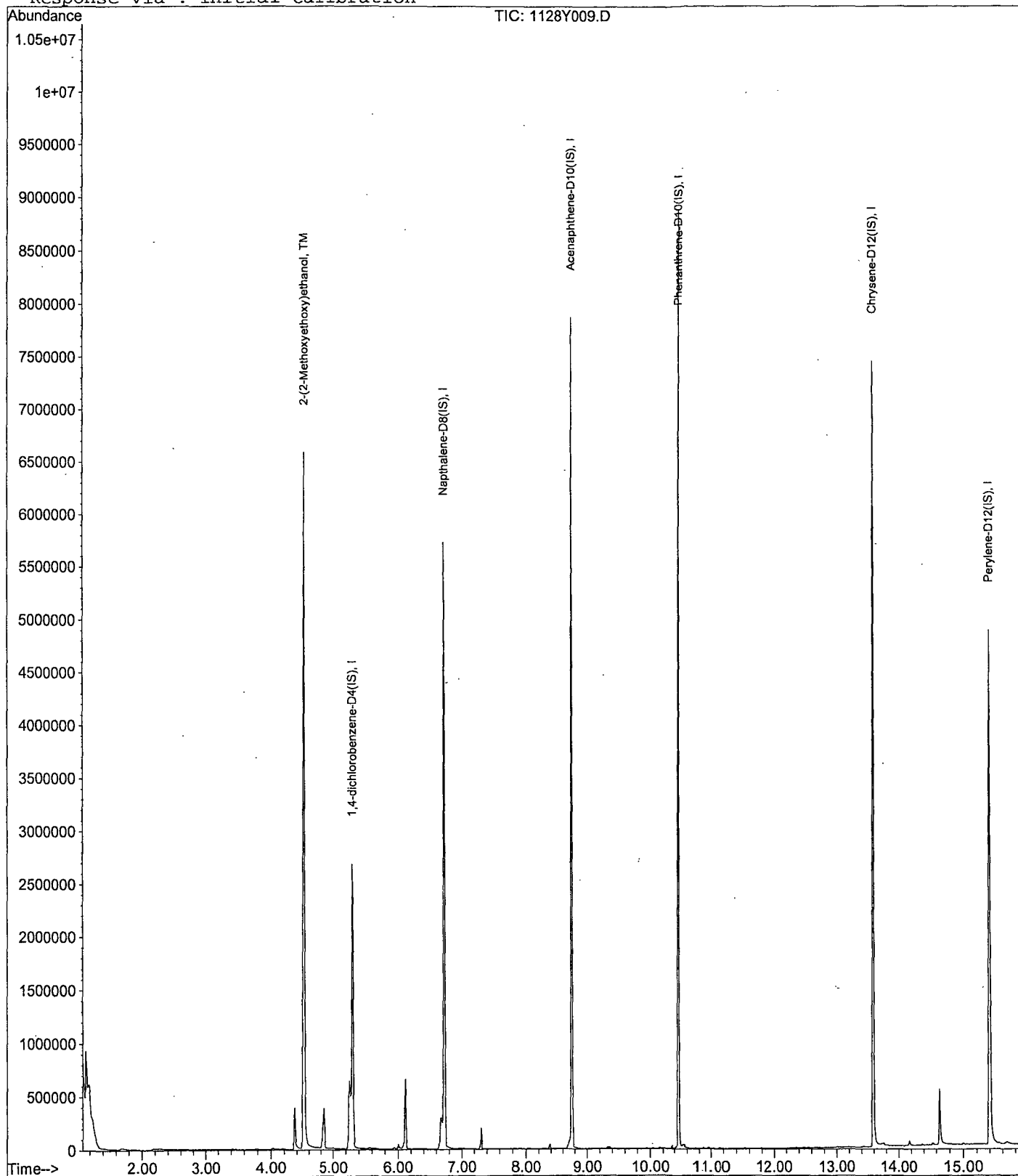
Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
Acq On : 28 Nov 18 10:06  
Sample : 800ug/ml MEE 08/01/18  
Misc : soil

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



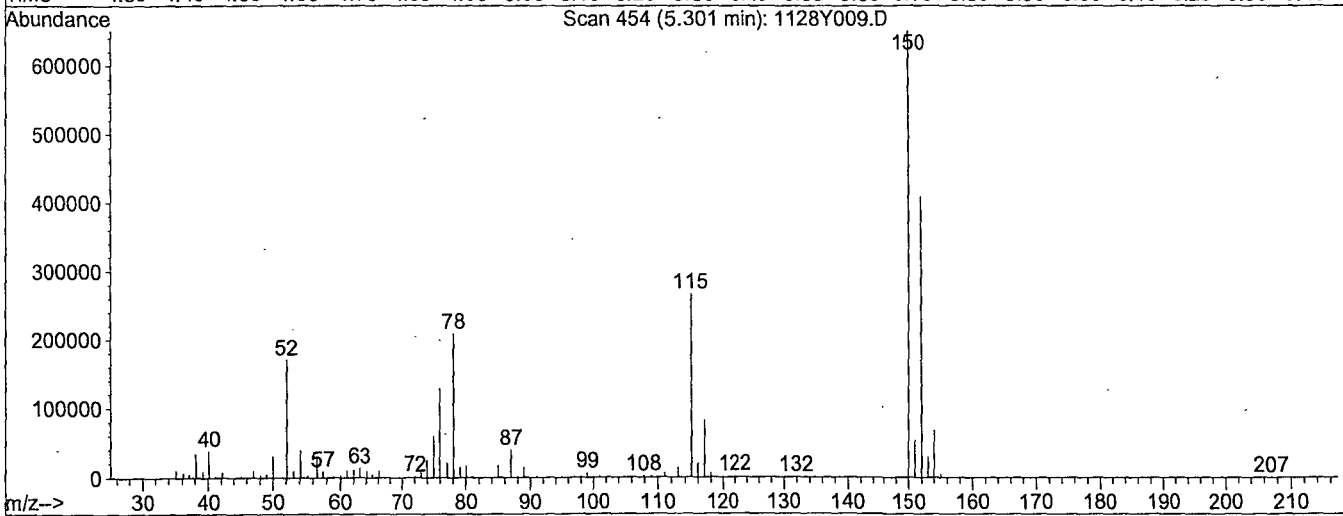
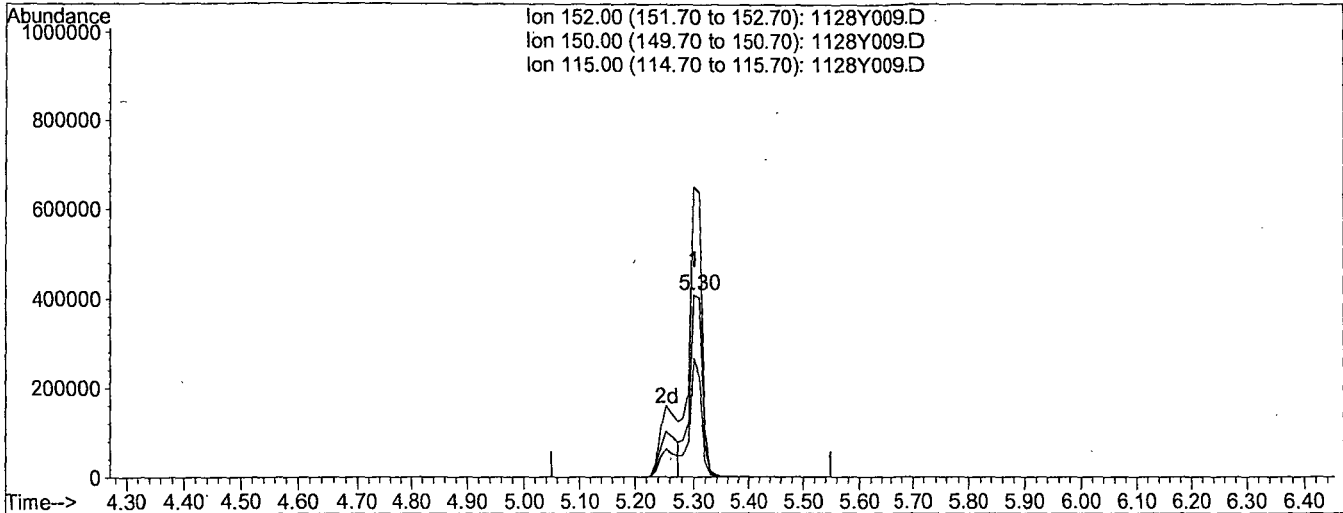


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:31 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(1S) (1)

5.30min 40.0000ppb

response 614492

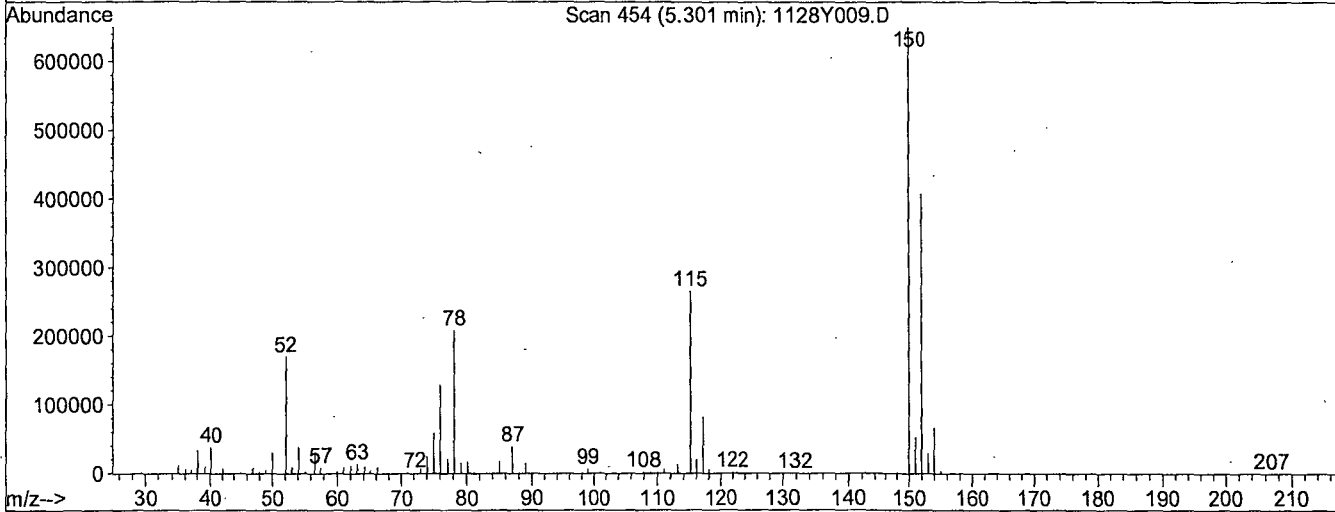
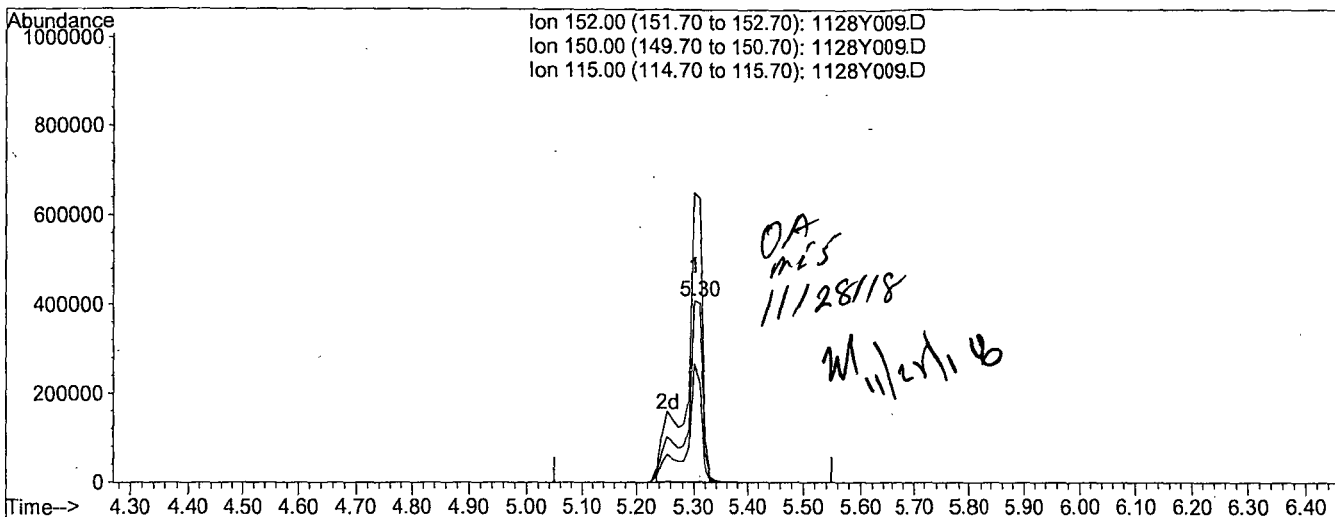
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.30
115.00	63.20	65.14
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 785528

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.35
115.00	63.20	65.18
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Nov 28 11:41 2018

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	817975m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3554268	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2016499	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3774107	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3353765	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3559145	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.53	45	5060771	787.46043	ppb	98

Quantitation Report

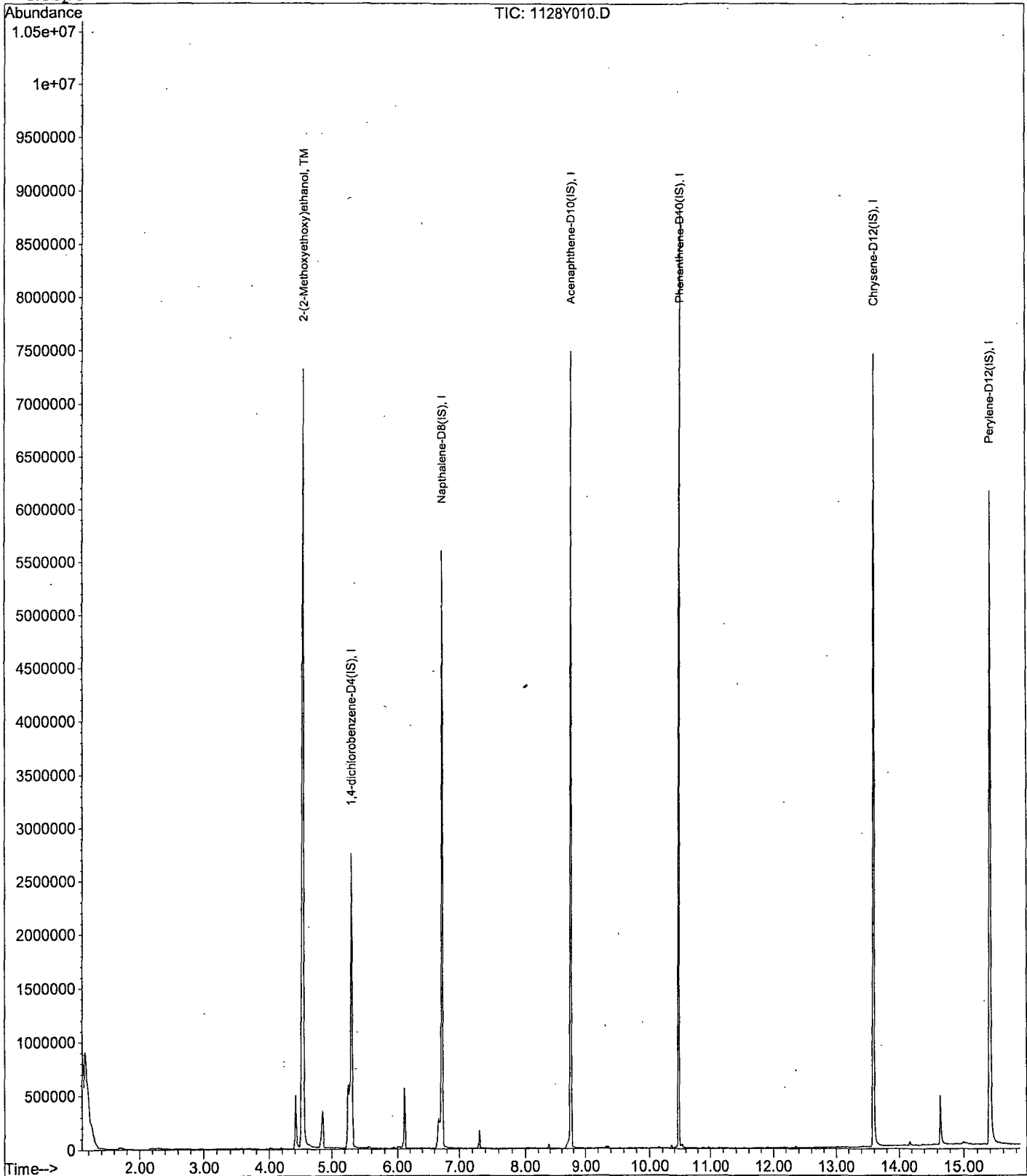
Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
Acq On : 28 Nov 18 10:30  
Sample : 1000ug/ml MEE 08/01/18  
Misc : soil

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:41 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

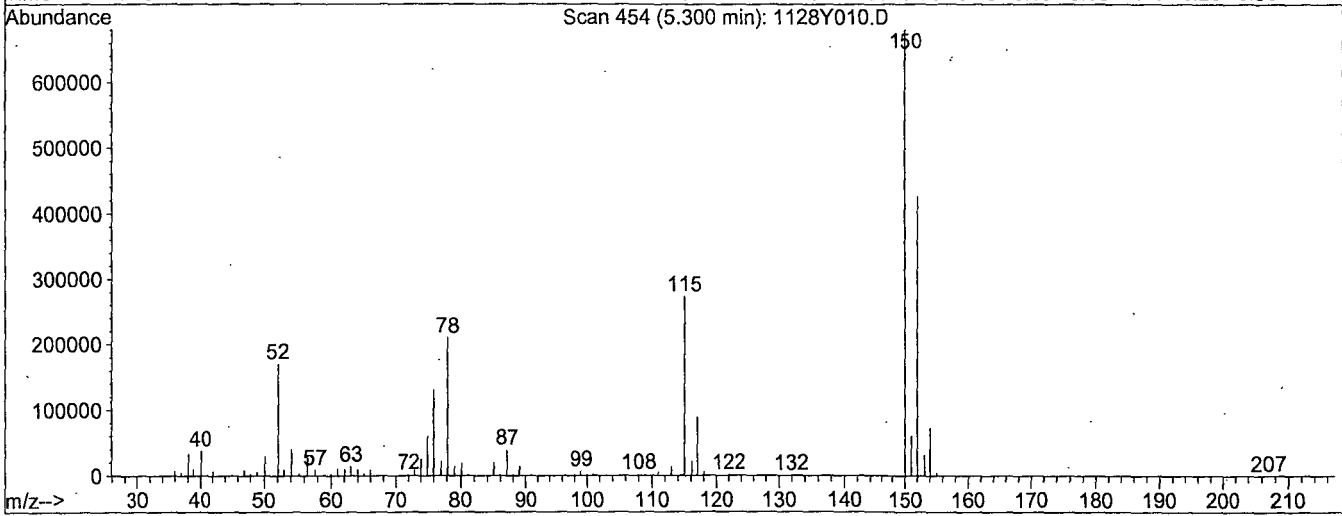
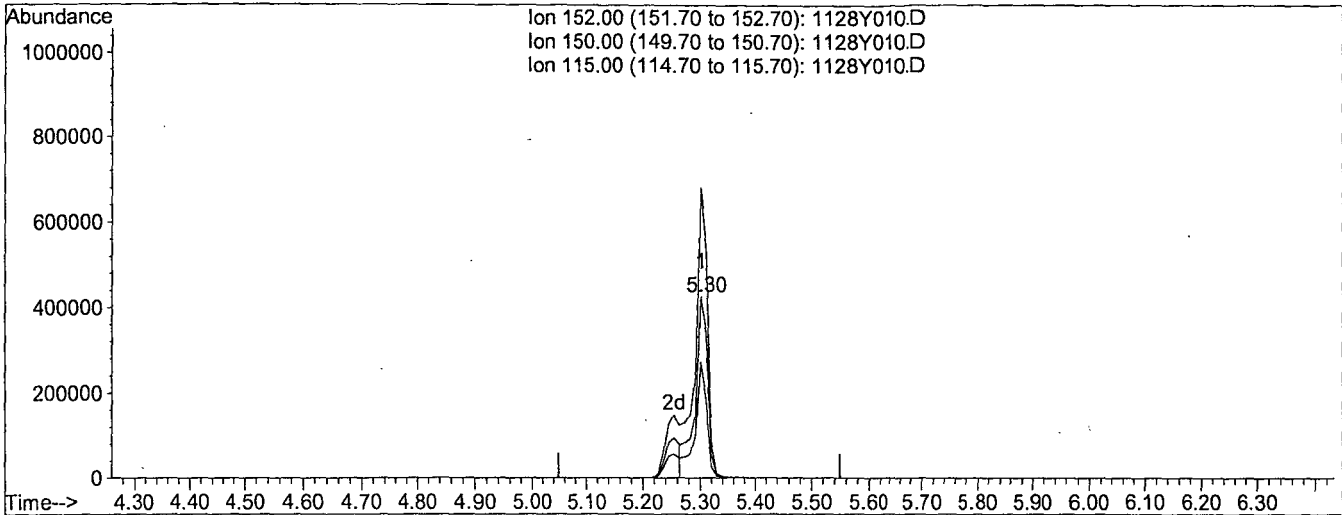


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE. 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:32 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 652352

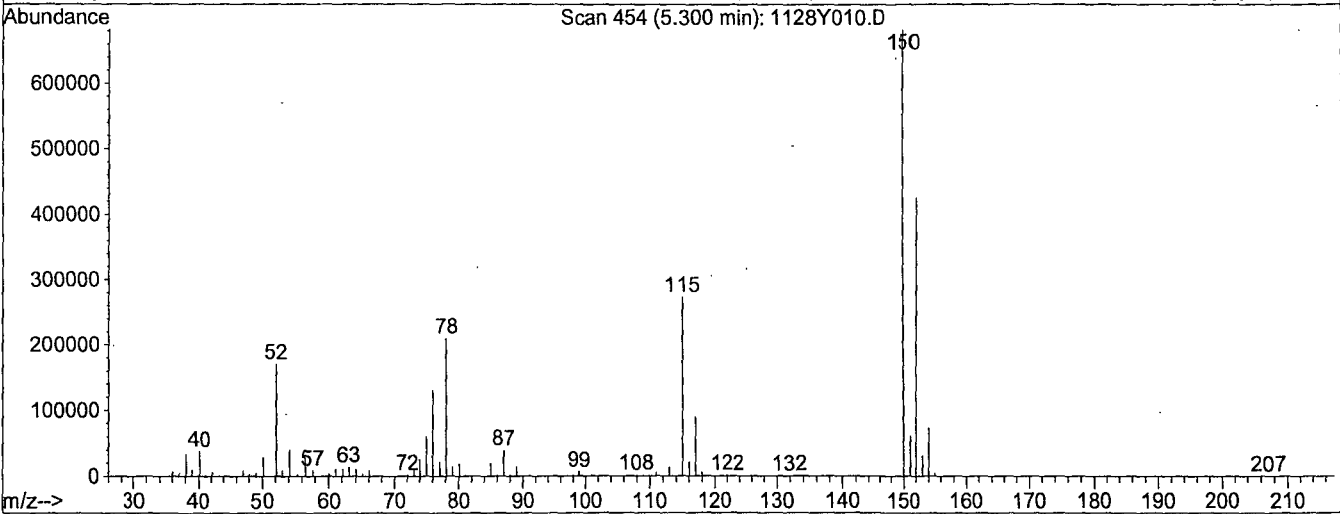
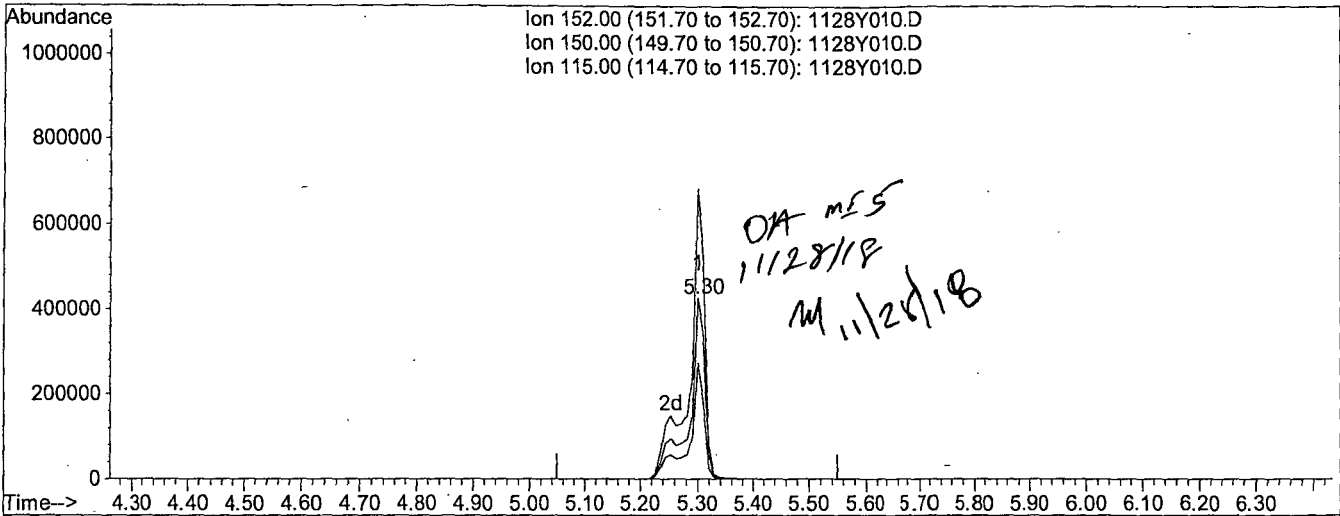
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.08
115.00	63.20	64.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:41 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(1S) (l)

5.30min 40.0000ppb m

response 817975

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.10
115.00	63.20	64.11
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 11/28/18  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y014.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2671	11	TM
2						
3						
4						
5						
6						
7						
8						
9						
10						
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33						
34						
35						
36						
37						
38						
39						
40						

Average

11.0

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y014.D Vial: 14  
 Acq On : 28 Nov 18 12:26 Operator: MA  
 Sample : SS ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 12:58 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	835108m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3156594	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1957153	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3684850	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3336185	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3221218	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2787828	555.84367	ppb	100



Quantitation Report

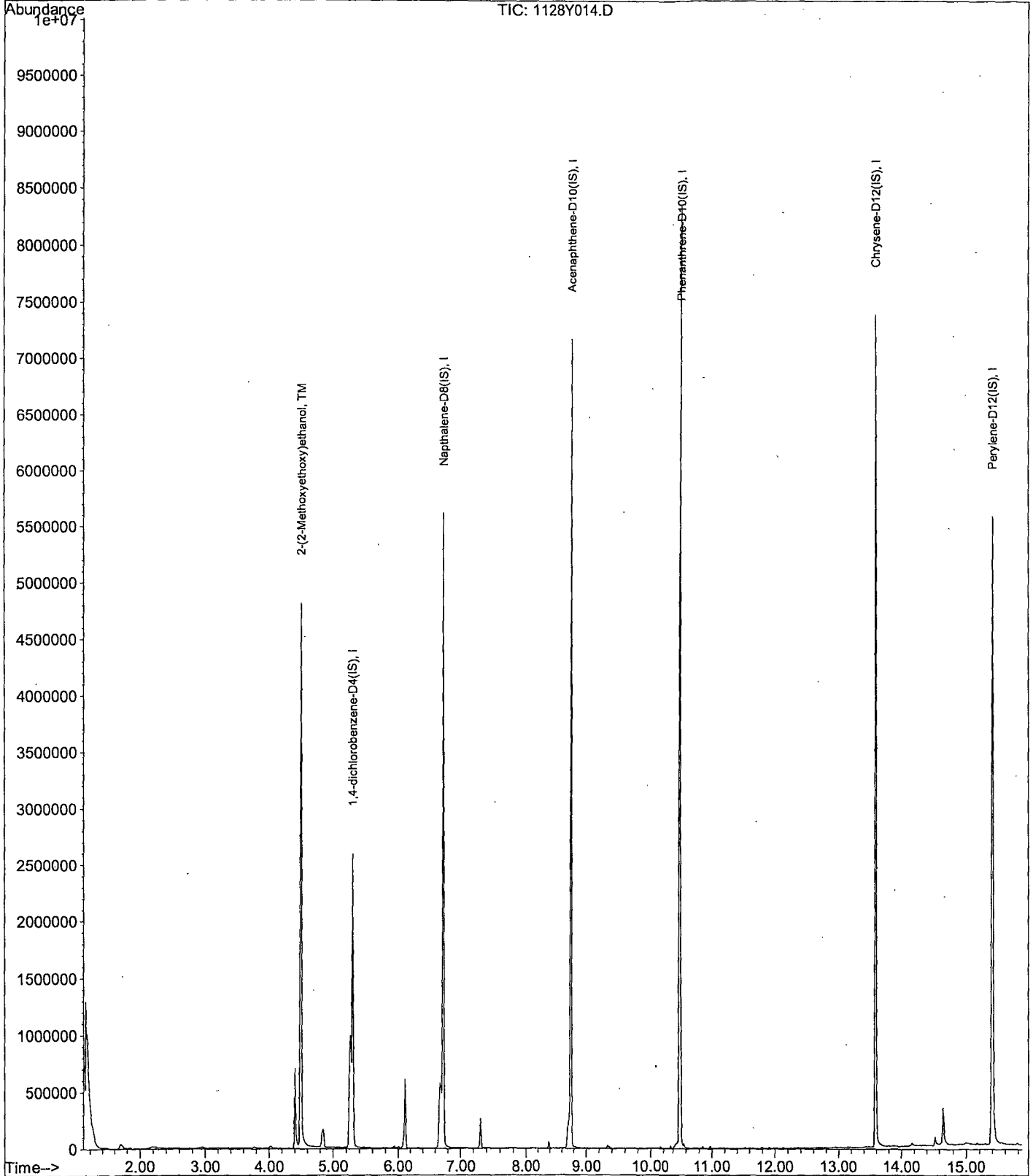
Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
Acq On : 28 Nov 18 12:26  
Sample : SS ug/ml MEE 08/01/18  
Misc : soil

Vial: 14  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 12:58 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

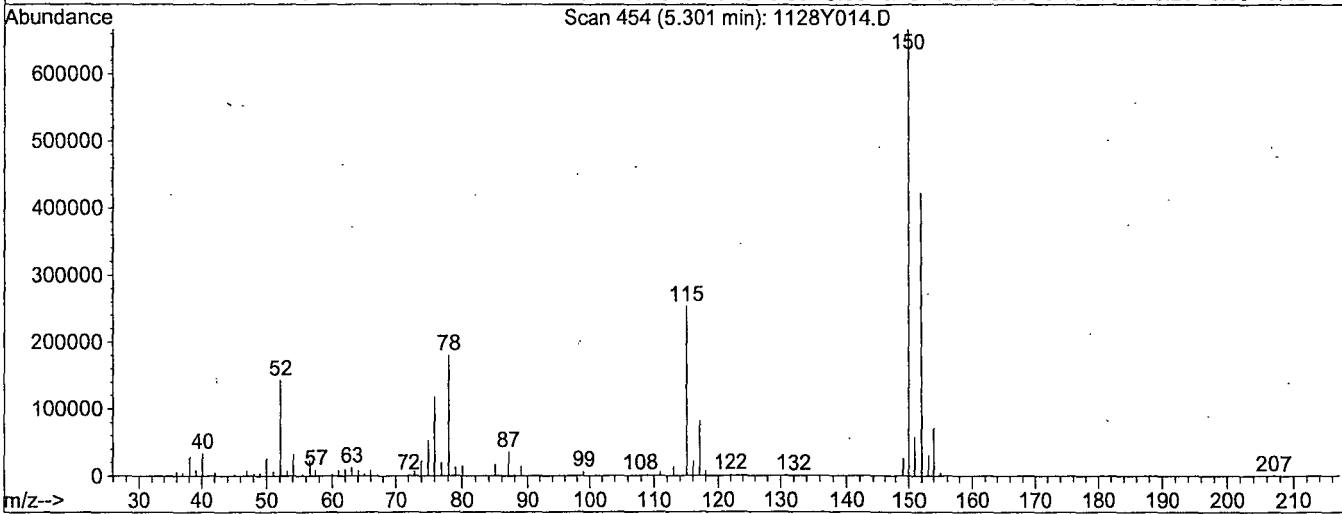
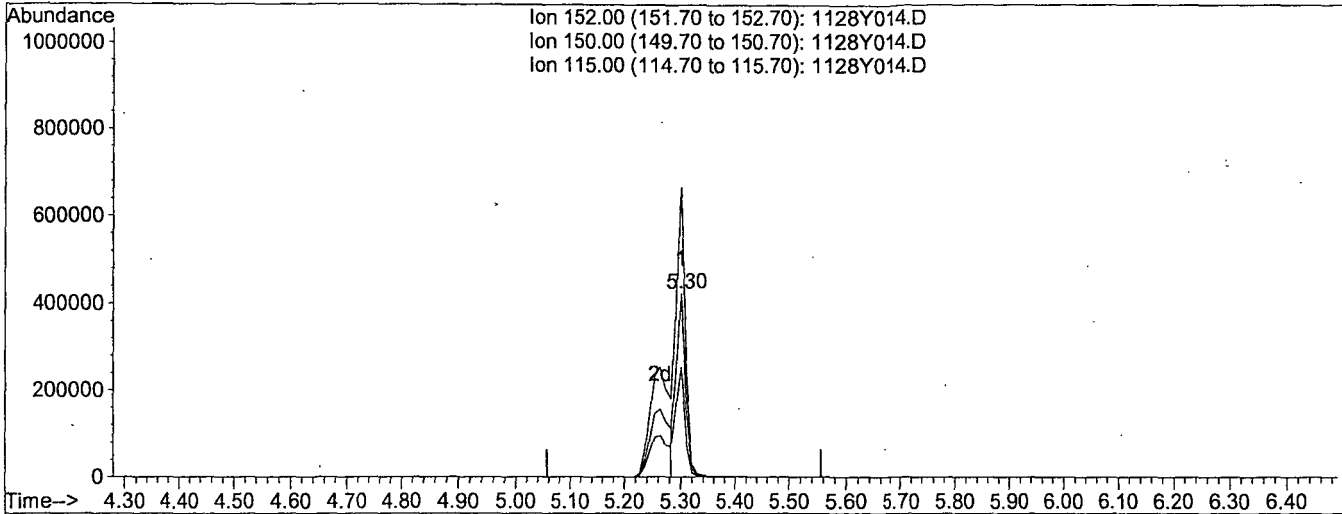


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 473674

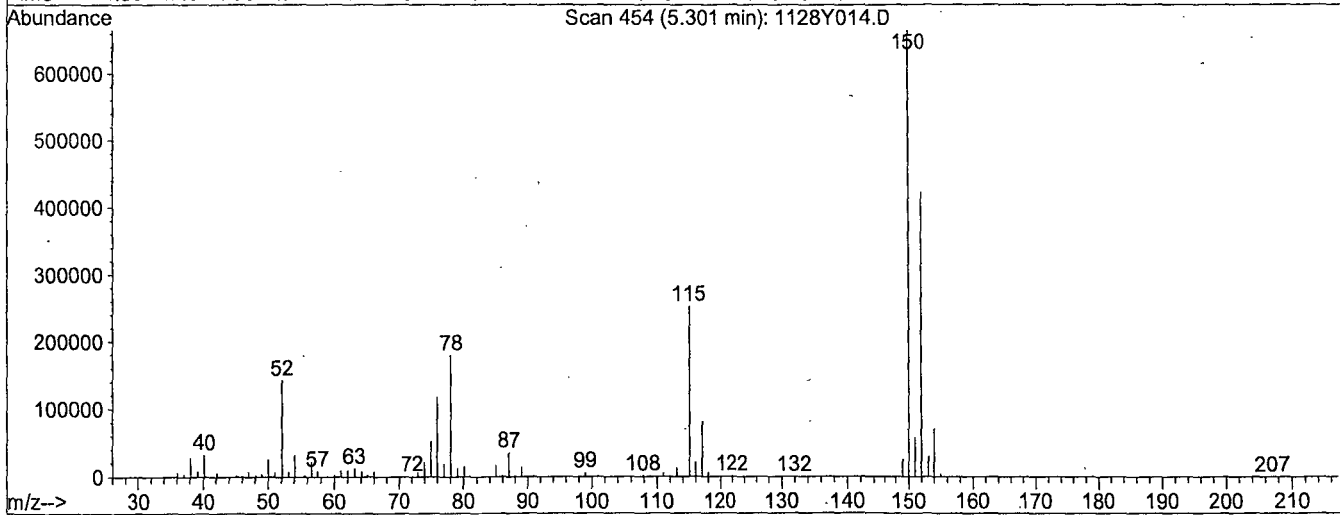
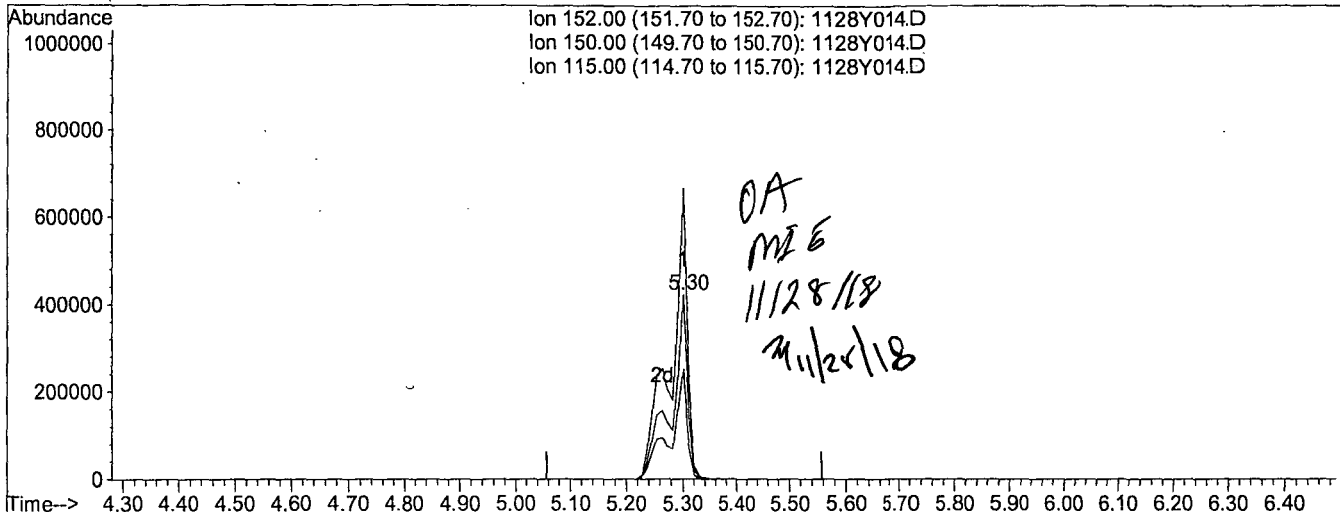
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.54
115.00	56.30	59.84
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 835108

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.52
115.00	56.30	59.85
0.00	0.00	0.00

2MEE -  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/29/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y057.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2337	2.7	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			2.7	

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y057.D  
 Acq On : 29 Jan 19 8:51  
 Sample : 500ug/mL mee 12/12/18  
 Misc : soil

Vial: 57  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 29 8:56 2019

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.22	152	614573	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.65	136	2630250	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1440513	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2797253	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2568643	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2576041	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.41	45	1795438	486.43662	ppb	96

Quantitation Report

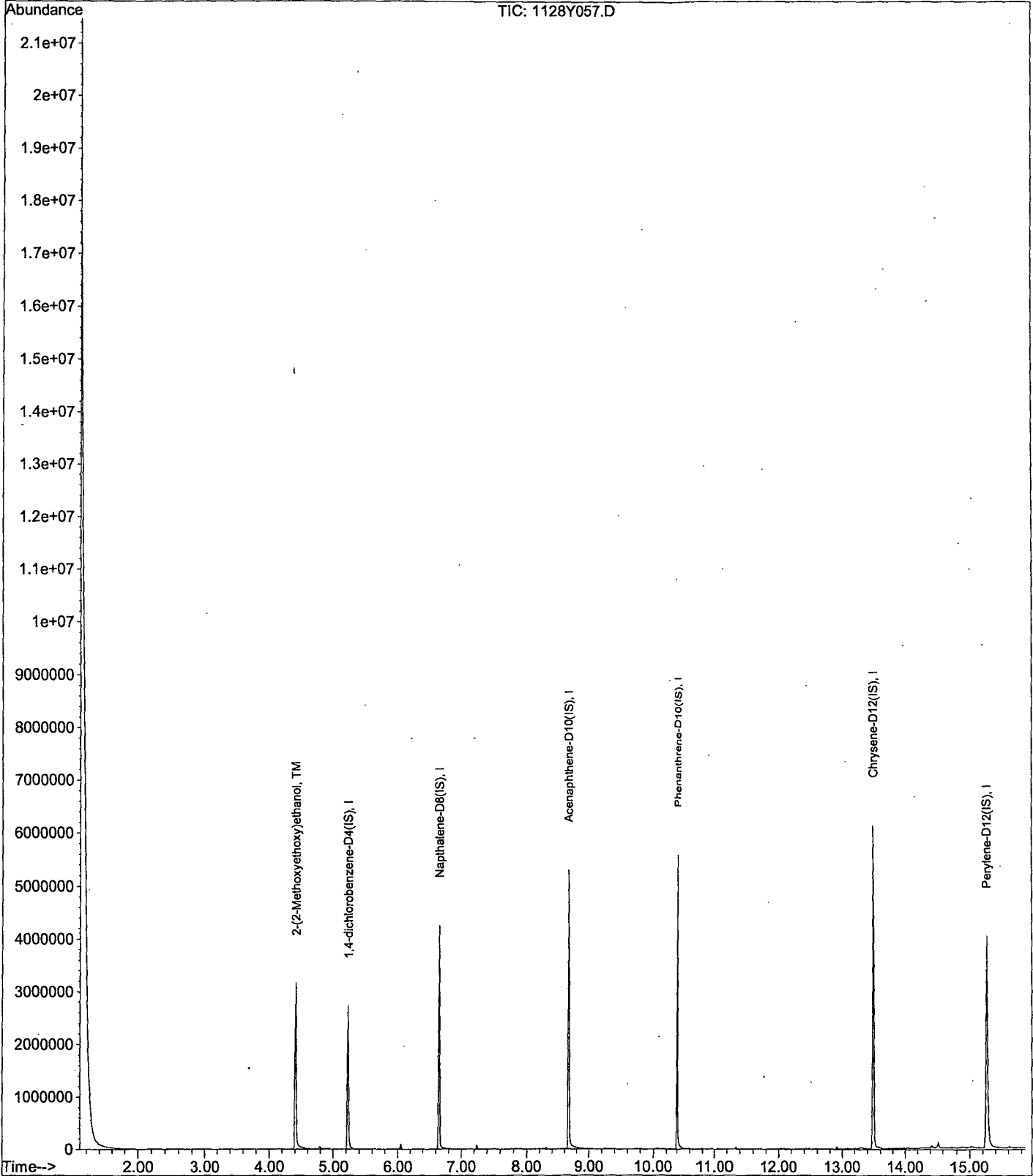
Data File : M:\YODA\DATA\Y181128M\1128Y057.D  
Acq On : 29 Jan 19 8:51  
Sample : 500ug/mL mee 12/12/18  
Misc : soil

Vial: 57  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 8:56 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/29/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y088.D

	Compound	MEAN	CCRF	%D	%Drift
1	1,4-dichlorobenzene-D4(IS)	ISTD			
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	Napthalene-D8(IS)	ISTD			
4	Acenaphthene-D10(IS)	ISTD			
5	Phenanthrene-D10(IS)	ISTD			
6	Chrysene-D12(IS)	ISTD			
7	Perylene-D12(IS)	ISTD			
8					
9					
10					
11					
12					
13					
14					
15					
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20					
21					
22					
23					
24					
25					
26					
27					
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29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			8.2	

2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y088.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
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33					
34					
35					
36					
37					
38					
39					
40	Average			8.2	



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
 Acq On : 29 Jan 19 21:24  
 Sample : 500ug/ml MEE 12/19/18  
 Misc : soil

Vial: 88  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	611145	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.66	136	2644721	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1462932	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2896073	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2668383	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2642413	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.41	45	1684434	458.92220	ppb	96

Quantitation Report

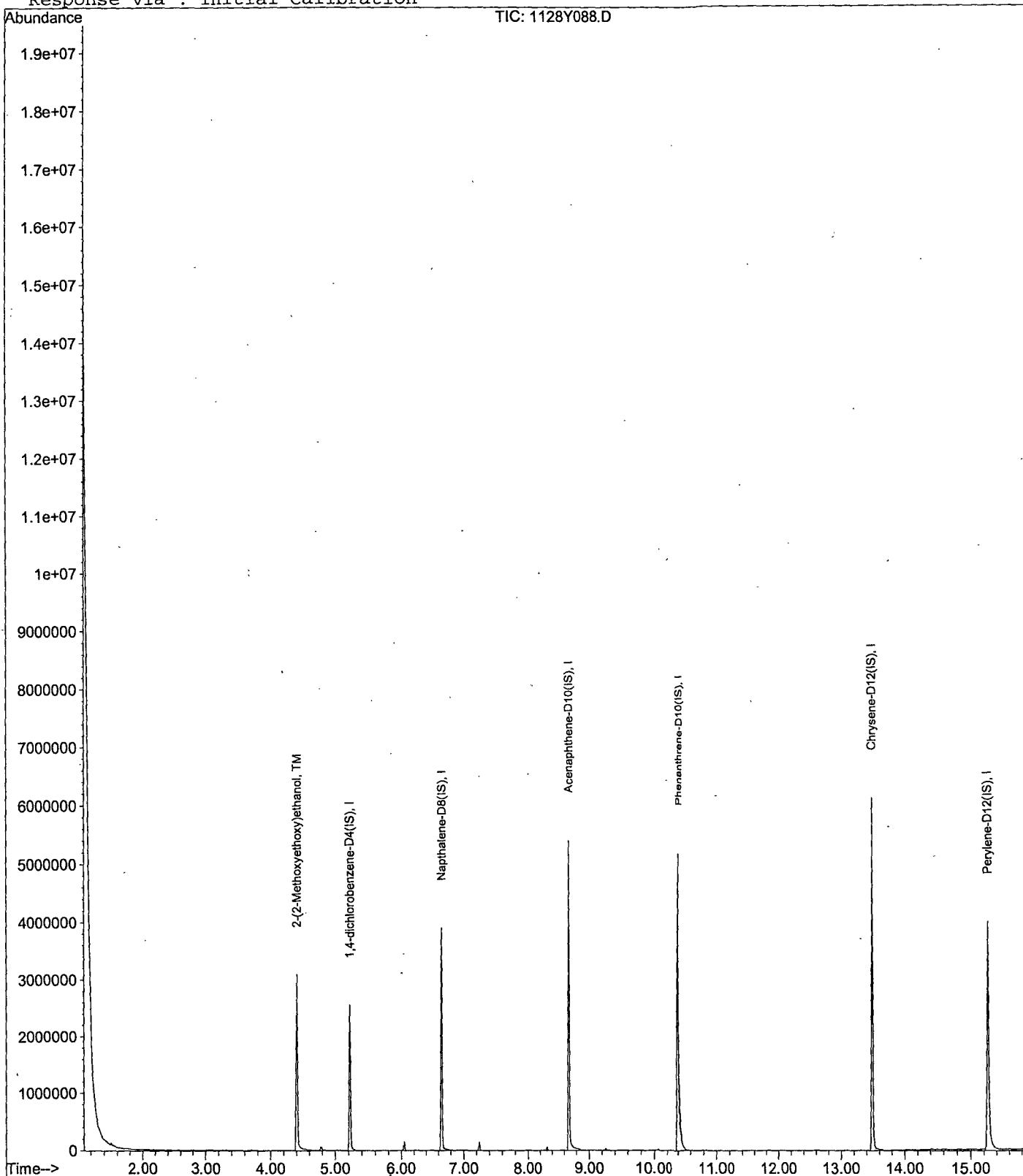
Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
Acq On : 29 Jan 19 21:24  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 88  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/30/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y094.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2563	6.7	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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32					
33					
34					
35					
36					
37					
38					
39					
40	Average			6.7	

Data File : M:\YODA\DATA\Y181128M\1128Y094.D Vial: 94  
 Acq On : 30 Jan 19 8:52 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 8:57 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	518699	40.00000	ppb	-0.07
3) Napthalene-D8 (IS)	6.65	136	2104684	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	1087736	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	2067856	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1821184	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1705599	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.44	45	1662065	533.53378	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

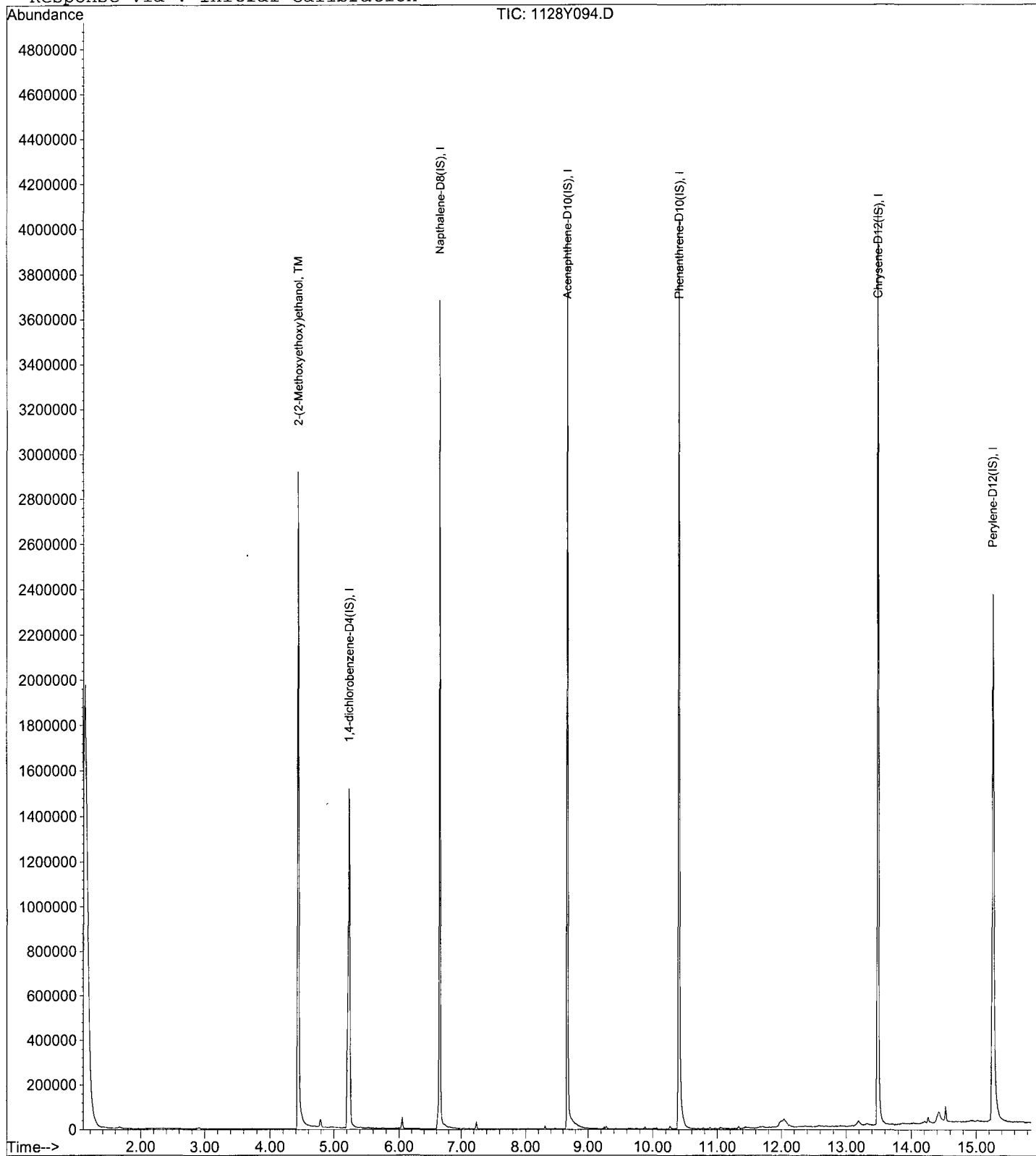
Data File : M:\YODA\DATA\Y181128M\1128Y094.D  
Acq On : 30 Jan 19 8:52  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 94  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 8:57 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/30/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y098.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2503	4.2	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
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36						
37						
38						
39						
40		Average			4.2	

Data File : M:\YODA\DATA\Y181128M\1128Y098.D Vial: 98  
 Acq On : 30 Jan 19 11:16 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 11:29 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	504597	40.00000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	2027190	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1053001	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	2013724	40.00000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1764522	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.25	264	1645023	40.00000	ppb	-0.15

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.44	45	1578886	520.99726	ppb	94

Quantitation Report

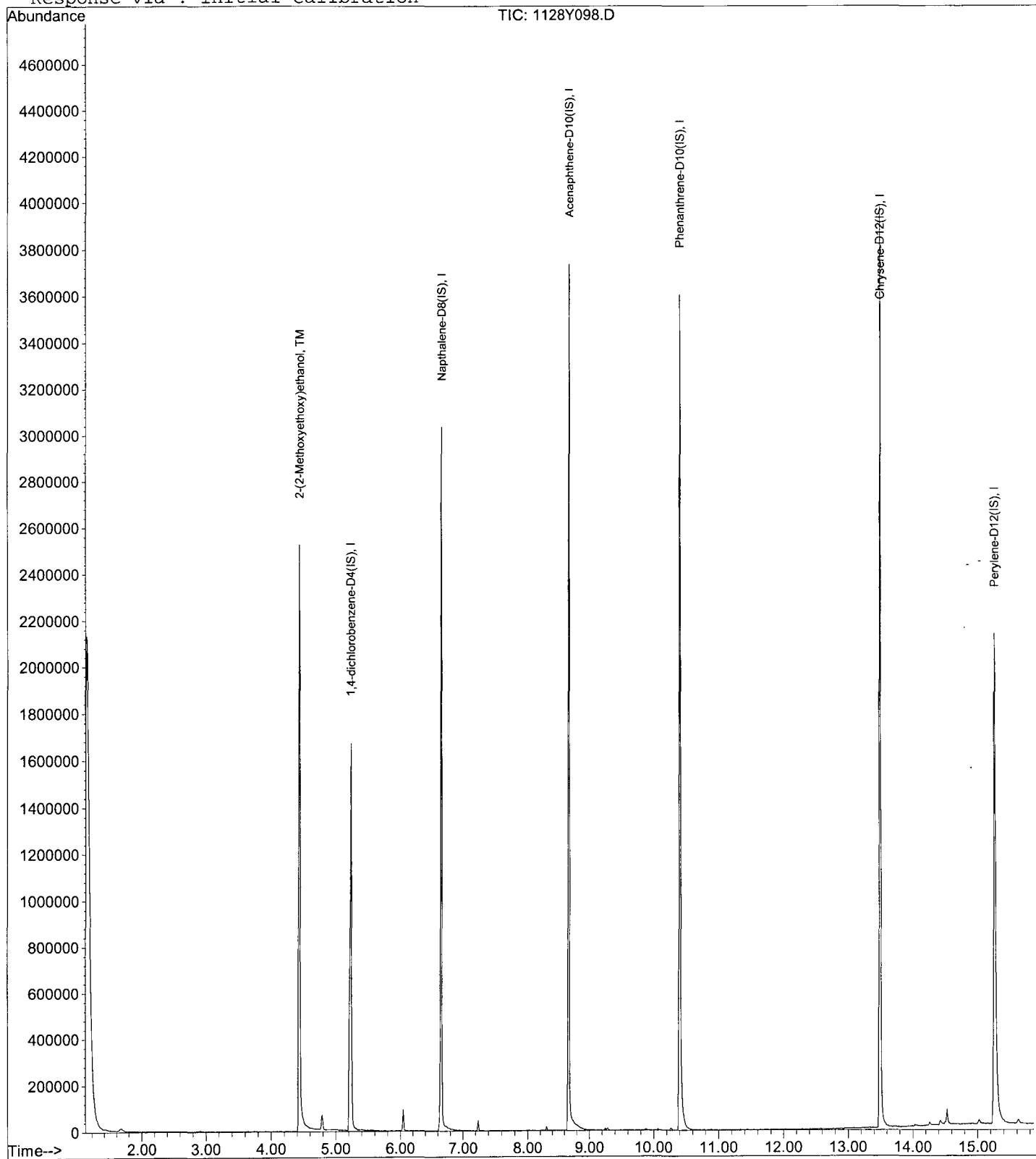
Data File : M:\YODA\DATA\Y181128M\1128Y098.D  
Acq On : 30 Jan 19 11:16  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 98  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 11:29 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 9:32  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y101.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2443	1.7	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
8					
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39					
40	Average			1.7	

Data File : M:\YODA\DATA\Y181128M\1128Y101.D Vial: 1  
 Acq On : 1 Feb 19 9:32 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 9:55 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	468889	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1873588	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	981470	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1867635	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1576721	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1451631	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.46	45	1431881	508.47103	ppb	95

Quantitation Report

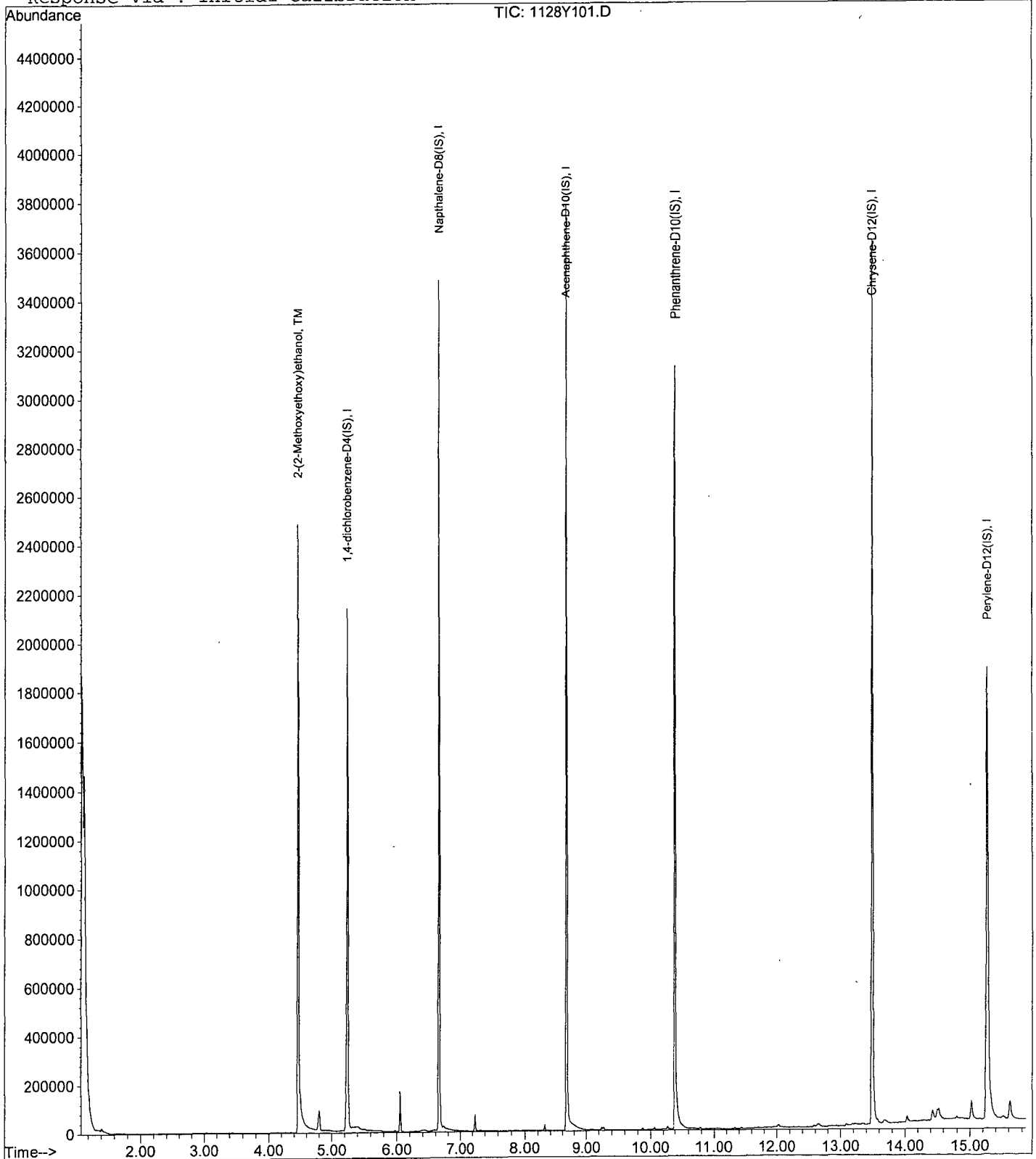
Data File : M:\YODA\DATA\Y181128M\1128Y101.D  
Acq On : 1 Feb 19 9:32  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 1  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 9:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 10:44  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y104.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2321	3.4	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
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39						
40						

Average

3.4

Data File : M:\YODA\DATA\Y181128M\1128Y104.D Vial: 4  
 Acq On : 1 Feb 19 10:44 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 11:08 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	464116	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1879796	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	985125	40.00000	ppb	-0.08
5) Phenanthrene-D10 (IS)	10.40	188	1843557	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1605500	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1444131	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.47	45	1346483	483.06288	ppb	92

Quantitation Report

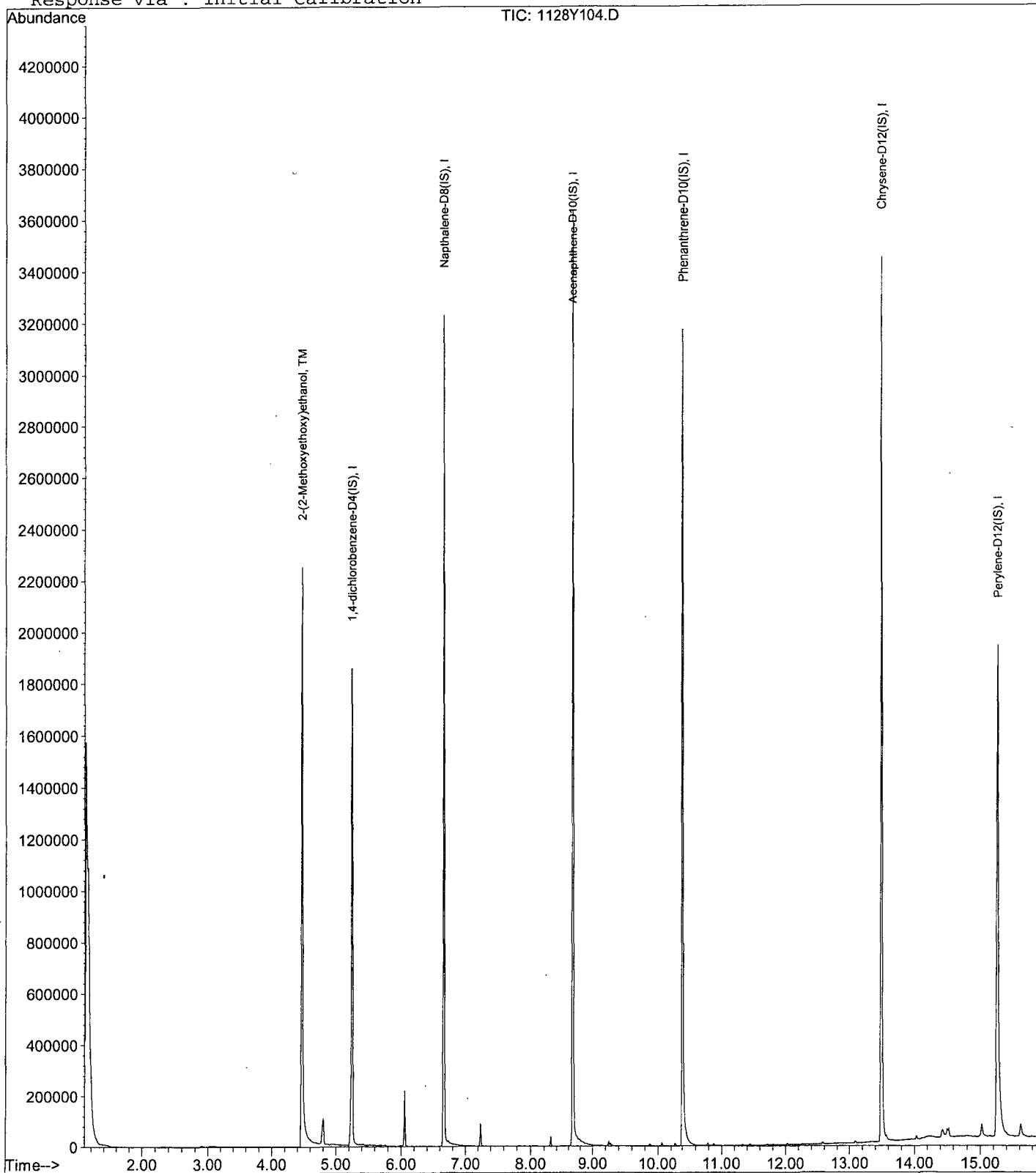
Data File : M:\YODA\DATA\Y181128M\1128Y104.D  
Acq On : 1 Feb 19 10:44  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 11:08 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y181128M\1128Y075.D Vial: 75  
 Acq On : 29 Jan 19 16:16 Operator: MA  
 Sample : AZ85562W24 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	467815	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1901395	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	997037	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1967331	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1720625	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1595477	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report

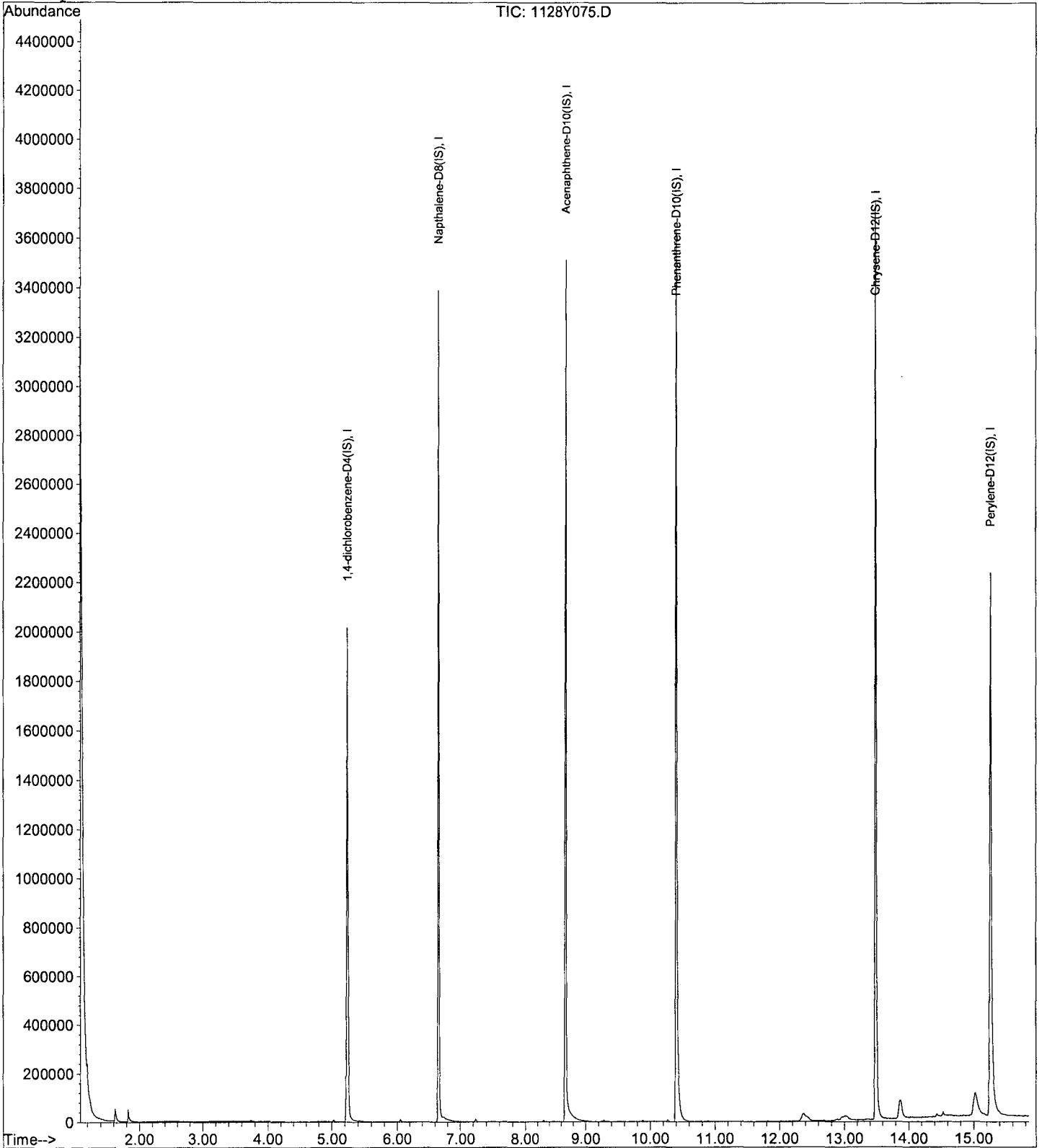
Data File : M:\YODA\DATA\Y181128M\1128Y075.D  
Acq On : 29 Jan 19 16:16  
Sample : AZ85562W24 2/500  
Misc : soil

Vial: 75  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y076.D Vial: 76  
 Acq On : 29 Jan 19 16:40 Operator: MA  
 Sample : AZ85563W05 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	375546	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1547149	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	796285	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1584016	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1396626	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1300461	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

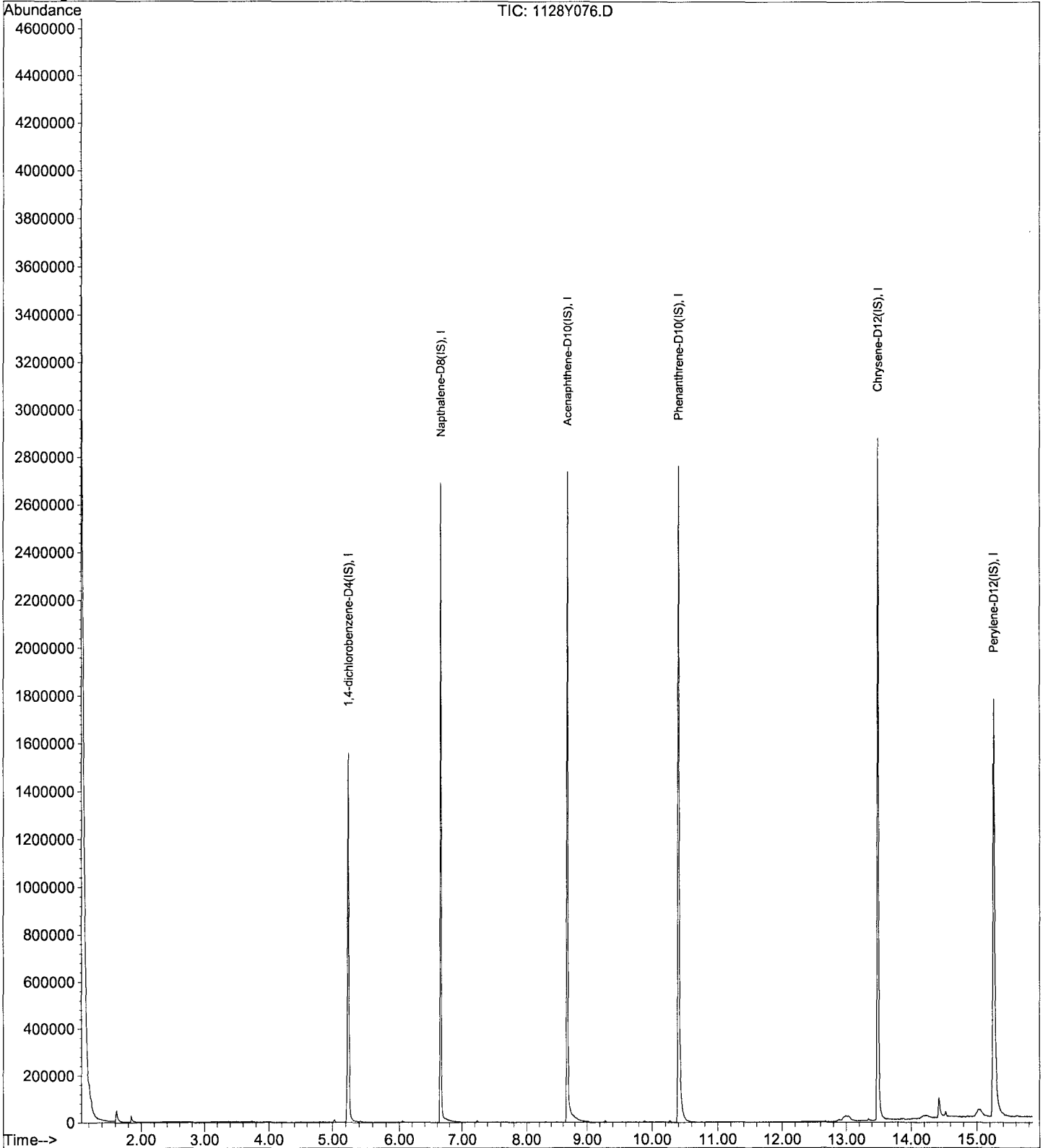
Data File : M:\YODA\DATA\Y181128M\1128Y076.D  
Acq On : 29 Jan 19 16:40  
Sample : AZ85563W05 2/500  
Misc : soil

Vial: 76  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y077.D Vial: 77  
 Acq On : 29 Jan 19 17:03 Operator: MA  
 Sample : AZ85565W19 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	412590	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1675951	40.0000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	953136	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1977071	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1722885	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1573686	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

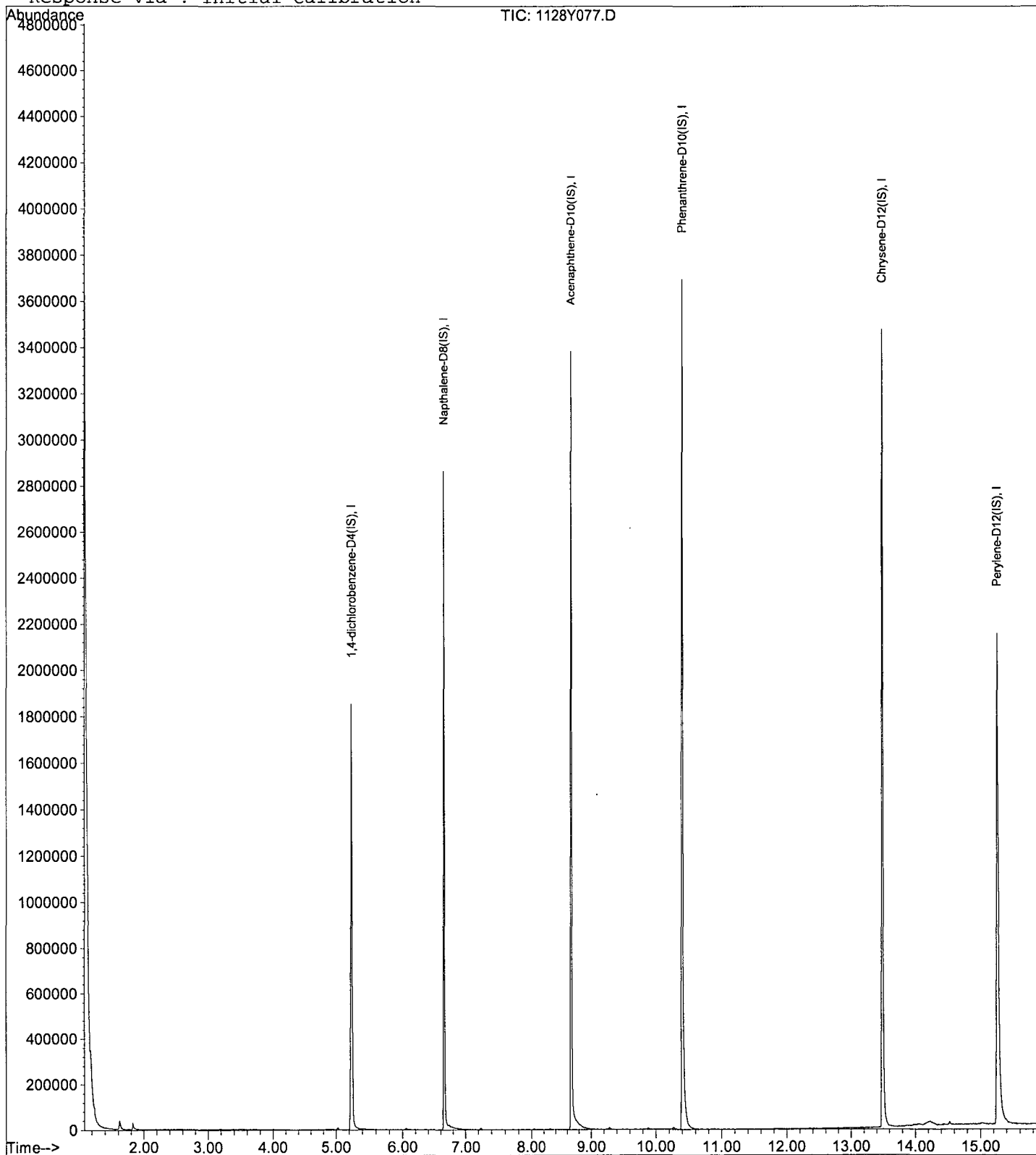
Data File : M:\YODA\DATA\Y181128M\1128Y077.D  
Acq On : 29 Jan 19 17:03  
Sample : AZ85565W19 2/500  
Misc : soil

Vial: 77  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y078.D Vial: 78  
 Acq On : 29 Jan 19 17:27 Operator: MA  
 Sample : AZ85567W19 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	409113	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	1667330	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	944567	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	1931614	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1579108	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1434837	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

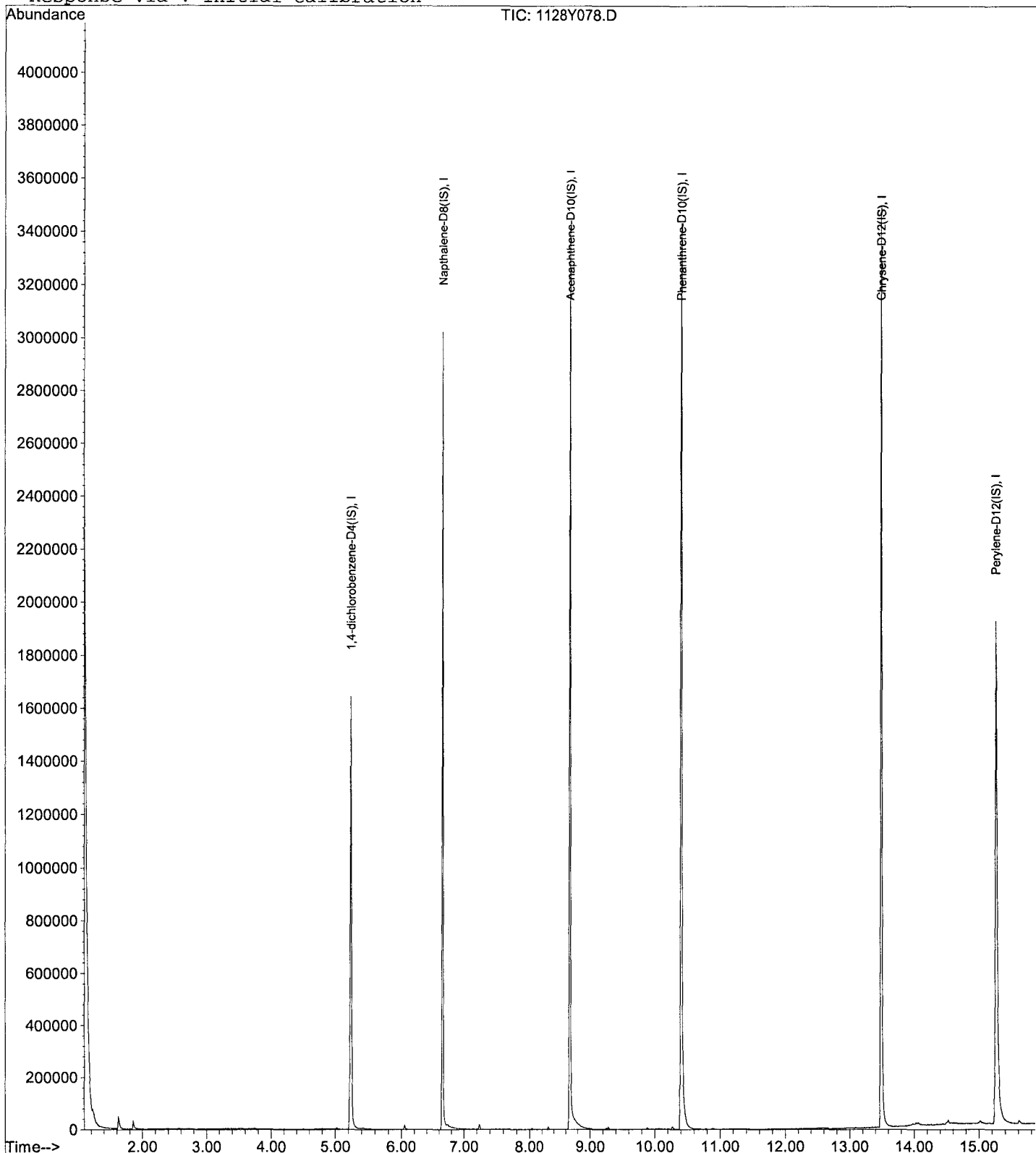
Data File : M:\YODA\DATA\Y181128M\1128Y078.D  
Acq On : 29 Jan 19 17:27  
Sample : AZ85567W19 2/500  
Misc : soil

Vial: 78  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y096.D Vial: 96  
 Acq On : 30 Jan 19 9:41 Operator: MA  
 Sample : AZ85569W19 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 10:03 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	337996	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	1498813	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	807093	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1549509	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1129294	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1034590	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report

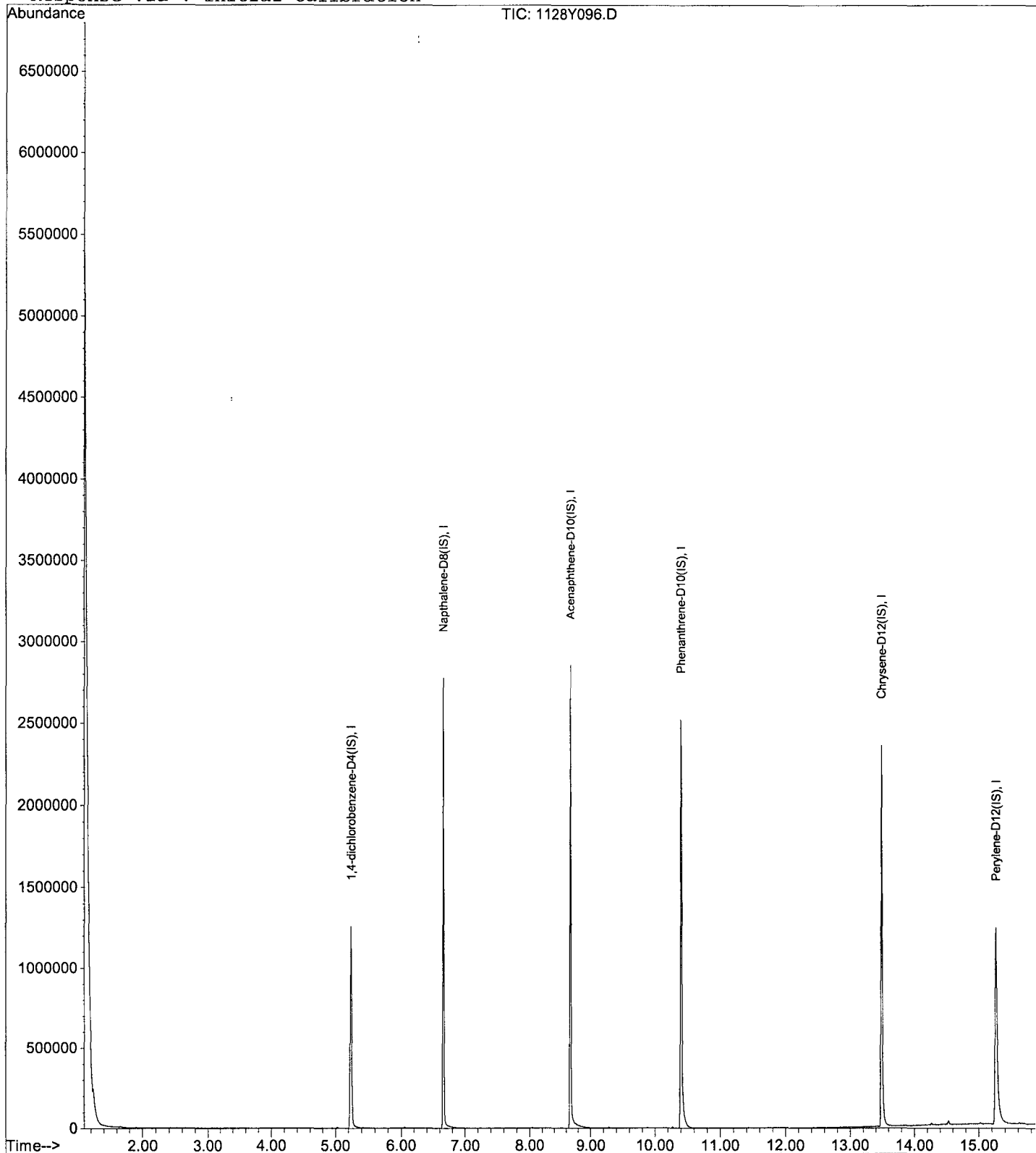
Data File : M:\YODA\DATA\Y181128M\1128Y096.D  
Acq On : 30 Jan 19 9:41  
Sample : AZ85569W19 2/500  
Misc : soil

Vial: 96  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 10:03 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y086.D Vial: 86  
 Acq On : 29 Jan 19 20:36 Operator: MA  
 Sample : 190128A BLK 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	429029	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	1804755	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	894647	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	1665679	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1447939	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1322650	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

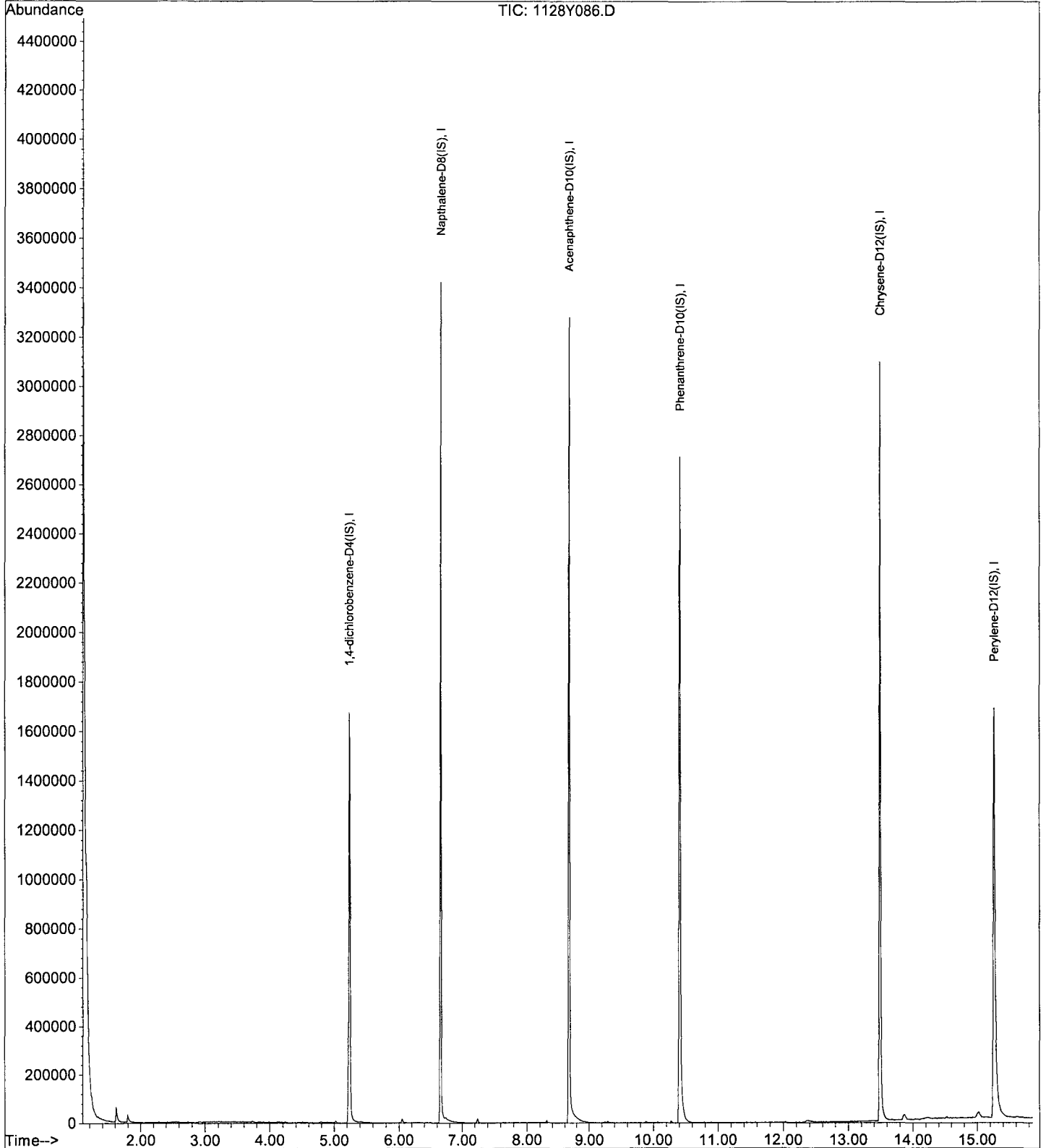
Data File : M:\YODA\DATA\Y181128M\1128Y086.D  
Acq On : 29 Jan 19 20:36  
Sample : 190128A BLK 2/500  
Misc : soil

Vial: 86  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y102.D Vial: 2  
 Acq On : 1 Feb 19 9:56 Operator: MA  
 Sample : 190128A LCS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 10:27 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	307091	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1402122	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	792591	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1492774	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1077392	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	971847	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.48	45	163673	88.7441	ppb	95

Quantitation Report

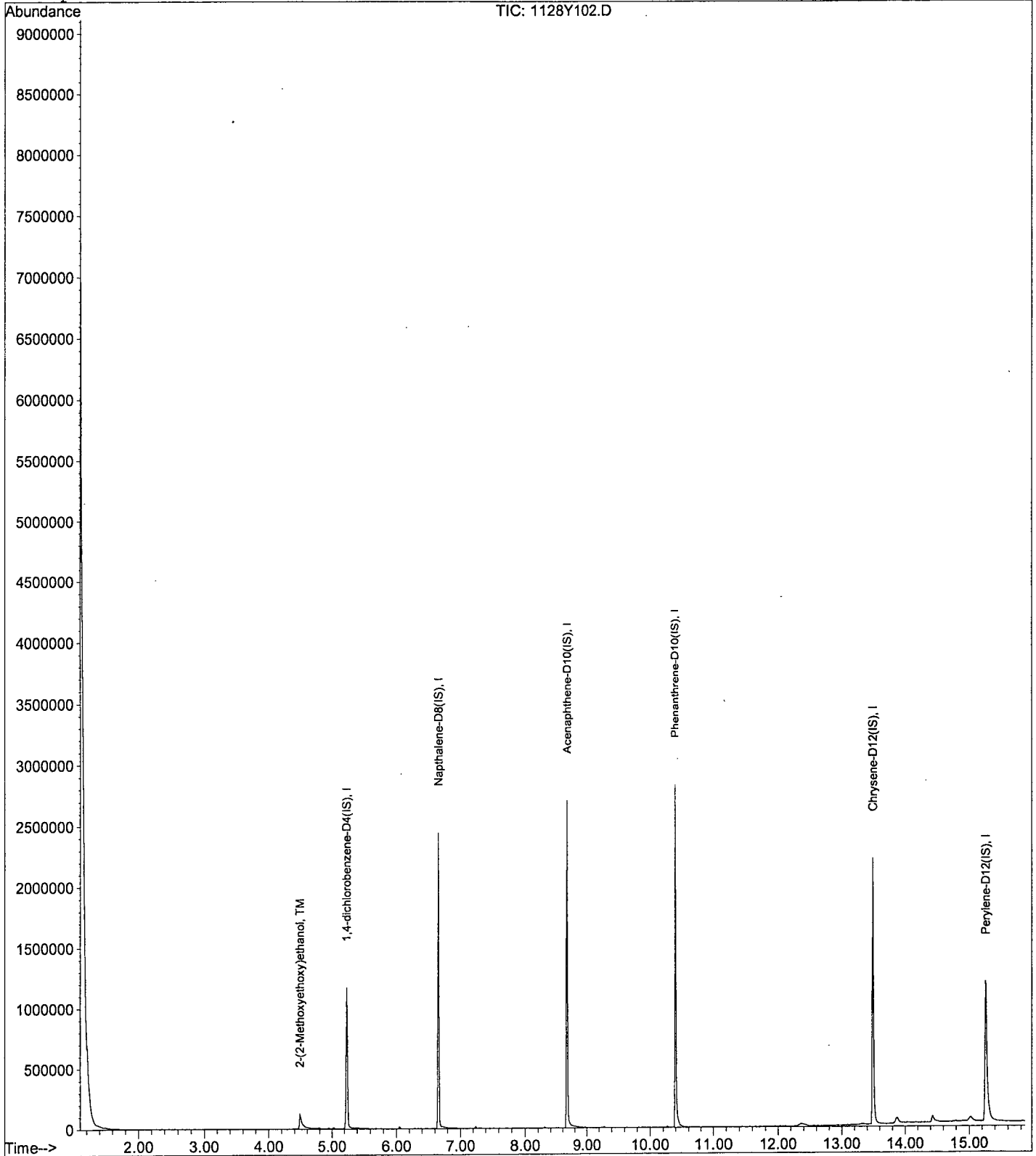
Data File : M:\YODA\DATA\Y181128M\1128Y102.D  
Acq On : 1 Feb 19 9:56  
Sample : 190128A LCS-1 2/500  
Misc : soil

Vial: 2  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 10:27 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y103.D Vial: 3  
 Acq On : 1 Feb 19 10:19 Operator: MA  
 Sample : 190128A LCSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 10:27 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	403357	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1743268	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	949174	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1744190	40.0000	ppb	-0.09
6) Chrysene-D12 (IS)	13.49	240	1349741	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.25	264	1235186	40.0000	ppb	-0.15

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.51	45	141807	58.5379	ppb	94

Quantitation Report

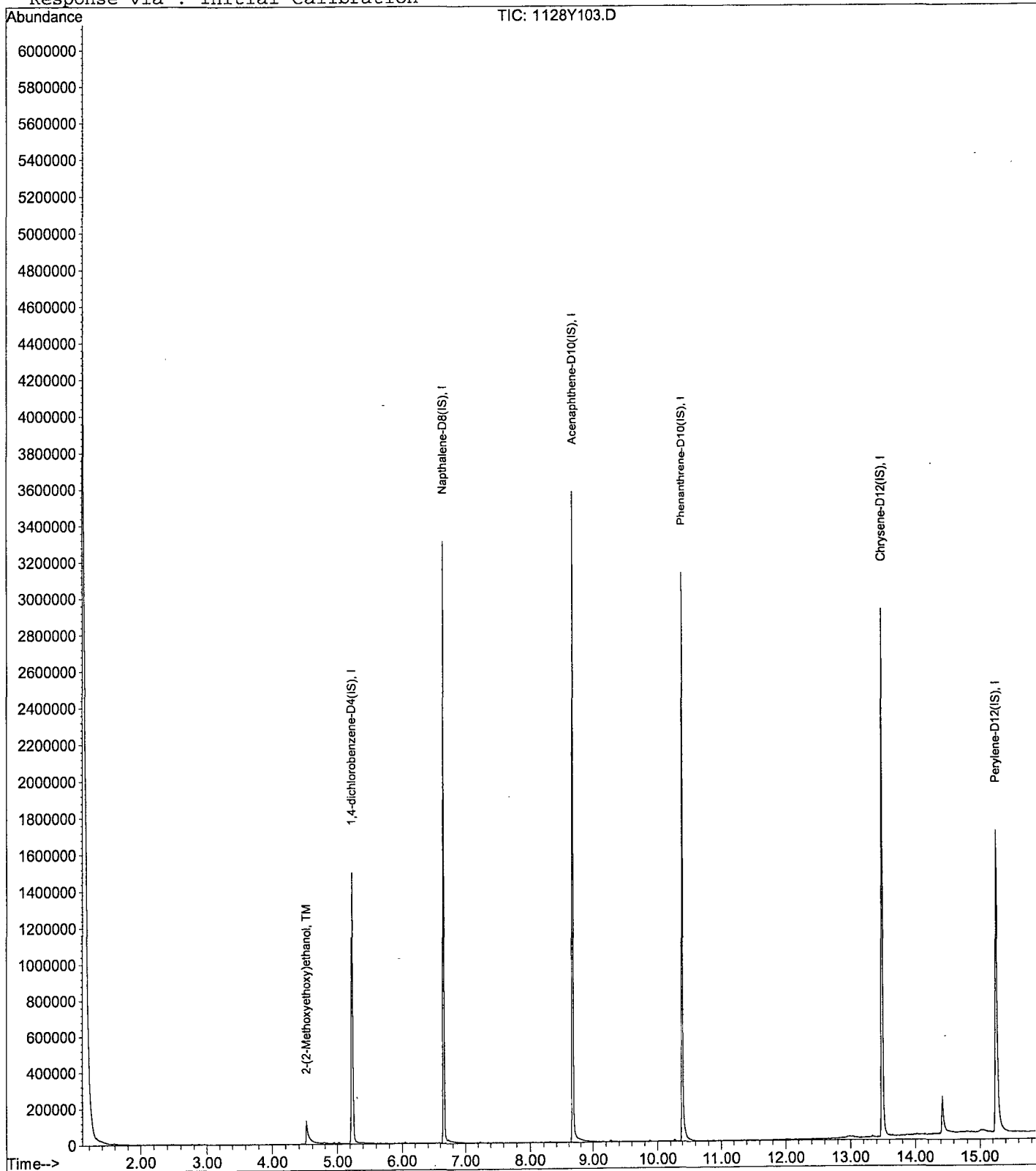
Data File : M:\YODA\DATA\Y181128M\1128Y103.D  
Acq On : 1 Feb 19 10:19  
Sample : 190128A LCSD-1 2/500  
Misc : soil

Vial: 3  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 10:27 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y073.D Vial: 73  
 Acq On : 29 Jan 19 15:29 Operator: MA  
 Sample : AZ85562W26 MS-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	386171	40.0000	ppb	-0.07
3) Napthalene-D8 (IS)	6.66	136	1608492	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	868323	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	1743171	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1495432	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1377266	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.48	45	169579	73.1176	ppb	97



Quantitation Report

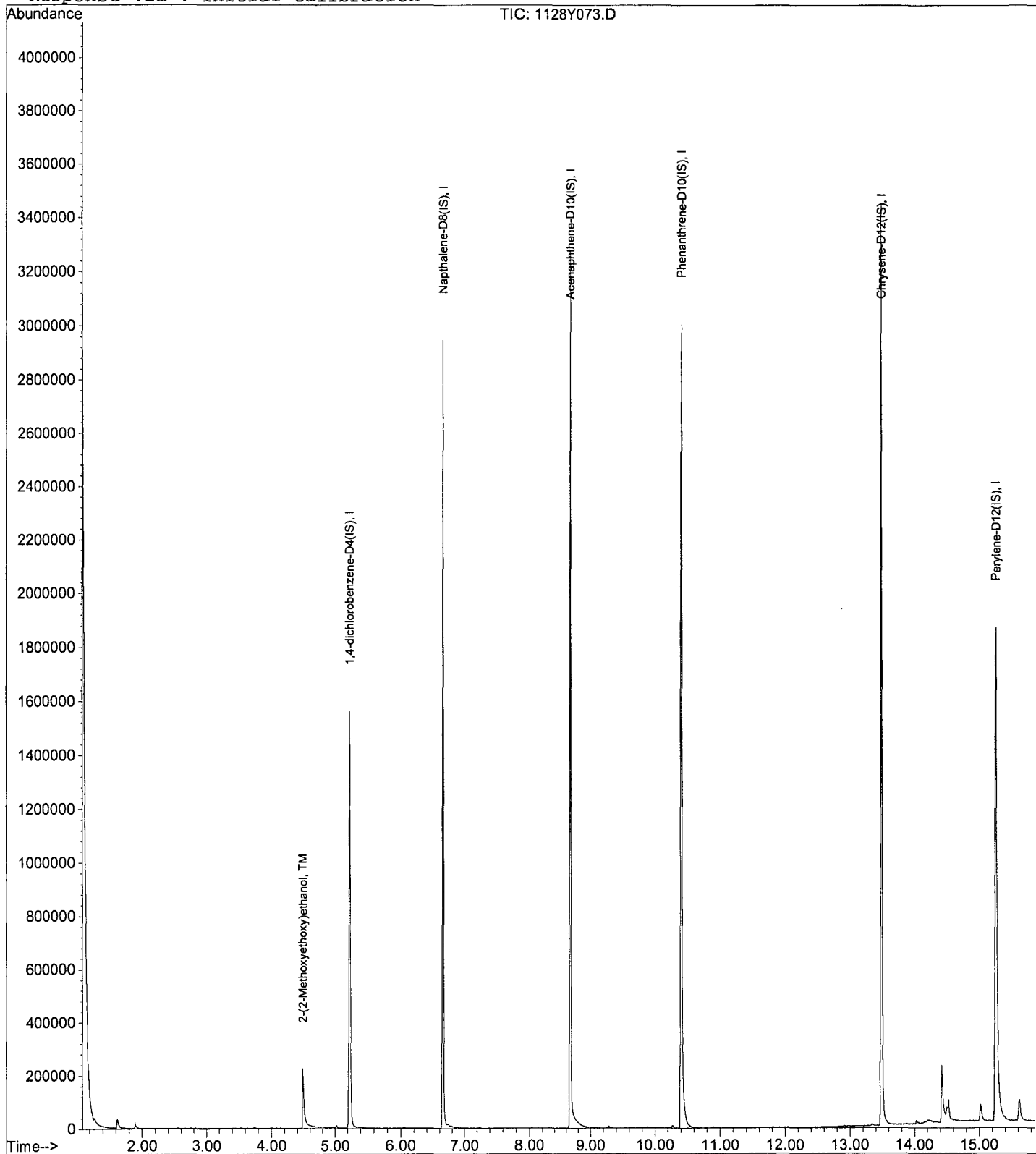
Data File : M:\YODA\DATA\Y181128M\1128Y073.D  
Acq On : 29 Jan 19 15:29  
Sample : AZ85562W26 MS-1 2/500  
Misc : soil

Vial: 73  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y074.D Vial: 74  
 Acq On : 29 Jan 19 15:52 Operator: MA  
 Sample : AZ85562W25 MSD-1 2/500 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 30 6:07 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	348349	40.0000	ppb	-0.06
3) Napthalene-D8 (IS)	6.66	136	1414776	40.0000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	877453	40.0000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	1763067	40.0000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1410614	40.0000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1282055	40.0000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.47	45	161555	77.2210	ppb	94

Quantitation Report

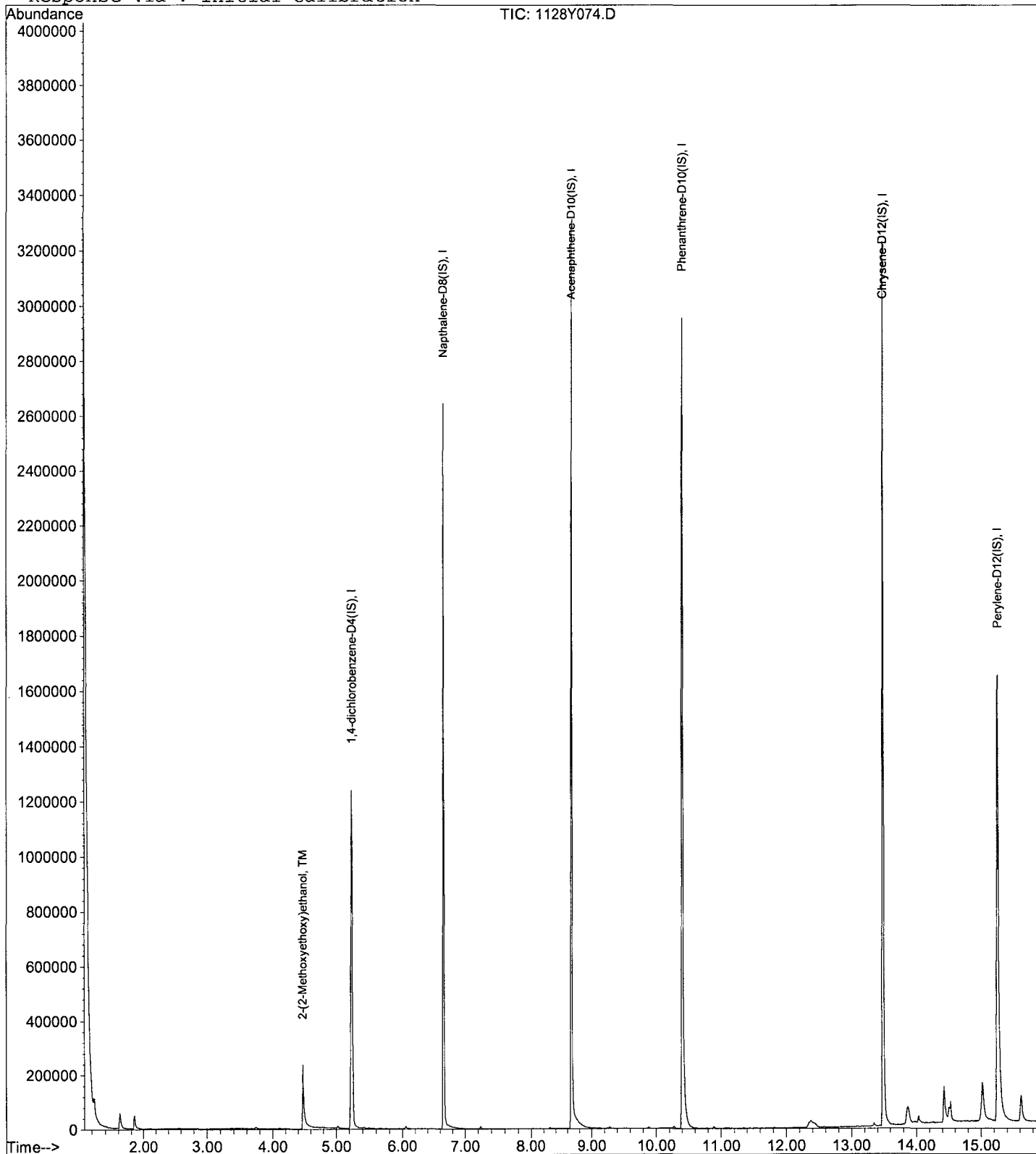
Data File : M:\YODA\DATA\Y181128M\1128Y074.D  
Acq On : 29 Jan 19 15:52  
Sample : AZ85562W25 MSD-1 2/500  
Misc : soil

Vial: 74  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 6:07 2019

Quant Results File: YMEE1128.RES

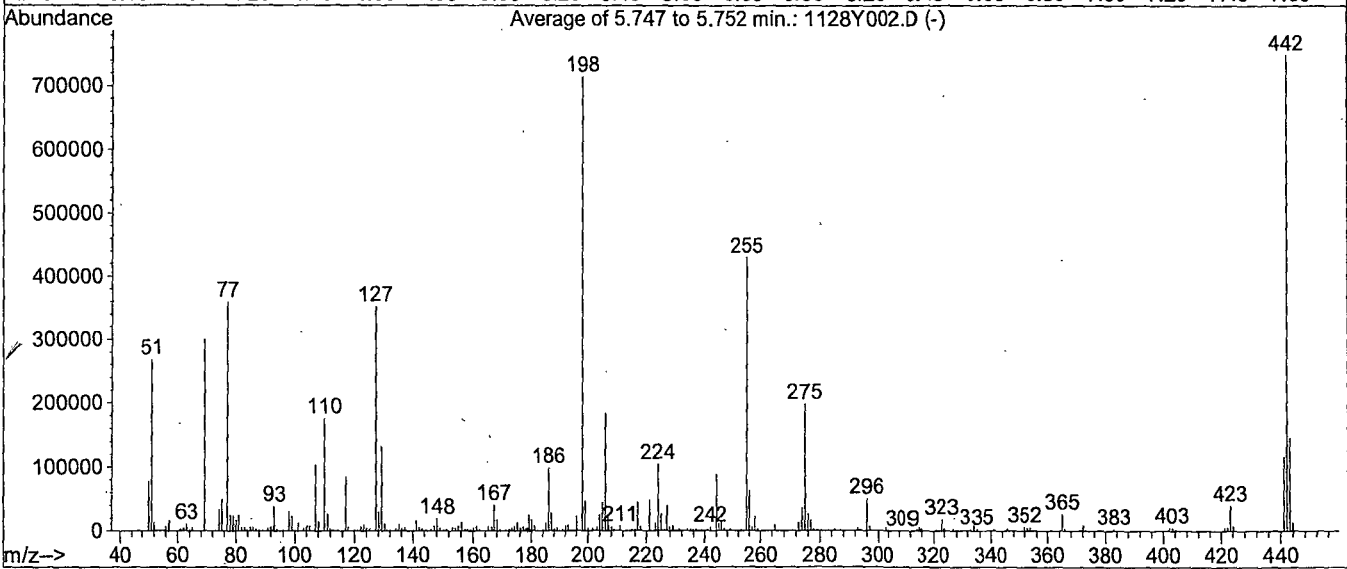
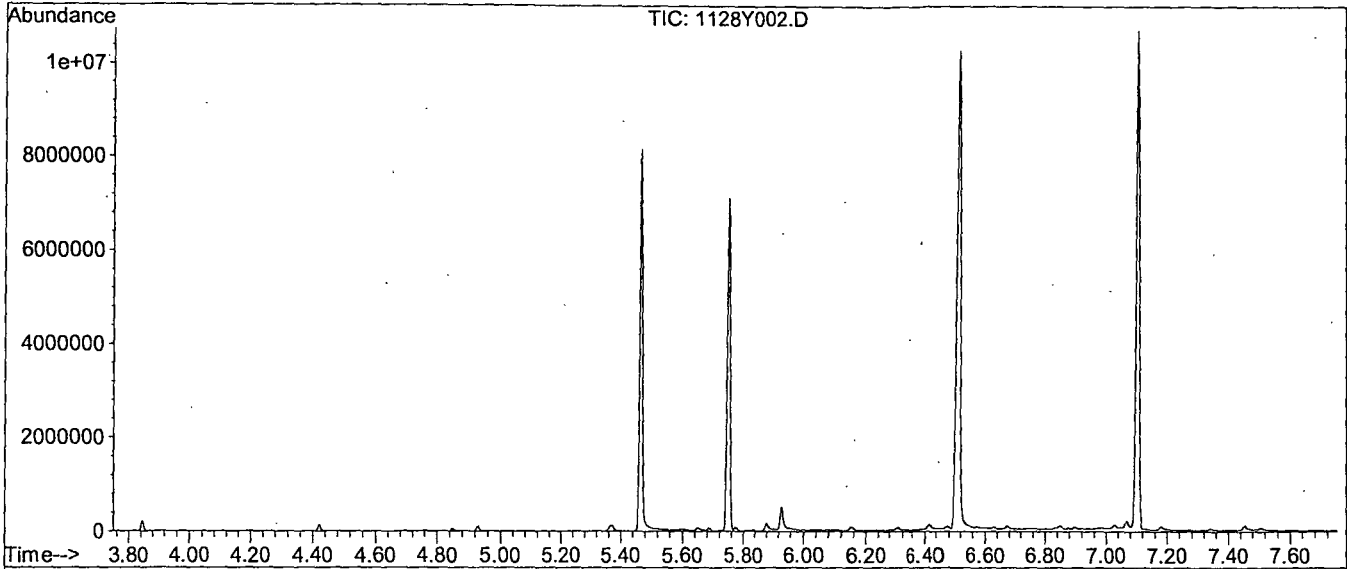
Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
 Acq On : 28 Nov 18 7:30  
 Sample : SV Tune 03/07/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 865, 866, 867; Background Corrected with Scan 856

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	37.6	268391	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	1292	PASS
127	198	10	80	49.3	352384	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	714581	PASS
199	198	5	9	6.6	46827	PASS
275	198	10	60	27.6	197547	PASS
365	198	1	100	3.7	26576	PASS
441	442	0.01	24	15.6	116851	PASS
442	198	50	150	104.9	749675	PASS
443	442	15	24	19.5	145880	PASS

M:\YODA\DATA\Y181128M\1128Y002.D

Data File Name: 1128Y002.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 28 Nov 2018 07:30  
Method File: DFTPP2.M  
Sample Name: SV Tune 03/07/18  
Vial Number: 2  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	75896800
2)	DDD	6.90	747340
3)	DDE	7.03	414795

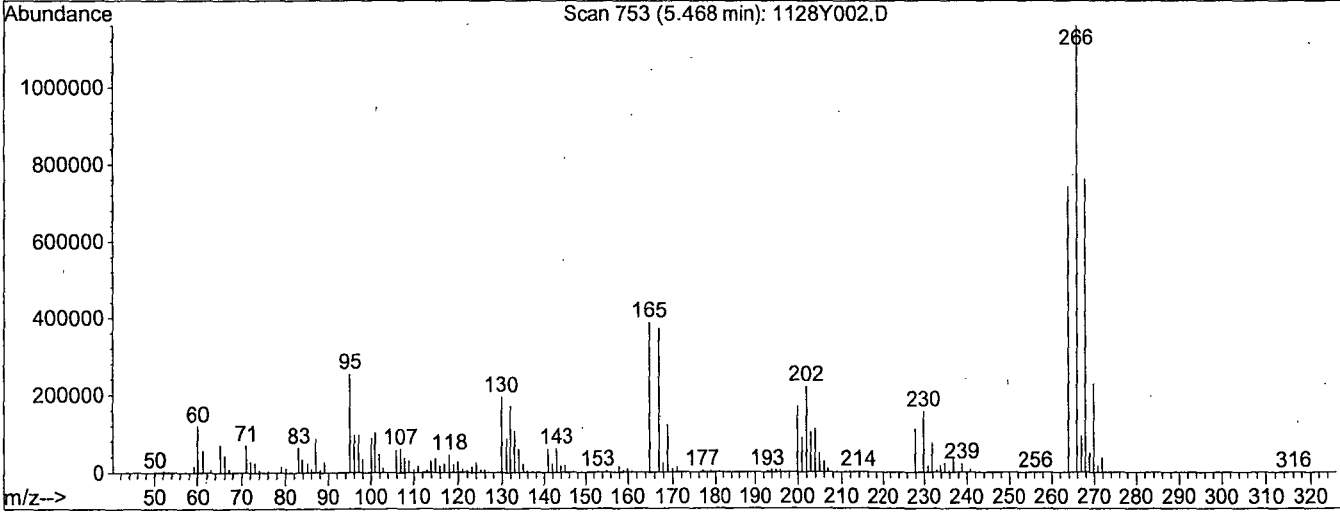
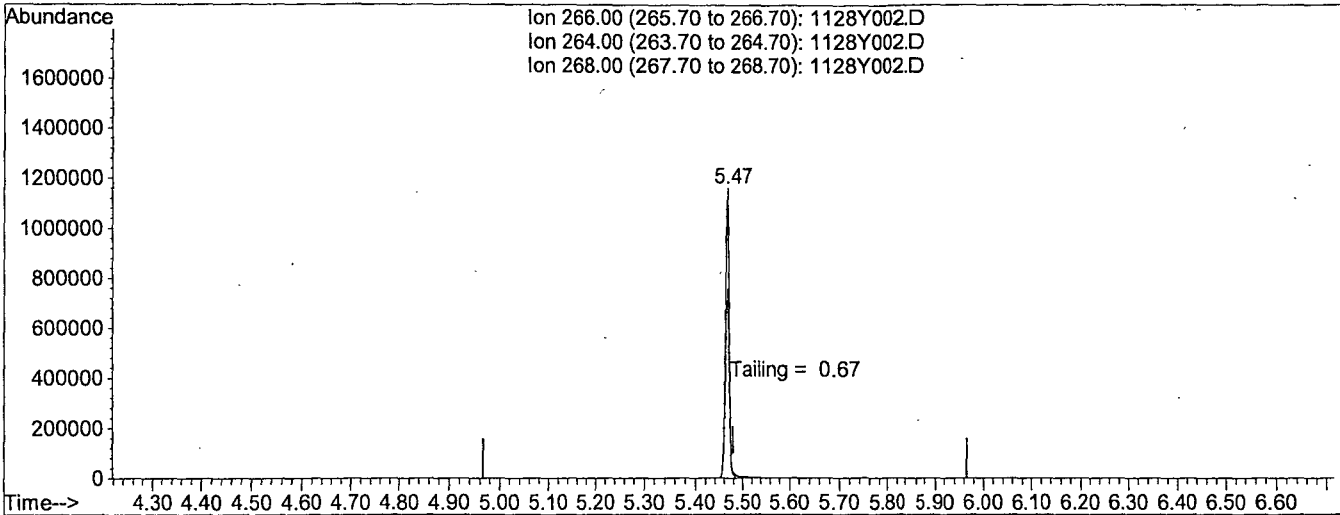
Breakdown 1.51

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D  
Acq On : 28 Nov 18 7:30  
Sample : SV Tune 03/07/18  
Misc :  
Quant Time: Nov 28 10:24 2018

Vial: 2  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
Title :  
Last Update : Wed Nov 28 10:24:36 2018  
Response via : Single Level Calibration



TIC: 1128Y002.D

(5) Pentachlorophenol

5.47min 0.0000

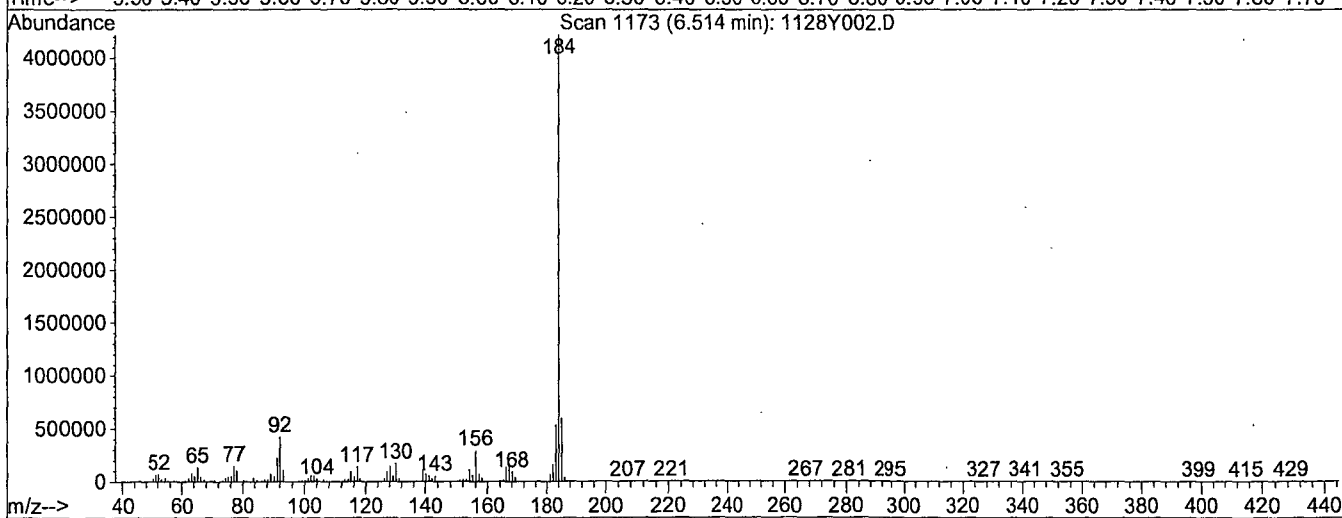
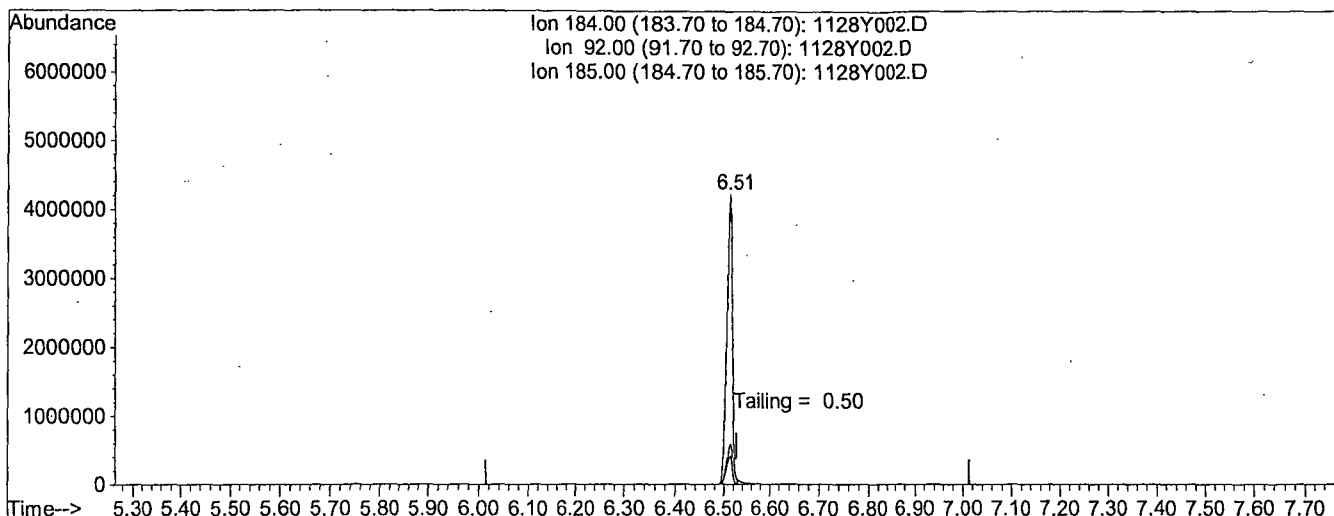
response 7009891

Ion	Exp%	Act%
266.00	100	100
264.00	63.80	61.59
268.00	65.50	63.39
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y002.D Vial: 2  
 Acq On : 28 Nov 18 7:30 Operator: MA  
 Sample : SV Tune 03/07/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Nov 28 10:24 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Nov 28 10:24:36 2018  
 Response via : Single Level Calibration



TIC: 1128Y002.D

(6) Benzidine

6.52min 0.0000

response 35701269

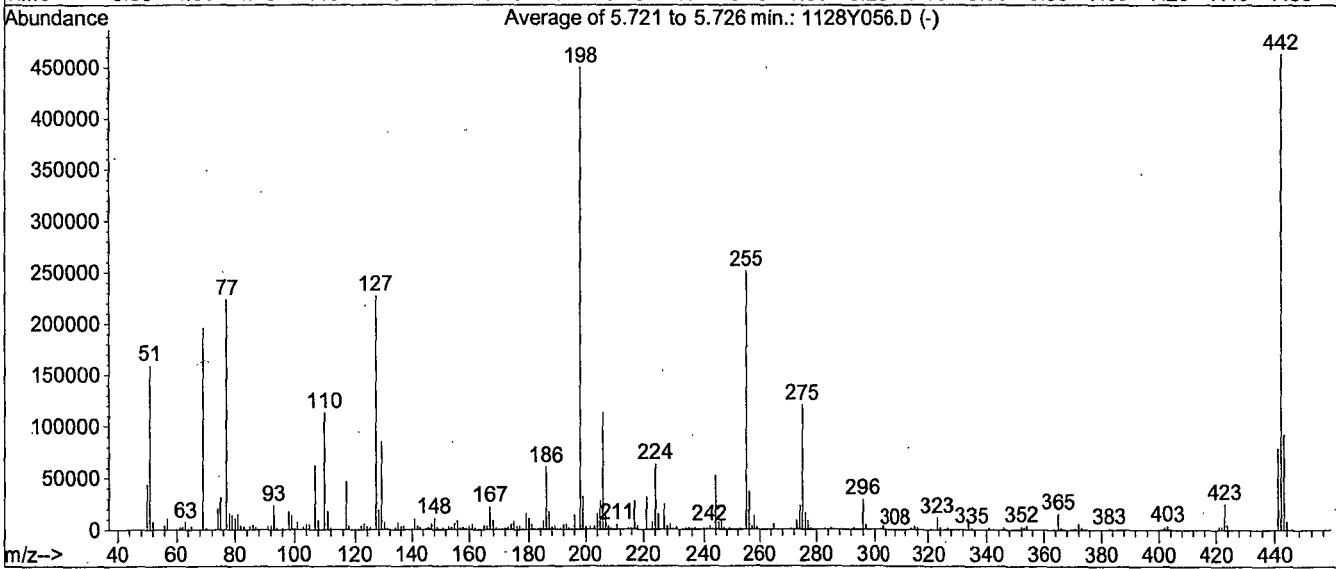
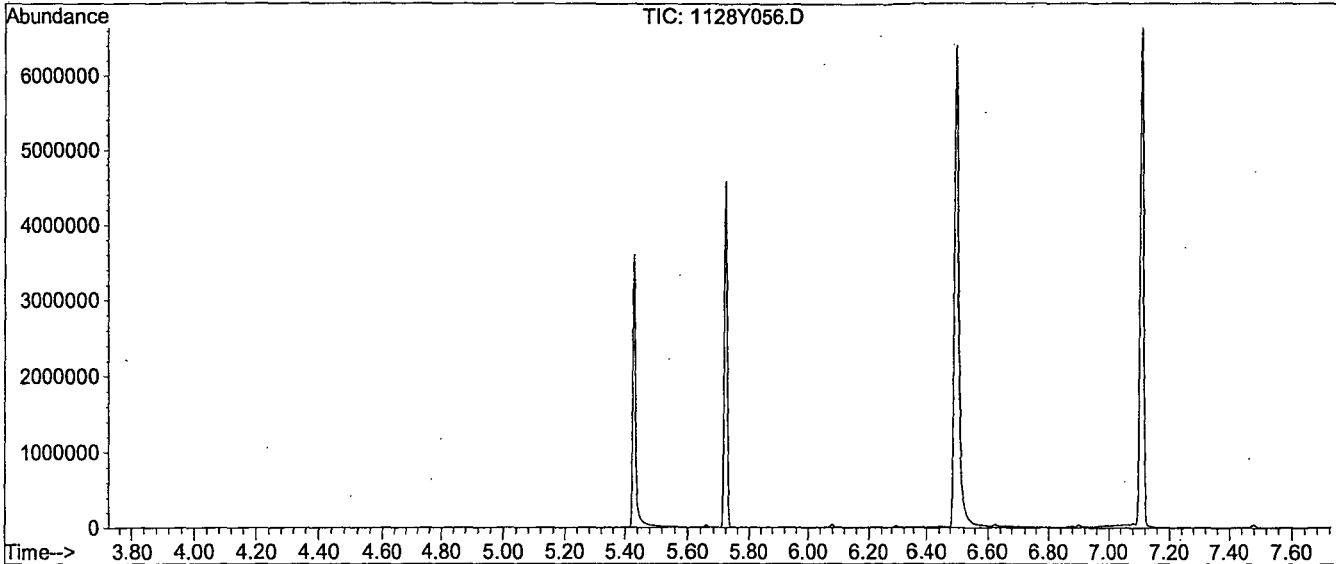
Ion	Exp%	Act%
184.00	100	100
92.00	9.90	10.15
185.00	14.00	14.16
0.00	0.00	0.00

DFTPP

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
 Acq On : 29 Jan 19 8:36  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 855, 856, 857; Background Corrected with Scan 846

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.4	158979	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1146	PASS
127	198	10	80	50.5	226944	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	449557	PASS
199	198	5	9	6.9	31235	PASS
275	198	10	60	26.7	120224	PASS
365	198	1	100	3.4	15263	PASS
441	442	0.01	24	16.9	78525	PASS
442	198	50	150	103.1	463467	PASS
443	442	15	24	19.9	92080	PASS



M:\YODA\DATA\Y181128M\1128Y056.D

Data File Name: 1128Y056.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 29 Jan 2019 08:36  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 56  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.11	48684800
2)	DDD	6.90	257255
3)	DDE	7.18	0

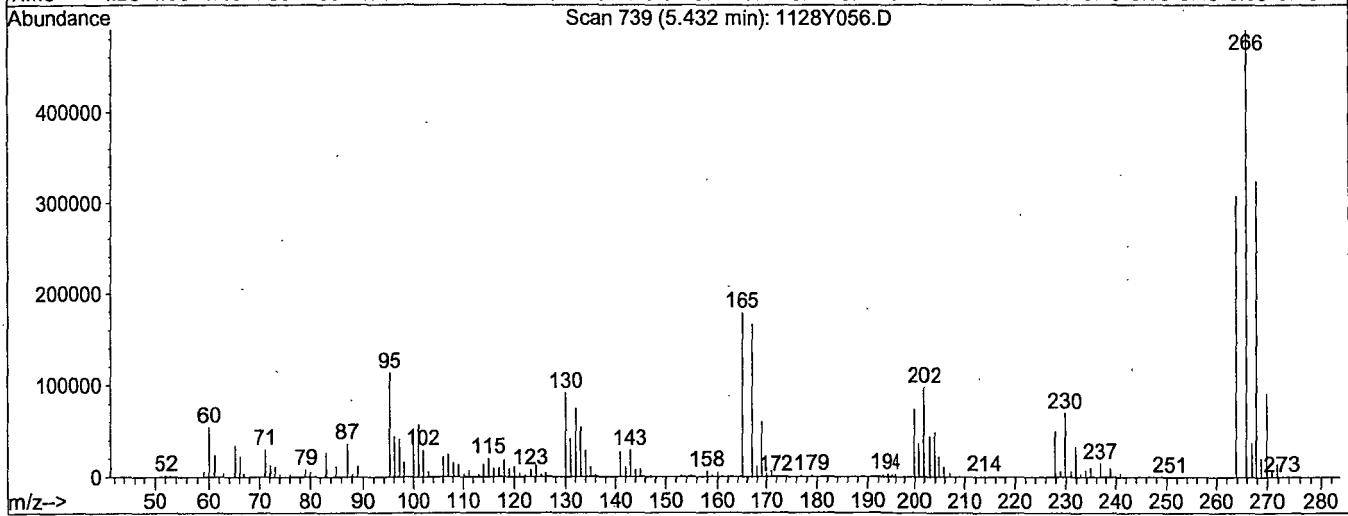
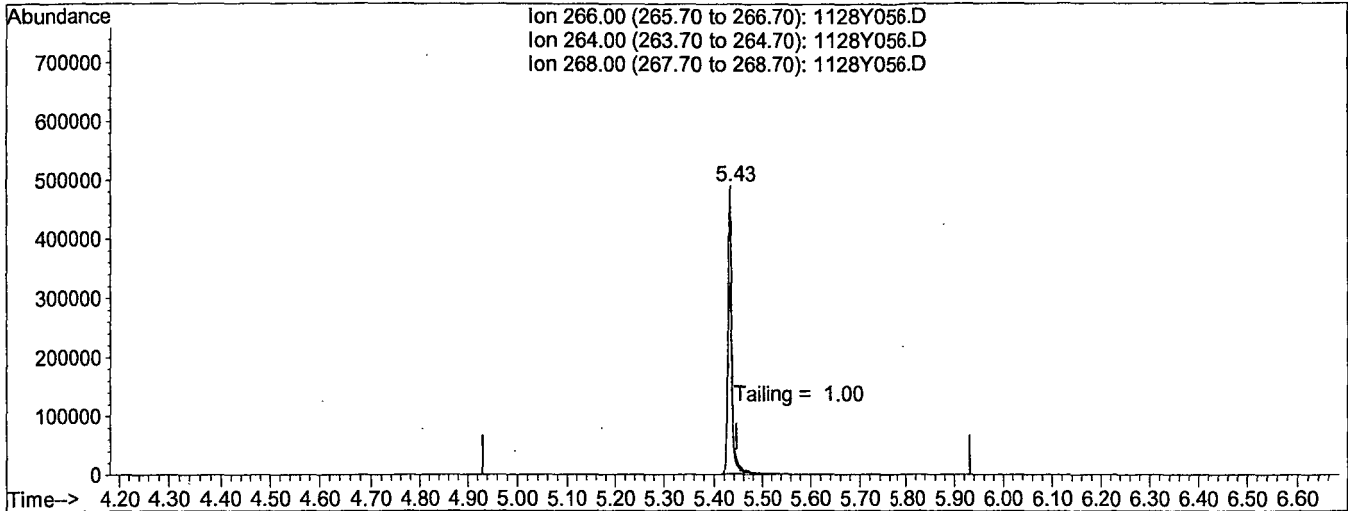
Breakdown 0.53

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y056.D  
 Acq On : 29 Jan 19 8:36  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 29 8:37 2019

Vial: 56  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 29 08:36:56 2019  
 Response via : Single Level Calibration



TIC: 1128Y056.D

(5) Pentachlorophenol

5.43min 0.0000

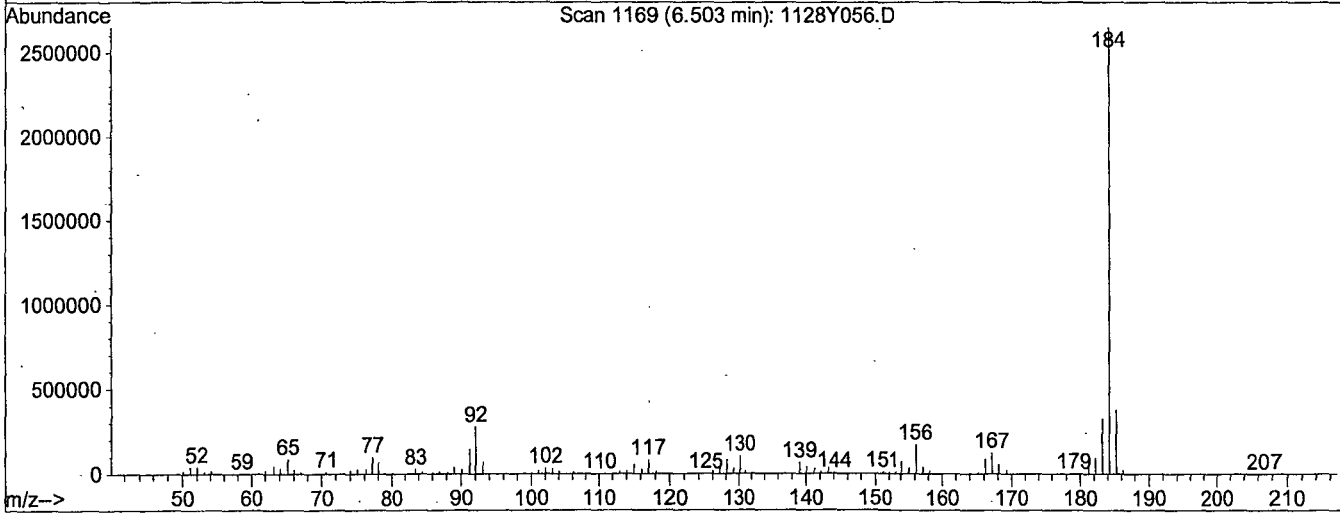
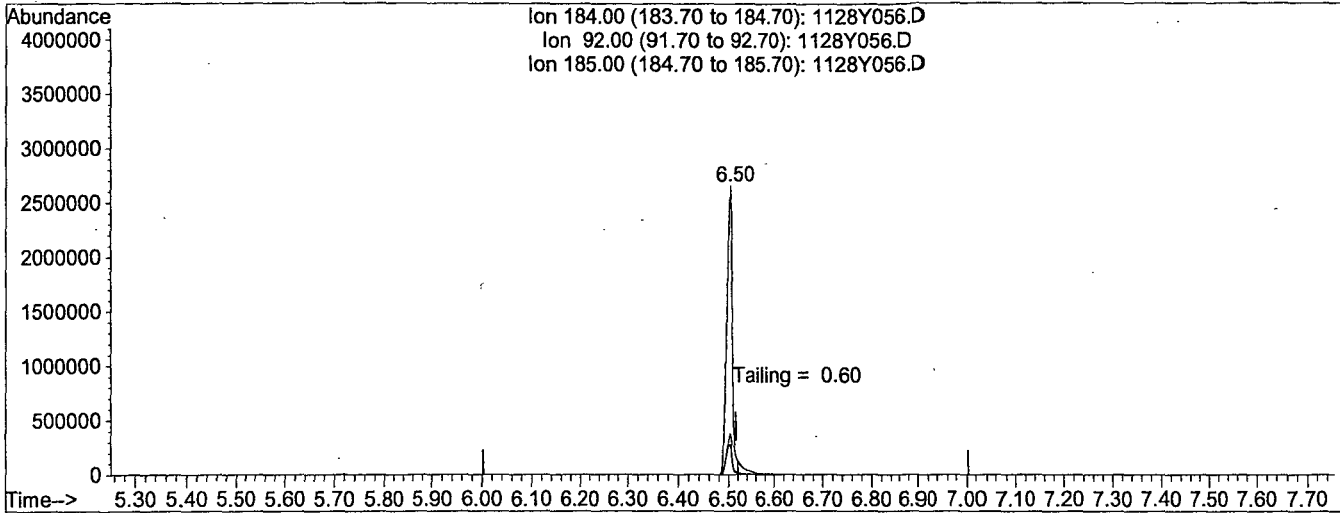
response 3073868

Ion	Exp%	Act%
266.00	100	100
264.00	63.10	62.99
268.00	66.50	63.06
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y056.D Vial: 56  
 Acq On : 29 Jan 19 8:36 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Jan 29 8:37 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Tue Jan 29 08:36:56 2019  
 Response via : Single Level Calibration



TIC: 1128Y056.D

(6) Benzidine

6.50min 0.0000

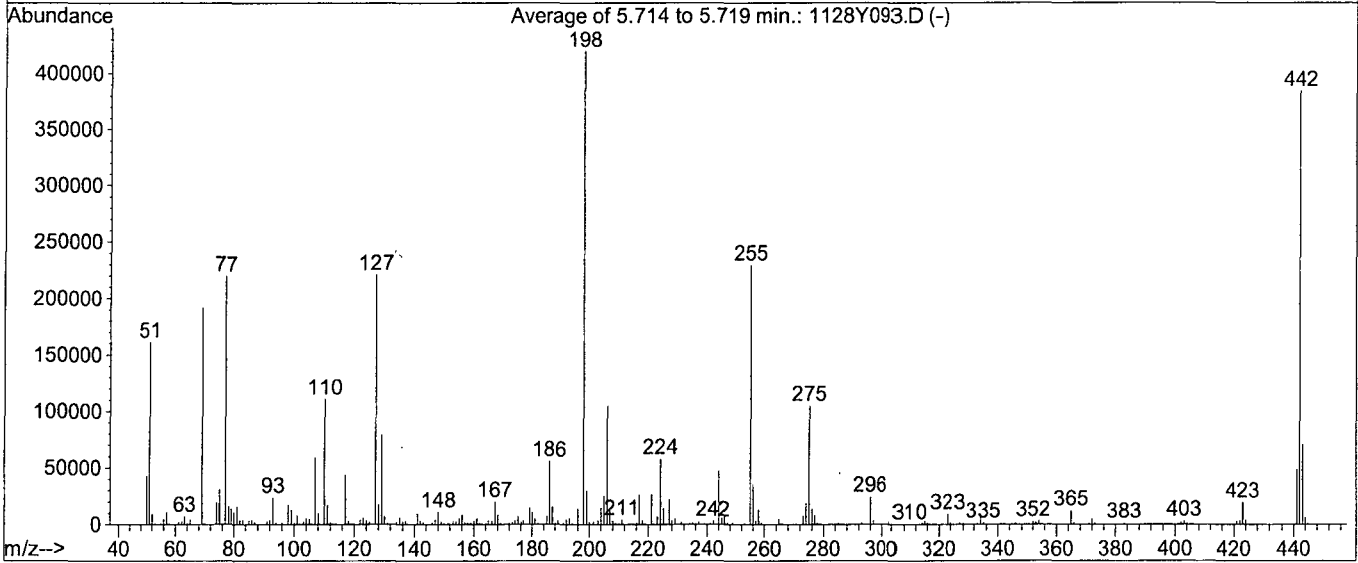
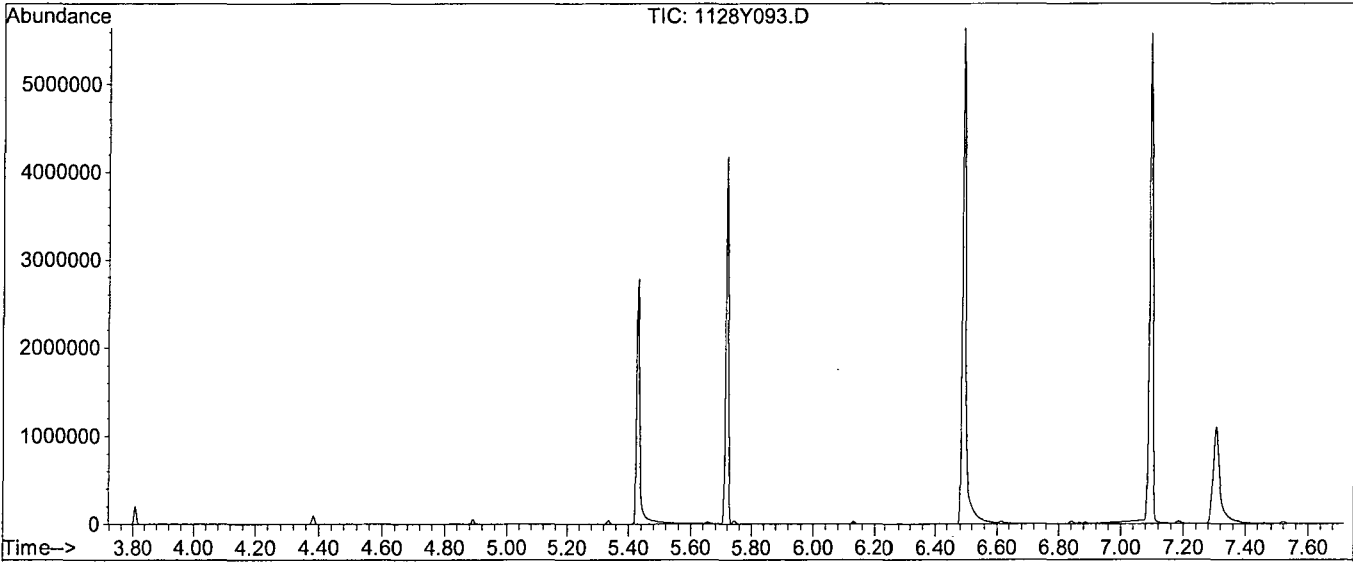
response 22876598

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.94
185.00	14.30	14.29
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y093.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 852, 853, 854; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.3	160992	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	701	PASS
127	198	10	80	52.6	220885	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	419925	PASS
199	198	5	9	7.0	29411	PASS
275	198	10	60	25.0	104971	PASS
365	198	1	100	2.9	12350	PASS
441	442	0.01	24	12.7	48587	PASS
442	198	50	150	91.4	384021	PASS
443	442	15	24	18.4	70520	PASS

Data File Name: 1128Y093.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 30 Jan 2019 07:56  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 93  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	39883400
2)	DDD	6.89	183880
3)	DDE	7.04	52658

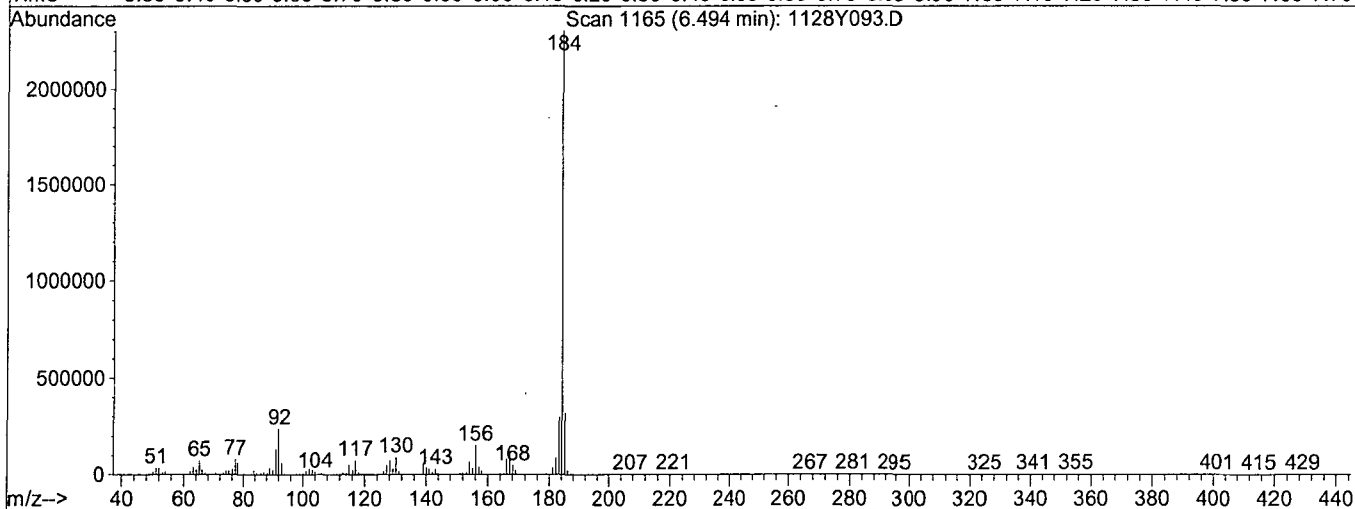
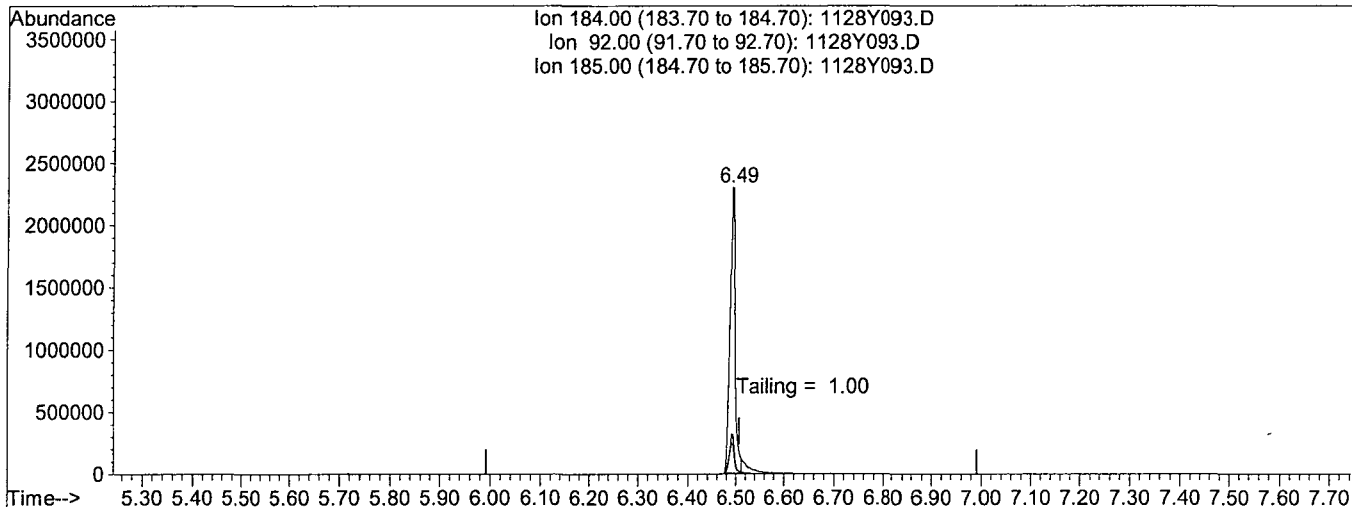
Breakdown 0.59

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y093.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 30 8:02 2019

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y093.D

(6) Benzidine

6.49min 0.0000

response 19651640

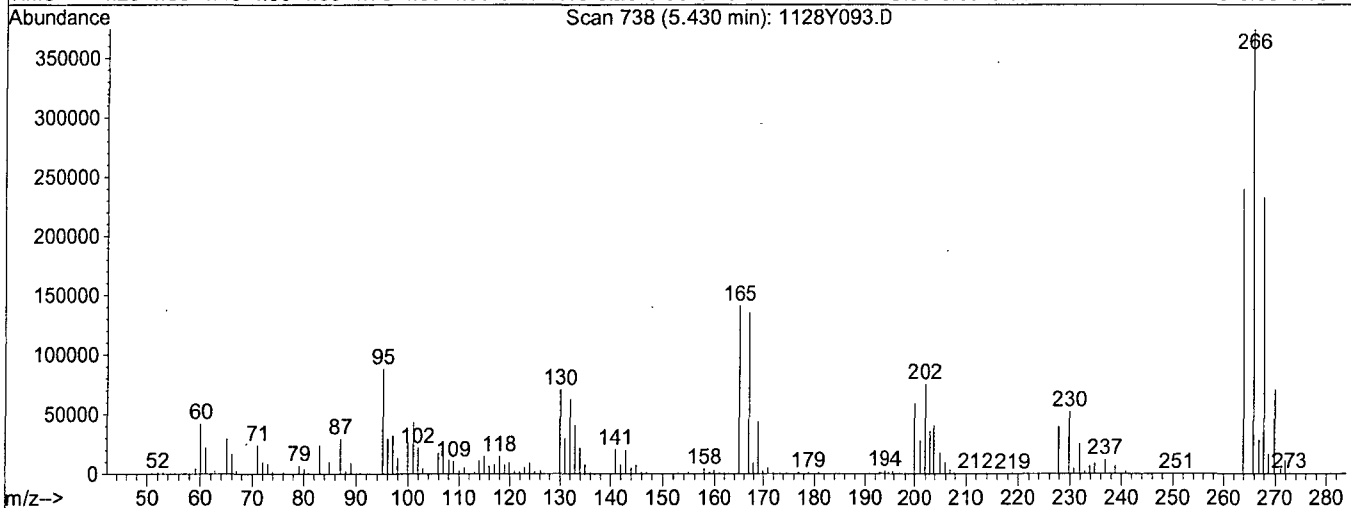
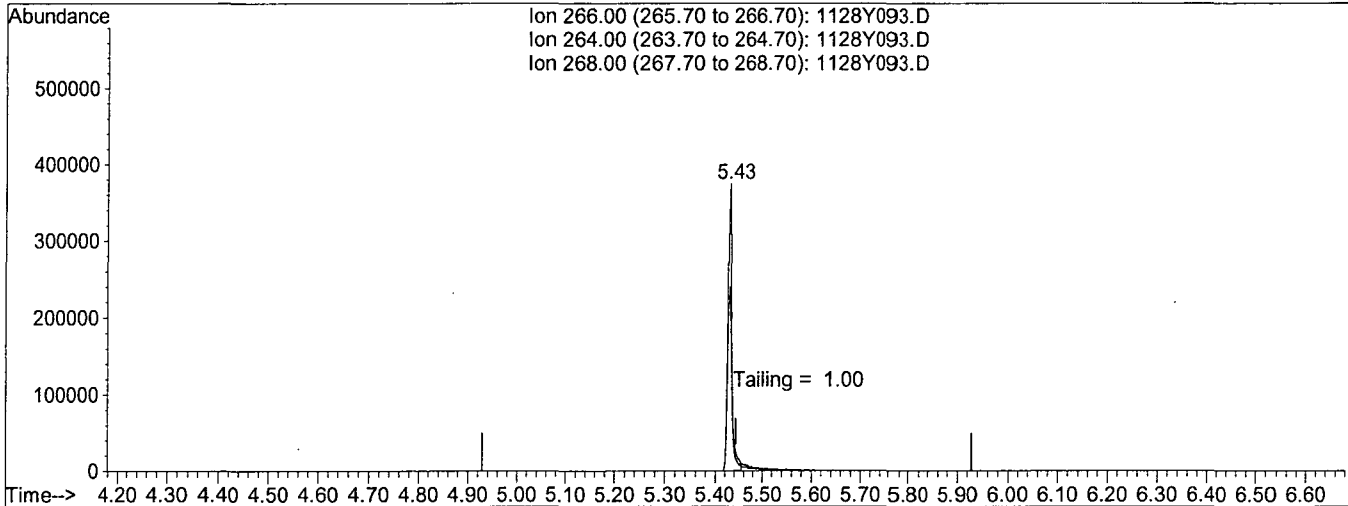
Ion	Exp%	Act%
184.00	100	100
92.00	10.90	10.99
185.00	14.10	14.04
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y093.D  
 Acq On : 30 Jan 19 7:56  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Jan 30 8:02 2019

Vial: 93  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y093.D

(5) Pentachlorophenol

5.43min 0.0000

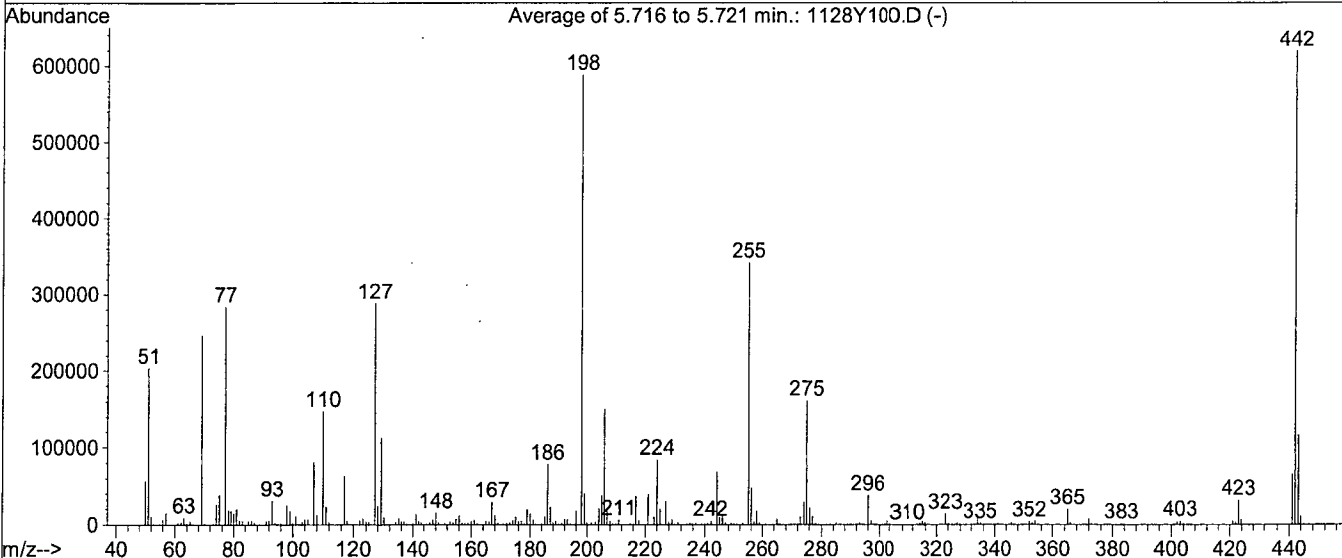
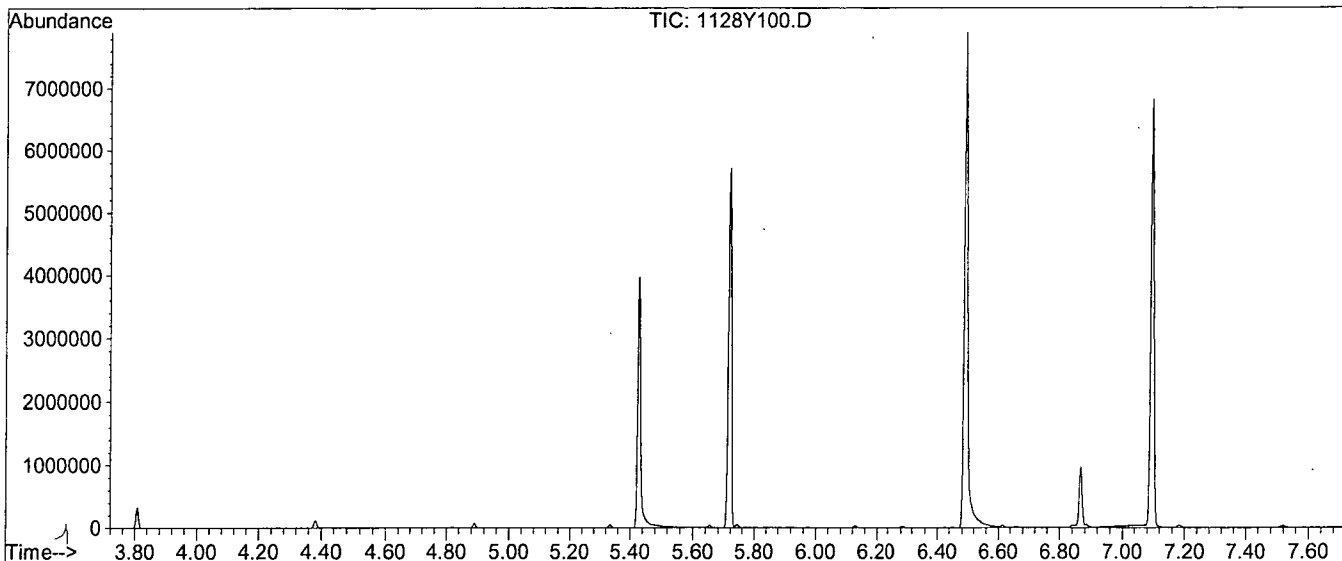
response 2431377

Ion	Exp%	Act%
266.00	100	100
264.00	64.20	62.73
268.00	62.40	65.33
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y100.D  
 Acq On : 1 Feb 19 9:17  
 Sample : SV TUNE 11/10/18  
 Misc : soil

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 853, 854, 855; Background Corrected with Scan 844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	34.6	203840	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	809	PASS
127	198	10	80	49.0	287979	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	588288	PASS
199	198	5	9	6.9	40451	PASS
275	198	10	60	27.4	160939	PASS
365	198	1	100	3.4	19896	PASS
441	442	0.01	24	10.5	65189	PASS
442	198	50	150	105.3	619285	PASS
443	442	15	24	18.8	116187	PASS



Data File Name: 1128Y100.D  
Data File Path: M:\YODA\DATA\Y181128M\  
Operator: MA  
Date Acquired: 1 Feb 19 9:17  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 100  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.10	52603900
2)	DDD	6.89	403043
3)	DDE	7.04	33343

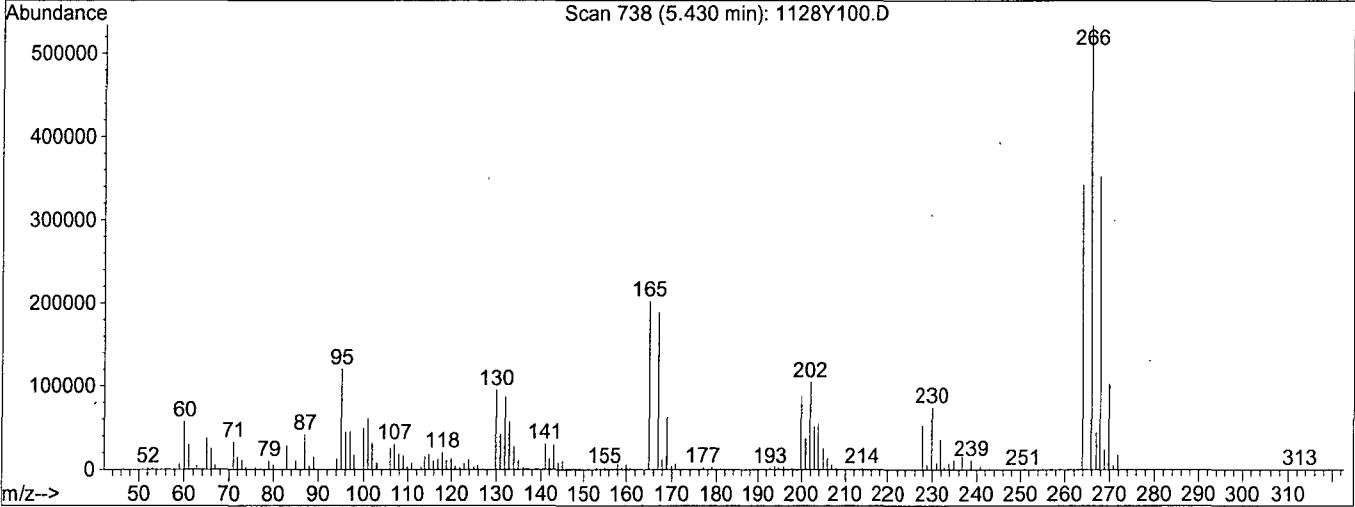
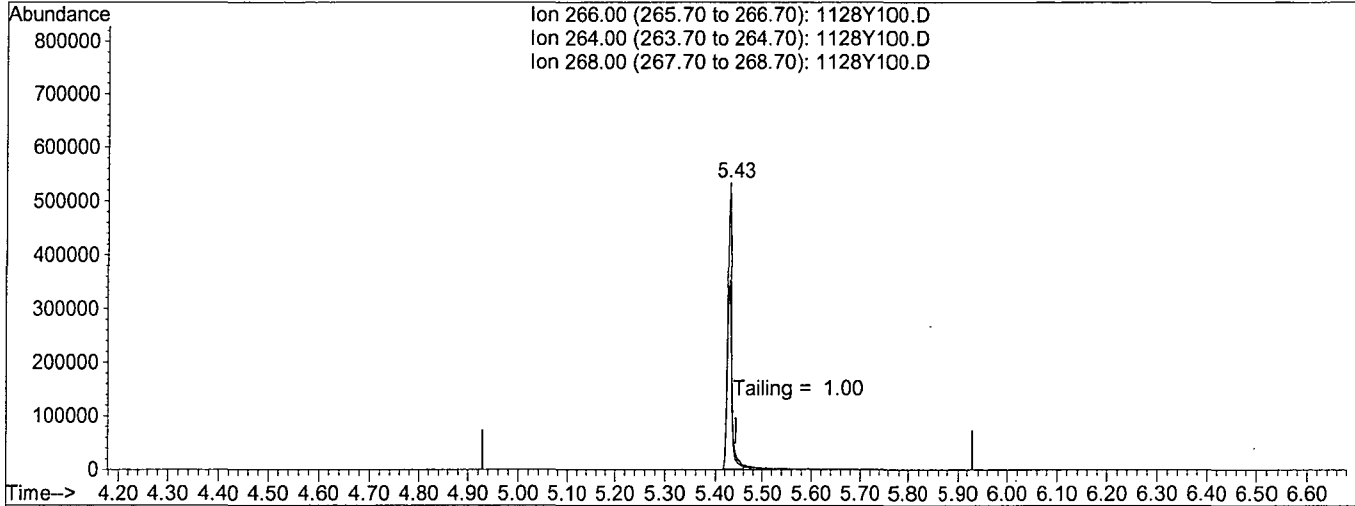
Breakdown 0.82

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y100.D  
 Acq On : 1 Feb 19 9:17  
 Sample : SV TUNE 11/10/18  
 Misc : soil  
 Quant Time: Feb 1 9:33 2019

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y100.D

(5) Pentachlorophenol

5.43min 0.0000

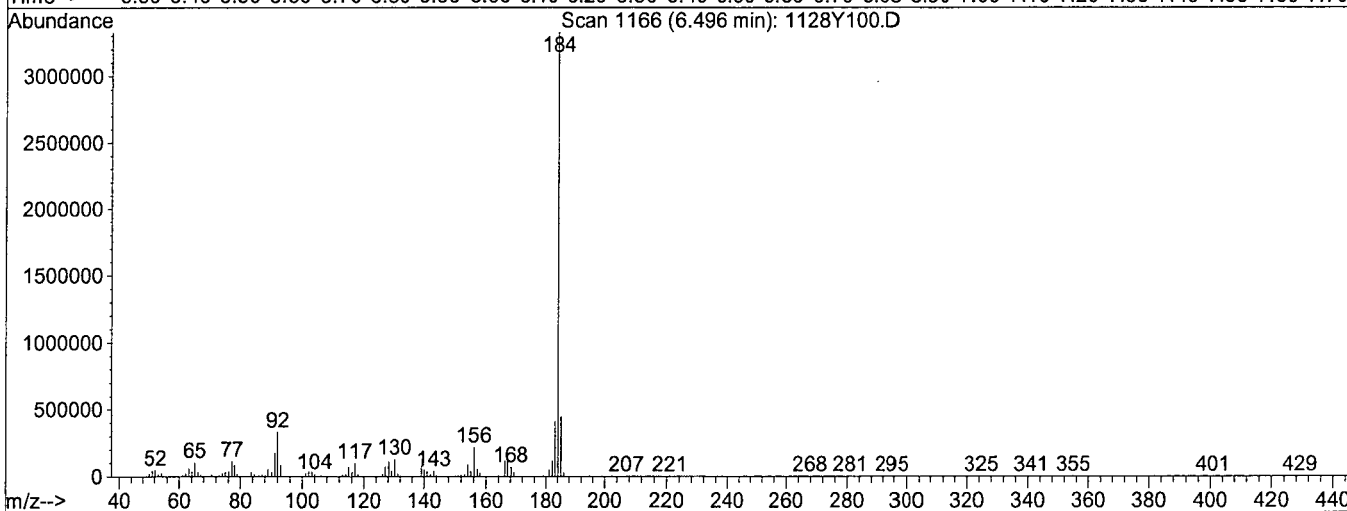
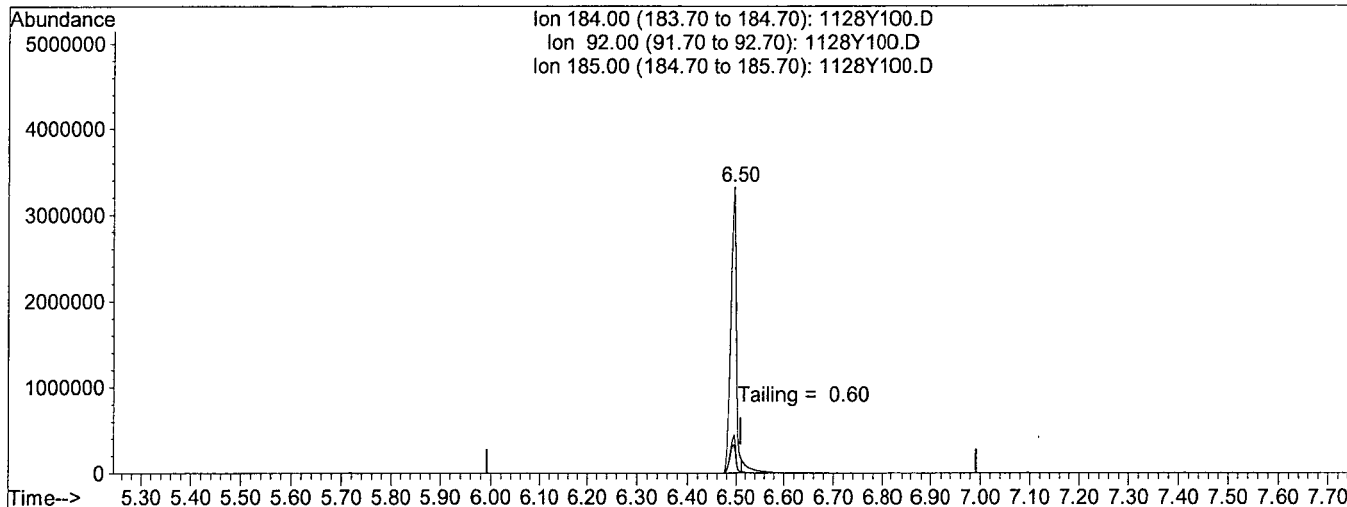
response 3490414

Ion	Exp%	Act%
266.00	100	100
264.00	64.20	61.20
268.00	62.40	63.41
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y100.D Vial: 100  
 Acq On : 1 Feb 19 9:17 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Feb 1 9:33 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Wed Jan 30 08:02:01 2019  
 Response via : Single Level Calibration



TIC: 1128Y100.D

(6) Benzidine

6.50min 0.0000

response 28645968

Ion	Exp%	Act%
184.00	100	100
92.00	10.90	10.63
185.00	14.10	13.33
0.00	0.00	0.00

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/19						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MEE	Neat 99.5%	HEM SERVICE	0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 7/31/22				

0.097ml were spiked in 500ml of water and extracted on 07/27/18. Final concentration is 2000ug/L  
 QC on 05/04/18

Name of Final Standard Diethylene Glycol

Prep'd By (Initials) GA

Prep Date 07/25/18  
 Exp Date 11/10/18

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	216101007-37330 and 37331	10/03/18	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do MEE M STD Stock (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 11/10/18 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 0801Y064

Methoxyethoxyethanol-Neat (MEE) SS Stock: 5/22/17-R.H. ex: 08/04/18						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MEE	Neat 99.5%	HEM SERVICE	.0.1032g	10 mL	10320 ug/ml	MC
		Cat: N-12404-1G				#56258
		Lot: 5259000-37082				
		OP: 09/27/16				
		EXP: 08/04/18				

0.097ml were spiked in 500ml of water and extracted on 06/07/17. Final concentration is 2000ug

APPL re-certified MEE SS stock Lot 5259000-37082 and extended the expiration date to 8/04/18 per verification with a different source Accu Standards Lot # 216101007-37334,5 injected on 05/04/18

Name of Final Standard 8270 Internal Standard (Ampule)

Prep'd By (Initials) OA

Prep Date 06/22/18

Exp Date 06/22/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
EPA 8270 Semivolatile Internal Standard	RESTEK	CRM48902	2000 ug/mL	A0130603-38562	06/22/19	1000 uL	1 mL	NA	100ug/mL

Name of  
Final

Standard MEE CCV

Prep'd By (Initials) OA

Prep Date 12/19/18

Exp Date 11/06/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD	APPL		2000 ug/mL	12/17/18	12/17/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	11/29/18	11/06/19	4 uL	*	*	*



Name of  
Final  
Standard Diethylene Glycol

Prep'd By (Initials) OA

Prep Date 12/17/18

Exp Date 02/28/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol monomethyl ether	AccuStandard	72273	2000 ug/mL	21610100 7-37332 and 37333	02/28/19	2.0 mL	4 mL	Methanol #042317C	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L  
 APPL re-certified diethylene glycol monomethyl ether lot 216101007-37330 and 37331 and extended the expiration date to 02/28/19 per verification with a second source from ChemService lot 7079100-39417 Inj on Yoda 1128Y014

Name of  
Final  
Standard

MEE Curve

Prep'd By (Initials)

GA

Prep Date

08/01/18

Exp Date

02/28/19

Initial Standard Information						Final Standard Information			
MEE M STD Stock	APPL		200 ug/mL	07/27/18	02/28/19	5 uL	200uL	Methanol 195uL	50 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	5 uL	100uL	Methanol 95uL	100 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	10 uL	100uL	Methanol 90 uL	200 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	20 uL	100uL	Methanol 80 uL	400 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	200 uL	Methanol 150 uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	30 uL	100uL	Methanol 70 uL	600 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	40 uL	100uL	Methanol 60 uL	800 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	07/27/18	02/28/19	50 uL	100uL	Methanol 50uL	1000 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	2 uL	*	*	*

Name of

Final

Standard

MEE Second Source

Prep'd By (Initials)

GA

Prep Date

08/01/18

Exp Date

06/22/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA# (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	07/27/18	07/27/19	50 uL	200uL	Methanol 150uL	500 ug/mL
SV Internal Standard	APPL	8270 I.S.	2000 ug/mL	06/22/18	06/22/19	4 uL	*	*	*

# Organic Extraction Worksheet

<b>Method</b>	Solid Phase Extraction of 2MEE in Water	<b>Extraction Set</b>	190128A	<b>Extraction Method</b>	MWE2MEE	<b>Units</b>	mL
Spiked ID 1	Diethylene Glycol 12-17-18 EXP 2-28-19		Surrogate ID 1				
Spiked ID 2	2MEE SS 10320ug/mL 8-3-18 exp 8-3-19		Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:		YES		
Spiked ID 7			Ext. Start Time:		01/28/19 10:55		
Spiked ID 8			Ext. End Time:		01/29/19 9:05		
			GC Requires Extract By:		01/31/19 0:00		
			pH1			Water Bath Temp Criteria	
			pH2				
			pH3				

Spiked By: DL

Date 01/28/19

Witnessed By: CFM

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 190128A Btk				NA	NA	500	2	7	01/28/19 10:55	
					equip					
2 190128A LCS-1		0.040	1	NA	NA	500	2	7	01/28/19 10:55	
					equip					
3 190128A LCSD-1		0.040	1	NA	NA	500	2	7	01/28/19 10:55	
					equip					
4 AZ85520	AZ85520W09			NA	NA	500	2	7	01/28/19 10:55	87932
					equip					
5 AZ85521	AZ85521W05			NA	NA	500	2	7	01/28/19 10:55	87932
					equip					
6 AZ85523	AZ85523W08			NA	NA	500	2	7	01/28/19 10:55	87932
					equip					
7 AZ85525	AZ85525W08			NA	NA	500	2	7	01/28/19 10:55	87932
					equip					
8 AZ85527	AZ85527W08			NA	NA	500	2	7	01/28/19 10:55	87932
					equip					
9 AZ85562 MS-1	AZ85562W26	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
10 AZ85562 MSD-1	AZ85562W25	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
11 AZ85562	AZ85562W24			NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
12 AZ85563	AZ85563W05			NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
13 AZ85565	AZ85565W19			NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
14 AZ85567	AZ85567W19			NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
15 AZ85569	AZ85569W19			NA	NA	500	2	7	01/28/19 10:55	87940
					equip					
16 AZ85643 MS-1	AZ85643W23	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87956
					equip					

<b>Solvent and Lot#</b>	
ENVI-Carb Plus 400MG/1ML	
Reverible Tube Lot:	10689901
PH Strip	HC 849161
Di Water	1-28-19
Dichloromethane	18G194011
Methanol	58179

<b>Extraction COC Transfer</b>	
Extraction lab employee Initials	KY
GC analyst's initials	DA
Date	01/30/19
Time	10:10
Refrigerator	8000

<b>Technician's Initials</b>	
Scanned By	DL
Sample Preparation	DL
Extraction Concentration	DL
Modified	01/29/19 1:07:47 PM

Reviewed By: *KY* Date 1/29/19

# Organic Extraction Worksheet











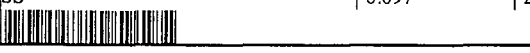
Method	Solid Phase Extraction of 2MEE in Water		Extraction Set	190128A	Extraction Method	MWE2MEE	Units	mL
Spiked ID 1	Diethylene Glycol 12-17-18 EXP 2-28-19		Surrogate ID 1					
Spiked ID 2	2MEE SS 10320ug/mL 8-3-18 exp 8-3-19		Surrogate ID 2					
Spiked ID 3			Surrogate ID 3					
Spiked ID 4			Surrogate ID 4					
Spiked ID 5			Surrogate ID 5					
Spiked ID 6			Sufficient Vol for Matrix QC:		YES			
Spiked ID 7			Ext. Start Time:		01/28/19 10:55			
Spiked ID 8			Ext. End Time:		01/29/19 9:05			
			GC Requires Extract By:		01/31/19 0:00			
			pH1		Water Bath Temp Criteria			
			pH2					
			pH3					

Spiked By: DL

Date 01/28/19

Witnessed By: CFM

Date 01/28/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
17	AZ85643 MSD-1 	AZ85643W25 	0.040	1	NA	NA	500	2	7	01/28/19 10:55	87956
						equip					
18	AZ85643 	AZ85643W26 			NA	NA	500	2	7	01/28/19 10:55	87956
						equip					
19	AZ85644 	AZ85644W06 			NA	NA	500	2	7	01/28/19 10:55	87956
						equip					
20	AZ85646 	AZ85646W18 			NA	NA	500	2	7	01/28/19 10:55	87956
						equip					
21	AZ85653 	AZ85653W18 			NA	NA	500	2	7	01/28/19 10:55	87956
						equip					
22	SS 		0.097	2	NA	NA	500	2	7	01/28/19 10:55	
						equip					

Key 1/29/19

Solvent and Lot#	
ENVI-Carb Plus 400MG/1ML	
Reverible Tube Lot:	10689901
PH Strip	HC 849161
Di Water	1-28-19
Dichloromethane	18G194011
Methanol	58179

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:07:47 PM

Reviewed By: *KY* Date 1/29/19

## Injection Log

Directory: M:\YODA\DATA\Y181128M\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1128Y002.D	1	SV Tune 03/07/18		28 Nov 18 7:30
4	1128Y004.D	1	50ug/ml MEE 08/01/18		28 Nov 18 8:08
5	1128Y005.D	1	100ug/ml MEE 08/01/18		28 Nov 18 8:32
6	1128Y006.D	1	200ug/ml MEE 08/01/18		28 Nov 18 8:55
7	1128Y007.D	1	400ug/ml MEE 08/01/18		28 Nov 18 9:19
8	1128Y008.D	1	600ug/ml MEE 08/01/18		28 Nov 18 9:43
9	1128Y009.D	1	800ug/ml MEE 08/01/18		28 Nov 18 10:06
10	1128Y010.D	1	1000ug/ml MEE 08/01/18		28 Nov 18 10:30
12	1128Y012.D	1	500ug/ml MEE 08/01/18		28 Nov 18 11:17
14	1128Y014.D	1	SS ug/ml MEE 08/01/18		28 Nov 18 12:26
56	1128Y056.D	1	SV TUNE 11/10/18		29 Jan 19 8:36
57	1128Y057.D	1	500ug/mL mee 12/12/18		29 Jan 19 8:51
73	1128Y073.D	1	AZ85562W26 MS-1 2/500		29 Jan 19 15:29
74	1128Y074.D	1	AZ85562W25 MSD-1 2/500		29 Jan 19 15:52
75	1128Y075.D	1	AZ85562W24 2/500		29 Jan 19 16:16
76	1128Y076.D	1	AZ85563W05 2/500		29 Jan 19 16:40
77	1128Y077.D	1	AZ85565W19 2/500		29 Jan 19 17:03
78	1128Y078.D	1	AZ85567W19 2/500		29 Jan 19 17:27
86	1128Y086.D	1	190128A BLK 2/500		29 Jan 19 20:36
88	1128Y088.D	1	500ug/ml MEE 12/19/18		29 Jan 19 21:24
93	1128Y093.D	1	SV TUNE 11/10/18		30 Jan 19 7:56
94	1128Y094.D	1	500ug/ml MEE 12/19/18		30 Jan 19 8:52
96	1128Y096.D	1	AZ85569W19 2/500		30 Jan 19 9:41
98	1128Y098.D	1	500ug/ml MEE 12/19/18		30 Jan 19 11:16
100	1128Y100.D	1	SV TUNE 11/10/18		1 Feb 19 9:17
1	1128Y101.D	1	500ug/ml MEE 12/19/18		1 Feb 19 9:32
2	1128Y102.D	1	190128A LCS-1 2/500		1 Feb 19 9:56
3	1128Y103.D	1	190128A LCSD-1 2/500		1 Feb 19 10:19
4	1128Y104.D	1	500ug/ml MEE 12/19/18		1 Feb 19 10:44

**ORGANICS**  
**Calibration Data**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/21/19  
Instrument: Loki

Initials: \_\_\_\_\_

0121L07.D 0121L08.D 0121L09.D 0121L10.D 0121L11.D 0121L12.D 0121L13.D 0121L14.D 0121L16.D 0121L15.D

	Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TM Freon 1113		0.1273	0.1476	0.1258	0.1347	0.1347	0.1402	0.1340	0.1327	0.1520	0.14	6.4	TM			
3	TMQ Dichlorodifluoromethane	0.2136	0.1923	0.2587	0.2239	0.2229	0.2085	0.2395	0.2198	0.2093	0.2382	0.22	8.5	TMQ	0.999		
4	TM Freon 114		0.2088	0.1965	0.1399	0.1643	0.1705	0.1812	0.1477		0.1534	0.17	14	TM			
5	TM** Chloromethane		0.4171	0.3811	0.3338	0.3561	0.3255	0.3425	0.3374	0.3171	0.3229	0.35	9.3	TM**			
6	TM* Vinyl chloride		0.2733	0.2880	0.3300	0.3261	0.3183	0.3404	0.3199	0.3004	0.3281	0.31	7.0	TM*			
7	TM 2-Chloro-1,1,1-trifluoroethane		0.2772	0.2859	0.2620	0.2673	0.2635	0.2774	0.2547	0.2314	0.2703	0.27	6.0	TM			
8	TML Bromomethane		0.3067	0.2320	0.2576	0.2402	0.2148	0.2151	0.1928	0.1760	0.1931	0.23	18	TML	0.997		
9	TML Chloroethane		0.2778	0.2171	0.1560	0.1915	0.1552	0.1670	0.1509		0.1534	0.18	24	TML	0.999		
10	TM Dichlorofluoromethane		0.7752	0.6136	0.5163	0.5437	0.5334	0.5489	0.5421	0.5193	0.5446	0.57	14	TM			
11	TM Trichlorofluoromethane		0.4457	0.4375	0.4003	0.4463	0.4257	0.4727	0.4321	0.4276	0.4557	0.44	4.7	TM			
12	TML Acrolein	0.0785	0.0700	0.0692	0.0631	0.0661	0.0619	0.0645	0.0635	0.0615	0.0654	0.07	7.7	TML	0.998		
13	TML Acetone			0.1275	0.1063	0.0901	0.0735	0.0672	0.0673	0.0572	0.0648	0.08	30	TML	0.995		
14	TM Freon-113		0.2243	0.2886	0.2392	0.2404	0.2359	0.2554	0.2237	0.2256	0.2533	0.24	8.5	TM			
15	TM* 1,1-DCE		0.0897	0.1084	0.0839	0.0722	0.0713	0.0778	0.0772	0.0732	0.0780	0.08	14	TM*			
16	TM t-Butanol	0.0341	0.0357	0.0285	0.0261	0.0259	0.0302	0.0240	0.0267	0.0329	0.0328	0.03	14	TM			
17	TM 2-Propanol			0.0259	0.0196	0.0219	0.0200	0.0194	0.0214	0.0219	0.0223	0.02	9.6	TM			
18	TM Acetonitrile		0.0606	0.0540	0.0484	0.0486	0.0487	0.0494	0.0493	0.0485	0.0500	0.05	8.0	TM			
19	TML Methyl Acetate		0.4174	0.5846	0.2828	0.2810	0.2735	0.2777	0.2727	0.2796	0.2849	0.33	32	TML	1.000		
20	TML Iodomethane		0.0264	0.0221	0.0272	0.0412	0.0578	0.0899	0.1133	0.1353	0.1279	0.07	64	TML	0.994		
21	TML Acrylonitrile		0.1594	0.1426	0.1074	0.0970	0.0993	0.1026	0.0940	0.0966	0.1066	0.11	21	TML	0.997		
22	TML Methylene chloride		0.5512	0.4334	0.3596	0.3299	0.3144	0.3140	0.3116	0.3044	0.3201	0.36	23	TML	1.000		
23	TM Carbon disulfide		0.9082	0.9658	0.8714	0.8112	0.8005	0.8318	0.8116	0.7911	0.8271	0.85	6.8	TM			
24	TM Methyl t-butyl ether (MtBE)		0.8313	0.7357	0.7762	0.7617	0.7621	0.7871	0.7657	0.7814	0.7850	0.78	3.4	TM			
25	TM Trans-1,2-DCE		0.1536	0.1567	0.1488	0.1488	0.1425	0.1463	0.1428	0.1405	0.1442	0.15	3.7	TM			
26	TM Diisopropyl Ether		0.8396	0.8255	0.8115	0.8421	0.8105	0.8573	0.8321	0.8594	0.8764	0.84	2.6	TM			
27	TM**L 2,2-Dichloro-1,1,1-trifluoroethane													TM**L			
28	TM** 1,1-DCA		0.4969	0.4796	0.4753	0.4742	0.4676	0.4884	0.4777	0.4835	0.4930	0.48	2.0	TM**			
29	TM Vinyl Acetate		0.1835	0.1735	0.1692	0.1706	0.1578	0.1880	0.1769	0.1779	0.1851	0.18	5.3	TM			
30	TM Ethyl tert Butyl Ether		0.6997	0.7075	0.6853	0.7027	0.7102	0.7491	0.7335	0.8023	0.7787	0.73	5.4	TM			
31	TML MEK (2-Butanone)		0.2325	0.1649	0.1605	0.1247	0.1261	0.1286	0.1353	0.1320	0.1320	0.15	24	TML	0.999		
32	TM Cis-1,2-DCE		0.3262	0.2780	0.2757	0.2662	0.2520	0.2655	0.2579	0.2733	0.2734	0.27	7.8	TM			
33	TM 2,2-Dichloropropane		0.5130	0.4058	0.3827	0.3351	0.3475	0.3526	0.3537	0.3651	0.3666	0.38	14	TM			
34	TM 2-Methylpentane													TM			
35	TML 3-Methylpentane													TML			



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/21/19

Matrix: \_\_\_\_\_

Instrument: Loki

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	Q	MRF
36	TM*	Chloroform		0.3936	0.4649	0.3878	0.4007	0.4194	0.4398	0.4187	0.4279	0.4381	0.42	5.9	TM*		
37	TM	Bromochloromethane		0.0746	0.0778	0.0634	0.0691	0.0621	0.0619	0.0621	0.0639	0.0673	0.07	8.8	TM		
38	S	Dibromofluoromethane(S)	0.5221	0.4890	0.4448	0.4243	0.4769	0.4660	0.4873	0.4754	0.4586	0.4666	0.47	5.6	S		
39	TM	1,1,1-TCA		0.1373	0.1686	0.1449	0.1557	0.1503	0.1546	0.1526	0.1553	0.1588	0.15	5.7	TM		
40	TML	Cyclohexane		0.4299	0.2455	0.2292	0.1914	0.1776	0.1894	0.1750	0.1867	0.1944	0.22	36	TML	0.999	
41	TM	1,1-Dichloropropene		0.3288	0.3278	0.2920	0.2908	0.2886	0.2876	0.2808	0.2859	0.2959	0.30	6.0	TM		
42	TM	2,2,4-Trimethylpentane		0.5376	0.5953	0.5442	0.5395	0.5226	0.5544	0.5116	0.5296	0.5660	0.54	4.6	TM		
43	S	1,2-DCA-D4(S)	0.6057	0.5772	0.5141	0.4993	0.5602	0.5360	0.5677	0.5517	0.5377	0.5437	0.55	5.6	S		
44	TM	Carbon Tetrachloride		0.2737	0.3556	0.2871	0.3196	0.3024	0.3263	0.3158	0.3171	0.3279	0.31	7.6	TM		
45	TM	Tert Amyl Methyl Ether		0.7082	0.6756	0.6341	0.6611	0.6390	0.6519	0.6446	0.6532	0.6662	0.66	3.4	TM		
46	TML	Methylcyclopentane													TML		
47	TM	1,2-DCA		0.3742	0.3272	0.3564	0.3317	0.3351	0.3389	0.3320	0.3403	0.3462	0.34	4.3	TM		
48	TM	Benzene		0.9781	0.9159	0.8505	0.8882	0.8484	0.8811	0.8653	0.8757	0.8898	0.89	4.5	TM		
49	TM	TCE		0.1844	0.1574	0.1258	0.1572	0.1470	0.1378	0.1433	0.1371	0.1470	0.15	11	TM		
50	TM	2-Pentanone		0.1709	0.1776	0.1645	0.1724	0.1680	0.1670	0.1712	0.1706	0.1736	0.17	2.2	TM		
51	TM*	1,2-Dichloropropane		0.2446	0.2720	0.2309	0.2298	0.2189	0.2304	0.2252	0.2259	0.2355	0.23	6.7	TM*		
52	TM	Bromodichloromethane		0.1697	0.1838	0.1695	0.1864	0.1757	0.1806	0.1770	0.1795	0.1837	0.18	3.4	TM		
53	TM	Methyl Cyclohexane		0.3570	0.3419	0.3078	0.3126	0.3073	0.3136	0.3005	0.2991	0.3207	0.32	6.1	TM		
54	TM	Dibromomethane		0.1398	0.1698	0.1670	0.1729	0.1632	0.1656	0.1659	0.1643	0.1680	0.16	5.8	TM		
55	TM	2-Chloroethyl vinyl ether						0.0056	0.0055	0.0069	0.0066	0.0066	0.01	10	TM		
56	TM	MIBK (methyl isobutyl ketone)		0.2214	0.2343	0.2554	0.2746	0.2302	0.2265	0.2281	0.2270	0.2231	0.24	7.5	TM		
57	TM	1-Bromo-2-chloroethane		0.1690	0.1999	0.1877	0.1754	0.1693	0.1792	0.1754	0.1810	0.1757	0.18	5.4	TM		
58	TM	Cis-1,3-Dichloropropene		0.3654	0.4018	0.3965	0.3874	0.3795	0.3941	0.3860	0.3904	0.4011	0.39	2.9	TM		
59	TM*	Toluene		0.5252	0.5226	0.4964	0.5482	0.5399	0.5389	0.5455	0.5295	0.5570	0.53	3.4	TM*		
60	TM	Trans-1,3-Dichloropropene		0.3973	0.3996	0.3642	0.3668	0.3665	0.3684	0.3676	0.3641	0.3741	0.37	3.7	TM		
61	TM	1,1,2-TCA		0.2099	0.1885	0.1807	0.1867	0.1876	0.1922	0.1895	0.1832	0.1918	0.19	4.4	TM		
62	TM	2-Hexanone			0.1753	0.1679	0.1574	0.1624	0.1494	0.1509	0.1542	0.1570	0.16	5.5	TM		
63	I	Chlorobenzene-D5 (IS)															
64	S	Toluene-D8(S)	2.277	2.221	1.853	1.876	2.026	2.061	2.066	2.029	1.932	2.087	2.0	6.7	S		
65	TM	1,2-EDB		0.1689	0.1769	0.1497	0.1574	0.1609	0.1543	0.1539	0.1547	0.1680	0.16	5.6	TM		
66	TM	Tetrachloroethene		0.1995	0.2291	0.2029	0.1964	0.1938	0.1907	0.1864	0.1858	0.1985	0.20	6.6	TM		
67	TML	1-Chlorohexane		0.5182	0.4962	0.3660	0.3477	0.3314	0.3273	0.3204	0.3184	0.3520	0.38	20	TML	0.998	
68	TM	1,1,1,2-Tetrachloroethane		0.3445	0.3223	0.3142	0.3070	0.3228	0.3230	0.3221	0.3178	0.3465	0.32	4.0	TM		
69	TM	m&p-Xylene		0.9334	0.9505	0.9034	0.9756	0.9704	0.9923	0.9961	0.9859	1.079	0.98	5.0	TM		
70	TM	o-Xylene		0.2800	0.3057	0.2647	0.2759	0.2886	0.2772	0.2859	0.2913	0.3072	0.29	4.9	TM		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc. \_\_\_\_\_  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/21/19 \_\_\_\_\_  
Instrument: Loki \_\_\_\_\_

Initials: \_\_\_\_\_

		Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	Q	MRF
71	TM	Styrene		0.8547	0.8649	0.8093	0.9094	0.8681	0.8703	0.8843	0.8764	0.9699	0.88	4.9	TM		
72	S	4-Bromofluorobenzene(S)	0.9406	0.9063	0.8074	0.8093	0.8633	0.8665	0.8665	0.8544	0.7873	0.8671	0.86	5.4	S		
73	TM	1,3-Dichloropropane		0.4680	0.5094	0.4528	0.4518	0.4463	0.4421	0.4417	0.4346	0.4737	0.46	5.0	TM		
74	TM	Dibromochloromethane		0.3588	0.3512	0.3347	0.3421	0.3463	0.3374	0.3378	0.3375	0.3652	0.35	3.1	TM		
75	TM**	Chlorobenzene		0.6971	0.8420	0.7551	0.8091	0.8274	0.8203	0.8042	0.7940	0.8687	0.80	6.3	TM**		
76	TM*	Ethylbenzene		0.7068	0.7742	0.6758	0.7119	0.7374	0.7022	0.7224	0.7177	0.7958	0.73	5.1	TM*		
77	TM**	Bromoform		0.2482	0.3469	0.2915	0.2909	0.2846	0.2690	0.2689	0.2729	0.2958	0.29	9.6	TM**		
78	I	1,4-Dichlorobenzene-D (IS)															
79	TM	Isopropylbenzene		2.190	2.366	2.335	2.338	2.409	2.493	2.325	2.261	2.343	2.3	3.6	TM		
80	TM**	1,1,2,2-Tetrachloroethane		0.7680	0.7120	0.6909	0.6574	0.6453	0.6615	0.6395	0.6433	0.6726	0.68	6.2	TM**		
81	TM	1,2,3-Trichloropropane		0.1092	0.1338	0.1072	0.1167	0.1240	0.1208	0.1188	0.1156	0.1153	0.12	6.7	TM		
82	TM	t-1,4-Dichloro-2-Butene		0.1629	0.2104	0.1443	0.1515	0.1446	0.1521	0.1384	0.1379	0.1457	0.15	15	TM		
83	TM	Bromobenzene		0.3220	0.4319	0.3804	0.3839	0.3837	0.3977	0.3619	0.3775	0.3788	0.38	7.6	TM		
84	TM	n-Propylbenzene		1.199	1.399	1.339	1.434	1.428	1.589	1.476	1.460	1.493	1.4	7.6	TM		
85	TM	4-Ethyltoluene		1.871	2.216	2.023	2.030	2.180	2.347	2.262	2.210	2.320	2.2	7.2	TM		
86	TM	2-Chlorotoluene		0.8399	0.9704	0.9418	0.9113	0.9032	0.9405	0.8957	0.8334	0.8960	0.90	5.0	TM		
87	TM	1,3,5-Trimethylbenzene		1.733	1.854	1.760	1.820	1.917	1.994	1.929	1.909	1.952	1.9	4.7	TM		
88	TM	4-Chlorotoluene		0.9116	1.108	1.019	1.031	1.056	1.081	1.027	0.9767	1.013	1.0	5.6	TM		
89	TM	Tert-Butylbenzene		1.825	1.839	2.015	1.967	2.023	2.182	2.026	1.960	2.039	2.0	5.4	TM		
90	TM	1,2,4-Trimethylbenzene		1.710	1.608	1.702	1.791	1.915	1.993	1.967	1.925	2.015	1.8	8.0	TM		
91	TM	Sec-Butylbenzene		2.184	2.410	2.370	2.391	2.462	2.580	2.461	2.379	2.511	2.4	4.6	TM		
92	TM	p-Isopropyltoluene		1.061	1.110	1.073	1.028	1.078	1.187	1.165	1.172	1.221	1.1	5.9	TM		
93	TM	Benzyl Chloride		0.8570	0.7787	0.7335	0.7729	0.7625	0.7823	0.8457	0.8342	0.8499	0.80	5.6	TM		
94	TM	1,3-DCB		0.6231	0.7035	0.6395	0.6861	0.6844	0.6866	0.6680	0.6769	0.6899	0.67	3.8	TM		
95	TM	1,4-DCB		1.258	1.445	1.369	1.275	1.375	1.362	1.302	1.274	1.339	1.3	4.6	TM		
96	TM	n-Butylbenzene		0.8570	0.7787	0.7335	0.7729	0.7625	0.7823	0.8457	0.8342	0.8499	0.80	5.6	TM		
97	TM	1,2-DCB		1.242	1.276	1.269	1.286	1.284	1.323	1.317	1.296	1.365	1.3	2.8	TM		
98	TM	Hexachloroethane		0.3531	0.3877	0.3416	0.4124	0.4274	0.4437	0.4253	0.4284	0.4399	0.41	9.2	TM		
99	TML	1,2-Dibromo-3-chloropropane		0.1629	0.2258	0.1568	0.1624	0.1430	0.1513	0.1498	0.1418	0.1460	0.16	16	TML	1.000	
100	TM	1,2,4-Trichlorobenzene		0.7205	0.7469	0.7167	0.7311	0.7829	0.8745	0.8966	0.9589	0.9259	0.82	12	TM		
101	TM	Hexachlorobutadiene		0.3290	0.3416	0.4300	0.4062	0.4037	0.4263	0.4351	0.4375	0.4456	0.41	10	TM		
102	TM	Naphthalene		1.576	1.413	1.483	1.571	1.628	1.797	1.847	2.037	1.944	1.7	13	TM		
103	TM	1,2,3-Trichlorobenzene		0.3217	0.3215	0.3578	0.3251	0.3216	0.3908	0.3950	0.4219	0.4144	0.36	12	TM		
104																	
105																	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	353856	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	302144	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	163584	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	36949	5.5411	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.164%	
43) 1,2-DCA-D4(S)	6.07	65	42868	5.5133	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.052%	
64) Toluene-D8(S)	8.37	98	137589	5.5734	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.292%	
72) 4-Bromofluorobenzene(S)	11.26	95	56841	5.4887	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.956%	
Target Compounds						
2) Freon 1113	1.12	116	5062	2.6187	ppb	95
3) Dichlorodifluoromethane	1.15	85	907	0.6037	ppb	94
4) Freon 114	1.25	85	1017	0.4220	ppb	# 73
5) Chloromethane	1.29	50	2048	0.4156	ppb	98
6) Vinyl chloride	1.38	62	1630	0.3669	ppb	91
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	12056	3.2078	ppb	95
8) Bromomethane	1.66	94	1310	-1.4293	ppb	87
9) Chloroethane	1.76	64	1106	-0.1356	ppb	# 77
10) Dichlorofluoromethane	1.92	67	572	0.0708	ppb	94
11) Trichlorofluoromethane	2.00	101	1790	0.2886	ppb	94
12) Acrolein	2.43	56	11107	11.8244	ppb	# 93
13) Acetone	2.61	43	1333	-1.6102	ppb	# 83
14) Freon-113	2.54	101	1273	0.3702	ppb	# 81
15) 1,1-DCE	2.52	63	545	0.4736	ppb	# 48
16) t-Butanol	3.38	59	4823	11.4819	ppb	# 82
17) 2-Propanol	2.84	45	1588	5.0053	ppb	# 1
18) Acetonitrile	2.92	41	8234	11.4489	ppb	# 66
19) Methyl Acetate	3.01	43	2506	0.4630	ppb	100
20) Iodomethane	2.66	142	136	3.4318	ppb	# 42
21) Acrylonitrile	3.47	52	1164	0.3224	ppb	# 27
23) Carbon disulfide	2.73	76	4272	0.3565	ppb	# 91
24) Methyl t-butyl ether (MtBE)	3.53	73	4470	0.4068	ppb	# 85
25) Trans-1,2-DCE	2.51	96	929	0.4460	ppb	# 29
26) Diisopropyl Ether	4.33	45	5310	0.4469	ppb	98
28) 1,1-DCA	4.09	63	2324	0.3408	ppb	# 87
29) Vinyl Acetate	4.28	43	1096	0.4404	ppb	# 78
30) Ethyl tert Butyl Ether	4.87	59	3018	0.2921	ppb	# 71
31) MEK (2-Butanone)	5.06	43	384	0.3451	ppb	# 44
32) Cis-1,2-DCE	4.97	96	1461	0.3764	ppb	77
33) 2,2-Dichloropropane	4.97	77	2653	0.4929	ppb	# 87
36) Chloroform	5.44	83	2030	0.3405	ppb	76
37) Bromochloromethane	5.30	128	396	0.4182	ppb	# 64
39) 1,1,1-TCA	5.65	97	775	0.3576	ppb	83
40) Cyclohexane	5.72	41	1216	0.3119	ppb	# 47
41) 1,1-Dichloropropene	5.88	75	1235	0.2932	ppb	# 69
42) 2,2,4-Trimethylpentane	6.27	57	3159	0.4099	ppb	# 74
44) Carbon Tetrachloride	5.87	117	1412	0.3178	ppb	91
45) Tert Amyl Methyl Ether	6.36	73	3763	0.4032	ppb	# 94
47) 1,2-DCA	6.17	62	1335	0.2754	ppb	# 82

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	6.13	78	3977	0.3164	ppb #	91
49) TCE	6.95	130	583	0.2773	ppb #	83
50) 2-Pentanone	7.23	43	26915	11.1427	ppb	95
51) 1,2-Dichloropropane	7.21	63	1054	0.3171	ppb #	86
52) Bromodichloromethane	7.54	83	950	0.3761	ppb #	88
53) Methyl Cyclohexane	7.17	83	1304	0.2899	ppb	87
54) Dibromomethane	7.34	93	936	0.4031	ppb	73
55) 2-Chloroethyl vinyl ether	8.06	43	561	0.1327	ppb #	24
56) MIBK (methyl isobutyl ket	8.29	43	1056	0.3166	ppb #	59
57) 1-Bromo-2-chloroethane	7.89	63	1009	0.3978	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	1981	0.3597	ppb #	33
59) Toluene	8.44	91	2264	0.2997	ppb	91
60) Trans-1,3-Dichloropropene	8.71	75	1802	0.3402	ppb	93
61) 1,1,2-TCA	8.90	83	948	0.3525	ppb	88
62) 2-Hexanone	9.39	43	1165	0.5167	ppb #	36
65) 1,2-EDB	9.44	107	587	0.3026	ppb	84
66) Tetrachloroethene	9.06	166	1090	0.4552	ppb #	66
68) 1,1,1,2-Tetrachloroethane	10.09	131	1465	0.3736	ppb #	59
69) m&p-Xylene	10.27	91	7735	0.6556	ppb	93
70) o-Xylene	10.70	106	1265	0.3656	ppb	64
71) Styrene	10.71	104	3372	0.3176	ppb #	79
73) 1,3-Dichloropropane	9.09	76	1757	0.3175	ppb	97
74) Dibromochloromethane	9.33	129	1527	0.3655	ppb	92
75) Chlorobenzene	10.00	112	3342	0.3448	ppb	92
76) Ethylbenzene	10.13	91	2494	0.2838	ppb	95
77) Bromoform	10.90	173	1263	0.3662	ppb #	56
79) Isopropylbenzene	11.11	105	4366	0.2851	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	1899	0.4289	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	365	0.4730	ppb #	70
82) t-1,4-Dichloro-2-Butene	11.50	53	290	0.2874	ppb #	20
83) Bromobenzene	11.42	156	935	0.3763	ppb	87
84) n-Propylbenzene	11.56	91	2679	0.2875	ppb #	79
85) 4-Ethyltoluene	11.69	105	4086	0.2888	ppb	98
86) 2-Chlorotoluene	11.65	91	2426	0.4103	ppb	86
87) 1,3,5-Trimethylbenzene	11.76	105	3515	0.2866	ppb	98
88) 4-Chlorotoluene	11.77	91	2028	0.3025	ppb	85
89) Tert-Butylbenzene	12.12	119	3713	0.2857	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	3808	0.3150	ppb	83
91) Sec-Butylbenzene	12.36	105	5100	0.3225	ppb	89
92) p-Isopropyltoluene	12.52	119	2805	0.3822	ppb	88
93) Benzyl Chloride	12.72	91	1923	0.3665	ppb	97
94) 1,3-DCB	12.46	146	1553	0.3526	ppb #	82
95) 1,4-DCB	12.56	146	2832	0.3246	ppb #	19
96) n-Butylbenzene	12.72	91	1923	0.3665	ppb #	90
97) 1,2-DCB	12.97	146	2647	0.3123	ppb	89
98) Hexachloroethane	13.26	117	717	0.2695	ppb	77
100) 1,2,4-Trichlorobenzene	14.74	180	1528	0.2858	ppb	83
101) Hexachlorobutadiene	14.94	225	630	0.2371	ppb #	62
102) Naphthalene	15.01	128	3003	0.2700	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	845	0.3555	ppb #	72

Quantitation Report

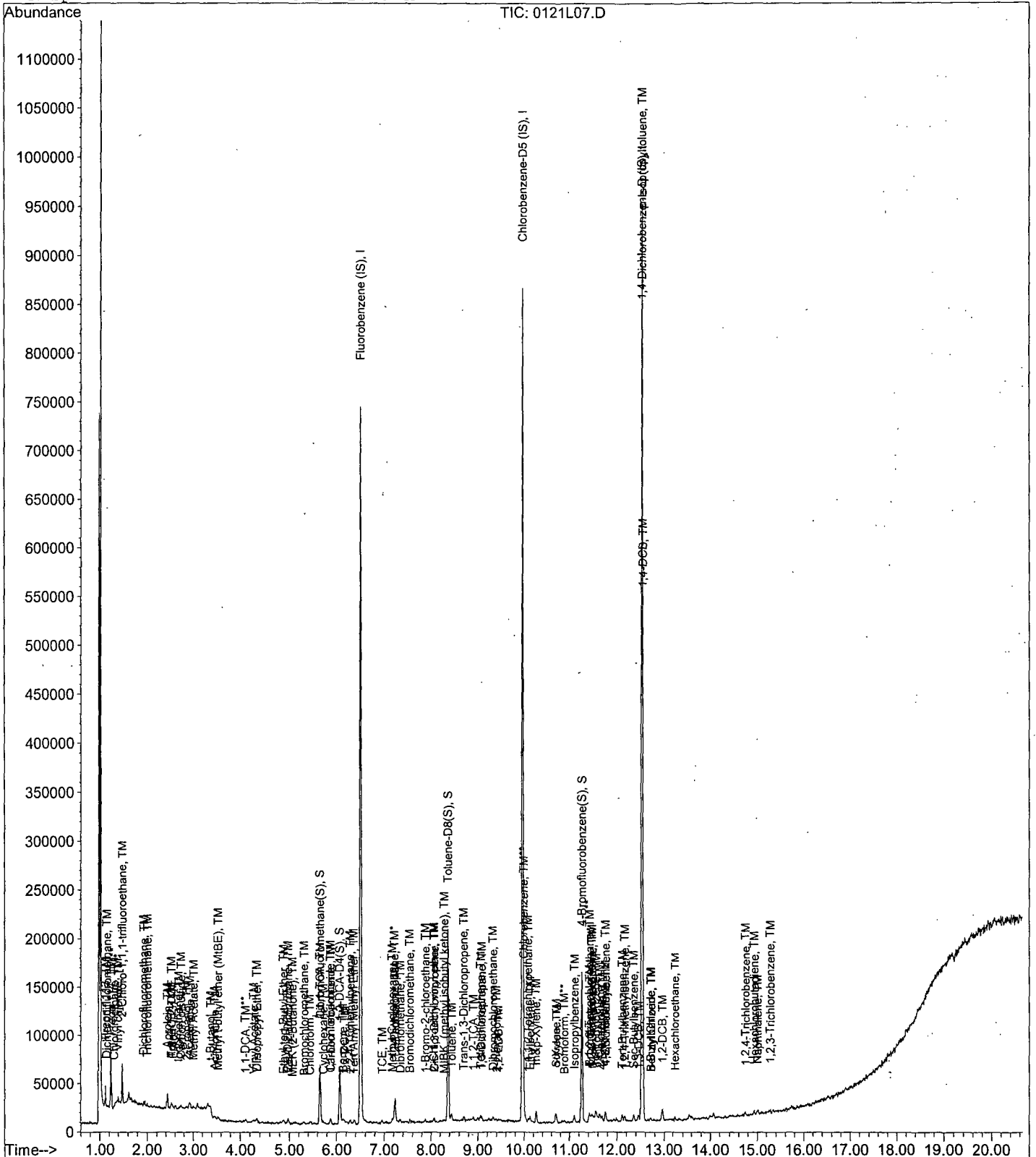
Data File : M:\LOKI\DATA\190121\0121L07.D  
Acq On : 21 Jan 19 17:50  
Sample : 0.3ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	357312	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	300736	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170368	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	34947	5.1902	ppb	0.00
Spiked Amount	25.000		Recovery	=	20.760%	
43) 1,2-DCA-D4(S)	6.07	65	41245	5.2533	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.012%	
64) Toluene-D8(S)	8.37	98	133613	5.4376	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.752%	
72) 4-Bromofluorobenzene(S)	11.27	95	54511	5.2884	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.152%	
Target Compounds						
2) Freon 1113	1.12	116	9096	4.6601	ppb	93
3) Dichlorodifluoromethane	1.15	85	1374	0.4440	ppb	91
4) Freon 114	1.25	85	1492	0.6131	ppb	95
5) Chloromethane	1.29	50	2981	0.5991	ppb	# 84
6) Vinyl chloride	1.38	62	1953	0.4354	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	19808	5.2194	ppb	96
8) Bromomethane	1.67	94	2192	-1.0854	ppb	# 70
9) Chloroethane	1.76	64	1985	0.2660	ppb	88
10) Dichlorofluoromethane	1.95	67	5540	0.6791	ppb	# 83
11) Trichlorofluoromethane	2.00	101	3185	0.5086	ppb	# 67
12) Acrolein	2.43	56	25004	26.3615	ppb	# 88
13) Acetone	2.61	43	1558	-1.3508	ppb	# 86
14) Freon-113	2.54	101	1603	0.4617	ppb	# 89
15) 1,1-DCE	2.52	63	641	0.5516	ppb	# 49
16) t-Butanol	3.39	59	12761	30.0857	ppb	98
18) Acetonitrile	2.92	41	21649	29.8106	ppb	97
19) Methyl Acetate	3.01	43	2983	0.5765	ppb	# 78
20) Iodomethane	2.67	142	189	3.4582	ppb	# 42
21) Acrylonitrile	3.45	52	1139	0.2963	ppb	# 48
22) Methylene chloride	3.09	84	3939	0.3188	ppb	91
23) Carbon disulfide	2.73	76	6490	0.5364	ppb	93
24) Methyl t-butyl ether (MtBE)	3.53	73	5941	0.5355	ppb	# 94
25) Trans-1,2-DCE	2.53	96	1098	0.5221	ppb	95
26) Diisopropyl Ether	4.34	45	6000	0.5001	ppb	97
28) 1,1-DCA	4.11	63	3551	0.5157	ppb	# 83
29) Vinyl Acetate	4.32	43	1311	0.5217	ppb	# 98
30) Ethyl tert Butyl Ether	4.88	59	5000	0.4793	ppb	# 88
32) Cis-1,2-DCE	4.97	96	2331	0.5947	ppb	# 69
33) 2,2-Dichloropropane	4.97	77	3666	0.6746	ppb	# 85
36) Chloroform	5.45	83	2813	0.4673	ppb	93
37) Bromochloromethane	5.31	128	533	0.5574	ppb	# 56
39) 1,1,1-TCA	5.64	97	981	0.4483	ppb	92
40) Cyclohexane	5.73	41	3072	1.0042	ppb	# 34
41) 1,1-Dichloropropene	5.88	75	2350	0.5525	ppb	# 78
42) 2,2,4-Trimethylpentane	6.29	57	3842	0.4937	ppb	# 64
44) Carbon Tetrachloride	5.87	117	1956	0.4359	ppb	96
45) Tert Amyl Methyl Ether	6.36	73	5061	0.5371	ppb	# 78
47) 1,2-DCA	6.16	62	2674	0.5463	ppb	# 73
48) Benzene	6.13	78	6990	0.5507	ppb	96

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	1318	0.6208	ppb	# 79
50) 2-Pentanone	7.23	43	61080	25.0422	ppb	98
51) 1,2-Dichloropropane	7.21	63	1748	0.5209	ppb	# 86
52) Bromodichloromethane	7.55	83	1213	0.4756	ppb	# 81
53) Methyl Cyclohexane	7.17	83	2551	0.5616	ppb	84
54) Dibromomethane	7.33	93	999	0.4261	ppb	87
56) MIBK (methyl isobutyl ket	8.29	43	1582	0.4698	ppb	93
57) 1-Bromo-2-chloroethane	7.89	63	1208	0.4717	ppb	# 79
58) Cis-1,3-Dichloropropene	8.07	75	2611	0.4695	ppb	# 69
59) Toluene	8.44	91	3753	0.4920	ppb	92
60) Trans-1,3-Dichloropropene	8.71	75	2839	0.5307	ppb	90
61) 1,1,2-TCA	8.90	83	1500	0.5523	ppb	83
65) 1,2-EDB	9.44	107	1016	0.5261	ppb	96
66) Tetrachloroethene	9.05	166	1200	0.5035	ppb	# 85
67) 1-Chlorohexane	10.00	91	3117	0.1588	ppb	# 86
68) 1,1,1,2-Tetrachloroethane	10.09	131	2072	0.5308	ppb	86
69) m&p-Xylene	10.27	91	11228	0.9560	ppb	85
70) o-Xylene	10.70	106	1684	0.4890	ppb	90
71) Styrene	10.71	104	5141	0.4864	ppb	96
73) 1,3-Dichloropropane	9.08	76	2815	0.5111	ppb	# 82
74) Dibromochloromethane	9.33	129	2158	0.5190	ppb	85
75) Chlorobenzene	10.00	112	4193	0.4346	ppb	# 79
76) Ethylbenzene	10.13	91	4251	0.4860	ppb	94
77) Bromoform	10.90	173	1493	0.4349	ppb	83
79) Isopropylbenzene	11.11	105	7463	0.4680	ppb	94
80) 1,1,2,2-Tetrachloroethane	11.42	83	2617	0.5675	ppb	# 90
81) 1,2,3-Trichloropropane	11.47	110	372	0.4628	ppb	83
82) t-1,4-Dichloro-2-Butene	11.50	53	555	0.5282	ppb	90
83) Bromobenzene	11.42	156	1097	0.4239	ppb	72
84) n-Propylbenzene	11.56	91	4087	0.4211	ppb	96
85) 4-Ethyltoluene	11.69	105	6374	0.4326	ppb	97
86) 2-Chlorotoluene	11.65	91	2862	0.4648	ppb	87
87) 1,3,5-Trimethylbenzene	11.76	105	5904	0.4622	ppb	99
88) 4-Chlorotoluene	11.76	91	3106	0.4448	ppb	100
89) Tert-Butylbenzene	12.11	119	6220	0.4595	ppb	85
90) 1,2,4-Trimethylbenzene	12.17	105	5826	0.4628	ppb	86
91) Sec-Butylbenzene	12.36	105	7440	0.4518	ppb	97
92) p-Isopropyltoluene	12.52	119	3615	0.4729	ppb	# 89
93) Benzyl Chloride	12.72	91	2920	0.5344	ppb	93
94) 1,3-DCB	12.46	146	2123	0.4628	ppb	88
95) 1,4-DCB	12.57	146	4286	0.4717	ppb	89
96) n-Butylbenzene	12.72	91	2920	0.5344	ppb	# 75
97) 1,2-DCB	12.98	146	4231	0.4793	ppb	94
98) Hexachloroethane	13.26	117	1203	0.4342	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.80	75	555	-0.1026	ppb	# 39
100) 1,2,4-Trichlorobenzene	14.75	180	2455	0.4409	ppb	# 65
101) Hexachlorobutadiene	14.94	225	1121	0.4051	ppb	80
102) Naphthalene	15.01	128	5369	0.4636	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	1096	0.4427	ppb	# 74

Quantitation Report

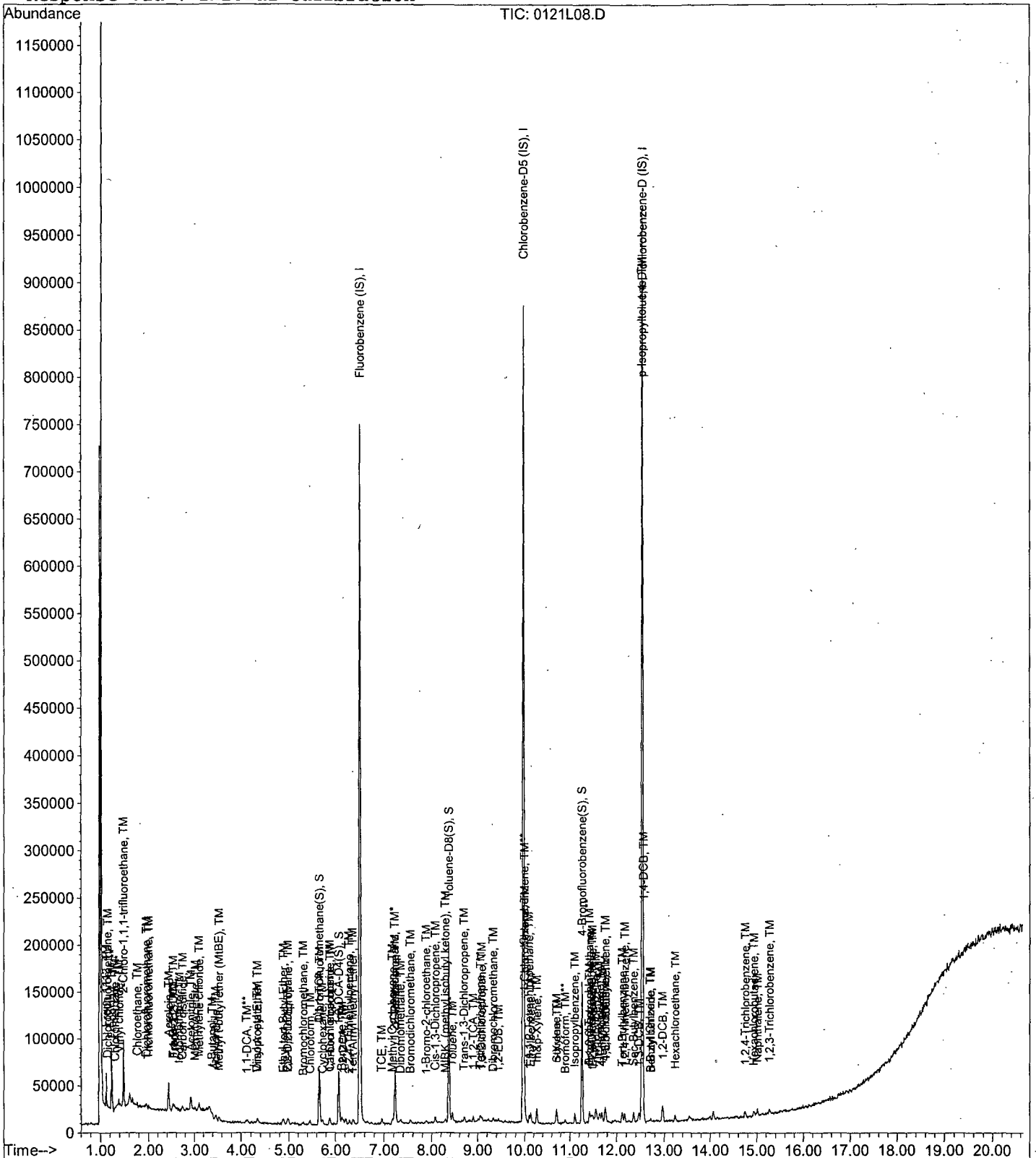
Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration





Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	348544	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305600	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	164672	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	62019	9.4425	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.768%	
43) 1,2-DCA-D4(S)	6.07	65	71668	9.3578	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.432%	
64) Toluene-D8(S)	8.37	98	226450	9.0692	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.276%	
72) 4-Bromofluorobenzene(S)	11.27	95	98697	9.4226	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.692%	
Target Compounds						
2) Freon 1113	1.12	116	20572	10.8046	ppb	99
3) Dichlorodifluoromethane	1.15	85	3607	1.1950	ppb	98
4) Freon 114	1.25	85	2739	1.1538	ppb	100
5) Chloromethane	1.29	50	5313	1.0945	ppb	96
6) Vinyl chloride	1.38	62	4015	0.9176	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	39864	10.7683	ppb	96
8) Bromomethane	1.67	94	3234	-0.6410	ppb	99
9) Chloroethane	1.76	64	3027	0.7833	ppb	# 79
10) Dichlorofluoromethane	1.95	67	8554	1.0750	ppb	100
11) Trichlorofluoromethane	2.00	101	6100	0.9985	ppb	90
12) Acrolein	2.43	56	48212	52.1082	ppb	# 87
13) Acetone	2.62	43	1777	-1.0282	ppb	# 62
14) Freon-113	2.54	101	4023	1.1879	ppb	93
15) 1,1-DCE	2.52	63	1511	1.3331	ppb	# 58
16) t-Butanol	3.38	59	19859	47.9979	ppb	98
17) 2-Propanol	2.84	45	3605	11.5360	ppb	# 51
18) Acetonitrile	2.92	41	37610	53.0917	ppb	91
19) Methyl Acetate	3.02	43	8151	1.9244	ppb	# 73
20) Iodomethane	2.66	142	308	3.5230	ppb	# 67
21) Acrylonitrile	3.45	52	1988	0.9420	ppb	# 55
22) Methylene chloride	3.10	84	6042	0.8352	ppb	94
23) Carbon disulfide	2.73	76	13465	1.1409	ppb	# 90
24) Methyl t-butyl ether (MtBE)	3.54	73	10257	0.9478	ppb	# 86
25) Trans-1,2-DCE	2.52	96	2185	1.0650	ppb	96
26) Diisopropyl Ether	4.33	45	11509	0.9835	ppb	94
28) 1,1-DCA	4.10	63	6686	0.9954	ppb	95
29) Vinyl Acetate	4.28	43	2419	0.9868	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	9864	0.9694	ppb	95
31) MEK (2-Butanone)	5.07	43	3241	1.8771	ppb	# 76
32) Cis-1,2-DCE	4.99	96	3876	1.0138	ppb	# 68
33) 2,2-Dichloropropane	4.97	77	5657	1.0671	ppb	96
36) Chloroform	5.45	83	6481	1.1036	ppb	83
37) Bromochloromethane	5.30	128	1084	1.1621	ppb	77
39) 1,1,1-TCA	5.65	97	2350	1.1009	ppb	97
40) Cyclohexane	5.72	41	3422	1.1680	ppb	81
41) 1,1-Dichloropropene	5.88	75	4570	1.1015	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	8300	1.0933	ppb	96
44) Carbon Tetrachloride	5.87	117	4958	1.1328	ppb	75
45) Tert Amyl Methyl Ether	6.36	73	9419	1.0247	ppb	# 96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	4562	0.9555	ppb	# 91
48) Benzene	6.14	78	12769	1.0313	ppb	90
49) TCE	6.95	130	2195	1.0599	ppb	# 84
50) 2-Pentanone	7.23	43	123775	52.0231	ppb	97
51) 1,2-Dichloropropane	7.21	63	3792	1.1584	ppb	# 81
52) Bromodichloromethane	7.54	83	2563	1.0303	ppb	# 97
53) Methyl Cyclohexane	7.17	83	4766	1.0756	ppb	92
54) Dibromomethane	7.34	93	2368	1.0354	ppb	93
55) 2-Chloroethyl vinyl ether	7.94	43	474	899.6219	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	3267	0.9945	ppb	# 79
57) 1-Bromo-2-chloroethane	7.88	63	2787	1.1156	ppb	90
58) Cis-1,3-Dichloropropene	8.07	75	5602	1.0326	ppb	95
59) Toluene	8.44	91	7286	0.9792	ppb	97
60) Trans-1,3-Dichloropropene	8.70	75	5571	1.0676	ppb	95
61) 1,1,2-TCA	8.90	83	2628	0.9920	ppb	85
62) 2-Hexanone	9.22	43	2444	1.1004	ppb	# 78
65) 1,2-EDB	9.44	107	2163	1.1023	ppb	94
66) Tetrachloroethene	9.05	166	2801	1.1565	ppb	85
67) 1-Chlorohexane	10.00	91	6065	0.8960	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	3940	0.9934	ppb	90
69) m&p-Xylene	10.26	91	23239	1.9473	ppb	94
70) o-Xylene	10.70	106	3737	1.0680	ppb	85
71) Styrene	10.71	104	10573	0.9845	ppb	98
73) 1,3-Dichloropropane	9.08	76	6227	1.1127	ppb	100
74) Dibromochloromethane	9.33	129	4293	1.0160	ppb	85
75) Chlorobenzene	9.99	112	10293	1.0499	ppb	97
76) Ethylbenzene	10.13	91	9464	1.0647	ppb	97
77) Bromoform	10.90	173	4240	1.2153	ppb	95
79) Isopropylbenzene	11.11	105	15582	1.0109	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	4690	1.0522	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	881	1.1341	ppb	81
82) t-1,4-Dichloro-2-Butene	11.49	53	1386	1.3646	ppb	# 66
83) Bromobenzene	11.42	156	2845	1.1374	ppb	93
84) n-Propylbenzene	11.56	91	9217	0.9825	ppb	98
85) 4-Ethyltoluene	11.69	105	14594	1.0248	ppb	95
86) 2-Chlorotoluene	11.64	91	6392	1.0740	ppb	94
87) 1,3,5-Trimethylbenzene	11.76	105	12213	0.9893	ppb	88
88) 4-Chlorotoluene	11.76	91	7297	1.0811	ppb	99
89) Tert-Butylbenzene	12.11	119	12116	0.9261	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	10589	0.8702	ppb	88
91) Sec-Butylbenzene	12.36	105	15873	0.9972	ppb	99
92) p-Isopropyltoluene	12.52	119	7311	0.9895	ppb	97
93) Benzyl Chloride	12.72	91	5129	0.9711	ppb	88
94) 1,3-DCB	12.46	146	4634	1.0452	ppb	98
95) 1,4-DCB	12.56	146	9518	1.0839	ppb	92
96) n-Butylbenzene	12.72	91	5129	0.9711	ppb	# 87
97) 1,2-DCB	12.97	146	8402	0.9847	ppb	97
98) Hexachloroethane	13.26	117	2554	0.9536	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.81	75	1487	0.9120	ppb	# 50
100) 1,2,4-Trichlorobenzene	14.74	180	4920	0.9141	ppb	85
101) Hexachlorobutadiene	14.94	225	2250	0.8411	ppb	93
102) Naphthalene	15.01	128	9306	0.8313	ppb	93
103) 1,2,3-Trichlorobenzene	15.27	180	2118	0.8851	ppb	93

Quantitation Report

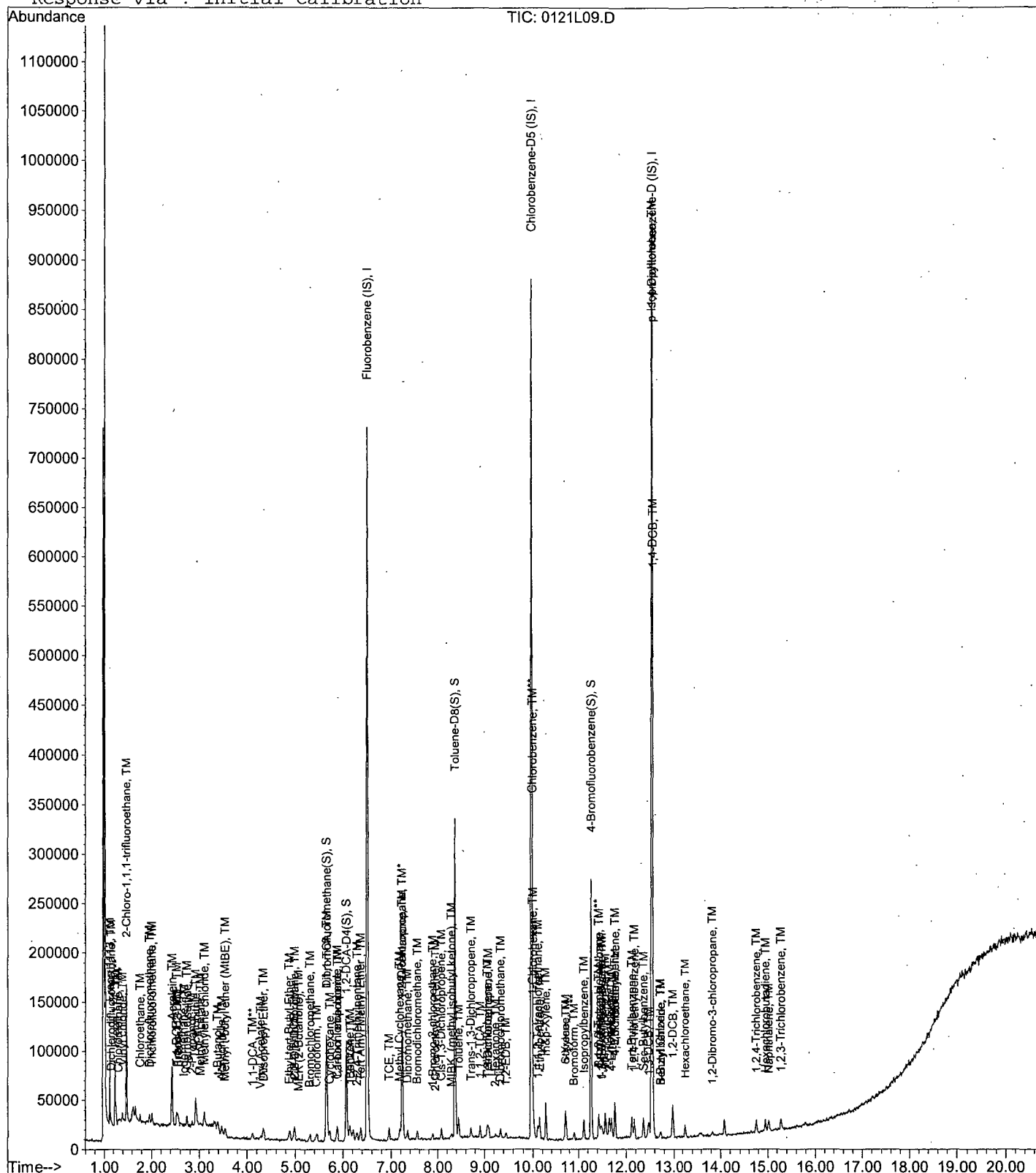
Data File : M:\LOKI\DATA\190121\0121L09.D  
Acq On : 21 Jan 19 18:47  
Sample : 1.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	369600	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	318272	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170944	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	62734	9.0072	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.028%	
43) 1,2-DCA-D4(S)	6.07	65	73820	9.0896	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.360%	
64) Toluene-D8(S)	8.37	98	238805	9.1832	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.732%	
72) 4-Bromofluorobenzene(S)	11.26	95	103026	9.4443	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.776%	
Target Compounds						
2) Freon 1113	1.12	116	37205	18.4273	ppb	96
3) Dichlorodifluoromethane	1.14	85	6620	2.0683	ppb	97
4) Freon 114	1.25	85	4136	1.6430	ppb	# 74
5) Chloromethane	1.29	50	9871	1.9177	ppb	96
6) Vinyl chloride	1.38	62	9757	2.1029	ppb	89
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	77480	19.7371	ppb	98
8) Bromomethane	1.66	94	7618	0.9610	ppb	86
9) Chloroethane	1.76	64	4613	1.4108	ppb	89
10) Dichlorofluoromethane	1.95	67	15265	1.8090	ppb	94
11) Trichlorofluoromethane	2.00	101	11836	1.8271	ppb	96
12) Acrolein	2.43	56	70018	71.3652	ppb	# 94
13) Acetone	2.61	43	3142	0.4593	ppb	94
14) Freon-113	2.55	101	7072	1.9692	ppb	87
15) 1,1-DCE	2.52	63	2480	2.0633	ppb	87
16) t-Butanol	3.39	59	28922	65.9203	ppb	# 92
17) 2-Propanol	2.85	45	5791	17.4755	ppb	# 53
18) Acetonitrile	2.92	41	53663	71.4371	ppb	99
19) Methyl Acetate	3.02	43	8362	1.8561	ppb	97
20) Iodomethane	2.67	142	805	3.7594	ppb	# 77
21) Acrylonitrile	3.45	52	3175	1.6828	ppb	# 60
22) Methylene chloride	3.10	84	10633	1.7709	ppb	93
23) Carbon disulfide	2.73	76	25765	2.0587	ppb	97
24) Methyl t-butyl ether (MtBE)	3.54	73	22952	2.0000	ppb	99
25) Trans-1,2-DCE	2.52	96	4399	2.0221	ppb	91
26) Diisopropyl Ether	4.33	45	23994	1.9336	ppb	# 90
28) 1,1-DCA	4.11	63	14054	1.9731	ppb	93
29) Vinyl Acetate	4.27	43	5002	1.9243	ppb	# 85
30) Ethyl tert Butyl Ether	4.87	59	20262	1.8777	ppb	100
31) MEK (2-Butanone)	5.08	43	4876	2.6034	ppb	92
32) Cis-1,2-DCE	4.98	96	8153	2.0110	ppb	97
33) 2,2-Dichloropropane	4.96	77	11317	2.0131	ppb	# 86
36) Chloroform	5.45	83	11467	1.8414	ppb	90
37) Bromochloromethane	5.30	128	1875	1.8956	ppb	95
39) 1,1,1-TCA	5.65	97	4285	1.8931	ppb	91
40) Cyclohexane	5.72	41	6776	2.3103	ppb	81
41) 1,1-Dichloropropene	5.88	75	8633	1.9623	ppb	# 88
42) 2,2,4-Trimethylpentane	6.29	57	16090	1.9987	ppb	# 75
44) Carbon Tetrachloride	5.86	117	8488	1.8288	ppb	89
45) Tert Amyl Methyl Ether	6.36	73	18748	1.9234	ppb	# 95

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	10539	2.0817	ppb	# 89
48) Benzene	6.14	78	25147	1.9153	ppb	98
49) TCE	6.95	130	3719	1.6935	ppb	87
50) 2-Pentanone	7.23	43	182419	72.3035	ppb	98
51) 1,2-Dichloropropane	7.21	63	6826	1.9664	ppb	100
52) Bromodichloromethane	7.54	83	5013	1.9003	ppb	# 95
53) Methyl Cyclohexane	7.18	83	9102	1.9371	ppb	90
54) Dibromomethane	7.34	93	4937	2.0356	ppb	97
55) 2-Chloroethyl vinyl ether	7.90	43	932	1.8970	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	7552	2.1680	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	5549	2.0946	ppb	94
58) Cis-1,3-Dichloropropene	8.07	75	11723	2.0378	ppb	91
59) Toluene	8.45	91	14678	1.8603	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	10769	1.9462	ppb	98
61) 1,1,2-TCA	8.90	83	5344	1.9022	ppb	95
62) 2-Hexanone	9.22	43	4965	2.1081	ppb	# 86
65) 1,2-EDB	9.44	107	3811	1.8648	ppb	90
66) Tetrachloroethene	9.06	166	5167	2.0484	ppb	90
67) 1-Chlorohexane	10.00	91	9318	1.6292	ppb	91
68) 1,1,1,2-Tetrachloroethane	10.09	131	8000	1.9367	ppb	82
69) m&p-Xylene	10.27	91	46006	3.7015	ppb	95
70) o-Xylene	10.70	106	6739	1.8492	ppb	91
71) Styrene	10.71	104	20607	1.8423	ppb	100
73) 1,3-Dichloropropane	9.08	76	11529	1.9780	ppb	94
74) Dibromochloromethane	9.33	129	8523	1.9368	ppb	88
75) Chlorobenzene	10.00	112	19225	1.8830	ppb	93
76) Ethylbenzene	10.14	91	17208	1.8589	ppb	88
77) Bromoform	10.90	173	7421	2.0424	ppb	96
79) Isopropylbenzene	11.11	105	31938	1.9961	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	9448	2.0418	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	1466	1.8179	ppb	# 67
82) t-1,4-Dichloro-2-Butene	11.49	53	1974	1.8722	ppb	# 76
83) Bromobenzene	11.42	156	5202	2.0033	ppb	92
84) n-Propylbenzene	11.56	91	18318	1.8810	ppb	99
85) 4-Ethyltoluene	11.69	105	27662	1.8712	ppb	99
86) 2-Chlorotoluene	11.64	91	12879	2.0845	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	24068	1.8780	ppb	86
88) 4-Chlorotoluene	11.77	91	13939	1.9894	ppb	97
89) Tert-Butylbenzene	12.11	119	27552	2.0286	ppb	90
90) 1,2,4-Trimethylbenzene	12.17	105	23275	1.8426	ppb	92
91) Sec-Butylbenzene	12.36	105	32415	1.9618	ppb	96
92) p-Isopropyltoluene	12.52	119	14671	1.9127	ppb	98
93) Benzyl Chloride	12.71	91	10031	1.8295	ppb	# 89
94) 1,3-DCB	12.46	146	8745	1.9001	ppb	98
95) 1,4-DCB	12.57	146	18721	2.0536	ppb	98
96) n-Butylbenzene	12.71	91	10031	1.8295	ppb	97
97) 1,2-DCB	12.97	146	17360	1.9600	ppb	96
98) Hexachloroethane	13.26	117	4671	1.6801	ppb	# 80
99) 1,2-Dibromo-3-chloropropan	13.82	75	2144	1.5293	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	9801	1.7542	ppb	89
101) Hexachlorobutadiene	14.94	225	5881	2.1178	ppb	92
102) Naphthalene	15.01	128	20275	1.7447	ppb	95
103) 1,2,3-Trichlorobenzene	15.27	180	4893	1.9697	ppb	90

Quantitation Report

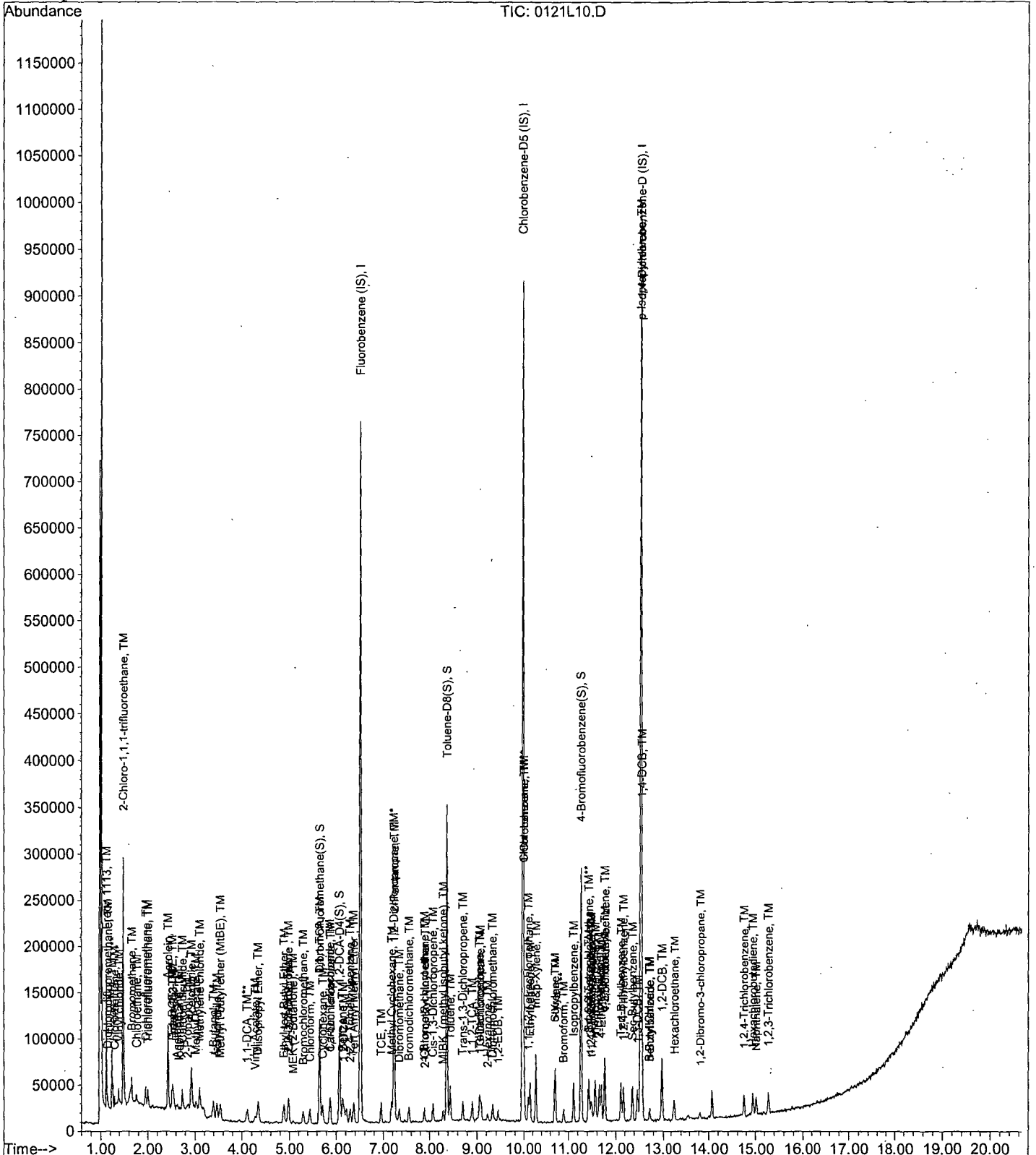
Data File : M:\LOKI\DATA\190121\0121L10.D  
Acq On : 21 Jan 19 19:16  
Sample : 2.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	353344	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	308864	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174208	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	168508	25.3070	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.228%	
43) 1,2-DCA-D4(S)	6.07	65	197954	25.4960	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.984%	
64) Toluene-D8(S)	8.37	98	625618	24.7908	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.164%	
72) 4-Bromofluorobenzene(S)	11.26	95	266638	25.1870	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.748%	
Target Compounds						
2) Freon 1113	1.12	116	76167	39.4603	ppb	98
3) Dichlorodifluoromethane	1.15	85	15755	5.1488	ppb	92
4) Freon 114	1.25	85	11613	4.8254	ppb	87
5) Chloromethane	1.29	50	25162	5.1133	ppb	91
6) Vinyl chloride	1.38	62	23045	5.1953	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	151104	40.2627	ppb	97
8) Bromomethane	1.66	94	16973	4.8374	ppb	93
9) Chloroethane	1.76	64	13536	5.6799	ppb	91
10) Dichlorofluoromethane	1.95	67	38421	4.7627	ppb	92
11) Trichlorofluoromethane	2.00	101	31539	5.0927	ppb	99
12) Acrolein	2.43	56	93376	99.5512	ppb	# 93
13) Acetone	2.61	43	6369	4.6227	ppb	94
14) Freon-113	2.55	101	16990	4.9485	ppb	95
15) 1,1-DCE	2.52	63	5104	4.4418	ppb	93
16) t-Butanol	3.38	59	36595	87.2463	ppb	97
17) 2-Propanol	2.84	45	12356	39.0021	ppb	# 77
18) Acetonitrile	2.92	41	68662	95.6091	ppb	96
19) Methyl Acetate	3.02	43	19861	4.8663	ppb	98
20) Iodomethane	2.67	142	2911	4.8665	ppb	99
21) Acrylonitrile	3.44	52	6854	4.4564	ppb	99
22) Methylene chloride	3.10	84	23312	4.8156	ppb	96
23) Carbon disulfide	2.73	76	57330	4.7917	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	53831	4.9065	ppb	97
25) Trans-1,2-DCE	2.52	96	10519	5.0577	ppb	98
26) Diisopropyl Ether	4.33	45	59512	5.0164	ppb	98
28) 1,1-DCA	4.10	63	33514	4.9216	ppb	97
29) Vinyl Acetate	4.33	43	12055	4.8511	ppb	# 98
30) Ethyl tert Butyl Ether	4.87	59	49662	4.8141	ppb	98
31) MEK (2-Butanone)	5.07	43	11339	6.1283	ppb	96
32) Cis-1,2-DCE	4.98	96	18809	4.8528	ppb	93
33) 2,2-Dichloropropane	4.97	77	23684	4.4069	ppb	95
36) Chloroform	5.45	83	28317	4.7565	ppb	99
37) Bromochloromethane	5.30	128	4883	5.1639	ppb	100
39) 1,1,1-TCA	5.65	97	11000	5.0834	ppb	95
40) Cyclohexane	5.72	41	13524	4.9854	ppb	96
41) 1,1-Dichloropropene	5.88	75	20553	4.8866	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	38125	4.9538	ppb	98
44) Carbon Tetrachloride	5.87	117	22586	5.0901	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	46716	5.0132	ppb	96

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	23438	4.8425	ppb	99
48) Benzene	6.13	78	62771	5.0008	ppb	97
49) TCE	6.95	130	11108	5.2907	ppb	93
50) 2-Pentanone	7.23	43	243642	101.0126	ppb	98
51) 1,2-Dichloropropane	7.20	63	16239	4.8934	ppb	100
52) Bromodichloromethane	7.55	83	13170	5.2222	ppb	94
53) Methyl Cyclohexane	7.17	83	22090	4.9175	ppb	97
54) Dibromomethane	7.34	93	12218	5.2695	ppb	92
55) 2-Chloroethyl vinyl ether	7.94	43	1355	4.3832	ppb	97
56) MIBK (methyl isobutyl ket)	8.28	43	19404	5.8267	ppb #	88
57) 1-Bromo-2-chloroethane	7.89	63	12398	4.8951	ppb	91
58) Cis-1,3-Dichloropropene	8.07	75	27380	4.9783	ppb	95
59) Toluene	8.44	91	38744	5.1364	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	25924	4.9006	ppb	99
61) 1,1,2-TCA	8.90	83	13197	4.9136	ppb	88
62) 2-Hexanone	9.22	43	11122	4.9396	ppb	92
65) 1,2-EDB	9.44	107	9722	4.9020	ppb	83
66) Tetrachloroethene	9.05	166	12132	4.9562	ppb	98
67) 1-Chlorohexane	10.00	91	21480	4.7600	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	18966	4.7312	ppb	97
69) m&p-Xylene	10.26	91	120535	9.9933	ppb	95
70) o-Xylene	10.70	106	17040	4.8182	ppb	97
71) Styrene	10.71	104	56179	5.1756	ppb	92
73) 1,3-Dichloropropane	9.08	76	27907	4.9339	ppb	92
74) Dibromochloromethane	9.33	129	21132	4.9484	ppb	90
75) Chlorobenzene	10.00	112	49981	5.0444	ppb	96
76) Ethylbenzene	10.13	91	43976	4.8951	ppb	98
77) Bromoform	10.90	173	17972	5.0970	ppb	96
79) Isopropylbenzene	11.11	105	81475	4.9966	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	22906	4.8574	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	4067	4.9487	ppb #	76
82) t-1,4-Dichloro-2-Butene	11.49	53	5279	4.9131	ppb	86
83) Bromobenzene	11.43	156	13375	5.0543	ppb	95
84) n-Propylbenzene	11.56	91	49969	5.0351	ppb	97
85) 4-Ethyltoluene	11.69	105	70713	4.6939	ppb	97
86) 2-Chlorotoluene	11.64	91	31752	5.0428	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	63419	4.8559	ppb	94
88) 4-Chlorotoluene	11.76	91	35912	5.0293	ppb	100
89) Tert-Butylbenzene	12.12	119	68550	4.9526	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	62396	4.8472	ppb	99
91) Sec-Butylbenzene	12.35	105	83294	4.9465	ppb	99
92) p-Isopropyltoluene	12.52	119	35808	4.5810	ppb	99
93) Benzyl Chloride	12.72	91	26928	4.8193	ppb	95
94) 1,3-DCB	12.46	146	23904	5.0965	ppb	98
95) 1,4-DCB	12.56	146	44420	4.7814	ppb	91
96) n-Butylbenzene	12.72	91	26928	4.8193	ppb #	90
97) 1,2-DCB	12.97	146	44805	4.9638	ppb	94
98) Hexachloroethane	13.26	117	14368	5.0712	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.82	75	5658	5.0335	ppb	97
100) 1,2,4-Trichlorobenzene	14.74	180	25473	4.4737	ppb	89
101) Hexachlorobutadiene	14.93	225	14153	5.0012	ppb	97
102) Naphthalene	15.01	128	54729	4.6213	ppb	94
103) 1,2,3-Trichlorobenzene	15.27	180	11326	4.4740	ppb	96



Quantitation Report

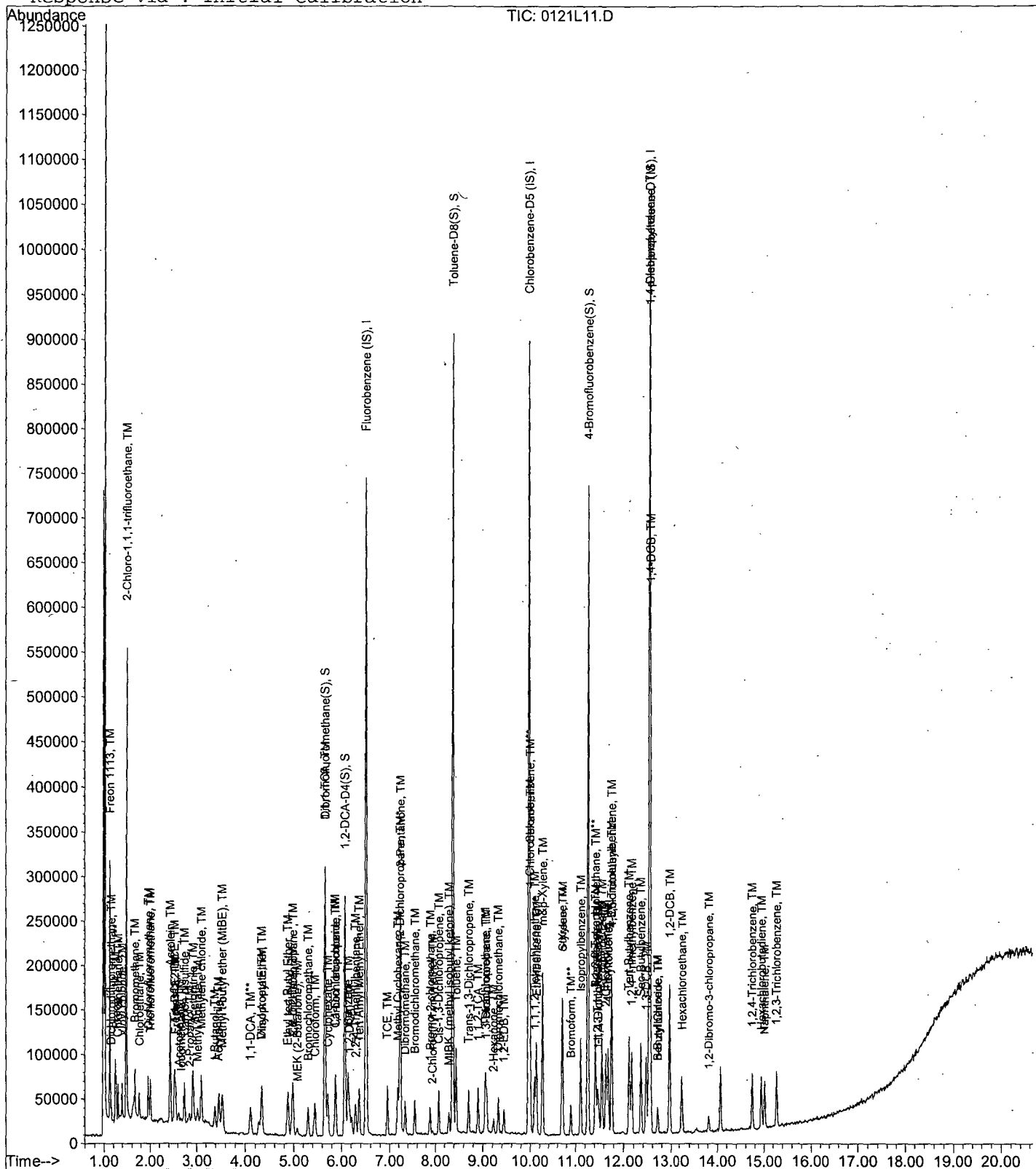
Data File : M:\LOKI\DATA\190121\0121L11.D  
Acq On : 21 Jan 19 19:44  
Sample : 5.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	368896	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	312384	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	171968	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	171899	24.7279	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.912%	
43) 1,2-DCA-D4(S)	6.07	65	197736	24.3942	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.576%	
64) Toluene-D8(S)	8.37	98	643709	25.2202	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.880%	
72) 4-Bromofluorobenzene(S)	11.26	95	270690	25.2817	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.128%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	198769	98.6361	ppb	100
3) Dichlorodifluoromethane	1.15	85	30773	8.8455	ppb	100
4) Freon 114	1.25	85	25160	10.0137	ppb	100
5) Chloromethane	1.29	50	48026	9.3482	ppb	100
6) Vinyl chloride	1.38	62	46975	10.1436	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	388800	99.2310	ppb	100
8) Bromomethane	1.65	94	31694	10.1920	ppb	100
9) Chloroethane	1.75	64	22898	9.6079	ppb	100
10) Dichlorofluoromethane	1.95	67	78702	9.3447	ppb	100
11) Trichlorofluoromethane	2.00	101	62822	9.7164	ppb	100
12) Acrolein	2.43	56	114170	120.8852	ppb	100
13) Acetone	2.62	43	10852	9.6031	ppb	100
14) Freon-113	2.54	101	34802	9.7090	ppb	100
15) 1,1-DCE	2.52	63	10525	8.7733	ppb	100
16) t-Butanol	3.38	59	55623	127.0204	ppb	100
17) 2-Propanol	2.84	45	29552	92.9936	ppb	# 100
18) Acetonitrile	2.92	41	89807	119.7807	ppb	100
19) Methyl Acetate	3.02	43	40350	9.6323	ppb	100
20) Iodomethane	2.67	142	8529	7.5851	ppb	100
21) Acrylonitrile	3.45	52	14652	9.6716	ppb	100
22) Methylene chloride	3.10	84	46385	9.7064	ppb	100
23) Carbon disulfide	2.73	76	118117	9.4561	ppb	100
24) Methyl t-butyl ether (MtBE)	3.54	73	112450	9.8173	ppb	100
25) Trans-1,2-DCE	2.52	96	21024	9.6824	ppb	100
26) Diisopropyl Ether	4.33	45	119590	9.6556	ppb	100
28) 1,1-DCA	4.10	63	68991	9.7043	ppb	100
29) Vinyl Acetate	4.33	43	23279	8.9728	ppb	100
30) Ethyl tert Butyl Ether	4.87	59	104802	9.7309	ppb	100
31) MEK (2-Butanone)	5.07	43	18395	9.4436	ppb	100
32) Cis-1,2-DCE	4.98	96	37183	9.1889	ppb	100
33) 2,2-Dichloropropane	4.97	77	51272	9.1379	ppb	100
36) Chloroform	5.45	83	61890	9.9576	ppb	100
37) Bromochloromethane	5.30	128	9165	9.2836	ppb	100
39) 1,1,1-TCA	5.65	97	22176	9.8160	ppb	100
40) Cyclohexane	5.71	41	26205	9.3805	ppb	100
41) 1,1-Dichloropropene	5.88	75	42586	9.6982	ppb	100
42) 2,2,4-Trimethylpentane	6.28	57	77117	9.5977	ppb	100
44) Carbon Tetrachloride	5.87	117	44622	9.6323	ppb	100
45) Tert Amyl Methyl Ether	6.36	73	94295	9.6924	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	49446	9.7852	ppb	100
48) Benzene	6.13	78	125189	9.5529	ppb	100
49) TCE	6.95	130	21696	9.8982	ppb	100
50) 2-Pentanone	7.23	43	309909	123.0698	ppb	100
51) 1,2-Dichloropropane	7.21	63	32295	9.3213	ppb	100
52) Bromodichloromethane	7.55	83	25920	9.8445	ppb	100
53) Methyl Cyclohexane	7.17	83	45341	9.6679	ppb	100
54) Dibromomethane	7.34	93	24082	9.9485	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	824	4.0693	ppb	100
56) MIBK (methyl isobutyl ket	8.29	43	33964	9.7689	ppb	100
57) 1-Bromo-2-chloroethane	7.89	63	24984	9.4486	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	55998	9.7524	ppb	100
59) Toluene	8.44	91	79664	10.1160	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	54074	9.7911	ppb	100
61) 1,1,2-TCA	8.90	83	27689	9.8748	ppb	100
62) 2-Hexanone	9.22	43	23961	10.1932	ppb	100
65) 1,2-EDB	9.44	107	20104	10.0225	ppb	100
66) Tetrachloroethene	9.05	166	24216	9.7813	ppb	100
67) 1-Chlorohexane	10.00	91	41411	9.6597	ppb	100
68) 1,1,1,2-Tetrachloroethane	10.09	131	40335	9.9484	ppb	100
69) m&p-Xylene	10.26	91	242518	19.8801	ppb	100
70) o-Xylene	10.70	106	36056	10.0803	ppb	100
71) Styrene	10.71	104	108468	9.8801	ppb	100
73) 1,3-Dichloropropane	9.08	76	55762	9.7475	ppb	100
74) Dibromochloromethane	9.33	129	43274	10.0191	ppb	100
75) Chlorobenzene	10.00	112	103383	10.3165	ppb	100
76) Ethylbenzene	10.13	91	92144	10.1413	ppb	100
77) Bromoform	10.90	173	35559	9.9712	ppb	100
79) Isopropylbenzene	11.11	105	165721	10.2956	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	44387	9.5353	ppb	100
81) 1,2,3-Trichloropropane	11.47	110	8530	10.5144	ppb	100
82) t-1,4-Dichloro-2-Butene	11.50	53	9944	9.3753	ppb	100
83) Bromobenzene	11.42	156	26392	10.1033	ppb	100
84) n-Propylbenzene	11.56	91	98217	10.0256	ppb	100
85) 4-Ethyltoluene	11.69	105	149952	10.0834	ppb	100
86) 2-Chlorotoluene	11.64	91	62128	9.9956	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	131873	10.2288	ppb	100
88) 4-Chlorotoluene	11.76	91	72632	10.3043	ppb	100
89) Tert-Butylbenzene	12.11	119	139174	10.1860	ppb	100
90) 1,2,4-Trimethylbenzene	12.17	105	131745	10.3678	ppb	100
91) Sec-Butylbenzene	12.35	105	169371	10.1893	ppb	100
92) p-Isopropyltoluene	12.52	119	74168	9.6121	ppb	100
93) Benzyl Chloride	12.71	91	52447	9.5088	ppb	100
94) 1,3-DCB	12.46	146	47080	10.1684	ppb	100
95) 1,4-DCB	12.56	146	94601	10.3156	ppb	100
96) n-Butylbenzene	12.71	91	52447	9.5088	ppb	100
97) 1,2-DCB	12.97	146	88322	9.9123	ppb	100
98) Hexachloroethane	13.26	117	29398	10.5111	ppb	100
99) 1,2-Dibromo-3-chloropropan	13.82	75	9836	9.3781	ppb	100
100) 1,2,4-Trichlorobenzene	14.74	180	53855	9.5816	ppb	100
101) Hexachlorobutadiene	14.94	225	27768	9.9401	ppb	100
102) Naphthalene	15.01	128	112019	9.5820	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	22120	8.8516	ppb	100

Quantitation Report

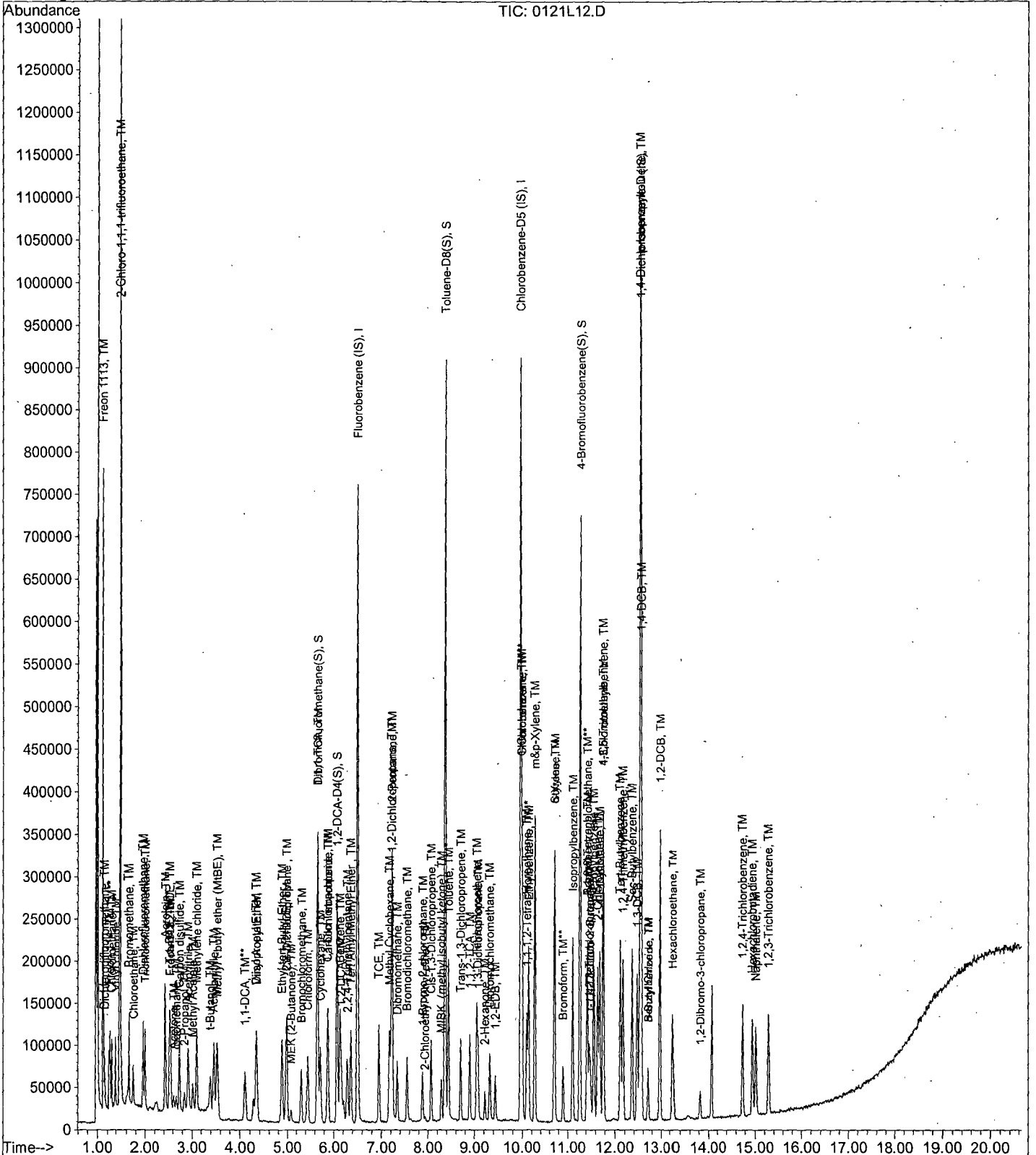
Data File : M:\LOKI\DATA\190121\0121L12.D  
Acq On : 21 Jan 19 20:13  
Sample : 10ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	345152	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307136	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	162624	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	336404	51.7212	ppb	0.00
Spiked Amount	25.000		Recovery	=	206.884%	
43) 1,2-DCA-D4(S)	6.07	65	391899	51.6736	ppb	0.00
Spiked Amount	25.000		Recovery	=	206.696%	
64) Toluene-D8(S)	8.37	98	1268942	50.5660	ppb	0.00
Spiked Amount	25.000		Recovery	=	202.264%	
72) 4-Bromofluorobenzene(S)	11.26	95	532258	50.5608	ppb	0.00
Spiked Amount	25.000		Recovery	=	202.244%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	232336	123.2246	ppb	99
3) Dichlorodifluoromethane	1.15	85	66144	20.2243	ppb	98
4) Freon 114	1.25	85	50024	21.2793	ppb	91
5) Chloromethane	1.29	50	94570	19.6742	ppb	97
6) Vinyl chloride	1.38	62	94000	21.6944	ppb	94
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	459520	125.3485	ppb	99
8) Bromomethane	1.65	94	59405	22.3763	ppb	94
9) Chloroethane	1.75	64	46120	21.4348	ppb	97
10) Dichlorofluoromethane	1.95	67	151557	19.2331	ppb	100
11) Trichlorofluoromethane	2.00	101	130510	21.5740	ppb	94
12) Acrolein	2.43	56	133567	152.0316	ppb	# 93
13) Acetone	2.61	43	18565	20.2568	ppb	98
14) Freon-113	2.54	101	70521	21.0273	ppb	94
15) 1,1-DCE	2.52	63	21488	19.1438	ppb	92
16) t-Butanol	3.39	59	49603	121.0655	ppb	98
17) 2-Propanol	2.85	45	32138	108.0883	ppb	# 99
18) Acetonitrile	2.92	41	102232	145.7327	ppb	98
19) Methyl Acetate	3.02	43	76670	19.7386	ppb	92
20) Iodomethane	2.67	142	24832	16.5042	ppb	98
21) Acrylonitrile	3.45	52	28326	20.5403	ppb	85
22) Methylene chloride	3.10	84	86698	19.9723	ppb	98
23) Carbon disulfide	2.73	76	229675	19.6521	ppb	98
24) Methyl t-butyl ether (MtBE)	3.54	73	217341	20.2800	ppb	97
25) Trans-1,2-DCE	2.52	96	40392	19.8819	ppb	96
26) Diisopropyl Ether	4.33	45	236728	20.4281	ppb	99
28) 1,1-DCA	4.10	63	134845	20.2722	ppb	99
29) Vinyl Acetate	4.27	43	51916	21.3874	ppb	# 79
30) Ethyl tert Butyl Ether	4.88	59	206845	20.5268	ppb	97
31) MEK (2-Butanone)	5.08	43	34819	18.9590	ppb	# 81
32) Cis-1,2-DCE	4.98	96	73308	19.3626	ppb	95
33) 2,2-Dichloropropane	4.97	77	97363	18.5462	ppb	96
36) Chloroform	5.45	83	121450	20.8846	ppb	94
37) Bromochloromethane	5.30	128	17088	18.4998	ppb	85
39) 1,1,1-TCA	5.65	97	42680	20.1915	ppb	99
40) Cyclohexane	5.72	41	52310	20.1824	ppb	93
41) 1,1-Dichloropropene	5.88	75	79419	19.3305	ppb	96
42) 2,2,4-Trimethylpentane	6.29	57	153073	20.3615	ppb	98
44) Carbon Tetrachloride	5.87	117	90088	20.7847	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	180001	19.7748	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	93572	19.7915	ppb	99
48) Benzene	6.13	78	243279	19.8412	ppb	97
49) TCE	6.95	130	38040	18.5485	ppb	96
50) 2-Pentanone	7.23	43	345887	146.8064	ppb	99
51) 1,2-Dichloropropane	7.20	63	63630	19.6290	ppb	98
52) Bromodichloromethane	7.54	83	49856	20.2382	ppb	93
53) Methyl Cyclohexane	7.17	83	86600	19.7356	ppb	99
54) Dibromomethane	7.34	93	45714	20.1839	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	1514	7.9911	ppb #	83
56) MIBK (methyl isobutyl ket	8.29	43	62554	19.2298	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	49488	20.0032	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	108818	20.2551	ppb	95
59) Toluene	8.44	91	148800	20.1950	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	101719	19.6851	ppb	97
61) 1,1,2-TCA	8.90	83	53082	20.2331	ppb	98
62) 2-Hexanone	9.22	43	41255	18.7576	ppb #	90
65) 1,2-EDB	9.44	107	37912	19.2233	ppb	93
66) Tetrachloroethene	9.05	166	46856	19.2494	ppb	96
67) 1-Chlorohexane	10.00	91	80410	19.7081	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	79373	19.9115	ppb	96
69) m&p-Xylene	10.26	91	487656	40.6580	ppb	95
70) o-Xylene	10.70	106	68104	19.3654	ppb	98
71) Styrene	10.71	104	213830	19.8102	ppb	97
73) 1,3-Dichloropropane	9.08	76	108622	19.3121	ppb	98
74) Dibromochloromethane	9.33	129	82904	19.5225	ppb	98
75) Chlorobenzene	10.00	112	201545	20.4556	ppb	95
76) Ethylbenzene	10.13	91	172544	19.3145	ppb	99
77) Bromoform	10.89	173	66087	18.8483	ppb	89
79) Isopropylbenzene	11.11	105	324331	21.3071	ppb	98
80) 1,1,2,2-Tetrachloroethane	11.43	83	86065	19.5510	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	15713	20.4813	ppb	86
82) t-1,4-Dichloro-2-Butene	11.50	53	19789	19.7292	ppb	92
83) Bromobenzene	11.43	156	51744	20.9467	ppb	97
84) n-Propylbenzene	11.56	91	206667	22.3079	ppb	100
85) 4-Ethyltoluene	11.69	105	305303	21.7094	ppb	100
86) 2-Chlorotoluene	11.64	91	122354	20.8163	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	259367	21.2739	ppb	97
88) 4-Chlorotoluene	11.77	91	140608	21.0942	ppb	100
89) Tert-Butylbenzene	12.11	119	283848	21.9683	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	259256	21.5748	ppb	99
91) Sec-Butylbenzene	12.36	105	335718	21.3572	ppb	98
92) p-Isopropyltoluene	12.52	119	154432	21.1641	ppb	99
93) Benzyl Chloride	12.71	91	101776	19.5124	ppb	92
94) 1,3-DCB	12.46	146	89320	20.4000	ppb	98
95) 1,4-DCB	12.56	146	177170	20.4292	ppb	96
96) n-Butylbenzene	12.71	91	101776	19.5124	ppb	95
97) 1,2-DCB	12.97	146	172125	20.4273	ppb	99
98) Hexachloroethane	13.26	117	57725	21.8252	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.82	75	19685	20.6008	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	113768	21.4040	ppb	94
101) Hexachlorobutadiene	14.94	225	55456	20.9923	ppb	94
102) Naphthalene	15.01	128	233837	21.1514	ppb	99
103) 1,2,3-Trichlorobenzene	15.28	180	50840	21.5131	ppb	93

Quantitation Report

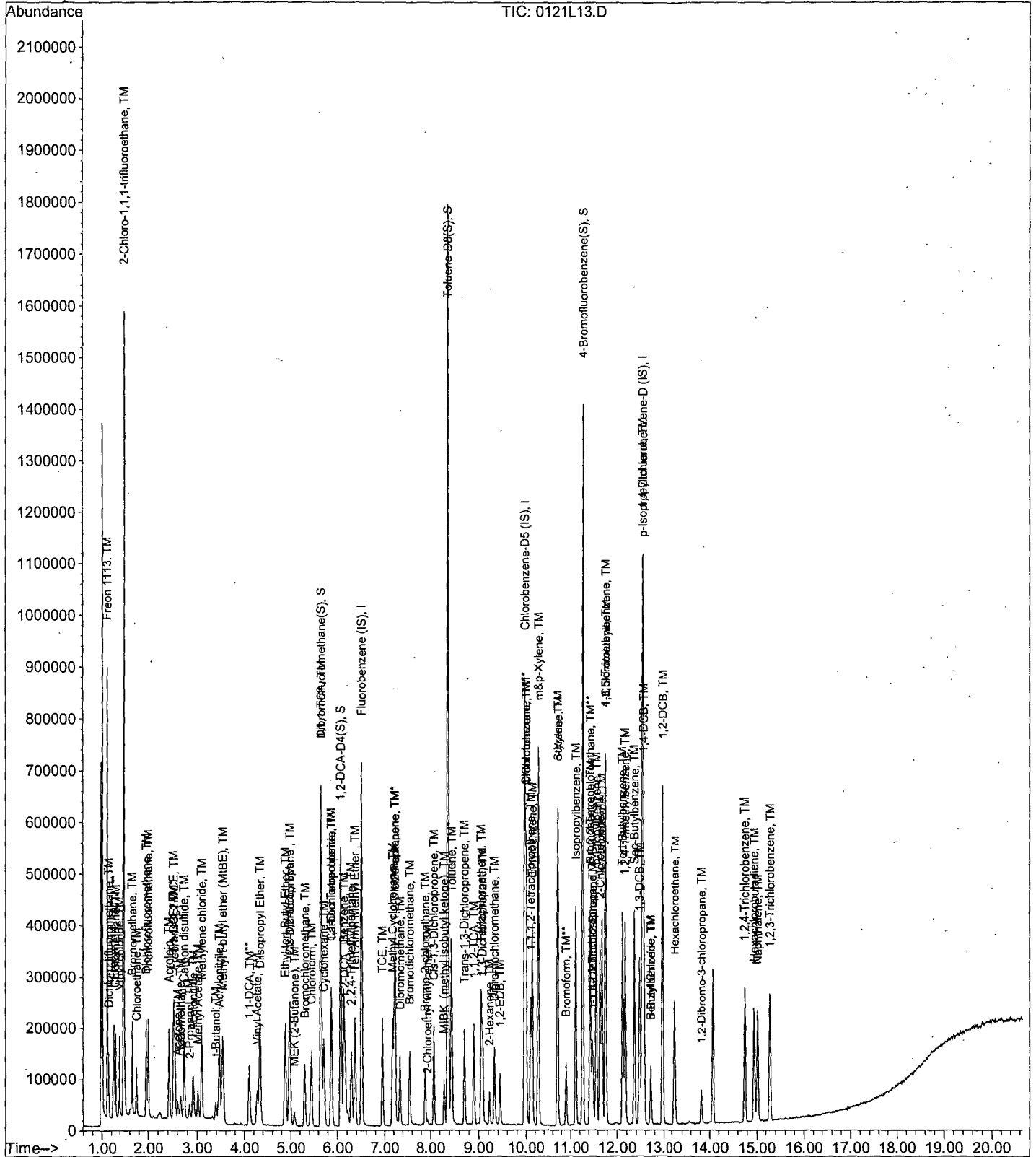
Data File : M:\LOKI\DATA\190121\0121L13.D  
Acq On : 21 Jan 19 20:41  
Sample : 20ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	341760	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305408	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174144	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	324971	50.4593	ppb	0.00
Spiked Amount	25.000		Recovery	= 201.836%		
43) 1,2-DCA-D4(S)	6.07	65	377103	50.2162	ppb	0.00
Spiked Amount	25.000		Recovery	= 200.864%		
64) Toluene-D8(S)	8.37	98	1239269	49.6630	ppb	0.00
Spiked Amount	25.000		Recovery	= 198.652%		
72) 4-Bromofluorobenzene(S)	11.26	95	521895	49.8568	ppb	0.00
Spiked Amount	25.000		Recovery	= 199.428%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.11	116	256540	137.4121	ppb	98
3) Dichlorodifluoromethane	1.14	85	120217	37.8848	ppb	96
4) Freon 114	1.25	85	80768	34.6983	ppb	97
5) Chloromethane	1.29	50	184500	38.7640	ppb	91
6) Vinyl chloride	1.38	62	174924	40.7716	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.47	118	487552	134.3151	ppb	98
8) Bromomethane	1.65	94	105409	41.6454	ppb	92
9) Chloroethane	1.75	64	82507	39.2528	ppb	99
10) Dichlorofluoromethane	1.95	67	296411	37.9889	ppb	96
11) Trichlorofluoromethane	2.00	101	236279	39.4458	ppb	98
12) Acrolein	2.43	56	151996	175.2499	ppb	# 94
13) Acetone	2.61	43	36824	43.8459	ppb	99
14) Freon-113	2.54	101	122325	36.8357	ppb	96
15) 1,1-DCE	2.52	63	42192	37.9622	ppb	89
16) t-Butanol	3.39	59	63856	157.3995	ppb	94
17) 2-Propanol	2.85	45	40966	139.1465	ppb	# 97
18) Acetonitrile	2.92	41	117922	169.7673	ppb	98
19) Methyl Acetate	3.01	43	149118	38.9370	ppb	97
20) Iodomethane	2.66	142	61952	36.4760	ppb	97
21) Acrylonitrile	3.45	52	51422	38.0931	ppb	92
22) Methylene chloride	3.09	84	170373	40.2121	ppb	95
23) Carbon disulfide	2.73	76	443795	38.3501	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	418688	39.4554	ppb	97
25) Trans-1,2-DCE	2.52	96	78108	38.8283	ppb	98
26) Diisopropyl Ether	4.33	45	454998	39.6530	ppb	96
28) 1,1-DCA	4.10	63	261232	39.6627	ppb	98
29) Vinyl Acetate	4.27	43	96718	40.2395	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	401062	40.1954	ppb	98
31) MEK (2-Butanone)	5.07	43	70323	38.5225	ppb	91
32) Cis-1,2-DCE	4.98	96	141010	37.6141	ppb	96
33) 2,2-Dichloropropane	4.96	77	193427	37.2107	ppb	95
36) Chloroform	5.45	83	228931	39.7579	ppb	99
37) Bromochloromethane	5.30	128	33952	37.1220	ppb	93
39) 1,1,1-TCA	5.65	97	83464	39.8780	ppb	99
40) Cyclohexane	5.71	41	95716	37.4225	ppb	97
41) 1,1-Dichloropropene	5.88	75	153573	37.7504	ppb	95
42) 2,2,4-Trimethylpentane	6.28	57	279729	37.5784	ppb	99
44) Carbon Tetrachloride	5.87	117	172684	40.2362	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	352491	39.1089	ppb	96



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	181549	38.7807	ppb	98
48) Benzene	6.13	78	473155	38.9723	ppb	98
49) TCE	6.95	130	78336	38.5761	ppb	97
50) 2-Pentanone	7.23	43	409603	175.5751	ppb	100
51) 1,2-Dichloropropane	7.20	63	123123	38.3587	ppb	98
52) Bromodichloromethane	7.55	83	96800	39.6842	ppb	97
53) Methyl Cyclohexane	7.17	83	164336	37.8229	ppb	96
54) Dibromomethane	7.34	93	90696	40.4421	ppb	100
55) 2-Chloroethyl vinyl ether	7.93	43	3750	19.9895	ppb	95
56) MIBK (methyl isobutyl ket	8.29	43	124704	38.7159	ppb	92
57) 1-Bromo-2-chloroethane	7.88	63	95936	39.1625	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	211060	39.6761	ppb	93
59) Toluene	8.44	91	298304	40.8873	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	201022	39.2887	ppb	98
61) 1,1,2-TCA	8.90	83	103628	39.8915	ppb	99
62) 2-Hexanone	9.22	43	82498	37.8820	ppb	91
65) 1,2-EDB	9.44	107	75224	38.3582	ppb	92
66) Tetrachloroethene	9.05	166	91104	37.6391	ppb	96
67) 1-Chlorohexane	10.00	91	156566	39.2106	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.09	131	157417	39.7130	ppb	95
69) m&p-Xylene	10.27	91	973464	81.6210	ppb	96
70) o-Xylene	10.70	106	139712	39.9519	ppb	99
71) Styrene	10.71	104	432133	40.2612	ppb	99
73) 1,3-Dichloropropane	9.08	76	215855	38.5945	ppb	99
74) Dibromochloromethane	9.33	129	165046	39.0854	ppb	98
75) Chlorobenzene	10.00	112	392997	40.1126	ppb	98
76) Ethylbenzene	10.13	91	353024	39.7409	ppb	98
77) Bromoform	10.90	173	131386	37.6839	ppb	92
79) Isopropylbenzene	11.11	105	647727	39.7378	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	178172	37.7970	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	33112	40.3051	ppb	100
82) t-1,4-Dichloro-2-Butene	11.49	53	38560	35.9004	ppb	98
83) Bromobenzene	11.42	156	100840	38.1209	ppb	97
84) n-Propylbenzene	11.56	91	411134	41.4427	ppb	99
85) 4-Ethyltoluene	11.69	105	630395	41.8606	ppb	100
86) 2-Chlorotoluene	11.64	91	249582	39.6530	ppb	96
87) 1,3,5-Trimethylbenzene	11.76	105	537564	41.1754	ppb	97
88) 4-Chlorotoluene	11.76	91	286018	40.0704	ppb	99
89) Tert-Butylbenzene	12.12	119	564404	40.7922	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	548158	42.5990	ppb	98
91) Sec-Butylbenzene	12.36	105	685840	40.7444	ppb	99
92) p-Isopropyltoluene	12.52	119	324736	41.5594	ppb	97
93) Benzyl Chloride	12.71	91	235642	42.1886	ppb	96
94) 1,3-DCB	12.46	146	186112	39.6946	ppb	98
95) 1,4-DCB	12.56	146	362736	39.0597	ppb	97
96) n-Butylbenzene	12.71	91	235642	42.1886	ppb	95
97) 1,2-DCB	12.97	146	367093	40.6837	ppb	97
98) Hexachloroethane	13.26	117	118495	41.8380	ppb	94
99) 1,2-Dibromo-3-chloropropan	13.82	75	41738	41.4520	ppb	93
100) 1,2,4-Trichlorobenzene	14.74	180	249819	43.8911	ppb	95
101) Hexachlorobutadiene	14.94	225	121241	42.8584	ppb	93
102) Naphthalene	15.01	128	514760	43.4817	ppb	98
103) 1,2,3-Trichlorobenzene	15.27	180	110048	43.4867	ppb	96

Quantitation Report

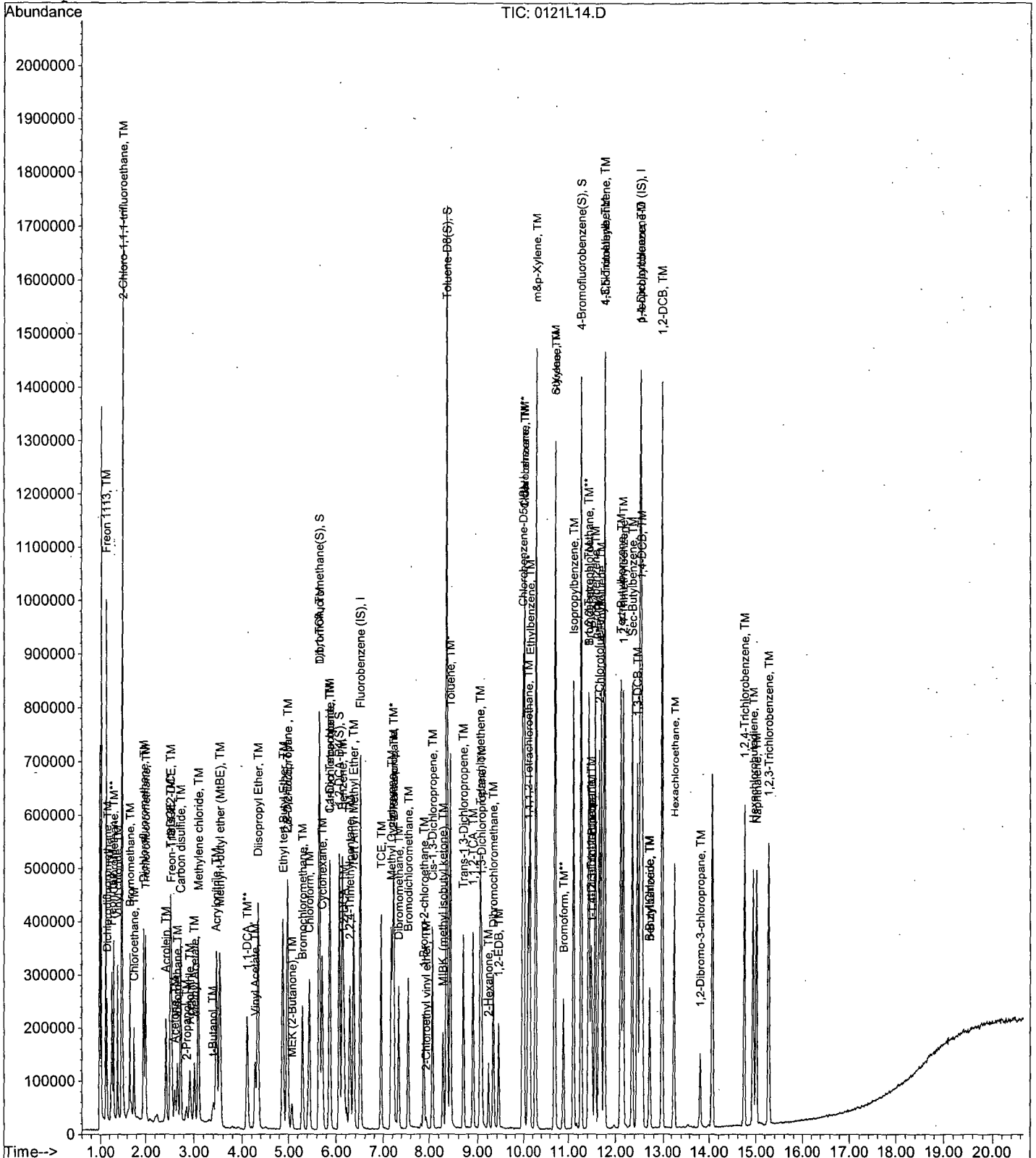
Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	340224	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	284800	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174592	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
38) Dibromofluoromethane(S)	5.65	111	634983	99.0411	ppb	0.00
Spiked Amount				25.000		
				Recovery =	396.164%	
43) 1,2-DCA-D4(S)	6.07	65	739931	98.9762	ppb	0.00
Spiked Amount				25.000		
				Recovery =	395.904%	
64) Toluene-D8(S)	8.37	98	2377544	102.1730	ppb	0.00
Spiked Amount				25.000		
				Recovery =	408.692%	
72) 4-Bromofluorobenzene(S)	11.26	95	987834	101.1966	ppb	0.00
Spiked Amount				25.000		
				Recovery =	404.788%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	310348	166.9841	ppb	98
3) Dichlorodifluoromethane	1.14	85	162106	52.4293	ppb	100
4) Freon 114	1.25	85	104356	45.0342	ppb	91
5) Chloromethane	1.29	50	219700	46.3680	ppb	94
6) Vinyl chloride	1.38	62	223274	52.2761	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	551872	152.7209	ppb	100
8) Bromomethane	1.65	94	131367	52.6272	ppb	97
9) Chloroethane	1.74	64	104390	50.0646	ppb	99
10) Dichlorofluoromethane	1.95	67	370548	47.7049	ppb	97
11) Trichlorofluoromethane	1.99	101	310052	51.9956	ppb	98
12) Acrolein	2.43	56	177970	206.7430	ppb	# 92
13) Acetone	2.62	43	44126	53.4409	ppb	99
14) Freon-113	2.54	101	172365	52.1386	ppb	93
15) 1,1-DCE	2.52	63	53104	47.9960	ppb	90
16) t-Butanol	3.40	59	89197	220.8555	ppb	95
17) 2-Propanol	2.86	45	45461	155.1115	ppb	# 100
18) Acetonitrile	2.92	41	135953	196.6094	ppb	94
19) Methyl Acetate	3.02	43	193892	50.9093	ppb	96
20) Iodomethane	2.67	142	87032	50.0917	ppb	97
21) Acrylonitrile	3.45	52	72530	54.1899	ppb	86
22) Methylene chloride	3.09	84	217803	51.8045	ppb	100
23) Carbon disulfide	2.73	76	562775	48.8512	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	534157	50.5640	ppb	97
25) Trans-1,2-DCE	2.52	96	98143	49.0081	ppb	96
26) Diisopropyl Ether	4.33	45	596314	52.2033	ppb	98
28) 1,1-DCA	4.10	63	335492	51.1675	ppb	96
29) Vinyl Acetate	4.27	43	125953	52.6393	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	529857	53.3433	ppb	97
31) MEK (2-Butanone)	5.07	43	89806	49.3770	ppb	87
32) Cis-1,2-DCE	4.98	96	186012	49.8424	ppb	97
33) 2,2-Dichloropropane	4.96	77	249483	48.2111	ppb	95
36) Chloroform	5.44	83	298096	52.0033	ppb	98
37) Bromochloromethane	5.30	128	45824	50.3286	ppb	100
39) 1,1,1-TCA	5.65	97	108032	51.8493	ppb	97
40) Cyclohexane	5.72	41	132255	51.9996	ppb	97
41) 1,1-Dichloropropene	5.88	75	201320	49.7107	ppb	96
42) 2,2,4-Trimethylpentane	6.28	57	385125	51.9708	ppb	98
44) Carbon Tetrachloride	5.87	117	223148	52.2294	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	453291	50.5197	ppb	96

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	235593	50.5523	ppb	100
48) Benzene	6.13	78	605445	50.0938	ppb	97
49) TCE	6.95	130	99992	49.4628	ppb	98
50) 2-Pentanone	7.23	43	472572	203.4811	ppb	100
51) 1,2-Dichloropropane	7.20	63	160267	50.1563	ppb	98
52) Bromodichloromethane	7.54	83	124984	51.4699	ppb	95
53) Methyl Cyclohexane	7.17	83	218224	50.4523	ppb	93
54) Dibromomethane	7.34	93	114312	51.2029	ppb	97
55) 2-Chloroethyl vinyl ether	7.94	43	4515	24.1761	ppb	94
56) MIBK (methyl isobutyl ket	8.29	43	151841	47.3537	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	119584	49.0364	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	272909	51.5344	ppb	96
59) Toluene	8.44	91	379008	52.1836	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	254532	49.9716	ppb	97
61) 1,1,2-TCA	8.90	83	130483	50.4561	ppb	100
62) 2-Hexanone	9.22	43	106841	49.2815	ppb	94
65) 1,2-EDB	9.44	107	95688	52.3238	ppb	93
66) Tetrachloroethene	9.05	166	113080	50.0989	ppb	97
67) 1-Chlorohexane	10.00	91	200521	54.0942	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.10	131	197359	53.3923	ppb	99
69) m&p-Xylene	10.26	91	1228980	110.5013	ppb	97
70) o-Xylene	10.70	106	174976	53.6565	ppb	94
71) Styrene	10.71	104	552454	55.1958	ppb	97
73) 1,3-Dichloropropane	9.08	76	269847	51.7394	ppb	100
74) Dibromochloromethane	9.33	129	207996	52.8209	ppb	99
75) Chlorobenzene	10.00	112	494814	54.1594	ppb	99
76) Ethylbenzene	10.13	91	453315	54.7235	ppb	99
77) Bromoform	10.90	173	168485	51.8213	ppb	90
79) Isopropylbenzene	11.11	105	818115	50.0622	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	234875	49.6979	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	40272	48.8947	ppb	88
82) t-1,4-Dichloro-2-Butene	11.50	53	50870	47.2398	ppb	98
83) Bromobenzene	11.43	156	132288	49.8810	ppb	98
84) n-Propylbenzene	11.56	91	521325	52.4152	ppb	100
85) 4-Ethyltoluene	11.69	105	809987	53.6481	ppb	99
86) 2-Chlorotoluene	11.64	91	312872	49.5808	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	681769	52.0870	ppb	98
88) 4-Chlorotoluene	11.76	91	353792	49.4382	ppb	99
89) Tert-Butylbenzene	12.12	119	711985	51.3265	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	703507	54.5313	ppb	98
91) Sec-Butylbenzene	12.36	105	876766	51.9533	ppb	99
92) p-Isopropyltoluene	12.52	119	426368	54.4262	ppb	98
93) Benzyl Chloride	12.71	91	296774	52.9972	ppb	96
94) 1,3-DCB	12.46	146	240896	51.2473	ppb	99
95) 1,4-DCB	12.56	146	467536	50.2155	ppb	98
96) n-Butylbenzene	12.71	91	296774	52.9972	ppb	96
97) 1,2-DCB	12.97	146	476543	52.6781	ppb	98
98) Hexachloroethane	13.26	117	153592	54.0908	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	50980	50.6482	ppb	# 84
100) 1,2,4-Trichlorobenzene	14.74	180	323298	56.6550	ppb	97
101) Hexachlorobutadiene	14.94	225	155604	54.8646	ppb	93
102) Naphthalene	15.01	128	678795	57.1906	ppb	99
103) 1,2,3-Trichlorobenzene	15.27	180	144704	57.0347	ppb	96

Quantitation Report

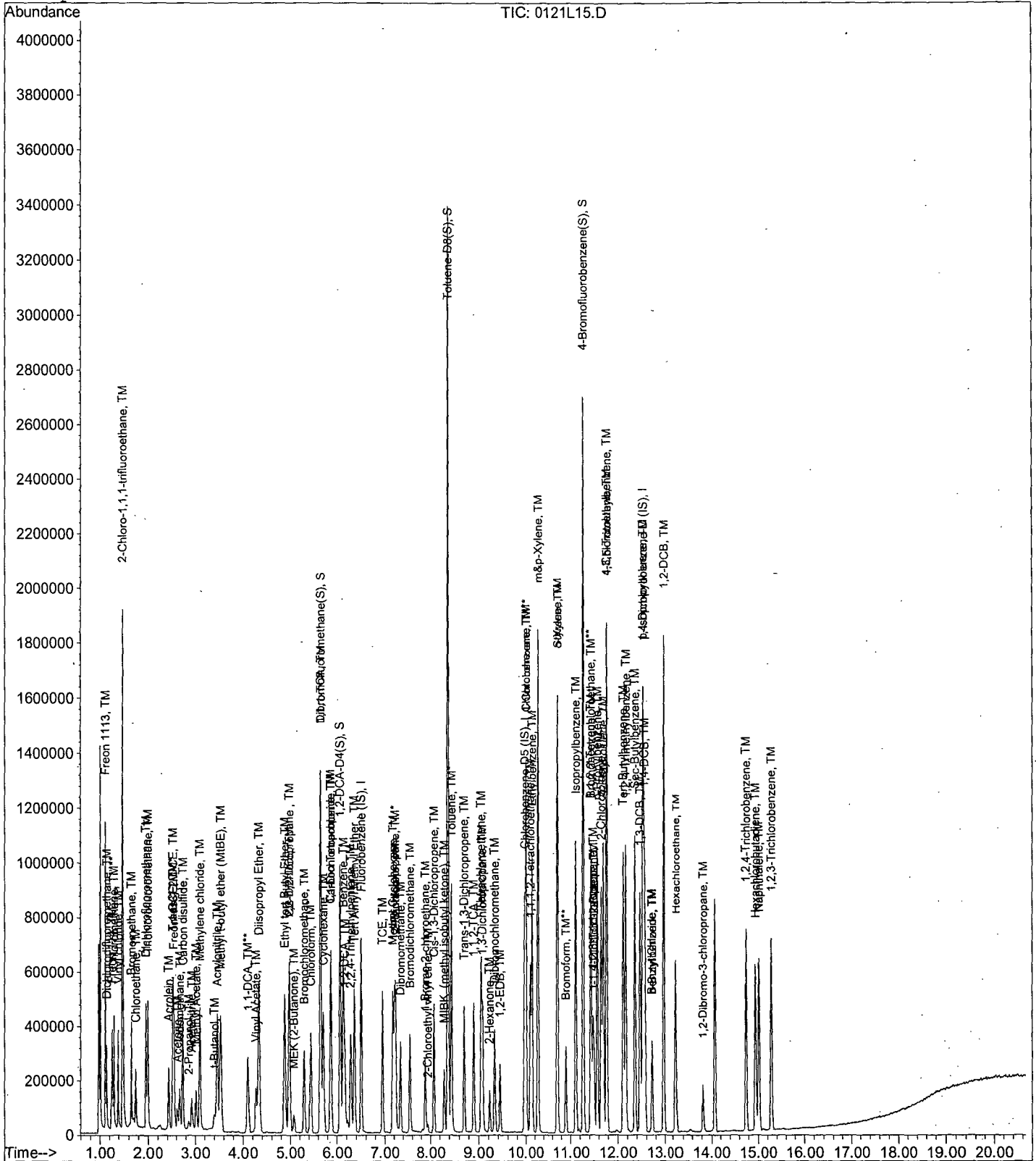
Data File : M:\LOKI\DATA\190121\0121L15.D  
Acq On : 21 Jan 19 21:38  
Sample : 50ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	354496	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307840	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174848	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	650234	97.3367	ppb	0.00
Spiked Amount	25.000		Recovery	= 389.348%		
43) 1,2-DCA-D4(S)	6.07	65	762420	97.8786	ppb	0.00
Spiked Amount	25.000		Recovery	= 391.516%		
64) Toluene-D8(S)	8.37	98	2378941	94.5815	ppb	0.00
Spiked Amount	25.000		Recovery	= 378.328%		
72) 4-Bromofluorobenzene(S)	11.27	95	969475	91.8827	ppb	0.00
Spiked Amount	25.000		Recovery	= 367.532%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	301065	155.4677	ppb	100
3) Dichlorodifluoromethane	1.14	85	296745	99.6959	ppb	98
4) Freon 114	1.25	85	168196	69.6617	ppb	93
5) Chloromethane	1.29	50	449678	91.0843	ppb	92
6) Vinyl chloride	1.39	62	425978	95.7207	ppb	95
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	524992	139.4333	ppb	99
8) Bromomethane	1.65	94	249630	97.5870	ppb	95
9) Chloroethane	1.74	64	164190	75.9062	ppb	97
10) Dichlorofluoromethane	1.95	67	736318	90.9783	ppb	95
11) Trichlorofluoromethane	1.99	101	606278	97.5793	ppb	97
12) Acrolein	2.43	56	196201	218.9493	ppb	96
13) Acetone	2.62	43	81137	96.7995	ppb	98
14) Freon-113	2.54	101	319836	92.8519	ppb	96
15) 1,1-DCE	2.52	63	103776	90.0177	ppb	93
16) t-Butanol	3.42	59	105103	249.7622	ppb	99
17) 2-Propanol	2.87	45	49665	162.6332	ppb	# 93
18) Acetonitrile	2.93	41	154689	214.6983	ppb	97
19) Methyl Acetate	3.02	43	396415	100.0596	ppb	95
20) Iodomethane	2.66	142	191872	102.2359	ppb	96
21) Acrylonitrile	3.45	52	136954	98.6277	ppb	90
22) Methylene chloride	3.09	84	431664	99.0642	ppb	95
23) Carbon disulfide	2.73	76	1121770	93.4540	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	1107947	100.6572	ppb	97
25) Trans-1,2-DCE	2.52	96	199277	95.5036	ppb	98
26) Diisopropyl Ether	4.34	45	1218553	102.3814	ppb	99
28) 1,1-DCA	4.10	63	685531	100.3444	ppb	99
29) Vinyl Acetate	4.27	43	252296	101.1966	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	1137608	109.9177	ppb	97
31) MEK (2-Butanone)	5.07	43	191856	101.0891	ppb	92
32) Cis-1,2-DCE	4.98	96	387491	99.6490	ppb	97
33) 2,2-Dichloropropane	4.96	77	517771	96.0280	ppb	94
36) Chloroform	5.45	83	606711	101.5805	ppb	100
37) Bromochloromethane	5.30	128	90552	95.4495	ppb	97
39) 1,1,1-TCA	5.65	97	220160	101.4104	ppb	98
40) Cyclohexane	5.72	41	264768	100.0470	ppb	91
41) 1,1-Dichloropropene	5.88	75	405383	96.0688	ppb	97
42) 2,2,4-Trimethylpentane	6.29	57	750921	97.2535	ppb	98
44) Carbon Tetrachloride	5.87	117	449635	101.0033	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	926198	99.0697	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	482592	99.3830	ppb	100
48) Benzene	6.13	78	1241738	98.6036	ppb	96
49) TCE	6.95	130	194368	92.2767	ppb	100
50) 2-Pentanone	7.23	43	544315	224.9366	ppb	98
51) 1,2-Dichloropropane	7.21	63	320379	96.2274	ppb	98
52) Bromodichloromethane	7.55	83	254528	100.5977	ppb	95
53) Methyl Cyclohexane	7.17	83	424113	94.1053	ppb	94
54) Dibromomethane	7.34	93	232996	100.1623	ppb	95
55) 2-Chloroethyl vinyl ether	7.93	43	9316	47.8752	ppb	91
56) MIBK (methyl isobutyl ket	8.29	43	321814	96.3216	ppb	96
57) 1-Bromo-2-chloroethane	7.89	63	256640	101.0005	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	553627	100.3346	ppb	95
59) Toluene	8.44	91	750784	99.2098	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	516228	97.2694	ppb	94
61) 1,1,2-TCA	8.90	83	259777	96.4083	ppb	98
62) 2-Hexanone	9.22	43	218599	96.7715	ppb	94
65) 1,2-EDB	9.44	107	190528	96.3864	ppb	95
66) Tetrachloroethene	9.05	166	228736	93.7545	ppb	97
67) 1-Chlorohexane	10.00	91	392101	98.3832	ppb	98
68) 1,1,1,2-Tetrachloroethane	10.09	131	391276	97.9308	ppb	97
69) m&p-Xylene	10.26	91	2428079	201.9763	ppb	97
70) o-Xylene	10.70	106	358656	101.7507	ppb	99
71) Styrene	10.71	104	1079123	99.7461	ppb	99
73) 1,3-Dichloropropane	9.08	76	535131	94.9245	ppb	99
74) Dibromochloromethane	9.33	129	415567	97.6352	ppb	97
75) Chlorobenzene	10.00	112	977697	99.0036	ppb	99
76) Ethylbenzene	10.13	91	883776	98.7031	ppb	98
77) Bromoform	10.90	173	336048	95.6231	ppb	88
79) Isopropylbenzene	11.11	105	1581123	96.6107	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	449901	95.0566	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	80880	98.0536	ppb	93
82) t-1,4-Dichloro-2-Butene	11.50	53	96411	89.3997	ppb	95
83) Bromobenzene	11.43	156	264000	99.3991	ppb	98
84) n-Propylbenzene	11.56	91	1021366	102.5401	ppb	98
85) 4-Ethyltoluene	11.69	105	1545604	102.2206	ppb	99
86) 2-Chlorotoluene	11.64	91	582884	92.2343	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	1334860	101.8337	ppb	98
88) 4-Chlorotoluene	11.77	91	683072	95.3113	ppb	98
89) Tert-Butylbenzene	12.12	119	1370798	98.6752	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	1346645	104.2304	ppb	98
91) Sec-Butylbenzene	12.36	105	1663958	98.4544	ppb	99
92) p-Isopropyltoluene	12.52	119	820032	104.5244	ppb	96
93) Benzyl Chloride	12.71	91	583435	104.0358	ppb	97
94) 1,3-DCB	12.46	146	473408	100.5636	ppb	98
95) 1,4-DCB	12.56	146	891137	95.5720	ppb	97
96) n-Butylbenzene	12.71	91	583435	104.0358	ppb	96
97) 1,2-DCB	12.97	146	906581	100.0688	ppb	97
98) Hexachloroethane	13.26	117	299614	105.3612	ppb	92
99) 1,2-Dibromo-3-chloropropan	13.82	75	99202	99.0488	ppb	86
100) 1,2,4-Trichlorobenzene	14.74	180	670652	117.3534	ppb	93
101) Hexachlorobutadiene	14.94	225	305966	107.7229	ppb	89
102) Naphthalene	15.01	128	1424406	119.8350	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	295040	116.1190	ppb	95

Quantitation Report

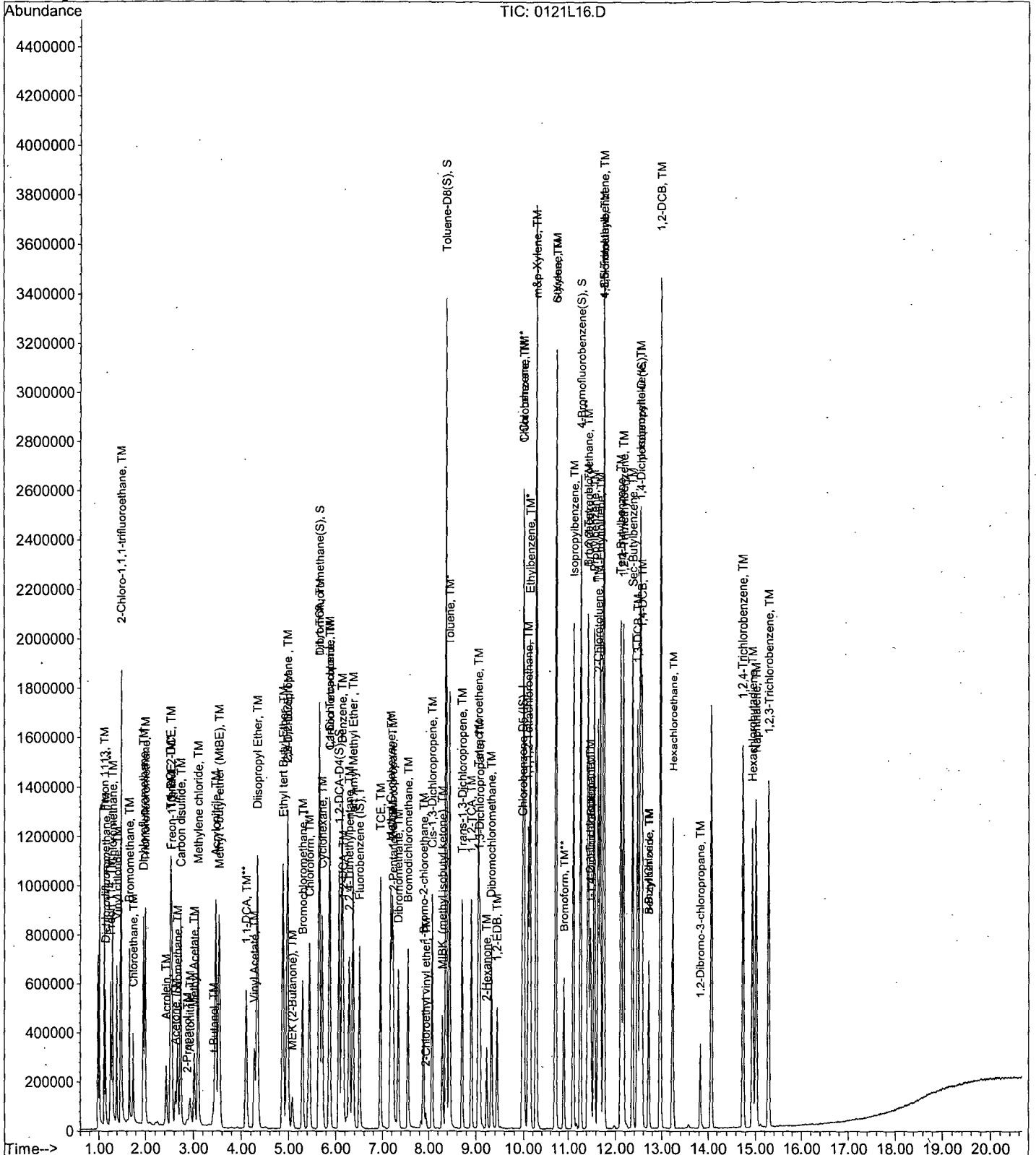
Data File : M:\LOKI\DATA\190121\0121L16.D  
Acq On : 21 Jan 19 22:07  
Sample : 100ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

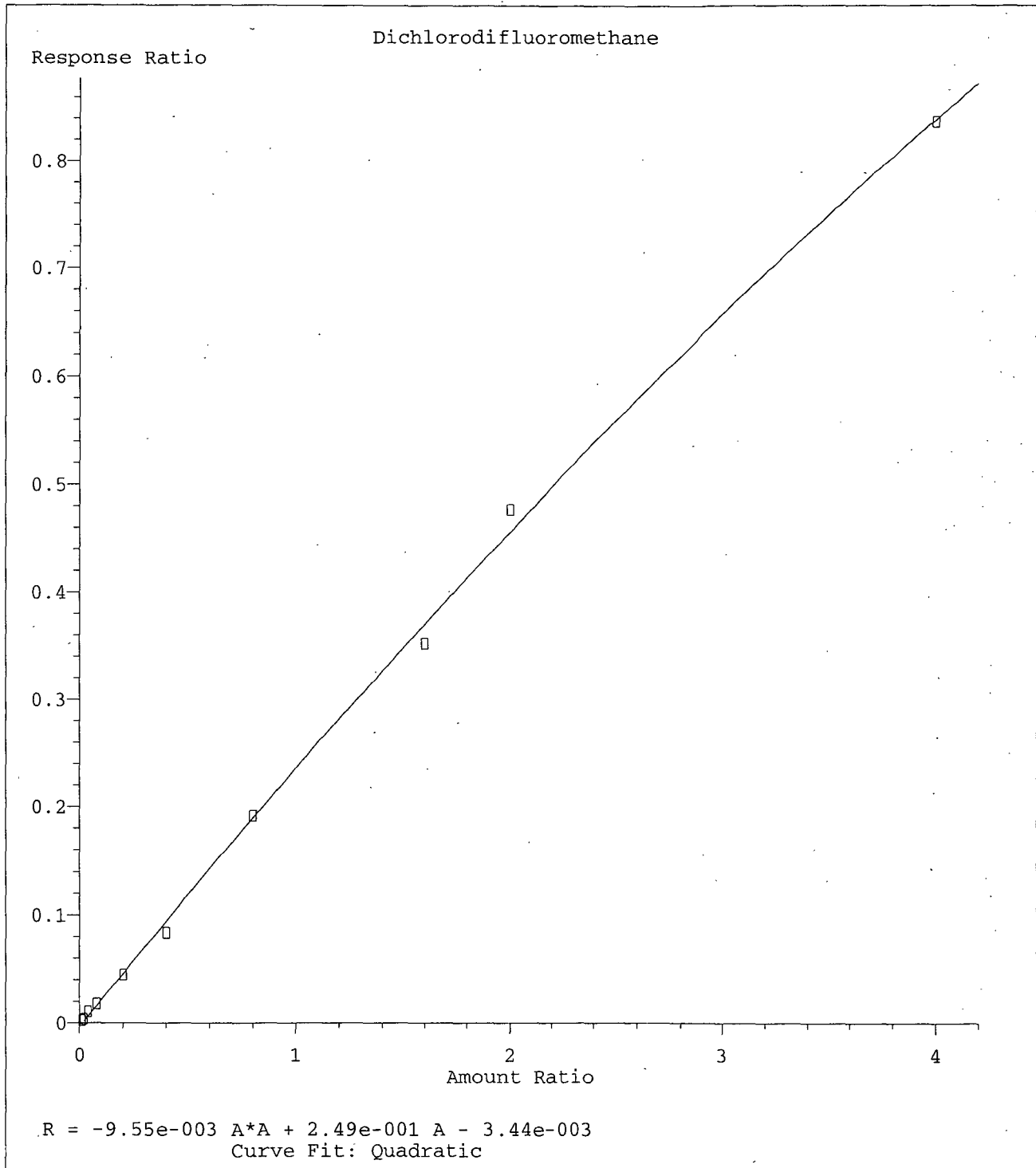
Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

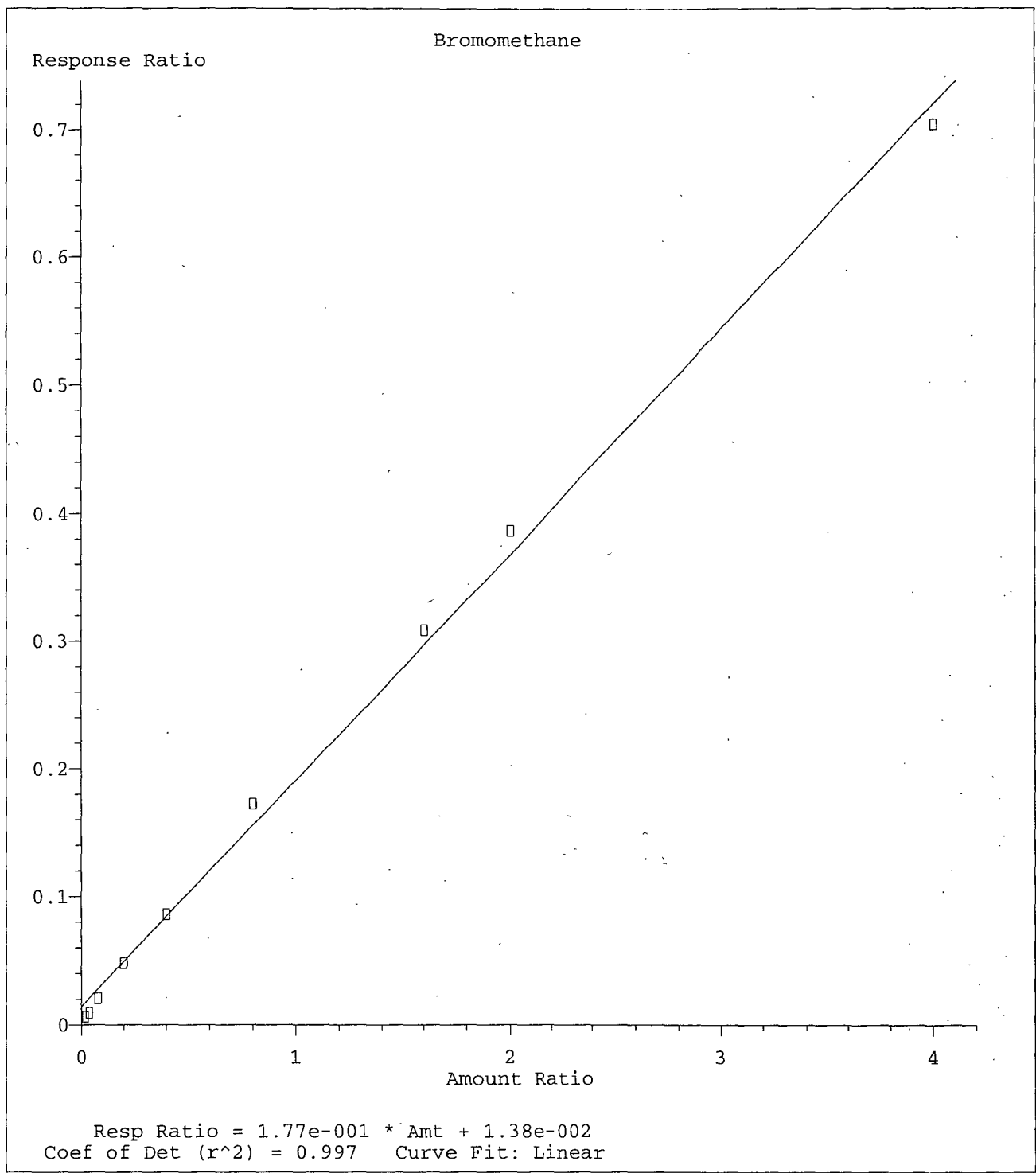
Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



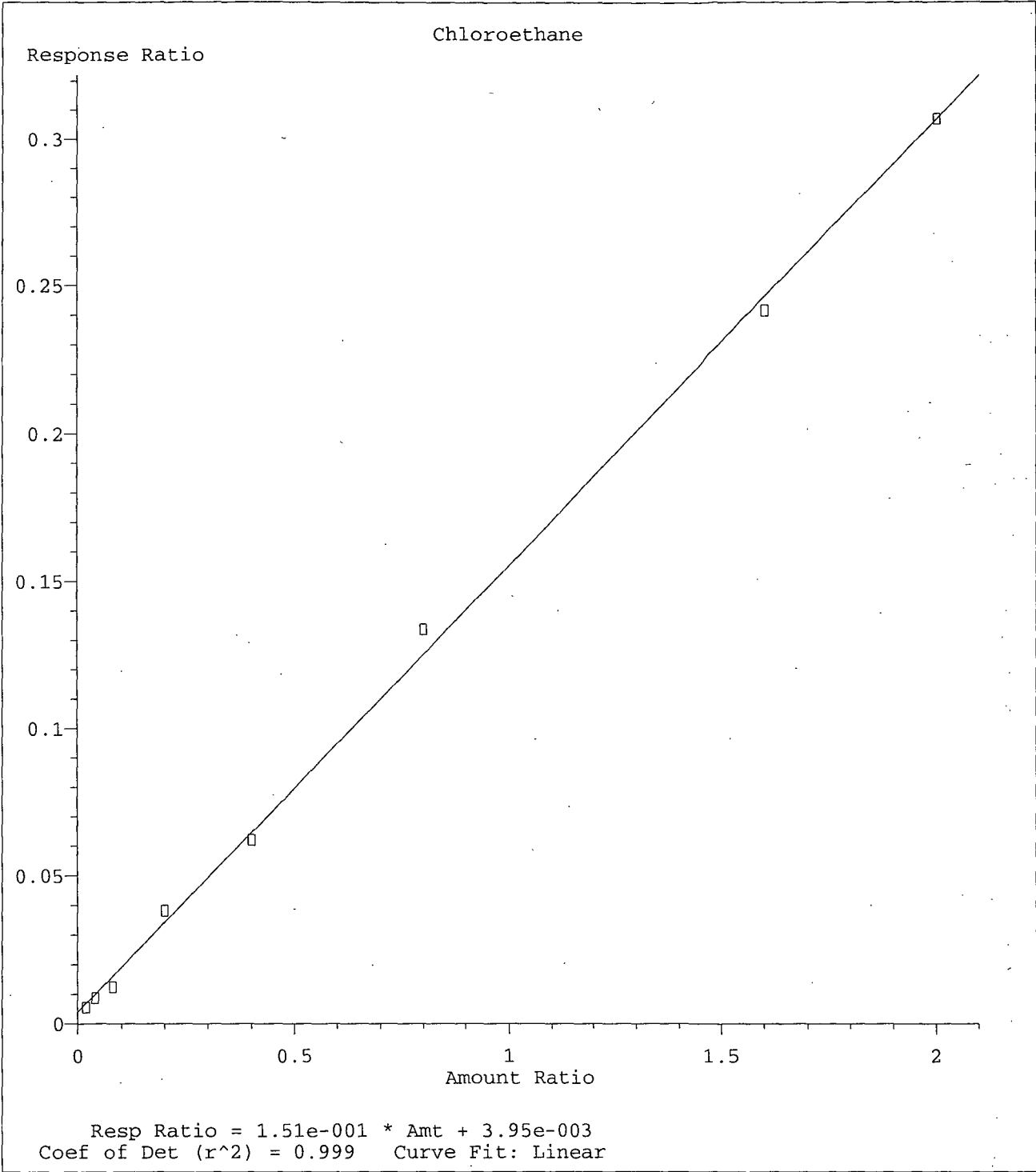




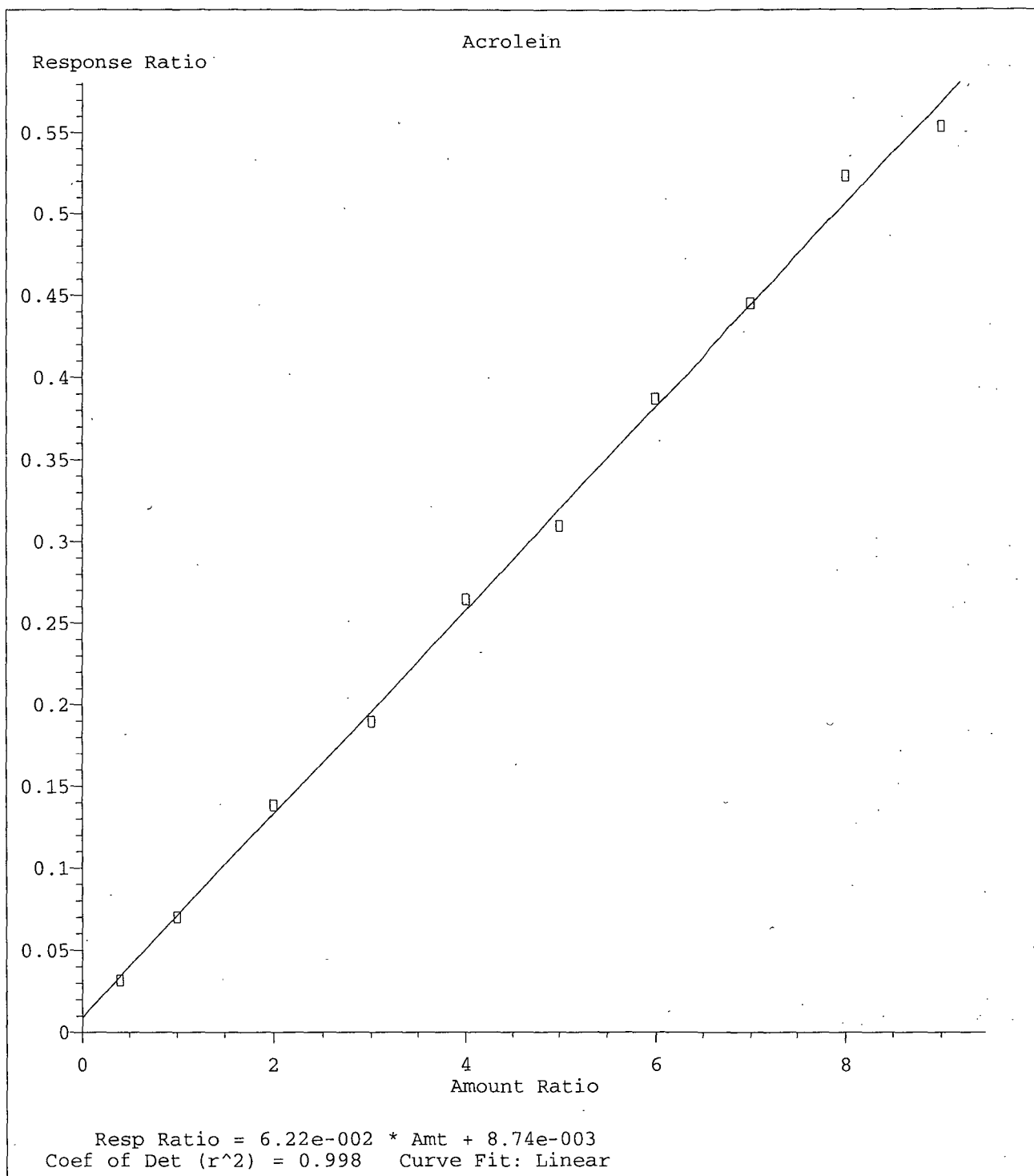
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



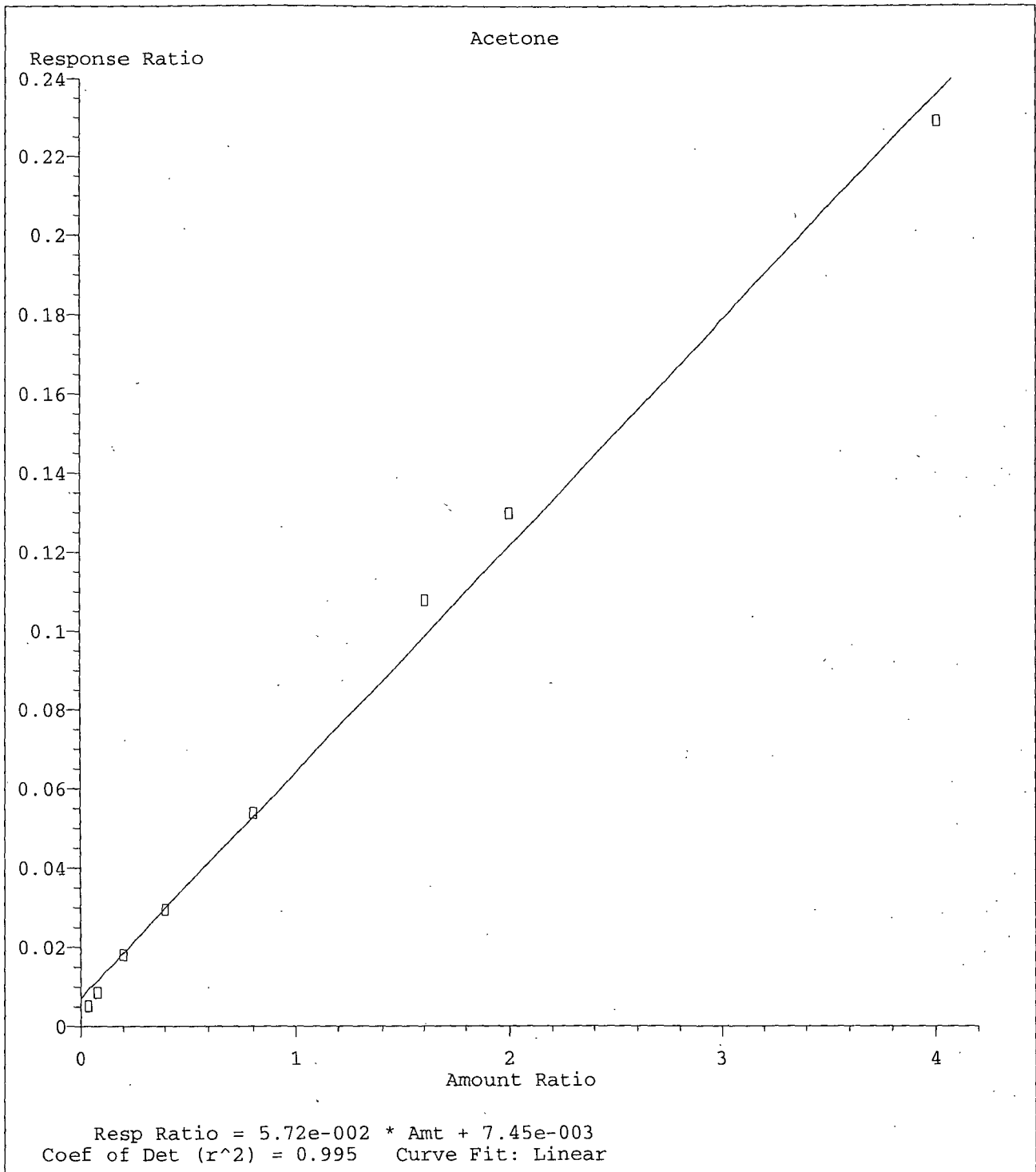
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



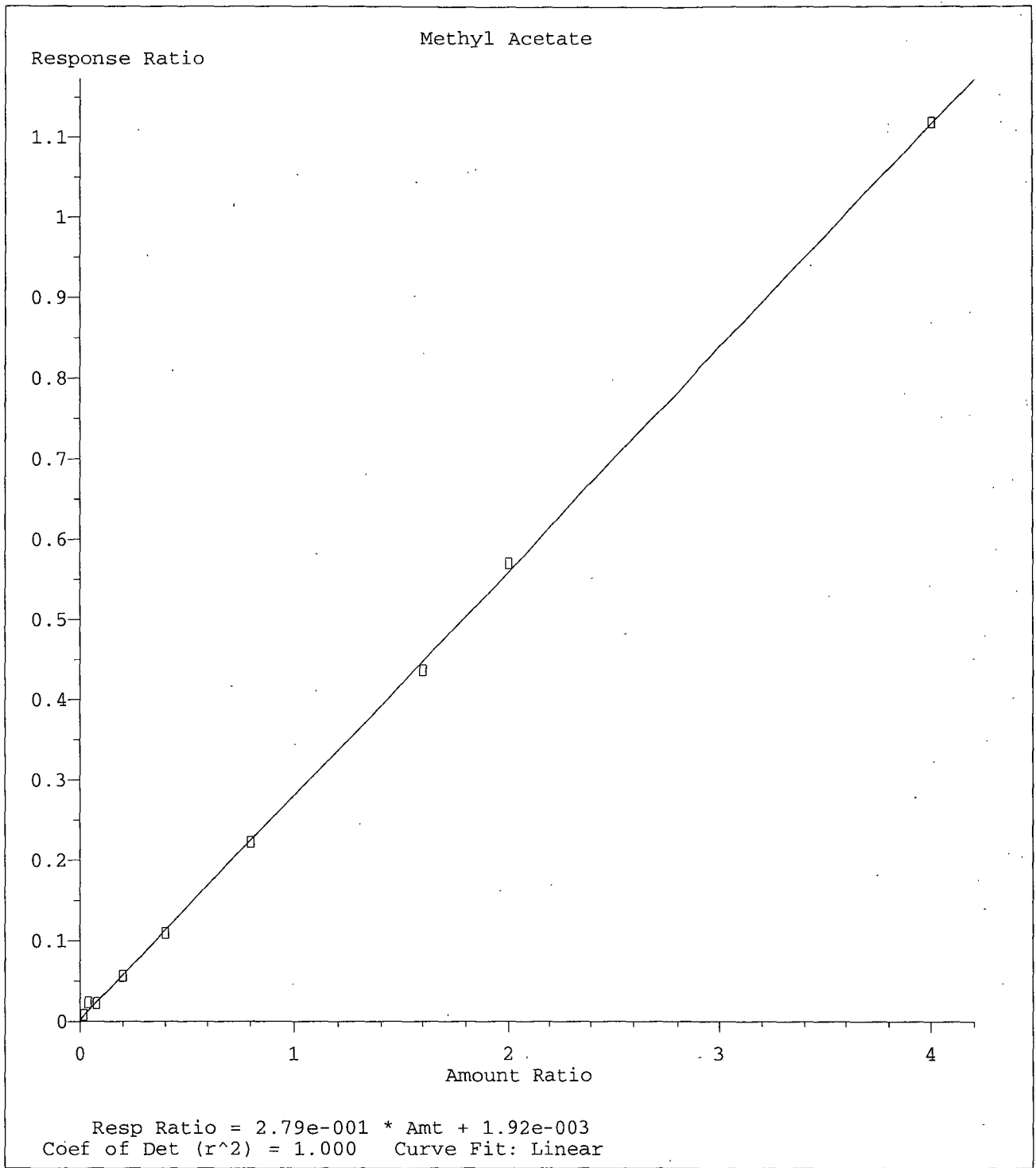
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



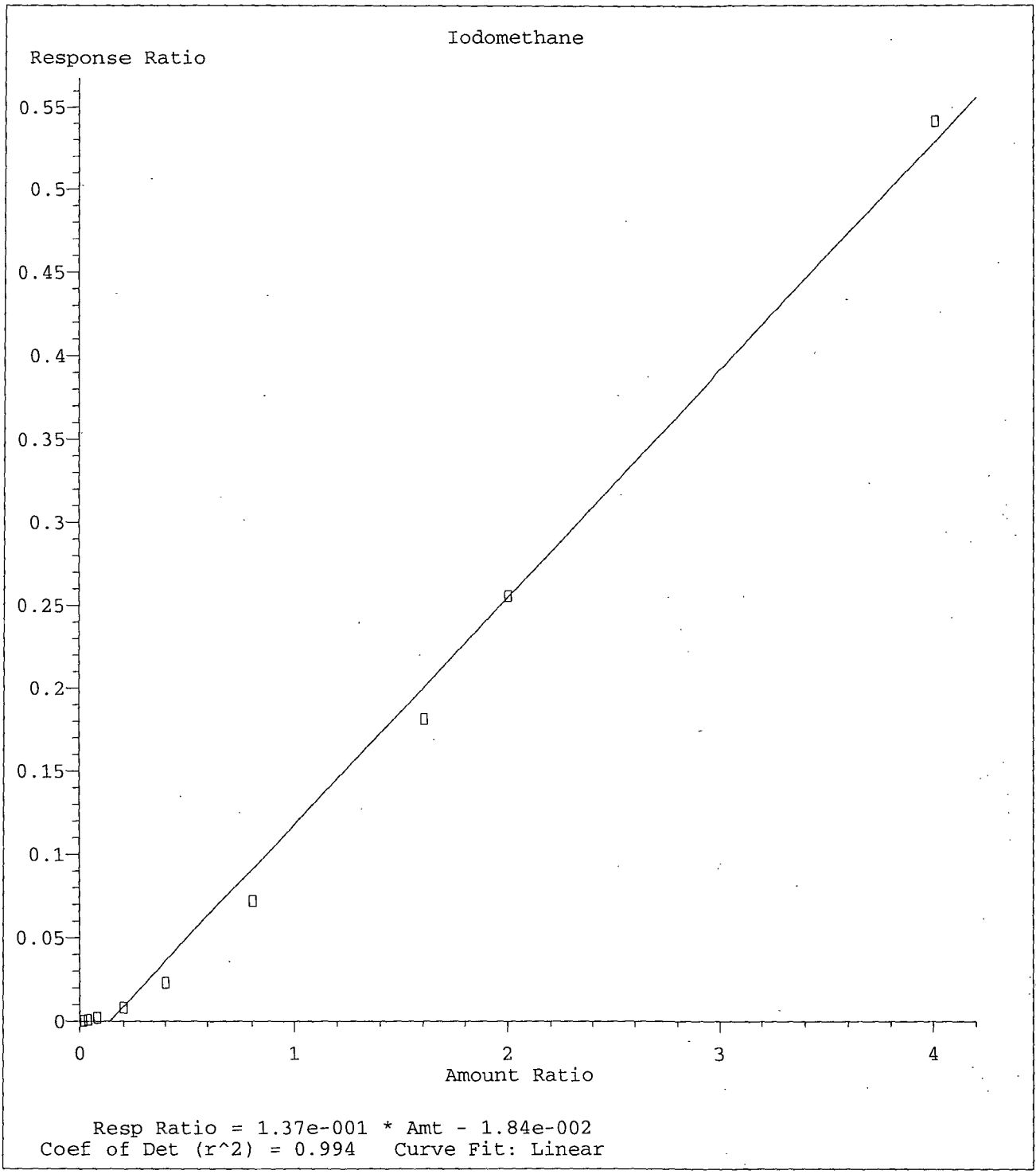
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



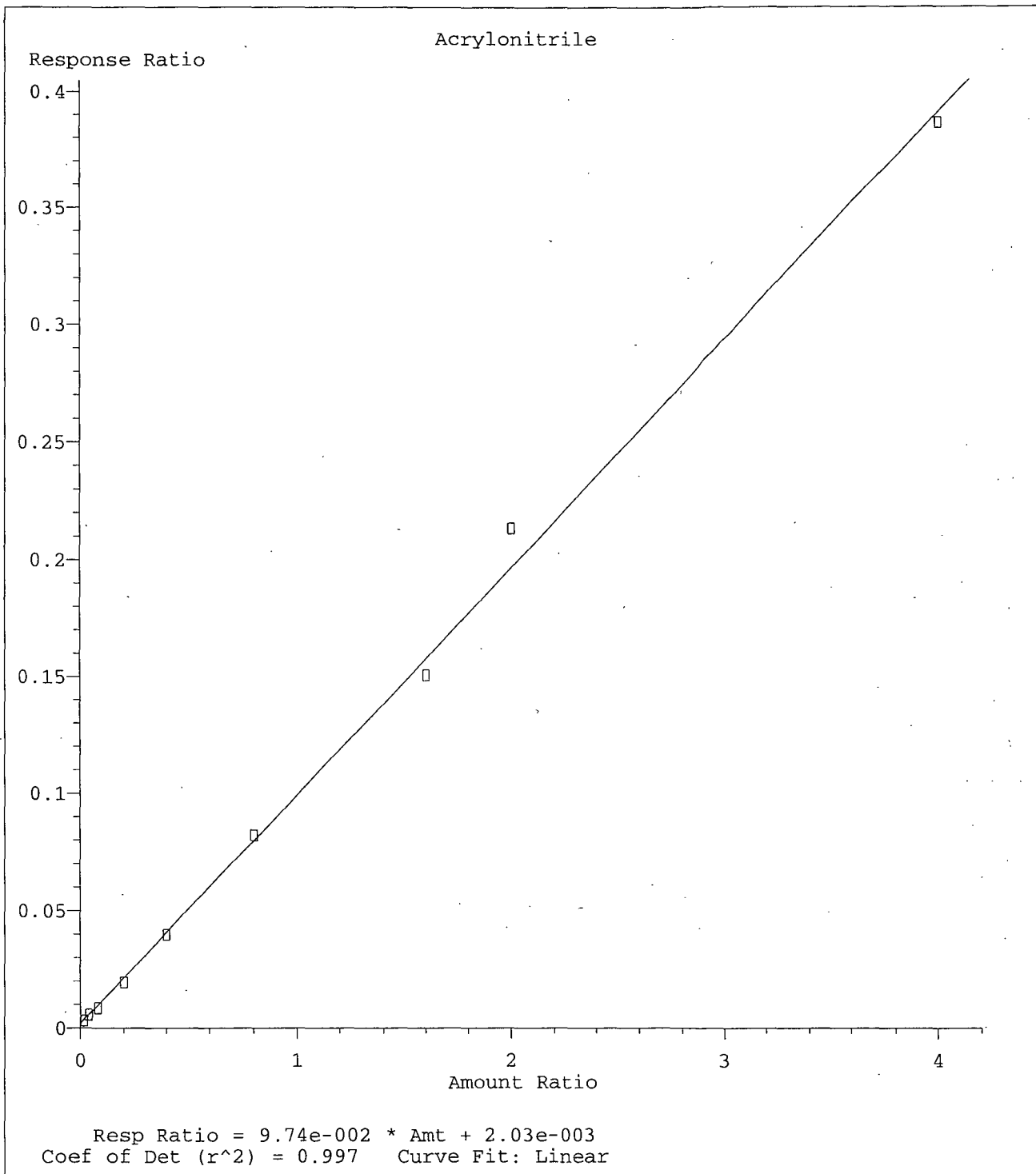
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019

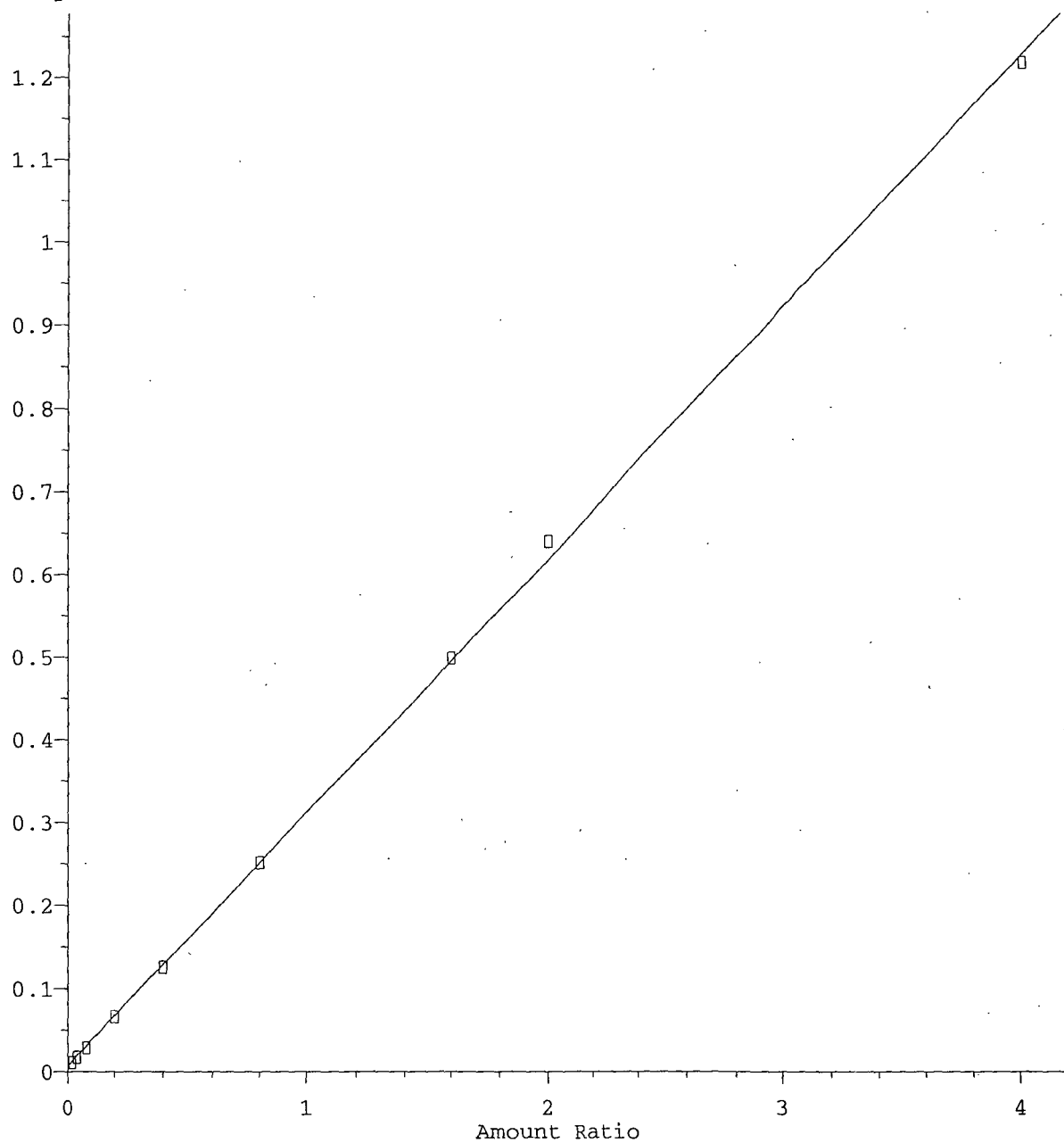


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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



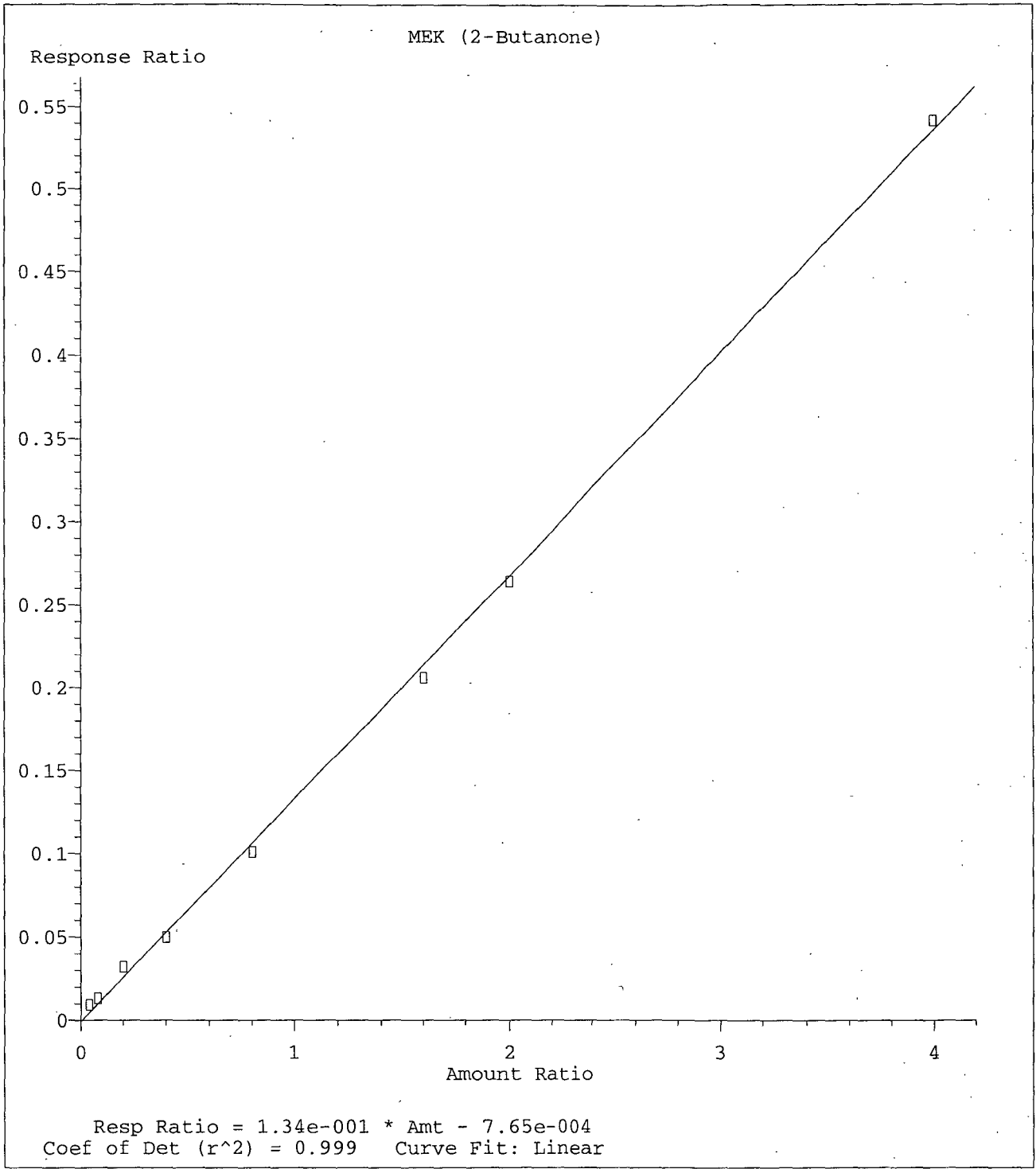
Methylene chloride

Response Ratio

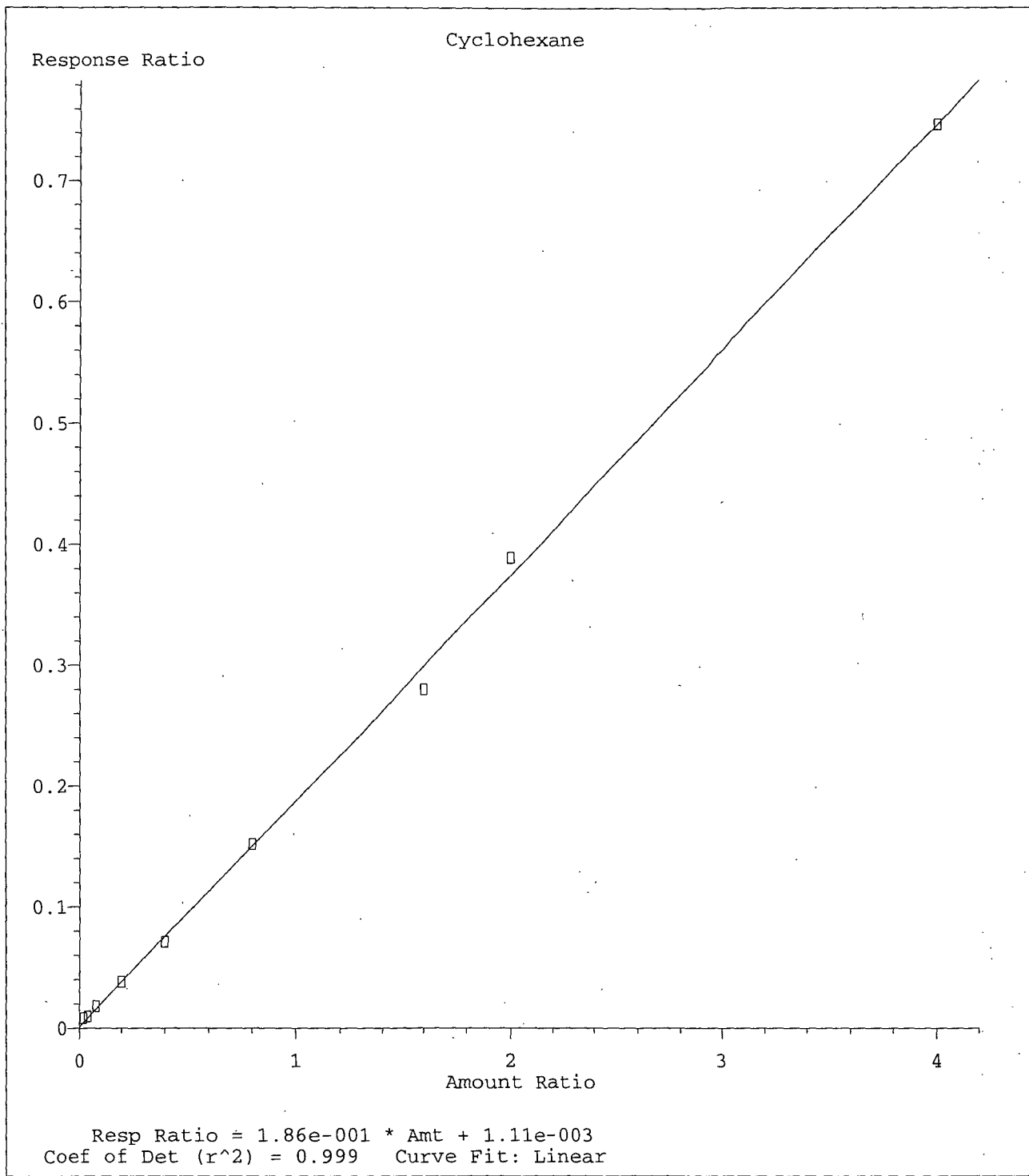


Resp Ratio = 3.05e-001 \* Amt + 7.13e-003  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

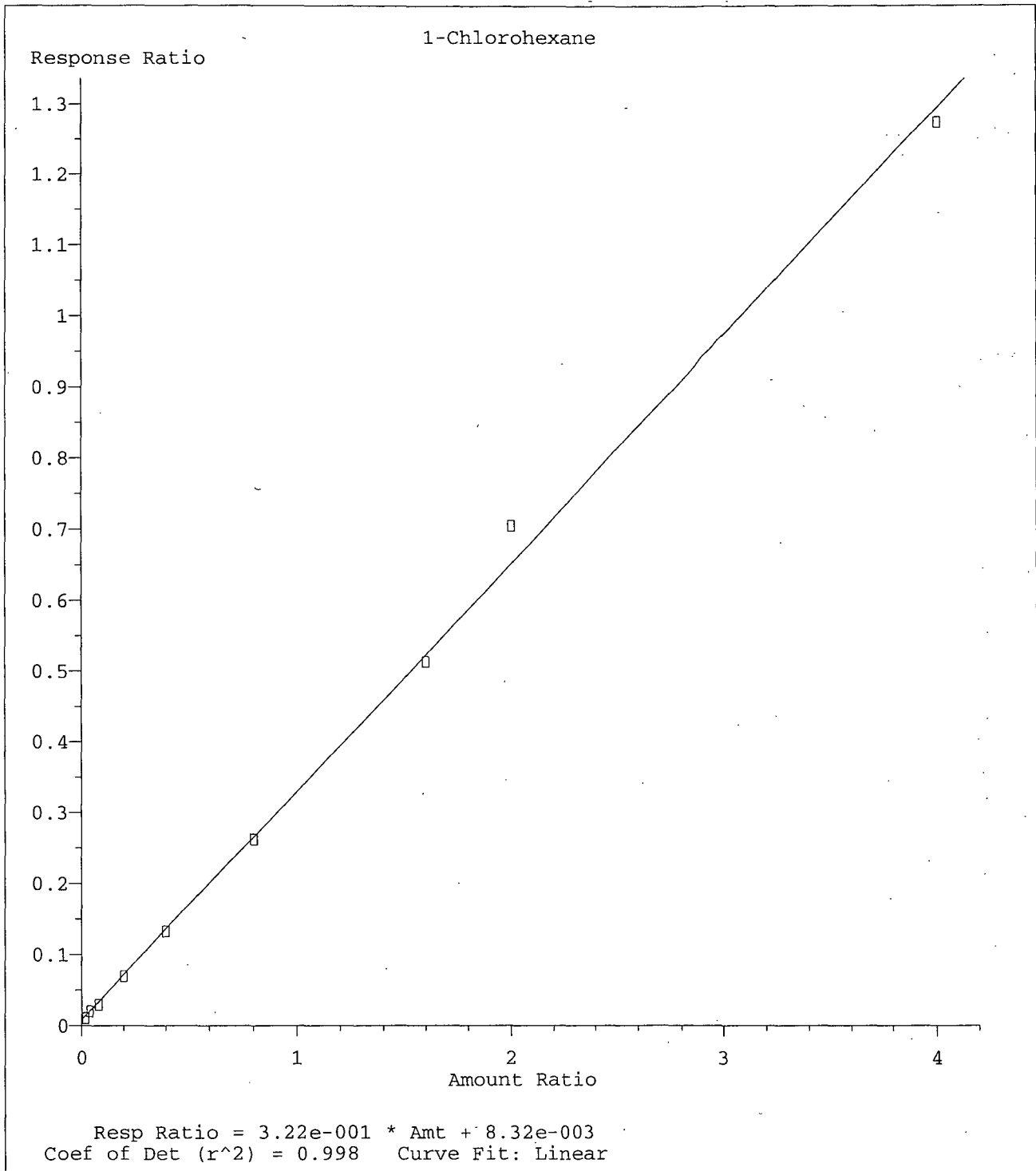
Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



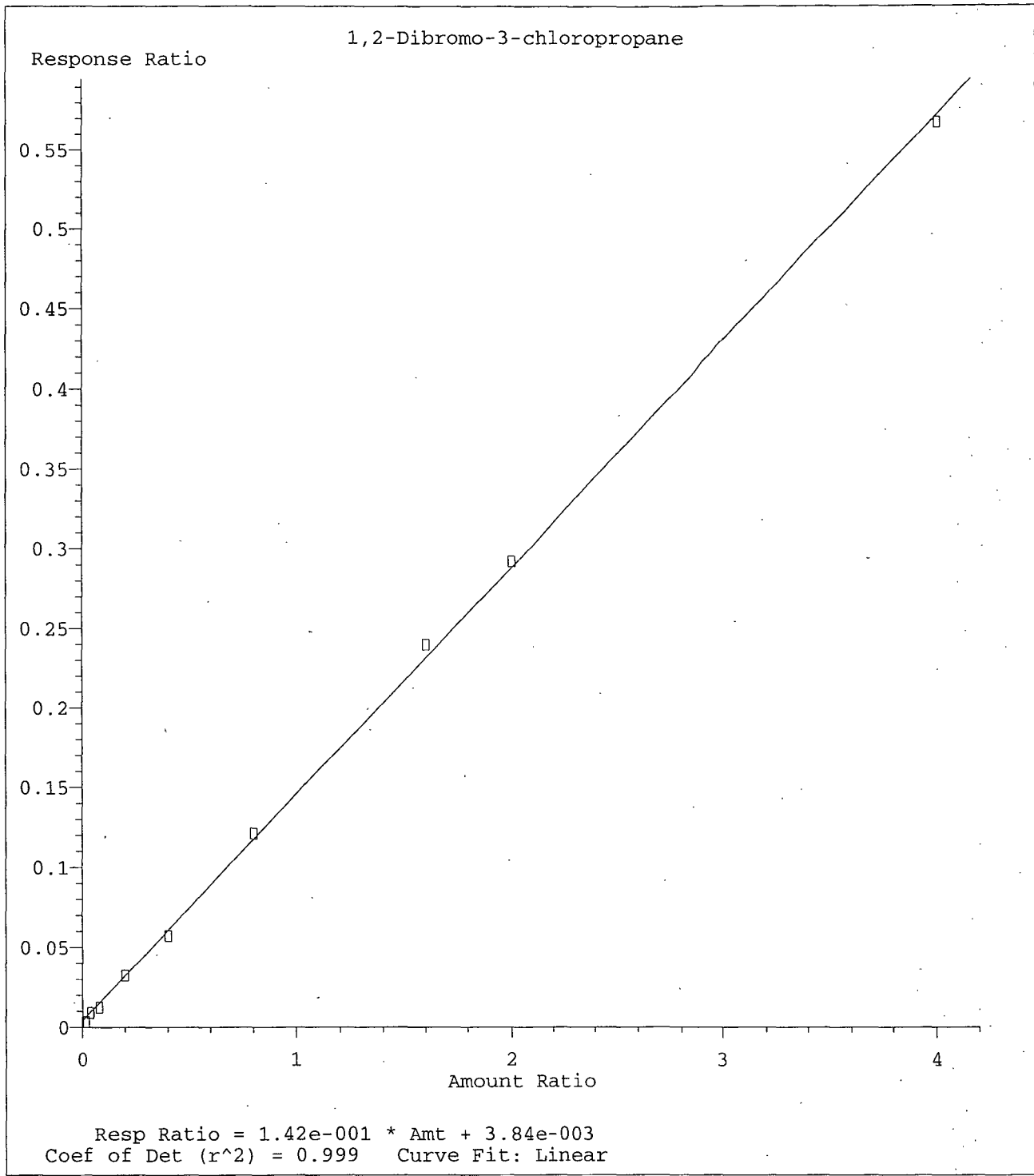
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Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019



Method Name: M:\LOKI\DATA\190121\L0121W.M  
Calibration Table Last Updated: Tue Jan 22 12:46:40 2019

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/21/19

Matrix: \_\_\_\_\_

Instrument: Loki

Initial Cal. Date: 01/21/19

Data File: 0121L19.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Freon 1113	0.1366	0.1413	3.4	TM
2	TMQ	Dichlorodifluoromethane	0.2227	0.2856	28	TMQ 20
3	TM	Freon 114	0.1703	0.1655	2.8	TM
4	TM**	Chloromethane	0.3482	0.3701	6.3	TM**
5	TM*	Vinyl chloride	0.3138	0.3603	15	TM*
6	TM	2-Chloro-1,1,1-trifluoroethane	0.2655	0.2878	8.4	TM
7	TML	Bromomethane	0.2254	0.2373	5.3	TML 15
8	TML	Chloroethane	0.1836	0.1641	11	TML 2.0
9	TM	Dichlorofluoromethane	0.5708	0.5285	7.4	TM
10	TM	Trichlorofluoromethane	0.4382	0.4547	3.8	TM
11	TML	Acrolein	0.0664	0.0514	23	TML 20
12	TML	Acetone	0.0818	0.0700	14	TML 10
13	TM	Freon-113	0.2429	0.2229	8.2	TM
14	TM*	1,1-DCE	0.0813	0.0722	11	TM*
15	TM	t-Butanol	0.0297	0.0263	11	TM
16	TM	2-Propanol	0.0215	0.0195	9.4	TM
17	TM	Acetonitrile	0.0508	0.0510	0.44	TM
18	TML	Methyl Acetate	0.3282	0.2564	22	TML 9.8
19	TML	Iodomethane	0.0712	0.0744	4.4	TML 12
20	TML	Acrylonitrile	0.1117	0.0888	21	TML 14
21	TML	Methylene chloride	0.3598	0.3267	9.2	TML 1.1
22	TM	Carbon disulfide	0.8465	0.8003	5.5	TM
23	TM	Methyl t-butyl ether (MtBE)	0.7763	0.7528	3.0	TM
24	TM	Trans-1,2-DCE	0.1472	0.1427	3.0	TM
25	TM	Diisopropyl Ether	0.8394	0.8095	3.6	TM
26	TM**L	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0222	0.00	TM**L
27	TM**	1,1-DCA	0.4818	0.4640	3.7	TM**
28	TM	Vinyl Acetate	0.1758	0.2333	33	TM
29	TM	Ethyl tert Butyl Ether	0.7299	0.7184	1.6	TM
30	TML	MEK (2-Butanone)	0.1506	0.1379	8.4	TML 4.3
31	TM	Cis-1,2-DCE	0.2742	0.2629	4.1	TM
32	TM	2,2-Dichloropropane	0.3802	0.3404	10	TM
33	TM	2-Methylpentane	0.0000	0.0017	0.00	TM
34	TML	3-Methylpentane	0.0000	0.0017	0.00	TML
35	TM*	Chloroform	0.4212	0.4234	0.53	TM*
36	TM	Bromochloromethane	0.0669	0.0641	4.2	TM
37	TM	1,1,1-TCA	0.1531	0.1561	2.0	TM
38	TML	Cyclohexane	0.2243	0.1761	22	TML 7.0
39	TM	1,1-Dichloropropene	0.2976	0.2855	4.0	TM
40	TM	2,2,4-Trimethylpentane	0.5445	0.4724	13	TM

Average

8.7

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0121L19.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	Carbon Tetrachloride	0.3139	0.3120	0.63	TM
42	TM	Tert Amyl Methyl Ether	0.6593	0.6330	4.0	TM
43	TML	Methylcyclopentane	0.0000	0.0003	0.00	TML
44	TM	1,2-DCA	0.3424	0.3381	1.3	TM
45	TM	Benzene	0.8881	0.8973	1.0	TM
46	TM	TCE	0.1485	0.1362	8.3	TM
47	TM	2-Pentanone	0.1707	0.1674	1.9	TM
48	TM*	1,2-Dichloropropane	0.2348	0.2327	0.89	TM*
49	TM	Bromodichloromethane	0.1784	0.1740	2.5	TM
50	TM	Methyl Cyclohexane	0.3178	0.3003	5.5	TM
51	TM	Dibromomethane	0.1640	0.1563	4.7	TM
52	TM	2-Chloroethyl vinyl ether	0.0062	0.0058	6.4	TM
53	TM	MIBK (methyl isobutyl ketone)	0.2356	0.2108	11	TM
54	TM	1-Bromo-2-chloroethane	0.1792	0.1885	5.2	TM
55	TM	Cis-1,3-Dichloropropene	0.3891	0.3930	1.0	TM
56	TM*	Toluene	0.5337	0.5496	3.0	TM*
57	TM	Trans-1,3-Dichloropropene	0.3743	0.3581	4.3	TM
58	TM	1,1,2-TCA	0.1900	0.1811	4.7	TM
59	TM	2-Hexanone	0.1593	0.1427	10	TM
60	TM	1,2-EDB	0.1605	0.1542	3.9	TM
61	TM	Tetrachloroethene	0.1981	0.1872	5.5	TM
62	TML	1-Chlorohexane	0.3753	0.3166	16	TML 8.0
63	TM	1,1,1,2-Tetrachloroethane	0.3245	0.3121	3.8	TM
64	TM	m&p-Xylene	0.9763	0.9675	0.90	TM
65	TM	o-Xylene	0.2863	0.2625	8.3	TM
66	TM	Styrene	0.8786	0.8954	1.9	TM
67	TM	1,3-Dichloropropane	0.4578	0.4386	4.2	TM
68	TM	Dibromochloromethane	0.3457	0.3202	7.4	TM
69	TM**	Chlorobenzene	0.8020	0.8180	2.0	TM**
70	TM*	Ethylbenzene	0.7272	0.7049	3.1	TM*
71	TM**	Bromoform	0.2854	0.2690	5.8	TM**
72	TM	Isopropylbenzene	2.340	2.239	4.3	TM
73	TM**	1,1,2,2-Tetrachloroethane	0.6767	0.6490	4.1	TM**
74	TM	1,2,3-Trichloropropane	0.1179	0.1177	0.17	TM
75	TM	t-1,4-Dichloro-2-Butene	0.1542	0.1348	13	TM
76	TM	Bromobenzene	0.3798	0.3824	0.70	TM
77	TM	n-Propylbenzene	1.424	1.345	5.5	TM
78	TM	4-Ethyltoluene	2.162	2.138	1.1	TM
79	TM	2-Chlorotoluene	0.9036	0.8686	3.9	TM
80	TM	1,3,5-Trimethylbenzene	1.874	1.811	3.4	TM
Average					4.4	

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/21/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0121L19.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	4-Chlorotoluene	1.025	0.9751	4.8	TM
82	TM	Tert-Butylbenzene	1.986	2.020	1.7	TM
83	TM	1,2,4-Trimethylbenzene	1.847	1.835	0.67	TM
84	TM	Sec-Butylbenzene	2.417	2.346	2.9	TM
85	TM	p-Isopropyltoluene	1.122	1.088	3.0	TM
86	TM	Benzyl Chloride	0.8018	0.6922	14	TM
87	TM	1,3-DCB	0.6731	0.6511	3.3	TM
88	TM	1,4-DCB	1.333	1.287	3.5	TM
89	TM	n-Butylbenzene	0.8018	0.6922	14	TM
90	TM	1,2-DCB	1.295	1.257	2.9	TM
91	TM	Hexachloroethane	0.4066	0.3982	2.1	TM
92	TML	1,2-Dibromo-3-chloropropane	0.1600	0.1373	14	TML 10
93	TM	1,2,4-Trichlorobenzene	0.8171	0.7797	4.6	TM
94	TM	Hexachlorobutadiene	0.4061	0.3901	3.9	TM
95	TM	Naphthalene	1.700	1.614	5.1	TM
96	TM	1,2,3-Trichlorobenzene	0.3633	0.3495	3.8	TM
97						
98						
99						
100						
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Average

5.3



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L19.D  
 Acq On : 21 Jan 19 23:32  
 Sample : (SS)10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan.22 12:46 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	352704	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	315584	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	177920	25.0000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	167482	25.1986	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.796%	
43) 1,2-DCA-D4(S)	6.07	65	197373	25.4673	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.868%	
64) Toluene-D8(S)	8.37	98	621534	24.1045	ppb	0.00
Spiked Amount	25.000		Recovery	=	96.416%	
72) 4-Bromofluorobenzene(S)	11.26	95	262142	24.2350	ppb	0.00
Spiked Amount	25.000		Recovery	=	96.940%	
Target Compounds						Qvalue
2) Freon 1113	1.12	116	199306	103.4430	ppb	99
3) Dichlorodifluoromethane	1.15	85	40292	12.0439	ppb	93
4) Freon 114	1.25	85	23344	9.7175	ppb	96
5) Chloromethane	1.29	50	52221	10.6313	ppb	91
6) Vinyl chloride	1.38	62	50825	11.4788	ppb	95
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	406080	108.3992	ppb	99
8) Bromomethane	1.65	94	33480	11.4653	ppb	95
9) Chloroethane	1.76	64	23154	10.1989	ppb	100
10) Dichlorofluoromethane	1.95	67	74555	9.2587	ppb	99
11) Trichlorofluoromethane	2.00	101	64155	10.3781	ppb	95
12) Acrolein	2.43	56	90574	99.7058	ppb	# 94
13) Acetone	2.61	43	9878	8.9862	ppb	96
14) Freon-113	2.54	101	31450	9.1767	ppb	95
15) 1,1-DCE	2.52	63	10180	8.8752	ppb	95
16) t-Butanol	3.38	59	46408	110.8423	ppb	99
17) 2-Propanol	2.84	45	27542	90.6474	ppb	# 99
18) Acetonitrile	2.92	41	90003	125.5530	ppb	95
19) Methyl Acetate	3.01	43	36175	9.0213	ppb	89
20) Iodomethane	2.67	142	10498	8.7988	ppb	96
21) Acrylonitrile	3.44	52	12525	8.5919	ppb	94
22) Methylene chloride	3.10	84	46087	10.1097	ppb	95
23) Carbon disulfide	2.73	76	112905	9.4538	ppb	98
24) Methyl t-butyl ether (MtBE)	3.54	73	106210	9.6982	ppb	96
25) Trans-1,2-DCE	2.52	96	20136	9.6992	ppb	88
26) Diisopropyl Ether	4.33	45	114199	9.6436	ppb	98
28) 1,1-DCA	4.10	63	65460	9.6304	ppb	99
29) Vinyl Acetate	4.27	43	32915	13.2694	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	101346	9.8420	ppb	92
31) MEK (2-Butanone)	5.07	43	19449	10.4280	ppb	93
32) Cis-1,2-DCE	4.98	96	37088	9.5862	ppb	95
33) 2,2-Dichloropropane	4.97	77	48031	8.9533	ppb	# 90
36) Chloroform	5.45	83	59740	10.0530	ppb	95
37) Bromochloromethane	5.30	128	9043	9.5805	ppb	94
39) 1,1,1-TCA	5.65	97	22024	10.1963	ppb	95
40) Cyclohexane	5.72	41	24838	9.2981	ppb	86
41) 1,1-Dichloropropene	5.88	75	40284	9.5951	ppb	91
42) 2,2,4-Trimethylpentane	6.28	57	66646	8.6753	ppb	98
44) Carbon Tetrachloride	5.87	117	44013	9.9370	ppb	93
45) Tert Amyl Methyl Ether	6.36	73	89305	9.6009	ppb	98

Data File : M:\LOKI\DATA\190121\0121L19.D  
 Acq On : 21 Jan 19 23:32  
 Sample : (SS)10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:46 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	47696	9.8722	ppb	96
48) Benzene	6.13	78	126596	10.1038	ppb	97
49) TCE	6.95	130	19216	9.1692	ppb	95
50) 2-Pentanone	7.23	43	295226	122.6211	ppb	98
51) 1,2-Dichloropropane	7.20	63	32830	9.9108	ppb	100
52) Bromodichloromethane	7.55	83	24544	9.7499	ppb	96
53) Methyl Cyclohexane	7.17	83	42362	9.4473	ppb	86
54) Dibromomethane	7.34	93	22047	9.5259	ppb	94
55) 2-Chloroethyl vinyl ether	7.93	43	822	9.3581	ppb	# 53
56) MIBK (methyl isobutyl ket	8.29	43	29745	8.9482	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	26592	10.5184	ppb	94
58) Cis-1,3-Dichloropropene	8.07	75	55452	10.1007	ppb	97
59) Toluene	8.44	91	77544	10.2988	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	50516	9.5667	ppb	96
61) 1,1,2-TCA	8.90	83	25543	9.5277	ppb	89
62) 2-Hexanone	9.22	43	20137	8.9597	ppb	93
65) 1,2-EDB	9.44	107	19464	9.6050	ppb	95
66) Tetrachloroethene	9.05	166	23632	9.4486	ppb	95
67) 1-Chlorohexane	10.00	91	39960	9.1977	ppb	97
68) 1,1,1,2-Tetrachloroethane	10.09	131	39400	9.6193	ppb	94
69) m&p-Xylene	10.26	91	244270	19.8206	ppb	98
70) o-Xylene	10.70	106	33136	9.1700	ppb	94
71) Styrene	10.71	104	113030	10.1913	ppb	94
73) 1,3-Dichloropropane	9.08	76	55370	9.5808	ppb	100
74) Dibromochloromethane	9.33	129	40416	9.2625	ppb	97
75) Chlorobenzene	10.00	112	103257	10.1994	ppb	96
76) Ethylbenzene	10.13	91	88984	9.6942	ppb	98
77) Bromoform	10.90	173	33955	9.4249	ppb	89
79) Isopropylbenzene	11.11	105	159352	9.5687	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	46191	9.5909	ppb	98
81) 1,2,3-Trichloropropane	11.47	110	8379	9.9828	ppb	95
82) t-1,4-Dichloro-2-Butene	11.50	53	9593	8.7418	ppb	99
83) Bromobenzene	11.42	156	27216	10.0702	ppb	97
84) n-Propylbenzene	11.56	91	95751	9.4470	ppb	99
85) 4-Ethyltoluene	11.69	105	152146	9.8886	ppb	97
86) 2-Chlorotoluene	11.64	91	61818	9.6130	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	128905	9.6641	ppb	95
88) 4-Chlorotoluene	11.76	91	69396	9.5159	ppb	98
89) Tert-Butylbenzene	12.11	119	143789	10.1718	ppb	93
90) 1,2,4-Trimethylbenzene	12.17	105	130586	9.9329	ppb	100
91) Sec-Butylbenzene	12.36	105	166952	9.7078	ppb	99
92) p-Isopropyltoluene	12.52	119	77440	9.7004	ppb	97
93) Benzyl Chloride	12.71	91	49259	8.6320	ppb	97
94) 1,3-DCB	12.47	146	46336	9.6730	ppb	98
95) 1,4-DCB	12.56	146	91599	9.6541	ppb	95
96) n-Butylbenzene	12.71	91	49259	8.6320	ppb	95
97) 1,2-DCB	12.97	146	89474	9.7057	ppb	95
98) Hexachloroethane	13.26	117	28338	9.7932	ppb	92
99) 1,2-Dibromo-3-chloropropan	13.82	75	9769	8.9756	ppb	92
100) 1,2,4-Trichlorobenzene	14.74	180	55490	9.5422	ppb	95
101) Hexachlorobutadiene	14.94	225	27766	9.6069	ppb	91
102) Naphthalene	15.01	128	114836	9.4943	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	24872	9.6199	ppb	93

Quantitation Report

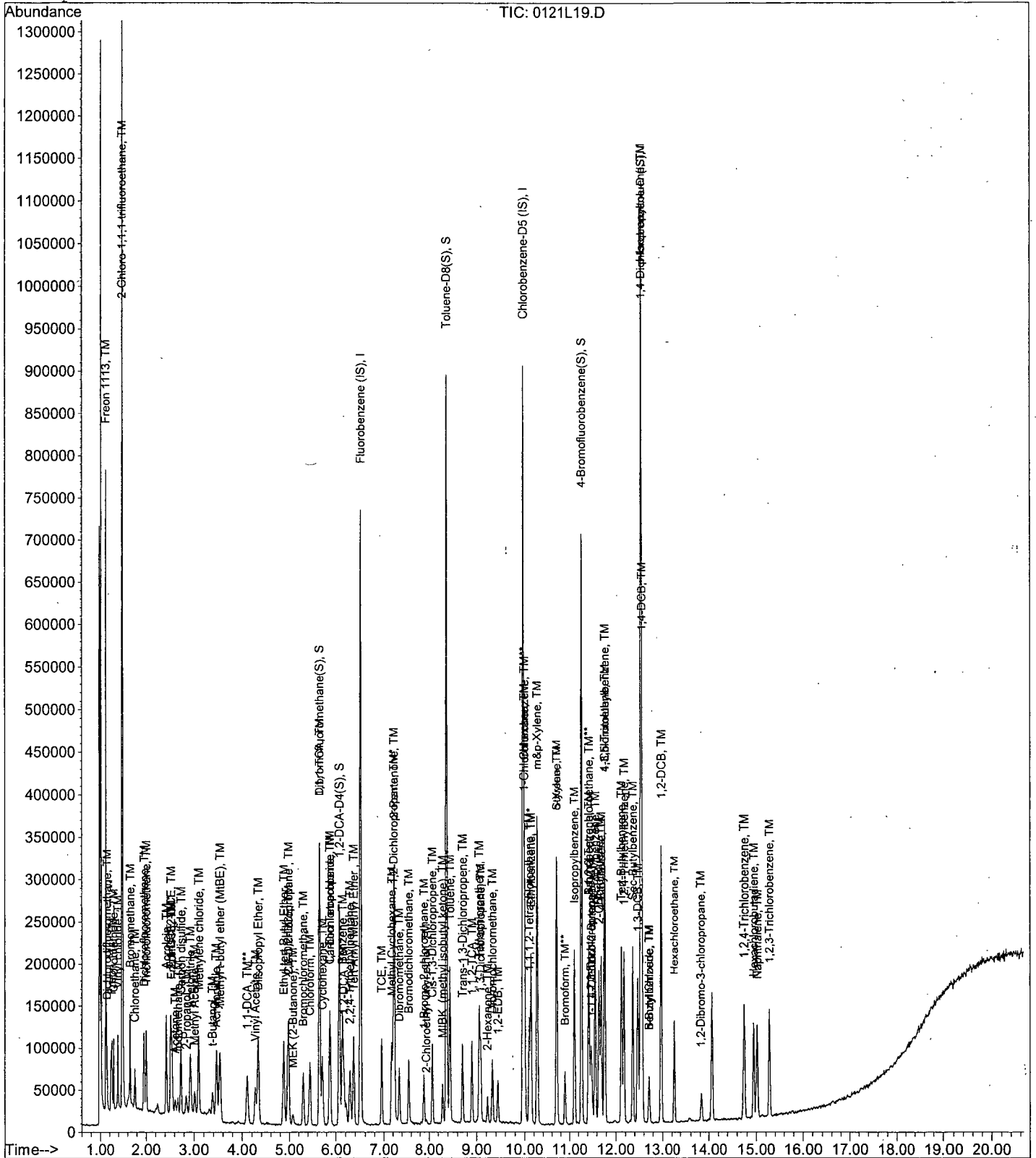
Data File : M:\LOKI\DATA\190121\0121L19.D  
 Acq On : 21 Jan 19 23:32  
 Sample : (SS)10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:46 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Loki  
Initial Cal. Date: 01/21/19  
Data File: 0125L02.D

	Compound	MEAN	CCRF	%D	%Drift	
1	I Fluorobenzene (IS)	ISTD			I	
2	TM Freon 1113	0.1366	0.0000	100	TM	*NT
3	TMQ Dichlorodifluoromethane	0.2227	0.2832	27	TMQ	19
4	TM Freon 114	0.1703	0.2517	48	TM	*NT
5	TM** Chloromethane	0.3482	0.4246	22	TM**	*NT
6	TM* Vinyl chloride	0.3138	0.3233	3.0	TM*	
7	TM 2-Chloro-1,1,1-trifluoroethane	0.2655	0.0001	100	TM	*NT
8	TML Bromomethane	0.2254	0.2076	7.9	TML	2.1
9	TML Chloroethane	0.1836	0.1589	13	TML	1.5
10	TM Dichlorofluoromethane	0.5708	0.5271	7.7	TM	
11	TM Trichlorofluoromethane	0.4382	0.4591	4.8	TM	
12	TML Acrolein	0.0664	0.0347	48	TML	47 *NT
13	TML Acetone	0.0818	0.0591	28	TML	29 *NT
14	TM Freon-113	0.2429	0.2491	2.5	TM	
15	TM* 1,1-DCE	0.0813	0.0715	12	TM*	
16	TM t-Butanol	0.0297	0.0229	23	TM	*NT
17	TM 2-Propanol	0.0215	0.0017	92	TM	*NT
18	TM Acetonitrile	0.0508	0.0374	26	TM	*NT
19	TML Methyl Acetate	0.3282	0.2000	39	TML	30 *NT
20	TML Iodomethane	0.0712	0.0675	5.2	TML	17
21	TML Acrylonitrile	0.1117	0.1043	6.6	TML	1.9
22	TML Methylene chloride	0.3598	0.2773	23	TML	15
23	TM Carbon disulfide	0.8465	0.7660	9.5	TM	
24	TM Methyl t-butyl ether (MtBE)	0.7763	0.7556	2.7	TM	
25	TM Trans-1,2-DCE	0.1472	0.1368	7.0	TM	
26	TM Diisopropyl Ether	0.8394	0.9147	9.0	TM	
27	TM**L 2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0207	0.00	TM**L	
28	TM** 1,1-DCA	0.4818	0.5112	6.1	TM**	
29	TM Vinyl Acetate	0.1758	0.2466	40	TM	*NT
30	TM Ethyl tert Butyl Ether	0.7299	0.7958	9.0	TM	
31	TML MEK (2-Butanone)	0.1506	0.1241	18	TML	6.0
32	TM Cis-1,2-DCE	0.2742	0.3061	12	TM	
33	TM 2,2-Dichloropropane	0.3802	0.4476	18	TM	
34	TM 2-Methylpentane	0.0000	0.0002	0.00	TM	
35	TML 3-Methylpentane	0.0000	0.0029	0.00	TML	
36	TM* Chloroform	0.4212	0.4811	14	TM*	
37	TM Bromochloromethane	0.0669	0.0811	21	TM	*NT
38	S Dibromofluoromethane(S)	0.4711	0.5650	20	S	
39	TM 1,1,1-TCA	0.1531	0.1870	22	TM	*NT
40	TML Cyclohexane	0.2243	0.2269	1.1	TML	20
Average				21.7		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0125L02.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	1,1-Dichloropropene	0.2976	0.3250	9.2	TM	
42	TM	2,2,4-Trimethylpentane	0.5445	0.7194	32	TM	*NT
43	S	1,2-DCA-D4(S)	0.5493	0.6438	17	S	
44	TM	Carbon Tetrachloride	0.3139	0.3583	14	TM	
45	TM	Tert Amyl Methyl Ether	0.6593	0.6483	1.7	TM	
46	TML	Methylcyclopentane	0.0000	0.0006	0.00	TML	
47	TM	1,2-DCA	0.3424	0.3743	9.3	TM	
48	TM	Benzene	0.8881	0.9418	6.0	TM	
49	TM	TCE	0.1485	0.1255	16	TM	
50	TM	2-Pentanone	0.1707	0.1295	24	TM	*NT
51	TM*	1,2-Dichloropropane	0.2348	0.2193	6.6	TM*	
52	TM	Bromodichloromethane	0.1784	0.1608	9.9	TM	
53	TM	Methyl Cyclohexane	0.3178	0.3101	2.4	TM	
54	TM	Dibromomethane	0.1640	0.1486	9.4	TM	
55	TM	2-Chloroethyl vinyl ether	0.0062	0.0018	71	TM	*NT
56	TM	MIBK (methyl isobutyl ketone)	0.2356	0.1690	28	TM	*NT
57	TM	1-Bromo-2-chloroethane	0.1792	0.1613	10.0	TM	
58	TM	Cis-1,3-Dichloropropene	0.3891	0.3297	15	TM	
59	TM*	Toluene	0.5337	0.4919	7.8	TM*	
60	TM	Trans-1,3-Dichloropropene	0.3743	0.3210	14	TM	
61	TM	1,1,2-TCA	0.1900	0.1638	14	TM	
62	TM	2-Hexanone	0.1593	0.1134	29	TM	*NT
63	I	Chlorobenzene-D5 (IS)	ISTD			I	
64	S	Toluene-D8(S)	2.043	2.077	1.7	S	
65	TM	1,2-EDB	0.1605	0.1471	8.4	TM	
66	TM	Tetrachloroethene	0.1981	0.2080	5.0	TM	
67	TML	1-Chlorohexane	0.3753	0.3316	12	TML	3.3
68	TM	1,1,1,2-Tetrachloroethane	0.3245	0.3360	3.5	TM	
69	TM	m&p-Xylene	0.9763	0.9603	1.6	TM	
70	TM	o-Xylene	0.2863	0.2754	3.8	TM	
71	TM	Styrene	0.8786	0.8080	8.0	TM	
72	S	4-Bromofluorobenzene(S)	0.8569	0.8150	4.9	S	
73	TM	1,3-Dichloropropane	0.4578	0.4401	3.9	TM	
74	TM	Dibromochloromethane	0.3457	0.3415	1.2	TM	
75	TM**	Chlorobenzene	0.8020	0.8103	1.0	TM**	
76	TM*	Ethylbenzene	0.7272	0.6816	6.3	TM*	
77	TM**	Bromoform	0.2854	0.2589	9.3	TM**	
78	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
79	TM	Isopropylbenzene	2.340	2.514	7.4	TM	
80	TM**	1,1,2,2-Tetrachloroethane	0.6767	0.6879	1.7	TM**	
Average					11.2		

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/25/19

Matrix: water

Instrument: Loki

Cal. Date: 01/21/19

Data File: 0125L02.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	1,2,3-Trichloropropane	0.1179	0.1263	7.1	TM	
82	TM	t-1,4-Dichloro-2-Butene	0.1542	0.1575	2.1	TM	
83	TM	Bromobenzene	0.3798	0.4346	14	TM	
84	TM	n-Propylbenzene	1.424	1.653	16	TM	
85	TM	4-Ethyltoluene	2.162	2.488	15	TM	
86	TM	2-Chlorotoluene	0.9036	0.9426	4.3	TM	
87	TM	1,3,5-Trimethylbenzene	1.874	1.987	6.0	TM	
88	TM	4-Chlorotoluene	1.025	1.111	8.5	TM	
89	TM	Tert-Butylbenzene	1.986	2.199	11	TM	
90	TM	1,2,4-Trimethylbenzene	1.847	1.938	4.9	TM	
91	TM	Sec-Butylbenzene	2.417	2.597	7.5	TM	
92	TM	p-Isopropyltoluene	1.122	1.174	4.7	TM	
93	TM	Benzyl Chloride	0.8018	0.8029	0.14	TM	
94	TM	1,3-DCB	0.6731	0.7673	14	TM	
95	TM	1,4-DCB	1.333	1.480	11	TM	
96	TM	n-Butylbenzene	0.8018	0.8029	0.14	TM	
97	TM	1,2-DCB	1.295	1.365	5.4	TM	
98	TM	Hexachloroethane	0.4066	0.4912	21	TM	*NT
99	TML	1,2-Dibromo-3-chloropropane	0.1600	0.1363	15	TML	11
100	TM	1,2,4-Trichlorobenzene	0.8171	0.8372	2.5	TM	
101	TM	Hexachlorobutadiene	0.4061	0.5050	24	TM	*NT
102	TM	Naphthalene	1.700	1.356	20	TM	
103	TM	1,2,3-Trichlorobenzene	0.3633	0.3910	7.6	TM	
104							
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Average

9.6

Quantitation Report (Not Reviewed)

Data File :- M:\LOKI\DATA\190121\0125L02.D  
 Acq On : 25 Jan 19 9:11  
 Sample : 190125A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 1  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 25 9:34 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	317696	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	239488	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	118256	25.000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	179500	29.983	ppb	0.00
Spiked Amount	25.000		Recovery	=	119.932%	
43) 1,2-DCA-D4(S)	6.07	65	204546	29.301	ppb	0.00
Spiked Amount	25.000		Recovery	=	117.204%	
64) Toluene-D8(S)	8.37	98	497422	25.421	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.684%	
72) 4-Bromofluorobenzene(S)	11.26	95	195176	23.777	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.108%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.15	85	35992	11.945	ppb	95
4) Freon 114	1.25	85	31992	14.785	ppb	98
5) Chloromethane	1.29	50	53957	12.195	ppb #	84
6) Vinyl chloride	1.38	62	41088	10.302	ppb	95
8) Bromomethane	1.66	94	26387	9.788	ppb	92
9) Chloroethane	1.76	64	20190	9.852	ppb	93
10) Dichlorofluoromethane	1.95	67	66977	9.234	ppb	96
11) Trichlorofluoromethane	2.00	101	58337	10.477	ppb	99
12) Acrolein	2.42	56	55178	66.297	ppb	96
13) Acetone	2.61	43	7515	7.084	ppb	97
14) Freon-113	2.54	101	31656	10.255	ppb	97
15) 1,1-DCE	2.52	63	9085	8.793	ppb	86
16) t-Butanol	3.37	59	36394	96.503	ppb	100
17) 2-Propanol	2.82	45	2117	7.735	ppb #	78
18) Acetonitrile	2.91	41	59441	92.057	ppb	97
19) Methyl Acetate	3.01	43	25417	6.999	ppb	92
20) Iodomethane	2.67	142	8581	8.296	ppb	91
21) Acrylonitrile	3.44	52	13258	10.188	ppb	73
22) Methylene chloride	3.09	84	35244	8.495	ppb	97
23) Carbon disulfide	2.73	76	97347	9.049	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	96021	9.734	ppb	96
25) Trans-1,2-DCE	2.52	96	17384	9.296	ppb	93
26) Diisopropyl Ether	4.33	45	116235	10.897	ppb	98
28) 1,1-DCA	4.10	63	64968	10.611	ppb	99
29) Vinyl Acetate	4.27	43	31339	14.026	ppb #	79
30) Ethyl tert Butyl Ether	4.86	59	101128	10.903	ppb	97
31) MEK (2-Butanone)	5.07	43	15767	9.400	ppb	96
32) Cis-1,2-DCE	4.98	96	38904	11.164	ppb	91
33) 2,2-Dichloropropane	4.96	77	56884	11.772	ppb	93
36) Chloroform	5.44	83	61134	11.421	ppb	98
37) Bromochloromethane	5.29	128	10306	12.122	ppb	92
39) 1,1,1-TCA	5.65	97	23760	12.212	ppb	99
40) Cyclohexane	5.72	41	28833	12.026	ppb	92
41) 1,1-Dichloropropene	5.88	75	41301	10.921	ppb	99
42) 2,2,4-Trimethylpentane	6.28	57	91419	13.211	ppb	97
44) Carbon Tetrachloride	5.87	117	45529	11.412	ppb	97
45) Tert Amyl Methyl Ether	6.36	73	82379	9.832	ppb	95
47) 1,2-DCA	6.16	62	47567	10.930	ppb	96
48) Benzene	6.13	78	119682	10.605	ppb	96

## Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L02.D  
 Acq On : 25 Jan 19 9:11  
 Sample : 190125A CCV 10ug/L  
 Misc : IS&S 11/8/18

Vial: 1  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 25 9:34 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	15942	8.445	ppb	98
50) 2-Pentanone	7.22	43	205785	94.891	ppb	99
51) 1,2-Dichloropropane	7.20	63	27868	9.340	ppb	98
52) Bromodichloromethane	7.54	83	20432	9.011	ppb	90
53) Methyl Cyclohexane	7.17	83	39402	9.756	ppb	99
54) Dibromomethane	7.34	93	18888	9.060	ppb	91
55) 2-Chloroethyl vinyl ether	8.11	43	232	2.932	ppb	# 24
56) MIBK (methyl isobutyl ket	8.28	43	21480	7.174	ppb	92
57) 1-Bromo-2-chloroethane	7.88	63	20496	9.001	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	41900	8.473	ppb	90
59) Toluene	8.44	91	62512	9.217	ppb	98
60) Trans-1,3-Dichloropropene	8.70	75	40793	8.577	ppb	100
61) 1,1,2-TCA	8.90	83	20816	8.620	ppb	93
62) 2-Hexanone	9.22	43	14410	7.118	ppb	98
65) 1,2-EDB	9.44	107	14091	9.163	ppb	93
66) Tetrachloroethene	9.05	166	19928	10.499	ppb	97
67) 1-Chlorohexane	10.00	91	31770	9.667	ppb	97
68) 1,1,1,2-Tetrachloroethane	10.09	131	32186	10.355	ppb	98
69) m&p-Xylene	10.26	91	183987	19.673	ppb	94
70) o-Xylene	10.70	106	26384	9.621	ppb	95
71) Styrene	10.71	104	77399	9.196	ppb	98
73) 1,3-Dichloropropane	9.08	76	42158	9.613	ppb	95
74) Dibromochloromethane	9.32	129	32714	9.880	ppb	94
75) Chlorobenzene	10.00	112	77626	10.104	ppb	98
76) Ethylbenzene	10.13	91	65296	9.374	ppb	99
77) Bromoform	10.90	173	24798	9.070	ppb	95
79) Isopropylbenzene	11.11	105	118906	10.742	ppb	96
80) 1,1,2,2-Tetrachloroethane	11.43	83	32541	10.166	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	5974	10.708	ppb	96
82) t-1,4-Dichloro-2-Butene	11.50	53	7449	10.213	ppb	98
83) Bromobenzene	11.42	156	20560	11.446	ppb	92
84) n-Propylbenzene	11.56	91	78209	11.609	ppb	96
85) 4-Ethyltoluene	11.69	105	117689	11.508	ppb	100
86) 2-Chlorotoluene	11.64	91	44585	10.431	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	93967	10.599	ppb	91
88) 4-Chlorotoluene	11.76	91	52568	10.845	ppb	100
89) Tert-Butylbenzene	12.12	119	104004	11.069	ppb	95
90) 1,2,4-Trimethylbenzene	12.17	105	91665	10.490	ppb	96
91) Sec-Butylbenzene	12.36	105	122848	10.747	ppb	98
92) p-Isopropyltoluene	12.52	119	55552	10.469	ppb	99
93) Benzyl Chloride	12.71	91	37981	10.014	ppb	96
94) 1,3-DCB	12.46	146	36296	11.400	ppb	99
95) 1,4-DCB	12.56	146	70026	11.104	ppb	98
96) n-Butylbenzene	12.71	91	37981	10.014	ppb	96
97) 1,2-DCB	12.97	146	64561	10.537	ppb	95
98) Hexachloroethane	13.26	117	23234	12.080	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	6446	8.906	ppb	90
100) 1,2,4-Trichlorobenzene	14.74	180	39600	10.245	ppb	93
101) Hexachlorobutadiene	14.94	225	23886	12.434	ppb	98
102) Naphthalene	15.01	128	64144	7.979	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	18496	10.763	ppb	91



Quantitation Report

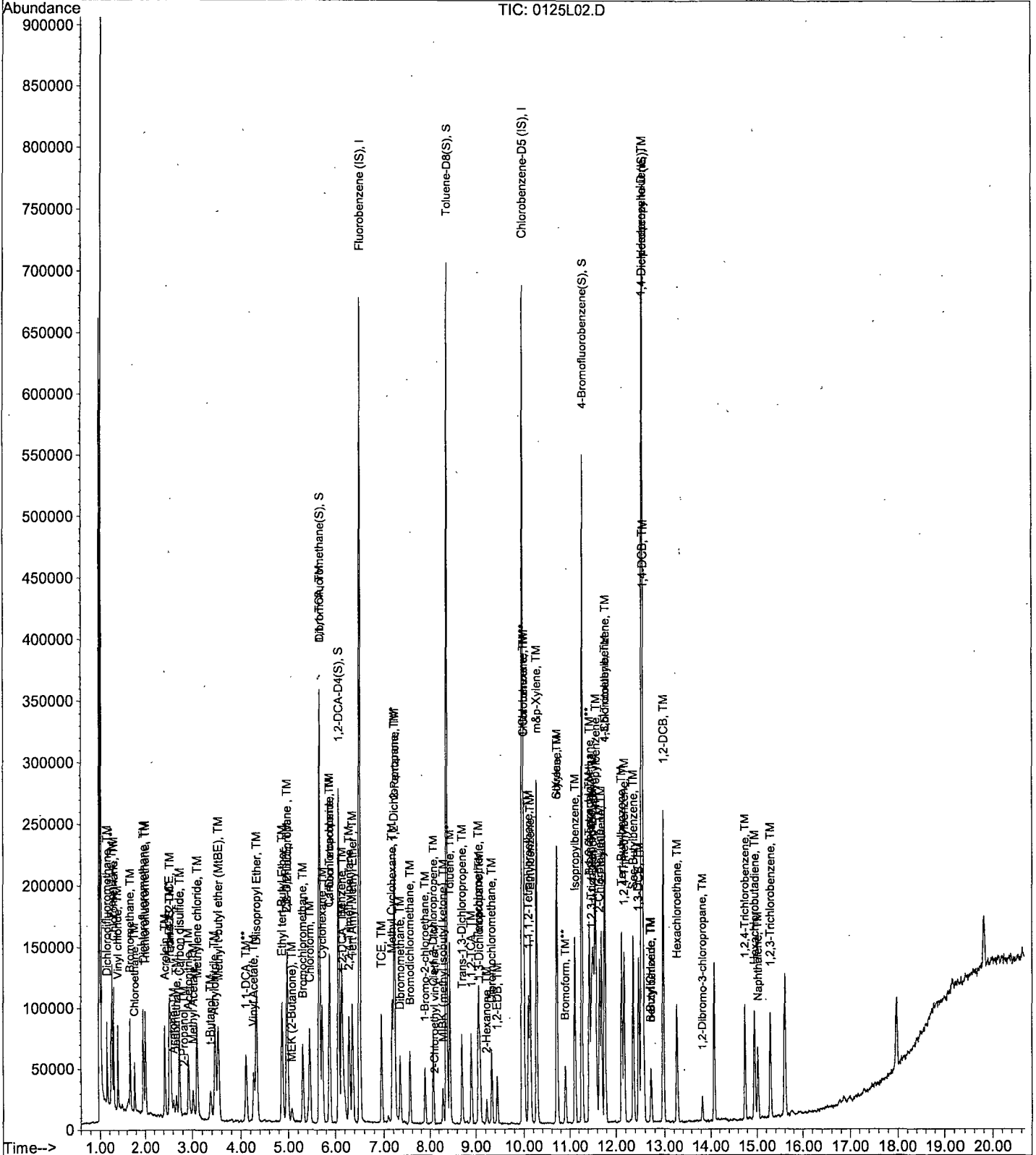
Data File : M:\LOKI\DATA\190121\0125L02.D  
Acq On : 25 Jan 19 9:11  
Sample : 190125A CCV 10ug/L  
Misc : IS&S 11/8/18.

Vial: 1  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 9:34 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/25/19

Matrix: water

Instrument: Loki

Initial Cal. Date: 01/21/19

Data File: 0125L28.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TMQ Dichlorodifluoromethane	0.2227	0.1858	17	TMQ 21
3	TM Freon 114	0.1703	0.1560	8.4	TM
4	TM** Chloromethane	0.3482	0.2985	14	TM**
5	TM* Vinyl chloride	0.3138	0.2142	32	TM*
6	TM 2-Chloro-1,1,1-trifluoroethane	0.2655	0.0001	100	TM *NT
7	TML Bromomethane	0.2254	0.1474	35	TML 36
8	TML Chloroethane	0.1836	0.1096	40	TML 34
9	TM Dichlorofluoromethane	0.5708	0.3645	36	TM
10	TM Trichlorofluoromethane	0.4382	0.3074	30	TM
11	TML Acrolein	0.0664	0.0352	47	TML 46
12	TML Acetone	0.0818	0.0464	43	TML 51 *NT
13	TM Freon-113	0.2429	0.1896	22	TM
14	TM* 1,1-DCE	0.0813	0.0515	37	TM*
15	TM t-Butanol	0.0297	0.0185	38	TM
16	TM 2-Propanol	0.0215	0.0005	98	TM *NT
17	TM Acetonitrile	0.0508	0.0307	40	TM
18	TML Methyl Acetate	0.3282	0.2001	39	TML 30
19	TML Iodomethane	0.0712	0.0494	31	TML 30
20	TML Acrylonitrile	0.1117	0.0883	21	TML 15
21	TML Methylene chloride	0.3598	0.2362	34	TML 29
22	TM Carbon disulfide	0.8465	0.5255	38	TM
23	TM Methyl t-butyl ether (MtBE)	0.7763	0.6519	16	TM
24	TM Trans-1,2-DCE	0.1472	0.0955	35	TM
25	TM Diisopropyl Ether	0.8394	0.7187	14	TM
26	TM**L 2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0137	0.00	TM**L
27	TM** 1,1-DCA	0.4818	0.4284	11	TM**
28	TM Vinyl Acetate	0.1758	0.1911	8.7	TM
29	TM Ethyl tert Butyl Ether	0.7299	0.6784	7.1	TM
30	TML MEK (2-Butanone)	0.1506	0.1239	18	TML 6.1
31	TM Cis-1,2-DCE	0.2742	0.2614	4.7	TM
32	TM 2,2-Dichloropropane	0.3802	0.3001	21	TM
33	TM 2-Methylpentane	0.0000	0.0004	0.00	TM
34	TML 3-Methylpentane	0.0000	0.0009	0.00	TML
35	TM* Chloroform	0.4212	0.4405	4.6	TM*
36	TM Bromochloromethane	0.0669	0.0703	5.1	TM
37	S Dibromofluoromethane(S)	0.4711	0.5131	8.9	S
38	TM 1,1,1-TCA	0.1531	0.1569	2.5	TM
39	TML Cyclohexane	0.2243	0.1929	14	TML 2.0
40	TM 1,1-Dichloropropene	0.2976	0.2938	1.3	TM
Average				24.9	

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0125L28.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2,2,4-Trimethylpentane	0.5445	0.5358	1.6	TM
42	S	1,2-DCA-D4(S)	0.5493	0.6038	9.9	S
43	TM	Carbon Tetrachloride	0.3139	0.3155	0.51	TM
44	TM	Tert Amyl Methyl Ether	0.6593	0.6462	2.0	TM
45	TML	Methylcyclopentane	0.0000	0.0003	0.00	TML
46	TM	1,2-DCA	0.3424	0.3590	4.8	TM
47	TM	Benzene	0.8881	0.9080	2.2	TM
48	TM	TCE	0.1485	0.1312	12	TM
49	TM	2-Pentanone	0.1707	0.1662	2.6	TM
50	TM*	1,2-Dichloropropane	0.2348	0.2342	0.24	TM*
51	TM	Bromodichloromethane	0.1784	0.1702	4.6	TM
52	TM	Methyl Cyclohexane	0.3178	0.2853	10	TM
53	TM	Dibromomethane	0.1640	0.1695	3.3	TM
54	TM	2-Chloroethyl vinyl ether	0.0062	0.0023	64	TM
55	TM	MIBK (methyl isobutyl ketone)	0.2356	0.2175	7.7	TM
56	TM	1-Bromo-2-chloroethane	0.1792	0.1681	6.2	TM
57	TM	Cis-1,3-Dichloropropene	0.3891	0.3357	14	TM
58	TM*	Toluene	0.5337	0.4315	19	TM*
59	TM	Trans-1,3-Dichloropropene	0.3743	0.2797	25	TM
60	TM	1,1,2-TCA	0.1900	0.1495	21	TM
61	TM	2-Hexanone	0.1593	0.1137	29	TM
62	I	Chlorobenzene-D5 (IS)	ISTD			I
63	S	Toluene-D8(S)	2.043	2.482	22	S
64	TM	1,2-EDB	0.1605	0.1658	3.3	TM
65	TM	Tetrachloroethene	0.1981	0.1864	5.9	TM
66	TML	1-Chlorohexane	0.3753	0.3292	12	TML 4.1
67	TM	1,1,1,2-Tetrachloroethane	0.3245	0.3497	7.8	TM
68	TM	m&p-Xylene	0.9763	0.9439	3.3	TM
69	TM	o-Xylene	0.2863	0.2702	5.6	TM
70	TM	Styrene	0.8786	0.8244	6.2	TM
71	S	4-Bromofluorobenzene(S)	0.8569	0.8005	6.6	S
72	TM	1,3-Dichloropropane	0.4578	0.4757	3.9	TM
73	TM	Dibromochloromethane	0.3457	0.3692	6.8	TM
74	TM**	Chlorobenzene	0.8020	0.8224	2.5	TM**
75	TM*	Ethylbenzene	0.7272	0.7335	0.88	TM*
76	TM**	Bromoform	0.2854	0.2973	4.2	TM**
77	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
78	TM	Isopropylbenzene	2.340	2.369	1.2	TM
79	TM**	1,1,2,2-Tetrachloroethane	0.6767	0.7318	8.1	TM**
80	TM	1,2,3-Trichloropropane	0.1179	0.1376	17	TM

\*NT

Average

9.4

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Loki  
Cal. Date: 01/21/19  
Data File: 0125L28.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	t-1,4-Dichloro-2-Butene	0.1542	0.1473	4.5	TM
82	TM	Bromobenzene	0.3798	0.3870	1.9	TM
83	TM	n-Propylbenzene	1.424	1.419	0.36	TM
84	TM	4-Ethyltoluene	2.162	2.088	3.4	TM
85	TM	2-Chlorotoluene	0.9036	0.8853	2.0	TM
86	TM	1,3,5-Trimethylbenzene	1.874	1.788	4.6	TM
87	TM	4-Chlorotoluene	1.025	1.065	3.9	TM
88	TM	Tert-Butylbenzene	1.986	1.910	3.9	TM
89	TM	1,2,4-Trimethylbenzene	1.847	1.661	10	TM
90	TM	Sec-Butylbenzene	2.417	2.309	4.4	TM
91	TM	p-Isopropyltoluene	1.122	1.012	9.8	TM
92	TM	Benzyl Chloride	0.8018	0.6413	20	TM
93	TM	1,3-DCB	0.6731	0.6929	2.9	TM
94	TM	1,4-DCB	1.333	1.360	2.0	TM
95	TM	n-Butylbenzene	0.8018	0.6413	20	TM
96	TM	1,2-DCB	1.295	1.298	0.20	TM
97	TM	Hexachloroethane	0.4066	0.4510	11	TM
98	TML	1,2-Dibromo-3-chloropropane	0.1600	0.1472	8.0	TML 3.3
99	TM	1,2,4-Trichlorobenzene	0.8171	0.8062	1.3	TM
100	TM	Hexachlorobutadiene	0.4061	0.4255	4.8	TM
101	TM	Naphthalene	1.700	1.486	13	TM
102	TM	1,2,3-Trichlorobenzene	0.3633	0.3787	4.2	TM
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						

Average

6.2

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L28.D  
 Acq On : 25 Jan 19 21:34  
 Sample : Ending CCV 10ug/L 1/25/19  
 Misc : IS&S 11/8/18

Vial: 27  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:26 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	386752	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	234560	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	122696	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	198435	27.227	ppb	0.00
Spiked Amount	25.000		Recovery	=	108.908%	
43) 1,2-DCA-D4(S)	6.07	65	233512	27.478	ppb	0.00
Spiked Amount	25.000		Recovery	=	109.912%	
64) Toluene-D8(S)	8.37	98	582167	30.377	ppb	0.00
Spiked Amount	25.000		Recovery	=	121.508%	
72) 4-Bromofluorobenzene(S)	11.26	95	187772	23.356	ppb	0.00
Spiked Amount	25.000		Recovery	=	93.424%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.14	85	28744	7.908	ppb	98
4) Freon 114	1.25	85	24136	9.163	ppb	84
5) Chloromethane	1.29	50	46176	8.573	ppb	90
6) Vinyl chloride	1.38	62	33130	6.824	ppb	93
8) Bromomethane	1.66	94	22808	6.384	ppb	95
9) Chloroethane	1.76	64	16957	6.595	ppb	98
10) Dichlorofluoromethane	1.95	67	56391	6.386	ppb	93
11) Trichlorofluoromethane	2.00	101	47558	7.016	ppb	98
12) Acrolein	2.42	56	68145	67.309	ppb	84
13) Acetone	2.61	43	7174	4.852	ppb	89
14) Freon-113	2.55	101	29328	7.804	ppb	91
15) 1,1-DCE	2.52	63	7970	6.337	ppb	87
16) t-Butanol	3.37	59	35794	77.965	ppb	95
17) 2-Propanol	2.81	45	730	2.191	ppb	# 17
18) Acetonitrile	2.92	41	59400	75.567	ppb	91
19) Methyl Acetate	3.01	43	30957	7.003	ppb	90
20) Iodomethane	2.67	142	7635	6.968	ppb	95
21) Acrylonitrile	3.45	52	13662	8.544	ppb	98
22) Methylene chloride	3.10	84	36544	7.149	ppb	98
23) Carbon disulfide	2.73	76	81288	6.207	ppb	100
24) Methyl t-butyl ether (MtBE)	3.53	73	100854	8.398	ppb	96
25) Trans-1,2-DCE	2.52	96	14772	6.489	ppb	95
26) Diisopropyl Ether	4.33	45	111181	8.562	ppb	97
28) 1,1-DCA	4.10	63	66270	8.891	ppb	95
29) Vinyl Acetate	4.27	43	29561	10.868	ppb	# 77
30) Ethyl tert Butyl Ether	4.87	59	104943	9.294	ppb	99
31) MEK (2-Butanone)	5.07	43	19172	9.389	ppb	93
32) Cis-1,2-DCE	4.98	96	40438	9.532	ppb	87
33) 2,2-Dichloropropane	4.96	77	46433	7.893	ppb	98
36) Chloroform	5.45	83	68148	10.458	ppb	99
37) Bromochloromethane	5.30	128	10874	10.506	ppb	99
39) 1,1,1-TCA	5.65	97	24280	10.251	ppb	100
40) Cyclohexane	5.72	41	29846	10.203	ppb	89
41) 1,1-Dichloropropene	5.88	75	45445	9.871	ppb	95
42) 2,2,4-Trimethylpentane	6.29	57	82882	9.839	ppb	96
44) Carbon Tetrachloride	5.87	117	48815	10.051	ppb	92
45) Tert Amyl Methyl Ether	6.36	73	99965	9.801	ppb	96
47) 1,2-DCA	6.17	62	55530	10.482	ppb	96
48) Benzene	6.13	78	140473	10.224	ppb	98

## Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L28.D  
 Acq On : 25 Jan 19 21:34  
 Sample : Ending CCV,10ug/L 1/25/19  
 Misc : IS&S 11/8/18

Vial: 27  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:26 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	20296	8.832	ppb	95
50) 2-Pentanone	7.22	43	321354	121.723	ppb	98
51) 1,2-Dichloropropane	7.20	63	36236	9.976	ppb	96
52) Bromodichloromethane	7.55	83	26336	9.541	ppb	99
53) Methyl Cyclohexane	7.17	83	44141	8.977	ppb	91
54) Dibromomethane	7.33	93	26221	10.332	ppb	83
55) 2-Chloroethyl vinyl ether	7.99	43	351	3.644	ppb #	24
56) MIBK (methyl isobutyl ket	8.28	43	33655	9.233	ppb	92
57) 1-Bromo-2-chloroethane	7.89	63	26000	9.379	ppb	93
58) Cis-1,3-Dichloropropene	8.07	75	51932	8.627	ppb	90
59) Toluene	8.44	91	66752	8.085	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	43270	7.473	ppb	90
61) 1,1,2-TCA	8.90	83	23129	7.868	ppb	98
62) 2-Hexanone	9.22	43	17593	7.139	ppb #	97
65) 1,2-EDB	9.44	107	15556	10.328	ppb	92
66) Tetrachloroethene	9.05	166	17488	9.407	ppb	93
67) 1-Chlorohexane	10.00	91	30886	9.591	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	32811	10.778	ppb	95
69) m&p-Xylene	10.26	91	177118	19.336	ppb	98
70) o-Xylene	10.70	106	25352	9.439	ppb	99
71) Styrene	10.71	104	77345	9.383	ppb	94
73) 1,3-Dichloropropane	9.08	76	44631	10.390	ppb	94
74) Dibromochloromethane	9.33	129	34642	10.682	ppb	97
75) Chlorobenzene	10.00	112	77164	10.255	ppb	98
76) Ethylbenzene	10.13	91	68824	10.088	ppb	100
77) Bromoform	10.90	173	27892	10.416	ppb	90
79) Isopropylbenzene	11.11	105	116260	10.123	ppb	96
80) 1,1,2,2-Tetrachloroethane	11.43	83	35916	10.814	ppb	98
81) 1,2,3-Trichloropropane	11.47	110	6752	11.665	ppb	99
82) t-1,4-Dichloro-2-Butene	11.50	53	7229	9.553	ppb	93
83) Bromobenzene	11.43	156	18992	10.190	ppb	100
84) n-Propylbenzene	11.56	91	69643	9.964	ppb	98
85) 4-Ethyltoluene	11.69	105	102470	9.658	ppb	98
86) 2-Chlorotoluene	11.64	91	43448	9.797	ppb	97
87) 1,3,5-Trimethylbenzene	11.76	105	87771	9.542	ppb	96
88) 4-Chlorotoluene	11.77	91	52264	10.392	ppb	100
89) Tert-Butylbenzene	12.11	119	93725	9.614	ppb	95
90) 1,2,4-Trimethylbenzene	12.17	105	81496	8.989	ppb	93
91) Sec-Butylbenzene	12.36	105	113344	9.557	ppb	95
92) p-Isopropyltoluene	12.52	119	49672	9.023	ppb	98
93) Benzyl Chloride	12.71	91	31472	7.997	ppb	94
94) 1,3-DCB	12.46	146	34008	10.295	ppb	97
95) 1,4-DCB	12.56	146	66725	10.198	ppb	97
96) n-Butylbenzene	12.71	91	31472	7.997	ppb	96
97) 1,2-DCB	12.97	146	63703	10.020	ppb	97
98) Hexachloroethane	13.26	117	22132	11.091	ppb	94
99) 1,2-Dibromo-3-chloropropan	13.82	75	7223	9.672	ppb	91
100) 1,2,4-Trichlorobenzene	14.74	180	39567	9.866	ppb	98
101) Hexachlorobutadiene	14.94	225	20882	10.477	ppb	89
102) Naphthalene	15.01	128	72908	8.741	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	18584	10.423	ppb	89

Quantitation Report

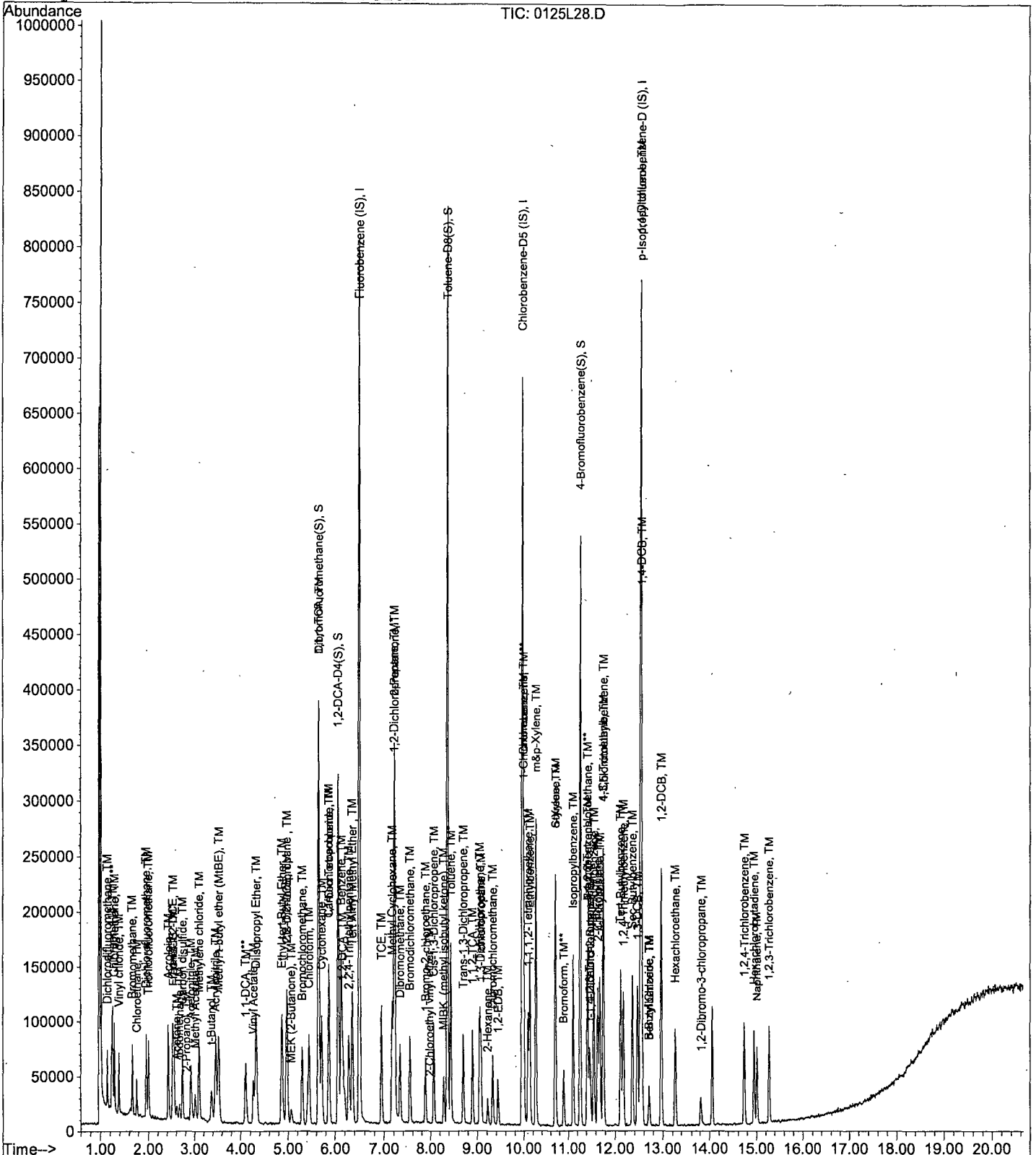
Data File : M:\LOKI\DATA\190121\0125L28.D  
Acq On : 25 Jan 19 21:34  
Sample : Ending CCV 10ug/L 1/25/19  
Misc : IS&S 11/8/18

Vial: 27  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 8:26 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L15.D  
 Acq On : 25 Jan 19 15:22  
 Sample : AZ85561W01  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:51 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	376448	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	241536	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	123744	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	194736	27.451	ppb	0.00
Spiked Amount				25.000		
					Recovery =	109.804%
43) 1,2-DCA-D4 (S)	6.07	65	231253	27.957	ppb	0.00
Spiked Amount				25.000		
					Recovery =	111.828%
64) Toluene-D8 (S)	8.37	98	516912	26.193	ppb	0.00
Spiked Amount				25.000		
					Recovery =	104.772%
72) 4-Bromofluorobenzene(S)	11.26	95	193126	23.328	ppb	0.00
Spiked Amount				25.000		
					Recovery =	93.312%

Target Compounds

Qvalue

Quantitation Report

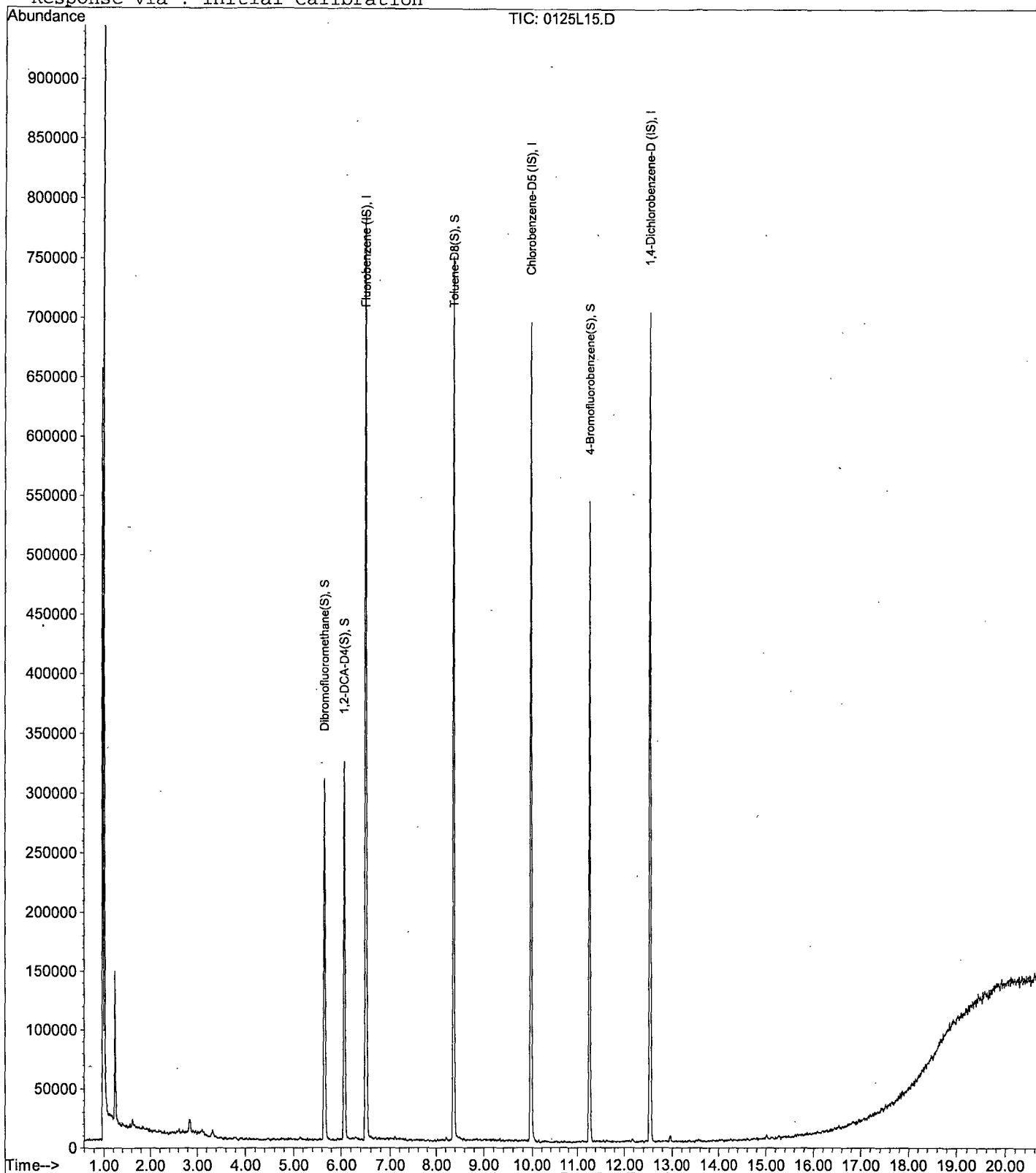
Data File : M:\LOKI\DATA\190121\0125L15.D  
Acq On : 25 Jan 19 15:22  
Sample : AZ85561W01  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:51 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L16.D  
 Acq On : 25 Jan 19 15:51  
 Sample : AZ85562W01  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:54 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	380608	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	246400	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	124416	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	193040	26.915	ppb	0.00
Spiked Amount				25.000		
					Recovery =	107.660%
43) 1,2-DCA-D4(S)	6.07	65	229042	27.387	ppb	0.00
Spiked Amount				25.000		
					Recovery =	109.548%
64) Toluene-D8(S)	8.37	98	510395	25.352	ppb	0.00
Spiked Amount				25.000		
					Recovery =	101.408%
72) 4-Bromofluorobenzene(S)	11.26	95	191772	22.707	ppb	0.00
Spiked Amount				25.000		
					Recovery =	90.828%

Target Compounds

Qvalue

Quantitation Report

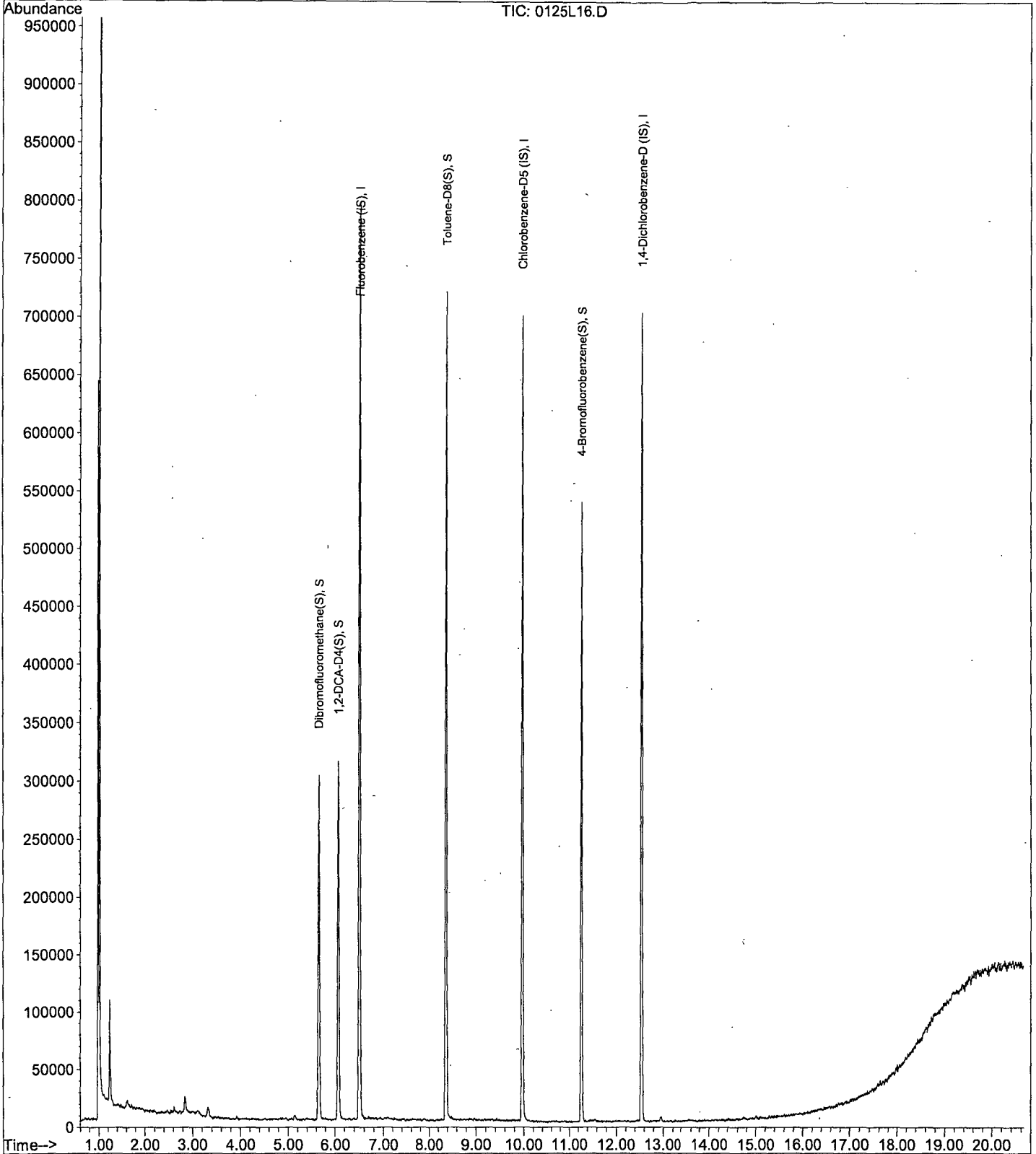
Data File : M:\LOKI\DATA\190121\0125L16.D  
Acq On : 25 Jan 19 15:51  
Sample : AZ85562W01  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:54 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L17.D Vial: 16  
 Acq On : 25 Jan 19 16:19 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85563W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 12:55 2019 Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	370304	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	242752	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	120472	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	194145	27.822	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	111.288%
43) 1,2-DCA-D4(S)	6.07	65	225463	27.709	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	110.836%
64) Toluene-D8(S)	8.37	98	506844	25.554	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	102.216%
72) 4-Bromofluorobenzene(S)	11.26	95	187769	22.567	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	90.268%

Target Compounds Qvalue

Quantitation Report

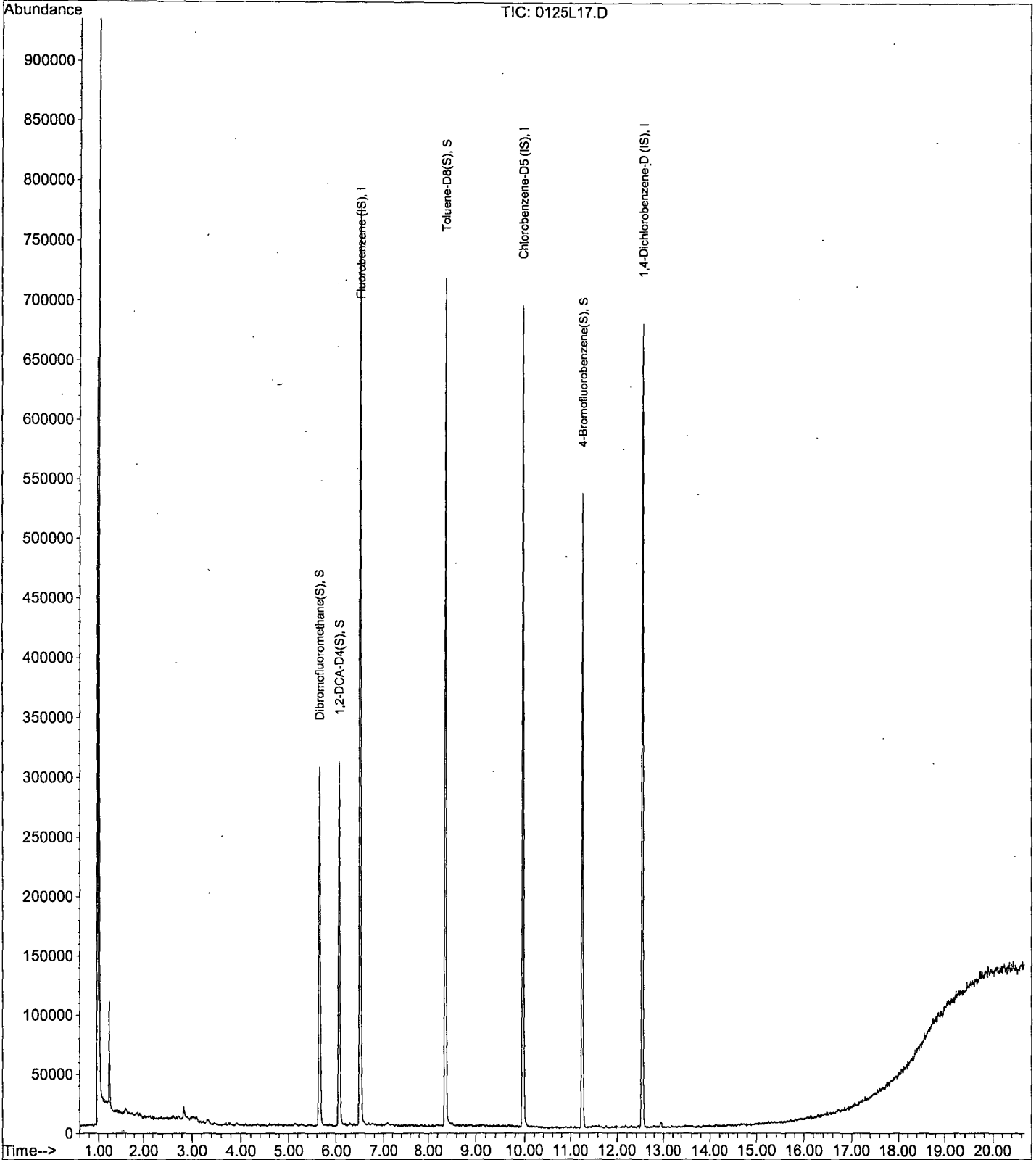
Data File : M:\LOKI\DATA\190121\0125L17.D  
Acq On : 25 Jan 19 16:19  
Sample : AZ85563W01  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:55 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L18.D  
 Acq On : 25 Jan 19 16:48  
 Sample : AZ85564W01  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:56 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	369024	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	230272	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	113144	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	196113	28.201	ppb	0.00
Spiked Amount				25.000		
					Recovery =	112.804%
43) 1,2-DCA-D4(S)	6.07	65	224379	27.671	ppb	0.00
Spiked Amount				25.000		
					Recovery =	110.684%
64) Toluene-D8(S)	8.37	98	504922	26.837	ppb	0.00
Spiked Amount				25.000		
					Recovery =	107.348%
72) 4-Bromofluorobenzene(S)	11.26	95	186930	23.684	ppb	0.00
Spiked Amount				25.000		
					Recovery =	94.736%
Target Compounds					Qvalue	

Quantitation Report

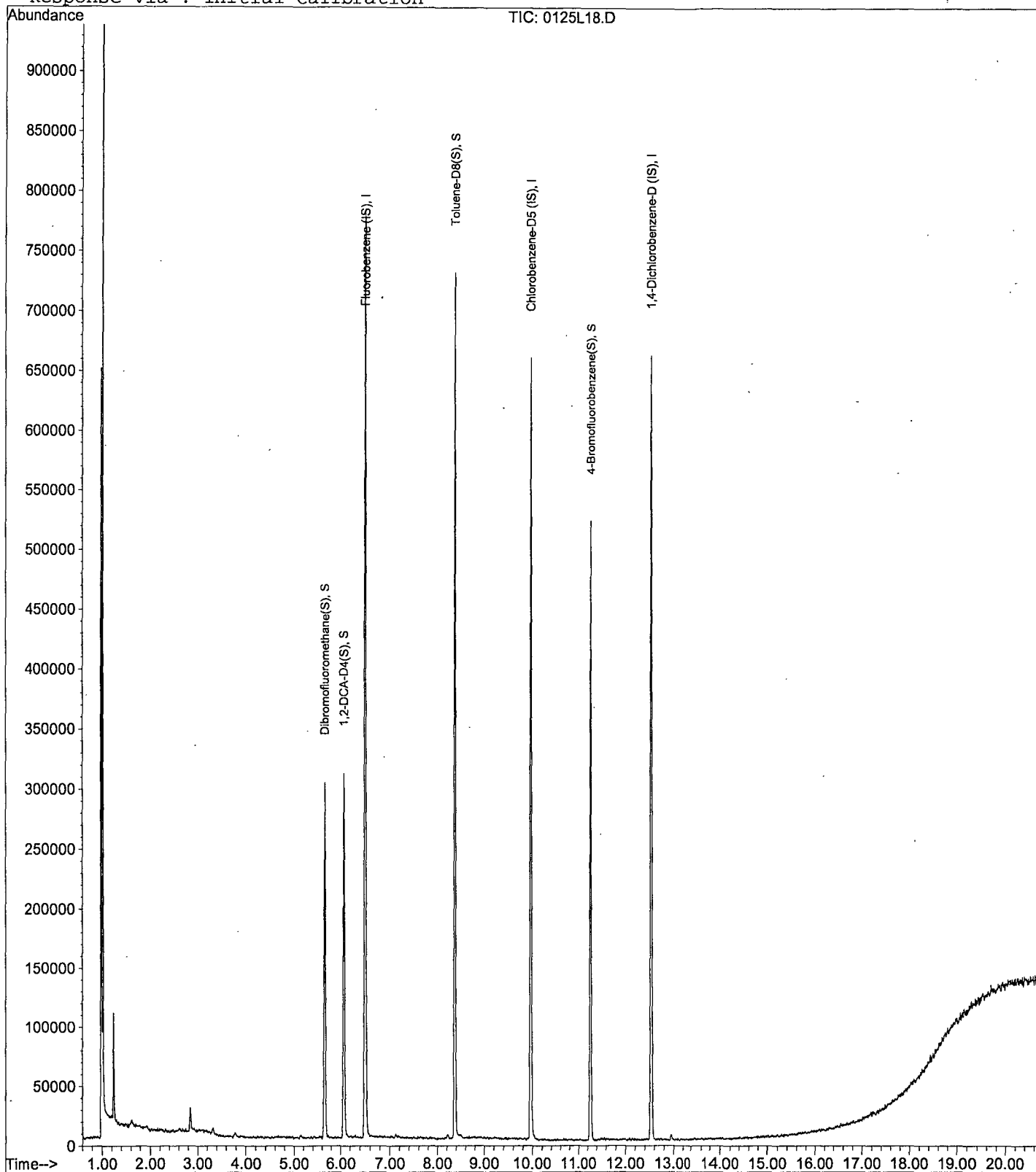
Data File : M:\LOKI\DATA\190121\0125L18.D  
Acq On : 25 Jan 19 16:48  
Sample : AZ85564W01  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:56 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L19.D  
 Acq On : 25 Jan 19 17:17  
 Sample : AZ85565W01  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:56 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	352704	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	230144	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	120976	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
38) Dibromofluoromethane(S)	5.65	111	191374	28.793	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	115.172%
43) 1,2-DCA-D4 (S)	6.07	65	222964	28.769	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	115.076%
64) Toluene-D8 (S)	8.37	98	497328	26.448	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	105.792%
72) 4-Bromofluorobenzene(S)	11.26	95	179970	22.815	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	91.260%

Target Compounds

Qvalue

Quantitation Report

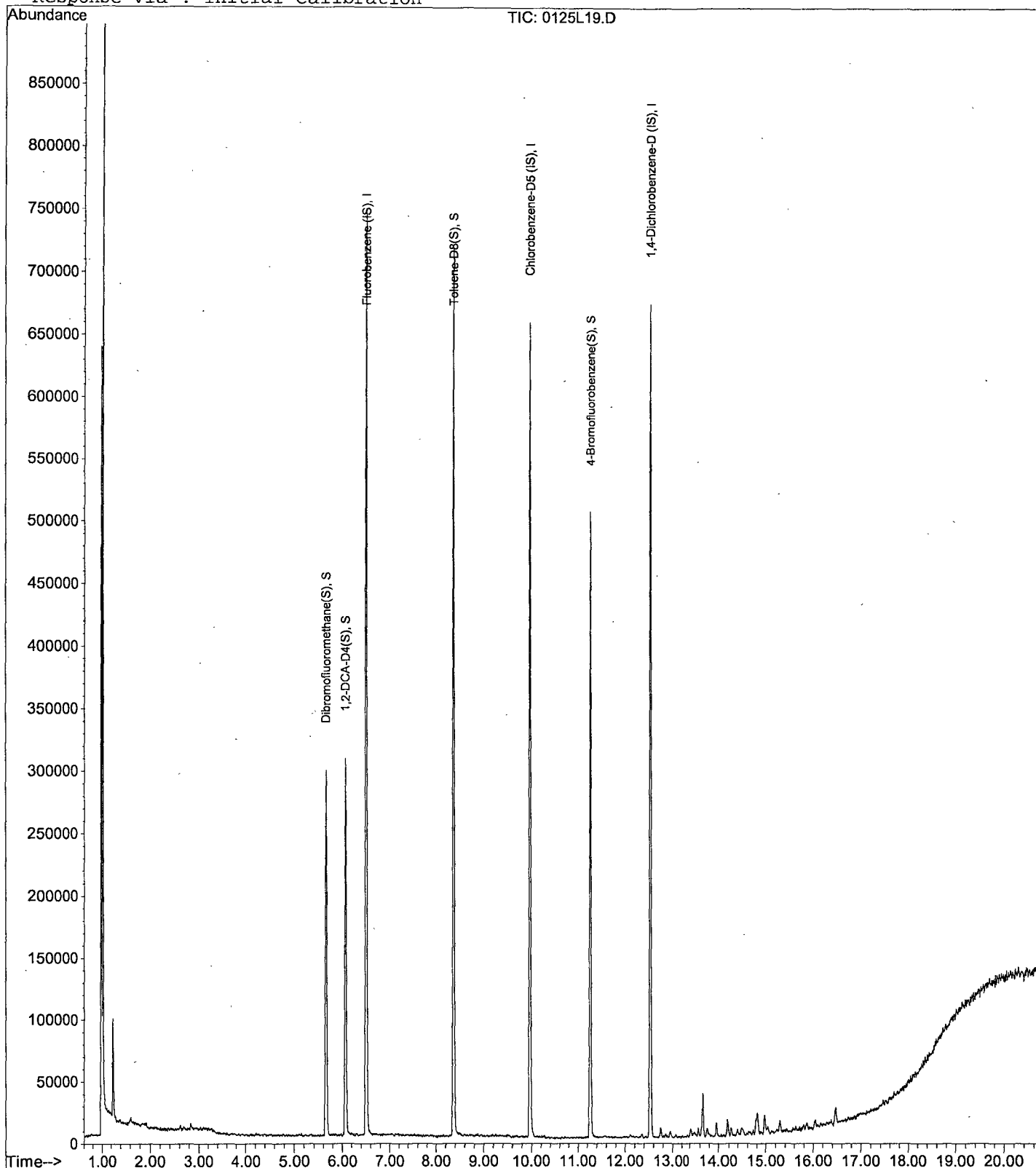
.Data File : M:\LOKI\DATA\190121\0125L19.D  
Acq On : 25 Jan 19 17:17  
Sample : AZ85565W01  
Misc : IS&S 11/8/18

Vial: 18  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:56 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0125L20.D  
 Acq On : 25 Jan 19 17:45  
 Sample : AZ85566W01  
 Misc : IS&S 11/8/18

Vial: 19  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:57 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	381376	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	249344	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	128984	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	196079	27.283	ppb	0.00
Spiked Amount	25.000					
					Recovery =	109.132%
43) 1,2-DCA-D4(S)	6.07	65	225585	26.919	ppb	0.00
Spiked Amount	25.000					
					Recovery =	107.676%
64) Toluene-D8(S)	8.37	98	500936	24.588	ppb	0.00
Spiked Amount	25.000					
					Recovery =	98.352%
72) 4-Bromofluorobenzene(S)	11.26	95	185746	21.734	ppb	0.00
Spiked Amount	25.000					
					Recovery =	86.936%

Target Compounds

Qvalue

Quantitation Report

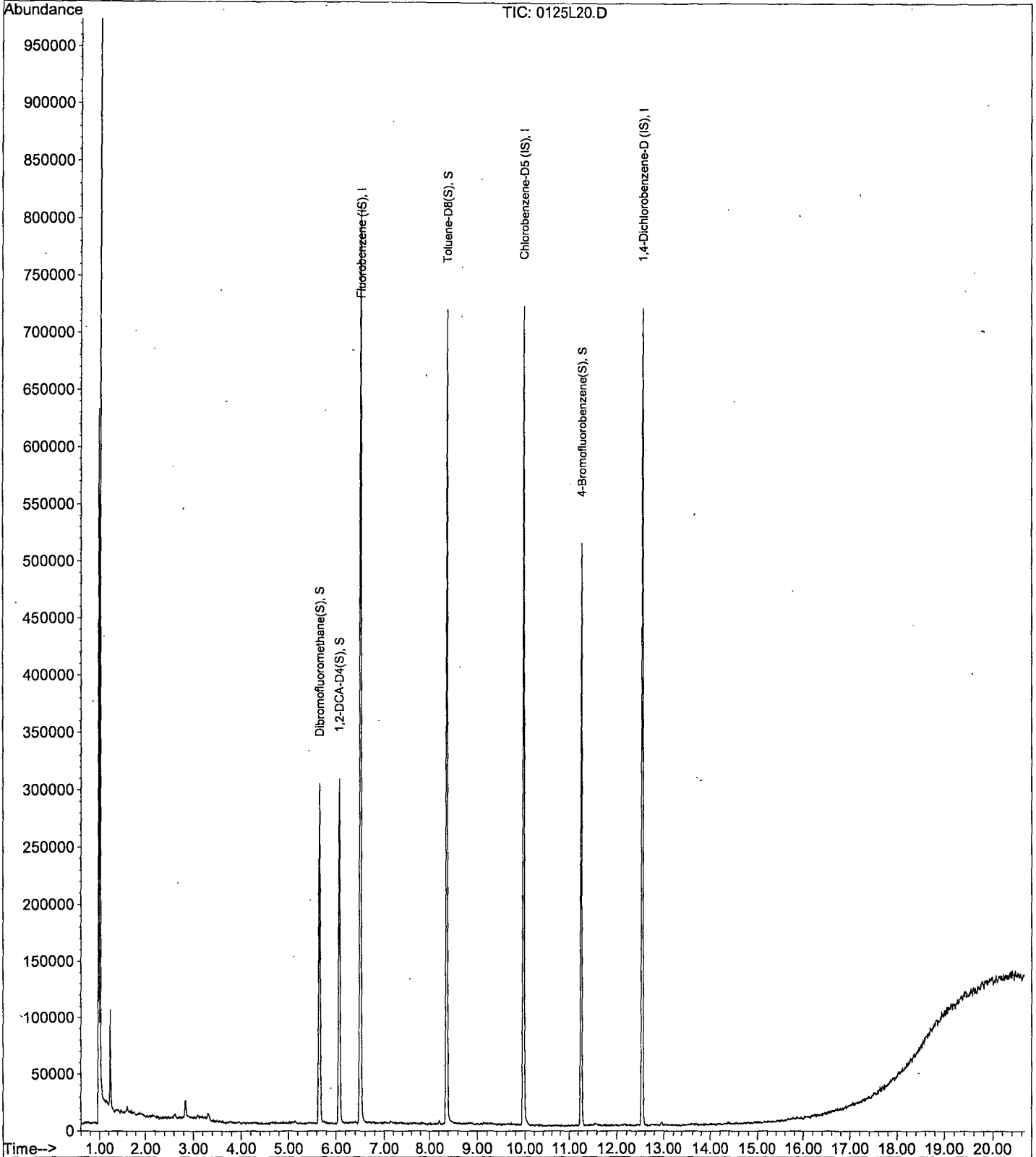
Data File : M:\LOKI\DATA\190121\0125L20.D  
Acq On : 25 Jan 19 17:45  
Sample : AZ85566W01  
Misc : IS&S 11/8/18

Vial: 19  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:57 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L21.D  
 Acq On : 25 Jan 19 18:14  
 Sample : AZ85567W01  
 Misc : IS&S 11/8/18

Vial: 20  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:57 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	354816	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	229184	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	116376	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	190816	28.538	ppb	0.00
Spiked Amount				25.000		
					Recovery =	114.152%
43) 1,2-DCA-D4(S)	6.07	65	221410	28.399	ppb	0.00
Spiked Amount				25.000		
					Recovery =	113.596%
64) Toluene-D8(S)	8.37	98	491891	26.268	ppb	0.00
Spiked Amount				25.000		
					Recovery =	105.072%
72) 4-Bromofluorobenzene(S)	11.26	95	177628	22.613	ppb	0.00
Spiked Amount				25.000		
					Recovery =	90.452%

Target Compounds

Qvalue

Quantitation Report

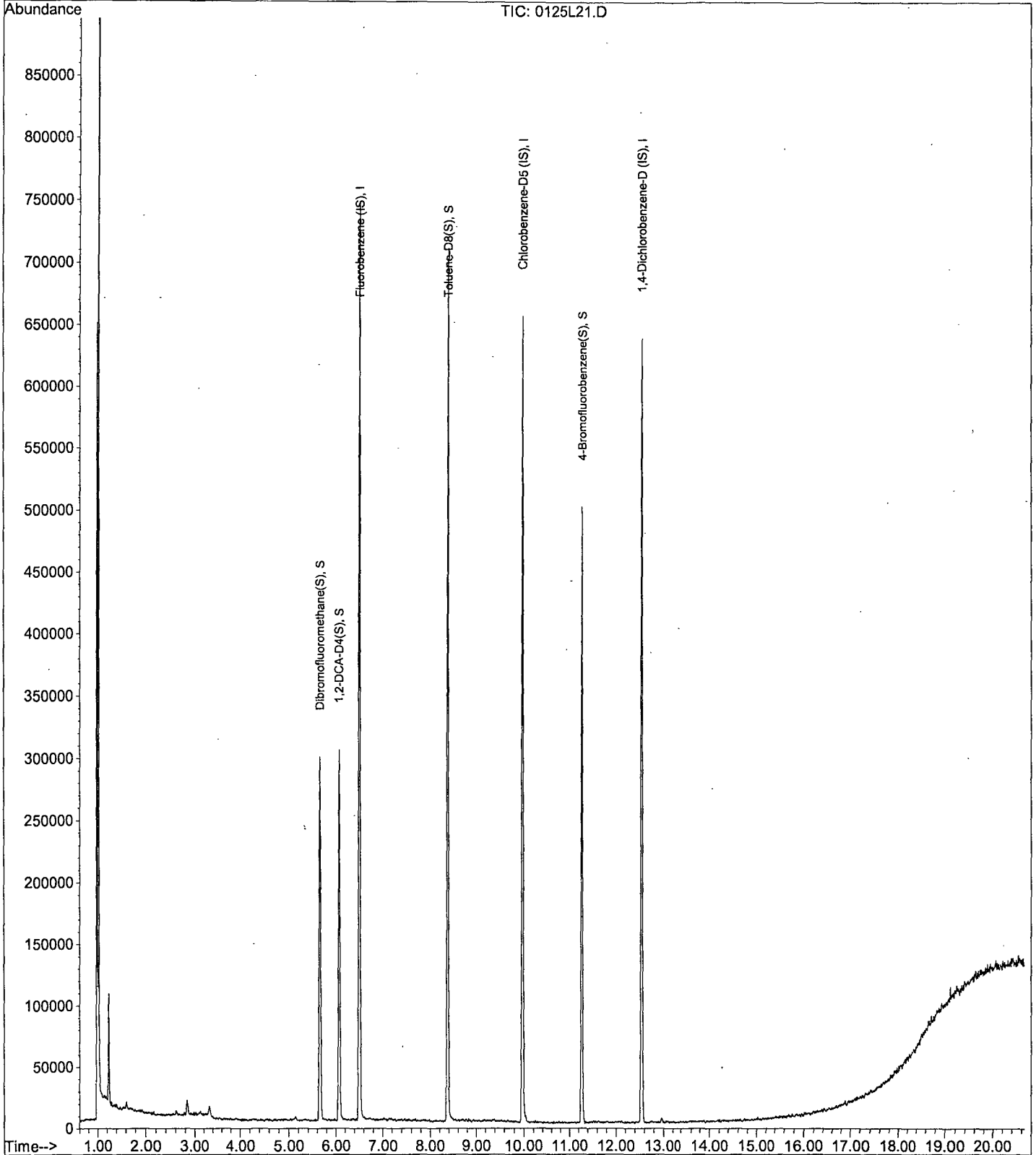
Data File : M:\LOKI\DATA\190121\0125L21.D  
Acq On : 25 Jan 19 18:14  
Sample : AZ85567W01  
Misc : IS&S 11/8/18

Vial: 20  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:57 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L22.D  
 Acq On : 25 Jan 19 18:42  
 Sample : AZ85568W01  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 12:58 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	368640	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	236608	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	121904	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	192283	27.679	ppb	0.00
Spiked Amount				25.000		
					Recovery =	110.716%
43) 1,2-DCA-D4(S)	6.07	65	222672	27.490	ppb	0.00
Spiked Amount				25.000		
					Recovery =	109.960%
64) Toluene-D8(S)	8.37	98	508721	26.315	ppb	0.00
Spiked Amount				25.000		
					Recovery =	105.260%
72) 4-Bromofluorobenzene(S)	11.26	95	185381	22.859	ppb	0.00
Spiked Amount				25.000		
					Recovery =	91.436%

Target Compounds

Qvalue

Quantitation Report

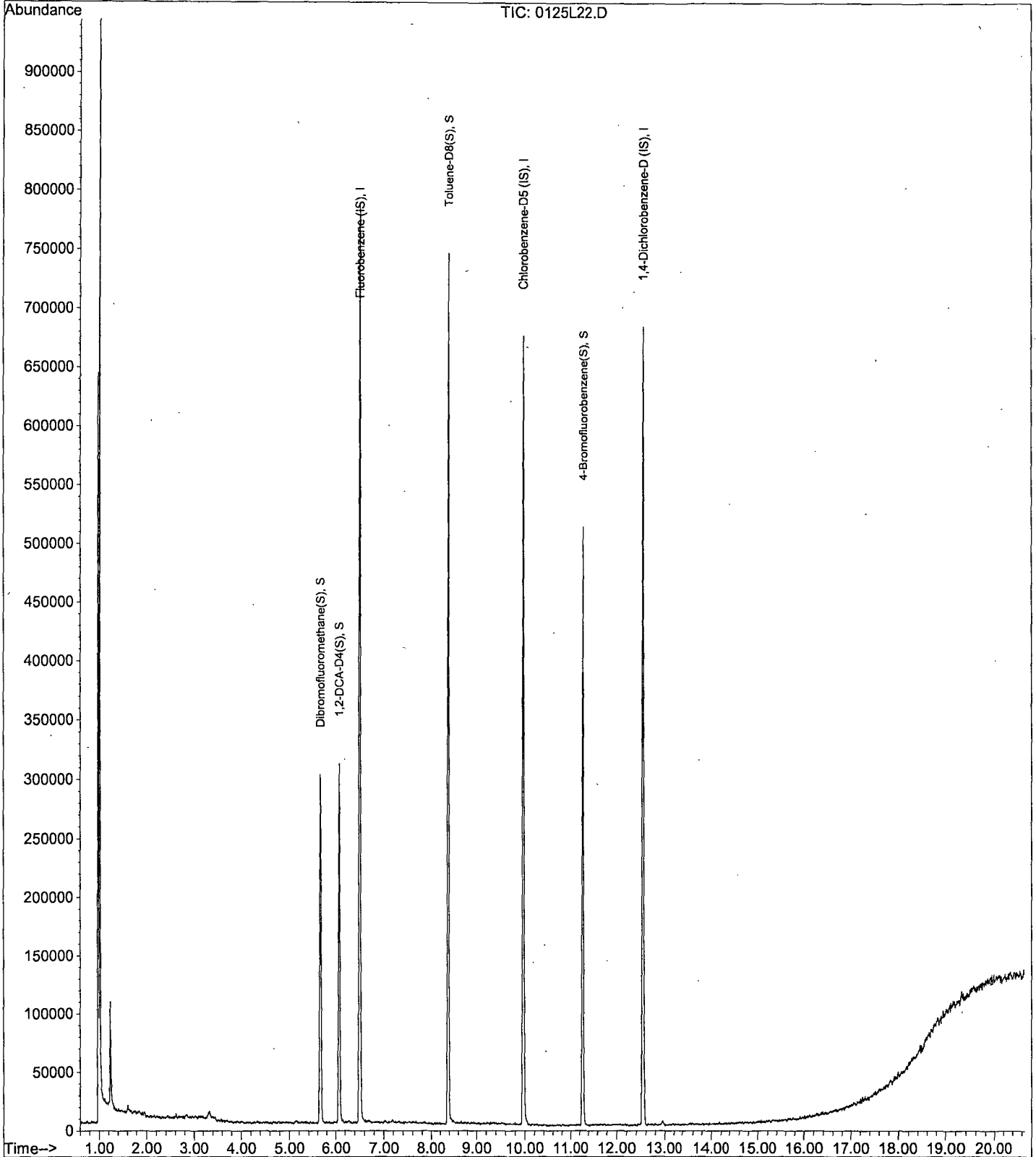
Data File : M:\LOKI\DATA\190121\0125L22.D  
Acq On : 25 Jan 19 18:42  
Sample : AZ85568W01  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:58 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration





Data File : M:\LOKI\DATA\190121\0125L23.D Vial: 22  
 Acq On : 25 Jan 19 19:11 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85569W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 12:59 2019 Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	352512	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	225088	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	111120	25.000	ppb	0.00
System Monitoring Compounds						
38) Dibromofluoromethane(S)	5.65	111	195937	29.496	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	117.984%
43) 1,2-DCA-D4(S)	6.07	65	224167	28.940	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	115.760%
64) Toluene-D8(S)	8.37	98	499226	27.145	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	108.580%
72) 4-Bromofluorobenzene(S)	11.26	95	179151	23.221	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	92.884%

Target Compounds Qvalue

Quantitation Report

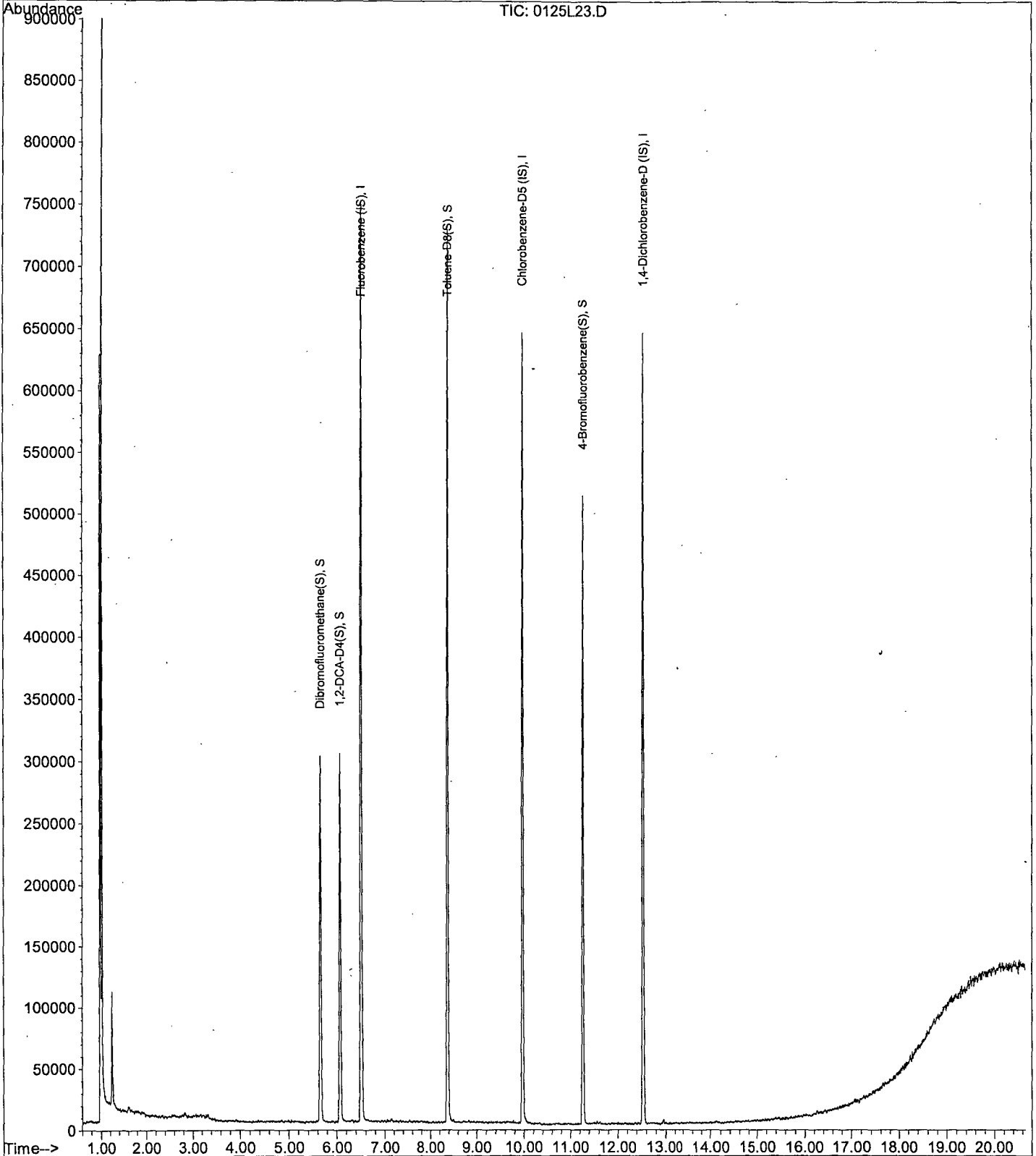
Data File : M:\LOKI\DATA\190121\0125L23.D  
Acq On : 25 Jan 19 19:11  
Sample : AZ85569W01  
Misc : IS&S 11/8/18

Vial: 22  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 12:59 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L04.D  
 Acq On : 25 Jan 19 10:08  
 Sample : 190125A Blk  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 25 12:12 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	344704	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	247040	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	121128	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
38) Dibromofluoromethane(S)	5.65	111	190494	29.326	ppb	0.00
Spiked Amount				25.000		
						Recovery = 117.304%
43) 1,2-DCA-D4(S)	6.07	65	222597	29.389	ppb	0.00
Spiked Amount				25.000		
						Recovery = 117.556%
64) Toluene-D8(S)	8.37	98	524929	26.006	ppb	0.00
Spiked Amount				25.000		
						Recovery = 104.024%
72) 4-Bromofluorobenzene(S)	11.26	95	198211	23.409	ppb	0.00
Spiked Amount				25.000		
						Recovery = 93.636%

Target Compounds

Qvalue

Quantitation Report

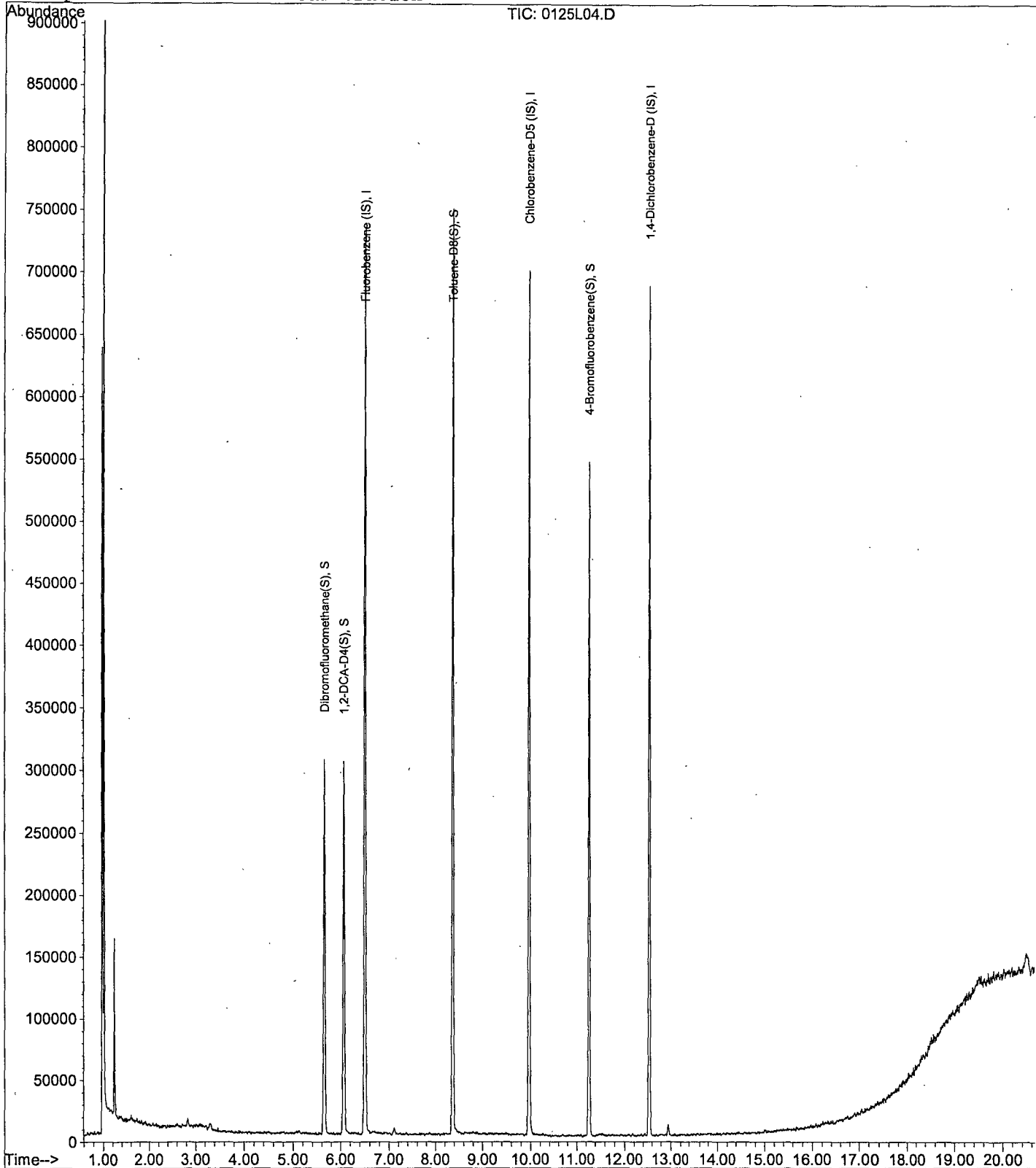
Data File : M:\LOKI\DATA\190121\0125L04.D  
Acq On : 25 Jan 19 10:08  
Sample : 190125A Blk  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 12:12 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0125L12.D  
 Acq On : 25 Jan 19 13:56  
 Sample : 190125A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:07 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth.: L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	366144	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	247104	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	131968	25.000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	200204	29.016	ppb	0.00
Spiked Amount	25.000		Recovery	=	116.064%	
43) 1,2-DCA-D4(S)	6.07	65	235411	29.260	ppb	0.00
Spiked Amount	25.000		Recovery	=	117.040%	
64) Toluene-D8(S)	8.37	98	534010	26.449	ppb	0.00
Spiked Amount	25.000		Recovery	=	105.796%	
72) 4-Bromofluorobenzene(S)	11.27	95	206787	24.415	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.660%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.14	85	30616	8.866	ppb	99
4) Freon 114	1.25	85	26600	10.666	ppb	80
5) Chloromethane	1.29	50	48175	9.448	ppb	91
6) Vinyl chloride	1.38	62	35955	7.822	ppb	96
8) Bromomethane	1.66	94	23488	7.115	ppb	93
9) Chloroethane	1.76	64	18063	7.502	ppb	100
10) Dichlorofluoromethane	1.95	67	63920	7.647	ppb	95
11) Trichlorofluoromethane	2.00	101	50474	7.865	ppb	93
12) Acrolein	2.43	56	78386	82.537	ppb	# 97
13) Acetone	2.61	43	8621	7.036	ppb	94
14) Freon-113	2.54	101	29612	8.323	ppb	99
15) 1,1-DCE	2.52	63	9464	7.948	ppb	86
16) t-Butanol	3.38	59	57783	132.945	ppb	94
17) 2-Propanol	2.85	45	1383	4.385	ppb	# 77
18) Acetonitrile	2.92	41	73929	99.344	ppb	97
19) Methyl Acetate	3.01	43	37850	9.094	ppb	# 85
20) Iodomethane	2.67	142	8667	7.686	ppb	97
21) Acrylonitrile	3.45	52	14740	9.810	ppb	99
22) Methylene chloride	3.09	84	39941	8.344	ppb	99
23) Carbon disulfide	2.73	76	88993	7.178	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	112192	9.868	ppb	96
25) Trans-1,2-DCE	2.52	96	17136	7.951	ppb	100
26) Diisopropyl Ether	4.33	45	117478	9.556	ppb	96
28) 1,1-DCA	4.11	63	69370	9.831	ppb	99
29) Vinyl Acetate	4.27	43	31668	12.298	ppb	# 76
30) Ethyl tert Butyl Ether	4.87	59	112854	10.557	ppb	91
31) MEK (2-Butanone)	5.07	43	23727	12.230	ppb	92
32) Cis-1,2-DCE	4.98	96	43919	10.935	ppb	94
33) 2,2-Dichloropropane	4.97	77	62999	11.312	ppb	95
36) Chloroform	5.45	83	71082	11.523	ppb	100
37) Bromochloromethane	5.30	128	10546	10.763	ppb	91
39) 1,1,1-TCA	5.65	97	26248	11.706	ppb	92
40) Cyclohexane	5.71	41	27911	10.077	ppb	92
41) 1,1-Dichloropropene	5.88	75	46417	10.650	ppb	95
42) 2,2,4-Trimethylpentane	6.29	57	90912	11.400	ppb	98
44) Carbon Tetrachloride	5.87	117	51321	11.162	ppb	85
45) Tert Amyl Methyl Ether	6.36	73	103736	10.743	ppb	95
47) 1,2-DCA	6.16	62	56387	11.243	ppb	99
48) Benzene	6.13	78	144642	11.120	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0125L12.D  
 Acq On : 25 Jan 19 13:56  
 Sample : 190125A LCS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:07 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	18440	8.476	ppb	98
50) 2-Pentanone	7.23	43	346812	138.760	ppb	100
51) 1,2-Dichloropropane	7.21	63	32311	9.396	ppb	98
52) Bromodichloromethane	7.55	83	23864	9.132	ppb	94
53) Methyl Cyclohexane	7.17	83	38911	8.359	ppb	97
54) Dibromomethane	7.34	93	23770	9.893	ppb	87
55) 2-Chloroethyl vinyl ether	7.90	43	367	4.025	ppb #	45
56) MIBK (methyl isobutyl ket	8.29	43	31193	9.039	ppb	95
57) 1-Bromo-2-chloroethane	7.89	63	22368	8.523	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	46746	8.202	ppb	94
59) Toluene	8.44	91	64584	8.263	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	45789	8.353	ppb	92
61) 1,1,2-TCA	8.90	83	24481	8.796	ppb	94
62) 2-Hexanone	9.22	43	21105	9.046	ppb #	96
65) 1,2-EDB	9.44	107	18624	11.737	ppb	99
66) Tetrachloroethene	9.05	166	18672	9.534	ppb	94
67) 1-Chlorohexane	10.00	91	34389	10.173	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	35636	11.111	ppb	100
69) m&p-Xylene	10.27	91	190333	19.724	ppb	100
70) o-Xylene	10.70	106	27544	9.735	ppb	94
71) Styrene	10.71	104	85484	9.844	ppb	99
73) 1,3-Dichloropropane	9.08	76	47823	10.568	ppb	99
74) Dibromochloromethane	9.33	129	37543	10.989	ppb	98
75) Chlorobenzene	10.00	112	85519	10.788	ppb	99
76) Ethylbenzene	10.14	91	72136	10.037	ppb	98
77) Bromoform	10.90	173	30492	10.809	ppb	99
79) Isopropylbenzene	11.11	105	122902	9.950	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	41820	11.707	ppb	95
81) 1,2,3-Trichloropropane	11.48	110	7334	11.780	ppb	83
82) t-1,4-Dichloro-2-Butene	11.49	53	9135	11.223	ppb	80
83) Bromobenzene	11.43	156	21344	10.647	ppb	98
84) n-Propylbenzene	11.56	91	77667	10.331	ppb	98
85) 4-Ethyltoluene	11.69	105	115471	10.118	ppb	99
86) 2-Chlorotoluene	11.65	91	48080	10.080	ppb	96
87) 1,3,5-Trimethylbenzene	11.76	105	96748	9.779	ppb	100
88) 4-Chlorotoluene	11.77	91	54448	10.066	ppb	99
89) Tert-Butylbenzene	12.12	119	104284	9.946	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	93120	9.549	ppb	99
91) Sec-Butylbenzene	12.36	105	127933	10.029	ppb	100
92) p-Isopropyltoluene	12.52	119	58336	9.852	ppb	98
93) Benzyl Chloride	12.71	91	50192	11.858	ppb	97
94) 1,3-DCB	12.47	146	37040	10.425	ppb	95
95) 1,4-DCB	12.57	146	71167	10.112	ppb	96
96) n-Butylbenzene	12.71	91	50192	11.858	ppb	96
97) 1,2-DCB	12.97	146	70531	10.315	ppb	96
98) Hexachloroethane	13.26	117	23256	10.835	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.83	75	8235	10.293	ppb #	75
100) 1,2,4-Trichlorobenzene	14.75	180	44192	10.246	ppb	88
101) Hexachlorobutadiene	14.94	225	23437	10.933	ppb	95
102) Naphthalene	15.01	128	90764	10.117	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	20112	10.487	ppb	95

Quantitation Report

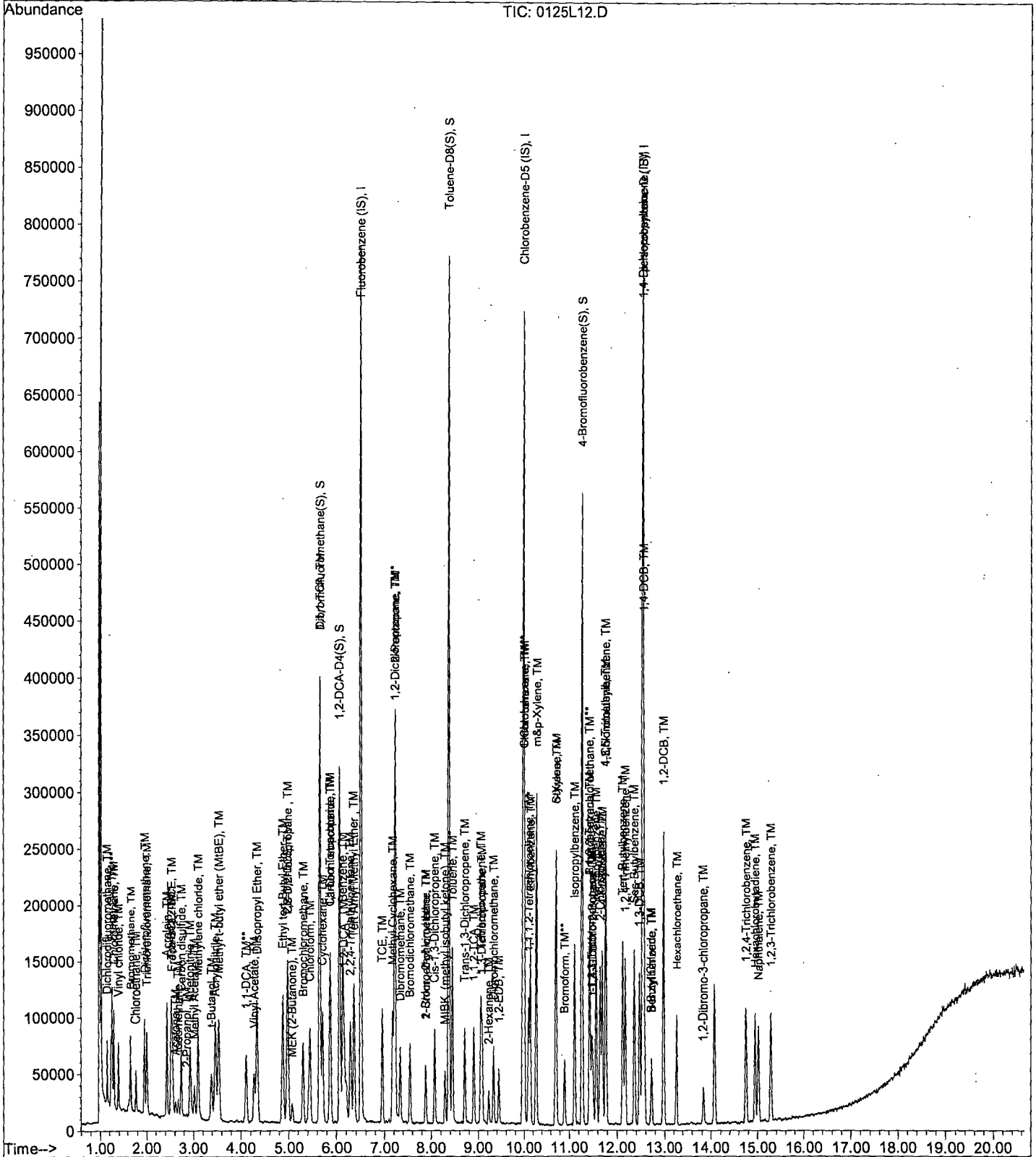
Data File : M:\LOKI\DATA\190121\0125L12.D  
Acq On : 25 Jan 19 13:56  
Sample : 190125A LCS 10ug/L  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 8:07 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0125L13.D  
 Acq On : 25 Jan 19 14:25  
 Sample : 190125A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:08 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	382464	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	250944	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	132352	25.000	ppb	0.00

## System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	198845	27.589	ppb	0.00
Spiked Amount	25.000		Recovery	= 110.356%		
43) 1,2-DCA-D4(S)	6.07	65	239674	28.519	ppb	0.00
Spiked Amount	25.000		Recovery	= 114.076%		
64) Toluene-D8(S)	8.37	98	541548	26.412	ppb	0.00
Spiked Amount	25.000		Recovery	= 105.648%		
72) 4-Bromofluorobenzene(S)	11.27	95	201866	23.470	ppb	0.00
Spiked Amount	25.000		Recovery	= 93.880%		

## Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.15	85	30248	8.399	ppb	96
4) Freon 114	1.25	85	26720	10.257	ppb	89
5) Chloromethane	1.29	50	48121	9.034	ppb	94
6) Vinyl chloride	1.38	62	33741	7.027	ppb	99
8) Bromomethane	1.66	94	22224	6.261	ppb	100
9) Chloroethane	1.76	64	17344	6.844	ppb	97
10) Dichlorofluoromethane	1.95	67	64063	7.337	ppb	96
11) Trichlorofluoromethane	2.00	101	49266	7.349	ppb	92
12) Acrolein	2.43	56	80724	81.322	ppb	# 91
13) Acetone	2.61	43	8495	6.453	ppb	# 87
14) Freon-113	2.54	101	28020	7.540	ppb	95
15) 1,1-DCE	2.52	63	8784	7.062	ppb	87
16) t-Butanol	3.38	59	62890	138.520	ppb	96
17) 2-Propanol	2.85	45	1600	4.856	ppb	# 94
18) Acetonitrile	2.92	41	79507	102.281	ppb	97
19) Methyl Acetate	3.02	43	35179	8.073	ppb	95
20) Iodomethane	2.67	142	10267	8.265	ppb	# 94
21) Acrylonitrile	3.45	52	17314	11.096	ppb	85
22) Methylene chloride	3.10	84	39378	7.842	ppb	96
23) Carbon disulfide	2.73	76	90473	6.986	ppb	94
24) Methyl t-butyl ether (MtBE)	3.54	73	111535	9.392	ppb	97
25) Trans-1,2-DCE	2.52	96	16253	7.220	ppb	94
26) Diisopropyl Ether	4.33	45	121845	9.489	ppb	99
28) 1,1-DCA	4.10	63	66837	9.068	ppb	99
29) Vinyl Acetate	4.27	43	32460	12.068	ppb	# 77
30) Ethyl tert Butyl Ether	4.87	59	115541	10.347	ppb	95
31) MEK (2-Butanone)	5.07	43	24696	12.187	ppb	96
32) Cis-1,2-DCE	4.98	96	42860	10.216	ppb	86
33) 2,2-Dichloropropane	4.97	77	61063	10.497	ppb	97
36) Chloroform	5.45	83	70734	10.977	ppb	98
37) Bromochloromethane	5.30	128	10764	10.516	ppb	90
39) 1,1,1-TCA	5.65	97	25712	10.977	ppb	100
40) Cyclohexane	5.72	41	28927	9.997	ppb	93
41) 1,1-Dichloropropene	5.88	75	45310	9.952	ppb	94
42) 2,2,4-Trimethylpentane	6.29	57	89666	10.764	ppb	98
44) Carbon Tetrachloride	5.87	117	50476	10.509	ppb	90
45) Tert Amyl Methyl Ether	6.36	73	105761	10.485	ppb	96
47) 1,2-DCA	6.17	62	56026	10.694	ppb	97
48) Benzene	6.13	78	142531	10.490	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0125L13.D L0121W.M Thu Jan 31 12:39:42 2019 Page 26 of 1057



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L13.D  
 Acq On : 25 Jan 19 14:25  
 Sample : 190125A LCSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:08 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	19800	8.713	ppb	96
50) 2-Pentanone	7.22	43	365621	140.043	ppb	98
51) 1,2-Dichloropropane	7.21	63	32951	9.173	ppb	99
52) Bromodichloromethane	7.55	83	25336	9.281	ppb	97
53) Methyl Cyclohexane	7.17	83	41259	8.485	ppb	90
54) Dibromomethane	7.34	93	22977	9.155	ppb	93
55) 2-Chloroethyl vinyl ether	7.95	43	610	6.404	ppb	# 24
56) MIBK (methyl isobutyl ket	8.28	43	31819	8.827	ppb	97
57) 1-Bromo-2-chloroethane	7.88	63	23152	8.445	ppb	92
58) Cis-1,3-Dichloropropene	8.07	75	47673	8.008	ppb	97
59) Toluene	8.44	91	64416	7.890	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	44997	7.858	ppb	99
61) 1,1,2-TCA	8.90	83	23080	7.939	ppb	97
62) 2-Hexanone	9.22	43	22297	9.149	ppb	95
65) 1,2-EDB	9.44	107	17512	10.868	ppb	98
66) Tetrachloroethene	9.05	166	20808	10.463	ppb	93
67) 1-Chlorohexane	10.00	91	31301	9.051	ppb	93
68) 1,1,1,2-Tetrachloroethane	10.09	131	36059	11.071	ppb	93
69) m&p-Xylene	10.27	91	189390	19.326	ppb	96
70) o-Xylene	10.70	106	27504	9.572	ppb	94
71) Styrene	10.71	104	83167	9.430	ppb	98
73) 1,3-Dichloropropane	9.08	76	48197	10.488	ppb	96
74) Dibromochloromethane	9.33	129	37622	10.843	ppb	91
75) Chlorobenzene	10.00	112	84947	10.552	ppb	96
76) Ethylbenzene	10.13	91	70768	9.696	ppb	98
77) Bromoform	10.90	173	31307	10.928	ppb	84
79) Isopropylbenzene	11.11	105	124568	10.055	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	45164	12.606	ppb	89
81) 1,2,3-Trichloropropane	11.47	110	7435	11.908	ppb	81
82) t-1,4-Dichloro-2-Butene	11.50	53	10732	13.147	ppb	85
83) Bromobenzene	11.43	156	20928	10.410	ppb	98
84) n-Propylbenzene	11.56	91	76771	10.182	ppb	97
85) 4-Ethyltoluene	11.69	105	112834	9.858	ppb	98
86) 2-Chlorotoluene	11.64	91	47848	10.002	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	94530	9.527	ppb	96
88) 4-Chlorotoluene	11.77	91	54872	10.115	ppb	97
89) Tert-Butylbenzene	12.12	119	102449	9.743	ppb	95
90) 1,2,4-Trimethylbenzene	12.17	105	93908	9.602	ppb	99
91) Sec-Butylbenzene	12.36	105	124260	9.713	ppb	100
92) p-Isopropyltoluene	12.52	119	56520	9.517	ppb	97
93) Benzyl Chloride	12.71	91	48899	11.519	ppb	96
94) 1,3-DCB	12.46	146	34856	9.782	ppb	98
95) 1,4-DCB	12.56	146	73775	10.453	ppb	97
96) n-Butylbenzene	12.71	91	48899	11.519	ppb	96
97) 1,2-DCB	12.97	146	69601	10.149	ppb	94
98) Hexachloroethane	13.26	117	23219	10.787	ppb	91
99) 1,2-Dibromo-3-chloropropan	13.82	75	9297	11.672	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	44057	10.185	ppb	92
101) Hexachlorobutadiene	14.94	225	23719	11.032	ppb	90
102) Naphthalene	15.01	128	98932	10.996	ppb	100
103) 1,2,3-Trichlorobenzene	15.28	180	20128	10.465	ppb	93

Quantitation Report

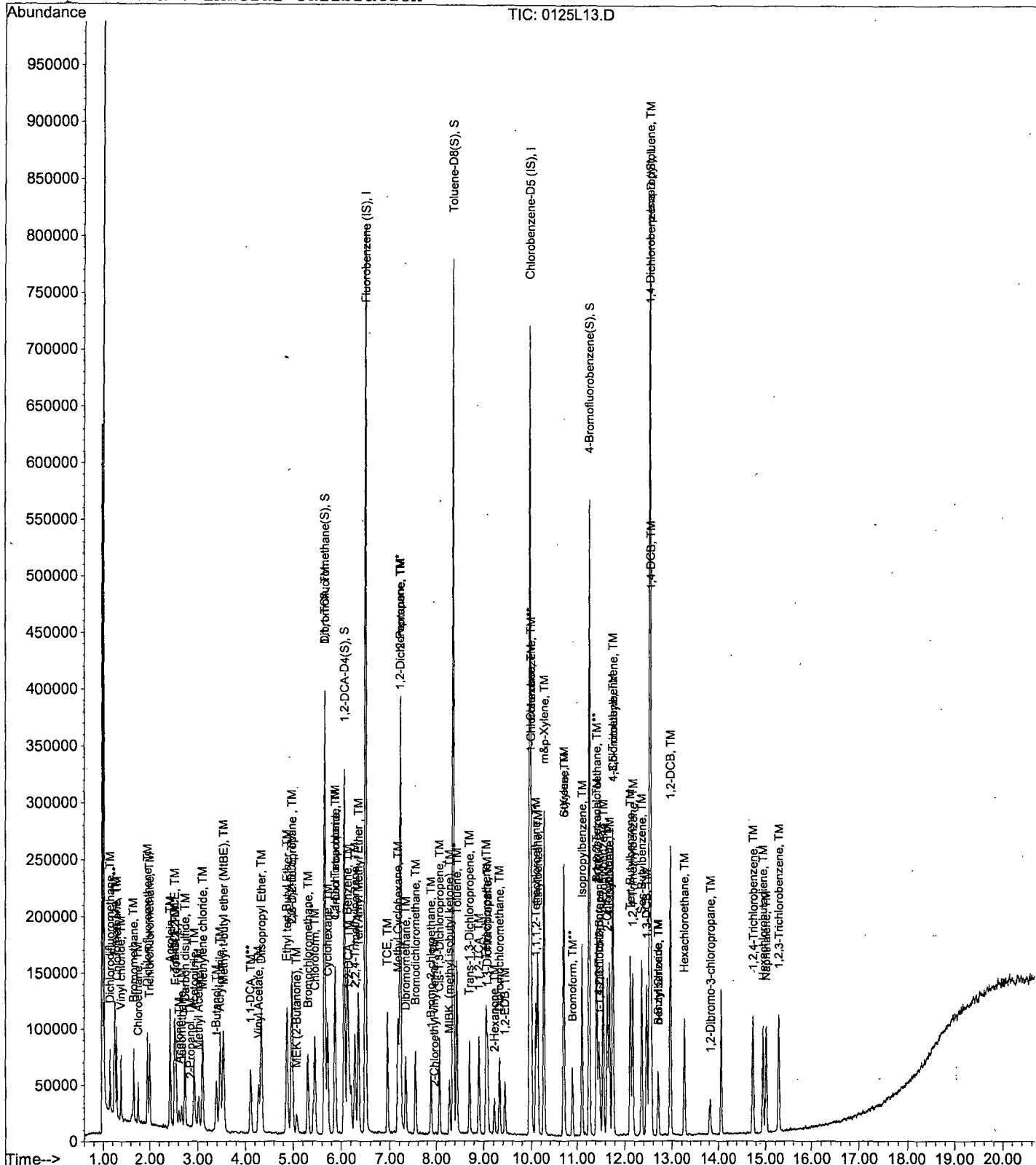
Data File : M:\LOKI\DATA\190121\0125L13.D  
Acq On : 25 Jan 19 14:25  
Sample : 190125A LCSD 10ug/L  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 8:08 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L24.D  
 Acq On : 25 Jan 19 19:40  
 Sample : AZ85562W234 MS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 23  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:13 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	391744	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	249152	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	123800	25.000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	200596	27.173	ppb	0.00
Spiked Amount	25.000		Recovery	= 108.692%		
43) 1,2-DCA-D4(S)	6.07	65	236691	27.497	ppb	0.00
Spiked Amount	25.000		Recovery	= 109.988%		
64) Toluene-D8(S)	8.37	98	543627	26.704	ppb	0.00
Spiked Amount	25.000		Recovery	= 106.816%		
72) 4-Bromofluorobenzene(S)	11.26	95	193022	22.603	ppb	0.00
Spiked Amount	25.000		Recovery	= 90.412%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.15	85	30120	8.172	ppb	97
4) Freon 114	1.25	85	24112	9.037	ppb	91
5) Chloromethane	1.29	50	46041	8.439	ppb	94
6) Vinyl chloride	1.38	62	35676	7.254	ppb	99
8) Bromomethane	1.66	94	22096	6.020	ppb	99
9) Chloroethane	1.76	64	16406	6.270	ppb	99
10) Dichlorofluoromethane	1.95	67	56746	6.345	ppb	99
11) Trichlorofluoromethane	2.00	101	49464	7.204	ppb	100
12) Acrolein	2.42	56	64987	63.166	ppb	# 95
13) Acetone	2.61	43	7463	5.071	ppb	89
14) Freon-113	2.54	101	24081	6.326	ppb	97
15) 1,1-DCE	2.52	63	7643	5.999	ppb	98
16) t-Butanol	3.37	59	43752	94.085	ppb	94
17) 2-Propanol	2.83	45	14213	42.117	ppb	# 88
18) Acetonitrile	2.92	41	61872	77.709	ppb	99
19) Methyl Acetate	3.01	43	24912	5.528	ppb	93
20) Iodomethane	2.67	142	5563	5.956	ppb	96
21) Acrylonitrile	3.44	52	12591	7.727	ppb	88
22) Methylene chloride	3.10	84	33147	6.341	ppb	98
23) Carbon disulfide	2.73	76	76827	5.792	ppb	97
24) Methyl t-butyl ether (MtBE)	3.53	73	91925	7.557	ppb	95
25) Trans-1,2-DCE	2.52	96	15265	6.620	ppb	98
26) Diisopropyl Ether	4.33	45	98995	7.527	ppb	95
28) 1,1-DCA	4.10	63	60099	7.961	ppb	97
29) Vinyl Acetate	4.27	43	25104	9.112	ppb	# 75
30) Ethyl tert Butyl Ether	4.87	59	95575	8.357	ppb	91
31) MEK (2-Butanone)	5.07	43	19412	9.385	ppb	92
32) Cis-1,2-DCE	4.98	96	36435	8.479	ppb	88
33) 2,2-Dichloropropane	4.96	77	48183	8.087	ppb	95
36) Chloroform	5.44	83	63151	9.568	ppb	95
37) Bromochloromethane	5.30	128	9485	9.047	ppb	99
39) 1,1,1-TCA	5.65	97	23392	9.750	ppb	98
40) Cyclohexane	5.71	41	24631	8.286	ppb	85
41) 1,1-Dichloropropene	5.88	75	40033	8.585	ppb	95
42) 2,2,4-Trimethylpentane	6.28	57	74836	8.771	ppb	99
44) Carbon Tetrachloride	5.86	117	46310	9.414	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	88374	8.554	ppb	# 93
47) 1,2-DCA	6.16	62	48904	9.113	ppb	95
48) Benzene	6.13	78	128874	9.261	ppb	98

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L24.D  
 Acq On : 25 Jan 19 19:40  
 Sample : AZ85562W234 MS 10ug/L  
 Misc : IS&S 11/8/18

Vial: 23  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:13 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	18400	7.905	ppb	94
50) 2-Pentanone	7.22	43	334290	125.009	ppb	99
51) 1,2-Dichloropropane	7.21	63	31236	8.490	ppb	98
52) Bromodichloromethane	7.54	83	24704	8.835	ppb	90
53) Methyl Cyclohexane	7.17	83	39654	7.962	ppb	88
54) Dibromomethane	7.34	93	22788	8.865	ppb	86
55) 2-Chloroethyl vinyl ether	7.91	43	320	3.280	ppb #	24
56) MIBK (methyl isobutyl ket	8.28	43	27196	7.366	ppb	99
57) 1-Bromo-2-chloroethane	7.88	63	22976	8.182	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	43855	7.192	ppb	92
59) Toluene	8.44	91	58352	6.978	ppb	96
60) Trans-1,3-Dichloropropene	8.71	75	39094	6.666	ppb	95
61) 1,1,2-TCA	8.90	83	19821	6.657	ppb	98
62) 2-Hexanone	9.22	43	15976	6.400	ppb #	93
65) 1,2-EDB	9.44	107	15107	9.443	ppb	98
66) Tetrachloroethene	9.05	166	17832	9.031	ppb	94
67) 1-Chlorohexane	10.00	91	27400	7.903	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	29938	9.258	ppb	97
69) m&p-Xylene	10.26	91	155224	15.954	ppb	100
70) o-Xylene	10.70	106	22176	7.773	ppb	94
71) Styrene	10.71	104	66945	7.645	ppb	97
73) 1,3-Dichloropropane	9.08	76	40450	8.865	ppb	96
74) Dibromochloromethane	9.33	129	31417	9.120	ppb	94
75) Chlorobenzene	10.00	112	72672	9.092	ppb	98
76) Ethylbenzene	10.13	91	62744	8.658	ppb	99
77) Bromoform	10.90	173	23741	8.347	ppb	85
79) Isopropylbenzene	11.11	105	103866	8.963	ppb	94
80) 1,1,2,2-Tetrachloroethane	11.43	83	34122	10.182	ppb	88
81) 1,2,3-Trichloropropane	11.47	110	6131	10.498	ppb	91
82) t-1,4-Dichloro-2-Butene	11.49	53	6415	8.401	ppb	95
83) Bromobenzene	11.42	156	17768	9.448	ppb	95
84) n-Propylbenzene	11.56	91	64538	9.151	ppb	100
85) 4-Ethyltoluene	11.69	105	91605	8.557	ppb	98
86) 2-Chlorotoluene	11.64	91	39552	8.839	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	79726	8.590	ppb	97
88) 4-Chlorotoluene	11.77	91	44936	8.855	ppb	99
89) Tert-Butylbenzene	12.11	119	84691	8.610	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	70341	7.689	ppb	98
91) Sec-Butylbenzene	12.35	105	102102	8.532	ppb	99
92) p-Isopropyltoluene	12.52	119	43824	7.889	ppb	97
93) Benzyl Chloride	12.71	91	36622	9.223	ppb	96
94) 1,3-DCB	12.46	146	31400	9.421	ppb	91
95) 1,4-DCB	12.56	146	58016	8.788	ppb	93
96) n-Butylbenzene	12.71	91	36622	9.223	ppb	96
97) 1,2-DCB	12.97	146	57124	8.905	ppb	95
98) Hexachloroethane	13.26	117	22202	11.027	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.82	75	6658	8.778	ppb	95
100) 1,2,4-Trichlorobenzene	14.74	180	32942	8.141	ppb	96
101) Hexachlorobutadiene	14.94	225	18754	9.325	ppb	85
102) Naphthalene	15.01	128	61425	7.299	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	15829	8.799	ppb	90

Quantitation Report

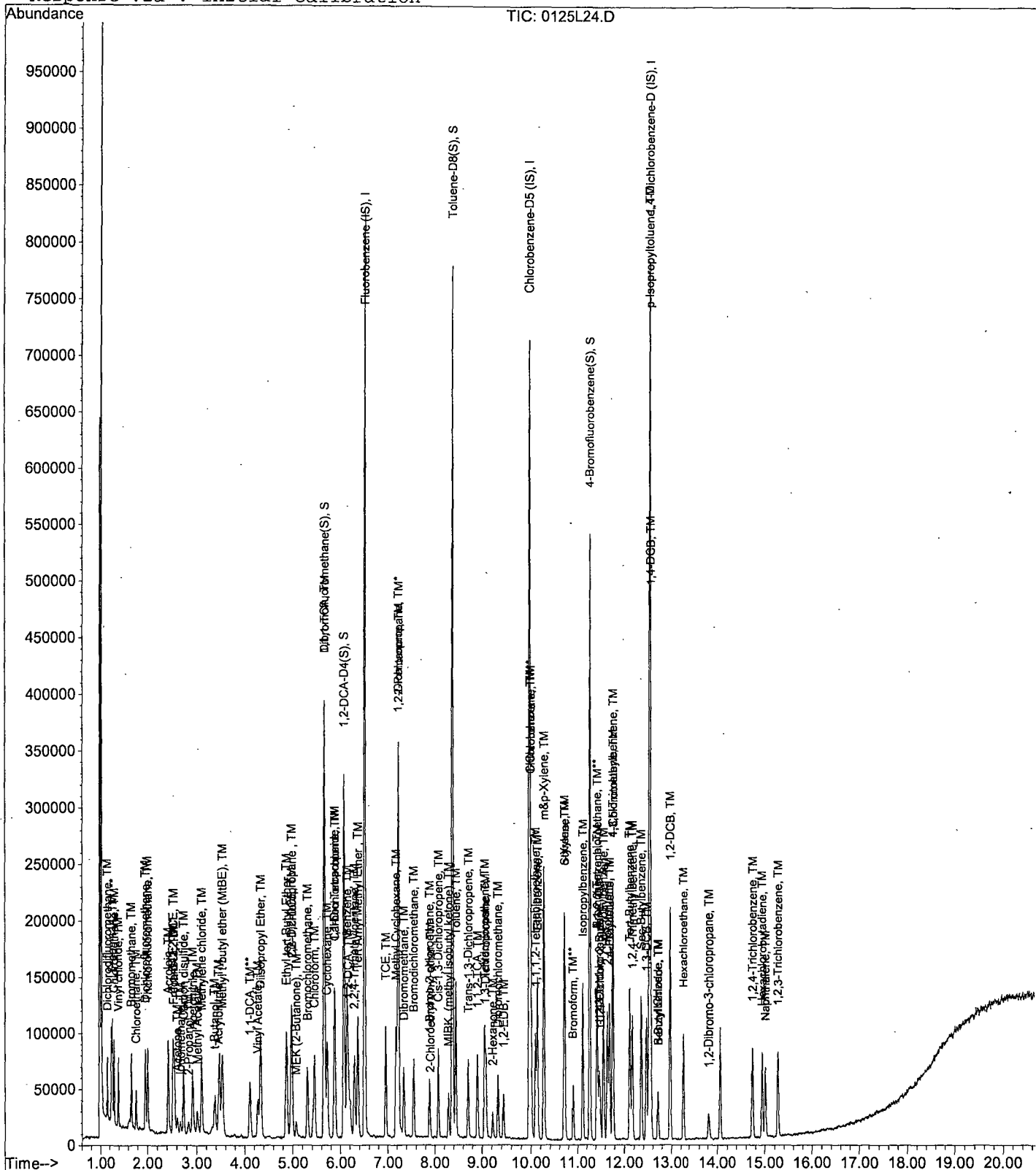
Data File : M:\LOKI\DATA\190121\0125L24.D  
Acq On : 25 Jan 19 19:40  
Sample : AZ85562W234 MS 10ug/L  
Misc : IS&S 11/8/18

Vial: 23  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 8:13 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L25.D  
 Acq On : 25 Jan 19 20:08  
 Sample : AZ85562W234 MSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 24  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:14 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	398464	25.000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	241472	25.000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	128936	25.000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	201283	26.806	ppb	0.00
Spiked Amount			25.000			
			Recovery	= 107.224%		
43) 1,2-DCA-D4(S)	6.07	65	241715	27.607	ppb	0.00
Spiked Amount			25.000			
			Recovery	= 110.428%		
64) Toluene-D8(S)	8.37	98	574208	29.104	ppb	0.00
Spiked Amount			25.000			
			Recovery	= 116.416%		
72) 4-Bromofluorobenzene(S)	11.26	95	197639	23.880	ppb	0.00
Spiked Amount			25.000			
			Recovery	= 95.520%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Dichlorodifluoromethane	1.14	85	29352	7.840	ppb	92
4) Freon 114	1.25	85	23472	8.649	ppb	93
5) Chloromethane	1.29	50	44744	8.063	ppb	91
6) Vinyl chloride	1.38	62	36146	7.226	ppb	95
8) Bromomethane	1.66	94	22264	5.946	ppb	93
9) Chloroethane	1.76	64	19487	7.432	ppb	98
10) Dichlorofluoromethane	1.95	67	54656	6.008	ppb	94
11) Trichlorofluoromethane	2.00	101	51295	7.345	ppb	96
12) Acrolein	2.42	56	67482	64.558	ppb	# 93
13) Acetone	2.61	43	7646	5.131	ppb	100
14) Freon-113	2.55	101	24075	6.218	ppb	96
15) 1,1-DCE	2.52	63	7053	5.443	ppb	95
16) t-Butanol	3.37	59	44684	94.468	ppb	94
17) 2-Propanol	2.83	45	15535	45.258	ppb	# 95
18) Acetonitrile	2.91	41	66363	81.944	ppb	97
19) Methyl Acetate	3.01	43	26342	5.754	ppb	89
20) Iodomethane	2.67	142	6378	6.286	ppb	97
21) Acrylonitrile	3.45	52	13320	8.057	ppb	83
22) Methylene chloride	3.10	84	33300	6.256	ppb	99
23) Carbon disulfide	2.73	76	74126	5.494	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	93585	7.564	ppb	93
25) Trans-1,2-DCE	2.52	96	14390	6.135	ppb	96
26) Diisopropyl Ether	4.33	45	100717	7.528	ppb	96
28) 1,1-DCA	4.10	63	59461	7.743	ppb	96
29) Vinyl Acetate	4.27	43	25782	9.200	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	97148	8.351	ppb	95
31) MEK (2-Butanone)	5.07	43	18545	8.824	ppb	84
32) Cis-1,2-DCE	4.98	96	36184	8.278	ppb	89
33) 2,2-Dichloropropane	4.97	77	49287	8.132	ppb	93
36) Chloroform	5.45	83	61042	9.092	ppb	100
37) Bromochloromethane	5.30	128	9558	8.963	ppb	93
39) 1,1,1-TCA	5.65	97	23520	9.638	ppb	99
40) Cyclohexane	5.72	41	24568	8.122	ppb	96
41) 1,1-Dichloropropene	5.88	75	40047	8.443	ppb	95
42) 2,2,4-Trimethylpentane	6.29	57	71361	8.222	ppb	# 85
44) Carbon Tetrachloride	5.87	117	45267	9.046	ppb	90
45) Tert Amyl Methyl Ether	6.36	73	88682	8.439	ppb	# 87
47) 1,2-DCA	6.17	62	50133	9.185	ppb	97
48) Benzene	6.13	78	127365	8.998	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0125L25.D L0121W.M Thu Jan 31 12:39:50 2019 Page 702 of 1057

Data File : M:\LOKI\DATA\190121\0125L25.D  
 Acq On : 25 Jan 19 20:08  
 Sample : AZ85562W234 MSD 10ug/L  
 Misc : IS&S 11/8/18

Vial: 24  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 28 8:14 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	17696	7.474	ppb	97
50) 2-Pentanone	7.22	43	343643	126.340	ppb	99
51) 1,2-Dichloropropane	7.21	63	33076	8.838	ppb	98
52) Bromodichloromethane	7.54	83	24832	8.731	ppb	97
53) Methyl Cyclohexane	7.17	83	36611	7.227	ppb	94
54) Dibromomethane	7.34	93	23319	8.918	ppb	89
55) 2-Chloroethyl vinyl ether	7.98	43	350	3.527	ppb #	24
56) MIBK (methyl isobutyl ket	8.28	43	31074	8.274	ppb	98
57) 1-Bromo-2-chloroethane	7.89	63	23592	8.260	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	45334	7.309	ppb	88
59) Toluene	8.44	91	59568	7.003	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	39110	6.556	ppb	99
61) 1,1,2-TCA	8.90	83	20578	6.794	ppb	93
62) 2-Hexanone	9.22	43	17488	6.888	ppb #	95
65) 1,2-EDB	9.44	107	14364	9.264	ppb	93
66) Tetrachloroethene	9.05	166	17440	9.113	ppb	96
67) 1-Chlorohexane	10.00	91	27474	8.199	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	29960	9.560	ppb	98
69) m&p-Xylene	10.26	91	159053	16.867	ppb	100
70) o-Xylene	10.70	106	20832	7.534	ppb	89
71) Styrene	10.71	104	68645	8.089	ppb	99
73) 1,3-Dichloropropane	9.08	76	40100	9.068	ppb	95
74) Dibromochloromethane	9.33	129	33023	9.891	ppb	96
75) Chlorobenzene	10.00	112	73876	9.537	ppb	96
76) Ethylbenzene	10.13	91	59784	8.512	ppb	98
77) Bromoform	10.90	173	25314	9.183	ppb	96
79) Isopropylbenzene	11.11	105	104638	8.670	ppb	91
80) 1,1,2,2-Tetrachloroethane	11.43	83	34972	10.020	ppb	90
81) 1,2,3-Trichloropropane	11.47	110	6279	10.323	ppb	91
82) t-1,4-Dichloro-2-Butene	11.49	53	6737	8.472	ppb	93
83) Bromobenzene	11.42	156	17640	9.007	ppb	97
84) n-Propylbenzene	11.56	91	65580	8.928	ppb	100
85) 4-Ethyltoluene	11.69	105	92317	8.280	ppb	95
86) 2-Chlorotoluene	11.64	91	40840	8.764	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	79716	8.247	ppb	97
88) 4-Chlorotoluene	11.76	91	44776	8.472	ppb	97
89) Tert-Butylbenzene	12.12	119	87223	8.514	ppb	99
90) 1,2,4-Trimethylbenzene	12.17	105	78546	8.244	ppb	96
91) Sec-Butylbenzene	12.36	105	104056	8.349	ppb	93
92) p-Isopropyltoluene	12.52	119	45568	7.877	ppb	97
93) Benzyl Chloride	12.71	91	36539	8.836	ppb	95
94) 1,3-DCB	12.46	146	30984	8.925	ppb	94
95) 1,4-DCB	12.56	146	60044	8.733	ppb	98
96) n-Butylbenzene	12.71	91	36539	8.836	ppb	97
97) 1,2-DCB	12.97	146	59202	8.862	ppb	90
98) Hexachloroethane	13.26	117	22414	10.689	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.83	75	6511	8.201	ppb	94
100) 1,2,4-Trichlorobenzene	14.74	180	35005	8.306	ppb	90
101) Hexachlorobutadiene	14.94	225	20289	9.687	ppb	97
102) Naphthalene	15.01	128	68002	7.758	ppb	94
103) 1,2,3-Trichlorobenzene	15.27	180	15548	8.298	ppb	98

Quantitation Report

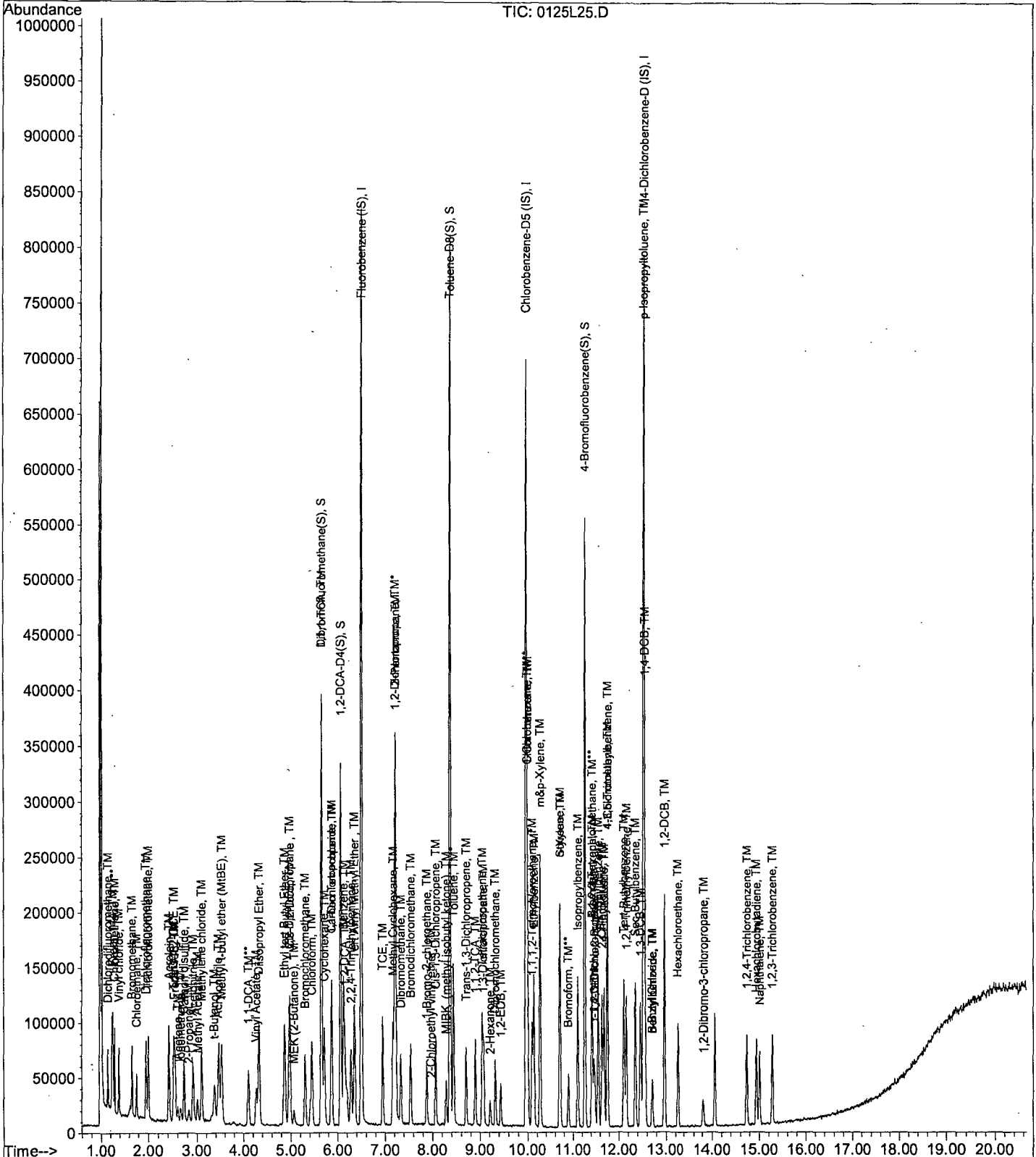
Data File : M:\LOKI\DATA\190121\0125L25.D  
Acq On : 25 Jan 19 20:08  
Sample : AZ85562W234 MSD 10ug/L  
Misc : IS&S 11/8/18

Vial: 24  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 28 8:14 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



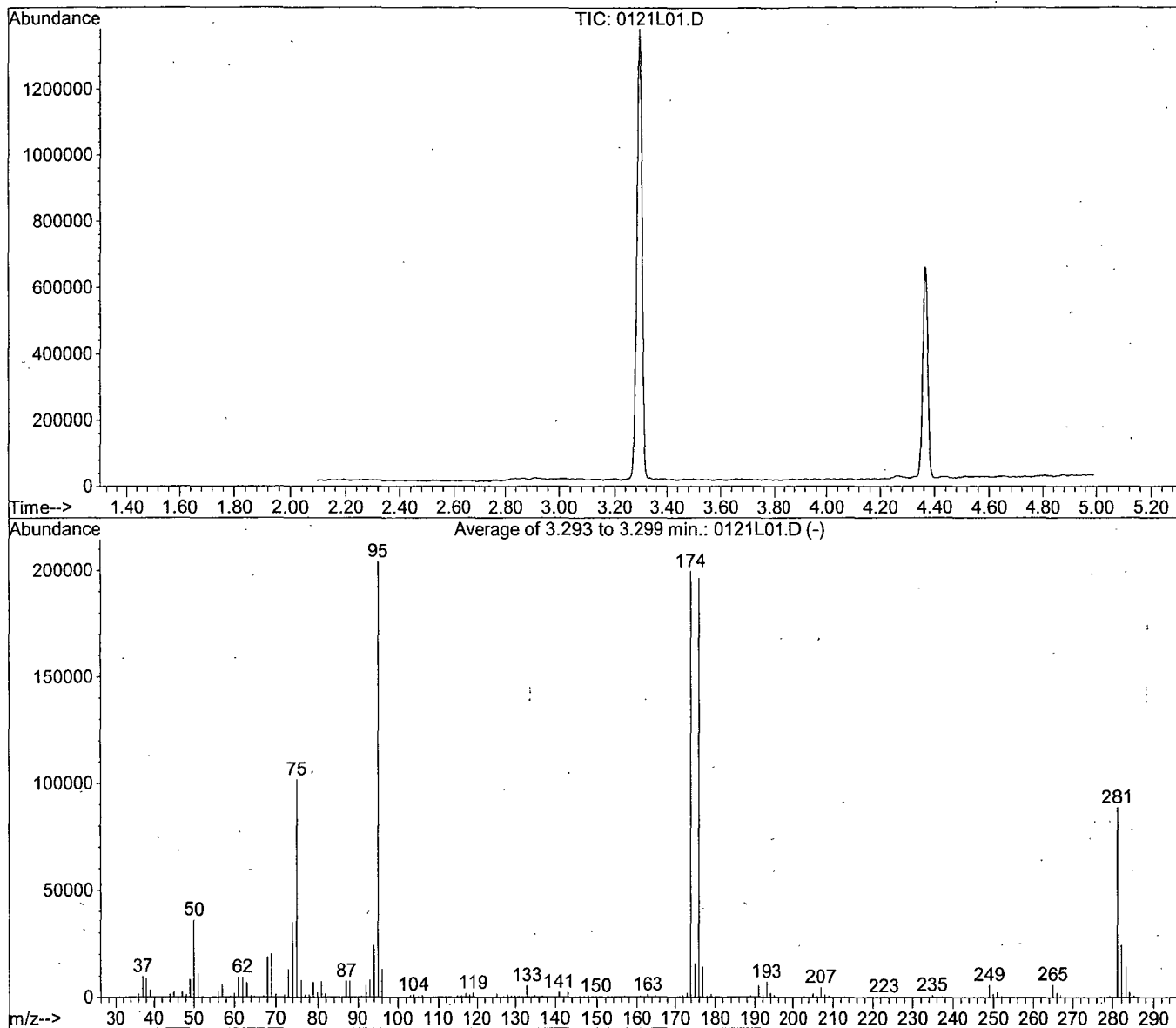


BFB

Data File : M:\LOKI\DATA\190121\0121L01.D  
Acq On : 21 Jan 19 15:04  
Sample : 25ug/L BFB STD 1/18/19  
Misc : 2ul

Vial: 1  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B



Spectrum Information: Average of 3.293 to 3.299 min.

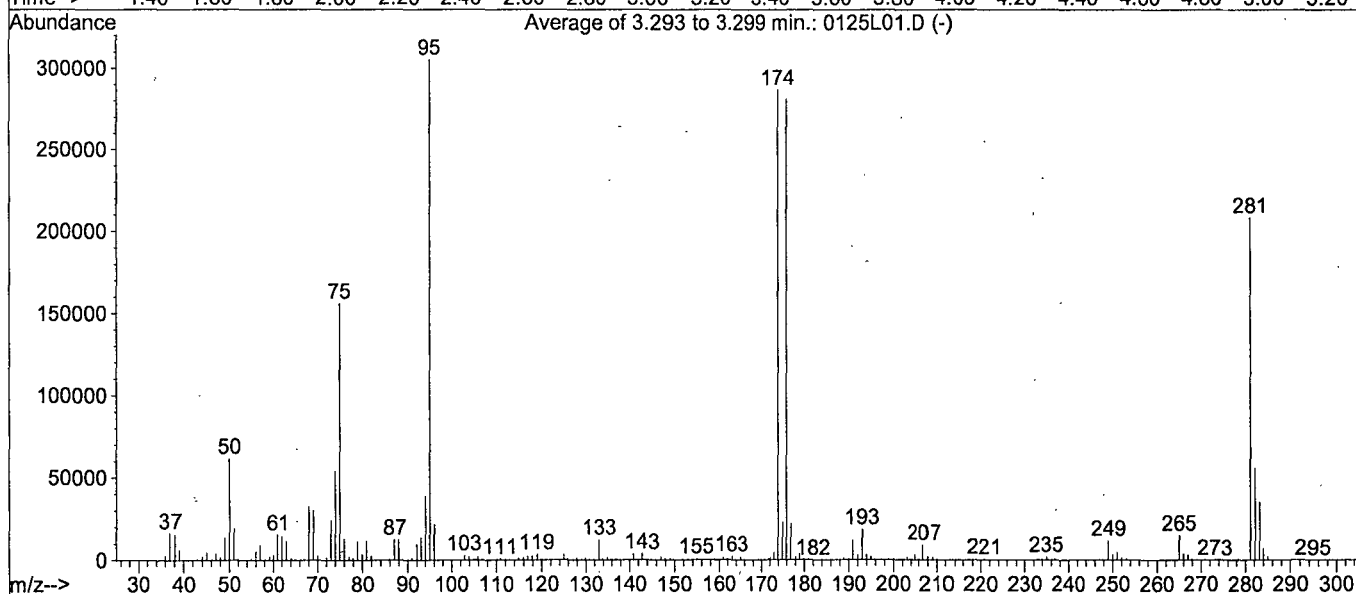
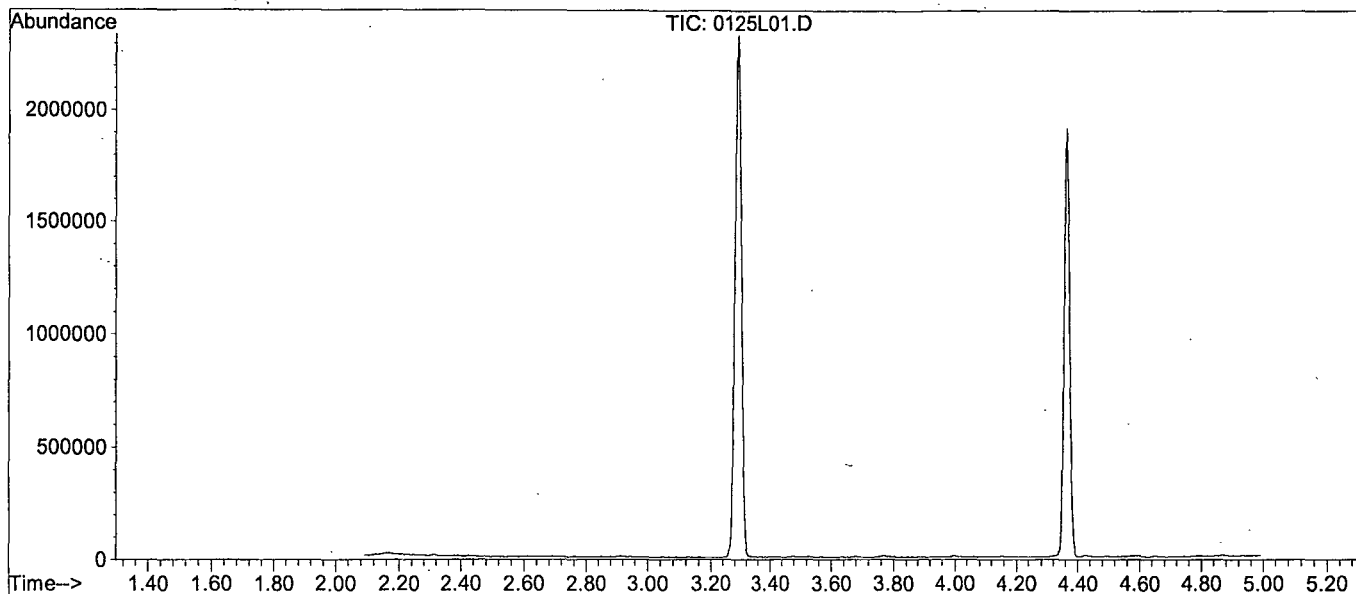
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	35937	PASS
75	95	30	60	49.8	101729	PASS
95	95	100	100	100.0	204224	PASS
96	95	5	9	6.5	13309	PASS
173	174	0.00	2	1.0	2007	PASS
174	95	50	100	97.7	199616	PASS
175	174	5	9	8.0	15907	PASS
176	174	95	101	98.3	196267	PASS
177	176	5	9	7.2	14213	PASS

BFB

Data File : M:\LOKI\DATA\190121\0125L01.D  
Acq On : 25 Jan 19 8:49  
Sample : 25ug/L BFB STD 1/18/19  
Misc : 2ul

Vial: 1  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
Title : METHOD 8260B



Spectrum Information: Average of 3.293 to 3.299 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	61597	PASS
75	95	30	60	51.1	156160	PASS
95	95	100	100	100.0	305344	PASS
96	95	5	9	7.1	21701	PASS
173	174	0.00	2	1.5	4393	PASS
174	95	50	100	93.9	286848	PASS
175	174	5	9	8.0	22987	PASS
176	174	95	101	98.1	281451	PASS
177	176	5	9	7.8	21989	PASS

## Loki 8260 Standard Prep

Loki 8260 Water Calibration Curve										
<b>0.3ug/L</b>						Prepared By (Initials): <u>DG</u>				
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.3ug/L	5	Prepared 01/17/19	02/01/19	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	3uL			0.3
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	3uL			0.3
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	2uL			10
<b>0.5ug/L</b>										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	0.5ug/L	5	Prepared 01/17/19	02/01/19	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	5uL			0.5
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	5uL			0.5
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	5uL			25
<b>1.0ug/L</b>										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	1.0ug/L	5	Prepared 01/17/19	02/01/19	N/A	10uL	50mL	P&T Water	1
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	10uL			1
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	10uL			1
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	10uL			50
<b>2.0ug/L</b>										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	O2SI	2.0ug/L	5	Prepared 01/17/19	02/01/19	N/A	20uL	50mL	P&T Water	2
VOA STD. 10	O2SI		5	Prepared 01/17/19	03/18/19	N/A	20uL			2
VOA STD. 12	O2SI		5	Prepared 01/17/19	03/18/19	N/A	20uL			2
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	15uL			75
<b>5ug/L</b>										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 01/17/19	03/18/19	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	5uL			5
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	5uL			5
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	5uL			5
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	20uL			100
<b>10ug/L</b>										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	25uL			125

20ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 01/17/19	03/18/19	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	20uL			20
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	20uL			20
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	30uL			150
40ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 01/17/19	03/18/19	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	40uL			40
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	40uL			40
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	40uL			40
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	35uL			175
100ug/L										
Prepared: 01/21/19										
Expires: 02/20/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 01/17/19	03/18/19	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 01/17/19	02/01/19	N/A	100uL			100
VOA STD. 1	O2SI		50	Prepared 01/17/19	03/18/19	N/A	100uL			100
VOA STD. 2	O2SI		50	Prepared 01/17/19	03/18/19	N/A	100uL			100
VOA STD. TBA	Various		250	Prepared 01/17/19	02/01/19	N/A	40uL			200
Loki 8260 Water Second Source (SS)										
Prepared: 01/21/19										
Expires: 02/20/19										
						Prepared By (Initials): <u>DG</u>				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 4	Phenova	8260 Water SS	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 5	O2SI	8260 Water SS	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 6	Various	8260 Water SS	50	Prepared 01/17/19	02/13/19	N/A	10uL			10
VOA STD. TBA	Various	8260 Water SS	250	Prepared 01/17/19	02/13/19	N/A	25uL			250
8260 Water Continuing Calibrations (CCV) Lab Control Spikes (LCS)										
Prepared: 01/21/19										
Expires: 01/22/19										
						Prepared By (Initials): <u>DG</u>				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 01/17/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI	CCV/ LCS	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 2	O2SI	CCV/ LCS	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 01/17/19	02/01/19	N/A	25uL			125
LCS (X4 Ketones)										
Prepared: 01/21/19										
Expires: 01/22/19										
						Prepared By (Initials): <u>DG</u>				
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	LCS X4 Ketones	50	Prepared 01/17/19	03/18/19	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	LCS X4 Ketones	50	Prepared 01/17/19	02/01/19	N/A	10uL			10
VOA STD. 1	O2SI	LCS X4 Ketones	50	Prepared 01/17/19	03/18/19	N/A	10uL			10
VOA STD. 2	O2SI	LCS X4 Ketones	50	Prepared 01/17/19	03/18/19	N/A	40uL			40
VOA STD. TBA	Various	LCS X4 Ketones	250	Prepared 01/17/19	02/01/19	N/A	25uL			125

Loki 8260 Water Surrogate										
Prepared: 12/13/18						Prepared By (Initials): <u>DG</u>				
Expires: 04/02/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Surrogate Solution	O2SI	120002-01	2,000	275545-36335	07/28/19	04/02/19	375uL	15mL	Methanol	50
Loki 8260 Water Internal Standard										
Prepared: 11/08/18						Prepared By (Initials): <u>DG</u>				
Expires: 10/05/19										
Methanol Lot No: 202404-9077										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Internal Standard Solution	O2SI	120004-02	2,000	326533-38441	10/05/19	04/27/21	375uL	15mL	Methanol	50

### Primary and Secondary Working Standards

Primary Standards										
<b>VOA STD 7</b>										
Prepared: 01/17/19 T										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	C12965-39996	01/17/20	10/31/23	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-40038	01/17/20	09/18/23	200uL			50
Benzyl Chloride	O2SI	020228-02	1,000	082218-39817	01/17/20	12/04/19	200uL			50
<b>VOA STD 8</b>										
Prepared: 01/17/19 U										
Expires: 02/01/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL39322-39479	01/17/20	06/30/20	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL12490-39491	01/17/20	05/31/23	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13125-40120	02/01/19	02/01/19	100uL			50
<b>VOA STD 9</b>										
Prepared: 01/17/19 V										
Expires: 02/01/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL12542-39530	01/17/20	05/31/20	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL13149-40121	02/01/19	02/01/19	100uL			250
<b>VOA STD 10</b>										
Prepared: 01/17/19 W										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	O2SI	020145-02	2,000	292247-38461	01/17/20	11/12/19	50	2mL	Methanol	50
<b>VOA STD 11</b>										
Prepared: 01/17/19 X										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	CL10956-39506	01/17/20	08/30/23	100	4mL	Methanol	50
<b>VOA STD 12</b>										
Prepared: 01/17/19 Y										
Expires: 02/01/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 01/17/19	12/04/19	N/A	200uL	2mL	Methanol	5
VOA STD. 8		VOA STD. 9	50	Prepared 01/17/19	02/01/19	N/A	200uL			5
<b>VOA STD. 10</b>										
Prepared: 01/17/19 Z										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 01/17/19	01/17/20	N/A	200uL	2mL	Methanol	5
<b>VOA STD. 12</b>										
Prepared: 01/17/19 AA										
Expires: 03/18/19										
Prepared By (Initials): KV _____										
Methanol Lot No. 907702-202404										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 01/17/19	01/17/20	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards										
VOA STD. 3										
Prepared: 01/17/19 AB										
Expires: 03/18/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL12730-39671	01/17/20	08/31/28	50uL	2mL	Methanol	50
VOA STD. 5										
Prepared: 01/17/19 AC										
Expires: 03/18/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL12966-39985	01/17/20	10/31/23	50uL	2mL	Methanol	50
2-CEVE (SS)	Absolute	82408	2,000	071018-39537	01/17/20	07/10/21	50uL			50
VOA STD. 6										
Prepared: 01/17/19 AD										
Expires: 02/13/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL12489-39970	01/17/20	05/31/23	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL13145-40120	01/17/20	02/13/19	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	218051281-39858	01/02/20	05/14/28	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	214101335-04-39960	01/17/20	10/18/20	500uL			50
VOA STD. TBA										
Prepared: 01/17/19 AF										
Expires: 02/13/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12542-39679	01/17/20	05/31/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	CL13181-40203	02/13/19	02/13/19	50uL			250
VOA STD. 0										
Prepared: 01/17/19 AG										
Expires: 03/18/19										
Methanol Lot No. 907702-202404										
Prepared By (Initials): KV										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL12744-40002	01/17/20	08/30/20	50uL	2mL	Methanol	50
BFB Tune										
Prepared: 01/18/19										
Expires: 12/12/19										
Methanol Lot No. 202404-00945										
Prepared By (Initials): DG										
Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
4-Bromofluorobenzene	O2SI	020135-03	2,500	342387-39075	12/12/19	01/19/21	20uL	2mL	Methanol	25

## Injection Log

Directory: M:\LOK\DATA\190121\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0121L01.D	1	25ug/L BFB STD 1/18/19	2ul	21 Jan 19 15:04
2	6	0121L07.D	1	0.3ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 17:50
3	7	0121L08.D	1	0.5ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:18
4	8	0121L09.D	1	1.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:47
5	9	0121L10.D	1	2.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:16
6	10	0121L11.D	1	5.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:44
7	11	0121L12.D	1	10ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:13
8	12	0121L13.D	1	20ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:41
9	13	0121L14.D	1	40ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:10
10	14	0121L15.D	1	50ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:38
11	15	0121L16.D	1	100ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 22:07
12	18	0121L19.D	1	(SS)10ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 23:32
13	1	0125L01.D	1	25ug/L BFB STD 1/18/19	2ul	25 Jan 19 8:49
14	1	0125L02.D	1	190125A CCV 10ug/L	IS&S 11/8/18	25 Jan 19 9:11
15	3	0125L04.D	1	190125A Blk	IS&S 11/8/18	25 Jan 19 10:08
16	11	0125L12.D	1	190125A LCS 10ug/L	IS&S 11/8/18	25 Jan 19 13:56
17	12	0125L13.D	1	190125A LCSD 10ug/L	IS&S 11/8/18	25 Jan 19 14:25
18	14	0125L15.D	1	AZ85561W01	IS&S 11/8/18	25 Jan 19 15:22
19	15	0125L16.D	1	AZ85562W01	IS&S 11/8/18	25 Jan 19 15:51
20	16	0125L17.D	1	AZ85563W01	IS&S 11/8/18	25 Jan 19 16:19
21	17	0125L18.D	1	AZ85564W01	IS&S 11/8/18	25 Jan 19 16:48
22	18	0125L19.D	1	AZ85565W01	IS&S 11/8/18	25 Jan 19 17:17
23	19	0125L20.D	1	AZ85566W01	IS&S 11/8/18	25 Jan 19 17:45
24	20	0125L21.D	1	AZ85567W01	IS&S 11/8/18	25 Jan 19 18:14
25	21	0125L22.D	1	AZ85568W01	IS&S 11/8/18	25 Jan 19 18:42
26	22	0125L23.D	1	AZ85569W01	IS&S 11/8/18	25 Jan 19 19:11
27	23	0125L24.D	1	AZ85562W234 MS 10ug/L	IS&S 11/8/18	25 Jan 19 19:40
28	24	0125L25.D	1	AZ85562W234 MSD 10ug/L	IS&S 11/8/18	25 Jan 19 20:08
29	27	0125L28.D	1	Ending CCV 10ug/L 1/25/19	IS&S 11/8/18	25 Jan 19 21:34



**ORGANICS**  
**Calibration Data**

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/21/19  
Instrument: Loki

Initials: \_\_\_\_\_

0121L07.D 0121L08.D 0121L09.D 0121L10.D 0121L11.D 0121L12.D 0121L13.D 0121L14.D 0121L16.D 0121L15.D

	Compound	1	2	3	4	5	6	7	8	9	8A	Avg	%RSD	Type	r <sup>2</sup>	q	MRF
1	I Fluorobenzene (IS)																
2	S Dibromofluoromethane(S)	0.5221	0.4890	0.4448	0.4243	0.4769	0.4660	0.4873	0.4754	0.4586	0.4666	0.47	5.6	S			
3	S 1,2-DCA-D4(S)	0.6057	0.5772	0.5141	0.4993	0.5602	0.5360	0.5677	0.5517	0.5377	0.5437	0.55	5.6	S			
4	I Chlorobenzene-D5 (IS)																
5	S Toluene-D8(S)	2.277	2.221	1.853	1.876	2.026	2.061	2.066	2.029	1.932	2.087	2.0	6.7	S			
6	S 4-Bromofluorobenzene(S)	0.9406	0.9063	0.8074	0.8093	0.8633	0.8665	0.8665	0.8544	0.7873	0.8671	0.86	5.4	S			
7	I 1,4-Dichlorobenzene-D (IS)																
8																	
9																	
10																	
11																	
12																	
13																	
14																	
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Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	353856	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	302144	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	163584	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	36949	5.5411	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.164%	
43) 1,2-DCA-D4(S)	6.07	65	42868	5.5133	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.052%	
64) Toluene-D8(S)	8.37	98	137589	5.5734	ppb	0.00
Spiked Amount	25.000		Recovery	=	22.292%	
72) 4-Bromofluorobenzene(S)	11.26	95	56841	5.4887	ppb	0.00
Spiked Amount	25.000		Recovery	=	21.956%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	5062	2.6187	ppb	95
3) Dichlorodifluoromethane	1.15	85	907	0.6037	ppb	94
4) Freon 114	1.25	85	1017	0.4220	ppb	# 73
5) Chloromethane	1.29	50	2048	0.4156	ppb	98
6) Vinyl chloride	1.38	62	1630	0.3669	ppb	91
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	12056	3.2078	ppb	95
8) Bromomethane	1.66	94	1310	-1.4293	ppb	87
9) Chloroethane	1.76	64	1106	-0.1356	ppb	# 77
10) Dichlorofluoromethane	1.92	67	572	0.0708	ppb	94
11) Trichlorofluoromethane	2.00	101	1790	0.2886	ppb	94
12) Acrolein	2.43	56	11107	11.8244	ppb	# 93
13) Acetone	2.61	43	1333	-1.6102	ppb	# 83
14) Freon-113	2.54	101	1273	0.3702	ppb	# 81
15) 1,1-DCE	2.52	63	545	0.4736	ppb	# 48
16) t-Butanol	3.38	59	4823	11.4819	ppb	# 82
17) 2-Propanol	2.84	45	1588	5.0053	ppb	# 1
18) Acetonitrile	2.92	41	8234	11.4489	ppb	# 66
19) Methyl Acetate	3.01	43	2506	0.4630	ppb	100
20) Iodomethane	2.66	142	136	3.4318	ppb	# 42
21) Acrylonitrile	3.47	52	1164	0.3224	ppb	# 27
23) Carbon disulfide	2.73	76	4272	0.3565	ppb	# 91
24) Methyl t-butyl ether (MtBE)	3.53	73	4470	0.4068	ppb	# 85
25) Trans-1,2-DCE	2.51	96	929	0.4460	ppb	# 29
26) Diisopropyl Ether	4.33	45	5310	0.4469	ppb	98
28) 1,1-DCA	4.09	63	2324	0.3408	ppb	# 87
29) Vinyl Acetate	4.28	43	1096	0.4404	ppb	# 78
30) Ethyl tert Butyl Ether	4.87	59	3018	0.2921	ppb	# 71
31) MEK (2-Butanone)	5.06	43	384	0.3451	ppb	# 44
32) Cis-1,2-DCE	4.97	96	1461	0.3764	ppb	77
33) 2,2-Dichloropropane	4.97	77	2653	0.4929	ppb	# 87
36) Chloroform	5.44	83	2030	0.3405	ppb	76
37) Bromochloromethane	5.30	128	396	0.4182	ppb	# 64
39) 1,1,1-TCA	5.65	97	775	0.3576	ppb	83
40) Cyclohexane	5.72	41	1216	0.3119	ppb	# 47
41) 1,1-Dichloropropene	5.88	75	1235	0.2932	ppb	# 69
42) 2,2,4-Trimethylpentane	6.27	57	3159	0.4099	ppb	# 74
44) Carbon Tetrachloride	5.87	117	1412	0.3178	ppb	91
45) Tert Amyl Methyl Ether	6.36	73	3763	0.4032	ppb	# 94
47) 1,2-DCA	6.17	62	1335	0.2754	ppb	# 82

(#) = qualifier out of range (m) = manual integration  
 0121L07.D L0121SUR.M Mon Jan 28 10:57 Page 375 of 1057

Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial : 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:22:26 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	6.13	78	3977	0.3164	ppb #	91
49) TCE	6.95	130	583	0.2773	ppb #	83
50) 2-Pentanone	7.23	43	26915	11.1427	ppb	95
51) 1,2-Dichloropropane	7.21	63	1054	0.3171	ppb #	86
52) Bromodichloromethane	7.54	83	950	0.3761	ppb #	88
53) Methyl Cyclohexane	7.17	83	1304	0.2899	ppb	87
54) Dibromomethane	7.34	93	936	0.4031	ppb	73
55) 2-Chloroethyl vinyl ether	8.06	43	561	0.1327	ppb #	24
56) MIBK (methyl isobutyl ket	8.29	43	1056	0.3166	ppb #	59
57) 1-Bromo-2-chloroethane	7.89	63	1009	0.3978	ppb	96
58) Cis-1,3-Dichloropropene	8.07	75	1981	0.3597	ppb #	33
59) Toluene	8.44	91	2264	0.2997	ppb	91
60) Trans-1,3-Dichloropropene	8.71	75	1802	0.3402	ppb	93
61) 1,1,2-TCA	8.90	83	948	0.3525	ppb	88
62) 2-Hexanone	9.39	43	1165	0.5167	ppb #	36
65) 1,2-EDB	9.44	107	587	0.3026	ppb	84
66) Tetrachloroethene	9.06	166	1090	0.4552	ppb #	66
68) 1,1,1,2-Tetrachloroethane	10.09	131	1465	0.3736	ppb #	59
69) m&p-Xylene	10.27	91	7735	0.6556	ppb	93
70) o-Xylene	10.70	106	1265	0.3656	ppb	64
71) Styrene	10.71	104	3372	0.3176	ppb #	79
73) 1,3-Dichloropropane	9.09	76	1757	0.3175	ppb	97
74) Dibromochloromethane	9.33	129	1527	0.3655	ppb	92
75) Chlorobenzene	10.00	112	3342	0.3448	ppb	92
76) Ethylbenzene	10.13	91	2494	0.2838	ppb	95
77) Bromoform	10.90	173	1263	0.3662	ppb #	56
79) Isopropylbenzene	11.11	105	4366	0.2851	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	1899	0.4289	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	365	0.4730	ppb #	70
82) t-1,4-Dichloro-2-Butene	11.50	53	290	0.2874	ppb #	20
83) Bromobenzene	11.42	156	935	0.3763	ppb	87
84) n-Propylbenzene	11.56	91	2679	0.2875	ppb #	79
85) 4-Ethyltoluene	11.69	105	4086	0.2888	ppb	98
86) 2-Chlorotoluene	11.65	91	2426	0.4103	ppb	86
87) 1,3,5-Trimethylbenzene	11.76	105	3515	0.2866	ppb	98
88) 4-Chlorotoluene	11.77	91	2028	0.3025	ppb	85
89) Tert-Butylbenzene	12.12	119	3713	0.2857	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	3808	0.3150	ppb	83
91) Sec-Butylbenzene	12.36	105	5100	0.3225	ppb	89
92) p-Isopropyltoluene	12.52	119	2805	0.3822	ppb	88
93) Benzyl Chloride	12.72	91	1923	0.3665	ppb	97
94) 1,3-DCB	12.46	146	1553	0.3526	ppb #	82
95) 1,4-DCB	12.56	146	2832	0.3246	ppb #	19
96) n-Butylbenzene	12.72	91	1923	0.3665	ppb #	90
97) 1,2-DCB	12.97	146	2647	0.3123	ppb	89
98) Hexachloroethane	13.26	117	717	0.2695	ppb	77
100) 1,2,4-Trichlorobenzene	14.74	180	1528	0.2858	ppb	83
101) Hexachlorobutadiene	14.94	225	630	0.2371	ppb #	62
102) Naphthalene	15.01	128	3003	0.2700	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	845	0.3555	ppb #	72

Quantitation Report

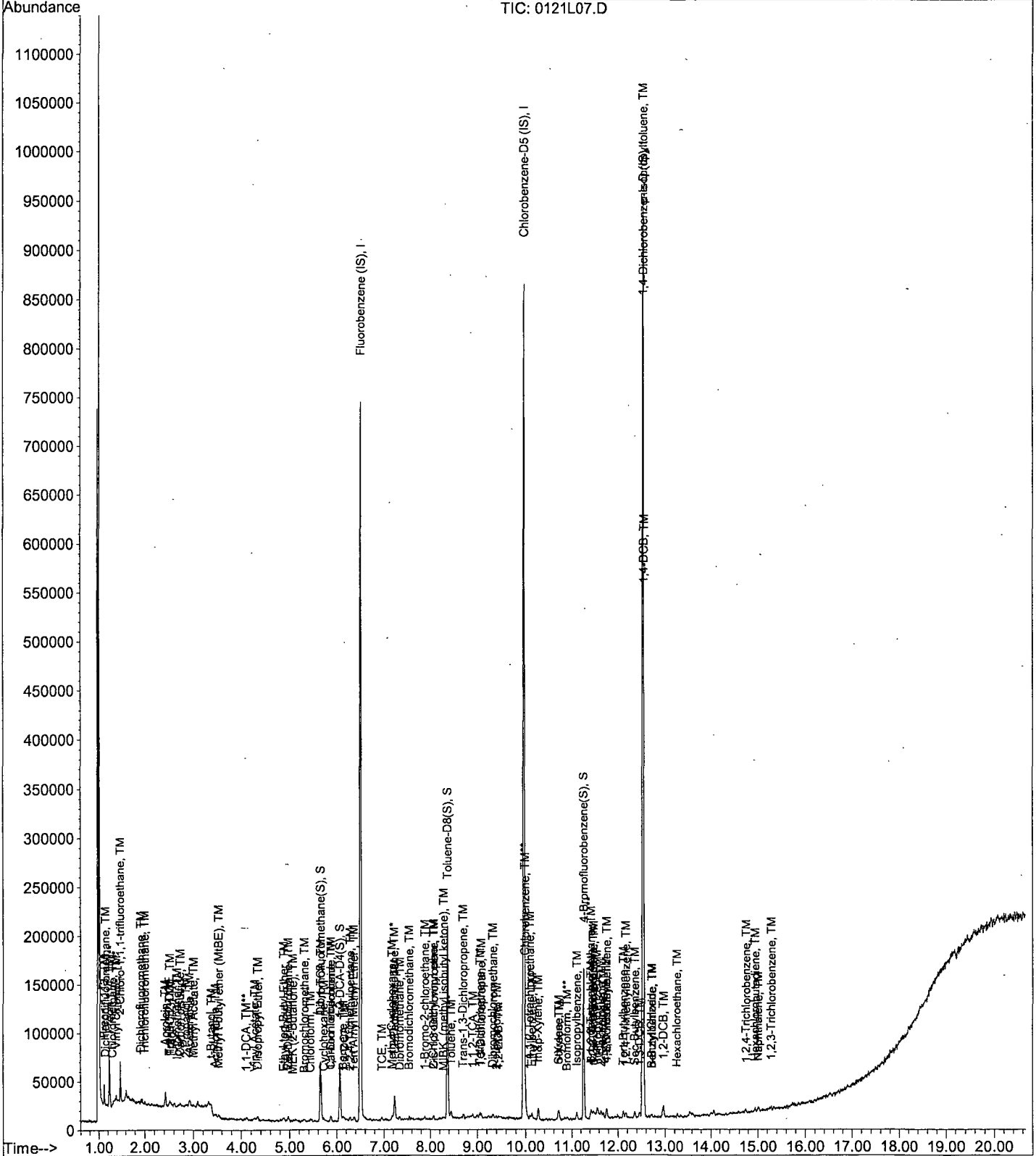
Data File : M:\LOKI\DATA\190121\0121L07.D  
 Acq On : 21 Jan 19 17:50  
 Sample : 0.3ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:22 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	357312	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	300736	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170368	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	34947	5.1902	ppb	0.00
Spiked Amount 25.000			Recovery	=	20.760%	
43) 1,2-DCA-D4(S)	6.07	65	41245	5.2533	ppb	0.00
Spiked Amount 25.000			Recovery	=	21.012%	
64) Toluene-D8(S)	8.37	98	133613	5.4376	ppb	0.00
Spiked Amount 25.000			Recovery	=	21.752%	
72) 4-Bromofluorobenzene(S)	11.27	95	54511	5.2884	ppb	0.00
Spiked Amount 25.000			Recovery	=	21.152%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	9096	4.6601	ppb	93
3) Dichlorodifluoromethane	1.15	85	1374	0.4440	ppb	91
4) Freon 114	1.25	85	1492	0.6131	ppb	95
5) Chloromethane	1.29	50	2981	0.5991	ppb #	84
6) Vinyl chloride	1.38	62	1953	0.4354	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	19808	5.2194	ppb	96
8) Bromomethane	1.67	94	2192	-1.0854	ppb #	70
9) Chloroethane	1.76	64	1985	0.2660	ppb	88
10) Dichlorofluoromethane	1.95	67	5540	0.6791	ppb #	83
11) Trichlorofluoromethane	2.00	101	3185	0.5086	ppb #	67
12) Acrolein	2.43	56	25004	26.3615	ppb #	88
13) Acetone	2.61	43	1558	-1.3508	ppb #	86
14) Freon-113	2.54	101	1603	0.4617	ppb #	89
15) 1,1-DCE	2.52	63	641	0.5516	ppb #	49
16) t-Butanol	3.39	59	12761	30.0857	ppb	98
18) Acetonitrile	2.92	41	21649	29.8106	ppb	97
19) Methyl Acetate	3.01	43	2983	0.5765	ppb #	78
20) Iodomethane	2.67	142	189	3.4582	ppb #	42
21) Acrylonitrile	3.45	52	1139	0.2963	ppb #	48
22) Methylene chloride	3.09	84	3939	0.3188	ppb	91
23) Carbon disulfide	2.73	76	6490	0.5364	ppb	93
24) Methyl t-butyl ether (MtBE)	3.53	73	5941	0.5355	ppb #	94
25) Trans-1,2-DCE	2.53	96	1098	0.5221	ppb	95
26) Diisopropyl Ether	4.34	45	6000	0.5001	ppb	97
28) 1,1-DCA	4.11	63	3551	0.5157	ppb #	83
29) Vinyl Acetate	4.32	43	1311	0.5217	ppb #	98
30) Ethyl tert Butyl Ether	4.88	59	5000	0.4793	ppb #	88
32) Cis-1,2-DCE	4.97	96	2331	0.5947	ppb #	69
33) 2,2-Dichloropropane	4.97	77	3666	0.6746	ppb #	85
36) Chloroform	5.45	83	2813	0.4673	ppb	93
37) Bromochloromethane	5.31	128	533	0.5574	ppb #	56
39) 1,1,1-TCA	5.64	97	981	0.4483	ppb	92
40) Cyclohexane	5.73	41	3072	1.0042	ppb #	34
41) 1,1-Dichloropropene	5.88	75	2350	0.5525	ppb #	78
42) 2,2,4-Trimethylpentane	6.29	57	3842	0.4937	ppb #	64
44) Carbon Tetrachloride	5.87	117	1956	0.4359	ppb	96
45) Tert Amyl Methyl Ether	6.36	73	5061	0.5371	ppb #	78
47) 1,2-DCA	6.16	62	2674	0.5463	ppb #	73
48) Benzene	6.13	78	6990	0.5507	ppb	96

## Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:09:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) TCE	6.95	130	1318	0.6208	ppb #	79
50) 2-Pentanone	7.23	43	61080	25.0422	ppb	98
51) 1,2-Dichloropropane	7.21	63	1748	0.5209	ppb #	86
52) Bromodichloromethane	7.55	83	1213	0.4756	ppb #	81
53) Methyl Cyclohexane	7.17	83	2551	0.5616	ppb	84
54) Dibromomethane	7.33	93	999	0.4261	ppb	87
56) MIBK (methyl isobutyl ket	8.29	43	1582	0.4698	ppb	93
57) 1-Bromo-2-chloroethane	7.89	63	1208	0.4717	ppb #	79
58) Cis-1,3-Dichloropropene	8.07	75	2611	0.4695	ppb #	69
59) Toluene	8.44	91	3753	0.4920	ppb	92
60) Trans-1,3-Dichloropropene	8.71	75	2839	0.5307	ppb	90
61) 1,1,2-TCA	8.90	83	1500	0.5523	ppb	83
65) 1,2-EDB	9.44	107	1016	0.5261	ppb	96
66) Tetrachloroethene	9.05	166	1200	0.5035	ppb #	85
67) 1-Chlorohexane	10.00	91	3117	0.1588	ppb #	86
68) 1,1,1,2-Tetrachloroethane	10.09	131	2072	0.5308	ppb	86
69) m&p-Xylene	10.27	91	11228	0.9560	ppb	85
70) o-Xylene	10.70	106	1684	0.4890	ppb	90
71) Styrene	10.71	104	5141	0.4864	ppb	96
73) 1,3-Dichloropropane	9.08	76	2815	0.5111	ppb #	82
74) Dibromochloromethane	9.33	129	2158	0.5190	ppb	85
75) Chlorobenzene	10.00	112	4193	0.4346	ppb #	79
76) Ethylbenzene	10.13	91	4251	0.4860	ppb	94
77) Bromoform	10.90	173	1493	0.4349	ppb	83
79) Isopropylbenzene	11.11	105	7463	0.4680	ppb	94
80) 1,1,2,2-Tetrachloroethane	11.42	83	2617	0.5675	ppb #	90
81) 1,2,3-Trichloropropane	11.47	110	372	0.4628	ppb	83
82) t-1,4-Dichloro-2-Butene	11.50	53	555	0.5282	ppb	90
83) Bromobenzene	11.42	156	1097	0.4239	ppb	72
84) n-Propylbenzene	11.56	91	4087	0.4211	ppb	96
85) 4-Ethyltoluene	11.69	105	6374	0.4326	ppb	97
86) 2-Chlorotoluene	11.65	91	2862	0.4648	ppb	87
87) 1,3,5-Trimethylbenzene	11.76	105	5904	0.4622	ppb	99
88) 4-Chlorotoluene	11.76	91	3106	0.4448	ppb	100
89) Tert-Butylbenzene	12.11	119	6220	0.4595	ppb	85
90) 1,2,4-Trimethylbenzene	12.17	105	5826	0.4628	ppb	86
91) Sec-Butylbenzene	12.36	105	7440	0.4518	ppb	97
92) p-Isopropyltoluene	12.52	119	3615	0.4729	ppb #	89
93) Benzyl Chloride	12.72	91	2920	0.5344	ppb	93
94) 1,3-DCB	12.46	146	2123	0.4628	ppb	88
95) 1,4-DCB	12.57	146	4286	0.4717	ppb	89
96) n-Butylbenzene	12.72	91	2920	0.5344	ppb #	75
97) 1,2-DCB	12.98	146	4231	0.4793	ppb	94
98) Hexachloroethane	13.26	117	1203	0.4342	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.80	75	555	-0.1026	ppb #	39
100) 1,2,4-Trichlorobenzene	14.75	180	2455	0.4409	ppb #	65
101) Hexachlorobutadiene	14.94	225	1121	0.4051	ppb	80
102) Naphthalene	15.01	128	5369	0.4636	ppb	91
103) 1,2,3-Trichlorobenzene	15.28	180	1096	0.4427	ppb #	74

(#) = qualifier out of range (m) = manual integration  
 0121L08.D L0121SUR.M Mon Jan 28 12:09:36 2019 Page 79 of 1057

Quantitation Report

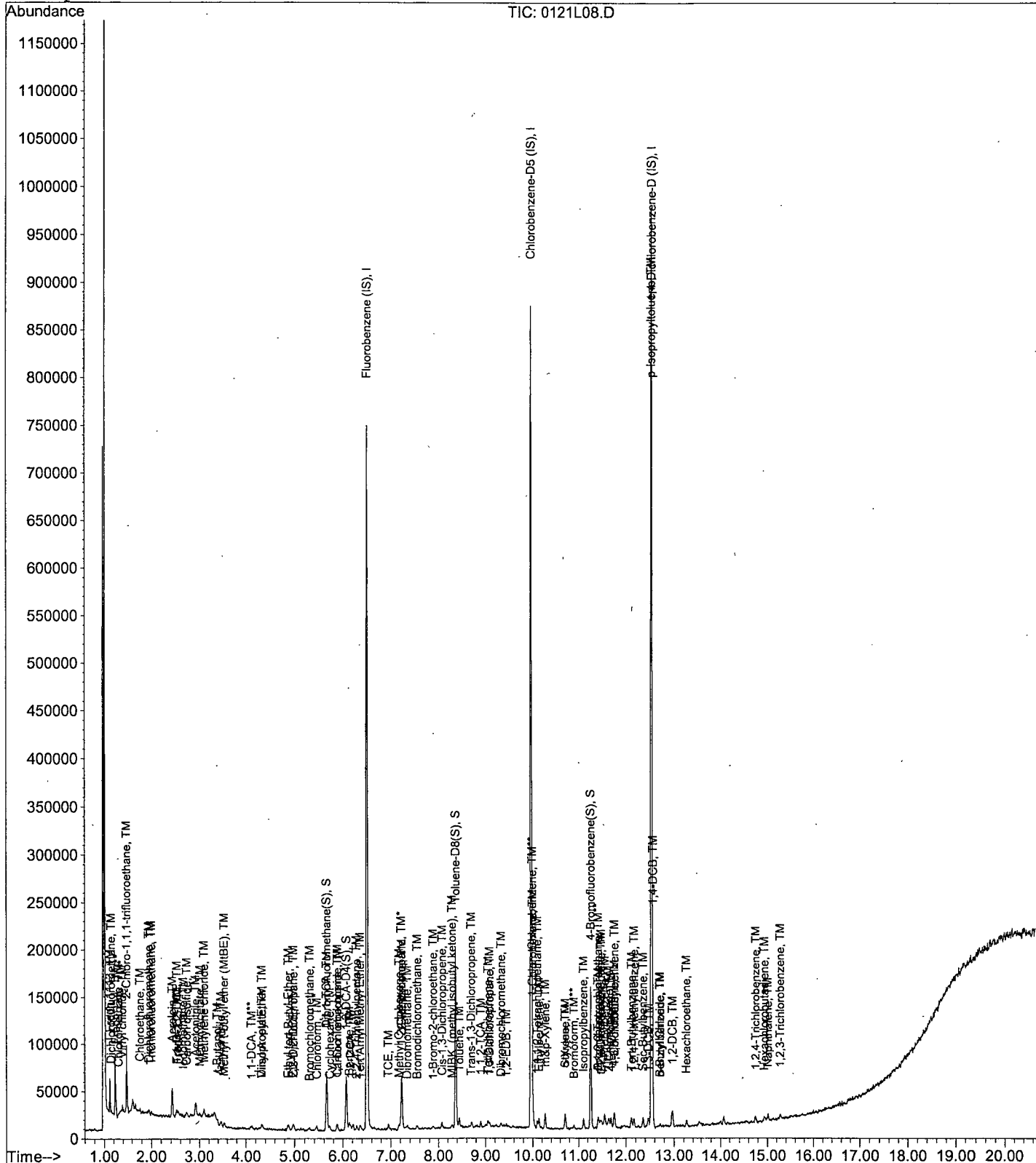
Data File : M:\LOKI\DATA\190121\0121L08.D  
 Acq On : 21 Jan 19 18:18  
 Sample : 0.5ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:31 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration





Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	348544	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305600	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	164672	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	62019	9.4425	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.768%	
43) 1,2-DCA-D4(S)	6.07	65	71668	9.3578	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.432%	
64) Toluene-D8(S)	8.37	98	226450	9.0692	ppb	0.00
Spiked Amount	25.000		Recovery	=	36.276%	
72) 4-Bromofluorobenzene(S)	11.27	95	98697	9.4226	ppb	0.00
Spiked Amount	25.000		Recovery	=	37.692%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	20572	10.8046	ppb	99
3) Dichlorodifluoromethane	1.15	85	3607	1.1950	ppb	98
4) Freon 114	1.25	85	2739	1.1538	ppb	100
5) Chloromethane	1.29	50	5313	1.0945	ppb	96
6) Vinyl chloride	1.38	62	4015	0.9176	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	39864	10.7683	ppb	96
8) Bromomethane	1.67	94	3234	-0.6410	ppb	99
9) Chloroethane	1.76	64	3027	0.7833	ppb	# 79
10) Dichlorofluoromethane	1.95	67	8554	1.0750	ppb	100
11) Trichlorofluoromethane	2.00	101	6100	0.9985	ppb	90
12) Acrolein	2.43	56	48212	52.1082	ppb	# 87
13) Acetone	2.62	43	1777	-1.0282	ppb	# 62
14) Freon-113	2.54	101	4023	1.1879	ppb	93
15) 1,1-DCE	2.52	63	1511	1.3331	ppb	# 58
16) t-Butanol	3.38	59	19859	47.9979	ppb	98
17) 2-Propanol	2.84	45	3605	11.5360	ppb	# 51
18) Acetonitrile	2.92	41	37610	53.0917	ppb	91
19) Methyl Acetate	3.02	43	8151	1.9244	ppb	# 73
20) Iodomethane	2.66	142	308	3.5230	ppb	# 67
21) Acrylonitrile	3.45	52	1988	0.9420	ppb	# 55
22) Methylene chloride	3.10	84	6042	0.8352	ppb	94
23) Carbon disulfide	2.73	76	13465	1.1409	ppb	# 90
24) Methyl t-butyl ether (MtBE)	3.54	73	10257	0.9478	ppb	# 86
25) Trans-1,2-DCE	2.52	96	2185	1.0650	ppb	96
26) Diisopropyl Ether	4.33	45	11509	0.9835	ppb	94
28) 1,1-DCA	4.10	63	6686	0.9954	ppb	95
29) Vinyl Acetate	4.28	43	2419	0.9868	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	9864	0.9694	ppb	95
31) MEK (2-Butanone)	5.07	43	3241	1.8771	ppb	# 76
32) Cis-1,2-DCE	4.99	96	3876	1.0138	ppb	# 68
33) 2,2-Dichloropropane	4.97	77	5657	1.0671	ppb	96
36) Chloroform	5.45	83	6481	1.1036	ppb	83
37) Bromochloromethane	5.30	128	1084	1.1621	ppb	77
39) 1,1,1-TCA	5.65	97	2350	1.1009	ppb	97
40) Cyclohexane	5.72	41	3422	1.1680	ppb	81
41) 1,1-Dichloropropene	5.88	75	4570	1.1015	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	8300	1.0933	ppb	96
44) Carbon Tetrachloride	5.87	117	4958	1.1328	ppb	75
45) Tert Amyl Methyl Ether	6.36	73	9419	1.0247	ppb	# 96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	4562	0.9555	ppb	# 91
48) Benzene	6.14	78	12769	1.0313	ppb	90
49) TCE	6.95	130	2195	1.0599	ppb	# 84
50) 2-Pentanone	7.23	43	123775	52.0231	ppb	97
51) 1,2-Dichloropropane	7.21	63	3792	1.1584	ppb	# 81
52) Bromodichloromethane	7.54	83	2563	1.0303	ppb	# 97
53) Methyl Cyclohexane	7.17	83	4766	1.0756	ppb	92
54) Dibromomethane	7.34	93	2368	1.0354	ppb	93
55) 2-Chloroethyl vinyl ether	7.94	43	474	899.6219	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	3267	0.9945	ppb	# 79
57) 1-Bromo-2-chloroethane	7.88	63	2787	1.1156	ppb	90
58) Cis-1,3-Dichloropropene	8.07	75	5602	1.0326	ppb	95
59) Toluene	8.44	91	7286	0.9792	ppb	97
60) Trans-1,3-Dichloropropene	8.70	75	5571	1.0676	ppb	95
61) 1,1,2-TCA	8.90	83	2628	0.9920	ppb	85
62) 2-Hexanone	9.22	43	2444	1.1004	ppb	# 78
65) 1,2-EDB	9.44	107	2163	1.1023	ppb	94
66) Tetrachloroethene	9.05	166	2801	1.1565	ppb	85
67) 1-Chlorohexane	10.00	91	6065	0.8960	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	3940	0.9934	ppb	90
69) m&p-Xylene	10.26	91	23239	1.9473	ppb	94
70) o-Xylene	10.70	106	3737	1.0680	ppb	85
71) Styrene	10.71	104	10573	0.9845	ppb	98
73) 1,3-Dichloropropane	9.08	76	6227	1.1127	ppb	100
74) Dibromochloromethane	9.33	129	4293	1.0160	ppb	85
75) Chlorobenzene	9.99	112	10293	1.0499	ppb	97
76) Ethylbenzene	10.13	91	9464	1.0647	ppb	97
77) Bromoform	10.90	173	4240	1.2153	ppb	95
79) Isopropylbenzene	11.11	105	15582	1.0109	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	4690	1.0522	ppb	97
81) 1,2,3-Trichloropropane	11.47	110	881	1.1341	ppb	81
82) t-1,4-Dichloro-2-Butene	11.49	53	1386	1.3646	ppb	# 66
83) Bromobenzene	11.42	156	2845	1.1374	ppb	93
84) n-Propylbenzene	11.56	91	9217	0.9825	ppb	98
85) 4-Ethyltoluene	11.69	105	14594	1.0248	ppb	95
86) 2-Chlorotoluene	11.64	91	6392	1.0740	ppb	94
87) 1,3,5-Trimethylbenzene	11.76	105	12213	0.9893	ppb	88
88) 4-Chlorotoluene	11.76	91	7297	1.0811	ppb	99
89) Tert-Butylbenzene	12.11	119	12116	0.9261	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	10589	0.8702	ppb	88
91) Sec-Butylbenzene	12.36	105	15873	0.9972	ppb	99
92) p-Isopropyltoluene	12.52	119	7311	0.9895	ppb	97
93) Benzyl Chloride	12.72	91	5129	0.9711	ppb	88
94) 1,3-DCB	12.46	146	4634	1.0452	ppb	98
95) 1,4-DCB	12.56	146	9518	1.0839	ppb	92
96) n-Butylbenzene	12.72	91	5129	0.9711	ppb	# 87
97) 1,2-DCB	12.97	146	8402	0.9847	ppb	97
98) Hexachloroethane	13.26	117	2554	0.9536	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.81	75	1487	0.9120	ppb	# 50
100) 1,2,4-Trichlorobenzene	14.74	180	4920	0.9141	ppb	85
101) Hexachlorobutadiene	14.94	225	2250	0.8411	ppb	93
102) Naphthalene	15.01	128	9306	0.8313	ppb	93
103) 1,2,3-Trichlorobenzene	15.27	180	2118	0.8851	ppb	93

Quantitation Report

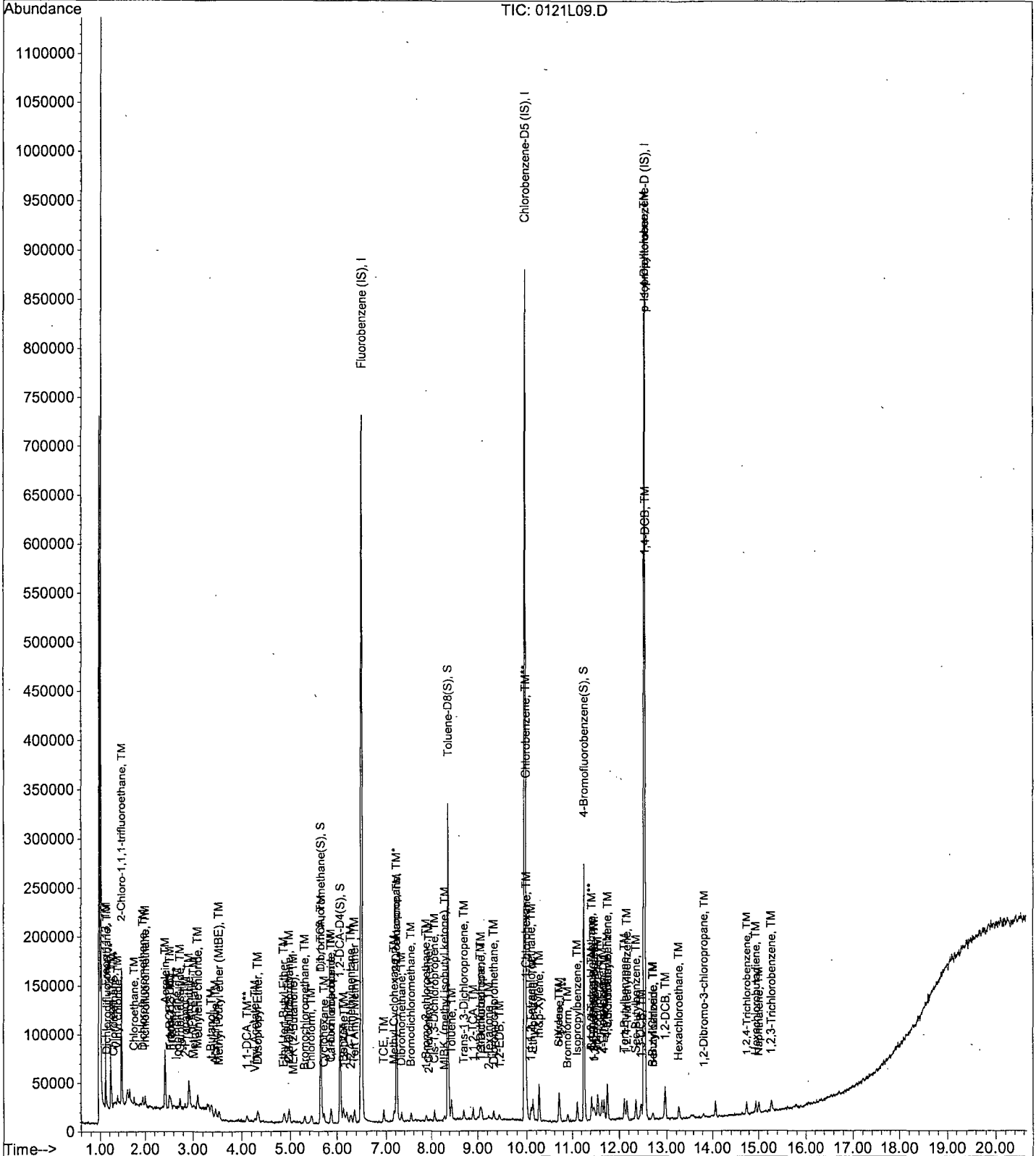
Data File : M:\LOKI\DATA\190121\0121L09.D  
 Acq On : 21 Jan 19 18:47  
 Sample : 1.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)

Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	369600	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	318272	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	170944	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	62734	9.0072	ppb	0.00
Spiked Amount 25.000			Recovery =	36.028%		
43) 1,2-DCA-D4(S)	6.07	65	73820	9.0896	ppb	0.00
Spiked Amount 25.000			Recovery =	36.360%		
64) Toluene-D8(S)	8.37	98	238805	9.1832	ppb	0.00
Spiked Amount 25.000			Recovery =	36.732%		
72) 4-Bromofluorobenzene(S)	11.26	95	103026	9.4443	ppb	0.00
Spiked Amount 25.000			Recovery =	37.776%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	37205	18.4273	ppb	96
3) Dichlorodifluoromethane	1.14	85	6620	2.0683	ppb	97
4) Freon 114	1.25	85	4136	1.6430	ppb #	74
5) Chloromethane	1.29	50	9871	1.9177	ppb	96
6) Vinyl chloride	1.38	62	9757	2.1029	ppb	89
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	77480	19.7371	ppb	98
8) Bromomethane	1.66	94	7618	0.9610	ppb	86
9) Chloroethane	1.76	64	4613	1.4108	ppb	89
10) Dichlorofluoromethane	1.95	67	15265	1.8090	ppb	94
11) Trichlorofluoromethane	2.00	101	11836	1.8271	ppb	96
12) Acrolein	2.43	56	70018	71.3652	ppb #	94
13) Acetone	2.61	43	3142	0.4593	ppb	94
14) Freon-113	2.55	101	7072	1.9692	ppb	87
15) 1,1-DCE	2.52	63	2480	2.0633	ppb	87
16) t-Butanol	3.39	59	28922	65.9203	ppb #	92
17) 2-Propanol	2.85	45	5791	17.4755	ppb #	53
18) Acetonitrile	2.92	41	53663	71.4371	ppb	99
19) Methyl Acetate	3.02	43	8362	1.8561	ppb	97
20) Iodomethane	2.67	142	805	3.7594	ppb #	77
21) Acrylonitrile	3.45	52	3175	1.6828	ppb #	60
22) Methylene chloride	3.10	84	10633	1.7709	ppb	93
23) Carbon disulfide	2.73	76	25765	2.0587	ppb	97
24) Methyl t-butyl ether (MtBE)	3.54	73	22952	2.0000	ppb	99
25) Trans-1,2-DCE	2.52	96	4399	2.0221	ppb	91
26) Diisopropyl Ether	4.33	45	23994	1.9336	ppb #	90
28) 1,1-DCA	4.11	63	14054	1.9731	ppb	93
29) Vinyl Acetate	4.27	43	5002	1.9243	ppb #	85
30) Ethyl tert Butyl Ether	4.87	59	20262	1.8777	ppb	100
31) MEK (2-Butanone)	5.08	43	4876	2.6034	ppb	92
32) Cis-1,2-DCE	4.98	96	8153	2.0110	ppb	97
33) 2,2-Dichloropropane	4.96	77	11317	2.0131	ppb #	86
36) Chloroform	5.45	83	11467	1.8414	ppb	90
37) Bromochloromethane	5.30	128	1875	1.8956	ppb	95
39) 1,1,1-TCA	5.65	97	4285	1.8931	ppb	91
40) Cyclohexane	5.72	41	6776	2.3103	ppb	81
41) 1,1-Dichloropropene	5.88	75	8633	1.9623	ppb #	88
42) 2,2,4-Trimethylpentane	6.29	57	16090	1.9987	ppb #	75
44) Carbon Tetrachloride	5.86	117	8488	1.8288	ppb	89
45) Tert Amyl Methyl Ether	6.36	73	18748	1.9234	ppb #	95

(#) = qualifier out of range (m) = manual integration  
 0121L10.D L0121SUR.M Mon Jan 28 12:10:02 2019 Page 784 of 1057

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L10.D  
 Acq On : 21 Jan 19 19:16  
 Sample : 2.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	10539	2.0817	ppb	# 89
48) Benzene	6.14	78	25147	1.9153	ppb	98
49) TCE	6.95	130	3719	1.6935	ppb	87
50) 2-Pentanone	7.23	43	182419	72.3035	ppb	98
51) 1,2-Dichloropropane	7.21	63	6826	1.9664	ppb	100
52) Bromodichloromethane	7.54	83	5013	1.9003	ppb	# 95
53) Methyl Cyclohexane	7.18	83	9102	1.9371	ppb	90
54) Dibromomethane	7.34	93	4937	2.0356	ppb	97
55) 2-Chloroethyl vinyl ether	7.90	43	932	1.8970	ppb	# 24
56) MIBK (methyl isobutyl ket	8.29	43	7552	2.1680	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	5549	2.0946	ppb	94
58) Cis-1,3-Dichloropropene	8.07	75	11723	2.0378	ppb	91
59) Toluene	8.45	91	14678	1.8603	ppb	99
60) Trans-1,3-Dichloropropene	8.71	75	10769	1.9462	ppb	98
61) 1,1,2-TCA	8.90	83	5344	1.9022	ppb	95
62) 2-Hexanone	9.22	43	4965	2.1081	ppb	# 86
65) 1,2-EDB	9.44	107	3811	1.8648	ppb	90
66) Tetrachloroethene	9.06	166	5167	2.0484	ppb	90
67) 1-Chlorohexane	10.00	91	9318	1.6292	ppb	91
68) 1,1,1,2-Tetrachloroethane	10.09	131	8000	1.9367	ppb	82
69) m&p-Xylene	10.27	91	46006	3.7015	ppb	95
70) o-Xylene	10.70	106	6739	1.8492	ppb	91
71) Styrene	10.71	104	20607	1.8423	ppb	100
73) 1,3-Dichloropropane	9.08	76	11529	1.9780	ppb	94
74) Dibromochloromethane	9.33	129	8523	1.9368	ppb	88
75) Chlorobenzene	10.00	112	19225	1.8830	ppb	93
76) Ethylbenzene	10.14	91	17208	1.8589	ppb	88
77) Bromoform	10.90	173	7421	2.0424	ppb	96
79) Isopropylbenzene	11.11	105	31938	1.9961	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	9448	2.0418	ppb	94
81) 1,2,3-Trichloropropane	11.47	110	1466	1.8179	ppb	# 67
82) t-1,4-Dichloro-2-Butene	11.49	53	1974	1.8722	ppb	# 76
83) Bromobenzene	11.42	156	5202	2.0033	ppb	92
84) n-Propylbenzene	11.56	91	18318	1.8810	ppb	99
85) 4-Ethyltoluene	11.69	105	27662	1.8712	ppb	99
86) 2-Chlorotoluene	11.64	91	12879	2.0845	ppb	99
87) 1,3,5-Trimethylbenzene	11.76	105	24068	1.8780	ppb	86
88) 4-Chlorotoluene	11.77	91	13939	1.9894	ppb	97
89) Tert-Butylbenzene	12.11	119	27552	2.0286	ppb	90
90) 1,2,4-Trimethylbenzene	12.17	105	23275	1.8426	ppb	92
91) Sec-Butylbenzene	12.36	105	32415	1.9618	ppb	96
92) p-Isopropyltoluene	12.52	119	14671	1.9127	ppb	98
93) Benzyl Chloride	12.71	91	10031	1.8295	ppb	# 89
94) 1,3-DCB	12.46	146	8745	1.9001	ppb	98
95) 1,4-DCB	12.57	146	18721	2.0536	ppb	98
96) n-Butylbenzene	12.71	91	10031	1.8295	ppb	97
97) 1,2-DCB	12.97	146	17360	1.9600	ppb	96
98) Hexachloroethane	13.26	117	4671	1.6801	ppb	# 80
99) 1,2-Dibromo-3-chloropropan	13.82	75	2144	1.5293	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	9801	1.7542	ppb	89
101) Hexachlorobutadiene	14.94	225	5881	2.1178	ppb	92
102) Naphthalene	15.01	128	20275	1.7447	ppb	95
103) 1,2,3-Trichlorobenzene	15.27	180	4893	1.9697	ppb	90

Quantitation Report

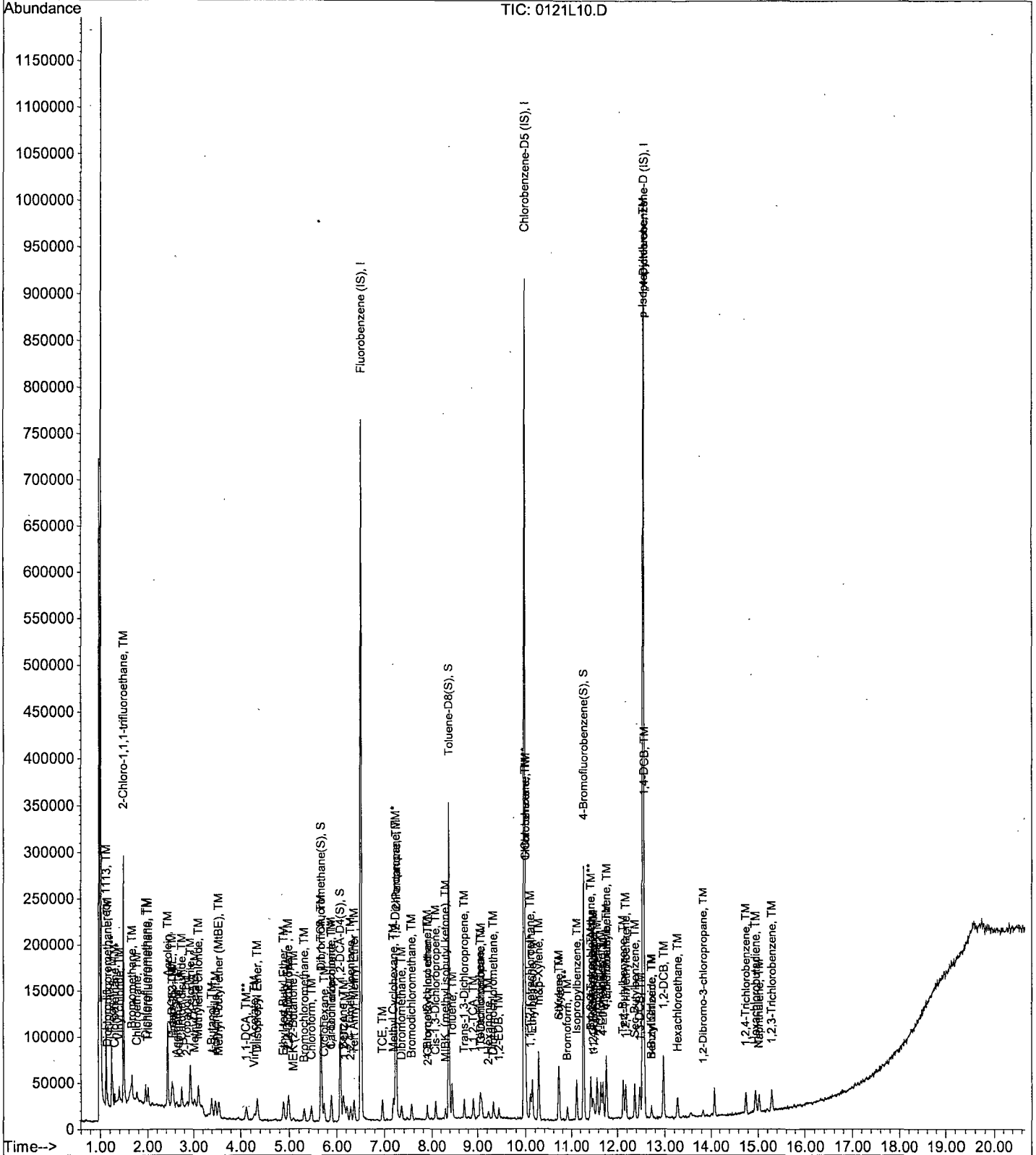
Data File : M:\LOKI\DATA\190121\0121L10.D  
Acq On : 21 Jan 19 19:16  
Sample : 2.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	353344	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	308864	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174208	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	168508	25.3070	ppb	0.00
Spiked Amount				25.000		
					Recovery =	101.228%
43) 1,2-DCA-D4(S)	6.07	65	197954	25.4960	ppb	0.00
Spiked Amount				25.000		
					Recovery =	101.984%
64) Toluene-D8(S)	8.37	98	625618	24.7908	ppb	0.00
Spiked Amount				25.000		
					Recovery =	99.164%
72) 4-Bromofluorobenzene(S)	11.26	95	266638	25.1870	ppb	0.00
Spiked Amount				25.000		
					Recovery =	100.748%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	76167	39.4603	ppb	98
3) Dichlorodifluoromethane	1.15	85	15755	5.1488	ppb	92
4) Freon 114	1.25	85	11613	4.8254	ppb	87
5) Chloromethane	1.29	50	25162	5.1133	ppb	91
6) Vinyl chloride	1.38	62	23045	5.1953	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	151104	40.2627	ppb	97
8) Bromomethane	1.66	94	16973	4.8374	ppb	93
9) Chloroethane	1.76	64	13536	5.6799	ppb	91
10) Dichlorofluoromethane	1.95	67	38421	4.7627	ppb	92
11) Trichlorofluoromethane	2.00	101	31539	5.0927	ppb	99
12) Acrolein	2.43	56	93376	99.5512	ppb	# 93
13) Acetone	2.61	43	6369	4.6227	ppb	94
14) Freon-113	2.55	101	16990	4.9485	ppb	95
15) 1,1-DCE	2.52	63	5104	4.4418	ppb	93
16) t-Butanol	3.38	59	36595	87.2463	ppb	97
17) 2-Propanol	2.84	45	12356	39.0021	ppb	# 77
18) Acetonitrile	2.92	41	68662	95.6091	ppb	96
19) Methyl Acetate	3.02	43	19861	4.8663	ppb	98
20) Iodomethane	2.67	142	2911	4.8665	ppb	99
21) Acrylonitrile	3.44	52	6854	4.4564	ppb	99
22) Methylene chloride	3.10	84	23312	4.8156	ppb	96
23) Carbon disulfide	2.73	76	57330	4.7917	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	53831	4.9065	ppb	97
25) Trans-1,2-DCE	2.52	96	10519	5.0577	ppb	98
26) Diisopropyl Ether	4.33	45	59512	5.0164	ppb	98
28) 1,1-DCA	4.10	63	33514	4.9216	ppb	97
29) Vinyl Acetate	4.33	43	12055	4.8511	ppb	# 98
30) Ethyl tert Butyl Ether	4.87	59	49662	4.8141	ppb	98
31) MEK (2-Butanone)	5.07	43	11339	6.1283	ppb	96
32) Cis-1,2-DCE	4.98	96	18809	4.8528	ppb	93
33) 2,2-Dichloropropane	4.97	77	23684	4.4069	ppb	95
36) Chloroform	5.45	83	28317	4.7565	ppb	99
37) Bromochloromethane	5.30	128	4883	5.1639	ppb	100
39) 1,1,1-TCA	5:65	97	11000	5.0834	ppb	95
40) Cyclohexane	5.72	41	13524	4.9854	ppb	96
41) 1,1-Dichloropropene	5.88	75	20553	4.8866	ppb	93
42) 2,2,4-Trimethylpentane	6.29	57	38125	4.9538	ppb	98
44) Carbon Tetrachloride	5.87	117	22586	5.0901	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	46716	5.0132	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L11.D  
 Acq On : 21 Jan 19 19:44  
 Sample : 5.0ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:10:02 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	23438	4.8425	ppb	99
48) Benzene	6.13	78	62771	5.0008	ppb	97
49) TCE	6.95	130	11108	5.2907	ppb	93
50) 2-Pentanone	7.23	43	243642	101.0126	ppb	98
51) 1,2-Dichloropropane	7.20	63	16239	4.8934	ppb	100
52) Bromodichloromethane	7.55	83	13170	5.2222	ppb	94
53) Methyl Cyclohexane	7.17	83	22090	4.9175	ppb	97
54) Dibromomethane	7.34	93	12218	5.2695	ppb	92
55) 2-Chloroethyl vinyl ether	7.94	43	1355	4.3832	ppb	97
56) MIBK (methyl isobutyl ket	8.28	43	19404	5.8267	ppb	# 88
57) 1-Bromo-2-chloroethane	7.89	63	12398	4.8951	ppb	91
58) Cis-1,3-Dichloropropene	8.07	75	27380	4.9783	ppb	95
59) Toluene	8.44	91	38744	5.1364	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	25924	4.9006	ppb	99
61) 1,1,2-TCA	8.90	83	13197	4.9136	ppb	88
62) 2-Hexanone	9.22	43	11122	4.9396	ppb	92
65) 1,2-EDB	9.44	107	9722	4.9020	ppb	83
66) Tetrachloroethene	9.05	166	12132	4.9562	ppb	98
67) 1-Chlorohexane	10.00	91	21480	4.7600	ppb	94
68) 1,1,1,2-Tetrachloroethane	10.09	131	18966	4.7312	ppb	97
69) m&p-Xylene	10.26	91	120535	9.9933	ppb	95
70) o-Xylene	10.70	106	17040	4.8182	ppb	97
71) Styrene	10.71	104	56179	5.1756	ppb	92
73) 1,3-Dichloropropane	9.08	76	27907	4.9339	ppb	92
74) Dibromochloromethane	9.33	129	21132	4.9484	ppb	90
75) Chlorobenzene	10.00	112	49981	5.0444	ppb	96
76) Ethylbenzene	10.13	91	43976	4.8951	ppb	98
77) Bromoform	10.90	173	17972	5.0970	ppb	96
79) Isopropylbenzene	11.11	105	81475	4.9966	ppb	99
80) 1,1,2,2-Tetrachloroethane	11.43	83	22906	4.8574	ppb	93
81) 1,2,3-Trichloropropane	11.47	110	4067	4.9487	ppb	# 76
82) t-1,4-Dichloro-2-Butene	11.49	53	5279	4.9131	ppb	86
83) Bromobenzene	11.43	156	13375	5.0543	ppb	95
84) n-Propylbenzene	11.56	91	49969	5.0351	ppb	97
85) 4-Ethyltoluene	11.69	105	70713	4.6939	ppb	97
86) 2-Chlorotoluene	11.64	91	31752	5.0428	ppb	95
87) 1,3,5-Trimethylbenzene	11.76	105	63419	4.8559	ppb	94
88) 4-Chlorotoluene	11.76	91	35912	5.0293	ppb	100
89) Tert-Butylbenzene	12.12	119	68550	4.9526	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	62396	4.8472	ppb	99
91) Sec-Butylbenzene	12.35	105	83294	4.9465	ppb	99
92) p-Isopropyltoluene	12.52	119	35808	4.5810	ppb	99
93) Benzyl Chloride	12.72	91	26928	4.8193	ppb	95
94) 1,3-DCB	12.46	146	23904	5.0965	ppb	98
95) 1,4-DCB	12.56	146	44420	4.7814	ppb	91
96) n-Butylbenzene	12.72	91	26928	4.8193	ppb	# 90
97) 1,2-DCB	12.97	146	44805	4.9638	ppb	94
98) Hexachloroethane	13.26	117	14368	5.0712	ppb	96
99) 1,2-Dibromo-3-chloropropan	13.82	75	5658	5.0335	ppb	97
100) 1,2,4-Trichlorobenzene	14.74	180	25473	4.4737	ppb	89
101) Hexachlorobutadiene	14.93	225	14153	5.0012	ppb	97
102) Naphthalene	15.01	128	54729	4.6213	ppb	94
103) 1,2,3-Trichlorobenzene	15.27	180	11326	4.4740	ppb	96

(#) = qualifier out of range (m) = manual integration  
 0121L11.D L0121SUR.M Mon Jan 28 12:58:19 2019 Page 788 of 1057



Quantitation Report

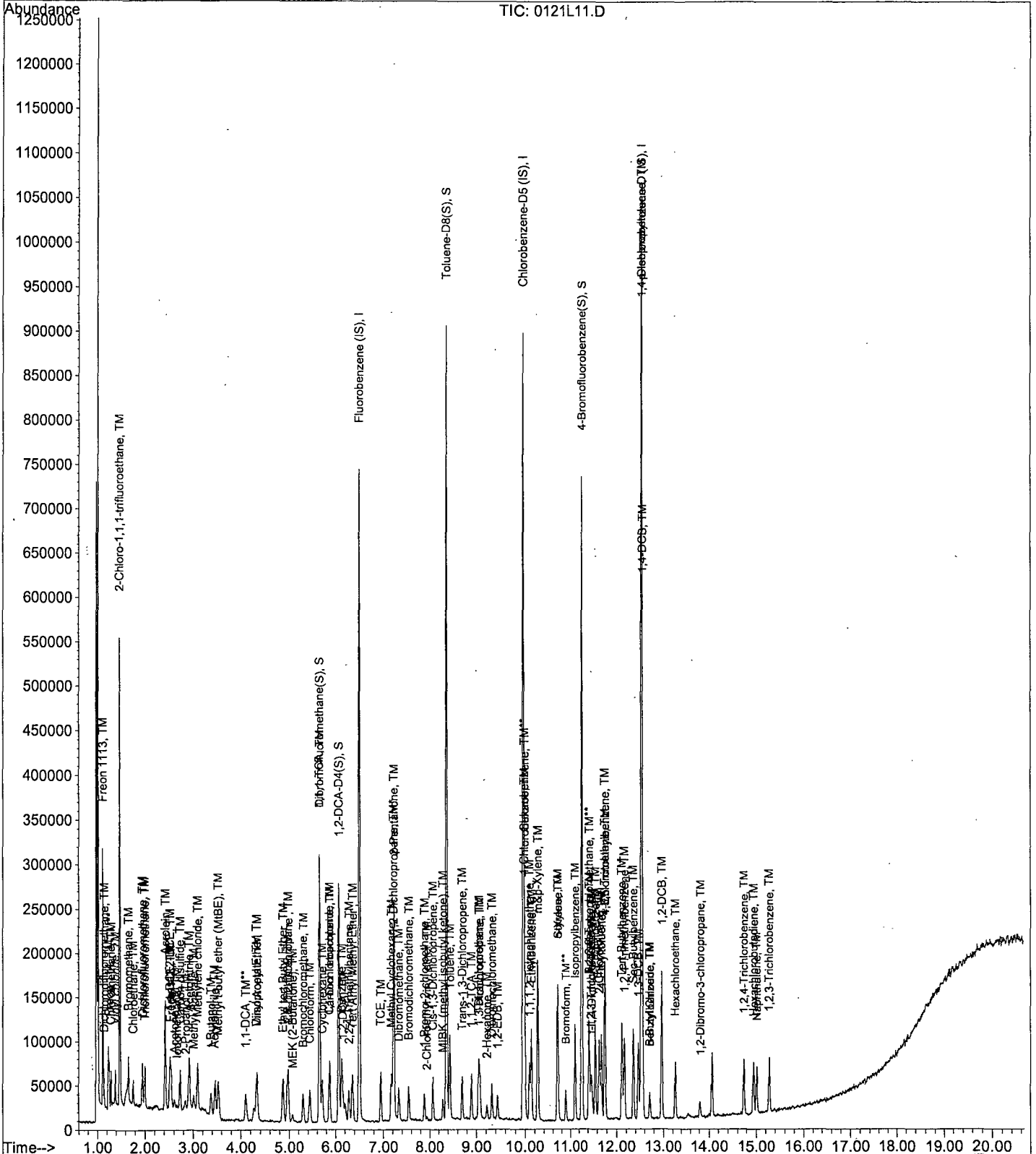
Data File : M:\LOKI\DATA\190121\0121L11.D  
Acq On : 21 Jan 19 19:44  
Sample : 5.0ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:10 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	368896	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	312384	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.53	152	171968	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	171899	24.7279	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.912%	
43) 1,2-DCA-D4(S)	6.07	65	197736	24.3942	ppb	0.00
Spiked Amount	25.000		Recovery	=	97.576%	
64) Toluene-D8(S)	8.37	98	643709	25.2202	ppb	0.00
Spiked Amount	25.000		Recovery	=	100.880%	
72) 4-Bromofluorobenzene(S)	11.26	95	270690	25.2817	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.128%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	198769	98.6361	ppb	100
3) Dichlorodifluoromethane	1.15	85	30773	8.8455	ppb	100
4) Freon 114	1.25	85	25160	10.0137	ppb	100
5) Chloromethane	1.29	50	48026	9.3482	ppb	100
6) Vinyl chloride	1.38	62	46975	10.1436	ppb	100
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	388800	99.2310	ppb	100
8) Bromomethane	1.65	94	31694	10.1920	ppb	100
9) Chloroethane	1.75	64	22898	9.6079	ppb	100
10) Dichlorofluoromethane	1.95	67	78702	9.3447	ppb	100
11) Trichlorofluoromethane	2.00	101	62822	9.7164	ppb	100
12) Acrolein	2.43	56	114170	120.8852	ppb	100
13) Acetone	2.62	43	10852	9.6031	ppb	100
14) Freon-113	2.54	101	34802	9.7090	ppb	100
15) 1,1-DCE	2.52	63	10525	8.7733	ppb	100
16) t-Butanol	3.38	59	55623	127.0204	ppb	100
17) 2-Propanol	2.84	45	29552	92.9936	ppb	# 100
18) Acetonitrile	2.92	41	89807	119.7807	ppb	100
19) Methyl Acetate	3.02	43	40350	9.6323	ppb	100
20) Iodomethane	2.67	142	8529	7.5851	ppb	100
21) Acrylonitrile	3.45	52	14652	9.6716	ppb	100
22) Methylene chloride	3.10	84	46385	9.7064	ppb	100
23) Carbon disulfide	2.73	76	118117	9.4561	ppb	100
24) Methyl t-butyl ether (MtBE)	3.54	73	112450	9.8173	ppb	100
25) Trans-1,2-DCE	2.52	96	21024	9.6824	ppb	100
26) Diisopropyl Ether	4.33	45	119590	9.6556	ppb	100
28) 1,1-DCA	4.10	63	68991	9.7043	ppb	100
29) Vinyl Acetate	4.33	43	23279	8.9728	ppb	100
30) Ethyl tert Butyl Ether	4.87	59	104802	9.7309	ppb	100
31) MEK (2-Butanone)	5.07	43	18395	9.4436	ppb	100
32) Cis-1,2-DCE	4.98	96	37183	9.1889	ppb	100
33) 2,2-Dichloropropane	4.97	77	51272	9.1379	ppb	100
36) Chloroform	5.45	83	61890	9.9576	ppb	100
37) Bromochloromethane	5.30	128	9165	9.2836	ppb	100
39) 1,1,1-TCA	5.65	97	22176	9.8160	ppb	100
40) Cyclohexane	5.71	41	26205	9.3805	ppb	100
41) 1,1-Dichloropropene	5.88	75	42586	9.6982	ppb	100
42) 2,2,4-Trimethylpentane	6.28	57	77117	9.5977	ppb	100
44) Carbon Tetrachloride	5.87	117	44622	9.6323	ppb	100
45) Tert Amyl Methyl Ether	6.36	73	94295	9.6924	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0121L12.D  
 Acq On : 21 Jan 19 20:13  
 Sample : 10ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:34:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	49446	9.7852	ppb	100
48) Benzene	6.13	78	125189	9.5529	ppb	100
49) TCE	6.95	130	21696	9.8982	ppb	100
50) 2-Pentanone	7.23	43	309909	123.0698	ppb	100
51) 1,2-Dichloropropane	7.21	63	32295	9.3213	ppb	100
52) Bromodichloromethane	7.55	83	25920	9.8445	ppb	100
53) Methyl Cyclohexane	7.17	83	45341	9.6679	ppb	100
54) Dibromomethane	7.34	93	24082	9.9485	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	824	4.0693	ppb	100
56) MIBK (methyl isobutyl ket	8.29	43	33964	9.7689	ppb	100
57) 1-Bromo-2-chloroethane	7.89	63	24984	9.4486	ppb	100
58) Cis-1,3-Dichloropropene	8.07	75	55998	9.7524	ppb	100
59) Toluene	8.44	91	79664	10.1160	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	54074	9.7911	ppb	100
61) 1,1,2-TCA	8.90	83	27689	9.8748	ppb	100
62) 2-Hexanone	9.22	43	23961	10.1932	ppb	100
65) 1,2-EDB	9.44	107	20104	10.0225	ppb	100
66) Tetrachloroethene	9.05	166	24216	9.7813	ppb	100
67) 1-Chlorohexane	10.00	91	41411	9.6597	ppb	100
68) 1,1,1,2-Tetrachloroethane	10.09	131	40335	9.9484	ppb	100
69) m&p-Xylene	10.26	91	242518	19.8801	ppb	100
70) o-Xylene	10.70	106	36056	10.0803	ppb	100
71) Styrene	10.71	104	108468	9.8801	ppb	100
73) 1,3-Dichloropropane	9.08	76	55762	9.7475	ppb	100
74) Dibromochloromethane	9.33	129	43274	10.0191	ppb	100
75) Chlorobenzene	10.00	112	103383	10.3165	ppb	100
76) Ethylbenzene	10.13	91	92144	10.1413	ppb	100
77) Bromoform	10.90	173	35559	9.9712	ppb	100
79) Isopropylbenzene	11.11	105	165721	10.2956	ppb	100
80) 1,1,2,2-Tetrachloroethane	11.43	83	44387	9.5353	ppb	100
81) 1,2,3-Trichloropropane	11.47	110	8530	10.5144	ppb	100
82) t-1,4-Dichloro-2-Butene	11.50	53	9944	9.3753	ppb	100
83) Bromobenzene	11.42	156	26392	10.1033	ppb	100
84) n-Propylbenzene	11.56	91	98217	10.0256	ppb	100
85) 4-Ethyltoluene	11.69	105	149952	10.0834	ppb	100
86) 2-Chlorotoluene	11.64	91	62128	9.9956	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	131873	10.2288	ppb	100
88) 4-Chlorotoluene	11.76	91	72632	10.3043	ppb	100
89) Tert-Butylbenzene	12.11	119	139174	10.1860	ppb	100
90) 1,2,4-Trimethylbenzene	12.17	105	131745	10.3678	ppb	100
91) Sec-Butylbenzene	12.35	105	169371	10.1893	ppb	100
92) p-Isopropyltoluene	12.52	119	74168	9.6121	ppb	100
93) Benzyl Chloride	12.71	91	52447	9.5088	ppb	100
94) 1,3-DCB	12.46	146	47080	10.1684	ppb	100
95) 1,4-DCB	12.56	146	94601	10.3156	ppb	100
96) n-Butylbenzene	12.71	91	52447	9.5088	ppb	100
97) 1,2-DCB	12.97	146	88322	9.9123	ppb	100
98) Hexachloroethane	13.26	117	29398	10.5111	ppb	100
99) 1,2-Dibromo-3-chloropropan	13.82	75	9836	9.3781	ppb	100
100) 1,2,4-Trichlorobenzene	14.74	180	53855	9.5816	ppb	100
101) Hexachlorobutadiene	14.94	225	27768	9.9401	ppb	100
102) Naphthalene	15.01	128	112019	9.5820	ppb	100
103) 1,2,3-Trichlorobenzene	15.27	180	22120	8.8516	ppb	100

Quantitation Report

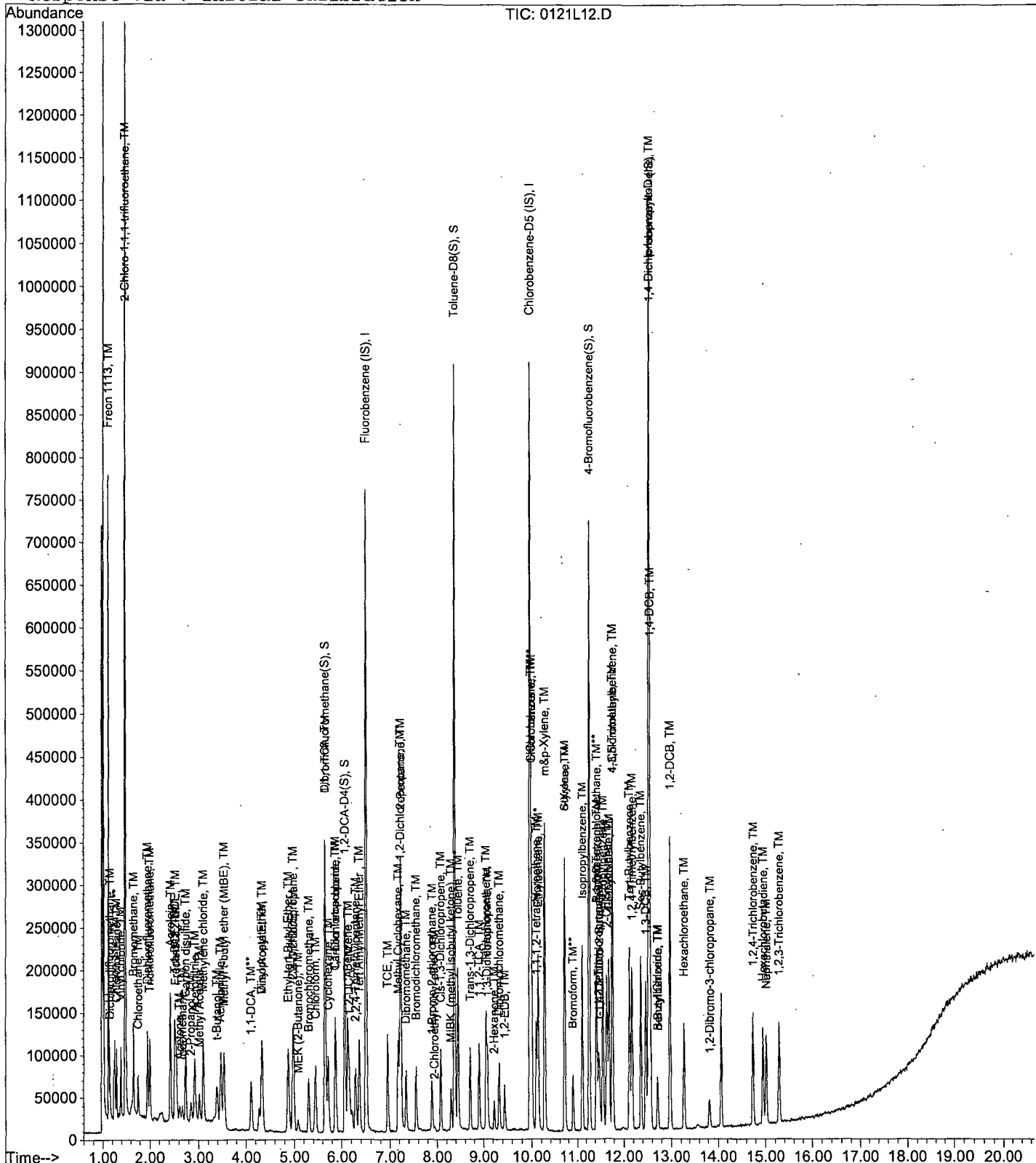
Data File : M:\LOKI\DATA\190121\0121L12.D  
Acq On : 21 Jan 19 20:13  
Sample : 10ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	345152	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307136	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	162624	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	336404	51.7212	ppb	0.00
Spiked Amount	25.000		Recovery	=	206.884%	
43) 1,2-DCA-D4(S)	6.07	65	391899	51.6736	ppb	0.00
Spiked Amount	25.000		Recovery	=	206.696%	
64) Toluene-D8(S)	8.37	98	1268942	50.5660	ppb	0.00
Spiked Amount	25.000		Recovery	=	202.264%	
72) 4-Bromofluorobenzene(S)	11.26	95	532258	50.5608	ppb	0.00
Spiked Amount	25.000		Recovery	=	202.244%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	232336	123.2246	ppb	99
3) Dichlorodifluoromethane	1.15	85	66144	20.2243	ppb	98
4) Freon 114	1.25	85	50024	21.2793	ppb	91
5) Chloromethane	1.29	50	94570	19.6742	ppb	97
6) Vinyl chloride	1.38	62	94000	21.6944	ppb	94
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	459520	125.3485	ppb	99
8) Bromomethane	1.65	94	59405	22.3763	ppb	94
9) Chloroethane	1.75	64	46120	21.4348	ppb	97
10) Dichlorofluoromethane	1.95	67	151557	19.2331	ppb	100
11) Trichlorofluoromethane	2.00	101	130510	21.5740	ppb	94
12) Acrolein	2.43	56	133567	152.0316	ppb	# 93
13) Acetone	2.61	43	18565	20.2568	ppb	98
14) Freon-113	2.54	101	70521	21.0273	ppb	94
15) 1,1-DCE	2.52	63	21488	19.1438	ppb	92
16) t-Butanol	3.39	59	49603	121.0655	ppb	98
17) 2-Propanol	2.85	45	32138	108.0883	ppb	# 99
18) Acetonitrile	2.92	41	102232	145.7327	ppb	98
19) Methyl Acetate	3.02	43	76670	19.7386	ppb	92
20) Iodomethane	2.67	142	24832	16.5042	ppb	98
21) Acrylonitrile	3.45	52	28326	20.5403	ppb	85
22) Methylene chloride	3.10	84	86698	19.9723	ppb	98
23) Carbon disulfide	2.73	76	229675	19.6521	ppb	98
24) Methyl t-butyl ether (MtBE)	3.54	73	217341	20.2800	ppb	97
25) Trans-1,2-DCE	2.52	96	40392	19.8819	ppb	96
26) Diisopropyl Ether	4.33	45	236728	20.4281	ppb	99
28) 1,1-DCA	4.10	63	134845	20.2722	ppb	99
29) Vinyl Acetate	4.27	43	51916	21.3874	ppb	# 79
30) Ethyl tert Butyl Ether	4.88	59	206845	20.5268	ppb	97
31) MEK (2-Butanone)	5.08	43	34819	18.9590	ppb	# 81
32) Cis-1,2-DCE	4.98	96	73308	19.3626	ppb	95
33) 2,2-Dichloropropane	4.97	77	97363	18.5462	ppb	96
36) Chloroform	5.45	83	121450	20.8846	ppb	94
37) Bromochloromethane	5.30	128	17088	18.4998	ppb	85
39) 1,1,1-TCA	5.65	97	42680	20.1915	ppb	99
40) Cyclohexane	5.72	41	52310	20.1824	ppb	93
41) 1,1-Dichloropropene	5.88	75	79419	19.3305	ppb	96
42) 2,2,4-Trimethylpentane	6.29	57	153073	20.3615	ppb	98
44) Carbon Tetrachloride	5.87	117	90088	20.7847	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	180001	19.7748	ppb	96

(#) = qualifier out of range (m) = manual integration  
 0121L13.D L0121SUR.M Mon Jan 28 12:00:2019 Page 793 of 1057

Data File : M:\LOKI\DATA\190121\0121L13.D  
 Acq On : 21 Jan 19 20:41  
 Sample : 20ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 12  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.16	62	93572	19.7915	ppb	99
48) Benzene	6.13	78	243279	19.8412	ppb	97
49) TCE	6.95	130	38040	18.5485	ppb	96
50) 2-Pentanone	7.23	43	345887	146.8064	ppb	99
51) 1,2-Dichloropropane	7.20	63	63630	19.6290	ppb	98
52) Bromodichloromethane	7.54	83	49856	20.2382	ppb	93
53) Methyl Cyclohexane	7.17	83	86600	19.7356	ppb	99
54) Dibromomethane	7.34	93	45714	20.1839	ppb	98
55) 2-Chloroethyl vinyl ether	7.93	43	1514	7.9911	ppb	# 83
56) MIBK (methyl isobutyl ket	8.29	43	62554	19.2298	ppb	98
57) 1-Bromo-2-chloroethane	7.88	63	49488	20.0032	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	108818	20.2551	ppb	95
59) Toluene	8.44	91	148800	20.1950	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	101719	19.6851	ppb	97
61) 1,1,2-TCA	8.90	83	53082	20.2331	ppb	98
62) 2-Hexanone	9.22	43	41255	18.7576	ppb	# 90
65) 1,2-EDB	9.44	107	37912	19.2233	ppb	93
66) Tetrachloroethene	9.05	166	46856	19.2494	ppb	96
67) 1-Chlorohexane	10.00	91	80410	19.7081	ppb	96
68) 1,1,1,2-Tetrachloroethane	10.09	131	79373	19.9115	ppb	96
69) m&p-Xylene	10.26	91	487656	40.6580	ppb	95
70) o-Xylene	10.70	106	68104	19.3654	ppb	98
71) Styrene	10.71	104	213830	19.8102	ppb	97
73) 1,3-Dichloropropane	9.08	76	108622	19.3121	ppb	98
74) Dibromochloromethane	9.33	129	82904	19.5225	ppb	98
75) Chlorobenzene	10.00	112	201545	20.4556	ppb	95
76) Ethylbenzene	10.13	91	172544	19.3145	ppb	99
77) Bromoform	10.89	173	66087	18.8483	ppb	89
79) Isopropylbenzene	11.11	105	324331	21.3071	ppb	98
80) 1,1,2,2-Tetrachloroethane	11.43	83	86065	19.5510	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	15713	20.4813	ppb	86
82) t-1,4-Dichloro-2-Butene	11.50	53	19789	19.7292	ppb	92
83) Bromobenzene	11.43	156	51744	20.9467	ppb	97
84) n-Propylbenzene	11.56	91	206667	22.3079	ppb	100
85) 4-Ethyltoluene	11.69	105	305303	21.7094	ppb	100
86) 2-Chlorotoluene	11.64	91	122354	20.8163	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	259367	21.2739	ppb	97
88) 4-Chlorotoluene	11.77	91	140608	21.0942	ppb	100
89) Tert-Butylbenzene	12.11	119	283848	21.9683	ppb	94
90) 1,2,4-Trimethylbenzene	12.17	105	259256	21.5748	ppb	99
91) Sec-Butylbenzene	12.36	105	335718	21.3572	ppb	98
92) p-Isopropyltoluene	12.52	119	154432	21.1641	ppb	99
93) Benzyl Chloride	12.71	91	101776	19.5124	ppb	92
94) 1,3-DCB	12.46	146	89320	20.4000	ppb	98
95) 1,4-DCB	12.56	146	177170	20.4292	ppb	96
96) n-Butylbenzene	12.71	91	101776	19.5124	ppb	95
97) 1,2-DCB	12.97	146	172125	20.4273	ppb	99
98) Hexachloroethane	13.26	117	57725	21.8252	ppb	98
99) 1,2-Dibromo-3-chloropropan	13.82	75	19685	20.6008	ppb	89
100) 1,2,4-Trichlorobenzene	14.74	180	113768	21.4040	ppb	94
101) Hexachlorobutadiene	14.94	225	55456	20.9923	ppb	94
102) Naphthalene	15.01	128	233837	21.1514	ppb	99
103) 1,2,3-Trichlorobenzene	15.28	180	50840	21.5131	ppb	93

(#) = qualifier out of range (m) = manual integration  
 0121L13.D L0121SUR.M Mon Jan 28 12:09:00 2019 Page 794 of 1057

Quantitation Report

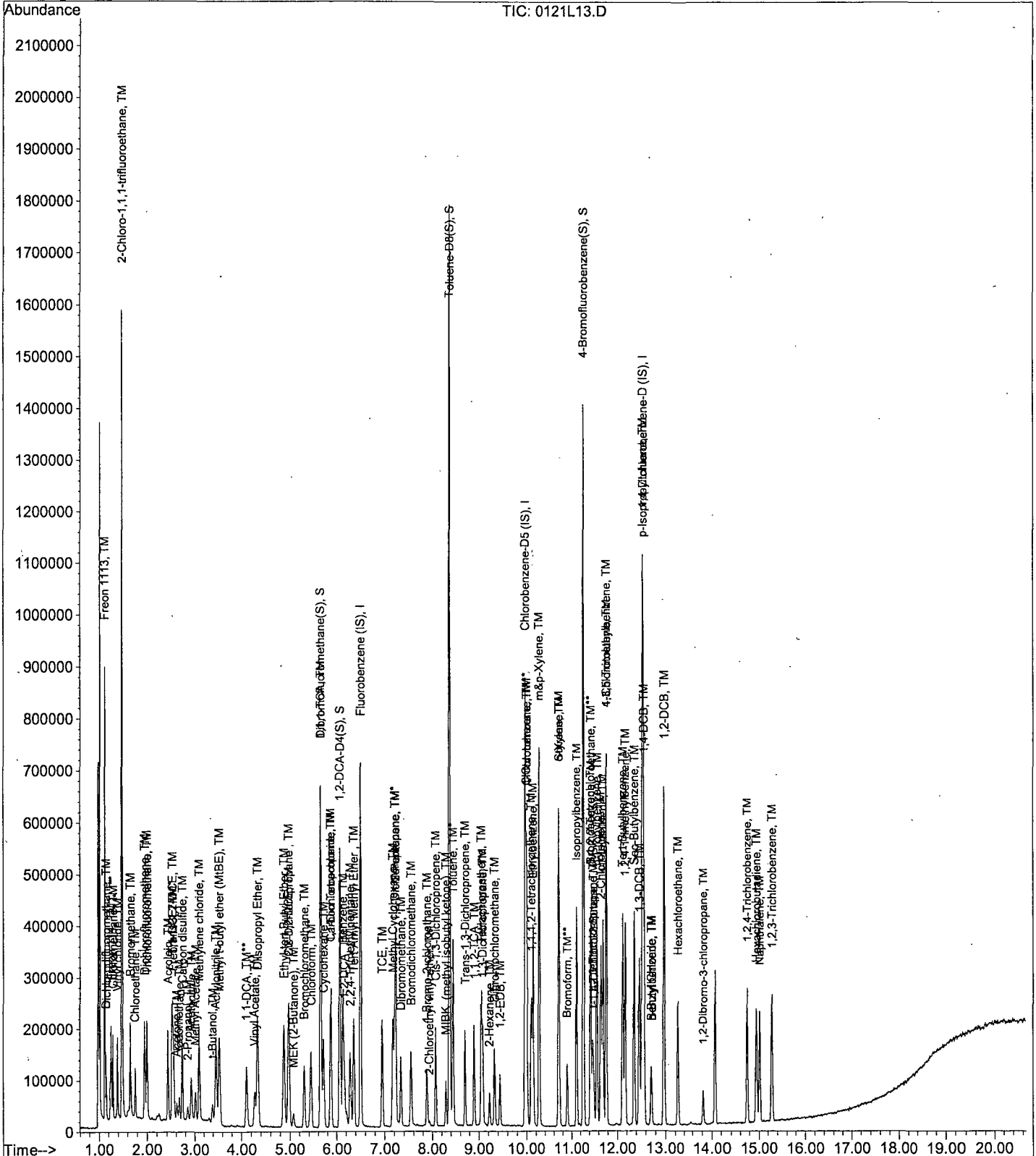
Data File : M:\LOKI\DATA\190121\0121L13.D  
Acq On : 21 Jan 19 20:41  
Sample : 20ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 12  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	341760	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	305408	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174144	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	324971	50.4593	ppb	0.00
Spiked Amount 25.000			Recovery = 201.836%			
43) 1,2-DCA-D4 (S)	6.07	65	377103	50.2162	ppb	0.00
Spiked Amount 25.000			Recovery = 200.864%			
64) Toluene-D8 (S)	8.37	98	1239269	49.6630	ppb	0.00
Spiked Amount 25.000			Recovery = 198.652%			
72) 4-Bromofluorobenzene(S)	11.26	95	521895	49.8568	ppb	0.00
Spiked Amount 25.000			Recovery = 199.428%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.11	116	256540	137.4121	ppb	98
3) Dichlorodifluoromethane	1.14	85	120217	37.8848	ppb	96
4) Freon 114	1.25	85	80768	34.6983	ppb	97
5) Chloromethane	1.29	50	184500	38.7640	ppb	91
6) Vinyl chloride	1.38	62	174924	40.7716	ppb	96
7) 2-Chloro-1,1,1-trifluoroet	1.47	118	487552	134.3151	ppb	98
8) Bromomethane	1.65	94	105409	41.6454	ppb	92
9) Chloroethane	1.75	64	82507	39.2528	ppb	99
10) Dichlorofluoromethane	1.95	67	296411	37.9889	ppb	96
11) Trichlorofluoromethane	2.00	101	236279	39.4458	ppb	98
12) Acrolein	2.43	56	151996	175.2499	ppb	# 94
13) Acetone	2.61	43	36824	43.8459	ppb	99
14) Freon-113	2.54	101	122325	36.8357	ppb	96
15) 1,1-DCE	2.52	63	42192	37.9622	ppb	89
16) t-Butanol	3.39	59	63856	157.3995	ppb	94
17) 2-Propanol	2.85	45	40966	139.1465	ppb	# 97
18) Acetonitrile	2.92	41	117922	169.7673	ppb	98
19) Methyl Acetate	3.01	43	149118	38.9370	ppb	97
20) Iodomethane	2.66	142	61952	36.4760	ppb	97
21) Acrylonitrile	3.45	52	51422	38.0931	ppb	92
22) Methylene chloride	3.09	84	170373	40.2121	ppb	95
23) Carbon disulfide	2.73	76	443795	38.3501	ppb	99
24) Methyl t-butyl ether (MtBE)	3.53	73	418688	39.4554	ppb	97
25) Trans-1,2-DCE	2.52	96	78108	38.8283	ppb	98
26) Diisopropyl Ether	4.33	45	454998	39.6530	ppb	96
28) 1,1-DCA	4.10	63	261232	39.6627	ppb	98
29) Vinyl Acetate	4.27	43	96718	40.2395	ppb	# 82
30) Ethyl tert Butyl Ether	4.87	59	401062	40.1954	ppb	98
31) MEK (2-Butanone)	5.07	43	70323	38.5225	ppb	91
32) Cis-1,2-DCE	4.98	96	141010	37.6141	ppb	96
33) 2,2-Dichloropropane	4.96	77	193427	37.2107	ppb	95
36) Chloroform	5.45	83	228931	39.7579	ppb	99
37) Bromochloromethane	5.30	128	33952	37.1220	ppb	93
39) 1,1,1-TCA	5.65	97	83464	39.8780	ppb	99
40) Cyclohexane	5.71	41	95716	37.4225	ppb	97
41) 1,1-Dichloropropene	5.88	75	153573	37.7504	ppb	95
42) 2,2,4-Trimethylpentane	6.28	57	279729	37.5784	ppb	99
44) Carbon Tetrachloride	5.87	117	172684	40.2362	ppb	87
45) Tert Amyl Methyl Ether	6.36	73	352491	39.1089	ppb	96



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L14.D  
 Acq On : 21 Jan 19 21:10  
 Sample : 40ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 13  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)

Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	181549	38.7807	ppb	98
48) Benzene	6.13	78	473155	38.9723	ppb	98
49) TCE	6.95	130	78336	38.5761	ppb	97
50) 2-Pentanone	7.23	43	409603	175.5751	ppb	100
51) 1,2-Dichloropropane	7.20	63	123123	38.3587	ppb	98
52) Bromodichloromethane	7.55	83	96800	39.6842	ppb	97
53) Methyl Cyclohexane	7.17	83	164336	37.8229	ppb	96
54) Dibromomethane	7.34	93	90696	40.4421	ppb	100
55) 2-Chloroethyl vinyl ether	7.93	43	3750	19.9895	ppb	95
56) MIBK (methyl isobutyl ket	8.29	43	124704	38.7159	ppb	92
57) 1-Bromo-2-chloroethane	7.88	63	95936	39.1625	ppb	98
58) Cis-1,3-Dichloropropene	8.07	75	211060	39.6761	ppb	93
59) Toluene	8.44	91	298304	40.8873	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	201022	39.2887	ppb	98
61) 1,1,2-TCA	8.90	83	103628	39.8915	ppb	99
62) 2-Hexanone	9.22	43	82498	37.8820	ppb	91
65) 1,2-EDB	9.44	107	75224	38.3582	ppb	92
66) Tetrachloroethene	9.05	166	91104	37.6391	ppb	96
67) 1-Chlorohexane	10.00	91	156566	39.2106	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.09	131	157417	39.7130	ppb	95
69) m&p-Xylene	10.27	91	973464	81.6210	ppb	96
70) o-Xylene	10.70	106	139712	39.9519	ppb	99
71) Styrene	10.71	104	432133	40.2612	ppb	99
73) 1,3-Dichloropropane	9.08	76	215855	38.5945	ppb	99
74) Dibromochloromethane	9.33	129	165046	39.0854	ppb	98
75) Chlorobenzene	10.00	112	392997	40.1126	ppb	98
76) Ethylbenzene	10.13	91	353024	39.7409	ppb	98
77) Bromoform	10.90	173	131386	37.6839	ppb	92
79) Isopropylbenzene	11.11	105	647727	39.7378	ppb	95
80) 1,1,2,2-Tetrachloroethane	11.43	83	178172	37.7970	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	33112	40.3051	ppb	100
82) t-1,4-Dichloro-2-Butene	11.49	53	38560	35.9004	ppb	98
83) Bromobenzene	11.42	156	100840	38.1209	ppb	97
84) n-Propylbenzene	11.56	91	411134	41.4427	ppb	99
85) 4-Ethyltoluene	11.69	105	630395	41.8606	ppb	100
86) 2-Chlorotoluene	11.64	91	249582	39.6530	ppb	96
87) 1,3,5-Trimethylbenzene	11.76	105	537564	41.1754	ppb	97
88) 4-Chlorotoluene	11.76	91	286018	40.0704	ppb	99
89) Tert-Butylbenzene	12.12	119	564404	40.7922	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	548158	42.5990	ppb	98
91) Sec-Butylbenzene	12.36	105	685840	40.7444	ppb	99
92) p-Isopropyltoluene	12.52	119	324736	41.5594	ppb	97
93) Benzyl Chloride	12.71	91	235642	42.1886	ppb	96
94) 1,3-DCB	12.46	146	186112	39.6946	ppb	98
95) 1,4-DCB	12.56	146	362736	39.0597	ppb	97
96) n-Butylbenzene	12.71	91	235642	42.1886	ppb	95
97) 1,2-DCB	12.97	146	367093	40.6837	ppb	97
98) Hexachloroethane	13.26	117	118495	41.8380	ppb	94
99) 1,2-Dibromo-3-chloropropan	13.82	75	41738	41.4520	ppb	93
100) 1,2,4-Trichlorobenzene	14.74	180	249819	43.8911	ppb	95
101) Hexachlorobutadiene	14.94	225	121241	42.8584	ppb	93
102) Naphthalene	15.01	128	514760	43.4817	ppb	98
103) 1,2,3-Trichlorobenzene	15.27	180	110048	43.4867	ppb	96

Quantitation Report

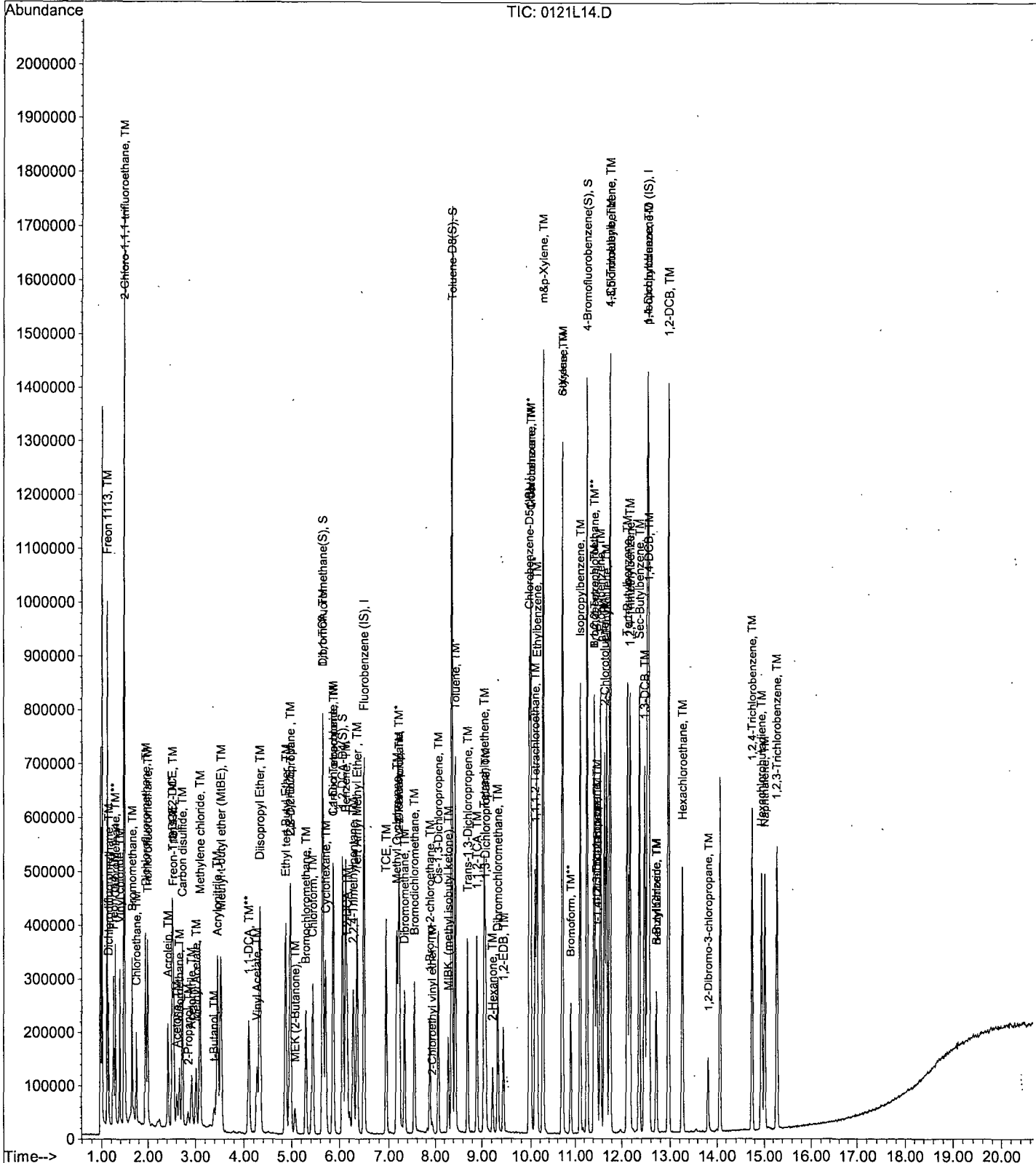
Data File : M:\LOKI\DATA\190121\0121L14.D  
Acq On : 21 Jan 19 21:10  
Sample : 40ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 13  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	340224	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	284800	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174592	25.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Dibromofluoromethane(S)	5.65	111	634983	99.0411	ppb	0.00
Spiked Amount 25.000			Recovery =	396.164%		
43) 1,2-DCA-D4(S)	6.07	65	739931	98.9762	ppb	0.00
Spiked Amount 25.000			Recovery =	395.904%		
64) Toluene-D8(S)	8.37	98	2377544	102.1730	ppb	0.00
Spiked Amount 25.000			Recovery =	408.692%		
72) 4-Bromofluorobenzene(S)	11.26	95	987834	101.1966	ppb	0.00
Spiked Amount 25.000			Recovery =	404.788%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	310348	166.9841	ppb	98
3) Dichlorodifluoromethane	1.14	85	162106	52.4293	ppb	100
4) Freon 114	1.25	85	104356	45.0342	ppb	91
5) Chloromethane	1.29	50	219700	46.3680	ppb	94
6) Vinyl chloride	1.38	62	223274	52.2761	ppb	97
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	551872	152.7209	ppb	100
8) Bromomethane	1.65	94	131367	52.6272	ppb	97
9) Chloroethane	1.74	64	104390	50.0646	ppb	99
10) Dichlorofluoromethane	1.95	67	370548	47.7049	ppb	97
11) Trichlorofluoromethane	1.99	101	310052	51.9956	ppb	98
12) Acrolein	2.43	56	177970	206.7430	ppb	# 92
13) Acetone	2.62	43	44126	53.4409	ppb	99
14) Freon-113	2.54	101	172365	52.1386	ppb	93
15) 1,1-DCE	2.52	63	53104	47.9960	ppb	90
16) t-Butanol	3.40	59	89197	220.8555	ppb	95
17) 2-Propanol	2.86	45	45461	155.1115	ppb	# 100
18) Acetonitrile	2.92	41	135953	196.6094	ppb	94
19) Methyl Acetate	3.02	43	193892	50.9093	ppb	96
20) Iodomethane	2.67	142	87032	50.0917	ppb	97
21) Acrylonitrile	3.45	52	72530	54.1899	ppb	86
22) Methylene chloride	3.09	84	217803	51.8045	ppb	100
23) Carbon disulfide	2.73	76	562775	48.8512	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	534157	50.5640	ppb	97
25) Trans-1,2-DCE	2.52	96	98143	49.0081	ppb	96
26) Diisopropyl Ether	4.33	45	596314	52.2033	ppb	98
28) 1,1-DCA	4.10	63	335492	51.1675	ppb	96
29) Vinyl Acetate	4.27	43	125953	52.6393	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	529857	53.3433	ppb	97
31) MEK (2-Butanone)	5.07	43	89806	49.3770	ppb	87
32) Cis-1,2-DCE	4.98	96	186012	49.8424	ppb	97
33) 2,2-Dichloropropane	4.96	77	249483	48.2111	ppb	95
36) Chloroform	5.44	83	298096	52.0033	ppb	98
37) Bromochloromethane	5.30	128	45824	50.3286	ppb	100
39) 1,1,1-TCA	5.65	97	108032	51.8493	ppb	97
40) Cyclohexane	5.72	41	132255	51.9996	ppb	97
41) 1,1-Dichloropropene	5.88	75	201320	49.7107	ppb	96
42) 2,2,4-Trimethylpentane	6.28	57	385125	51.9708	ppb	98
44) Carbon Tetrachloride	5.87	117	223148	52.2294	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	453291	50.5197	ppb	96

## Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L15.D  
 Acq On : 21 Jan 19 21:38  
 Sample : 50ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	235593	50.5523	ppb	100
48) Benzene	6.13	78	605445	50.0938	ppb	97
49) TCE	6.95	130	99992	49.4628	ppb	98
50) 2-Pentanone	7.23	43	472572	203.4811	ppb	100
51) 1,2-Dichloropropane	7.20	63	160267	50.1563	ppb	98
52) Bromodichloromethane	7.54	83	124984	51.4699	ppb	95
53) Methyl Cyclohexane	7.17	83	218224	50.4523	ppb	93
54) Dibromomethane	7.34	93	114312	51.2029	ppb	97
55) 2-Chloroethyl vinyl ether	7.94	43	4515	24.1761	ppb	94
56) MIBK (methyl isobutyl ket	8.29	43	151841	47.3537	ppb	95
57) 1-Bromo-2-chloroethane	7.88	63	119584	49.0364	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	272909	51.5344	ppb	96
59) Toluene	8.44	91	379008	52.1836	ppb	98
60) Trans-1,3-Dichloropropene	8.71	75	254532	49.9716	ppb	97
61) 1,1,2-TCA	8.90	83	130483	50.4561	ppb	100
62) 2-Hexanone	9.22	43	106841	49.2815	ppb	94
65) 1,2-EDB	9.44	107	95688	52.3238	ppb	93
66) Tetrachloroethene	9.05	166	113080	50.0989	ppb	97
67) 1-Chlorohexane	10.00	91	200521	54.0942	ppb	99
68) 1,1,1,2-Tetrachloroethane	10.10	131	197359	53.3923	ppb	99
69) m&p-Xylene	10.26	91	1228980	110.5013	ppb	97
70) o-Xylene	10.70	106	174976	53.6565	ppb	94
71) Styrene	10.71	104	552454	55.1958	ppb	97
73) 1,3-Dichloropropane	9.08	76	269847	51.7394	ppb	100
74) Dibromochloromethane	9.33	129	207996	52.8209	ppb	99
75) Chlorobenzene	10.00	112	494814	54.1594	ppb	99
76) Ethylbenzene	10.13	91	453315	54.7235	ppb	99
77) Bromoform	10.90	173	168485	51.8213	ppb	90
79) Isopropylbenzene	11.11	105	818115	50.0622	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	234875	49.6979	ppb	96
81) 1,2,3-Trichloropropane	11.47	110	40272	48.8947	ppb	88
82) t-1,4-Dichloro-2-Butene	11.50	53	50870	47.2398	ppb	98
83) Bromobenzene	11.43	156	132288	49.8810	ppb	98
84) n-Propylbenzene	11.56	91	521325	52.4152	ppb	100
85) 4-Ethyltoluene	11.69	105	809987	53.6481	ppb	99
86) 2-Chlorotoluene	11.64	91	312872	49.5808	ppb	100
87) 1,3,5-Trimethylbenzene	11.76	105	681769	52.0870	ppb	98
88) 4-Chlorotoluene	11.76	91	353792	49.4382	ppb	99
89) Tert-Butylbenzene	12.12	119	711985	51.3265	ppb	97
90) 1,2,4-Trimethylbenzene	12.17	105	703507	54.5313	ppb	98
91) Sec-Butylbenzene	12.36	105	876766	51.9533	ppb	99
92) p-Isopropyltoluene	12.52	119	426368	54.4262	ppb	98
93) Benzyl Chloride	12.71	91	296774	52.9972	ppb	96
94) 1,3-DCB	12.46	146	240896	51.2473	ppb	99
95) 1,4-DCB	12.56	146	467536	50.2155	ppb	98
96) n-Butylbenzene	12.71	91	296774	52.9972	ppb	96
97) 1,2-DCB	12.97	146	476543	52.6781	ppb	98
98) Hexachloroethane	13.26	117	153592	54.0908	ppb	95
99) 1,2-Dibromo-3-chloropropan	13.82	75	50980	50.6482	ppb	# 84
100) 1,2,4-Trichlorobenzene	14.74	180	323298	56.6550	ppb	97
101) Hexachlorobutadiene	14.94	225	155604	54.8646	ppb	93
102) Naphthalene	15.01	128	678795	57.1906	ppb	99
103) 1,2,3-Trichlorobenzene	15.27	180	144704	57.0347	ppb	96

(#) = qualifier out of range (m) = manual integration  
 0121L15.D L0121SUR.M Mon Jan 28 12:43 2019 Page 600 of 1057

Quantitation Report

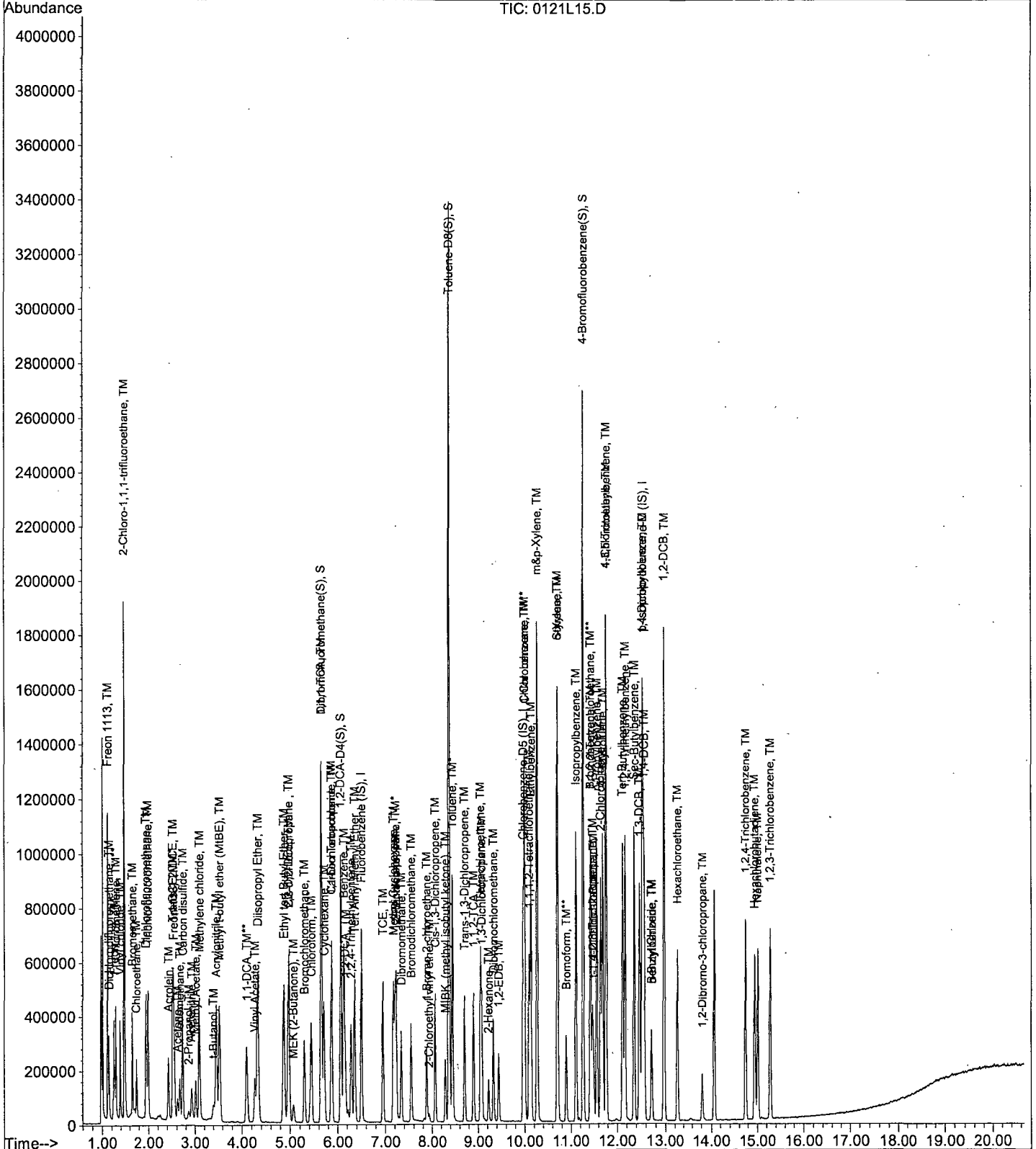
Data File : M:\LOKI\DATA\190121\0121L15.D  
Acq On : 21 Jan 19 21:38  
Sample : 50ug/L VOC STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Tue Jan 22 12:46:40 2019  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	354496	25.0000	ppb	0.00
63) Chlorobenzene-D5 (IS)	9.97	117	307840	25.0000	ppb	0.00
78) 1,4-Dichlorobenzene-D (IS)	12.54	152	174848	25.0000	ppb	0.00

System Monitoring Compounds

38) Dibromofluoromethane(S)	5.65	111	650234	97.3367	ppb	0.00
Spiked Amount	25.000		Recovery	=	389.348%	
43) 1,2-DCA-D4(S)	6.07	65	762420	97.8786	ppb	0.00
Spiked Amount	25.000		Recovery	=	391.516%	
64) Toluene-D8(S)	8.37	98	2378941	94.5815	ppb	0.00
Spiked Amount	25.000		Recovery	=	378.328%	
72) 4-Bromofluorobenzene(S)	11.27	95	969475	91.8827	ppb	0.00
Spiked Amount	25.000		Recovery	=	367.532%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Freon 1113	1.12	116	301065	155.4677	ppb	100
3) Dichlorodifluoromethane	1.14	85	296745	99.6959	ppb	98
4) Freon 114	1.25	85	168196	69.6617	ppb	93
5) Chloromethane	1.29	50	449678	91.0843	ppb	92
6) Vinyl chloride	1.39	62	425978	95.7207	ppb	95
7) 2-Chloro-1,1,1-trifluoroet	1.48	118	524992	139.4333	ppb	99
8) Bromomethane	1.65	94	249630	97.5870	ppb	95
9) Chloroethane	1.74	64	164190	75.9062	ppb	97
10) Dichlorofluoromethane	1.95	67	736318	90.9783	ppb	95
11) Trichlorofluoromethane	1.99	101	606278	97.5793	ppb	97
12) Acrolein	2.43	56	196201	218.9493	ppb	96
13) Acetone	2.62	43	81137	96.7995	ppb	98
14) Freon-113	2.54	101	319836	92.8519	ppb	96
15) 1,1-DCE	2.52	63	103776	90.0177	ppb	93
16) t-Butanol	3.42	59	105103	249.7622	ppb	99
17) 2-Propanol	2.87	45	49665	162.6332	ppb	# 93
18) Acetonitrile	2.93	41	154689	214.6983	ppb	97
19) Methyl Acetate	3.02	43	396415	100.0596	ppb	95
20) Iodomethane	2.66	142	191872	102.2359	ppb	96
21) Acrylonitrile	3.45	52	136954	98.6277	ppb	90
22) Methylene chloride	3.09	84	431664	99.0642	ppb	95
23) Carbon disulfide	2.73	76	1121770	93.4540	ppb	99
24) Methyl t-butyl ether (MtBE)	3.54	73	1107947	100.6572	ppb	97
25) Trans-1,2-DCE	2.52	96	199277	95.5036	ppb	98
26) Diisopropyl Ether	4.34	45	1218553	102.3814	ppb	99
28) 1,1-DCA	4.10	63	685531	100.3444	ppb	99
29) Vinyl Acetate	4.27	43	252296	101.1966	ppb	# 81
30) Ethyl tert Butyl Ether	4.87	59	1137608	109.9177	ppb	97
31) MEK (2-Butanone)	5.07	43	191856	101.0891	ppb	92
32) Cis-1,2-DCE	4.98	96	387491	99.6490	ppb	97
33) 2,2-Dichloropropane	4.96	77	517771	96.0280	ppb	94
36) Chloroform	5.45	83	606711	101.5805	ppb	100
37) Bromochloromethane	5.30	128	90552	95.4495	ppb	97
39) 1,1,1-TCA	5.65	97	220160	101.4104	ppb	98
40) Cyclohexane	5.72	41	264768	100.0470	ppb	91
41) 1,1-Dichloropropene	5.88	75	405383	96.0688	ppb	97
42) 2,2,4-Trimethylpentane	6.29	57	750921	97.2535	ppb	98
44) Carbon Tetrachloride	5.87	117	449635	101.0033	ppb	88
45) Tert Amyl Methyl Ether	6.36	73	926198	99.0697	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Quant Method : M:\LOKI\DATA\190121\L0121W.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:42:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) 1,2-DCA	6.17	62	482592	99.3830	ppb	100
48) Benzene	6.13	78	1241738	98.6036	ppb	96
49) TCE	6.95	130	194368	92.2767	ppb	100
50) 2-Pentanone	7.23	43	544315	224.9366	ppb	98
51) 1,2-Dichloropropane	7.21	63	320379	96.2274	ppb	98
52) Bromodichloromethane	7.55	83	254528	100.5977	ppb	95
53) Methyl Cyclohexane	7.17	83	424113	94.1053	ppb	94
54) Dibromomethane	7.34	93	232996	100.1623	ppb	95
55) 2-Chloroethyl vinyl ether	7.93	43	9316	47.8752	ppb	91
56) MIBK (methyl isobutyl ket	8.29	43	321814	96.3216	ppb	96
57) 1-Bromo-2-chloroethane	7.89	63	256640	101.0005	ppb	99
58) Cis-1,3-Dichloropropene	8.07	75	553627	100.3346	ppb	95
59) Toluene	8.44	91	750784	99.2098	ppb	100
60) Trans-1,3-Dichloropropene	8.71	75	516228	97.2694	ppb	94
61) 1,1,2-TCA	8.90	83	259777	96.4083	ppb	98
62) 2-Hexanone	9.22	43	218599	96.7715	ppb	94
65) 1,2-EDB	9.44	107	190528	96.3864	ppb	95
66) Tetrachloroethene	9.05	166	228736	93.7545	ppb	97
67) 1-Chlorohexane	10.00	91	392101	98.3832	ppb	98
68) 1,1,1,2-Tetrachloroethane	10.09	131	391276	97.9308	ppb	97
69) m&p-Xylene	10.26	91	2428079	201.9763	ppb	97
70) o-Xylene	10.70	106	358656	101.7507	ppb	99
71) Styrene	10.71	104	1079123	99.7461	ppb	99
73) 1,3-Dichloropropane	9.08	76	535131	94.9245	ppb	99
74) Dibromochloromethane	9.33	129	415567	97.6352	ppb	97
75) Chlorobenzene	10.00	112	977697	99.0036	ppb	99
76) Ethylbenzene	10.13	91	883776	98.7031	ppb	98
77) Bromoform	10.90	173	336048	95.6231	ppb	88
79) Isopropylbenzene	11.11	105	1581123	96.6107	ppb	97
80) 1,1,2,2-Tetrachloroethane	11.43	83	449901	95.0566	ppb	99
81) 1,2,3-Trichloropropane	11.47	110	80880	98.0536	ppb	93
82) t-1,4-Dichloro-2-Butene	11.50	53	96411	89.3997	ppb	95
83) Bromobenzene	11.43	156	264000	99.3991	ppb	98
84) n-Propylbenzene	11.56	91	1021366	102.5401	ppb	98
85) 4-Ethyltoluene	11.69	105	1545604	102.2206	ppb	99
86) 2-Chlorotoluene	11.64	91	582884	92.2343	ppb	98
87) 1,3,5-Trimethylbenzene	11.76	105	1334860	101.8337	ppb	98
88) 4-Chlorotoluene	11.77	91	683072	95.3113	ppb	98
89) Tert-Butylbenzene	12.12	119	1370798	98.6752	ppb	96
90) 1,2,4-Trimethylbenzene	12.17	105	1346645	104.2304	ppb	98
91) Sec-Butylbenzene	12.36	105	1663958	98.4544	ppb	99
92) p-Isopropyltoluene	12.52	119	820032	104.5244	ppb	96
93) Benzyl Chloride	12.71	91	583435	104.0358	ppb	97
94) 1,3-DCB	12.46	146	473408	100.5636	ppb	98
95) 1,4-DCB	12.56	146	891137	95.5720	ppb	97
96) n-Butylbenzene	12.71	91	583435	104.0358	ppb	96
97) 1,2-DCB	12.97	146	906581	100.0688	ppb	97
98) Hexachloroethane	13.26	117	299614	105.3612	ppb	92
99) 1,2-Dibromo-3-chloropropan	13.82	75	99202	99.0488	ppb	86
100) 1,2,4-Trichlorobenzene	14.74	180	670652	117.3534	ppb	93
101) Hexachlorobutadiene	14.94	225	305966	107.7229	ppb	89
102) Naphthalene	15.01	128	1424406	119.8350	ppb	97
103) 1,2,3-Trichlorobenzene	15.28	180	295040	116.1190	ppb	95

Quantitation Report

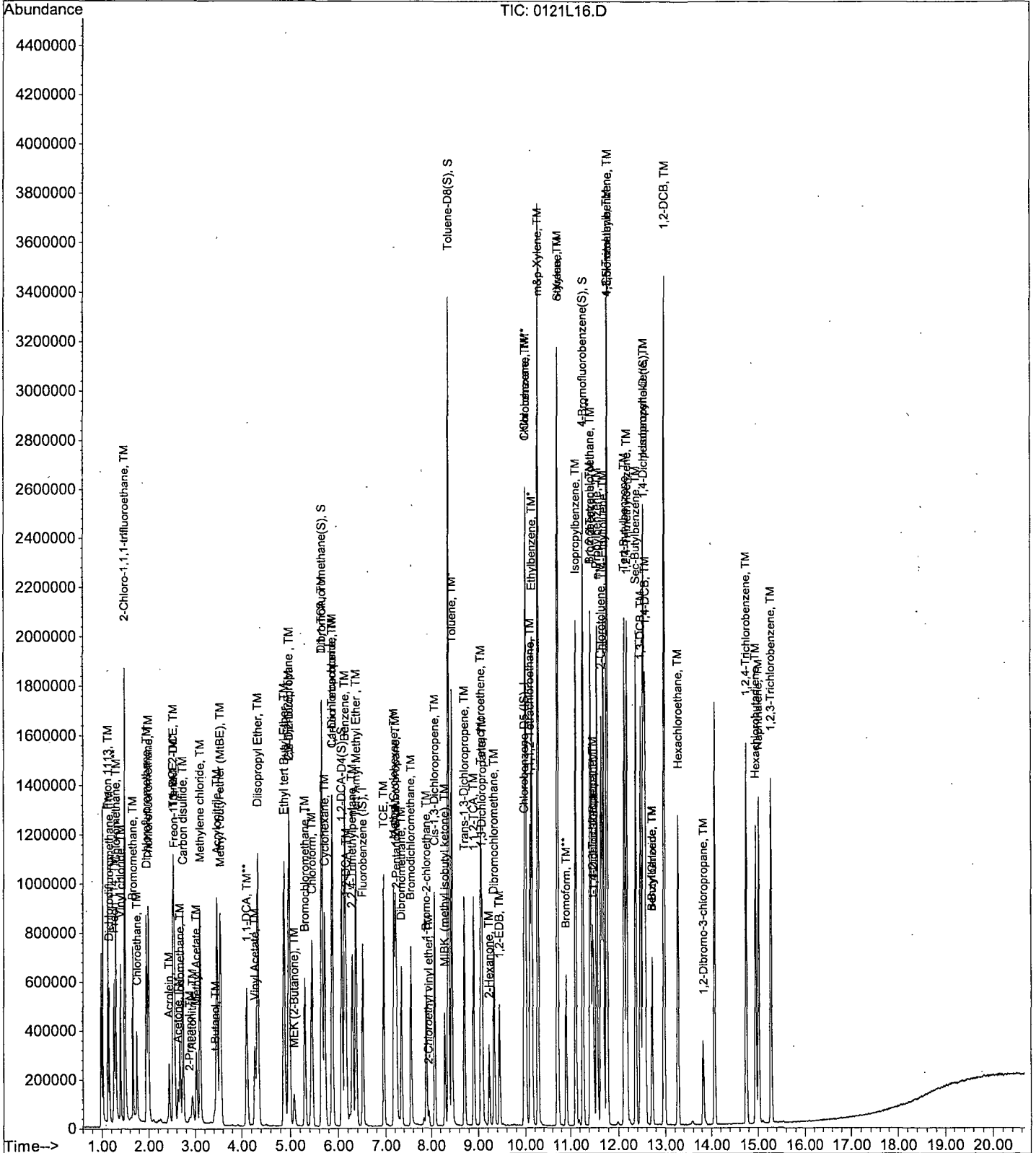
Data File : M:\LOKI\DATA\190121\0121L16.D  
 Acq On : 21 Jan 19 22:07  
 Sample : 100ug/L VOC STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 22 12:43 2019

Quant Results File: L0121W.RES

Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration





VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/22/19

Matrix: water

Instrument: Loki

Initials: \_\_\_\_\_

0122L03.D 0122L04.D 0122L05.D 0122L06.D 0122L07.D 0122L08.D 0122L09.D

	Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r <sup>2</sup>	Q	MRF
1	I Fluorobenzene (IS)																
2	TMHBL Gasoline C6-C10	14.2	5.991	3.156	1.510	0.9912	0.8940	0.8282				3.9	124	TMHBL	0.998		
3	I Chlorobenzene-D5 (IS)																
4	I 1,4-Dichlorobenzene-D (IS)																
5																	
6																	
7																	
8																	
9																	
10																	
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35																	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L03.D Vial: 2  
Acq On : 22 Jan 19 14:10 Operator: PM, DG, SV, CMM, KV  
Sample : 20ug/L GAS STD 1/21/19 Inst : Loki  
Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:19 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:17:29 2019  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	657725	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	773287	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	888330	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	7468095m	27.796	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L03.D Vial: 2  
 Acq On : 22 Jan 19 14:10 Operator: PM, DG, SV, CMM, KV  
 Sample : 20ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	315648	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	269696	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	161216	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157557	26.4882	ppb	0.00
Spiked Amount	25.000					
					Recovery = 105.952%	
3) 1,2-DCA-D4(S)	6.07	65	182006	26.2414	ppb	0.00
Spiked Amount	25.000					
					Recovery = 104.964%	
5) Toluene-D8(S)	8.37	98	583651	26.4866	ppb	0.00
Spiked Amount	25.000					
					Recovery = 105.948%	
6) 4-Bromofluorobenzene(S)	11.27	95	236797	25.6167	ppb	0.00
Spiked Amount	25.000					
					Recovery = 102.468%	

Target Compounds Qvalue

Quantitation Report

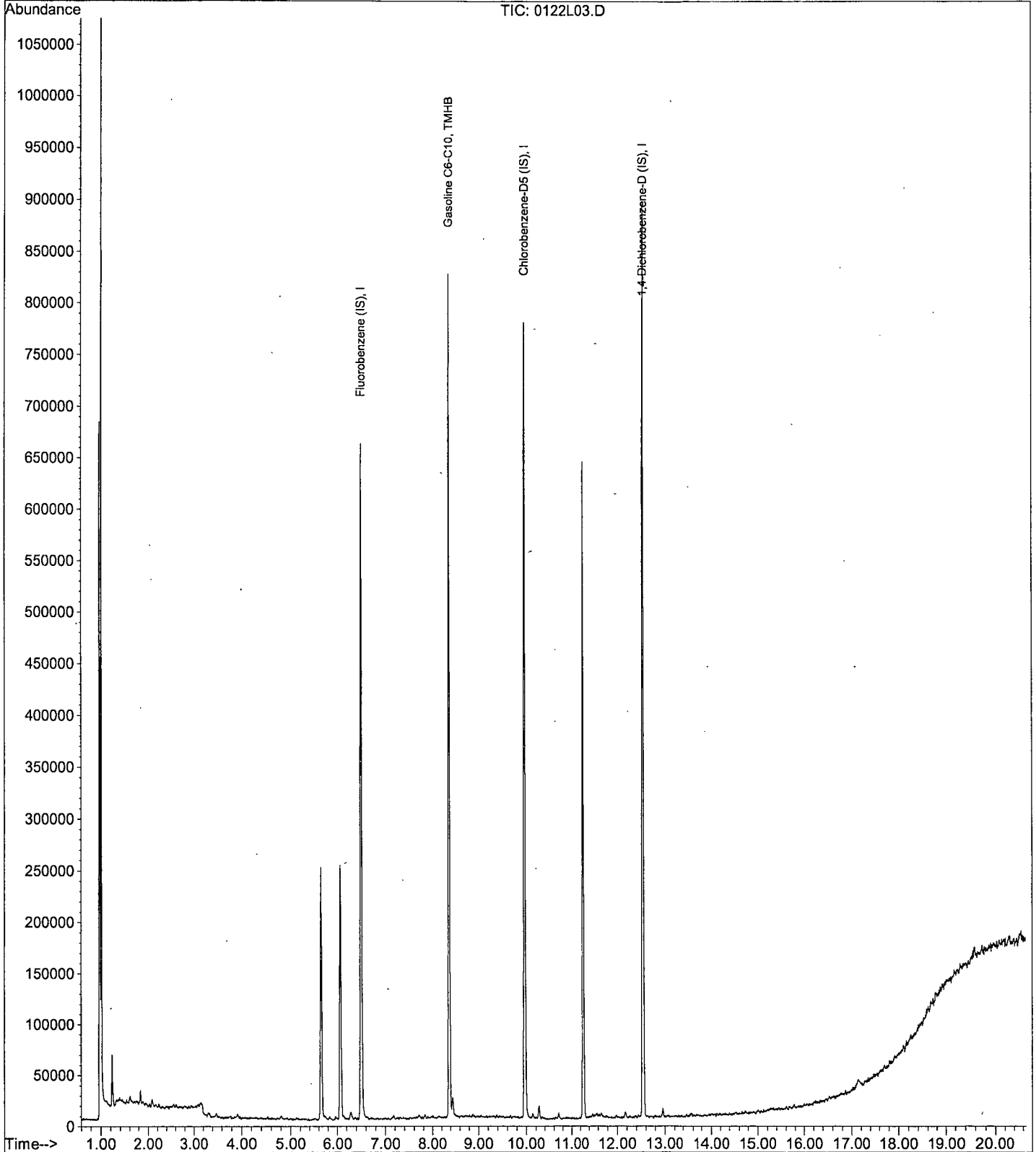
Data File : M:\LOKI\DATA\190121\0122L03.D  
Acq On : 22 Jan 19 14:10  
Sample : 20ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:19 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L04.D Vial: 3  
 Acq On : 22 Jan 19 14:39 Operator: PM,DG,SV,CMM,KV  
 Sample : 50ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:21 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	691706	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	846157	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	858020	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	9.97	TIC	8287767m	56.195	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L04.D  
 Acq On : 22 Jan 19 14:39  
 Sample : 50ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	335552	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	300864	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	155712	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	156820	24.8005	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.200%	
3) 1,2-DCA-D4(S)	6.07	65	181620	24.6325	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.532%	
5) Toluene-D8(S)	8.37	98	586804	23.8710	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.484%	
6) 4-Bromofluorobenzene(S)	11.26	95	234045	22.6961	ppb	0.00
Spiked Amount	25.000		Recovery	=	90.784%	

Target Compounds

Qvalue

Quantitation Report

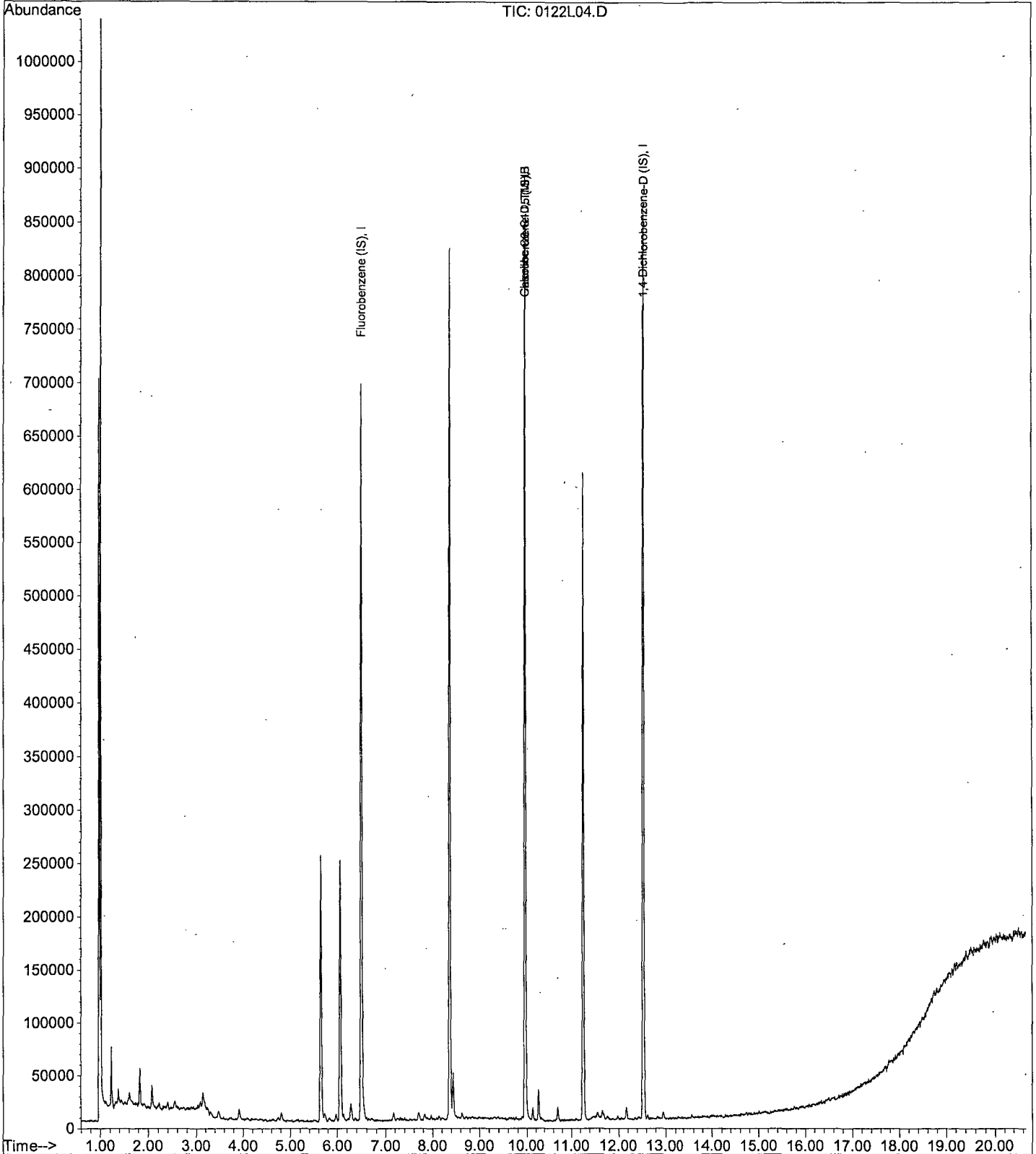
Data File : M:\LOKI\DATA\190121\0122L04.D  
Acq On : 22 Jan 19 14:39  
Sample : 50ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L05.D Vial: 4  
 Acq On : 22 Jan 19 15:07 Operator: PM, DG, SV, CMM, KV  
 Sample : 100ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:21 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	795029	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	937148	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	1003701	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	9.97	TIC	10034916m	85.194	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L05.D Vial: 4  
 Acq On : 22 Jan 19 15:07 Operator: PM,DG,SV,CMM,KV  
 Sample : 100ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	387456	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	333184	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	174272	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	156930	21.4932	ppb	0.00
Spiked Amount	25.000		Recovery	=	85.972%	
3) 1,2-DCA-D4(S)	6.07	65	181170	21.2799	ppb	0.00
Spiked Amount	25.000		Recovery	=	85.120%	
5) Toluene-D8(S)	8.37	98	575279	21.1321	ppb	0.00
Spiked Amount	25.000		Recovery	=	84.528%	
6) 4-Bromofluorobenzene(S)	11.26	95	227110	19.8872	ppb	0.00
Spiked Amount	25.000		Recovery	=	79.548%	

Target Compounds Qvalue

Quantitation Report

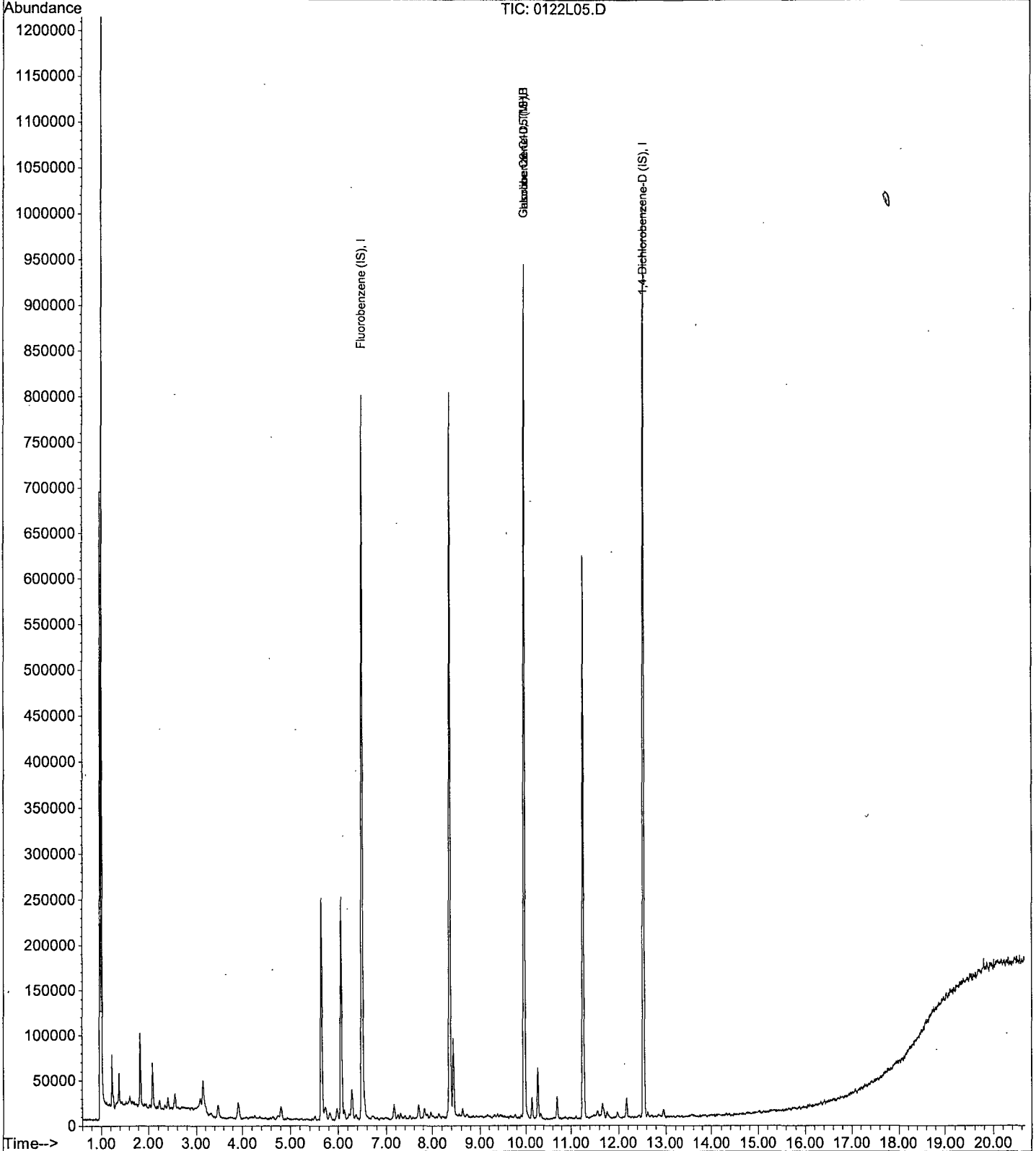
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Acq On : 22 Jan 19 15:07  
Sample : 100ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 4  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L06.D  
 Acq On : 22 Jan 19 15:36  
 Sample : 300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	658006	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	790181	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	849355	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11919364m	333.880	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L06.D  
 Acq On : 22 Jan 19 15:36  
 Sample : 300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 5  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant. Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	315520	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	280000	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	151296	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	160111	26.9285	ppb	0.00
Spiked Amount	25.000					
				Recovery	=	107.716%
3) 1,2-DCA-D4(S)	6.07	65	184739	26.6463	ppb	0.00
Spiked Amount	25.000					
				Recovery	=	106.584%
5) Toluene-D8(S)	8.37	98	591987	25.8763	ppb	0.00
Spiked Amount	25.000					
				Recovery	=	103.504%
6) 4-Bromofluorobenzene(S)	11.26	95	238857	24.8887	ppb	0.00
Spiked Amount	25.000					
				Recovery	=	99.556%

Target Compounds

Qvalue

Quantitation Report

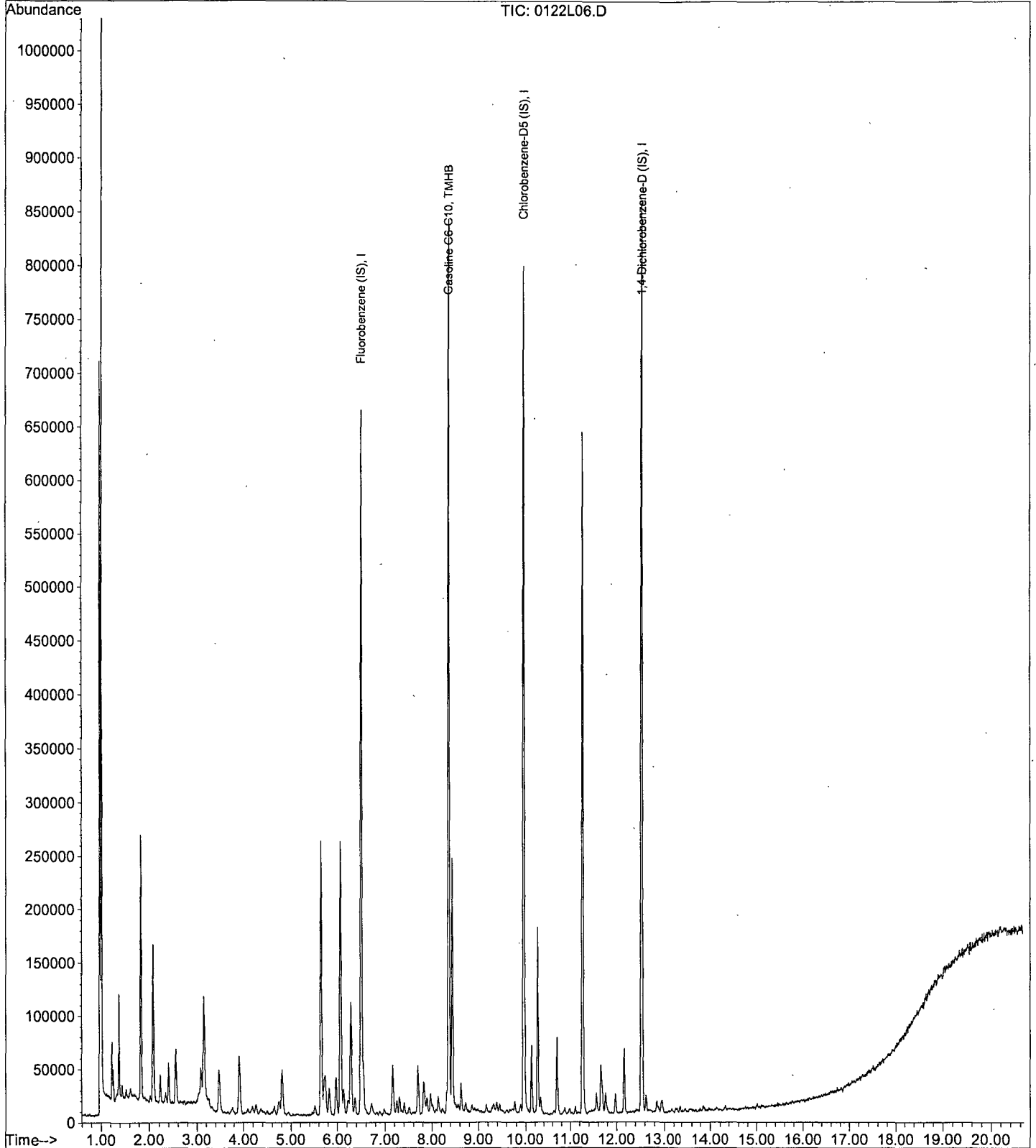
Data File : M:\LOKI\DATA\190121\0122L06.D  
Acq On : 22 Jan 19 15:36  
Sample : 300ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 5  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L07.D Vial: 6  
 Acq On : 22 Jan 19 16:04 Operator: PM,DG,SV,CMM,KV  
 Sample : 600ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	655093	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	794318	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	859138	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	15583633m	590.796	ppb	100

Data File : M:\LOKI\DATA\190121\0122L07.D  
 Acq On : 22 Jan 19 16:04  
 Sample : 600ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 6  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	321536	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	283584	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	151424	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	153983	25.4133	ppb	0.00
Spiked Amount	25.000		Recovery	=	101.652%	
3) 1,2-DCA-D4(S)	6.07	65	182681	25.8564	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.424%	
5) Toluene-D8(S)	8.37	98	569135	24.5630	ppb	0.00
Spiked Amount	25.000		Recovery	=	98.252%	
6) 4-Bromofluorobenzene(S)	11.26	95	230967	23.7624	ppb	0.00
Spiked Amount	25.000		Recovery	=	95.048%	

Target Compounds

Qvalue

Quantitation Report

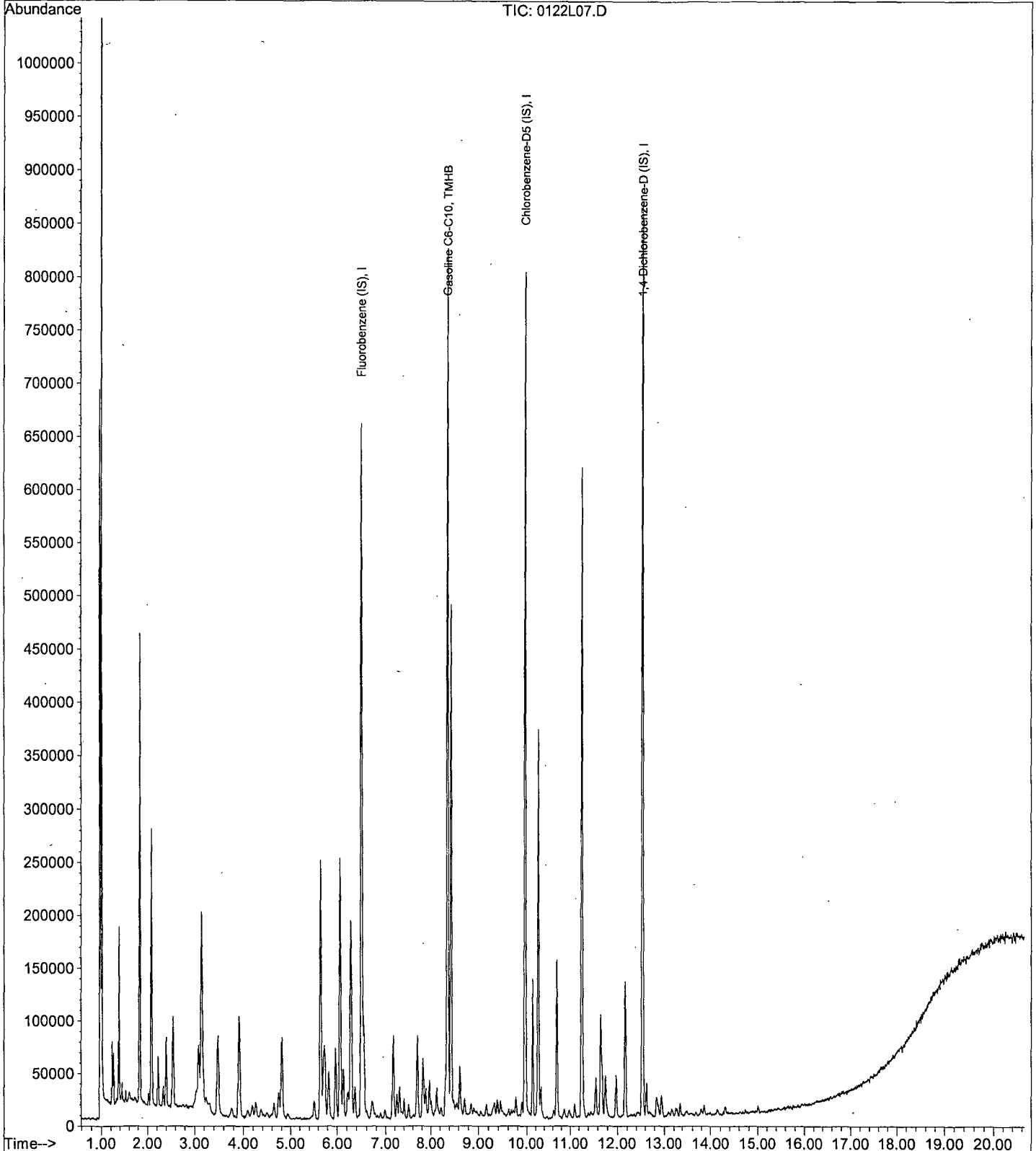
Data File : M:\LOKI\DATA\190121\0122L07.D  
Acq On : 22 Jan 19 16:04  
Sample : 600ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 6  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L08.D Vial: 7  
 Acq On : 22 Jan 19 16:33 Operator: PM, DG, SV, CMM, KV  
 Sample : 800ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:22 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	650619	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	767904	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	822805	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	18612406m	808.987	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L08.D  
 Acq On : 22 Jan 19 16:33  
 Sample : 800ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 7  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	313920	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	275584	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	147456	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	157489	26.6225	ppb	0.00
Spiked Amount	25.000		Recovery	= 106.492%		
3) 1,2-DCA-D4(S)	6.07	65	179529	26.0268	ppb	0.00
Spiked Amount	25.000		Recovery	= 104.108%		
5) Toluene-D8(S)	8.37	98	580104	25.7632	ppb	0.00
Spiked Amount	25.000		Recovery	= 103.052%		
6) 4-Bromofluorobenzene(S)	11.27	95	236208	25.0071	ppb	0.00
Spiked Amount	25.000		Recovery	= 100.028%		

Target Compounds Qvalue

Quantitation Report

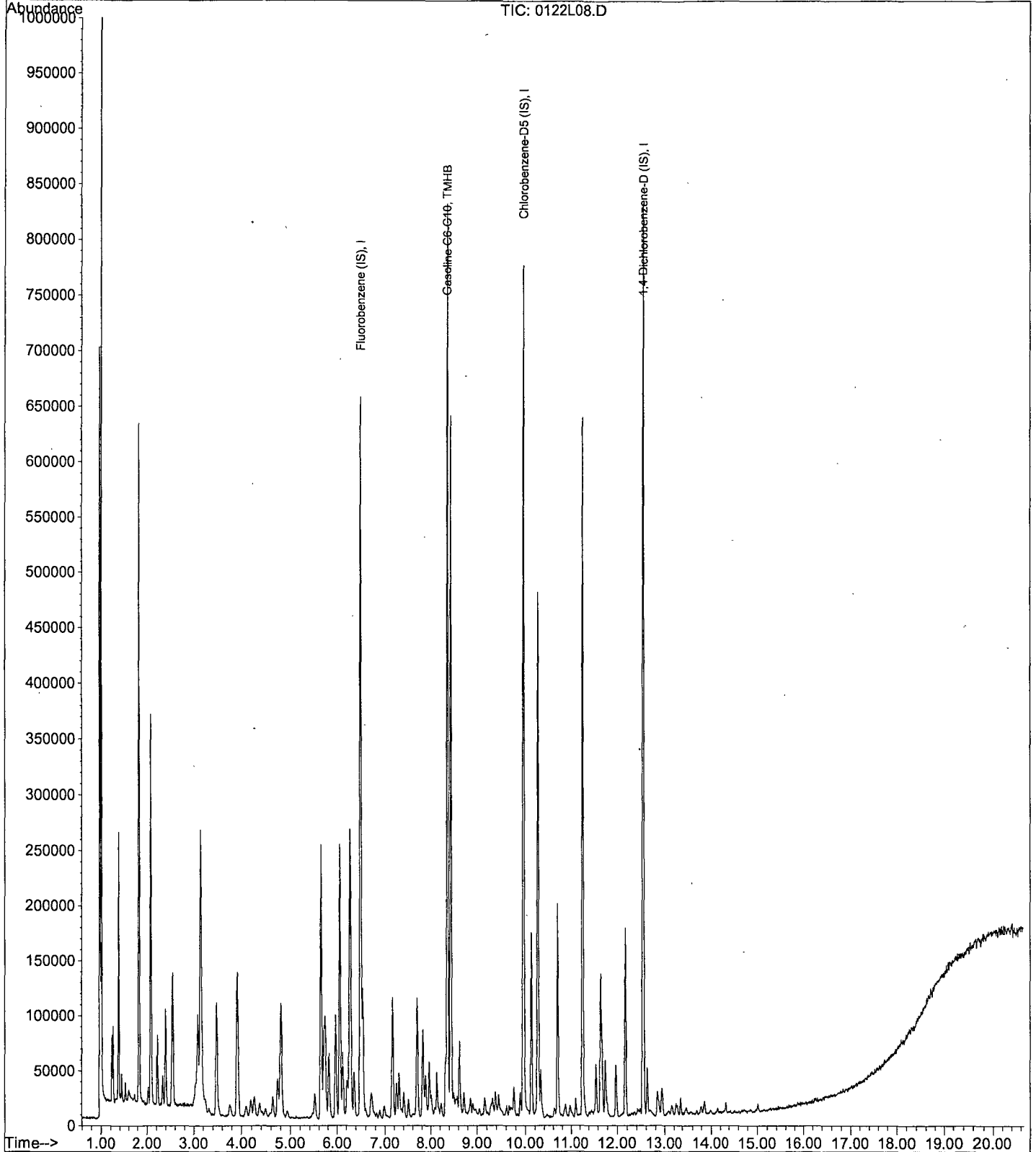
Data File : M:\LOKI\DATA\190121\0122L08.D  
Acq On : 22 Jan 19 16:33  
Sample : 800ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 7  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:22 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0122L09.D  
 Acq On : 22 Jan 19 17:01  
 Sample : 1000ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 8  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:23 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:17:29 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	644633	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	773447	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	813437	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	21356569m	1013.765	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L09.D Vial: 8  
 Acq On : 22 Jan 19 17:01 Operator: PM,DG,SV,CMM,KV  
 Sample : 1000ug/L GAS STD 1/21/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 24 9:53 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	315584	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	274176	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	146048	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	153101	25.7443	ppb	0.00
Spiked Amount	25.000		Recovery	=	102.976%	
3) 1,2-DCA-D4(S)	6.07	65	179163	25.8368	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.348%	
5) Toluene-D8(S)	8.37	98	581229	25.9457	ppb	0.00
Spiked Amount	25.000		Recovery	=	103.784%	
6) 4-Bromofluorobenzene(S)	11.26	95	233744	24.8733	ppb	0.00
Spiked Amount	25.000		Recovery	=	99.492%	

Target Compounds Qvalue

Quantitation Report

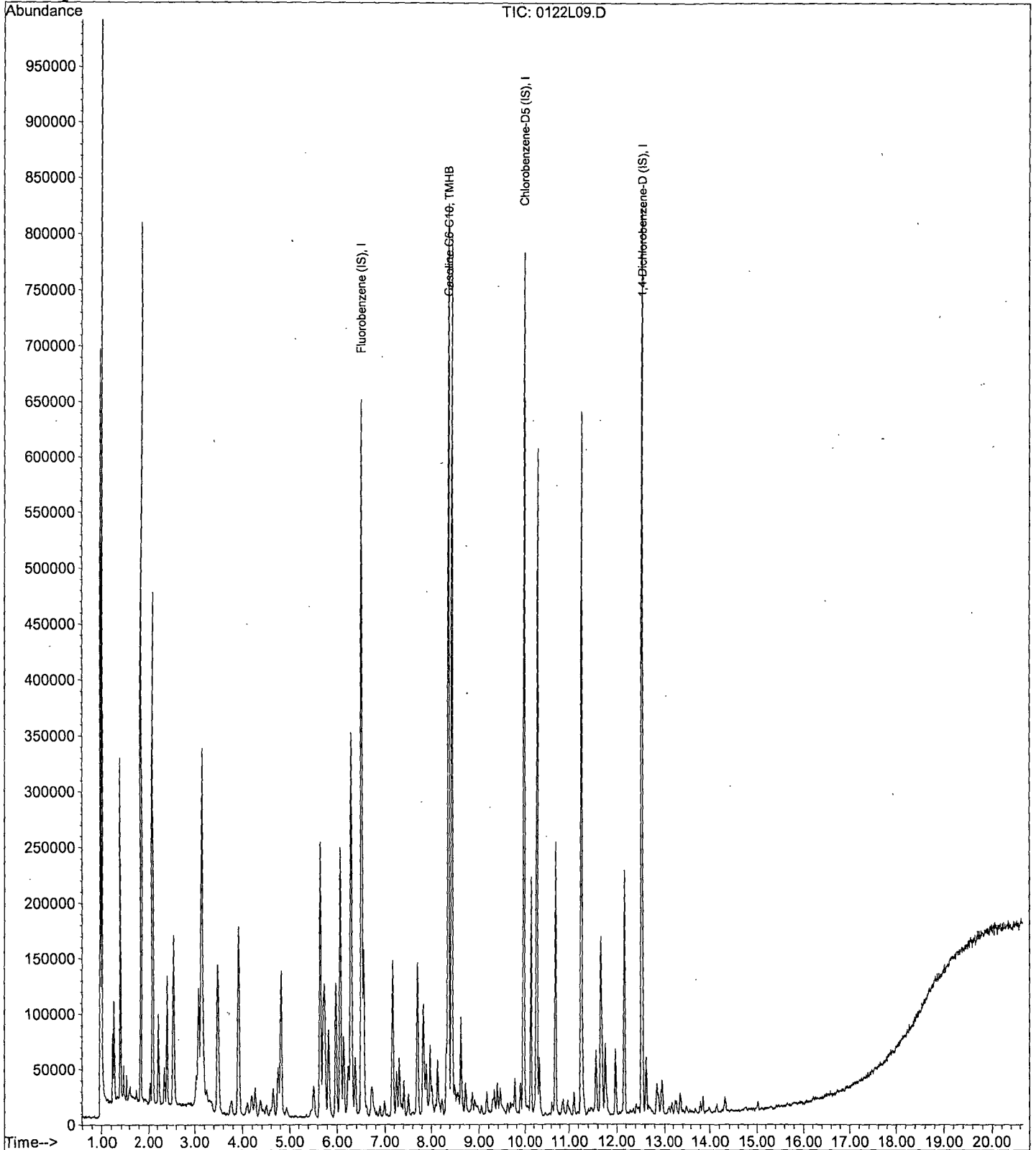
Data File : M:\LOKI\DATA\190121\0122L09.D  
Acq On : 22 Jan 19 17:01  
Sample : 1000ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

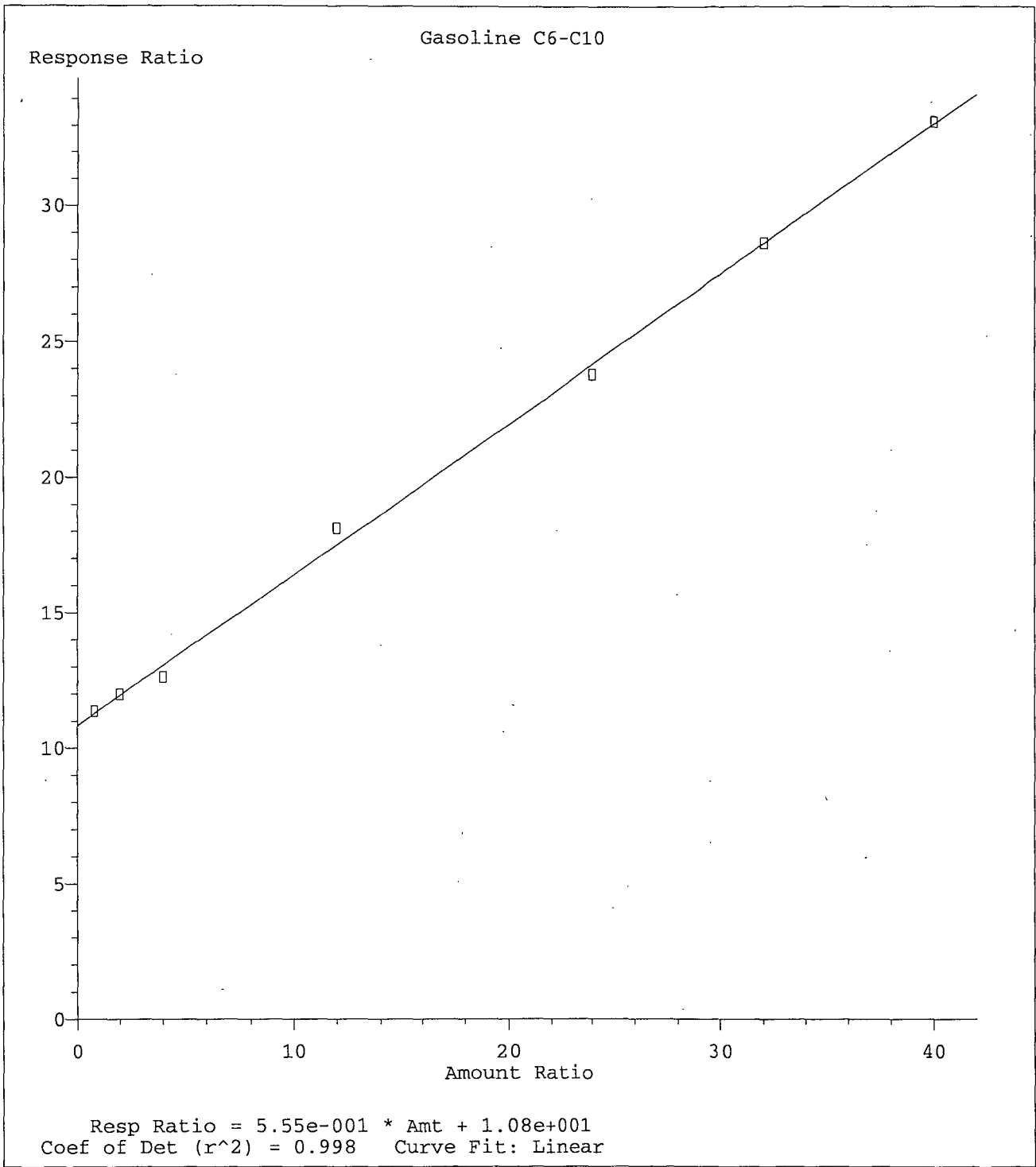
Vial: 8  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:23 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Method Name: M:\LOKI\DATA\190121\LGAS0122.M  
Calibration Table Last Updated: Thu Jan 24 09:25:37 2019

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0122L12.D

	Compound	MEAN	CCRF	%D	%Drift
1	TMHB Gasoline C6-C10	3.937	1.468	63	TMHBL 1.7
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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36					
37					
38					
39					
40	Average			63.0	



Data File : M:\LOKI\DATA\190121\0122L12.D  
 Acq On : 22 Jan 19 18:27  
 Sample : (SS)300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 9:30 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	661911	25.000 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	791838	25.000 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	820940	25.000 ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	11658465m	305.154 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0122L12.D  
 Acq On : 22 Jan 19 18:27  
 Sample : (SS)300ug/L GAS STD 1/21/19  
 Misc : IS&S 11/8/18

Vial: 11  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 24 10:26 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	322112	25.0000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	279488	25.0000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	144704	25.0000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	152512	25.1255	ppb	0.00
Spiked Amount	25.000			Recovery = 100.504%		
3) 1,2-DCA-D4(S)	6.07	65	178958	25.2842	ppb	0.00
Spiked Amount	25.000			Recovery = 101.136%		
5) Toluene-D8(S)	8.37	98	563836	24.6909	ppb	0.00
Spiked Amount	25.000			Recovery = 98.764%		
6) 4-Bromofluorobenzene(S)	11.27	95	231410	24.1569	ppb	0.00
Spiked Amount	25.000			Recovery = 96.628%		
Target Compounds					Qvalue	

Quantitation Report

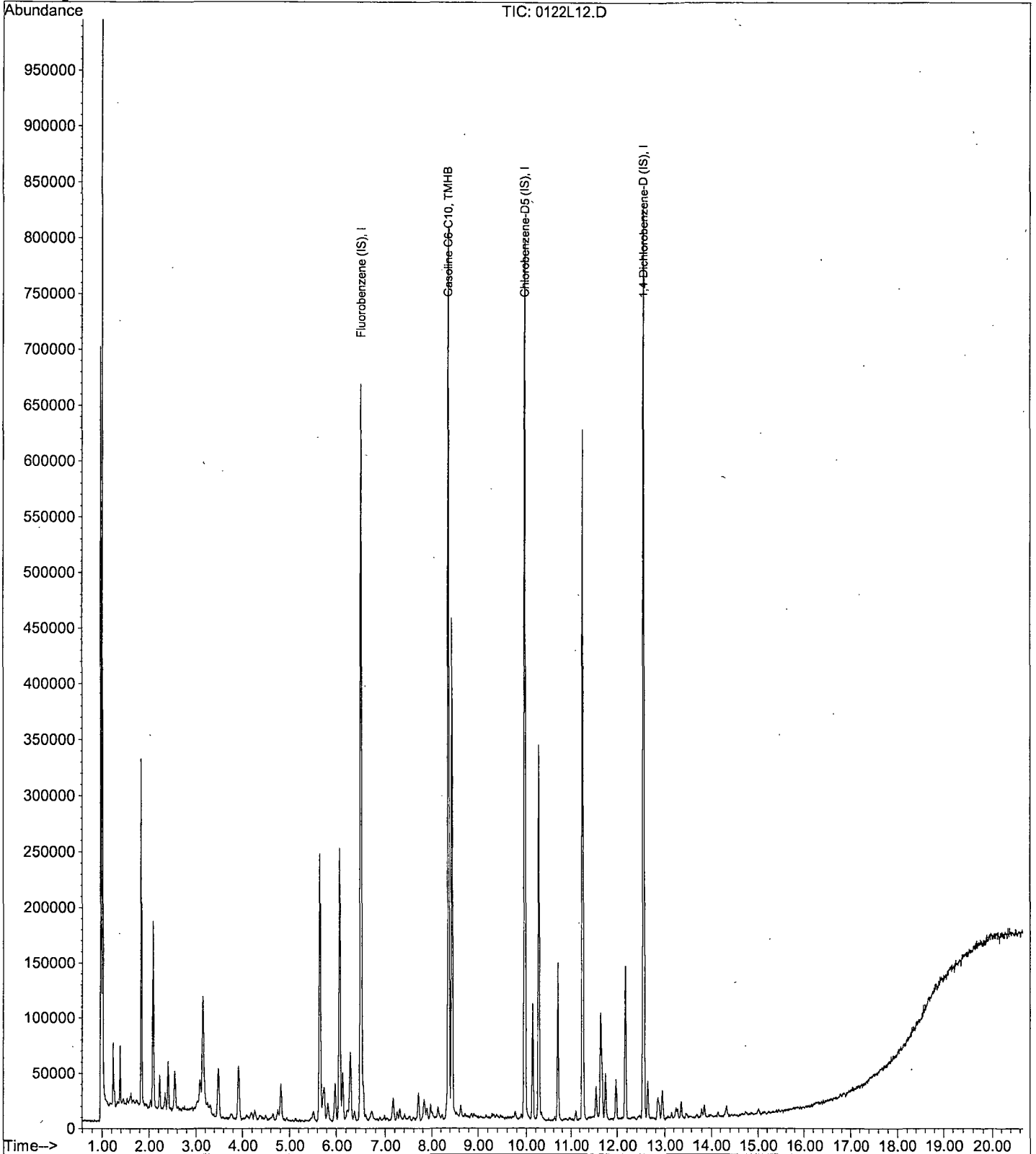
Data File : M:\LOKI\DATA\190121\0122L12.D  
Acq On : 22 Jan 19 18:27  
Sample : (SS)300ug/L GAS STD 1/21/19  
Misc : IS&S 11/8/18

Vial: 11  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 24 9:30 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/25/19

Matrix: water

Instrument: Loki

Initial Cal. Date: 01/22/19

Data File: 0125L03.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TMHB Gasoline C6-C10	3.937	1.430	64	TMHBL 5.0
3	I Chlorobenzene-D5 (IS)	ISTD			I
4	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
5					
6					
7					
8					
9					
10					
11					
12					
13					
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37					
38					
39					
40	Average			64.0	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L03.D Vial: 2  
 Acq On : 25 Jan 19 9:39 Operator: PM,DG,SV,CMM,KV  
 Sample : 190125A CCV 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	735183	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	693473	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	707314	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.50	TIC	12619895m	285.002	ppb	100

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/25/19

Matrix: water

Instrument: Loki

Initial Cal. Date: 01/21/19

Data File: 0125L03.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	S Dibromofluoromethane(S)	0.4711	0.5244	11	S
3	S 1,2-DCA-D4(S)	0.5493	0.6169	12	S
4	I Chlorobenzene-D5 (IS)	ISTD			I
5	S Toluene-D8(S)	2.043	2.112	3.4	S
6	S 4-Bromofluorobenzene(S)	0.8569	0.8338	2.7	S
7	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
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16					
17					
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35					
36					
37					
38					
39					
40	Average			7.3	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L03.D  
 Acq On : 25 Jan 19 9:39  
 Sample : 190125A CCV 300ug/L  
 Misc : IS&S 11/8/18

Vial: 2  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:58 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	350016	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	242816	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	125264	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	183562	27.830	ppb	0.00
Spiked Amount				25.000		
					Recovery =	111.320%
3) 1,2-DCA-D4(S)	6.07	65	215927	28.075	ppb	0.00
Spiked Amount				25.000		
					Recovery =	112.300%
5) Toluene-D8(S)	8.37	98	512771	25.846	ppb	0.00
Spiked Amount				25.000		
					Recovery =	103.384%
6) 4-Bromofluorobenzene(S)	11.26	95	202466	24.327	ppb	0.00
Spiked Amount				25.000		
					Recovery =	97.308%

Target Compounds

Qvalue

Quantitation Report

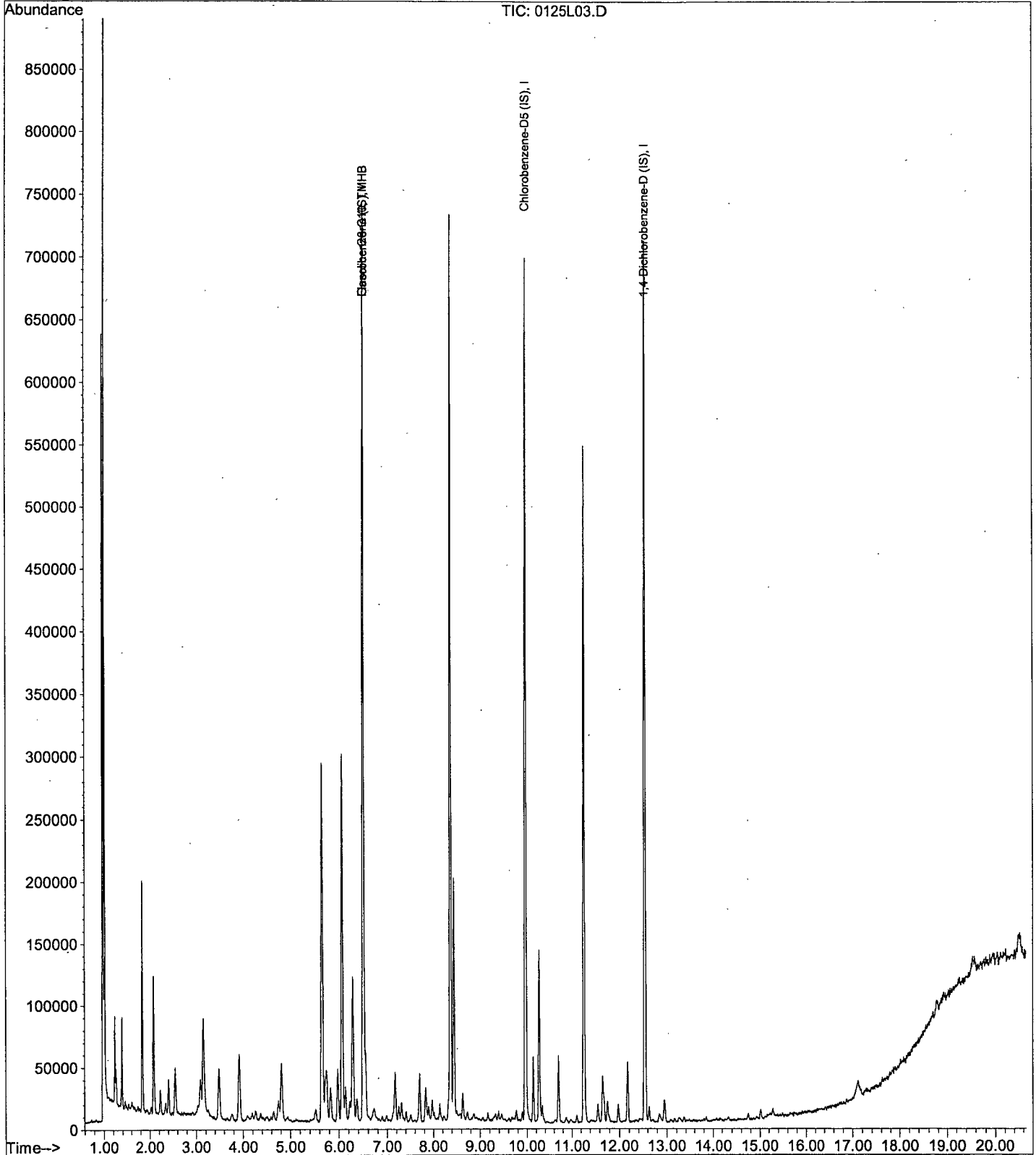
Data File : M:\LOKI\DATA\190121\0125L03.D  
Acq On : 25 Jan 19 9:39  
Sample : 190125A CCV 300ug/L  
Misc : IS&S 11/8/18

Vial: 2  
Operator: PM;DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Loki  
Initial Cal. Date: 01/22/19  
Data File: 0125L29.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TMHB Gasoline C6-C10	3.937	1.349	66	TMHBL 20
3	I Chlorobenzene-D5 (IS)	ISTD			I
4	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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36					
37					
38					
39					
40	Average			66.0	

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L29.D Vial: 28  
 Acq On : 25 Jan 19 22:02 Operator: PM,DG,SV,CMM,KV  
 Sample : Ending CCV 300ug/L 1/25/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:41 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	834236	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	685974	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	674456	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	13505634m	241.050	ppb	100

VOLATILE ORGANIC ANALYSIS  
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/25/19  
Instrument: Loki  
Initial Cal. Date: 01/21/19  
Data File: 0125L29.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	S Dibromofluoromethane(S)	0.4711	0.4941	4.9	S
3	S 1,2-DCA-D4(S)	0.5493	0.5713	4.0	S
4	I Chlorobenzene-D5 (IS)	ISTD			I
5	S Toluene-D8(S)	2.043	2.548	25	S
6	S 4-Bromofluorobenzene(S)	0.8569	0.7755	9.5	S
7	I 1,4-Dichlorobenzene-D (IS)	ISTD			I
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
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35					
36					
37					
38					
39					
40	Average			10.9	

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L29.D Vial: 28  
 Acq On : 25 Jan 19 22:02 Operator: PM,DG,SV,CMM,KV  
 Sample : Ending CCV 300ug/L 1/25/19 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	403072	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	236288	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	118384	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	199154	26.220	ppb	0.00
Spiked Amount			Recovery	=	104.880%	
3) 1,2-DCA-D4(S)	6.07	65	230280	26.000	ppb	0.00
Spiked Amount			Recovery	=	104.000%	
5) Toluene-D8(S)	8.37	98	602023	31.183	ppb	0.00
Spiked Amount			Recovery	=	124.732%	
6) 4-Bromofluorobenzene(S)	11.26	95	183248	22.627	ppb	0.00
Spiked Amount			Recovery	=	90.508%	
Target Compounds						Qvalue

Quantitation Report

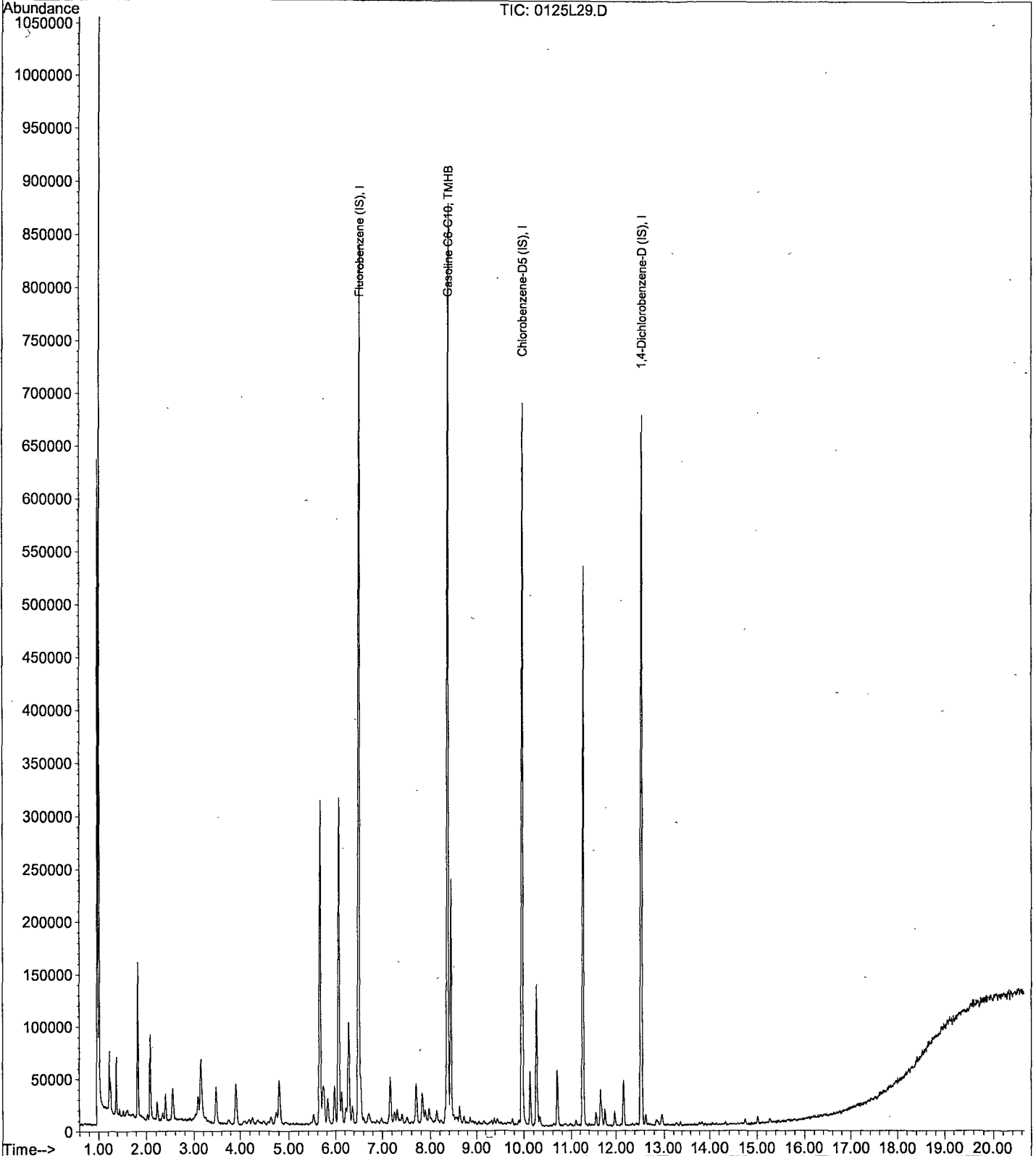
Data File : M:\LOKI\DATA\190121\0125L29.D  
Acq On : 25 Jan 19 22:02  
Sample : Ending CCV 300ug/L 1/25/19  
Misc : IS&S 11/8/18

Vial: 28  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:41 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L15.D  
Acq On : 25 Jan 19 15:22  
Sample : AZ85561W01  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	781547	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	691240	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	699977	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L15.D  
 Acq On : 25 Jan 19 15:22  
 Sample : AZ85561W01  
 Misc : IS&S 11/8/18

Vial: 14  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	376448	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	241536	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	123744	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	5.65	111	194736	27.451	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	109.804%
3) 1,2-DCA-D4(S)	6.07	65	231253	27.957	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	111.828%
5) Toluene-D8(S)	8.37	98	516912	26.193	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	104.772%
6) 4-Bromofluorobenzene(S)	11.26	95	193126	23.328	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	93.312%

Target Compounds

Qvalue



Quantitation Report

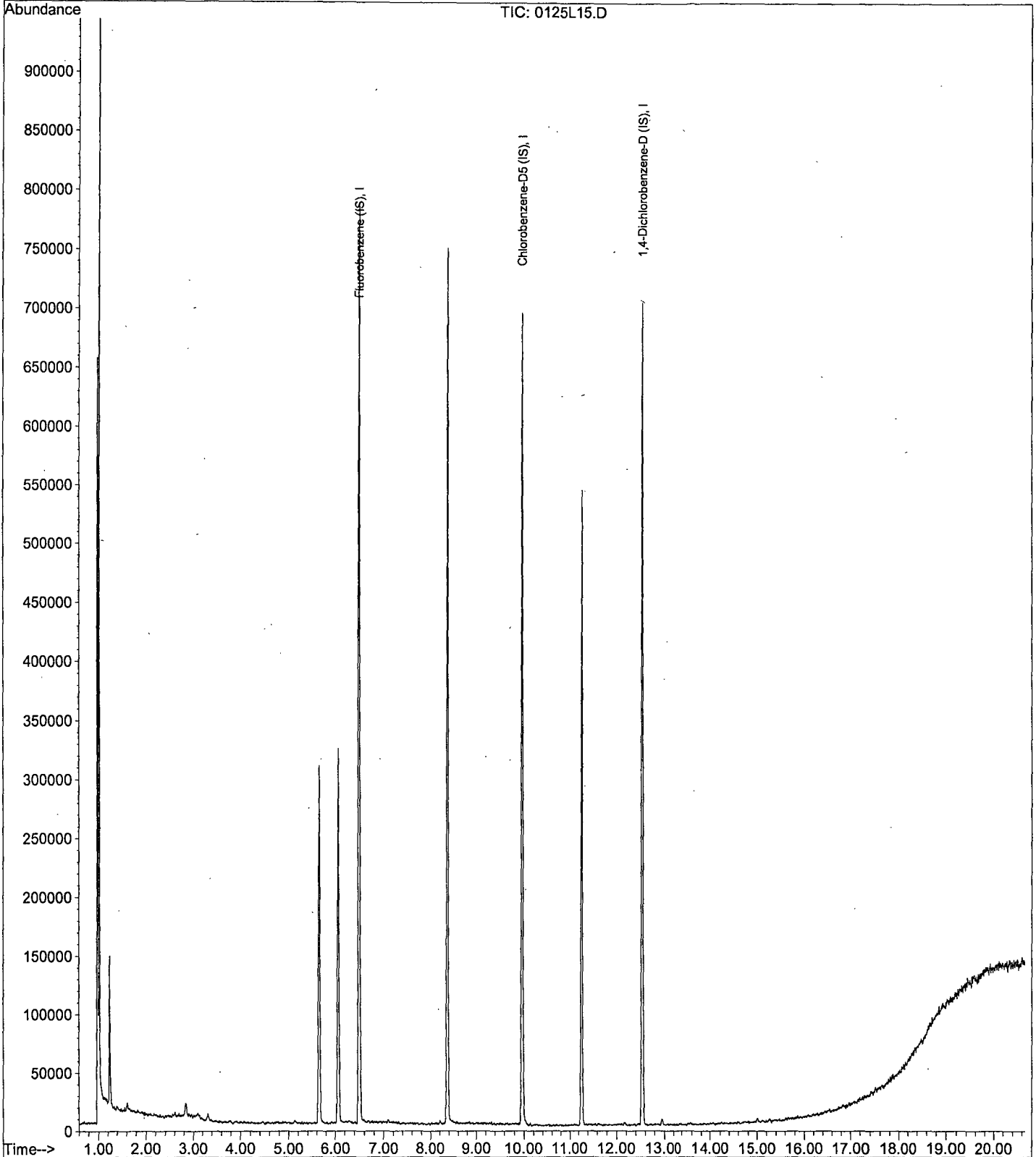
Data File : M:\LOKI\DATA\190121\0125L15.D  
Acq On : 25 Jan 19 15:22  
Sample : AZ85561W01  
Misc : IS&S 11/8/18

Vial: 14  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L16.D Vial: 15  
 Acq On : 25 Jan 19 15:51 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85562W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:42 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	791337	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	696447	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	699125	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Data File : M:\LOKI\DATA\190121\0125L16.D  
 Acq On : 25 Jan 19 15:51  
 Sample : AZ85562W01  
 Misc : IS&S 11/8/18

Vial: 15  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	380608	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	246400	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	124416	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	5.65	111	193040	26.915	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	107.660%
3) 1,2-DCA-D4(S)	6.07	65	229042	27.387	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	109.548%
5) Toluene-D8(S)	8.37	98	510395	25.352	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	101.408%
6) 4-Bromofluorobenzene(S)	11.26	95	191772	22.707	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	90.828%

Target Compounds

Qvalue

Quantitation Report

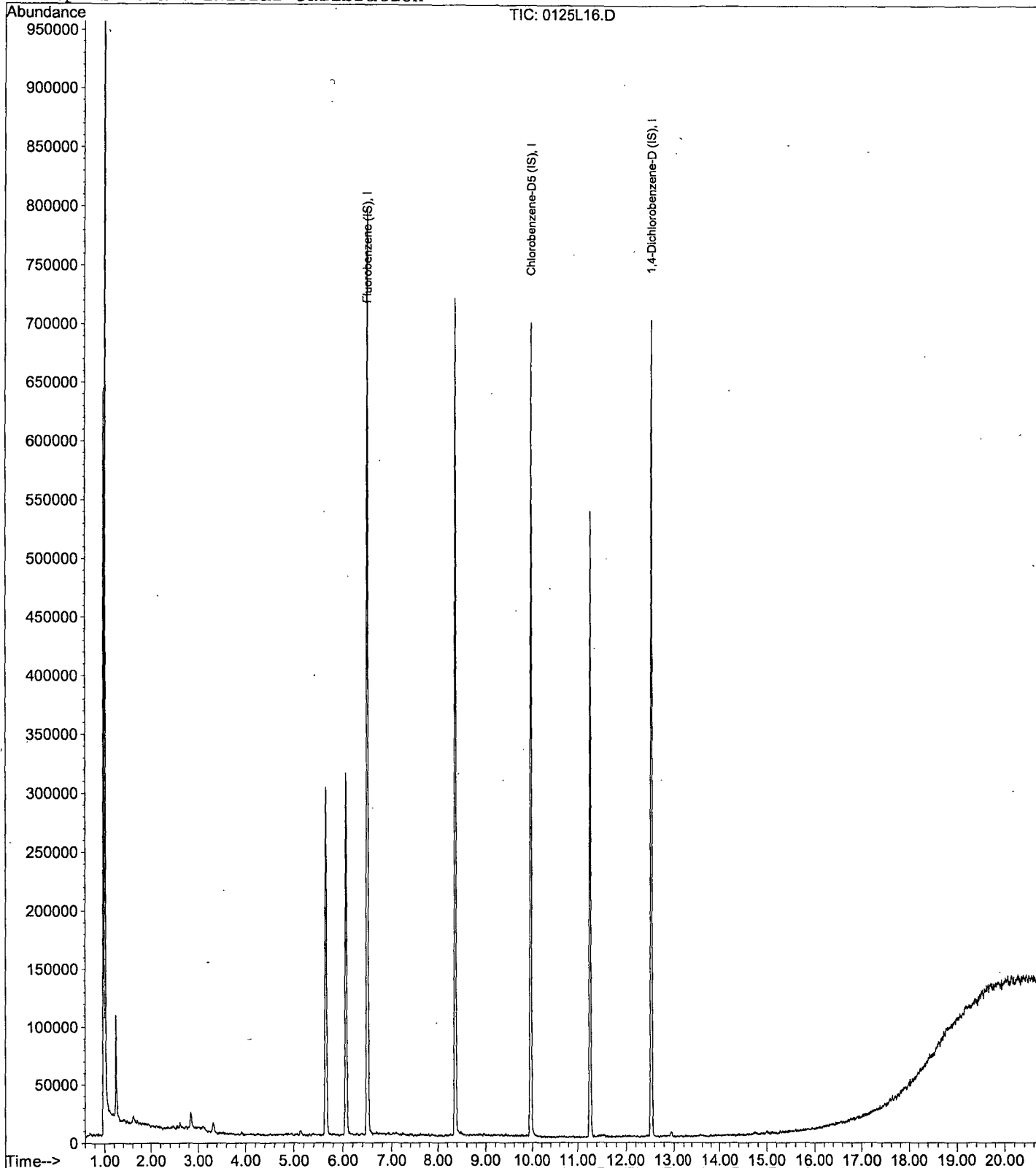
Data File : M:\LOKI\DATA\190121\0125L16.D  
Acq On : 25 Jan 19 15:51  
Sample : AZ85562W01  
Misc : IS&S 11/8/18

Vial: 15  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L17.D  
 Acq On : 25 Jan 19 16:19  
 Sample : AZ85563W01  
 Misc : IS&S 11/8/18

Vial: 16  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	772362	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	691366	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	677607	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L17.D Vial: 16  
 Acq On : 25 Jan 19 16:19 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85563W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	370304	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	242752	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	120472	25.000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane(S)	5.65	111	194145	27.822	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	111.288%
3) 1,2-DCA-D4(S)	6.07	65	225463	27.709	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	110.836%
5) Toluene-D8(S)	8.37	98	506844	25.554	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	102.216%
6) 4-Bromofluorobenzene(S)	11.26	95	187769	22.567	ppb	0.00
Spiked Amount				25.000		
				Recovery	=	90.268%

Target Compounds Qvalue

Quantitation Report

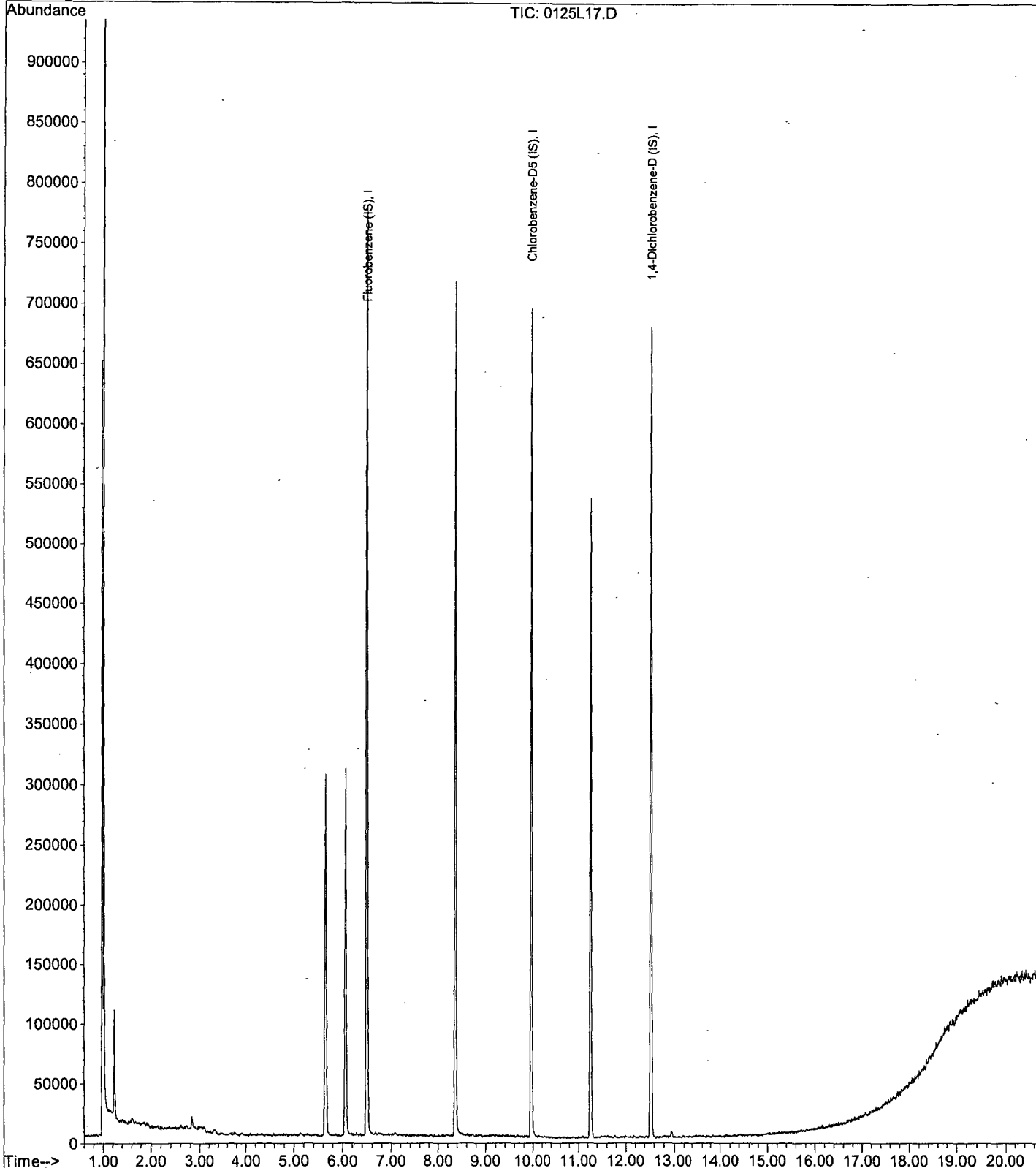
Data File : M:\LOKI\DATA\190121\0125L17.D  
Acq On : 25 Jan 19 16:19  
Sample : AZ85563W01  
Misc : IS&S 11/8/18

Vial: 16  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L18.D Vial: 17  
 Acq On : 25 Jan 19 16:48 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85564W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:42 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	775762	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	656011	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	658740	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L18.D  
 Acq On : 25 Jan 19 16:48  
 Sample : AZ85564W01  
 Misc : IS&S 11/8/18

Vial: 17  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	369024	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	230272	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	113144	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	196113	28.201	ppb	0.00
Spiked Amount				25.000		
					Recovery =	112.804%
3) 1,2-DCA-D4(S)	6.07	65	224379	27.671	ppb	0.00
Spiked Amount				25.000		
					Recovery =	110.684%
5) Toluene-D8(S)	8.37	98	504922	26.837	ppb	0.00
Spiked Amount				25.000		
					Recovery =	107.348%
6) 4-Bromofluorobenzene(S)	11.26	95	186930	23.684	ppb	0.00
Spiked Amount				25.000		
					Recovery =	94.736%
Target Compounds					Qvalue	

Quantitation Report

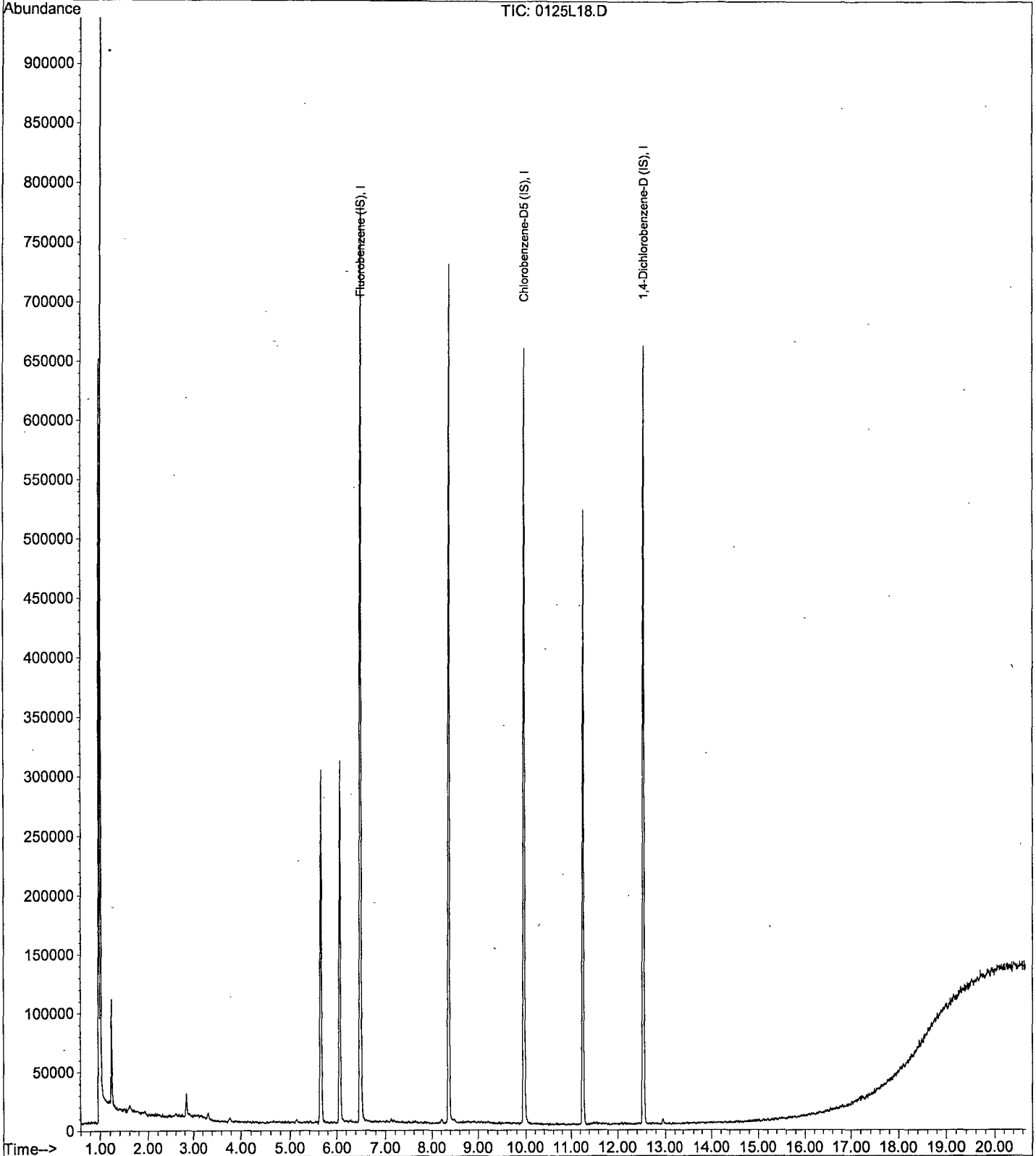
Data File : M:\LOKI\DATA\190121\0125L18.D  
Acq On : 25 Jan 19 16:48  
Sample : AZ85564W01  
Misc : IS&S 11/8/18

Vial: 17  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L19.D Vial: 18  
 Acq On : 25 Jan 19 17:17 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85565W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:42 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	741461	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	655035	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	669498	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L19.D  
 Acq On : 25 Jan 19 17:17  
 Sample : AZ85565W01  
 Misc : IS&S 11/8/18

Vial: 18  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	352704	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	230144	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	120976	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	191374	28.793	ppb	0.00
Spiked Amount				25.000		
					Recovery =	115.172%
3) 1,2-DCA-D4(S)	6.07	65	222964	28.769	ppb	0.00
Spiked Amount				25.000		
					Recovery =	115.076%
5) Toluene-D8(S)	8.37	98	497328	26.448	ppb	0.00
Spiked Amount				25.000		
					Recovery =	105.792%
6) 4-Bromofluorobenzene(S)	11.26	95	179970	22.815	ppb	0.00
Spiked Amount				25.000		
					Recovery =	91.260%
Target Compounds					Qvalue	

Quantitation Report

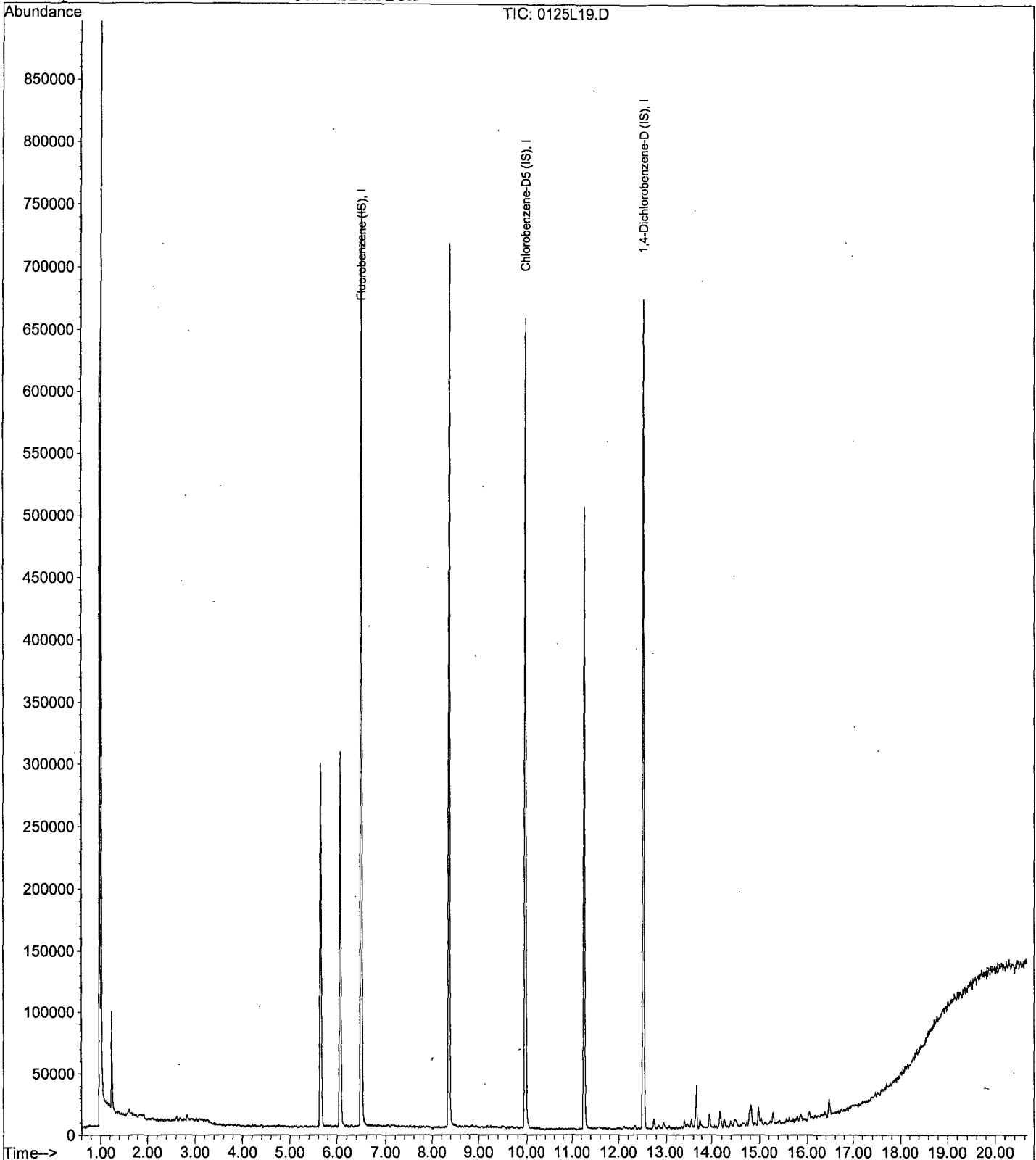
Data File : M:\LOKI\DATA\190121\0125L19.D  
Acq On : 25 Jan 19 17:17  
Sample : AZ85565W01  
Misc : IS&S 11/8/18

Vial: 18  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L20.D  
Acq On : 25 Jan 19 17:45  
Sample : AZ85566W01  
Misc : IS&S 11/8/18

Vial: 19  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration  
DataAcq Meth.: L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	804639	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	719510	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	717879	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Data File : M:\LOKI\DATA\190121\0125L20.D Vial: 19  
 Acq On : 25 Jan 19 17:45 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85566W01 Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	381376	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	249344	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	128984	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	196079	27.283	ppb	0.00
Spiked Amount				25.000		
					Recovery =	109.132%
3) 1,2-DCA-D4(S)	6.07	65	225585	26.919	ppb	0.00
Spiked Amount				25.000		
					Recovery =	107.676%
5) Toluene-D8(S)	8.37	98	500936	24.588	ppb	0.00
Spiked Amount				25.000		
					Recovery =	98.352%
6) 4-Bromofluorobenzene(S)	11.26	95	185746	21.734	ppb	0.00
Spiked Amount				25.000		
					Recovery =	86.936%

Target Compounds Qvalue

Quantitation Report

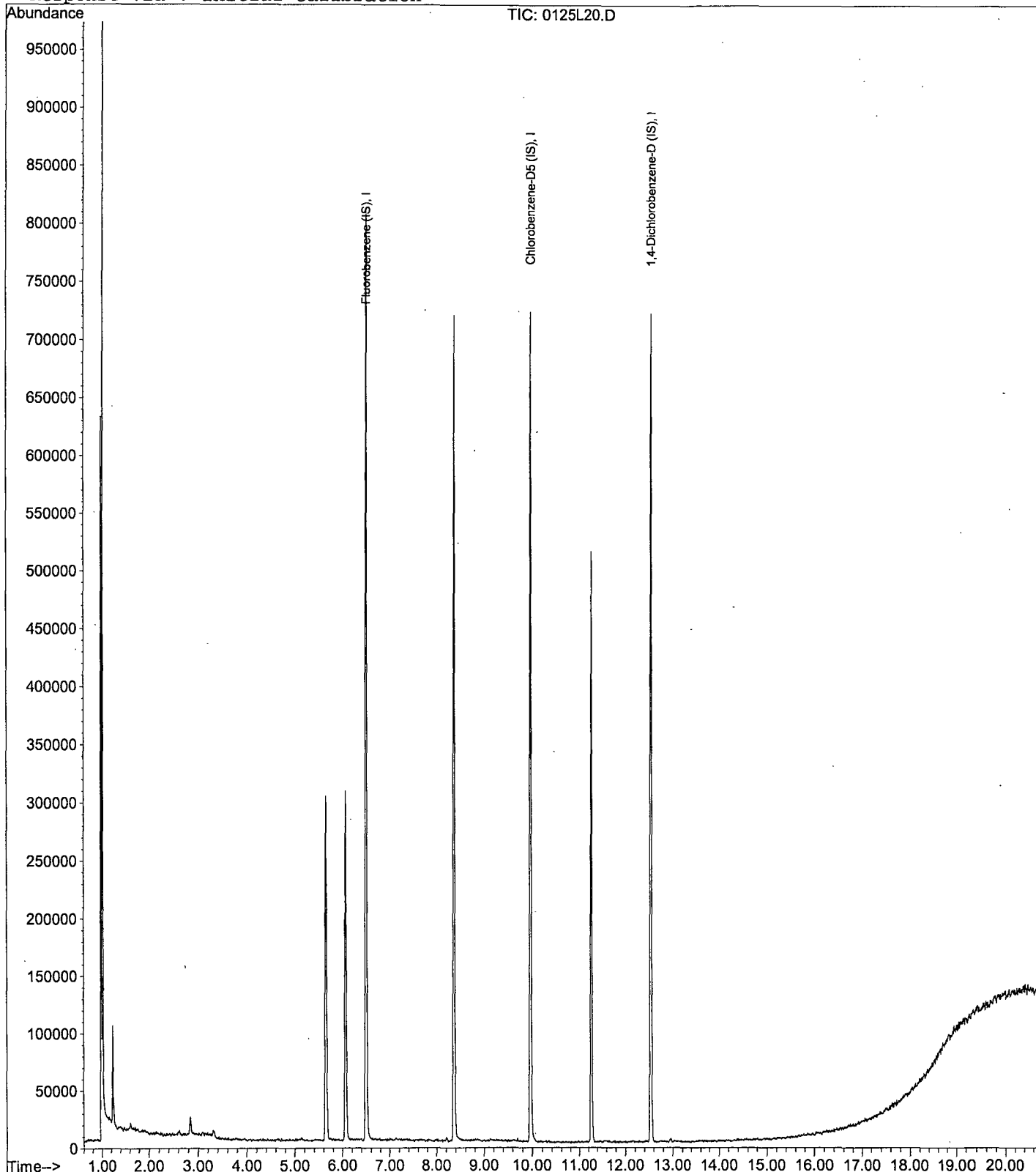
Data File : M:\LOKI\DATA\190121\0125L20.D  
Acq On : 25 Jan 19 17:45  
Sample : AZ85566W01  
Misc : IS&S 11/8/18

Vial: 19  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:42 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L21.D Vial: 20  
Acq On : 25 Jan 19 18:14 Operator: PM,DG,SV,CMM,KV  
Sample : AZ85567W01 Inst : Loki  
Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:43 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	TIC	740182	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	652661	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	634419	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L21.D  
 Acq On : 25 Jan 19 18:14  
 Sample : AZ85567W01  
 Misc : IS&S 11/8/18

Vial: 20  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	354816	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	229184	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	116376	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	190816	28.538	ppb	0.00
Spiked Amount				25.000		
					Recovery =	114.152%
3) 1,2-DCA-D4(S)	6.07	65	221410	28.399	ppb	0.00
Spiked Amount				25.000		
					Recovery =	113.596%
5) Toluene-D8(S)	8.37	98	491891	26.268	ppb	0.00
Spiked Amount				25.000		
					Recovery =	105.072%
6) 4-Bromofluorobenzene(S)	11.26	95	177628	22.613	ppb	0.00
Spiked Amount				25.000		
					Recovery =	90.452%

Target Compounds

Qvalue

Quantitation Report

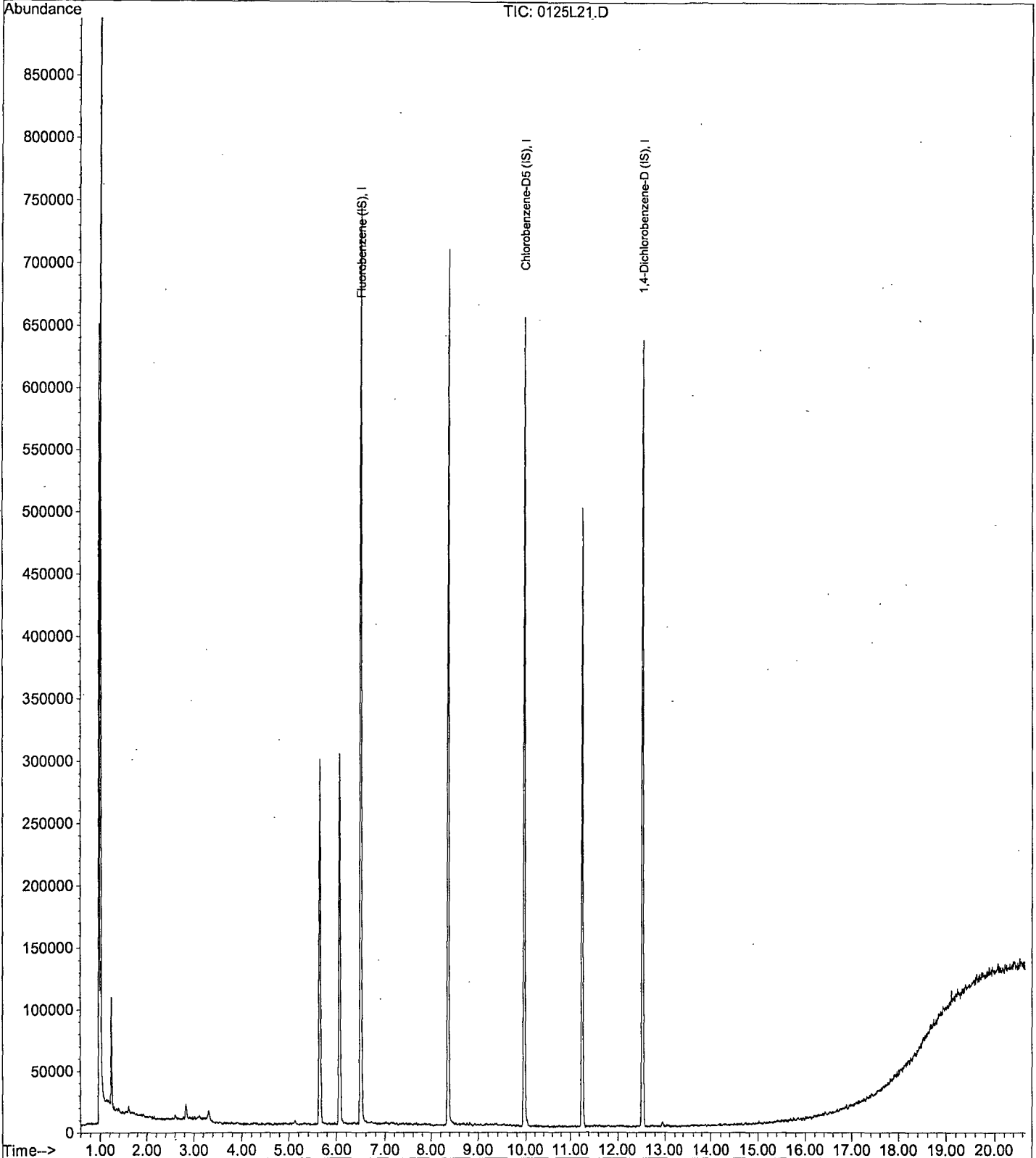
Data File : M:\LOKI\DATA\190121\0125L21.D  
Acq On : 25 Jan 19 18:14  
Sample : AZ85567W01  
Misc : IS&S 11/8/18

Vial: 20  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L22.D  
 Acq On : 25 Jan 19 18:42  
 Sample : AZ85568W01  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	780692	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	671993	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	680440	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L22.D  
 Acq On : 25 Jan 19 18:42  
 Sample : AZ85568W01  
 Misc : IS&S 11/8/18

Vial: 21  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	368640	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	236608	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	121904	25.000	ppb	0.00

System Monitoring Compounds

2) Dibromofluoromethane(S)	5.65	111	192283	27.679	ppb	0.00
Spiked Amount	25.000		Recovery	= 110.716%		
3) 1,2-DCA-D4(S)	6.07	65	222672	27.490	ppb	0.00
Spiked Amount	25.000		Recovery	= 109.960%		
5) Toluene-D8(S)	8.37	98	508721	26.315	ppb	0.00
Spiked Amount	25.000		Recovery	= 105.260%		
6) 4-Bromofluorobenzene(S)	11.26	95	185381	22.859	ppb	0.00
Spiked Amount	25.000		Recovery	= 91.436%		

Target Compounds

Qvalue

Quantitation Report

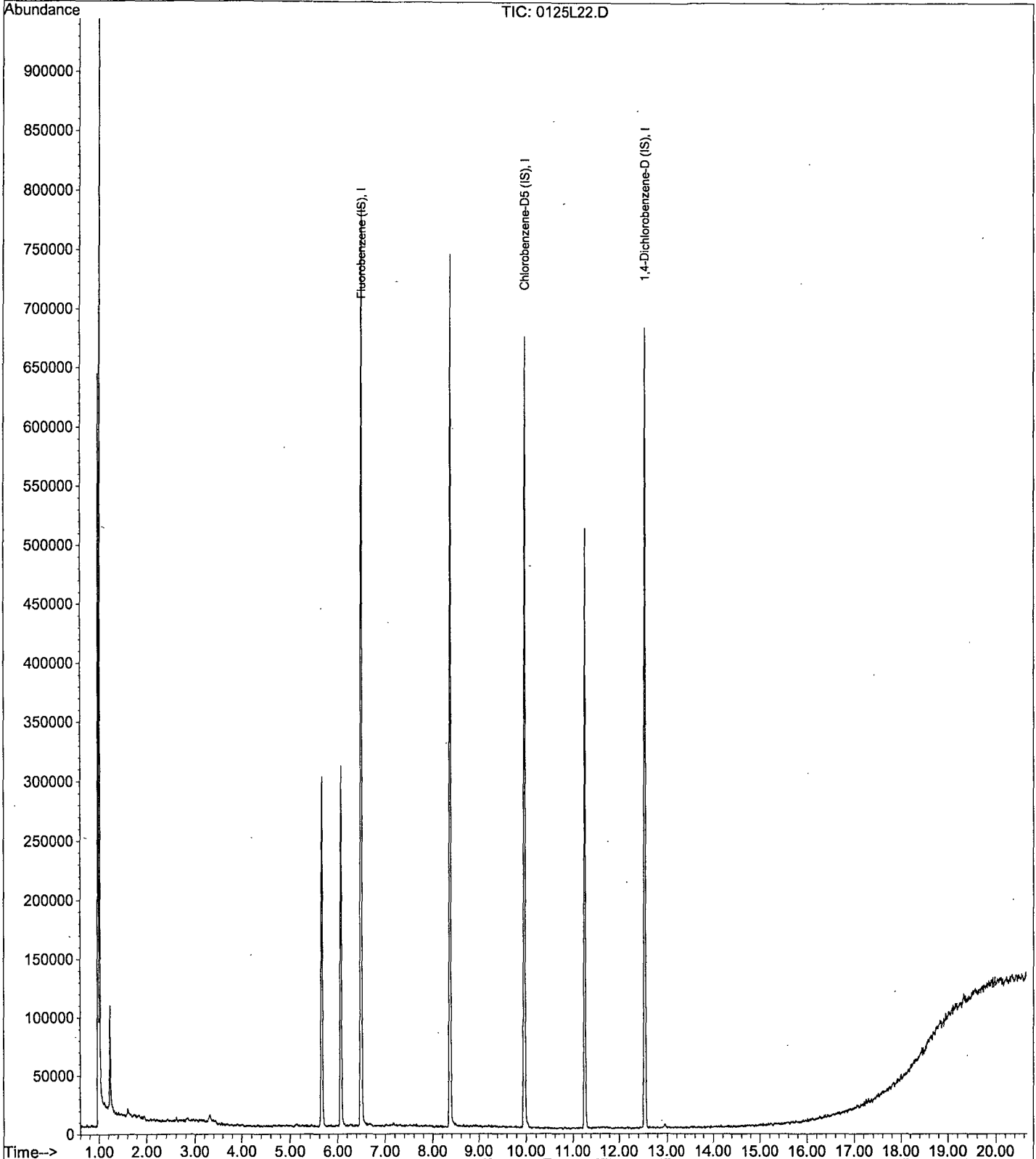
Data File : M:\LOKI\DATA\190121\0125L22.D  
Acq On : 25 Jan 19 18:42  
Sample : AZ85568W01  
Misc : IS&S 11/8/18

Vial: 21  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L23.D Vial: 22  
Acq On : 25 Jan 19 19:11 Operator: PM,DG,SV,CMM,KV  
Sample : AZ85569W01 Inst : Loki  
Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:43 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	743746	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	641430	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	642172	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L23.D  
 Acq On : 25 Jan 19 19:11  
 Sample : AZ85569W01  
 Misc : IS&S 11/8/18

Vial: 22  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	352512	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	225088	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	111120	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	195937	29.496	ppb	0.00
Spiked Amount				25.000		
					Recovery =	117.984%
3) 1,2-DCA-D4(S)	6.07	65	224167	28.940	ppb	0.00
Spiked Amount				25.000		
					Recovery =	115.760%
5) Toluene-D8(S)	8.37	98	499226	27.145	ppb	0.00
Spiked Amount				25.000		
					Recovery =	108.580%
6) 4-Bromofluorobenzene(S)	11.26	95	179151	23.221	ppb	0.00
Spiked Amount				25.000		
					Recovery =	92.884%

Target Compounds

Qvalue



Quantitation Report

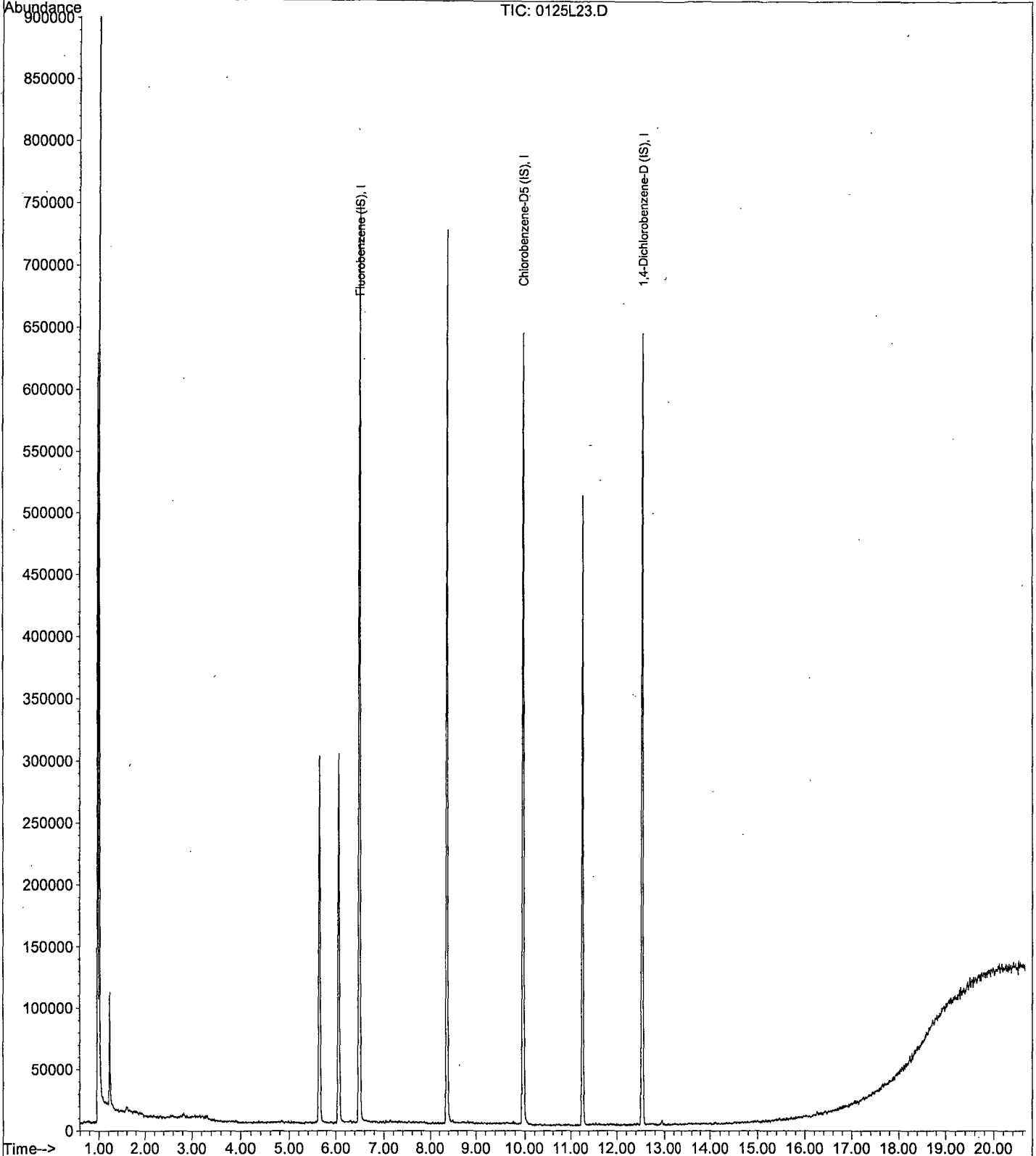
Data File : M:\LOKI\DATA\190121\0125L23.D  
Acq On : 25 Jan 19 19:11  
Sample : AZ85569W01  
Misc : IS&S 11/8/18

Vial: 22  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L04.D  
Acq On : 25 Jan 19 10:08  
Sample : 190125A Blk  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 12:21 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration  
DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	730274	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	695835	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	684743	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds

Qvalue

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L04.D  
 Acq On : 25 Jan 19 10:08  
 Sample : 190125A Blk  
 Misc : IS&S 11/8/18

Vial: 3  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 25 12:22 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	344704	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	247040	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	121128	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	190494	29.326	ppb	0.00
Spiked Amount				25.000		
			Recovery		=	117.304%
3) 1,2-DCA-D4(S)	6.07	65	222597	29.389	ppb	0.00
Spiked Amount				25.000		
			Recovery		=	117.556%
5) Toluene-D8(S)	8.37	98	524929	26.006	ppb	0.00
Spiked Amount				25.000		
			Recovery		=	104.024%
6) 4-Bromofluorobenzene(S)	11.26	95	198211	23.409	ppb	0.00
Spiked Amount				25.000		
			Recovery		=	93.636%

Target Compounds

Qvalue

Quantitation Report

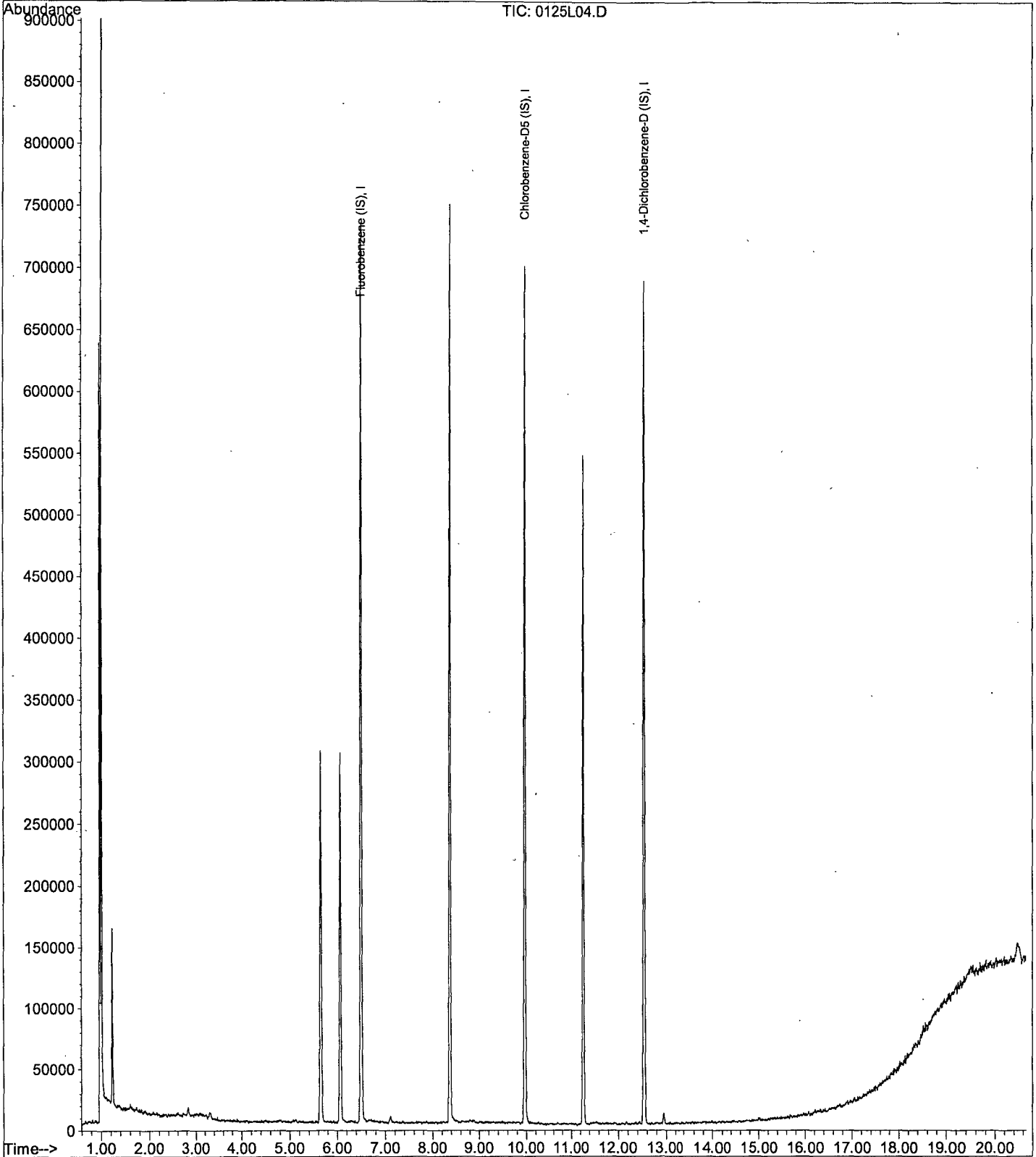
Data File : M:\LOKI\DATA\190121\0125L04.D  
Acq On : 25 Jan 19 10:08  
Sample : 190125A Blk  
Misc : IS&S 11/8/18

Vial: 3  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 12:21 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L10.D Vial: 9  
 Acq On : 25 Jan 19 12:59 Operator: PM,DG,SV,CMM,KV  
 Sample : 190125A LCS 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 25 13:52 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	760444	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	670836	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	688745	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.50	TIC	13365746m	303.484	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L10.D  
 Acq On : 25 Jan 19 12:59  
 Sample : 190125A LCS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 9  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 25 13:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	6.50	96	361344	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	236480	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	122864	25.000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane(S)	5.65	111	191364	28.103	ppb	0.00
Spiked Amount				25.000		
						Recovery = 112.412%
3) 1,2-DCA-D4(S)	6.07	65	230075	28.977	ppb	0.00
Spiked Amount				25.000		
						Recovery = 115.908%
5) Toluene-D8(S)	8.37	98	519682	26.896	ppb	0.00
Spiked Amount				25.000		
						Recovery = 107.584%
6) 4-Bromofluorobenzene(S)	11.26	95	196874	24.289	ppb	0.00
Spiked Amount				25.000		
						Recovery = 97.156%

Target Compounds

Qvalue

Quantitation Report

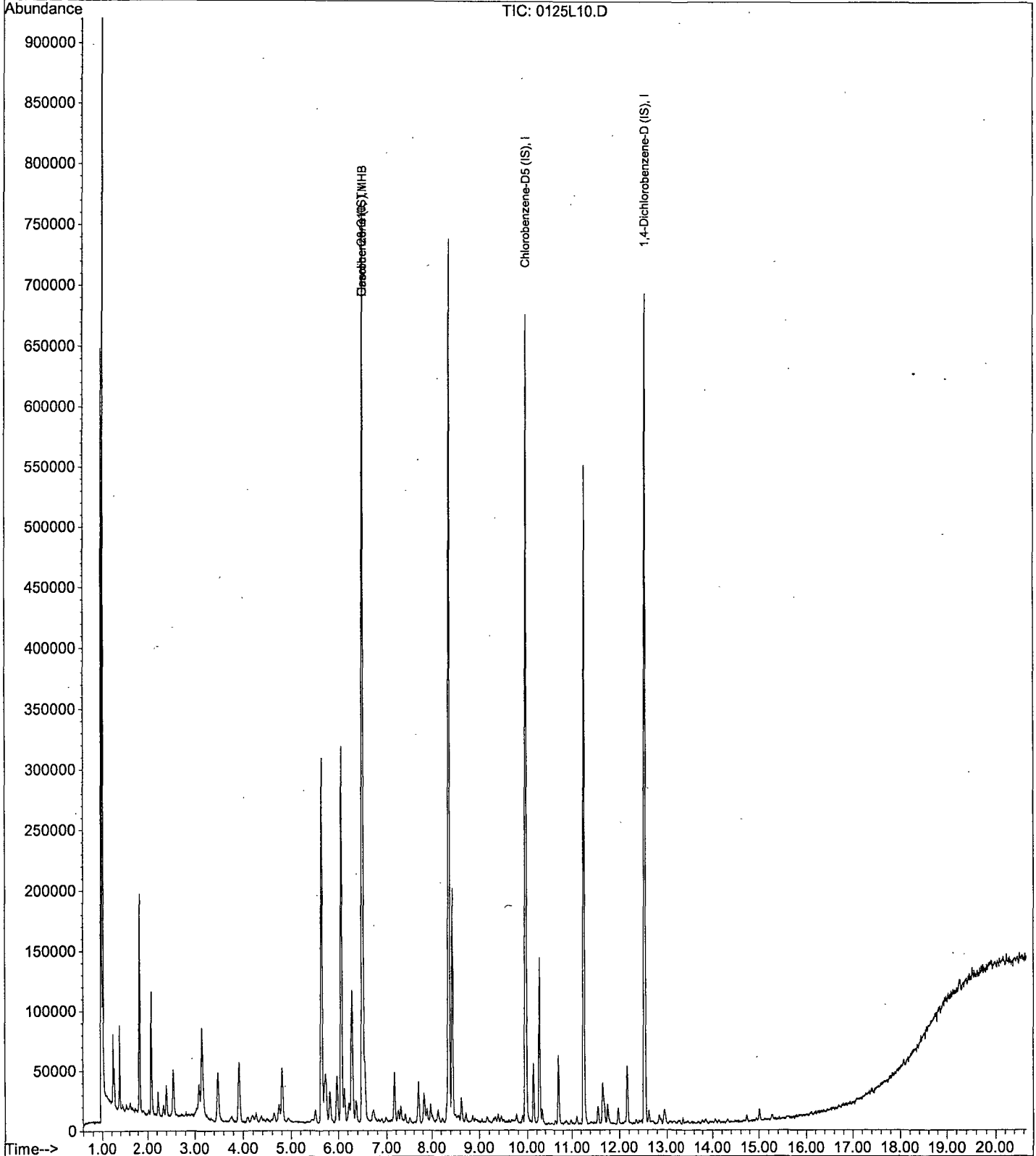
Data File : M:\LOKI\DATA\190121\0125L10.D  
Acq On : 25 Jan 19 12:59  
Sample : 190125A LCS 300ug/L  
Misc : IS&S 11/8/18

Vial: 9  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 13:52 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L11.D  
 Acq On : 25 Jan 19 13:28  
 Sample : 190125A LCSD 300ug/L  
 Misc : IS&S 11/8/18

Vial: 10  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 25 13:53 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	741433	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	666474	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	701479	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.50	TIC	13270047m	317.960	ppb	100



Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L11.D Vial: 10  
 Acq On : 25 Jan 19 13:28 Operator: PM,DG,SV,CMM,KV  
 Sample : 190125A LCSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 25 13:53 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	350528	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	232128	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	125856	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	188592	28.551	ppb	0.00
Spiked Amount				25.000		
					Recovery = 114.204%	
3) 1,2-DCA-D4(S)	6.07	65	224719	29.176	ppb	0.00
Spiked Amount				25.000		
					Recovery = 116.704%	
5) Toluene-D8(S)	8.37	98	513160	27.057	ppb	0.00
Spiked Amount				25.000		
					Recovery = 108.228%	
6) 4-Bromofluorobenzene(S)	11.27	95	195242	24.540	ppb	0.00
Spiked Amount				25.000		
					Recovery = 98.160%	

Target Compounds Qvalue

Quantitation Report

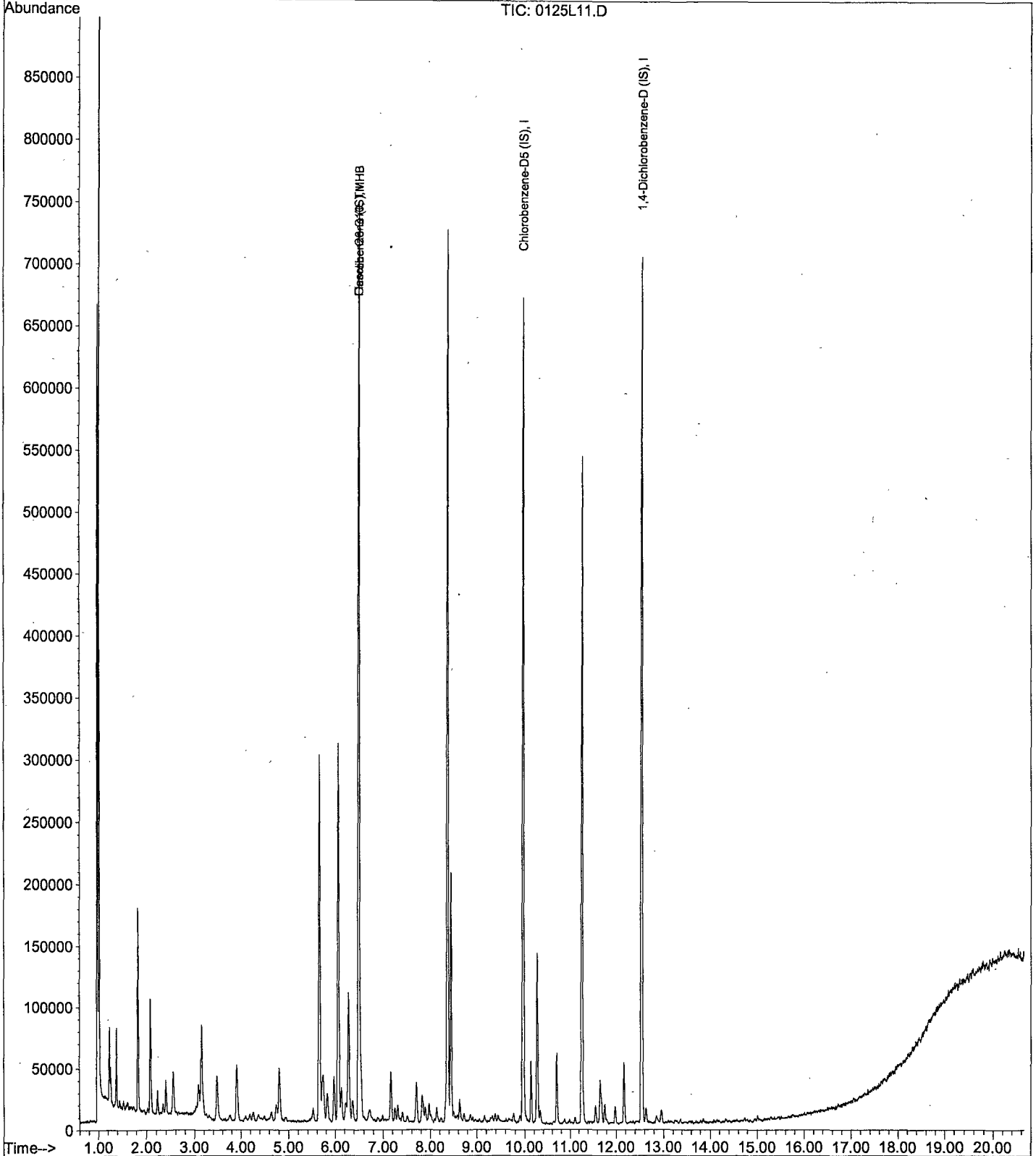
Data File : M:\LOKI\DATA\190121\0125L11.D  
Acq On : 25 Jan 19 13:28  
Sample : 190125A LCSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 10  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 25 13:53 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report. (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L26.D  
 Acq On : 25 Jan 19 20:37  
 Sample : AZ85562W456 MS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 25  
 Operator: PM,DG,SV,CMM,KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	818267	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	695868	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.54	TIC	697835	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	6.50	TIC	13539622m	257.141	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L26.D  
 Acq On : 25 Jan 19 20:37  
 Sample : AZ85562W456 MS 300ug/L  
 Misc : IS&S 11/8/18

Vial: 25  
 Operator: PM, DG, SV, CMM, KV  
 Inst : Loki  
 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019

Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	397056	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	242240	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.54	152	125032	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	195621	26.145	ppb	0.00
Spiked Amount				25.000		
					Recovery =	104.580%
3) 1,2-DCA-D4(S)	6.07	65	230621	26.433	ppb	0.00
Spiked Amount				25.000		
					Recovery =	105.732%
5) Toluene-D8(S)	8.37	98	544060	27.488	ppb	0.00
Spiked Amount				25.000		
					Recovery =	109.952%
6) 4-Bromofluorobenzene(S)	11.26	95	184673	22.242	ppb	0.00
Spiked Amount				25.000		
					Recovery =	88.968%
Target Compounds						Qvalue

Quantitation Report

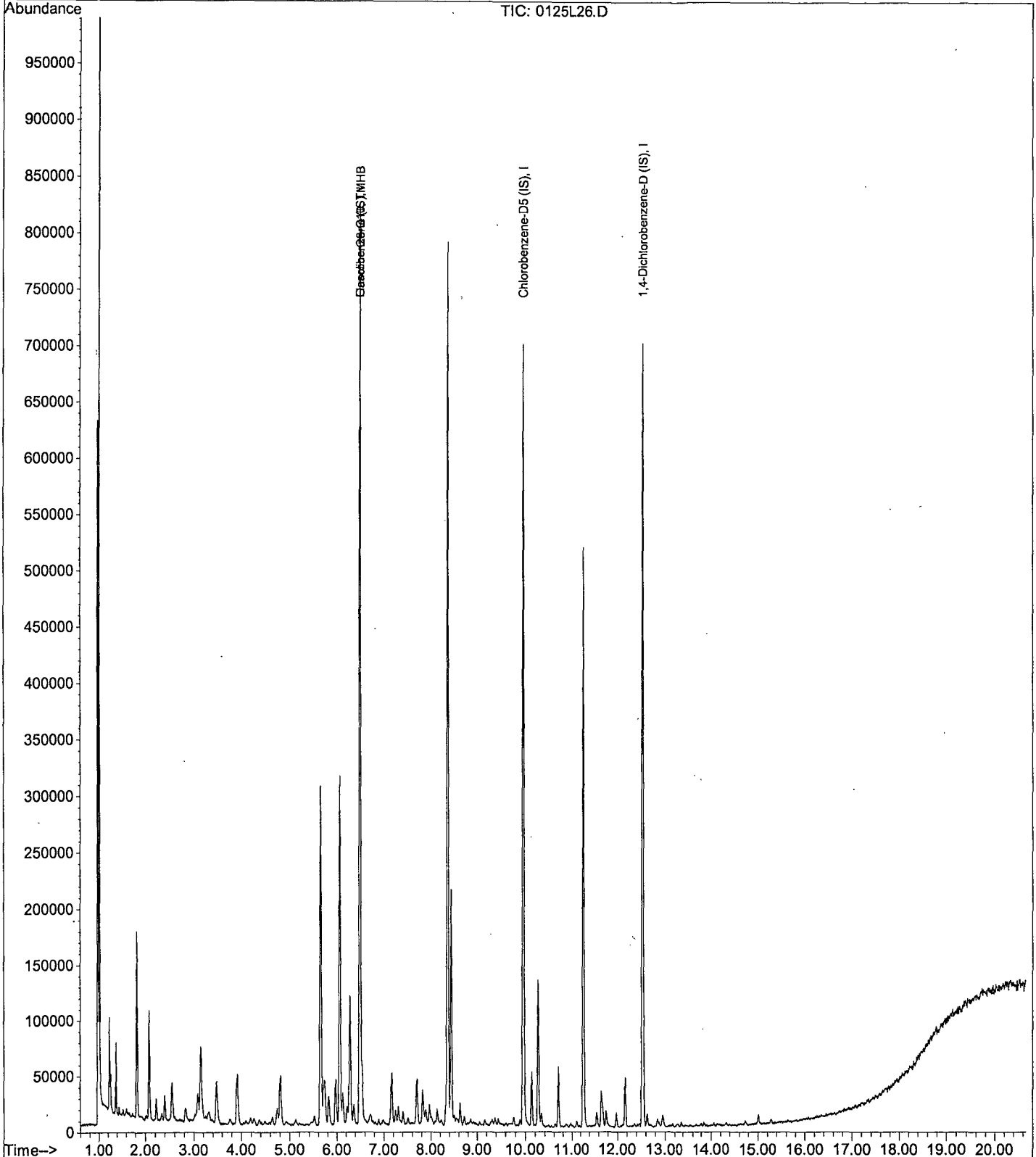
Data File : M:\LOKI\DATA\190121\0125L26.D  
Acq On : 25 Jan 19 20:37  
Sample : AZ85562W456 MS 300ug/L  
Misc : IS&S 11/8/18

Vial: 25  
Operator: PM,DG,SV,CMM,KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LOKI\DATA\190121\0125L27.D Vial: 26  
 Acq On : 25 Jan 19 21:05 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85562W456 MSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:43 2019 Quant Results File: LGAS0122.RES

Quant Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Jan 24 09:25:37 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	TIC	778070	25.000	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.97	TIC	665051	25.000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.53	TIC	653530	25.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline C6-C10	8.37	TIC	13434838m	289.558	ppb	100

Quantitation Report (Not Reviewed)

Data File : M:\LOKI\DATA\190121\0125L27.D Vial: 26  
 Acq On : 25 Jan 19 21:05 Operator: PM,DG,SV,CMM,KV  
 Sample : AZ85562W456 MSD 300ug/L Inst : Loki  
 Misc : IS&S 11/8/18 Multiplr: 1.00

Quant Time: Jan 31 13:52 2019 Quant Results File: L0121SUR.RES

Quant Method : M:\LOKI\DATA\190121\L0121SUR.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Tue Jan 22 12:46:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : L8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.50	96	372864	25.000	ppb	0.00
4) Chlorobenzene-D5 (IS)	9.97	117	231744	25.000	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	12.53	152	114656	25.000	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	5.65	111	197914	28.167	ppb	0.00
Spiked Amount				25.000		
						Recovery = 112.668%
3) 1,2-DCA-D4(S)	6.07	65	227030	27.710	ppb	0.00
Spiked Amount				25.000		
						Recovery = 110.840%
5) Toluene-D8(S)	8.37	98	558656	29.504	ppb	0.00
Spiked Amount				25.000		
						Recovery = 118.016%
6) 4-Bromofluorobenzene(S)	11.26	95	187376	23.590	ppb	0.00
Spiked Amount				25.000		
						Recovery = 94.360%

Target Compounds Qvalue

Quantitation Report

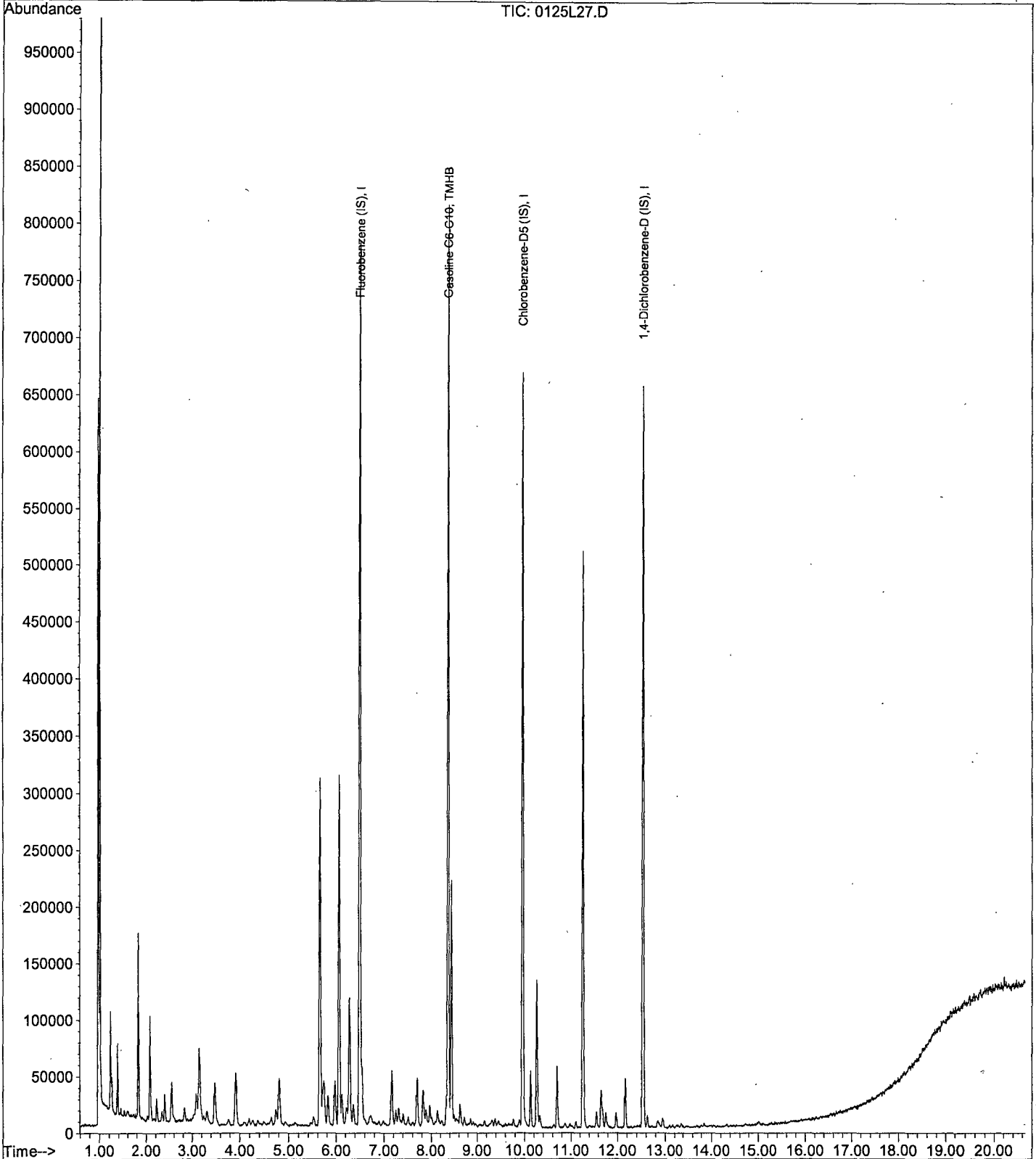
Data File : M:\LOKI\DATA\190121\0125L27.D  
Acq On : 25 Jan 19 21:05  
Sample : AZ85562W456 MSD 300ug/L  
Misc : IS&S 11/8/18

Vial: 26  
Operator: PM, DG, SV, CMM, KV  
Inst : Loki  
Multiplr: 1.00

Quant Time: Jan 31 13:43 2019

Quant Results File: LGAS0122.RES

Method : M:\LOKI\DATA\190121\LGAS0122.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Jan 24 09:25:37 2019  
Response via : Initial Calibration





## Injection Log

Directory: M:\LOKI\DATA\190121\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	6	0121L07.D	1	0.3ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 17:50
2	7	0121L08.D	1	0.5ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:18
3	8	0121L09.D	1	1.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 18:47
4	9	0121L10.D	1	2.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:16
5	10	0121L11.D	1	5.0ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 19:44
6	11	0121L12.D	1	10ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:13
7	12	0121L13.D	1	20ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 20:41
8	13	0121L14.D	1	40ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:10
9	14	0121L15.D	1	50ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 21:38
10	15	0121L16.D	1	100ug/L VOC STD 1/21/19	IS&S 11/8/18	21 Jan 19 22:07
11	2	0122L03.D	1	20ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 14:10
12	3	0122L04.D	1	50ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 14:39
13	4	0122L05.D	1	100ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 15:07
14	5	0122L06.D	1	300ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 15:36
15	6	0122L07.D	1	600ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 16:04
16	7	0122L08.D	1	800ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 16:33
17	8	0122L09.D	1	1000ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 17:01
18	11	0122L12.D	1	(SS)300ug/L GAS STD 1/21/19	IS&S 11/8/18	22 Jan 19 18:27
19	2	0125L03.D	1	190125A CCV 300ug/L	IS&S 11/8/18	25 Jan 19 9:39
20	3	0125L04.D	1	190125A Blk	IS&S 11/8/18	25 Jan 19 10:08
21	9	0125L10.D	1	190125A LCS 300ug/L	IS&S 11/8/18	25 Jan 19 12:59
22	10	0125L11.D	1	190125A LCSD 300ug/L	IS&S 11/8/18	25 Jan 19 13:28
23	14	0125L15.D	1	AZ85561W01	IS&S 11/8/18	25 Jan 19 15:22
24	15	0125L16.D	1	AZ85562W01	IS&S 11/8/18	25 Jan 19 15:51
25	16	0125L17.D	1	AZ85563W01	IS&S 11/8/18	25 Jan 19 16:19
26	17	0125L18.D	1	AZ85564W01	IS&S 11/8/18	25 Jan 19 16:48
27	18	0125L19.D	1	AZ85565W01	IS&S 11/8/18	25 Jan 19 17:17
28	19	0125L20.D	1	AZ85566W01	IS&S 11/8/18	25 Jan 19 17:45
29	20	0125L21.D	1	AZ85567W01	IS&S 11/8/18	25 Jan 19 18:14
30	21	0125L22.D	1	AZ85568W01	IS&S 11/8/18	25 Jan 19 18:42
31	22	0125L23.D	1	AZ85569W01	IS&S 11/8/18	25 Jan 19 19:11
32	25	0125L26.D	1	AZ85562W456 MS 300ug/L	IS&S 11/8/18	25 Jan 19 20:37
33	26	0125L27.D	1	AZ85562W456 MSD 300ug/L	IS&S 11/8/18	25 Jan 19 21:05
34	28	0125L29.D	1	Ending CCV 300ug/L 1/25/19	IS&S 11/8/18	25 Jan 19 22:02

**ORGANICS**  
**Calibration Data**

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/20/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initials: \_\_\_\_\_

19012000.D    19012001.D    19012002.D    19012003.D    19012005.D    19012007.D    19012008.D

		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r <sup>2</sup>	Q
1	ATML	Methane	31727	15184	9929	15034	12111	11418	8746				14878	52	ATM	0.994	
2	ATML	Ethane	25078	13064	8590	12630	9815	9659	7285				12303	49	ATM	0.994	
3	ATML	Ethene	22488	11903	7914	11685	9157	8919	6685				11250	47	ATM	0.993	
4																	
5																	
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7																	
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35																	

4.239405

Data File : G:\ROCKY\DATA\190120RS\19012000.D Vial: 1  
 Acq On : 20 Jan 19 11:58 Operator: cmm  
 Sample : RSK Std 1 01/20/19 Inst : 7890  
 Misc : 125uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:35 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:34:55 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

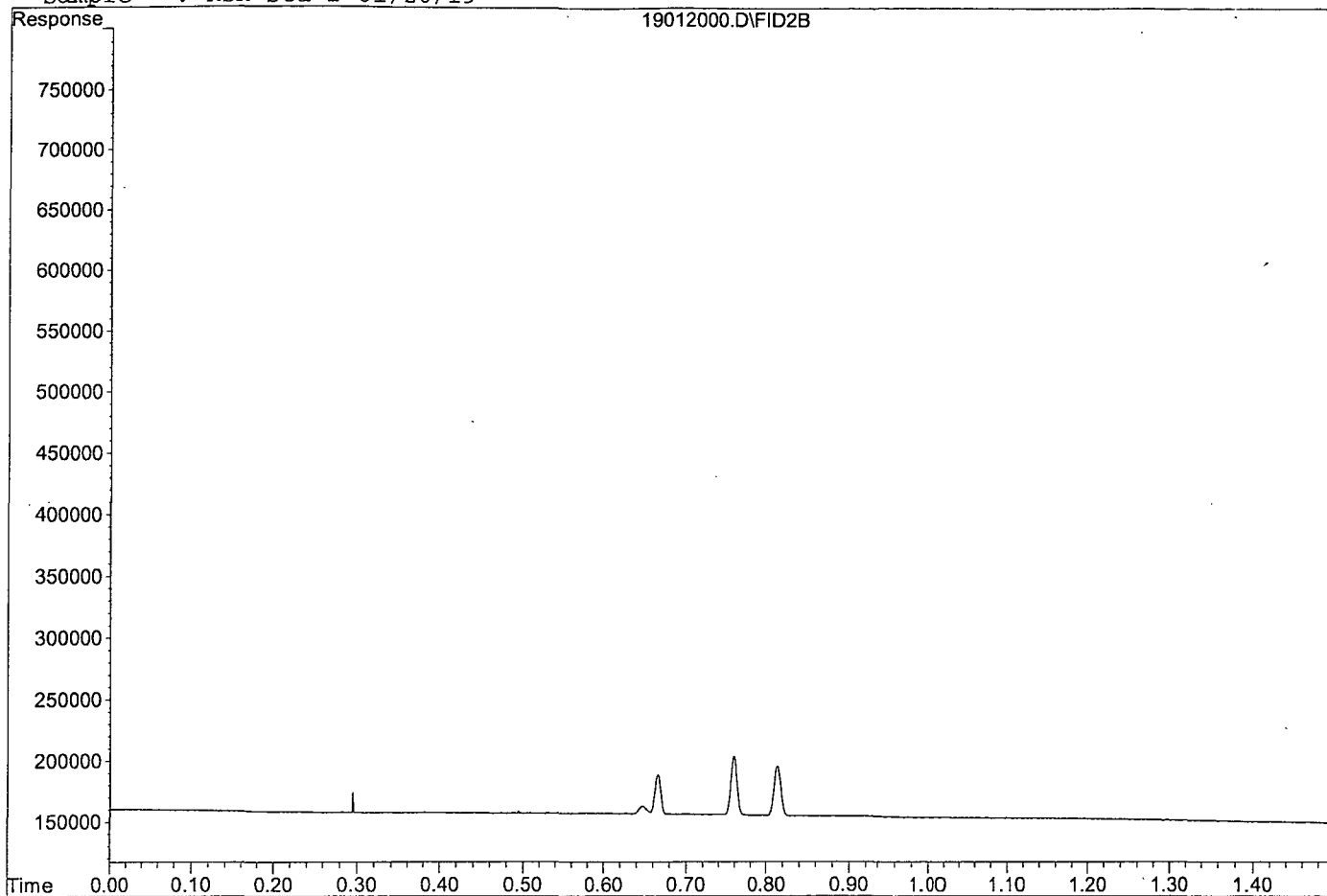
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.67	32996	N.D.	ppb
2) ATM Ethane	0.76	49028	N.D.	ppb
3) ATM Ethene	0.81	41040	N.D.	ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012000.D

Sample : RSK Std 1 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012001.D Vial: 2  
 Acq On : 20 Jan 19 12:02 Operator: cmm  
 Sample : RSK Std 2 01/20/19 Inst : 7890  
 Misc : 250uL from RSK Std 3 Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:35 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:35:30 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

Target Compounds

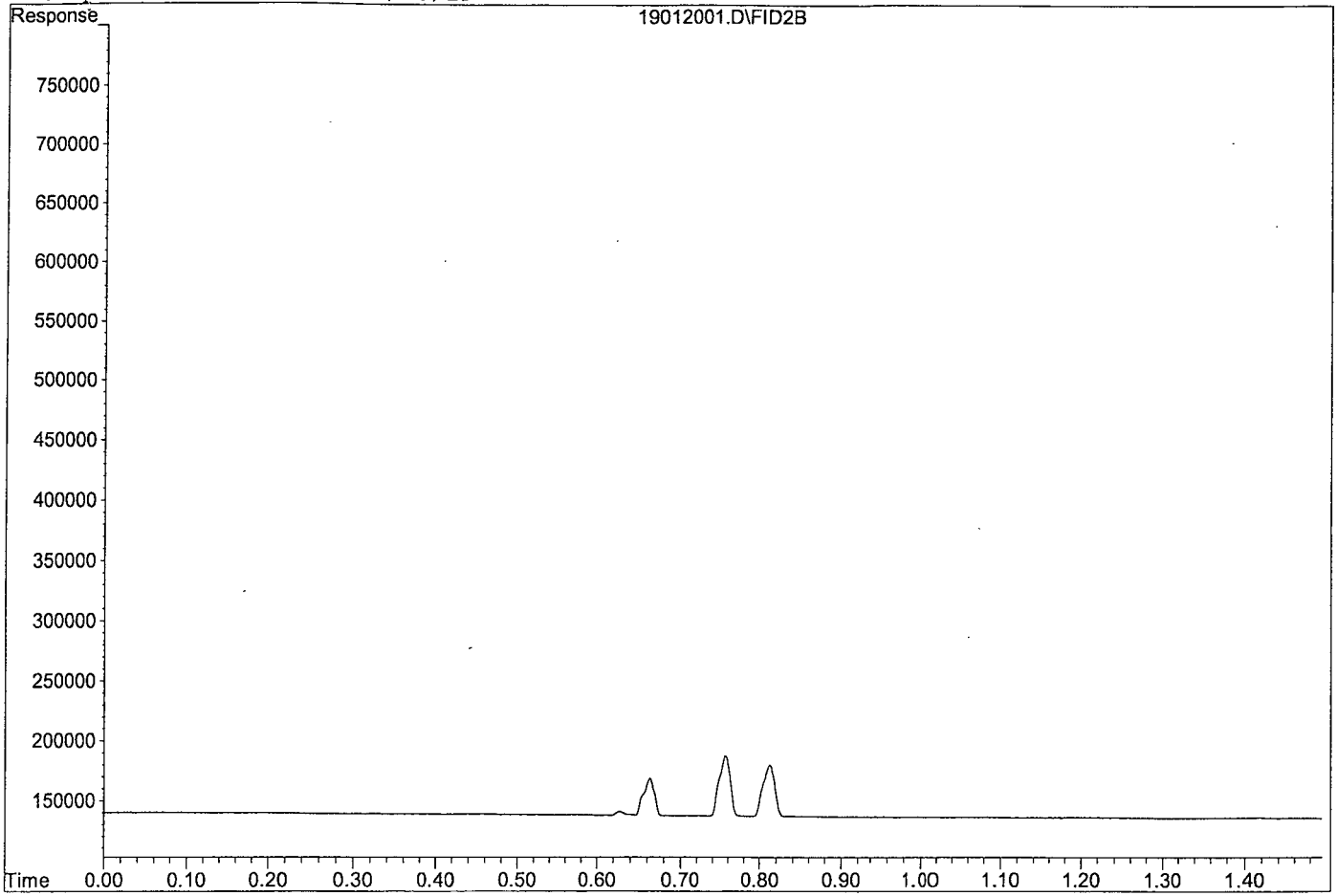
Target Compounds

1) ATM Methane	0.66	31584	N.D. ppb
2) ATM Ethane	0.76	51016	N.D. ppb
3) ATM Ethene	0.81	43446	N.D. ppb

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012001.D

Sample : RSK Std 2 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012002.D Vial: 3  
 Acq On : 20 Jan 19 12:04 Operator: cmm  
 Sample : RSK Std 3 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:36 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:01 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

Target Compounds

Target Compounds

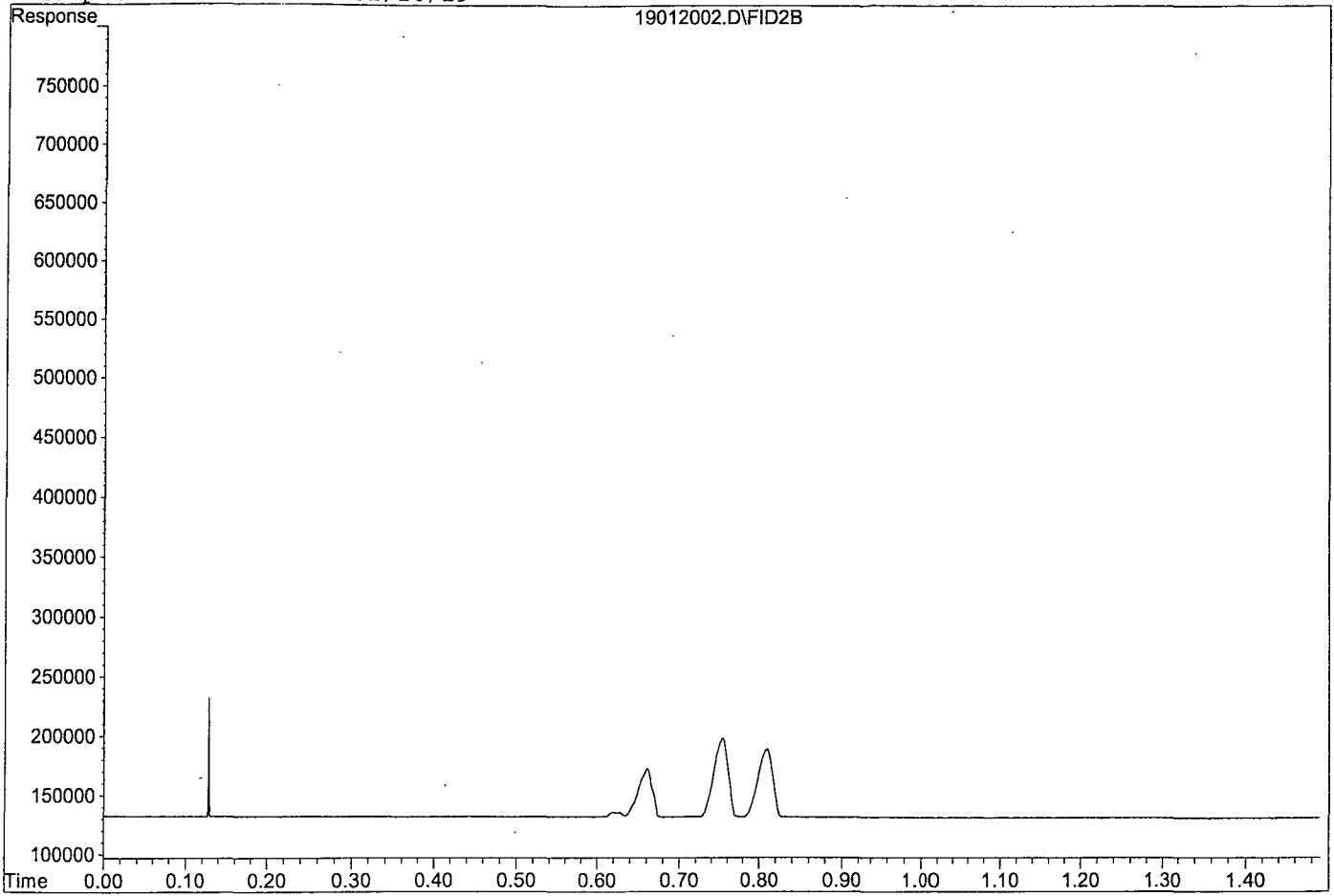
1) ATM Methane	0.66	41402	N.D. ppb
2) ATM Ethane	0.75	66998	N.D. ppb
3) ATM Ethene	0.81	57770	N.D. ppb



Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012002.D

Sample : RSK Std 3 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012003.D Vial: 4  
 Acq On : 20 Jan 19 12:07 Operator: cmm  
 Sample : RSK Std 4 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:36 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

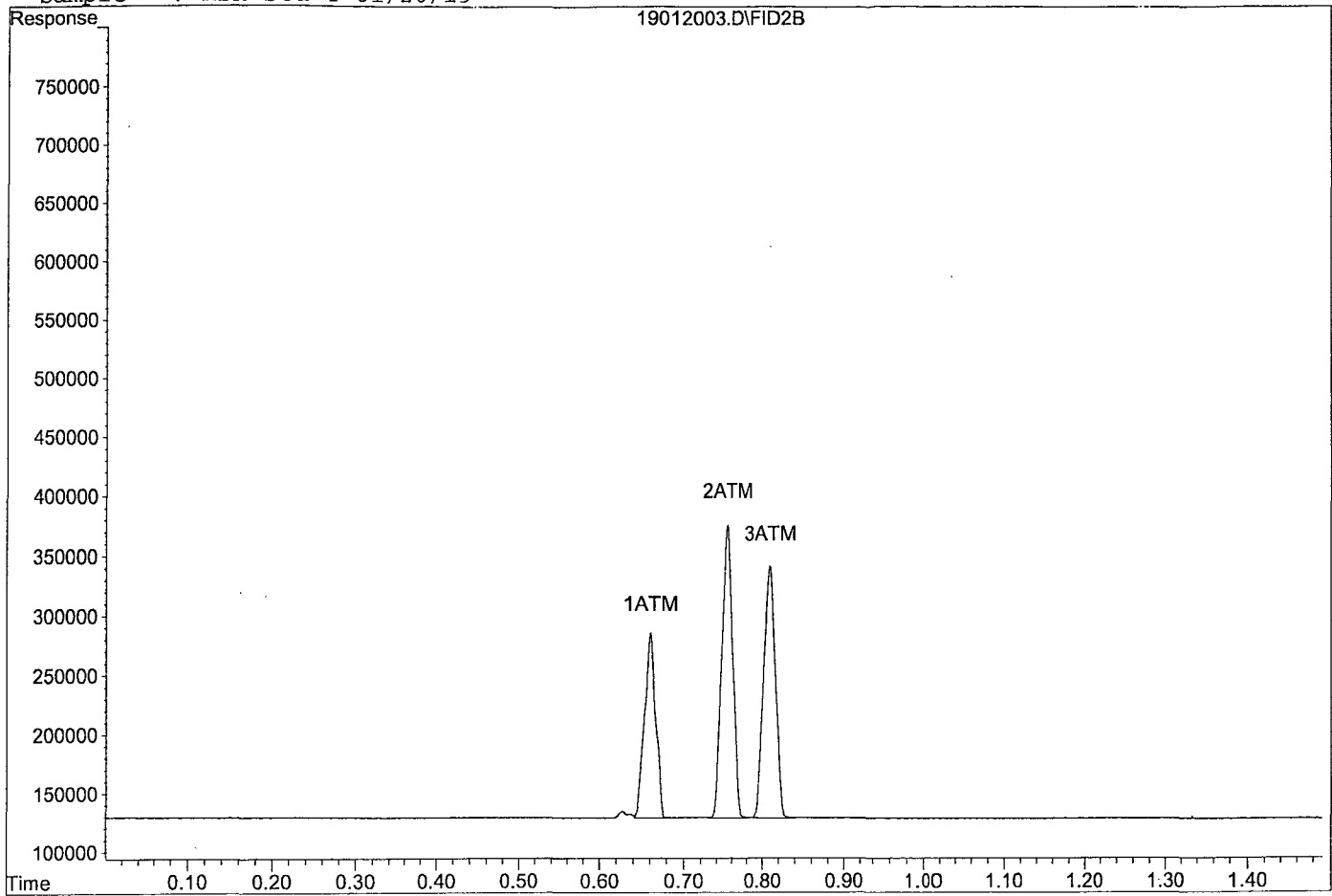
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.66	156731	17.650 ppb
2) ATM Ethane	0.75	246852	33.403 ppb
3) ATM Ethene	0.81	213014	30.693 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012003.D

Sample : RSK Std 4 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012005.D Vial: 6  
 Acq On : 20 Jan 19 12:12 Operator: cmm  
 Sample : RSK Std 5 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:36:58 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

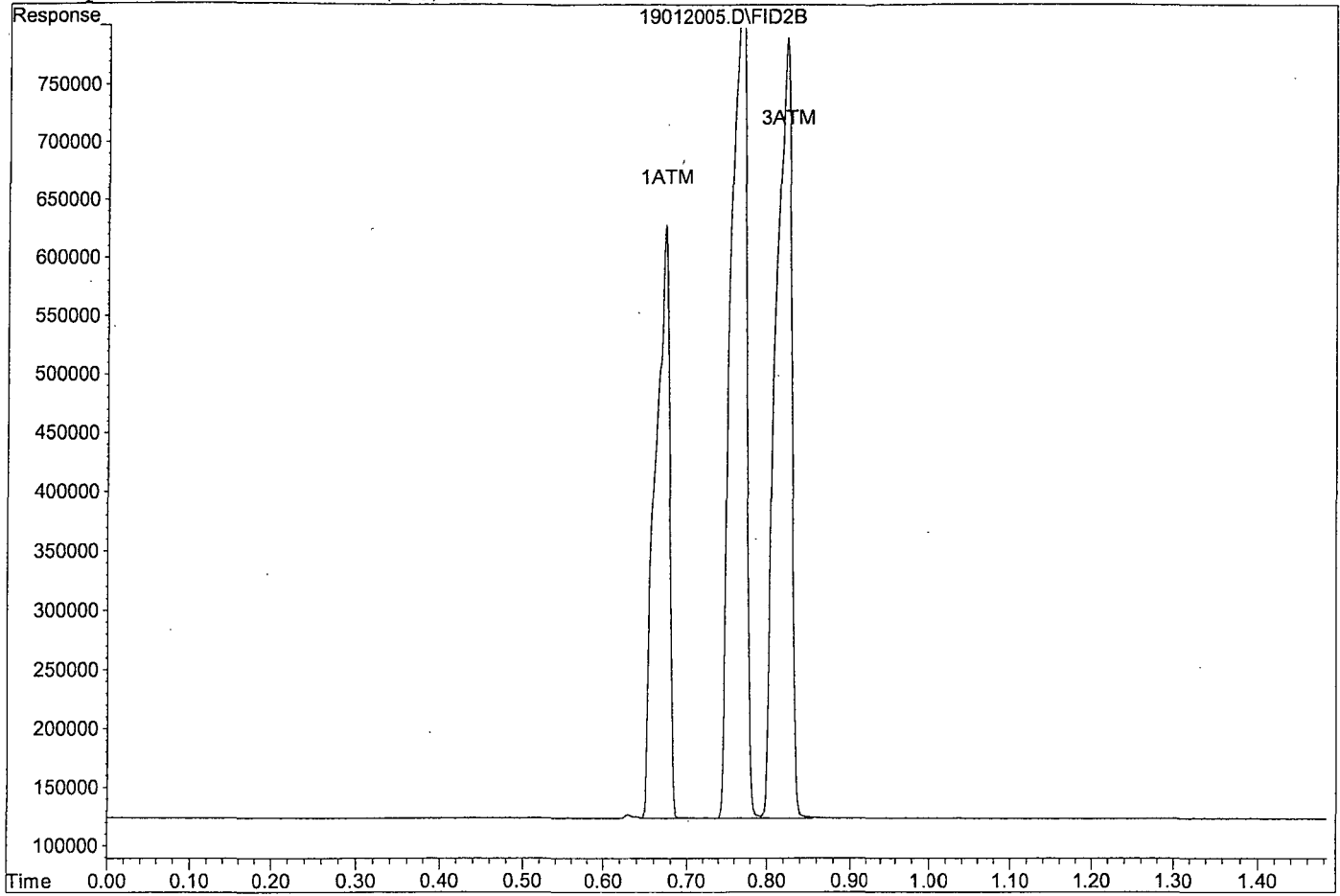
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	505025	97.832 ppb
2) ATM Ethane	0.77	767300	177.156 ppb
3) ATM Ethene	0.82	667740	167.580 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012005.D

Sample : RSK Std 5 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012007.D Vial: 8  
 Acq On : 20 Jan 19 12:17 Operator: cmm  
 Sample : RSK Std 6 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:37 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:37:36 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

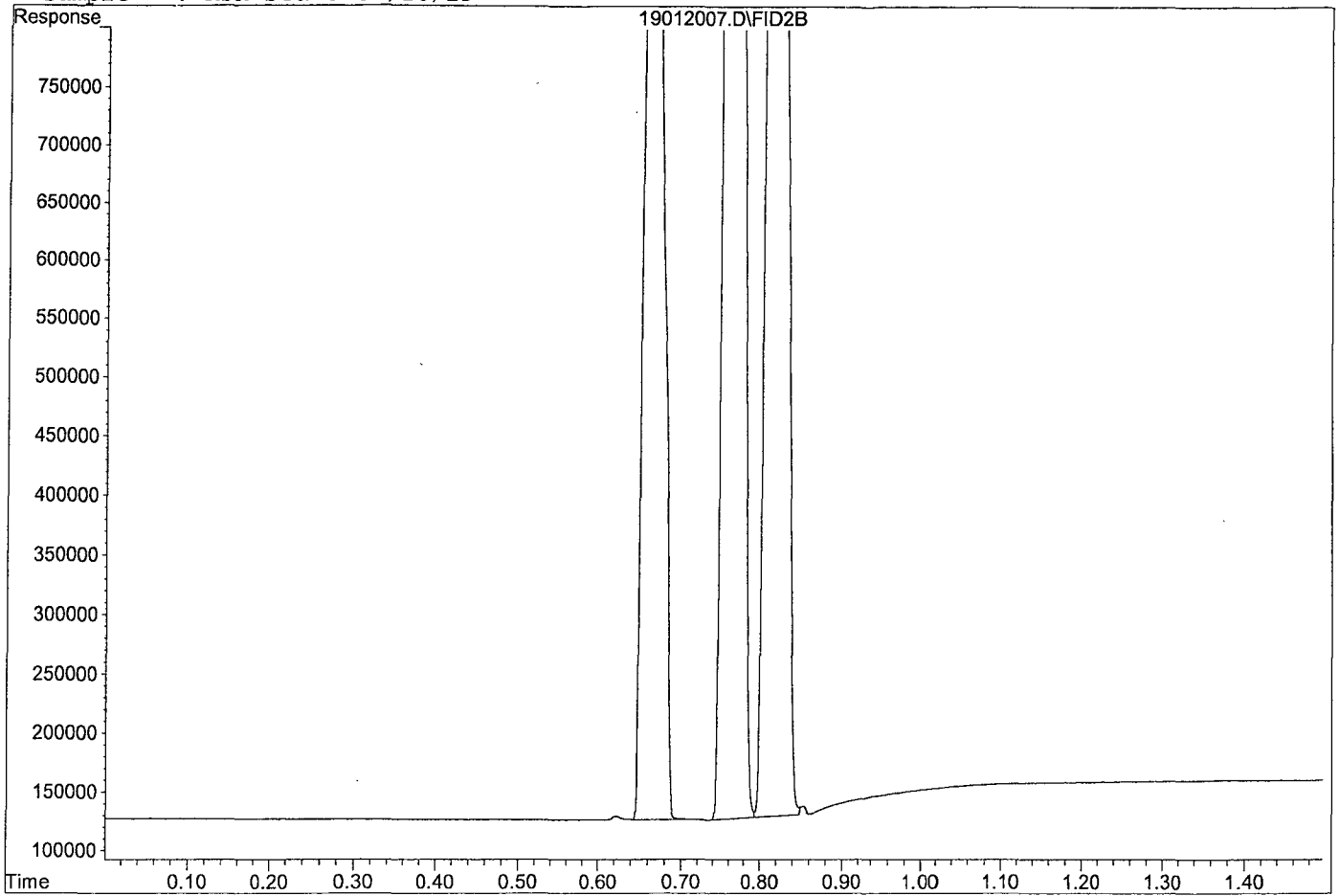
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	1190356	255.605 ppb
2) ATM Ethane	0.77	1887834	486.657 ppb
3) ATM Ethene	0.82	1625935	456.029 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012007.D

Sample : RSK Std 6 01/20/19



Data File : G:\ROCKY\DATA\190120RS\19012008.D Vial: 9  
 Acq On : 20 Jan 19 12:20 Operator: cmm  
 Sample : RSK Std 7 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:38 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:38:08 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

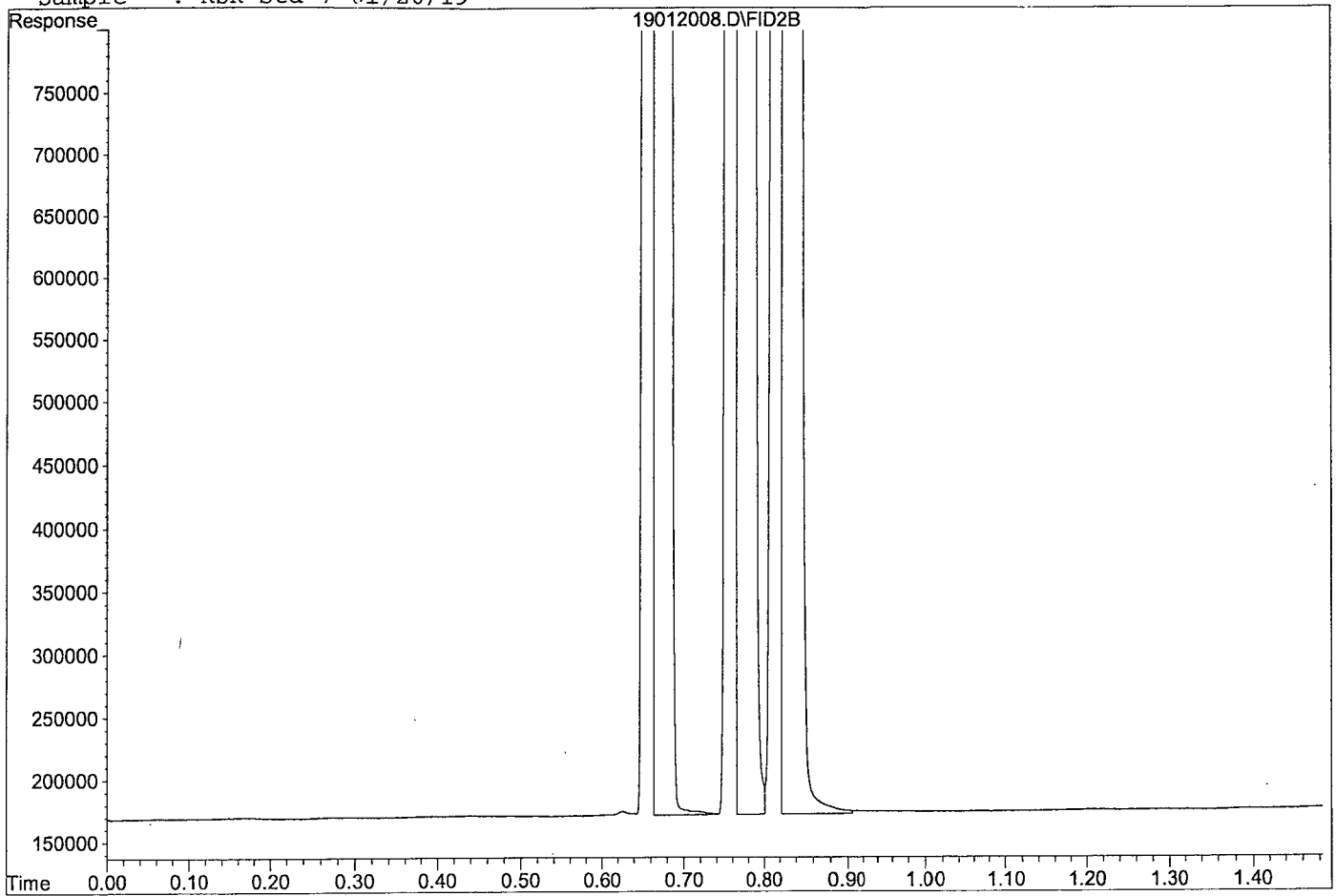
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	3646926	821.142 ppb
2) ATM Ethane	0.77	5694692	1538.144 ppb
3) ATM Ethene	0.83	4874710	1434.020 ppb

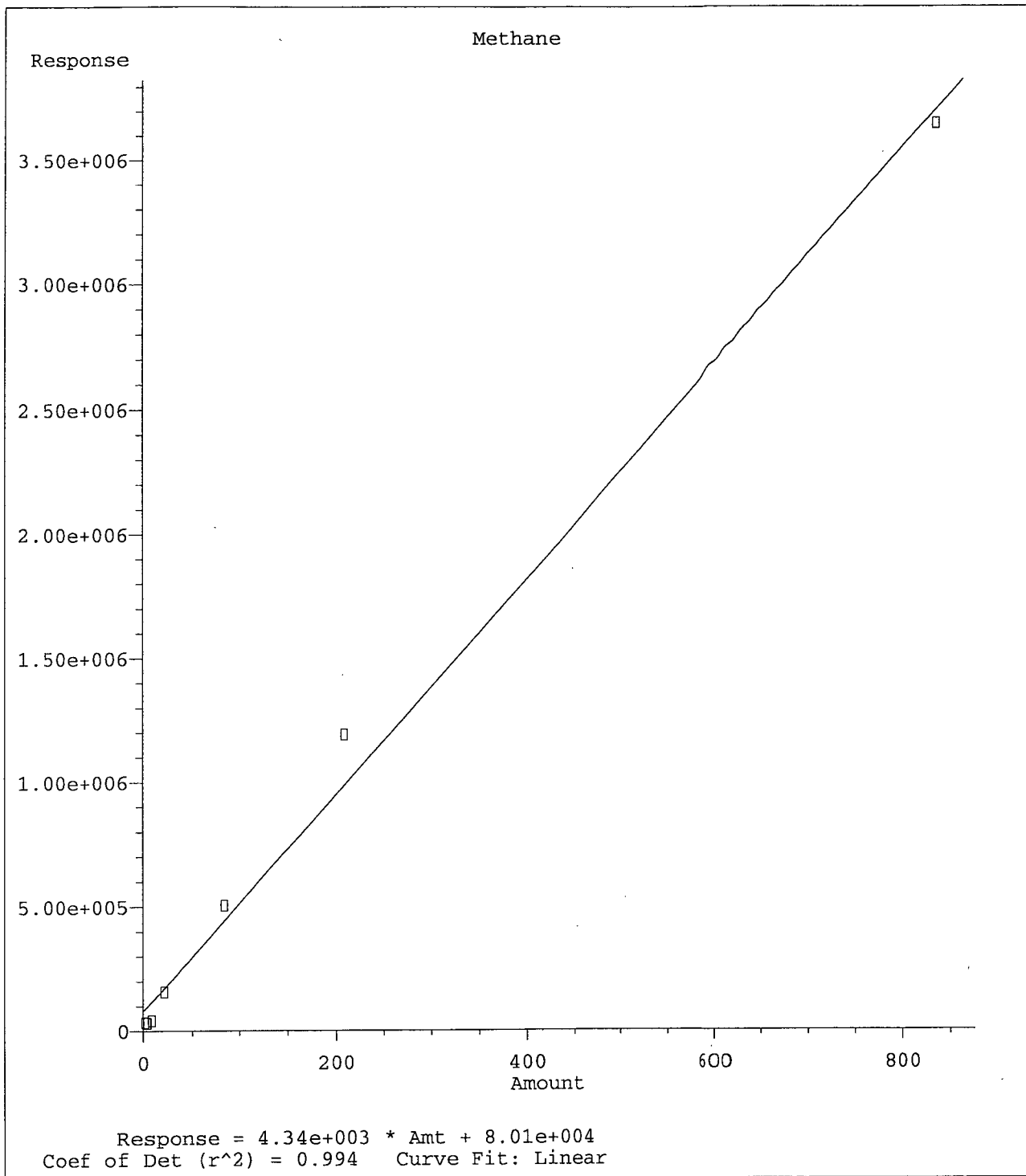
Target Compounds



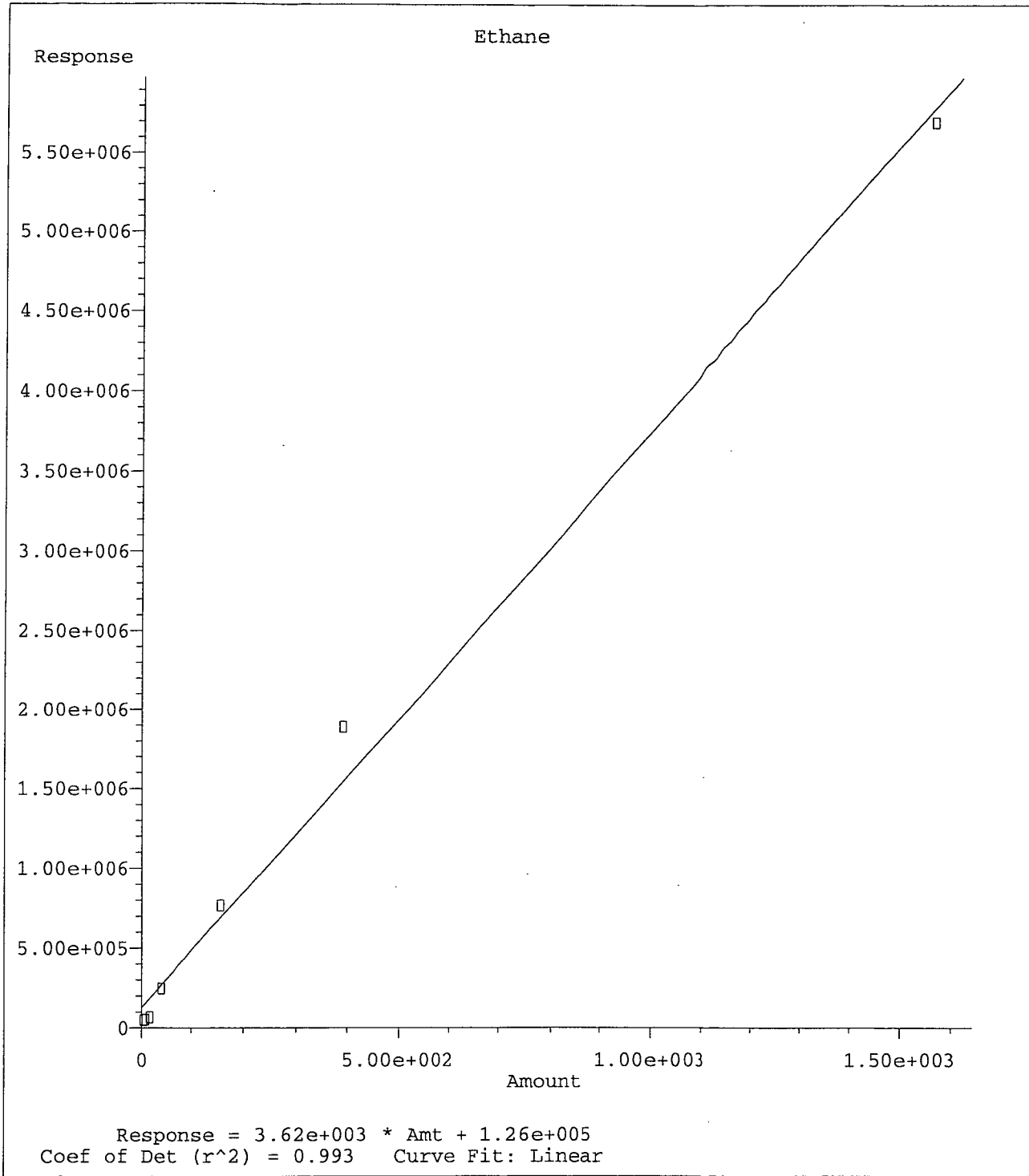
Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012008.D  
Sample : RSK Std 7 01/20/19

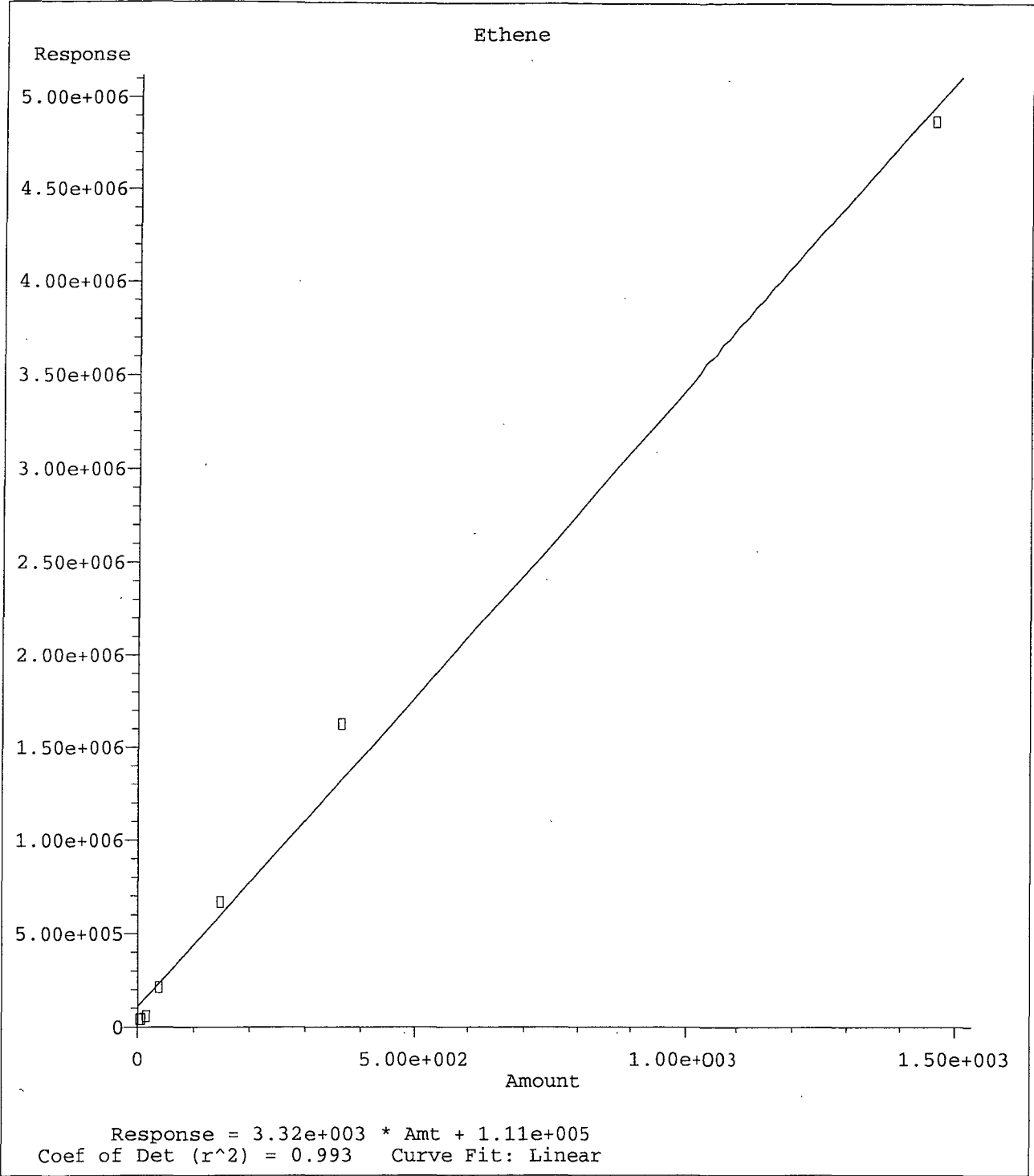




Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:32:56 2019



Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:32:56 2019



Method Name: G:\ROCKY\DATA\190120RS\RSK0120.M  
Calibration Table Last Updated: Sun Jan 20 12:33:08 2019

RSK 175  
RSK 175

Form 7

### Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/20/19  
Instrument: 7890  
Initial Cal. Date: 01/20/19  
Data File: 19012010.D

		Compound	MEAN	CCRF	%D	%Drift	
1	ATML	Methane	14878	10667	28	ATML	0.69
2	ATML	Ethane	12303	9330	24	ATML	6.6
3	ATML	Ethene	11250	8592	24	ATML	6.4
4							
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6							
7							
8							
9							
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39							
40							

Average

25.3

Data File : G:\ROCKY\DATA\190120RS\19012010.D Vial: 11  
 Acq On : 20 Jan 19 12:39 Operator: cmm  
 Sample : SS RSK Std 5 01/20/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 20 12:42 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Sun Jan 20 12:42:01 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

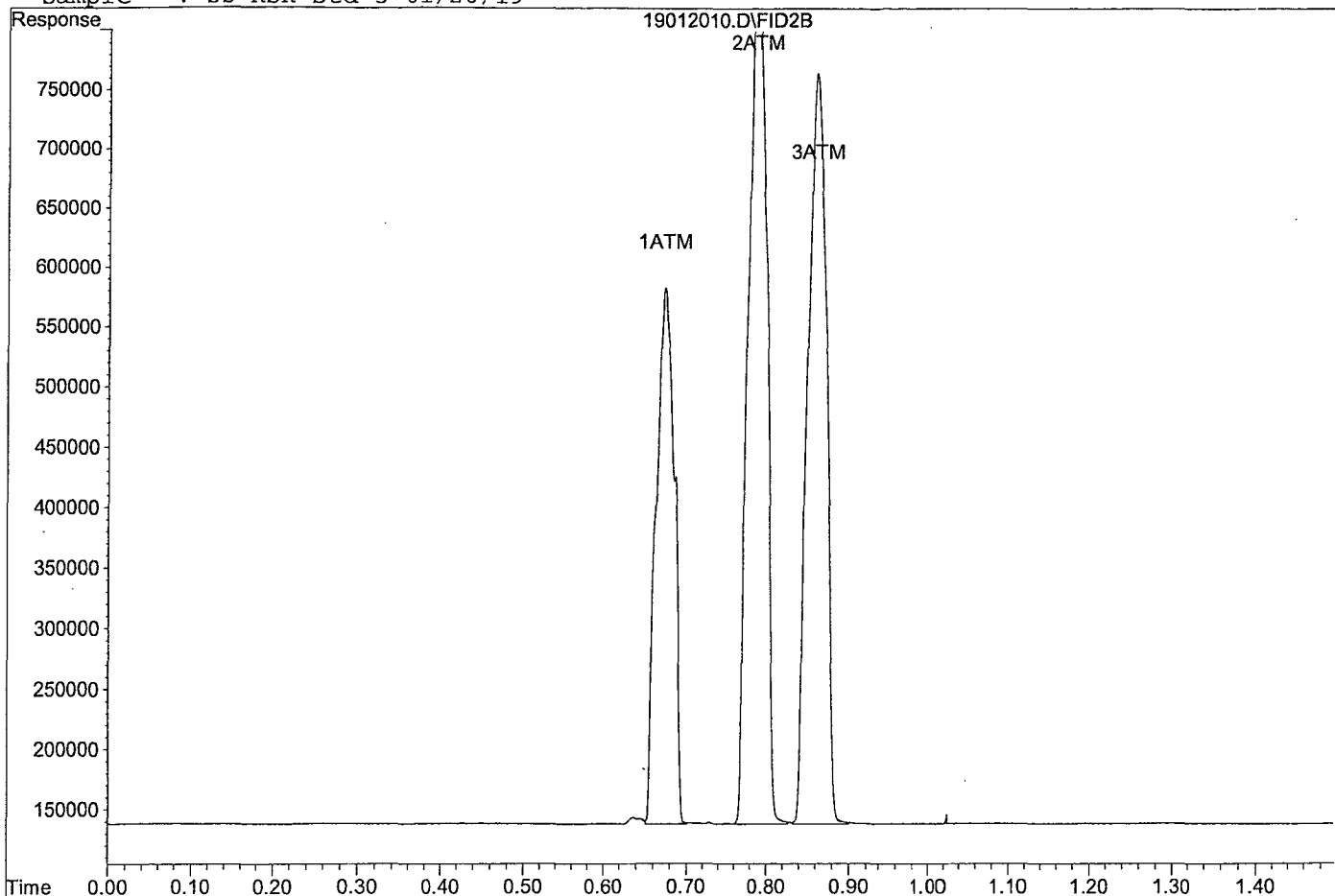
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.67	444826	83.973 ppb
2) ATM Ethane	0.79	729370	166.679 ppb
3) ATM Ethene	0.86	626499	155.165 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012010.D

Sample : SS RSK Std 5 01/20/19



RSK 175

RSK 175

Form 7

### Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initial Cal. Date: 01/20/19

Data File: 19012800.D

	Compound	MEAN	CCRF	%D	%Drift	
1	ATML Methane	14878	12071	19	ATML	17
2	ATML Ethane	12303	10218	17	ATML	19
3	ATML Ethene	11250	9484	16	ATML	20
4						
5						
6						
7						
8						
9						
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39						
40						

Average

17.3



Data File : G:\ROCKY\DATA\190120RS\19012800.D Vial: 1  
 Acq On : 28 Jan 19 10:22 Operator: cmm  
 Sample : 190128A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:24 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:24:37 2019  
 Response via : Multiple Level Calibration

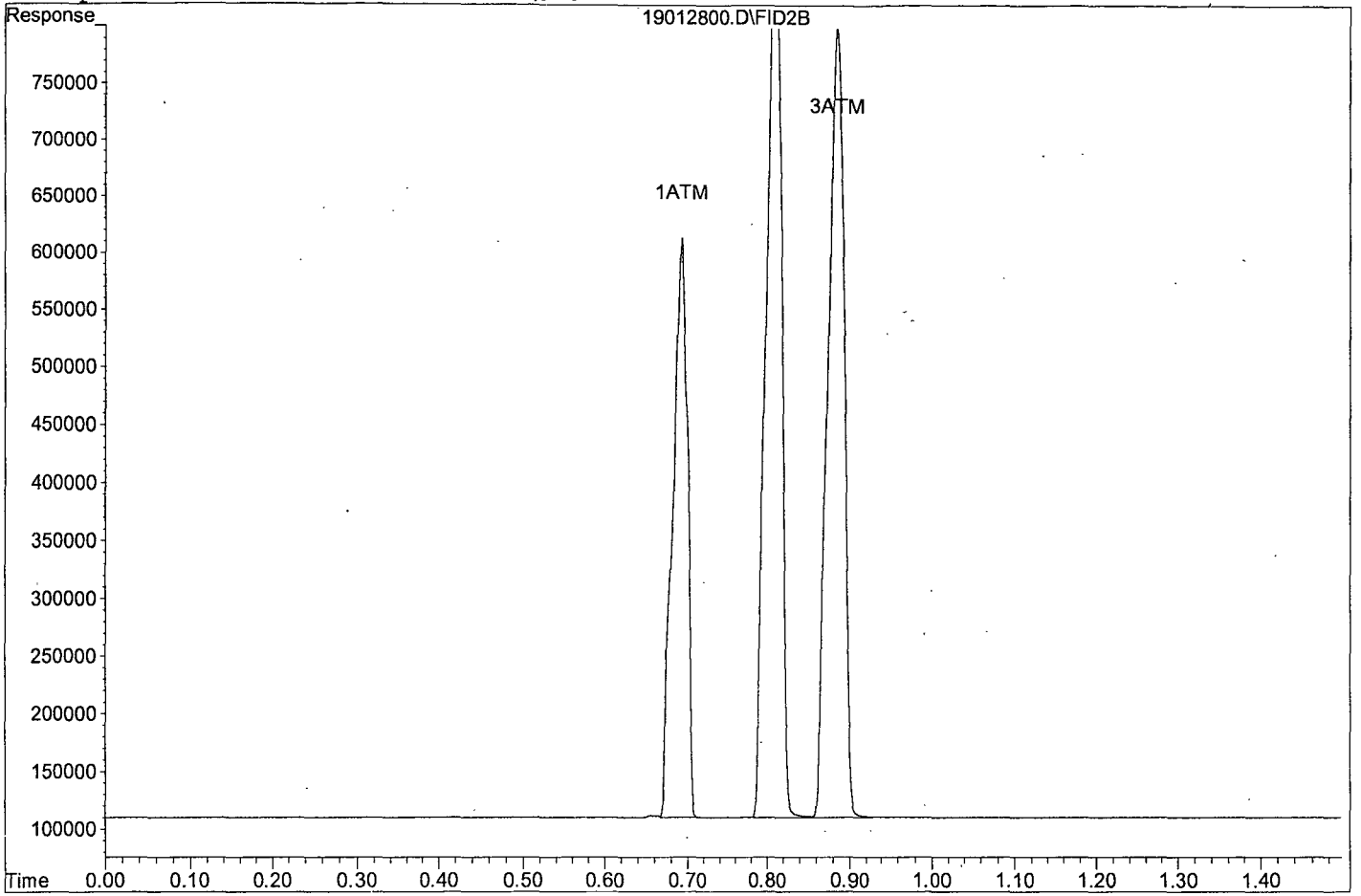
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.69	503374	97.452 ppb
2) ATM Ethane	0.81	798757	185.844 ppb
3) ATM Ethene	0.89	691542	174.745 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012800.D  
Sample : 190128A LCS/CCV RSK Std 5



RSK 175

RSK 175

Form 7

### Ending Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: \_\_\_\_\_

Instrument: 7890

Initial Cal. Date: 01/20/19

Data File: 19012832.D

	Compound	MEAN	CCRF	%D	%Drift	
1	ATML Methane	14878	11389	23	ATML	9.0
2	ATML Ethane	12303	9607	22	ATML	10
3	ATML Ethene	11250	8462	25	ATML	4.4
4						
5						
6						
7						
8						
9						
10						
11						
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36						
37						
38						
39						
40						

Average

23.3

Data File : G:\ROCKY\DATA\190120RS\19012832.D Vial: 33  
 Acq On : 28 Jan 19 11:49 Operator: cmm  
 Sample : Ending CCV RSK Std 5 01/28/19 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:52 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 11:51:55 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

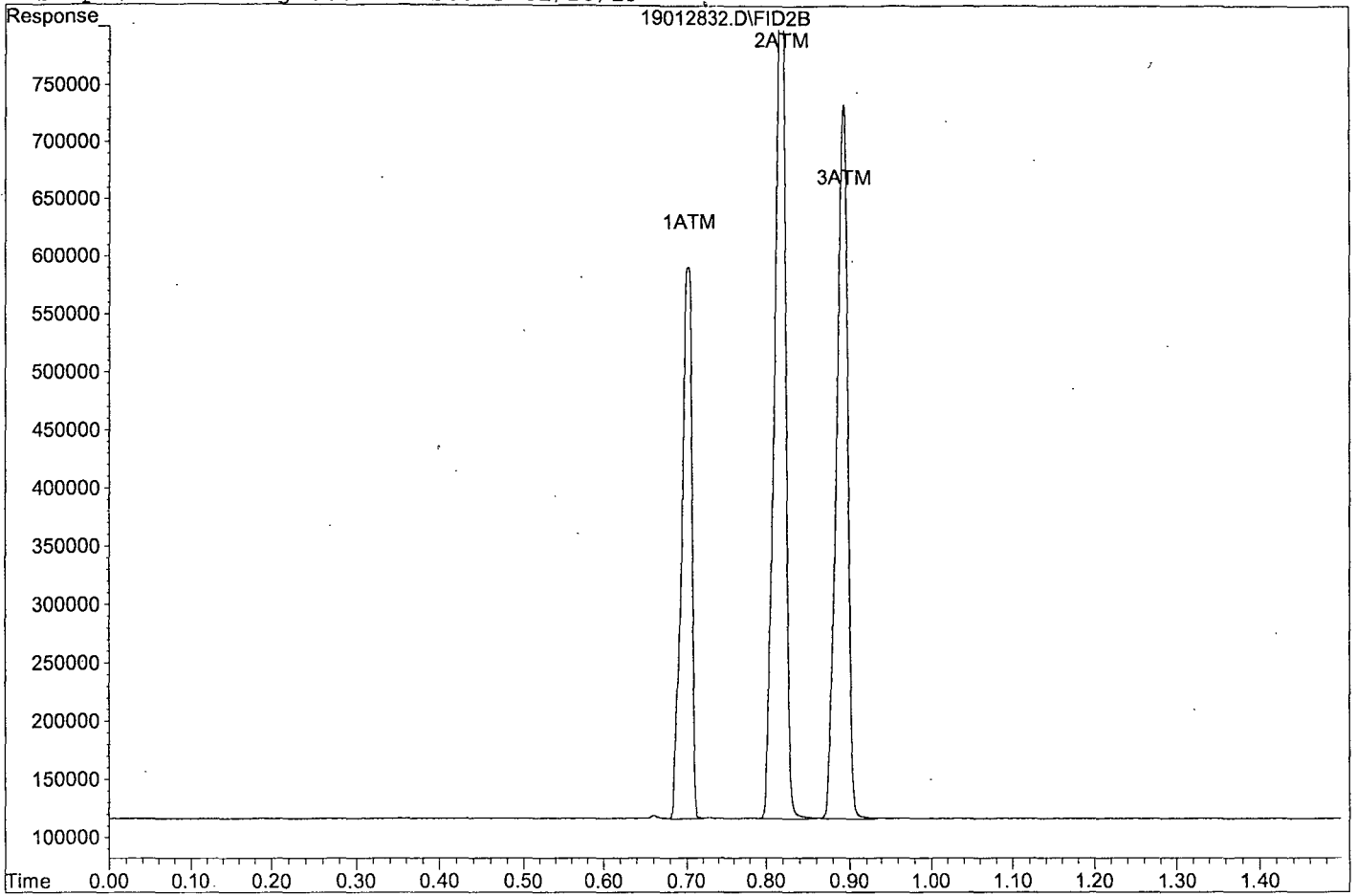
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.70	474919	90.901 ppb
2) ATM Ethane	0.82	751015	172.657 ppb
3) ATM Ethene	0.89	617077	152.329 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012832.D

Sample : Ending CCV RSK Std 5 01/28/19



**ORGANICS**  
**Raw Data**

Data File : G:\ROCKY\DATA\190120RS\19012813.D Vial: 14  
 Acq On : 28 Jan 19 10:56 Operator: cmm  
 Sample : AZ85561W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:02 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

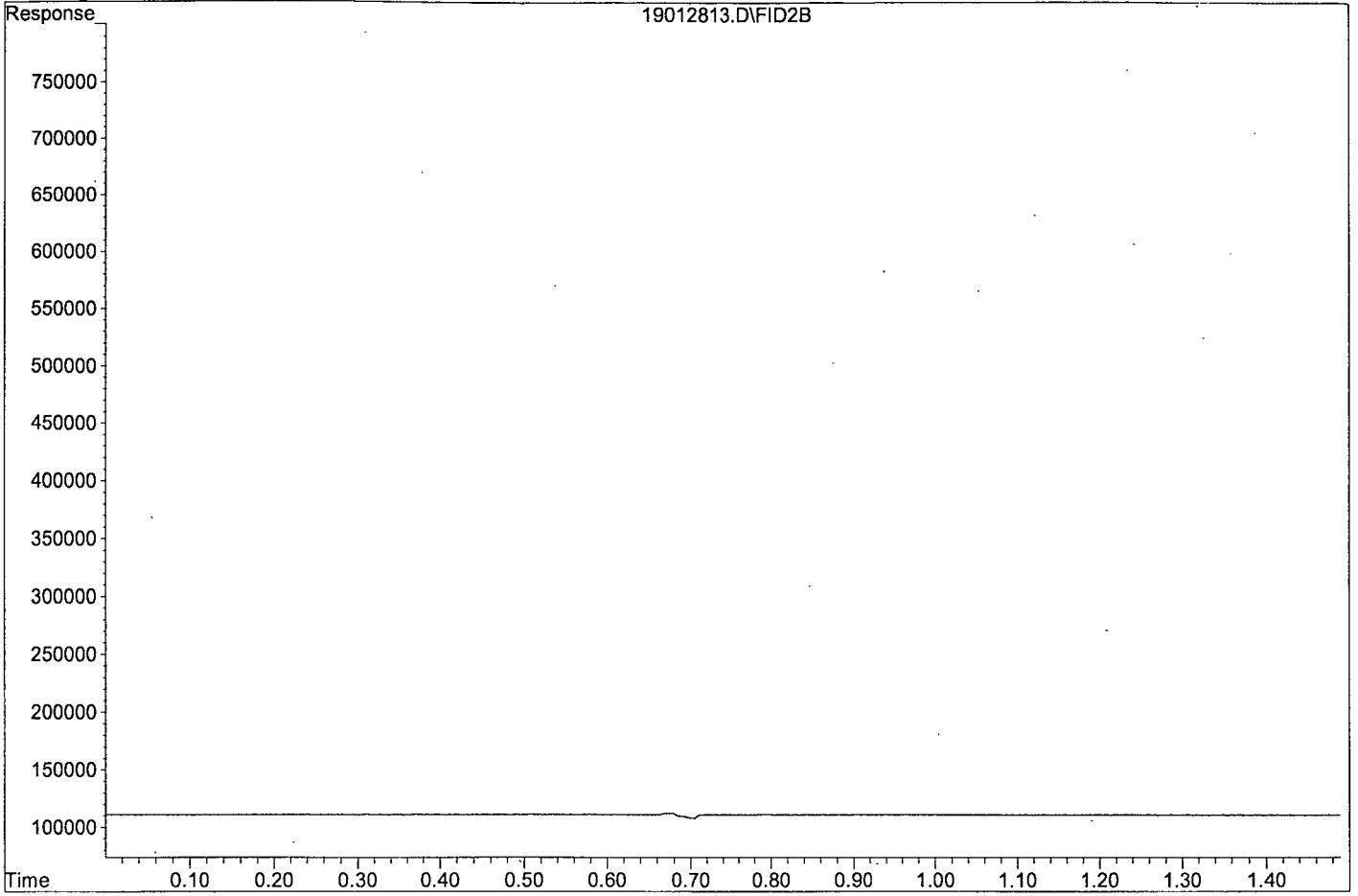
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012813.D

Sample : AZ85561W04





Data File : G:\ROCKY\DATA\190120RS\19012814.D Vial: 15  
 Acq On : 28 Jan 19 11:01 Operator: cmm  
 Sample : AZ85562W07 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:04 2019 Quant. Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
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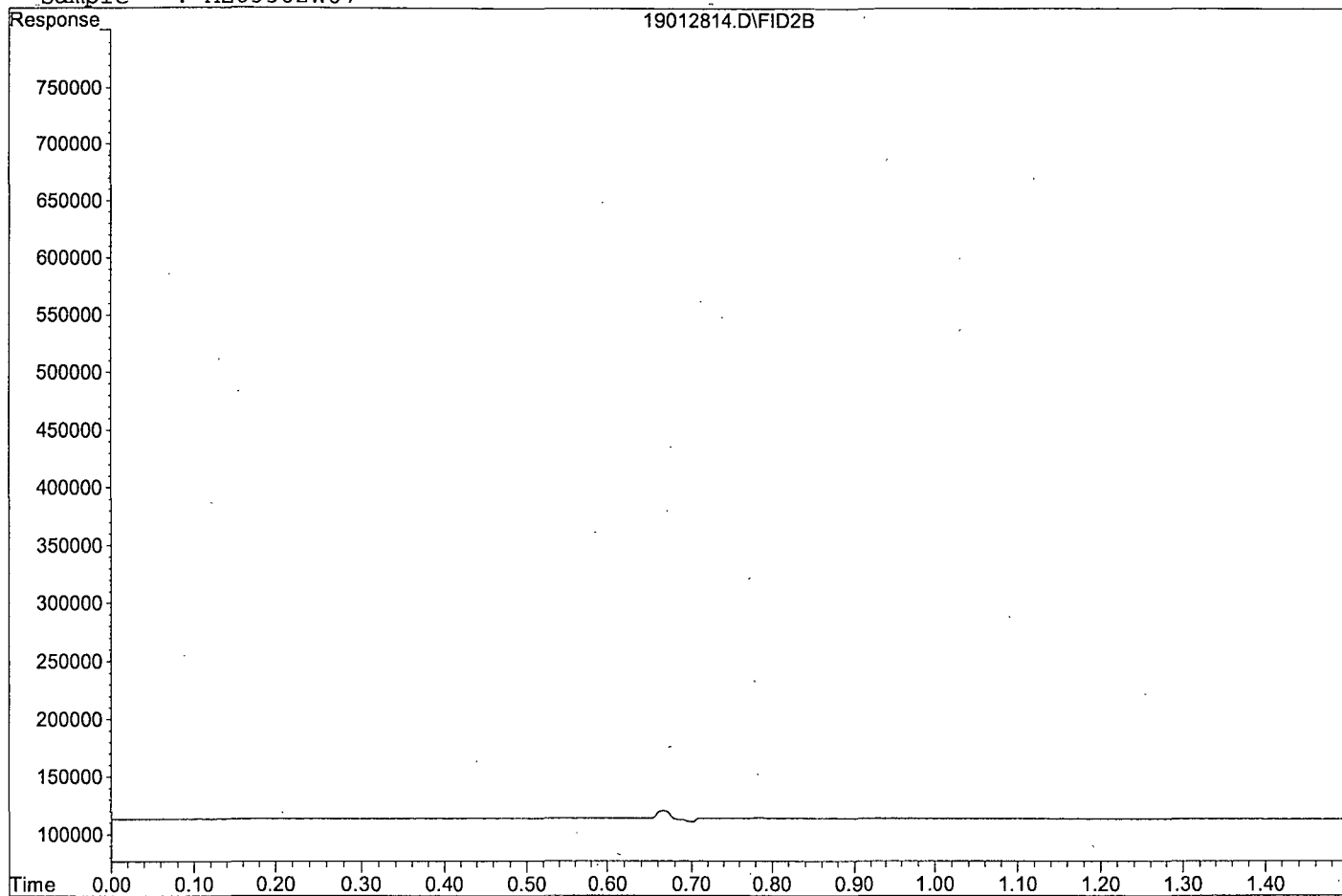
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012814.D

Sample : AZ85562W07



Data File : G:\ROCKY\DATA\190120RS\19012817.D Vial: 18  
 Acq On : 28 Jan 19 11:12 Operator: cmm  
 Sample : AZ85564W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:15 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

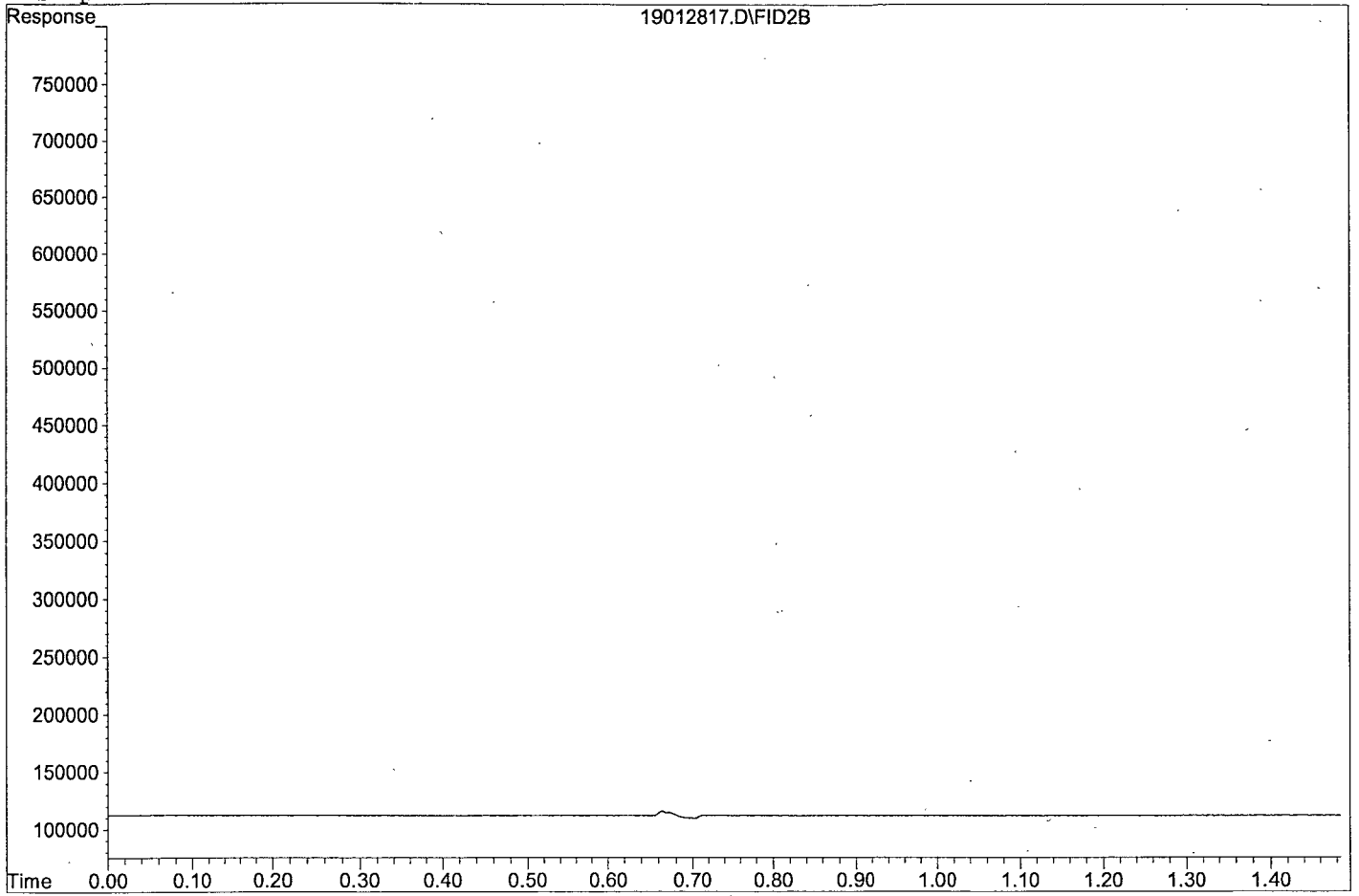
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012817.D

Sample : AZ85564W04



Data File : G:\ROCKY\DATA\190120RS\19012816.D Vial: 17  
 Acq On : 28 Jan 19 11:05 Operator: cmm  
 Sample : AZ85565W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:13 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

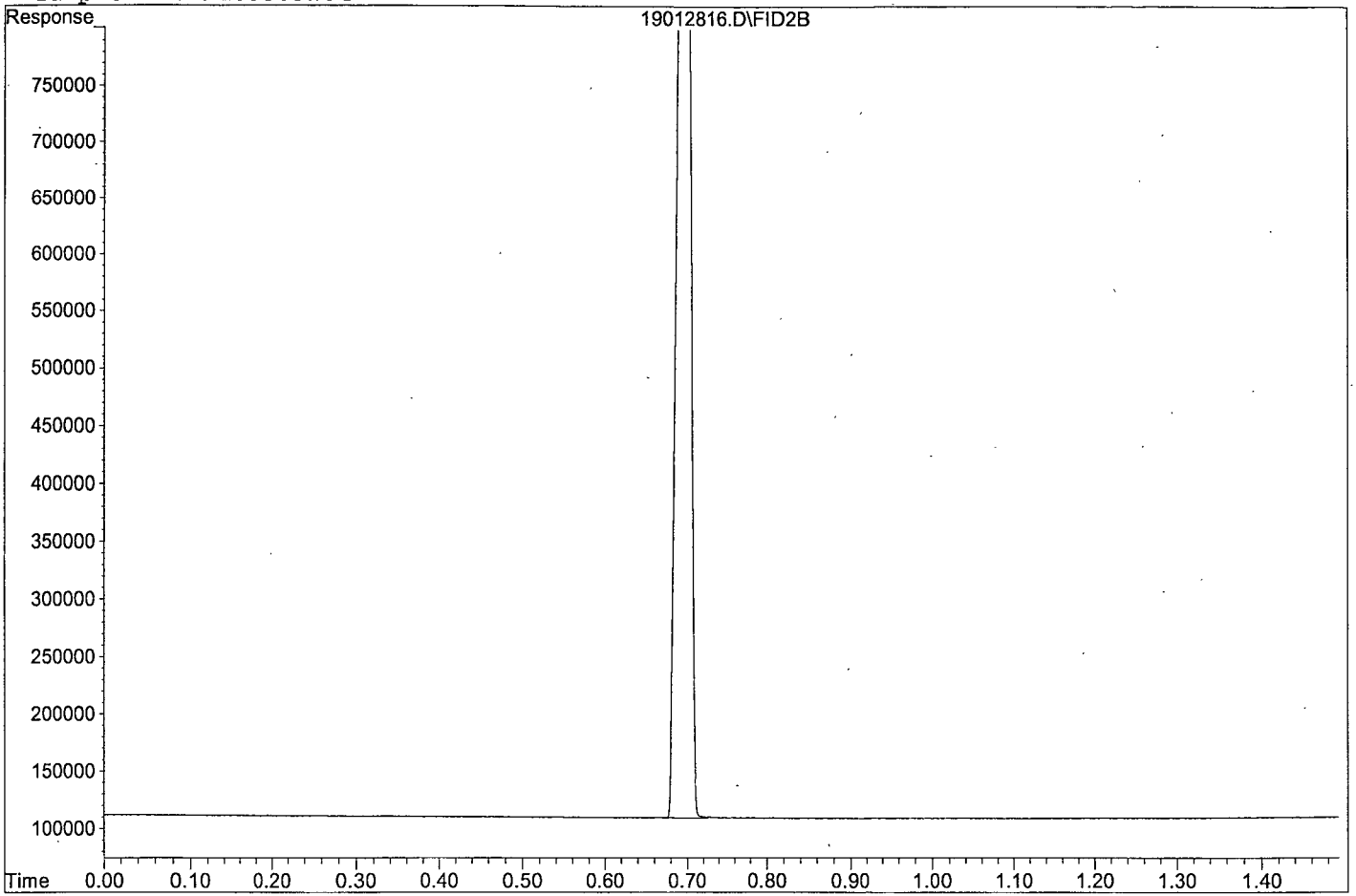
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1) ATM Methane	0.69	939593	197.875	ppb
Target Compounds				
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012816.D

Sample : AZ85565W04



Data File : G:\ROCKY\DATA\190120RS\19012818.D Vial: 19  
 Acq On : 28 Jan 19 11:14 Operator: cmm  
 Sample : AZ85566W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:17 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

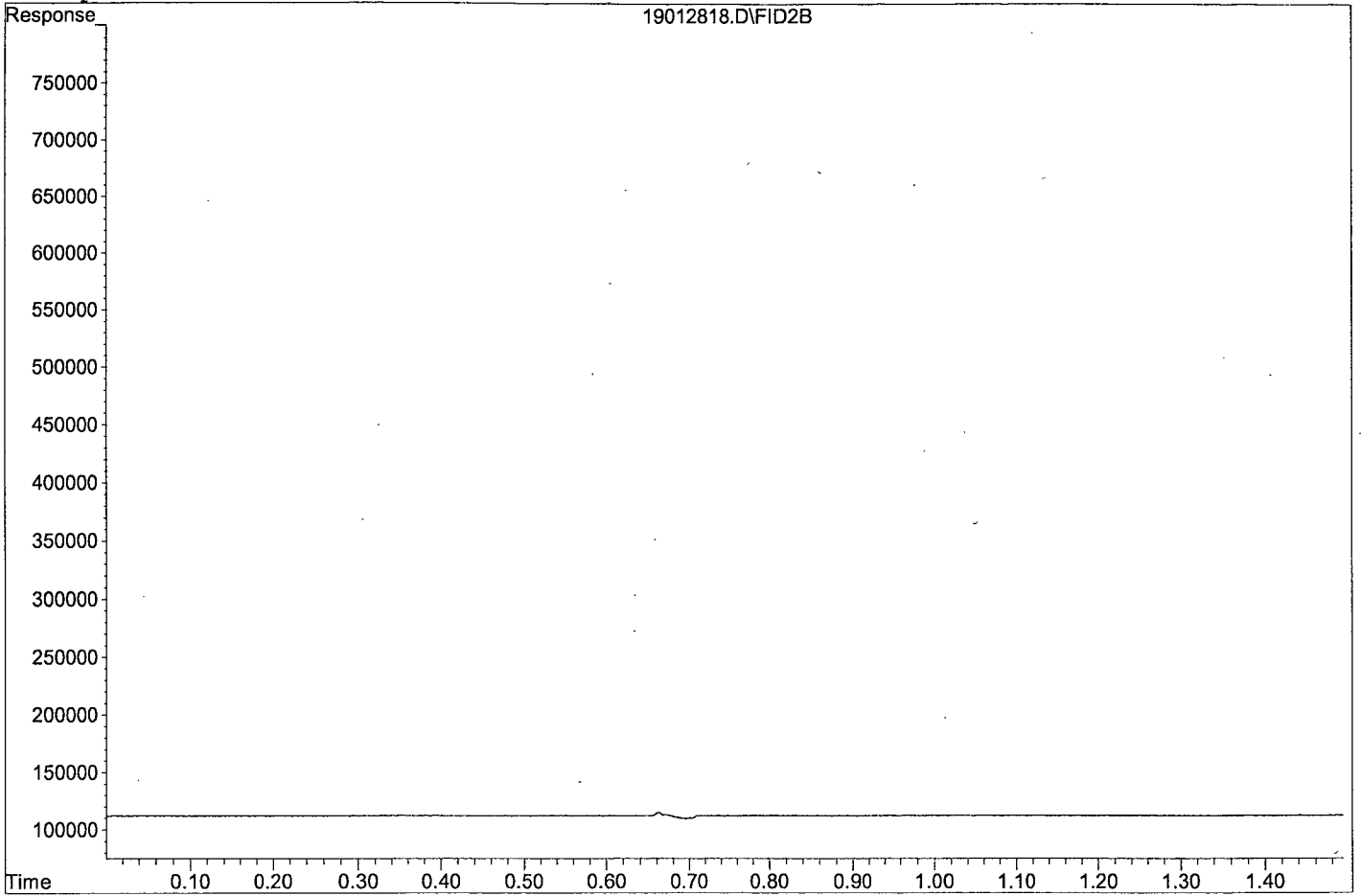
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012818.D

Sample : AZ85566W04





Data File : G:\ROCKY\DATA\190120RS\19012819.D Vial: 20  
 Acq On : 28 Jan 19 11:17 Operator: cmm  
 Sample : AZ85567W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:19 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

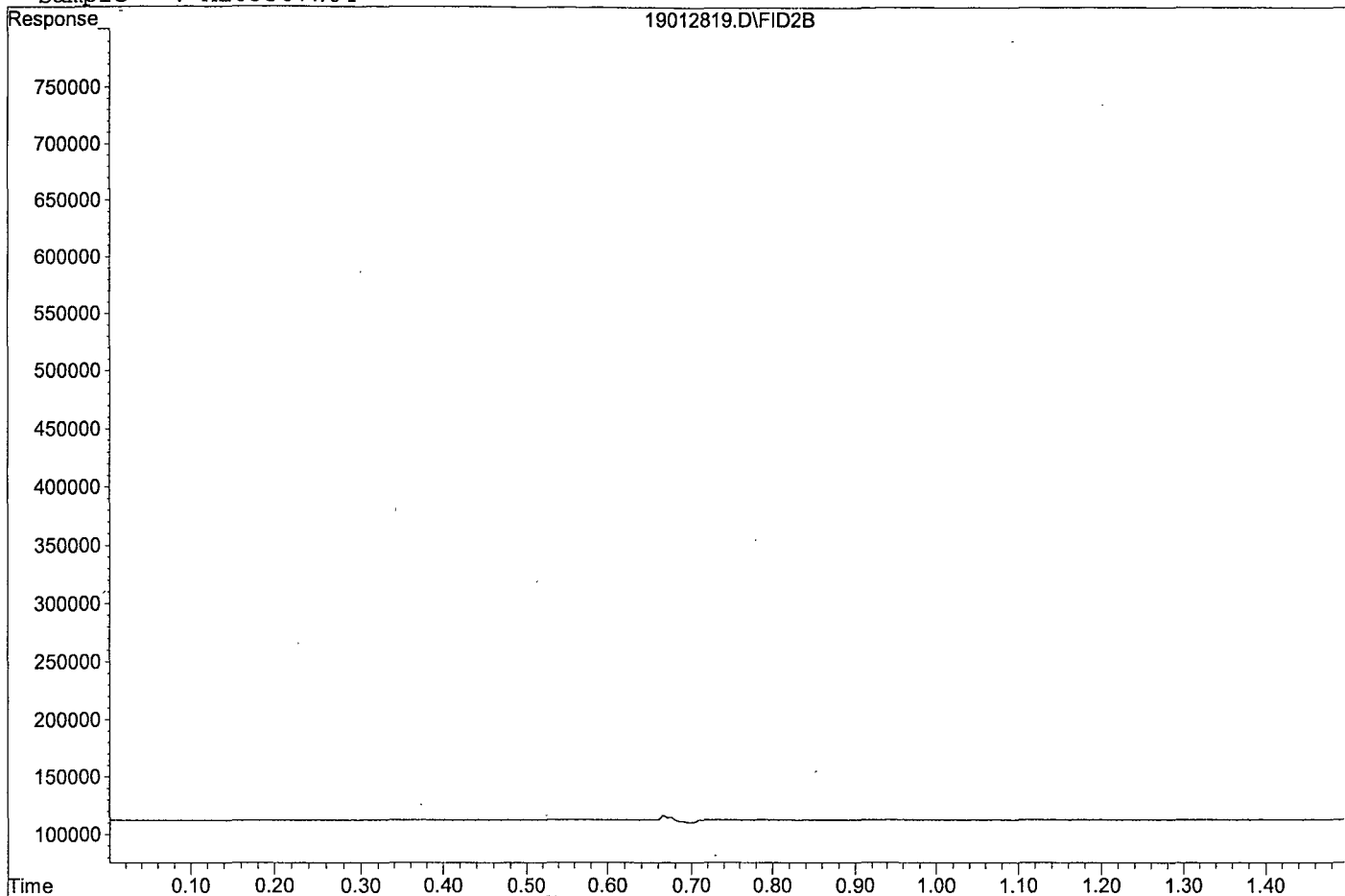
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012819.D

Sample : AZ85567W04



Data File : G:\ROCKY\DATA\190120RS\19012820.D Vial: 21  
 Acq On : 28 Jan 19 11:19 Operator: cmm  
 Sample : AZ85568W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:22 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

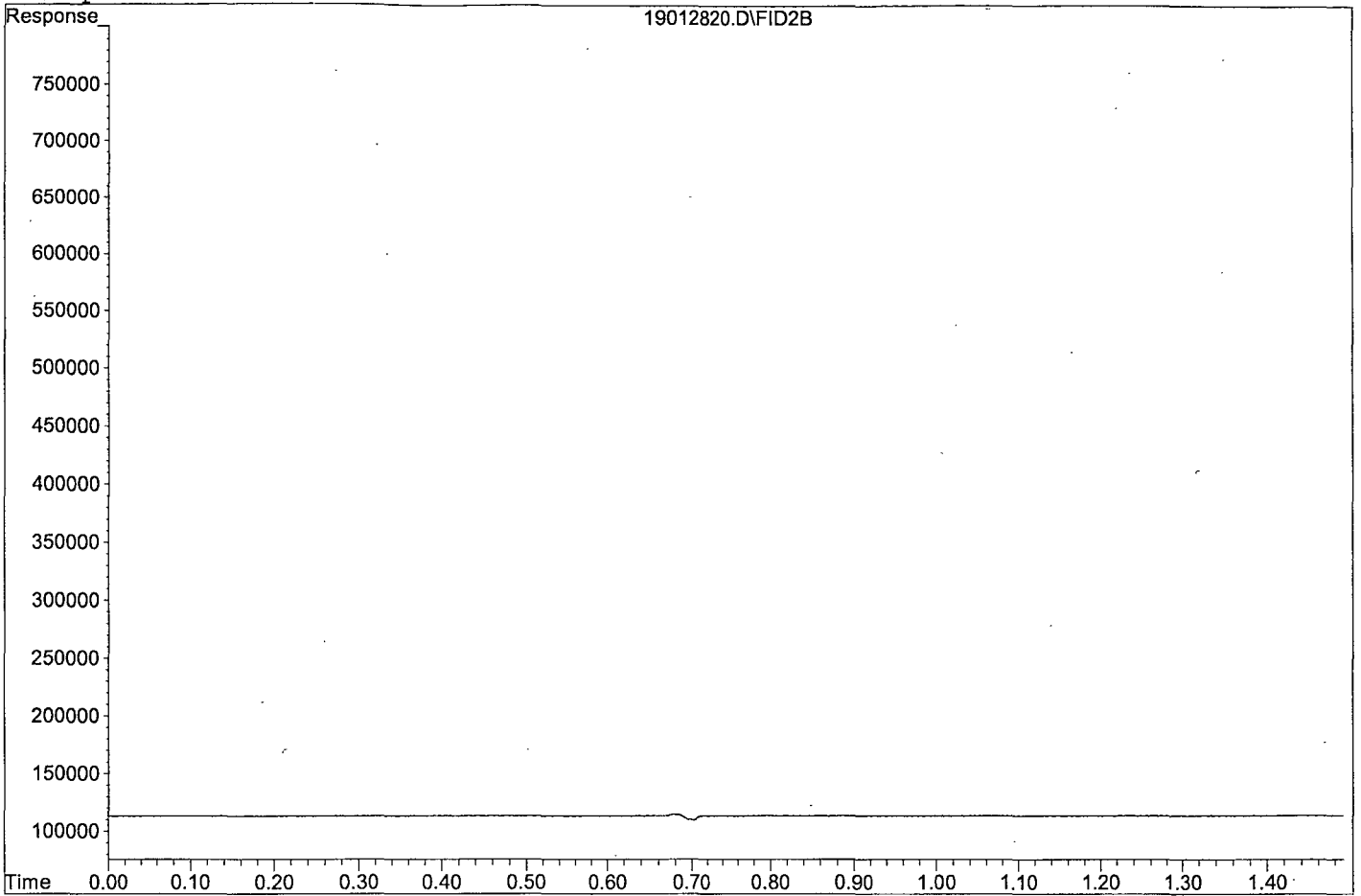
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012820.D

Sample : AZ85568W04



Data File : G:\ROCKY\DATA\190120RS\19012821.D Vial: 22  
 Acq On : 28 Jan 19 11:21 Operator: cmm  
 Sample : AZ85569W04 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 11:24 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:36:09 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

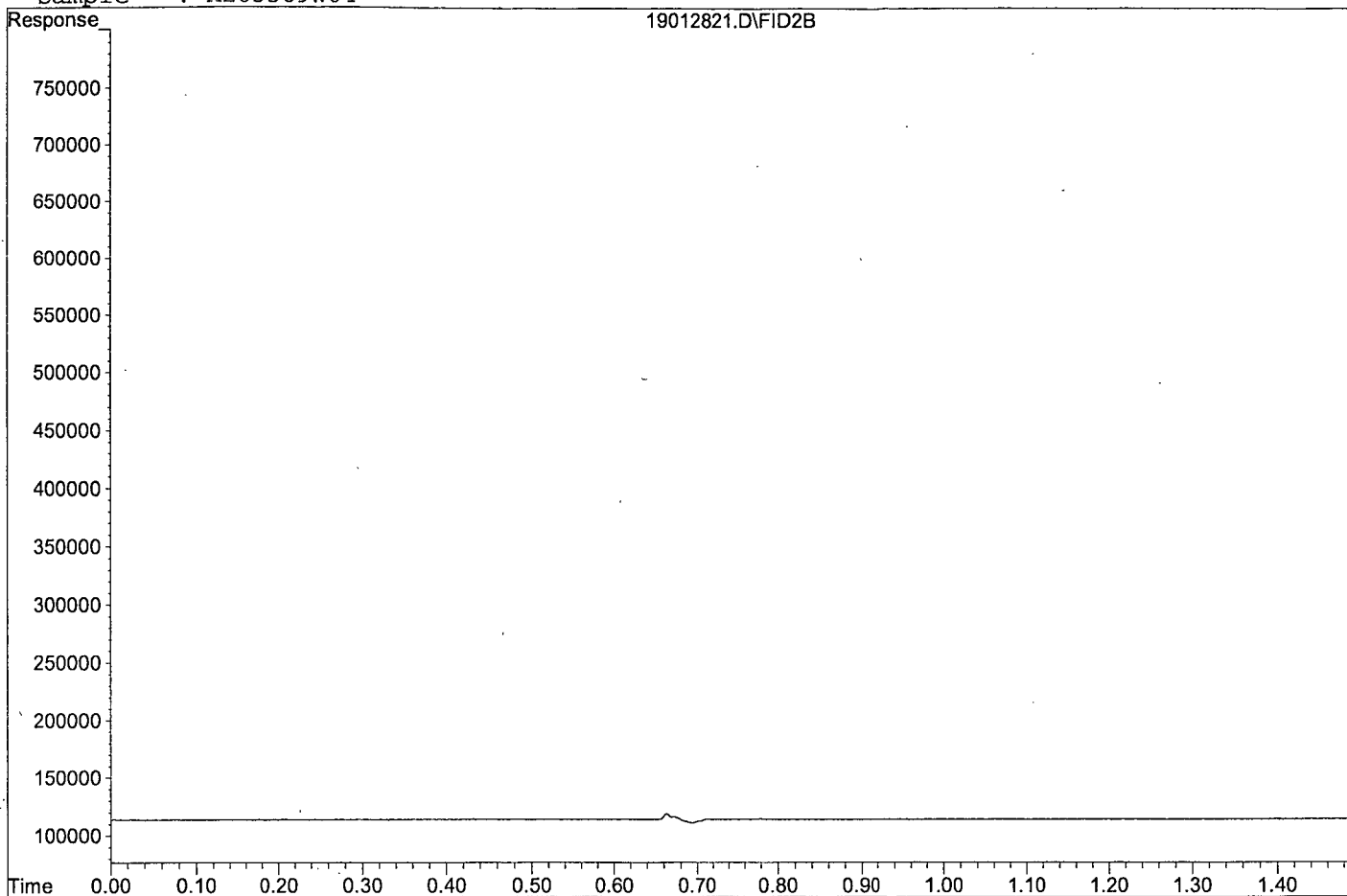
Target Compounds

Target Compounds	R.T.	Response	Conc	Units
1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012821.D

Sample : AZ85569W04



Data File : G:\ROCKY\DATA\190120RS\19012802.D Vial: 3  
 Acq On : 28 Jan 19 10:28 Operator: cmm  
 Sample : 190128A Blk Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:31 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:28:05 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

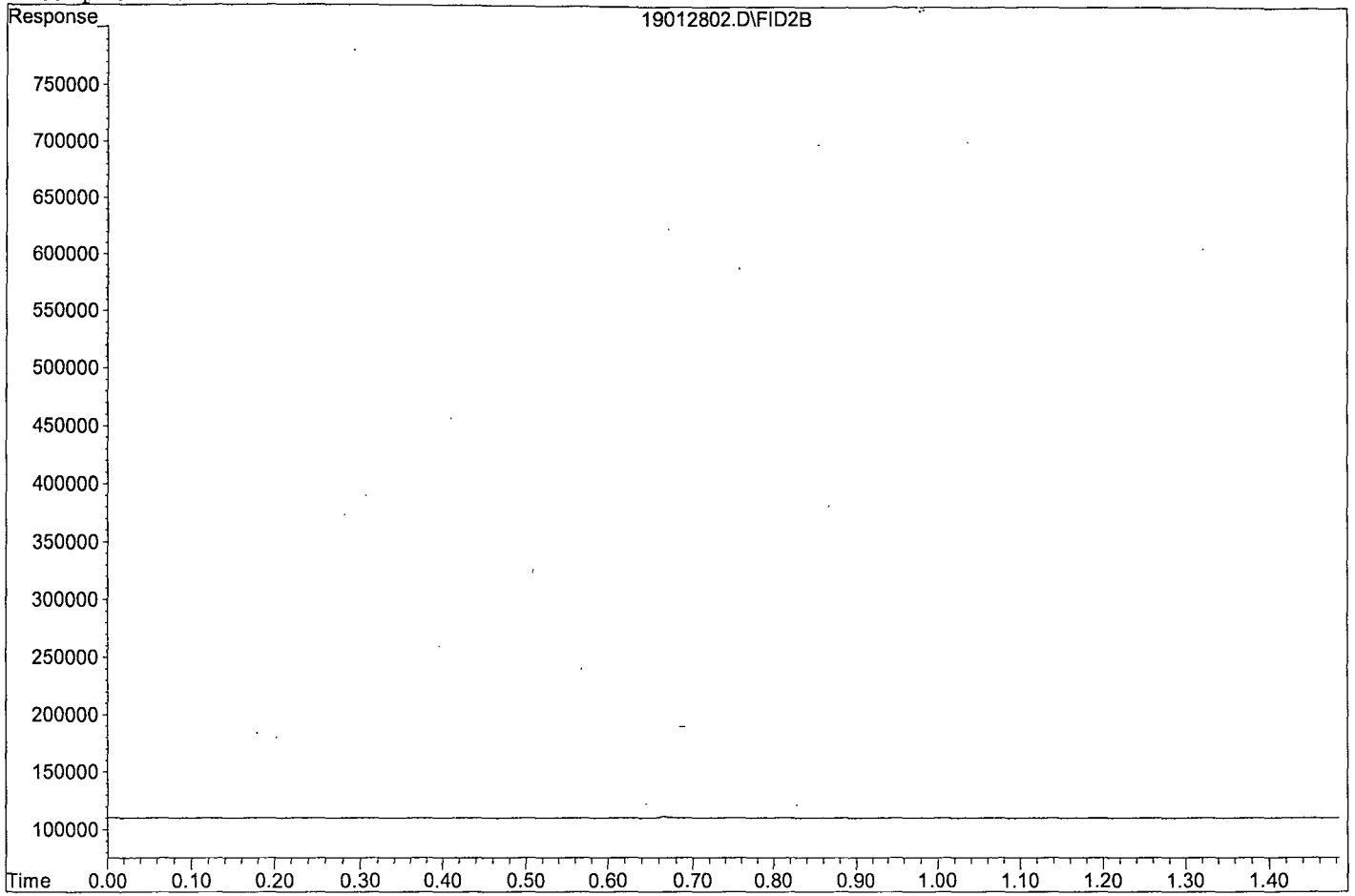
Target Compounds

1) ATM Methane	0.00	0	N.D.	ppb d
2) ATM Ethane	0.00	0	N.D.	ppb d
3) ATM Ethene	0.00	0	N.D.	ppb d

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012802.D

Sample : 190128A Blk





Data File : G:\ROCKY\DATA\190120RS\19012800.D Vial: 1  
 Acq On : 28 Jan 19 10:22 Operator: cmm  
 Sample : 190128A LCS/CCV RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:24 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:24:37 2019  
 Response via : Multiple Level Calibration

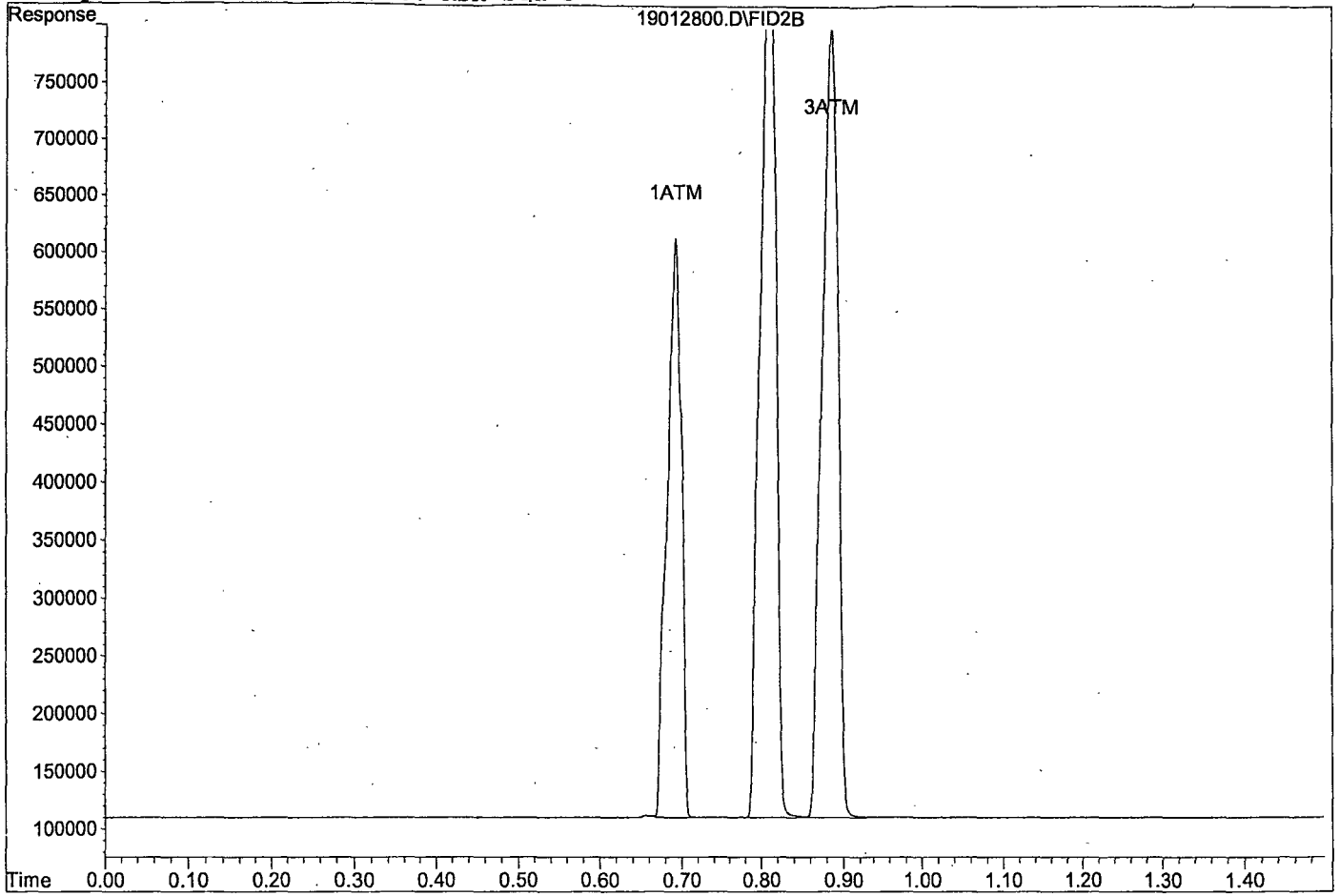
Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.69	503374	97.452 ppb
2) ATM Ethane	0.81	798757	185.844 ppb
3) ATM Ethene	0.89	691542	174.745 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012800.D  
Sample : 190128A LCS/CCV RSK Std 5



Data File : G:\ROCKY\DATA\190120RS\19012801.D Vial: 2  
 Acq On : 28 Jan 19 10:25 Operator: cmm  
 Sample : 190128A LCSD RSK Std 5 Inst : 7890  
 Misc : Multiplr: 1.00  
 IntFile : autoint1.e  
 Quant Time: Jan 28 10:28 2019 Quant Results File: RSK0120.RES

Method : G:\ROCKY\DATA\190120RS\RSK0120.M (Chemstation Integrator)  
 Title : RSK 175  
 Last Update : Mon Jan 28 10:28:05 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL  
 Signal Phase : CARBOPACK  
 Signal Info :

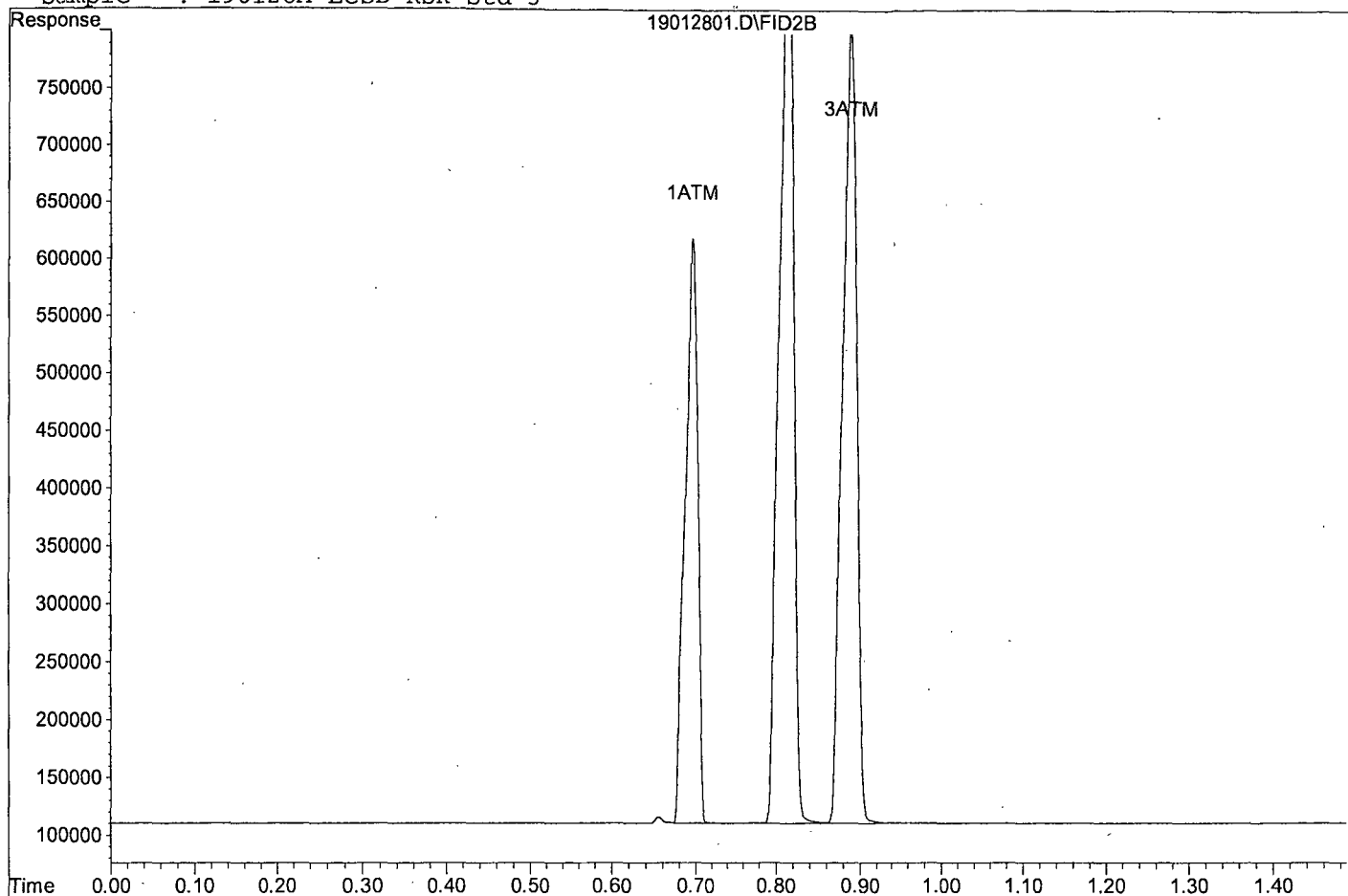
Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) ATM Methane	0.70	508083	98.536 ppb
2) ATM Ethane	0.81	805993	187.843 ppb
3) ATM Ethene	0.89	693879	175.449 ppb

Target Compounds

Quantitation Report

Data File: G:\ROCKY\DATA\190120RS\19012801.D

Sample : 190128A LCSD RSK Std 5



**Primary Source Stock Standard 10,000ppmV**

Manufacturer Exp Date 6-19-18

RSK Gas Mix (Scott Specialty Gas) Cat.# 0104E40028'4, Lot # 170PLU5SPC06L-35410

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

**RSK Calibration Curve (prepared in 1.0 L Tedlar Bags at room temp)****Expires 02/24/18****CMM 01/23/18**

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC 06L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410	RSK Tank Lot #170PLU5SPC0 6L-35410
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL

**Second Source Stock Standard 10,000ppmV**

Manufacturer Exp date 7-8-2017 (lot exp extension to 1/8/18)\*

RSK Gas Mix (Scott Specialty Gas) Cat.# 23452, Lot # 164PLU4SPC05L-34436

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

\*(verified with acceptable second source exp 6/19/18. OK per APPL QAU - sd)

**Second Source****Expires 02/23/18****CMM 01/23/18**

2.0mL of SS from tank into 980 mL Nitrogen

final conc: 13.3ug/L Methane, 25.0 ug/L Ethane, and 23.3 ug/L Ethene

**CCV/LCS/LCSD****CMM 01/23/18**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

**AZ66793 MS/MSD****CMM 01/23/18**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

# Injection Log

Directory: G:\ROCKY\DATA\190120RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	19012000.D	1	RSK Std 1 01/20/19	125uL from RSK Std 3	20 Jan 19 11:58
2	2	19012001.D	1	RSK Std 2 01/20/19	250uL from RSK Std 3	20 Jan 19 12:02
3	3	19012002.D	1	RSK Std 3 01/20/19		20 Jan 19 12:04
4	4	19012003.D	1	RSK Std 4 01/20/19		20 Jan 19 12:07
5	6	19012005.D	1	RSK Std 5 01/20/19		20 Jan 19 12:12
6	8	19012007.D	1	RSK Std 6 01/20/19		20 Jan 19 12:17
7	9	19012008.D	1	RSK Std 7 01/20/19		20 Jan 19 12:20
8	11	19012010.D	1	SS RSK Std 5 01/20/19		20 Jan 19 12:39
9	1	19012800.D	1	190128A LCS/CCV RSK Std 5		28 Jan 19 10:22
10	2	19012801.D	1	190128A LCSD RSK Std 5		28 Jan 19 10:25
11	3	19012802.D	1	190128A Blk		28 Jan 19 10:28
12	14	19012813.D	1	AZ85561W04		28 Jan 19 10:56
13	15	19012814.D	1	AZ85562W07		28 Jan 19 11:01
14	17	19012816.D	1	AZ85565W04		28 Jan 19 11:05
15	18	19012817.D	1	AZ85564W04		28 Jan 19 11:12
16	19	19012818.D	1	AZ85566W04		28 Jan 19 11:14
17	20	19012819.D	1	AZ85567W04		28 Jan 19 11:17
18	21	19012820.D	1	AZ85568W04		28 Jan 19 11:19
19	22	19012821.D	1	AZ85569W04		28 Jan 19 11:21
20	33	19012832.D	1	Ending CCV RSK Std 5 01/28/19		28 Jan 19 11:49

**INORGANIC ANALYSIS**  
**Calibration Data**

**APPL, INC.**

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/15/18

Analyte	Calibration Verification									M
	True ICV	Found 12:31	%R(1)	True CCV1	Found 8:27	%R(1)	True CCV1	Found 8:46	%R(1)	
Ferrous Iron	3	3.15693	105	4	3.96680	99.2	4	3.95680	98.9	



INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/24/19

Analyte	Calibration Verification									M
	True CCV1	Found 17:59	%R(1)	True CCV1	Found 18:02	%R(1)	True	Found	%R(1)	
Ferrous Iron	4	3.97680	99.4	4	3.97680	99.4				

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87940

SDG: 87940

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB 06/15/18 12:32	C	CCB 01/24/19 08:27	C	CCB 01/24/19 08:47	C	CCB 01/24/19 18:00	C	CCB 01/24/19 18:03	C	
Ferrous Iron	1.000	U	1.000	U	1.000	U	1.000	U	1.0000	U	

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/15/18

Analyte	Calibration Verification									M
	True ICV	Found 12:31	%R(1)	True CCV1	Found 9:21	%R(1)	True CCV1	Found 9:31	%R(1)	
Ferrous Iron	3	3.15693	105	4	3.92681	98.2	4	3.93681	98.4	

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/25/19

Analyte	Calibration Verification									M
	True CCV1	Found 12:47	%R(1)	True CCV1	Found 12:51	%R(1)	True	Found	%R(1)	
Ferrous Iron	4	3.97680	99.4	4	3.98680	99.7				

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87940

SDG: 87940

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB	C	CCB	C	CCB	C	CCB	C	CCB	C	
	06/15/18 12:32		01/25/19 09:21		01/25/19 09:32		01/25/19 12:48		01/25/19 12:51		
Ferrous Iron	1.000	U	1.000	U	1.000	U	1.000	U	1.0000	U	

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: \_\_\_\_\_

ARF No: \_\_\_\_\_ SDG: \_\_\_\_\_

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/24/19

Analyte	Calibration Verification									M
	True ICV	Found 13:12	%R(1)	True ICV	Found 13:20	%R(1)	True	Found	%R(1)	
bromide	12.5	12.8349	103	12.5	12.8652	103				
chloride	25	24.9773	99.9	25	25.0366	100				
fluoride	5	5.0197	100	5	4.9943	99.9				
Nitrate(NO3)	22.1	21.9822	99.5	22.1	22.0247	99.7				
Nitrate(NO3)-N	5	4.9637	99.3	5	4.9733	99.5				
Nitrite(NO2)	9.98	10.2443	103	9.98	10.2551	103				
Nitrite(NO2)-N	3.04	3.1189	103	3.04	3.1222	103				
phosphate	30.7	28.2065	91.9	30.7	28.7373	93.6				
phosphate-p	10	9.2043	92.0	10	9.3775	93.8				
sulfate	25	24.8282	99.3	25	24.8792	99.5				

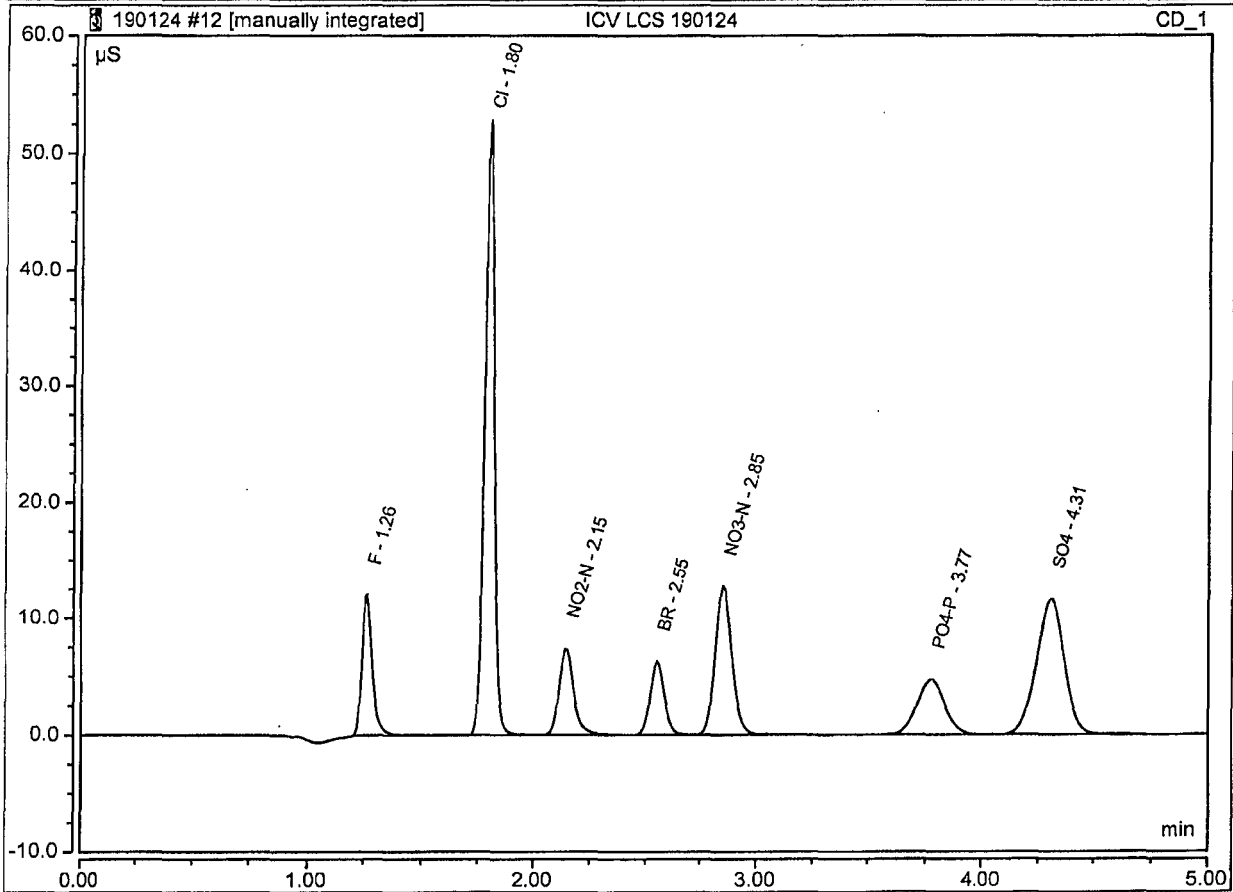
(1) Control Limits: 90-110

ILM02.0

**Peak Integration Report**

Sample Name:	ICV LCS 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:12	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.626	12.036	5.0197
2	1.80	Cl	BMB	2.660	52.786	24.9773
3	2.15	NO2-N	BMB	0.552	7.368	3.1189
4	2.55	BR	BMB	0.467	6.249	12.8349
5	2.85	NO3-N	BMB	1.088	12.728	4.9637
6	3.77	PO4-P	BMB	0.642	4.687	9.2043
7	4.31	SO4	BMB	1.650	11.613	24.8282



F mi1 HH 190128 MM

Algorith Check:

y = Peak Area

x = mg/L S04

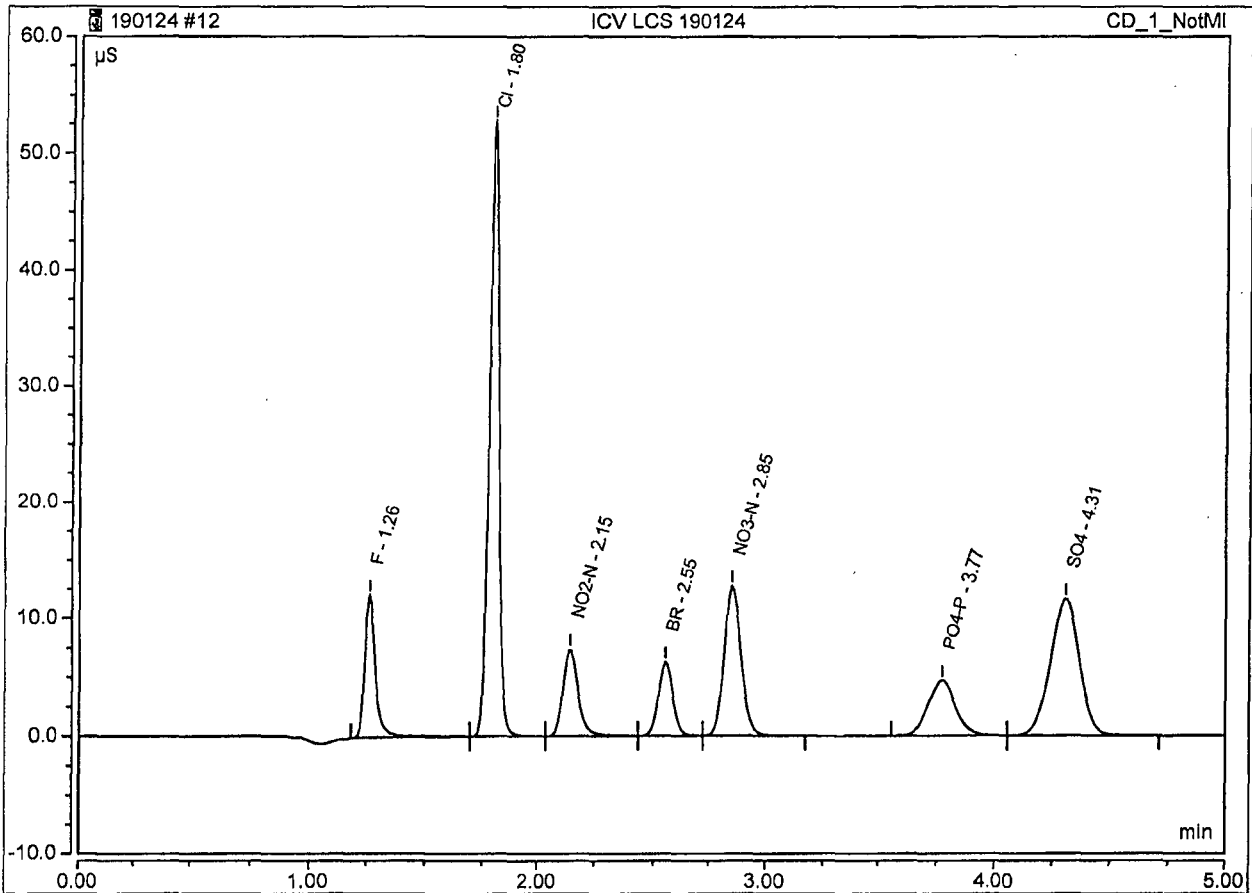
$$y = 0.0664 \quad x + \quad 0.0000$$

$$y = 1.6497 \quad \text{therefor } x = 24.85 \text{ HH 190129}$$

### Not Manipulated Peak Integration Report

Sample Name:	ICV LCS 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:12	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.653	12.130	4.9830
2	1.80	Cl	BMB	2.660	52.786	24.9773
3	2.15	NO <sub>2</sub> -N	BMB	0.552	7.368	3.1189
4	2.55	BR	BMB	0.467	6.249	12.8349
5	2.85	NO <sub>3</sub> -N	BMB	1.088	12.728	4.9637
6	3.77	PO <sub>4</sub> -P	BMB	0.642	4.687	9.2043
7	4.31	SO <sub>4</sub>	BMB	1.650	11.613	24.8282

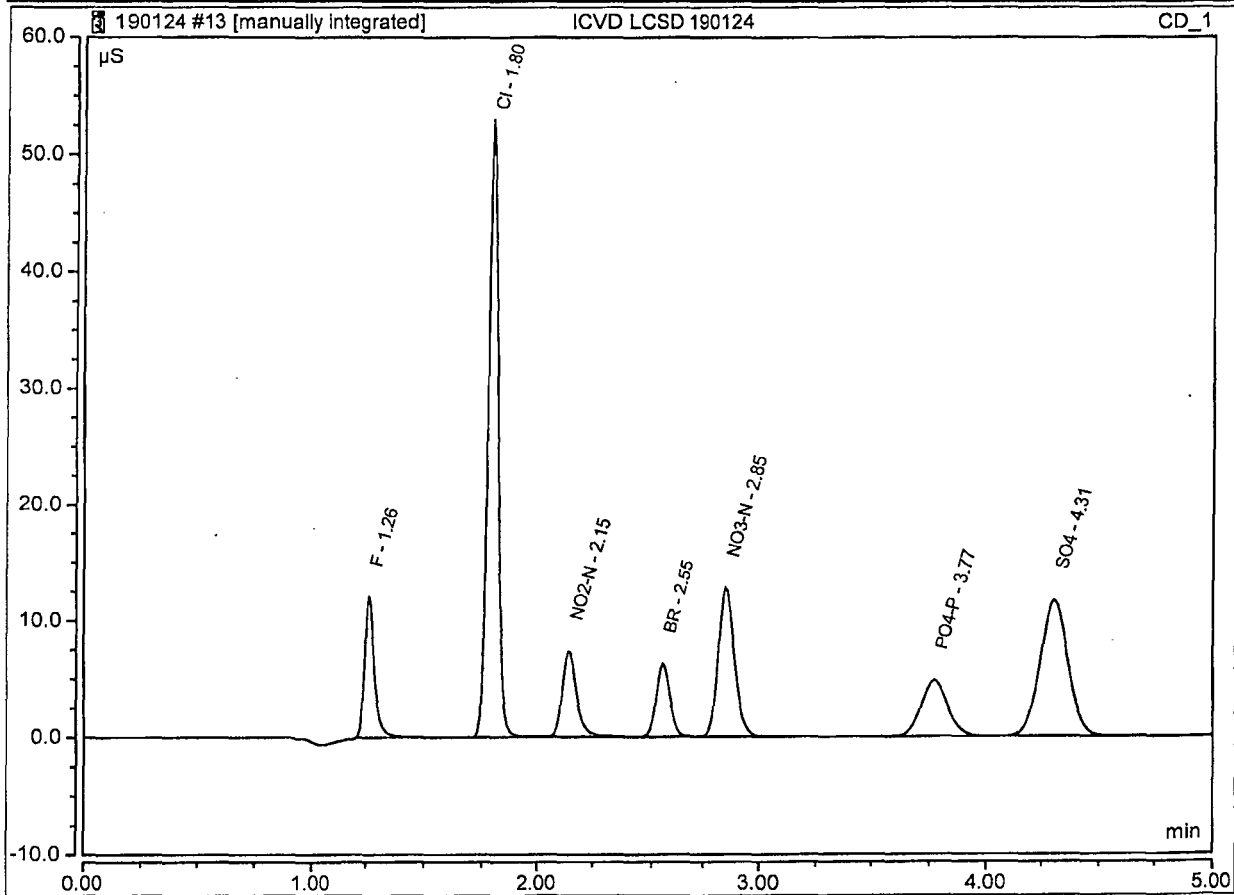




**Peak Integration Report**

Sample Name:	ICVD LCSD 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:20	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.623	12.051	4.9943
2	1.80	Cl	BMB	2.666	52.924	25.0366
3	2.15	NO2-N	BMB	0.552	7.375	3.1222
4	2.55	BR	BMB	0.468	6.262	12.8652
5	2.85	NO3-N	BMB	1.090	12.755	4.9733
6	3.77	PO4-P	BMB	0.654	4.778	9.3775
7	4.31	SO4	BMB	1.653	11.628	24.8792

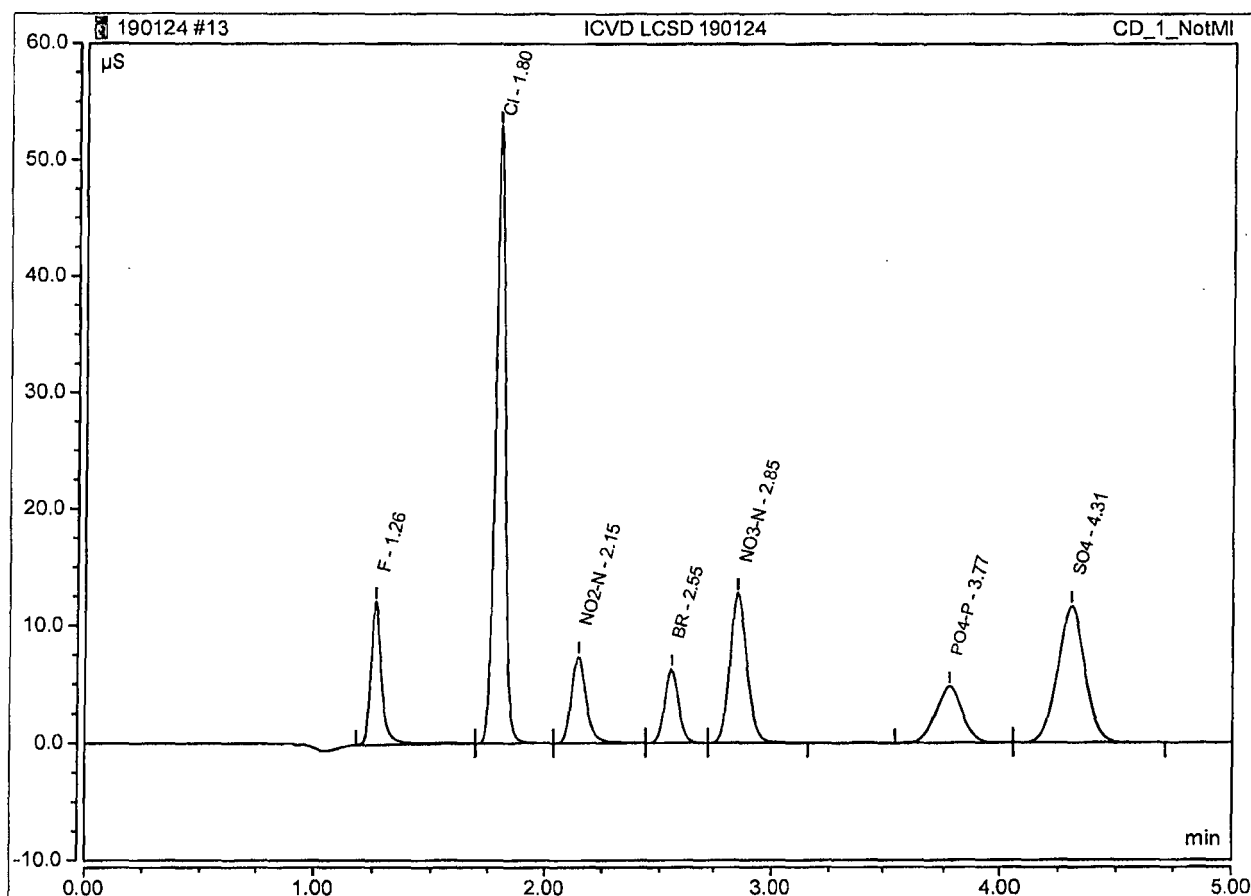


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	ICVD LCSD 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:20	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.26	F	BMB*	0.653	12.160	4.9894
2	1.80	Cl	BMB	2.666	52.924	25.0366
3	2.15	NO <sub>2</sub> -N	BMB	0.552	7.375	3.1222
4	2.55	BR	BMB	0.468	6.262	12.8652
5	2.85	NO <sub>3</sub> -N	BMB	1.090	12.755	4.9733
6	3.77	PO <sub>4</sub> -P	BMB	0.654	4.778	9.3775
7	4.31	SO <sub>4</sub>	BMB	1.653	11.628	24.8792



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: \_\_\_\_\_

ARF No.: \_\_\_\_\_

SDG: \_\_\_\_\_

Preparation Blank Matrix (soil/water): water

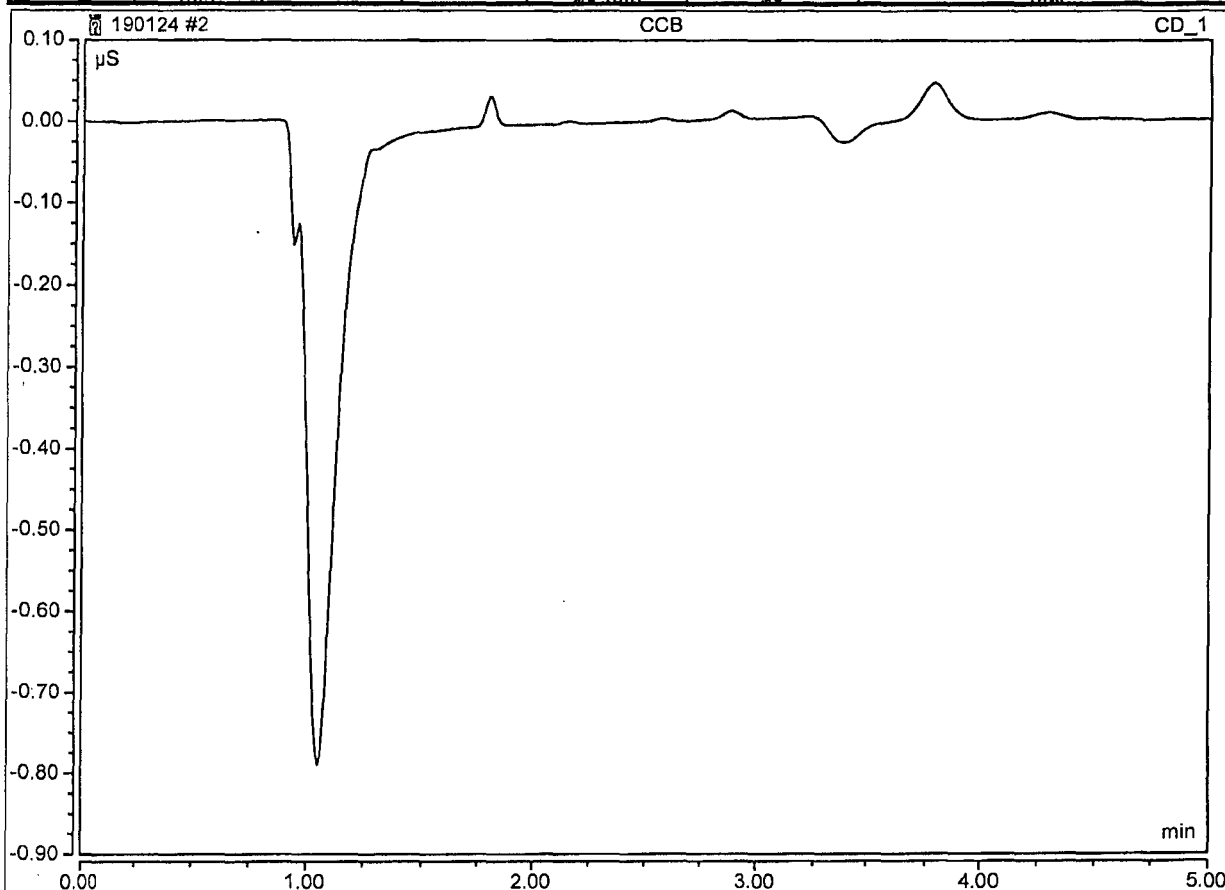
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/24/19 11:58	C	CCB 01/24/19 13:05	C		C		C		C	
bromide	.500	U	.500	U							
chloride	1.000	U	1.000	U							
fluoride	.100	U	.100	U							
Nitrate(NO3)	.500	U	.500	U							
Nitrate(NO3)-N	.200	U	.200	U							
Nitrite(NO2)	.300	U	.300	U							
Nitrite(NO2)-N	.100	U	.100	U							
phosphate	.600	U	.316	J							
phosphate-p	.200	U	.103	J							
sulfate	1.000	U	1.000	U							

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anlon APM 190109	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 11:58	Run Time:	5.00

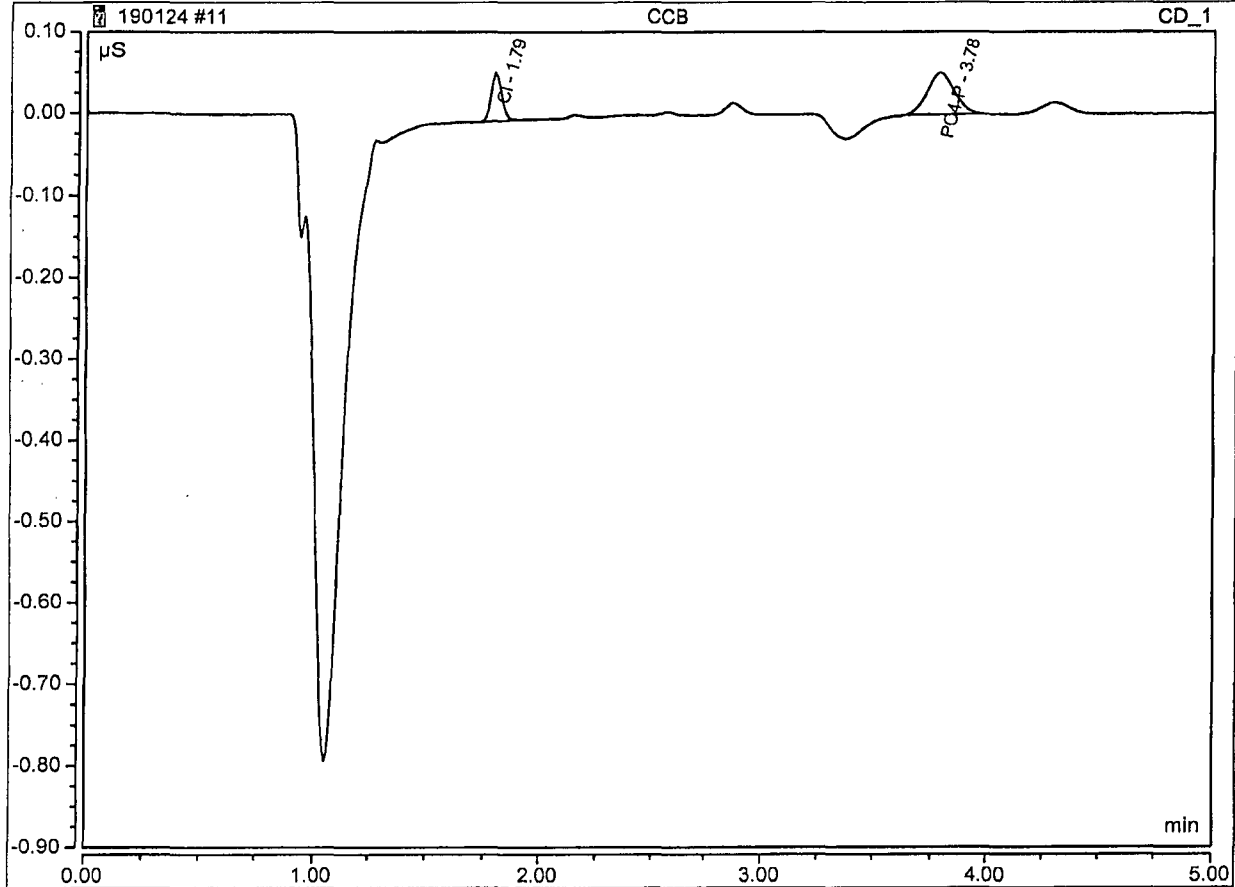
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
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**Peak Integration Report**

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:05	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.79	Cl	BMB	0.003	0.059	0.0294
2	3.78	PO4-P	BMB	0.007	0.051	0.1030



INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

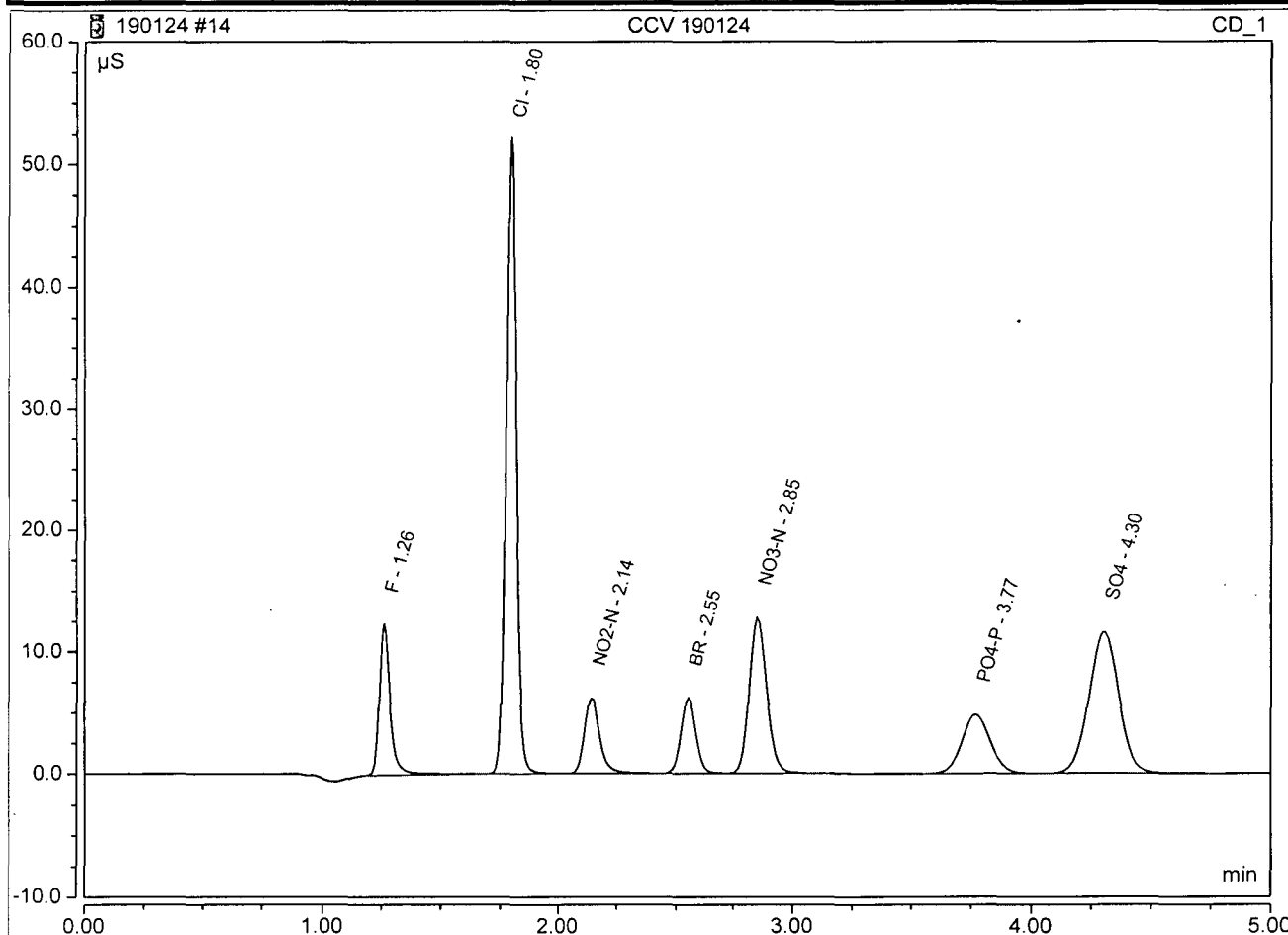
Analysis Date: 01/24/19

Analyte	Calibration Verification									M
	True CCV1	Found 13:27	%R(1)	True CCV1	Found 16:13	%R(1)	True CCV1	Found 18:41	%R(1)	
chloride	25	24.7694	99.1	25	24.8739	99.5	25	24.831	99.3	
Nitrate(NO3)	22.1	21.9716	99.4	22.1	22.0185	99.6	22.1	21.8281	98.8	
sulfate	25	24.877	99.5	25	24.9796	99.9	25	24.9736	99.9	

### Peak Integration Report

Sample Name:	CCV 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:27	Run Time:	5.00

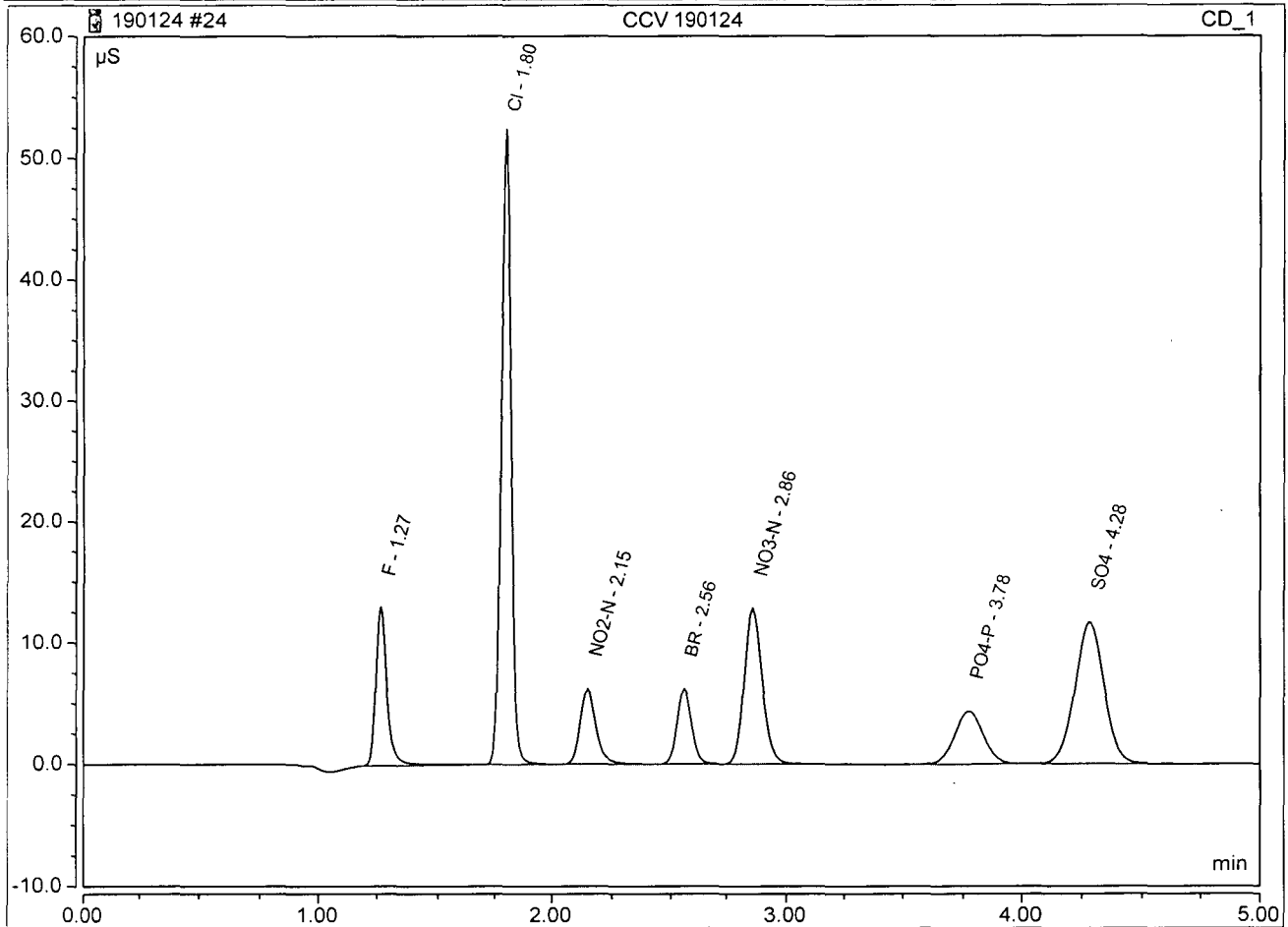
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.661	12.393	5.2964
2	1.80	Cl	BMB	2.638	52.259	24.7694
3	2.14	NO2-N	BMB	0.461	6.178	2.6084
4	2.55	BR	BMB	0.462	6.191	12.6915
5	2.85	NO3-N	BMB	1.088	12.773	4.9613
6	3.77	PO4-P	BMB	0.661	4.809	9.4784
7	4.30	SO4	BMB	1.653	11.572	24.8770



**Peak Integration Report**

Sample Name:	CCV 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 16:13	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.691	13.031	5.5382
2	1.80	Cl	BMB	2.649	52.387	24.8739
3	2.15	NO2-N	BMB	0.463	6.180	2.6164
4	2.56	BR	BMB	0.462	6.175	12.7086
5	2.86	NO3-N	BMB	1.090	12.766	4.9719
6	3.78	PO4-P	BMB	0.600	4.326	8.6081
7	4.28	SO4	BMB	1.660	11.594	24.9796

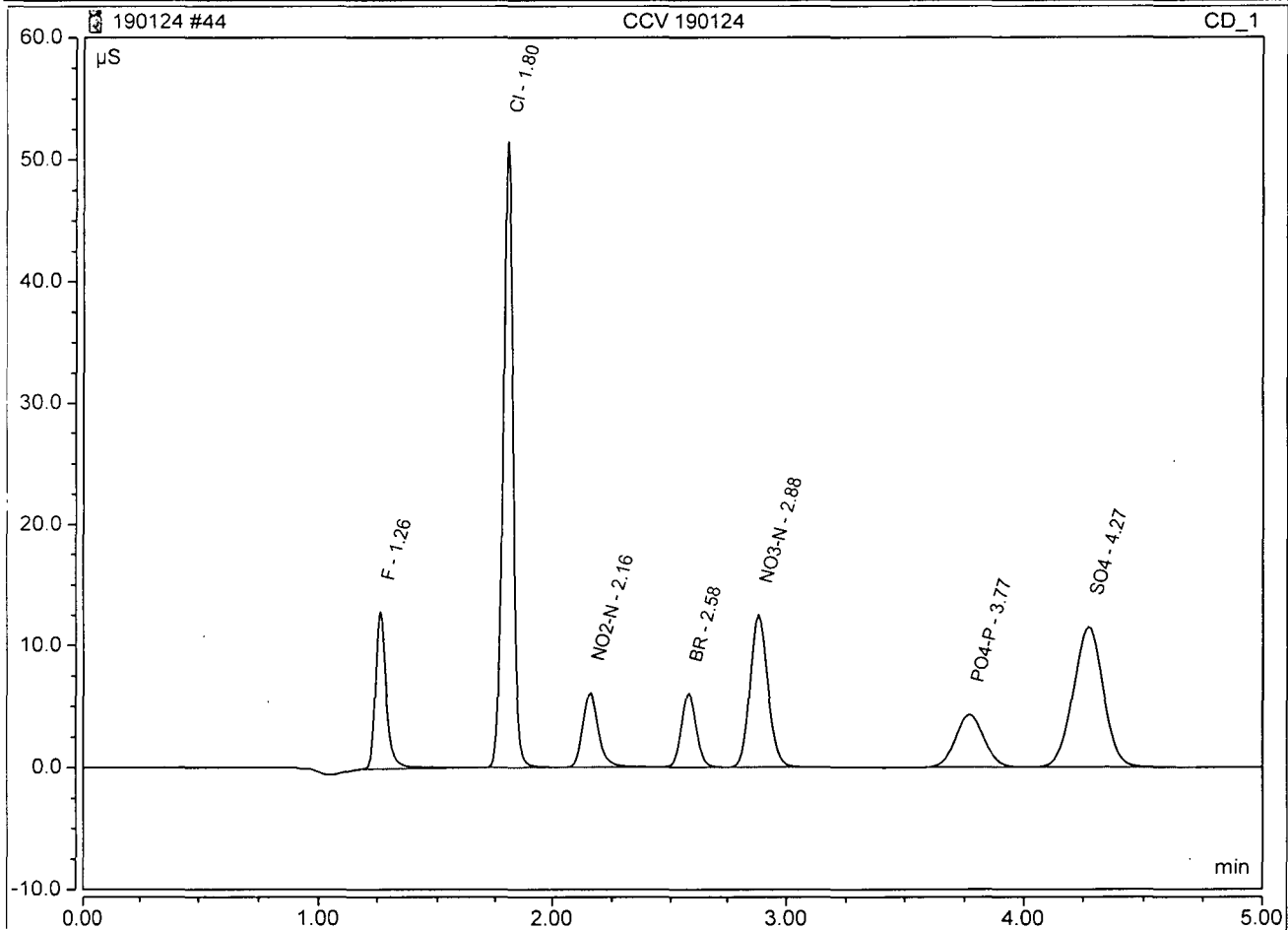




### Peak Integration Report

Sample Name:	CCV 190124	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 18:41	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.690	12.905	5.5307
2	1.80	Cl	BMB	2.644	51.469	24.8310
3	2.16	NO <sub>2</sub> -N	BMB	0.463	6.077	2.6184
4	2.58	BR	BMB	0.462	6.040	12.6983
5	2.88	NO <sub>3</sub> -N	BMB	1.081	12.450	4.9289
6	3.77	PO <sub>4</sub> -P	BMB	0.598	4.277	8.5845
7	4.27	SO <sub>4</sub>	BMB	1.659	11.448	24.9736



BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87940

SDG: 87940

Preparation Blank Matrix (soil/water): water

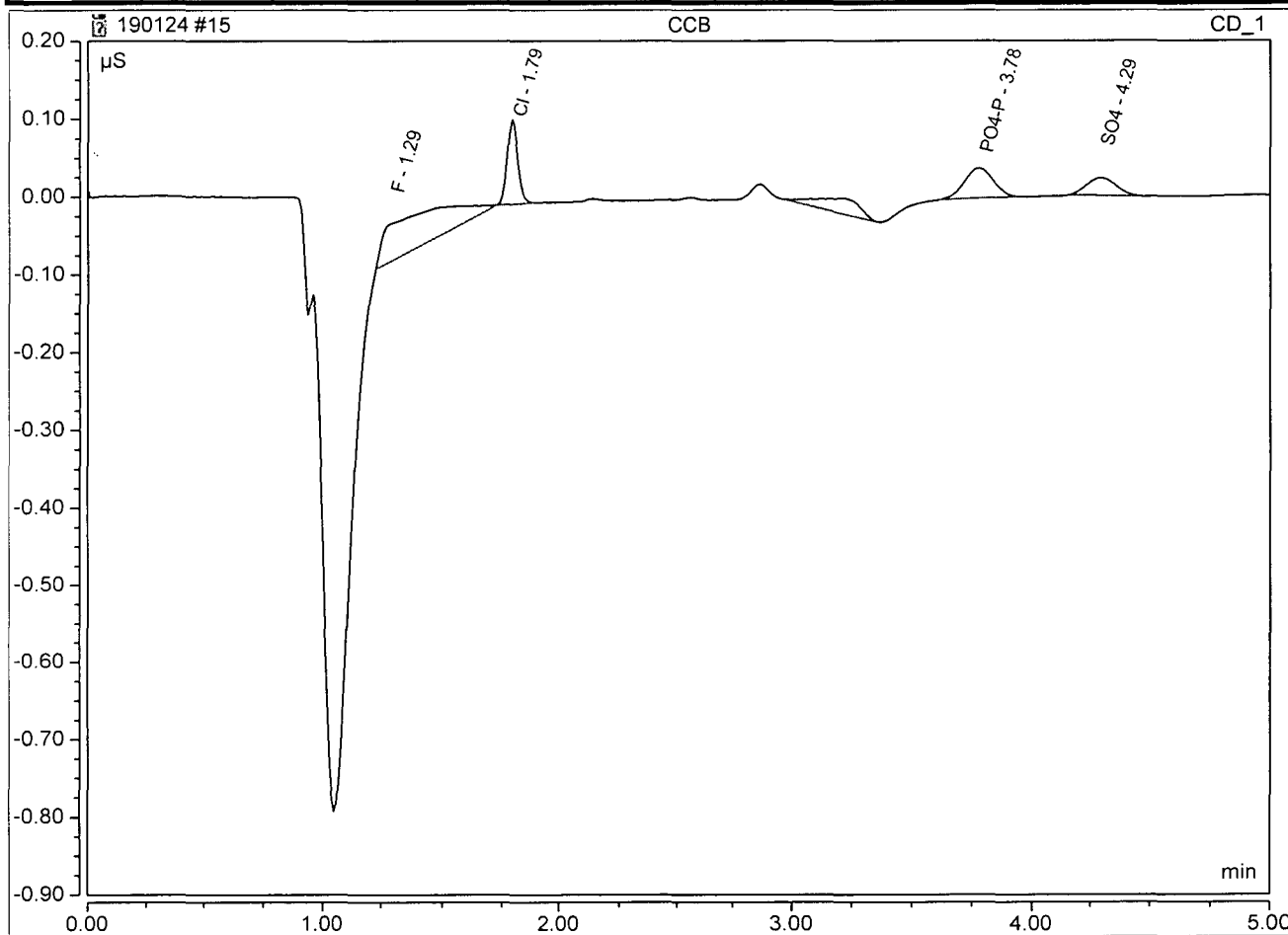
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/24/19 13:34	C	CCB 01/24/19 16:20	C	CCB 01/24/19 18:48	C		C		C	
chloride	1.000	U	1.000	U	1.000	U					
Nitrate(NO3)	.500	U	.500	U	.500	U					
sulfate	1.000	U	1.000	U	1.000	U					

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 13:34	Run Time:	5.00

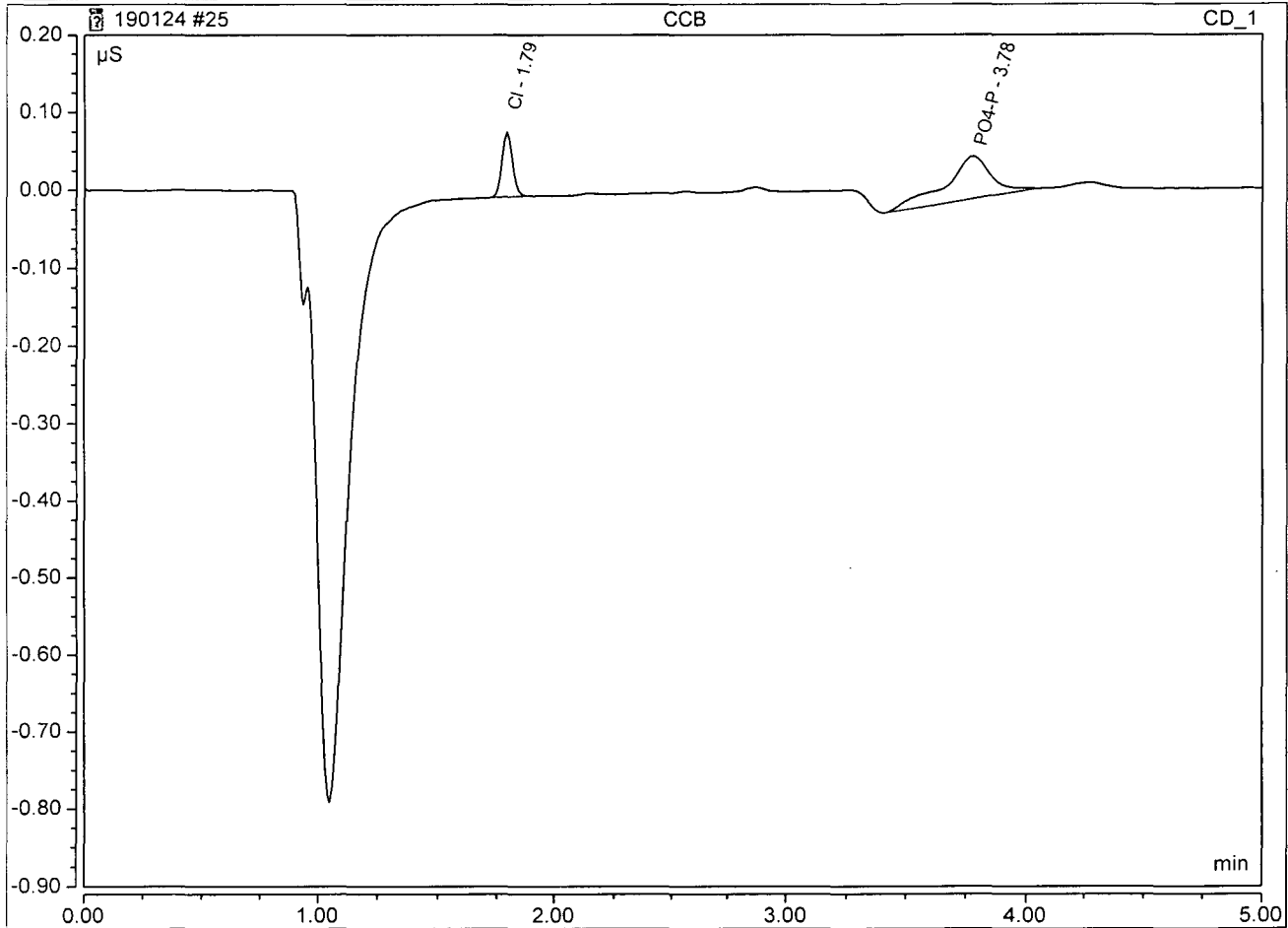
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.29	F	BMB	0.015	0.048	0.1674
2	1.79	Cl	BMB	0.006	0.108	0.0542
4	3.78	PO4-P	BMB	0.005	0.039	0.0767
5	4.29	SO4	BMB	0.003	0.023	0.0479



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 16:20	Run Time:	5.00

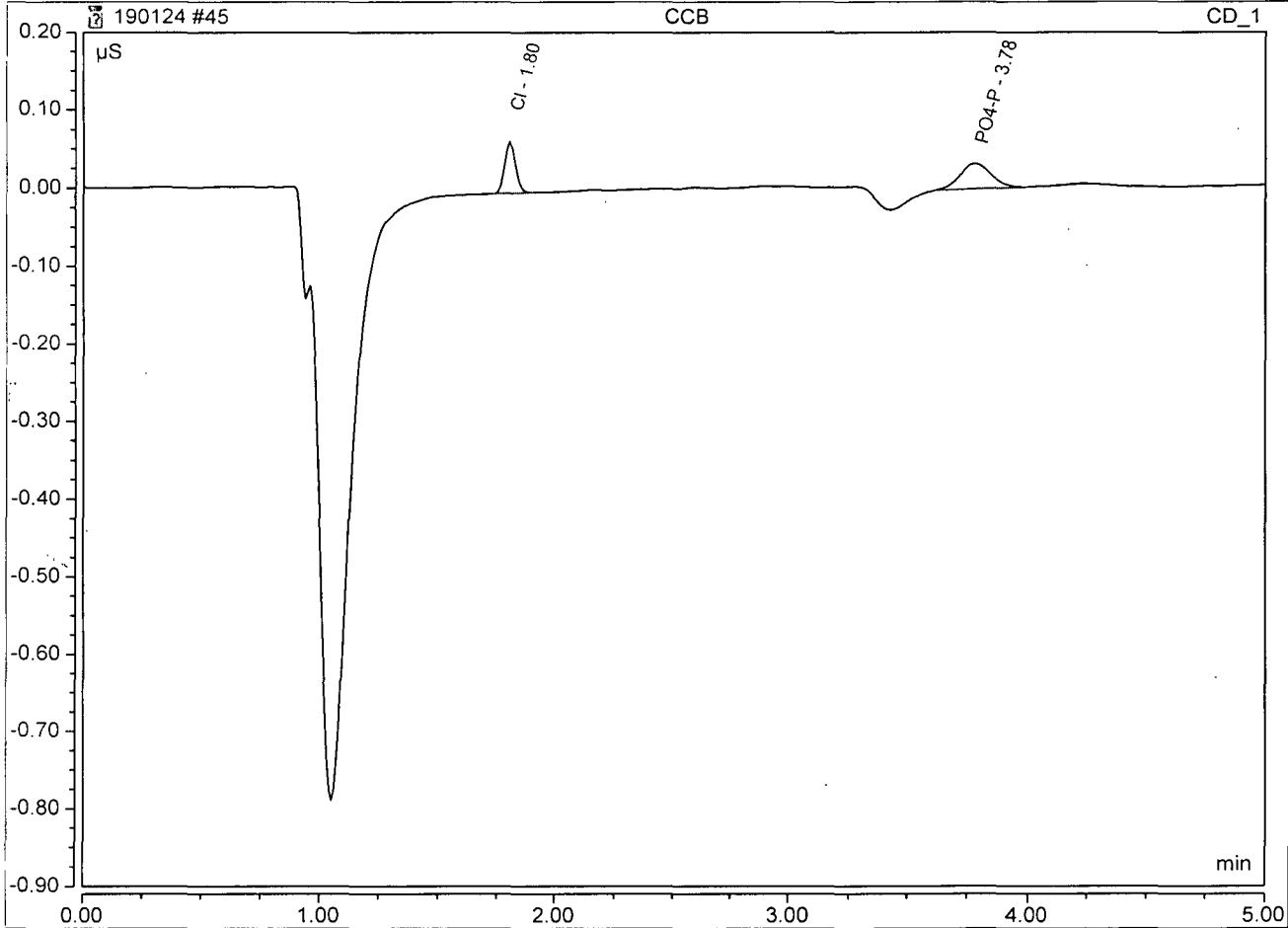
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.004	0.083	0.0417
2	3.78	PO4-P	BMB	0.012	0.055	0.1788



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 18:48	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.80	Cl	BMB	0.004	0.066	0.0338
2	3.78	PO4-P	BMB	0.005	0.033	0.0704



A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/25/19

Analyte	Calibration Verification									M
	True CCV1	Found 18:09	%R(1)	True CCV1	Found 18:31	%R(1)	True CCV1	Found 19:59	%R(1)	
chloride	25	24.9944	100	25	25.1012	100	25	25.2264	101	
Nitrate(NO3)	22.1	22.1279	100	22.1	22.1137	100	22.1	22.1549	100	
sulfate	25	25.0937	100	25	25.0799	100	25	25.2009	101	

(1) Control Limits: 90-110

ILM02.0

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

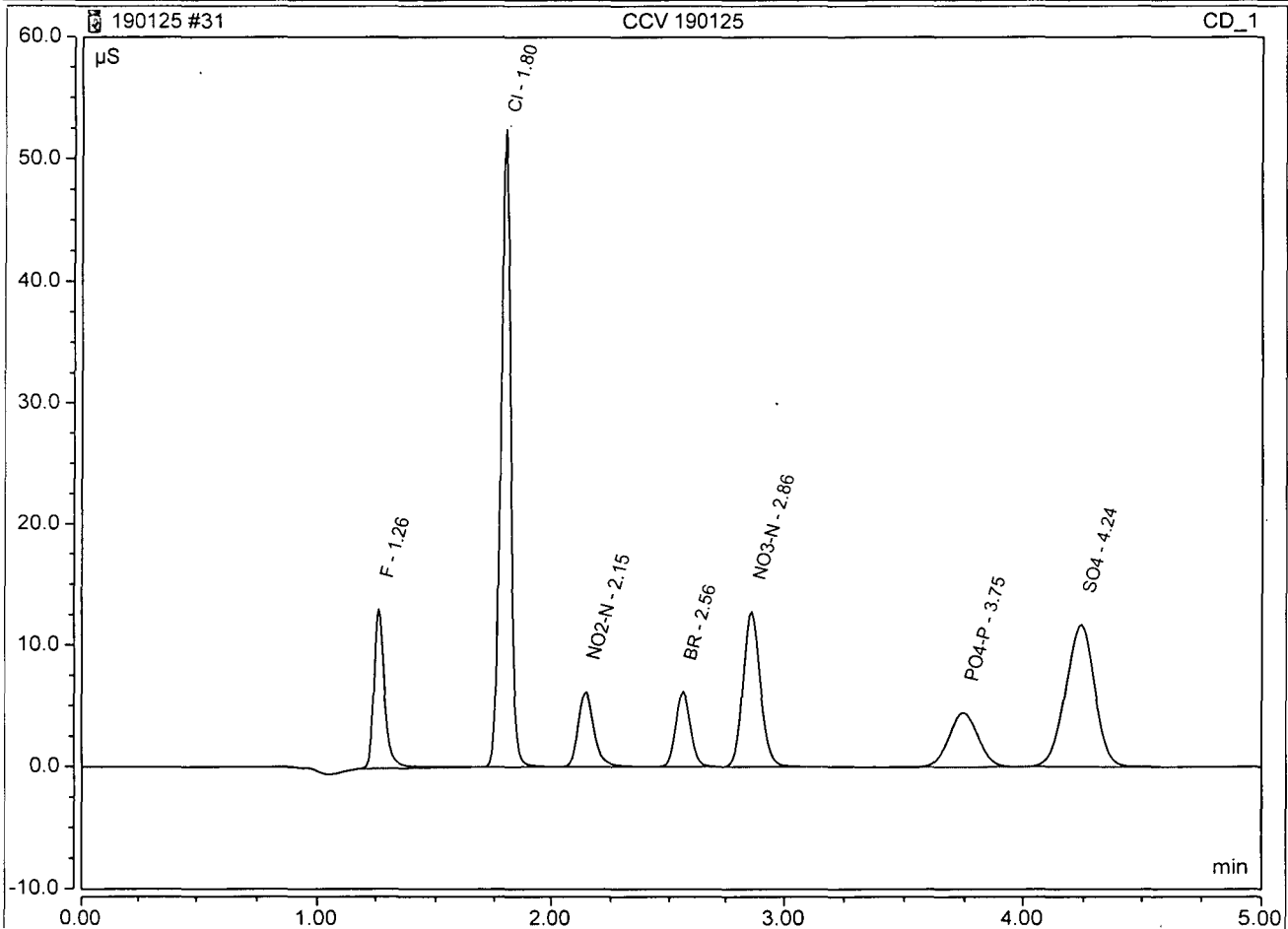
Analysis Date: 01/25/19

Analyte	Calibration Verification									M
	True CCV1	Found 20:29	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
chloride	25	25.1293	101							
Nitrate(NO3)	22.1	22.1917	100							
sulfate	25	25.1479	101							

**Peak Integration Report**

Sample Name:	CCV 190125	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 18:09	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.695	13.074	5.5669
2	1.80	Cl	BMB	2.662	52.450	24.9944
3	2.15	NO2-N	BMB	0.464	6.158	2.6224
4	2.56	BR	BMB	0.464	6.157	12.7486
5	2.86	NO3-N	BMB	1.095	12.755	4.9966
6	3.75	PO4-P	BMB	0.616	4.433	8.8330
7	4.24	SO4	BMB	1.667	11.678	25.0937

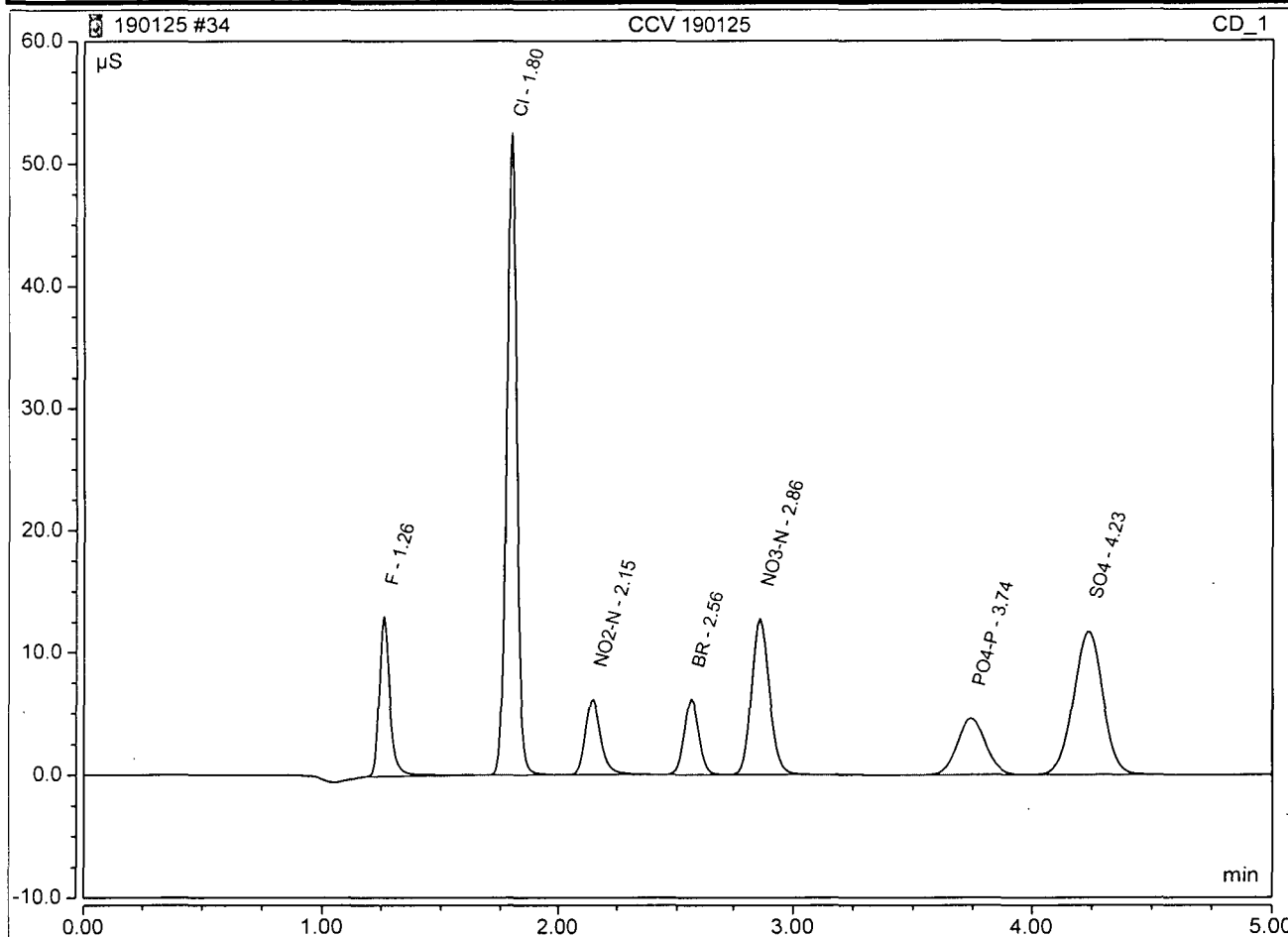




### Peak Integration Report

Sample Name:	CCV 190125	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 18:31	Run Time:	5.00

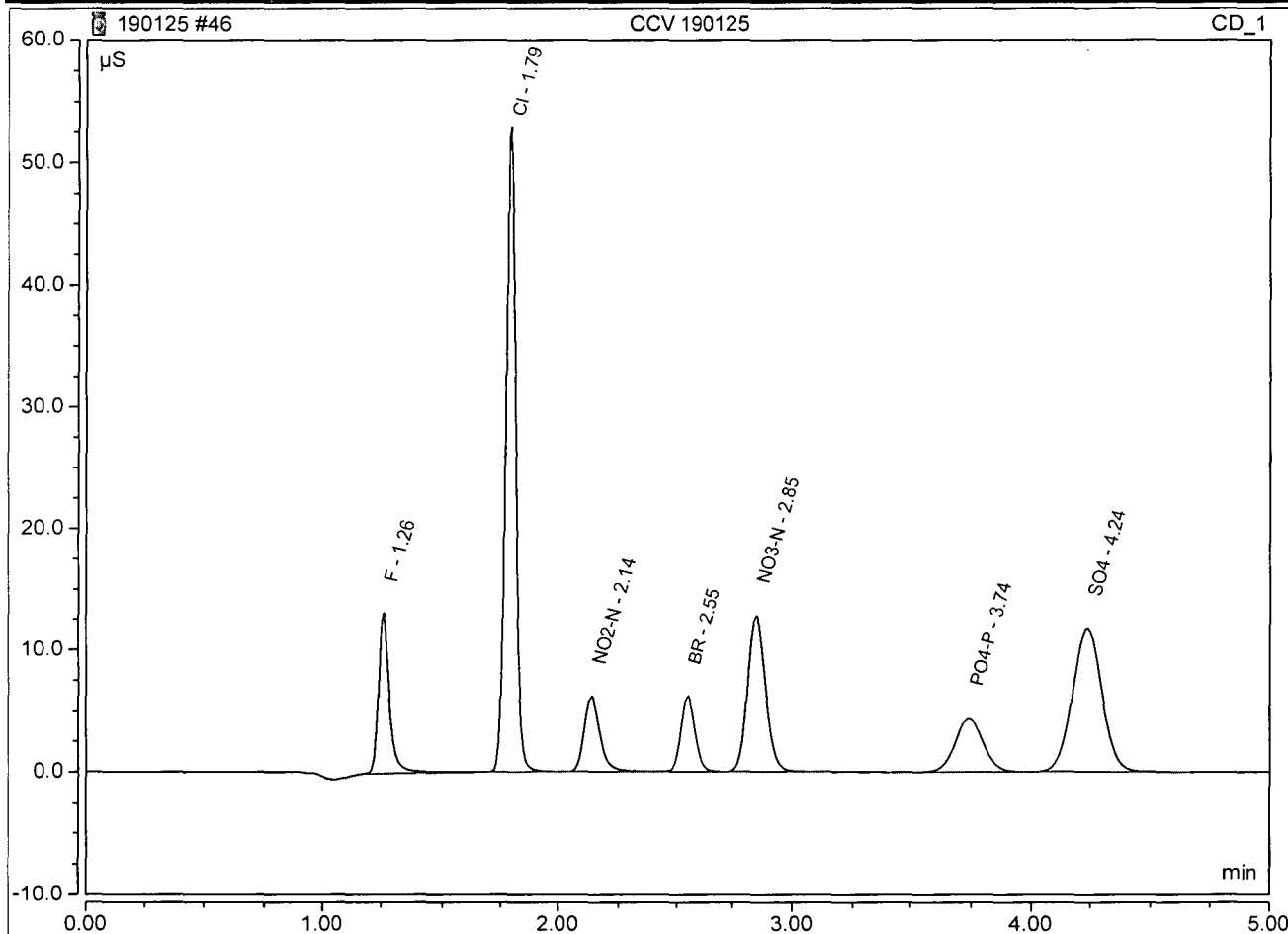
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.694	13.045	5.5586
2	1.80	Cl	BMB	2.673	52.460	25.1012
3	2.15	NO <sub>2</sub> -N	BMB	0.464	6.138	2.6242
4	2.56	BR	BMB	0.464	6.130	12.7530
5	2.86	NO <sub>3</sub> -N	BMB	1.095	12.689	4.9934
6	3.74	PO <sub>4</sub> -P	BMB	0.638	4.584	9.1554
7	4.23	SO <sub>4</sub>	BMB	1.666	11.655	25.0799



### Peak Integration Report

Sample Name:	CCV 190125	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 19:59	Run Time:	5.00

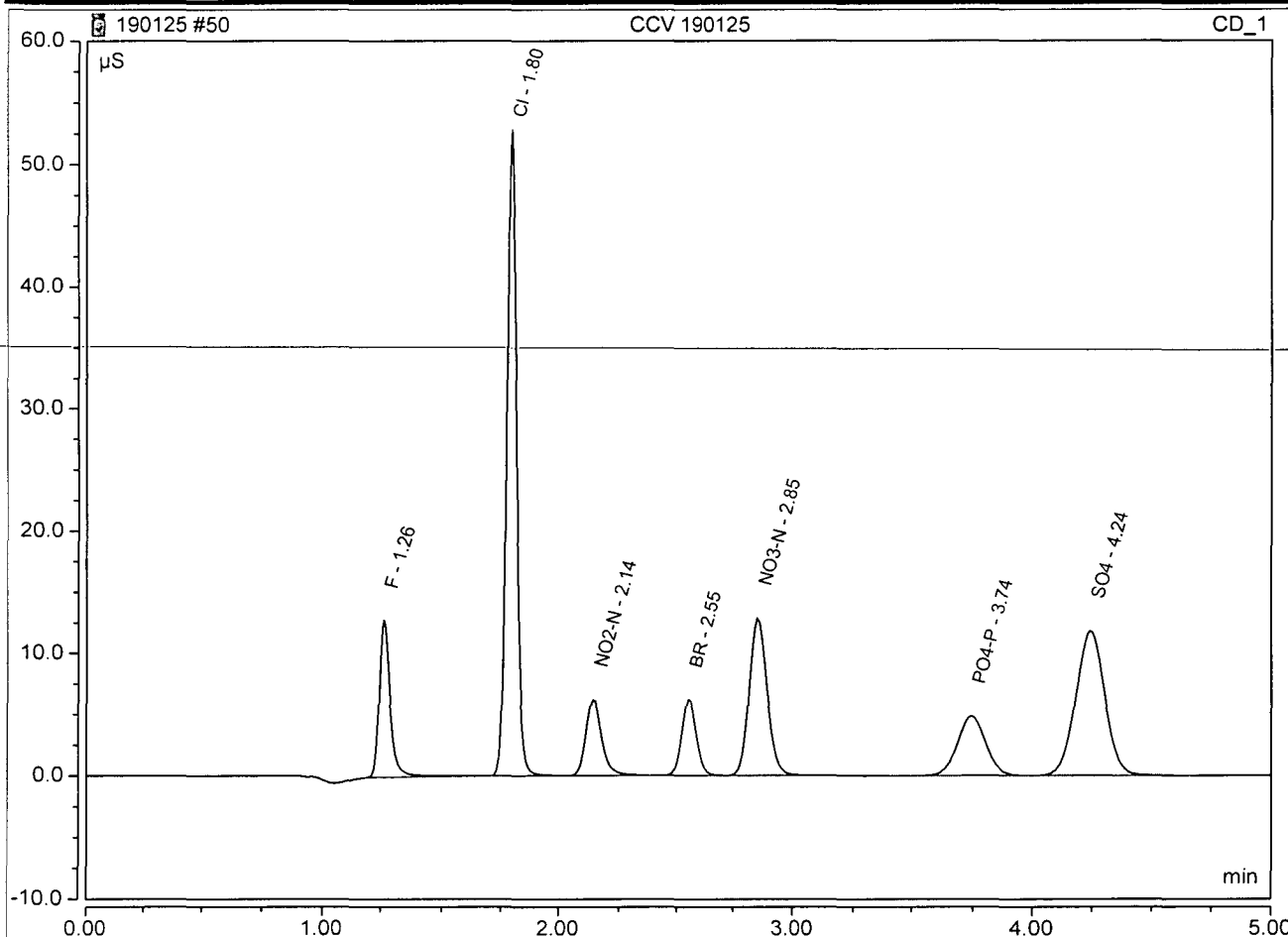
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.696	13.141	5.5784
2	1.79	Cl	BMB	2.686	52.966	25.2264
3	2.14	NO2-N	BMB	0.465	6.197	2.6286
4	2.55	BR	BMB	0.465	6.197	12.7765
5	2.85	NO3-N	BMB	1.097	12.837	5.0027
6	3.74	PO4-P	BMB	0.609	4.397	8.7326
7	4.24	SO4	BMB	1.674	11.775	25.2009



### Peak Integration Report

Sample Name:	CCV 190125	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 20:29	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.680	12.832	5.4482
2	1.80	Cl	BMB	2.676	52.816	25.1293
3	2.14	NO2-N	BMB	0.466	6.205	2.6346
4	2.55	BR	BMB	0.466	6.204	12.7975
5	2.85	NO3-N	BMB	1.099	12.844	5.0110
6	3.74	PO4-P	BMB	0.668	4.838	9.5777
7	4.24	SO4	BMB	1.671	11.778	25.1479



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87940

SDG: 87940

Preparation Blank Matrix (soil/water): water

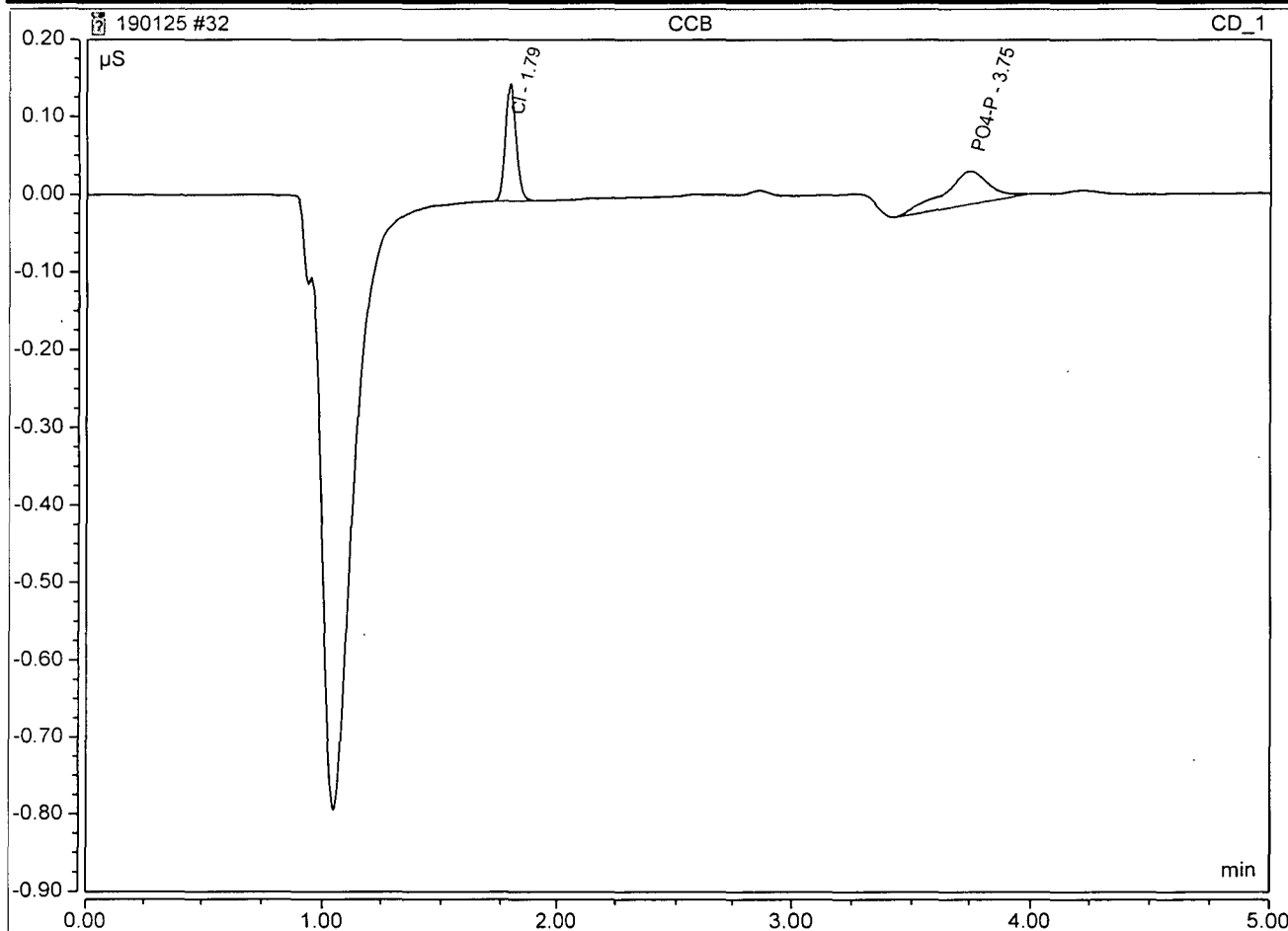
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/25/19 18:16	C	CCB 01/25/19 18:38	C	CCB 01/25/19 20:07	C	CCB 01/25/19 20:36	C		C	
chloride	1.000	U	.110	J	.147	J	.107	J			
Nitrate(NO3)	.500	U	.500	U	.500	U	.500	U			
sulfate	1.000	U	1.000	U	1.000	U	1.000	U			

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 18:16	Run Time:	5.00

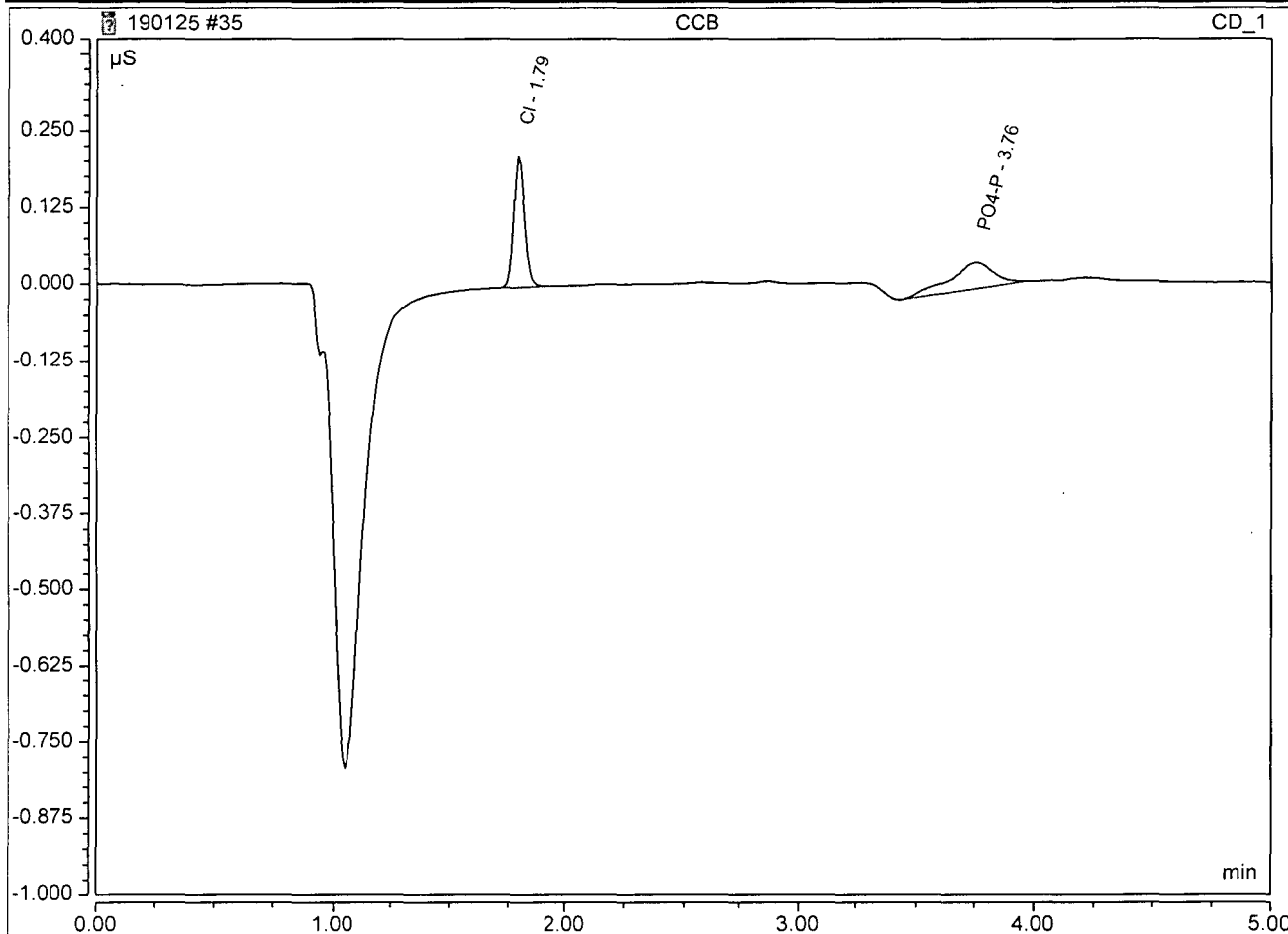
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.008	0.151	0.0769
2	3.75	PO4-P	BMB	0.009	0.042	0.1355



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 18:38	Run Time:	5.00

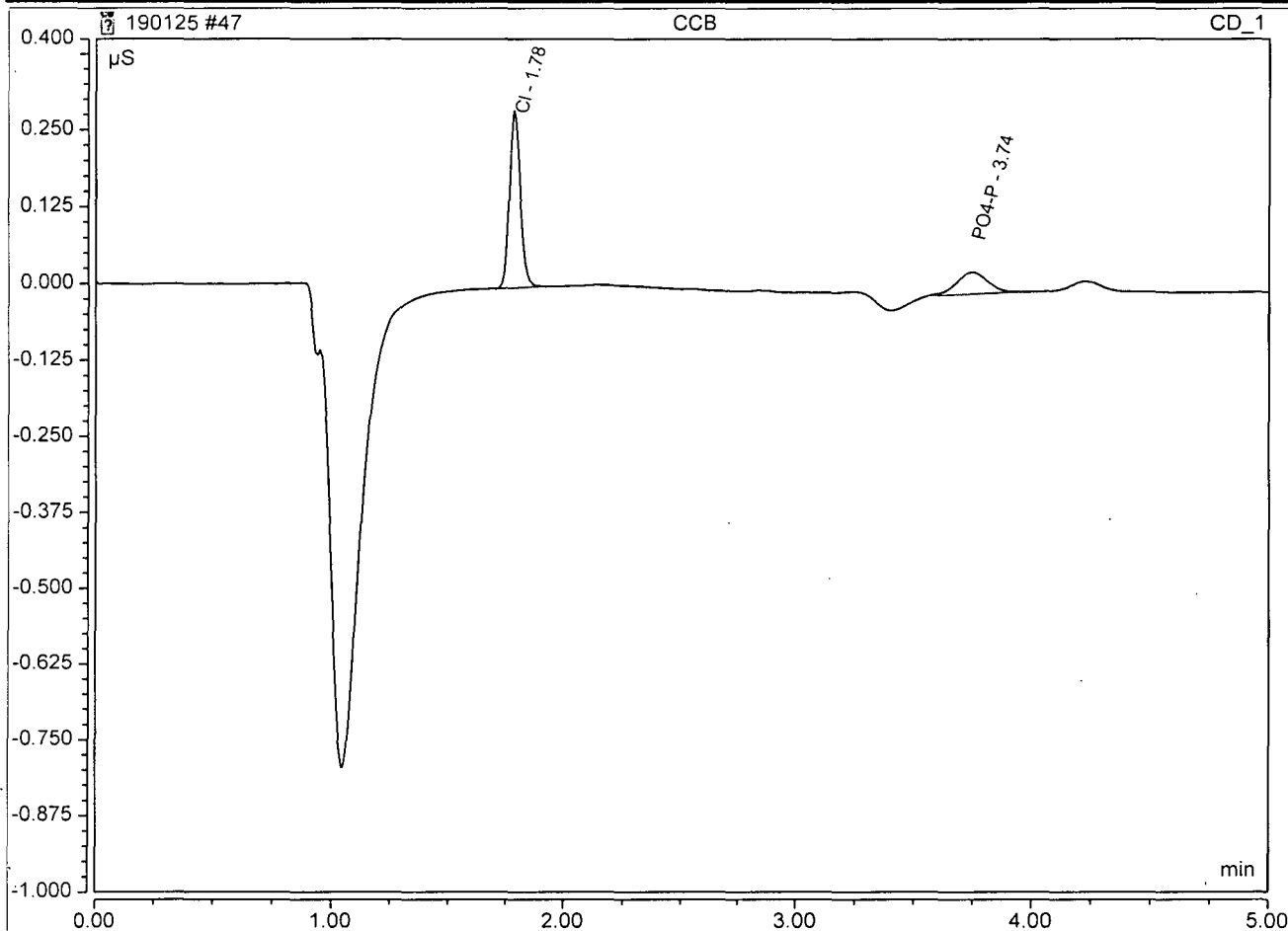
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.012	0.214	0.1096
2	3.76	PO4-P	BMB	0.010	0.043	0.1366



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 20:07	Run Time:	5.00

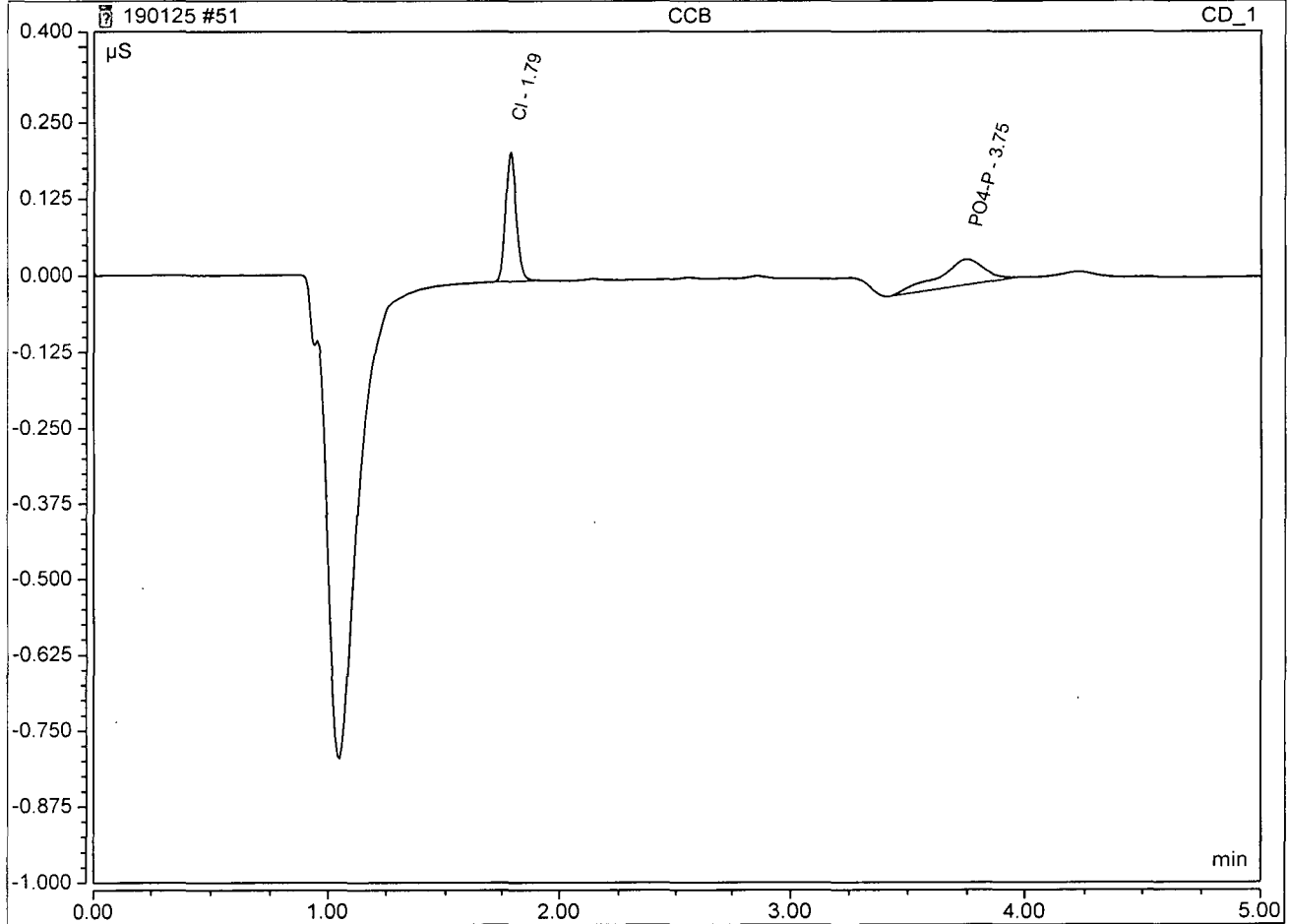
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.016	0.289	0.1466
2	3.74	PO4-P	BMB	0.005	0.036	0.0776



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 20:36	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.011	0.211	0.1071
2	3.75	PO4-P	BMB	0.009	0.041	0.1339





A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 9:55	%R(1)	True CCV1	Found 11:58	%R(1)	True CCV1	Found 12:45	%R(1)	
chloride	25	24.9271	99.7	25	25.0031	100	25	25.0596	100	
sulfate	25	25.0084	100	25	25.0883	100	25	25.1412	101	

(1) Control Limits: 90-110

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

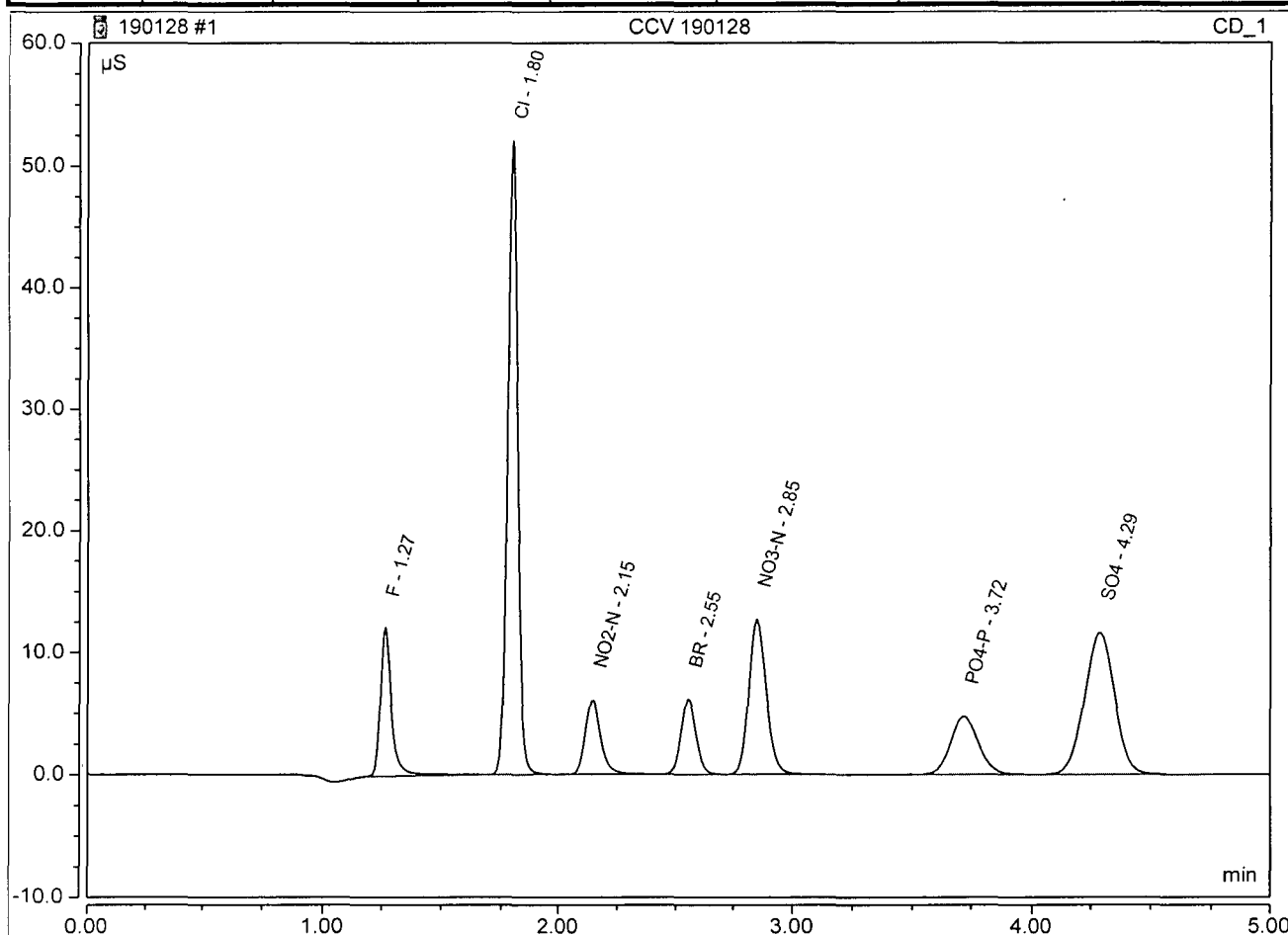
Lab Name: A.P.P.L. INC. Contract: AECOMARF No: 87940 SDG: 87940Initial Calibration Source: CPIContinuing Calibration Source: Environmental ExpressAnalysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 15:25	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
chloride	25	25.1431	101							
sulfate	25	25.1905	101							

### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 09:55	Run Time:	5.00

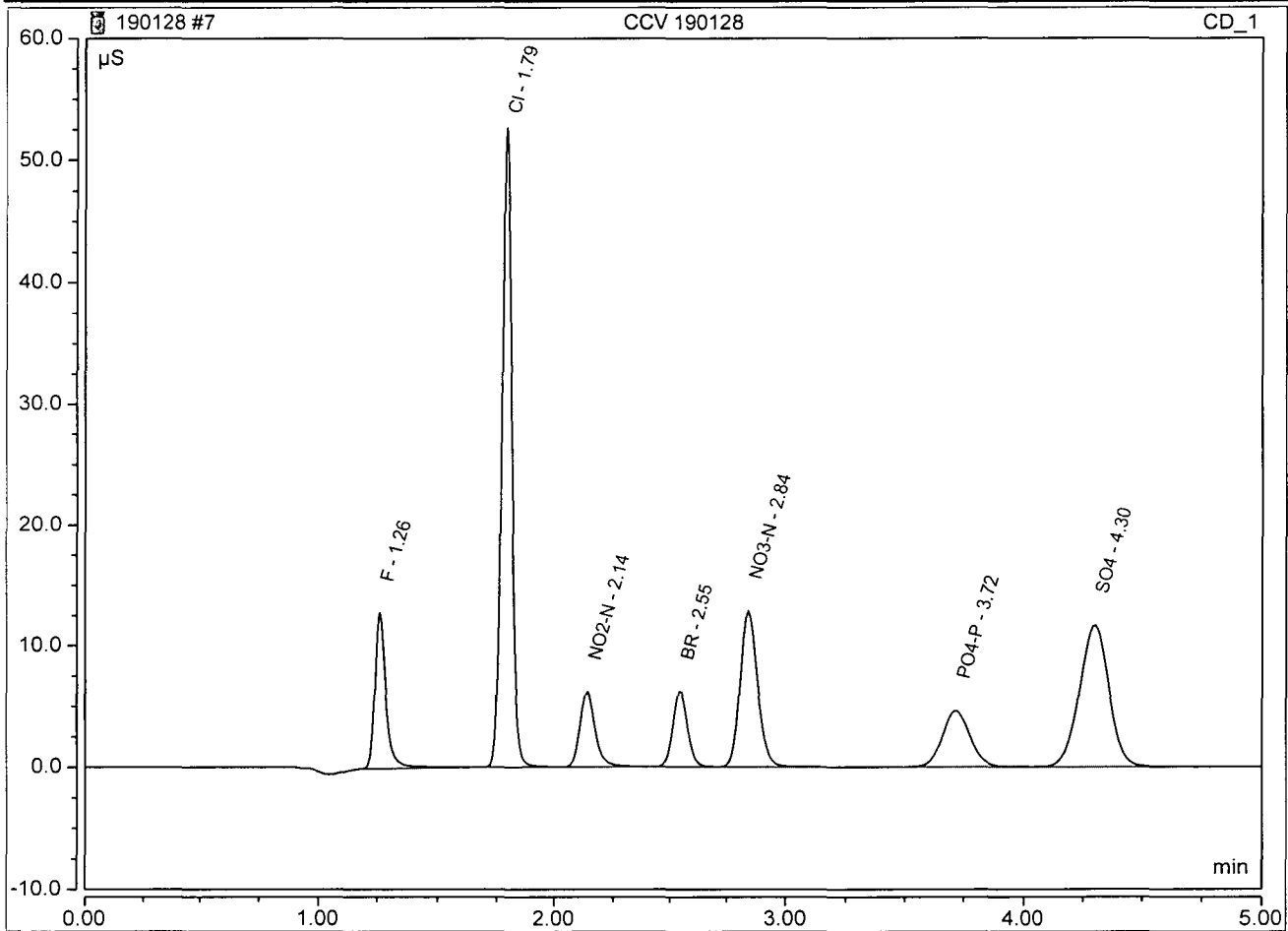
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.674	12.112	5.4036
2	1.80	Cl	BMB	2.654	52.046	24.9271
3	2.15	NO2-N	BMB	0.460	6.081	2.5985
4	2.55	BR	BMB	0.463	6.153	12.7223
5	2.85	NO3-N	BMB	1.094	12.679	4.9899
6	3.72	PO4-P	BMB	0.648	4.732	9.2976
7	4.29	SO4	BMB	1.662	11.599	25.0084



### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 11:58	Run Time:	5.00

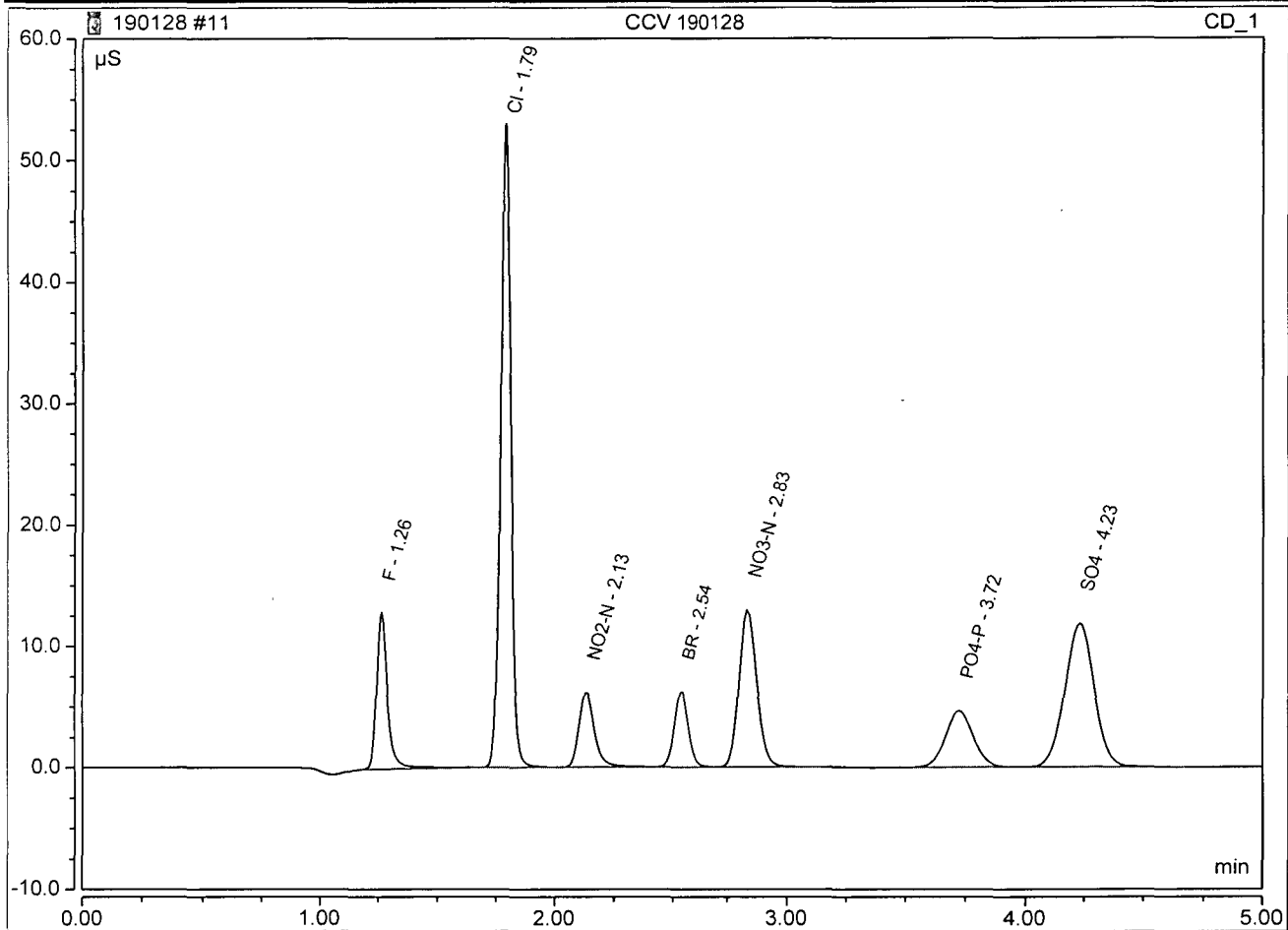
No.	Time (min)	Peak Name	Peak Type	Area (μS*min)	Height (μS)	Amount (mg/L)
1	1.26	F	BMB	0.692	12.839	5.5497
2	1.79	Cl	BMB	2.662	52.652	25.0031
3	2.14	NO2-N	BMB	0.462	6.162	2.6129
4	2.55	BR	BMB	0.465	6.231	12.7697
5	2.84	NO3-N	BMB	1.099	12.830	5.0119
6	3.72	PO4-P	BMB	0.626	4.598	8.9852
7	4.30	SO4	BMB	1.667	11.651	25.0883



### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 12:45	Run Time:	5.00

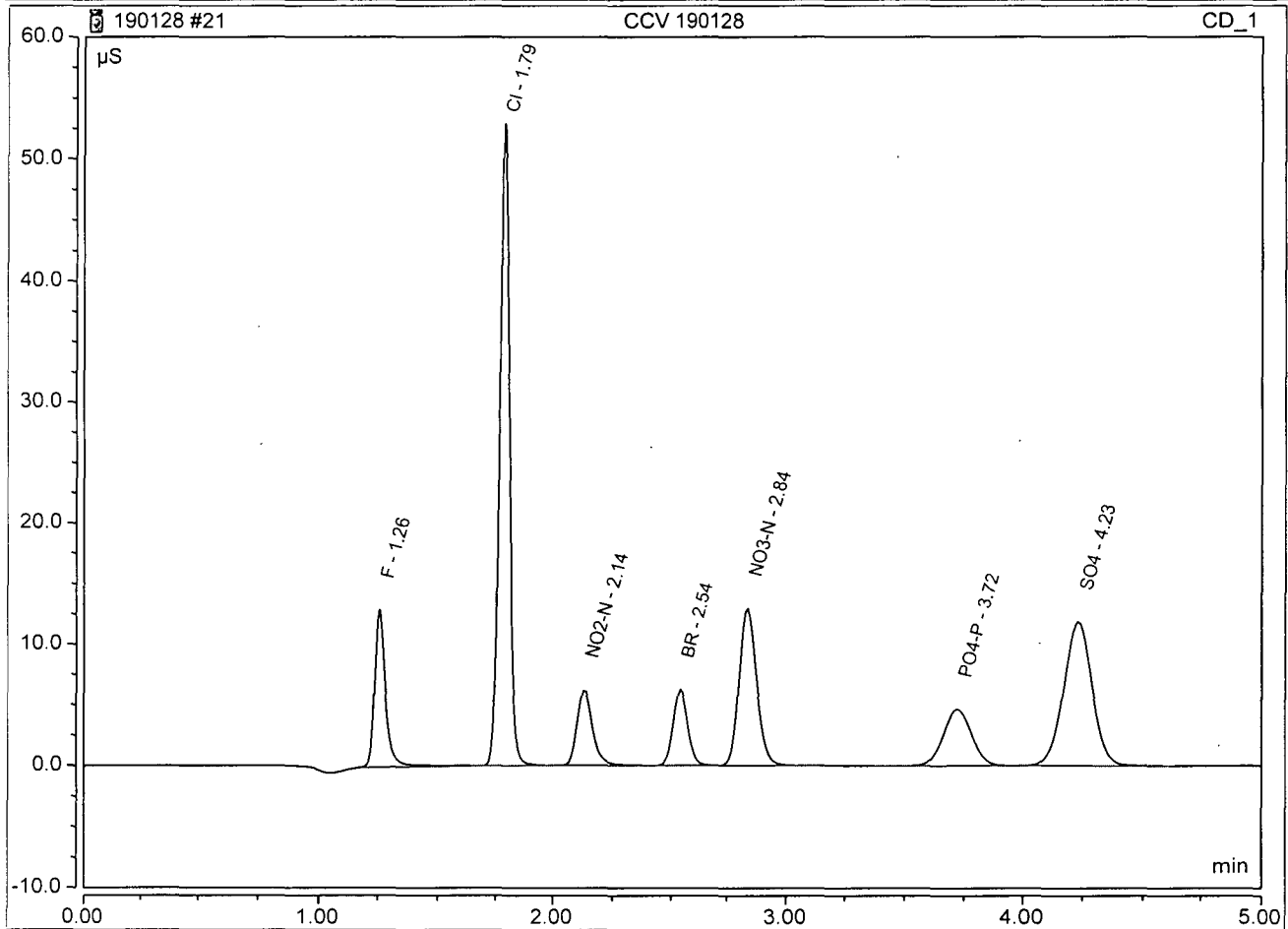
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.692	12.912	5.5471
2	1.79	Cl	BMB	2.668	52.972	25.0596
3	2.13	NO2-N	BMB	0.463	6.199	2.6172
4	2.54	BR	BMB	0.465	6.252	12.7704
5	2.83	NO3-N	BMB	1.098	12.964	5.0074
6	3.72	PO4-P	BMB	0.637	4.648	9.1403
7	4.23	SO4	BMB	1.670	11.825	25.1412



### Peak Integration Report

Sample Name:	CCV 190128	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 15:25	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.691	12.937	5.5372
2	1.79	Cl	BMB	2.677	52.910	25.1431
3	2.14	NO2-N	BMB	0.464	6.185	2.6252
4	2.54	BR	BMB	0.466	6.232	12.8086
5	2.84	NO3-N	BMB	1.100	12.913	5.0185
6	3.72	PO4-P	BMB	0.638	4.629	9.1514
7	4.23	SO4	BMB	1.674	11.803	25.1905



A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87940

SDG: 87940

Preparation Blank Matrix (soil/water): water

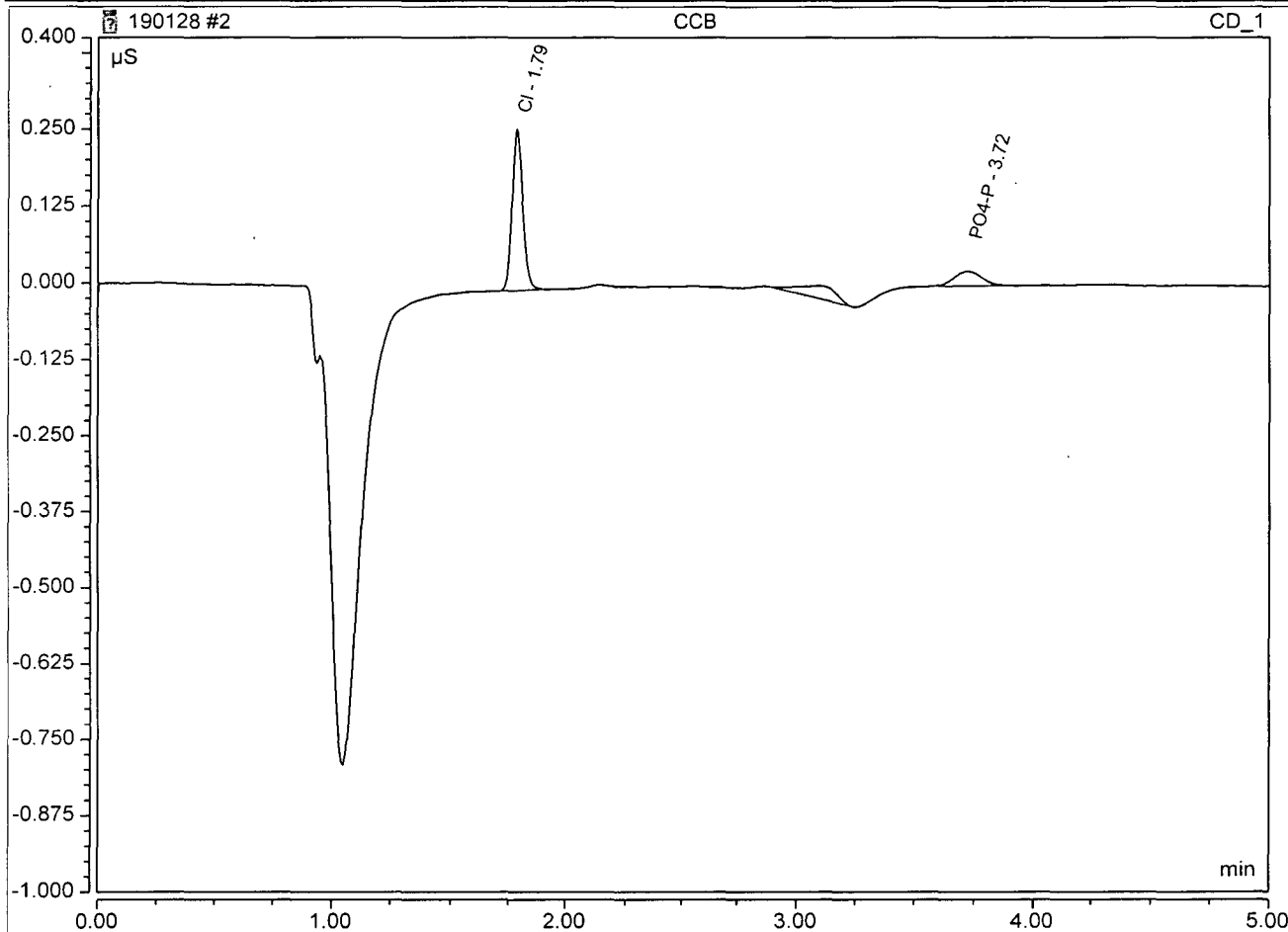
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB	C	CCB	C	CCB	C	CCB	C		C	
	01/28/19 10:02		01/28/19 12:06		01/28/19 12:52		01/28/19 15:32				
chloride	.134	J	.134	J	.133	J	.145	J			
sulfate	1.000	U	1.000	U	1.000	U	1.000	U			

### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 10:02	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.79	Cl	BMB	0.014	0.262	0.1339
3	3.72	PO4-P	BMB	0.003	0.024	0.0465

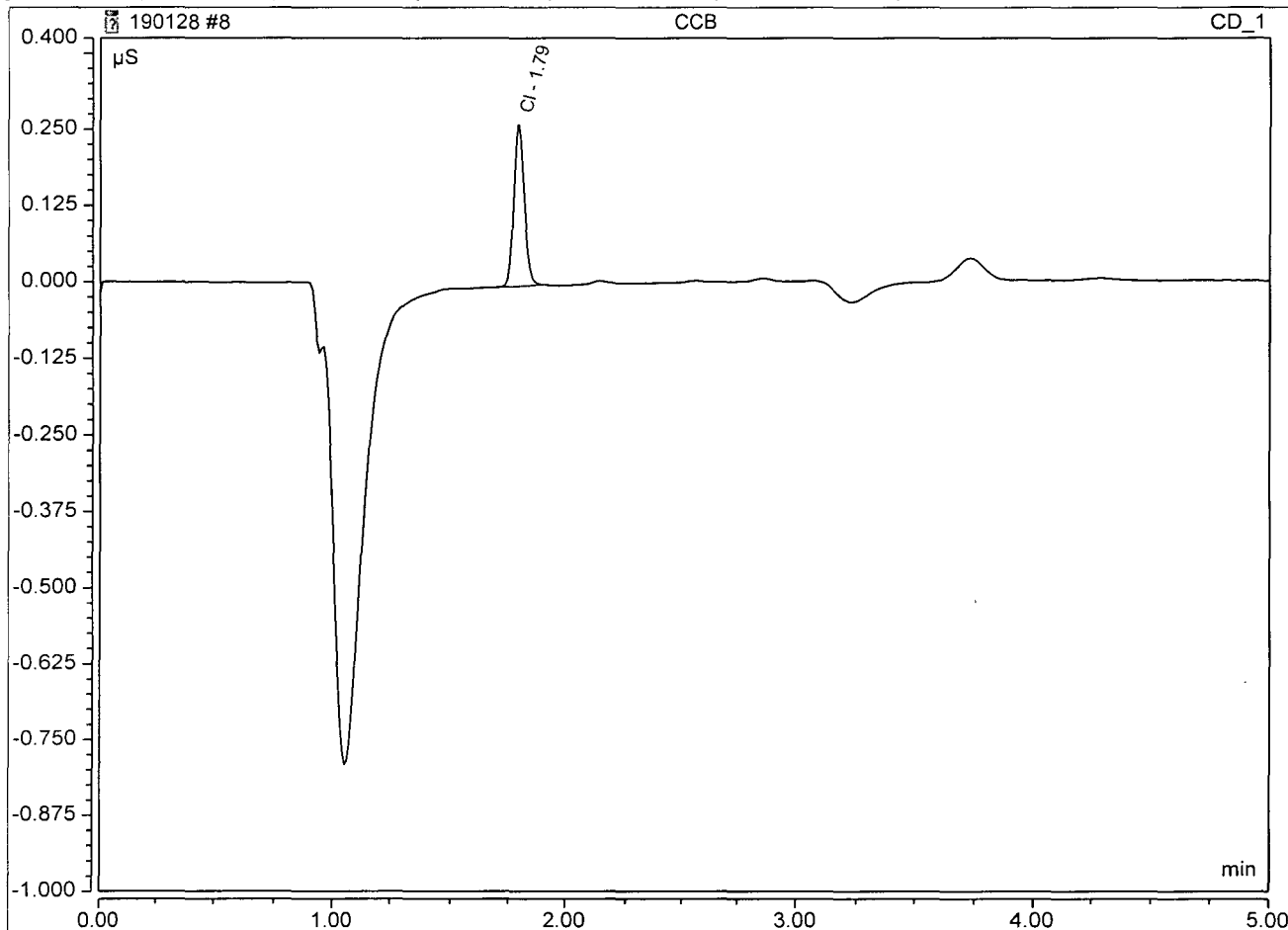




### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 12:06	Run Time:	5.00

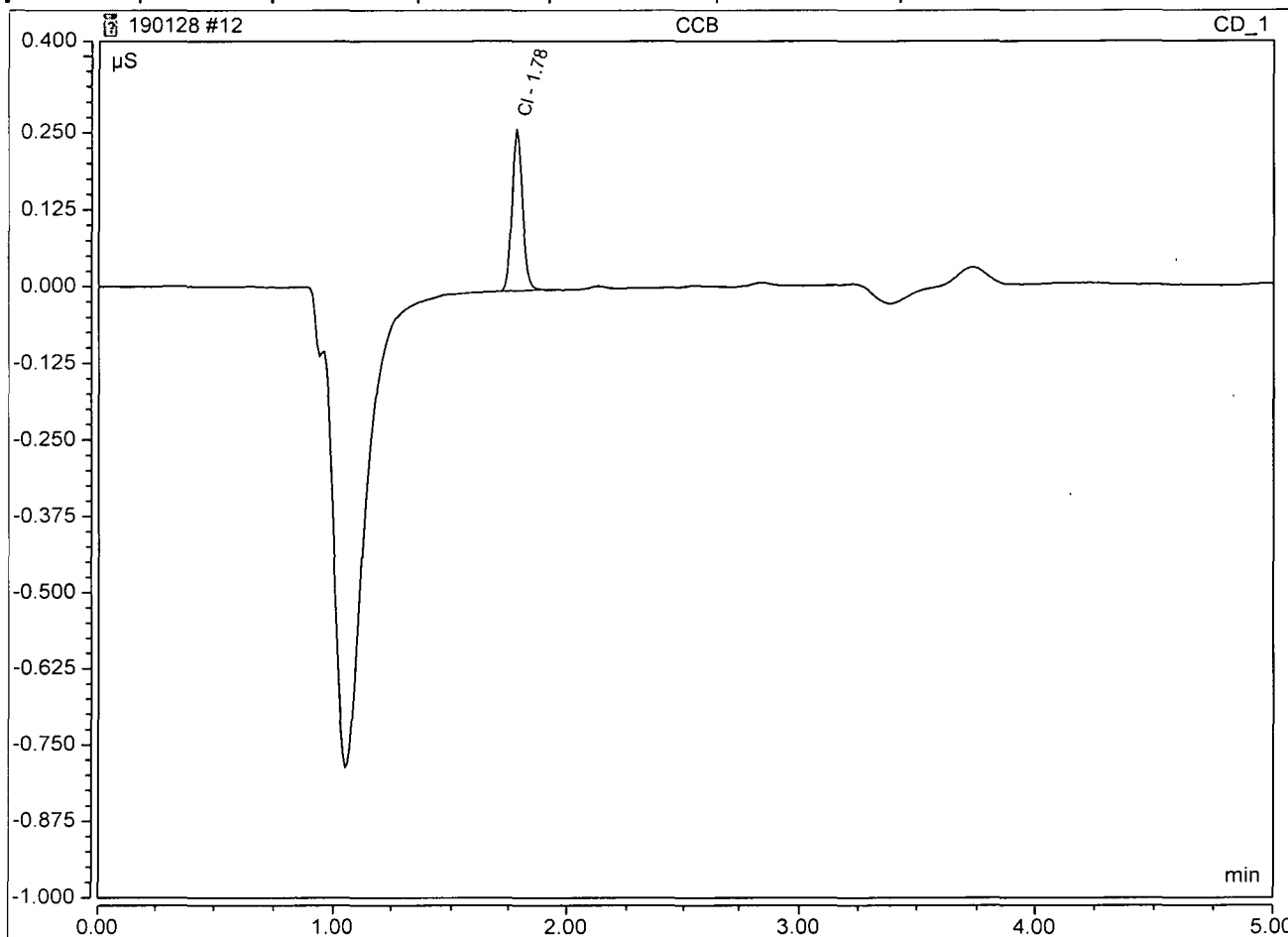
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.014	0.265	0.1339



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 12:52	Run Time:	5.00

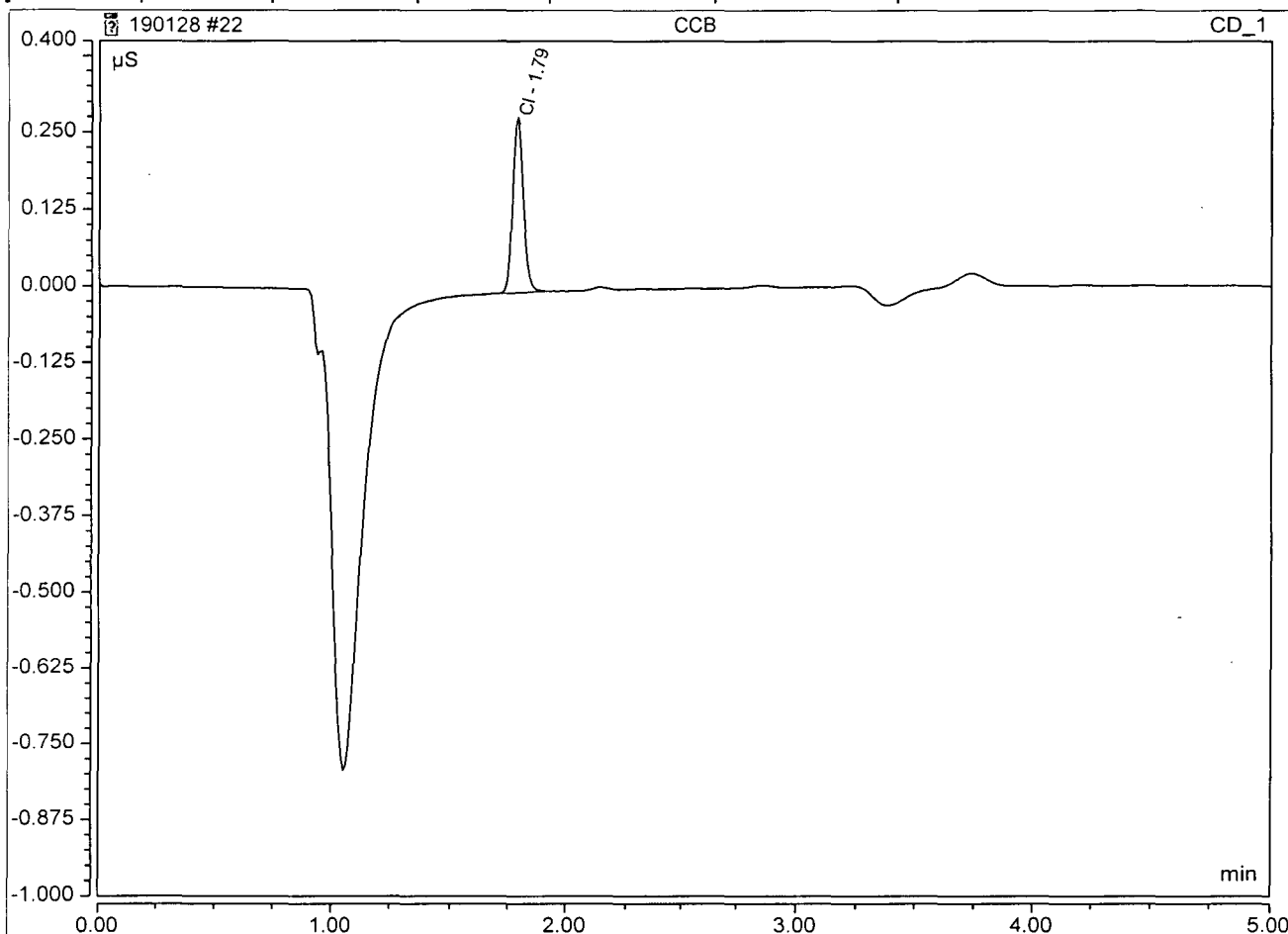
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.78	Cl	BMB	0.014	0.263	0.1327



### Peak Integration Report

Sample Name:	CCB	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 15:32	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	0.015	0.284	0.1446



A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: O2si

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 16:33	%R(1)	True ICV	Found 16:37	%R(1)	True CCV1	Found 16:59	%R(1)	
TOXN	3	3.0152	101	3	3.0099	100	3	3.0892	103	

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No: 87940 SDG: 87940

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: O2si

Analysis Date: 01/28/19

Analyte	Calibration Verification									M
	True CCV1	Found 17:19	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
TOXN	3	3.0464	102							

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: AECOM

ARF No.: 87940

SDG: 87940

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 01/28/19 16:35	C	ICB 01/28/19 16:40	C	CCB 01/28/19 17:02	C	CCB 01/28/19 17:20	C		C	
TOXN	.100	U	.100	U	.100	U	.100	U			

APPL Inc  
2A  
Initial and Continuing Calibration Verification

Lab Name: APPL Inc  
 ARF No:  
 ICAL Source:  
 CCV Source:  
 Analysis Date: 02/11/19

Contract:  
 SDG:

Analyte	Calibration Verification									M
	True ICV	Found 20:02	%R (1)	True CCV	Found	%R (2)	True CCV	Found	%R (3)	
TOC	2.50	2.696	107.8							

APPL Inc  
3  
Blanks

Lab Name: APPL Inc  
 ARF No:  
 Prep Blank Matrix: water  
 Prep BlankUnits: mg/L

Contract:  
 SDG:

	Calibration Blanks												M	
	Analyte	ICB 2/11/19 19:31	C											
TOC	0.16	J												



**APPL Inc  
2A  
Initial and Continuing Calibration Verification**

**Lab Name:** APPL Inc  
**ARF No:** 87940  
**ICAL Source:**  
**CCV Source:**  
**Analysis Date:** 02/12/19

**Contract:** AECOM  
**SDG:** 87940

Analyte	Calibration Verification									M
	True CCV	Found 00:41	%R (2)	True CCV	Found 08:48	%R (3)	True CCV	Found 21:23	%R (1)	
TOC	2.50	2.718	108.7	2.50	2.658	106.3	2.50	2.704	108.2	

**APPL Inc**  
**3**  
**Blanks**

**Lab Name:** APPL Inc  
**ARF No:** 87940  
**Prep Blank Matrix:** water  
**Prep BlankUnits:** mg/L

**Contract:** AECOM  
**SDG:** 87940

	Calibration Blanks											M
	CCB 2/13/19 01:16		CCB 2/13/19 09:23		CCB 2/13/19 21:58							
Analyte	C	C	C									
TOC	0.28	J	0.31	J	0.28	J						

### Calibration Batch Report

Sequence:	190124	Injection Volume:	25.00
Instrument Method:	Anions IM	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:57	Run Time:	5

Calibration Summary							
Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin, WithOffset, 1/A	8.000	-0.006	0.126	0.000	99.6784
Cl	Area	Lin	8.000	0.000	0.106	0.000	99.5874
NO2-N	Area	Lin	8.000	0.000	0.177	0.000	99.9482
BR	Area	Lin	8.000	0.000	0.036	0.000	99.8938
NO3-N	Area	Lin	8.000	0.000	0.219	0.000	99.7197
PO4-P	Area	Lin	8.000	0.000	0.070	0.000	99.1895
SO4	Area	Lin	8.000	0.000	0.066	0.000	99.7785

Injection Name	Ret.Time	Area	Height	Amount
	min	$\mu\text{S} \cdot \text{min}$	$\mu\text{S}$	mg/L
	CD 1	CD 1	CD 1	CD 1
	F	F	F	F
i cal 1	1.258	0.0078	0.177	0.110
i cal 2	1.263	0.0331	0.551	0.311
i cal 3	1.263	0.0600	1.273	0.525
i cal 4	1.260	0.1319	2.702	1.096
i cal 5	1.258	0.2788	5.622	2.263
i cal 6	1.267	0.7668	14.736	6.141
i cal 7	1.270	1.1062	20.788	8.837
i cal 8	1.272	1.6227	29.189	12.941

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	Cl	Cl	Cl	Cl
i cal 1	1.790	0.0388	0.720	0.364
i cal 2	1.790	0.1261	2.353	1.184
i cal 3	1.795	0.1988	3.728	1.867
i cal 4	1.792	0.4159	7.930	3.906
i cal 5	1.792	0.8761	17.063	8.228
i cal 6	1.798	2.4846	49.285	23.333
i cal 7	1.803	3.6782	72.562	34.542
i cal 8	1.807	5.4995	106.635	51.646

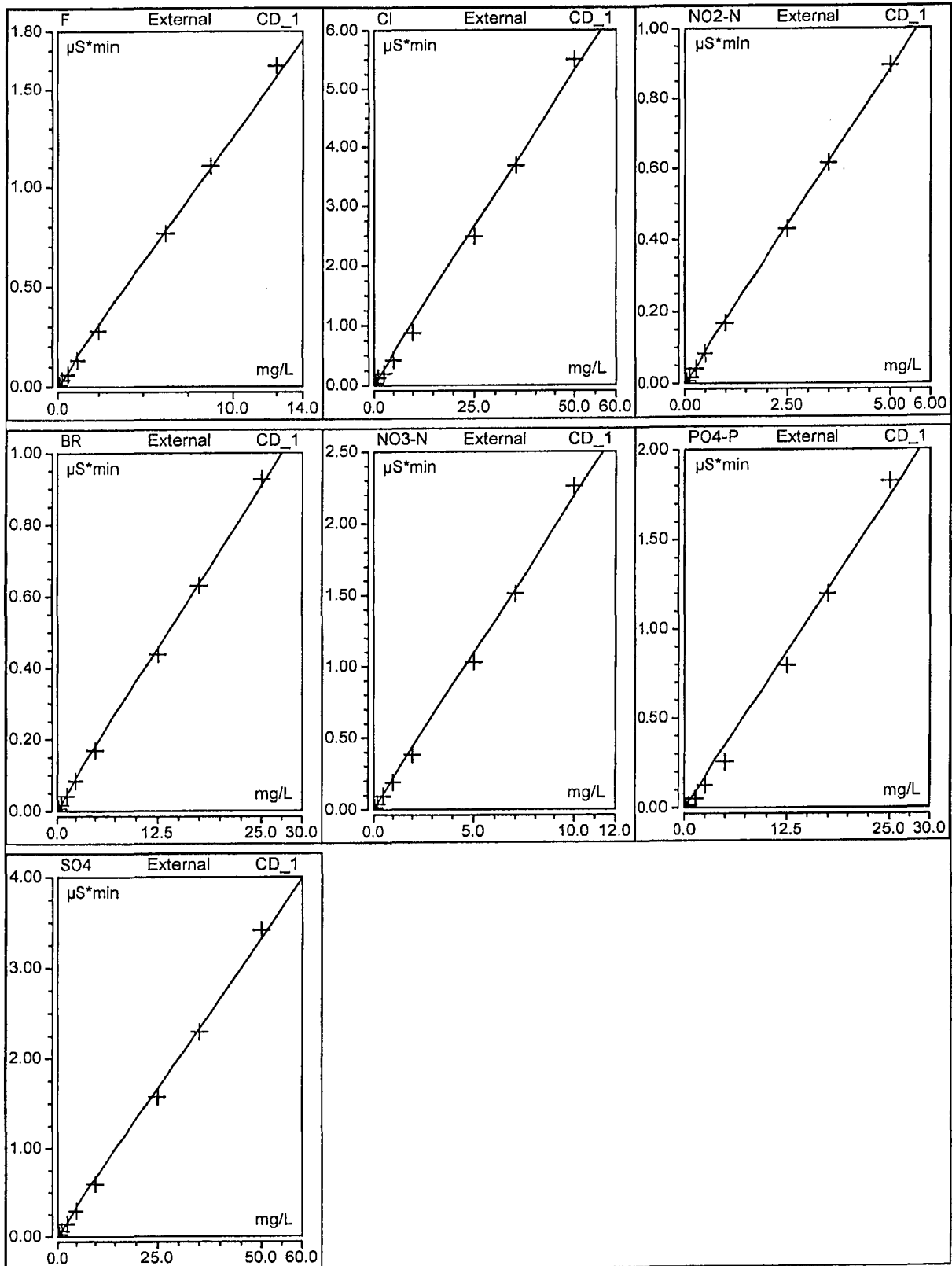
Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO2-N	NO2-N	NO2-N	NO2-N
i cal 1	2.143	0.0068	0.093	0.038
i cal 2	2.143	0.0168	0.228	0.095
i cal 3	2.148	0.0409	0.554	0.231
i cal 4	2.143	0.0830	1.119	0.469
i cal 5	2.143	0.1677	2.261	0.948
i cal 6	2.147	0.4302	5.768	2.433
i cal 7	2.150	0.6156	8.211	3.481
i cal 8	2.152	0.8951	11.797	5.061

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	BR	BR	BR	BR
i cal 1	2.558	0.0071	0.093	0.195
i cal 2	2.558	0.0171	0.224	0.470
i cal 3	2.562	0.0416	0.544	1.144
i cal 4	2.557	0.0838	1.099	2.304
i cal 5	2.555	0.1691	2.232	4.648
i cal 6	2.557	0.4375	5.850	12.024
i cal 7	2.557	0.6299	8.490	17.311
i cal 8	2.553	0.9266	12.598	25.466

Injection Name	Ret.Time min CD 1	Area $\mu\text{S}^*\text{min}$ CD 1	Height $\mu\text{S}$ CD 1	Amount mg/L CD 1
	NO3-N	NO3-N	NO3-N	NO3-N
i cal 1	2.867	0.0162	0.183	0.074
i cal 2	2.867	0.0392	0.446	0.179
i cal 3	2.868	0.0936	1.062	0.427
i cal 4	2.863	0.1896	2.162	0.865
i cal 5	2.858	0.3821	4.442	1.743
i cal 6	2.857	1.0311	12.086	4.704
i cal 7	2.855	1.5088	17.791	6.883
i cal 8	2.850	2.2578	26.658	10.299

Injection Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	PO4-P	PO4-P	PO4-P	PO4-P
i cal 1	3.775	0.0077	0.055	0.111
i cal 2	3.773	0.0176	0.121	0.252
i cal 3	3.778	0.0508	0.355	0.729
i cal 4	3.773	0.1246	0.850	1.788
i cal 5	3.772	0.2545	1.894	3.651
i cal 6	3.772	0.7954	5.814	11.410
i cal 7	3.772	1.1958	8.858	17.153
i cal 8	3.770	1.8237	13.683	26.161

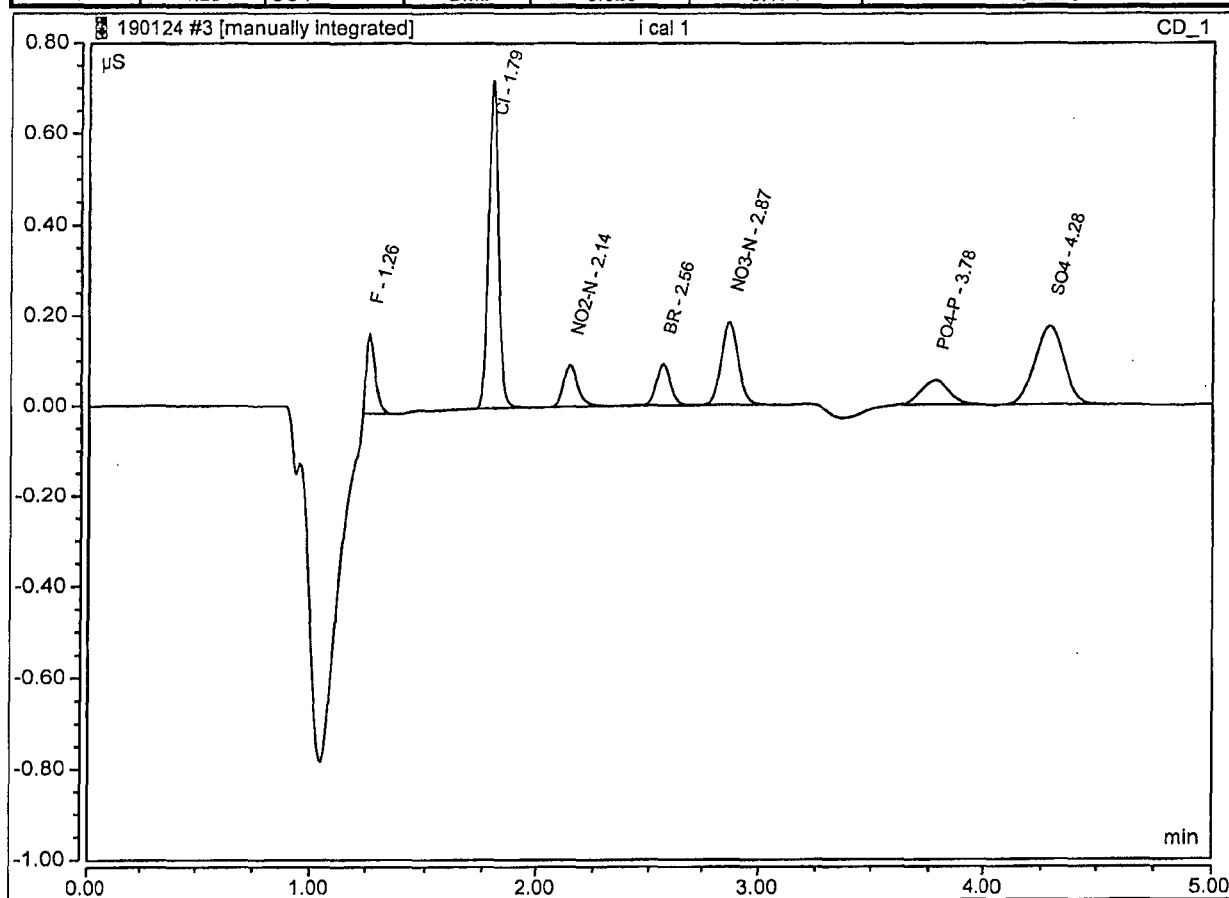
Injection Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount mg/L
	CD 1	CD 1	CD 1	CD 1
	SO4	SO4	SO4	SO4
i cal 1	4.282	0.0258	0.174	0.388
i cal 2	4.283	0.0616	0.417	0.927
i cal 3	4.288	0.1444	0.976	2.174
i cal 4	4.288	0.2937	1.996	4.421
i cal 5	4.290	0.5930	4.065	8.925
i cal 6	4.300	1.5710	10.997	23.643
i cal 7	4.308	2.2902	16.201	34.468
i cal 8	4.315	3.4113	24.358	51.341



### Peak Integration Report

Sample Name:	i cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:06	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.008	0.177	0.1105
2	1.79	Cl	BMB	0.039	0.720	0.3640
3	2.14	NO2-N	BMB	0.007	0.093	0.0383
4	2.56	BR	BMB	0.007	0.093	0.1945
5	2.87	NO3-N	BMB	0.016	0.183	0.0739
6	3.78	PO4-P	BMB	0.008	0.055	0.1109
7	4.28	SO4	BMB	0.026	0.174	0.3876

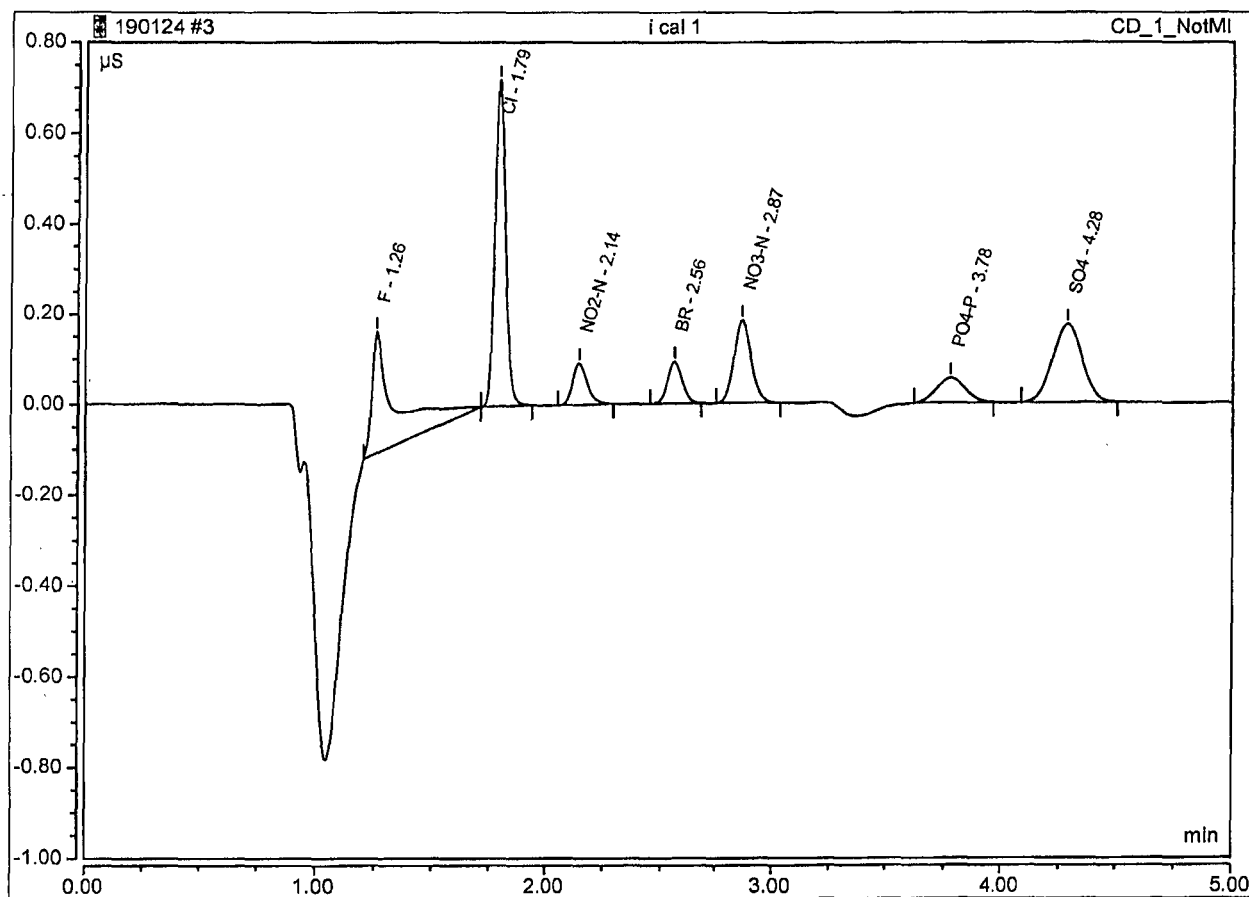


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	I cal 1	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:06	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.032	0.269	0.0900
2	1.79	Cl	BMB	0.039	0.720	0.3640
3	2.14	NO <sub>2</sub> -N	BMB	0.007	0.093	0.0383
4	2.56	BR	BMB	0.007	0.093	0.1945
5	2.87	NO <sub>3</sub> -N	BMB	0.016	0.183	0.0739
6	3.78	PO <sub>4</sub> -P	BMB	0.008	0.055	0.1109
7	4.28	SO <sub>4</sub>	BMB	0.026	0.174	0.3876

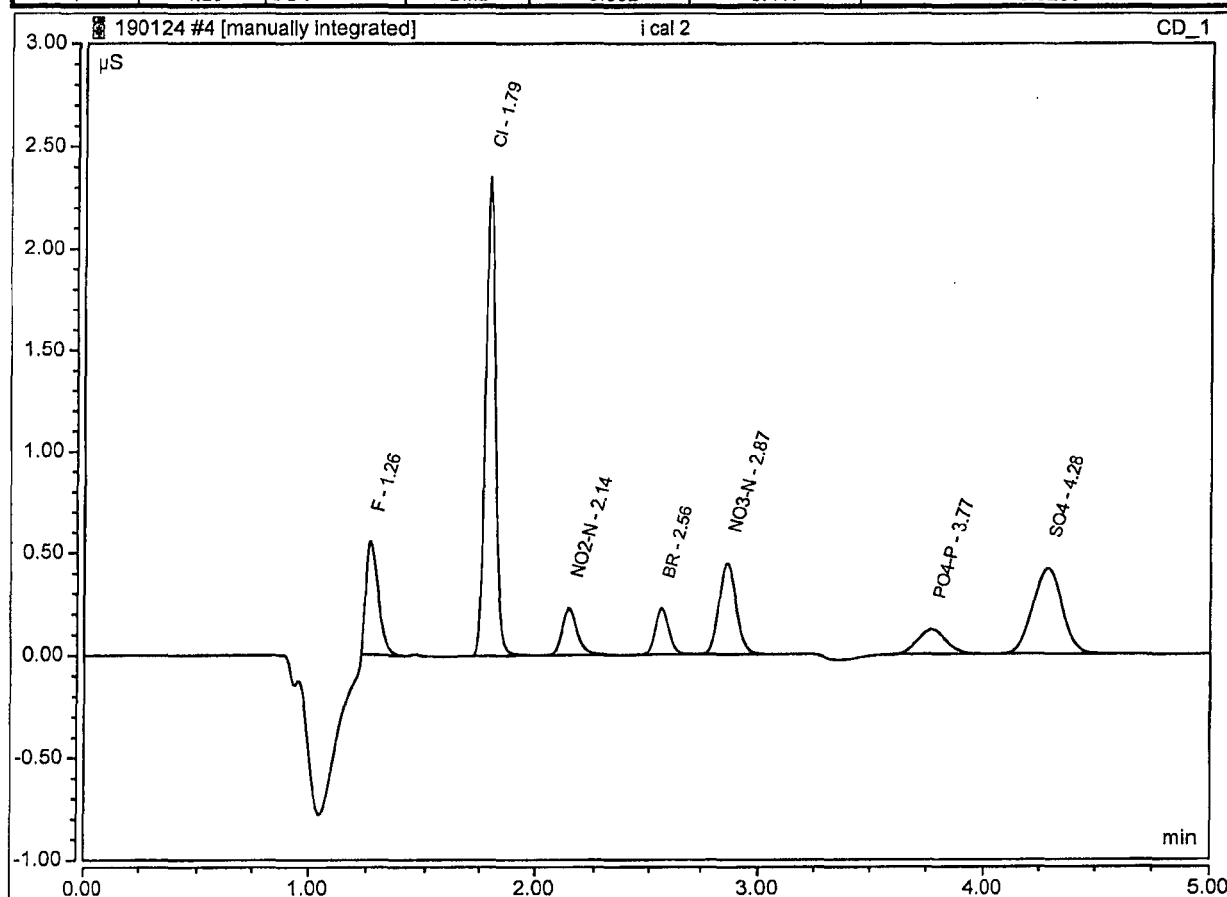




### Peak Integration Report

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:13	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.033	0.551	0.3114
2	1.79	Cl	BMB	0.126	2.353	1.1844
3	2.14	NO2-N	BMB	0.017	0.228	0.0951
4	2.56	BR	BMB	0.017	0.224	0.4697
5	2.87	NO3-N	BMB	0.039	0.446	0.1790
6	3.77	PO4-P	BMB	0.018	0.121	0.2519
7	4.28	SO4	BMB	0.062	0.417	0.9266

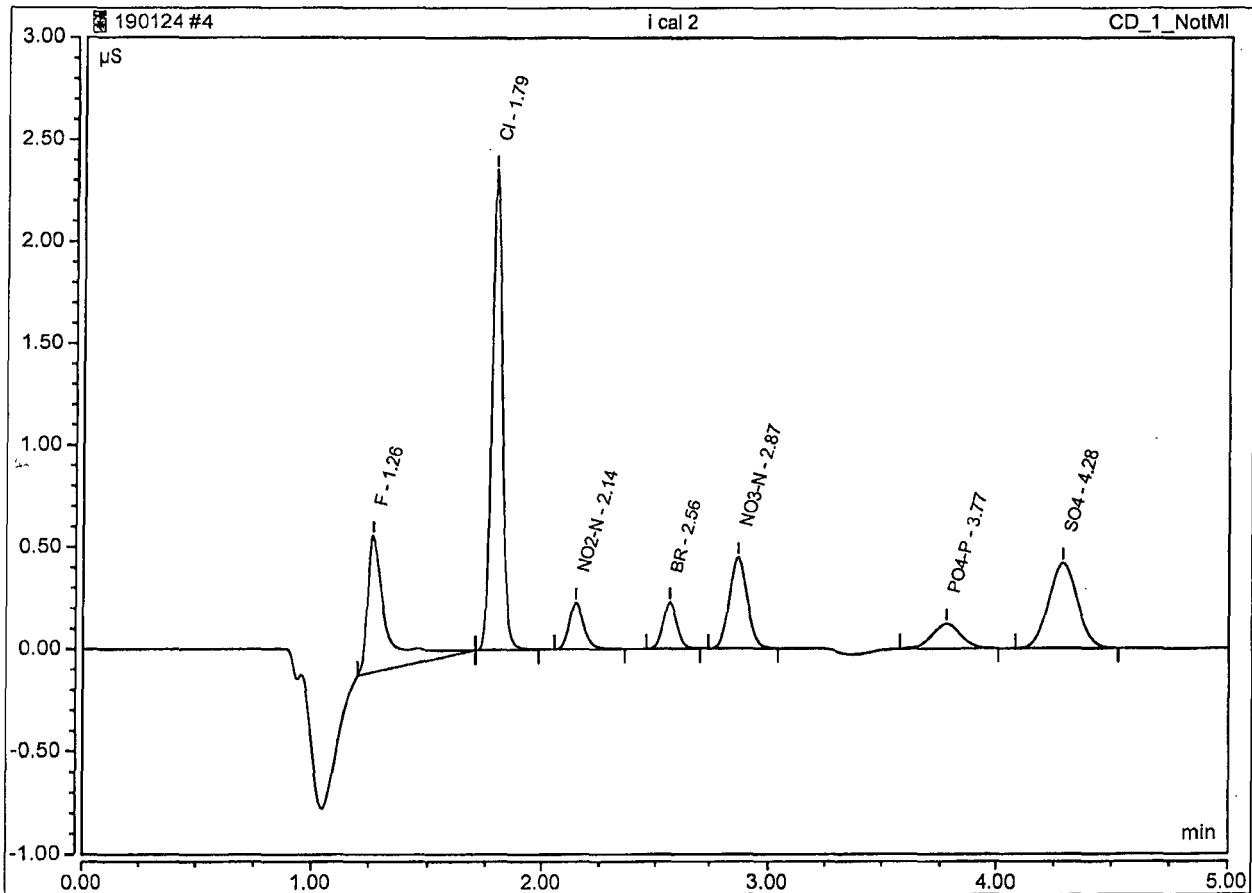


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	i cal 2	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:13	Run Time:	5.00

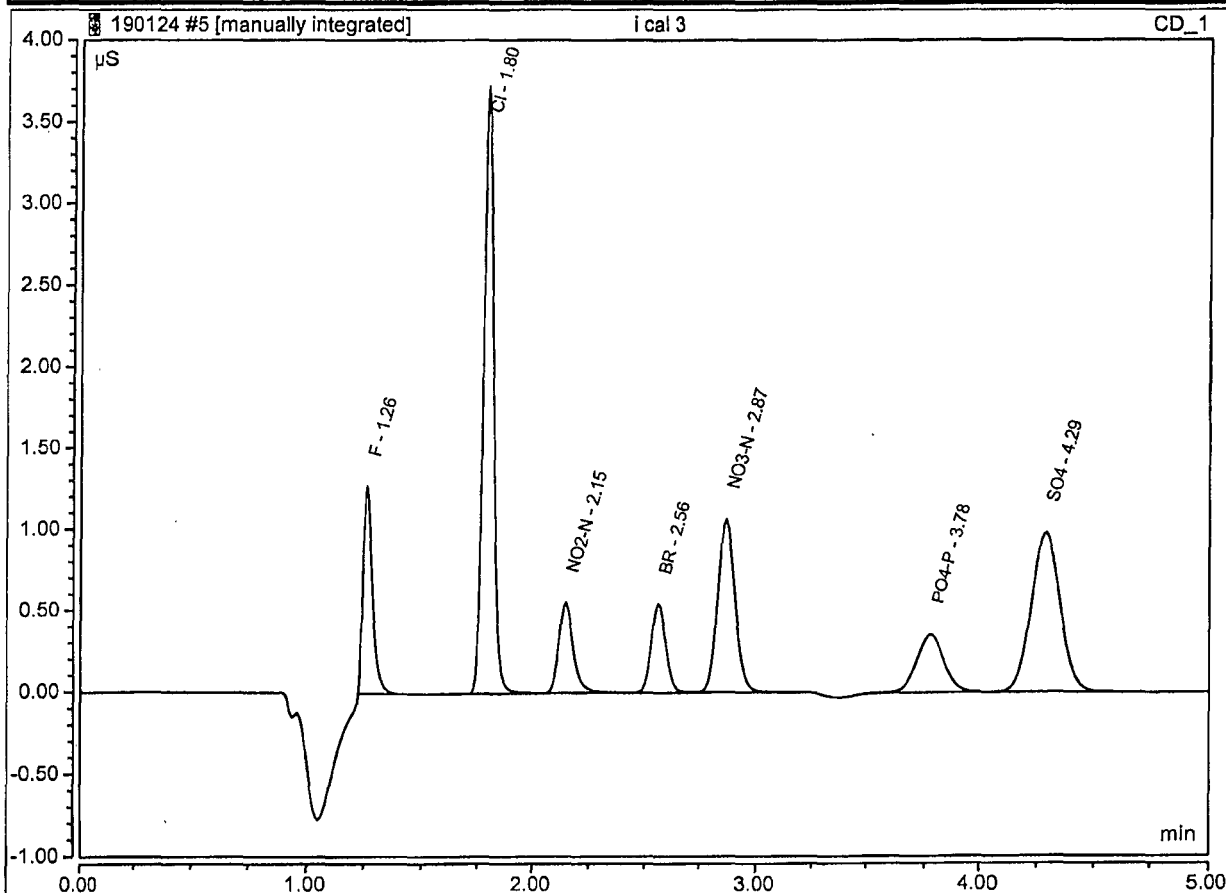
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.064	0.668	0.3399
2	1.79	Cl	BMB	0.126	2.353	1.1844
3	2.14	NO <sub>2</sub> -N	BMB	0.017	0.228	0.0951
4	2.56	BR	BMB	0.017	0.224	0.4697
5	2.87	NO <sub>3</sub> -N	BMB	0.039	0.446	0.1790
6	3.77	PO <sub>4</sub> -P	BMB	0.018	0.121	0.2519
7	4.28	SO <sub>4</sub>	BMB	0.062	0.417	0.9266



### Peak Integration Report

Sample Name:	i cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:20	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.060	1.273	0.5246
2	1.80	Cl	BMB	0.199	3.728	1.8672
3	2.15	NO2-N	BMB	0.041	0.554	0.2311
4	2.56	BR	BMB	0.042	0.544	1.1439
5	2.87	NO3-N	BMB	0.094	1.062	0.4271
6	3.78	PO4-P	BMB	0.051	0.355	0.7288
7	4.29	SO4	BMB	0.144	0.976	2.1737

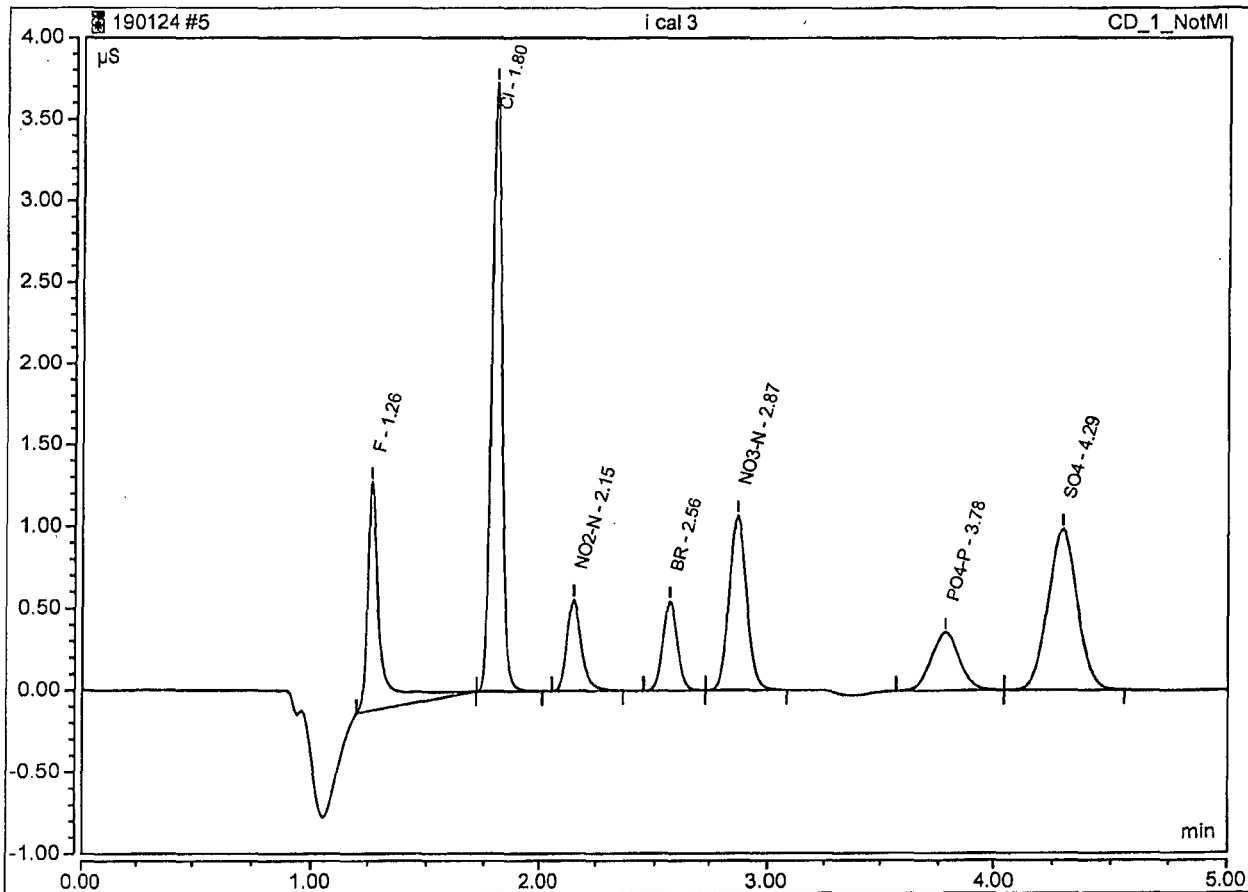


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	I cal 3	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:20	Run Time:	5.00

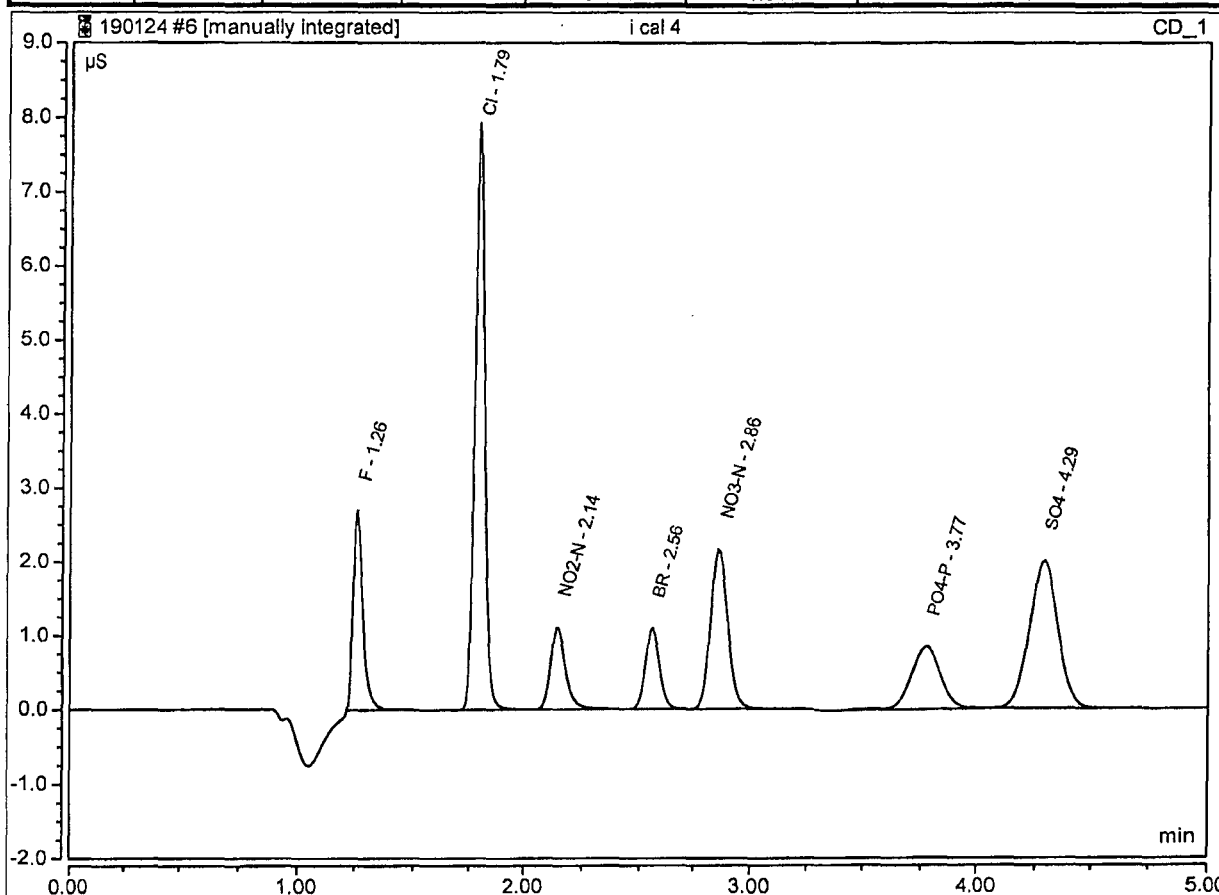
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.26	F	BMB*	0.091	1.392	0.5597
2	1.80	Cl	BMB	0.199	3.728	1.8672
3	2.15	NO2-N	BMB	0.041	0.554	0.2311
4	2.56	BR	BMB	0.042	0.544	1.1439
5	2.87	NO3-N	BMB	0.094	1.062	0.4271
6	3.78	PO4-P	BMB	0.051	0.355	0.7288
7	4.29	SO4	BMB	0.144	0.976	2.1737



### Peak Integration Report

Sample Name:	i cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:28	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.132	2.702	1.0962
2	1.79	Cl	BMB	0.416	7.930	3.9059
3	2.14	NO2-N	BMB	0.083	1.119	0.4691
4	2.56	BR	BMB	0.084	1.099	2.3038
5	2.86	NO3-N	BMB	0.190	2.162	0.8648
6	3.77	PO4-P	BMB	0.125	0.850	1.7878
7	4.29	SO4	BMB	0.294	1.996	4.4209

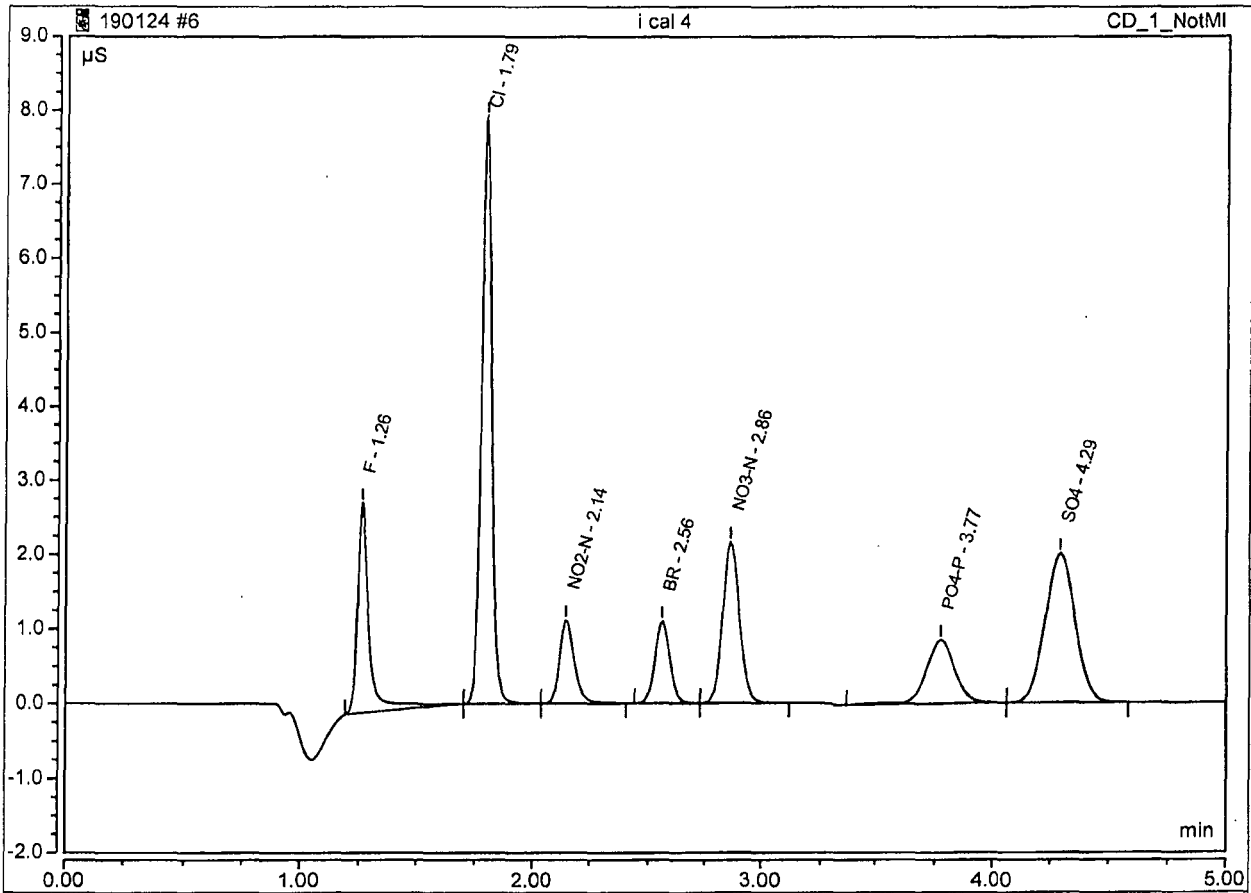


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	I cal 4	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:28	Run Time:	5.00

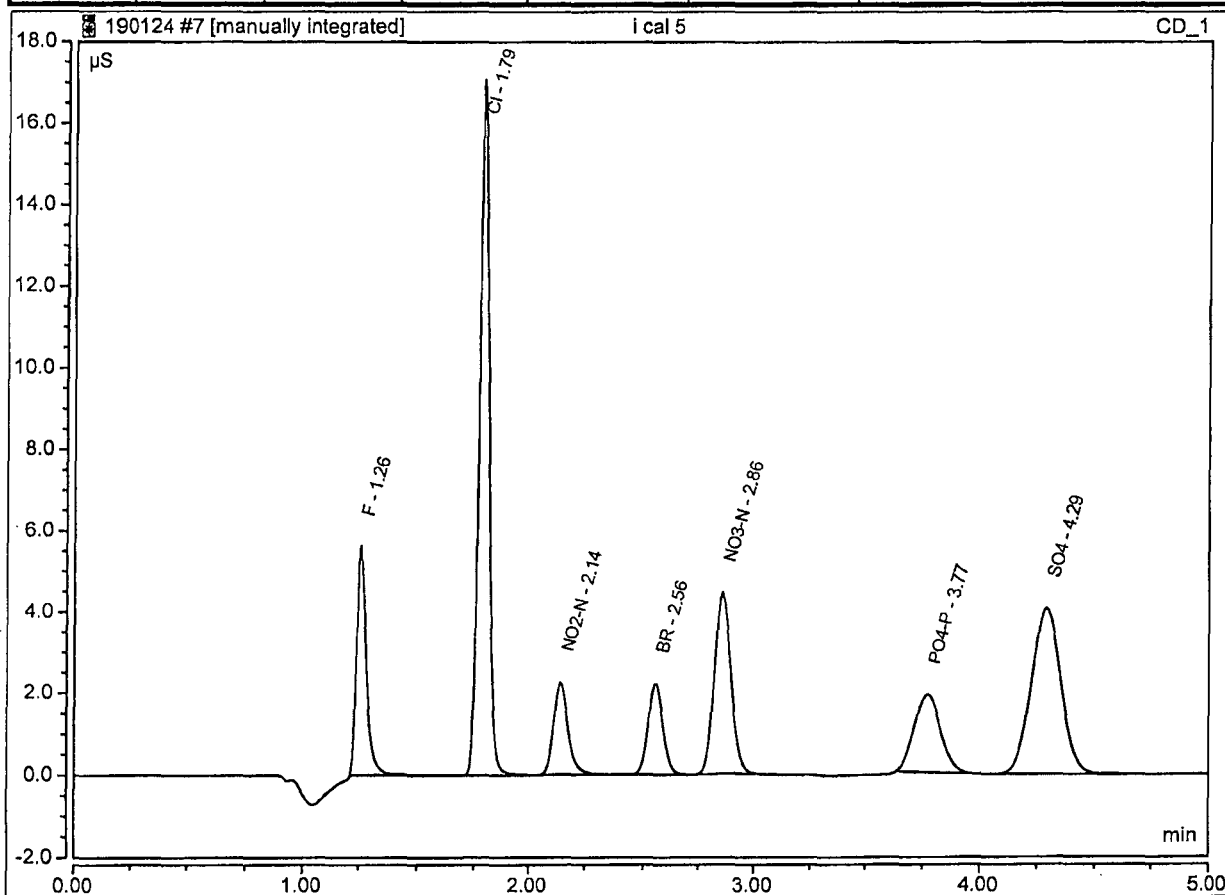
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.164	2.815	1.1319
2	1.79	Cl	BMB	0.416	7.930	3.9059
3	2.14	NO <sub>2</sub> -N	BMB	0.083	1.119	0.4691
4	2.56	BR	BMB	0.084	1.099	2.3038
5	2.86	NO <sub>3</sub> -N	BMB	0.190	2.162	0.8648
6	3.77	PO <sub>4</sub> -P	BMB	0.125	0.850	1.7878
7	4.29	SO <sub>4</sub>	BMB	0.294	1.996	4.4209



### Peak Integration Report

Sample Name:	i cal 5	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:35	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB*	0.279	5.622	2.2633
2	1.79	Cl	BMB	0.876	17.063	8.2279
3	2.14	NO2-N	BMB	0.168	2.261	0.9484
4	2.56	BR	BMB	0.169	2.232	4.6484
5	2.86	NO3-N	BMB	0.382	4.442	1.7432
6	3.77	PO4-P	BMB	0.255	1.894	3.6510
7	4.29	SO4	BMB	0.593	4.065	8.9251

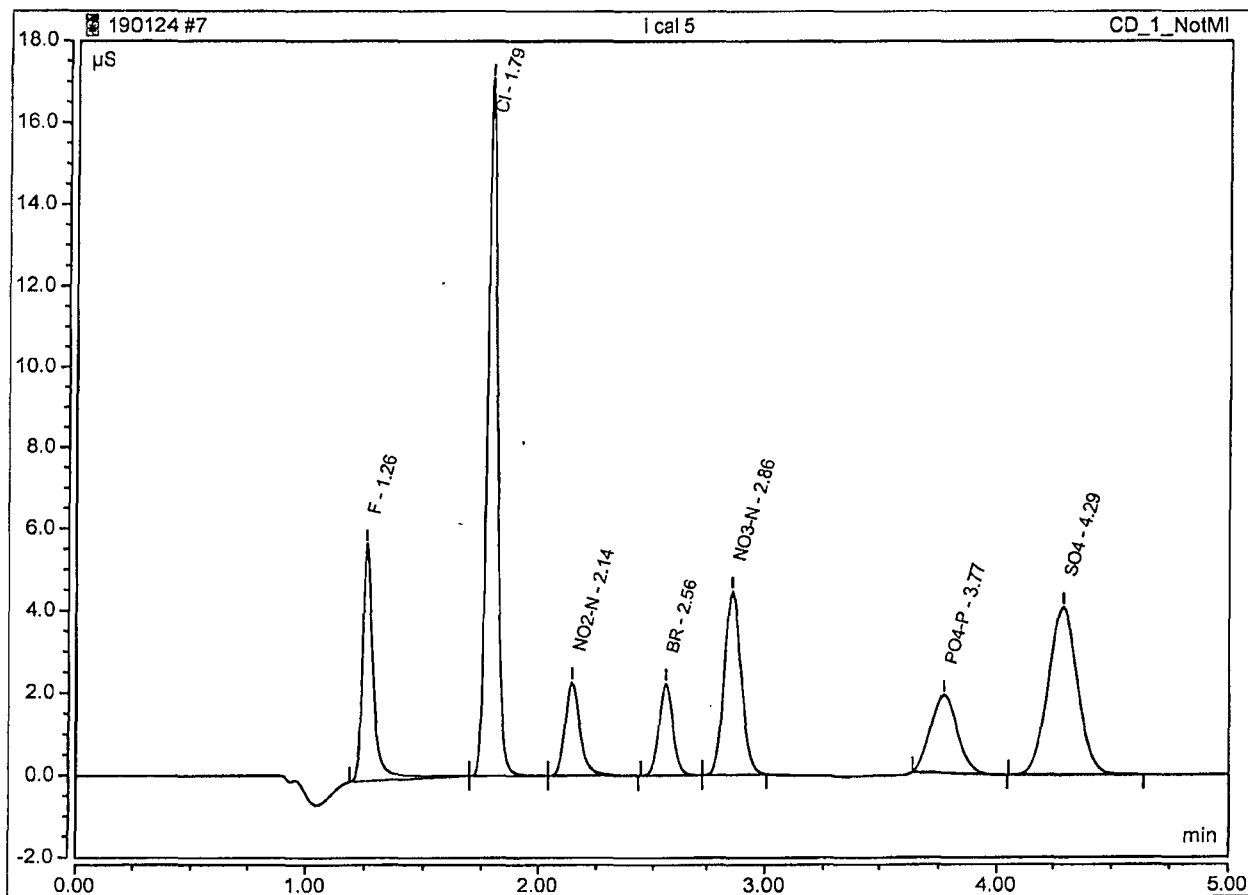


F mi1 HH 190128 MM

Not Manipulated Peak Integration Report

Sample Name:	I cal 5	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:35	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB*	0.313	5.748	2.3094
2	1.79	Cl	BMB	0.876	17.063	8.2279
3	2.14	NO2-N	BMB	0.168	2.261	0.9484
4	2.56	BR	BMB	0.169	2.232	4.6484
5	2.86	NO3-N	BMB	0.382	4.442	1.7432
6	3.77	PO4-P	BMB	0.255	1.894	3.6510
7	4.29	SO4	BMB	0.593	4.065	8.9251

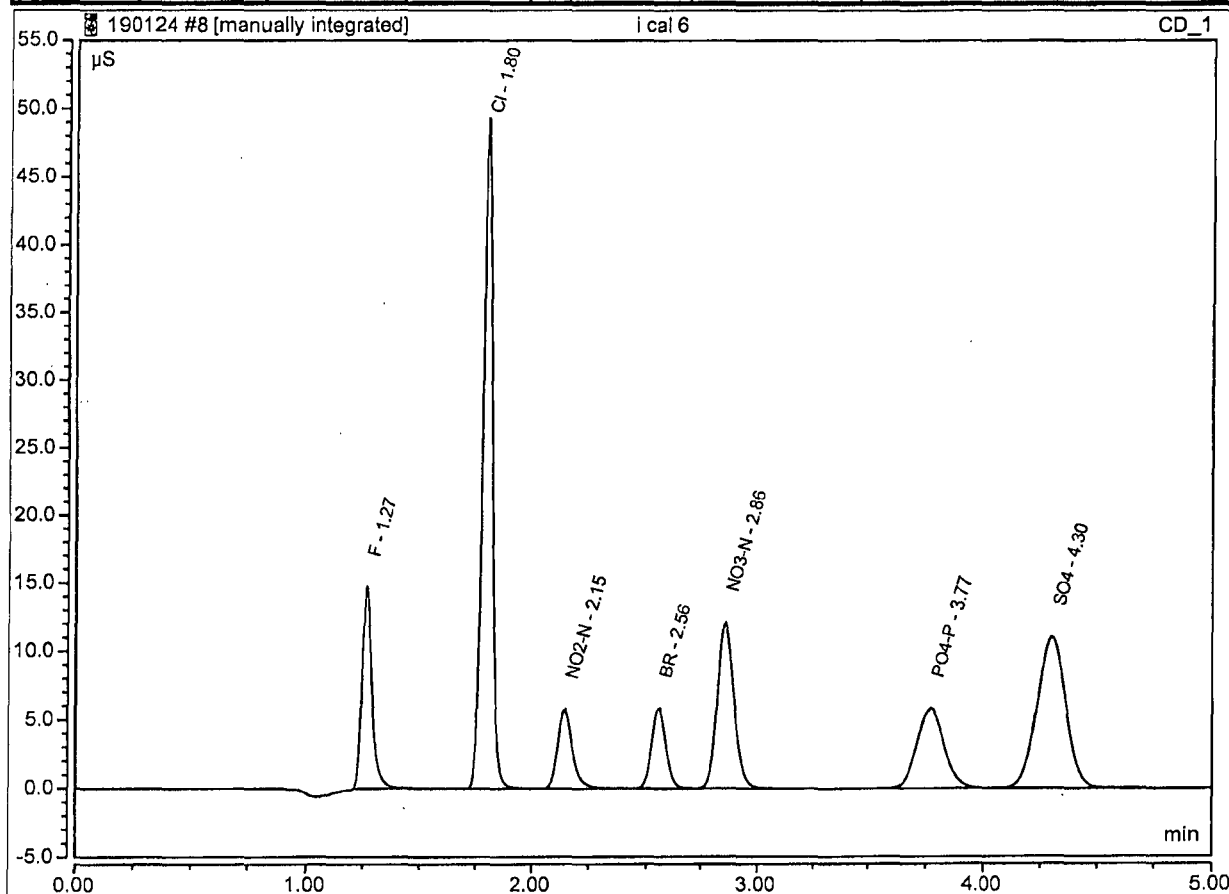




### Peak Integration Report

Sample Name:	i cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anlon APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:43	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	0.767	14.736	6.1409
2	1.80	Cl	BMB	2.485	49.285	23.3335
3	2.15	NO2-N	BMB	0.430	5.768	2.4325
4	2.56	BR	BMB	0.437	5.850	12.0236
5	2.86	NO3-N	BMB	1.031	12.086	4.7035
6	3.77	PO4-P	BMB	0.795	5.814	11.4097
7	4.30	SO4	BMB	1.571	10.997	23.6433

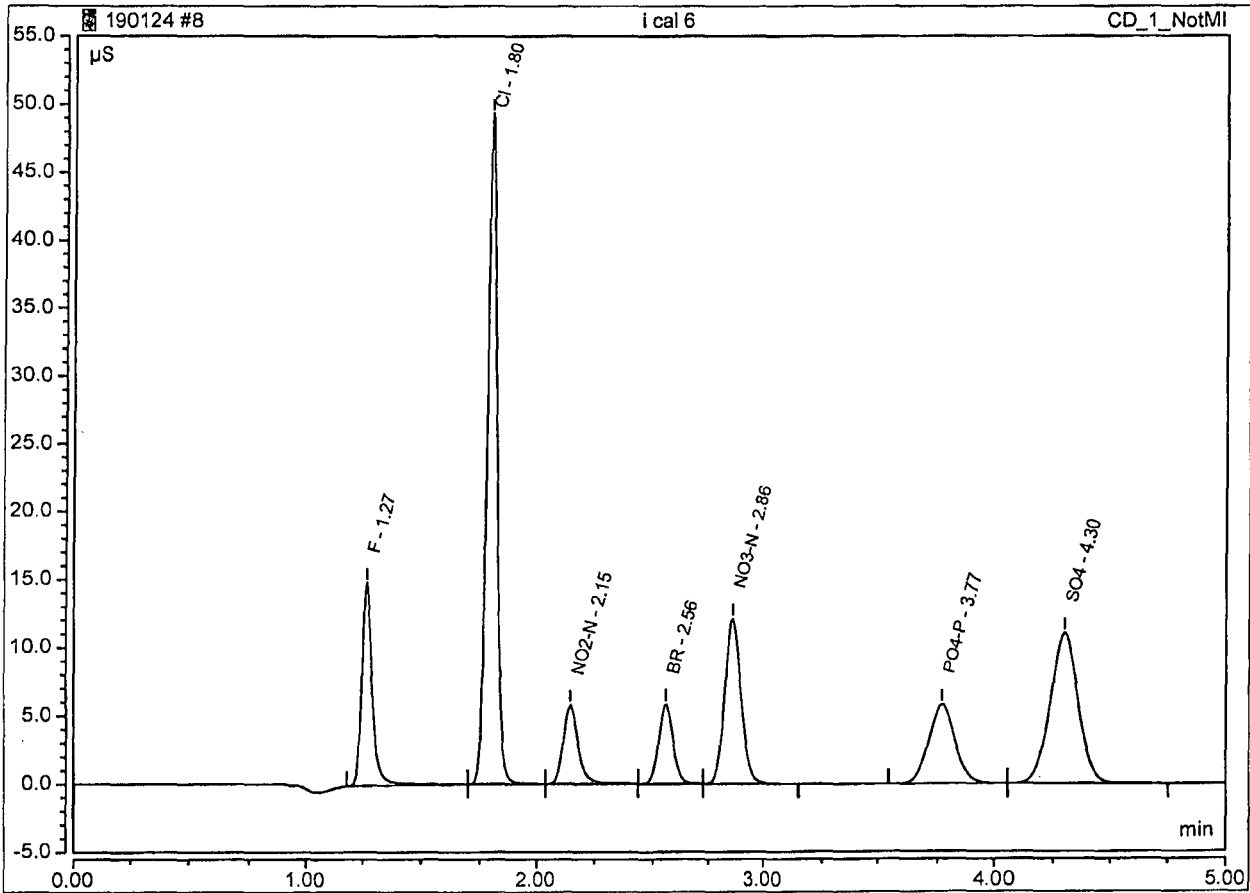


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	i cal 6	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:43	Run Time:	5.00

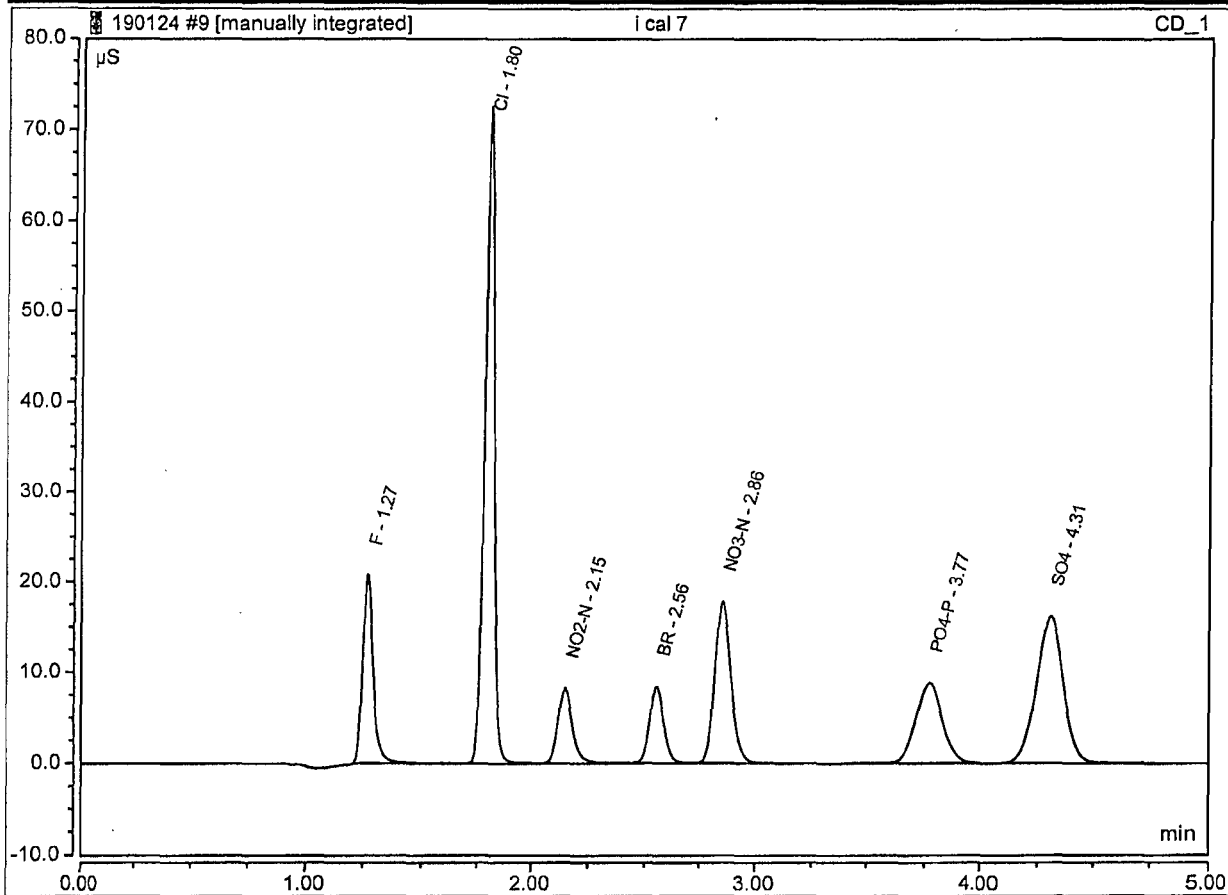
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.27	F	BMB*	0.797	14.841	6.1203
2	1.80	Cl	BMB	2.485	49.285	23.3335
3	2.15	NO <sub>2</sub> -N	BMB	0.430	5.768	2.4325
4	2.56	BR	BMB	0.437	5.850	12.0236
5	2.86	NO <sub>3</sub> -N	BMB	1.031	12.086	4.7035
6	3.77	PO <sub>4</sub> -P	BMB	0.795	5.814	11.4097
7	4.30	SO <sub>4</sub>	BMB	1.571	10.997	23.6433



**Peak Integration Report**

Sample Name:	I cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:50	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	1.106	20.788	8.8373
2	1.80	Cl	BMB	3.678	72.562	34.5418
3	2.15	NO2-N	BMB	0.616	8.211	3.4811
4	2.56	BR	BMB	0.630	8.490	17.3110
5	2.86	NO3-N	BMB	1.509	17.791	6.8826
6	3.77	PO4-P	BMB	1.196	8.858	17.1532
7	4.31	SO4	BMB	2.290	16.201	34.4680

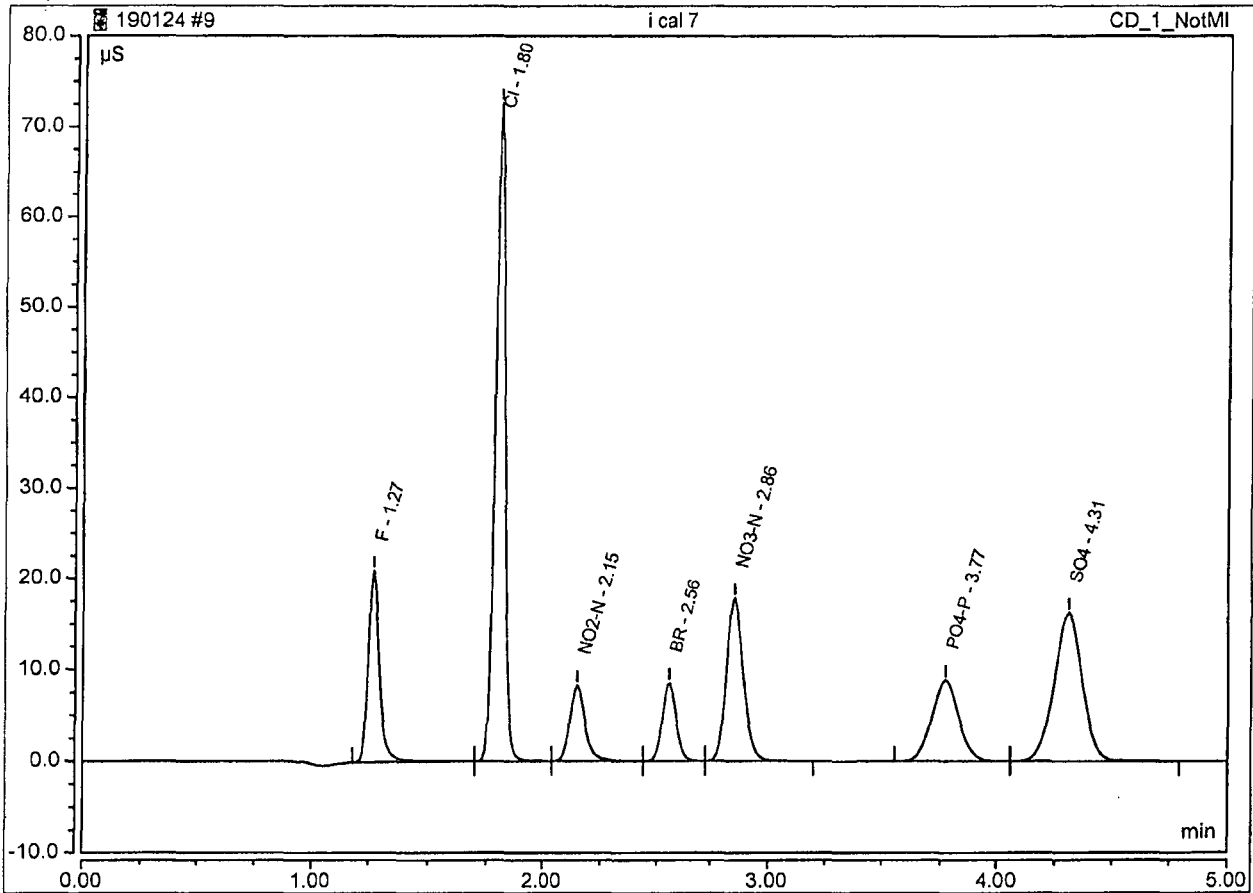


F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	i cal 7	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:50	Run Time:	5.00

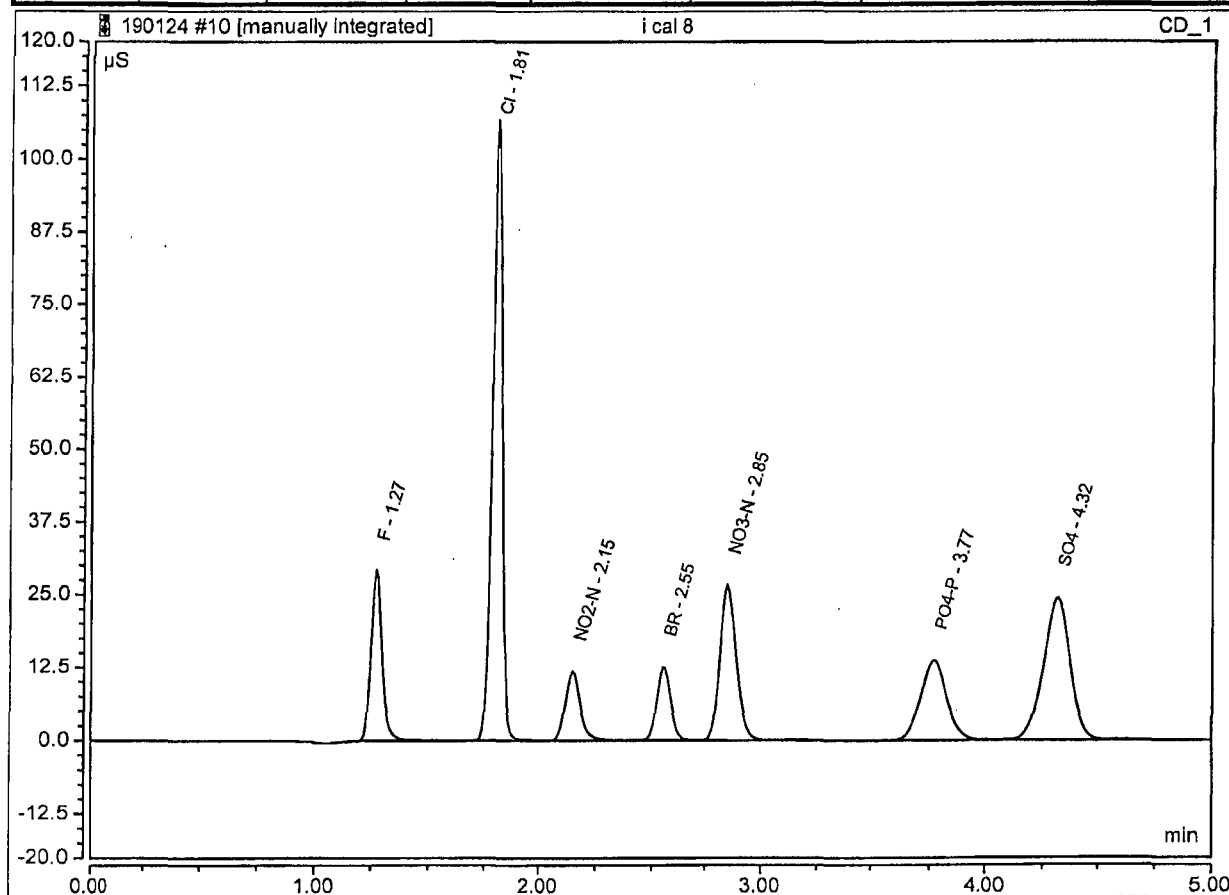
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.27	F	BMB*	1.139	20.900	8.8150
2	1.80	Cl	BMB	3.678	72.562	34.5418
3	2.15	NO <sub>2</sub> -N	BMB	0.616	8.211	3.4811
4	2.56	BR	BMB	0.630	8.490	17.3110
5	2.86	NO <sub>3</sub> -N	BMB	1.509	17.791	6.8826
6	3.77	PO <sub>4</sub> -P	BMB	1.196	8.858	17.1532
7	4.31	SO <sub>4</sub>	BMB	2.290	16.201	34.4680



### Peak Integration Report

Sample Name:	i cal 8	Inj. Vol.:	25.00
Injection Type:	Calibration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:57	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB*	1.623	29.189	12.9407
2	1.81	Cl	BMB	5.499	106.635	51.6461
3	2.15	NO2-N	BMB	0.895	11.797	5.0614
4	2.55	BR	BMB	0.927	12.598	25.4664
5	2.85	NO3-N	BMB	2.258	26.658	10.2994
6	3.77	PO4-P	BMB	1.824	13.683	26.1607
7	4.32	SO4	BMB	3.411	24.358	51.3415

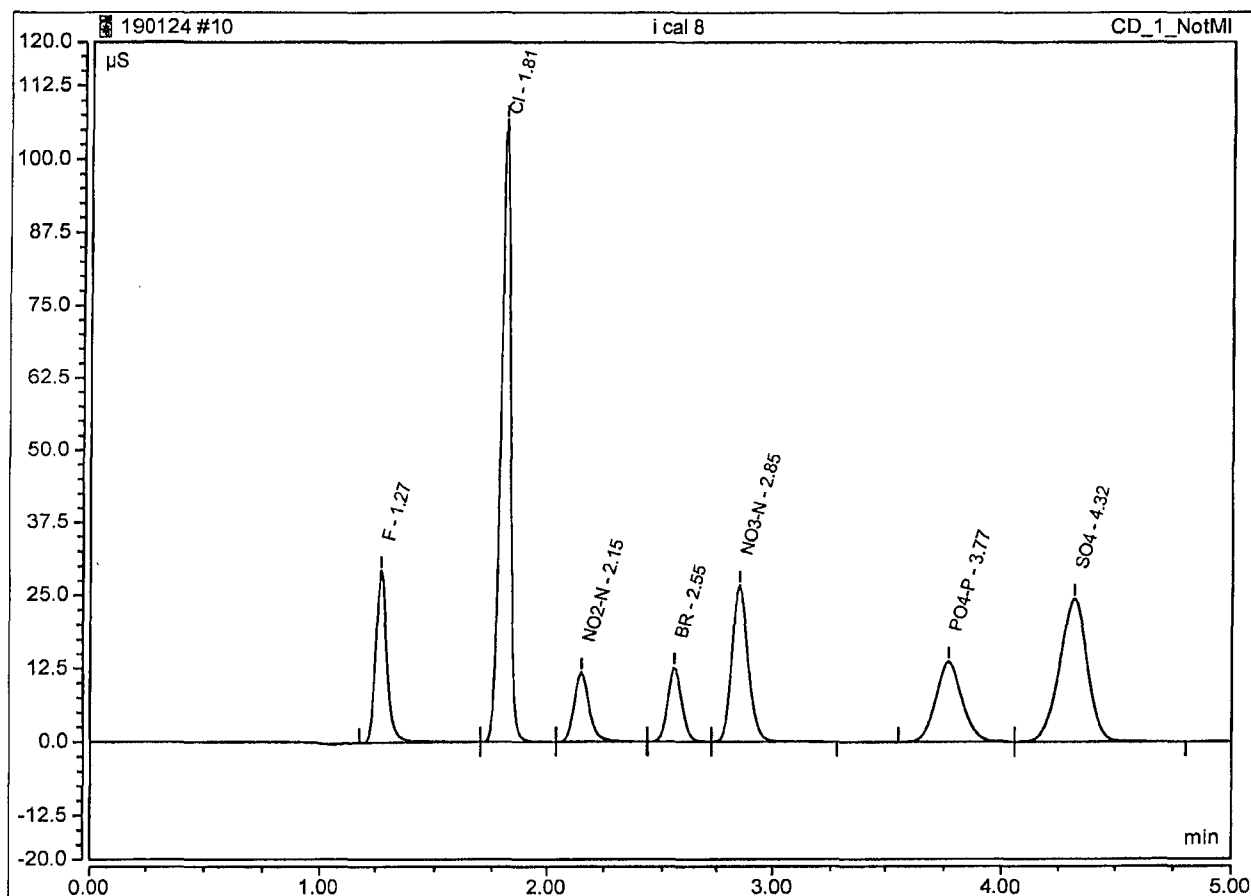


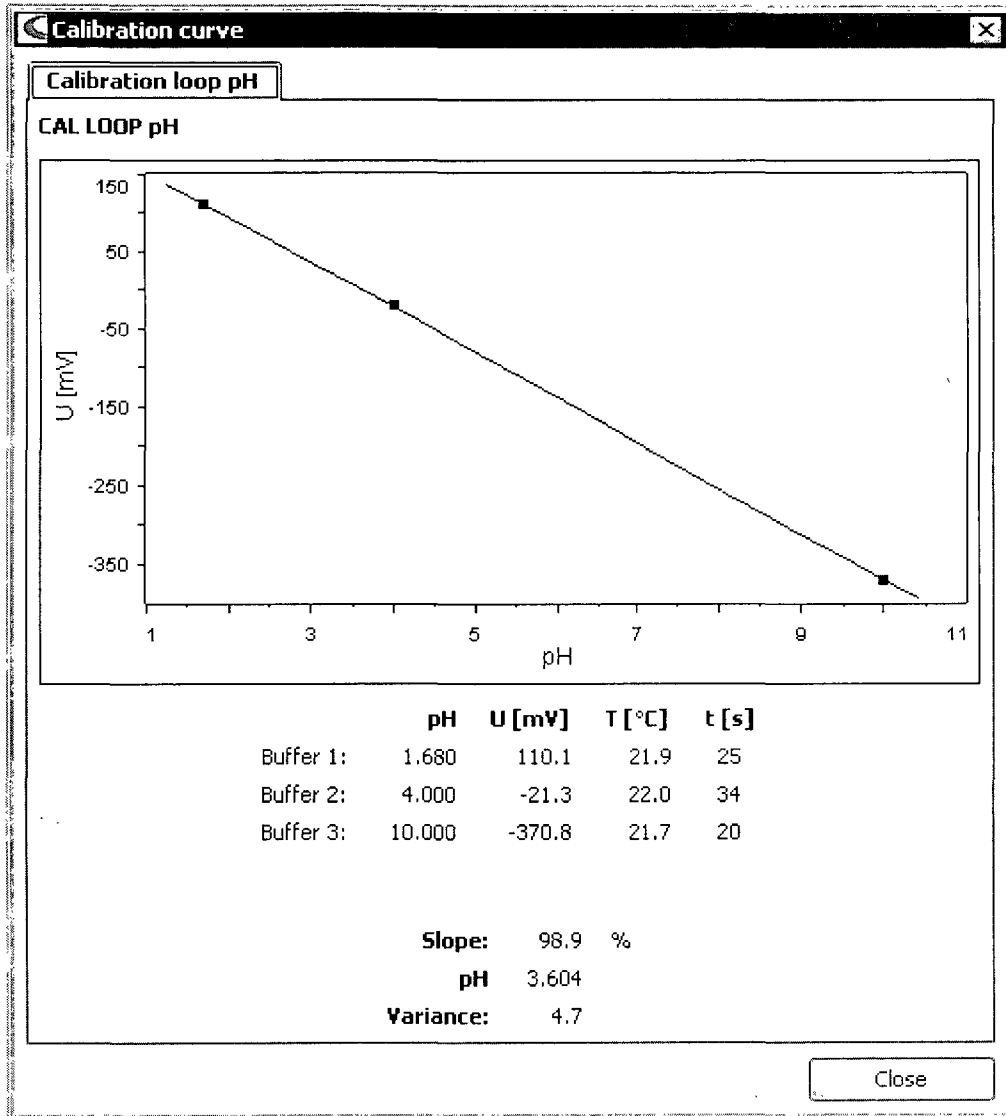
F mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

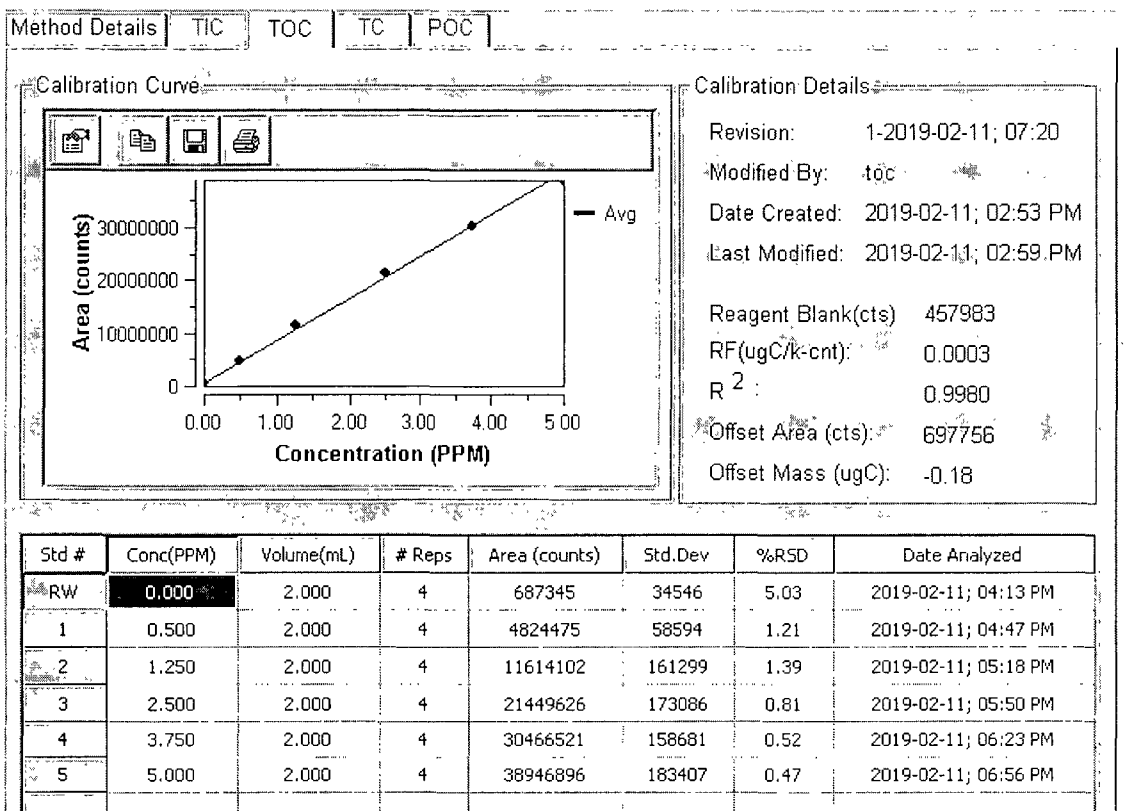
Sample Name:	I cal 8	Inj. Vol.:	25.00
Injection Type:	Callbration Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 12:57	Run Time:	5.00

No.	Time min	Peak Name	Peak Type	Area $\mu\text{S} \cdot \text{min}$	Helght $\mu\text{S}$	Area $\mu\text{S} \cdot \text{min}$
1	1.27	F	BMB*	1.652	29.287	12.8588
2	1.81	Cl	BMB	5.499	106.635	51.6461
3	2.15	NO2-N	BMB	0.895	11.797	5.0614
4	2.55	BR	BMB	0.927	12.598	25.4664
5	2.85	NO3-N	BMB	2.258	26.658	10.2994
6	3.77	PO4-P	BMB	1.824	13.683	26.1607
7	4.32	SO4	BMB	3.411	24.358	51.3415





TicToc Calibration Curve 190211A







Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: TOC

Date Approved: By:

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
2	1	TOC-RW	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	687,345	0.000	0.000	34,546	5.03	
3	2	TOC-Std#1-0.500 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	4,824,475	1.000	0.500	58,594	1.21	
4	3	TOC-Std#2-1.250 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	11,614,102	2.500	1.250	161,299	1.39	
5	4	TOC-Std#3-2.500 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	21,449,626	5.000	2.500	173,086	0.81	
6	5	TOC-Std#4-3.750 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	30,466,521	7.500	3.750	158,681	0.52	
7	6	TOC-Std#5-5.000 PPM	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Standard	1 : 1	00000000	TOC	38,946,896	10.000	5.000	183,407	0.47	
8	7	ICB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1 : 1	00000000	TOC	1,717,970	0.316	0.158	31,138	1.81	Pass
9	8	ICV Sugar	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Check_Stan	1 : 1	00000000	TOC	22,163,151	5.392	2.696	109,699	0.49	



Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

**Sample Results**

Spl #: 2 Sample ID : TOC-RW Type : Standard Date: 02/11/2019 Status: Passed  
 Vial #: 1 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:13 pm	-	-	-	668,867	0.000	0.000
2	4:21 pm	-	-	-	739,036	0.000	0.000
3	4:28 pm	-	-	-	667,973	0.000	0.000
4	4:36 pm	-	-	-	673,502	0.000	0.000
Avg.		-	-	-	687,345	0.000	0.000
Std.Dev.							
% RSD.					5.03		

Spl #: 3 Sample ID : TOC-Std#1-0.500 PPM Type : Standard Date: 02/11/2019 Status: Passed  
 Vial #: 2 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:47 pm	-	-	-	4,799,949	1.000	0.500
2	4:54 pm	-	-	-	4,769,063	1.000	0.500
3	5:02 pm	-	-	-	4,823,015	1.000	0.500
4	5:10 pm	-	-	-	4,905,872	1.000	0.500
Avg.		-	-	-	4,824,475	1.000	0.500
Std.Dev.							
% RSD.					1.21		



Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: TOC

Date Approved: By:

Spl #: 4 Sample ID: TOC-Std#2-1.250 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 3 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:18 pm	-	-	-	11,514,099	2.500	1.250
2	5:26 pm	-	-	-	11,788,000	2.500	1.250
3	5:34 pm	-	-	-	11,444,716	2.500	1.250
4	5:42 pm	-	-	-	11,709,594	2.500	1.250
Avg.		-	-	-	11,614,102	2.500	1.250
Std.Dev.							
% RSD.					1.39		

Spl #: 5 Sample ID: TOC-Std#3-2.500 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 4 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:50 pm	-	-	-	21,654,245	5.000	2.500
2	5:58 pm	-	-	-	21,360,038	5.000	2.500
3	6:06 pm	-	-	-	21,521,272	5.000	2.500
4	6:15 pm	-	-	-	21,262,949	5.000	2.500
Avg.		-	-	-	21,449,626	5.000	2.500
Std.Dev.							
% RSD.					0.81		



Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: *TOC*

Date Approved: By:

Spl #: 6 Sample ID: TOC-Std#4-3.750 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 5 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:23 pm	-	-	-	30,612,289	7.500	3.750
2	6:31 pm	-	-	-	30,309,053	7.500	3.750
3	6:39 pm	-	-	-	30,351,074	7.500	3.750
4	6:47 pm	-	-	-	30,593,670	7.500	3.750
Avg.		-	-	-	30,466,521	7.500	3.750
Std.Dev.							
% RSD.					0.52		

Spl #: 7 Sample ID: TOC-Std#5-5.000 PPM Type: Standard Date: 02/11/2019 Status: Passed  
 Vial #: 6 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:56 pm	-	-	-	38,971,032	10.000	5.000
2	7:04 pm	-	-	-	38,706,906	10.000	5.000
3	7:12 pm	-	-	-	38,956,234	10.000	5.000
4	7:20 pm	-	-	-	39,153,413	10.000	5.000
Avg.		-	-	-	38,946,896	10.000	5.000
Std.Dev.							
% RSD.					0.47		



Appl.Inc  
 908 N Temperance Ave  
 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By: TOC

Date Approved: By:

Spl #: 8 Sample ID: ICB Type: Sample Date: 02/11/2019 Status: Passed  
 Vial #: 7 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:31 pm	-	-	-	1,702,854	0.313	0.156
2	7:39 pm	-	-	-	1,725,871	0.318	0.159
3	7:46 pm	-	-	-	1,685,579	0.308	0.154
4	7:54 pm	-	-	-	1,757,576	0.326	0.163
Avg.		-	-	-	1,717,970	0.316	0.158
Std.Dev.							
% RSD.					1.81		

Spl #: 9 Sample ID: ICV Sugar Type: Check\_Stan Date: 02/11/2019 Status: Passed  
 Vial #: 8 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:02 pm	-	-	-	22,271,756	5.419	2.710
2	8:10 pm	-	-	-	22,113,536	5.379	2.690
3	8:18 pm	-	-	-	22,033,394	5.359	2.680
4	8:26 pm	-	-	-	22,233,919	5.409	2.705
Avg.		-	-	-	22,163,151	5.392	2.696
Std.Dev.							
% RSD.					0.49		



**INORGANIC ANALYSIS**  
**Raw Data**

**APPL, INC.**

Method SM3500Fe	Units mg/L	Ferrous Iron	Instrument: Genisis Spectrometer
Analyte Fe2+	QCG: 190124A		Wavelength: 510 nm
Analyst HH	Final Volume: 50mL		

Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/15/18	12:27	ICB	0.00	0.000	
06/15/18	12:27	Ical 1	1.00	0.099	98.7%
06/15/18	12:28	Ical 2	2.00	0.201	100.4%
06/15/18	12:28	Ical 3	4.00	0.396	98.9%
06/15/18	12:29	Ical 4	5.00	0.501	100.1%
06/15/18	12:30	Ical 5	10.00	1.000	100.0%
06/15/18	12:31	ICV	3.00	0.316	105.2%
06/15/18	12:32	ICB	0.00	0.000	

Slope	0.100015306	Algorithm Check:	Appl ID	Absorbance	Result
Intercept	0.000258661		190124 LCS	0.307	3.07
Coefficient of Determination	0.999973247		Result = (Absorbance-Raw Blk-Intercept)/ Slope		
Test:					

Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
01/24/19	8:27	CCV 4.0 190124	1	0.397	25mL		3.97	3.97	4.00	99.2%
01/24/19	8:27	CCB 190124	1	-0.002	25mL		-0.02	-0.02		
01/24/19	8:28	190124 LCS	1	0.307	25mL		3.07	3.07	3.00	102.2%
01/24/19	8:29	190124 LCSD	1	0.307	25mL		3.07	3.07	3.00	102.2%
01/24/19	8:30	AZ85552W13	1	0.110	25mL		1.10	1.10		
01/24/19	8:30	AZ85553W13	1	0.092	25mL		0.92	0.92		
01/24/19	8:31	AZ85554W13	1	0.091	25mL		0.91	0.91		
01/24/19	8:31	AZ85555W13	1	0.124	25mL		1.24	1.24		
01/24/19	8:32	AZ85556W13	1	0.122	25mL		1.22	1.22		
01/24/19	8:44	AZ85557W13	1	0.069	25mL		0.69	0.69		
01/24/19	8:44	AZ85558W13	1	0.053	25mL		0.53	0.53		
01/24/19	8:45	AZ85559W13	1	0.019	25mL		0.19	0.19	4.00	4.7%
01/24/19	8:45	AZ85558W13 MS	1	0.367	25mL		3.67	3.67		
01/24/19	8:46	AZ85558W13 MSD	1	0.369	25mL		3.69	3.69	4.00	92.2%
01/24/19	8:46	CCV 4.0 190124	1	0.396	25mL		3.96	3.96		
01/24/19	8:47	CCB 190124	1	-0.002	25mL		-0.02	-0.02		
01/24/19	17:59	CCV 4.0 190124	1	0.398	25mL		3.98	3.98		
01/24/19	18:00	CCB 190124	1	0.000	25mL		0.00	0.00		
01/24/19	18:02	AZ85565W17	1	0.004	25mL		0.04	0.04		
01/24/19	18:02	AZ85569W17	1	0.040	25mL		0.40	0.40	4.00	9.9%
01/24/19	18:02	CCV 4.0 190124	1	0.398	25mL		3.98	3.98		
01/24/19	18:03	CCB 190124	1	0.000	25mL		0.00	0.00		

Method SM3500Fe	Units mg/L	Ferrous Iron	Instrument: Genesis Spectrometer
Analyte Fe2+	QCG: 190125A		Wavelength: 510 nm
Analyst HH	Final Volume: 50mL		

Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/15/18	12:27	ICB	0.00	0.000	
06/15/18	12:27	Ical 1	1.00	0.099	98.7%
06/15/18	12:28	Ical 2	2.00	0.201	100.4%
06/15/18	12:28	Ical 3	4.00	0.396	98.9%
06/15/18	12:29	Ical 4	5.00	0.501	100.1%
06/15/18	12:30	Ical 5	10.00	1.000	100.0%
06/15/18	12:31	ICV	3.00	0.316	105.2%
06/15/18	12:32	ICB	0.00	0.000	

Slope	0.100015306	Algorithm Check:	Appl ID	Absorbance	Result
Intercept	0.000258661		190125 LCS	0.310	3.10
Coefficient of Determination	0.999973247		Result = (Absorbance-Raw Blk-Intercept)/ Slope		
Test:					

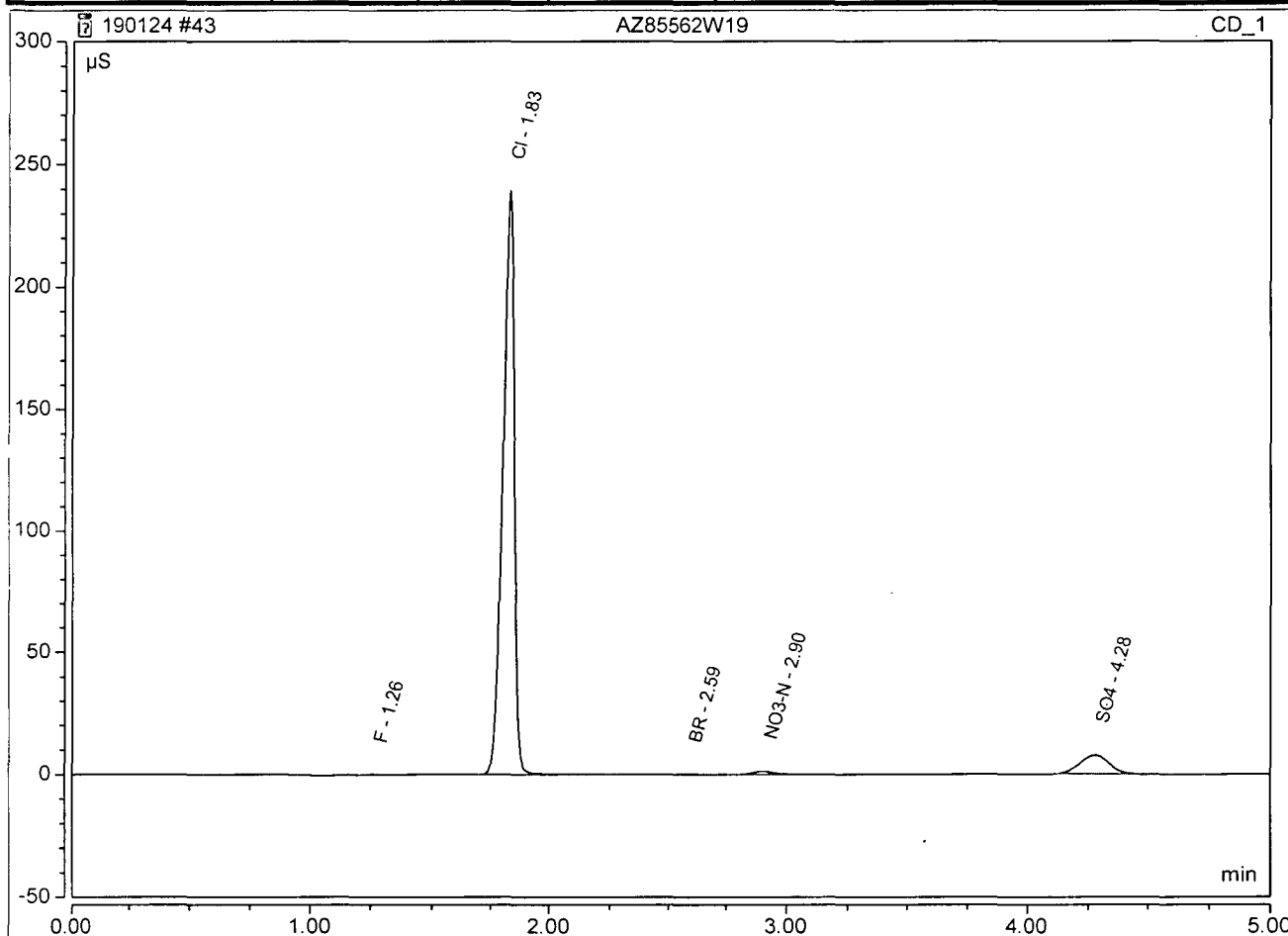
Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
01/25/19	9:21	CCV 4.0 190125	1	0.393	25mL		3.93	3.93	4.00	98.2%
01/25/19	9:21	CCB 190125	1	0.000	25mL		0.00	0.00		
01/25/19	9:22	190125 LCS	1	0.310	25mL		3.10	3.10	3.00	103.2%
01/25/19	9:23	190125 LCSD	1	0.309	25mL		3.09	3.09	3.00	102.9%
01/25/19	9:23	AZ85618W13	1	0.140	25mL		1.40	1.40		
01/25/19	9:24	AZ85620W13	1	0.061	25mL		0.61	0.61		
01/25/19	9:24	AZ85619W13	1	0.055	25mL		0.55	0.55		
01/25/19	9:25	AZ85621W13	1	0.056	25mL		0.56	0.56		
01/25/19	9:26	AZ85622W13	1	0.064	25mL		0.64	0.64		
01/25/19	9:30	AZ85620W13 MS	1	0.364	25mL		3.64	3.64		
01/25/19	9:31	AZ85620W13 MSD	1	0.370	25mL		3.70	3.70		
01/25/19	9:31	CCV 4.0 190125	1	0.394	25mL		3.94	3.94	4.00	98.4%
01/25/19	9:32	CCB 190125	1	0.000	25mL		0.00	0.00		
01/25/19	10:37	CCV 4.0 190125	1	0.393	25mL		3.93	3.93	4.00	98.2%
01/25/19	10:38	CCB 190125	1	0.000	25mL		0.00	0.00		
01/25/19	10:38	AZ85643W21	1	0.005	25mL		0.05	0.05		
01/25/19	10:39	AZ85646W17	1	0.006	25mL		0.06	0.06		
01/25/19	10:39	CCV 4.0 190125	1	0.392	25mL		3.92	3.92	4.00	97.9%
01/25/19	10:40	CCB 190125	1	0.000	25mL		0.00	0.00		
01/25/19	12:47	CCV 4.0 190125	1	0.398	25mL		3.98	3.98	4.00	99.4%
01/25/19	12:48	CCB 190125	1	-0.001	25mL		-0.01	-0.01		
01/25/19	12:48	AZ85562W21	1	0.013	25mL		0.13	0.13		
01/25/19	12:49	AZ85567W17	1	0.011	25mL		0.11	0.11		
01/25/19	12:50	AZ85562W21 MS	1	0.321	25mL		3.21	3.21		
01/25/19	12:50	AZ85562W21 MSD	1	0.325	25mL		3.25	3.25		
01/25/19	12:51	CCV 4.0 190125	1	0.399	25mL		3.99	3.99	4.00	99.7%
01/25/19	12:51	CCB 190125	1	0.001	25mL		0.01	0.01		
01/25/19	15:18	CCV 4.0 190125	1	0.400	25mL		4.00	4.00	4.00	99.9%
01/25/19	15:19	CCB 190125	1	0.000	25mL		0.00	0.00		
01/25/19	15:21	AZ85653W17	1	0.007	25mL		0.07	0.07		
01/25/19	15:22	CCV 4.0 190125	1	0.401	25mL		4.01	4.01	4.00	100.2%
01/25/19	15:23	CCB 190125	1	0.001	25mL		0.01	0.01		



### Peak Integration Report

Sample Name:	AZ85562W19	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 18:33	Run Time:	5.00

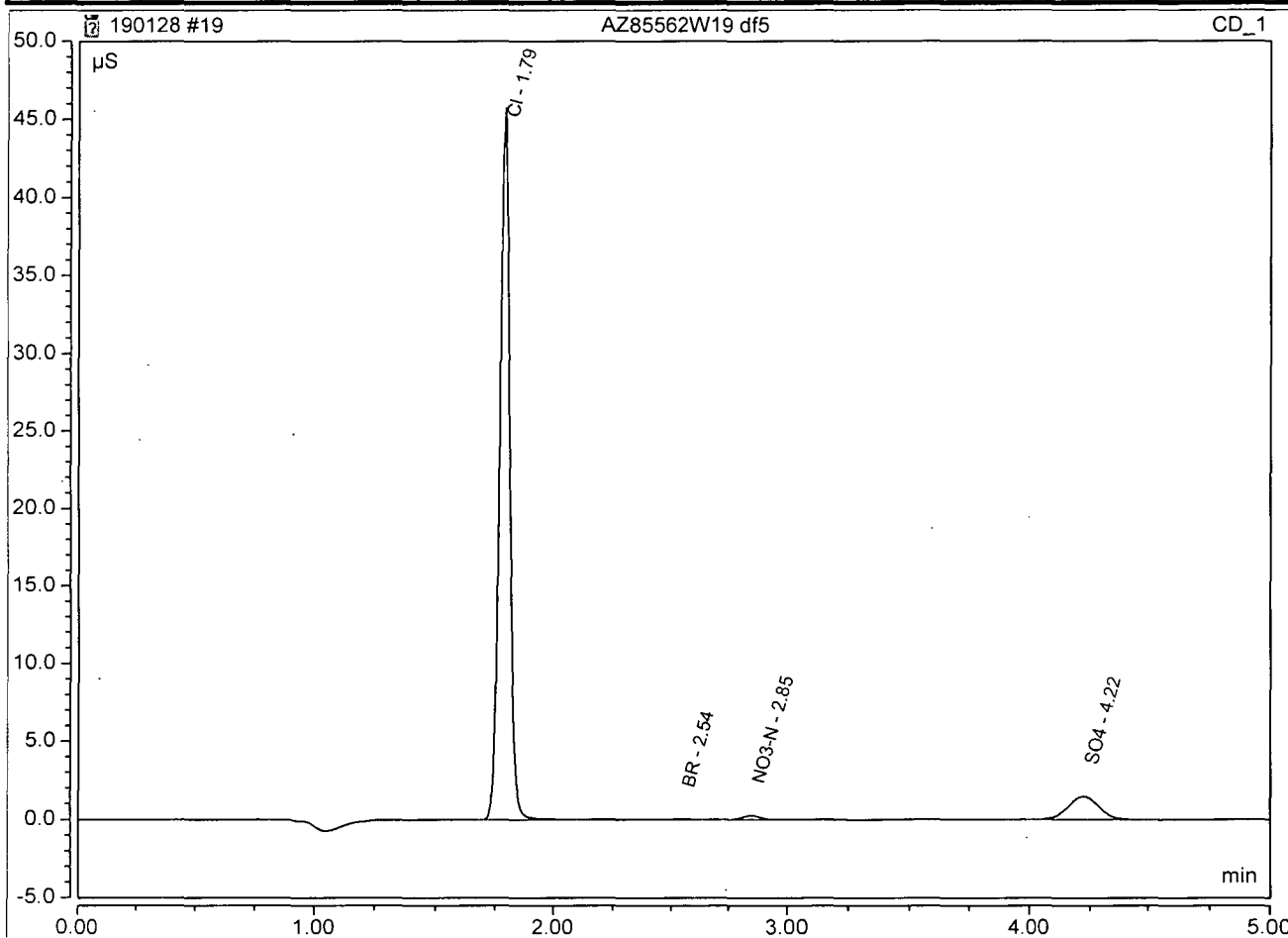
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.010	0.195	0.1258
2	1.83	Cl	BMB	13.801	239.190	129.6020
3	2.59	BR	BMB	0.014	0.173	0.3749
4	2.90	NO3-N	BMB	0.114	1.227	0.5207
5	4.28	SO4	BMB	1.046	7.606	15.7449



### Peak Integration Report

Sample Name:	AZ85562W19 df5	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	5.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 15:10	Run Time:	5.00

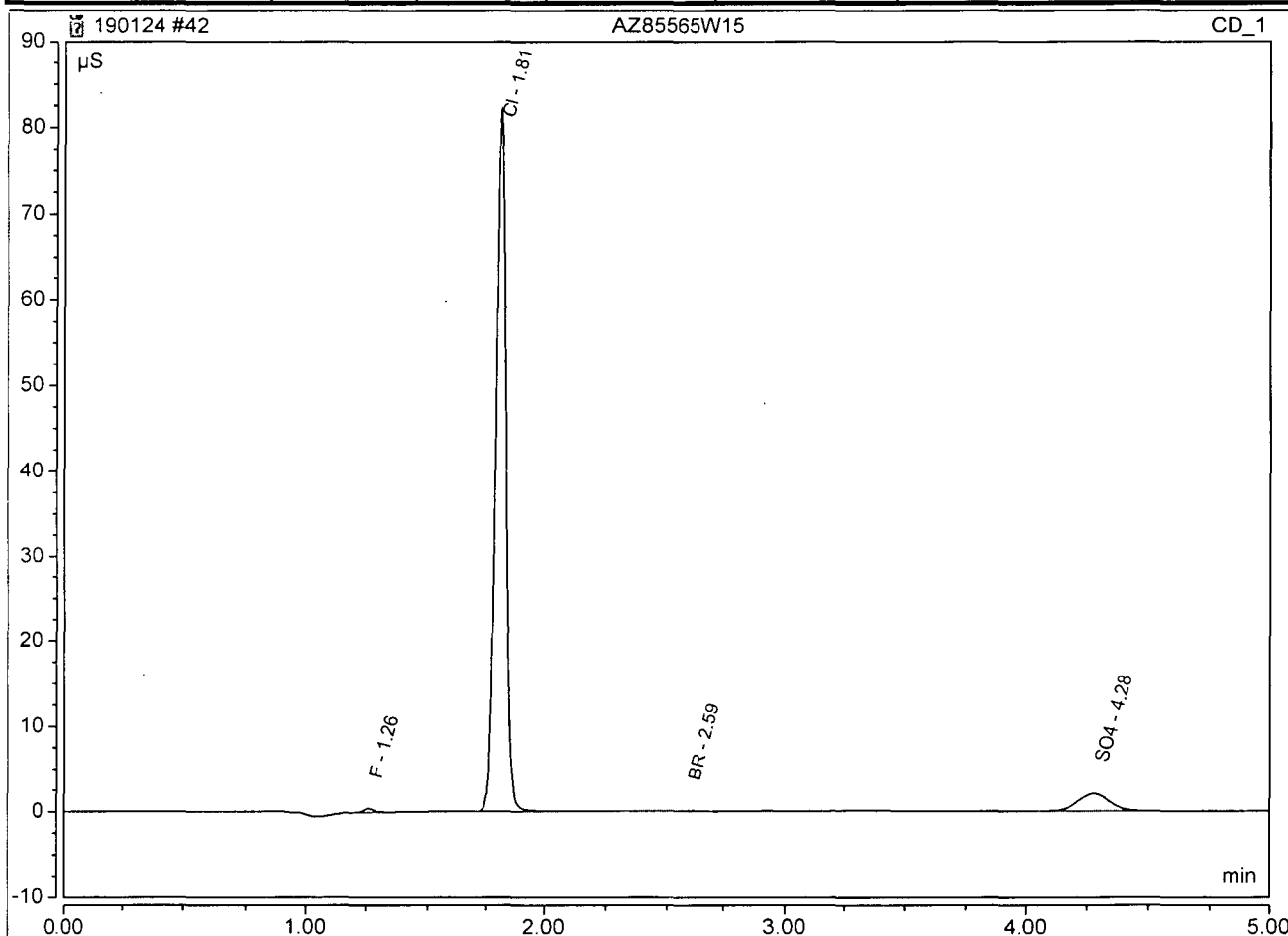
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.79	Cl	BMB	2.302	45.723	108.1106
2	2.54	BR	BMB	0.003	0.036	0.3721
3	2.85	NO3-N	BMB	0.024	0.267	0.5417
4	4.22	SO4	BMB	0.215	1.474	16.1631



### Peak Integration Report

Sample Name:	AZ85565W15	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	24-Jan-2019 / 18:26	Run Time:	5.00

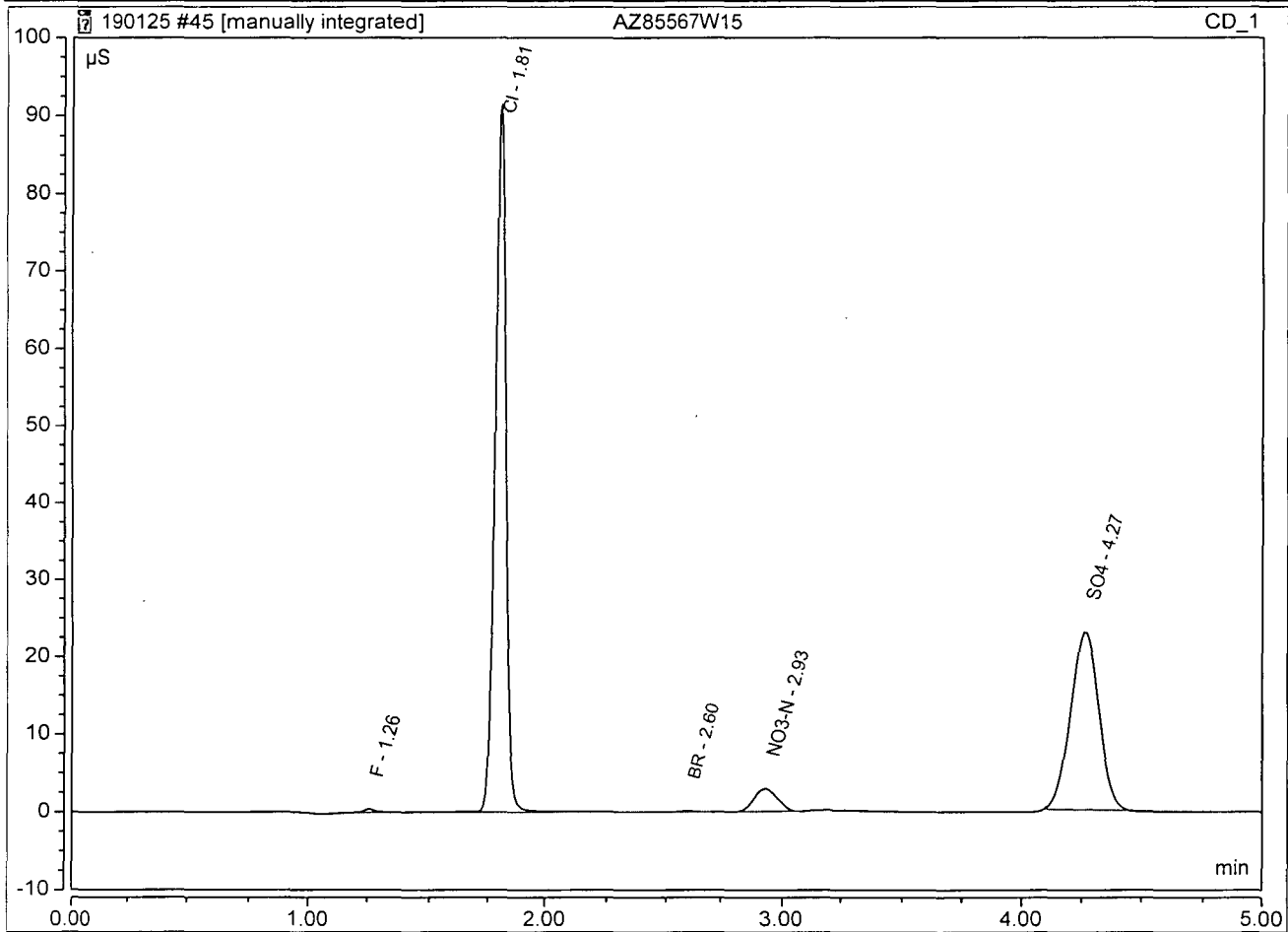
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.26	F	BMB	0.022	0.458	0.2242
2	1.81	Cl	BMB	4.296	82.208	40.3431
3	2.59	BR	BMB	0.005	0.064	0.1407
4	4.28	SO4	BMB	0.300	2.040	4.5113



### Peak Integration Report

Sample Name:	AZ85567W15	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 19:52	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.022	0.460	0.2227
2	1.81	Cl	BMB	5.127	91.396	48.1526
3	2.60	BR	BMB	0.007	0.086	0.1873
4	2.93	NO3-N	BMB*	0.307	2.903	1.4024
5	4.27	SO4	BMB	3.062	22.890	46.0794

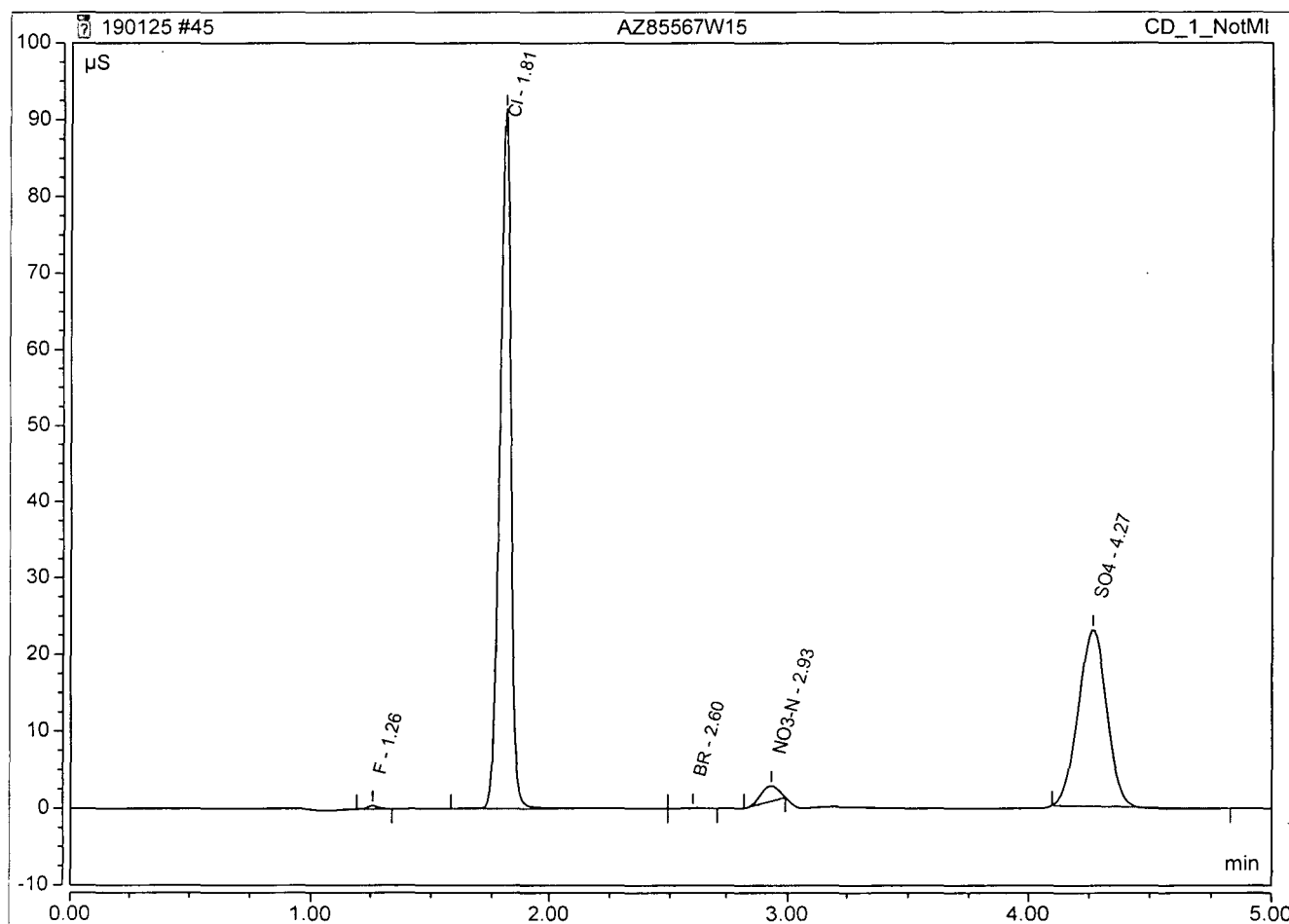


NO3 mi1 HH 190128 MM

### Not Manipulated Peak Integration Report

Sample Name:	AZ85567W15	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 19:52	Run Time:	5.00

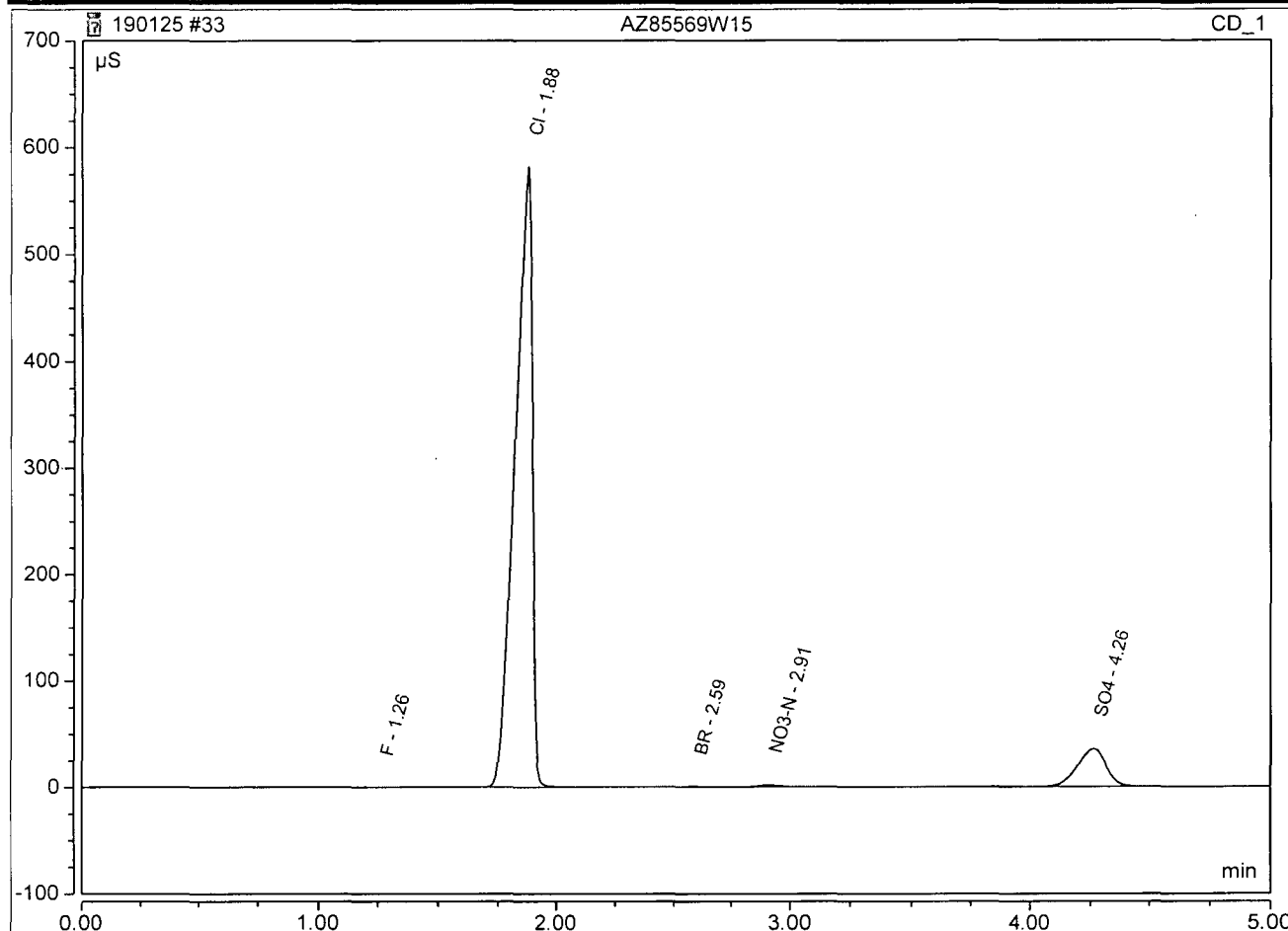
No.	Time min	Peak Name	Peak Type	Area $\mu\text{S}\cdot\text{min}$	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$
1	1.26	F	BMB	0.022	0.460	0.0116
2	1.81	Cl	BMB	5.127	91.396	48.1526
3	2.60	BR	BMB	0.007	0.086	0.1873
4	2.93	NO3-N	BMB*	0.159	1.995	0.7275
5	4.27	SO4	BMB	3.062	22.890	46.0794



### Peak Integration Report

Sample Name:	AZ85569W15	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 18:23	Run Time:	5.00

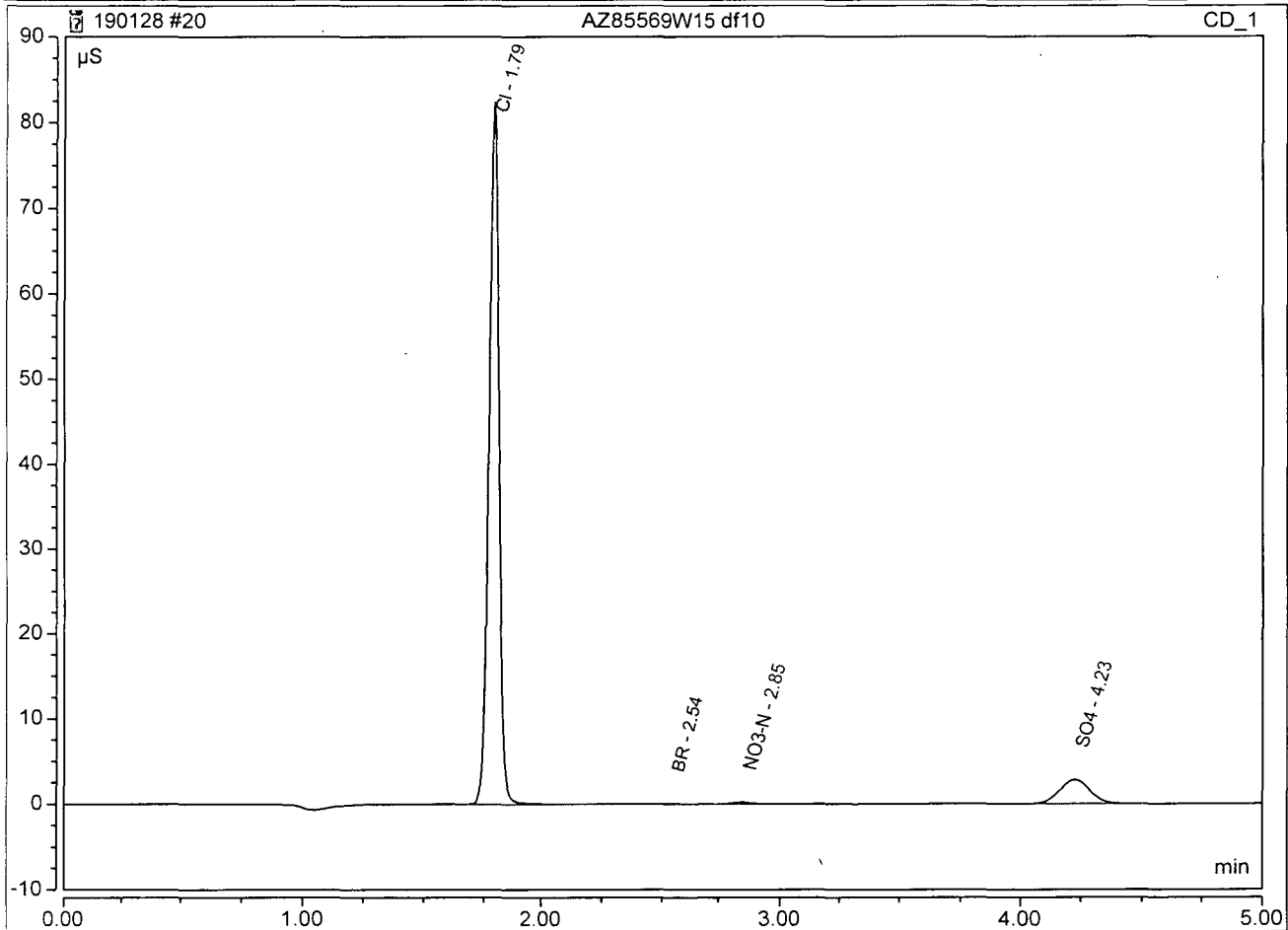
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.006	0.113	0.0943
2	1.88	Cl	BMB	50.002	581.839	469.5741
3	2.59	BR	BMB	0.041	0.503	1.1405
4	2.91	NO3-N	BMB	0.176	1.787	0.8047
6	4.26	SO4	BMB	4.918	35.443	74.0172



### Peak Integration Report

Sample Name:	AZ85569W15 df10	Inj. Vol.:	25.00
Injection Type:	Unknown	Dilution Factor:	10.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 15:18	Run Time:	5.00

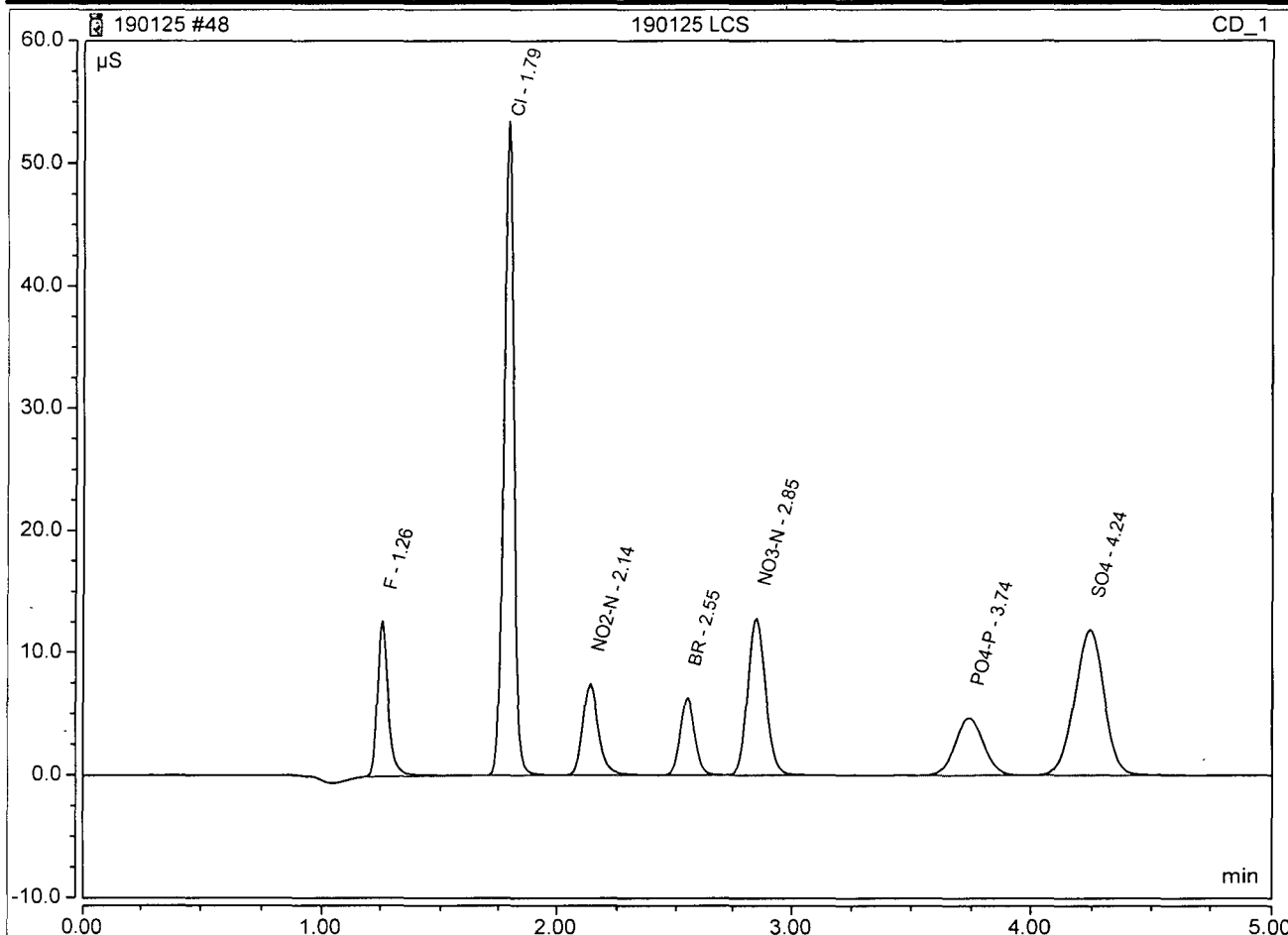
No.	Time (min)	Peak Name	Peak Type	Area ( $\mu\text{S}\cdot\text{min}$ )	Height ( $\mu\text{S}$ )	Amount (mg/L)
1	1.79	Cl	BMB	4.179	82.286	392.4631
2	2.54	BR	BMB	0.004	0.054	1.1126
3	2.85	NO3-N	BMB	0.018	0.198	0.7995
4	4.23	SO4	BMB	0.405	2.797	60.8954



### Peak Integration Report

Sample Name:	190125 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 20:14	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.672	12.685	5.3843
2	1.79	Cl	BMB	2.708	53.417	25.4272
3	2.14	NO2-N	BMB	0.557	7.402	3.1518
4	2.55	BR	BMB	0.471	6.271	12.9539
5	2.85	NO3-N	BMB	1.101	12.836	5.0219
6	3.74	PO4-P	BMB	0.639	4.658	9.1695
7	4.24	SO4	BMB	1.673	11.848	25.1753



Algorithm Check:

y = Peak Area

x = mg/L SO4

$$y = 0.0664 \quad x + \quad 0.0000$$

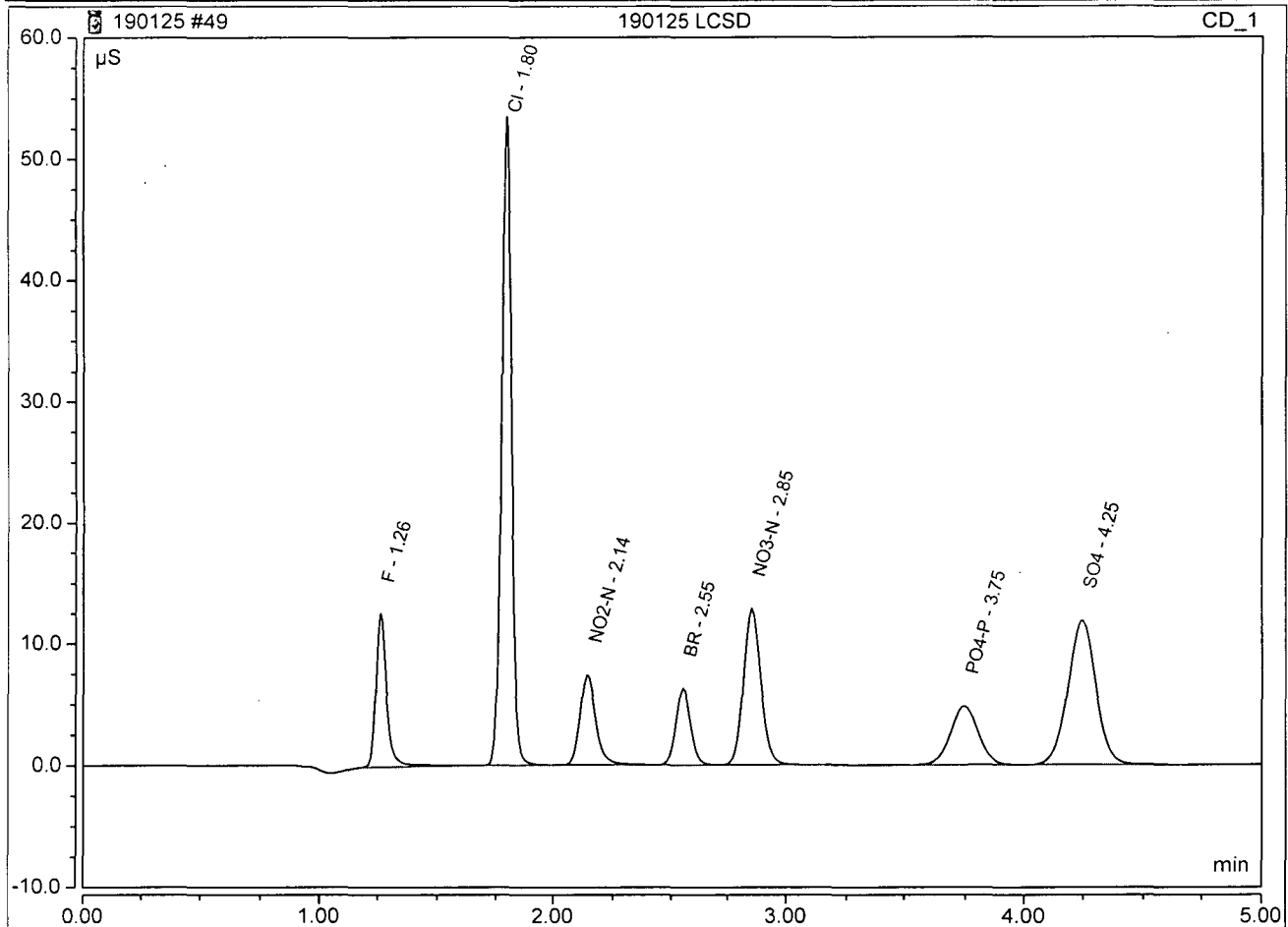
$$y = 1.6727 \quad \text{therefor } x =$$



### Peak Integration Report

Sample Name:	190125 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	25-Jan-2019 / 20:22	Run Time:	5.00

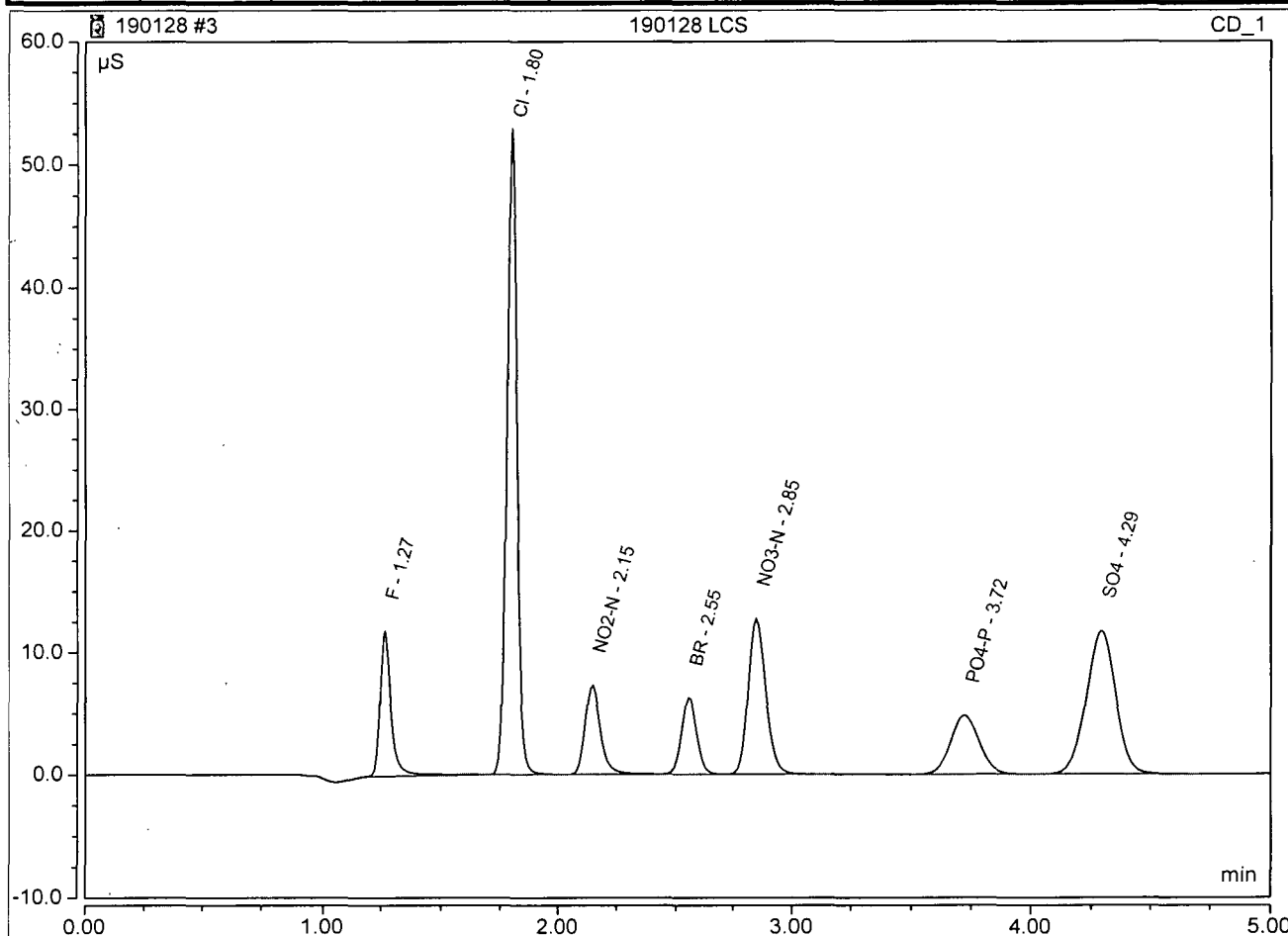
No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.669	12.620	5.3657
2	1.80	Cl	BMB	2.707	53.472	25.4219
3	2.14	NO2-N	BMB	0.558	7.412	3.1547
4	2.55	BR	BMB	0.472	6.280	12.9733
5	2.85	NO3-N	BMB	1.103	12.849	5.0294
6	3.75	PO4-P	BMB	0.656	4.789	9.4163
7	4.25	SO4	BMB	1.673	11.855	25.1725



### Peak Integration Report

Sample Name:	190128 LCS	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 10:09	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.27	F	BMB	0.655	11.852	5.2552
2	1.80	Cl	BMB	2.693	52.886	25.2862
3	2.15	NO2-N	BMB	0.551	7.285	3.1178
4	2.55	BR	BMB	0.471	6.251	12.9383
5	2.85	NO3-N	BMB	1.098	12.700	5.0092
6	3.72	PO4-P	BMB	0.650	4.770	9.3232
7	4.29	SO4	BMB	1.666	11.683	25.0735



Algorithm Check:

y = Peak Area

x = mg/L S04

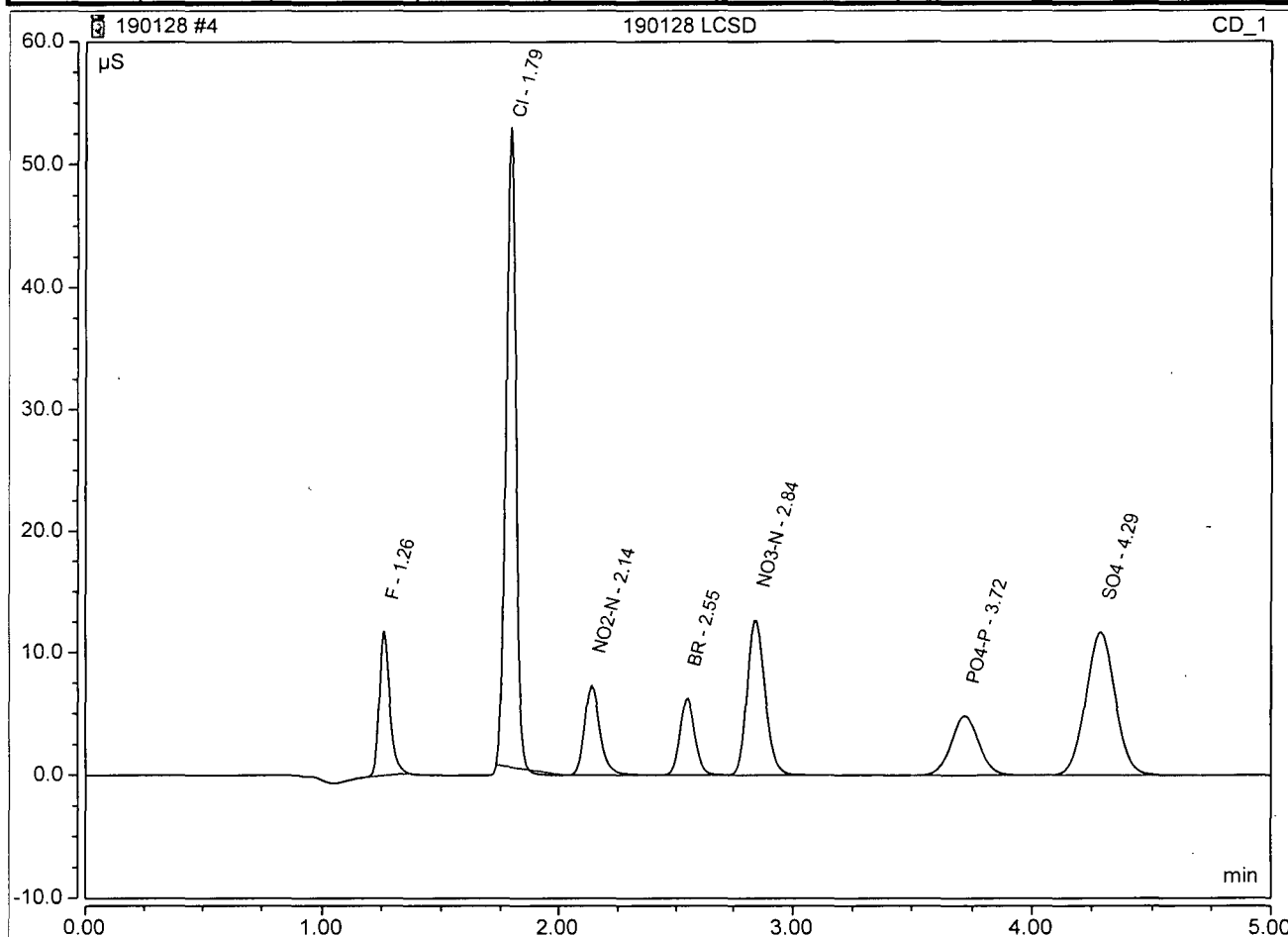
$$y = 0.0664 \quad x + \quad 0.0000$$

$$y = 1.6660 \quad \text{therefor } x = 25.09 \text{ HH } 190129$$

### Peak Integration Report

Sample Name:	190128 LCSD	Inj. Vol.:	25.00
Injection Type:	Check Standard	Dilution Factor:	1.0000
Program:	Anion APM 190124	Operator:	chemist_wetlab
Inj. Date / Time:	28-Jan-2019 / 10:17	Run Time:	5.00

No.	Time (min)	Peak Name	Peak Type	Area (µS*min)	Height (µS)	Amount (mg/L)
1	1.26	F	BMB	0.605	11.764	4.8564
2	1.79	Cl	BMB	2.562	52.342	24.0600
3	2.14	NO2-N	BMB	0.552	7.302	3.1229
4	2.55	BR	BMB	0.471	6.264	12.9479
5	2.84	NO3-N	BMB	1.100	12.727	5.0166
6	3.72	PO4-P	BMB	0.660	4.853	9.4717
7	4.29	SO4	BMB	1.667	11.692	25.0949



12	U10	1 PPM NO3 TOXN	-0.0004	mg/L	0.006601	Ev	2019-01-28 15:36:50
	CCV	CCV .75	0.7939	mg/L	0.669575	Ev	2019-01-28 15:38:04
	CCB	CCB	-0.0021	mg/L	0.005204	Ev	2019-01-28 15:39:19
13	U11	AZ85418W07	-0.0059	mg/L	0.002034	Ev	2019-01-28 15:40:33
14	U12	AZ85420W07	-0.0051	mg/L	0.002676	Ev	2019-01-28 15:41:48
15	U13	AZ85520W06	-0.0051	mg/L	0.002701	Ev	2019-01-28 15:43:02
16	U14	AZ85523W06	-0.0053	mg/L	0.002525	Ev	2019-01-28 15:44:17
17	U15	AZ85525W06	-0.0055	mg/L	0.002361	Ev	2019-01-28 15:45:31
18	U16	AZ85527W06	-0.0059	mg/L	0.002084	Ev	2019-01-28 15:46:46
19	U17	AZ85562W20	-0.0050	mg/L	0.002790	Ev	2019-01-28 15:48:00
20	U18	AZ85562W20 MS	0.7589	mg/L	0.640323	Ev	2019-01-28 15:49:14
21	U19	AZ85562W20 MSD	0.7671	mg/L	0.647217	Ev	2019-01-28 15:50:27
22	U20	AZ85565W16	-0.0017	mg/L	0.005559	Ev	2019-01-28 15:51:42
	CCV	CCV .75	0.7851	mg/L	0.662205	Ev	2019-01-28 15:52:57
	CCB	CCB	-0.0012	mg/L	0.005991	Ev	2019-01-28 15:53:35
23	U21	AZ85567W16	-0.0041	mg/L	0.003534	Ev	2019-01-28 15:55:44
24	U22	AZ85569W16	-0.0036	mg/L	0.004002	Ev	2019-01-28 15:57:58
25	U23	AZ85643W20	-0.0050	mg/L	0.002777	Ev	2019-01-28 16:00:17
26	U24	AZ85646W16	-0.0022	mg/L	0.005115	Ev	2019-01-28 16:02:35
27	U25	AZ85653W16	-0.0057	mg/L	0.002235	Ev	2019-01-28 16:04:53
	CCV	CCV .75	0.7063	mg/L	0.596435	Ev	2019-01-28 16:07:12
	CCB	CCB	-0.0028	mg/L	0.004672	Ev	2019-01-28 16:09:25

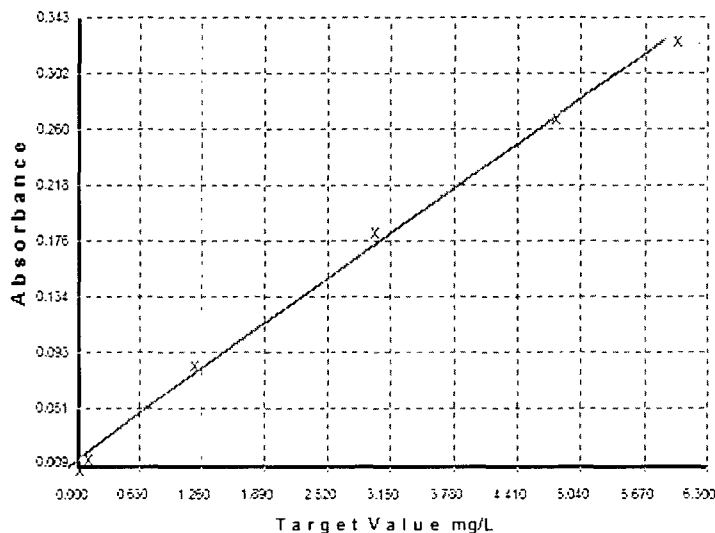
**TOXN**

**Calibration Chart**

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0089	-0.1257	0.0000	
S90	0.0168	0.0232	0.1000	-76.85
S91	0.0861	1.3311	1.2000	10.92
S92	0.1847	3.1931	3.0000	6.44
S93	0.2698	4.7990	4.8000	-0.02
S94	0.3270	5.8793	6.0000	-2.01
S0	0.0197	0.0772	0.0000	

Polynomial Order: 1  
 Correlation Coefficient: 0.9986  
 Carryover(%): 3.4  
 Calibration equation:  $y = bx + a$   
 y = Concentration mg/L  
 x = Measured absorbance  
 a = -2.940597E-001  
 b = 1.887621E+001  
 Date & Time: 2019-01-28 16:31:22

**Calibration Graph**



**Reagents**

Name	Batch	Prepared By	Expiry Date
NO3 W Buffer	Algorithm check	Joel	
Sulfa-NEDD	$y = 18.87621x - 0.2940597$ $y = 3.01$	Joel	EV 1/29/19

Cup Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
S1	Standard 1	0.0089			0.008922			Ev	2019-01-28 16:18:12
S90	Standard 90	0.0168			0.016805			Ev	2019-01-28 16:20:24
S91	Standard 91	0.0861			0.086095			Ev	2019-01-28 16:22:36
S92	Standard 92	0.1847			0.184738			Ev	2019-01-28 16:24:47
S93	Standard 93	0.2698			0.269813			Ev	2019-01-28 16:26:59
S94	Standard 94	0.3270			0.327046			Ev	2019-01-28 16:29:10
S0	Standard 0	0.0197			0.019666			Ev	2019-01-28 16:31:22
CCV	CCV	3.0152	mg/L		0.175315			Ev	2019-01-28 16:33:33
CCB	CCB	-0.1244	mg/L		0.008986			Ev	2019-01-28 16:35:45
4	U2	✓ ICV NO3 TOXN	3.0099	mg/L	0.175034			Ev	2019-01-28 16:37:56
5	U3	ICB NO2 NO3 TOXN	-0.0978	mg/L	0.010395			Ev	2019-01-28 16:40:08
6	U4	190128A BLK NO2 NO3 TOXN	-0.1119	mg/L	0.009651			Ev	2019-01-28 16:42:21
9	U7	190128A LCS NO3 TOXN	2.9894	mg/L	0.173948			Ev	2019-01-28 16:44:32
10	U8	190128A LCSD NO3 TOXN	3.0721	mg/L	0.178327			Ev	2019-01-28 16:46:43

12	U10	1 PPM NO3 TOXN	0.9478	mg/L	0.065792	Ev	2019-01-28 16:48:55
13	U11	AZ85418W07	0.7704	mg/L	0.056392	Ev	2019-01-28 16:51:06
14	U12	AZ85420W07	0.5308	mg/L	0.043700	Ev	2019-01-28 16:53:18
15	U13	AZ85520W06	-0.1087	mg/L	0.009818	Ev	2019-01-28 16:55:29
16	U14	AZ85523W06	0.4787	mg/L	0.040938	Ev	2019-01-28 16:57:40
	CCV	CCV	3.0892	mg/L	0.179234	Ev	2019-01-28 16:59:54
	CCB	CCB	-0.0918	mg/L	0.010715	Ev	2019-01-28 17:02:08
17	U15	AZ85525W06	1.1453	mg/L	0.076250	Ev	2019-01-28 17:04:22
18	U16	AZ85527W06	0.3767	mg/L	0.035535	Ev	2019-01-28 17:06:35
19	U17	AZ85562W20	0.5125	mg/L	0.042731	Ev	2019-01-28 17:08:49
20	U18	AZ85562W20 MS	4.1373	mg/L	0.234757	Ev	2019-01-28 17:11:02
21	U19	AZ85562W20 MSD	4.1137	mg/L	0.233511	Ev	2019-01-28 17:13:13
22	U20	AZ85565W16	-0.0707	mg/L	0.011834	Ev	2019-01-28 17:15:26
23	U21	AZ85567W16	1.6987	mg/L	0.105570	Ev	2019-01-28 17:16:04
24	U22	AZ85569W16	0.8856	mg/L	0.062496	Ev	2019-01-28 17:17:08
25	U23	AZ85643W20	0.5180	mg/L	0.043022	Ev	2019-01-28 17:18:05
26	U24	AZ85646W16	1.8067	mg/L	0.111293	Ev	2019-01-28 17:19:01
	CCV	CCV	3.0464	mg/L	0.176969	Ev	2019-01-28 17:19:57
	CCB	CCB	-0.0913	mg/L	0.010741	Ev	2019-01-28 17:20:54
27	U25	AZ85653W16	0.3759	mg/L	0.035494	Ev	2019-01-28 17:21:51
	CCV	CCV	2.9233	mg/L	0.170448	Ev	2019-01-28 17:22:47
	CCB	CCB	-0.1177	mg/L	0.009344	Ev	2019-01-28 17:23:44

### Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume		OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
			(to 8.3)	(total)									
AZ85569W15	2019-01-30 15:11:38 UTC-8	Alkalinity	0.000	2.570	0.00	0.00	104.34	104.34	mg/L	25 mL	0.0203	190130A	AR
AZ85567W15	2019-01-30 15:00:19 UTC-8	Alkalinity	0.000	6.558	0.00	0.00	266.25	266.25	mg/L	25 mL	0.0203	190130A	AR
AZ85565W15	2019-01-30 14:54:22 UTC-8	Alkalinity	0.000	1.996	0.00	0.00	81.04	81.04	mg/L	25 mL	0.0203	190130A	AR
AZ85562W19	2019-01-30 14:21:08 UTC-8	Alkalinity	0.000	1.452	0.00	0.00	58.95	58.95	mg/L	25 mL	0.0203	190130A	AR
190130A LCSD	2019-01-30 13:45:02 UTC-8	Alkalinity	0.000	5.926	0.00	0.00	240.60	240.60	mg/L	25 mL	0.0203	190130A	AR
190130A LCS	2019-01-30 13:35:25 UTC-8	Alkalinity	0.000	5.606	0.00	0.00	227.60	227.60	mg/L	25 mL	0.0203	190130A	AR
190130A BLK	2019-01-30 13:32:23 UTC-8	Alkalinity	0.000	0.038	0.00	0.00	1.54	1.54	mg/L	25 mL	0.0203	190130A	AR



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 Clovis, Ca  
 93611  
 USA

Date Prepared: 02/18/2019 By:

TOC

Date Approved: By:

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
19	19	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,652,866	5.436	2.718	190,255	0.88	
20	20	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	2,250,407	0.565	0.283	32,805	1.46	
23	23	AZ85562W14	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	5,903,614	1.367	0.684	50,815	0.86	Pass
25	25	AZ85565W05	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	9,645,617	2.307	1.153	52,012	0.54	Pass
27	27	AZ85567W05	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	14,626,456	3.557	1.778	173,951	1.19	Pass
29	29	AZ85569W10	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	Sample	1:1	00000000	TOC	8,085,684	1.915	0.958	8,722	0.11	Pass
34	34	CCV	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,173,836	5.316	2.658	461,598	2.18	
35	35	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	2,431,812	0.611	0.306	63,952	2.63	
	2	4 190212A LCSD	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	17,255,653	4.332	2.166	175,980	1.02	
	5	3 190212A LCS	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	17,306,132	4.345	2.172	159,928	0.92	
11	10	CCV 190212	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	21,546,495	5.409	2.704	129,277	0.60	
12	11	CCB	4	4	NPOC - Feb 11, 2019; 02-54-31 PM	QC #1	1:1	00000000	TOC	2,243,558	0.563	0.282	64,732	2.89	





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**Sample Results**

Spl #: 19 Sample ID: CCV Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 19 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:41 am	-	-	-	21,692,556	5.446	2.723
2	12:49 am	-	-	-	21,873,624	5.492	2.746
3	12:57 am	-	-	-	21,633,019	5.431	2.716
4	1:05 am	-	-	-	21,412,267	5.376	2.688
Avg.		-	-	-	21,652,866	5.436	2.718
Std.Dev.							
% RSD.					0.88		

Spl #: 20 Sample ID: CCB Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 20 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:16 am	-	-	-	2,285,555	0.574	0.287
2	1:23 am	-	-	-	2,261,842	0.568	0.284
3	1:31 am	-	-	-	2,207,401	0.554	0.277
4	1:39 am	-	-	-	2,246,830	0.564	0.282
Avg.		-	-	-	2,250,407	0.565	0.283
Std.Dev.							
% RSD.					1.46		





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By: TOC

Date Approved:

By:

Spl #: 23 Sample ID : AZ85562W14 Type : Sample Date: 02/13/2019 Status: Passed  
 Vial #: 23 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:54 am	-	-	-	5,898,188	1.366	0.683
2	3:02 am	-	-	-	5,844,182	1.352	0.676
3	3:10 am	-	-	-	5,903,784	1.367	0.684
4	3:18 am	-	-	-	5,968,304	1.383	0.692
Avg.		-	-	-	5,903,614	1.367	0.684
Std.Dev.							
% RSD.					0.86		

Spl #: 25 Sample ID : AZ85565W05 Type : Sample Date: 02/13/2019 Status: Passed  
 Vial #: 25 Method : NPOC - Feb 11, 2019; 02-54-31 Dilution : 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:58 am	-	-	-	9,655,892	2.309	1.155
2	4:06 am	-	-	-	9,689,596	2.318	1.159
3	4:14 am	-	-	-	9,666,471	2.312	1.156
4	4:22 am	-	-	-	9,570,509	2.288	1.144
Avg.		-	-	-	9,645,617	2.307	1.153
Std.Dev.							
% RSD.					0.54		



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Date Prepared: 02/18/2019 By: TOC

Date Approved: By:

Spl #: 27 Sample ID: AZ85567W05 Type: Sample Date: 02/13/2019 Status: Passed  
 Vial #: 27 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 am	-	-	-	14,370,294	3.493	1.746
2	5:10 am	-	-	-	14,665,139	3.567	1.783
3	5:18 am	-	-	-	14,732,632	3.584	1.792
4	5:26 am	-	-	-	14,737,759	3.585	1.793
Avg.		-	-	-	14,626,456	3.557	1.778
Std.Dev.							
% RSD.						1.19	

Spl #: 29 Sample ID: AZ85569W10 Type: Sample Date: 02/13/2019 Status: Passed  
 Vial #: 29 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:07 am	-	-	-	8,096,204	1.918	0.959
2	6:15 am	-	-	-	8,074,860	1.912	0.956
3	6:23 am	-	-	-	8,085,411	1.915	0.958
4	6:31 am	-	-	-	8,086,263	1.915	0.958
Avg.		-	-	-	8,085,684	1.915	0.958
Std.Dev.							
% RSD.						0.11	



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Date Prepared: 02/18/2019 By: TOC

Date Approved: By:

Spl #: 34 Sample ID: CCV Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 34 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:48 am	-	-	-	21,613,624	5.426	2.713
2	8:56 am	-	-	-	21,531,430	5.406	2.703
3	9:04 am	-	-	-	20,771,851	5.215	2.608
4	9:12 am	-	-	-	20,778,437	5.217	2.608
Avg.		-	-	-	21,173,836	5.316	2.658
Std.Dev.							
% RSD.					2.18		

Spl #: 35 Sample ID: CCB Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 35 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 am	-	-	-	2,426,350	0.609	0.305
2	9:31 am	-	-	-	2,523,661	0.634	0.317
3	9:39 am	-	-	-	2,394,622	0.601	0.301
4	9:46 am	-	-	-	2,382,614	0.598	0.299
Avg.		-	-	-	2,431,812	0.611	0.306
Std.Dev.							
% RSD.					2.63		





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Date Prepared: 02/18/2019

By:

TOC

Date Approved:

By:

Spl #: 11 Sample ID: CCV 190212 Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 10 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 pm	-	-	-	21,570,741	5.415	2.708
2	9:31 pm	-	-	-	21,668,118	5.440	2.719
3	9:39 pm	-	-	-	21,583,376	5.419	2.709
4	9:47 pm	-	-	-	21,363,745	5.364	2.682
Avg.		-	-	-	21,546,495	5.409	2.704
Std.Dev.							
% RSD.					0.60		

Spl #: 12 Sample ID: CCB Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 11 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:58 pm	-	-	-	2,334,995	0.586	0.293
2	10:05 pm	-	-	-	2,221,045	0.558	0.279
3	10:13 pm	-	-	-	2,234,864	0.561	0.281
4	10:21 pm	-	-	-	2,183,327	0.548	0.274
Avg.		-	-	-	2,243,558	0.563	0.282
Std.Dev.							
% RSD.					2.89		



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Date Prepared: 02/18/2019 By: TOC  
 Date Approved: By:

Spl #: 2 Sample ID: 190212A LCSD Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 4 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:13 am	-	-	-	17,222,002	4.324	2.162
2	11:21 am	-	-	-	17,414,910	4.372	2.186
3	11:29 am	-	-	-	17,363,909	4.359	2.180
4	11:37 am	-	-	-	17,021,790	4.273	2.137
Avg.		-	-	-	17,255,653	4.332	2.166
Std.Dev.							
% RSD.					1.02		

Spl #: 5 Sample ID: 190212A LCS Type: QC #1 Date: 02/13/2019 Status: Passed  
 Vial #: 3 Method: NPOC - Feb 11, 2019; 02-54-31 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:58 pm	-	-	-	17,229,597	4.326	2.163
2	1:06 pm	-	-	-	17,167,125	4.310	2.154
3	1:14 pm	-	-	-	17,532,901	4.402	2.201
4	1:22 pm	-	-	-	17,294,906	4.342	2.171
Avg.		-	-	-	17,306,132	4.345	2.172
Std.Dev.							
% RSD.					0.92		

Standard Prep							
Prep Date	Ferrous Iron Standards		Prep'd By (Initials)		HH		
Exp Date	06/15/18						
	06/15/19						
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.249	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV			Prep'd By (Initials)		HH		
Prep Date	See Injection Log						
Exp Date	24 Hours						
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T Baker	0000184592	06/14/19	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	06/14/19	375uL	25mL	Deionized water	3mg/L
Ferrous Iron Calibration Curve			Prep'd By (Initials)		HH		
Prep Date	06/15/18						
Exp Date	06/16/18						
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T Baker	0000184592	06/14/19	0	25mL	Deionized water	0mg/L
Ical 1	J.T Baker	0000184592	06/14/19	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T Baker	0000184592	06/14/19	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T Baker	0000184592	06/14/19	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T Baker	0000184592	06/14/19	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T Baker	0000184592	06/14/19	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/14/19	0.375	25mL	Deionized water	3mg/L

Reagent Prep						
Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep	
Colorizer	0747C107	1,10-phenanthroline	na	0.2025	01/25/19	
		HCL conc	na	8drops		
Buffer	Z28B018	Ammonia Acetate	na	249.3g	01/15/19	
	2018071399	Glacial Acetic Acid	06/27/20	700mL		

Standard Prep							
Prep Date		Ferrous Iron Standards		Prep'd By (Initials)		HH	
Exp Date		06/15/18					
Exp Date		06/15/19					
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.249	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV				Prep'd By (Initials)		HH	
Prep Date		See Injection Log					
Exp Date		24 Hours					
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	06/14/19	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	06/14/19	375uL	25mL	Deionized water	3mg/L
Prep Date		Ferrous Iron Calibration Curve		Prep'd By (Initials)		HH	
Exp Date		06/15/18					
Exp Date		06/16/18					
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T.Baker	0000184592	06/14/19	0	25mL	Deionized water	0mg/L
Ical 1	J.T.Baker	0000184592	06/14/19	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T.Baker	0000184592	06/14/19	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T.Baker	0000184592	06/14/19	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T.Baker	0000184592	06/14/19	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T.Baker	0000184592	06/14/19	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/14/19	0.375	25mL	Deionized water	3mg/L

Reagent Prep					
Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep
Colorizer	0747C107	1,10-phenanthroline	na	0.199g	01/23/19
		HCL conc	na	8drops	
Buffer	Z28B018	Ammonia Acetate	na	249.3g	01/15/19
	2018071399	Glacial Acetic Acid	06/27/20	700mL	

Anion Chromatography Working Standard									
Prep Date: 01/24/19									
Exp Date: 01/25/19									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H <sub>2</sub> O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H <sub>2</sub> O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H <sub>2</sub> O	o2si	062001-08-03	5000	10084781-1-39578	02/21/20	250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H <sub>2</sub> O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	250 µL	25 mL	Millipore Water	10
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-6372-39521	12/31/21	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve									
Prep Date: 01/24/19									
Exp Date: 01/25/19									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Conc. Range (ug/mL)
Ical2	Varries	ICal1	5.0-50.0	Prepared 01/24/19	01/25/19	400 µL	1000 µL	Millipore Water	0.08-0.40
Anion Chromatography Working Standard	Varries	ICal2	5.0-50.0	Prepared 01/24/19	01/25/19	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varries	ICal3	5.0-50.0	Prepared 01/24/19	01/25/19	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varries	ICal4	5.0-50.0	Prepared 01/24/19	01/25/19	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varries	ICal5	5.0-50.0	Prepared 01/24/19	01/25/19	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varries	ICal6	5.0-50.0	Prepared 01/24/19	01/25/19	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varries	ICal7	5.0-50.0	Prepared 01/24/19	01/25/19	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varries	ICal8	5.0-50.0	Prepared 01/24/19	01/25/19	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography ICS/ICV									
Prep Date: See Injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Fluoride	Inorganic Ventures	ICF1	993-999	K-F652018-39801	10/23/19	62.5 µL	25 mL	Millipore Water	5
Nitrite	Inorganic Ventures	ICNO21	993-1001	M2-NOX660562-39802	10/23/19	250 µL	25 mL	Millipore Water	3.04
Chloride	Inorganic Ventures	ICCL1	995-1001	NaCL664868-39904	11/26/19	500 µL	25 mL	Millipore Water	20
O-Phosphate as P	Inorganic Ventures	IPPO41	1001-1009	M2-POX655826-39803	10/23/19	125 µL	25 mL	Millipore Water	10
Nitrate as N	Inorganic Ventures	ICNNO31	994-1002	Na-NOX667147-39510	10/23/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Bromide Standard	CPI International	4400-ICBM	1000	161681-8-39539	02/06/20	312.5 µL	25 mL	Millipore Water	12.5
Sulfate	Inorganic Ventures	ICSO41	998-1006	Ka-SOX01111-38875	08/13/19	500 µL	25 mL	Millipore Water	20

Anion Chromatography CCV									
Prep Date: See Injection Log									
Exp Date: 24 hours after prep									
Prep'd By (Initials): HH									
Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (ug/mL)
Ion Chromatography Standard Fluoride 1000ug/mL in H <sub>2</sub> O	o2si	O2SI-062002-01-01	1000	142626-24-38407	04/20/19	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite as N 1000 ug/mL in H <sub>2</sub> O	o2si	O2SI-062004-01-01	1000	142626-24-38408	04/20/19	62.5 µL	25 mL	Millipore Water	2.5
Ion Chromatography Standard Chloride, 500mL 5,000 mg/L in H <sub>2</sub> O	o2si	062001-08-03	5000	10084781-1-39578	02/21/20	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Ultra Scientific	ICC-005A	1000	G34-CP-3323-39057	08/31/23	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N, 500mL 1,000 mg/L in H <sub>2</sub> O	o2si	062003-01-03	1000	880117-4-39577	02/21/20	125 µL	25 mL	Millipore Water	5
Bromide Standard	Ultra Scientific	ICC-001	1000	CR-6372-39521	12/31/21	312.5 µL	25 mL	Millipore Water	12.5
Sulfate Standard	Agilent	ICC-006	1000	CS-0688-40047	03/31/22	625 µL	25 mL	Millipore Water	25



## Nitrite

### High Point @ 1.5 mg/L

0.075 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24 - 38408 exp: 4/20/19  
50 mL DI Water

### CCV @ 0.75 mg/L

0.0375 mL NO<sub>2</sub> O<sub>2</sub>Si lot 142626-24-38408 exp: 4/20/19  
50 mL DI Water

### ICV/LCS @ 0.73 mg/L

0.12mL NO<sub>2</sub> Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>2</sub>

400 uL of High point and 200 uL of DI made directly into a sample cup

Prep 12/20/18  
Exp 12/27/18  
Initials BP

## Nitrate/TOXN

### High Point @ 6 mg/L

0.30 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### CCV @ 3.0 mg/L

0.15 mL NO<sub>3</sub> O<sub>2</sub>Si lot 880117-39577 exp: 2/21/20  
50 mL DI Water

### ICV/LCS @ 3.0 mg/L

0.150 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
50 mL DI Water

### 1 mg/L NO<sub>3</sub>

100 uL of High point and 500 uL of DI made directly into a sample cup

### MS @ 2.5 mg/L NO<sub>3</sub> and 0.73 mg/L NO<sub>2</sub>

0.125 mL NO<sub>3</sub> Inorganic Ventures lot N2-NOX667147-39510 exp: 10/23/19  
and 0.12mL Inorganic Ventures lot M2-NOX660562-39802 exp: 10/23/19  
Final volume 50 mL of sample

Prep 01/28/19  
Exp 2/4/19  
EV

**Tiamo Alkalinity Standard Prep**

Prep Date:

Exp Date:

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H2SO4)	J.T.Baker	NA	NA	167828	NA	NA	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.1N	167828	12/19/18	12/19/19	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.02N	167828	12/19/18	12/19/19	200mL	1L	DI	0.02N
Inorganic Spike(NaHCO3)	BDH	NA	NA	1575C510	10/18/18	08/14/20	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	1575C510	01/29/19	01/29/20	3.5g	500mL	DI	250mg/L
Standarizing Solution(NaCO3)	J.T.Baker	Normality	1N	178494	07/25/17	07/25/19	PURCHASED	NA	NA	NA

Name of Final Standard **TOC Calibration Curve**  
 Prep Date 02/11/19  
 Exp Date 03/11/19

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	20 uL	40 mL	DI Water	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	50 uL	40 mL	DI Water	1.25 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	100 uL	40 mL	DI Water	2.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	150 uL	40 mL	DI Water	3.75 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	200 uL	40 mL	DI Water	5 ppm

Name of Final Standard **1000 PPM ICV TOC Intermediate**  
 Prep Date 02/11/19  
 Exp Date 02/11/20

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sugar	Millenia	814-293	42% Carbon	V298J-NA	NA	2.3831 g	1 L	DI Water	1003.45 ppm

Name of Final Standard **ICV (TOC)**  
 Prep Date 02/11/19  
 Exp Date 03/11/19

Prep'd By (Initials) HH

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	Prep: 2/11/19	03/11/19	100 uL	40mL	DI Water	2.5 ppm

Name of Final Standard CCV (TOC)  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	CS-5157-40233	11/30/20	100 uL	40 mL	DI Water	2.5 ppm

Name of Final Standard TOC LCS/LCSD  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	CR-0328-37639	02/28/19	80 uL	40 mL	DI Water	2.0 ppm

Name of Final Standard TOC MS/MSD  
 Prep Date 02/12/19  
 Exp Date 03/12/19

Prep'd By (Initials) MM

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	CR-0328-37639	02/28/19	100 uL	40 mL	sample	2.5 ppm

# SM3500FeB Injection Log

Directory: I:\Spec Sheets\Ferrous Iron (Fe2)\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
12	24 Jan 2019	08:27	CCV 4.0 190124		190124A	1.
11	24 Jan 2019	08:27	CCB 190124		190124A	1.
13	24 Jan 2019	08:28	190124 LCS		190124A	1.
14	24 Jan 2019	08:29	190124 LCSD		190124A	1.
24	24 Jan 2019	08:46	CCV 4.0 190124		190124A	1.
26	24 Jan 2019	08:47	CCB 190124		190124A	1.
27	24 Jan 2019	17:59	CCV 4.0 190124		190124A	1.
28	24 Jan 2019	18:00	CCB 190124		190124A	1.
31	24 Jan 2019	18:02	CCV 4.0 190124		190124A	1.
30	24 Jan 2019	18:02	AZ85565W17		190124A	1.
29	24 Jan 2019	18:02	AZ85569W17		190124A	1.
32	24 Jan 2019	18:03	CCB 190124		190124A	1.
33	15 Jun 2018	12:27	Ical 1		190124A	1.
34	15 Jun 2018	12:27	ICB		190124A	1.
35	15 Jun 2018	12:28	Ical 2		190124A	1.
36	15 Jun 2018	12:28	Ical 3		190124A	1.
37	15 Jun 2018	12:29	Ical 4		190124A	1.
38	15 Jun 2018	12:30	Ical 5		190124A	1.
39	15 Jun 2018	12:31	ICV		190124A	1.
40	15 Jun 2018	12:32	ICB		190124A	1.

# SM3500FeB Injection Log

Directory: I:\Spec Sheets\Ferrous Iron (Fe2)\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
2	25 Jan 2019	09:21	CCB 190125		190125A	1.
1	25 Jan 2019	09:21	CCV 4.0 190125		190125A	1.
3	25 Jan 2019	09:22	190125 LCS		190125A	1.
4	25 Jan 2019	09:23	190125 LCSD		190125A	1.
12	25 Jan 2019	09:31	CCV 4.0 190125		190125A	1.
13	25 Jan 2019	09:32	CCB 190125		190125A	1.
20	25 Jan 2019	12:47	CCV 4.0 190125		190125A	1.
22	25 Jan 2019	12:48	CCB 190125		190125A	1.
21	25 Jan 2019	12:48	AZ85562W21		190125A	1.
23	25 Jan 2019	12:49	AZ85567W17		190125A	1.
27	25 Jan 2019	12:51	CCV 4.0 190125		190125A	1.
26	25 Jan 2019	12:51	CCB 190125		190125A	1.
33	15 Jun 2018	12:27	Ical 1		190125A	1.
34	15 Jun 2018	12:27	ICB		190125A	1.
35	15 Jun 2018	12:28	Ical 2		190125A	1.
36	15 Jun 2018	12:28	Ical 3		190125A	1.
37	15 Jun 2018	12:29	Ical 4		190125A	1.
38	15 Jun 2018	12:30	Ical 5		190125A	1.
39	15 Jun 2018	12:31	ICV		190125A	1.
40	15 Jun 2018	12:32	ICB		190125A	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
2	24 Jan 2019	11:58	CCB		Anions	1.
3	24 Jan 2019	12:06	i cal 1		Anions	1.
4	24 Jan 2019	12:13	i cal 2		Anions	1.
5	24 Jan 2019	12:20	i cal 3		Anions	1.
6	24 Jan 2019	12:28	i cal 4		Anions	1.
7	24 Jan 2019	12:35	i cal 5		Anions	1.
8	24 Jan 2019	12:43	i cal 6		Anions	1.
9	24 Jan 2019	12:50	i cal 7		Anions	1.
10	24 Jan 2019	12:57	i cal 8		Anions	1.
11	24 Jan 2019	13:05	CCB		Anions	1.
12	24 Jan 2019	13:12	ICV LCS 190124		Anions	1.
13	24 Jan 2019	13:20	ICVD LCSD 190124		Anions	1.
14	24 Jan 2019	13:27	CCV 190124		Anions	1.
15	24 Jan 2019	13:34	CCB		Anions	1.
24	24 Jan 2019	16:13	CCV 190124		Anions	1.
25	24 Jan 2019	16:20	CCB		Anions	1.
42	24 Jan 2019	18:26	AZ85565W15		Anions	1.
43	24 Jan 2019	18:33	AZ85562W19		Anions	1.
44	24 Jan 2019	18:41	CCV 190124		Anions	1.
45	24 Jan 2019	18:48	CCB		Anions	1.

# EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
31	25 Jan 2019	18:09	CCV 190125		Anions	1.
32	25 Jan 2019	18:16	CCB		Anions	1.
33	25 Jan 2019	18:23	AZ85569W15		Anions	1.
34	25 Jan 2019	18:31	CCV 190125		Anions	1.
35	25 Jan 2019	18:38	CCB		Anions	1.
45	25 Jan 2019	19:52	AZ85567W15		Anions	1.
46	25 Jan 2019	19:59	CCV 190125		Anions	1.
47	25 Jan 2019	20:07	CCB		Anions	1.
48	25 Jan 2019	20:14	190125 LCS		Anions	1.
49	25 Jan 2019	20:22	190125 LCSD		Anions	1.
50	25 Jan 2019	20:29	CCV 190125		Anions	1.
51	25 Jan 2019	20:36	CCB		Anions	1.



## EPA 300.0 Injection Log

Directory: I:\Dionex\Charlie\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	28 Jan 2019	09:55	CCV 190128		Anions	1.
2	28 Jan 2019	10:02	CCB		Anions	1.
3	28 Jan 2019	10:09	190128 LCS		Anions	1.
4	28 Jan 2019	10:17	190128 LCSD		Anions	1.
7	28 Jan 2019	11:58	CCV 190128		Anions	1.
8	28 Jan 2019	12:06	CCB		Anions	1.
11	28 Jan 2019	12:45	CCV 190128		Anions	1.
12	28 Jan 2019	12:52	CCB		Anions	1.
19	28 Jan 2019	15:10	AZ85562W19 df5		Anions	5.
20	28 Jan 2019	15:18	AZ85569W15 df10		Anions	10.
21	28 Jan 2019	15:25	CCV 190128		Anions	1.
22	28 Jan 2019	15:32	CCB		Anions	1.

# EPA 353.2 Injection Log

Directory: I:\EVE\Export\2019\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	28 Jan 2019	16:18	Standard 1 TOXN/NO3		190128A TO	1.
2	28 Jan 2019	16:20	Standard 90 TOXN/NO3		190128A TO	1.
3	28 Jan 2019	16:22	Standard 91 TOXN/NO3		190128A TO	1.
4	28 Jan 2019	16:24	Standard 92 TOXN/NO3		190128A TO	1.
5	28 Jan 2019	16:26	Standard 93 TOXN/NO3		190128A TO	1.
6	28 Jan 2019	16:29	Standard 94 TOXN/NO3		190128A TO	1.
7	28 Jan 2019	16:31	Standard 0 TOXN/NO3		190128A TO	1.
8	28 Jan 2019	16:33	CCV TOXN/NO3		190128A TO	1.
9	28 Jan 2019	16:35	CCB TOXN/NO3		190128A TO	1.
10	28 Jan 2019	16:37	ICV NO3 TOXN		190128A TO	1.
11	28 Jan 2019	16:40	ICB NO2 NO3 TOXN		190128A TO	1.
12	28 Jan 2019	16:42	190128A BLK NO2 NO3 TOXN		190128A TO	1.
13	28 Jan 2019	16:44	190128A LCS NO3 TOXN		190128A TO	1.
14	28 Jan 2019	16:46	190128A LCSD NO3 TOXN		190128A TO	1.
20	28 Jan 2019	16:59	CCV TOXN/NO3		190128A TO	1.
21	28 Jan 2019	17:02	CCB TOXN/NO3		190128A TO	1.
24	28 Jan 2019	17:08	AZ85562W20 TOXN/NO3		190128A TO	1.
27	28 Jan 2019	17:15	AZ85565W16 TOXN/NO3		190128A TO	1.
28	28 Jan 2019	17:16	AZ85567W16 TOXN/NO3		190128A TO	1.
29	28 Jan 2019	17:17	AZ85569W16 TOXN/NO3		190128A TO	1.
32	28 Jan 2019	17:19	CCV TOXN/NO3		190128A TO	1.
33	28 Jan 2019	17:20	CCB TOXN/NO3		190128A TO	1.

# SM 2320B Injection Log

Directory: I:\Tiamo\EXPORT\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	30 Jan 2019	13:32	190130A BLK		190130A_AL	1.
2	30 Jan 2019	13:35	190130A LCS		190130A_AL	1.
3	30 Jan 2019	13:45	190130A LCSD		190130A_AL	1.
8	30 Jan 2019	14:21	AZ85562W19		190130A_AL	1.
12	30 Jan 2019	14:54	AZ85565W15		190130A_AL	1.
13	30 Jan 2019	15:00	AZ85567W15		190130A_AL	1.
14	30 Jan 2019	15:11	AZ85569W15		190130A_AL	1.

## 9060A Injection Log

Directory: OI Analytical - TOC Reporter - G949730077 - Wet Chemistry

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	11 Feb 2019	16:13	TOC-RW		190211A	1.
2	11 Feb 2019	16:47	TOC-Std#1-0.500 PPM		190211A	1.
3	11 Feb 2019	17:18	TOC-Std#2-1.250 PPM		190211A	1.
4	11 Feb 2019	17:50	TOC-Std#3-2.500 PPM		190211A	1.
5	11 Feb 2019	18:23	TOC-Std#4-3.750 PPM		190211A	1.
6	11 Feb 2019	18:56	TOC-Std#5-5.000 PPM		190211A	1.
7	11 Feb 2019	19:31	ICB		190211A	1.
8	11 Feb 2019	20:02	ICV Sugar		190211A	1.

## 9060A Injection Log

Directory: OI Analytical - TOC Reporter - G949730077 - Wet Chemistry

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
19	13 Feb 2019	0:41	CCV		190212A	1.
20	13 Feb 2019	1:16	CCB		190212A	1.
23	13 Feb 2019	2:54	AZ85562W14		190212A	1.
25	13 Feb 2019	3:58	AZ85565W10		190212A	1.
27	13 Feb 2019	5:02	AZ85567W05		190212A	1.
29	13 Feb 2019	6:07	AZ85569W10		190212A	1.
34	13 Feb 2019	8:48	CCV		190212A	1.
35	13 Feb 2019	9:23	CCB		190212A	1.
37	13 Feb 2019	11:13	190212A LCSD		190212A	1.
40	13 Feb 2019	12:58	190212A LCS		190212A	1.
52	13 Feb 2019	21:23	CCV		190213A	1.
53	13 Feb 2019	21:58	CCB		190213A	1.



908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

Certification Number: CA1312  
NELAP Certification number: CA00046  
DoD-ELAP Certificate number: 4064.01

## Data Validatable Report

February 21, 2019

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, Hawaii 96813

Attn: Margie Pascua

Title: Report of Data: Case 87956

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126  
Subcontract: 18S-22209-HI27

Dear Ms. Pascua:

Two water samples were received January 25, 2019. Written results for the requested analyses are being provided on this February 21, 2019.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

A handwritten signature in black ink that reads 'Paula McCartney'.

Paula McCartney, Laboratory Director  
APPL, Inc.

PM/gs  
Enclosure  
cc: File

Data Validation Package  
for  
60481245 CIV 0053 Red Hill Fuel Storage  
APPL SDG 87956

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# **CASE NARRATIVE**



# Case Narrative

ARF: 87956

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

## Sample Receipt Information:

Two water samples were received January 25, 2019, at 3.0°C, 3.0°C, 3.0°C, 2.5°C, 2.5°C, and 2.0°C. The sample group was assigned Analytical Request Form (ARF) number 87956.

## Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D SIM analysis, the samples were extracted according to EPA method 3520C.

For the EPA 8270D Phenol analysis, the samples were extracted according to EPA method 3520C. The samples were screened for Tentatively Identified Compounds (TICs).

For the APPL SOP ANA2MEE analysis, the samples were extracted according to EPA method 3535.

For the EPA 8260B VOC and Gasoline analyses, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the samples were allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 300.0, 353.2, 9060A, SM 2320B, and SM 3500FeB analyses, the sample was prepared according to the methods.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

## Analytical Exceptions, Deviations and Abnormalities.

**EPA 8015B:** Both surrogates recovered above the upper control limit in one sample.

Corrective action: None, no target compounds were detected in the sample. The client was notified.

Manual integrations were performed in accordance with APPL's SOP. Chromatograms of before and after manual integration are enclosed.

**EPA 8270D SIM:** Manual integrations were performed in accordance with APPL's SOP.

Benzo(k) fluoranthene was manually integrated in a calibration standard. Chromatograms of before and after manual integration are enclosed.

The surrogates recovered above their higher control limit in one sample. No target compound was detected in the sample.

**EPA 8270D:** Manual integrations were performed in accordance with APPL's SOP. Benzo(b) fluoranthene was manually integrated in a calibration standard. Chromatograms of before and after manual integration are enclosed.

Two surrogates recovered above their higher control limit in one sample. No target compound was detected in the sample.

**APPL SOP ANA2MEE:** MEE was manually integrated in the ICAL. The manual integrations are performed according to the SOP. Before and after chromatograms are provided in the package.

**EPA 8260B:** The surrogate Toluene-d8 for sample ERH757 was outside the lower control limit of 89%. Corrective action: The sample was reanalyzed with similar results. The raw data for the reinjection has been included in the data package.

The surrogate Toluene-d8 for 190130AL was outside the lower control limit of 89%. The associated spike recoveries of target compounds were in control.

In the MS/MSD performed on sample ERH733, one compound and one surrogate recovered outside their control limits. Corrective action: the client was notified.

**Inorganics:** The samples were analyzed as soon as possible for ferrous iron.

In the method blank, alkalinity and bicarbonate were detected above one-half the LOQ. Corrective action: None, the concentration of alkalinity and bicarbonate in the samples exceeds the blank concentration by ten-fold or more.

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
87956	01/25/19	ERH732	AZ85642	01/24/19 8:15:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH732	AZ85642	01/24/19 8:15:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH732	AZ85642	01/24/19 8:15:00 AM	WATER	RSK 175	METHANE BY RSK 175
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	SM3500FeB	Ferrous Iron
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 353.2	EPA 353.2 - WATER
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87956	01/25/19	ERH733	AZ85643	01/24/19 8:45:00 AM	WATER	SW846 9060A	9060A TOC & DOC
87956	01/25/19	ERH734	AZ85644	01/24/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH734	AZ85644	01/24/19 8:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
87956	01/25/19	ERH734	AZ85644	01/24/19 8:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87956	01/25/19	ERH734	AZ85644	01/24/19 8:45:00 AM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87956	01/25/19	ERH734	AZ85644	01/24/19 8:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH734	AZ85644	01/24/19 8:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87956	01/25/19	ERH756	AZ85645	01/23/19 1:20:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH756	AZ85645	01/23/19 1:20:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH756	AZ85645	01/23/19 1:20:00 PM	WATER	RSK 175	METHANE BY RSK 175
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	SM3500FeB	Ferrous Iron
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 353.2	EPA 353.2 - WATER
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 8270D	EPA 8270D WATER
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	RSK 175	METHANE BY RSK 175
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87956	01/25/19	ERH757	AZ85646	01/23/2019 15:25:00 PM	WATER	SW846 9060A	9060A TOC & DOC
87956	01/25/19	ERH754	AZ85652	01/24/19 12:08:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH754	AZ85652	01/24/19 12:08:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH754	AZ85652	01/24/19 12:08:00 PM	WATER	RSK 175	METHANE BY RSK 175
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	SM3500FeB	Ferrous Iron
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 353.2	EPA 353.2 - WATER
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 8270D	EPA 8270D WATER
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 8015B-eLL	EPA 8015B TPH LIQ-LIQ
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	RSK 175	METHANE BY RSK 175
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
87956	01/25/19	ERH755	AZ85653	01/24/19 12:40:00 PM	WATER	SW846 9060A	9060A TOC & DOC

**APPL Inc.**  
**Abbreviations and Flags**


<b>FLAG</b>	<b>DESCRIPTION</b>
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

**SAMPLE RECORDS MANAGEMENT  
CHAIN OF CUSTODY,  
ARF, CRF, AND  
CLIENT COMMUNICATION**

**APPL - Analysis Request Form**

**87956**

Client: AECOM  
 Address: 1001 Bishop Street, Suite 1600  
Honolulu, HI 96813  
 Attn: Margie Pascua  
 Phone: 808-356-5373 Fax: 808-523-8950  
 Job: 60571032 CV18F0126 Red Hill Fuel Storage  
 PO #: 18S-22209-HI27 PO# 102604  
 Chain of Custody (Y/N): Y # 011-012,019-022  
 RAD Screen (Y/N): Y pH (Y/N): N  
 Turn Around Type: 1 WEEK

Received by: AAR   
 Date Received: 01/25/19 Time: 10:00  
 Delivered by: FEDEX  
 Shuttle Custody Seals (Y/N): Y Time Zone: -10  
 Chest Temp(s): 3.0X3,2.5X2,2.0°C  
 Color: VOA/B-Red  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Libby Cheesebor  
 QC Report Type: DVP4DOD/EQUIS/HI  
 Due Date: 02/01/19

Comments:

PM: login and F1s to Margie.Pascua@aecom.com  
 AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms (LOQ/LOD database/DL)  
 8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.  
 TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections  
 RSK: Methane only; 8011: EDB only; \$87DC53W5: report phenol + TICs; \$87DMEEW5: 2-MEE (LCS Spk 80ppb).  
 TOC subbed out to ARI.  
 FR: HC to LDC, 2 labeled CDs to Margie Pascua.  
 EDD: AECOM EQUIS EDD 2.5.3 Red Hill 87DMEE->3535A to Margie.Pascua@aecom.com & jecklund@lab-data.com

Sample Distribution:

GC: 4-\$87DC53W5, 4-\$87DMEEW5, 4-\$DOC53W5LIQ, 4-\$SIM53LIQ51  
 Extractions: 4- LIQ003, 4- LIQ005SGC, 4- MWE2MEE  
 VOA: 7-\$86BTOTXDOD5W, 7-\$GASBL, 7-\$GRO86BW, 6-\$RSKMETH  
 Wetlab: 3-\$232W(HCO3,CO3,ALK), 3-\$300W(NO3,CL,SO4), 3-\$35FE, 3-\$35OF, 2-\$TOCDOCW

Charges:

Invoice To:

ACCOUNTS PAYABLE  
 1001 Bishop Street, Ste 1600  
 USAPImaging@aecom.com  
 mary.basano@aecom.com

Client ID	APPL ID	Sampled	Analyses Requested
1. ERH732	LCSD AZ85642W	01/24/19 08:15	\$86BTOTXDOD5W, \$GASBL, \$GRO86BW, \$RSKMETH
2. ERH733	MS/MSD/NoWL/RSK AZ85643W	01/24/19 08:45	\$232W(HCO3,CO3,ALK), \$300W(NO3,CL,SO4), \$35FE, \$35OF, \$86BTOTXDOD5W, \$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ, \$GASBL, \$GRO86BW, \$RSKMETH, \$SIM53LIQ51, \$TOCDOCW -- D&O: SGC analysis if detections

APPL - Analysis Request Form

87956

- 3. ERH734      AZ85644W      01/24/19 08:45      \$86BTOTXDOD5W, \$87DC53W5,  
LCSD       \$87DMEEW5, \$DOC53W5LIQ, \$GASBL,  
\$GRO86BW, \$SIM53LIQ51 -- D&O: SGC  
analysis if detections

---

- 4. ERH756      AZ85645W      01/23/19 13:20      \$86BTOTXDOD5W, \$GASBL, \$GRO86BW,  
LCSD       \$RSKMETH

---

- 5. ERH757      AZ85646W      01/23/19 15:25      \$232W(HCO3,CO3,ALK),  
LCSD       \$300W(NO3,CL,SO4), \$300WD(CL,SO4),  
\$35FE, \$35OF, \$86BTOTXDOD5W,  
\$87DC53W5, \$87DMEEW5, \$DOC53W5LIQ,  
\$GASBL, \$GRO86BW, \$RSKMETH,  
\$SIM53LIQ51, \$TOCDOCW -- D&O: SGC  
analysis if detections

---

- 6. ERH754      AZ85652W      01/24/19 12:08      \$86BTOTXDOD5W, \$GASBL, \$GRO86BW,  
LCSD       \$RSKMETH

---

- 7. ERH755      AZ85653W      01/24/19 12:40      \$232W(HCO3,CO3,ALK),  
LCSD       \$300W(NO3,CL,SO4), \$35FE, \$35OF,  
\$86BTOTXDOD5W, \$87DC53W5,  
\$87DMEEW5, \$DOC53W5LIQ, \$GASBL,  
\$GRO86BW, \$RSKMETH, \$SIM53LIQ51,  
\$TOCDOCW -- D&O: SGC analysis if  
detections

AMENDED PAGE

# APPL Sample Receipt Form

ARF# 87956

Sample	Container Type	Count	p
AZ85642	<sup>13</sup> VOAs - HCL	4	NA
AZ85643	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	8	NA
	<sup>17</sup> Amber Liter	15	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	6	NA
AZ85644	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85645	<sup>13</sup> VOAs - HCL	4	NA
AZ85646	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA
AZ85652	<sup>13</sup> VOAs - HCL	4	NA
AZ85653	<sup>3</sup> PL 250mL	1	NA
	<sup>10</sup> PL 250mL - H2SO4	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	5	NA
	<sup>32</sup> Clear VOA - H2SO4	10	NA
	<sup>38</sup> 250mL brn poly, HCl prsvd	1	1.7
	<sup>40</sup> 500mL Amber, unprsvd	2	NA

Sample    Container Type    Count    p



## Libby Cheeseborough

---

**From:** Pascua, Margie Fabian. <Margie.Pascua@aecom.com>  
**Sent:** Tuesday, January 29, 2019 5:42 PM  
**To:** Libby Cheeseborough  
**Subject:** RE: Red Hill 87956

**Categories:** Red Category

Hi Libby,

Can you please update the time for ERH732 (AZ85642W) to 08:15 in the login? The time field was blank in the COC.

Thank you,

Margie Pascua  
Environmental Scientist  
Environment, West Region, Pacific District  
Direct 808.356.5373

---

**From:** Libby Cheeseborough [<mailto:libby@applinc.com>]  
**Sent:** Saturday, January 26, 2019 11:13 AM  
**To:** Pascua, Margie Fabian.  
**Subject:** Red Hill 87956

Hi Margie,

Here is a log in for your review. Please let me know if there are any changes.

Thank you,  
Libby

Libby Cheeseborough  
Project Manager



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CHAIN OF CUSTODY RECORD

C.O.C. 021

87956

Report to: <u>PLEASE PRINT</u>	Invoice to: <u>PLEASE PRINT</u>
Company Name: <u>AECOM</u> Phone: <u>808-356-5373</u>	Company Name: <u>AECOM</u> Phone: <u>808-529-7249</u>
Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>	Address: <u>1001 Bishop St, Suite 1600</u> <u>Honolulu, HI 96813</u> Fax: <u>808-523-8950</u>
Attn: <u>Margie Pascua</u>	Attn: <u>Mary Basano</u>
Email: <u>margie.pascua@aecom.com</u>	Email: <u>mary.basano@aecom.com; usapimaging@aecom.com</u>

Project Name/Number CV18F0126 / 60571032	Sampler (Print)				No. of Containers	Matrix			Analysis Requested/Method Number														Date Shipped: <u>8/24/19</u>			
	Purchase Order Number 102604	Sampler (Signature)				Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	FSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	3610 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Solids	9060A TOC	Carrier: <u>FedEx</u>
Sample Identification	Location	Date Collected	Time Collected	Time Zone															Waybill No.:							
<u>ERH733</u>	<u>PHMW2254-01 dug</u>	<u>1/24/19</u>	<u>0845</u>	<u>HST</u>	<u>8</u>	<u>X</u>					<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>											<u>See other cooler for MS/MD: 8015, 8260, 8270, 8270 SIM</u>
<u>Deleted</u>														<u>4/24/19</u>												

Shuttle Temperature: <u>2.0, 3.0, 3.0, 2.5, 2.5, 3.0</u>	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>AECOM</u> <u>Danielle Henry</u>	Date: <u>1/24/19</u> Time: <u>4:30</u>	Received by: _____ Date: _____ Time: _____
Relinquished by: _____	Date: _____ Time: _____	Received at lab by: _____ Date: <u>1-23-19</u> Time: <u>1000</u>

See page 2 for Container Preservative and Sampling Information



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--	--

Project Name/Number CV18F0126 / 60571032	Sampler (Print)	Analysis Requested/Method Number										Date Shipped: <u>01/24/19</u>												
Purchase Order Number 102604	Sampler (Signature)	No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Argon, K, Ni	SM6500 Total & Dissolved Silica	9060A	TOC	Carrier: <u>FedEx</u>
Sample Identification	Location		Date Collected	Time Collected	Time Zone																			Waybill No.:
<u>EPH734</u>	<u>PHMW2254-01 day 2</u>	<u>1/24/19</u>	<u>0845</u>	<u>HST</u>	<u>7</u>	<u>X</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>												Comments: <u>See other codes for VOAs</u>
*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o & PAHs need liquid-liquid extraction.																								
Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____										Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)												
Relinquished by sampler: <u>AECOM</u> <u>Danielle Huang</u>		Date <u>1/24/19</u>	Time <u>1430</u>	Received by:			Relinquished by:			Date	Time	Received by:												
Relinquished by:		Date	Time	Received by:			Relinquished by:			Date <u>1-25-19</u>	Time <u>1000</u>	Received at lab by: 												

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--	--

Project Name/Number CV18F0126 / 60571032		Sampler (Print)			Analysis Requested/Method Number												Date Shipped: <u>01/24/19</u>								
Purchase Order Number 102604		Sampler (Signature)			No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate Sulfate, Chloride	300.0 Bromide/Fluoride	300.0 Total Ca/Mg/Mn/K/Na Sulfate Total & Dissolved Sulfate	9060A TOC	Carrier: <u>FedEx</u>
Sample Identification		Location		Date Collected		Time Collected		Time Zone																	Aq
<u>ERH 733</u>		<u>PHMWDST-01 day 2</u>		<u>1/24/19</u>		<u>0845</u>		<u>HST</u>		<u>8</u>	<u>X</u>														Comments: <u>See other cooler for MS/MSD: 8015, 8260, 8270, 8270SCM</u>
<div style="font-size: 2em; font-family: cursive;">             [Signature] 1/24/19           </div>																									
<small>*Analyze TPH w/SGT only if TPH-d/o detected. TPH-d/o &amp; PAHs need liquid-liquid extraction.</small>																									

Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____										Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)			
Relinquished by sampler: <u>AECOM</u> <u>Danielle Arany</u>		Date <u>1/24/19</u>	Time <u>1430</u>	Received by:						Relinquished by:			Date	Time	Received by:
Relinquished by:		Date	Time	Received by:						Relinquished by:			Date <u>1-25-19</u>	Time <u>1000</u>	Received at lab by: <u>[Signature]</u>

See page 2 for Container Preservative and Sampling Information



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--	--

Project Name/Number CV18F0126 / 60571032		Sampler (Print)					Analysis Requested/Method Number														Date Shipped: <u>01/24/19</u>							
Purchase Order Number 102604		Sampler (Signature)					No. of Containers	Matrix			8260C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	30.0 Total Ca, Mg, Mn, K, Ni	SM4500 Total & Dissolved Silica	9060A TOC	Carrier: <u>FedEx</u>
Sample Identification		Location		Date Collected	Time Collected	Time Zone		Aq	Sed.	Soil																	Waybill No.:	
ERH 756		BWDFMW01 - Trip Blank		1/23/19	1320	HST	4	X									X									Comments:		
ERH 757		OWDFMW01		1/23/19	1525	HST	24	X				X	X	X*	X	X	X	X	X	X	X				X			

Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____							Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)		
Relinquished by sampler: AECOM <u>Danielle Huang</u>		Date <u>1/24/19</u>	Time <u>1430</u>	Received by:			Relinquished by:	Date	Time	Received by:	
Relinquished by:		Date	Time	Received by:			Relinquished by:	Date <u>1-25-19</u>	Time <u>1000</u>	Received at lab by:	



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Report to: PLEASE PRINT  
 Company Name: AECOM Phone: 808-356-5373  
 Address: 1001 Bishop St, Suite 1600  
Honolulu, HI 96813 Fax: 808-523-8950  
 Attn: Margie Pascua  
 Email: margie.pascua@aecom.com

Invoice to: PLEASE PRINT  
 Company Name: AECOM Phone: 808-529-7249  
 Address: 1001 Bishop St, Suite 1600  
Honolulu, HI 96813 Fax: 808-523-8950  
 Attn: Mary Basano  
 Email: mary.basano@aecom.com; usapimaging@aecom.com

Project Name/Number CV18F0126 / 60571032		Sampler (Print)				No. of Containers	Matrix			Analysis Requested/Method Number															Date Shipped: <u>01/24/19</u>				
Purchase Order Number 102604		Sampler (Signature)					Aq	Sed.	Soil	8280C BTEX, TPH-g	8260C DCA	8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxyethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity	300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	5010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	9060A TOC	9060B TOC	Carrier: FedEx	
Sample Identification	Location	Date Collected	Time Collected	Time Zone																								Waybill No.:	Comments:
ERH 732	PHMW2254-01 - Trip day 2 Blank			HST	4	X			X								X												
ERH 733	PHMW2254-01 day 2	1/24/19	0845	HST	26	X			X	X	X*	X	X	X	X	X	X	X	X							X		see other coolers MS/MSD 8015, 9240, 9270, 9275 SIM	
ERH 734	PHMW2254-01 day 2	1/24/19	0845	HST	4	X			X																			see other cooler	
																													*Analyze TPH w/SGT only if TPH-d/o detected.
																													TPH-d/o & PAHs need liquid-liquid extraction.
Shuttle Temperature:		Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____										Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)																	
Relinquished by sampler: AECOM <i>Danielle Huang</i>		Date 1/24/19	Time 1430	Received by:			Relinquished by:			Date	Time	Received by:																	
Relinquished by:		Date	Time	Received by:			Relinquished by:			Date 1-25-19	Time 10-00	Received at lab by: <i>[Signature]</i>																	

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CHAIN OF CUSTODY RECORD

C.O.C. 011

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--	--

Project Name/Number CV18F0126 / 60571032	Sampler (Print)	Analysis Requested/Method Number															Date Shipped: <u>01/24/19</u>				
Purchase Order Number 102604	Sampler (Signature)	No. of Containers	Matrix			8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/SGT	8270DSIM PAHs short list	8270D Phenol, TICs	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate, Sulfate, Chloride	300.0 Bromide/Fluoride	8010 Total Ca, Mg, Mn, K, Na	SM4500 Total & Dissolved Silica	9060A TOC	Carrier: <u>FedEx</u>
Sample Identification	Location		Date Collected	Time Collected	Time Zone																Aq
<u>ERH 754</u>	<u>PHMWIO - Trip Blank</u>	<u>1/24/19</u>	<u>1208</u>	<u>HST</u>	<u>4</u>	<u>X</u>		<u>X</u>				<u>X</u>									
<u>ERH 755</u>	<u>PHMWIO</u>	<u>1/24/19</u>	<u>1240</u>	<u>HST</u>	<u>24</u>	<u>X</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<i>[Handwritten Signature]</i> <u>1/24/19</u>																					
Shuttle Temperature: <u>23.5</u> Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input checked="" type="checkbox"/> One week <input type="checkbox"/> 3 days <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____ Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)																					
Relinquished by sampler: <u>AECOM</u>		Date	Time	Received by:		Relinquished by:		Date	Time	Received by:											
<u>danielle huang</u>		<u>1/24/19</u>	<u>1530</u>																		
Relinquished by:		Date	Time	Received by:		Relinquished by:		Date	Time	Received at lab by:											

See page 2 for Container Preservative and Sampling Information

COOLER RECEIPT FORM

ARF: 87956

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 01/25/19

2) Coolers: Number of Coolers: 6

3) YES Were custody seals present and intact? How many? 12 Name/Date on seal? see below

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap popcorn foam X plastic bags other X wet ice dry ice no ice gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of certified NIST thermometer use R1

8) Cooler temp(s): In °C 1: 3.0°C x3 2: 2.5°C x2 3: 2.0°C 4: 5: 7: 8: 9: 10: 11:

Chain of custody:

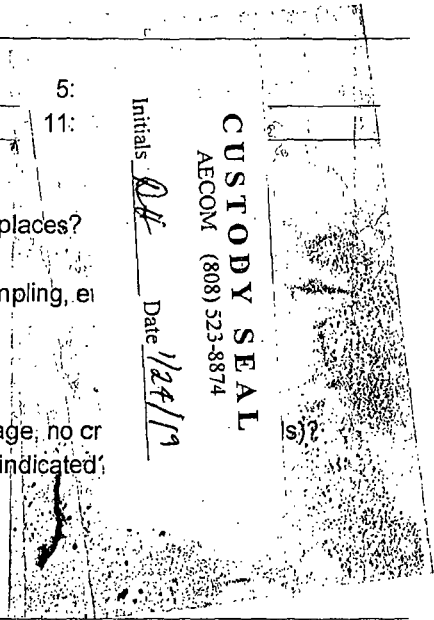
9) YES Was a chain of custody received? 10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc)? 12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags? 14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracks)? 15) YES Were correct containers and preservatives used for the tests indicated? 16) YES Was a sufficient amount of sample sent for tests indicated? 17) Yes Were bubbles present in volatile samples? If yes, the following were received with air bubbles: Larger than a pea: Smaller than a pea: AZ85642W01-4, AZ85645W01-4, AZ85652W01-4



Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples? 19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container? 20) Yes Was the pH of acid preserved non-VOA samples < 2? 21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide >9? 22) NO Were unpreserved VOA Vials received? 23) NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF? pH strip lot number: 90b2031 Lab notified if pH was not adequate:

Notes/Deficiencies:

Personnel receiving samples: ZG Second reviewer: [Signature] 1/25/19 Personnel labeling samples: ZG Project manager notified: ZG, AA Date/Time of notification 01/15/19 Name of client notified: Date/Time of notification

Revision: 22, November 5, 2013



## **SAMPLE RESULTS**

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH733**

**APPL ID: AZ85643**

Sample Collection Date: 01/24/19

QCG: #DOC53-190125A-237016

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	113	60-142			%	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	110	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M
Run #: 124062
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 12:40:37 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH734**

Sample Collection Date: 01/24/19

ARF: 87956

**APPL ID: AZ85644**

QCG: #DOC53-190125A-237016

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	115	60-142			%	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	109	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M
Run #: 124063
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 12:40:37 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH757**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85646**

QCG: #DOC53-190125A-237016

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-e	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	115	60-142			%	01/25/19	01/29/19
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	110	56-125			%	01/25/19	01/29/19

**AMENDED PAGE**

Quant Method: DOC0117.M  
Run #: 124064  
Instrument: Apollo  
Sequence: 190124  
Dilution Factor: 1  
Initials: DPO

# EPA 8015B TPH LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH755**

Sample Collection Date: 01/24/19

ARF: 87956

**APPL ID: AZ85653**

QCG: #DOC53-190125A-237016

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-eL	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
EPA 8015B-eL	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: OCTACOSANE (S)	147 #	60-142			%	01/25/19	01/29/19
EPA 8015B-eL	SURROGATE: ORTHO-TERPHENYL (S)	133 #	56-125			%	01/25/19	01/29/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: DOC0117.M
Run #: 124065
Instrument: Apollo
Sequence: 190124
Dilution Factor: 1
Initials: DPO

Printed: 01/30/19 12:40:37 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH733**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85643**

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	96.8	39-114			%	01/30/19	02/01/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	85.0	58-120			%	01/30/19	02/01/19

Quant Method: L0122.M
Run #: 0122L096
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

Printed: 02/04/19 3:15:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH734**

Sample Collection Date: 01/24/19

ARF: 87956

**APPL ID: AZ85644**

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	113	39-114			%	01/30/19	02/01/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	98.5	58-120			%	01/30/19	02/01/19

Quant Method: L0122.M  
Run #: 0122L097  
Instrument: Linus  
Sequence: L190122  
Dilution Factor: 1  
Initials: AAB

Printed: 02/04/19 3:15:22 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH757**

**APPL ID: AZ85646**

Sample Collection Date: 01/23/19

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	119 #	39-114			%	01/30/19	02/01/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	121 #	58-120			%	01/30/19	02/01/19

# = Recovery (or RPD) is outside QC limits.

Quant Method: L0122.M
Run #: 0122L098
Instrument: Linus
Sequence: L190122
Dilution Factor: 1
Initials: AAB

**AMENDED PAGE**

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*Printed: 03/04/19 1:28:53 PM*  
APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8270D SIM LIQ-LIQ

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH755**

**APPL ID: AZ85653**

Sample Collection Date: 01/24/19

QCG: #SIM53-190130A-237166

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	85.4	39-114			%	01/30/19	02/01/19
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	89.2	58-120			%	01/30/19	02/01/19

Quant Method: L0122.M  
Run #: 0122L099  
Instrument: Linus  
Sequence: L190122  
Dilution Factor: 1  
Initials: AAB

Printed: 02/04/19 3:15:23 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH733**

Sample Collection Date: 01/24/19

ARF: 87956

**APPL ID: AZ85643**

QCG: #87DC5-190130A-237158

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	110 T	TIC			ug/L	01/30/19	02/01/19
EPA 8270D	CYCLOPENTASILOXANE, DECAMETHY	15 T	TIC			ug/L	01/30/19	02/01/19
EPA 8270D	CYCLOTETRASILOXANE, OCTAMETHY	43 T	TIC			ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	188 #	43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	162 #	44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	94.5	19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	98.2	44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	70.4	10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	126	50-134			%	01/30/19	02/01/19

# = Recovery (or RPD) is outside QC limits.  
T = Tentatively identified compound.

Quant Method: Y0125NC.M
Run #: 0124Y108
Instrument: Yoda
Sequence: Y190124
Dilution Factor: 1
Initials: AAB

## AMENDED PAGE

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH734**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85644**

QCG: #87DC5-190130A-237158

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	3-PENTEN-2-ONE, 4-METHYL-	20 T	TIC			ug/L	01/30/19	02/01/19
EPA 8270D	HEXANEDIOIC ACID, DIOCTYL ESTER	19 T	TIC			ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	96.9	43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	86.8	44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	93.3	19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	95.2	44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	90.2	10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	83.0	50-134			%	01/30/19	02/01/19

T = Tentatively identified compound.

**AMENDED PAGE**

Quant Method: Y0125NC.M  
Run #: 0124Y109  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH757**

Sample Collection Date: 01/23/19

ARF: 87956

**APPL ID: AZ85646**

QCG: #87DC5-190130A-237158

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	BENZENESULFONAMIDE, N-ETHYL-4-	23 T	TIC			TIC ug/L	01/30/19	02/01/19
EPA 8270D	HEXANEDIOIC ACID, DIOCTYL ESTER	50 T	TIC			TIC ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	120	43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	106	44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	93.9	19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	99.5	44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	90.9	10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	107	50-134			%	01/30/19	02/01/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M
Run #: 0124Y110
Instrument: Yoda
Sequence: Y190124
Dilution Factor: 1
Initials: AAB

## AMENDED PAGE

# EPA 8270D WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH755**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85653**

QCG: #87DC5-190130A-237158

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PENTANEDIOIC ACID, DIMETHYL ESTE	24 T	TIC			ug/L	01/30/19	02/01/19
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	100	43-140			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROBIPHENYL (S)	90.6	44-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	96.8	19-119			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	101	44-120			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: PHENOL-D6 (S)	94.5	10-115			%	01/30/19	02/01/19
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	87.9	50-134			%	01/30/19	02/01/19

T = Tentatively identified compound.

Quant Method: Y0125NC.M  
Run #: 0124Y111  
Instrument: Yoda  
Sequence: Y190124  
Dilution Factor: 1  
Initials: AAB

## AMENDED PAGE

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH733**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85643**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y082  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 1:19:34 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH734**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85644**

QCG: #87DME-190128A-237008

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Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

---

Quant Method: YMEE1128.M
Run #: 1128Y083
Instrument: Yoda
Sequence: Y181128M
Dilution Factor: 1
Initials: AAB

Printed: 01/30/19 1:19:35 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH757**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85646**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/30/19

**AMENDED PAGE**

Quant Method: YMEE1128.M  
Run #: 1128Y097  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB



# EPA 8270D MODIFIED WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH755**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85653**

QCG: #87DME-190128A-237008

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y085  
Instrument: Yoda  
Sequence: Y181128M  
Dilution Factor: 1  
Initials: AAB

Printed: 01/30/19 1:56:08 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH732**  
Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956  
**APPL ID: AZ85642**  
QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	101	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	106	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	106	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	93.3	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M
Run #: 0128L34
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 02/04/19 9:52:52 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH733**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85643**

QCG: #86BTO-190130AL-237148

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/30/19	01/30/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/30/19	01/30/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/30/19	01/30/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/30/19	01/30/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	100	81-118			%	01/30/19	01/30/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	110	85-114			%	01/30/19	01/30/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	103	80-119			%	01/30/19	01/30/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	89.6	89-112			%	01/30/19	01/30/19

Quant Method: L0128W.M  
Run #: 0130L21  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:52:52 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH734**

**APPL ID: AZ85644**

Sample Collection Date: 01/24/19

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	101	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	108	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	102	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.0	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M  
Run #: 0128L35  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:52:52 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH756  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956  
APPL ID: AZ85645  
QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	93.4	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	99.1	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	94.6	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	92.8	89-112			%	01/29/19	01/29/19

**AMENDED PAGE**

Quant Method: L0128W.M  
Run #: 0128L23  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 03/04/19 1:28:53 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH757**

**APPL ID: AZ85646**

Sample Collection Date: 01/23/19

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	96.0	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	99.4	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	88.1 #	89-112			%	01/29/19	01/29/19

# = Recovery (or RPD) is outside QC limits.

**AMENDED PAGE**

Quant Method: L0128W.M
Run #: 0128L36
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

*Printed: 03/04/19 1:28:53 PM*  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH754**  
Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956  
**APPL ID: AZ85652**  
QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	99.4	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	102	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	95.6	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M
Run #: 0128L24
Instrument: Loki
Sequence: 190128
Dilution Factor: 1
Initials: KVA

Printed: 02/04/19 9:52:52 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B BTEX WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH755**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85653**

QCG: #86BTO-AL190128-237015

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	101	81-118			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	104	85-114			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	105	80-119			%	01/29/19	01/29/19
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	91.0	89-112			%	01/29/19	01/29/19

Quant Method: L0128W.M  
Run #: 0128L37  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:52:52 AM

APPL-F1-SC-NoMC-REG MDLs-DOD



# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH732**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85642**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	106	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L34  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:54:17 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

**EPA 8260B GRO WATER**

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH733**

**APPL ID: AZ85643**

Sample Collection Date: 01/24/19

QCG: #GRO86-190130AL1-23715

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/30/19	01/30/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	110	85-114			%	01/30/19	01/30/19

Quant Method: L0128W.M  
Run #: 0130L21  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:54:17 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH734**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85644**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	108	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L35  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:54:17 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956

**Sample ID: ERH756**

**APPL ID: AZ85645**

Sample Collection Date: 01/23/19

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	99.1	85-114			%	01/29/19	01/29/19

**AMENDED PAGE**

Quant Method: L0128SUR.M  
Run #: 0128L23  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH757

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

APPL ID: AZ85646

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19

**AMENDED PAGE**

Quant Method: L0128SUR.M  
Run #: 0128L36  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

# EPA 8260B GRO WATER

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH754**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85652**

QCG: #GRO86-AL190128-237022

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L24  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:54:17 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

**EPA 8260B GRO WATER**

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 87956  
APPL ID: **AZ85653**  
QCG: #GRO86-AL190128-237022

**Sample ID: ERH755**  
Sample Collection Date: 01/24/19

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	104	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L37  
Instrument: Loki  
Sequence: 190128  
Dilution Factor: 1  
Initials: KVA

Printed: 02/04/19 9:54:17 AM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH732**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85642**

QCG: #RSKME-190128B-236922

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012826  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:12:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD



# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH733**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85643**

QCG: #RSKME-190128B-236922

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012827  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:12:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH756**

Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85645**

QCG: #RSKME-190128B-236922

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

**AMENDED PAGE**

Quant Method: RSK0120.M  
Run #: 19012828  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 03/04/19 1:28:53 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH757**  
Sample Collection Date: 01/23/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956  
**APPL ID: AZ85646**  
QCG: #RSKME-190128B-236922

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

**AMENDED PAGE**

Quant Method: RSK0120.M  
Run #: 19012829  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH754**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85652**

QCG: #RSKME-190128B-236922

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012830  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:12:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

# METHANE

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

Attn: Margie Pascua  
Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH755**

Sample Collection Date: 01/24/19

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 87956

**APPL ID: AZ85653**

QCG: #RSKME-190128B-236922

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method: RSK0120.M  
Run #: 19012831  
Instrument: Rocky  
Sequence: 190120  
Dilution Factor: 1  
Initials: CMO

Printed: 01/28/19 12:12:19 PM  
APPL-F1-SC-NoMC-REG MDLs-DOD

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH733**

Sample Collection Date: 01/24/19

**APPL ID: AZ85643**

ARF: 87956

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	108	5.0	1.00	0.40	mg/L	5	01/28/19	01/28/19
EPA 300.0	NITRATE	2.2	0.5	0.18	0.04	mg/L	1	01/25/19	01/25/19
EPA 300.0	SULFATE	16.7	1.0	0.20	0.09	mg/L	1	01/25/19	01/25/19
EPA 353.2	NITRATE-NITRITE-N	0.52	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO3	58.7	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO3	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO3	58.7	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/25/19	01/25/19
SW846 9060A	TOTAL ORGANIC CARBON	0.48 J	0.93	0.350	0.130	mg/L	1	02/14/19	02/14/19

J = Estimated value.

Printed: 02/17/19 9:36:24 AM

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH757**

Sample Collection Date: 01/23/19

**APPL ID: AZ85646**

ARF: 87956

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	1110	50.0	10.00	4.00	mg/L	50	01/28/19	01/28/19
EPA 300.0	SULFATE	311	50.0	10.00	4.50	mg/L	50	01/28/19	01/28/19
EPA 300.0	NITRATE	6.6	0.5	0.18	0.04	mg/L	1	01/25/19	01/25/19
EPA 353.2	NITRATE-NITRITE-N	1.8	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	139	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	139	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/25/19	01/25/19
SW846 9060A	TOTAL ORGANIC CARBON	1.1	0.93	0.350	0.130	mg/L	1	02/14/19	02/14/19

**AMENDED PAGE**

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*Printed: 03/04/19 1:29:34 PM*

APPL-F1-SC-NoMC-REG MDLs

## Wet Lab Analysis

AECOM  
1001 Bishop Street, Suite 1600  
Honolulu, HI 96813

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Margie Pascua

Project: 60571032 CV18F0126 Red Hill Fuel Storage

**Sample ID: ERH755**

Sample Collection Date: 01/24/19

**APPL ID: AZ85653**

ARF: 87956

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	41.2	1.0	0.20	0.08	mg/L	1	01/25/19	01/25/19
EPA 300.0	NITRATE	1.7	0.5	0.18	0.04	mg/L	1	01/25/19	01/25/19
EPA 300.0	SULFATE	6.0	1.0	0.20	0.09	mg/L	1	01/25/19	01/25/19
EPA 353.2	NITRATE-NITRITE-N	0.38	0.10	0.100	0.028	mg/L	1	01/28/19	01/28/19
SM 2320B	BICARBONATE AS CaCO <sub>3</sub>	65.5	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	CARBONATE AS CaCO <sub>3</sub>	1.70 U	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM 2320B	TOTAL ALKALINITY AS CaCO <sub>3</sub>	65.5	2.0	1.70	0.85	mg/L	1	01/30/19	01/30/19
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	01/25/19	01/25/19
SW846 9060A	TOTAL ORGANIC CARBON	0.63 J	0.93	0.350	0.130	mg/L	1	02/20/19	02/20/19

J = Estimated value.

Printed: 02/21/19 9:53:30 AM

APPL-F1-SC-NoMC-REG MDLs



## **QC FORMS**

# EPA 8015B-eLL

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190125A-BLK	Blank	60-142	114		56-125	109	
190125A-LCS	Lab Control Spike	60-142	109		56-125	110	
190125A-LCSD	Lab Control SpikeD	60-142	114		56-125	105	
AZ85643-MS	Matrix Spike	60-142	108		56-125	107	
AZ85643-MSD	Matrix SpikeD	60-142	109		56-125	102	
AZ85643	ERH733	60-142	113		56-125	110	
AZ85644	ERH734	60-142	115		56-125	109	
AZ85646	ERH757	60-142	115		56-125	110	
AZ85653	ERH755	60-142	147	#	56-125	133	#

Comments: Batch: #DOC53-190125A

# = Recovery outside of Control Limits on Sample.

Printed: 01/30/19 12:40:52 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8015B-eL

Form 4

## Blank Summary

Lab Name: APPL, Inc.  
Case No: 87956  
Matrix: WATER  
Blank ID: 190125A-BLK

SDG No: 87956  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Time Analyzed: 1220

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125A-BLK	Blank	124048	01/29/19 1220
190125A-LCS	Lab Control Spike	124049	01/29/19 1240
190125A-LCSD	Lab Control SpikeD	124050	01/29/19 1300
190125A-MS	Matrix Spike	124059	01/29/19 1600
190125A-MSD	Matrix SpikeD	124060	01/29/19 1620
AZ85643	ERH733	124062	01/29/19 1701
AZ85644	ERH734	124063	01/29/19 1721
AZ85646	ERH757	124064	01/29/19 1740
AZ85653	ERH755	124065	01/29/19 1800

Comments: Batch: #DOC53-190125A

Printed: 01/30/19 12:40:44 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8015B TPH LIQ-LIQ**

Blank Name/QCG: **190125W-85562 - 237016**  
Batch ID: #DOC53-190125A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	25.00 U	40.0	25.00	13.07	ug/L	01/25/19	01/29/19
BLANK	OIL (C24-C40)	40.00 U	40.0	40.00	5.54	ug/L	01/25/19	01/29/19
BLANK	SURROGATE: OCTACOSANE (S)	114	60-142			%	01/25/19	01/29/19
BLANK	SURROGATE: ORTHO-TERPHEN	109	56-125			%	01/25/19	01/29/19

Quant Method: DOC0117.M  
Run #: 124048  
Instrument: Apollo  
Sequence: 190124  
Initials: DPO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 12:40:54 PM

# EPA 8015B-eL

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Apollo

LCS ID: 190125A-LCS

Time Analyzed: 1240

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190125A-BLK	Blank	124048	01/29/19 1220
190125A-LCS	Lab Control Spike	124049	01/29/19 1240
190125A-LCSD	Lab Control SpikeD	124050	01/29/19 1300
190125A-MS	Matrix Spike	124059	01/29/19 1600
190125A-MSD	Matrix SpikeD	124060	01/29/19 1620
AZ85643	ERH733	124062	01/29/19 1701
AZ85644	ERH734	124063	01/29/19 1721
AZ85646	ERH757	124064	01/29/19 1740
AZ85653	ERH755	124065	01/29/19 1800

Comments: Batch: #DOC53-190125A

Printed: 01/30/19 12:40:40 PM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8015B TPH LIQ-LIQ

APPL ID: 190125W-85562 LCS - 237016  
 Batch ID: #DOC53-190125A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1280	1260	102	101	36-132	1.6	30
OIL (C24-C40)	1250	1360	1210	109	96.8	41-113	11.7	30
SURROGATE: OCTACOSANE (S)	75.0	82.0	85.7	109	114	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	82.8	79.1	110	105	56-125		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Apollo	Apollo
Run :	124049	124050
Initials :	DPO	

## Matrix Spike Recoveries

### EPA 8015B TPH LIQ-LIQ

APPL ID: 190125W-85643 MS - 237016  
 Batch ID: #DOC53-190125A  
 Sample ID: AZ85643  
 Client ID: ERH733

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	ND	1260	1270	101	102	36-132	0.79	30
OIL (C24-C40)	1250	ND	1350	1320	108	106	41-113	2.2	30
SURROGATE: OCTACOSANE (S)	75.0	NA	80.9	81.9	108	109	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	NA	80.6	76.5	107	102	56-125		

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	DOC0117.M	DOC0117.M
Extraction Date :	01/25/19	01/25/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Apollo	Apollo
Run :	124059	124060
Initials :	DPO	

Printed: 01/30/19 12:40:45 PM  
 APPL MSD SCII

# 8270D-SIM

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	39-114	101		58-120	96.6	
190130A-LCS	Lab Control Spike	39-114	110		58-120	93.6	
190130A-LCSD	Lab Control Spiked	39-114	112		58-120	97.6	
AZ85643-MS	Matrix Spike	39-114	86.4		58-120	93.0	
AZ85643-MSD	Matrix Spiked	39-114	89.9		58-120	90.9	
AZ85643	ERH733	39-114	96.8		58-120	85.0	
AZ85644	ERH734	39-114	113		58-120	98.5	
AZ85646	ERH757	39-114	119	#	58-120	121	#
AZ85653	ERH755	39-114	85.4		58-120	89.2	

Comments: Batch: #SIM53-190130A

# = Recovery outside of Control Limits on Sample.

Printed: 02/04/19 3:15:08 PM  
Form 2 & 8, Surrogate Recovery Summary



# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Linus

Blank ID: 190130A-BLK

Time Analyzed: 1251

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	0122L084	02/01/19 1251
190130A-LCS	Lab Control Spike	0122L085	02/01/19 1313
190130A-LCSD	Lab Control SpikeD	0122L086	02/01/19 1335
190130A-MS	Matrix Spike	0122L094	02/01/19 1831
190130A-MSD	Matrix SpikeD	0122L095	02/01/19 1854
AZ85643	ERH733	0122L096	02/01/19 1916
AZ85644	ERH734	0122L097	02/01/19 1938
AZ85646	ERH757	0122L098	02/01/19 2001
AZ85653	ERH755	0122L099	02/01/19 2023

Comments: Batch: #SIM53-190130A

Printed: 02/04/19 3:15:04 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D SIM LIQ-LIQ**

Blank Name/QCG: **190130W-85562 - 237166**  
Batch ID: #SIM53-190130A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	01/30/19	02/01/19
BLANK	SURROGATE: 2-METHYLNAPHT	101	39-114			%	01/30/19	02/01/19
BLANK	SURROGATE: FLUORANTHENE-	96.6	58-120			%	01/30/19	02/01/19

Quant Method: L0122.M  
Run #: 0122L084  
Instrument: Linus  
Sequence: L190122  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 3:15:26 PM

# 8270D-SIM

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Linus

LCS ID: 190130A-LCS

Time Analyzed: 1313

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	0122L084	02/01/19 1251
190130A-LCS	Lab Control Spike	0122L085	02/01/19 1313
190130A-LCSD	Lab Control SpikeD	0122L086	02/01/19 1335
190130A-MS	Matrix Spike	0122L094	02/01/19 1831
190130A-MSD	Matrix SpikeD	0122L095	02/01/19 1854
AZ85643	ERH733	0122L096	02/01/19 1916
AZ85644	ERH734	0122L097	02/01/19 1938
AZ85646	ERH757	0122L098	02/01/19 2001
AZ85653	ERH755	0122L099	02/01/19 2023

Comments: Batch: #SIM53-190130A

Printed: 02/04/19 3:15:00 PM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8270D SIM LIQ-LIQ**

APPL ID: 190130W-85562 LCS - 237166  
 Batch ID: #SIM53-190130A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	6.34	6.29	101	101	41-115	0.79	20
2-METHYLNAPHTHALENE	6.25	6.28	6.45	100	103	39-114	2.7	20
NAPHTHALENE	6.25	6.00	6.17	96.0	98.7	43-114	2.8	20
-----								
SURROGATE: 2-METHYLNAPHTHALEN	6.25	6.85	6.98	110	112	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	5.85	6.10	93.6	97.6	58-120		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0122.M	L0122.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Linus	Linus
Run :	0122L085	0122L086
Initials :	AAB	

## Matrix Spike Recoveries

### EPA 8270D SIM LIQ-LIQ

APPL ID: **190130W-85643 MS - 237166**  
 Batch ID: #SIM53-190130A  
 Sample ID: AZ85643  
 Client ID: ERH733

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	ND	4.92	5.10	78.7	81.6	41-115	3.6	20
2-METHYLNAPHTHALENE	6.25	ND	4.92	5.15	78.7	82.4	39-114	4.6	20
NAPHTHALENE	6.25	ND	4.73	4.93	75.7	78.9	43-114	4.1	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	NA	5.40	5.62	86.4	89.9	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	NA	5.81	5.68	93.0	90.9	58-120		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0122.M	L0122.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Linus	Linus
Run :	0122L094	0122L095
Initials :	AAB	

Printed: 02/04/19 3:15:13 PM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0122L002.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Linus  
Time Analyzed: 9:21

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.1 SIM 01/18/19	0122L003.D	01/22/19 9:37
2	0.2 SIM 01/18/19	0122L004.D	01/22/19 9:59
3	0.5 SIM 01/18/19	0122L005.D	01/22/19 10:21
4	1 SIM 01/18/19	0122L006.D	01/22/19 10:43
5	5 SIM 01/18/19	0122L007.D	01/22/19 11:30
6	10 SIM 01/18/19	0122L008.D	01/22/19 11:53
7	50 SIM 01/18/19	0122L009.D	01/22/19 12:15
8	100 SIM 01/18/19	0122L010.D	01/22/19 12:37
9	SS SIM 01/18/19	0122L011.D	01/22/19 12:59
10			
11			
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21			
22			

m/e

51 9.95 - 80% of mass 198	<u>52.3</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.8</u>
127 10 - 80% of mass 198	<u>58.6</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>22.8</u>
365 1 - 100% of mass 198	<u>3.3</u>
441 0.01 - 24% of mass 442	<u>16.7</u>
442 50 - 150% of mass 198	<u>68.2</u>
443 15 - 24% of mass 442	<u>19.2</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 0122L080.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 02/01/19  
 Instrument: Linus  
 Time Analyzed: 8:11

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	5 SIM 01/18/19	0122L081.D	02/01/19 8:27
2	Blank	190130A Bk 1/800	0122L084.D
3	Lab Control Spike	190130A LCS-1 1/800	0122L085.D
4	Lab Control SpikeD	190130A LCSD-1 1/800	0122L086.D
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80% of mass 198	<u>49.6</u>
68 0 - 2.05% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.6</u>
127 10 - 80% of mass 198	<u>53.4</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.8</u>
275 10 - 60% of mass 198	<u>21.5</u>
365 1 - 100% of mass 198	<u>2.7</u>
441 0.01 - 24% of mass 442	<u>17.2</u>
442 50 - 150% of mass 198	<u>70.5</u>
443 15 - 24% of mass 442	<u>19.0</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87956  
Matrix: Water  
ID: 0122L087.D

SDG No: 87956  
Date Analyzed: 02/01/19  
Instrument: Linus  
Time Analyzed: 15:16

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 01/18/19	0122L088.D	02/01/19 15:32
2		AZ85643W35 MS-2 1/80	0122L094.D	02/01/19 18:31
3		AZ85643W30 MSD-2 1/8	0122L095.D	02/01/19 18:54
4	ERH733	AZ85643W32 1/800	0122L096.D	02/01/19 19:16
5	ERH734	AZ85644W07 1/800	0122L097.D	02/01/19 19:38
6	ERH757	AZ85646W21 1/800	0122L098.D	02/01/19 20:01
7	ERH755	AZ85653W20 1/800	0122L099.D	02/01/19 20:23
8		5 SIM 01/18/19 (1)	0122L103.D	02/01/19 21:52
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

51 9.95 - 80% of mass 198	57.2
68 0 - 2.05% of mass 69	0.0
70 0 - 2% of mass 69	0.6
127 10 - 80% of mass 198	59.3
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.6
275 10 - 60% of mass 198	20.9
365 1 - 100% of mass 198	2.7
441 0.01 - 24% of mass 442	17.4
442 50 - 150% of mass 198	61.4
443 15 - 24% of mass 442	21.1



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 0122L081.D Date Analyzed: 1 Feb 19 8:27  
 Instrument ID: Linus Time Analyzed: 1 Feb 19 8:27  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD		20177		4.03		9030		6.06	
UPPER LIMIT		40354		4.20		18060		6.23	
LOWER LIMIT		10089		3.86		4515		5.89	
SAMPLE									
NO.									
01	190130A BIK 1/800	17323		4.03		8262		6.06	
02	190130A LCS-1 1/800	16459		4.03		8259		6.06	
03	190130A LCSD-1 1/800	15802		4.03		7807		6.06	
04	5 SIM 01/18/19	21775		4.03		9726		6.06	
05	AZ85643W35 MS-2 1/800	22398		4.05		10064		6.06	
06	AZ85643W30 MSD-2 1/800	22003		4.03		10048		6.06	
07	AZ85643W32 1/800	19222		4.03		5159		6.06	
08	AZ85644W07 1/800	19626		4.03		9095		6.06	
09	AZ85646W21 1/800	17131		4.03		7898		6.06	
10	AZ85653W20 1/800	23811		4.05		10634		6.06	
11	5 SIM 01/18/19 (1)	38045		4.05		16950		6.06	
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 0122L081.D Date Analyzed: 1 Feb 19 8:27  
 Instrument ID: Linus Time Analyzed: 1 Feb 19 8:27  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	25878	10.89	25566	13.28		
	UPPER LIMIT	51756	11.06	51132	13.45		
	LOWER LIMIT	12939	10.72	12783	13.11		
	SAMPLE NO.						
01	190130A BIK 1/800	25466	10.90	25914	13.29		
02	190130A LCS-1 1/800	24439	10.89	25760	13.28		
03	190130A LCSD-1 1/800	27968	10.89	18922	13.28		
04	5 SIM 01/18/19	28633	10.89	25493	13.29		
05	AZ85643W35 MS-2 1/800	29972	10.89	29164	13.28		
06	AZ85643W30 MSD-2 1/800	27881	10.89	23918	13.28		
07	AZ85643W32 1/800	19644	10.90	1934 *	13.32		*
08	AZ85644W07 1/800	28231	10.89	24552	13.29		
09	AZ85646W21 1/800	23550	10.90	21125	13.29		
10	AZ85653W20 1/800	28978	10.90	28139	13.29		
11	5 SIM 01/18/19 (1)	47162	10.89	45173	13.28		
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

\* Not associated with target analytes. HA 2/15/19

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

**EPA 8270D**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87956  
Matrix: WATER

SDG No: 87956  
Date Analyzed: 02/01/19  
Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	43-140	115		44-119	103	
190130A-LCS	Lab Control Spike	43-140	92.8		44-119	77.8	
190130A-LCSD	Lab Control SpikeD	43-140	95.2		44-119	80.8	
AZ85643-MS	Matrix Spike	43-140	102		44-119	87.2	
AZ85643-MSD	Matrix SpikeD	43-140	92.4		44-119	80.8	
AZ85643	ERH733	43-140	188	#	44-119	162	#
AZ85644	ERH734	43-140	96.9		44-119	86.8	
AZ85646	ERH757	43-140	120		44-119	106	
AZ85653	ERH755	43-140	100		44-119	90.6	

Comments: Batch: #87DC5-190130A  
# = Recovery outside of Control Limits on Sample.

Printed: 02/04/19 3:17:49 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	19-119	91.1		44-120	97.8	
190130A-LCS	Lab Control Spike	19-119	72.0		44-120	75.5	
190130A-LCSD	Lab Control SpikeD	19-119	73.6		44-120	77.5	
AZ85643-MS	Matrix Spike	19-119	79.2		44-120	81.6	
AZ85643-MSD	Matrix SpikeD	19-119	77.2		44-120	77.5	
AZ85643	ERH733	19-119	94.5		44-120	98.2	
AZ85644	ERH734	19-119	93.3		44-120	95.2	
AZ85646	ERH757	19-119	93.9		44-120	99.5	
AZ85653	ERH755	19-119	96.8		44-120	101	

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 3:17:50 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130A-BLK	Blank	10-115	88.0		50-134	107	
190130A-LCS	Lab Control Spike	10-115	70.8		50-134	80.8	
190130A-LCSD	Lab Control SpikeD	10-115	73.2		50-134	86.4	
AZ85643-MS	Matrix Spike	10-115	74.8		50-134	89.6	
AZ85643-MSD	Matrix SpikeD	10-115	78.4		50-134	84.8	
AZ85643	ERH733	10-115	70.4		50-134	126	
AZ85644	ERH734	10-115	90.2		50-134	83.0	
AZ85646	ERH757	10-115	90.9		50-134	107	
AZ85653	ERH755	10-115	94.5		50-134	87.9	

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 3:17:50 PM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190130A-BLK

Time Analyzed: 1619

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190130A-BLK	Blank	0124Y098	02/01/19 1619
190130A-LCS	Lab Control Spike	0124Y099	02/01/19 1647
190130A-LCSD	Lab Control SpikeD	0124Y100	02/01/19 1714
190130A-MS	Matrix Spike	0124Y106	02/01/19 2001
190130A-MSD	Matrix SpikeD	0124Y107	02/01/19 2029
AZ85643	ERH733	0124Y108	02/01/19 2057
AZ85644	ERH734	0124Y109	02/01/19 2125
AZ85646	ERH757	0124Y110	02/01/19 2153
AZ85653	ERH755	0124Y111	02/01/19 2221

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 3:17:43 PM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8270D WATER**

Blank Name/QCG: **190130W-85562 - 237158**  
Batch ID: #87DC5-190130A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	01/30/19	02/01/19
BLANK	SURROGATE: 2,4,6-TRIBROMOP	115	43-140			%	01/30/19	02/01/19
BLANK	SURROGATE: 2-FLUORBIPHENY	103	44-119			%	01/30/19	02/01/19
BLANK	SURROGATE: 2-FLUOROPHENO	91.1	19-119			%	01/30/19	02/01/19
BLANK	SURROGATE: NITROBENZENE-	97.8	44-120			%	01/30/19	02/01/19
BLANK	SURROGATE: PHENOL-D6 (S)	88.0	10-115			%	01/30/19	02/01/19
BLANK	SURROGATE: TERPHENYL-D14 (	107	50-134			%	01/30/19	02/01/19

Quant Method: Y0125NC.M  
Run #: 0124Y098  
Instrument: Yoda  
Sequence: Y190124  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 3:18:09 PM

# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190130A-LCS

Time Analyzed: 1647

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190130A-BLK	Blank	0124Y098	02/01/19 1619
190130A-LCS	Lab Control Spike	0124Y099	02/01/19 1647
190130A-LCSD	Lab Control SpikeD	0124Y100	02/01/19 1714
190130A-MS	Matrix Spike	0124Y106	02/01/19 2001
190130A-MSD	Matrix Spiked	0124Y107	02/01/19 2029
AZ85643	ERH733	0124Y108	02/01/19 2057
AZ85644	ERH734	0124Y109	02/01/19 2125
AZ85646	ERH757	0124Y110	02/01/19 2153
AZ85653	ERH755	0124Y111	02/01/19 2221

Comments: Batch: #87DC5-190130A

Printed: 02/04/19 3:17:39 PM  
Form 4, LCS Summary



## Laboratory Control Spike Recoveries

### EPA 8270D WATER

APPL ID: **190130W-85562 LCS - 237158**  
 Batch ID: #87DC5-190130A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	37.4	38.7	59.8	61.9	10-115	3.4	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	232	238	92.8	95.2	43-140		
SURROGATE: 2-FLUOROBIPHENYL (S)	125	97.3	101	77.8	80.8	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	180	184	72.0	73.6	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	94.4	96.9	75.5	77.5	44-120		
SURROGATE: PHENOL-D6 (S)	250	177	183	70.8	73.2	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	101	108	80.8	86.4	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	0124Y099	0124Y100
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D WATER

APPL ID: 190130W-85643 MS - 237158  
 Batch ID: #87DC5-190130A  
 Sample ID: AZ85643  
 Client ID: ERH733

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	ND	40.5	42.0	64.8	67.2	10-115	3.6	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	NA	255	231	102	92.4	43-140		
SURROGATE: 2-FLUOROBIPHENYL (S)	125	NA	109	101	87.2	80.8	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	NA	198	193	79.2	77.2	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	NA	102	96.9	81.6	77.5	44-120		
SURROGATE: PHENOL-D6 (S)	250	NA	187	196	74.8	78.4	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	NA	112	106	89.6	84.8	50-134		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	Y0125NC.M	Y0125NC.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	0124Y106	0124Y107
Initials :	AAB	

Printed: 02/04/19 3:17:54 PM  
 APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Soil  
 ID: 0124Y014.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/25/19  
 Instrument: Yoda  
 Time Analyzed: 7:05

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/mL 8270 01/24/	0124Y015.D	01/25/19 7:20
2	4ug/mL 8270 01/24/1	0124Y016.D	01/25/19 9:53
3	5ug/mL 8270 01/24/1	0124Y017.D	01/25/19 10:21
4	10ug/mL 8270 01/24/	0124Y018.D	01/25/19 10:49
5	40ug/mL 8270 01/24/	0124Y020.D	01/25/19 11:44
6	60ug/mL 8270 01/24/	0124Y021.D	01/25/19 12:11
7	80ug/mL 8270 01/24/	0124Y022.D	01/25/19 12:39
8	100ug/mL 8270 01/24	0124Y023.D	01/25/19 13:07
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 10 - 80% of mass 198	<u>38.0</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.2</u>
127 10 - 80% of mass 198	<u>52.7</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>26.4</u>
365 1 - 100% of mass 198	<u>3.2</u>
441 0.01 - 24% of mass 442	<u>16.3</u>
442 50 - 150% of mass 198	<u>96.4</u>
443 17 - 23% of mass 442	<u>19.1</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Soil  
 ID: 0124Y030.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 01/28/19  
 Instrument: Yoda  
 Time Analyzed: 11:49

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	20ug/mL 8270 01/24/	0124Y033.D	01/28/19 13:36
2	SS-8270 01/24/19	0124Y034.D	01/28/19 14:11
3			
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7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>36.7</u>
68 0 - 2% of mass 69	<u>0.0</u>
70 0 - 2% of mass 69	<u>0.5</u>
127 10 - 80% of mass 198	<u>51.8</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.7</u>
275 10 - 60% of mass 198	<u>26.6</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>10.6</u>
442 50 - 150% of mass 198	<u>104.5</u>
443 15 - 24% of mass 442	<u>19.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87956  
Matrix: Water  
ID: 0124Y094.D

SDG No: 87956  
Date Analyzed: 02/01/19  
Instrument: Yoda  
Time Analyzed: 13:23

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/mL 8270 01/24/	0124Y095.D	02/01/19 13:38
2	Blank	190130A Blk 1/800	0124Y098.D
3	Lab Control Spike	190130A LCS-1 1/800	0124Y099.D
4	Lab Control SpikeD	190130A LCSD-1 1/800	0124Y100.D
5		AZ85643W33 MS-1 1/80	0124Y106.D
6		AZ85643W34 MSD-1 1/8	0124Y107.D
7	ERH733	AZ85643W32 1/800	0124Y108.D
8	ERH734	AZ85644W07 1/800	0124Y109.D
9	ERH757	AZ85646W21 1/800	0124Y110.D
10	ERH755	AZ85653W20 1/800	0124Y111.D
11		50ug/mL 8270 01/24/	0124Y115.D
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	33.4
68 0 - 2% of mass 69	0.0
70 0 - 2% of mass 69	0.6
127 10 - 80% of mass 198	49.6
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.7
275 10 - 60% of mass 198	28.3
365 1 - 100% of mass 198	3.4
441 0.01 - 24% of mass 442	16.1
442 50 - 150% of mass 198	115.1
443 15 - 24% of mass 442	18.9

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 0124Y095.D Date Analyzed: 1 Feb 19 13:38  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 13:38  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)			
		AREA	#	RT	#	AREA	#	RT	#
12 HOUR STD		416513		5.46		1765190		6.90	
UPPER LIMIT		833026		5.63		3530380		7.07	
LOWER LIMIT		208257		5.29		882595		6.73	
SAMPLE NO.									
01	190130A Blk 1/800	407906		5.46		1730020		6.90	
02	190130A LCS-1 1/800	511564		5.47		2139040		6.91	
03	190130A LCSD-1 1/800	493547		5.47		2051250		6.91	
04	AZ85643W33 MS-1 1/800	489488		5.47		2058320		6.91	
05	AZ85643W34 MSD-1 1/800	484237		5.47		2132840		6.91	
06	AZ85643W32 1/800	418016		5.47		1757140		6.90	
07	AZ85644W07 1/800	409099		5.46		1781370		6.90	
08	AZ85646W21 1/800	434608		5.46		1823770		6.90	
09	AZ85653W20 1/800	405613		5.47		1746490		6.90	
10	50ug/mL 8270 01/24/19	496552		5.47		2165400		6.90	
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 0124Y095.D Date Analyzed: 1 Feb 19 13:38  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 13:38  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12 HOUR STD	1903140	10.66	1732950	13.75	1699590	15.63	
UPPER LIMIT	3806280	10.83	3465900	13.92	3399180	15.80	
LOWER LIMIT	951570	10.49	866475	13.58	849795	15.46	
SAMPLE NO.							
01	190130A Blk 1/800	1761480	10.66	1559810	13.75	1513970	15.63
02	190130A LCS-1 1/800	2179020	10.66	1955930	13.76	1751730	15.63
03	190130A LCSD-1 1/800	2061300	10.66	1805530	13.76	1080610	15.63
04	AZ85643W33 MS-1 1/800	2115840	10.66	1821680	13.76	1247360	15.63
05	AZ85643W34 MSD-1 1/800	2200970	10.66	1941660	13.76	1920700	15.63
06	AZ85643W32 1/800	1717010	10.66	1315980	13.75	32061 *	15.65 *
07	AZ85644W07 1/800	2204890	10.66	1984120	13.75	1768330	15.64
08	AZ85646W21 1/800	1850040	10.66	1628410	13.75	1434620	15.63
09	AZ85653W20 1/800	2195030	10.66	1964120	13.75	1808190	15.63
10	50ug/mL 8270 01/24/19	2389880	10.66	2082070	13.76	2039770	15.64
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

*\* Not associated with target analyte. NA 2/15/19*

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8270D

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Yoda

Blank ID: 190128A-BLK

Time Analyzed: 2036

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-MS	Matrix Spike	1128Y080	01/29/19 1814
190128A-MSD	Matrix Spiked	1128Y081	01/29/19 1838
AZ85643	ERH733	1128Y082	01/29/19 1902
AZ85644	ERH734	1128Y083	01/29/19 1925
AZ85653	ERH755	1128Y085	01/29/19 2013
AZ85646	ERH757	1128Y097	01/30/19 1004

Comments: Batch: #87DME-190128A

Printed: 02/04/19 11:54:26 AM  
Form 4, Blank Summary



**Method Blank**  
**EPA 8270D MODIFIED WATER**

Blank Name/QCG: **190128W-85562 - 237008**  
Batch ID: #87DME-190128A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	01/28/19	01/29/19

Quant Method: YMEE1128.M  
Run #: 1128Y086  
Instrument: Yoda  
Sequence: Y181128M  
Initials: AAB

GC SC-Blank-REG MDLs-DOD  
Printed: 01/30/19 1:19:34 PM

# EPA 8270D

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/01/19

Matrix: WATER

Instrument: Yoda

LCS ID: 190128A-LCS

Time Analyzed: 0956

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A-MS	Matrix Spike	1128Y080	01/29/19 1814
190128A-MSD	Matrix Spiked	1128Y081	01/29/19 1838
AZ85643	ERH733	1128Y082	01/29/19 1902
AZ85644	ERH734	1128Y083	01/29/19 1925
AZ85653	ERH755	1128Y085	01/29/19 2013
AZ85646	ERH757	1128Y097	01/30/19 1004

Comments: Batch: #87DME-190128A

Printed: 02/04/19 11:54:09 AM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8270D MODIFIED WATER**

APPL ID: 190128W-85562 LCS - 237008  
 Batch ID: #87DME-190128A

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	88.7	58.5	111	73.1	30-130	41.0 #	20

# = Recovery is outside QC limits.

Comments:

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	02/01/19	02/01/19
Instrument :	Yoda	Yoda
Run :	1128Y102	1128Y103
Initials :	AAB	

# Matrix Spike Recoveries

## EPA 8270D MODIFIED WATER

APPL ID: 190128W-85643 MS - 237008  
 Batch ID: #87DME-190128A  
 Sample ID: AZ85643  
 Client ID: ERH733

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	ND	68.8	52.3	86.0	65.4	30-130	27.3 #	20

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	YMEE1128.M	YMEE1128.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/29/19	01/29/19
Instrument :	Yoda	Yoda
Run :	1128Y080	1128Y081
Initials :	AAB	

Printed: 01/30/19 1:19:53 PM

APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: \_\_\_\_\_  
 Matrix: Water  
 ID: 1128Y002.D

SDG No: \_\_\_\_\_  
 Date Analyzed: 11/28/18  
 Instrument: Yoda  
 Time Analyzed: 7:30

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/ml MEE 08/01/18	1128Y004.D	11/28/18 8:08
2	100ug/ml MEE 08/01/1	1128Y005.D	11/28/18 8:32
3	200ug/ml MEE 08/01/1	1128Y006.D	11/28/18 8:55
4	400ug/ml MEE 08/01/1	1128Y007.D	11/28/18 9:19
5	600ug/ml MEE 08/01/1	1128Y008.D	11/28/18 9:43
6	800ug/ml MEE 08/01/1	1128Y009.D	11/28/18 10:06
7	1000ug/ml MEE 08/01/	1128Y010.D	11/28/18 10:30
8	500ug/ml MEE 08/01/1	1128Y012.D	11/28/18 11:17
9	SS ug/ml MEE 08/01/1	1128Y014.D	11/28/18 12:26
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>37.6</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.4</u>
127 10 - 80% of mass 198	<u>49.3</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.6</u>
275 10 - 60% of mass 198	<u>27.6</u>
365 1 - 100% of mass 198	<u>3.7</u>
441 0.01 - 24% of mass 442	<u>15.6</u>
442 50 - 150% of mass 198	<u>104.9</u>
443 15 - 24% of mass 442	<u>19.5</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87956  
Matrix: Water  
ID: 1128Y056.D

SDG No: 87956  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Time Analyzed: 8:36

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	500ug/mL mee 12/12/1	1128Y057.D	01/29/19 8:51
2	AZ85643W23 MS-1 2/50	1128Y080.D	01/29/19 18:14
3	AZ85643W25 MSD-1 2/5	1128Y081.D	01/29/19 18:38
4 ERH733	AZ85643W26 2/500	1128Y082.D	01/29/19 19:02
5 ERH734	AZ85644W06 2/500	1128Y083.D	01/29/19 19:25
6 Blank	190128A BLK 2/500	1128Y086.D	01/29/19 20:36
7	500ug/ml MEE 12/19/1	1128Y088.D	01/29/19 21:24
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	35.4
68 0 - 2.04% of mass 69	0.0
70 0 - 2.04% of mass 69	0.6
127 10 - 80% of mass 198	50.5
197 0 - 2% of mass 198	0.0
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	6.9
275 10 - 60% of mass 198	26.7
365 1 - 100% of mass 198	3.4
441 0.01 - 24% of mass 442	16.9
442 50 - 150% of mass 198	103.1
443 15 - 24% of mass 442	19.9

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 1128Y100.D

SDG No: \_\_\_\_\_  
Date Analyzed: 02/01/19  
Instrument: Yoda  
Time Analyzed: 9:17

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	500ug/ml MEE 12/19/1	1128Y101.D	02/01/19 9:32
2	Lab Control Spike	190128A LCS-1 2/500	1128Y102.D
3	Lab Control SpikeD	190128A LCSD-1 2/500	1128Y103.D
4	500ug/ml MEE 12/19/1	1128Y104.D	02/01/19 10:44
5			
6			
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8			
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11			
12			
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14			
15			
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17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>34.6</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>49.0</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.9</u>
275 10 - 60% of mass 198	<u>27.4</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>10.5</u>
442 50 - 150% of mass 198	<u>105.3</u>
443 15 - 24% of mass 442	<u>18.8</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 1128Y057.D Date Analyzed: 01/29/19  
 Instrument ID: Yoda Time Analyzed: 8:51  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		614573	5.22	2630250	6.65	1440510	8.67
UPPER LIMIT		1229146	5.39	5260500	6.82	2881020	8.84
LOWER LIMIT		307287	5.05	1315125	6.48	720255	8.50
SAMPLE NO.							
01	AZ85643W23 MS-1 2/50	351823	5.25	1449640	6.66	850197	8.67
02	AZ85643W25 MSD-1 2/	407383	5.24	1632070	6.65	889059	8.67
03	AZ85643W26 2/500	374614	5.24	1581900	6.65	916189	8.67
04	AZ85644W06 2/500	427156	5.24	1752350	6.66	928071	8.67
05	190128A BLK 2/500	429029	5.25	1804760	6.66	894647	8.67
06	500ug/ml MEE 12/19/18	611145	5.23	2644720	6.66	1462930	8.67
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.



8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: \_\_\_\_\_  
 Lab Code: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Lab File ID (Standard): 1128Y101.D Date Analyzed: 1 Feb 19 9:32  
 Instrument ID: Yoda Time Analyzed: 1 Feb 19 9:32  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	468889	5.24	1873590	6.65	981470	8.67
	UPPER LIMIT	937778	5.41	3747180	6.82	1962940	8.84
	LOWER LIMIT	234445	5.07	936795	6.48	490735	8.50
	SAMPLE NO.						
01	190128A LCS-1 2/500	307091	5.24	1402120	6.66	792591	8.67
02	190128A LCSD-1 2/500	403357	5.23	1743270	6.66	949174	8.67
03	500ug/ml MEE 12/19/18	464116	5.25	1879800	6.65	985125	8.67
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130AL-LCS	Lab Control Spike	81-118	94.4		85-114	108	
190130AL-LCSD	Lab Control SpikeD	81-118	93.6		85-114	107	
190130AL-BLK	Blank	81-118	98.4		85-114	105	
AZ85643	ERH733	81-118	100		85-114	110	
AZ85643-MS	Matrix Spike	81-118	102		85-114	112	
AZ85643-MSD	Matrix SpikeD	81-118	101		85-114	109	

Comments: Batch: #86BTO-190130AL

Printed: 02/04/19 9:52:07 AM

Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
190130AL-LCS	Lab Control Spike	80-119	98.0		89-112	85.2	*
190130AL-LCSD	Lab Control SpikeD	80-119	98.4		89-112	85.6	*
190130AL-BLK	Blank	80-119	103		89-112	88.7	
AZ85643	ERH733	80-119	103		89-112	89.6	
AZ85643-MS	Matrix Spike	80-119	104		89-112	89.2	
AZ85643-MSD	Matrix SpikeD	80-119	104		89-112	88.0	*

Comments: Batch: #86BTO-190130AL

\* = Recovery outside of Control Limits on QC Sample.

Printed: 02/04/19 9:52:07 AM

Form 2 & 8, Surrogate Recovery Summary

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190128-LCS	Lab Control Spike	81-118	98.8		85-114	98.0	
AL190128-LCSD	Lab Control SpikeD	81-118	98.0		85-114	102	
AL190128-BLK	Blank	81-118	98.9		85-114	98.8	
AZ85645	ERH756	81-118	93.4		85-114	99.1	
AZ85652	ERH754	81-118	99.4		85-114	102	
AZ85642	ERH732	81-118	101		85-114	106	
AZ85644	ERH734	81-118	101		85-114	108	
AZ85646	ERH757	81-118	96.0		85-114	102	
AZ85653	ERH755	81-118	101		85-114	104	

Comments: Batch: #86BTO-AL190128

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 87956  
Matrix: WATER

SDG No: 87956  
Date Analyzed: 01/28/19  
Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
AL190128-LCS	Lab Control Spike	80-119	98.8		89-112	91.6	
AL190128-LCSD	Lab Control SpikeD	80-119	103		89-112	94.0	
AL190128-BLK	Blank	80-119	100		89-112	94.1	
AZ85645	ERH756	80-119	94.6		89-112	92.8	
AZ85652	ERH754	80-119	102		89-112	95.6	
AZ85642	ERH732	80-119	106		89-112	93.3	
AZ85644	ERH734	80-119	102		89-112	94.0	
AZ85646	ERH757	80-119	99.4		89-112	88.1	#
AZ85653	ERH755	80-119	105		89-112	91.0	

Comments: Batch: #86BTO-AL190128  
# = Recovery outside of Control Limits on Sample.

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Loki

Blank ID: AL190128-BLK

Time Analyzed: 0006

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L16	01/28/19 2115
AL190128-LCSD	Lab Control SpikeD	0128L17	01/28/19 2144
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85645	ERH756	0128L23	01/29/19 0035
AZ85652	ERH754	0128L24	01/29/19 0104
AZ85642	ERH732	0128L34	01/29/19 0549
AZ85644	ERH734	0128L35	01/29/19 0618
AZ85646	ERH757	0128L36	01/29/19 0646
AZ85653	ERH755	0128L37	01/29/19 0715

Comments: Batch: #86BTO-AL190128

Printed: 02/04/19 9:52:03 AM  
Form 4, Blank Summary

**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **AL1901W-85519 - 237015**  
Batch ID: #86BTO-AL190128

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/29/19	01/29/19
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/29/19	01/29/19
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/29/19	01/29/19
BLANK	SURROGATE: 1,2-DICHLOROET	98.9	81-118			%	01/29/19	01/29/19
BLANK	SURROGATE: 4-BROMOFLUORO	98.8	85-114			%	01/29/19	01/29/19
BLANK	SURROGATE: DIBROMOFLUOR	100	80-119			%	01/29/19	01/29/19
BLANK	SURROGATE: TOLUENE-D8 (S)	94.1	89-112			%	01/29/19	01/29/19

Quant Method:L0128W.M  
Run #:0128L22  
Instrument:Loki  
Sequence:190128  
Initials:KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 9:52:58 AM

**EPA 8260B**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Loki

Blank ID: 190130AL-BLK

Time Analyzed: 1455

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130AL-LCS	Lab Control Spike	0130L05	01/30/19 1008
190130AL-LCSD	Lab Control SpikeD	0130L06	01/30/19 1037
190130AL-BLK	Blank	0130L15	01/30/19 1455
AZ85643	ERH733	0130L21	01/30/19 1747
190130AL-MS	Matrix Spike	0130L24	01/30/19 1913
190130AL-MSD	Matrix SpikeD	0130L25	01/30/19 1942

Comments: Batch: #86BTO-190130AL



**Method Blank**  
**EPA 8260B BTEX WATER**

Blank Name/QCG: **190130W-85643 - 237148**  
Batch ID: #86BTO-190130AL

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	01/30/19	01/30/19
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	01/30/19	01/30/19
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	01/30/19	01/30/19
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	01/30/19	01/30/19
BLANK	SURROGATE: 1,2-DICHLOROET	98.4	81-118			%	01/30/19	01/30/19
BLANK	SURROGATE: 4-BROMOFLUORO	105	85-114			%	01/30/19	01/30/19
BLANK	SURROGATE: DIBROMOFLUOR	103	80-119			%	01/30/19	01/30/19
BLANK	SURROGATE: TOLUENE-D8 (S)	88.7	89-112			%	01/30/19	01/30/19

Quant Method: L0128W.M  
Run #: 0130L15  
Instrument: Loki  
Sequence: 190128  
Initials: KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 9:52:58 AM

**EPA 8260B**

Form 4

**LCS Summary**

Lab Name: APPL, Inc.  
Case No: 87956  
Matrix: WATER  
LCS ID: 190130AL-LCS

SDG No: 87956  
Date Analyzed: 01/30/19  
Instrument: Loki  
Time Analyzed: 1008

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130AL-LCS	Lab Control Spike	0130L05	01/30/19 1008
190130AL-LCSD	Lab Control SpikeD	0130L06	01/30/19 1037
190130AL-BLK	Blank	0130L15	01/30/19 1455
AZ85643	ERH733	0130L21	01/30/19 1747
190130AL-MS	Matrix Spike	0130L24	01/30/19 1913
190130AL-MSD	Matrix SpikeD	0130L25	01/30/19 1942

Comments: Batch: #86BTO-190130AL

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

LCS ID: AL190128-LCS

Time Analyzed: 2115

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L16	01/28/19 2115
AL190128-LCSD	Lab Control SpikeD	0128L17	01/28/19 2144
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85645	ERH756	0128L23	01/29/19 0035
AZ85652	ERH754	0128L24	01/29/19 0104
AZ85642	ERH732	0128L34	01/29/19 0549
AZ85644	ERH734	0128L35	01/29/19 0618
AZ85646	ERH757	0128L36	01/29/19 0646
AZ85653	ERH755	0128L37	01/29/19 0715

Comments: Batch: #86BTO-AL190128

Printed: 02/04/19 9:52:00 AM  
Form 4, LCS Summary

**Laboratory Control Spike Recoveries**  
**EPA 8260B BTEX WATER**

APPL ID: **190128W-85519 LCS - 237015**  
 Batch ID: #86BTO-AL190128

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.8	10.3	108	103	79-120	4.7	20
ETHYLBENZENE	10.00	10.6	10.6	106	106	79-121	0.0	20
TOLUENE	10.00	11.3	10.8	113	108	80-121	4.5	20
XYLENES (TOTAL)	30.0	33.0	32.6	110	109	79-121	1.2	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	24.7	24.5	98.8	98.0	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	24.5	25.4	98.0	102	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	24.7	25.7	98.8	103	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	22.9	23.5	91.6	94.0	89-112		
-----								

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128W.M	L0128W.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Loki	Loki
Run :	0128L16	0128L17
Initials :	KVA	

## Laboratory Control Spike Recoveries

### EPA 8260B BTEX WATER

APPL ID: 190130W-85643 LCS - 237148

Batch ID: #86BTO-190130AL

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.1	10.3	101	103	79-120	2.0	20
ETHYLBENZENE	10.00	9.90	10.5	99.0	105	79-121	5.9	20
TOLUENE	10.00	10.8	11.2	108	112	80-121	3.6	20
XYLENES (TOTAL)	30.0	30.8	33.2	103	111	79-121	7.5	20
-----								
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	23.6	23.4	94.4	93.6	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	26.9	26.8	108	107	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	24.5	24.6	98.0	98.4	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	21.3	21.4	85.2 #	85.6 #	89-112		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	L0128W.M	L0128W.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Loki	Loki
Run :	0130L05	0130L06
Initials :	KVA	

# Matrix Spike Recoveries

## EPA 8260B BTEX WATER

APPL ID: 190130W-85643 MS - 237148

Batch ID: #86BTO-190130AL

Sample ID: AZ85643

Client ID: ERH733

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	ND	10.9	11.1	109	111	79-120	1.8	20
ETHYLBENZENE	10.00	ND	11.2	11.3	112	113	79-121	0.89	20
TOLUENE	10.00	ND	12.4	12.5	124 #	125 #	80-121	0.80	20
XYLENES (TOTAL)	30.0	ND	34.7	34.7	116	116	79-121	0.0	20
-----									
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	NA	25.4	25.3	102	101	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	28.1	27.2	112	109	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	NA	26.0	26.0	104	104	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	NA	22.3	22.0	89.2	88.0 #	89-112		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128W.M	L0128W.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Loki	Loki
Run :	0130L24	0130L25
Initials :	KVA	

Printed: 02/04/19 9:52:30 AM

APPL MSD SCII

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: \_\_\_\_\_  
Matrix: Water  
ID: 0128L01.D

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Loki  
Time Analyzed: 14:12

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	0.3ug/L VOC STD 01/2	0128L03.D	01/28/19 15:03
2	0.5ug/L VOC STD 01/2	0128L04.D	01/28/19 15:31
3	1.0ug/L VOC STD 01/2	0128L05.D	01/28/19 16:00
4	2.0ug/L VOC STD 01/2	0128L06.D	01/28/19 16:29
5	5.0ug/L VOC STD 01/2	0128L07.D	01/28/19 16:57
6	10ug/L VOC STD 01/28	0128L08.D	01/28/19 17:26
7	20ug/L VOC STD 01/28	0128L09.D	01/28/19 17:55
8	40ug/L VOC STD 01/28	0128L10.D	01/28/19 18:23
9	50ug/L VOC STD 01/28	0128L11.D	01/28/19 18:52
10	100ug/L VOC STD 01/2	0128L12.D	01/28/19 19:21
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>18.9</u>
75 30 - 60% of mass 95	<u>51.4</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>7.7</u>
173 0 - 2% of mass 174	<u>1.2</u>
174 50 - 100% of mass 95	<u>90.0</u>
175 5 - 9% of mass 174	<u>8.0</u>
176 94.95 - 101% of mass 174	<u>97.5</u>
177 5 - 9% of mass 176	<u>8.4</u>

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87956  
Matrix: Water  
ID: 0128L13.D

SDG No: 87956  
Date Analyzed: 01/28/19  
Instrument: Loki  
Time Analyzed: 19:49

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	(SS)10ug/L VOC STD 0	0128L14.D	01/28/19 20:18
2	Lab Control Spike	190128A LCS 10ug/L	01/28/19 21:15
3	Lab Control SpikeD	190128A LCSD 10ug/L	01/28/19 21:44
4	Blank	190128A blk	01/29/19 0:06
5	ERH756	AZ85645W01	01/29/19 0:35
6	ERH754	AZ85652W01	01/29/19 1:04
7	ERH732	AZ85642W01	01/29/19 5:49
8	ERH734	AZ85644W01	01/29/19 6:18
9	ERH757	AZ85646W01	01/29/19 6:46
10	ERH755	AZ85653W01	01/29/19 7:15
11	Ending CCV 10ug/L 01	0128L38.D	01/29/19 7:43
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>20.6</u>
75 30 - 60% of mass 95	<u>50.7</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.4</u>
173 0 - 2% of mass 174	<u>0.0</u>
174 50 - 100% of mass 95	<u>83.9</u>
175 5 - 9% of mass 174	<u>8.5</u>
176 94.95 - 101% of mass 174	<u>100.0</u>
177 5 - 9% of mass 176	<u>8.1</u>



Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 87956  
Matrix: Water  
ID: 0130L01.D

SDG No: 87956  
Date Analyzed: 01/30/19  
Instrument: Loki  
Time Analyzed: 8:19

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	190130A CCV 10ug/L	0130L04.D	01/30/19 9:40
2	Lab Control Spike	190130A LCS 10ug/L	0130L05.D
3	Lab Control SpikeD	190130A LCSD 10ug/L	0130L06.D
4	Blank	190130A Blk	0130L15.D
5	ERH733	AZ85643W01	0130L21.D
6		AZ85643W02 MS 10ug/L	0130L24.D
7		AZ85643W03 MSD 10ug/	0130L25.D
8		Ending CCV 10ug/L 01	0130L28.D
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	<u>16.7</u>
75 30 - 60% of mass 95	<u>50.1</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.8</u>
173 0 - 2% of mass 174	<u>0.0</u>
174 50 - 100% of mass 95	<u>93.9</u>
175 5 - 9% of mass 174	<u>7.6</u>
176 94.95 - 101% of mass 174	<u>96.5</u>
177 5 - 9% of mass 176	<u>8.8</u>

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 0128L08.D Date Analyzed: 01/28/19  
 Instrument ID: Loki Time Analyzed: 17:26  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	408128	6.50	289088	9.97	128392	12.53
UPPER LIMIT	816256	6.67	578176	10.14	256784	12.70
LOWER LIMIT	204064	6.33	144544	9.80	64196	12.36
SAMPLE NO.						
01 (SS)10ug/L VOC STD 0	431360	6.50	334592	9.97	134464	12.54
02 190128A LCS 10ug/L	418368	6.50	328000	9.97	133440	12.54
03 190128A LCSD 10ug/L	401792	6.50	308096	9.97	128800	12.53
04 190128A blk	381568	6.50	292096	9.97	111128	12.53
05 AZ85645W01	426944	6.50	313088	9.97	118448	12.54
06 AZ85652W01	387584	6.50	291904	9.97	119232	12.54
07 AZ85642W01	377280	6.50	300928	9.97	131392	12.54
08 AZ85644W01	376832	6.50	294656	9.97	127824	12.54
09 AZ85646W01	385536	6.50	307968	9.97	126504	12.54
10 AZ85653W01	363200	6.50	297856	9.97	128072	12.53
11 Ending CCV 10ug/L 01/2	381632	6.50	307200	9.97	145920	12.54
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 87956  
 Lab File ID (Standard): 0130L04.D Date Analyzed: 01/30/19  
 Instrument ID: Loki Time Analyzed: 9:40  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	358528	6.50	306304	9.97	163264	12.53
UPPER LIMIT	717056	6.67	612608	10.14	326528	12.70
LOWER LIMIT	179264	6.33	153152	9.80	81632	12.36
SAMPLE NO.						
01 190130A LCS 10ug/L	373120	6.50	318656	9.97	165632	12.54
02 190130A LCSD 10ug/L	370368	6.50	313152	9.97	163520	12.54
03 190130A Bik	343168	6.50	294208	9.97	140288	12.53
04 AZ85643W01	325504	6.50	276480	9.97	136128	12.54
05 AZ85643W02 MS 10ug/	319296	6.50	283840	9.97	151680	12.54
06 AZ85643W03 MSD 10ug	323712	6.50	286208	9.97	149568	12.54
07 Ending CCV 10ug/L 01/3	320320	6.50	279680	9.97	149184	12.54
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = -50% of internal standard area.  
 RT UPPER LIMIT = +0.17 minutes of internal standard RT  
 RT LOWER LIMIT = -0.17 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

**EPA 8260B**

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)			Limits	Result	Qualifier
		Limits	Result	Qualifier			
190130AL1-LCS	Lab Control Spike	85-114	114				
190130AL1-LCSD	Lab Control Spiked	85-114	109				
190130AL1-BLK	Blank	85-114	105				
AZ85643	ERH733	85-114	110				
AZ85643-MS	Matrix Spike	85-114	111				
AZ85643-MSD	Matrix Spiked	85-114	111				

Comments: Batch: #GRO86-190130AL

# EPA 8260B

Form 2 & 8

## Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)			Limits	Result	Qualifier
		Limits	Result	Qualifier			
AL190128-LCS	Lab Control Spike	85-114	90.8				
AL190128-LCSD	Lab Control Spiked	85-114	100				
AL190128-BLK	Blank	85-114	98.8				
AZ85645	ERH756	85-114	99.1				
AZ85652	ERH754	85-114	102				
AZ85642	ERH732	85-114	106				
AZ85644	ERH734	85-114	108				
AZ85646	ERH757	85-114	102				
AZ85653	ERH755	85-114	104				

Comments: Batch: #GRO86-AL190128

Printed: 02/04/19 9:54:21 AM  
Form 2 & 8, Surrogate Recovery Summary

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Loki

Blank ID: 190130AL1-BLK

Time Analyzed: 1455

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190130AL1-LCS	Lab Control Spike	0130L10	01/30/19 1232
190130AL1-LCSD	Lab Control SpikeD	0130L11	01/30/19 1300
190130AL1-BLK	Blank	0130L15	01/30/19 1455
AZ85643	ERH733	0130L21	01/30/19 1747
190130AL1-MS	Matrix Spike	0130L26	01/30/19 2010
190130AL1-MSD	Matrix SpikeD	0130L27	01/30/19 2039

Comments: Batch: #GRO86-190130AL

Printed: 02/04/19 9:54:30 AM  
Form 4, Blank Summary

**EPA 8260B**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/29/19

Matrix: WATER

Instrument: Loki

Blank ID: AL190128-BLK

Time Analyzed: 0006

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AL190128-LCS	Lab Control Spike	0128L19	01/28/19 2241
AL190128-LCSD	Lab Control SpikeD	0128L20	01/28/19 2309
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85645	ERH756	0128L23	01/29/19 0035
AZ85652	ERH754	0128L24	01/29/19 0104
AZ85642	ERH732	0128L34	01/29/19 0549
AZ85644	ERH734	0128L35	01/29/19 0618
AZ85646	ERH757	0128L36	01/29/19 0646
AZ85653	ERH755	0128L37	01/29/19 0715

Comments: Batch: #GRO86-AL190128

**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **AL1901W-85519 - 237022**  
Batch ID: #GRO86-AL190128

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/29/19	01/29/19
BLANK	SURROGATE: 4-BROMOFLUORO	98.8	85-114			%	01/29/19	01/29/19

Quant Method: L0128SUR.M  
Run #: 0128L22  
Instrument: Loki  
Sequence: 190128  
Initials: KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 9:54:33 AM



**Method Blank**  
**EPA 8260B GRO WATER**

Blank Name/QCG: **190130W-85643 - 237150**  
Batch ID: #GRO86-190130AL1

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	01/30/19	01/30/19
BLANK	SURROGATE: 4-BROMOFLUORO	105	85-114			%	01/30/19	01/30/19

Quant Method:L0128SUR.M  
Run #:0130L15  
Instrument:Loki  
Sequence:190128  
Initials:KVA

GC SC-Blank-REG MDLs-DOD  
Printed: 02/04/19 9:54:33 AM

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Loki

LCS ID: 190130AL1-LCS

Time Analyzed: 1232

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190130AL1-LCS	Lab Control Spike	0130L10	01/30/19 1232
190130AL1-LCSD	Lab Control SpikeD	0130L11	01/30/19 1300
190130AL1-BLK	Blank	0130L15	01/30/19 1455
AZ85643	ERH733	0130L21	01/30/19 1747
190130AL1-MS	Matrix Spike	0130L26	01/30/19 2010
190130AL1-MSD	Matrix SpikeD	0130L27	01/30/19 2039

Comments: Batch: #GRO86-190130AL

Printed: 02/04/19 9:54:40 AM  
Form 4, LCS Summary

# EPA 8260B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Loki

LCS ID: AL190128-LCS

Time Analyzed: 2241

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AL190128-LCS	Lab Control Spike	0128L19	01/28/19 2241
AL190128-LCSD	Lab Control SpikeD	0128L20	01/28/19 2309
AL190128-BLK	Blank	0128L22	01/29/19 0006
AZ85645	ERH756	0128L23	01/29/19 0035
AZ85652	ERH754	0128L24	01/29/19 0104
AZ85642	ERH732	0128L34	01/29/19 0549
AZ85644	ERH734	0128L35	01/29/19 0618
AZ85646	ERH757	0128L36	01/29/19 0646
AZ85653	ERH755	0128L37	01/29/19 0715

Comments: Batch: #GRO86-AL190128

Printed: 02/04/19 9:54:40 AM  
Form 4, LCS Summary

## Laboratory Control Spike Recoveries

### EPA 8260B GRO WATER

APPL ID: **190128W-85519 LCS - 237022**

Batch ID: #GRO86-AL190128

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	261	291	87.0	97.0	78-122	10.9	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	22.7	25.1	90.8	100	85-114		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128SUR.M	L0128SUR.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Loki	Loki
Run :	0128L19	0128L20
Initials :	KVA	

## Laboratory Control Spike Recoveries

### EPA 8260B GRO WATER

APPL ID: 190130W-85643 LCS - 237150  
 Batch ID: #GRO86-190130AL1

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	315	303	105	101	78-122	3.9	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	28.6	27.2	114	109	85-114		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128SUR.M	L0128SUR.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Loki	Loki
Run :	0130L10	0130L11
Initials :	KVA	

# Matrix Spike Recoveries

## EPA 8260B GRO WATER

APPL ID: 190130W-85643 MS - 237150

Batch ID: #GRO86-190130AL1

Sample ID: AZ85643

Client ID: ERH733

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	ND	305	294	102	98.0	78-122	3.7	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	NA	27.8	27.7	111	111	85-114		

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	L0128SUR.M	L0128SUR.M
Extraction Date :	01/30/19	01/30/19
Analysis Date :	01/30/19	01/30/19
Instrument :	Loki	Loki
Run :	0130L26	0130L27
Initials :	KVA	

Printed: 02/04/19 9:54:58 AM

APPL MSD SCII

# RSK 175

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Rocky

Blank ID: 190128B-BLK

Time Analyzed: 1133

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128B-LCS	Lab Control Spike	19012823	01/28/19 1127
190128B-LCSD	Lab Control SpikeD	19012824	01/28/19 1130
190128B-BLK	Blank	19012825	01/28/19 1133
AZ85642	ERH732	19012826	01/28/19 1136
AZ85643	ERH733	19012827	01/28/19 1138
AZ85645	ERH756	19012828	01/28/19 1140
AZ85646	ERH757	19012829	01/28/19 1143
AZ85652	ERH754	19012830	01/28/19 1145
AZ85653	ERH755	19012831	01/28/19 1147

Comments: Batch: #RSKME-190128B

Printed: 01/28/19 12:12:13 PM  
Form 4, Blank Summary

**Method Blank**  
**METHANE**

Blank Name/QCG: **190128W-85642 - 236922**  
Batch ID: #RSKME-190128B

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	01/28/19	01/28/19

Quant Method:RSK0120.M  
Run #:19012825  
Instrument:Rocky  
Sequence:190120  
Initials:CMO

GC SC-Blank-REG MDLs-DOD  
Printed: 01/28/19 12:12:22 PM



# RSK 175

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Rocky

LCS ID: 190128B-LCS

Time Analyzed: 1127

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128B-LCS	Lab Control Spike	19012823	01/28/19 1127
190128B-LCSD	Lab Control SpikeD	19012824	01/28/19 1130
190128B-BLK	Blank	19012825	01/28/19 1133
AZ85642	ERH732	19012826	01/28/19 1136
AZ85643	ERH733	19012827	01/28/19 1138
AZ85645	ERH756	19012828	01/28/19 1140
AZ85646	ERH757	19012829	01/28/19 1143
AZ85652	ERH754	19012830	01/28/19 1145
AZ85653	ERH755	19012831	01/28/19 1147

Comments: Batch: #RSKME-190128B

Printed: 01/28/19 12:12:11 PM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## METHANE

APPL ID: 190128W-85642 LCS - 236922  
 Batch ID: #RSKME-190128B

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	88.5	103	106	124	72-125	15.1	30

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	RSK0120.M	RSK0120.M
Extraction Date :	01/28/19	01/28/19
Analysis Date :	01/28/19	01/28/19
Instrument :	Rocky	Rocky
Run :	19012823	19012824
Initials :	CMO	

# SM3500FeB

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Manual Spec

Blank ID: 190125A-BLK

Time Analyzed: 0921

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
AZ85643	ERH733	15	01/25/19 1038
AZ85646	ERH757	18	01/25/19 1039
190125A-BLK	Blank	2	01/25/19 0921
190125A-LCS	Lab Control Spike	3	01/25/19 0922
AZ85653	ERH755	30	01/25/19 1521
190125A-LCSD	Lab Control SpikeD	4	01/25/19 0923

Comments: Batch: #35FE-190125A

Printed: 02/17/19 9:36:28 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	01/25/19	01/25/19	#35FE-190125A-AZ85562

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:36:30 AM

# EPA 300.0

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Charlie

Blank ID: 190125A2-BLK

Time Analyzed: 2007

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85653	ERH755	18	01/25/19 1550
AZ85643	ERH733	43	01/25/19 1937
AZ85646	ERH757	44	01/25/19 1945
190125A2-BLK	Blank	47	01/25/19 2007
190125A2-LCS	Lab Control Spike	48	01/25/19 2014
190125A2-LCSD	Lab Control SpikeD	49	01/25/19 2022

Comments: Batch: #300W-190125A2

Printed: 02/17/19 9:36:28 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.15 J	1.0	0.20	0.08	mg/L	01/25/19	01/25/19	#300W-190125A2-AZ85643
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	01/25/19	01/25/19	#300W-190125A2-AZ85643
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/25/19	01/25/19	#300W-190125A2-AZ85643

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:36:30 AM

**EPA 300.0**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.  
Case No: 87956  
Matrix: WATER  
Blank ID: 190128A5-BLK

SDG No: 87956  
Date Analyzed: 01/28/19  
Instrument: Charlie  
Time Analyzed: 1002

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190128A5-BLK	Blank	2	01/28/19 1002
190128A5-LCS	Lab Control Spike	3	01/28/19 1009
AZ85643	ERH733	32	01/28/19 1646
AZ85646	ERH757	33	01/28/19 1654
190128A5-LCSD	Lab Control SpikeD	4	01/28/19 1017

Comments: Batch: #300WD-190128A5

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.13 J	1.0	0.20	0.08	mg/L	01/28/19	01/28/19	#300WD-190128A5-AZ85643
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	01/28/19	01/28/19	#300WD-190128A5-AZ85643

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:36:30 AM



# EPA 353.2

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

Blank ID: 190128A-BLK

Time Analyzed: 1642

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85643	ERH733	30	01/28/19 1718
AZ85646	ERH757	31	01/28/19 1719
AZ85653	ERH755	34	01/28/19 1721

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:36:28 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 353.2	NITRATE-NITRITE-N	0.100 U	0.10	0.100	0.028	mg/L	01/28/19	01/28/19	#35OF-190128A-AZ85562

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:36:30 AM

# SM 2320B

Form 4

## Blank Summary

Lab Name: APPL, Inc. SDG No: 87956  
Case No: 87956 Date Analyzed: 01/30/19  
Matrix: WATER Instrument: Tiamo  
Blank ID: 190130A-BLK Time Analyzed: 1332

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	1	01/30/19 1332
AZ85643	ERH733	15	01/30/19 1518
AZ85646	ERH757	16	01/30/19 1523
AZ85653	ERH755	17	01/30/19 1529
190130A-LCS	Lab Control Spike	2	01/30/19 1335
190130A-LCSD	Lab Control SpikeD	3	01/30/19 1345

Comments: Batch: #232W-190130A

Printed: 02/17/19 9:36:28 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS CA	1.5 J	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	CARBONATE AS CACO	1.70 U	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	TOTAL ALKALINITY AS	1.5 J	2.0	1.70	0.85	mg/L	01/30/19	01/30/19	#232W-190130A-AZ85562

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:36:30 AM

# **SW846 9060A**

Form 4

## **Blank Summary**

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/13/19

Matrix: WATER

Instrument: Manual

Blank ID: 190213A-BLK

Time Analyzed: 0923

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190213A-LCSD	Lab Control SpikeD		02/13/19 1223
AZ85643	ERH733		02/14/19 0039
190213A-LCS	Lab Control Spike		02/13/19 1148
AZ85646	ERH757		02/14/19 0143
190213A-BLK	Blank		02/13/19 0923

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:36:28 AM  
Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SW846 90	TOTAL ORGANIC CAR	0.31 J	0.93	0.350	0.130	mg/L	02/13/19	02/13/19	CDOCW-190213A-AZ85643

J = Estimated value.

Wetlab SC-Blank-REG MDLs  
Printed: 02/17/19 9:36:30 AM

**SW846 9060A**

Form 4

**Blank Summary**

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/20/19

Matrix: WATER

Instrument: Manual

Blank ID: 190220B-BLK

Time Analyzed: 1958

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85653	ERH755		02/20/19 2326
190220B-LCSD	Lab Control SpikeD		02/20/19 2142
190220B-LCS	Lab Control Spike		02/20/19 2107
190220B-BLK	Blank		02/20/19 1958

Comments: Batch: #TOCDOCW-19022

Printed: 02/21/19 9:54:00 AM

Form 4, Blank Summary

# WETLAB BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SW846 90	TOTAL ORGANIC CAR	0.350 U	0.93	0.350	0.130	mg/L	02/20/19	02/20/19	CDOCW-190220B-AZ85653

Wetlab SC-Blank-REG MDLs  
Printed: 02/21/19 9:54:05 AM



# SM3500FeB

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Manual Spec

LCS ID: 190125A-LCS

Time Analyzed: 0922

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85643	ERH733	15	01/25/19 1038
AZ85646	ERH757	18	01/25/19 1039
190125A-BLK	Blank	2	01/25/19 0921
190125A-LCS	Lab Control Spike	3	01/25/19 0922
AZ85653	ERH755	30	01/25/19 1521
190125A-LCSD	Lab Control SpikeD	4	01/25/19 0923

Comments: Batch: #35FE-190125A

Printed: 02/17/19 9:36:33 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.10	3.09	103	103	0.32	20	80-120	01/25/19	01/25/19	01/25/19	01/25/19	#35FE-190125A-AZ85562

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/25/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190125A2-LCS

Time Analyzed: 2014

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
AZ85653	ERH755	18	01/25/19 1550
AZ85643	ERH733	43	01/25/19 1937
AZ85646	ERH757	44	01/25/19 1945
190125A2-BLK	Blank	47	01/25/19 2007
190125A2-LCS	Lab Control Spike	48	01/25/19 2014
190125A2-LCSD	Lab Control SpikeD	49	01/25/19 2022

Comments: Batch: #300W-190125A2

Printed: 02/17/19 9:36:33 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	25.4	25.4	102	102	0.0	20	90-110	01/25/19	01/25/19	01/25/19	01/25/19	#300W-190125A2-AZ8564
EPA 300.0	NITRATE	22.1	22.2	22.3	100	101	0.45	20	90-110	01/25/19	01/25/19	01/25/19	01/25/19	#300W-190125A2-AZ8564
EPA 300.0	SULFATE	25.0	25.2	25.2	101	101	0.0	20	90-110	01/25/19	01/25/19	01/25/19	01/25/19	#300W-190125A2-AZ8564

Comments: \_\_\_\_\_

# EPA 300.0

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: Charlie

LCS ID: 190128A5-LCS

Time Analyzed: 1009

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
190128A5-BLK	Blank	2	01/28/19 1002
190128A5-LCS	Lab Control Spike	3	01/28/19 1009
AZ85643	ERH733	32	01/28/19 1646
AZ85646	ERH757	33	01/28/19 1654
190128A5-LCSD	Lab Control SpikeD	4	01/28/19 1017

Comments: Batch: #300WD-190128A5

Printed: 02/17/19 9:36:33 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	25.3	24.1	101	96.4	4.9	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#300WD-190128A5-AZ856
EPA 300.0	SULFATE	25.0	25.1	25.1	100	100	0.0	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#300WD-190128A5-AZ856

Comments: \_\_\_\_\_

# EPA 353.2

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/28/19

Matrix: WATER

Instrument: EVE

LCS ID: 190128A-LCS

Time Analyzed: 1644

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
190128A-BLK	Blank	12	01/28/19 1642
190128A-LCS	Lab Control Spike	13	01/28/19 1644
190128A-LCSD	Lab Control SpikeD	14	01/28/19 1646
AZ85643	ERH733	30	01/28/19 1718
AZ85646	ERH757	31	01/28/19 1719
AZ85653	ERH755	34	01/28/19 1721

Comments: Batch: #35OF-190128A

Printed: 02/17/19 9:36:33 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE-N	3.00	2.99	3.07	99.7	102	2.6	20	90-110	01/28/19	01/28/19	01/28/19	01/28/19	#35OF-190128A-AZ85562

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



# SM 2320B

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 01/30/19

Matrix: WATER

Instrument: Tiamo

LCS ID: 190130A-LCS

Time Analyzed: 1335

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190130A-BLK	Blank	1	01/30/19 1332
AZ85643	ERH733	15	01/30/19 1518
AZ85646	ERH757	16	01/30/19 1523
AZ85653	ERH755	17	01/30/19 1529
190130A-LCS	Lab Control Spike	2	01/30/19 1335
190130A-LCSD	Lab Control SpikeD	3	01/30/19 1345

Comments: Batch: #232W-190130A

Printed: 02/17/19 9:36:33 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM 2320B	BICARBONATE AS CaCO3	250	228	241	91.2	96.4	5.5	20	90-110	01/30/19	01/30/19	01/30/19	01/30/19	#232W-190130A-AZ85562
SM 2320B	TOTAL ALKALINITY AS CA	250	228	241	91.2	96.4	5.5	20	90-110	01/30/19	01/30/19	01/30/19	01/30/19	#232W-190130A-AZ85562

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# SW846 9060A

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/13/19

Matrix: WATER

Instrument: Manual

LCS ID: 190213A-LCS

Time Analyzed: 1148

APPL ID.	Client Sample No.	File ID.	Date Analyzed
190213A-LCSD	Lab Control SpikeD		02/13/19 1223
AZ85643	ERH733		02/14/19 0039
190213A-LCS	Lab Control Spike		02/13/19 1148
AZ85646	ERH757		02/14/19 0143
190213A-BLK	Blank		02/13/19 0923

Comments: Batch: #TOCDOCW-19021

Printed: 02/17/19 9:36:33 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SW846 90	TOTAL ORGANIC CARBO	2.00	2.19	2.16	110	108	1.4	20	90-110	02/13/19	02/13/19	02/13/19	02/13/19	#TOCDOCW-190213A-AZ8

Comments: \_\_\_\_\_

# SW846 9060A

Form 4

## LCS Summary

Lab Name: APPL, Inc.

SDG No: 87956

Case No: 87956

Date Analyzed: 02/20/19

Matrix: WATER

Instrument: Manual

LCS ID: 190220B-LCS

Time Analyzed: 2107

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ85653	ERH755		02/20/19 2326
190220B-LCSD	Lab Control SpikeD		02/20/19 2142
190220B-LCS	Lab Control Spike		02/20/19 2107
190220B-BLK	Blank		02/20/19 1958

Comments: Batch: #TOCDOCW-19022

Printed: 02/21/19 9:54:08 AM  
Form 4, LCS Summary

# Laboratory Control Spike Recoveries

## WETLAB

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SW846 90	TOTAL ORGANIC CARBO	1.25	1.37	1.32	110	106	3.7	20	90-110	02/20/19	02/20/19	02/20/19	02/20/19	#TOCDOCW-190220B-AZ8

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**ORGANICS**  
**Calibration Data**

TPH Extractables  
DOC0117

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 01/17/19

Matrix: Water

Instrument: Apollo

Initials: \_\_\_\_\_

117002.D    117003.D    117004.D    117005.D    117006.D    117007.D

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATM	Diesel (C10-C24)	1247225	1163187	1209913	1221573	1152277	1133164					1187890	3.8	HATM		
2	HBTM	Motor Oil (C24-C40)	1046830	917795	948443	920306	882639	861594					929601	7.0	HBTM		
3	SC	Decanoic Acid(S)	648675	1095549	1090928	1053315	1004335	1065935					993123	17	SC		
4	SA	Ortho-Terphenyl(S)	2315091	2079412	2039254	2009486	1862079	1811493					2019469	8.8	SA		
5	SA	Octacosane(S)	2056338	1855545	1861468	1912913	1840710	1711226					1876367	6.0	SA		
6																	
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Data File : G:\APOLLO\DATA\190117\117002.D Vial: 2  
 Acq On : 1-17-19 16:38:28 Operator: DP  
 Sample : Diesel / Motor Oil - 1 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

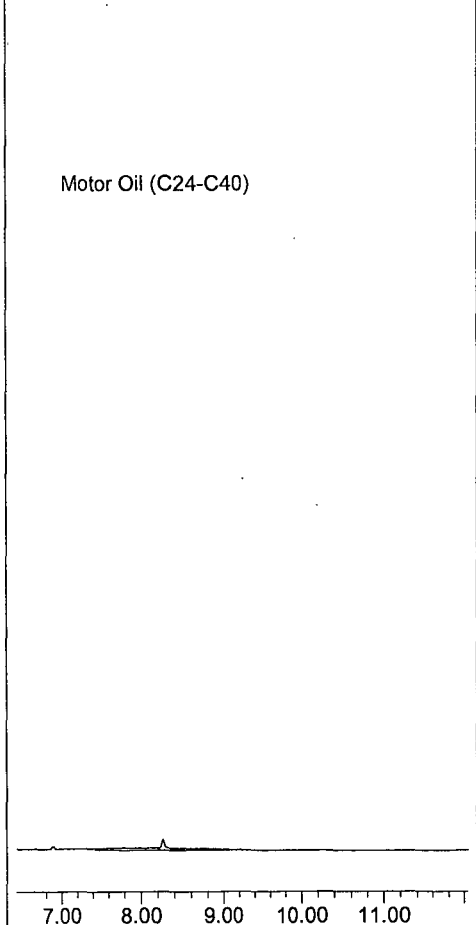
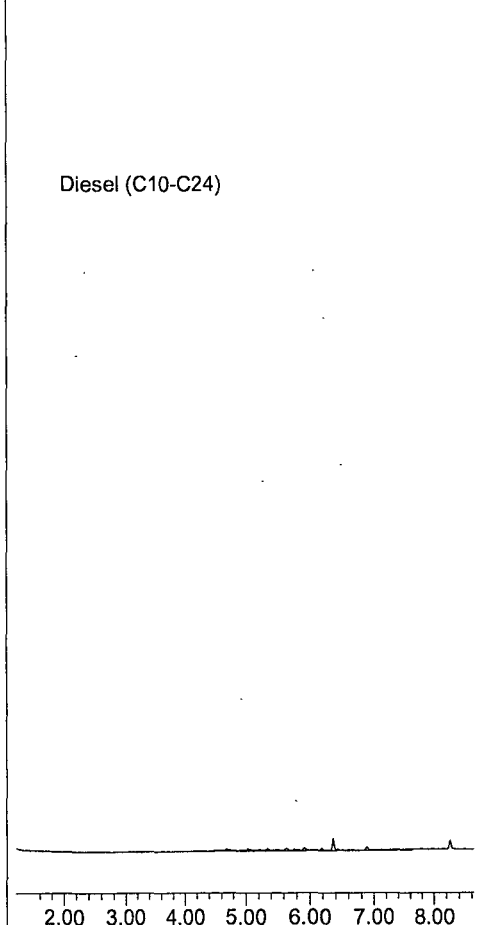
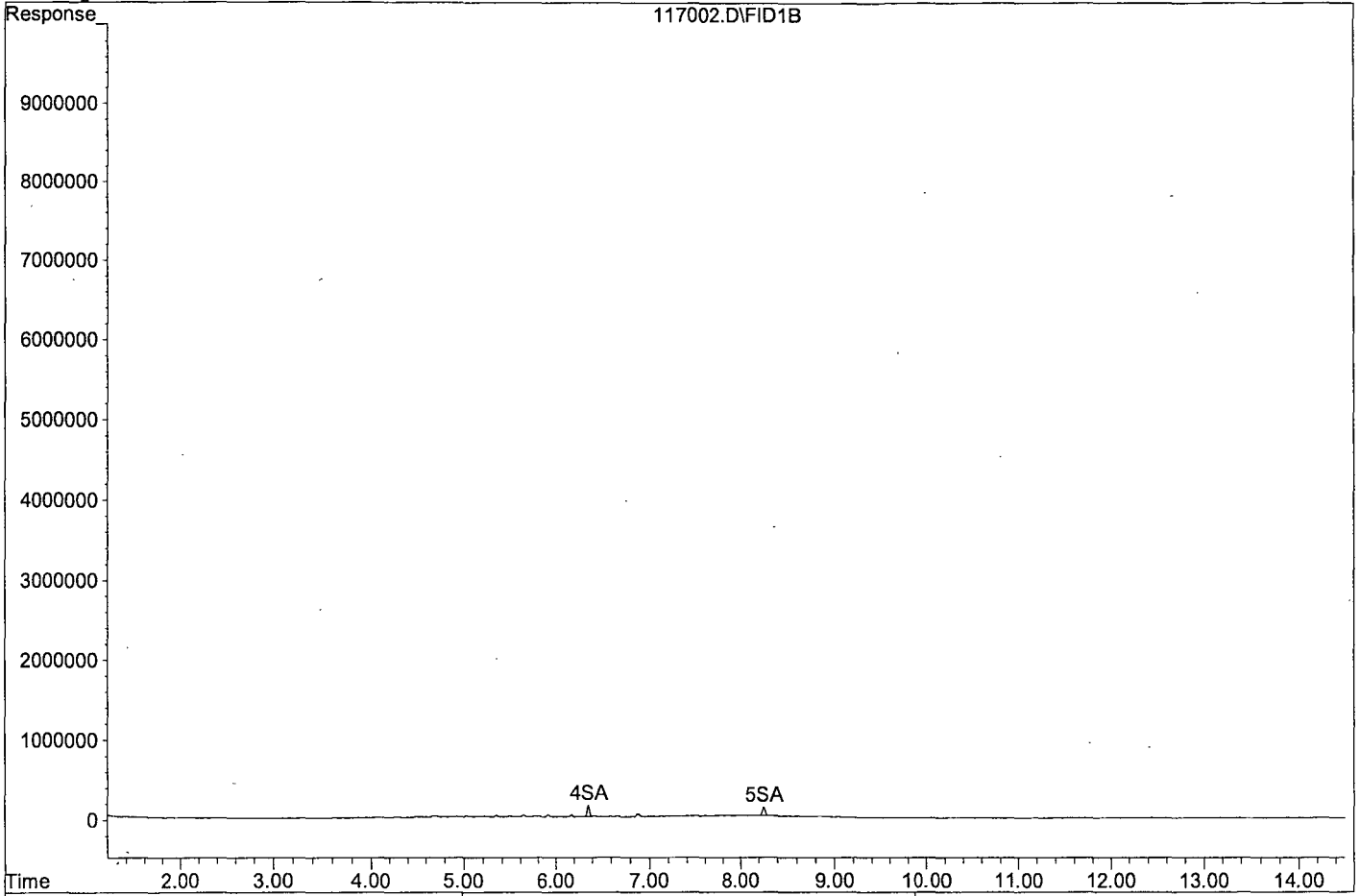
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	2315091	0.573 ppb
Surrogate Spike 30.000		Recovery =	1.91%
5) SA Octacosane(S)	8.26	2056338	0.548 ppb
Surrogate Spike 30.000		Recovery =	1.83%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	24944497	10.500 ppb
2) HBTM Motor Oil (C24-C40)	9.23	20936598	11.261 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117002.D  
Sample : Diesel / Motor Oil - 1 1/17/19



Data File : G:\APOLLO\DATA\190117\117003.D Vial: 3  
 Acq On : 1-17-19 16:58:29 Operator: DP  
 Sample : Diesel / Motor Oil - 2 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

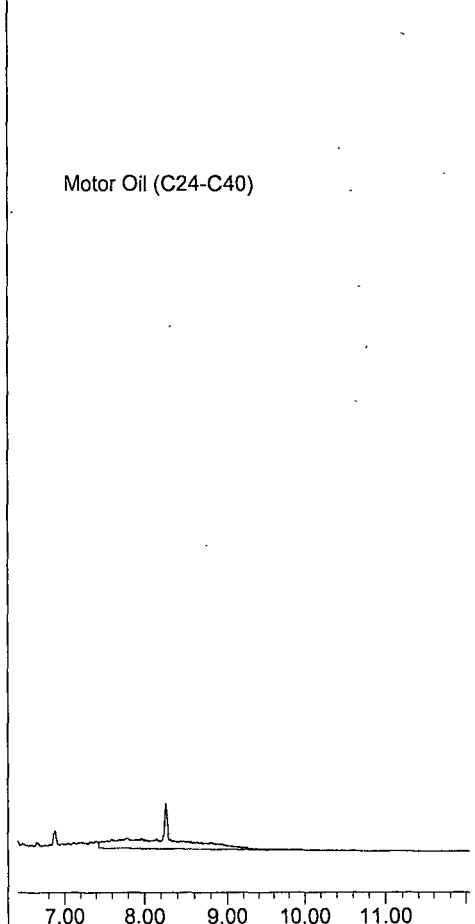
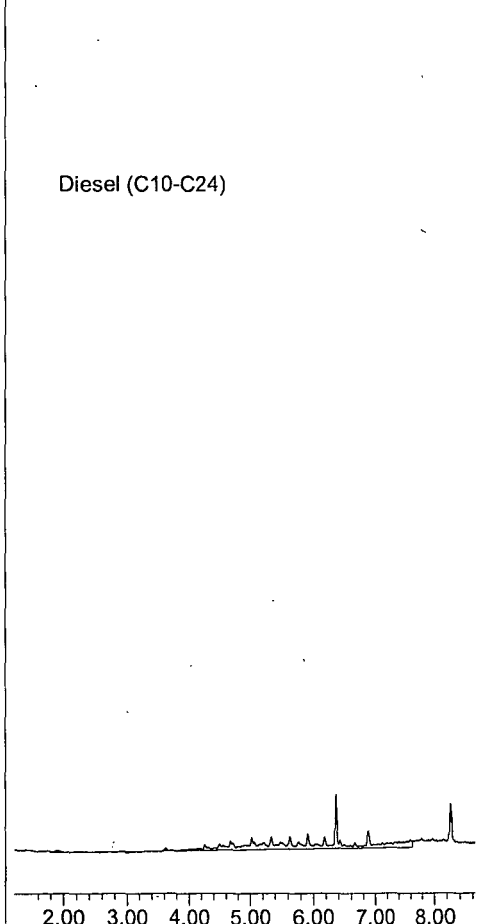
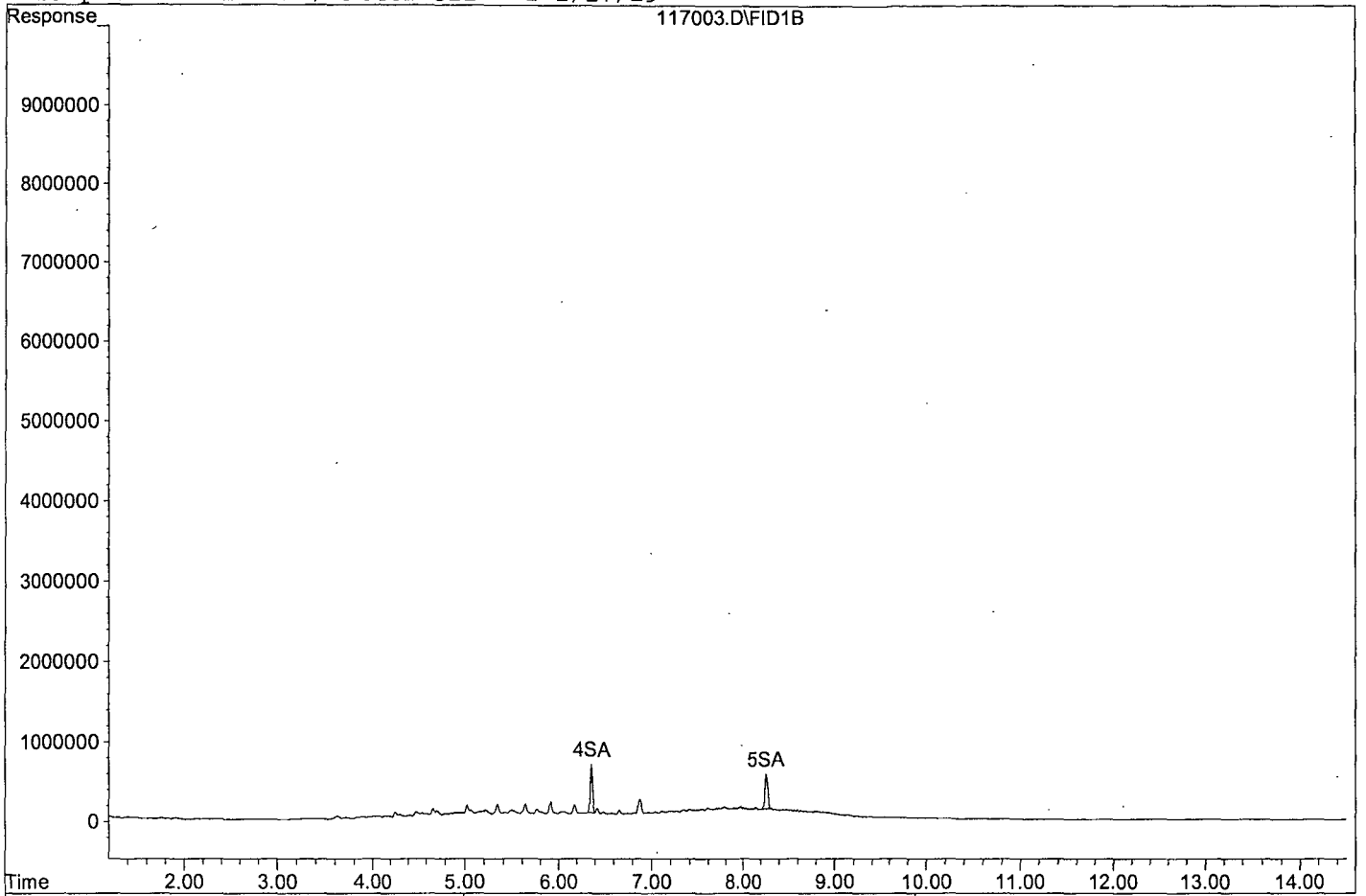
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	10397059	2.574 ppb
Surrogate Spike 30.000		Recovery =	8.58%
5) SA Octacosane(S)	8.26	9277725	2.472 ppb
Surrogate Spike 30.000		Recovery =	8.24%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	116318686	48.960 ppb
2) HBTM Motor Oil (C24-C40)	9.23	91779450	49.365 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117003.D  
Sample : Diesel / Motor Oil - 2 1/17/19



Data File : G:\APOLLO\DATA\190117\117004.D Vial: 4  
 Acq On : 1-17-19 17:17:50 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

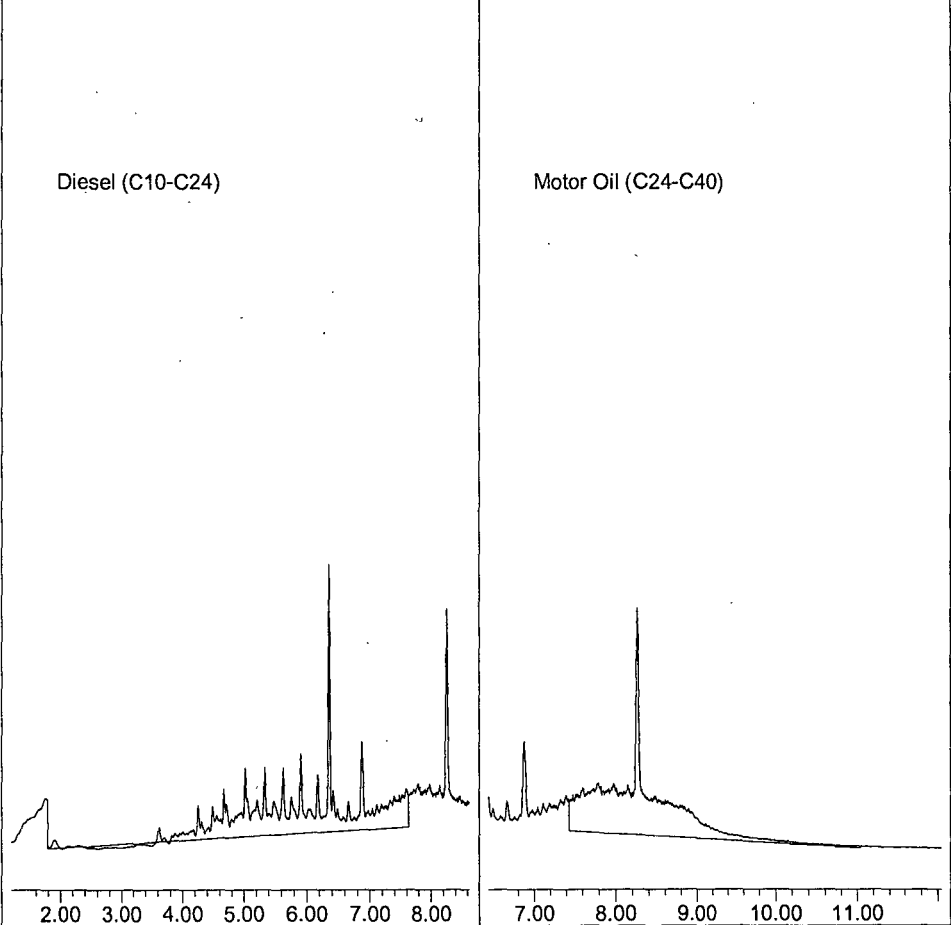
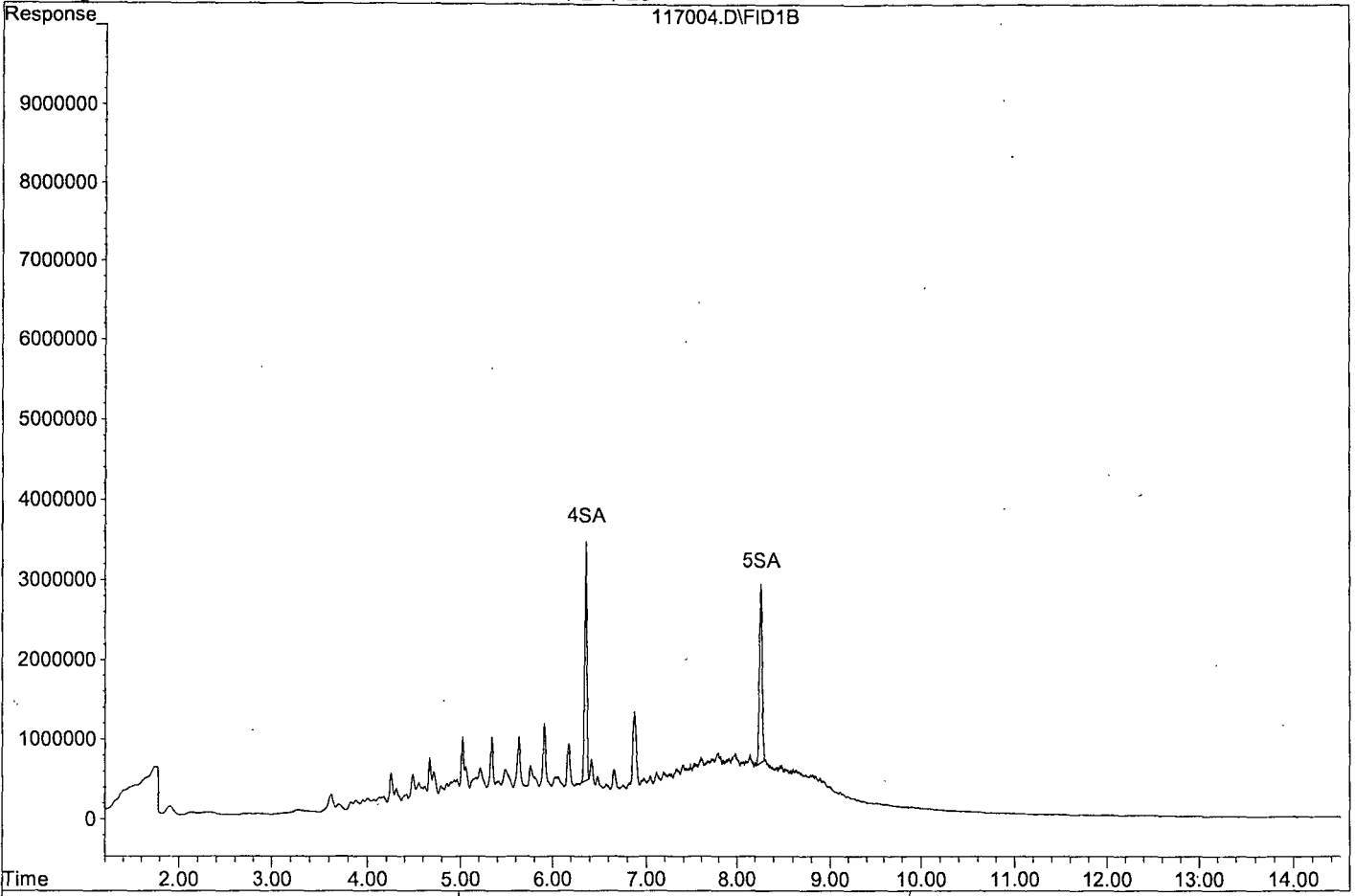
4) SA Ortho-Terphenyl(S)	6.36	50981338	12.622 ppb
Surrogate Spike 30.000		Recovery =	42.07%
5) SA Octacosane(S)	8.26	47036708	12.534 ppb
Surrogate Spike 30.000		Recovery =	41.78%

Target Compounds

1) HATM Diesel (C10-C24)	4.71	604956690	254.635 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474221646	255.067 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117004.D  
Sample : Diesel / Motor Oil - 3 1/17/19



Data File : G:\APOLLO\DATA\190117\117005.D Vial: 5  
 Acq On : 1-17-19 17:37:44 Operator: DP  
 Sample : Diesel / Motor Oil - 4 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

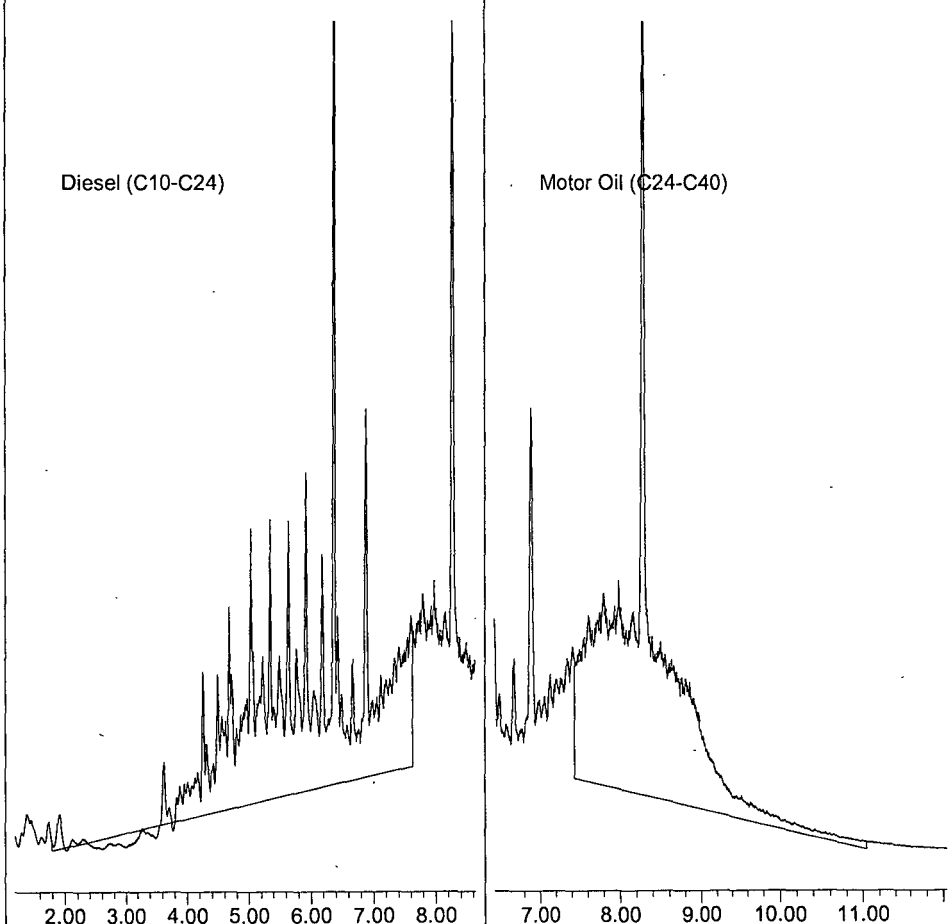
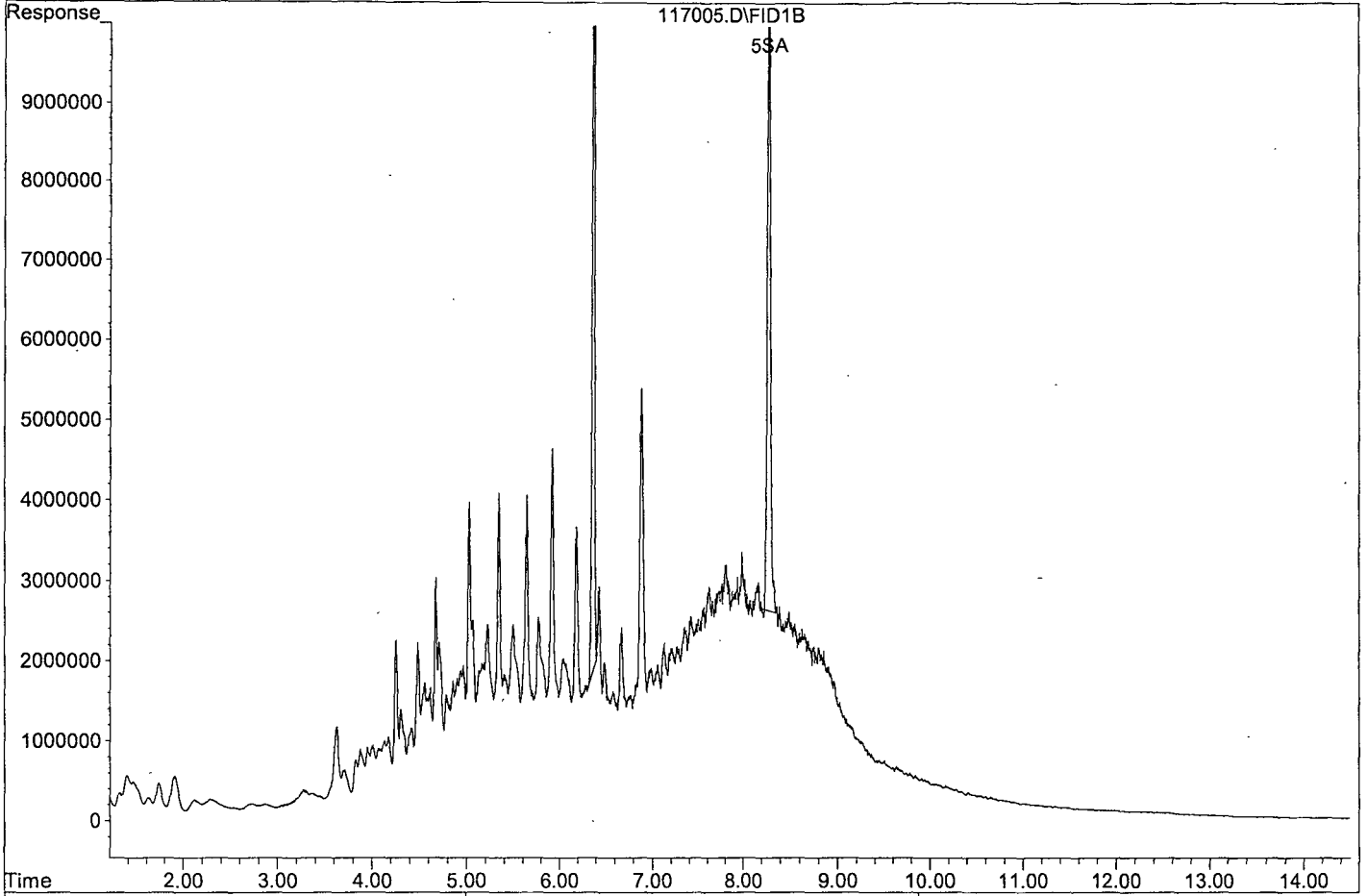
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 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	200948587	49.753 ppb
Surrogate Spike 30.000		Recovery =	165.84%
5) SA Octacosane(S)	8.27	191291289	50.974 ppb
Surrogate Spike 30.000		Recovery =	169.91%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	2443146618	1028.356 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1840612778	990.001 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117005.D  
Sample : Diesel / Motor Oil - 4 1/17/19





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\190117\117006.D Vial: 6  
 Acq On : 1-17-19 17:57:32 Operator: DP  
 Sample : Diesel / Motor Oil - 5 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

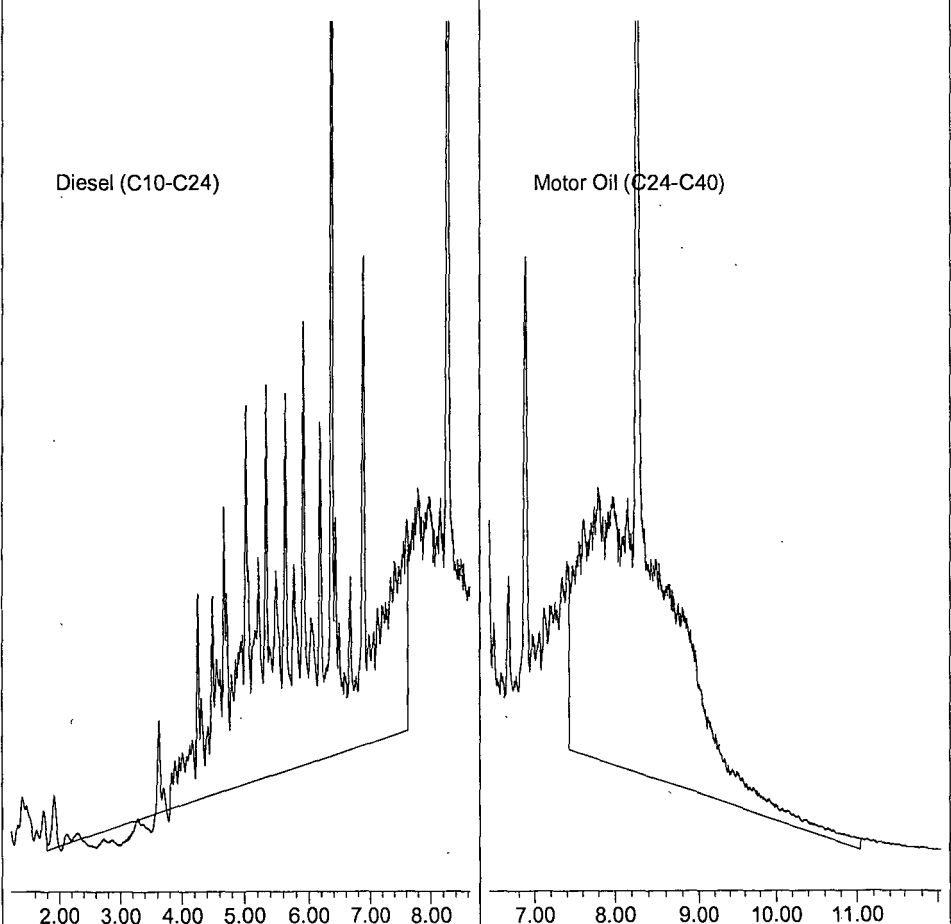
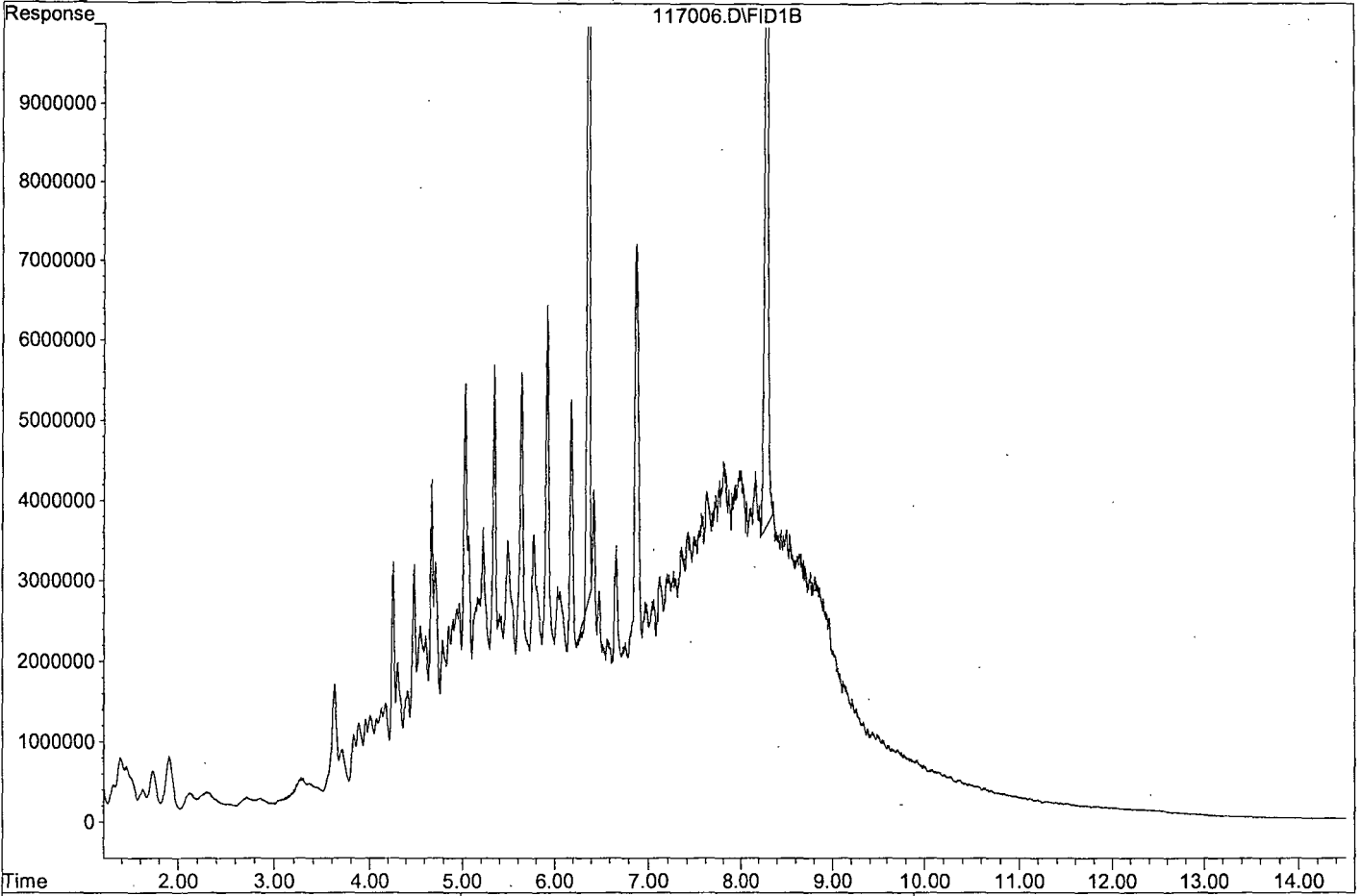
Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.37	279311894	69.155 ppb
Surrogate Spike 30.000		Recovery =	230.52%
5) SA Octacosane(S)	8.28	276106552	73.575 ppb
Surrogate Spike 30.000		Recovery =	245.25%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	3456829820	1455.030 ppb
2) HBTM Motor Oil (C24-C40)	9.23	2647918269	1424.223 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117006.D  
Sample : Diesel / Motor Oil - 5 1/17/19



Data File : G:\APOLLO\DATA\190117\117007.D Vial: 7  
 Acq On : 1-17-19 18:17:22 Operator: DP  
 Sample : Diesel / Motor Oil - 6 1/17/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

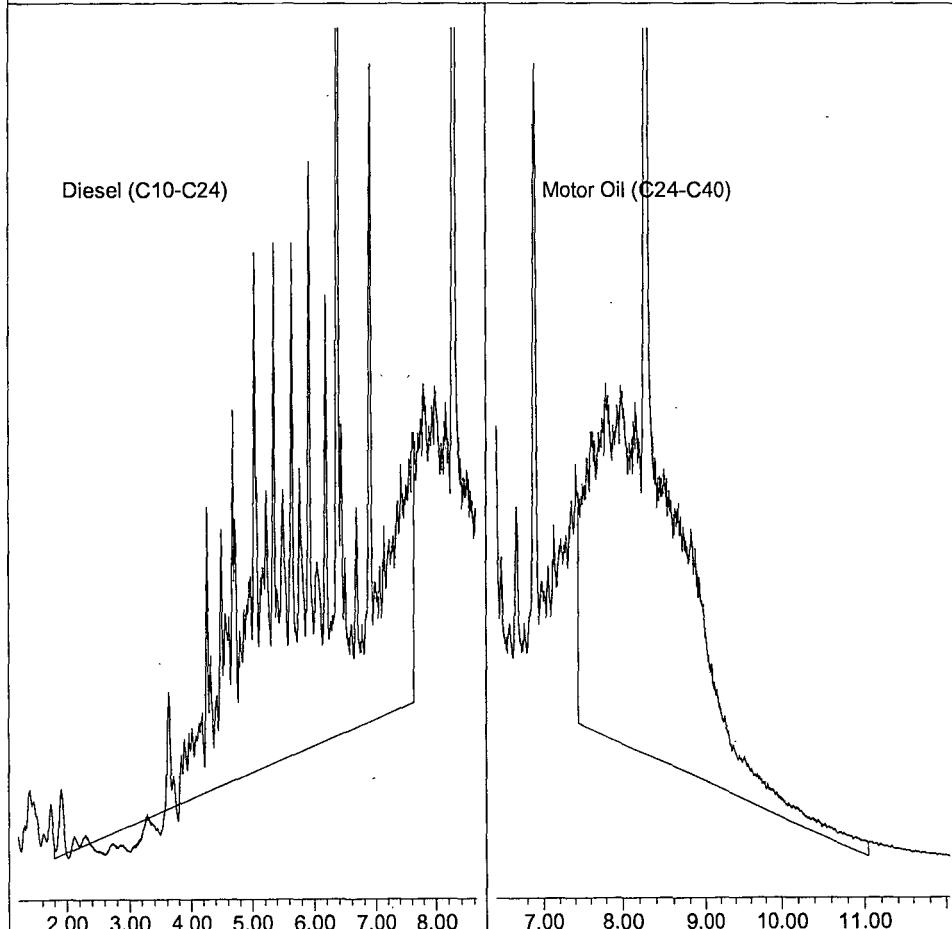
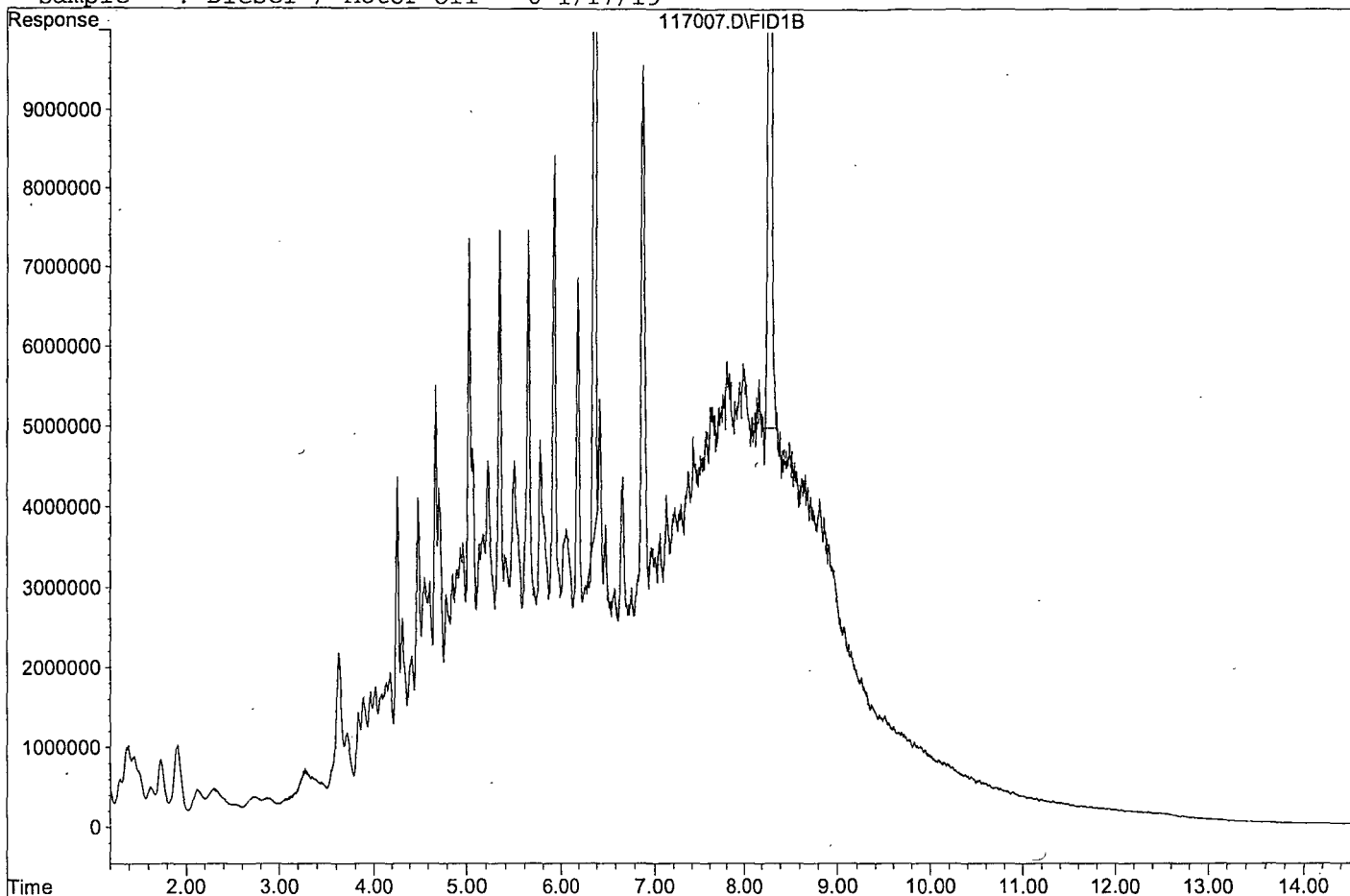
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 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.38	362298697	89.701 ppb
Surrogate Spike 30.000		Recovery =	299.00%
5) SA Octacosane(S)	8.29	342245296	91.199 ppb
Surrogate Spike 30.000		Recovery =	304.00%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	4532654243	1907.860 ppb
2) HBTM Motor Oil (C24-C40)	9.23	3446375794	1853.685 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117007.D  
Sample : Diesel / Motor Oil - 6 1/17/19



TPH Extractables  
DOC0117

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/17/19

Matrix: Water

Instrument: Apollo

Initial Cal. Date: 01/17/19

Data File: 117008.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1199930	1.0	HATM
2	HBTM	Motor Oil (C24-C40)	929601	923236	0.68	HBTM
3						
4						
5						
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40		Average			0.8	

Data File : G:\APOLLO\DATA\190117\117008.D Vial: 8  
 Acq On : 1-17-19 18:37:21 Operator: DP  
 Sample : Diesel / Motor Oil - SS 1/15/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 24 13:42 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190117\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 13:38:12 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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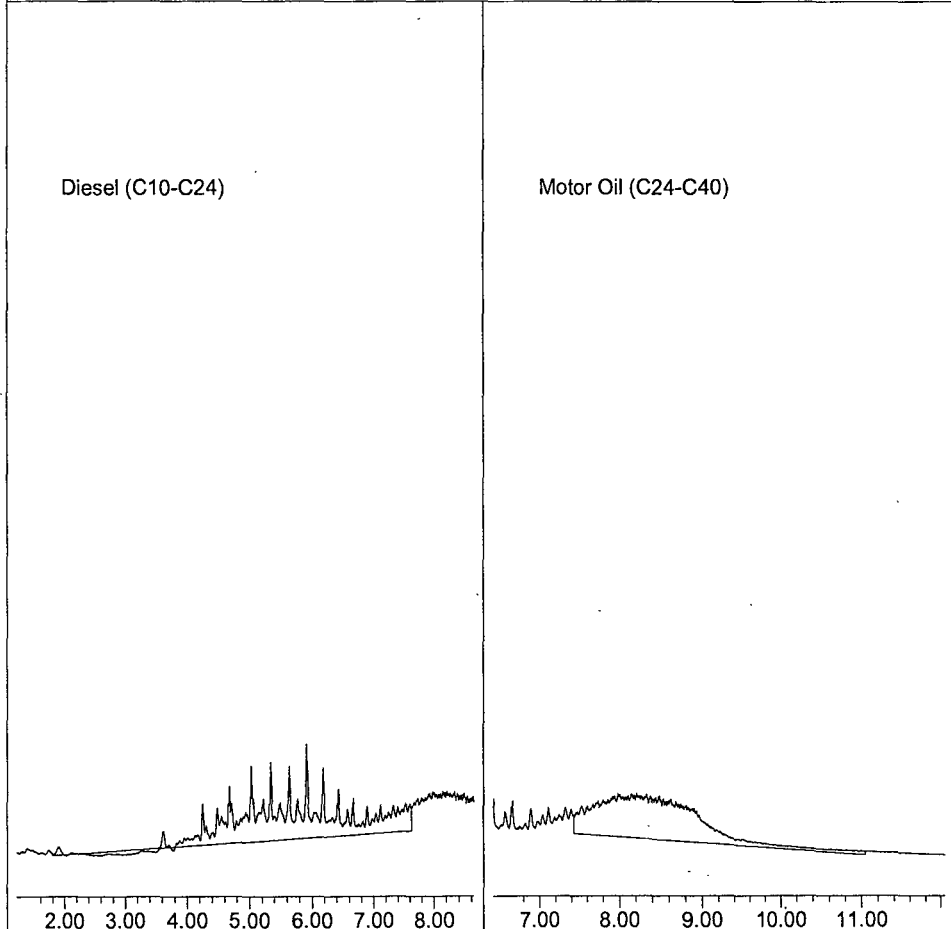
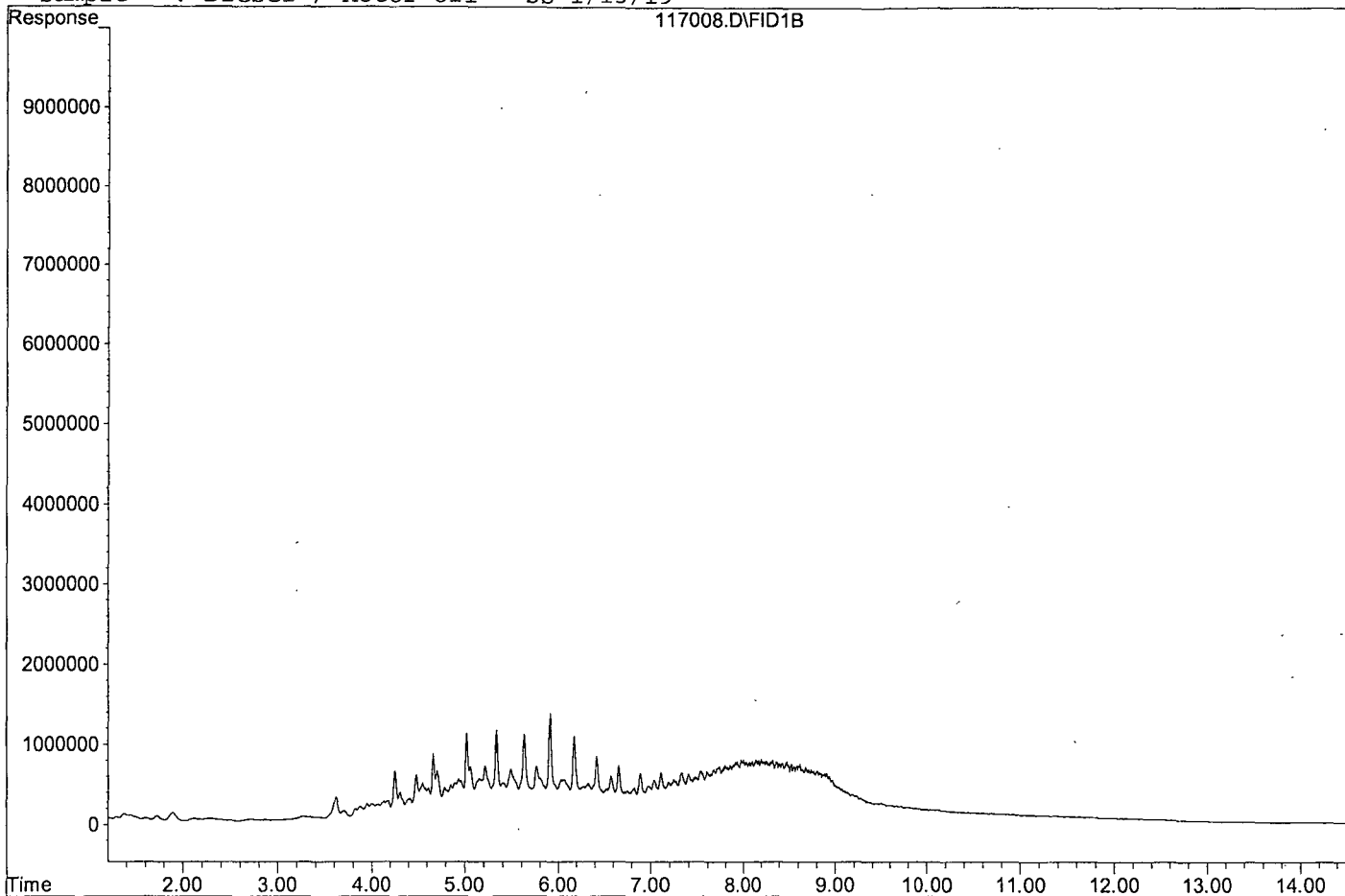
System Monitoring Compounds

Target Compounds

1) HATM Diesel (C10-C24)	4.71	599966004	252.534 ppb
2) HBTM Motor Oil (C24-C40)	9.23	461617841	248.288 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190117\117008.D  
Sample : Diesel / Motor Oil - SS 1/15/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124047.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1146170	3.5	HATM
2	HBTM	Motor Oil (C24-C40)	929601	925343	0.46	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	1942960	3.8	SA
4	SA	Octacosane(S)	1876370	1969020	4.9	SA
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31						
32						
33						
34						
35						
36						
37						
38						
39						
40		Average			3.2	



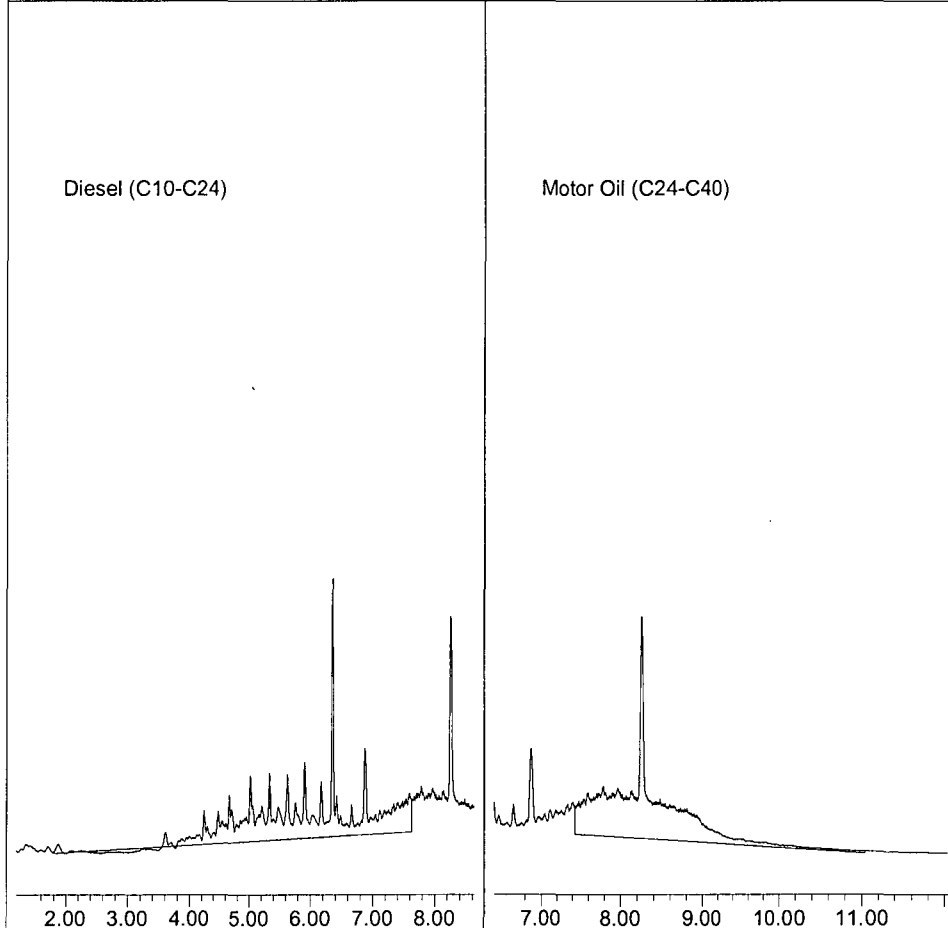
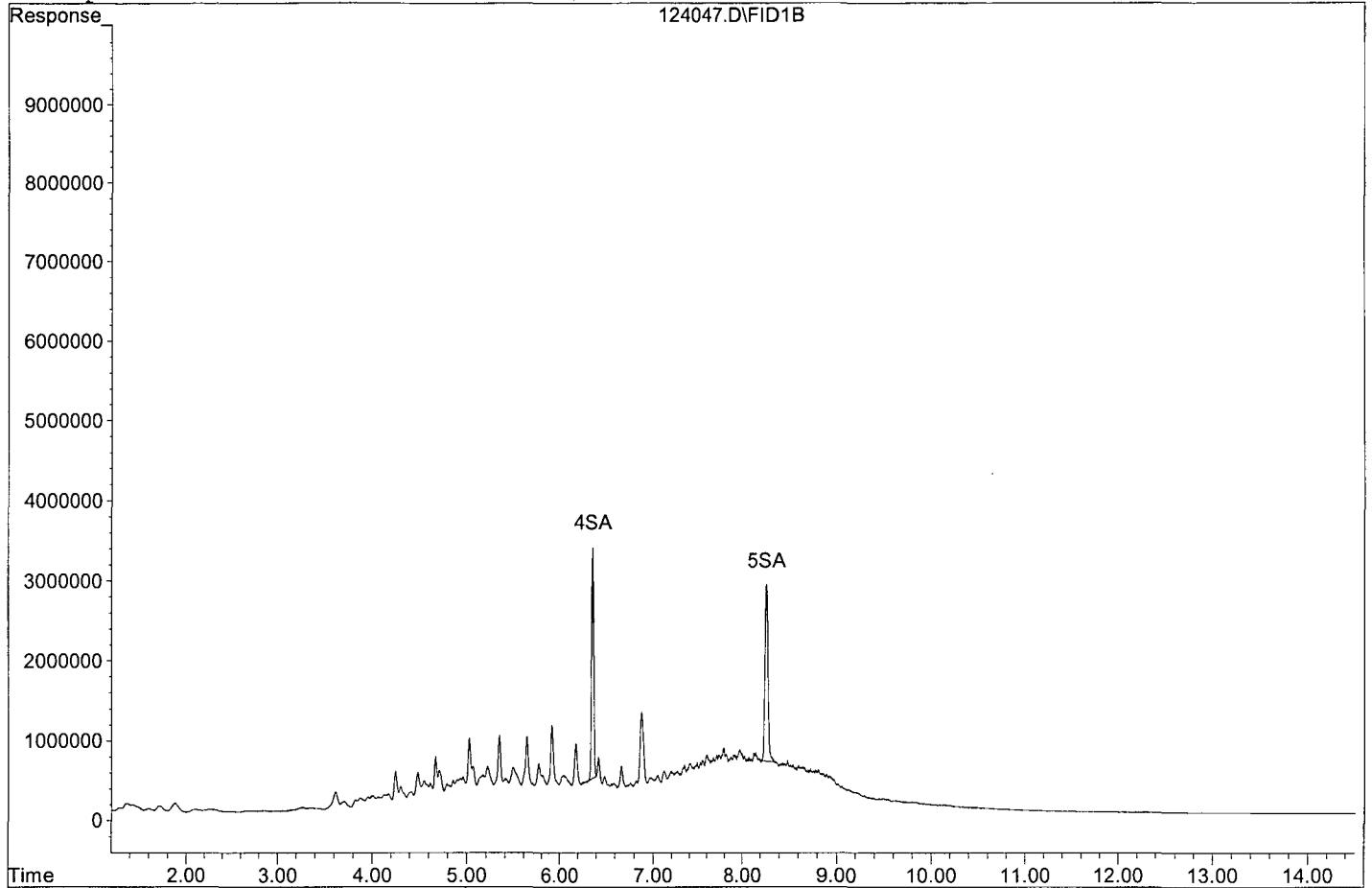
Data File : G:\APOLLO\DATA\190124\124047.D Vial: 47  
 Acq On : 1-29-19 12:00:52 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 31 11:21 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	48573960	12.026 ppb
Surrogate Spike 30.000		Recovery =	40.09%
5) SA Octacosane(S)	8.26	49225551	13.117 ppb
Surrogate Spike 30.000		Recovery =	43.72%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	573084647	241.220 ppb
2) HBTM Motor Oil (C24-C40)	9.23	462671393	248.855 ppb

Data File: G:\APOLLO\DATA\190124\124047.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124061.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C24)	1187890	1163780	2.0	HATM
2	HBTM Motor Oil (C24-C40)	929601	949337	2.1	HBTM
3	SA Ortho-Terphenyl(S)	2019470	2002670	0.83	SA
4	SA Octacosane(S)	1876370	1970950	5.0	SA
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
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25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			2.5	

Data File : G:\APOLLO\DATA\190124\124061.D Vial: 61  
 Acq On : 1-29-19 16:41:00 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

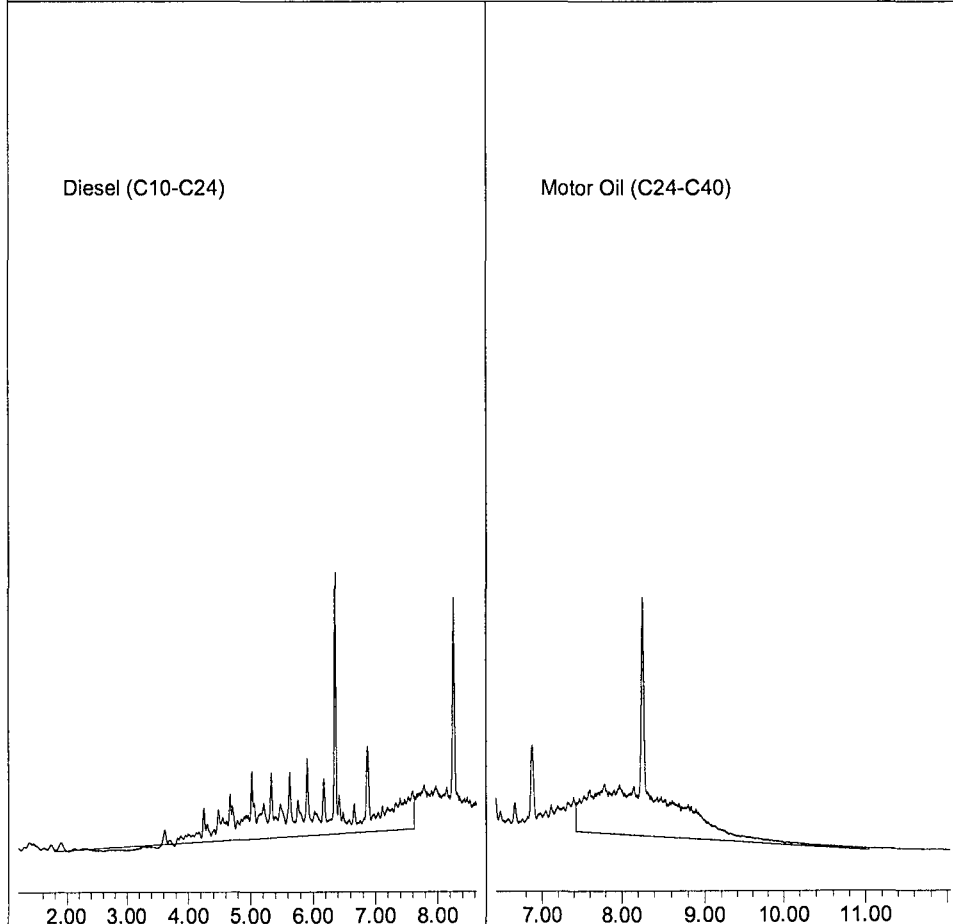
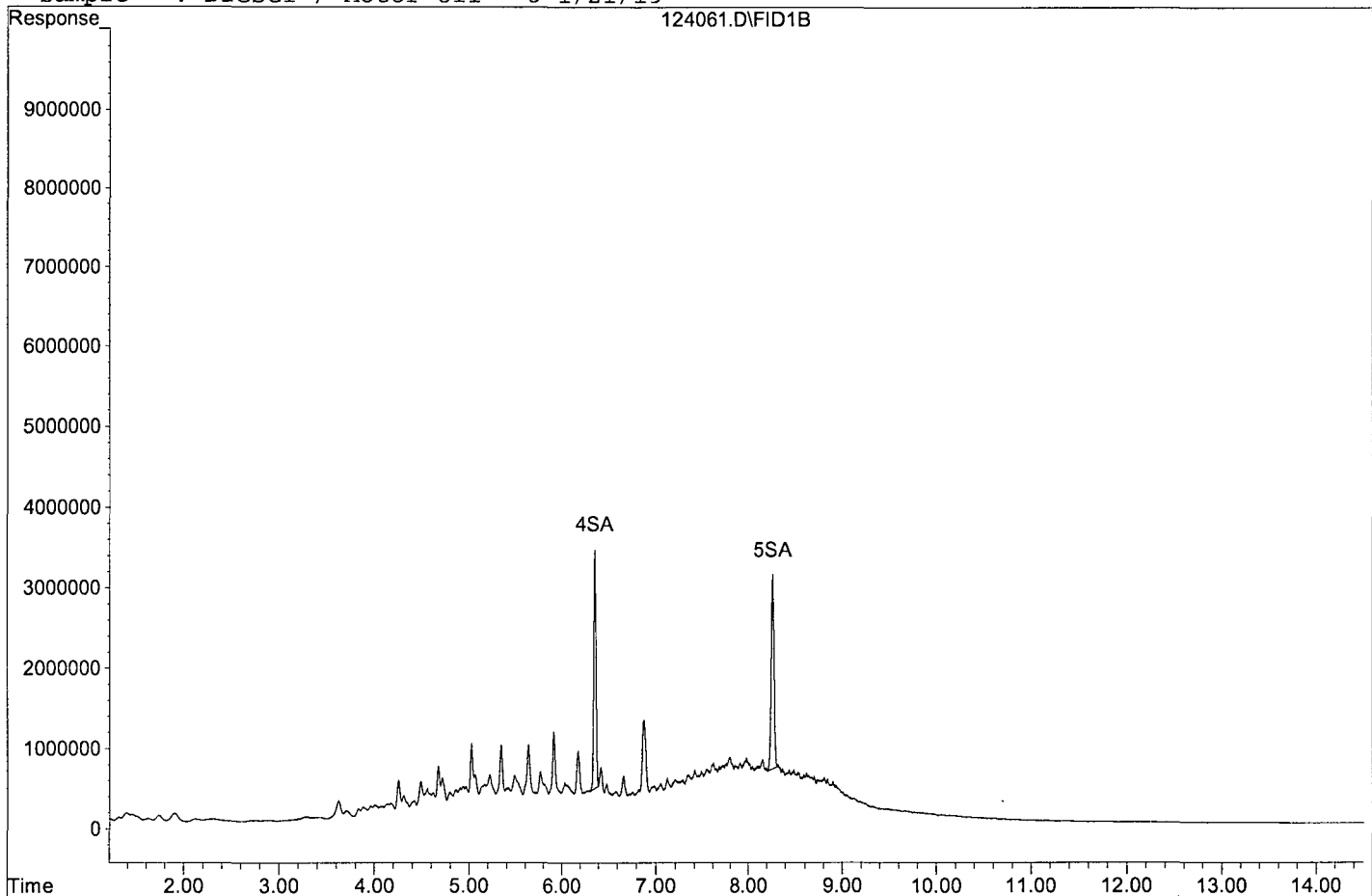
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	50066851	12.396 ppb
Surrogate Spike 30.000		Recovery =	41.32%
5) SA Octacosane(S)	8.26	49273687	13.130 ppb
Surrogate Spike 30.000		Recovery =	43.77%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	581891783	244.927 ppb
2) HBTM Motor Oil (C24-C40)	9.23	474668635	255.308 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124061.D  
Sample : Diesel / Motor Oil - 3 1/21/19



TPH Extractables  
DOC0117

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: Water

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Apollo  
Initial Cal. Date: 01/17/19  
Data File: 124072.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C24)	1187890	1217280	2.5	HATM
2	HBTM	Motor Oil (C24-C40)	929601	967645	4.1	HBTM
3	SA	Ortho-Terphenyl(S)	2019470	2082790	3.1	SA
4	SA	Octacosane(S)	1876370	1842740	1.8	SA
5						
6						
7						
8						
9						
10						
11						
12						
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28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40		Average			2.9	

Data File : G:\APOLLO\DATA\190124\124072.D Vial: 72  
 Acq On : 1-29-19 20:19:55 Operator: DP  
 Sample : Diesel / Motor Oil - 3 1/21/19 Inst : Apollo  
 Misc : water Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Jan 30 9:58 2019 Quant Results File: DOC0117.RES

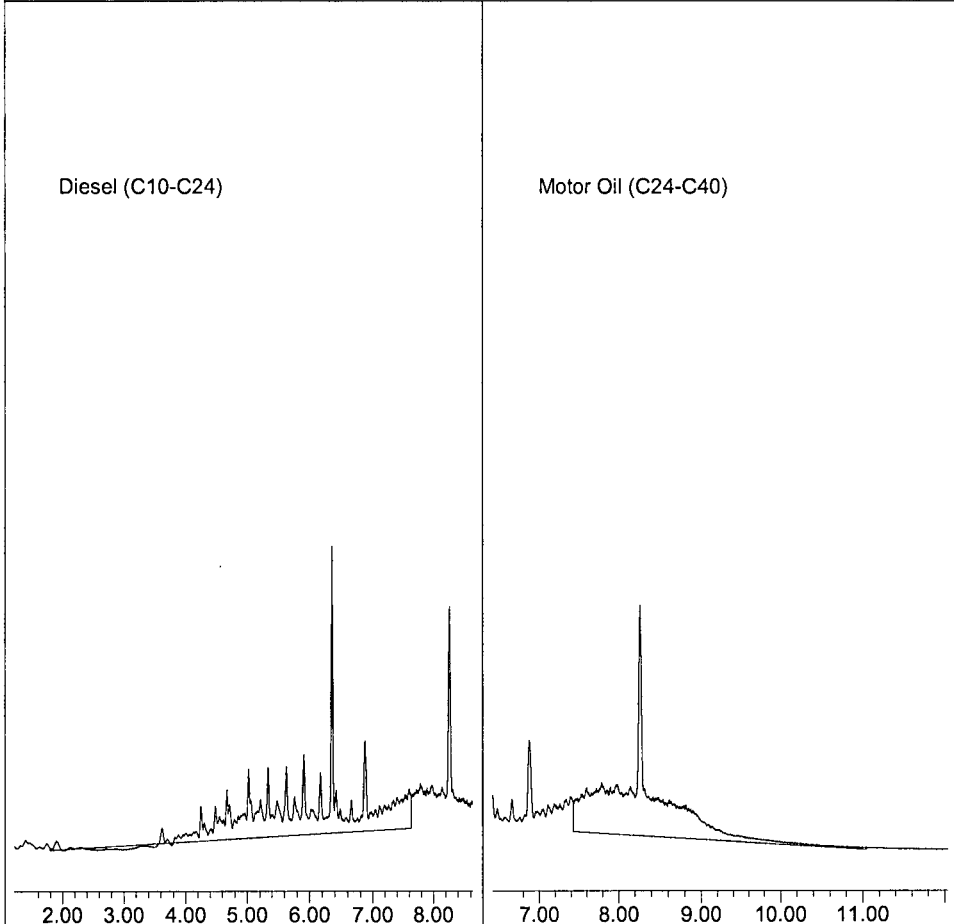
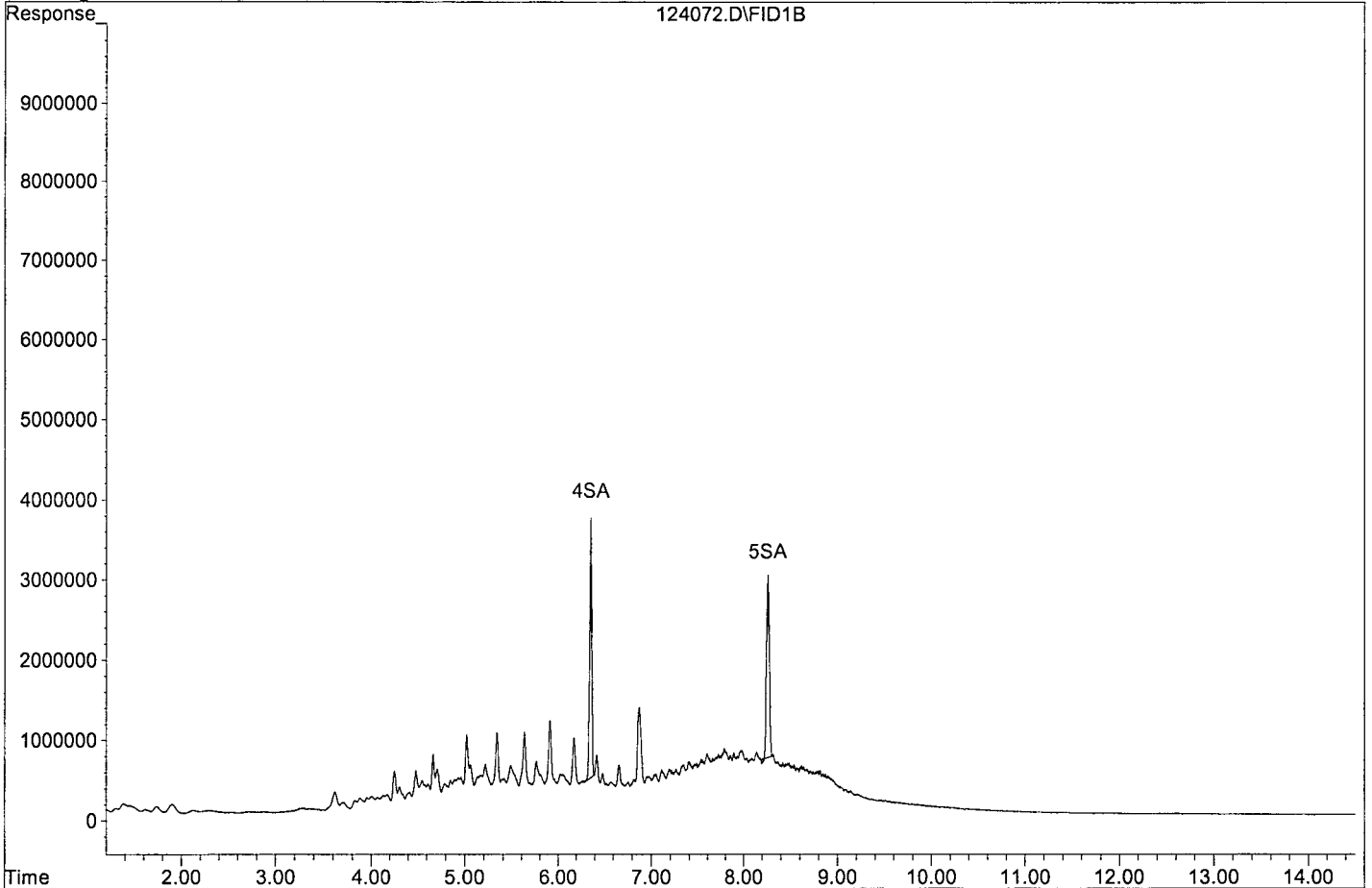
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	52069794	12.892 ppb
Surrogate Spike 30.000		Recovery =	42.97%
5) SA Octacosane(S)	8.26	46068587	12.276 ppb
Surrogate Spike 30.000		Recovery =	40.92%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	608639669	256.185 ppb
2) HBTM Motor Oil (C24-C40)	9.23	483822490	260.231 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124072.D  
Sample : Diesel / Motor Oil - 3 1/21/19





**ORGANICS**  
**Raw Data**

Data File : G:\APOLLO\DATA\190124\124062.D Vial: 62  
 Acq On : 1-29-19 17:01:10 Operator: DP  
 Sample : AZ85643W40 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

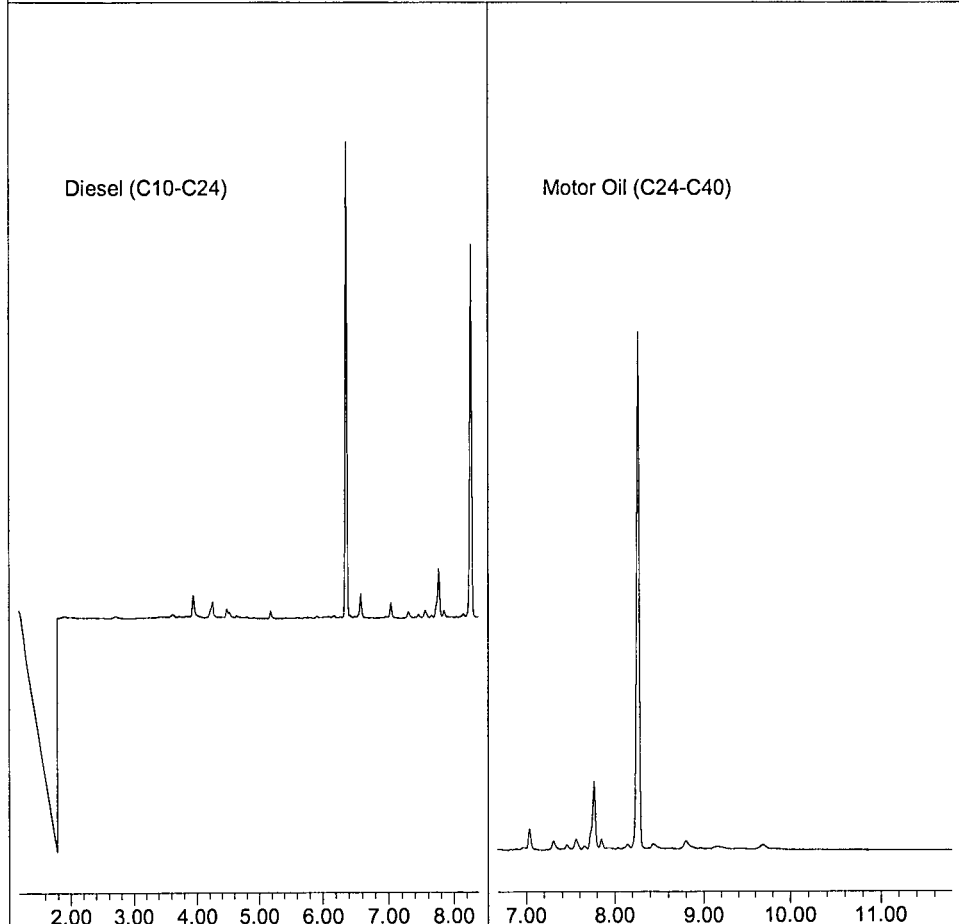
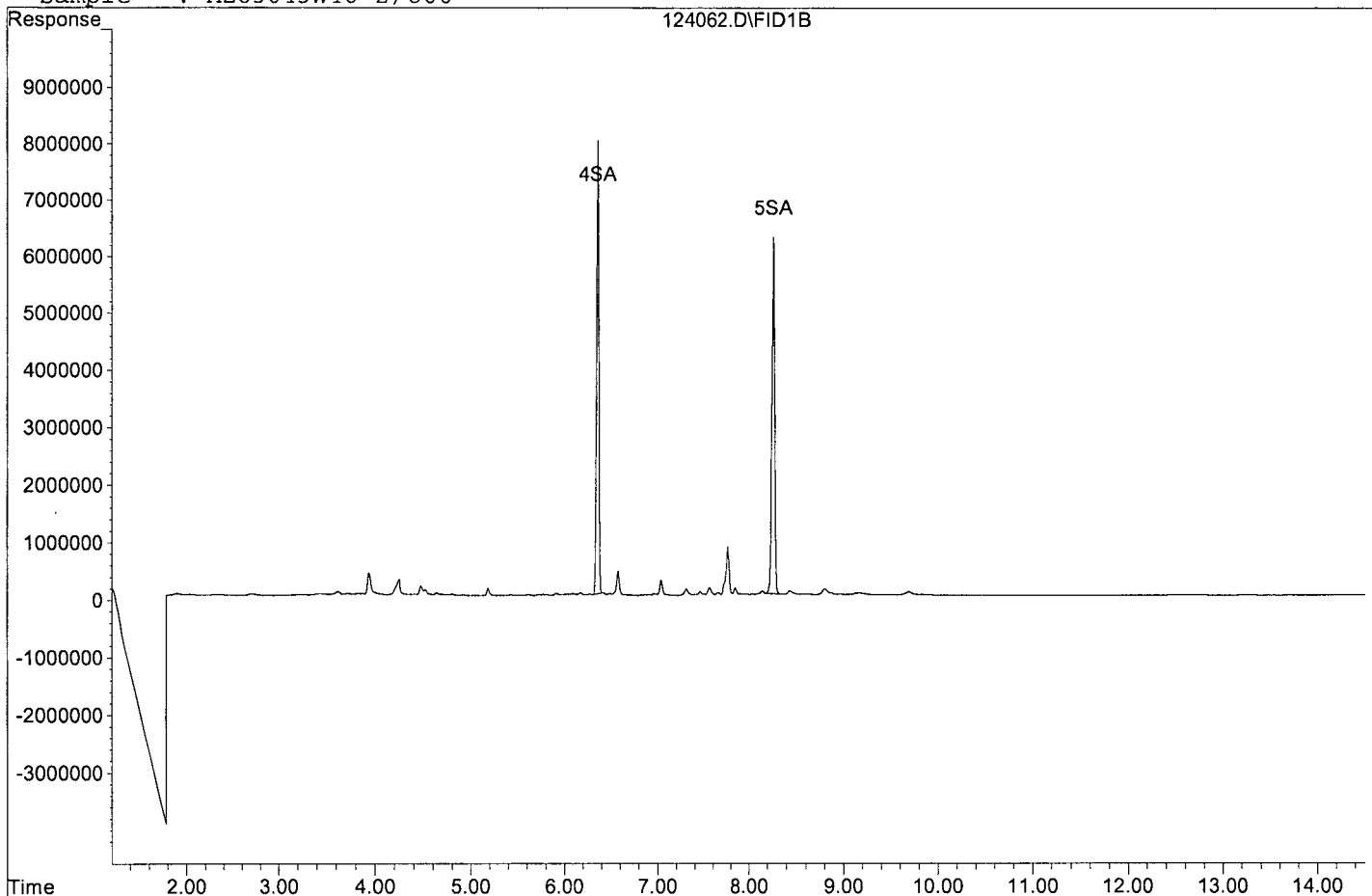
4) SA Ortho-Terphenyl(S)	6.36	132976379	82.309 ppb
Surrogate Spike 75.000		Recovery =	109.75%
5) SA Octacosane(S)	8.27	127721528	85.086 ppb
Surrogate Spike 75.000		Recovery =	113.45%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124062.D

Sample : AZ85643W40 2/800



Data File : G:\APOLLO\DATA\190124\124063.D Vial: 63  
 Acq On : 1-29-19 17:21:18 Operator: DP  
 Sample : AZ85644W11 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

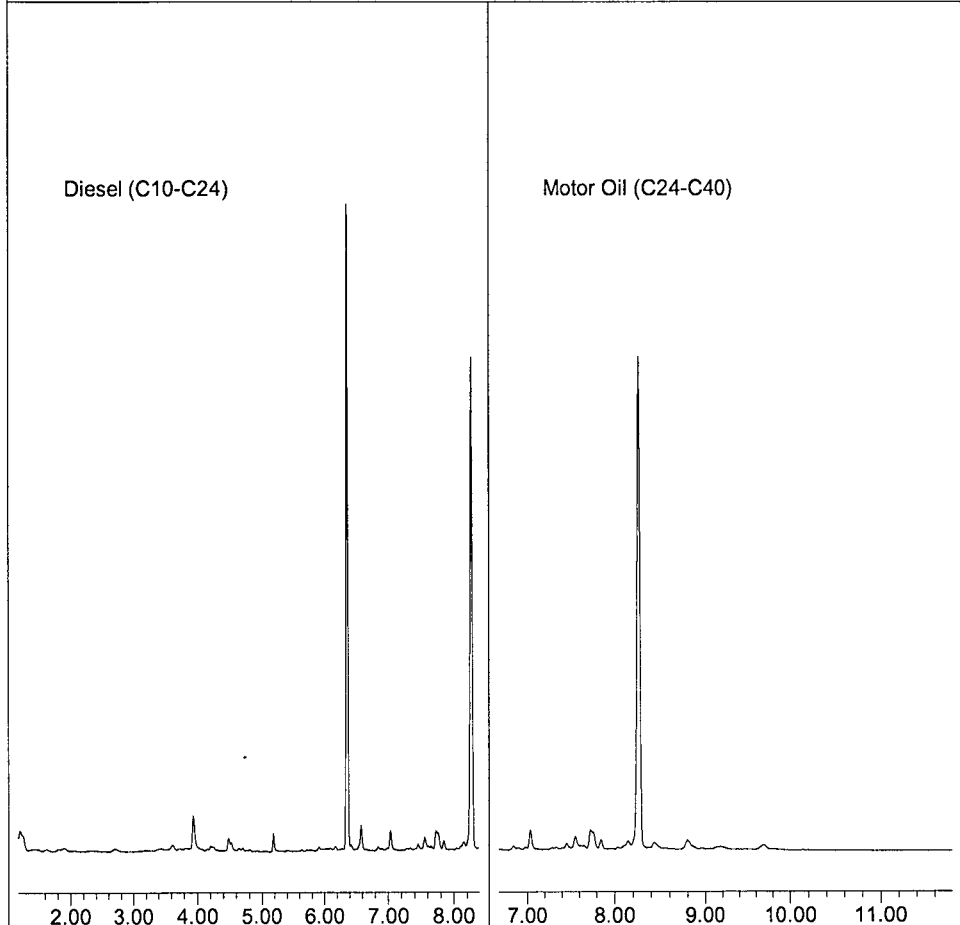
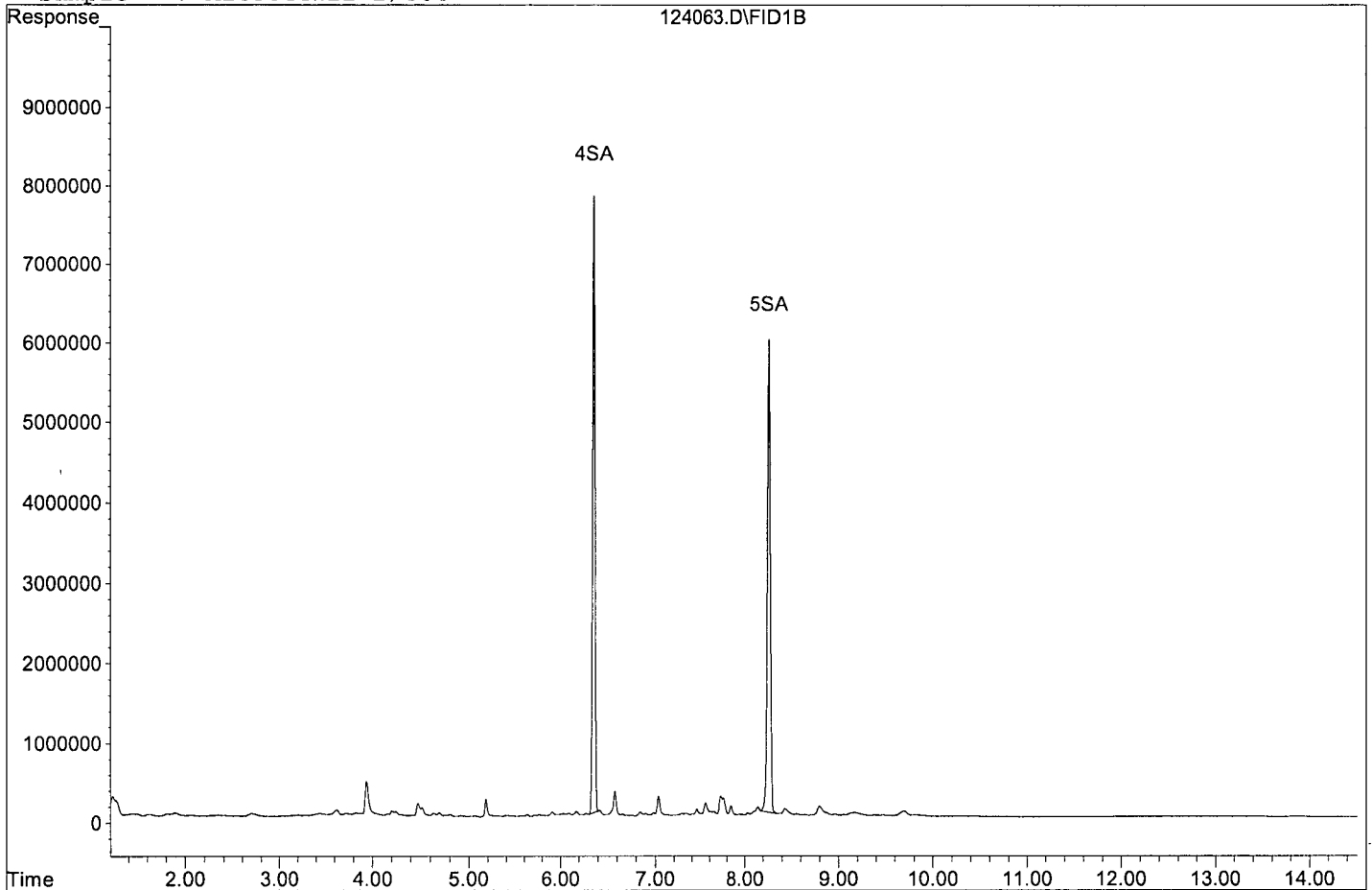
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	132316116	81.900 ppb
Surrogate Spike 75.000		Recovery =	109.20%
5) SA Octacosane(S)	8.26	129183202	86.059 ppb
Surrogate Spike 75.000		Recovery =	114.75%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124063.D  
Sample : AZ85644W11 2/800



Data File : G:\APOLLO\DATA\190124\124064.D Vial: 64  
 Acq On : 1-29-19 17:40:45 Operator: DP  
 Sample : AZ85646W24 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
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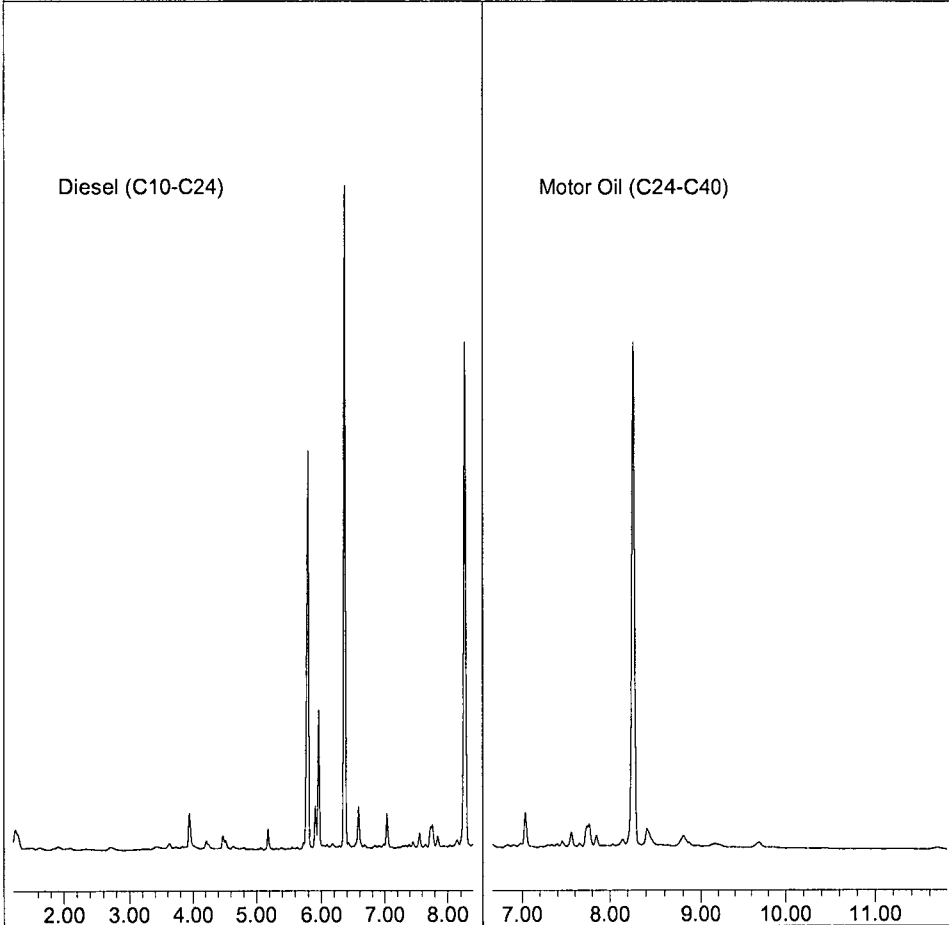
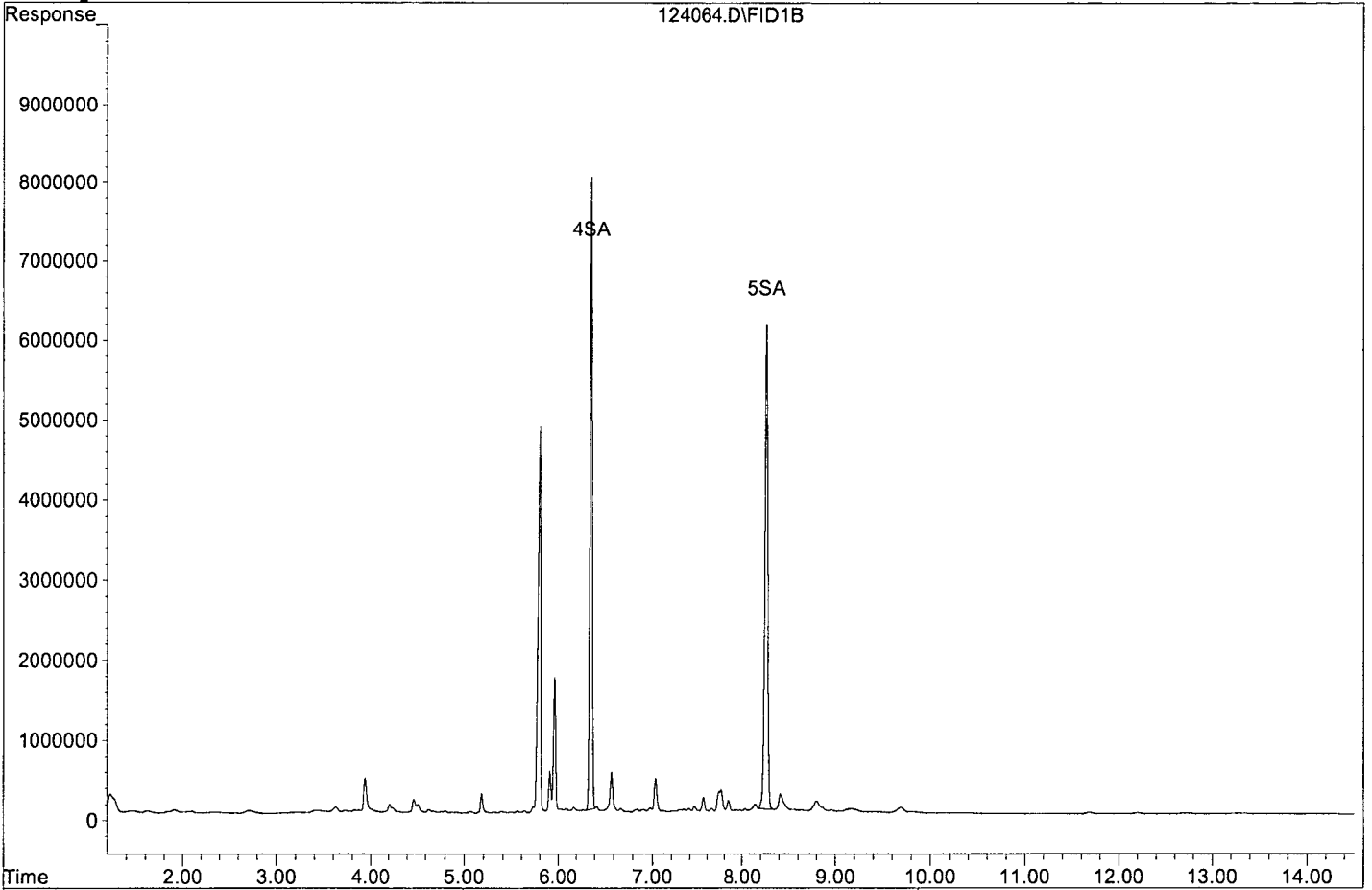
System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.36	133491192	82.628 ppb
Surrogate Spike 75.000		Recovery =	110.17%
5) SA Octacosane(S)	8.26	129454680	86.240 ppb
Surrogate Spike 75.000		Recovery =	114.99%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124064.D  
Sample : AZ85646W24 2/800



Data File : G:\APOLLO\DATA\190124\124065.D Vial: 65  
 Acq On : 1-29-19 18:00:47 Operator: DP  
 Sample : AZ85653W24 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:23 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

4) SA Ortho-Terphenyl(S)	6.36	160602602	99.409 ppb
Surrogate Spike 75.000		Recovery =	132.55%
5) SA Octacosane(S)	8.26	165216941	110.064 ppb
Surrogate Spike 75.000		Recovery =	146.75%

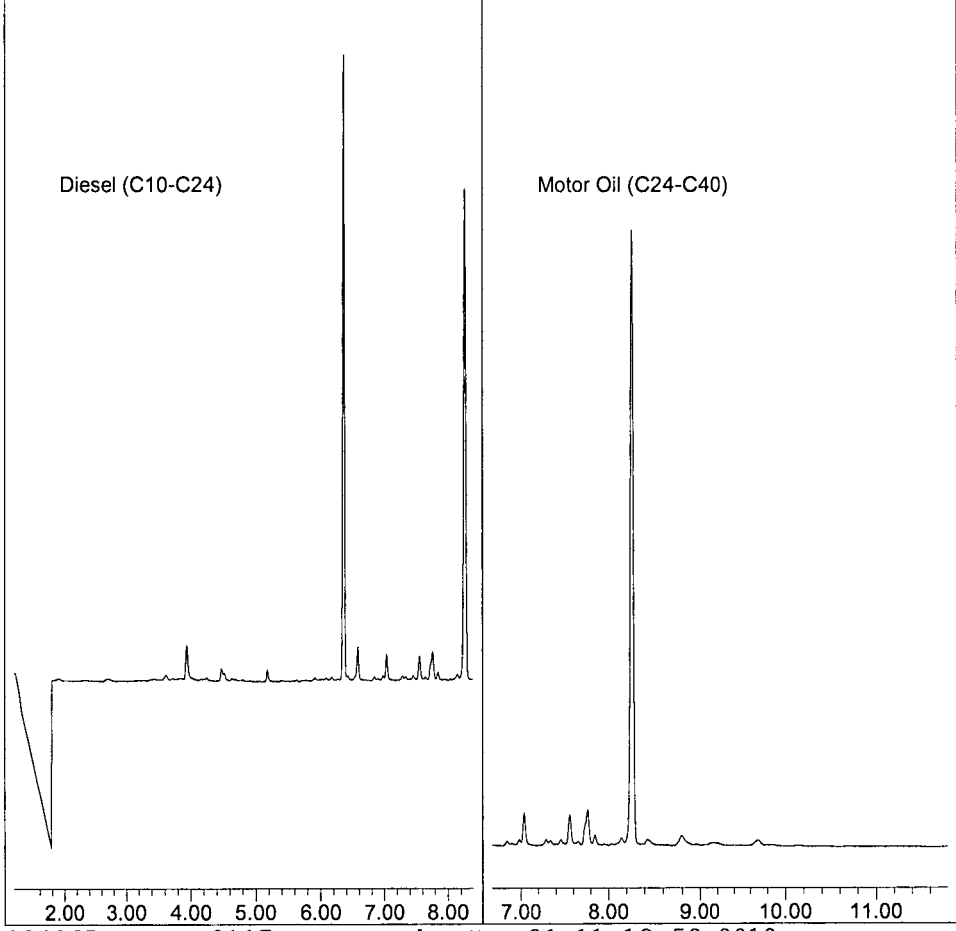
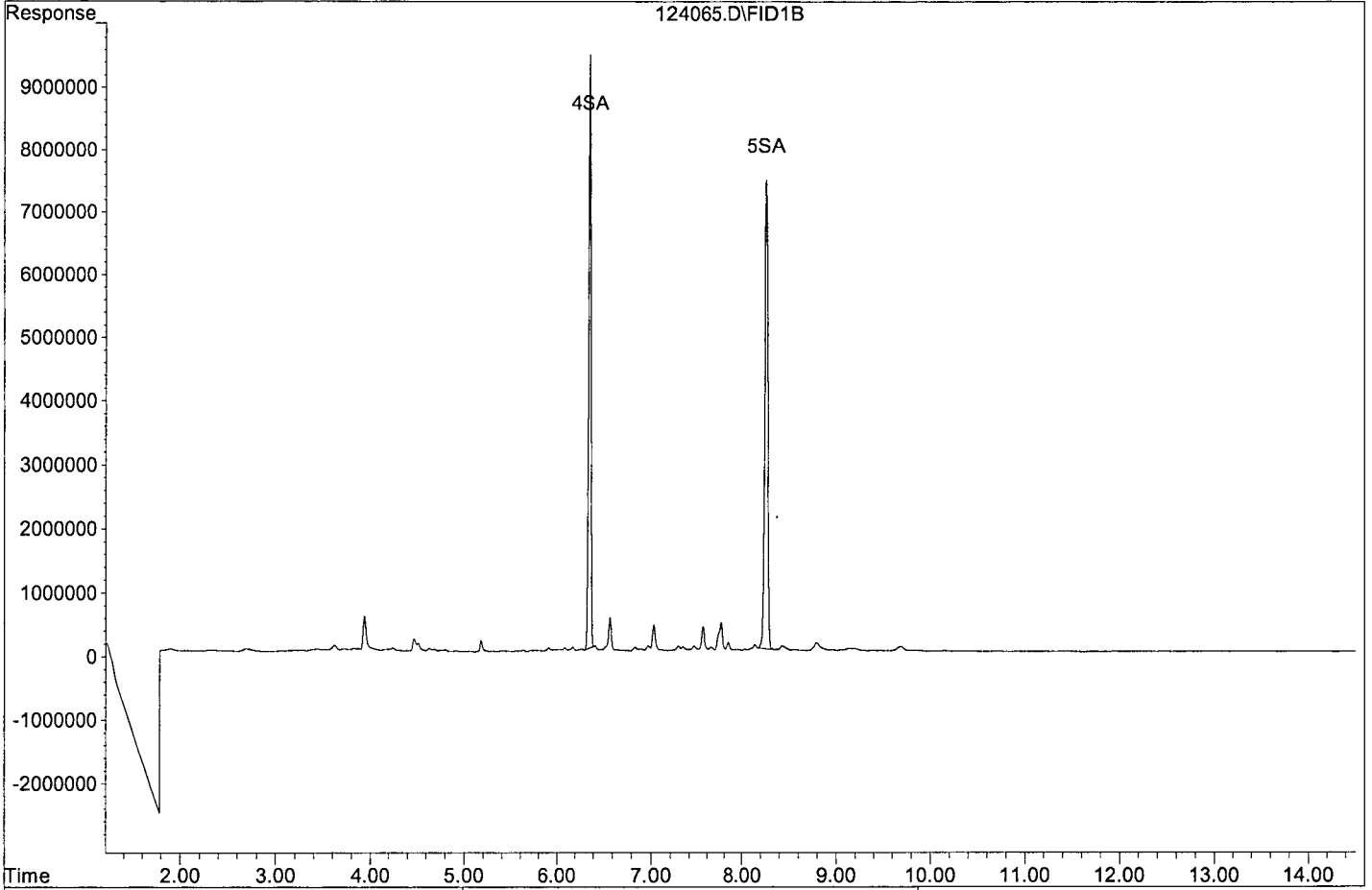
Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124065.D

Sample : AZ85653W24 2/800



Data File : G:\APOLLO\DATA\190124\124048.D Vial: 48  
 Acq On : 1-29-19 12:20:41 Operator: DP  
 Sample : 190125A BLK 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:19 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

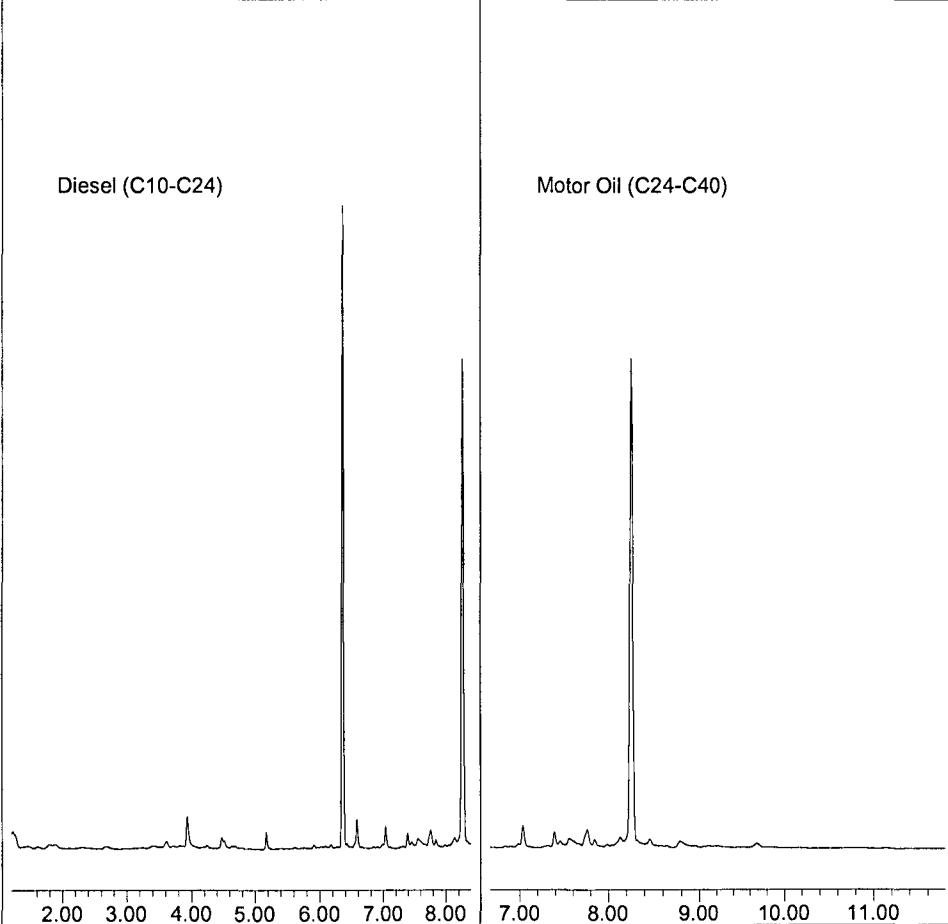
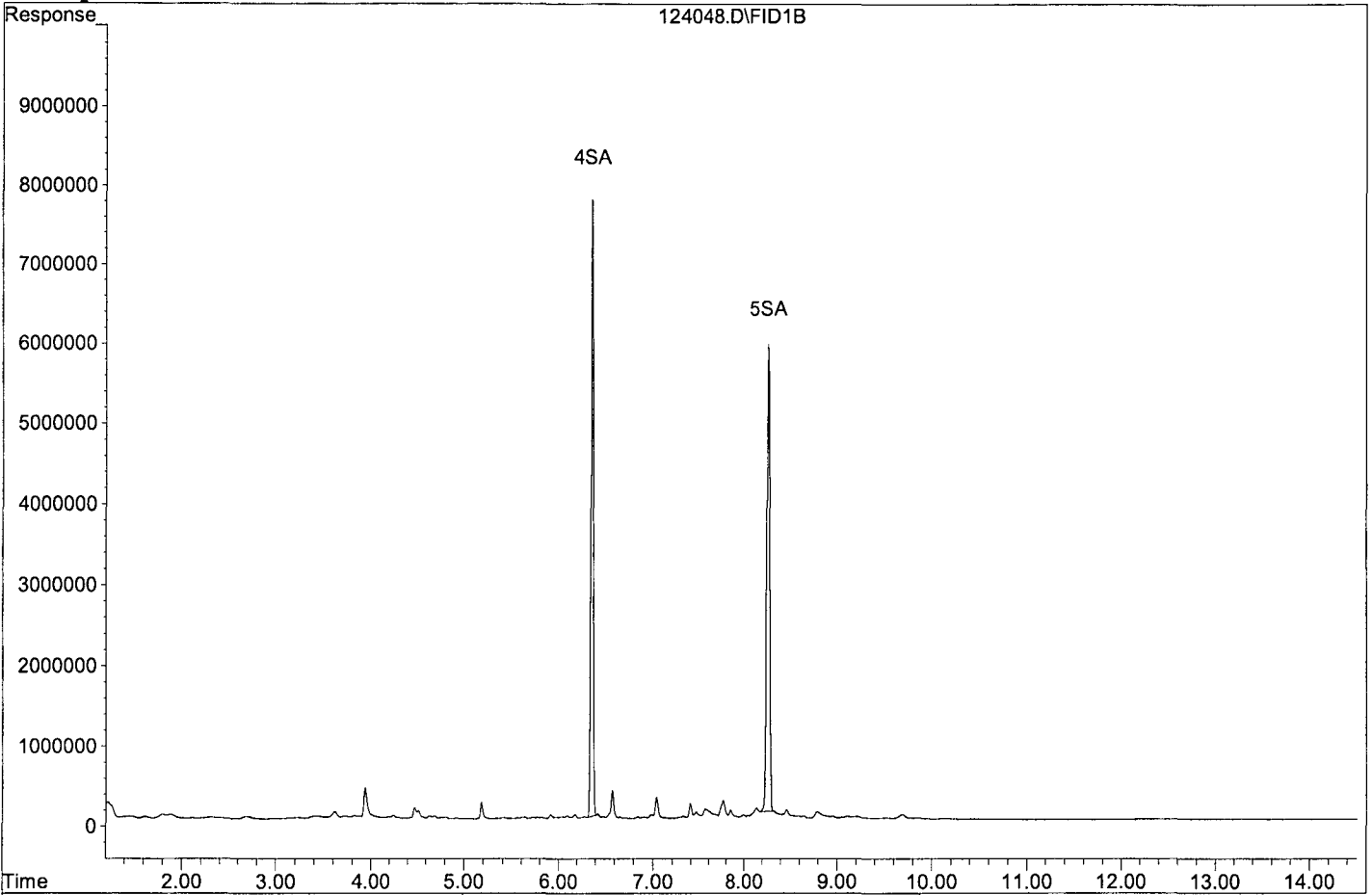
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	132662086	82.114 ppb
Surrogate Spike 75.000		Recovery =	109.49%
5) SA Octacosane(S)	8.26	127800848	85.138 ppb
Surrogate Spike 75.000		Recovery =	113.52%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124048.D

Sample : 190125A BLK 2/800



Data File : G:\APOLLO\DATA\190124\124049.D Vial: 49  
 Acq On : 1-29-19 12:40:39 Operator: DP  
 Sample : 190125A LCS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:20 2019 Quant Results File: DOC0117.RES

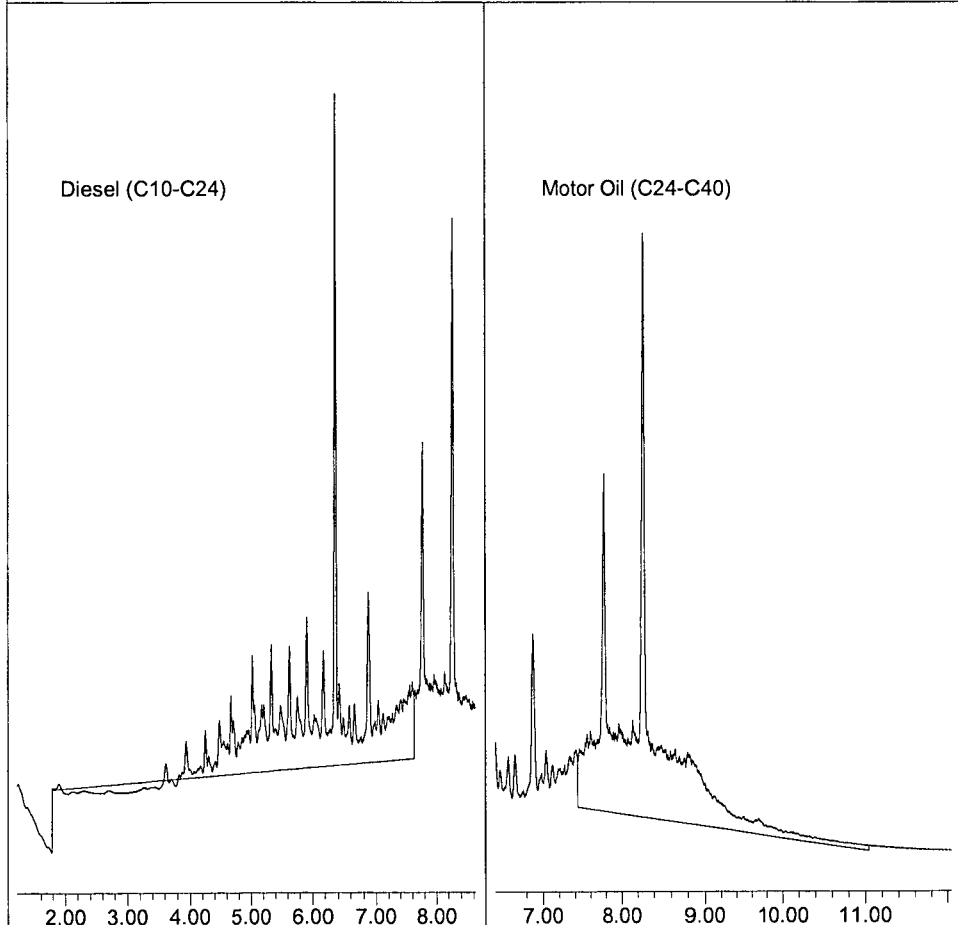
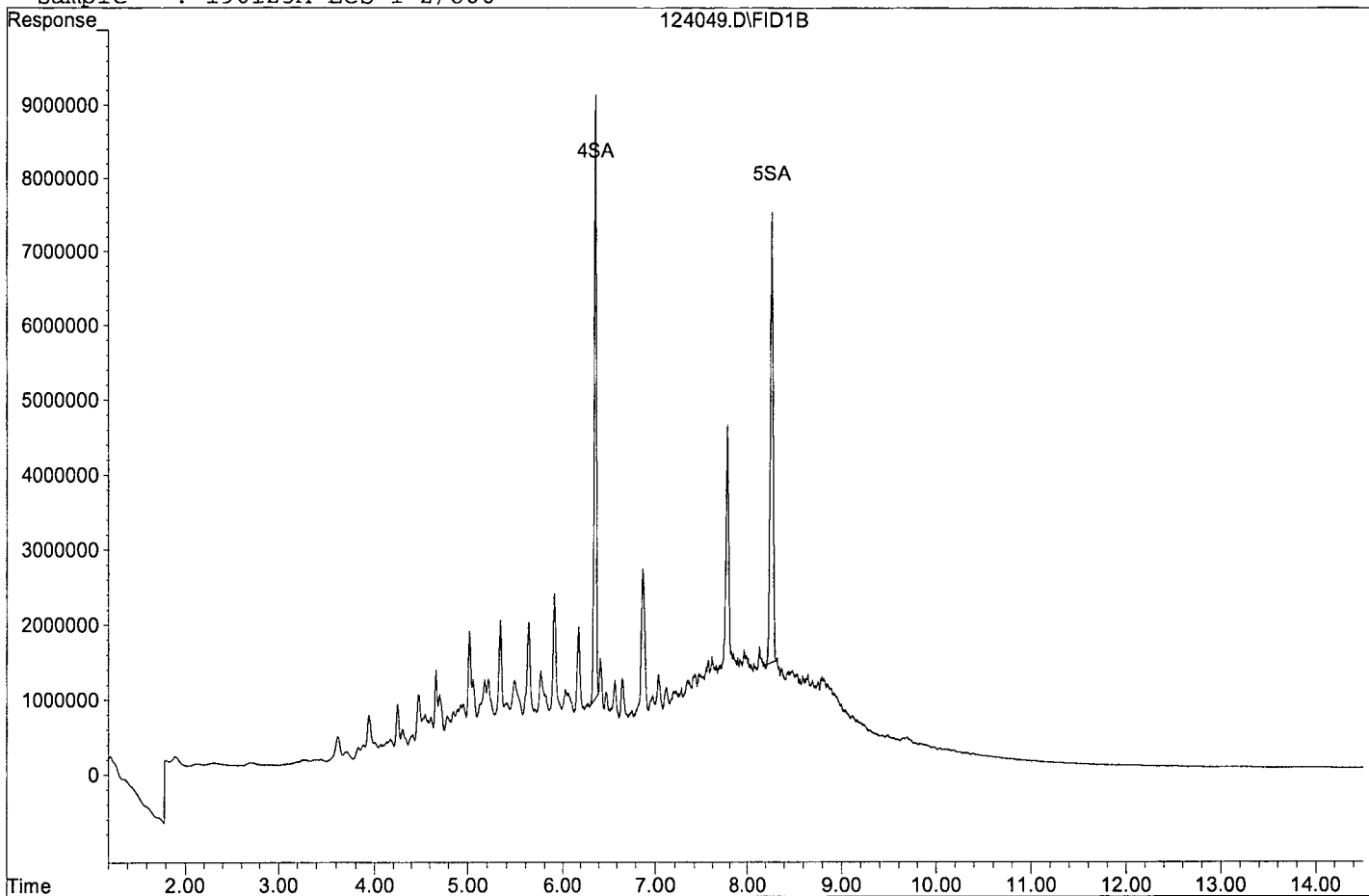
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	133850361	82.850 ppb
Surrogate Spike 75.000		Recovery =	110.47%
5) SA Octacosane(S)	8.27	123081483	81.995 ppb
Surrogate Spike 75.000		Recovery =	109.33%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1215668990	1279.232 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1008036562	1355.469 ppb

Quantitation Report

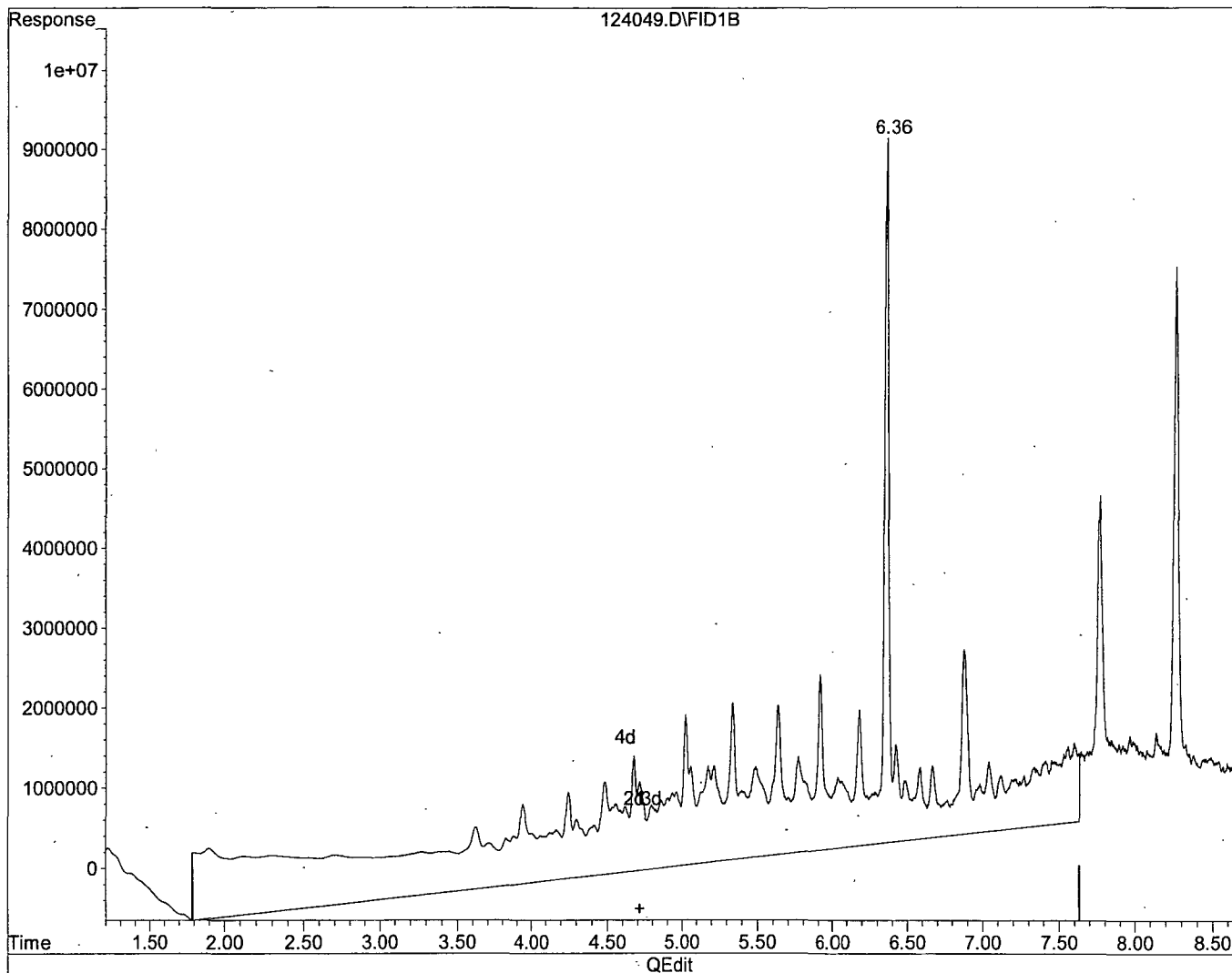
Data File: G:\APOLLO\DATA\190124\124049.D  
Sample : 190125A LCS-1 2/800



Quantitation Report

Data File : G:\APOLLO\DATA\190124\124049.D Vial: 49  
Acq On : 1-29-19 12:40:39 Operator: DP  
Sample : 190125A LCS-1 2/800 Inst : Apollo  
Misc : water Multiplr: 2.50  
IntFile : events.e  
Quant Time: Jan 30 12:19 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration

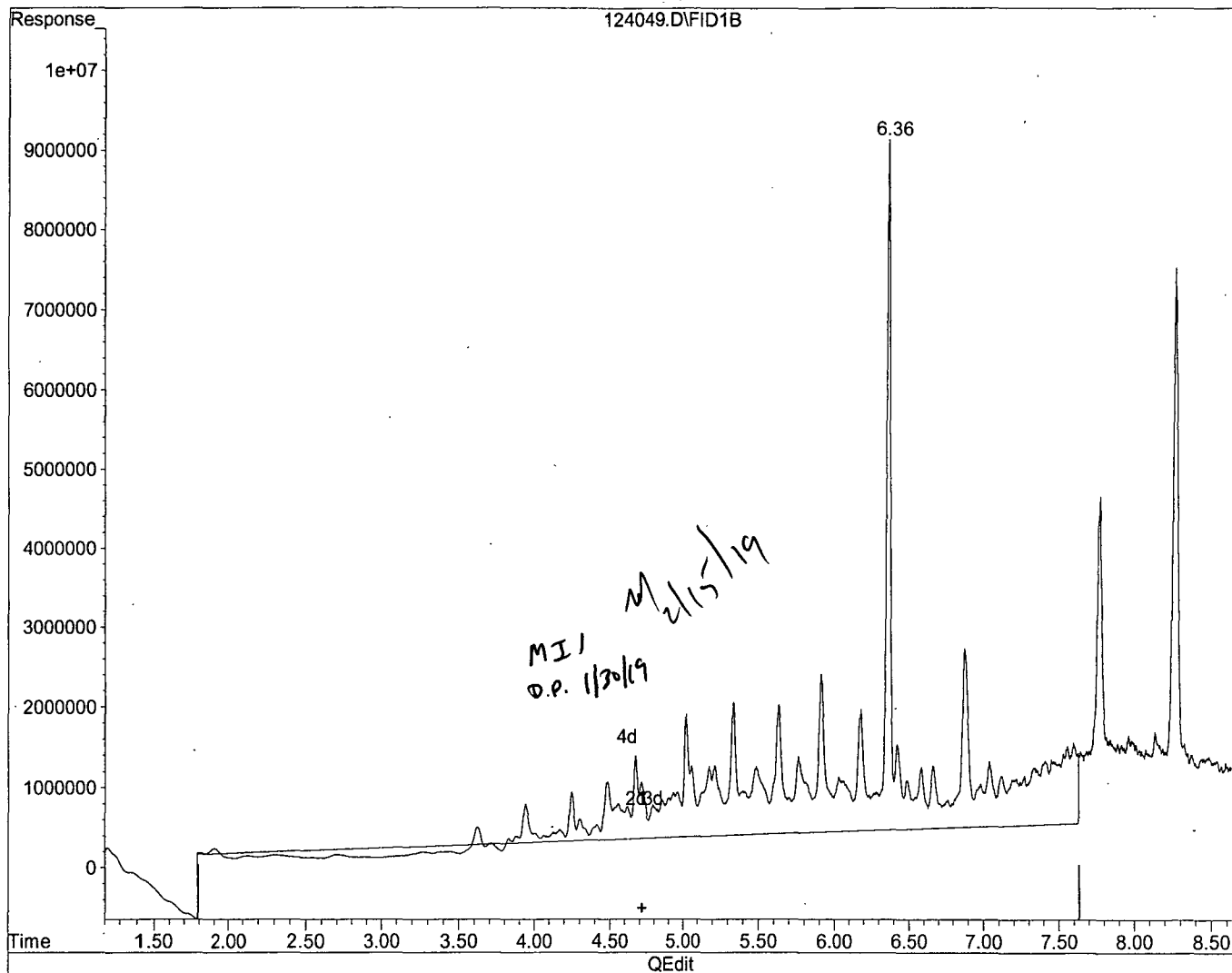


(1) Diesel (C10-C24) (HATM)  
4.71min 2643.085ppb m  
response 2511754816

Quantitation Report

Data File : G:\APOLLO\DATA\190124\124049.D Vial: 49  
Acq On : 1-29-19 12:40:39 Operator: DP  
Sample : 190125A LCS-1 2/800 Inst : Apollo  
Misc : water Multiplr: 2.50  
IntFile : events.e  
Quant Time: Jan 30 12:19 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1279.232ppb m  
response 1215668990

Data File : G:\APOLLO\DATA\190124\124050.D Vial: 50  
 Acq On : 1-29-19 13:00:39 Operator: DP  
 Sample : 190125A LCSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:20 2019 Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

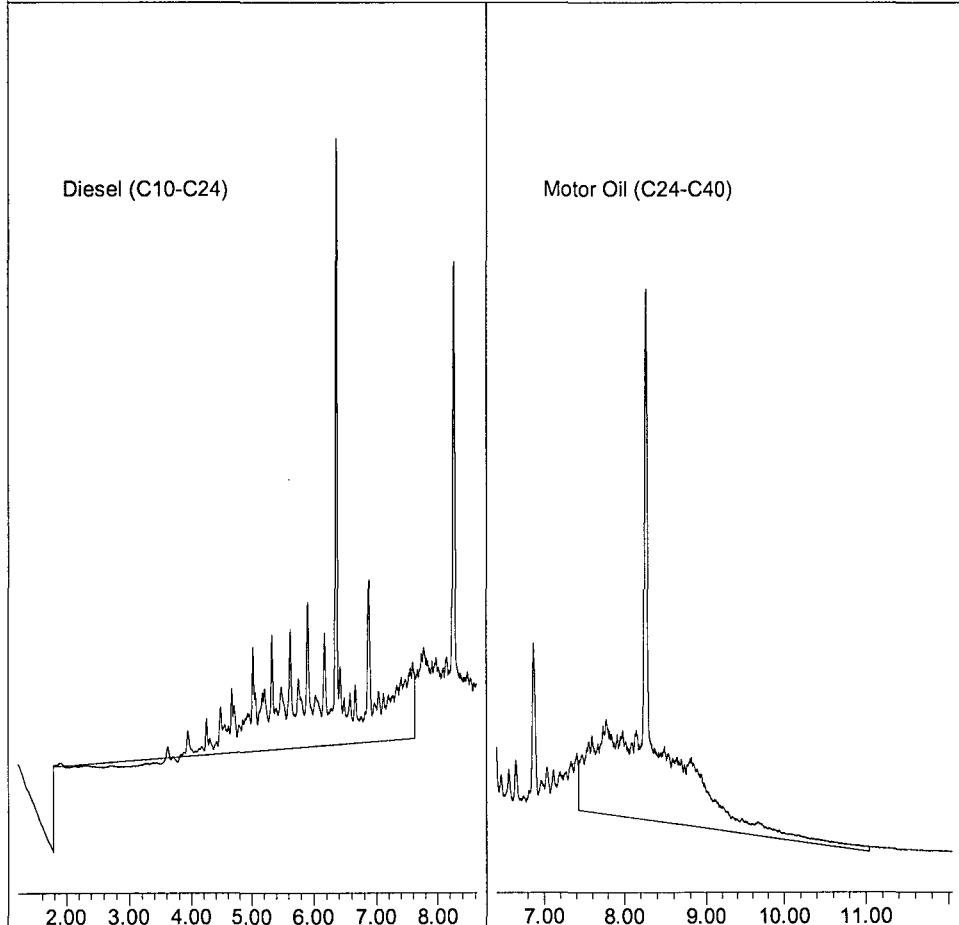
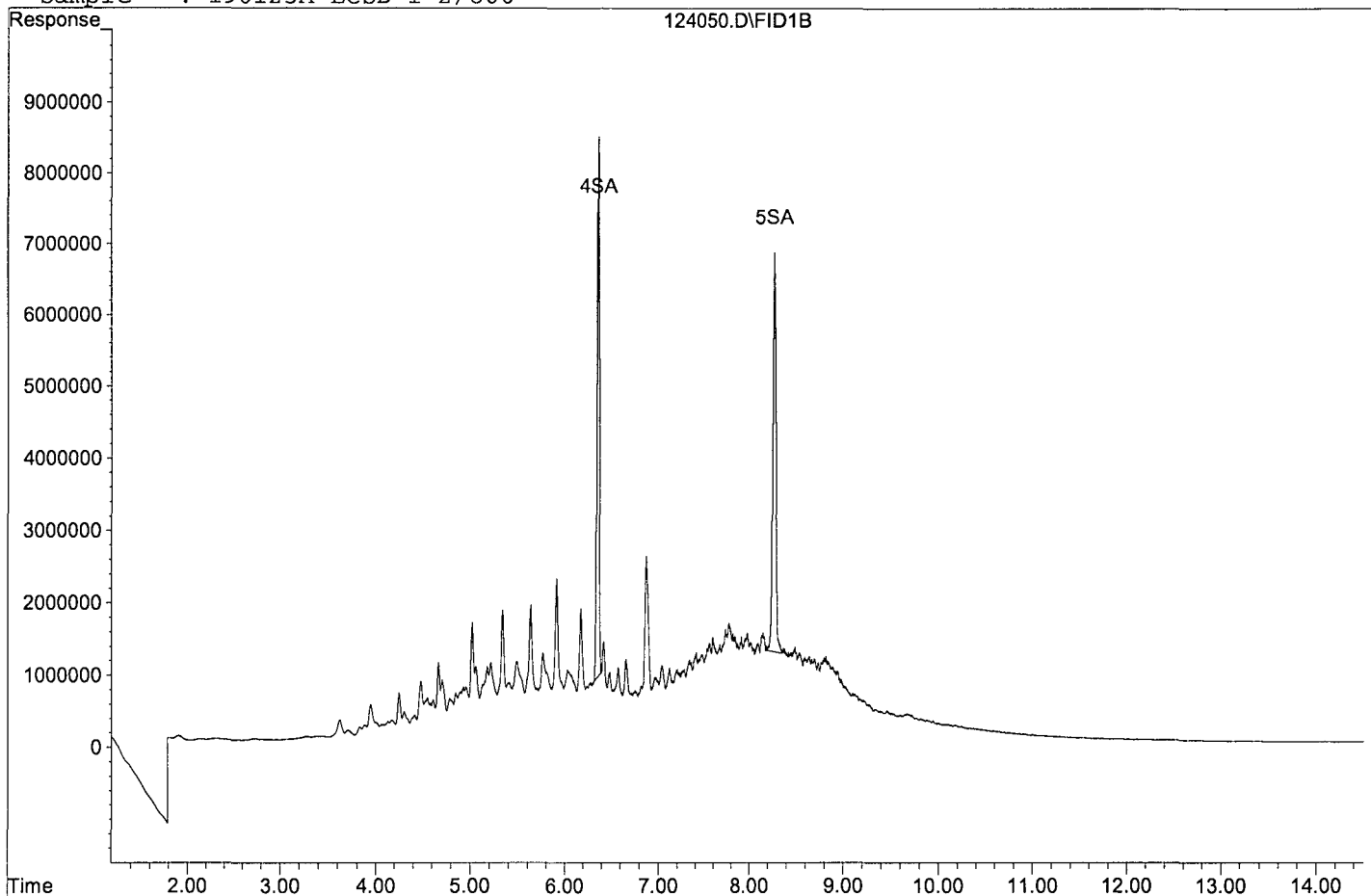
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	127828135	79.122 ppb
Surrogate Spike 75.000		Recovery =	105.50%
5) SA Octacosane(S)	8.27	128702555	85.739 ppb
Surrogate Spike 75.000		Recovery =	114.32%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1199134001	1261.832 ppb
2) HBTM Motor Oil (C24-C40)	9.23	900347664	1210.664 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\190124\124050.D

Sample : 190125A LCSD-1 2/800



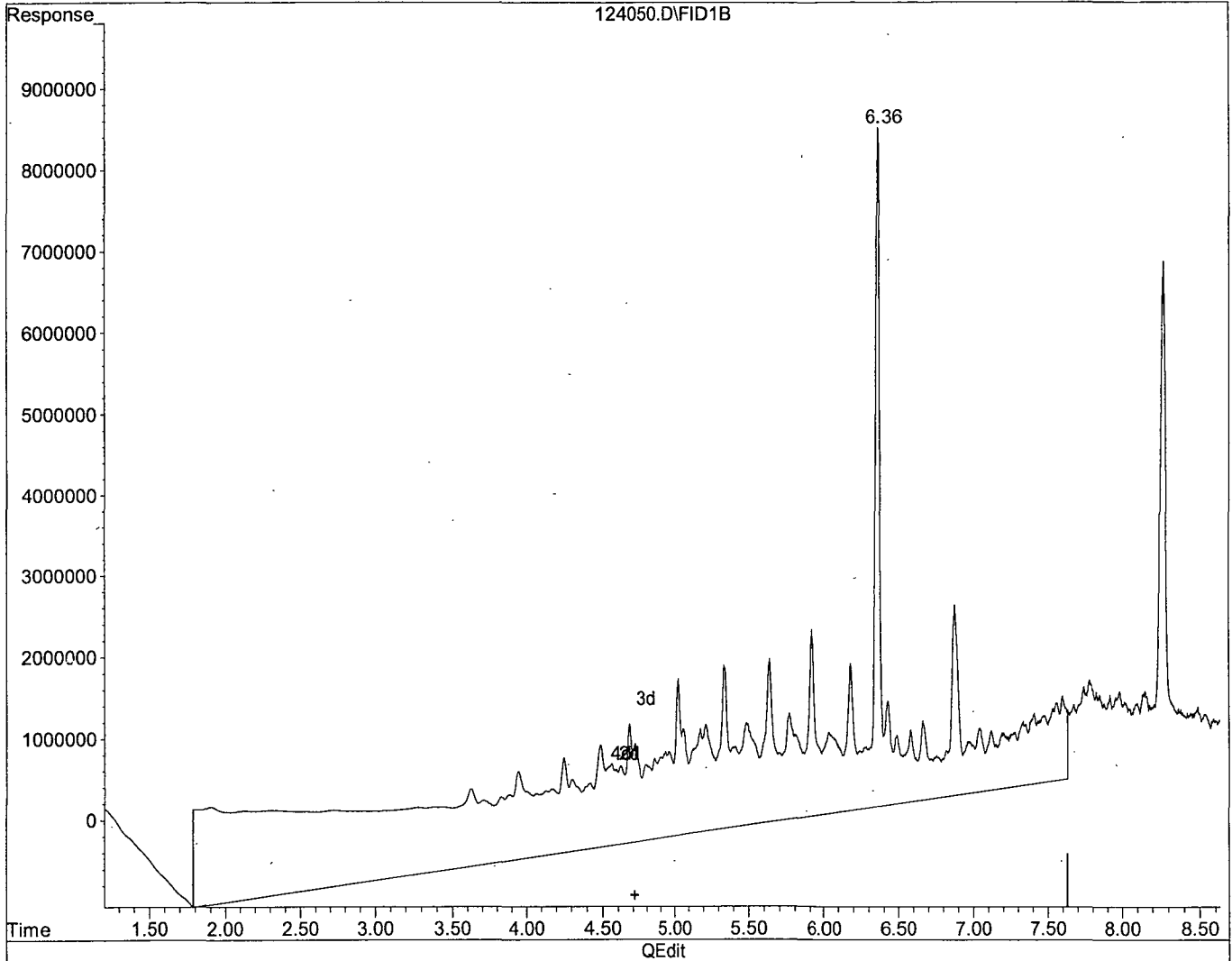
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124050.D  
Acq On : 1-29-19 13:00:39  
Sample : 190125A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:20 2019

Vial: 50  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 3313.909ppb m

response 3149247211

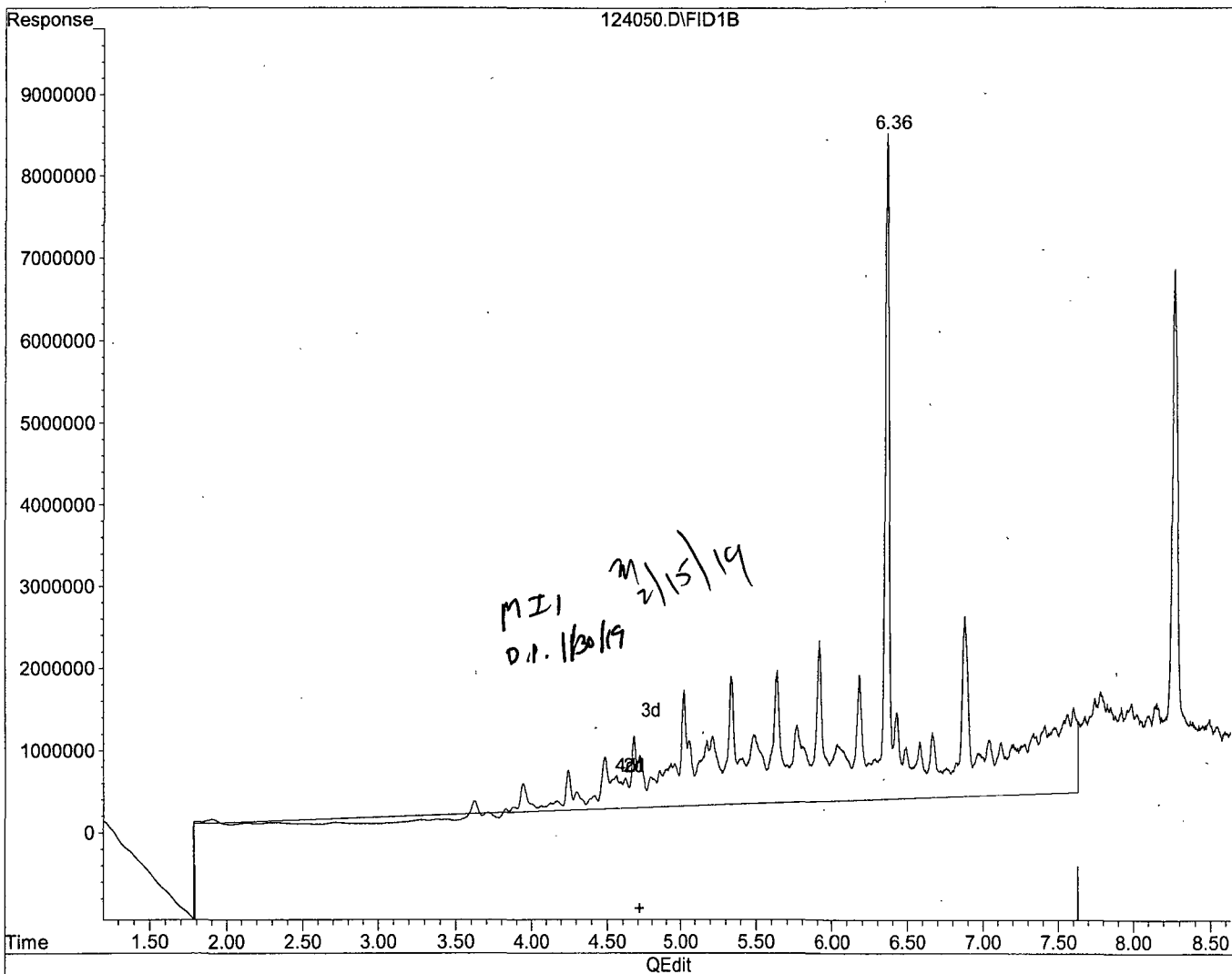
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124050.D  
Acq On : 1-29-19 13:00:39  
Sample : 190125A LCSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:20 2019

Vial: 50  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 1261.832ppb m

response 1199134001

Data File : G:\APOLLO\DATA\190124\124059.D Vial: 59  
 Acq On : 1-29-19 16:00:44 Operator: DP  
 Sample : AZ85643W41 MS-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

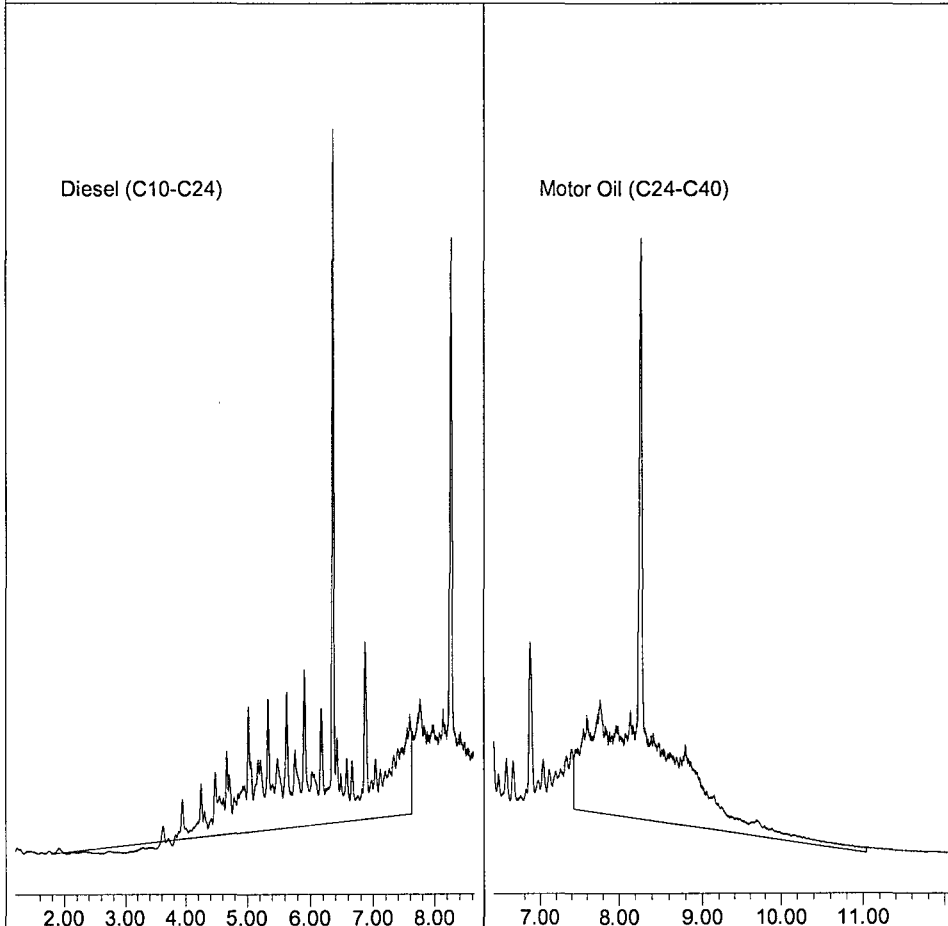
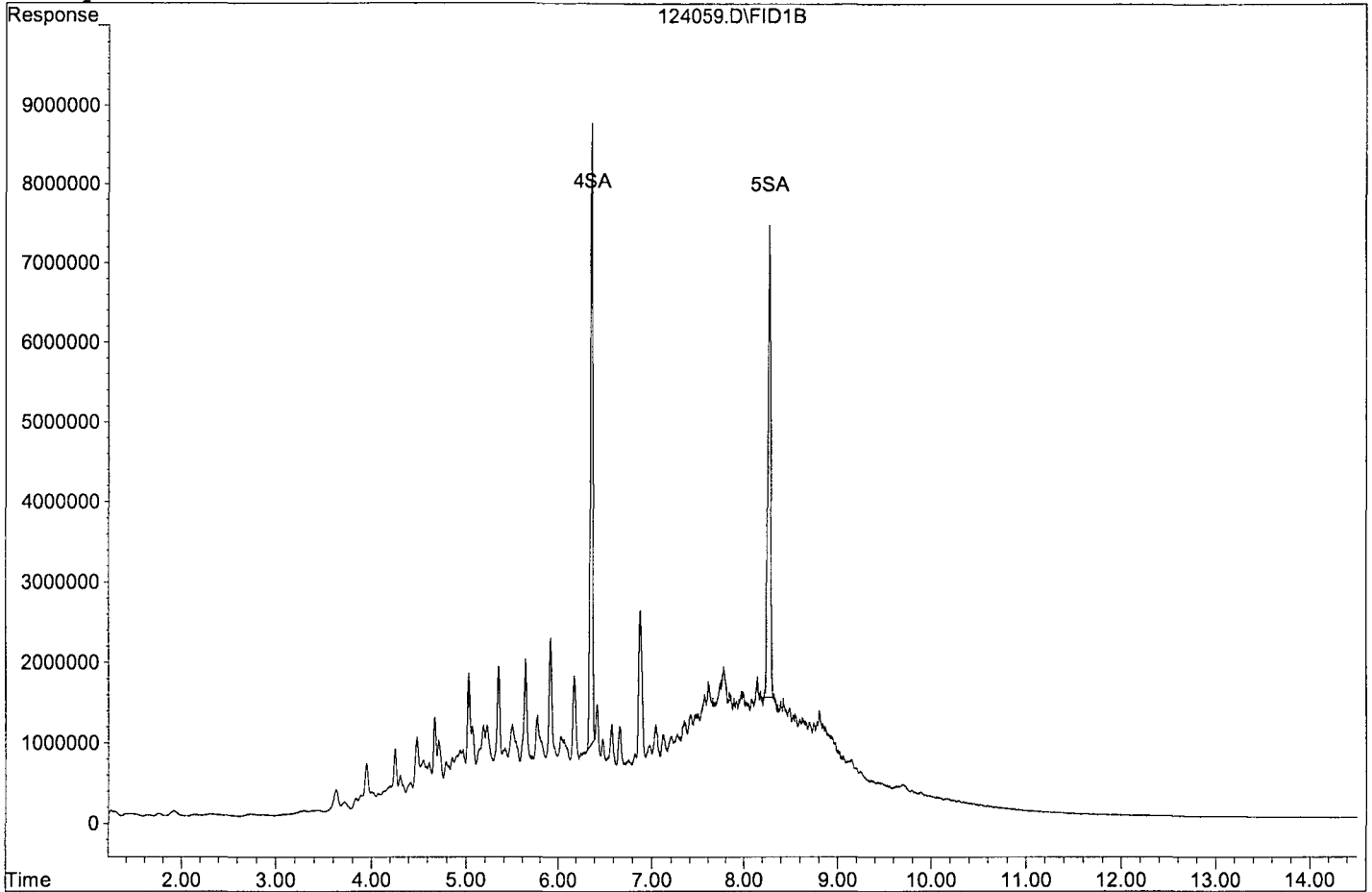
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	130292106	80.647 ppb
Surrogate Spike 75.000		Recovery =	107.53%
5) SA Octacosane(S)	8.27	121506578	80.945 ppb
Surrogate Spike 75.000		Recovery =	107.93%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1200184559	1262.938 ppb
2) HBTM Motor Oil (C24-C40)	9.23	1005223749	1351.687 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124059.D  
Sample : AZ85643W41 MS-1 2/800



Data File : G:\APOLLO\DATA\190124\124060.D Vial: 60  
 Acq On : 1-29-19 16:20:50 Operator: DP  
 Sample : AZ85643W42 MSD-1 2/800 Inst : Apollo  
 Misc : water Multiplr: 2.50  
 IntFile : events.e  
 Quant Time: Jan 30 12:22 2019 Quant Results File: DOC0117.RES

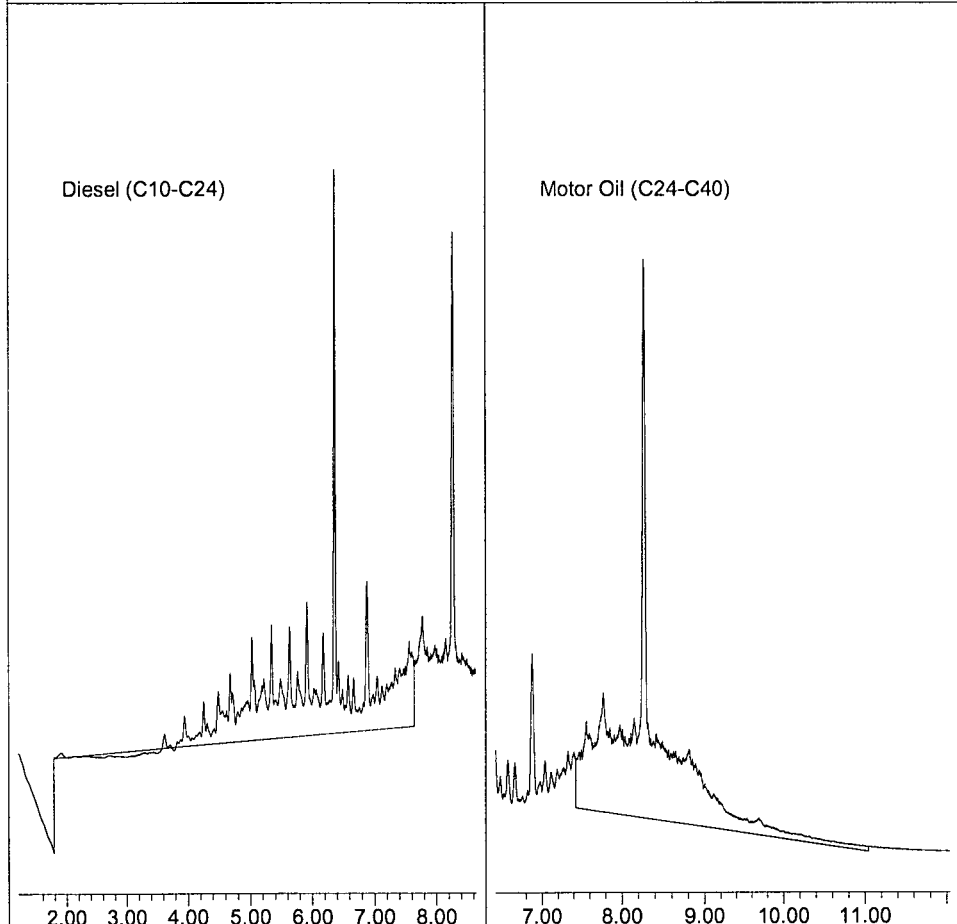
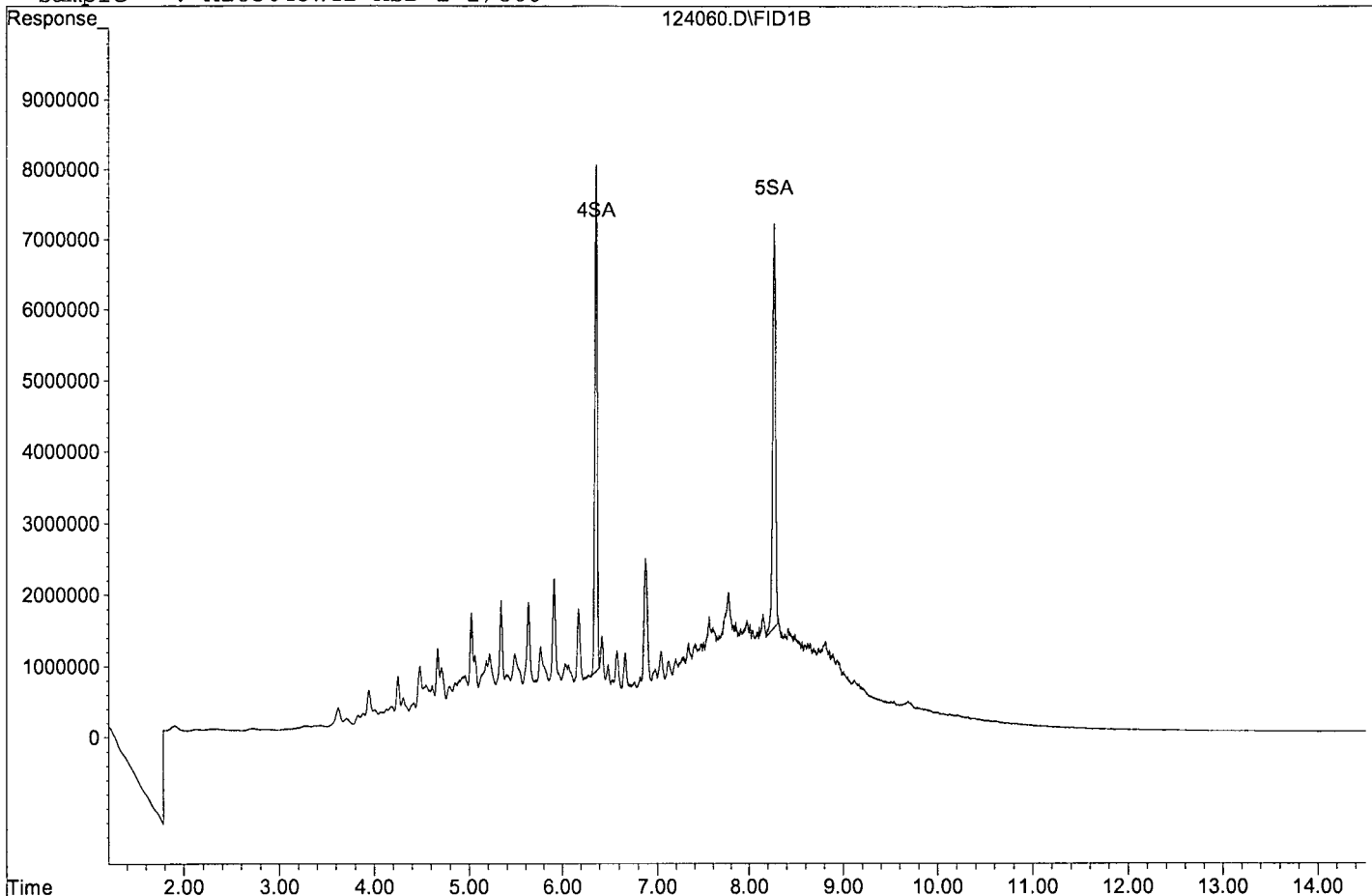
Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
 Title : 8015 B&C  
 Last Update : Thu Jan 24 14:36:29 2019  
 Response via : Multiple Level Calibration

Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SA Ortho-Terphenyl(S)	6.36	123613496	76.514 ppb
Surrogate Spike 75.000		Recovery =	102.02%
5) SA Octacosane(S)	8.27	122920634	81.887 ppb
Surrogate Spike 75.000		Recovery =	109.18%
Target Compounds			
1) HATM Diesel (C10-C24)	4.71	1207271662	1270.395 ppb
2) HBTM Motor Oil (C24-C40)	9.23	979695913	1317.360 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\190124\124060.D  
Sample : AZ85643W42 MSD-1 2/800



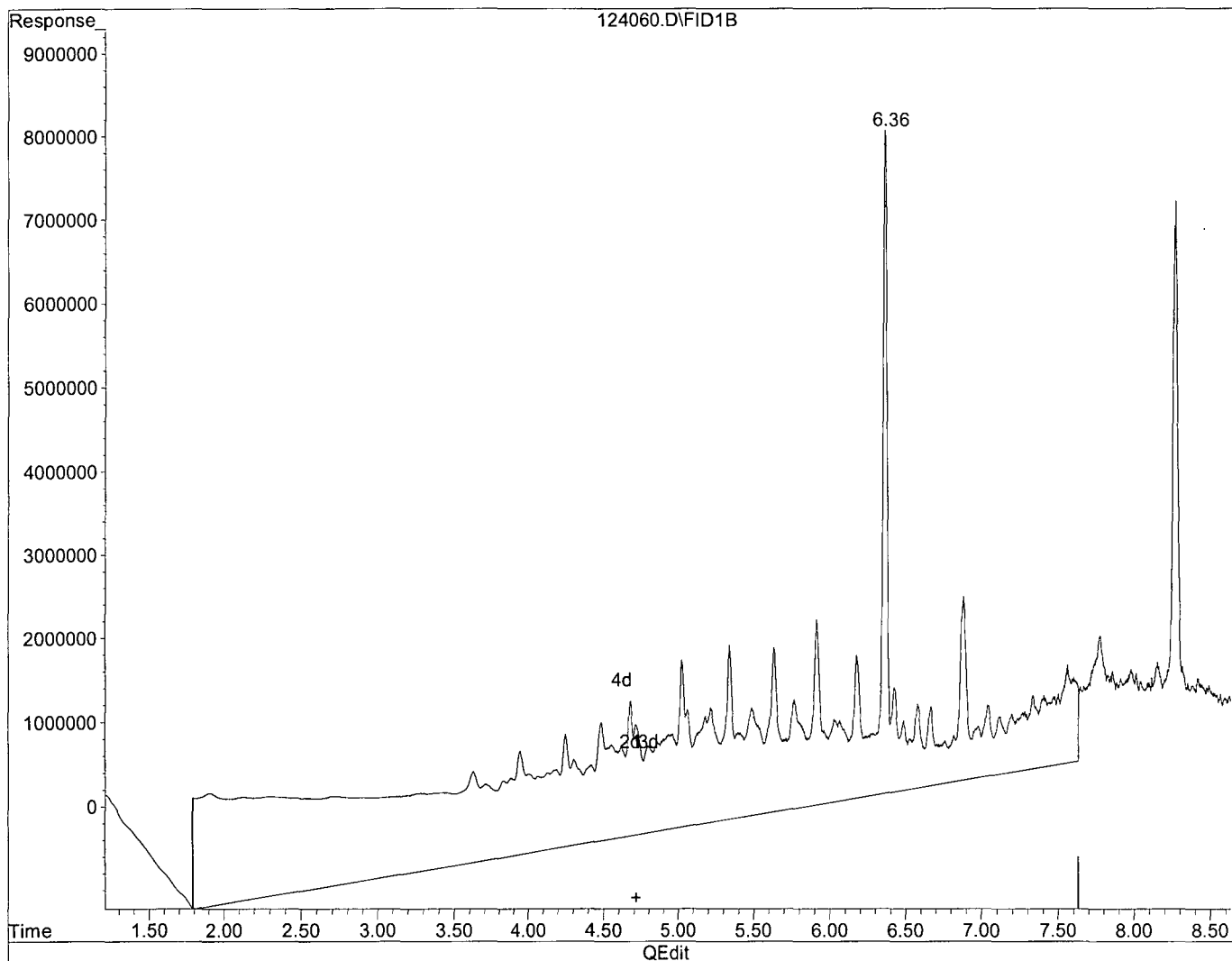
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124060.D  
Acq On : 1-29-19 16:20:50  
Sample : AZ85643W42 MSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:22 2019

Vial: 60  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)

4.71min 3574.178ppb m

response 3396584030

(+) = Expected Retention Time



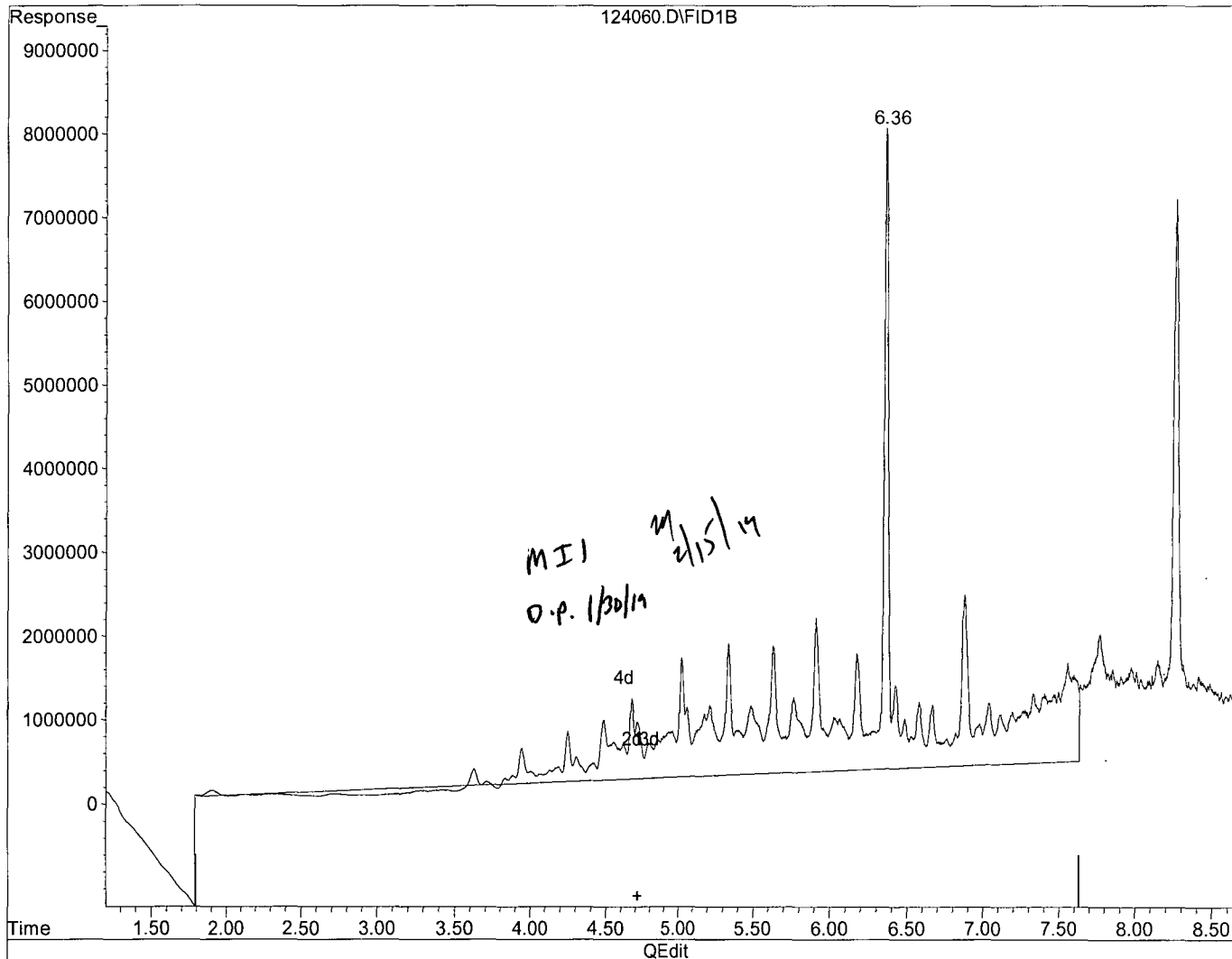
Quantitation Report

Data File : G:\APOLLO\DATA\190124\124060.D  
Acq On : 1-29-19 16:20:50  
Sample : AZ85643W42 MSD-1 2/800  
Misc : water  
IntFile : events.e  
Quant Time: Jan 30 12:22 2019

Vial: 60  
Operator: DP  
Inst : Apollo  
Multiplr: 2.50

Quant Results File: DOC0117.RES

Method : G:\APOLLO\DATA\190124\DOC0117.M (Chemstation Integrator)  
Title : 8015 B&C  
Last Update : Thu Jan 24 14:36:29 2019  
Response via : Multiple Level Calibration



(1) Diesel (C10-C24) (HATM)  
4.71min 1270.395ppb m  
response 1207271662

Diesel / Motor Oil Calibration Standard										
Prepared: 01/15/19						Prepared By (Initials): DP				
Expires: 01/15/20										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0135614-39409	01/15/20	03/31/25	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	A0135245-39351	01/15/20	03/31/25	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	CL12572-39691	08/13/19	06/30/23	1666uL			100

Diesel / Motor Oil Second Source (SS)										
Prepared: 01/15/19						Prepared By (Initials): DP				
Expires: 01/15/20										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2 Second Source	O2SI	G34-011598-03	50,000	G34-319187-38958	08/02/19	09/29/21	50uL	10mL	MC	250
Motor Oil Second Source	O2SI	116390-02-SS	50,000	301142-37652	07/13/19	03/05/22	50uL			

Diesel / Motor Oil Calibration Curve										
Prepared: 01/17/19						Prepared By (Initials): DP				
Expires: 07/17/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 1	2,000	Prepared 01/17/19	01/15/20	N/A	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 2	2,000	Prepared 01/17/19	01/15/20	N/A	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 3	2,000	Prepared 01/17/19	01/15/20	N/A	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 4	2,000	Prepared 01/17/19	01/15/20	N/A	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 5	2,000	Prepared 01/17/19	01/15/20	N/A	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	APPL	Diesel / Motor Oil - 6	2,000	Prepared 01/17/19	01/15/20	N/A	100uL	100uL	N/A	2,000

Diesel / Motor Oil CCV										
Prepared: 01/21/19						Prepared By (Initials): DP				
Expires: 07/22/19										
Methylene Chloride Lot No. 56278										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil STD	APPL	Diesel / Motor Oil CCV	2,000	Prepared 01/15/19	01/15/20	N/A	1250uL	10mL	MC	250

**Motor Oil Spike**

Prepared: 11/15/18

Prepared By (Initials): DP

Expires: 11/15/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Motor Oil Composite	Restek	31464	50,000	A0135245-39352	11/15/19	03/31/25	N/A	N/A	N/A	50,000

**Diesel Spike**

Prepared: 12/11/18

Prepared By (Initials): DP

Expires: 12/11/19

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Absolute	51046	50,000	111715-39355	12/11/19	11/17/20	N/A	N/A	N/A	50,000

THC Surrogate										
Prepared: 11/21/18						Prepared By (Initials): DP				
Expires: 10/18/19										
Initial Standard Information						Final Standard Information				
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	CL12572-39687	10/18/19	06/30/23	N/A	N/A	N/A	600

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liq/Liq TPH-Diesel/MO 3520C	<b>Extraction Set</b>	190125A	<b>Extraction Method</b>	LIQ005	<b>Units</b>	mL
Spiked ID 1	Diesel Spike 1-25-19 exp 1-25-20	Surrogate ID 1	THC Surrogate 12-17-18 exp 12-17-19				
Spiked ID 2	Motor Oil Spike 12-20-18 exp 12-20-19	Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: YES					
Spiked ID 7		Ext. Start Time: 01/25/19 14:40					
Spiked ID 8		Ext. End Time: 01/26/19 10:07 <b>01/29/19 07:45</b>					
		GC Requires Extract By: 01/31/19 0:00					
		pH1	2	01/25/19 1:20:00 PM	Water Bath Temp Criteria	35,35,35 °	
		pH2					
		pH3					

Spiked By: DL

Date 01/25/19

Witnessed By: FM

Date 01/25/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 190125A Blk				0.100	1	800	2	2	01/25/19 13:30	
					equip	E-HP51 E-WB1				
2 190125A LCS-1		0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	
					equip	E-HP50 E-WB2				
3 190125A LCSD-1		0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	
					equip	E-HP49 E-WB2				
4 AZ85560	AZ85560W23			0.100	1	800	2	2	01/25/19 13:30	87935
					equip	E-HP48 E-WB3				
5 AZ85562 MS-1	AZ85562W39	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP47 E-WB2				
6 AZ85562 MSD-1	AZ85562W40	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP25 E-WB2				
7 AZ85562	AZ85562W34			0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP26 E-WB1				
8 AZ85563	AZ85563W07			0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP27 E-WB2				
9 AZ85569	AZ85569W20			0.100	1	800	2	2	01/25/19 13:30	87940
					equip	E-HP28 E-WB3				
10 AZ85617	AZ85617W08			0.100	1	800	2	2	01/25/19 13:30	87950
					equip	E-HP29 E-WB1				
11 AZ85623	AZ85623W17			0.100	1	800	2	2	01/25/19 13:30	87950
					equip	E-HP30 E-WB2				
12 AZ85643 MS-1	AZ85643W41	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP16 E-WB2				
13 AZ85643 MSD-1	AZ85643W42	0.020,0.020	1,2	0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP15 E-WB2				
14 AZ85643	AZ85643W40			0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP17 E-WB3				
15 AZ85644	AZ85644W11			0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP14 E-WB1				
16 AZ85646	AZ85646W24			0.100	1	800	2	2	01/25/19 13:30	87956
					equip	E-HP13 E-WB2				

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:02:06 PM

Reviewed By: *KY* Date *1/29/19*  
 Page 217 of 917  
 Ext\_ID 61609

# Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	190125A	Extraction Method	LIQ005	Units	mL
Spiked ID 1	Diesel Spike 1-25-19 exp 1-25-20		Surrogate ID 1	THC Surrogate 12-17-18 exp 12-17-19			
Spiked ID 2	Motor Oil Spike 12-20-18 exp 12-20-19		Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:		YES		
Spiked ID 7			Ext. Start Time:		01/25/19 14:40		
Spiked ID 8			Ext. End Time:		01/26/19 10:07		01/29/19 07:45
			GC Requires Extract By:		01/31/19 0:00		
			pH1	2	01/25/19 1:20:00 PM	Water Bath Temp Criteria	35,35,35 °
			pH2				
			pH3				

Spiked By: DL

Date 01/25/19

Witnessed By: FM

Date 01/25/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85653	AZ85653W24		0.100	1	800	2	2	01/25/19 13:30	87956
						equip	E-HP12 E-WB3			

Solvent and Lot#	
1+1 HCL	11-19-18
PH Strips	HC 849161
Dicholormethane (DCM)	18G194011
Filter Paper	400148
B. Sodium Sulfate	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	01/29/19 1:02:06 PM

Reviewed By: *KY* Date *1/29/19*  
 Page 218 of 917  
 Ext\_ID 61609

## Injection Log

Directory: G:\APOLLO\DATA\190117\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	117002.D	1	Diesel / Motor Oil - 1 1/17/19	water	1-17-19 16:38:28
3	117003.D	1	Diesel / Motor Oil - 2 1/17/19	water	1-17-19 16:58:29
4	117004.D	1	Diesel / Motor Oil - 3 1/17/19	water	1-17-19 17:17:50
5	117005.D	1	Diesel / Motor Oil - 4 1/17/19	water	1-17-19 17:37:44
6	117006.D	1	Diesel / Motor Oil - 5 1/17/19	water	1-17-19 17:57:32
7	117007.D	1	Diesel / Motor Oil - 6 1/17/19	water	1-17-19 18:17:22
8	117008.D	1	Diesel / Motor Oil - SS 1/15/19	water	1-17-19 18:37:21
47	124047.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 12:00:52
48	124048.D	2.5	190125A BLK 2/800	water	1-29-19 12:20:41
49	124049.D	2.5	190125A LCS-1 2/800	water	1-29-19 12:40:39
50	124050.D	2.5	190125A LCSD-1 2/800	water	1-29-19 13:00:39
59	124059.D	2.5	AZ85643W41 MS-1 2/800	water	1-29-19 16:00:44
60	124060.D	2.5	AZ85643W42 MSD-1 2/800	water	1-29-19 16:20:50
61	124061.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 16:41:00
62	124062.D	2.5	AZ85643W40 2/800	water	1-29-19 17:01:10
63	124063.D	2.5	AZ85644W11 2/800	water	1-29-19 17:21:18
64	124064.D	2.5	AZ85646W24 2/800	water	1-29-19 17:40:45
65	124065.D	2.5	AZ85653W24 2/800	water	1-29-19 18:00:47
72	124072.D	1	Diesel / Motor Oil - 3 1/21/19	water	1-29-19 20:19:55



**ORGANICS**  
**Calibration Data**

PAH by GCMS SIM  
EPA 8270 SIM

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/22/19  
Instrument: Linus

Initials: \_\_\_\_\_

0122L003.D 0122L004.D 0122L005.D 0122L008.D 0122L007.D 0122L008.D 0122L009.D 0122L010.D

	Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD	Type	r^2	Q	MRF
1	I Naphthalene-D8(IS)																
2	S Surrogate Recovery (NBZ)	0.5368	0.4662	0.3581	0.3806	0.4597	0.4513	0.4398	0.4353			0.44	12	S			
3	TM Naphthalene	1.501	1.326	1.089	1.286	1.383	1.355	1.095	1.039			1.3	13	TM			0.700
4	S 2-Methylnaphthalene-D10 (2M)	1.165	1.119	0.8912	1.140	1.265	1.295	1.170	1.119			1.1	11	S			
5	TM 2-Methylnaphthalene	0.8415	0.7811	0.6384	0.7893	0.8609	0.8572	0.6703	0.6454			0.76	13	TM			0.400
6	TM 1-Methylnaphthalene	0.9488	0.7945	0.6729	0.8072	0.8294	0.8268	0.6596	0.6061			0.77	15	TM			
7	I Acenaphthene-D10(IS)																
8	S Surrogate Recovery (FBP)	2.032	1.654	1.457	1.744	1.923	1.928	1.728	1.675			1.8	10	S			
9	TM Acenaphthylene	6.283	5.718	4.707	5.612	6.305	6.346	5.135	4.672			5.6	12	TM			0.900
10	*TM Acenaphthene	1.920	1.700	1.428	1.705	1.810	1.782	1.400	1.360			1.6	13	*TM			0.900
11	TM Fluorene	2.106	1.923	1.607	1.975	2.155	2.142	1.716	1.657			1.9	12	TM			0.900
12	I Phenanthrene-D10(IS)																
13	TM Phenanthrene	1.596	1.429	1.206	1.461	1.584	1.571	1.261	1.133			1.4	13	TM			0.700
14	TM Anthracene	1.546	1.378	1.157	1.401	1.639	1.579	1.259	1.212			1.4	13	TM			0.700
15	S Fluoranthene-D10 (FRT)	1.960	1.740	1.370	1.644	1.947	1.964	1.702	1.672			1.7	12	S			
16	*TM Fluoranthene	2.487	2.295	1.834	2.252	2.506	2.476	1.900	1.837			2.2	14	*TM			0.600
17	I Chrysene-D12(IS)																
18	TM Pyrene	1.754	1.558	1.296	1.539	1.745	1.699	1.421	1.348			1.5	12	TM			0.600
19	S Surrogate Recovery (TPH)	0.8778	0.8099	0.6667	0.7580	0.8727	0.8657	0.8359	0.7712			0.81	9.0	S			
20	TM Benz (a) anthracene	1.671	1.359	1.076	1.304	1.538	1.509	1.341	1.262			1.4	13	TM			0.800
21	TM Chrysene	1.479	1.472	1.188	1.390	1.453	1.388	1.153	1.067			1.3	12	TM			0.700
22	TM Indeno (1,2,3-cd) pyrene	1.529	1.415	1.156	1.393	1.490	1.490	1.274	1.181			1.4	11	TM			0.500
23	I Perylene-D12(IS)																
24	TM Benzo (b) fluoranthene	1.433	1.243	1.096	1.291	1.531	1.603	1.305	1.301			1.4	12	TM			0.700
25	TM Benzo (k) fluoranthene	1.579	1.319	1.194	1.327	1.553	1.453	1.299	1.266			1.4	10	TM			0.700
26	*TM Benzo (a) pyrene	1.308	1.224	1.092	1.285	1.456	1.489	1.256	1.223			1.3	10.0	*TM			0.700
27	TM Dibenz (a,h) anthracene	1.354	1.225	1.012	1.231	1.275	1.310	1.060	1.044			1.2	11	TM			0.400
28	TM Benzo (g,h,i) perylene	1.377	1.229	1.021	1.247	1.271	1.322	1.097	1.043			1.2	11	TM			0.500
29																	
30																	
31																	
32																	
33																	
34																	
35																	

Data File : M:\LINUS\DATA\L190122\0122L003.D  
 Acq On : 22 Jan 19 9:37  
 Sample : 0.1 SIM 01/18/19  
 Misc :

Vial: 3  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 09:56:33 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	15835	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7110	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13830	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20163	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19644	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	170	0.04555	ppb	0.00
Spiked Amount	5.000					
Recovery				=	0.920%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	369	0.03991	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	0.800%	
8) Surrogate Recovery (FBP)	5.31	172	289	0.04745	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	0.940%	
15) Fluoranthene-D10 (FRT)	9.20	212	542	0.04079	ppb	0.00
Spiked Amount	5.000					
Recovery				=	0.820%	
19) Surrogate Recovery (TPH)	9.67	244	354	0.04542	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	0.900%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	951	0.12746	ppb	99
5) 2-Methylnaphthalene	4.88	142	533	0.11867	ppb	97
6) 1-Methylnaphthalene	4.99	142	601	0.13228	ppb	97
9) Acenaphthylene	5.92	152	1787	0.11640	ppb	98
10) Acenaphthene	6.11	154	546	0.12405	ppb	92
11) Fluorene	6.72	166	599	0.11841	ppb	93
13) Phenanthrene	7.83	178	883	0.11967	ppb	98
14) Anthracene	7.89	178	855	0.11674	ppb	99
16) Fluoranthene	9.22	202	1376	0.11919	ppb	98
18) Pyrene	9.48	202	1415	0.12511	ppb	# 89
20) Benz (a) anthracene	10.89	228	1348	0.13332	ppb	96
21) Chrysene	10.95	228	1193	0.12015	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.83	276	1233	0.11749	ppb	# 82
24) Benzo (b) fluoranthene	12.66	252	1126	0.11931	ppb	98
25) Benzo (k) fluoranthene	12.71	252	1241	0.11008	ppb	96
26) Benzo (a) pyrene	13.22	252	1028	0.11184	ppb	98
27) Dibenz (a,h) anthracene	14.85	278	1064	0.12449	ppb	94
28) Benzo (g,h,i) perylene	15.18	276	1082	0.12500	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

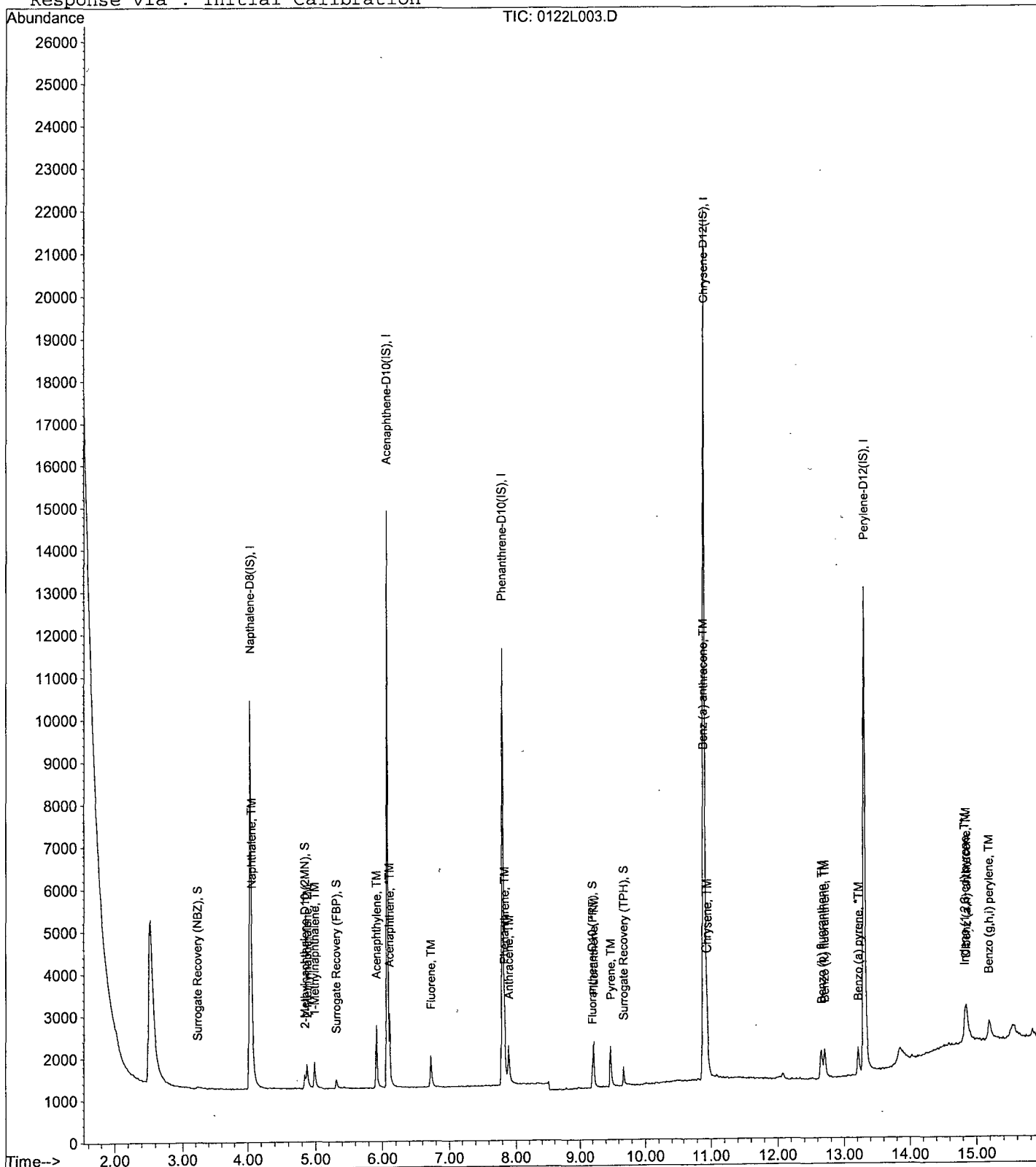
Data File : M:\LINUS\DATA\L190122\0122L003.D  
Acq On : 22 Jan 19 9:37  
Sample : 0.1 SIM 01/18/19  
Misc :

Vial: 3  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L004.D Vial: 4  
 Acq On : 22 Jan 19 9:59 Operator: MA  
 Sample : 0.2 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	18660	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8631	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	16928	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	24788	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	24016	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.24	82	348	0.07912	ppb	0.01
Spiked Amount	5.000		Recovery	=	1.580%	
4) 2-Methyl-naphthalene-D10 (2)	4.84	152	835	0.07663	ppb	-0.01
Spiked Amount	5.000		Recovery	=	1.540%	
8) Surrogate Recovery (FBP)	5.31	172	571	0.07723	ppb	-0.01
Spiked Amount	5.000		Recovery	=	1.540%	
15) Fluoranthene-D10 (FRT)	9.20	212	1178	0.07243	ppb	0.00
Spiked Amount	5.000		Recovery	=	1.440%	
19) Surrogate Recovery (TPH)	9.67	244	803	0.08381	ppb	0.00
Spiked Amount	5.000		Recovery	=	1.680%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	1979	0.22509	ppb	99
5) 2-Methyl-naphthalene	4.88	142	1166	0.22030	ppb	99
6) 1-Methyl-naphthalene	4.99	142	1186	0.22151	ppb	97
9) Acenaphthylene	5.92	152	3948	0.21185	ppb	99
10) Acenaphthene	6.11	154	1174	0.21972	ppb	98
11) Fluorene	6.72	166	1328	0.21626	ppb	100
13) Phenanthrene	7.83	178	1935	0.21425	ppb	99
14) Anthracene	7.89	178	1866	0.20815	ppb	99
16) Fluoranthene	9.22	202	3108	0.21994	ppb	97
18) Pyrene	9.47	202	3089	0.22216	ppb	99
20) Benz (a) anthracene	10.89	228	2695	0.21680	ppb	98
21) Chrysene	10.95	228	2920	0.23921	ppb	96
22) Indeno (1,2,3-cd) pyrene	14.82	276	2806	0.21749	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	2388	0.20696	ppb	# 98
25) Benzo (k) fluoranthene	12.71	252	2534	0.18385	ppb	99
26) Benzo (a) pyrene	13.22	252	2352	0.20930	ppb	97
27) Dibenzo (a,h) anthracene	14.85	278	2354	0.22529	ppb	94
28) Benzo (g,h,i) perylene	15.19	276	2362	0.22319	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

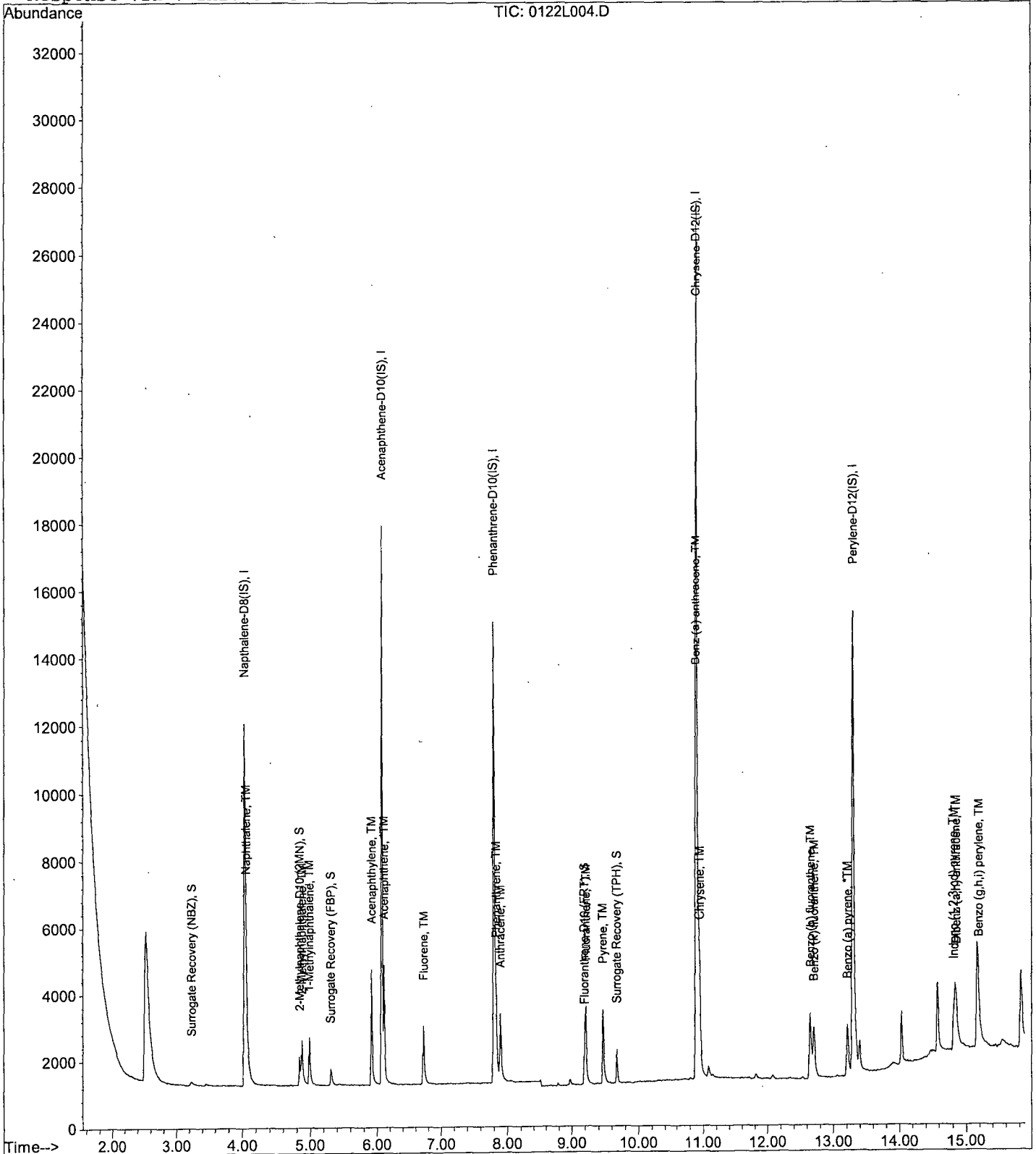
Data File : M:\LINUS\DATA\L190122\0122L004.D  
Acq On : 22 Jan 19 9:59  
Sample : 0.2 SIM 01/18/19  
Misc :

Vial: 4  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L005.D Vial: 5  
 Acq On : 22 Jan 19 10:21 Operator: MA  
 Sample : 0.5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	19378	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8194	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	15631	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	22574	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	21122	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	694	0.15194	ppb	0.00
Spiked Amount	5.000		Recovery	=	3.040%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	1727	0.15263	ppb	-0.01
Spiked Amount	5.000		Recovery	=	3.060%	
8) Surrogate Recovery (FBP)	5.31	172	1194	0.17011	ppb	-0.01
Spiked Amount	5.000		Recovery	=	3.400%	
15) Fluoranthene-D10 (FRT)	9.18	212	2141	0.14256	ppb	-0.01
Spiked Amount	5.000		Recovery	=	2.860%	
19) Surrogate Recovery (TPH)	9.67	244	1505	0.17248	ppb	0.00
Spiked Amount	5.000		Recovery	=	3.440%	
Target Compounds						
3) Naphthalene	4.06	128	4220	0.46220	ppb	99
5) 2-Methylnaphthalene	4.88	142	2474	0.45012	ppb	100
6) 1-Methylnaphthalene	4.99	142	2608	0.46906	ppb	95
9) Acenaphthylene	5.92	152	7714	0.43600	ppb	98
10) Acenaphthene	6.11	154	2341	0.46149	ppb	95
11) Fluorene	6.72	166	2634	0.45181	ppb	100
13) Phenanthrene	7.83	178	3771	0.45218	ppb	98
14) Anthracene	7.89	178	3618	0.43707	ppb	99
16) Fluoranthene	9.21	202	5733	0.43937	ppb	# 89
18) Pyrene	9.47	202	5849	0.46191	ppb	93
20) Benz (a) anthracene	10.89	228	4857	0.42905	ppb	98
21) Chrysene	10.93	228	5362	0.48235	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.82	276	5219	0.44419	ppb	# 86
24) Benzo (b) fluoranthene	12.65	252	4632	0.45644	ppb	98
25) Benzo (k) fluoranthene	12.70	252	5045	0.41618	ppb	98
26) Benzo (a) pyrene	13.22	252	4615	0.46695	ppb	99
27) Dibenzo (a,h) anthracene	14.84	278	4275	0.46520	ppb	95
28) Benzo (g,h,i) perylene	15.17	276	4311	0.46317	ppb	96

Quantitation Report

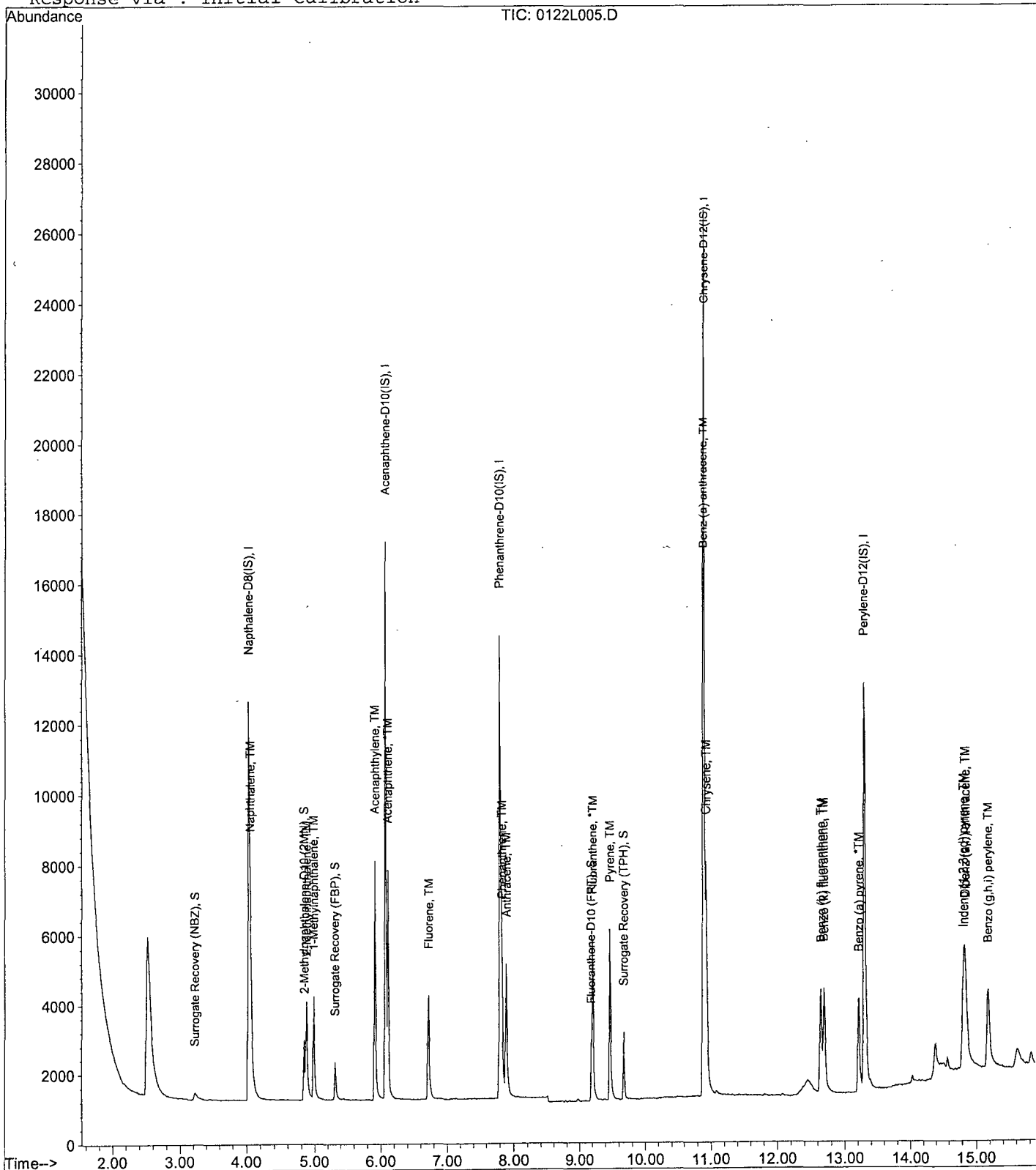
Data File : M:\LINUS\DATA\L190122\0122L005.D  
Acq On : 22 Jan 19 10:21  
Sample : 0.5 SIM 01/18/19  
Misc :

Vial: 5  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





Data File : M:\LINUS\DATA\L190122\0122L006.D Vial: 6  
 Acq On : 22 Jan 19 10:43 Operator: MA  
 Sample : 1 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 11:50:13 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	17997	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	8238	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	16224	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	23806	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	22387	2.50000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	1370	0.32296	ppb	0.00
Spiked Amount	5.000					
Recovery				=	6.460%	
4) 2-Methylnaphthalene-D10 (2)	4.84	152	4102	0.39034	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	7.800%	
8) Surrogate Recovery (FBP)	5.31	172	2874	0.40727	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	8.140%	
15) Fluoranthene-D10 (FRT)	9.18	212	5335	0.34225	ppb	-0.01
Spiked Amount	5.000					
Recovery				=	6.840%	
19) Surrogate Recovery (TPH)	9.67	244	3609	0.39220	ppb	0.00
Spiked Amount	5.000					
Recovery				=	7.840%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	9261	1.09215	ppb	99
5) 2-Methylnaphthalene	4.88	142	5682	1.11310	ppb	97
6) 1-Methylnaphthalene	4.99	142	5811	1.12533	ppb	96
9) Acenaphthylene	5.92	152	18493	1.03965	ppb	99
10) Acenaphthene	6.11	154	5619	1.10178	ppb	98
11) Fluorene	6.71	166	6507	1.11018	ppb	96
13) Phenanthrene	7.83	178	9481	1.09531	ppb	97
14) Anthracene	7.89	178	9094	1.05845	ppb	99
16) Fluoranthene	9.21	202	14616	1.07921	ppb	# 93
18) Pyrene	9.47	202	14652	1.09722	ppb	90
20) Benz (a) anthracene	10.89	228	12417	1.04011	ppb	99
21) Chrysene	10.93	228	13234	1.12887	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.80	276	13263	1.07040	ppb	# 88
24) Benzo (b) fluoranthene	12.64	252	11564	1.07514	ppb	# 98
25) Benzo (k) fluoranthene	12.70	252	11886	0.92512	ppb	98
26) Benzo (a) pyrene	13.21	252	11511	1.09889	ppb	99
27) Dibenz (a,h) anthracene	14.83	278	11022	1.13162	ppb	99
28) Benzo (g,h,i) perylene	15.16	276	11170	1.13229	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

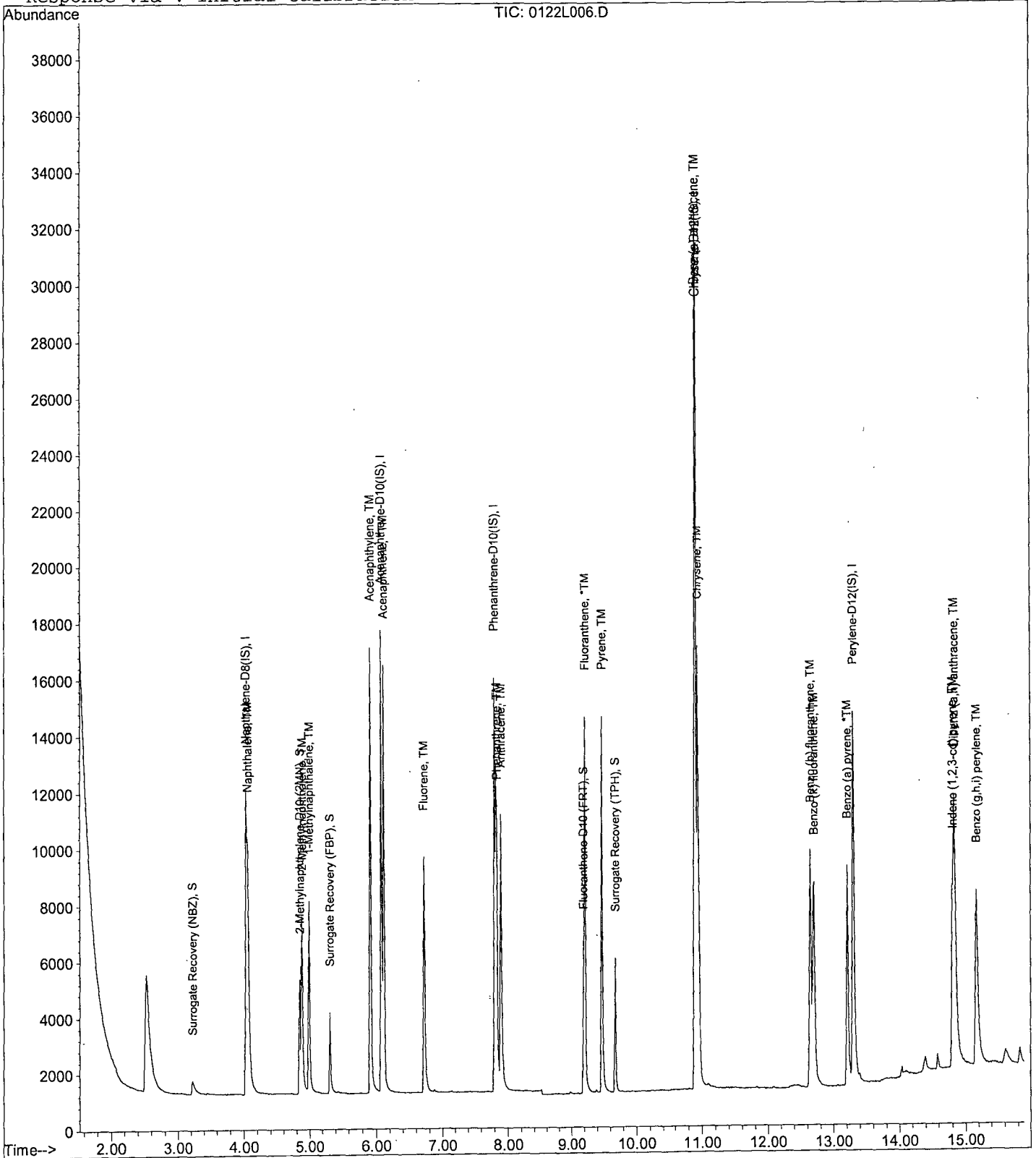
Data File : M:\LINUS\DATA\L190122\0122L006.D  
Acq On : 22 Jan 19 10:43  
Sample : 1 SIM 01/18/19  
Misc :

Vial: 6  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L007.D Vial: 7  
 Acq On : 22 Jan 19 11:30 Operator: MA  
 Sample : 5 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 12:47 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:16 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16548	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7268	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13995	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	19950	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.30	264	19225	2.50000	ppb	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	7607	2.60121	ppb	-0.01
Spiked Amount 5.000			Recovery =	52.020%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	20941	2.75267	ppb	-0.02
Spiked Amount 5.000			Recovery =	55.060%		
8) Surrogate Recovery (FBP)	5.31	172	13978	2.69964	ppb	-0.01
Spiked Amount 5.000			Recovery =	54.000%		
15) Fluoranthene-D10 (FRT)	9.18	212	27245	2.76398	ppb	-0.01
Spiked Amount 5.000			Recovery =	55.280%		
19) Surrogate Recovery (TPH)	9.67	244	17410	2.68552	ppb	-0.01
Spiked Amount 5.000			Recovery =	53.720%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	45784	5.47796	ppb	100
5) 2-Methylnaphthalene	4.87	142	28493	5.66542	ppb	100
6) 1-Methylnaphthalene	4.97	142	27451	5.39862	ppb	100
9) Acenaphthylene	5.90	152	91655	5.61140	ppb	100
10) Acenaphthene	6.11	154	26309	5.54466	ppb	100
11) Fluorene	6.71	166	31330	5.66322	ppb	100
13) Phenanthrene	7.82	178	44335	5.57391	ppb	100
14) Anthracene	7.88	178	45862	5.88051	ppb	100
16) Fluoranthene	9.21	202	70142	5.71546	ppb	100
18) Pyrene	9.46	202	69644	5.66416	ppb	100
20) Benz (a) anthracene	10.89	228	61372	5.59012	ppb	100
21) Chrysene	10.93	228	57972	5.50231	ppb	100
22) Indeno (1,2,3-cd) pyrene	14.79	276	59462	5.44362	ppb	100
24) Benzo (b) fluoranthene	12.64	252	58876	5.66105	ppb	100
25) Benzo (k) fluoranthene	12.68	252	59717	5.64321	ppb	100
26) Benzo (a) pyrene	13.21	252	55980	5.65364	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	49007	5.37458	ppb	100
28) Benzo (g,h,i) perylene	15.15	276	48865	5.30011	ppb	100

Quantitation Report

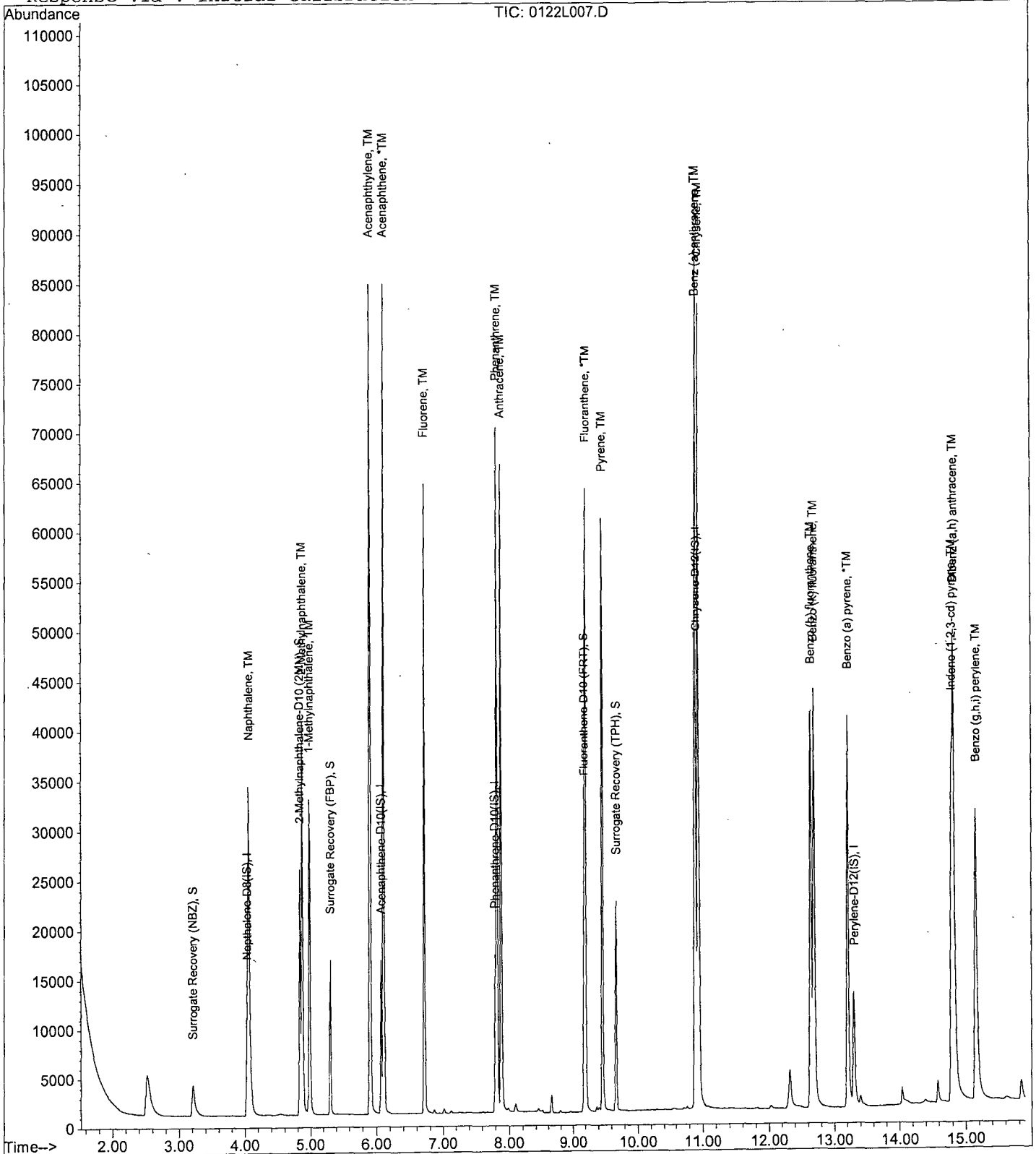
Data File : M:\LINUS\DATA\L190122\0122L007.D  
Acq On : 22 Jan 19 11:30  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 7  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:47 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 5 11:09 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:47:40 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16401	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7199	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	13870	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	20037	2.50000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	18684	2.50000	ppb	-0.03

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.20	82	14805	5.85339	ppb	-0.02
Spiked Amount	5.000		Recovery	=	117.060%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	42463	6.47148	ppb	-0.02
Spiked Amount	5.000		Recovery	=	129.420%	
8) Surrogate Recovery (FBP)	5.31	172	27763	6.17375	ppb	-0.01
Spiked Amount	5.000		Recovery	=	123.480%	
15) Fluoranthene-D10 (FRT)	9.18	212	54468	6.35262	ppb	-0.01
Spiked Amount	5.000		Recovery	=	127.060%	
19) Surrogate Recovery (TPH)	9.66	244	34694	6.13619	ppb	-0.02
Spiked Amount	5.000		Recovery	=	122.720%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	88896	11.85448	ppb	100
5) 2-Methylnaphthalene	4.87	142	56236	12.48160	ppb	100
6) 1-Methylnaphthalene	4.97	142	54242	11.87753	ppb	100
9) Acenaphthylene	5.90	152	182742	12.55338	ppb	99
10) Acenaphthene	6.11	154	51321	12.04426	ppb	98
11) Fluorene	6.71	166	61684	12.48808	ppb	99
13) Phenanthrene	7.82	178	87145	12.24258	ppb	100
14) Anthracene	7.88	178	87619	12.57174	ppb	100
16) Fluoranthene	9.21	202	137396	12.46906	ppb	97
18) Pyrene	9.46	202	136155	12.26524	ppb	96
20) Benz (a) anthracene	10.89	228	120980	12.29858	ppb	100
21) Chrysene	10.93	228	111248	11.62149	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	119439	12.13320	ppb	# 84
24) Benzo (b) fluoranthene	12.63	252	119776	13.26251	ppb	# 97
25) Benzo (k) fluoranthene	12.68	252	108622m	11.78686	ppb	99
26) Benzo (a) pyrene	13.20	252	111267	12.95931	ppb	# 97
27) Dibenz (a,h) anthracene	14.82	278	97893	12.25147	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	98835	12.27085	ppb	# 94

Quantitation Report

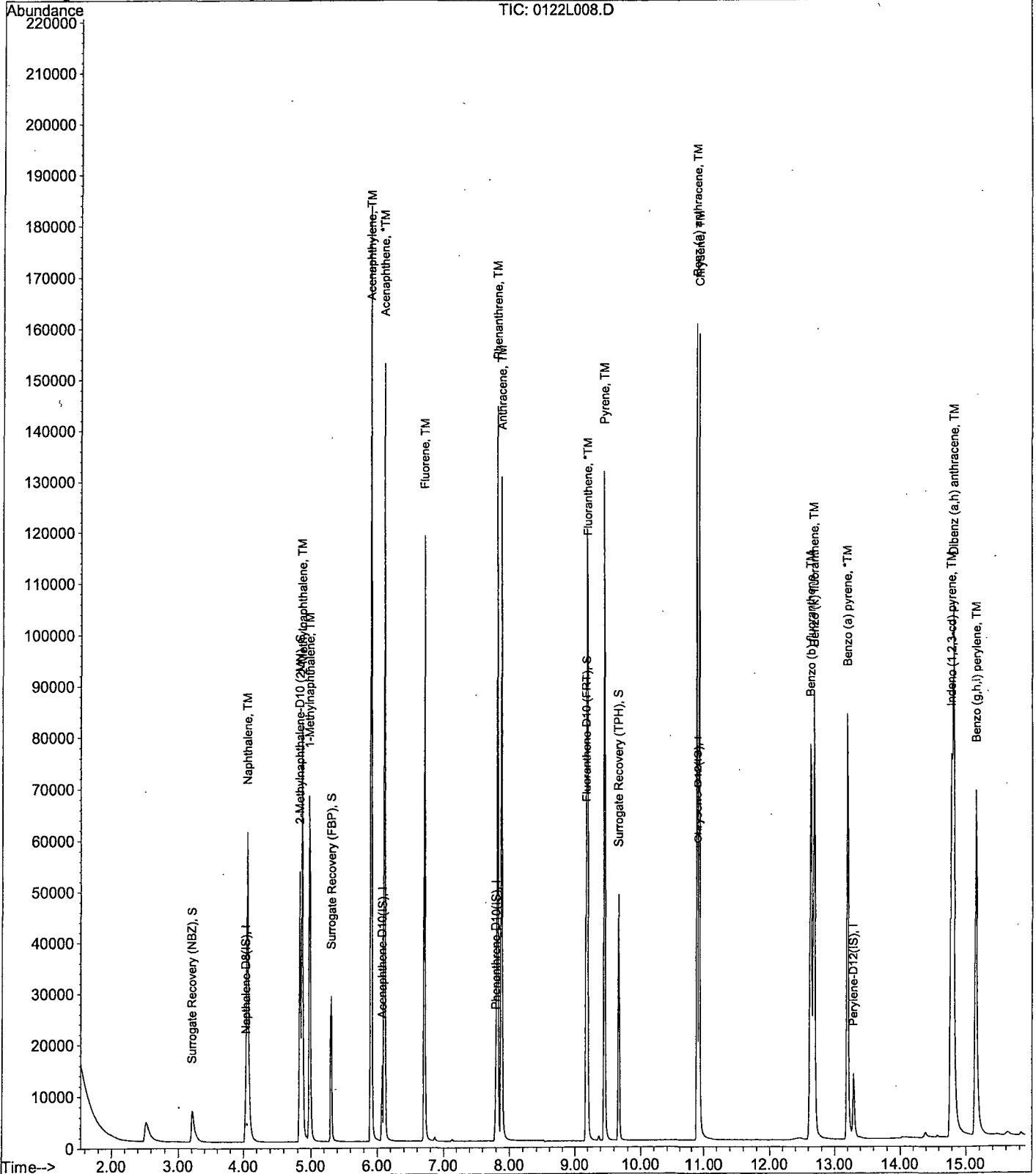
Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 5 11:09 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration

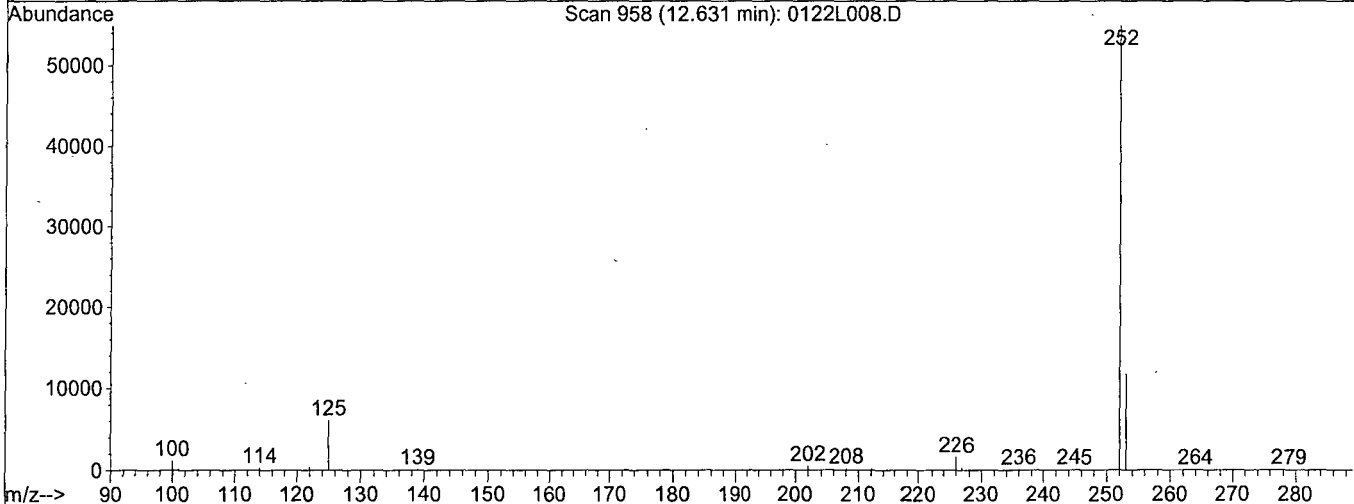
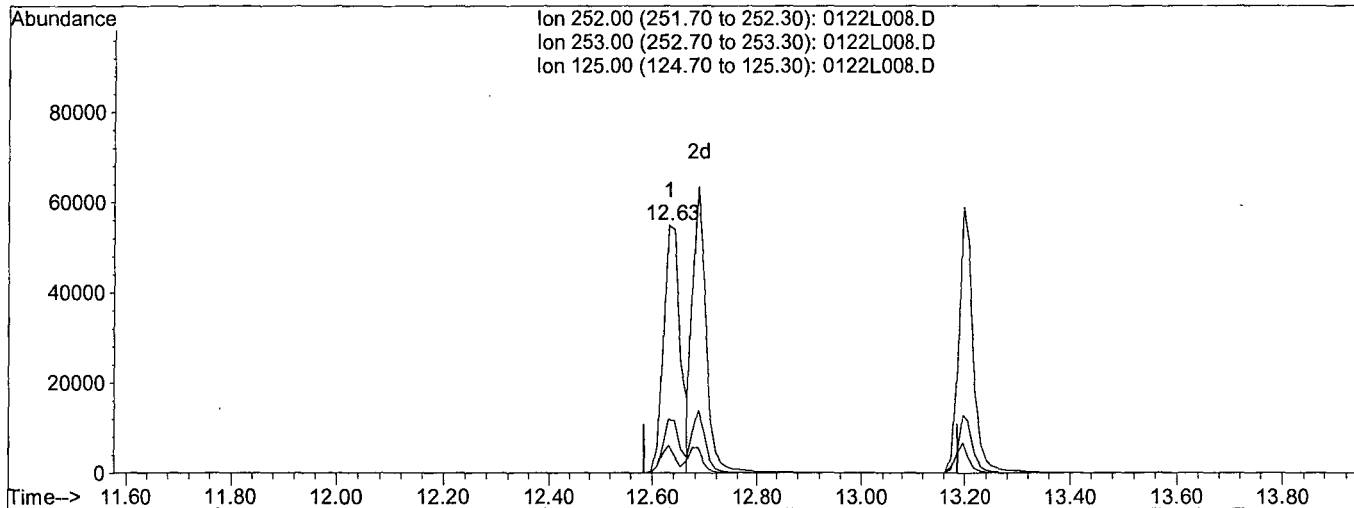


Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :  
 Quant Time: Jan 22 12:48 2019

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Multiple Level Calibration



TIC: 0122L008.D

(25) Benzo (k) fluoranthene (TM)

12.63min 12.9969ppb

response 119773

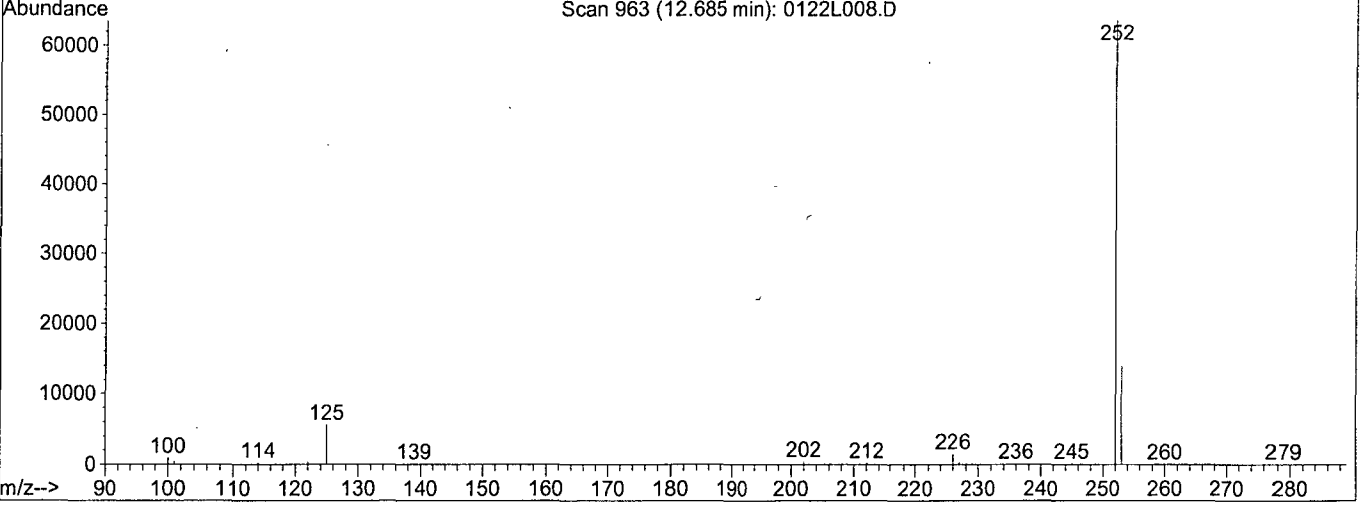
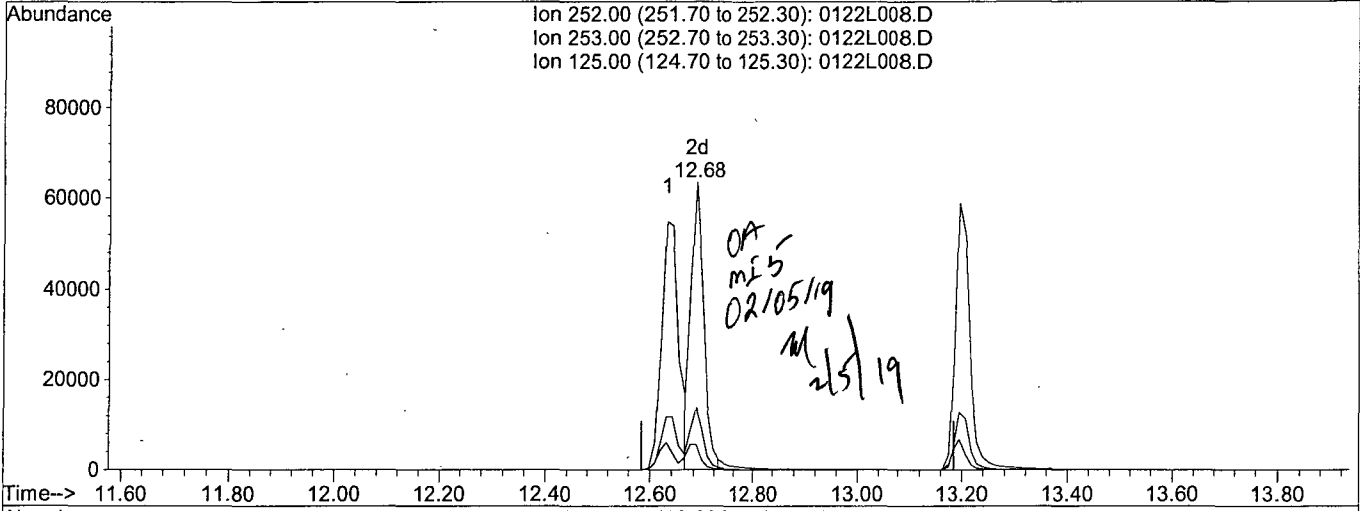
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.45
125.00	9.60	10.98
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L190122\0122L008.D  
 Acq On : 22 Jan 19 11:53  
 Sample : 10 SIM 01/18/19  
 Misc :  
 Quant Time: Feb 5 11:09 2019

Vial: 8  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Multiple Level Calibration



TIC: 0122L008.D

(25) Benzo (k) fluoranthene (TM)

12.68min 11.7869ppb m

response 108622

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.90
125.00	9.60	8.79
0.00	0.00	0.00



Data File : M:\LINUS\DATA\L190122\0122L009.D Vial: 9  
 Acq On : 22 Jan 19 12:15 Operator: MA  
 Sample : 50 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 12:48:57 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16882	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7435	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14943	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.91	240	19605	2.50000	ppb	-0.01
23) Perylene-D12 (IS)	13.29	264	18780	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.20	82	74252	28.52027	ppb	-0.02
Spiked Amount	5.000		Recovery	=	570.400%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	197601	29.25691	ppb	-0.02
Spiked Amount	5.000		Recovery	=	585.140%	
8) Surrogate Recovery (FBP)	5.31	172	128459	27.65911	ppb	-0.01
Spiked Amount	5.000		Recovery	=	553.180%	
15) Fluoranthene-D10 (FRT)	9.18	212	254396	27.53979	ppb	-0.01
Spiked Amount	5.000		Recovery	=	550.800%	
19) Surrogate Recovery (TPH)	9.67	244	163882	29.62386	ppb	-0.01
Spiked Amount	5.000		Recovery	=	592.480%	
Target Compounds						
3) Naphthalene	4.06	128	369785	47.90669	ppb	Qvalue 100
5) 2-Methylnaphthalene	4.87	142	226326	48.80191	ppb	99
6) 1-Methylnaphthalene	4.99	142	222700	47.37585	ppb	94
9) Acenaphthylene	5.92	152	763610	50.79081	ppb	97
10) Acenaphthene	6.11	154	208204	47.31133	ppb	95
11) Fluorene	6.71	166	255227	50.03119	ppb	97
13) Phenanthrene	7.83	178	376921	49.14954	ppb	98
14) Anthracene	7.89	178	376399	50.12843	ppb	99
16) Fluoranthene	9.21	202	567787	47.82815	ppb	# 84
18) Pyrene	9.47	202	556994	51.28126	ppb	99
20) Benz (a) anthracene	10.90	228	525902	54.64017	ppb	100
21) Chrysene	10.95	228	451974	48.25575	ppb	# 98
22) Indeno (1,2,3-cd) pyrene	14.82	276	499473	51.85698	ppb	# 90
24) Benzo (b) fluoranthene	12.65	252	490265	54.00836	ppb	100
25) Benzo (k) fluoranthene	12.72	252	488050	50.37199	ppb	100
26) Benzo (a) pyrene	13.22	252	471645	54.65189	ppb	99
27) Dibenz (a,h) anthracene	14.85	278	398222	49.58336	ppb	# 94
28) Benzo (g,h,i) perylene	15.17	276	411886	50.87625	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

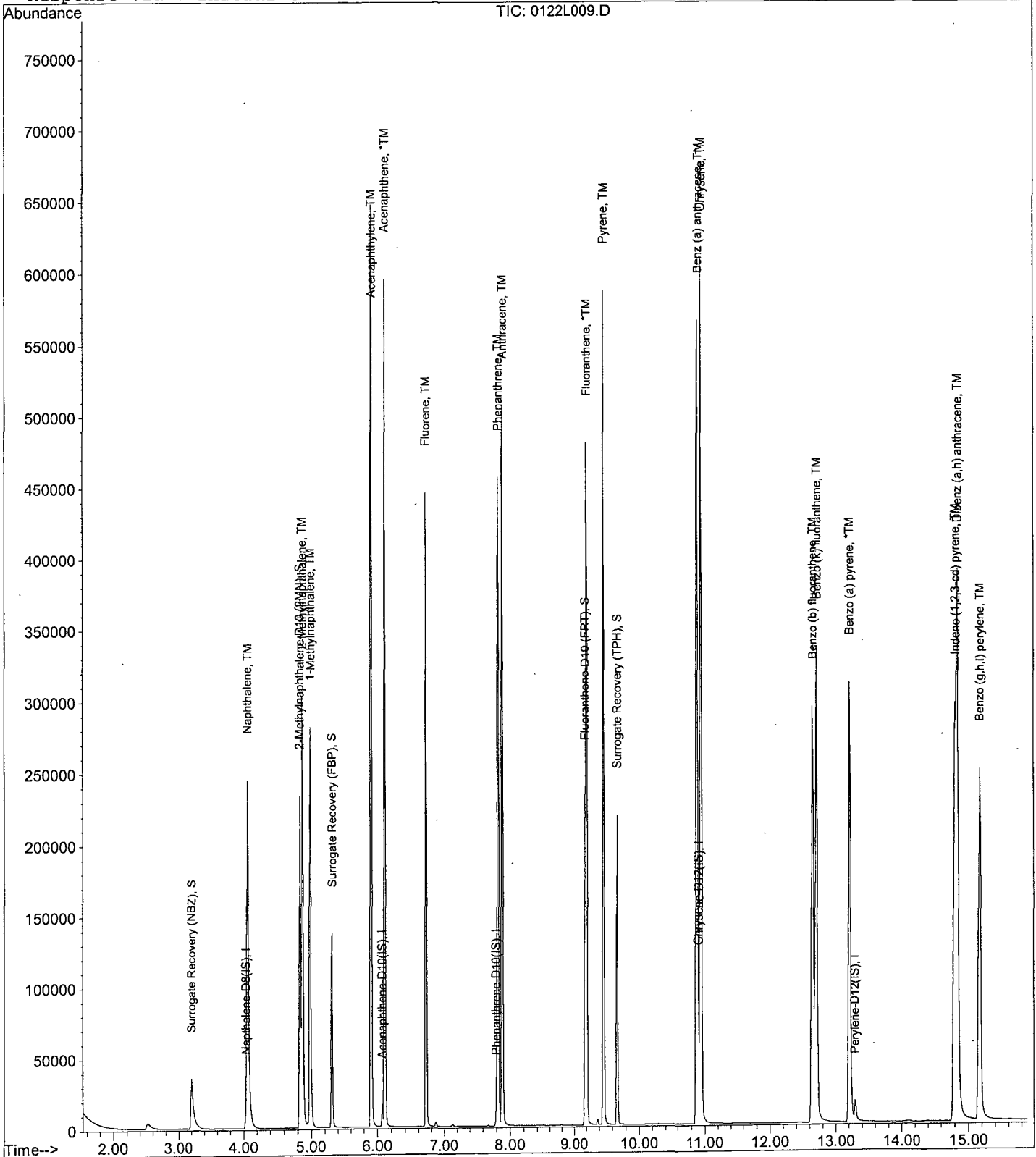
Data File : M:\LINUS\DATA\L190122\0122L009.D  
Acq On : 22 Jan 19 12:15  
Sample : 50 SIM 01/18/19  
Misc :

Vial: 9  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 12:49 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L010.D Vial: 10  
 Acq On : 22 Jan 19 12:37 Operator: MA  
 Sample : 100 SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jan 22 13:02:2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	16509	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.07	164	7340	2.50000	ppb	-0.01
12) Phenanthrene-D10 (IS)	7.80	188	14625	2.50000	ppb	-0.01
17) Chrysene-D12 (IS)	10.92	240	19570	2.50000	ppb	0.00
23) Perylene-D12 (IS)	13.30	264	18015	2.50000	ppb	-0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.20	82	143716	49.35106	ppb	-0.02
Spiked Amount 5.000			Recovery =	987.020%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	369507	48.84651	ppb	-0.02
Spiked Amount 5.000			Recovery =	976.940%		
8) Surrogate Recovery (FBP)	5.31	172	245947	47.38619	ppb	-0.01
Spiked Amount 5.000			Recovery =	947.720%		
15) Fluoranthene-D10 (FRT)	9.20	212	489050	47.77794	ppb	0.00
Spiked Amount 5.000			Recovery =	955.560%		
19) Surrogate Recovery (TPH)	9.67	244	301836	47.76577	ppb	-0.01
Spiked Amount 5.000			Recovery =	955.320%		
Target Compounds						
3) Naphthalene	4.06	128	686154	82.50506	ppb	Qvalue 99
5) 2-Methylnaphthalene	4.88	142	426189	84.86301	ppb	97
6) 1-Methylnaphthalene	4.99	142	400215	78.89615	ppb	96
9) Acenaphthylene	5.92	152	1371750	83.47032	ppb	99
10) Acenaphthene	6.12	154	399394	83.03305	ppb	99
11) Fluorene	6.72	166	486427	86.73013	ppb	99
13) Phenanthrene	7.83	178	662559	80.60560	ppb	99
14) Anthracene	7.91	178	708940	86.78483	ppb	98
16) Fluoranthene	9.23	202	1074355	83.53801	ppb	# 93
18) Pyrene	9.48	202	1055051	87.24305	ppb	94
20) Benz (a) anthracene	10.91	228	987627	91.25364	ppb	99
21) Chrysene	10.97	228	835356	80.61549	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.86	276	924286	86.44058	ppb	# 71
24) Benzo (b) fluoranthene	12.67	252	937424	96.32808	ppb	# 97
25) Benzo (k) fluoranthene	12.74	252	912491	92.99727	ppb	100
26) Benzo (a) pyrene	13.25	252	880967	94.64847	ppb	# 96
27) Dibenz (a,h) anthracene	14.88	278	752245	87.80959	ppb	# 88
28) Benzo (g,h,i) perylene	15.21	276	751231	86.81489	ppb	# 92

Quantitation Report

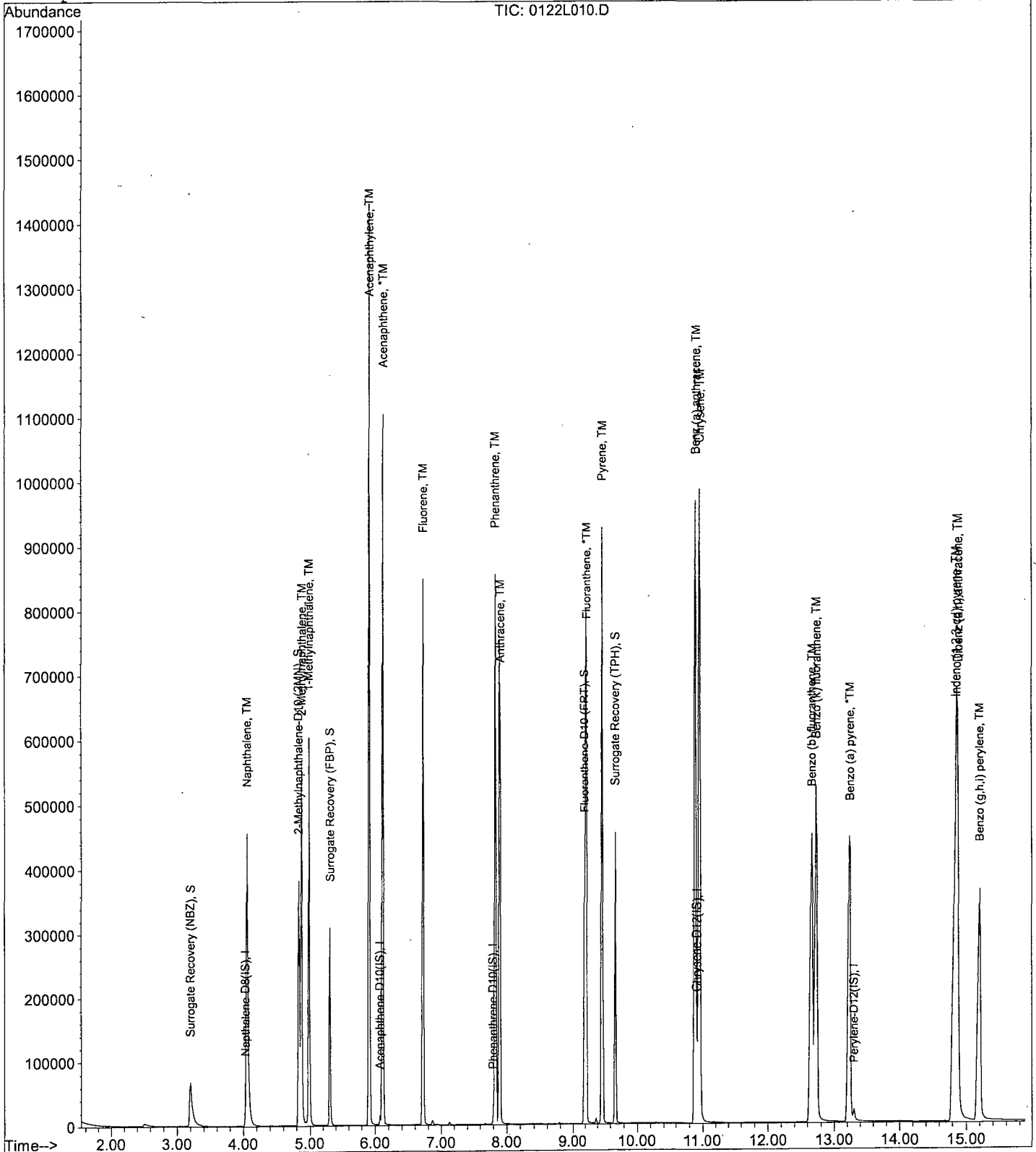
Data File : M:\LINUS\DATA\L190122\L0122L010.D  
Acq On : 22 Jan 19 12:37  
Sample : 100 SIM 01/18/19  
Misc :

Vial: 10  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Jan 22 13:02 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/22/19  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L011.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	Naphthalene	1.259	1.319	4.7	TM
2	TM	2-Methylnaphthalene	0.7605	0.8383	10	TM
3	TM	1-Methylnaphthalene	0.7682	0.8611	12	TM
4	TM	Acenaphthylene	5.597	6.034	7.8	TM
5	*TM	Acenaphthene	1.638	1.715	4.7	*TM
6	TM	Fluorene	1.910	2.087	9.2	TM
7	TM	Phenanthrene	1.405	1.525	8.5	TM
8	TM	Anthracene	1.396	1.436	2.8	TM
9	*TM	Fluoranthene	2.198	2.322	5.6	*TM
10	TM	Pyrene	1.545	1.638	6.0	TM
11	TM	Benz (a) anthracene	1.383	1.444	4.5	TM
12	TM	Chrysene	1.324	1.416	6.9	TM
13	TM	Indeno (1,2,3-cd) pyrene	1.366	1.426	4.4	TM
14	TM	Benzo (b) fluoranthene	1.350	1.445	7.0	TM
15	TM	Benzo (k) fluoranthene	1.374	1.606	17	TM
16	*TM	Benzo (a) pyrene	1.292	1.370	6.1	*TM
17	TM	Dibenz (a,h) anthracene	1.189	1.313	10	TM
18	TM	Benzo (g,h,i) perylene	1.201	1.300	8.3	TM
19						
20						
21						
22						
23						
24						
25						
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32						
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34						
35						
36						
37						
38						
39						
40						

Average

7.5

Data File : M:\LINUS\DATA\L190122\0122L011.D Vial: 11  
 Acq On : 22 Jan 19 12:59 Operator: MA  
 Sample : SS SIM 01/18/19 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 5 14:36 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.03	136	15442	2.50	ppb	-0.01
7) Acenaphthene-D10(IS)	6.07	164	6948	2.50	ppb	-0.01
12) Phenanthrene-D10(IS)	7.80	188	13744	2.50	ppb	-0.01
17) Chrysene-D12(IS)	10.90	240	19942	2.50	ppb	-0.02
23) Perylene-D12(IS)	13.29	264	18334	2.50	ppb	-0.03

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
4) 2-Methylnaphthalene-D10 (2)	0.00	152	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
8) Surrogate Recovery (FBP)	0.00	172	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
15) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	
19) Surrogate Recovery (TPH)	0.00	244	0d	0.00	ppb	
Spiked Amount	5.000		Recovery	=	0.000%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	40738	5.24	ppb	100
5) 2-Methylnaphthalene	4.87	142	25890	5.51	ppb	97
6) 1-Methylnaphthalene	4.99	142	26593	5.60	ppb	94
9) Acenaphthylene	5.90	152	83849	5.39	ppb	100
10) Acenaphthene	6.11	154	23838	5.24	ppb	100
11) Fluorene	6.71	166	28998	5.46	ppb	99
13) Phenanthrene	7.82	178	41914	5.43	ppb	99
14) Anthracene	7.88	178	39465	5.14	ppb	99
16) Fluoranthene	9.21	202	63819	5.28	ppb	100
18) Pyrene	9.46	202	65311	5.30	ppb	97
20) Benz (a) anthracene	10.88	228	57608	5.22	ppb	96
21) Chrysene	10.93	228	56462	5.35	ppb	98
22) Indeno (1,2,3-cd) pyrene	14.78	276	56868	5.22	ppb	# 91
24) Benzo (b) fluoranthene	12.63	252	52976	5.35	ppb	99
25) Benzo (k) fluoranthene	12.68	252	58877	5.84	ppb	# 96
26) Benzo (a) pyrene	13.20	252	50232	5.30	ppb	98
27) Dibenz (a,h) anthracene	14.82	278	48137	5.52	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	47680	5.41	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

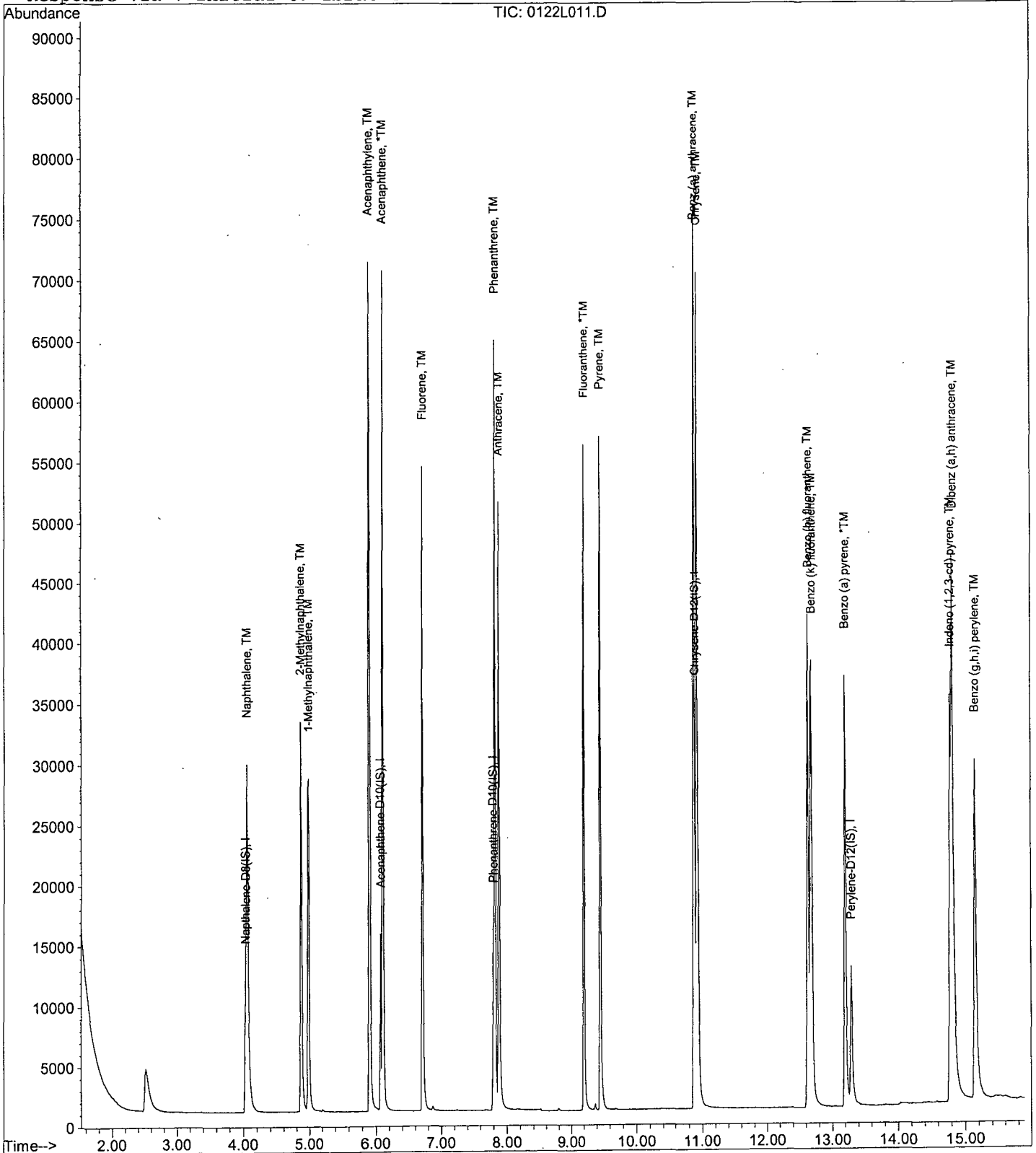
Data File : M:\LINUS\DATA\L190122\0122L011.D  
Acq On : 22 Jan 19 12:59  
Sample : SS SIM 01/18/19  
Misc :

Vial: 11  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 5 14:36 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 8:27  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L081.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4573	3.7	S
3	TM	Naphthalene	1.259	1.291	2.5	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.315	15	S
5	TM	2-Methylnaphthalene	0.7605	0.8228	8.2	TM
6	TM	1-Methylnaphthalene	0.7682	0.7912	3.0	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.931	9.2	S
9	TM	Acenaphthylene	5.597	5.943	6.2	TM
10	*TM	Acenaphthene	1.638	1.698	3.7	*TM
11	TM	Fluorene	1.910	2.027	6.1	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.418	0.92	TM
14	TM	Anthracene	1.396	1.511	8.2	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.994	14	S
16	*TM	Fluoranthene	2.198	2.303	4.8	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.597	3.3	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9075	12	S
20	TM	Benz (a) anthracene	1.383	1.436	3.9	TM
21	TM	Chrysene	1.324	1.370	3.5	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.482	8.5	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.426	5.6	TM
25	TM	Benzo (k) fluoranthene	1.393	1.322	5.1	TM
26	*TM	Benzo (a) pyrene	1.292	1.321	2.2	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.239	4.2	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.219	1.5	TM
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

5.9



Data File : M:\LINUS\DATA\L190122\0122L081.D  
 Acq On : 1 Feb 19 8:27  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 81  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 1 8:49 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	20177	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9030	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17612	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	25878	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	25566	2.50000	ppb	-0.04

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.22	82	9226	2.59220	ppb	0.00
Spiked Amount	5.000		Recovery	= 51.840%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	26528	2.86932	ppb	-0.02
Spiked Amount	5.000		Recovery	= 57.380%		
8) Surrogate Recovery (FBP)	5.30	172	17433	2.73018	ppb	-0.02
Spiked Amount	5.000		Recovery	= 54.600%		
15) Fluoranthene-D10 (FRT)	9.17	212	35111	2.84842	ppb	-0.02
Spiked Amount	5.000		Recovery	= 56.960%		
19) Surrogate Recovery (TPH)	9.66	244	23485	2.81058	ppb	-0.02
Spiked Amount	5.000		Recovery	= 56.220%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	52106	5.12638	ppb	100
5) 2-Methylnaphthalene	4.87	142	33205	5.40983	ppb	98
6) 1-Methylnaphthalene	4.97	142	31928	5.14989	ppb	97
9) Acenaphthylene	5.90	152	107329	5.30863	ppb	98
10) Acenaphthene	6.10	154	30673	5.18339	ppb	96
11) Fluorene	6.70	166	36613	5.30635	ppb	98
13) Phenanthrene	7.81	178	49948	5.04598	ppb	100
14) Anthracene	7.87	178	53216	5.40958	ppb	99
16) Fluoranthene	9.20	202	81124	5.23809	ppb	97
18) Pyrene	9.46	202	82634	5.16745	ppb	# 87
20) Benz (a) anthracene	10.88	228	74323	5.19327	ppb	99
21) Chrysene	10.92	228	70892	5.17374	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	76692	5.42402	ppb	93
24) Benzo (b) fluoranthene	12.62	252	72896	5.27827	ppb	# 97
25) Benzo (k) fluoranthene	12.67	252	67599	4.74649	ppb	98
26) Benzo (a) pyrene	13.18	252	67523	5.11184	ppb	# 95
27) Dibenz (a,h) anthracene	14.82	278	63351	5.21084	ppb	95
28) Benzo (g,h,i) perylene	15.14	276	62311	5.07408	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

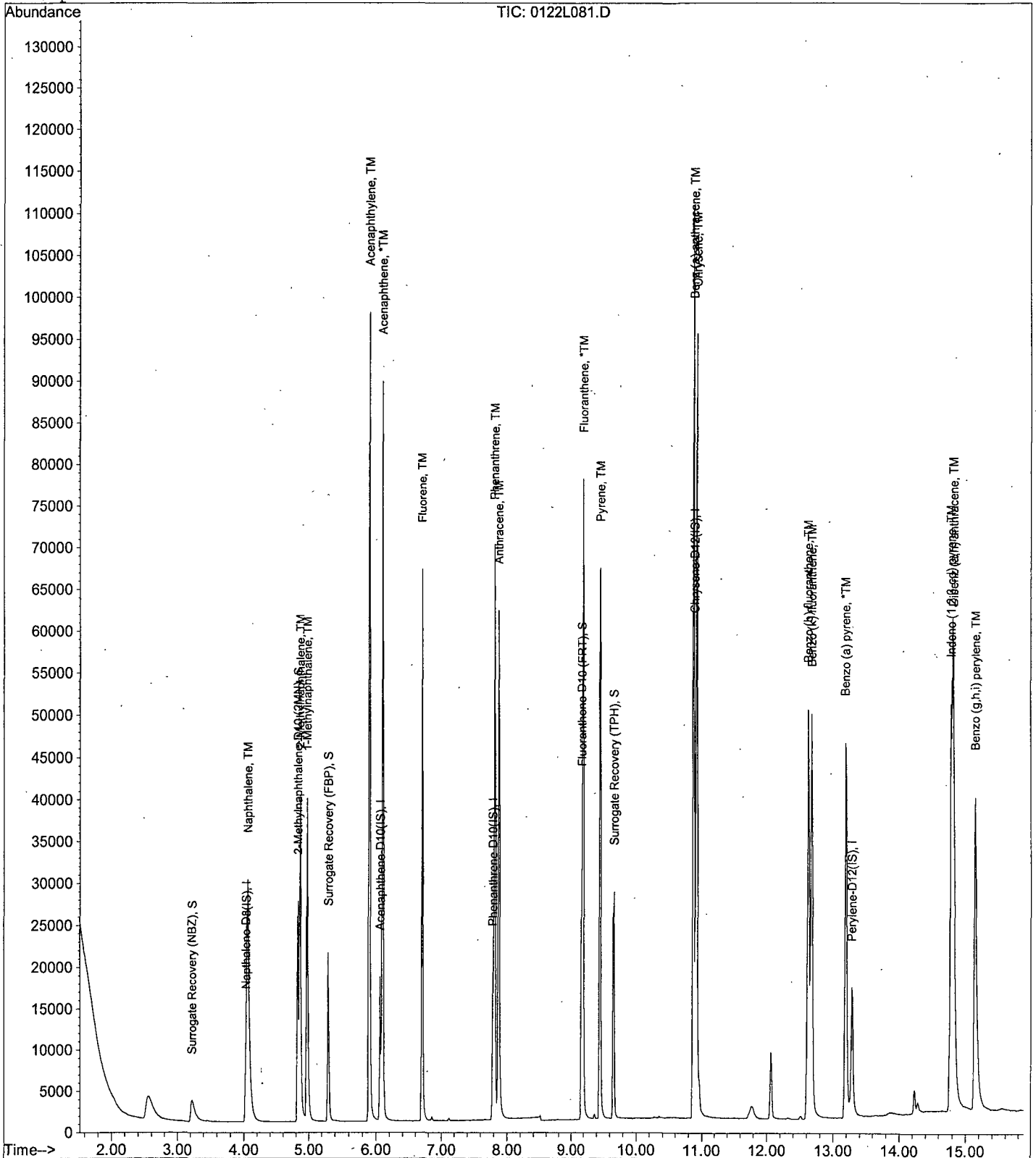
Data File : M:\LINUS\DATA\L190122\0122L081.D  
Acq On : 1 Feb 19 8:27  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 81  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 1 8:49 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 15:32  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L088.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4542	3.0	S
3	TM	Napthalene	1.259	1.289	2.4	TM
4	S	2-Methylnapthalene-D10 (2MN)	1.146	1.290	13	S
5	TM	2-Methylnapthalene	0.7605	0.8008	5.3	TM
6	TM	1-Methylnapthalene	0.7682	0.7962	3.7	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.882	6.5	S
9	TM	Acenaphthylene	5.597	5.686	1.6	TM
10	*TM	Acenaphthene	1.638	1.668	1.8	*TM
11	TM	Fluorene	1.910	2.015	5.5	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.449	3.1	TM
14	TM	Anthracene	1.396	1.475	5.6	TM
15	S	Fluoranthene-D10 (FRT)	1.750	1.942	11	S
16	*TM	Fluoranthene	2.198	2.313	5.2	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.573	1.8	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.8808	9.1	S
20	TM	Benz (a) anthracene	1.383	1.375	0.56	TM
21	TM	Chrysene	1.324	1.361	2.8	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.392	1.9	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.523	13	TM
25	TM	Benzo (k) fluoranthene	1.393	1.530	9.9	TM
26	*TM	Benzo (a) pyrene	1.292	1.447	12	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.288	8.4	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.278	6.4	TM
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

5.8

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L190122\0122L088.D  
 Acq On : 1 Feb 19 15:32  
 Sample : 5 SIM 01/18/19  
 Misc :

Vial: 88  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Feb 4 7:44 2019

Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	21775	2.50000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9726	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	19119	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	28633	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	25493	2.50000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.22	82	9891	2.57510	ppb	0.00
Spiked Amount	5.000		Recovery	=	51.500%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	28096	2.81590	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.320%	
8) Surrogate Recovery (FBP)	5.30	172	18308	2.66203	ppb	-0.02
Spiked Amount	5.000		Recovery	=	53.240%	
15) Fluoranthene-D10 (FRT)	9.17	212	37127	2.77456	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.500%	
19) Surrogate Recovery (TPH)	9.66	244	25220	2.72781	ppb	-0.02
Spiked Amount	5.000		Recovery	=	54.560%	
Target Compounds						
3) Naphthalene	4.06	128	56145	5.11838	ppb	99
5) 2-Methylnaphthalene	4.87	142	34877	5.26524	ppb	99
6) 1-Methylnaphthalene	4.97	142	34676	5.18268	ppb	98
9) Acenaphthylene	5.90	152	110599	5.07891	ppb	98
10) Acenaphthene	6.10	154	32437	5.08923	ppb	94
11) Fluorene	6.70	166	39186	5.27285	ppb	95
13) Phenanthrene	7.81	178	55414	5.15693	ppb	99
14) Anthracene	7.88	178	56392	5.28059	ppb	98
16) Fluoranthene	9.20	202	88448	5.26084	ppb	94
18) Pyrene	9.46	202	90091	5.09170	ppb	# 90
20) Benz (a) anthracene	10.88	228	78735	4.97221	ppb	100
21) Chrysene	10.92	228	77950	5.14147	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	79693	5.09396	ppb	# 83
24) Benzo (b) fluoranthene	12.62	252	77665	5.63969	ppb	# 97
25) Benzo (k) fluoranthene	12.67	252	78025	5.49425	ppb	98
26) Benzo (a) pyrene	13.20	252	73793	5.60251	ppb	98
27) Dibenz. (a,h) anthracene	14.82	278	65681	5.41796	ppb	98
28) Benzo (g,h,i) perylene	15.14	276	65153	5.32070	ppb	# 92

Quantitation Report

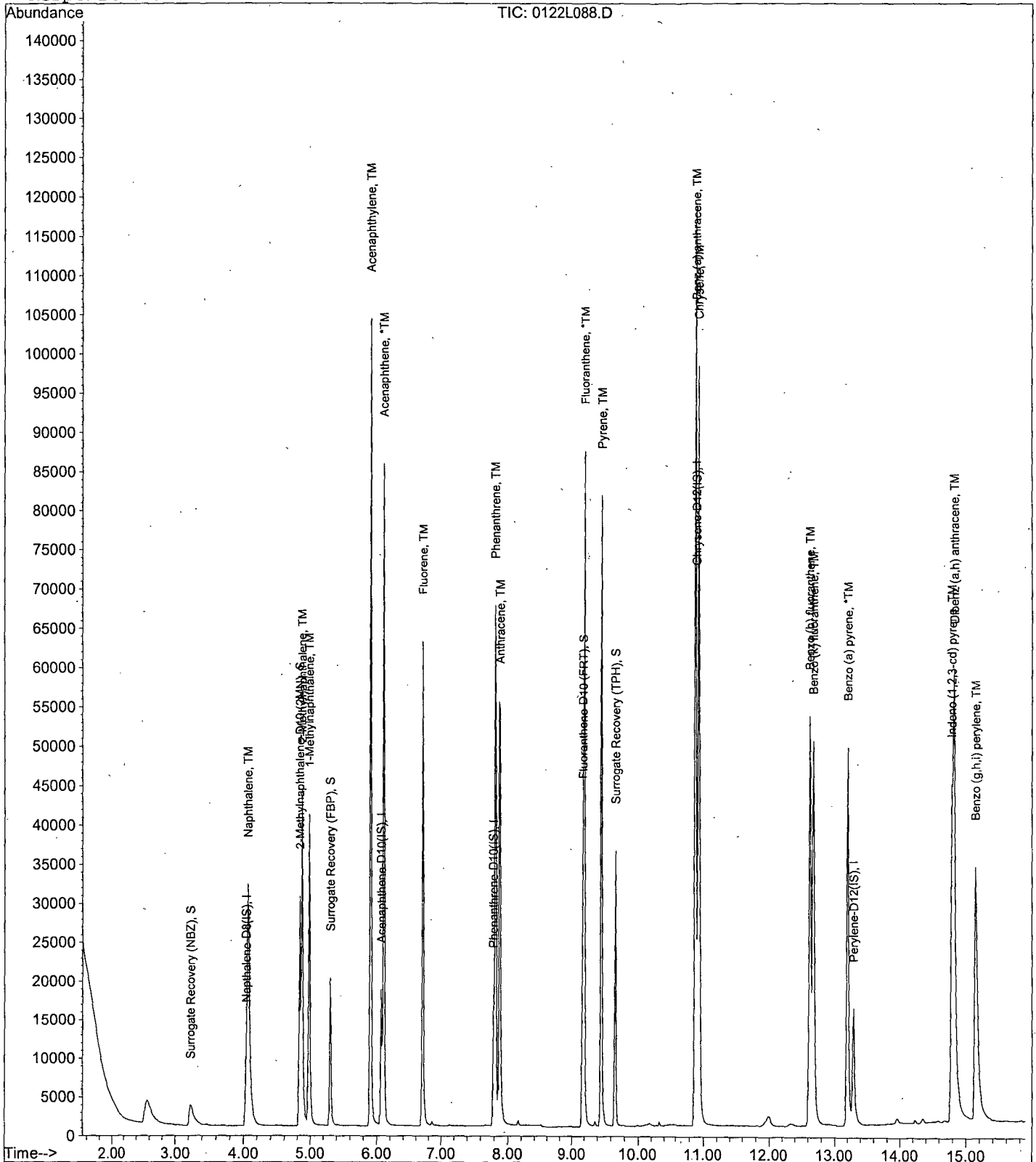
Data File : M:\LINUS\DATA\L190122\0122L088.D  
Acq On : 1 Feb 19 15:32  
Sample : 5 SIM 01/18/19  
Misc :

Vial: 88  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 4 7:44 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



PAH by GCMS SIM  
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 21:52  
Instrument: Linus  
Initial Cal. Date: 01/22/19  
Data File: 0122L103.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Napthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4410	0.4879	11	S
3	TM	Naphthalene	1.259	1.388	10	TM
4	S	2-Methylnaphthalene-D10 (2MN)	1.146	1.311	14	S
5	TM	2-Methylnaphthalene	0.7605	0.8733	15	TM
6	TM	1-Methylnaphthalene	0.7682	0.8473	10	TM
7	I	Acenaphthene-D10(IS)	ISTD			I
8	S	Surrogate Recovery (FBP)	1.768	1.961	11	S
9	TM	Acenaphthylene	5.597	6.443	15	TM
10	*TM	Acenaphthene	1.638	1.807	10	*TM
11	TM	Fluorene	1.910	2.234	17	TM
12	I	Phenanthrene-D10(IS)	ISTD			I
13	TM	Phenanthrene	1.405	1.577	12	TM
14	TM	Anthracene	1.396	1.666	19	TM
15	S	Fluoranthene-D10 (FRT)	1.750	2.004	15	S
16	*TM	Fluoranthene	2.198	2.496	14	*TM
17	I	Chrysene-D12(IS)	ISTD			I
18	TM	Pyrene	1.545	1.769	15	TM
19	S	Surrogate Recovery (TPH)	0.8072	0.9048	12	S
20	TM	Benz (a) anthracene	1.383	1.543	12	TM
21	TM	Chrysene	1.324	1.471	11	TM
22	TM	Indeno (1,2,3-cd) pyrene	1.366	1.488	8.9	TM
23	I	Perylene-D12(IS)	ISTD			I
24	TM	Benzo (b) fluoranthene	1.350	1.644	22	TM
25	TM	Benzo (k) fluoranthene	1.393	1.529	9.8	TM
26	*TM	Benzo (a) pyrene	1.292	1.518	18	*TM
27	TM	Dibenz (a,h) anthracene	1.189	1.290	8.5	TM
28	TM	Benzo (g,h,i) perylene	1.201	1.264	5.3	TM
29						
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Average

12.8

Data File : M:\LINUS\DATA\L190122\0122L103.D Vial: 3  
 Acq On : 1 Feb 19 21:52 Operator: MA  
 Sample : 5 SIM 01/18/19 (1) Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Feb 4 7:45 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	38045	2.50000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.06	164	16950	2.50000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	33136	2.50000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	47162	2.50000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	45173	2.50000	ppb	-0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.24	82	18563	2.76607	ppb	0.01
Spiked Amount	5.000		Recovery	=	55.320%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	49889	2.86180	ppb	-0.02
Spiked Amount	5.000		Recovery	=	57.240%	
8) Surrogate Recovery (FBP)	5.30	172	33232	2.77264	ppb	-0.02
Spiked Amount	5.000		Recovery	=	55.460%	
15) Fluoranthene-D10 (FRT)	9.17	212	66402	2.86320	ppb	-0.02
Spiked Amount	5.000		Recovery	=	57.260%	
19) Surrogate Recovery (TPH)	9.66	244	42674	2.80226	ppb	-0.02
Spiked Amount	5.000		Recovery	=	56.040%	
Target Compounds						
3) Naphthalene	4.06	128	105598	5.50983	ppb	Qvalue 100
5) 2-Methylnaphthalene	4.87	142	66449	5.74153	ppb	100
6) 1-Methylnaphthalene	4.97	142	64469	5.51489	ppb	98
9) Acenaphthylene	5.90	152	218428	5.75562	ppb	98
10) Acenaphthene	6.10	154	61253	5.51446	ppb	95
11) Fluorene	6.70	166	75735	5.84757	ppb	97
13) Phenanthrene	7.81	178	104524	5.61245	ppb	99
14) Anthracene	7.87	178	110387	5.96414	ppb	99
16) Fluoranthene	9.20	202	165412	5.67674	ppb	97
18) Pyrene	9.46	202	166878	5.72605	ppb	# 87
20) Benz (a) anthracene	10.88	228	145497	5.57840	ppb	100
21) Chrysene	10.92	228	138783	5.55753	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	140367	5.44722	ppb	91
24) Benzo (b) fluoranthene	12.62	252	148498	6.08545	ppb	# 97
25) Benzo (k) fluoranthene	12.67	252	138144	5.48970	ppb	98
26) Benzo (a) pyrene	13.20	252	137146	5.87614	ppb	100
27) Dibenz (a,h) anthracene	14.82	278	116521	5.42428	ppb	94
28) Benzo (g,h,i) perylene	15.14	276	114213	5.26371	ppb	96

Quantitation Report

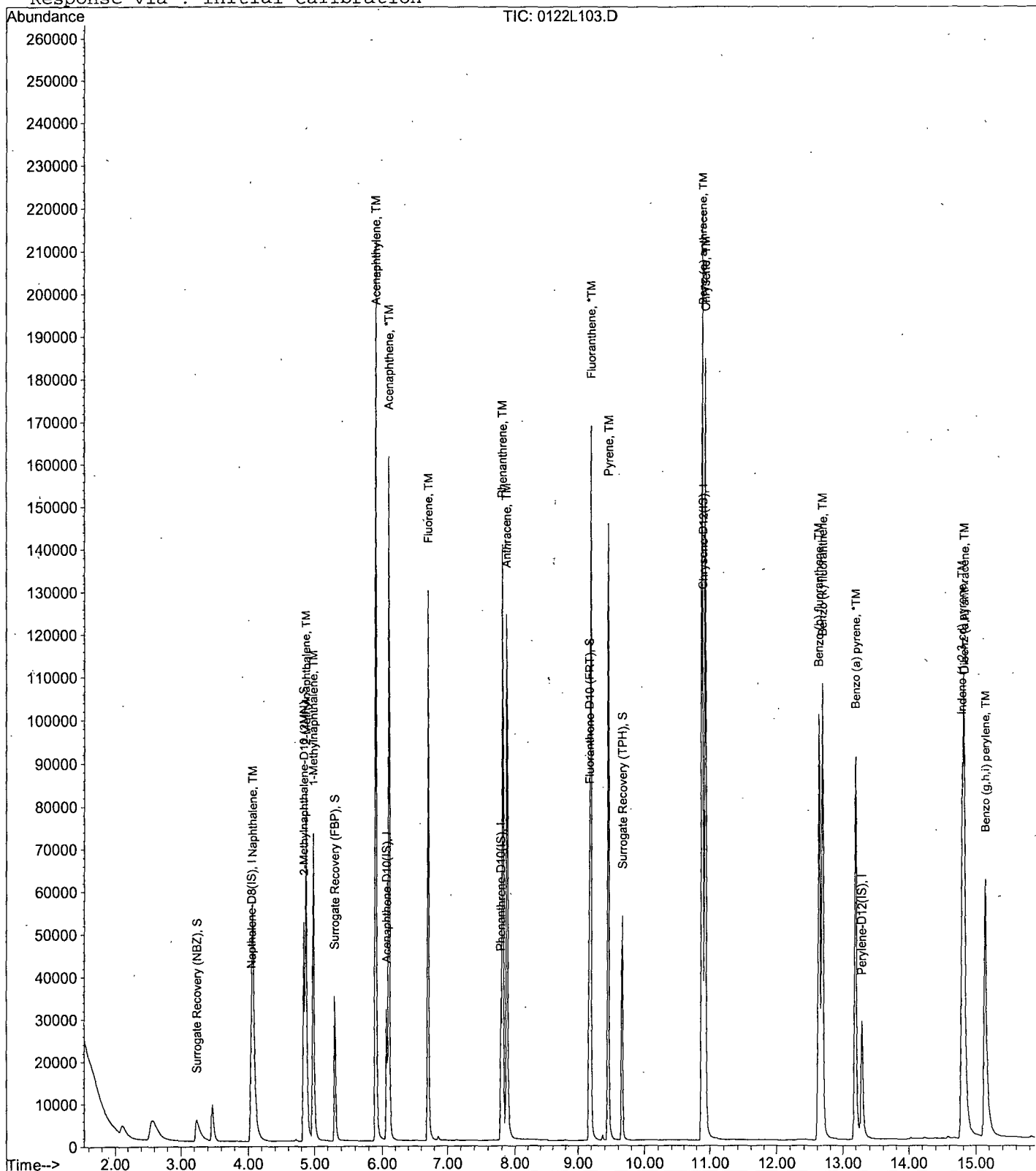
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Acq On : 1 Feb 19 21:52  
Sample : 5 SIM 01/18/19 (1)  
Misc :

Vial: 3  
Operator: MA  
Inst : Linus  
Multiplr: 1.00

Quant Time: Feb 4 7:45 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration





**ORGANICS**  
**Raw Data**

Data File : M:\LINUS\DATA\L190122\0122L096.D Vial: 96  
 Acq On : 1 Feb 19 19:16 Operator: MA  
 Sample : AZ85643W32 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	19222	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	5159	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	16582	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.90	240	19644	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.32	264	1934	2.5000	ppb	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	326473	120.3569	ppb	-0.01
Spiked Amount 6.250			Recovery =	1925.712%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	42626	6.0495	ppb	-0.02
Spiked Amount 6.250			Recovery =	96.784%		
8) Surrogate Recovery (FBP)	5.31	172	532896	182.5968	ppb	-0.01
Spiked Amount 6.250			Recovery =	2921.552%		
15) Fluoranthene-D10 (FRT)	9.17	212	49323	5.3124	ppb	-0.02
Spiked Amount 6.250			Recovery =	84.992%		
19) Surrogate Recovery (TPH)	9.67	244	645049	127.1187	ppb	0.00
Spiked Amount 6.250			Recovery =	2033.904%		

Target Compounds Qvalue

Quantitation Report

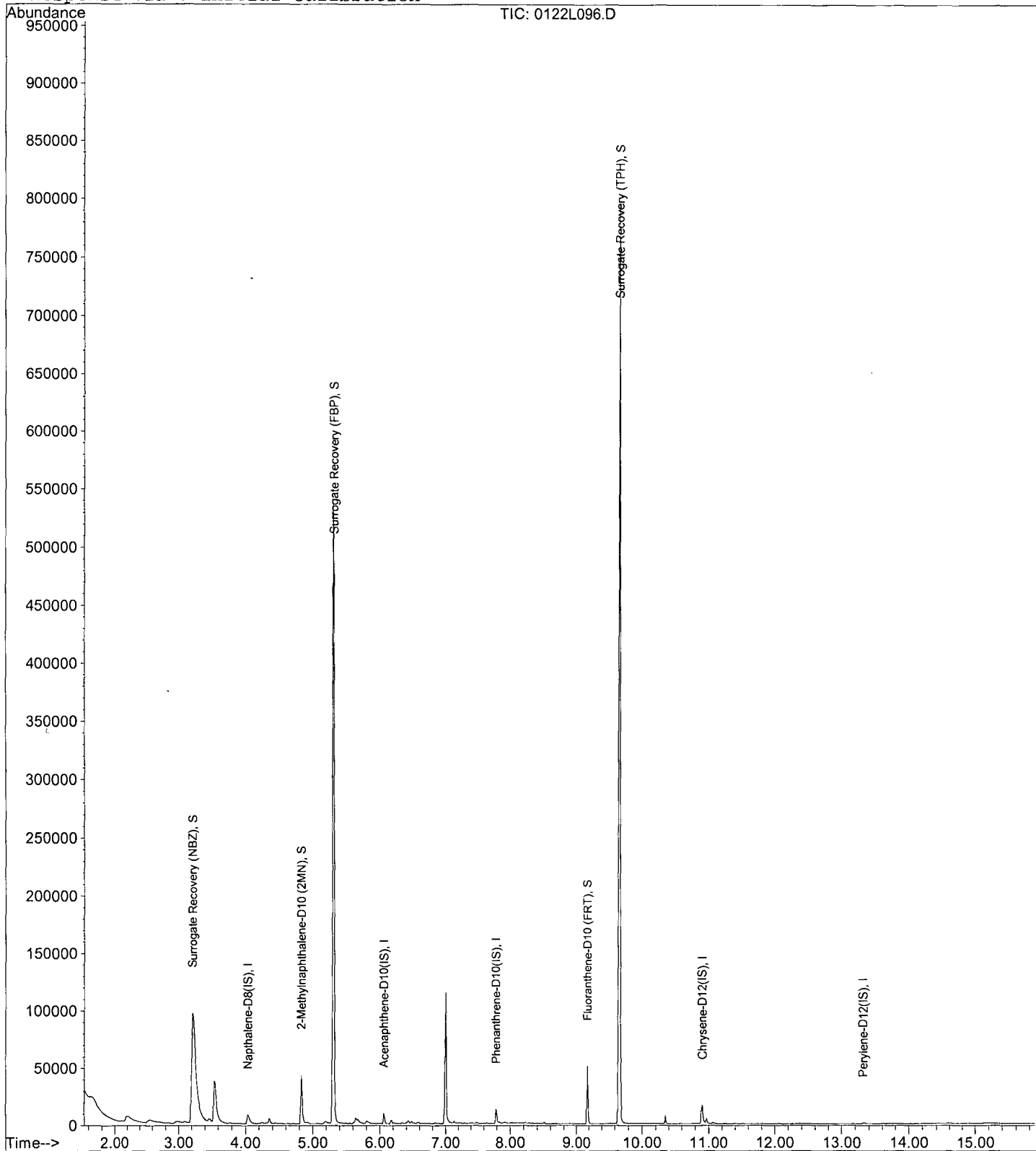
Data File : M:\LINUS\DATA\L190122\0122L096.D  
Acq On : 1 Feb 19 19:16  
Sample : AZ85643W32 1/800  
Misc :

Vial: 96  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L097.D Vial: 97  
 Acq On : 1 Feb 19 19:38 Operator: MA  
 Sample : AZ85644W07 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:50 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	19626	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	9095	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	19630	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	28231	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.29	264	24552	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.21	82	353809	127.7495	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2044.000%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	50587	7.0315	ppb	-0.02
Spiked Amount	6.250		Recovery	= 112.512%		
8) Surrogate Recovery (FBP)	5.30	172	576580	112.0658	ppb	-0.02
Spiked Amount	6.250		Recovery	= 1793.056%		
15) Fluoranthene-D10 (FRT)	9.17	212	67647	6.1547	ppb	-0.02
Spiked Amount	6.250		Recovery	= 98.480%		
19) Surrogate Recovery (TPH)	9.67	244	739003	101.3366	ppb	0.00
Spiked Amount	6.250		Recovery	= 1621.392%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

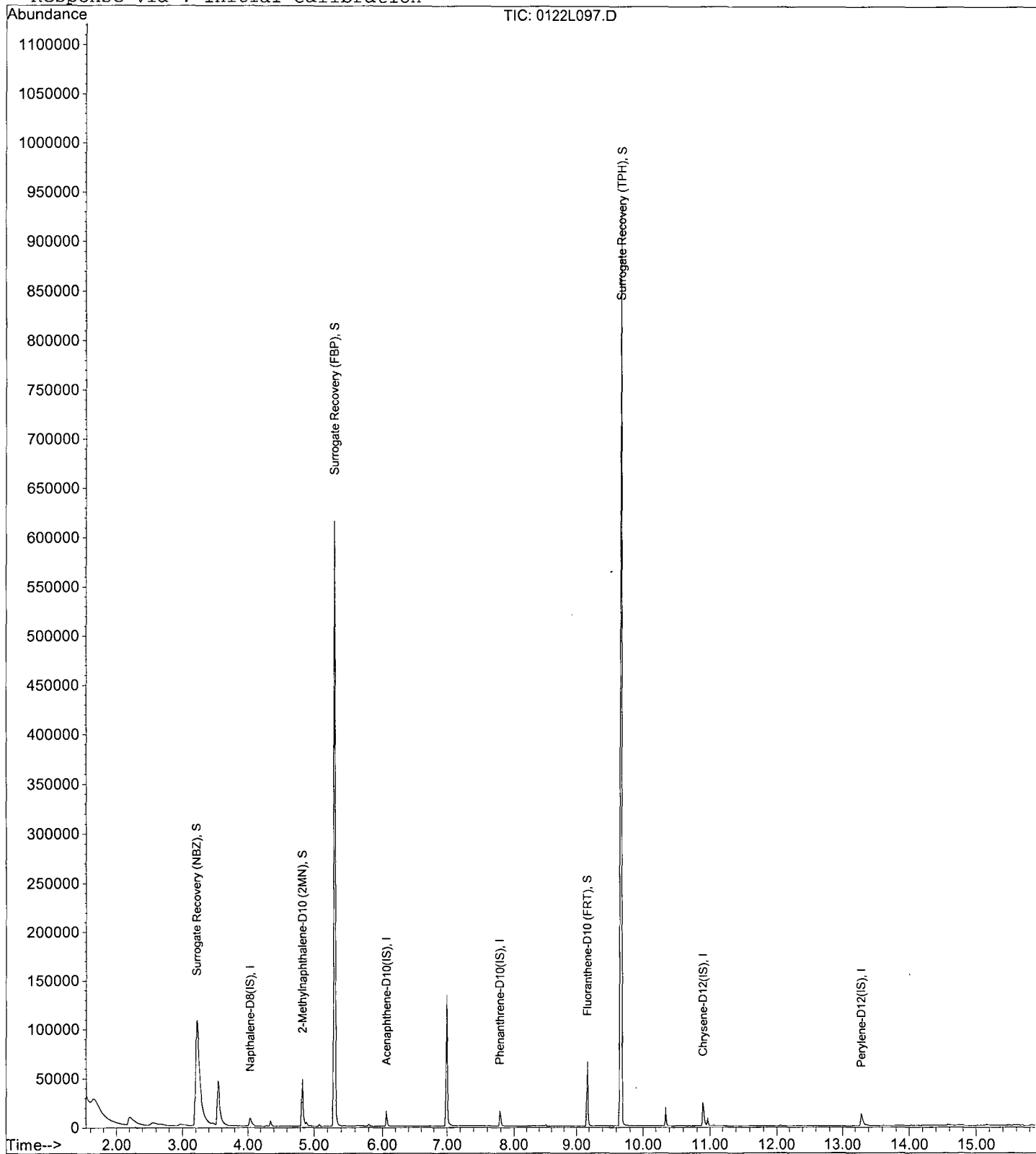
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Acq On : 1 Feb 19 19:38  
Sample : AZ85644W07 1/800  
Misc :

Vial: 97  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:50 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L098.D Vial: 98  
 Acq On : 1 Feb 19 20:01 Operator: MA  
 Sample : AZ85646W21 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:55 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	17131	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	7898	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	15399	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.90	240	23550	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	21125	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	352742	145.9139	ppb	0.00
Spiked Amount	6.250					
					Recovery = 2334.624%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	46760	7.4462	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 119.136%	
8) Surrogate Recovery (FBP)	5.31	172	571199	127.8459	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 2045.536%	
15) Fluoranthene-D10 (FRT)	9.17	212	64945	7.5324	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 120.512%	
19) Surrogate Recovery (TPH)	9.67	244	717580	117.9576	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1887.328%	

Target Compounds Qvalue

Quantitation Report

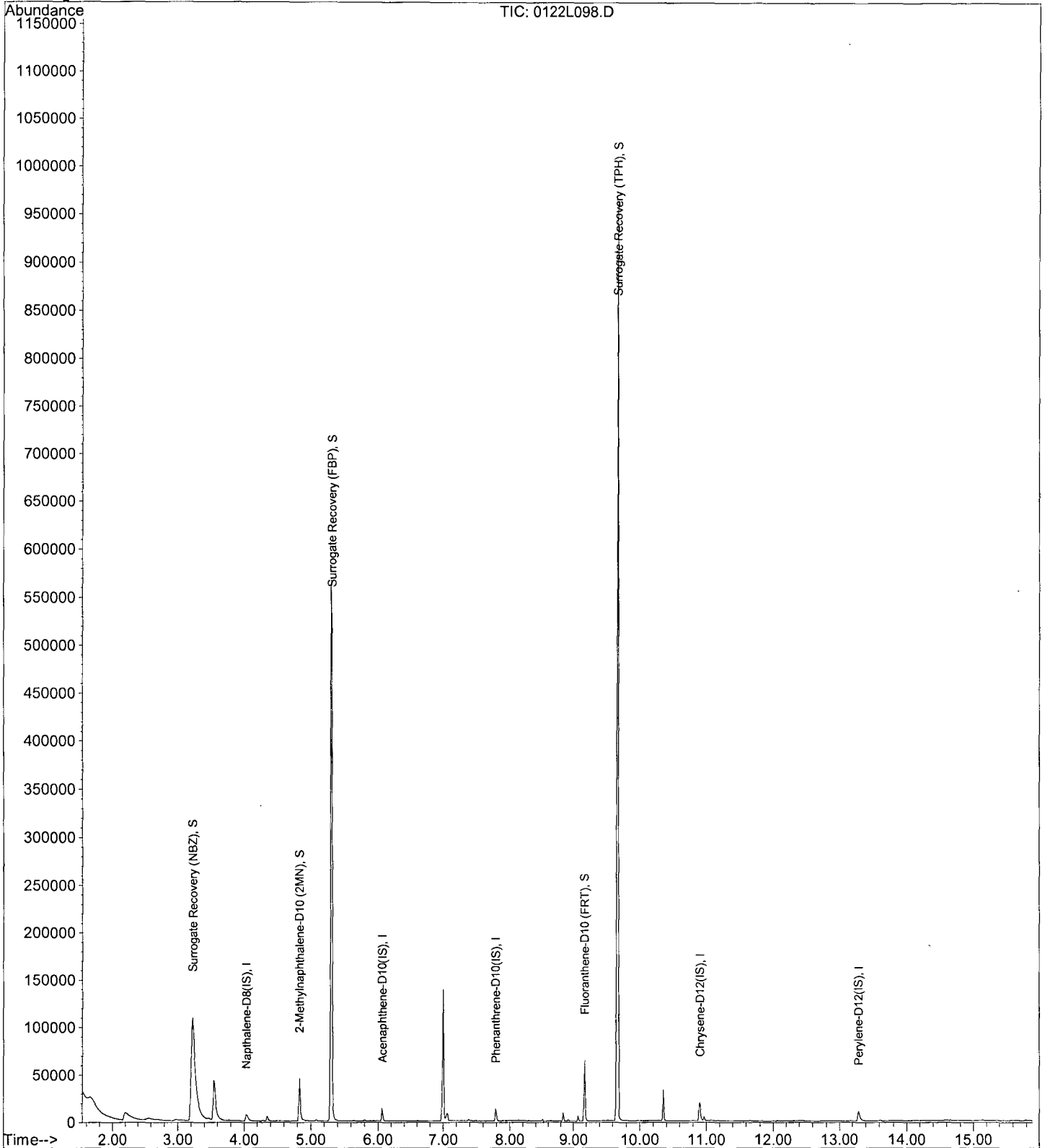
Data File : M:\LINUS\DATA\L190122\0122L098.D  
Acq On : 1 Feb 19 20:01  
Sample : AZ85646W21 1/800  
Misc :

Vial: 98  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:55 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L099.D Vial: 99  
 Acq On : 1 Feb 19 20:23 Operator: MA  
 Sample : AZ85653W20 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:56 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.05	136	23811	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.06	164	10634	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.80	188	19794	2.5000	ppb	-0.01
17) Chrysene-D12 (IS)	10.90	240	28978	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	28139	2.5000	ppb	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.22	82	358449	106.6773	ppb	0.00
Spiked Amount	6.250					
					Recovery = 1706.832%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	46604	5.3393	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 85.424%	
8) Surrogate Recovery (FBP)	5.31	172	581511	96.6669	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1546.672%	
15) Fluoranthene-D10 (FRT)	9.17	212	61755	5.5721	ppb	-0.02
Spiked Amount	6.250					
					Recovery = 89.152%	
19) Surrogate Recovery (TPH)	9.67	244	717064	95.7935	ppb	-0.01
Spiked Amount	6.250					
					Recovery = 1532.704%	

Target Compounds Qvalue



Quantitation Report

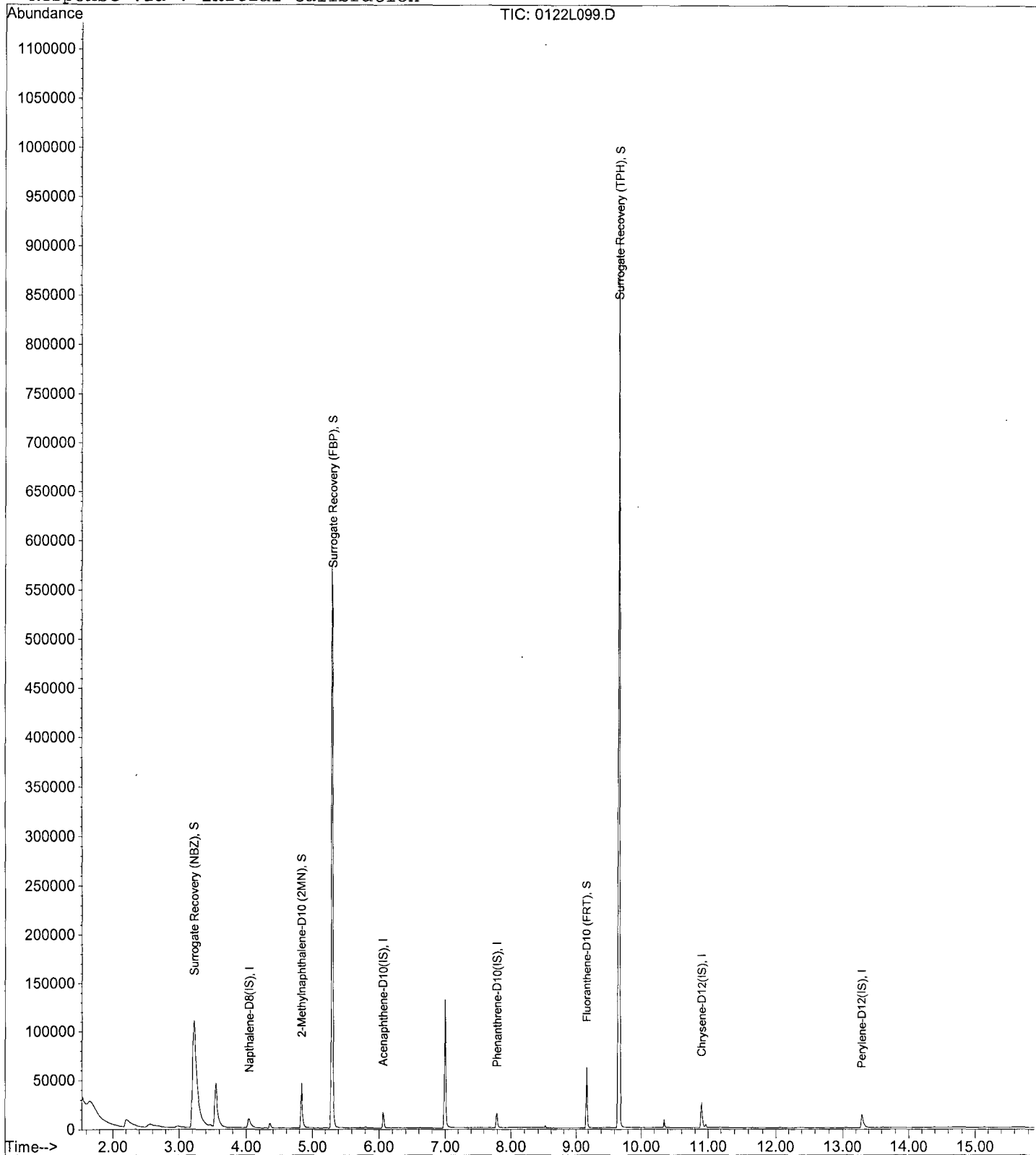
Data File : M:\LINUS\DATA\L190122\0122L099.D  
Acq On : 1 Feb 19 20:23  
Sample : AZ85653W20 1/800  
Misc :

Vial: 99  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:56 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L084.D Vial: 84  
 Acq On : 1 Feb 19 12:51 Operator: MA  
 Sample : 190130A Blk 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 11:42 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	17323	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	8262	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17139	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.90	240	25466	2.5000	ppb	-0.02
23) Perylene-D12 (IS)	13.29	264	25914	2.5000	ppb	-0.03
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.21	82	312855	127.9800	ppb	-0.01
Spiked Amount	6.250		Recovery	= 2047.680%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	40076	6.3111	ppb	-0.02
Spiked Amount	6.250		Recovery	= 100.976%		
8) Surrogate Recovery (FBP)	5.30	172	489127	104.6533	ppb	-0.02
Spiked Amount	6.250		Recovery	= 1674.448%		
15) Fluoranthene-D10 (FRT)	9.17	212	57927	6.0364	ppb	-0.02
Spiked Amount	6.250		Recovery	= 96.576%		
19) Surrogate Recovery (TPH)	9.67	244	642238	97.6297	ppb	-0.01
Spiked Amount	6.250		Recovery	= 1562.080%		

Target Compounds Qvalue

Quantitation Report

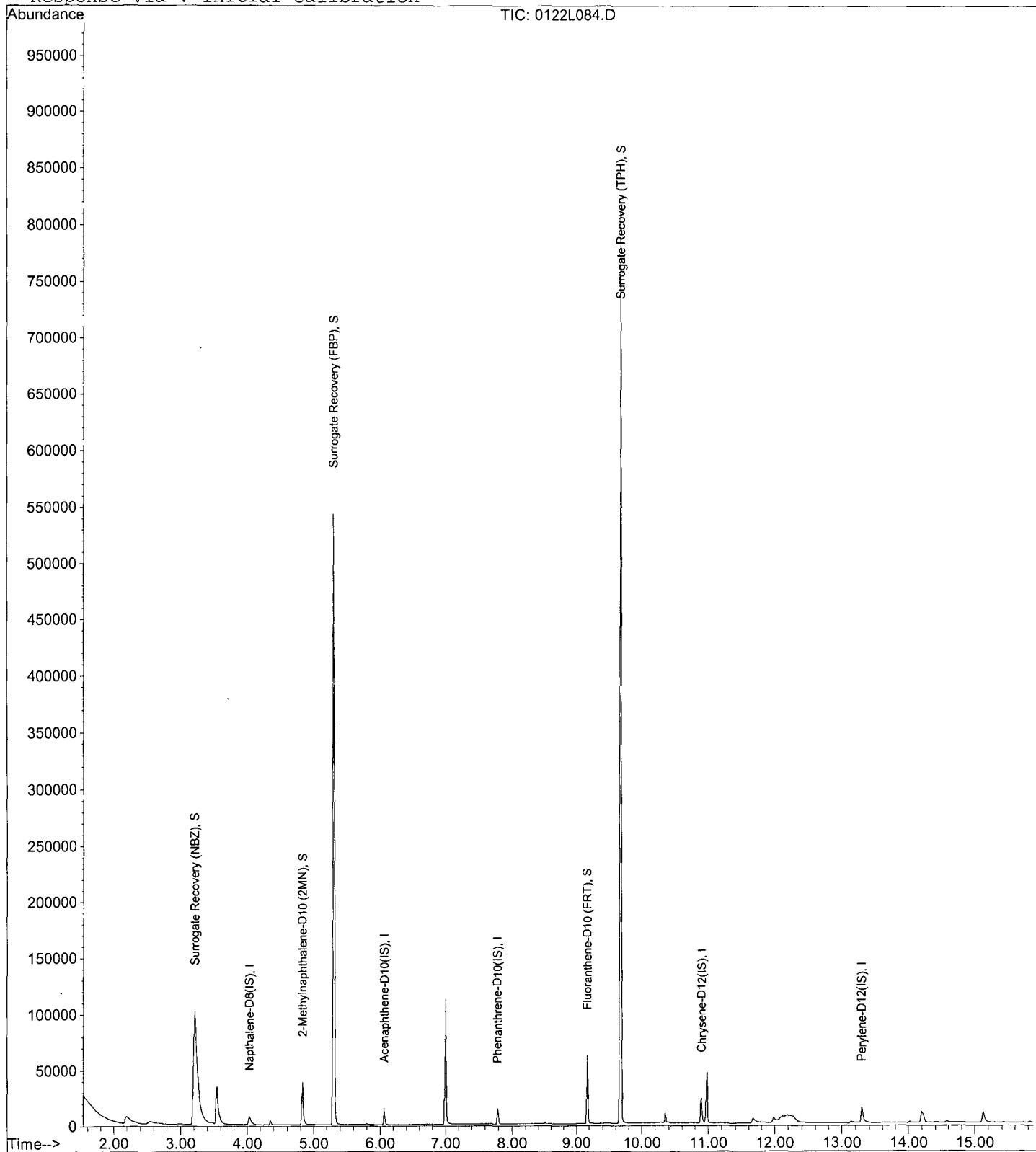
Data File : M:\LINUS\DATA\L190122\0122L084.D  
Acq On : 1 Feb 19 12:51  
Sample : 190130A Blk 1/800  
Misc :

Vial: 84  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 11:42 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L085.D Vial: 85  
 Acq On : 1 Feb 19 13:13 Operator: MA  
 Sample : 190130A LCS-1 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
1) Napthalene-D8 (IS)	4.03	136	16459	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	8259	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	17794	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	24439	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	25760	2.5000	ppb	-0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	3.26	82	1778	0.7655	ppb	0.04
Spiked Amount 6.250			Recovery =	12.256%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	41327	6.8497	ppb	-0.02
Spiked Amount 6.250			Recovery =	109.600%		
8) Surrogate Recovery (FBP)	5.30	172	2375	0.5083	ppb	-0.02
Spiked Amount 6.250			Recovery =	8.128%		
15) Fluoranthene-D10 (FRT)	9.17	212	58272	5.8488	ppb	-0.02
Spiked Amount 6.250			Recovery =	93.584%		
19) Surrogate Recovery (TPH)	9.66	244	4144	0.6564	ppb	-0.02
Spiked Amount 6.250			Recovery =	10.496%		
Target Compounds						Qvalue
3) Naphthalene	4.06	128	39797	5.9998	ppb	100
5) 2-Methylnaphthalene	4.87	142	25160	6.2814	ppb	99
6) 1-Methylnaphthalene	4.97	142	25642	6.3378	ppb	98
9) Acenaphthylene	5.90	152	81066	5.4799	ppb	98
10) Acenaphthene	6.10	154	24708	5.7064	ppb	97
11) Fluorene	6.70	166	30752	6.0912	ppb	99
13) Phenanthrene	7.81	178	43853	5.4812	ppb	100
14) Anthracene	7.87	178	40981	5.1541	ppb	99
16) Fluoranthene	9.20	202	66502	5.3126	ppb	98
18) Pyrene	9.46	202	67214	5.5633	ppb	# 88
20) Benz (a) anthracene	10.88	228	55062	5.0924	ppb	99
21) Chrysene	10.92	228	56489	5.4567	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	60946	5.7052	ppb	# 88
24) Benzo (b) fluoranthene	12.62	252	53557	4.8110	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	60543	5.2738	ppb	97
26) Benzo (a) pyrene	13.20	252	49207	4.6215	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	51432	5.2482	ppb	96
28) Benzo (g,h,i) perylene	15.14	276	47649	4.8136	ppb	# 93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

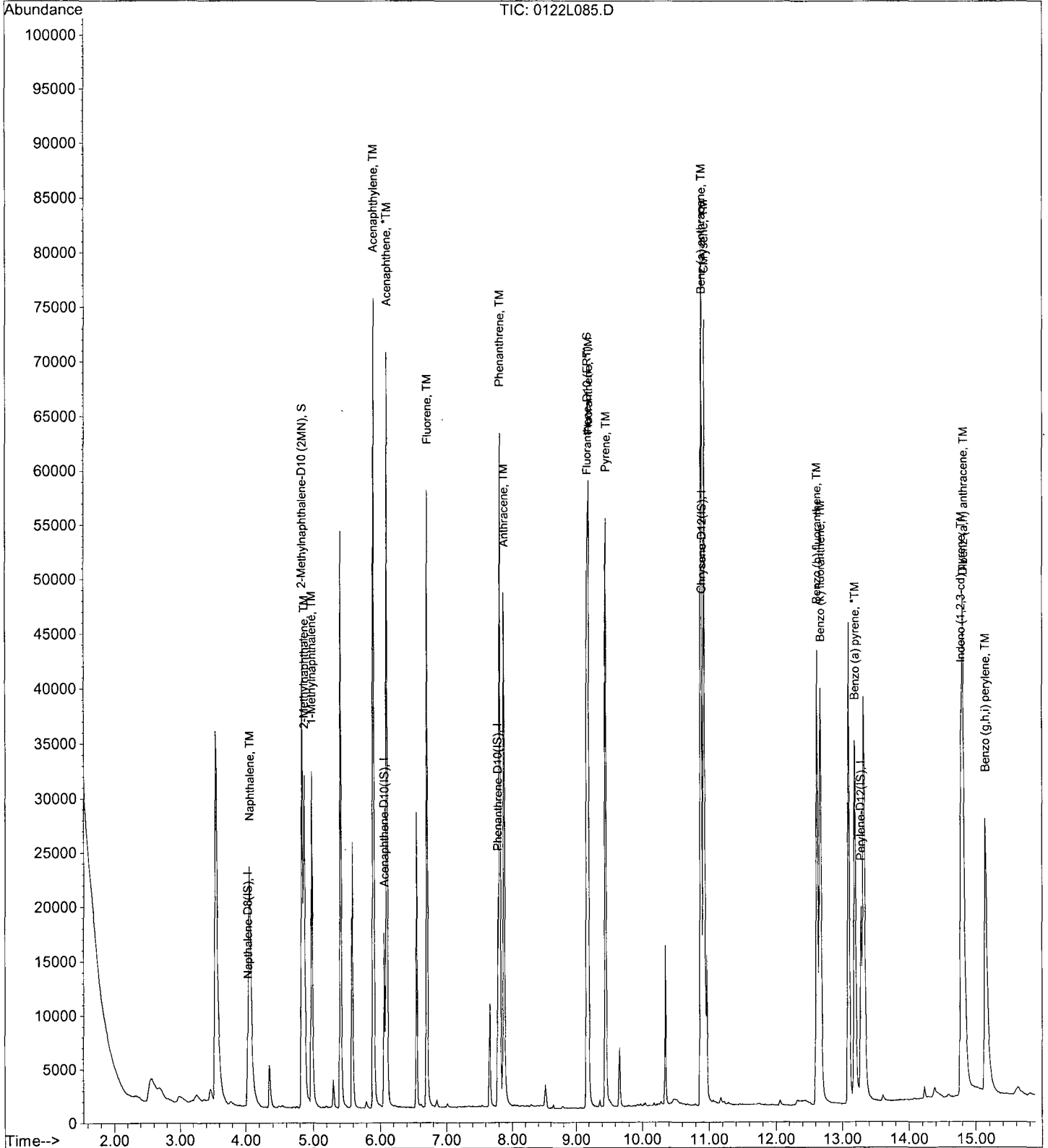
Data File : M:\LINUS\DATA\L190122\0122L085.D  
 Acq On : 1 Feb 19 13:13  
 Sample : 190130A LCS-1 1/800  
 Misc :

Vial: 85  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L086.D Vial: 86  
 Acq On : 1 Feb 19 13:35 Operator: MA  
 Sample : 190130A LCSD-1 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	4.03	136	15802	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	7807	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	18324	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	27968	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	18922	2.5000	ppb	-0.04

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	3.18	82	83	0.0372	ppb	-0.05
Spiked Amount	6.250		Recovery	=	0.592%	
4) 2-Methylnaphthalene-D10 (2)	4.83	152	40405	6.9753	ppb	-0.02
Spiked Amount	6.250		Recovery	=	111.600%	
8) Surrogate Recovery (FBP)	5.31	172	161	0.0365	ppb	-0.01
Spiked Amount	6.250		Recovery	=	0.576%	
15) Fluoranthene-D10 (FRT)	9.17	212	62606	6.1020	ppb	-0.02
Spiked Amount	6.250		Recovery	=	97.632%	
19) Surrogate Recovery (TPH)	9.66	244	466	0.0645	ppb	-0.02
Spiked Amount	6.250		Recovery	=	1.040%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	39274	6.1671	ppb	99
5) 2-Methylnaphthalene	4.87	142	24821	6.4544	ppb	99
6) 1-Methylnaphthalene	4.97	142	24419	6.2865	ppb	99
9) Acenaphthylene	5.90	152	63800	4.5625	ppb	98
10) Acenaphthene	6.10	154	23273	5.6862	ppb	96
11) Fluorene	6.70	166	28225	5.9144	ppb	97
13) Phenanthrene	7.81	178	43609	5.2930	ppb	100
14) Anthracene	7.88	178	35694	4.3593	ppb	98
16) Fluoranthene	9.20	202	71790	5.5691	ppb	96
18) Pyrene	9.46	202	68927	4.9852	ppb	# 88
20) Benz (a) anthracene	10.88	228	59490	4.8077	ppb	100
21) Chrysene	10.92	228	63547	5.3639	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	61599	5.0388	ppb	89
24) Benzo (b) fluoranthene	12.62	252	57204	6.9955	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	65278	7.7411	ppb	97
26) Benzo (a) pyrene	13.20	252	45046	5.7595	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	51947	7.2164	ppb	97
28) Benzo (g,h,i) perylene	15.14	276	48450	6.6633	ppb	# 92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

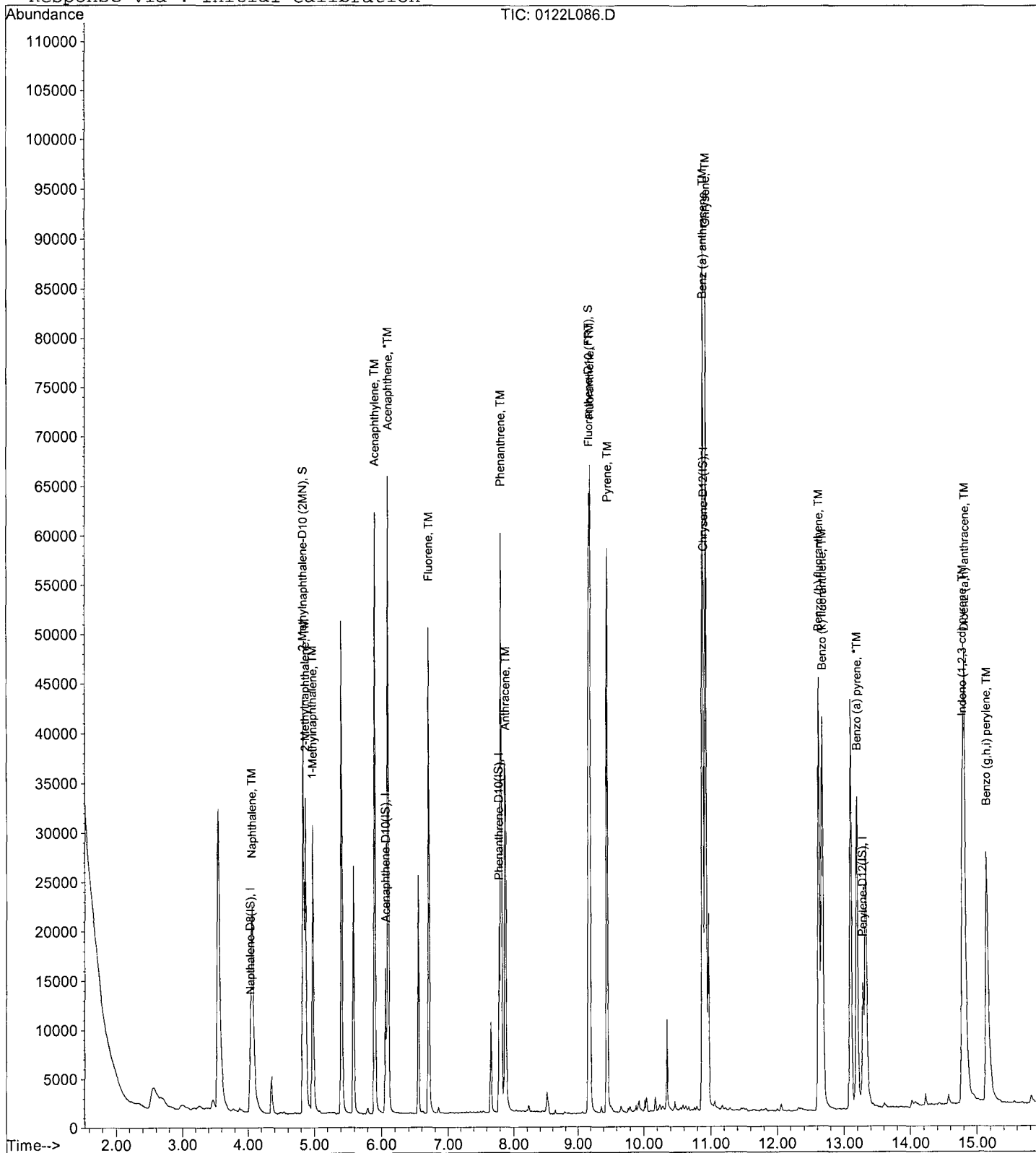
Data File : M:\LINUS\DATA\L190122\0122L086.D  
Acq On : 1 Feb 19 13:35  
Sample : 190130A LCSD-1 1/800  
Misc :

Vial: 86  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L094.D Vial: 94  
 Acq On : 1 Feb 19 18:31 Operator: MA  
 Sample : AZ85643W35 MS-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.05	136	22398	2.5000	ppb	0.00
7) Acenaphthene-D10 (IS)	6.06	164	10064	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	19947	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	29972	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	29164	2.5000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.19	82	130	0.0411	ppb	-0.04
Spiked Amount 6.250			Recovery =	0.656%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	44310	5.3968	ppb	-0.02
Spiked Amount 6.250			Recovery =	86.352%		
8) Surrogate Recovery (FBP)	5.30	172	55	0.0097	ppb	-0.02
Spiked Amount 6.250			Recovery =	0.160%		
15) Fluoranthene-D10 (FRT)	9.17	212	64844	5.8059	ppb	-0.02
Spiked Amount 6.250			Recovery =	92.896%		
19) Surrogate Recovery (TPH)	9.66	244	287	0.0371	ppb	-0.02
Spiked Amount 6.250			Recovery =	0.592%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	42669	4.7271	ppb	100
5) 2-Methylnaphthalene	4.87	142	26816	4.9196	ppb	100
6) 1-Methylnaphthalene	4.97	142	27091	4.9205	ppb	98
9) Acenaphthylene	5.90	152	88582	4.9140	ppb	98
10) Acenaphthene	6.10	154	26237	4.9728	ppb	95
11) Fluorene	6.70	166	32026	5.2058	ppb	95
13) Phenanthrene	7.81	178	47860	5.3363	ppb	99
14) Anthracene	7.87	178	45453	5.0995	ppb	99
16) Fluoranthene	9.20	202	76004	5.4163	ppb	97
18) Pyrene	9.46	202	76448	5.1595	ppb	# 88
20) Benz (a) anthracene	10.88	228	67194	5.0673	ppb	100
21) Chrysene	10.92	228	69699	5.4898	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	69307	5.2902	ppb	# 84
24) Benzo (b) fluoranthene	12.62	252	65463	5.1941	ppb	# 98
25) Benzo (k) fluoranthene	12.67	252	73117	5.6257	ppb	97
26) Benzo (a) pyrene	13.18	252	56864	4.7172	ppb	# 95
27) Dibenz (a,h) anthracene	14.82	278	57680	5.1988	ppb	95
28) Benzo (g,h,i) perylene	15.14	276	54169	4.8336	ppb	# 91

(#) = qualifier out of range (m) = manual integration



Quantitation Report

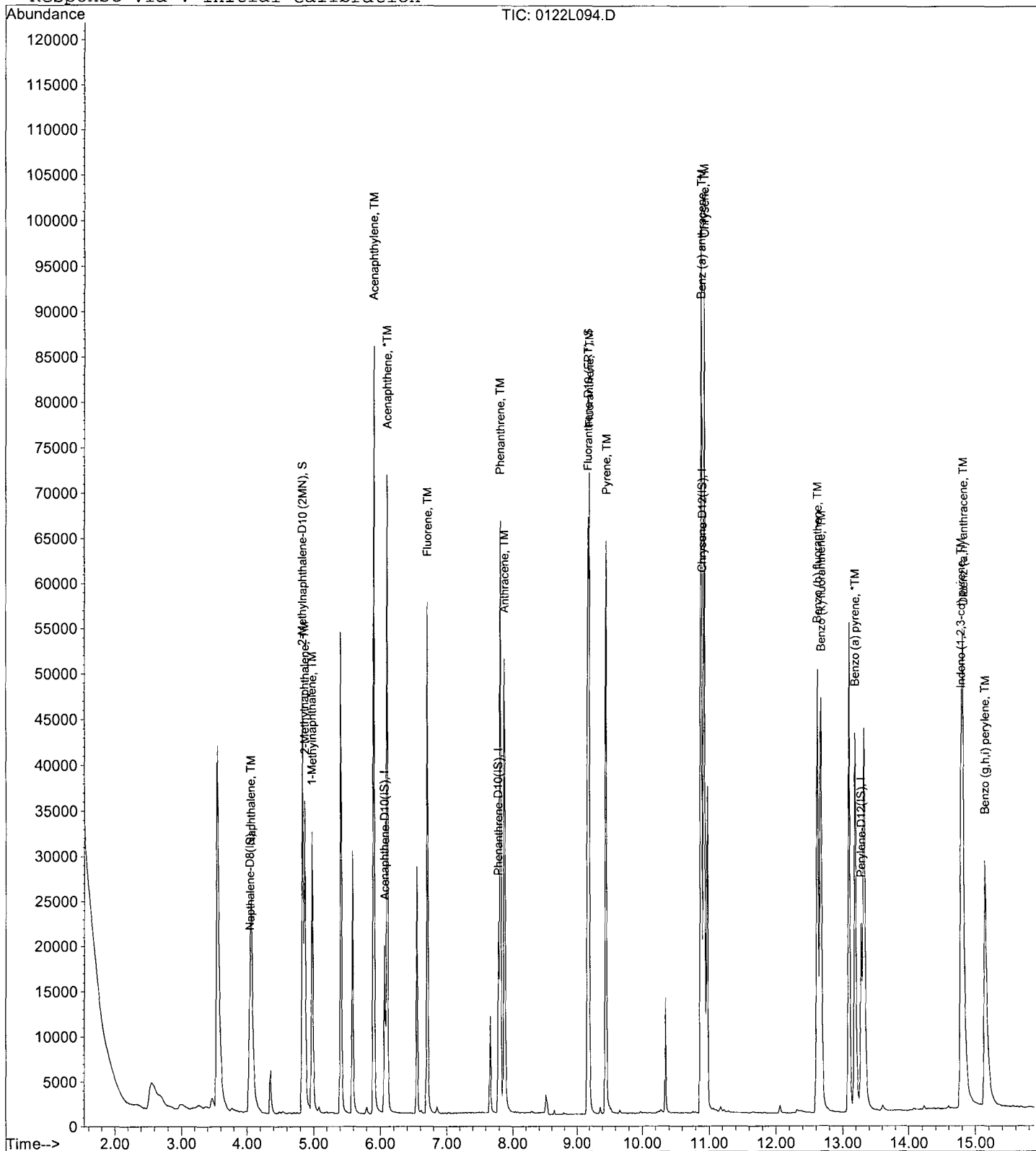
Data File : M:\LINUS\DATA\L190122\0122L094.D  
Acq On : 1 Feb 19 18:31  
Sample : AZ85643W35 MS-2 1/800  
Misc :

Vial: 94  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L095.D Vial: 95  
 Acq On : 1 Feb 19 18:54 Operator: MA  
 Sample : AZ85643W30 MSD-2 1/800 Inst : Linus  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 7:51 2019 Quant Results File: L0122.RES

Quant Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270  
 Last Update : Tue Jan 22 13:02:31 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SIM\_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	4.03	136	22003	2.5000	ppb	-0.01
7) Acenaphthene-D10 (IS)	6.06	164	10048	2.5000	ppb	-0.02
12) Phenanthrene-D10 (IS)	7.79	188	19734	2.5000	ppb	-0.02
17) Chrysene-D12 (IS)	10.89	240	27881	2.5000	ppb	-0.03
23) Perylene-D12 (IS)	13.28	264	23918	2.5000	ppb	-0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	3.18	82	127	0.0409	ppb	-0.05
Spiked Amount 6.250			Recovery =	0.656%		
4) 2-Methylnaphthalene-D10 (2)	4.83	152	45320	5.6189	ppb	-0.02
Spiked Amount 6.250			Recovery =	89.904%		
8) Surrogate Recovery (FBP)	5.30	172	37	0.0065	ppb	-0.02
Spiked Amount 6.250			Recovery =	0.112%		
15) Fluoranthene-D10 (FRT)	9.17	212	62734	5.6776	ppb	-0.02
Spiked Amount 6.250			Recovery =	90.848%		
19) Surrogate Recovery (TPH)	9.66	244	198	0.0275	ppb	-0.02
Spiked Amount 6.250			Recovery =	0.432%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	4.06	128	43711	4.9295	ppb	100
5) 2-Methylnaphthalene	4.87	142	27591	5.1527	ppb	99
6) 1-Methylnaphthalene	4.97	142	27572	5.0978	ppb	98
9) Acenaphthylene	5.90	152	84927	4.7188	ppb	98
10) Acenaphthene	6.10	154	26701	5.0688	ppb	97
11) Fluorene	6.70	166	32404	5.2757	ppb	97
13) Phenanthrene	7.81	178	48050	5.4153	ppb	99
14) Anthracene	7.87	178	42659	4.8377	ppb	99
16) Fluoranthene	9.20	202	73319	5.2813	ppb	98
18) Pyrene	9.46	202	72518	5.2613	ppb #	88
20) Benz (a) anthracene	10.88	228	62768	5.0885	ppb	100
21) Chrysene	10.92	228	65425	5.5397	ppb	99
22) Indeno (1,2,3-cd) pyrene	14.78	276	62874	5.1591	ppb	90
24) Benzo (b) fluoranthene	12.62	252	65798	6.3657	ppb #	97
25) Benzo (k) fluoranthene	12.67	252	60402	5.6667	ppb	98
26) Benzo (a) pyrene	13.20	252	49773	5.0346	ppb	99
27) Dibenz (a,h) anthracene	14.82	278	52323	5.7504	ppb	97
28) Benzo (g,h,i) perylene	15.14	276	50392	5.4828	ppb #	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

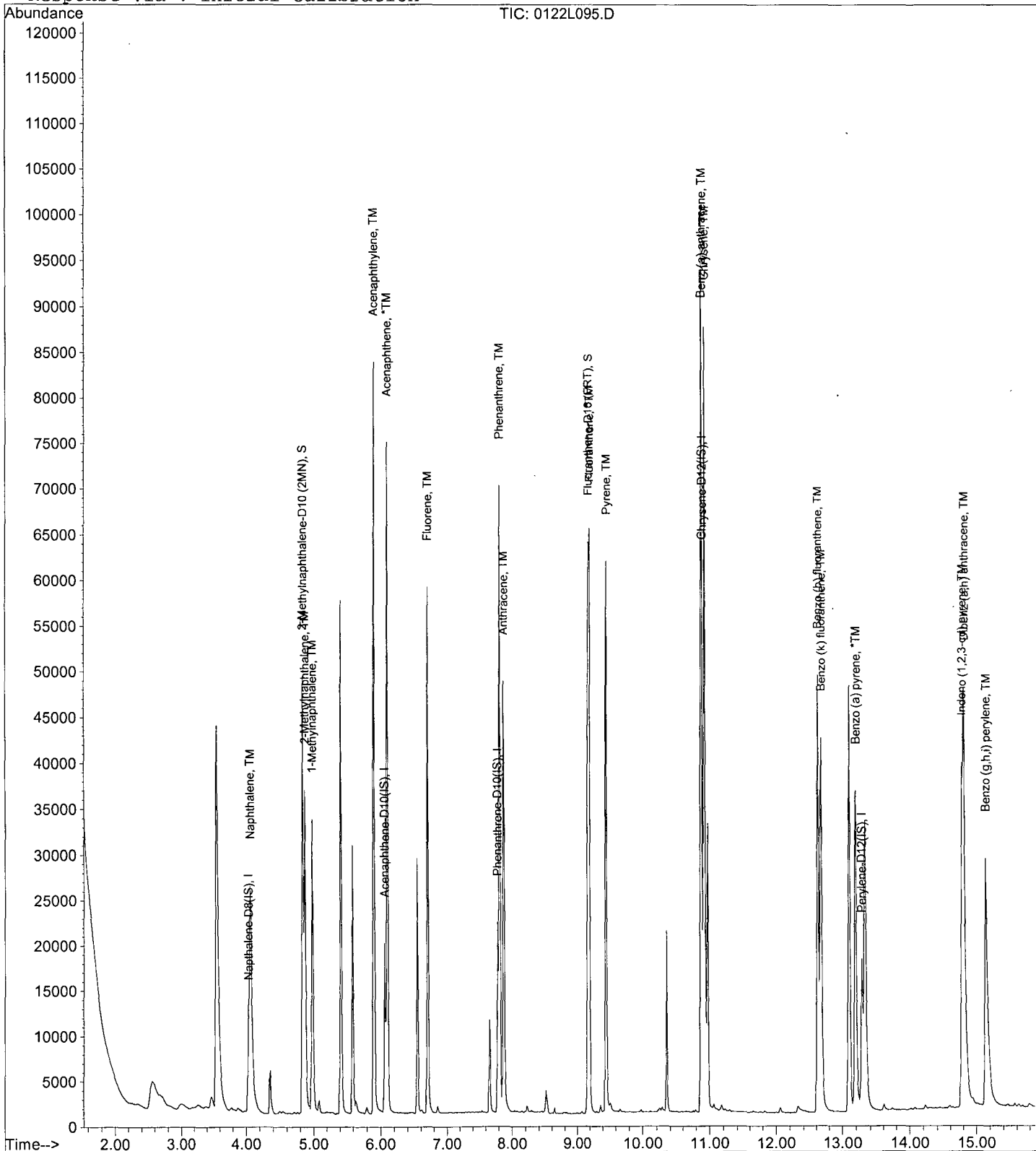
Data File : M:\LINUS\DATA\L190122\0122L095.D  
Acq On : 1 Feb 19 18:54  
Sample : AZ85643W30 MSD-2 1/800  
Misc :

Vial: 95  
Operator: MA  
Inst : Linus  
Multiplr: 1.25

Quant Time: Feb 4 7:51 2019

Quant Results File: L0122.RES

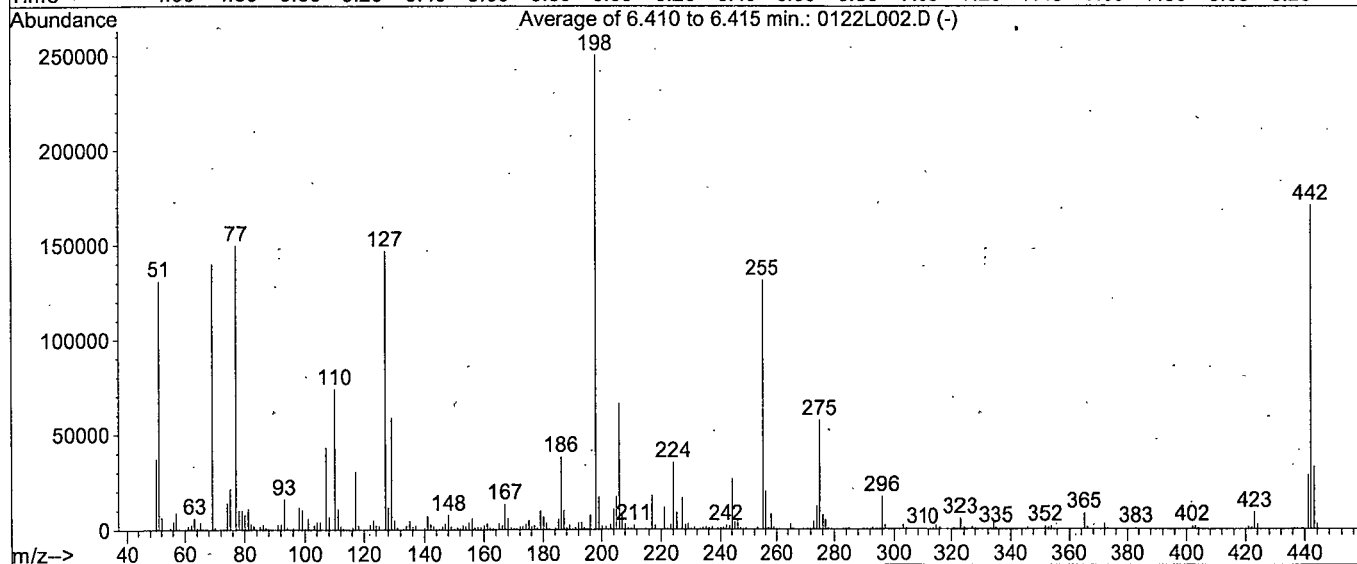
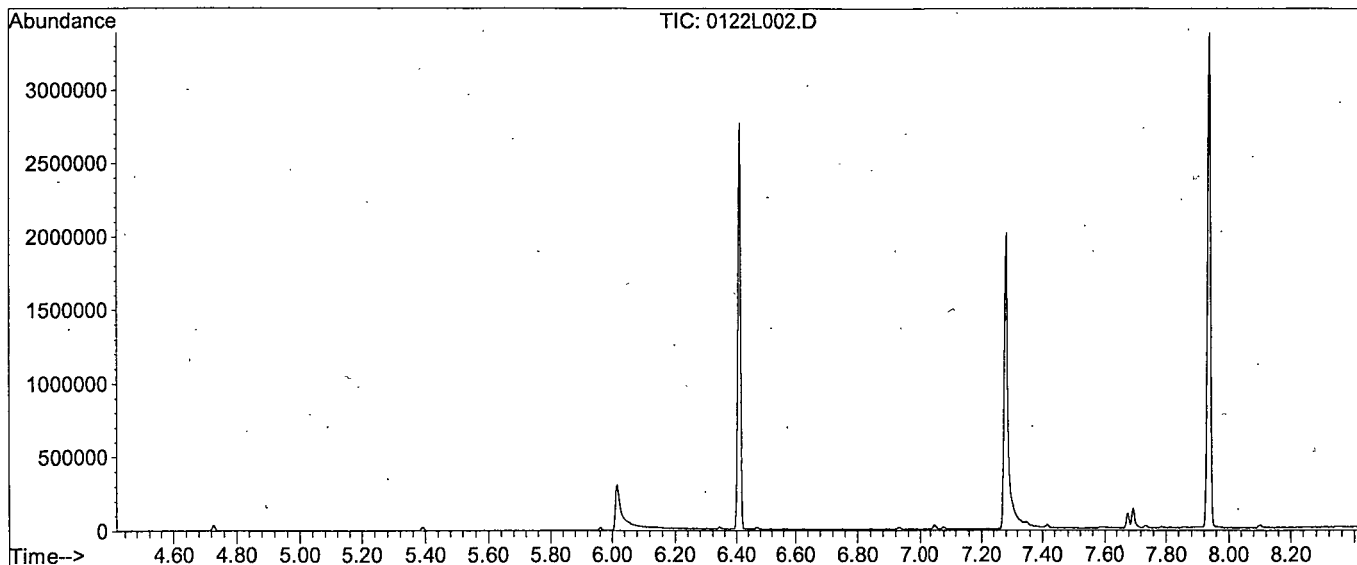
Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
Title : EPA 8270  
Last Update : Tue Jan 22 13:02:31 2019  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L190122\0122L002.D  
 Acq On : 22 Jan 19 9:21  
 Sample : SV Tune 10/11/18  
 Misc :

Vial: 2  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0115.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1536, 1537, 1538; Background Corrected with Scan 1526

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	52.3	131012	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.8	1098	PASS
127	198	10	80	58.6	146811	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	250517	PASS
199	198	5	9	6.7	16904	PASS
275	198	10	60	22.8	57021	PASS
365	198	1	100	3.3	8323	PASS
441	442	0.01	24	16.7	28459	PASS
442	198	50	150	68.2	170773	PASS
443	442	15	24	19.2	32747	PASS

M:\LINUS\DATA\190122\0122L002.D

Data File Name: 0122L002.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 22 Jan 2019 09:21  
Method File: DFTPP2.M  
Sample Name: SV Tune 10/11/18  
Vial Number: 2  
Instrument Name: Linus

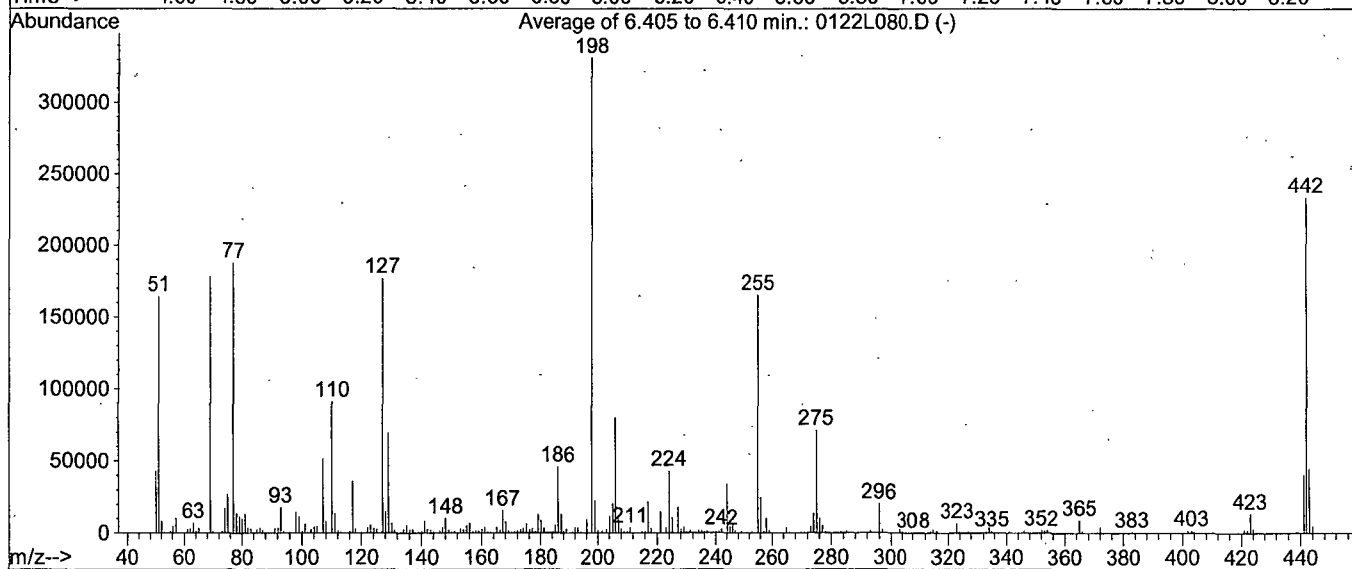
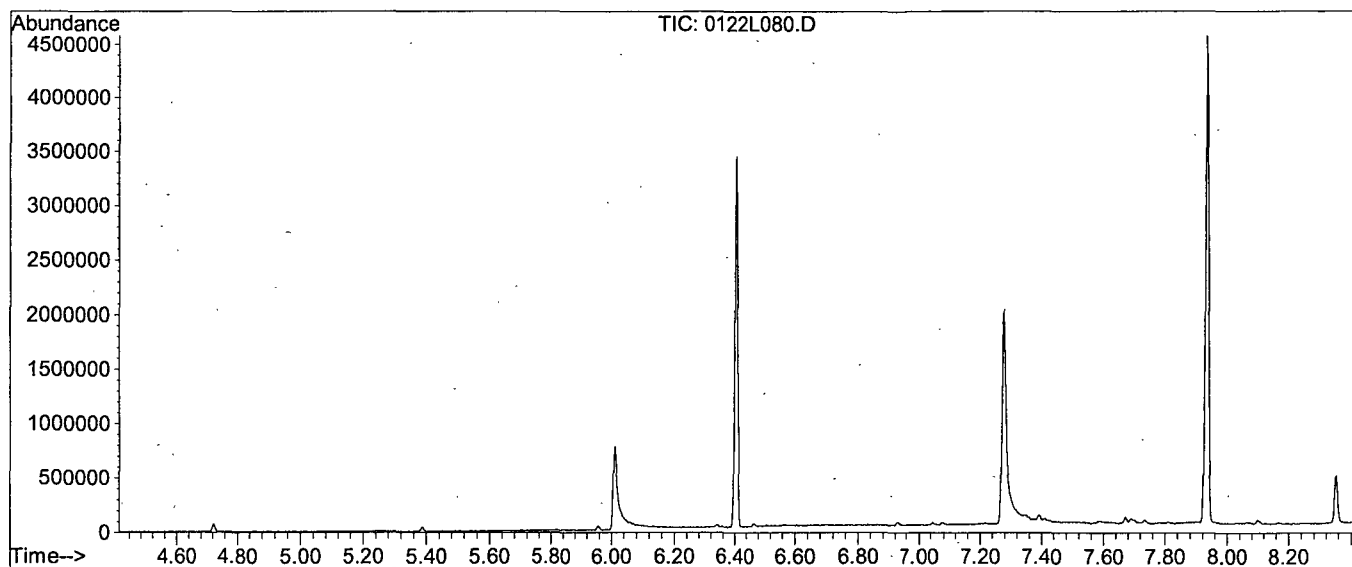
#	Name	Ret Time	Target Response
1)	DDT	7.95	23063100
2)	DDD	7.71	1029070
3)	DDE	7.88	0

Breakdown 4.27

Data File : M:\LINUS\DATA\L190122\0122L080.D  
 Acq On : 1 Feb 19 8:11  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 80  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1524

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	49.6	164376	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1000	PASS
127	198	10	80	53.4	176853	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	331477	PASS
199	198	5	9	6.8	22400	PASS
275	198	10	60	21.5	71360	PASS
365	198	1	100	2.7	9004	PASS
441	442	0.01	24	17.2	40272	PASS
442	198	50	150	70.5	233792	PASS
443	442	15	24	19.0	44421	PASS

Data File Name: 0122L080.D  
Data File Path: M:\LINUS\DATA\190122\  
Operator: MA  
Date Acquired: 1 Feb 19 8:11  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 80  
Instrument Name: Linus

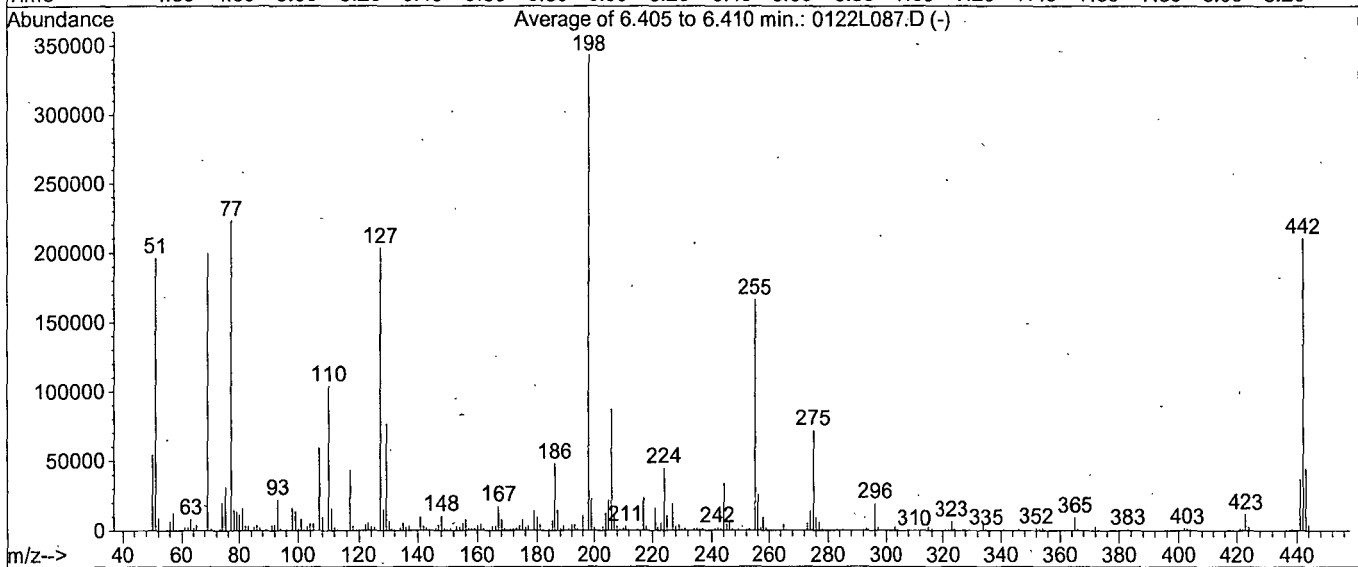
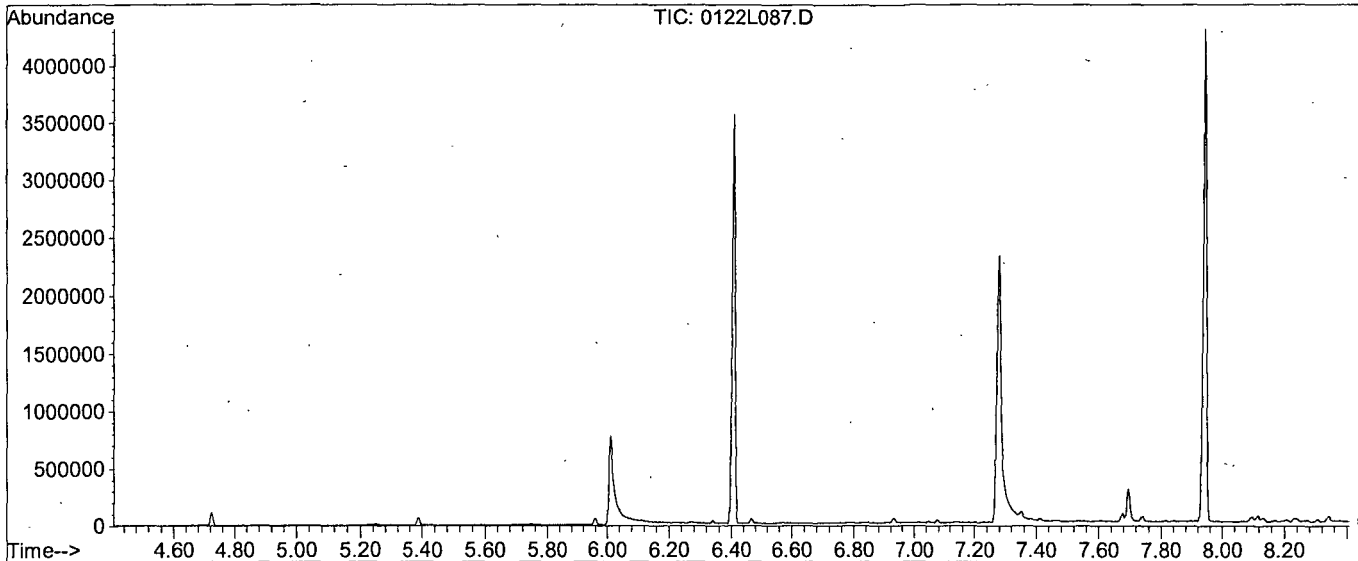
#	Name	Ret Time	Target Response
1)	DDT	7.95	32986500
2)	DDD	7.71	332068
3)	DDE	7.88	0

Breakdown 1.00

Data File : M:\LINUS\DATA\L190122\0122L087.D  
 Acq On : 1 Feb 19 15:16  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 87  
 Operator: MA  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L190122\L0122.M (RTE Integrator)  
 Title : EPA 8270



AutoFind: Scans 1534, 1535, 1536; Background Corrected with Scan 1525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	57.2	196269	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1294	PASS
127	198	10	80	59.3	203264	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	342976	PASS
199	198	5	9	6.6	22656	PASS
275	198	10	60	20.9	71704	PASS
365	198	1	100	2.7	9369	PASS
441	442	0.01	24	17.4	36651	PASS
442	198	50	150	61.4	210624	PASS
443	442	15	24	21.1	44469	PASS



M:\LINUS\DATA\L190122\0122L087.D

Data File Name: 0122L087.D  
Data File Path: M:\LINUS\DATA\L190122\  
Operator: MA  
Date Acquired: 1 Feb 19 15:16  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 87  
Instrument Name: Linus

#	Name	Ret Time	Target Response
1)	DDT	7.95	31175900
2)	DDD	7.71	2186160
3)	DDE	7.88	0

Breakdown 6.55

Name of Final Standard SIM Curve  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	10 uL	100uL	MC 56258 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	01/18/19	06/01/19	20 uL	100uL	MC 56258 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	200uL	MC 56258 190 uL	5.0 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURR	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	5 uL	100 uL	MC 56258 90 uL	10 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	5 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200	CL13117-40078	12/28/19	25 uL	100uL	MC 56258 50 uL	50 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	25 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL
PAH SIM STOCK	APPL	PAH SIM STOCK	200 ug/mL	CL13117-40078	12/28/19	50 uL	100uL	na	100 ug/mL
SIM 2S SURROGATE	APPL	SIM 2S SURROGATE	100 ug/mL	06/07/18	06/01/19	50 uL	*	*	*
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	2 uL	*	*	2.5ug/mL

Name of Final Standard 8270 PAH SIM Second Source  
 Prep Date 01/18/19  
 Exp Date 06/01/19

Prep'd By (Initials) GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	CL13121 - 40082	12/28/19	5 uL	200uL	MC 56258 195uL	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	11/06/18	11/06/19	4 uL	*	*	2.5ug/mL

Name of

Final

Standard 8270 SIM PAH Internal Standard

Prep'd By (Initials) GA

Prep Date 11/06/18

Exp Date 11/06/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	A0130603-38560	11/06/19	350 uL	5,600 uL	MC 56258 5,250 uL	125 ug/mL

Name of

Final

Standard PAH SIM Spike (Ampules)

Prep'd By (Initials) OA

Prep Date 12/17/18

Exp Date 12/17/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270D PAH SIM	O2SI	110780-01	200 ug/mL	353450-39730	12/17/19	1 mL	1 mL	NA	200ug/mL

Name of  
Final  
Standard

**SIM Surrogate**

Prep'd By (Initials)

**GA**

Prep Date **01/24/19**

Exp Date **06/07/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0131716 - 38554 A0137718 - 39318	06/07/19 01/24/20	1250 uL	25 mL	Acetone #1017171	100 ug/mL

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	190130A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19			Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19		
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20			Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19		
Spiked ID 3				Surrogate ID 3			
Spiked ID 4				Surrogate ID 4			
Spiked ID 5				Surrogate ID 5			
Spiked ID 6				Sufficient Vol for Matrix QC:		yes	
Spiked ID 7				Ext. Start Time:	01/30/19 16:15	01/31/19 13:00	
Spiked ID 8				Ext. End Time:	01/31/19 10:30	01/31/19 07:05, 02/01/19 11:20	
				GC Requires Extract By:	01/31/19 0:00		
		pH1	2	01/30/19 1:40:00 PM	Water Bath Temp Criteria 73,75 °C		
		pH2	14	01/31/19 12:30:00 PM			
		pH3					

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments	
1	190130A Blk			1,0.050	1,2	800	1	2/1	01/30/19 13:30		
						equip					
2	190130A LCS-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30		
						equip					
3	190130A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30		
						equip					
4	190130A LCSD-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30		
						equip					
5	190130A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30		
						equip					
6	AZ85562 MS-1	AZ85562W31	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87940
						equip					
7	AZ85562 MSD-1	AZ85562W33	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87940
						equip					
8	AZ85562 MS-2	AZ85562W37	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87940
						equip					
9	AZ85562 MSD-2	AZ85562W38	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87940
						equip					
10	AZ85562	AZ85562W36		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
						equip					
11	AZ85563	AZ85563W10		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
						equip					
12	AZ85569	AZ85569W22		1,0.050	1,2	800	1	2/1	01/30/19 13:30	87940	
						equip					
13	AZ85643 MS-1	AZ85643W33	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87956
						equip					
14	AZ85643 MSD-1	AZ85643W34	0.250	1	1	1	800	1	2/1	01/30/19 13:30	87956
						equip					
15	AZ85643 MS-2	AZ85643W35	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87956
						equip					
16	AZ85643 MSD-2	AZ85643W30	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	87956
						equip					

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	02/01/19
Time	11:31
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *KY*

Date: *2/1/19*

# Organic Extraction Worksheet

<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190130A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20	Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC: yes					
Spiked ID 7		Ext. Start Time:	01/30/19 16:15	01/31/19 13:00			
Spiked ID 8		Ext. End Time:	01/31/19 10:30	02/01/19 07:05, 02/01/19 11:20			
		GC Requires Extract By:	01/31/19 0:00				
		pH1	2	01/30/19 1:40:00 PM	Water Bath Temp Criteria	73,75 °C	
		pH2	14	01/31/19 12:30:00 PM			
		pH3					

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85643 AZ85643W32			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP12				
18	AZ85644 AZ85644W07			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP11				
19	AZ85646 AZ85646W21			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP10				
20	AZ85653 AZ85653W20			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP9				
21	AZ85763 AZ85763W10			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP7				
22	AZ85764 AZ85764W10			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP6				
23	AZ85766 AZ85766W24			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP4				

KCS 2/14/19

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *KCS*

Page 281 of 917 Date 2/14/19

Ext\_ID 61640

## Injection Log

Directory: M:\LINUS\DATA\L190122\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	0122L002.D	1	SV Tune 10/11/18		22 Jan 19 9:21
3	0122L003.D	1	0.1 SIM 01/18/19		22 Jan 19 9:37
4	0122L004.D	1	0.2 SIM 01/18/19		22 Jan 19 9:59
5	0122L005.D	1	0.5 SIM 01/18/19		22 Jan 19 10:21
6	0122L006.D	1	1 SIM 01/18/19		22 Jan 19 10:43
7	0122L007.D	1	5 SIM 01/18/19		22 Jan 19 11:30
8	0122L008.D	1	10 SIM 01/18/19		22 Jan 19 11:53
9	0122L009.D	1	50 SIM 01/18/19		22 Jan 19 12:15
10	0122L010.D	1	100 SIM 01/18/19		22 Jan 19 12:37
11	0122L011.D	1	SS SIM 01/18/19		22 Jan 19 12:59
80	0122L080.D	1	SV TUNE 11/10/18		1 Feb 19 8:11
81	0122L081.D	1	5 SIM 01/18/19		1 Feb 19 8:27
84	0122L084.D	1.25	190130A Blk 1/800		1 Feb 19 12:51
85	0122L085.D	1.25	190130A LCS-1 1/800		1 Feb 19 13:13
86	0122L086.D	1.25	190130A LCSD-1 1/800		1 Feb 19 13:35
87	0122L087.D	1.25	SV TUNE 11/10/18		1 Feb 19 15:16
88	0122L088.D	1.25	5 SIM 01/18/19		1 Feb 19 15:32
94	0122L094.D	1.25	AZ85643W35 MS-2 1/800		1 Feb 19 18:31
95	0122L095.D	1.25	AZ85643W30 MSD-2 1/800		1 Feb 19 18:54
96	0122L096.D	1.25	AZ85643W32 1/800		1 Feb 19 19:16
97	0122L097.D	1.25	AZ85644W07 1/800		1 Feb 19 19:38
98	0122L098.D	1.25	AZ85646W21 1/800		1 Feb 19 20:01
99	0122L099.D	1.25	AZ85653W20 1/800		1 Feb 19 20:23
3	0122L103.D	1.25	5 SIM 01/18/19 (1)		1 Feb 19 21:52

**ORGANICS**  
**Calibration Data**



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

0124Y016.D 0124Y017.D 0124Y018.D 0124Y033.D 0124Y020.D 0124Y015.D 0124Y021.D 0124Y022.D 0124Y023.D

	Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type	r^2	Q	MRF
1	I 1,4-dichlorobenzene-D4(ISTD)	ISTD															
2	1,4-Dioxane		0.2010	0.2484	0.1994	0.2178	0.2503	0.2439	0.1987	0.2300		0.22	10				
3	TM n-Nitrosodimethylamine		0.3036	0.3464	0.3472	0.3686	0.3760	0.3802	0.3692	0.4098		0.36	8.6	TM			
4	TM Pyridine		0.6226	0.9649	0.9041	0.8601	0.9985	0.9071	0.8936	0.9876		0.89	13	TM			
5	S 2-Fluorophenol (S)		1.464	1.647	1.696	1.931	1.714	1.935	1.978	1.907		1.8	10	S			
6	S Phenol-D6 (S)		1.955	2.290	2.260	2.539	2.267	2.507	2.532	2.442		2.3	8.5	S			
7	*TM Phenol		2.309	3.261	3.084	3.089	3.172	3.085	3.021	3.188		3.0	9.9	*TM			0.800
8	TM Aniline		2.291	3.413	3.293	3.218	3.311	3.249	3.188	3.375		3.2	11	TM			
9	TM Bis (2-chloroethyl) ether		1.107	1.513	1.402	1.404	1.463	1.392	1.379	1.490		1.4	9.0	TM			0.700
10	TM 2-Chlorophenol		1.663	2.317	2.143	2.142	2.214	2.152	2.142	2.311		2.1	9.6	TM			0.800
11	TM 1,3-DCB		1.862	2.463	2.257	2.276	2.341	2.265	2.278	2.432		2.3	8.1	TM			
12	*TM 1,4-DCB		1.940	2.591	2.299	2.299	2.379	2.314	2.289	2.459		2.3	8.0	*TM			
13	TM Benzyl alcohol		0.9641	1.383	1.344	1.346	1.411	1.369	1.373	1.455		1.3	11	TM			
14	TM 1,2-DCB		1.768	2.340	2.165	2.152	2.212	2.150	2.136	2.280		2.2	7.9	TM			
15	TM 2-Methylphenol		1.393	1.915	1.834	1.841	1.908	1.859	1.837	1.986		1.8	9.9	TM			0.700
16	TM Bis (2-chloroisopropyl) ether		1.751	2.355	2.130	2.076	2.164	2.068	2.037	2.161		2.1	8.1	TM			0.010
17	TM Acetophenone		2.287	3.133	2.851	2.790	2.854	2.733	2.701	2.853		2.8	8.5	TM			0.010
18	TM 3&4-Methylphenol		1.687	2.384	2.207	2.169	2.236	2.161	2.120	2.247		2.2	9.5	TM			0.600
19	**TM n-Nitrosodi-n-propylamine		1.290	1.739	1.600	1.552	1.616	1.548	1.528	1.628		1.6	8.2	**TM			0.500
20	TM Hexachloroethane		0.6787	0.9014	0.8397	0.8456	0.8839	0.8545	0.8606	0.9193		0.85	8.7	TM			0.300
21	I Naphthalene-D8(ISTD)	ISTD															
22	S Nitrobenzene-D5(S)		0.4172	0.4561	0.4585	0.5041	0.4742	0.4998	0.5077	0.4929		0.48	6.5	S			
23	TM Nitrobenzene		0.4469	0.5751	0.5371	0.5310	0.5810	0.5343	0.5232	0.5564		0.54	7.8	TM			0.200
24	TM Isophorone		0.7599	0.9777	0.9504	0.9246	1.023	0.9350	0.9196	0.9841		0.93	8.4	TM			0.400
25	*TM 2-Nitrophenol		0.1948	0.2706	0.2673	0.2678	0.2879	0.2720	0.2649	0.2844		0.26	11	*TM			0.100
26	TM 2,4-Dimethylphenol		0.3309	0.4574	0.4473	0.4439	0.4880	0.4322	0.4209	0.4700		0.44	11	TM			0.200
27	TM Benzoic acid			0.2515	0.3383	0.3387	0.3922	0.3729	0.3299	0.3663		0.34	13	TM			
28	TM Bis (2-chloroethoxy) methane		0.4805	0.6305	0.5898	0.5703	0.6237	0.5769	0.5647	0.5992		0.58	8.0	TM			0.300
29	*TM 2,4-Dichlorophenol		0.2454	0.3924	0.3797	0.3834	0.4214	0.3911	0.3838	0.4066		0.38	14	*TM			0.200
30	TM 1,2,4-Trichlorobenzene		0.3572	0.4552	0.4197	0.4116	0.4453	0.4123	0.4080	0.4301		0.42	7.1	TM			
31	TM 3,4-Dimethylphenol		0.4569	0.6144	0.5866	0.5901	0.6511	0.6054	0.5866	0.6284		0.59	9.9	TM			
32	TM Naphthalene		1.224	1.541	1.429	1.405	1.534	1.409	1.372	1.442		1.4	7.0	TM			0.700
33	TM 4-Chloroaniline		0.4196	0.5900	0.5787	0.5395	0.5729	0.5252	0.4856	0.4901		0.53	11	TM			0.010
34	TM 2,6-Dichlorophenol		0.2964	0.3976	0.3779	0.3724	0.4050	0.3739	0.3662	0.3853		0.37	8.9	TM			
35	TM Hexachloropropene		0.1833	0.2513	0.2596	0.2564	0.2830	0.2654	0.2601	0.2772		0.25	12	TM			

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type	Q	
36	*TM	Hexachlorobutadiene		0.1855	0.2329	0.2183	0.2157	0.2306	0.2159	0.2133	0.2276	0.22	6.9	*TM	0.010	
37	TM	Caprolactam			0.1761	0.1918	0.1813	0.2044	0.1887	0.1842	0.1967	0.19	5.1	TM	0.010	
38	*TM	4-Chloro-3-methylphenol		0.3189	0.4315	0.4287	0.4246	0.4671	0.4341	0.4259	0.4540	0.42	11	*TM	0.200	
39	TM	2-Methylnaphthalene		0.7750	0.9767	0.9344	0.9063	0.9850	0.9230	0.8855	0.9371	0.92	7.2	TM	0.400	
40	TM	1-Methylnaphthalene		0.7978	0.9910	0.9253	0.9071	0.9825	0.9103	0.8816	0.9236	0.91	6.6	TM		
41	I	Acenaphthene-D10(IS)	ISTD													
42	**TML	Hexachlorocyclopentadiene		0.0268	0.0999	0.2275	0.2530	0.3014	0.2855	0.2979		0.21	51	**TML	0.996	0.050
43	TM	1,2,4,5-Tetrachlorobenzene		0.5955	0.6952	0.6554	0.6773	0.7402	0.6738	0.6303	0.7074	0.67	6.7	TM		0.010
44	*TM	2,4,6-Trichlorophenol		0.3002	0.4102	0.4294	0.4630	0.5087	0.4583	0.4386	0.5003	0.44	15	*TM		0.200
45	TM	2,4,5-Trichlorophenol		0.4330	0.5116	0.4827	0.4976	0.5457	0.4923	0.4709	0.5287	0.50	7.1	TM		0.200
46	S	2-Fluorobiphenyl(S)		1.625	1.611	1.507	1.734	1.604	1.650	1.614	1.613	1.6	3.8	S		
47	TM	1,1'-Biphenyl		1.781	2.065	1.968	2.025	2.175	1.951	1.867	2.049	2.0	6.2	TM		0.010
48	TM	2-Chloronaphthalene		1.378	1.590	1.494	1.548	1.646	1.481	1.423	1.571	1.5	5.9	TM		0.800
49	TM	2-Nitroaniline		0.3769	0.4826	0.4917	0.5116	0.5641	0.4985	0.4806	0.5374	0.49	11	TM		0.010
50	TM	Dimethyl phthalate		1.529	1.833	1.788	1.826	1.980	1.784	1.703	1.879	1.8	7.4	TM		0.010
51	TM	2,6-DNT		0.2877	0.3968	0.4059	0.4128	0.4512	0.4131	0.3984	0.4457	0.40	13	TM		0.200
52	TM	Acenaphthylene		2.072	2.461	2.402	2.474	2.659	2.394	2.275	2.504	2.4	7.2	TM		0.900
53	TM	3-Nitroaniline		0.3376	0.4515	0.4701	0.4800	0.5102	0.4646	0.4380	0.4849	0.45	11	TM		0.010
54	*TM	Acenaphthene		1.424	1.620	1.539	1.584	1.710	1.526	1.442	1.616	1.6	6.1	*TM		0.900
55	**TML	2,4-Dinitrophenol			0.0858	0.1951	0.1966	0.2219	0.2297	0.2173		0.19	28	**TML	0.993	0.010
56	**TM	4-Nitrophenol			0.2666	0.2169	0.2453	0.3062	0.2859	0.2836	0.3294	0.28	14	**TM		0.010
57	TM	Dibenzofuran		2.016	2.307	2.196	2.232	2.383	2.132	2.013	2.186	2.2	5.9	TM		0.800
58	TM	2,4-DNT		0.3898	0.5315	0.5442	0.5489	0.5964	0.5400	0.5147	0.5706	0.53	12	TM		0.200
59	TM	2,3,4,6-Tetrachlorophenol		0.2834	0.3521	0.3620	0.3746	0.4076	0.3725	0.3622	0.4018	0.36	10	TM		0.010
60	TM	Diethyl phthalate		1.482	1.741	1.704	1.730	1.874	1.675	1.580	1.784	1.7	7.1	TM		0.010
61	TM	4-Chlorophenyl phenyl ether		0.7891	0.9079	0.8509	0.8738	0.9244	0.8287	0.7845	0.8542	0.85	5.9	TM		0.400
62	TM	Fluorene		1.610	1.844	1.765	1.800	1.920	1.706	1.609	1.746	1.7	6.2	TM		0.900
63	TM	4-Nitroaniline		0.3704	0.4711	0.4796	0.4923	0.5304	0.4469	0.4228	0.4690	0.46	10	TM		0.010
64	S	2,4,6-Tribromophenol(S)		0.1476	0.1571	0.1526	0.1804	0.1668	0.1735	0.1716	0.1759	0.17	7.2	S		
65	I	Phenanthrene-D10(IS)	ISTD													
66	TM	4,6-Dinitro-2-methylphenol			0.1285	0.1724	0.1795	0.1979	0.1866	0.1812	0.2048	0.18	14	TM		0.010
67	TM	Diphenyl amine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161	0.71	6.3	TM		
68	*TM	n-Nitrosodiphenylamine		0.6436	0.7341	0.6998	0.7210	0.7785	0.7053	0.6471	0.7161	0.71	6.3	*TM		0.010
69	TM	1,2-Diphenylhydrazine		0.8393	0.9626	0.9494	0.9785	1.077	0.9618	1.037	1.152	0.99	9.5	TM		
70	TM	4-Bromophenyl phenyl ether		0.2070	0.2339	0.2359	0.2466	0.2634	0.2451	0.2263	0.2537	0.24	7.3	TM		0.100

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 01/25/19  
Instrument: Yoda

Initials: \_\_\_\_\_

		Compound	4	5	10	20	40	50	60	80	100	Avg	%RSD	Type		Q
71	TM	Hexachlorobenzene		0.1973	0.2291	0.2190	0.2309	0.2483	0.2277	0.2140	0.2412	0.23	7.1	TM		0.100
72	TM	Atrazine		0.1931	0.2446	0.2396	0.2514	0.2738	0.2448	0.2302	0.2596	0.24	9.8	TM		0.010
73	*TM	Pentachlorophenol			0.1082	0.1268	0.1398	0.1629	0.1475	0.1404	0.1642	0.14	14	*TM		0.050
74	TM	Phenanthrene		1.216	1.392	1.334	1.397	1.499	1.346	1.245	1.387	1.4	6.7	TM		0.700
75	TM	Anthracene		1.230	1.425	1.366	1.438	1.535	1.381	1.283	1.421	1.4	6.8	TM		0.700
76	TM	Carbazol		1.112	1.272	1.251	1.292	1.398	1.257	1.168	1.316	1.3	7.0	TM		0.010
77	TM	Di-n-butylphthalate		1.241	1.480	1.498	1.545	1.690	1.484	1.399	1.543	1.5	8.7	TM		0.010
78	*TM	Fluoranthene		1.277	1.487	1.454	1.489	1.613	1.457	1.344	1.491	1.5	7.0	*TM		0.600
79	I	Chrysene-D12(ISTD)	ISTD													
80	TM	Benzidine		0.3273	0.5090	0.5365	0.5127	0.5486	0.5087	0.4832	0.5314	0.49	14	TM		
81	TM	Pyrene		1.510	1.711	1.686	1.730	1.876	1.674	1.614	1.782	1.7	6.4	TM		0.600
82	S	Terphenyl-D14(S)		0.9724	0.9816	0.9517	1.100	1.010	1.044	1.040	1.063	1.0	4.9	S		
83	TM	Butyl benzylphthalate		0.5931	0.7238	0.7708	0.7869	0.8621	0.7758	0.7515	0.8250	0.76	11	TM		0.010
84	TM	3,3'-Dichlorobenzidine		0.3876	0.5178	0.5500	0.5455	0.5955	0.5299	0.4962	0.5426	0.52	12	TM		0.010
85	TM	Benz (a) anthracene		1.338	1.486	1.435	1.485	1.664	1.484	1.400	1.553	1.5	6.6	TM		0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.9337	1.069	1.068	1.077	1.217	1.043	0.9862	1.080	1.1	7.7	TM		0.010
87	TM	Chrysene		1.282	1.463	1.453	1.480	1.548	1.436	1.382	1.540	1.4	6.0	TM		0.700
88	*TM	Di-n-octylphthalate		1.339	1.676	1.828	1.873	2.078	1.835	1.774	1.976	1.8	12	*TM		0.010
89	I	Perylene-D12(ISTD)	ISTD													
90	TM	Benzo (b) fluoranthene		1.259	1.442	1.425	1.498	1.752	1.503	1.399	1.733	1.5	11	TM		0.700
91	TM	Benzo (k) fluoranthene		1.297	1.493	1.470	1.545	1.505	1.401	1.398	1.435	1.4	5.4	TM		0.700
92	*TM	Benzo (a) pyrene	1.270	1.120	1.343	1.345	1.434	1.536	1.372	1.315	1.496	1.4	9.1	*TM		0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.143	1.345	1.386	1.461	1.580	1.400	1.349	1.536	1.4	9.6	TM		0.500
94	TM	Dibenz (a,h) anthracene	1.164	1.060	1.244	1.258	1.335	1.437	1.271	1.222	1.399	1.3	9.2	TM		0.400
95	TM	Benzo (g,h,i) perylene		1.023	1.195	1.224	1.286	1.399	1.232	1.201	1.362	1.2	9.3	TM		0.500
96																
97																
98																
99																
100																
101																
102																
103																
104																
105																

Data File : M:\YODA\DATA\Y190124\0124Y016.D Vial: 16  
 Acq On : 25 Jan 19 9:53 Operator: MA  
 Sample : 4ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 10:15 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	441679	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1882270	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1025541	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1966994	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1763281	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1696541	40.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
5) 2-Fluorophenol (S)	0.00	112	0d	0.00000	ppb	
Spiked Amount	200.000		Recovery	=	0.000%	
6) Phenol-D6 (S)	0.00	99	0d	0.00000	ppb	
Spiked Amount	200.000		Recovery	=	0.000%	
22) Nitrobenzene-D5 (S)	0.00	82	0d	0.00000	ppb	
Spiked Amount	100.000		Recovery	=	0.000%	
46) 2-Fluorobiphenyl (S)	0.00	172	0d	0.00000	ppb	
Spiked Amount	100.000		Recovery	=	0.000%	
64) 2,4,6-Tribromophenol (S)	0.00	330	0d	0.00000	ppb	
Spiked Amount	200.000		Recovery	=	0.000%	
82) Terphenyl-D14 (S)	0.00	244	0d	0.00000	ppb	
Spiked Amount	100.000		Recovery	=	0.000%	
<b>Target Compounds</b>						
92) Benzo (a) pyrene	15.55	252	215402	4.01854	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	197436	3.98872	ppb	99

Quantitation Report

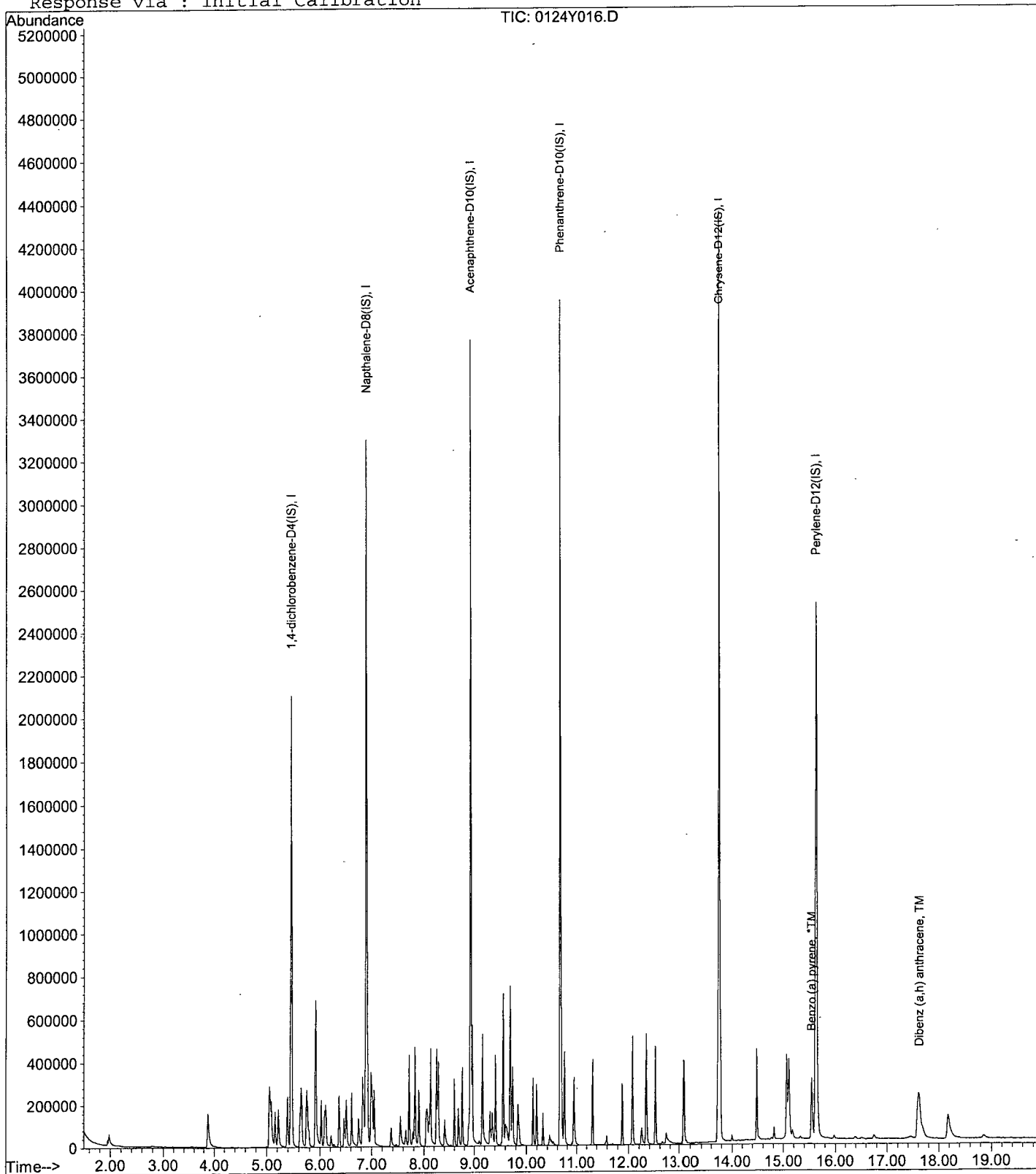
Data File : M:\YODA\DATA\Y190124\0124Y016.D  
Acq On : 25 Jan 19 9:53  
Sample : 4ug/mL 8270 01/24/19  
Misc :

Vial: 16  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:15 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	433806	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1862853	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1024206	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1955322	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1777036	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1697848	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	158780	9.11528	ppb	0.01
Spiked Amount 200.000			Recovery =	4.558%		
6) Phenol-D6 (S)	5.05	99	211993	9.21070	ppb	0.00
Spiked Amount 200.000			Recovery =	4.606%		
22) Nitrobenzene-D5 (S)	6.09	82	97141	4.70950	ppb	0.00
Spiked Amount 100.000			Recovery =	4.710%		
46) 2-Fluorobiphenyl (S)	8.13	172	208026	4.99771	ppb	0.00
Spiked Amount 100.000			Recovery =	4.998%		
64) 2,4,6-Tribromophenol (S)	9.85	330	37804	8.79031	ppb	0.00
Spiked Amount 200.000			Recovery =	4.395%		
82) Terphenyl-D14 (S)	12.52	244	215993	4.65872	ppb	0.00
Spiked Amount 100.000			Recovery =	4.659%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	1090	0.57680		91
3) n-Nitrosodimethylamine	1.95	42	16461	5.13857	ppb	94
4) Pyridine	1.98	79	33762	4.24827	ppb	96
7) Phenol	5.07	94	125184	4.49703	ppb	97
8) Aniline	5.09	93	124237	6.74291	ppb	94
9) Bis (2-chloroethyl) ether	5.16	63	60048	4.34169	ppb	97
10) 2-Chlorophenol	5.23	128	90184	4.67937	ppb	94
11) 1,3-DCB	5.40	146	100957	5.05261	ppb	99
12) 1,4-DCB	5.48	146	105192	5.19009	ppb	99
13) Benzyl alcohol	5.63	108	52278	4.28441	ppb	96
14) 1,2-DCB	5.65	146	95867	5.05812	ppb	99
15) 2-Methylphenol	5.75	107	75528	4.80831	ppb	98
16) Bis (2-chloroisopropyl) et	5.77	45	94938	4.14003	ppb	97
17) Acetophenone	5.91	105	124039	4.96640	ppb	91
18) 3&4-Methylphenol	5.92	107	182967	9.37874	ppb	99
19) n-Nitrosodi-n-propylamine	5.91	70	69974	4.72570	ppb	99
20) Hexachloroethane	6.03	117	36804	4.73413	ppb	96
23) Nitrobenzene	6.11	77	104065	4.95234	ppb	96
24) Isophorone	6.37	82	176946	4.71645	ppb	95
25) 2-Nitrophenol	6.47	139	45356	4.84831	ppb	99
26) 2,4-Dimethylphenol	6.51	122	77050	4.47597	ppb	99
27) Benzoic acid	6.62	105	28927	2.75298	ppb	92
28) Bis (2-chloroethoxy) metha	6.62	93	111881	4.76503	ppb	99
29) 2,4-Dichlorophenol	6.75	162	57137	3.93210	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	83169	5.27706	ppb	96
31) 3,4-Dimethylphenol	6.85	107	106384	4.64367	ppb	97
32) Napthalene	6.93	128	285107	5.16052	ppb	99
33) 4-Chloroaniline	6.99	127	97717	4.63173	ppb	99
34) 2,6-Dichlorophenol	7.00	162	69020	4.84772	ppb	95
35) Hexachloropropene	7.02	213	42691	4.62772	ppb	97
36) Hexachlorobutadiene	7.05	225	43193	5.21952	ppb	97
37) Caprolactum	7.47	55	1195	0.15005	ppb #	36

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y017.D  
 Acq On : 25 Jan 19 10:21  
 Sample : 5ug/mL 8270 01/24/19  
 Misc :

Vial: 17  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	74252	4.55952	ppb	97
39) 2-Methylnaphthalene	7.72	142	180460	5.14530	ppb	99
40) 1-Methylnaphthalene	7.83	142	185768	5.28579	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	3428	5.53579	ppb	88
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	76235	4.71955	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	38434	3.61995	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	55433	4.84840	ppb	97
47) 1,1'-Biphenyl	8.25	154	227953	4.84265	ppb	98
48) 2-Chloronaphthalene	8.28	162	176377	4.92611	ppb	94
49) 2-Nitroaniline	8.40	65	48257	4.02083	ppb	95
50) Dimethyl phthalate	8.60	163	195702	4.76078	ppb	100
51) 2,6-DNT	8.68	165	36830	4.30328	ppb	91
52) Acenaphthylene	8.76	152	265238	4.76003	ppb	97
53) 3-Nitroaniline	8.89	138	43223	4.19099	ppb	97
54) Acenaphthene	8.96	154	182254	4.96067	ppb	99
55) 2,4-Dinitrophenol	9.06	184	658	8.05478	ppb	# 33
56) 4-Nitrophenol	9.15	65	23069	3.17827	ppb	80
57) Dibenzofuran	9.16	168	258059	5.10906	ppb	97
58) 2,4-DNT	9.15	165	49898	4.40819	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	36282	4.29569	ppb	96
60) Diethyl phthalate	9.41	149	189707	4.80021	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	101023	5.14228	ppb	91
62) Fluorene	9.56	166	206121	5.05430	ppb	100
63) 4-Nitroaniline	9.61	138	47426	4.61367	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	17537	2.42073	ppb	96
67) Diphenyl amine	9.69	169	314635	9.52215	ppb	100
68) n-Nitrosodiphenylamine	9.69	169	314635	9.52215	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	205129	4.13217	ppb	97
70) 4-Bromophenyl phenyl ether	10.13	248	50606	4.40498	ppb	89
71) Hexachlorobenzene	10.19	284	48221	4.39067	ppb	91
72) Atrazine	10.32	200	23603	2.09887	ppb	99
73) Pentachlorophenol	10.45	266	16395	2.42031	ppb	95
74) Phenanthrene	10.69	178	297175	4.81234	ppb	100
75) Anthracene	10.74	178	300675	4.74183	ppb	99
76) Carbazol	10.94	167	271825	4.72407	ppb	98
77) Di-n-butylphthalate	11.32	149	303348	4.49966	ppb	99
78) Fluoranthene	12.08	202	312240	4.72269	ppb	98
80) Benzidine	12.25	184	72705	5.45225	ppb	97
81) Pyrene	12.35	202	335405	4.91780	ppb	98
83) Butyl benzylphthalate	13.07	149	131736	4.51371	ppb	90
84) 3,3'-Dichlorobenzidine	13.71	252	86100	4.42832	ppb	98
85) Benz (a) anthracene	13.74	228	297279	5.01836	ppb	98
86) Bis (2-ethylhexyl) phthala	13.72	149	207396	5.26210	ppb	# 95
87) Chrysene	13.78	228	284704	4.80830	ppb	99
88) Di-n-octylphthalate	14.48	149	297371	4.40999	ppb	98
90) Benzo (b) fluoranthene	15.07	252	267244	4.53531	ppb	99
91) Benzo (k) fluoranthene	15.11	252	275294	4.84812	ppb	99
92) Benzo (a) pyrene	15.55	252	237730	4.44308	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.59	276	242506	4.50565	ppb	96
94) Dibenz (a,h) anthracene	17.61	278	224895	4.56524	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	217110	4.50340	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0124Y017.D Y0125NC.M Tue Jan 29 08:16:34 2019

Quantitation Report

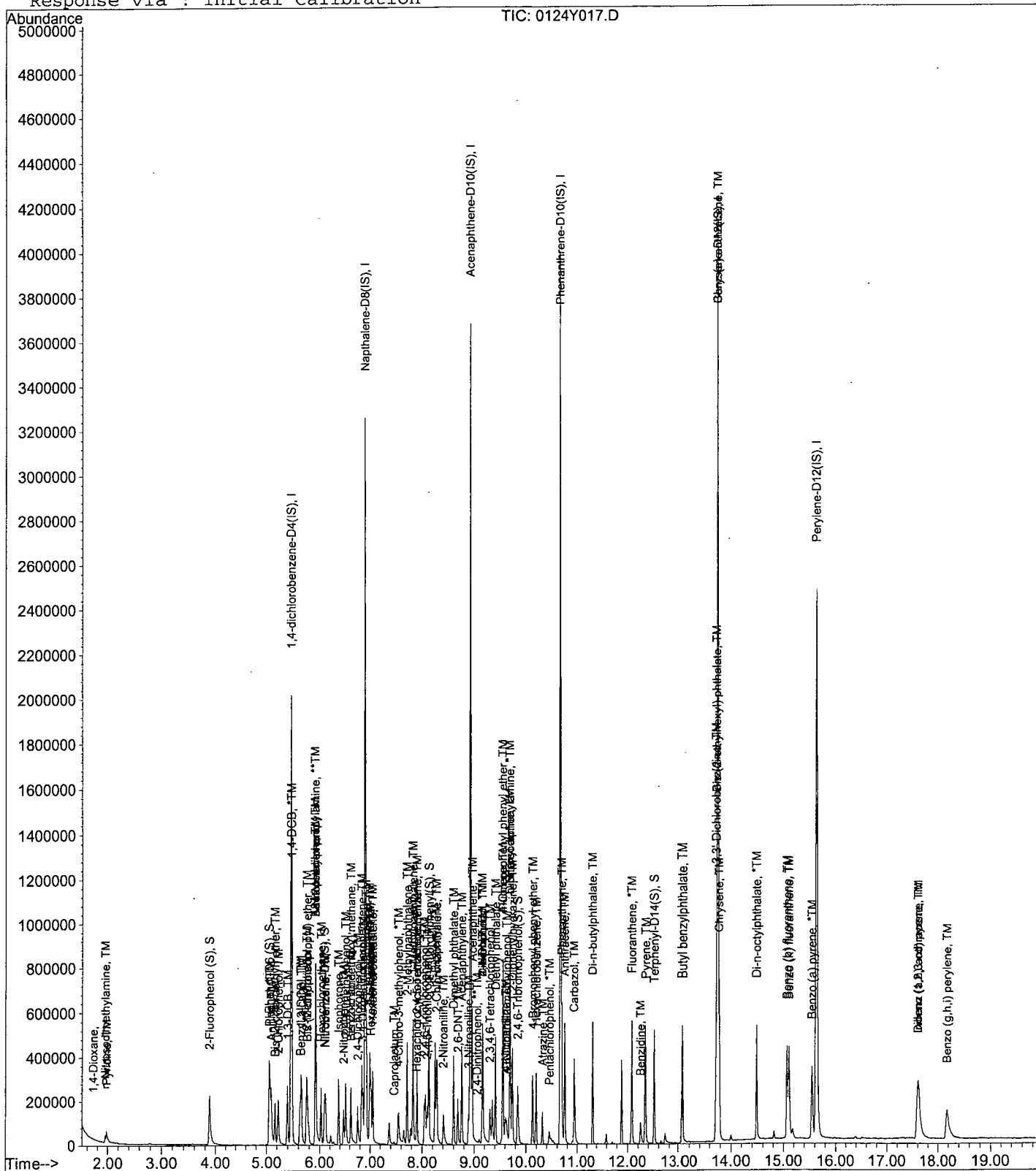
Data File : M:\YODA\DATA\Y190124\0124Y017.D  
Acq On : 25 Jan 19 10:21  
Sample : 5ug/mL 8270 01/24/19  
Misc :

Vial: 17  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	384341	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1739801	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1039183	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2028761	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1850112	40.00000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1783876	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
5) 2-Fluorophenol (S)	3.88	112	316592	20.53949	ppb	0.00
Spiked Amount 200.000			Recovery =	10.270%		
6) Phenol-D6 (S)	5.05	99	440013	21.66685	ppb	0.00
Spiked Amount 200.000			Recovery =	10.834%		
22) Nitrobenzene-D5 (S)	6.09	82	198391	10.26779	ppb	0.00
Spiked Amount 100.000			Recovery =	10.268%		
46) 2-Fluorobiphenyl (S)	8.13	172	418518	9.97848	ppb	0.00
Spiked Amount 100.000			Recovery =	9.978%		
64) 2,4,6-Tribromophenol (S)	9.85	330	81639	18.82269	ppb	0.00
Spiked Amount 200.000			Recovery =	9.412%		
82) Terphenyl-D14 (S)	12.51	244	454030	9.47395	ppb	0.00
Spiked Amount 100.000			Recovery =	9.474%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.72	58	2387	1.43229		93
3) n-Nitrosodimethylamine	1.95	42	33282	11.82047	ppb	93
4) Pyridine	1.97	79	92711	13.48027	ppb	95
7) Phenol	5.06	94	313314	12.97943	ppb	100
8) Aniline	5.09	93	327926	17.05779	ppb	98
9) Bis (2-chloroethyl) ether	5.16	63	145392	12.15860	ppb	96
10) 2-Chlorophenol	5.22	128	222632	13.20506	ppb	99
11) 1,3-DCB	5.39	146	236649	13.46726	ppb	99
12) 1,4-DCB	5.48	146	248996	13.95093	ppb	98
13) Benzyl alcohol	5.62	108	132840	12.48051	ppb	95
14) 1,2-DCB	5.65	146	224867	13.49664	ppb	96
15) 2-Methylphenol	5.75	107	183959	13.32530	ppb	97
16) Bis (2-chloroisopropyl) et	5.76	45	226279	11.57309	ppb	99
17) Acetophenone	5.92	105	301056	13.80954	ppb	87
18) 3&4-Methylphenol	5.91	107	458174	26.98121	ppb	95
19) n-Nitrosodi-n-propylamine	5.91	70	167080	12.97727	ppb	99
20) Hexachloroethane	6.02	117	86615	12.72916	ppb	96
23) Nitrobenzene	6.11	77	250149	12.87562	ppb	94
24) Isophorone	6.38	82	425236	12.32322	ppb	99
25) 2-Nitrophenol	6.47	139	117688	13.32620	ppb	99
26) 2,4-Dimethylphenol	6.51	122	198936	12.56466	ppb	99
27) Benzoic acid	6.63	105	109400	11.81149	ppb	95
28) Bis (2-chloroethoxy) metha	6.62	93	274235	12.76702	ppb	99
29) 2,4-Dichlorophenol	6.75	162	170664	12.99975	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	197991	13.52465	ppb	100
31) 3,4-Dimethylphenol	6.85	107	267251	12.69235	ppb	98
32) Napthalene	6.92	128	670423	13.15159	ppb	99
33) 4-Chloroaniline	6.99	127	256609	13.35270	ppb	98
34) 2,6-Dichlorophenol	7.00	162	172928	13.15852	ppb	99
35) Hexachloropropene	7.02	213	109295	12.68217	ppb	99
36) Hexachlorobutadiene	7.05	225	101284	13.21557	ppb	99
37) Caprolactum	7.38	55	76598	11.82877	ppb	96

(#) = qualifier out of range (m) = manual integration  
 0124Y018.D Y0125NC.M Tue Jan 29 08:16:37 2019

Data File : M:\YODA\DATA\Y190124\0124Y018.D  
 Acq On : 25 Jan 19 10:49  
 Sample : 10ug/mL 8270 01/24/19  
 Misc :

Vial: 18  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	187678	12.50412	ppb	99
39) 2-Methylnaphthalene	7.71	142	424829	13.07207	ppb	100
40) 1-Methylnaphthalene	7.82	142	431022	13.18742	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	25947	8.64993	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	180614	11.32970	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	106564	10.25727	ppb	98
45) 2,4,5-Trichlorophenol	8.09	196	132923	11.57256	ppb	94
47) 1,1'-Biphenyl	8.25	154	536521	11.49396	ppb	99
48) 2-Chloronaphthalene	8.28	162	413165	11.62515	ppb	98
49) 2-Nitroaniline	8.40	65	125367	10.51312	ppb	96
50) Dimethyl phthalate	8.60	163	476215	11.65010	ppb	99
51) 2,6-DNT	8.68	165	103086	11.85231	ppb	85
52) Acenaphthylene	8.76	152	639384	11.52284	ppb	100
53) 3-Nitroaniline	8.88	138	117306	11.40934	ppb	90
54) Acenaphthene	8.96	154	420910	11.54206	ppb	100
55) 2,4-Dinitrophenol	9.02	184	22288	11.33622	ppb	96
56) 4-Nitrophenol	9.15	65	69255	9.85262	ppb	81
57) Dibenzofuran	9.16	168	599251	11.90622	ppb	99
58) 2,4-DNT	9.15	165	138090	11.98503	ppb	92
59) 2,3,4,6-Tetrachlorophenol	9.31	232	91483	10.74912	ppb	99
60) Diethyl phthalate	9.41	149	452309	11.51698	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	235880	12.01438	ppb	96
62) Fluorene	9.56	166	479043	11.78218	ppb	100
63) 4-Nitroaniline	9.60	138	122396	11.95160	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.63	198	65167	9.35947	ppb	97
67) Diphenyl amine	9.69	169	744703	22.27867	ppb	99
68) n-Nitrosodiphenylamine	9.69	169	744703	22.27867	ppb	99
69) 1,2-Diphenylhydrazine	9.74	77	488203	9.83872	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	118641	10.25921	ppb	97
71) Hexachlorobenzene	10.19	284	116191	10.54252	ppb #	85
72) Atrazine	10.31	200	62029	5.43603	ppb	98
73) Pentachlorophenol	10.44	266	54861	8.42679	ppb	94
74) Phenanthrene	10.68	178	705975	11.26347	ppb	98
75) Anthracene	10.75	178	722528	11.20099	ppb	99
76) Carbazol	10.93	167	645327	11.02334	ppb	98
77) Di-n-butylphthalate	11.32	149	750554	10.93554	ppb	99
78) Fluoranthene	12.08	202	754194	11.20916	ppb	99
80) Benzidine	12.24	184	235410	13.07671	ppb	99
81) Pyrene	12.35	202	791563	11.29349	ppb	100
83) Butyl benzylphthalate	13.08	149	334771	11.08547	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	239496	12.05618	ppb	99
85) Benz (a) anthracene	13.74	228	687210	11.28964	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	494589	11.99644	ppb	99
87) Chrysene	13.78	228	676758	11.17616	ppb	99
88) Di-n-octylphthalate	14.48	149	775210	11.06033	ppb	95
90) Benzo (b) fluoranthene	15.07	252	643284	10.74979	ppb	100
91) Benzo (k) fluoranthene	15.10	252	665843	11.43139	ppb	98
92) Benzo (a) pyrene	15.55	252	599150	10.90497	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	599788	10.86003	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	554735	10.91790	ppb	97
95) Benzo (g,h,i) perylene	18.16	276	532716	10.75641	ppb	99

(#) = qualifier out of range (m) = manual integration

0124Y018.D Y0125NC.M

Tue Jan 29 08:16:37 2019

Quantitation Report

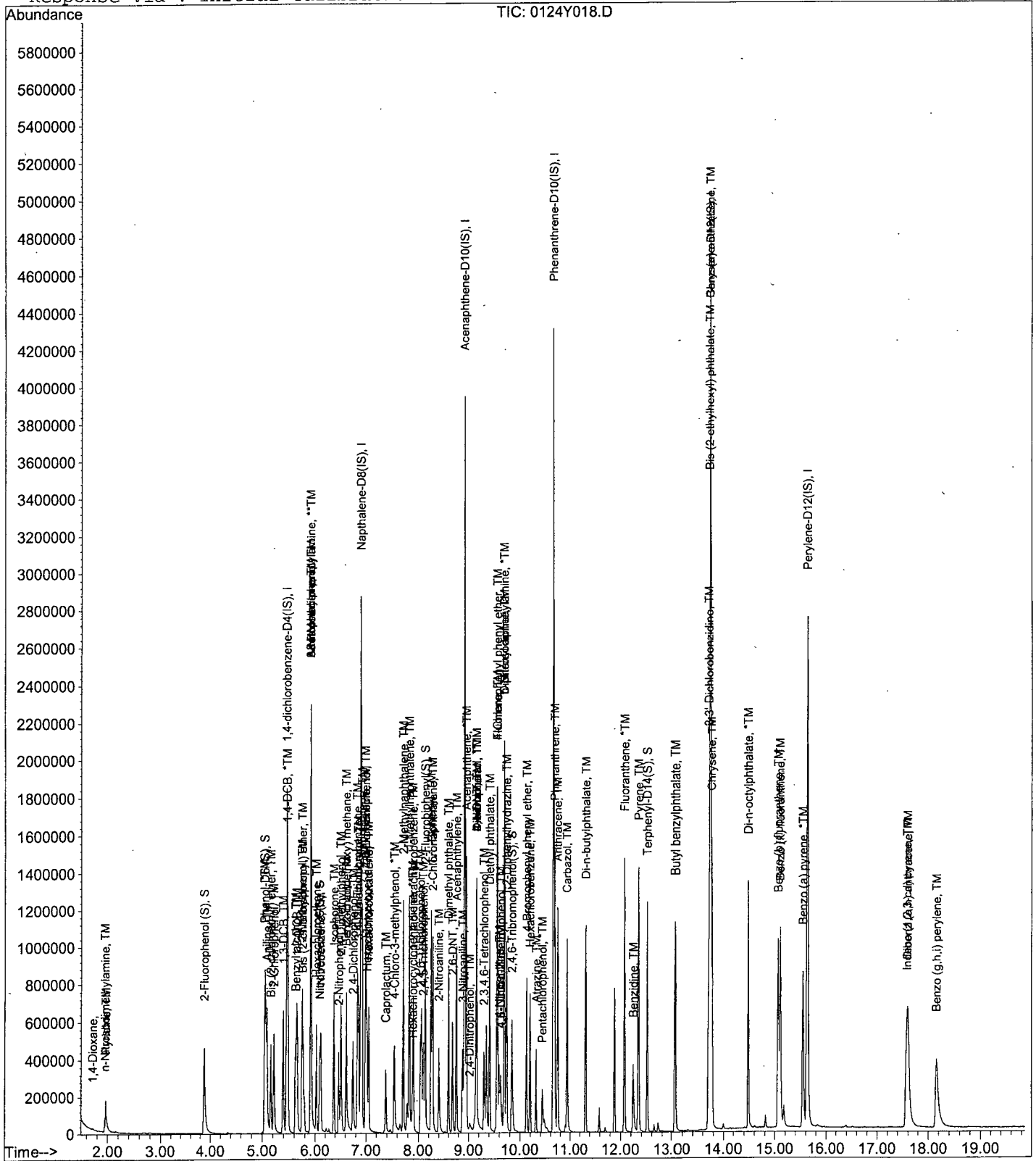
Data File : M:\YODA\DATA\Y190124\0124Y018.D  
Acq On : 25 Jan 19 10:49  
Sample : 10ug/mL 8270 01/24/19  
Misc :

Vial: 18  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:06 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	636350	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2822233	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1682401	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	3270571	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2912554	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	2895614	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.89	112	1079558	38.19181	ppb	0.02
Spiked Amount 200.000			Recovery =	19.096%		
6) Phenol-D6 (S)	5.06	99	1438233	38.70168	ppb	0.00
Spiked Amount 200.000			Recovery =	19.351%		
22) Nitrobenzene-D5 (S)	6.10	82	647018	19.21156	ppb	0.00
Spiked Amount 100.000			Recovery =	19.212%		
46) 2-Fluorobiphenyl (S)	8.13	172	1267437	18.31256	ppb	0.00
Spiked Amount 100.000			Recovery =	18.313%		
64) 2,4,6-Tribromophenol (S)	9.85	330	256663	36.47674	ppb	0.00
Spiked Amount 200.000			Recovery =	18.239%		
82) Terphenyl-D14 (S)	12.51	244	1385929	18.53138	ppb	0.00
Spiked Amount 100.000			Recovery =	18.531%		

Target Compounds

					Qvalue	
2) 1,4-Dioxane	1.74	58	6343	1.78753	#	40
3) n-Nitrosodimethylamine	1.97	42	110467	19.65117	ppb	99
4) Pyridine	1.99	79	287660	20.82293	ppb	98
7) Phenol	5.07	94	981147	21.01690	ppb	96
8) Aniline	5.10	93	1047674	21.82394	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	446038	20.68812	ppb	94
10) 2-Chlorophenol	5.23	128	681991	20.66769	ppb	97
11) 1,3-DCB	5.39	146	718229	20.40878	ppb	98
12) 1,4-DCB	5.49	146	731607	20.35996	ppb	98
13) Benzyl alcohol	5.62	108	427502	20.86251	ppb	100
14) 1,2-DCB	5.65	146	688805	20.68155	ppb	98
15) 2-Methylphenol	5.75	107	583589	20.77993	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	677853	20.93213	ppb	98
17) Acetophenone	5.92	105	907012	21.16813	ppb	96
18) 3&4-Methylphenol	5.92	107	1404575	42.32633	ppb	100
19) n-Nitrosodi-n-propylamine	5.91	70	508956	21.09969	ppb	96
20) Hexachloroethane	6.02	117	267187	20.37551	ppb	91
23) Nitrobenzene	6.12	77	757965	20.48330	ppb	100
24) Isophorone	6.38	82	1341118	20.81504	ppb	96
25) 2-Nitrophenol	6.47	139	377174	20.80099	ppb	97
26) 2,4-Dimethylphenol	6.52	122	631247	21.01422	ppb	97
27) Benzoic acid	6.64	105	477365	20.56102	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	832246	20.80697	ppb	99
29) 2,4-Dichlorophenol	6.75	162	535793	20.69550	ppb	99
30) 1,2,4-Trichlorobenzene	6.83	180	592289	20.55579	ppb	99
31) 3,4-Dimethylphenol	6.85	107	827785	20.40945	ppb	99
32) Napthalene	6.92	128	2017143	20.57394	ppb	100
33) 4-Chloroaniline	6.99	127	816613	23.12180	ppb	99
34) 2,6-Dichlorophenol	7.00	162	533260	20.81659	ppb	99
35) Hexachloropropene	7.02	213	366301	20.91040	ppb	100
36) Hexachlorobutadiene	7.05	225	307988	20.51106	ppb	99
37) Caprolactum	7.40	55	270633	20.95717	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y033.D  
 Acq On : 28 Jan 19 13:36  
 Sample : 20ug/mL 8270 01/24/19  
 Misc :

Vial: 33  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 12:35:34 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	605008	20.75534	ppb	99
39) 2-Methylnaphthalene	7.71	142	1318606	20.92289	ppb	99
40) 1-Methylnaphthalene	7.83	142	1305773	20.69797	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	191376	21.57080	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	551349	19.64363	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	361209	19.89672	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	406036	19.63299	ppb	96
47) 1,1'-Biphenyl	8.25	154	1655511	19.99468	ppb	99
48) 2-Chloronaphthalene	8.28	162	1256537	19.88748	ppb	98
49) 2-Nitroaniline	8.40	65	413623	20.12430	ppb	94
50) Dimethyl phthalate	8.60	163	1504216	20.21148	ppb	100
51) 2,6-DNT	8.68	165	341441	20.51423	ppb	# 80
52) Acenaphthylene	8.76	152	2020333	20.16825	ppb	100
53) 3-Nitroaniline	8.88	138	395406	21.11807	ppb	90
54) Acenaphthene	8.96	154	1294988	19.94266	ppb	99
55) 2,4-Dinitrophenol	9.01	184	164125	22.39567	ppb	93
56) 4-Nitrophenol	9.09	65	182439	16.32491	ppb	99
57) Dibenzofuran	9.16	168	1847609	20.28865	ppb	99
58) 2,4-DNT	9.15	165	457778	20.84223	ppb	94
59) 2,3,4,6-Tetrachlorophenol	9.31	232	304485	20.10263	ppb	97
60) Diethyl phthalate	9.42	149	1433219	20.26618	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	715742	20.13953	ppb	98
62) Fluorene	9.56	166	1484736	20.34866	ppb	99
63) 4-Nitroaniline	9.60	138	403406	21.13706	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.63	198	281851	19.79880	ppb	90
67) Diphenyl amine	9.70	169	2288686	39.99363	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2288686	39.99363	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1552599	19.28814	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	385777	20.00697	ppb	96
71) Hexachlorobenzene	10.19	284	358181	19.60977	ppb	# 82
72) Atrazine	10.31	200	195866	10.00458	ppb	98
73) Pentachlorophenol	10.43	266	207382	18.32753	ppb	99
74) Phenanthrene	10.68	178	2181956	19.92184	ppb	99
75) Anthracene	10.75	178	2233354	19.89161	ppb	100
76) Carbazol	10.94	167	2046080	20.08647	ppb	97
77) Di-n-butylphthalate	11.32	149	2449042	20.43049	ppb	100
78) Fluoranthene	12.08	202	2378299	20.22733	ppb	99
80) Benzidine	12.23	184	781270	23.13756	ppb	99
81) Pyrene	12.35	202	2455450	20.10623	ppb	100
83) Butyl benzylphthalate	13.07	149	1122474	20.60463	ppb	86
84) 3,3'-Dichlorobenzidine	13.70	252	800909	22.00303	ppb	# 96
85) Benz (a) anthracene	13.74	228	2089802	19.61471	ppb	100
86) Bis (2-ethylhexyl) phthala	13.72	149	1554697	20.44048	ppb	# 94
87) Chrysene	13.79	228	2116115	20.36358	ppb	99
88) Di-n-octylphthalate	14.48	149	2662183	20.67607	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2063545	19.14984	ppb	99
91) Benzo (k) fluoranthene	15.10	252	2127884	20.66410	ppb	99
92) Benzo (a) pyrene	15.55	252	1946711	20.00326	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.57	276	2006323	20.06100	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	1821992	20.10773	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	1772162	20.01866	ppb	100

(#) = qualifier out of range (m) = manual integration  
 0124Y033.D Y0125NC.M Tue Jan 29 08:16:58 2019

Quantitation Report

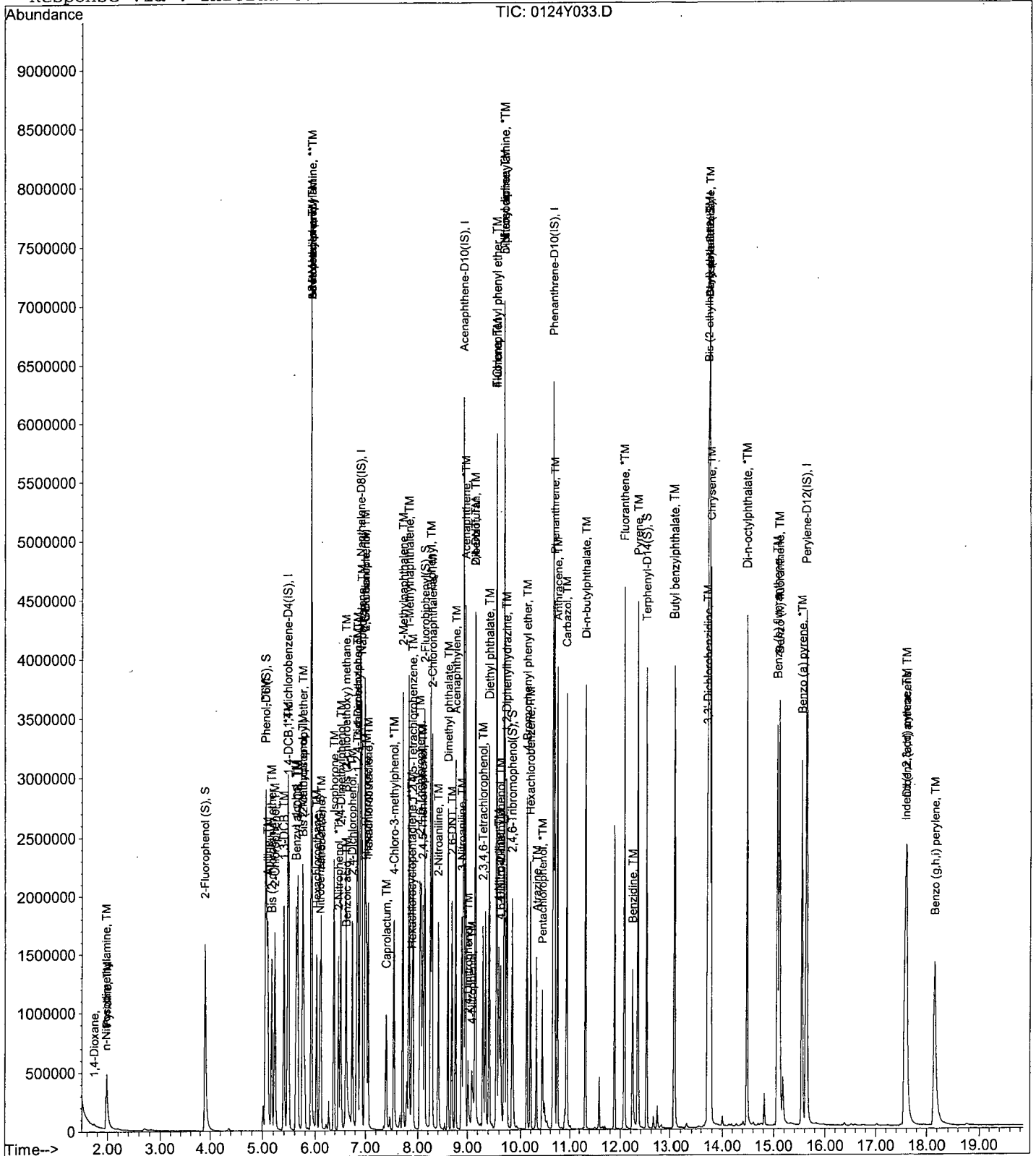
Data File : M:\YODA\DATA\Y190124\0124Y033.D  
Acq On : 28 Jan 19 13:36  
Sample : 20ug/mL 8270 01/24/19  
Misc :

Vial: 33  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 13:50 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y020.D Vial: 20  
 Acq On : 25 Jan 19 11:44 Operator: MA  
 Sample : 40ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 11:57 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	408392	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1826097	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1029111	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1952804	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1752683	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1690710	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.87	112	1576988	96.03480	ppb	0.00
Spiked Amount	200.000		Recovery	=	48.018%	
6) Phenol-D6 (S)	5.05	99	2074169	95.72002	ppb	0.00
Spiked Amount	200.000		Recovery	=	47.860%	
22) Nitrobenzene-D5 (S)	6.09	82	920567	45.10467	ppb	0.00
Spiked Amount	100.000		Recovery	=	45.105%	
46) 2-Fluorobiphenyl (S)	8.13	172	1784780	43.52172	ppb	0.00
Spiked Amount	100.000		Recovery	=	43.522%	
64) 2,4,6-Tribromophenol (S)	9.85	330	371290	88.61400	ppb	0.00
Spiked Amount	200.000		Recovery	=	44.307%	
82) Terphenyl-D14 (S)	12.51	244	1928566	43.95301	ppb	0.00
Spiked Amount	100.000		Recovery	=	43.953%	

Target Compounds

					Qvalue	
2) 1,4-Dioxane	1.71	58	8893	4.60032		85
3) n-Nitrosodimethylamine	1.94	42	150528	46.74232	ppb	96
4) Pyridine	1.96	79	351271	44.18707	ppb	100
7) Phenol	5.07	94	1261343	46.82655	ppb	96
8) Aniline	5.09	93	1314100	62.04190	ppb	100
9) Bis (2-chloroethyl) ether	5.16	63	573382	43.98308	ppb	99
10) 2-Chlorophenol	5.22	128	874660	46.11987	ppb	100
11) 1,3-DCB	5.39	146	929323	46.62662	ppb	99
12) 1,4-DCB	5.48	146	938789	46.00154	ppb	99
13) Benzyl alcohol	5.63	108	549797	46.45135	ppb	96
14) 1,2-DCB	5.64	146	878821	46.40937	ppb	99
15) 2-Methylphenol	5.75	107	751943	47.78444	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	847848	41.05298	ppb	100
17) Acetophenone	5.92	105	1139391	46.49578	ppb	97
18) 3&4-Methylphenol	5.92	107	1771636	93.15009	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	633950	44.61799	ppb	99
20) Hexachloroethane	6.03	117	345343	45.34081	ppb	97
23) Nitrobenzene	6.12	77	969667	44.81490	ppb	99
24) Isophorone	6.38	82	1688334	44.66263	ppb	96
25) 2-Nitrophenol	6.47	139	489091	48.03698	ppb	100
26) 2,4-Dimethylphenol	6.52	122	810674	46.22740	ppb	98
27) Benzoic acid	6.65	105	618515	56.35463	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1041352	44.18621	ppb	99
29) 2,4-Dichlorophenol	6.75	162	700142	47.67577	ppb	100
30) 1,2,4-Trichlorobenzene	6.83	180	751549	45.52085	ppb	98
31) 3,4-Dimethylphenol	6.85	107	1077521	46.09716	ppb	98
32) Napthalene	6.93	128	2565227	45.16039	ppb	100
33) 4-Chloroaniline	6.99	127	985263	45.18327	ppb	99
34) 2,6-Dichlorophenol	7.00	162	680077	46.24222	ppb	99
35) Hexachloropropene	7.02	213	468255	47.83385	ppb	99
36) Hexachlorobutadiene	7.06	225	393866	45.81648	ppb	98
37) Caprolactum	7.42	55	331158	48.21368	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y020.D  
 Acq On : 25 Jan 19 11:44  
 Sample : 40ug/mL 8270 01/24/19  
 Misc :

Vial: 20  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	775271	46.64409	ppb	99
39) 2-Methylnaphthalene	7.71	142	1654926	45.58868	ppb	100
40) 1-Methylnaphthalene	7.83	142	1656365	45.28050	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	260385	37.52819	ppb	99
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	697052	43.25958	ppb	99
44) 2,4,6-Trichlorophenol	8.04	196	476510	46.12089	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	512115	43.18820	ppb	98
47) 1,1'-Biphenyl	8.25	154	2083441	44.06097	ppb	99
48) 2-Chloronaphthalene	8.28	162	1593407	44.06701	ppb	98
49) 2-Nitroaniline	8.40	65	526512	44.12615	ppb	97
50) Dimethyl phthalate	8.61	163	1878647	44.85122	ppb	100
51) 2,6-DNT	8.69	165	424850	46.29368	ppb	96
52) Acenaphthylene	8.76	152	2546320	45.04805	ppb	100
53) 3-Nitroaniline	8.88	138	493983	46.59969	ppb	93
54) Acenaphthene	8.96	154	1629656	44.02788	ppb	100
55) 2,4-Dinitrophenol	9.01	184	202328	49.83992	ppb	94
56) 4-Nitrophenol	9.09	65	252473	37.36787	ppb	99
57) Dibenzofuran	9.16	168	2296507	44.72552	ppb	99
58) 2,4-DNT	9.15	165	564838	46.45799	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	385457	44.53544	ppb	97
60) Diethyl phthalate	9.42	149	1780276	44.67228	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	899275	44.93476	ppb	95
62) Fluorene	9.56	166	1851974	44.77181	ppb	100
63) 4-Nitroaniline	9.60	138	506599	47.29416	ppb	95
66) 4,6-Dinitro-2-methylphenol	9.64	198	350459	51.16538	ppb	92
67) Diphenyl amine	9.70	169	2815867	86.66649	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2815867	86.66649	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1910724	40.62544	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	481519	43.40023	ppb	96
71) Hexachlorobenzene	10.20	284	450841	42.81056	ppb	97
72) Atrazine	10.31	200	245469	21.89136	ppb	98
73) Pentachlorophenol	10.43	266	273044	44.84102	ppb	99
74) Phenanthrene	10.69	178	2727361	44.43391	ppb	99
75) Anthracene	10.75	178	2807769	44.55359	ppb	100
76) Carbazol	10.94	167	2523384	44.09131	ppb	97
77) Di-n-butylphthalate	11.33	149	3017620	44.85844	ppb	100
78) Fluoranthene	12.08	202	2906835	43.98185	ppb	100
80) Benzidine	12.24	184	898587	45.75595	ppb	99
81) Pyrene	12.35	202	3031839	44.58907	ppb	100
83) Butyl benzylphthalate	13.08	149	1379263	46.39175	ppb	97
84) 3,3'-Dichlorobenzidine	13.70	252	956135	47.45949	ppb	# 98
85) Benz (a) anthracene	13.74	228	2602250	44.02477	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	1887612	45.82238	ppb	# 95
87) Chrysene	13.79	228	2593818	44.52277	ppb	100
88) Di-n-octylphthalate	14.48	149	3283408	47.07623	ppb	# 94
90) Benzo (b) fluoranthene	15.07	252	2532432	43.64482	ppb	98
91) Benzo (k) fluoranthene	15.10	252	2611986	46.58763	ppb	98
92) Benzo (a) pyrene	15.55	252	2424047	45.72107	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2469600	46.03273	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2257333	45.81781	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2175059	45.42992	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0124Y020.D Y0125NC.M Tue Jan 29 08:16:42 2019



Quantitation Report

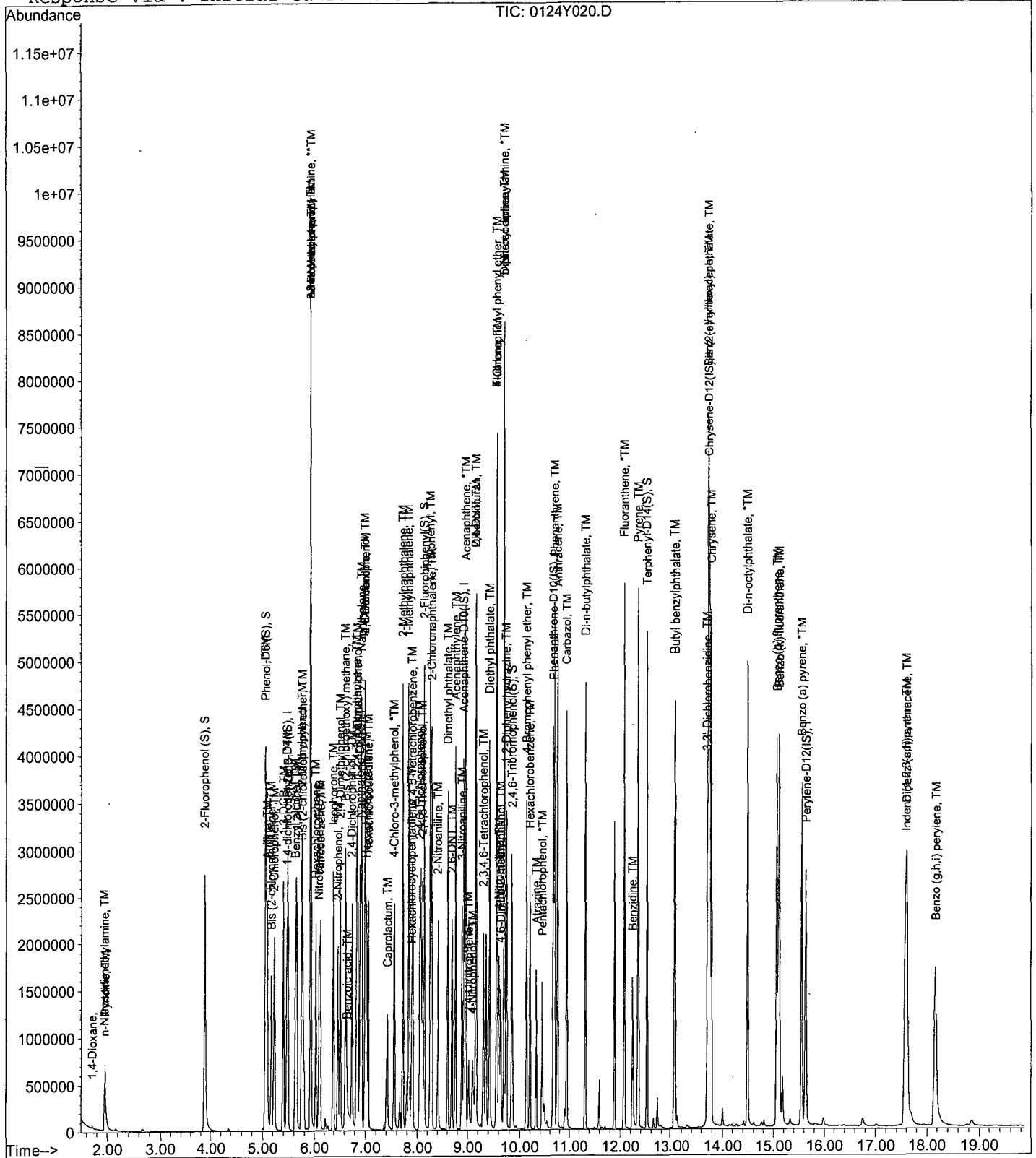
Data File : M:\YODA\DATA\Y190124\0124Y020.D  
Acq On : 25 Jan 19 11:44  
Sample : 40ug/mL 8270 01/24/19  
Misc :

Vial: 20  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 11:57 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y015.D  
 Acq On : 25 Jan 19 7:20  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	414061	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1774388	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1005371	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1908764	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1698051	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1677536	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.87	112	1774474	106.72722	ppb	0.00
Spiked Amount 200.000				Recovery =	53.363%	
6) Phenol-D6 (S)	5.05	99	2346261	106.80179	ppb	0.00
Spiked Amount 200.000				Recovery =	53.401%	
22) Nitrobenzene-D5 (S)	6.09	82	1051841	53.53683	ppb	0.00
Spiked Amount 100.000				Recovery =	53.537%	
46) 2-Fluorobiphenyl (S)	8.13	172	2016382	49.35001	ppb	0.00
Spiked Amount 100.000				Recovery =	49.350%	
64) 2,4,6-Tribromophenol (S)	9.85	330	419249	99.31143	ppb	0.00
Spiked Amount 200.000				Recovery =	49.656%	
82) Terphenyl-D14 (S)	12.51	244	2143936	48.39314	ppb	0.00
Spiked Amount 100.000				Recovery =	48.393%	

Target Compounds

					Qvalue
2) 1,4-Dioxane	1.71	58	12955	7.18240	100
3) n-Nitrosodimethylamine	1.94	42	194605	63.64599	ppb 100
4) Pyridine	1.96	79	516800	68.12982	ppb 100
7) Phenol	5.07	94	1641696	61.78760	ppb 100
8) Aniline	5.09	93	1713521	82.39935	ppb 100
9) Bis (2-chloroethyl) ether	5.16	63	757200	57.35908	ppb 100
10) 2-Chlorophenol	5.22	128	1145751	62.28435	ppb 100
11) 1,3-DCB	5.39	146	1211613	63.52942	ppb 100
12) 1,4-DCB	5.48	146	1231153	63.64076	ppb 100
13) Benzyl alcohol	5.63	108	730277	62.70332	ppb 100
14) 1,2-DCB	5.64	146	1145010	63.29364	ppb 100
15) 2-Methylphenol	5.75	107	987729	65.88002	ppb 100
16) Bis (2-chloroisopropyl) et	5.77	45	1119934	51.16664	ppb 100
17) Acetophenone	5.92	105	1477135	61.96329	ppb 100
18) 3&4-Methylphenol	5.92	107	2314803	124.31319	ppb 100
19) n-Nitrosodi-n-propylamine	5.92	70	836205	59.16615	ppb 100
20) Hexachloroethane	6.03	117	457500	61.65493	ppb 100
23) Nitrobenzene	6.12	77	1288575	64.37919	ppb 100
24) Isophorone	6.39	82	2269915	63.52050	ppb 100
25) 2-Nitrophenol	6.47	139	638487	71.65350	ppb 100
26) 2,4-Dimethylphenol	6.52	122	1082343	66.00996	ppb 100
27) Benzoic acid	6.66	105	869869	86.91271	ppb 100
28) Bis (2-chloroethoxy) metha	6.62	93	1383448	61.85884	ppb 100
29) 2,4-Dichlorophenol	6.75	162	934592	67.52420	ppb 100
30) 1,2,4-Trichlorobenzene	6.83	180	987733	65.79606	ppb 100
31) 3,4-Dimethylphenol	6.85	107	1444182	66.18149	ppb 100
32) Napthalene	6.93	128	3403361	64.67306	ppb 100
33) 4-Chloroaniline	6.99	127	1270710	63.23385	ppb 100
34) 2,6-Dichlorophenol	7.00	162	898322	66.24065	ppb 100
35) Hexachloropropene	7.02	213	627626	71.42681	ppb 100
36) Hexachlorobutadiene	7.06	225	511358	64.87426	ppb 100
37) Caprolactum	7.43	55	453404	59.77045	ppb 100

(#) = qualifier out of range (m) = manual integration  
 0124Y015.D Y0125NC.M Tue Jan 29 08:16:26 2019

Data File : M:\YODA\DATA\Y190124\0124Y015.D  
 Acq On : 25 Jan 19 7:20  
 Sample : 50ug/mL 8270 01/24/19  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:12:36 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1035975	66.78669	ppb	100
39) 2-Methylnaphthalene	7.71	142	2184777	65.39842	ppb	100
40) 1-Methylnaphthalene	7.83	142	2179083	65.09430	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	378734	51.68775	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	930158	58.66291	ppb	100
44) 2,4,6-Trichlorophenol	8.04	196	639238	61.33524	ppb	100
45) 2,4,5-Trichlorophenol	8.10	196	685751	61.10232	ppb	100
47) 1,1'-Biphenyl	8.25	154	2732730	59.14192	ppb	100
48) 2-Chloronaphthalene	8.28	162	2068546	58.85563	ppb	100
49) 2-Nitroaniline	8.40	65	708868	60.17019	ppb	100
50) Dimethyl phthalate	8.61	163	2488618	61.67396	ppb	100
51) 2,6-DNT	8.69	165	567043	67.49549	ppb	100
52) Acenaphthylene	8.76	152	3341916	61.09854	ppb	100
53) 3-Nitroaniline	8.88	138	641142	63.33110	ppb	100
54) Acenaphthene	8.96	154	2149307	59.59678	ppb	100
55) 2,4-Dinitrophenol	9.01	184	278852	68.71932	ppb	100
56) 4-Nitrophenol	9.09	65	384761	54.00246	ppb	100
57) Dibenzofuran	9.16	168	2994672	60.39932	ppb	100
58) 2,4-DNT	9.15	165	749501	67.45448	ppb	100
59) 2,3,4,6-Tetrachlorophenol	9.31	232	512262	61.78663	ppb	100
60) Diethyl phthalate	9.42	149	2355039	60.70661	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	1161750	60.24333	ppb	100
62) Fluorene	9.56	166	2412535	60.26614	ppb	100
63) 4-Nitroaniline	9.61	138	666535	66.05633	ppb	100
66) 4,6-Dinitro-2-methylphenol	9.64	198	472238	66.77560	ppb	100
67) Diphenyl amine	9.70	169	3715091	115.17640	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3715091	115.17640	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2569030	53.01351	ppb	100
70) 4-Bromophenyl phenyl ether	10.13	248	628479	56.04009	ppb	100
71) Hexachlorobenzene	10.20	284	592346	55.25050	ppb	100
72) Atrazine	10.32	200	326684	29.75859	ppb	100
73) Pentachlorophenol	10.43	266	388571	58.76203	ppb	100
74) Phenanthrene	10.69	178	3576095	59.32245	ppb	100
75) Anthracene	10.75	178	3661605	59.15429	ppb	100
76) Carbazol	10.95	167	3335622	59.38406	ppb	100
77) Di-n-butylphthalate	11.33	149	4032317	61.27161	ppb	100
78) Fluoranthene	12.08	202	3849484	59.64433	ppb	100
80) Benzidine	12.24	184	1164345	61.38179	ppb	100
81) Pyrene	12.35	202	3982978	61.11597	ppb	100
83) Butyl benzylphthalate	13.08	149	1829888	65.61444	ppb	100
84) 3,3'-Dichlorobenzidine	13.71	252	1264021	68.03546	ppb	100
85) Benz (a) anthracene	13.74	228	3532562	62.40700	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2582639	68.57527	ppb	100
87) Chrysene	13.79	228	3286756	58.09122	ppb	100
88) Di-n-octylphthalate	14.49	149	4410272	68.44635	ppb	100
90) Benzo (b) fluoranthene	15.08	252	3673387	63.09472	ppb	100
91) Benzo (k) fluoranthene	15.11	252	3156080	56.25376	ppb	100
92) Benzo (a) pyrene	15.55	252	3221278	60.77698	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3312285	62.28582	ppb	100
94) Dibenz (a,h) anthracene	17.61	278	3013495	61.57009	ppb	100
95) Benzo (g,h,i) perylene	18.17	276	2934416	61.60401	ppb	100

(#) = qualifier out of range (m) = manual integration  
 0124Y015.D Y0125NC.M Tue Jan 29 08:16:26 2019

Quantitation Report

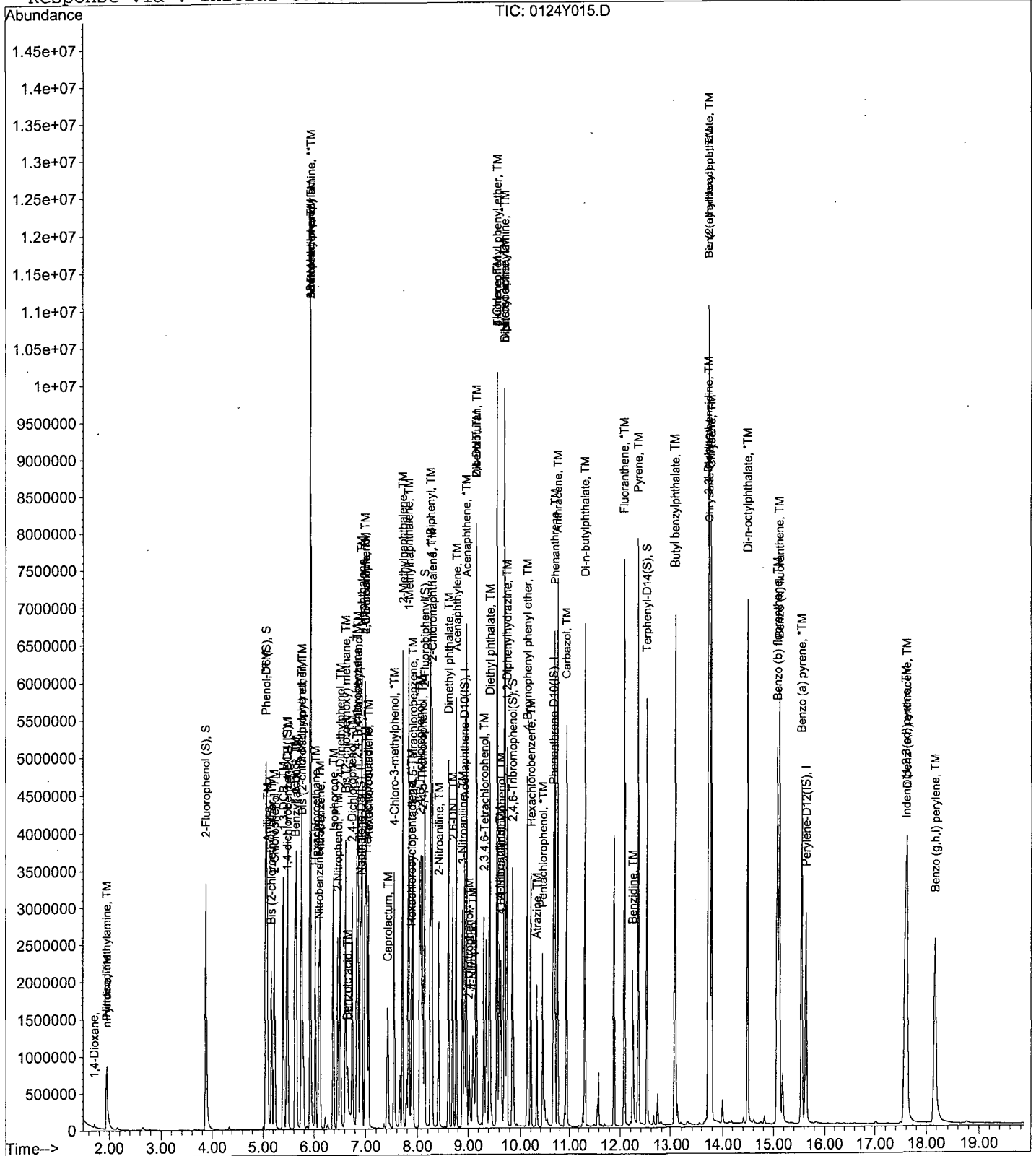
Data File : M:\YODA\DATA\Y190124\0124Y015.D  
Acq On : 25 Jan 19 7:20  
Sample : 50ug/mL 8270 01/24/19  
Misc :

Vial: 15  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 10:13 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	411492	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1847622	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1087788	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2043698	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1825170	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1822854	40.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
5) 2-Fluorophenol (S)	3.88	112	2388786	139.91173	ppb	0.00
Spiked Amount 200.000			Recovery =	69.956%		
6) Phenol-D6 (S)	5.06	99	3094929	137.28392	ppb	0.00
Spiked Amount 200.000			Recovery =	68.642%		
22) Nitrobenzene-D5 (S)	6.10	82	1385267	65.82130	ppb	0.00
Spiked Amount 100.000			Recovery =	65.821%		
46) 2-Fluorobiphenyl (S)	8.14	172	2691759	61.53111	ppb	0.00
Spiked Amount 100.000			Recovery =	61.531%		
64) 2,4,6-Tribromophenol (S)	9.86	330	566249	127.04869	ppb	0.00
Spiked Amount 200.000			Recovery =	63.525%		
82) Terphenyl-D14 (S)	12.51	244	2859499	61.98232	ppb	0.00
Spiked Amount 100.000			Recovery =	61.982%		
<b>Target Compounds</b>						
2) 1,4-Dioxane	1.71	58	15055	7.35395		Qvalue 98
3) n-Nitrosodimethylamine	1.94	42	234687	69.57953	ppb	92
4) Pyridine	1.96	79	559879	67.49718	ppb	99
7) Phenol	5.08	94	1903943	67.69059	ppb	90
8) Aniline	5.09	93	2005258	97.05679	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	859457	63.95748	ppb	96
10) 2-Chlorophenol	5.23	128	1328278	67.03092	ppb	95
11) 1,3-DCB	5.39	146	1398342	66.86645	ppb	99
12) 1,4-DCB	5.48	146	1428123	66.71691	ppb	99
13) Benzyl alcohol	5.62	108	844806	68.44766	ppb	99
14) 1,2-DCB	5.65	146	1327093	66.81074	ppb	97
15) 2-Methylphenol	5.75	107	1147188	69.20556	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1276374	60.79362	ppb	# 93
17) Acetophenone	5.92	105	1686876	65.70510	ppb	96
18) 3&4-Methylphenol	5.93	107	2667787	134.04591	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	955387	64.70552	ppb	97
20) Hexachloroethane	6.02	117	527414	66.49643	ppb	92
23) Nitrobenzene	6.12	77	1480669	65.69034	ppb	96
24) Isophorone	6.39	82	2591162	65.95824	ppb	97
25) 2-Nitrophenol	6.47	139	753885	70.14750	ppb	95
26) 2,4-Dimethylphenol	6.52	122	1197903	65.32117	ppb	99
27) Benzoic acid	6.67	105	1033459	86.56029	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1598772	65.35066	ppb	99
29) 2,4-Dichlorophenol	6.75	162	1084013	70.36616	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	1142665	66.06580	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1677901	68.69908	ppb	97
32) Naphthalene	6.92	128	3904346	65.86913	ppb	100
33) 4-Chloroaniline	7.00	127	1455527	64.54043	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1036115	67.19592	ppb	98
35) Hexachloropropene	7.02	213	735631	71.37657	ppb	99
36) Hexachlorobutadiene	7.05	225	598218	66.49856	ppb	99
37) Caprolactum	7.43	55	523076	73.96100	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0124Y021.D Y0125NC.M Tue Jan 29 08:16:45 2019

Data File : M:\YODA\DATA\Y190124\0124Y021.D  
 Acq On : 25 Jan 19 12:11  
 Sample : 60ug/mL 8270 01/24/19  
 Misc :

Vial: 21  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1202951	69.24052	ppb	95
39) 2-Methylnaphthalene	7.71	142	2558030	67.41383	ppb	99
40) 1-Methylnaphthalene	7.83	142	2522812	65.98369	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	465849	58.92991	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1099351	63.54491	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	747759	67.19329	ppb	98
45) 2,4,5-Trichlorophenol	8.10	196	803269	63.02165	ppb	94
47) 1,1'-Biphenyl	8.25	154	3182683	62.55468	ppb	99
48) 2-Chloronaphthalene	8.28	162	2416128	62.03380	ppb	99
49) 2-Nitroaniline	8.41	65	813392	63.67971	ppb	88
50) Dimethyl phthalate	8.60	163	2911438	64.28604	ppb	99
51) 2,6-DNT	8.69	165	674079	67.65007	ppb	89
52) Acenaphthylene	8.76	152	3906723	63.98517	ppb	100
53) 3-Nitroaniline	8.89	138	758104	66.12012	ppb	90
54) Acenaphthene	8.97	154	2490018	62.43796	ppb	100
55) 2,4-Dinitrophenol	9.02	184	374823	82.05906	ppb	89
56) 4-Nitrophenol	9.09	65	466498	66.71350	ppb	98
57) Dibenzofuran	9.16	168	3479456	62.68371	ppb	98
58) 2,4-DNT	9.16	165	881163	66.74748	ppb	93
59) 2,3,4,6-Tetrachlorophenol	9.31	232	607779	65.40593	ppb	96
60) Diethyl phthalate	9.43	149	2733586	63.51185	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.56	204	1352119	62.49603	ppb	90
62) Fluorene	9.57	166	2782910	62.35255	ppb	100
63) 4-Nitroaniline	9.62	138	729227	62.72259	ppb	94
66) 4,6-Dinitro-2-methylphenol	9.64	198	571889	76.48129	ppb	91
67) Diphenyl amine	9.71	169	4324107	125.43365	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	4324107	125.43365	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	2948425	59.57822	ppb	96
70) 4-Bromophenyl phenyl ether	10.13	248	751419	64.07488	ppb	96
71) Hexachlorobenzene	10.20	284	698037	62.77685	ppb	93
72) Atrazine	10.32	200	375225	31.55538	ppb	99
73) Pentachlorophenol	10.43	266	452076	70.41952	ppb	98
74) Phenanthrene	10.69	178	4126819	63.01664	ppb	100
75) Anthracene	10.75	178	4232567	62.94612	ppb	100
76) Carbazol	10.94	167	3854357	63.29312	ppb	98
77) Di-n-butylphthalate	11.32	149	4548380	63.48597	ppb	99
78) Fluoranthene	12.08	202	4467332	63.49679	ppb	98
80) Benzidine	12.24	184	1392654	66.15707	ppb	97
81) Pyrene	12.35	202	4582066	63.30843	ppb	100
83) Butyl benzylphthalate	13.08	149	2123881	66.71496	ppb	97
84) 3,3'-Dichlorobenzidine	13.71	252	1450726	67.29146	ppb	99
85) Benz (a) anthracene	13.74	228	4063341	64.69439	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2855356	64.56887	ppb	98
87) Chrysene	13.78	228	3930215	63.46061	ppb	100
88) Di-n-octylphthalate	14.49	149	5023122	67.13574	ppb	98
90) Benzo (b) fluoranthene	15.08	252	4110006	64.78398	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3831221	62.41409	ppb	98
92) Benzo (a) pyrene	15.56	252	3751562	64.72168	ppb	98
93) Indeno (1,2,3-cd) pyrene	17.58	276	3829234	65.10334	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	3476233	64.50384	ppb	98
95) Benzo (g,h,i) perylene	18.18	276	3368865	64.36887	ppb	99

Quantitation Report

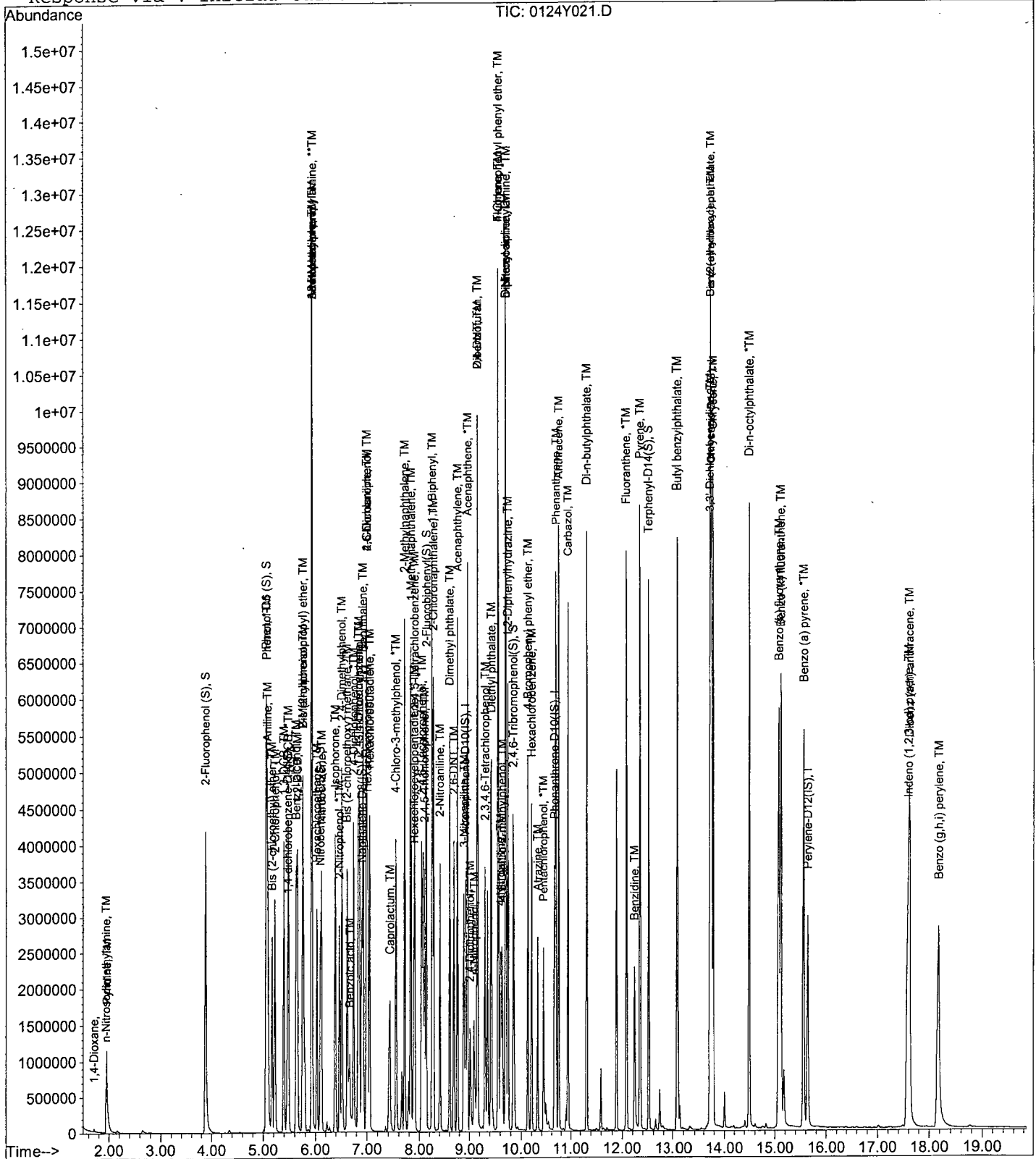
Data File : M:\YODA\DATA\Y190124\0124Y021.D  
Acq On : 25 Jan 19 12:11  
Sample : 60ug/mL 8270 01/24/19  
Misc :

Vial: 21  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 12:29 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y022.D Vial: 22  
 Acq On : 25 Jan 19 12:39 Operator: MA  
 Sample : 80ug/mL 8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Jan 25 13:02 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTI Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	390377	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1776812	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1059625	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	2046360	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1763849	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1771022	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.88	112	3088976	185.47310	ppb	0.00
Spiked Amount 200.000			Recovery =	92.737%		
6) Phenol-D6 (S)	5.06	99	3953802	179.89705	ppb	0.00
Spiked Amount 200.000			Recovery =	89.949%		
22) Nitrobenzene-D5 (S)	6.10	82	1804113	87.68532	ppb	0.00
Spiked Amount 100.000			Recovery =	87.685%		
46) 2-Fluorobiphenyl (S)	8.14	172	3420176	79.89967	ppb	0.00
Spiked Amount 100.000			Recovery =	79.900%		
64) 2,4,6-Tribromophenol (S)	9.86	330	727255	167.25732	ppb	0.00
Spiked Amount 200.000			Recovery =	83.629%		
82) Terphenyl-D14 (S)	12.52	244	3667120	82.00033	ppb	0.00
Spiked Amount 100.000			Recovery =	82.000%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.71	58	15511	7.51444		72
3) n-Nitrosodimethylamine	1.94	42	288229	86.04170	ppb	89
4) Pyridine	1.96	79	697679	84.73709	ppb	100
7) Phenol	5.08	94	2358274	85.23173	ppb	91
8) Aniline	5.10	93	2489180	119.40676	ppb	98
9) Bis (2-chloroethyl) ether	5.17	63	1076644	82.53804	ppb	95
10) 2-Chlorophenol	5.23	128	1672258	85.80938	ppb	97
11) 1,3-DCB	5.39	146	1778320	86.15822	ppb	98
12) 1,4-DCB	5.49	146	1787289	84.50692	ppb	98
13) Benzyl alcohol	5.63	108	1072292	88.46892	ppb	94
14) 1,2-DCB	5.65	146	1667744	85.09298	ppb	97
15) 2-Methylphenol	5.75	107	1433948	87.27826	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1590546	79.05994	ppb	# 86
17) Acetophenone	5.93	105	2108764	83.42297	ppb	97
18) 3&4-Methylphenol	5.93	107	3310187	168.84789	ppb	100
19) n-Nitrosodi-n-propylamine	5.93	70	1192858	82.57022	ppb	99
20) Hexachloroethane	6.02	117	671891	86.23765	ppb	90
23) Nitrobenzene	6.13	77	1859324	83.03849	ppb	97
24) Isophorone	6.39	82	3268065	83.85452	ppb	99
25) 2-Nitrophenol	6.48	139	941527	87.24439	ppb	94
26) 2,4-Dimethylphenol	6.52	122	1495864	82.27582	ppb	98
27) Benzoic acid	6.69	105	1172491	94.71906	ppb	98
28) Bis (2-chloroethoxy) metha	6.63	93	2006734	82.81745	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1363953	88.32544	ppb	97
30) 1,2,4-Trichlorobenzene	6.84	180	1449991	84.05610	ppb	97
31) 3,4-Dimethylphenol	6.86	107	2084631	85.46152	ppb	98
32) Napthalene	6.93	128	4875097	82.59448	ppb	100
33) 4-Chloroaniline	7.00	127	1725667	77.69143	ppb	97
34) 2,6-Dichlorophenol	7.00	162	1301355	84.49556	ppb	98
35) Hexachloropropene	7.02	213	924461	89.22651	ppb	99
36) Hexachlorobutadiene	7.05	225	757876	84.43582	ppb	98
37) Caprolactum	7.44	55	654459	93.87552	ppb	100

(#) = qualifier out of range (m) = manual integration



Data File : M:\YODA\DATA\Y190124\0124Y022.D  
 Acq On : 25 Jan 19 12:39  
 Sample : 80ug/mL 8270 01/24/19  
 Misc :

Vial: 22  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1513654	87.06098	ppb	100
39) 2-Methylnaphthalene	7.71	142	3146756	82.97836	ppb	99
40) 1-Methylnaphthalene	7.83	142	3133044	82.22878	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	631254	78.79714	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1335660	77.68918	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	929432	83.85905	ppb	97
45) 2,4,5-Trichlorophenol	8.10	196	997882	78.83150	ppb	97
47) 1,1'-Biphenyl	8.26	154	3955801	78.21989	ppb	98
48) 2-Chloronaphthalene	8.29	162	3015805	77.95661	ppb	98
49) 2-Nitroaniline	8.41	65	1018616	80.87427	ppb	92
50) Dimethyl phthalate	8.61	163	3609843	79.88493	ppb	99
51) 2,6-DNT	8.70	165	844260	84.43330	ppb	91
52) Acenaphthylene	8.76	152	4822141	79.16164	ppb	100
53) 3-Nitroaniline	8.89	138	928189	81.28531	ppb	94
54) Acenaphthene	8.97	154	3056253	77.17140	ppb	100
55) 2,4-Dinitrophenol	9.02	184	460548	96.14185	ppb	91
56) 4-Nitrophenol	9.10	65	601091	88.48440	ppb	95
57) Dibenzofuran	9.16	168	4265758	77.08443	ppb	97
58) 2,4-DNT	9.16	165	1090701	82.46328	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	767671	83.24367	ppb	95
60) Diethyl phthalate	9.43	149	3348639	78.15623	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.56	204	1662617	77.15444	ppb	93
62) Fluorene	9.57	166	3410866	76.86824	ppb	100
63) 4-Nitroaniline	9.62	138	896039	77.75631	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	741553	95.23484	ppb	99
67) Diphenyl amine	9.71	169	5296492	150.79364	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	5296492	150.79364	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	4242116	84.81525	ppb	94
70) 4-Bromophenyl phenyl ether	10.14	248	926151	77.57348	ppb	88
71) Hexachlorobenzene	10.20	284	875905	77.71894	ppb	91
72) Atrazine	10.32	200	471083	38.93444	ppb	98
73) Pentachlorophenol	10.44	266	574673	88.00062	ppb	97
74) Phenanthrene	10.69	178	5093537	76.13277	ppb	100
75) Anthracene	10.75	178	5251660	76.54085	ppb	100
76) Carbazol	10.94	167	4781015	76.94485	ppb	98
77) Di-n-butylphthalate	11.32	149	5725493	78.34953	ppb	99
78) Fluoranthene	12.09	202	5499034	76.51468	ppb	97
80) Benzidine	12.24	184	1704671	73.49542	ppb	97
81) Pyrene	12.35	202	5693688	79.55389	ppb	99
83) Butyl benzylphthalate	13.08	149	2651101	83.69807	ppb	94
84) 3,3'-Dichlorobenzidine	13.71	252	1750394	81.51398	ppb	98
85) Benz (a) anthracene	13.75	228	4939935	79.29669	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	3478919	78.91435	ppb	98
87) Chrysene	13.79	228	4874253	79.65689	ppb	99
88) Di-n-octylphthalate	14.49	149	6257268	83.98293	ppb	97
90) Benzo (b) fluoranthene	15.07	252	4954951	78.33436	ppb	99
91) Benzo (k) fluoranthene	15.12	252	4952396	81.94906	ppb	99
92) Benzo (a) pyrene	15.56	252	4659102	81.23823	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.59	276	4779081	81.77579	ppb	99
94) Dibenz (a,h) anthracene	17.62	278	4328036	81.09588	ppb	99
95) Benzo (g,h,i) perylene	18.18	276	4252951	81.97289	ppb	99

Quantitation Report

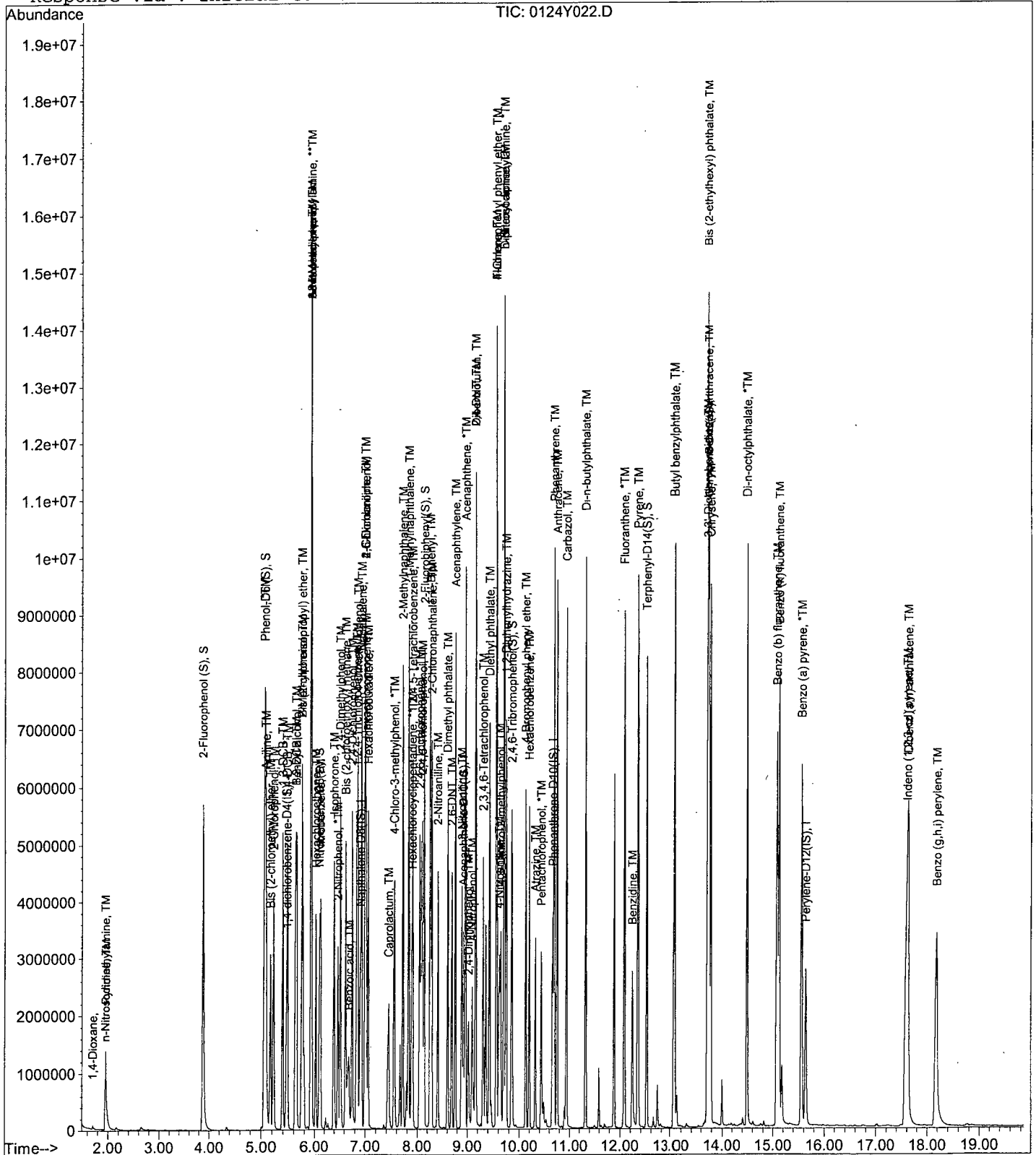
Data File : M:\YODA\DATA\Y190124\0124Y022.D  
Acq On : 25 Jan 19 12:39  
Sample : 80ug/mL 8270 01/24/19  
Misc :

Vial: 22  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:02 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	369028	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	1684122	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.93	164	958383	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.67	188	1833191	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1593355	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1574038	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.88	112	3517772	218.05743	ppb	0.00
Spiked Amount 200.000			Recovery = 109.029%			
6) Phenol-D6 (S)	5.07	99	4506620	212.13191	ppb	0.02
Spiked Amount 200.000			Recovery = 106.066%			
22) Nitrobenzene-D5 (S)	6.10	82	2075102	104.76853	ppb	0.00
Spiked Amount 100.000			Recovery = 104.769%			
46) 2-Fluorobiphenyl (S)	8.14	172	3864993	99.49368	ppb	0.00
Spiked Amount 100.000			Recovery = 99.494%			
64) 2,4,6-Tribromophenol (S)	9.86	330	843089	213.66568	ppb	0.00
Spiked Amount 200.000			Recovery = 106.833%			
82) Terphenyl-D14 (S)	12.52	244	4235562	104.75775	ppb	0.00
Spiked Amount 100.000			Recovery = 104.758%			

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.71	58	21223	10.61042		85
3) n-Nitrosodimethylamine	1.95	42	378062	115.37176	ppb	78
4) Pyridine	1.96	79	911139	113.60957	ppb	98
7) Phenol	5.09	94	2940939	109.44414	ppb	# 75
8) Aniline	5.10	93	3113942	135.46800	ppb	96
9) Bis (2-chloroethyl) ether	5.17	63	1375041	109.91033	ppb	98
10) 2-Chlorophenol	5.23	128	2131761	112.54263	ppb	98
11) 1,3-DCB	5.39	146	2244057	111.37429	ppb	98
12) 1,4-DCB	5.49	146	2268718	110.04841	ppb	98
13) Benzyl alcohol	5.63	108	1342620	113.91313	ppb	99
14) 1,2-DCB	5.65	146	2103625	110.13676	ppb	98
15) 2-Methylphenol	5.75	107	1832669	113.94939	ppb	99
16) Bis (2-chloroisopropyl) et	5.76	45	1993329	104.61607	ppb	# 76
17) Acetophenone	5.93	105	2632203	106.93049	ppb	90
18) 3&4-Methylphenol	5.94	107	4146604	217.27081	ppb	97
19) n-Nitrosodi-n-propylamine	5.93	70	1501508	107.49302	ppb	98
20) Hexachloroethane	6.02	117	848109	112.09751	ppb	89
23) Nitrobenzene	6.13	77	2342621	107.56140	ppb	100
24) Isophorone	6.40	82	4143509	109.37870	ppb	97
25) 2-Nitrophenol	6.48	139	1197455	113.03844	ppb	96
26) 2,4-Dimethylphenol	6.53	122	1978968	112.13683	ppb	99
27) Benzoic acid	6.70	105	1542045	125.57459	ppb	99
28) Bis (2-chloroethoxy) metha	6.63	93	2522989	107.22198	ppb	100
29) 2,4-Dichlorophenol	6.75	162	1711713	112.94899	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	1811029	107.19704	ppb	98
31) 3,4-Dimethylphenol	6.86	107	2645726	110.94561	ppb	100
32) Napthalene	6.93	128	6069171	105.32980	ppb	100
33) 4-Chloroaniline	7.00	127	2063322	96.10560	ppb	99
34) 2,6-Dichlorophenol	7.01	162	1622155	107.64178	ppb	99
35) Hexachloropropene	7.02	213	1167286	114.53420	ppb	100
36) Hexachlorobutadiene	7.05	225	958401	109.07716	ppb	98
37) Caprolactum	7.45	55	828168	123.09343	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y023.D  
 Acq On : 25 Jan 19 13:07  
 Sample : 100ug/mL 8270 01/24/19  
 Misc :

Vial: 23  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Fri Jan 25 10:13:14 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	1911489	112.23315	ppb	98
39) 2-Methylnaphthalene	7.72	142	3945297	106.48229	ppb	99
40) 1-Methylnaphthalene	7.83	142	3888604	104.67399	ppb	100
42) Hexachlorocyclopentadiene	7.89	237	861901	114.64271	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1694943	107.65840	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	1198737	117.92398	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	1266846	108.97004	ppb	98
47) 1,1'-Biphenyl	8.26	154	4909140	105.71606	ppb	98
48) 2-Chloronaphthalene	8.29	162	3763364	106.06503	ppb	99
49) 2-Nitroaniline	8.41	65	1287497	111.93280	ppb	96
50) Dimethyl phthalate	8.61	163	4502449	108.28243	ppb	100
51) 2,6-DNT	8.70	165	1067927	115.60401	ppb	100
52) Acenaphthylene	8.76	152	6000220	107.15505	ppb	100
53) 3-Nitroaniline	8.89	138	1161704	110.46197	ppb	96
54) Acenaphthene	8.97	154	3871991	106.71414	ppb	100
55) 2,4-Dinitrophenol	9.02	184	628043	130.63629	ppb	97
56) 4-Nitrophenol	9.10	65	789110	129.35218	ppb	99
57) Dibenzofuran	9.17	168	5237511	103.01684	ppb	99
58) 2,4-DNT	9.17	165	1367064	111.91777	ppb	85
59) 2,3,4,6-Tetrachlorophenol	9.31	232	962675	113.66677	ppb	94
60) Diethyl phthalate	9.43	149	4275410	108.65157	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.56	204	2046659	103.16033	ppb	94
62) Fluorene	9.57	166	4183100	102.50265	ppb	100
63) 4-Nitroaniline	9.63	138	1123718	105.55637	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.65	198	938503	131.25620	ppb	94
67) Diphenyl amine	9.72	169	6563877	207.51246	ppb	99
68) n-Nitrosodiphenylamine	9.72	169	6563877	207.51246	ppb	99
69) 1,2-Diphenylhydrazine	9.75	77	5281854	118.32410	ppb	91
70) 4-Bromophenyl phenyl ether	10.14	248	1162593	108.52969	ppb	93
71) Hexachlorobenzene	10.20	284	1105478	109.26263	ppb	# 85
72) Atrazine	10.33	200	594812	54.68055	ppb	99
73) Pentachlorophenol	10.44	266	752725	128.44553	ppb	98
74) Phenanthrene	10.69	178	6357117	105.02352	ppb	100
75) Anthracene	10.76	178	6513717	105.00530	ppb	99
76) Carbazol	10.94	167	6031129	107.43352	ppb	97
77) Di-n-butylphthalate	11.32	149	7069564	106.85870	ppb	98
78) Fluoranthene	12.09	202	6831981	105.11853	ppb	99
80) Benzidine	12.24	184	2116848	105.65380	ppb	98
81) Pyrene	12.36	202	7097992	108.08786	ppb	100
83) Butyl benzylphthalate	13.08	149	3286296	112.53736	ppb	91
84) 3,3'-Dichlorobenzidine	13.71	252	2161447	108.82542	ppb	# 97
85) Benz (a) anthracene	13.75	228	6187037	108.12217	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	4303302	105.70566	ppb	97
87) Chrysene	13.79	228	6136199	109.64013	ppb	99
88) Di-n-octylphthalate	14.49	149	7872322	114.69387	ppb	96
90) Benzo (b) fluoranthene	15.08	252	6819800	120.21812	ppb	99
91) Benzo (k) fluoranthene	15.12	252	5648056	102.19151	ppb	99
92) Benzo (a) pyrene	15.57	252	5887626	113.66648	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.59	276	6044154	114.14032	ppb	99
94) Dibenz (a,h) anthracene	17.63	278	5506458	114.28713	ppb	100
95) Benzo (g,h,i) perylene	18.19	276	5357774	114.13819	ppb	100

(#) = qualifier out of range (m) = manual integration  
 0124Y023.D Y0125NC.M Tue Jan 29 08:16:54 2019

Quantitation Report

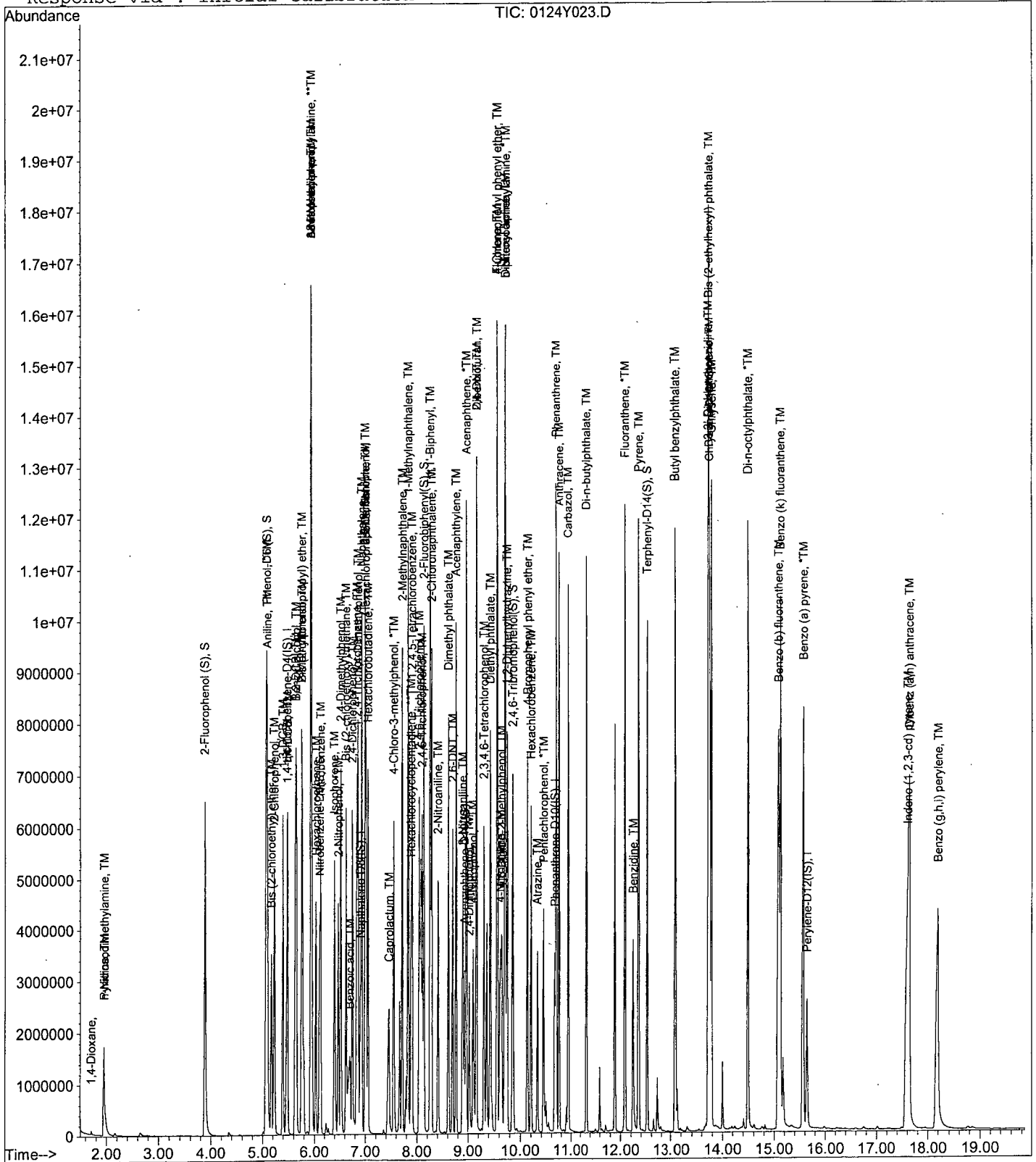
Data File : M:\YODA\DATA\Y190124\0124Y023.D  
Acq On : 25 Jan 19 13:07  
Sample : 100ug/mL 8270 01/24/19  
Misc :

Vial: 23  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 25 13:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/28/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 01/25/19

Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
1		1,4-Dioxane	0.2237	0.2222	0.68	
2	TM	n-Nitrosodimethylamine	0.3626	0.3593	0.90	TM
3	TM	Pyridine	0.8923	0.9235	3.5	TM
4	*TM	Phenol	3.026	2.969	1.9	*TM
5	TM	Aniline	3.167	3.000	5.3	TM
6	TM	Bis (2-chloroethyl) ether	1.394	1.327	4.8	TM
7	TM	2-Chlorophenol	2.135	2.080	2.6	TM
8	TM	1,3-DCB	2.272	2.228	1.9	TM
9	*TM	1,4-DCB	2.321	2.241	3.5	*TM
10	TM	Benzyl alcohol	1.331	1.255	5.7	TM
11	TM	1,2-DCB	2.150	2.089	2.9	TM
12	TM	2-Methylphenol	1.822	1.746	4.2	TM
13	TM	Bis (2-chloroisopropyl) ether	2.093	1.968	6.0	TM
14	TM	Acetophenone	2.775	2.579	7.1	TM
15	TM	3&4-Methylphenol	2.152	2.049	4.8	TM
16	**TM	n-Nitrosodi-n-propylamine	1.563	1.452	7.1	**TM
17	TM	Hexachloroethane	0.8480	0.8171	3.6	TM
18	TM	Nitrobenzene	0.5356	0.5518	3.0	TM
19	TM	Isophorone	0.9343	0.9637	3.1	TM
20	*TM	2-Nitrophenol	0.2637	0.2706	2.6	*TM
21	TM	2,4-Dimethylphenol	0.4363	0.4511	3.4	TM
22	TM	Benzoic acid	0.3414	0.3692	8.2	TM
23	TM	Bis (2-chloroethoxy) methane	0.5794	0.5715	1.4	TM
24	*TM	2,4-Dichlorophenol	0.3755	0.3920	4.4	*TM
25	TM	1,2,4-Trichlorobenzene	0.4174	0.4207	0.78	TM
26	TM	3,4-Dimethylphenol	0.5899	0.6009	1.9	TM
27	TM	Naphthalene	1.420	1.398	1.5	TM
28	TM	4-Chloroaniline	0.5252	0.5196	1.1	TM
29	TM	2,6-Dichlorophenol	0.3718	0.3779	1.6	TM
30	TM	Hexachloropropene	0.2546	0.2632	3.4	TM
31	*TM	Hexachlorobutadiene	0.2175	0.2221	2.1	*TM
32	TM	Caprolactum	0.1890	0.1906	0.85	TM
33	*TM	4-Chloro-3-methylphenol	0.4231	0.4348	2.8	*TM
34	TM	2-Methylnaphthalene	0.9154	0.8857	3.2	TM
35	TM	1-Methylnaphthalene	0.9149	0.9061	0.96	TM
36	**TML	Hexachlorocyclopentadiene	0.2131	0.3252	53	**TML 13
37	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.7344	9.3	TM
38	*TM	2,4,6-Trichlorophenol	0.4386	0.5022	15	*TM
39	TM	2,4,5-Trichlorophenol	0.4953	0.5390	8.8	TM
40	TM	1,1'-Biphenyl	1.985	2.208	11	TM

Average

5.2

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	2-Chloronaphthalene	1.516	1.702	12	TM
42	TM	2-Nitroaniline	0.4929	0.5434	10	TM
43	TM	Dimethyl phthalate	1.790	1.944	8.6	TM
44	TM	2,6-DNT	0.4015	0.4696	17	TM
45	TM	Acenaphthylene	2.405	2.664	11	TM
46	TM	3-Nitroaniline	0.4546	0.4922	8.3	TM
47	*TM	Acenaphthene	1.558	1.693	8.7	*TM
48	**TML	2,4-Dinitrophenol	0.1911	0.2391	25	**TML 10
49	**TM	4-Nitrophenol	0.2763	0.2845	3.0	**TM
50	TM	Dibenzofuran	2.183	2.306	5.6	TM
51	TM	2,4-DNT	0.5295	0.6234	18	TM
52	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.4330	19	TM
53	TM	Diethyl phthalate	1.696	1.855	9.4	TM
54	TM	4-Chlorophenyl phenyl ether	0.8517	0.9262	8.7	TM
55	TM	Fluorene	1.750	1.915	9.4	TM
56	TM	4-Nitroaniline	0.4603	0.5193	13	TM
57	TM	4,6-Dinitro-2-methylphenol	0.1787	0.2120	19	TM
58	TM	Diphenyl amine	0.7057	0.7914	12	TM
59	*TM	n-Nitrosodiphenylamine	0.7057	0.7914	12	*TM
60	TM	1,2-Diphenylhydrazine	0.9947	1.099	10	TM
61	TM	4-Bromophenyl phenyl ether	0.2390	0.2673	12	TM
62	TM	Hexachlorobenzene	0.2259	0.2560	13	TM
63	TM	Atrazine	0.2421	0.2663	10.0	TM
64	*TM	Pentachlorophenol	0.1414	0.1559	10	*TM
65	TM	Phenanthrene	1.352	1.515	12	TM
66	TM	Anthracene	1.385	1.525	10	TM
67	TM	Carbazol	1.258	1.450	15	TM
68	TM	Di-n-butylphthalate	1.485	1.684	13	TM
69	*TM	Fluoranthene	1.452	1.629	12	*TM
70	TM	Benzidine	0.4947	0.5317	7.5	TM
71	TM	Pyrene	1.698	1.882	11	TM
72	TM	Butyl benzylphthalate	0.7611	0.8756	15	TM
73	TM	3,3'-Dichlorobenzidine	0.5206	0.6069	17	TM
74	TM	Benz (a) anthracene	1.481	1.633	10	TM
75	TM	Bis (2-ethylhexyl) phthalate	1.059	1.175	11	TM
76	TM	Chrysene	1.448	1.604	11	TM
77	*TM	Di-n-octylphthalate	1.797	2.065	15	*TM
78	TM	Benzo (b) fluoranthene	1.501	1.609	7.2	TM
79	TM	Benzo (k) fluoranthene	1.443	1.462	1.3	TM
80	*TM	Benzo (a) pyrene	1.359	1.566	15	*TM

Average

11.7

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 01/28/19  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y034.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Indeno (1,2,3-cd) pyrene	1.400	1.669	19	TM
82	TM	Dibenz (a,h) anthracene	1.266	1.452	15	TM
83	TM	Benzo (g,h,i) perylene	1.240	1.331	7.4	TM
84						
85						
86						
87						
88						
89						
90						
91						
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119						
120		Average			13.8	



Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	458368	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1938809	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1014849	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1912266	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1708227	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1674833	40.00000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	0.00	112	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
6) Phenol-D6 (S)	0.00	99	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
22) Nitrobenzene-D5 (S)	6.03	82	108224	4.68761	ppb	-0.06
Spiked Amount 100.000			Recovery =	4.688%		
46) 2-Fluorobiphenyl (S)	8.13	172	213	0.00518	ppb	0.00
Spiked Amount 100.000			Recovery =	0.005%		
64) 2,4,6-Tribromophenol (S)	0.00	330	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
82) Terphenyl-D14 (S)	12.52	244	770	0.01767	ppb	0.00
Spiked Amount 100.000			Recovery =	0.018%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	1.74	58	12729	4.96599		86
3) n-Nitrosodimethylamine	1.96	42	205883	49.54778	ppb	87
4) Pyridine	1.98	79	529141	51.74874	ppb	96
7) Phenol	5.07	94	1701203	49.06389	ppb	94
8) Aniline	5.09	93	1718990	47.36392	ppb	93
9) Bis (2-chloroethyl) ether	5.17	63	760366	47.60321	ppb	91
10) 2-Chlorophenol	5.23	128	1191637	48.69709	ppb	96
11) 1,3-DCB	5.40	146	1276386	49.03029	ppb	99
12) 1,4-DCB	5.49	146	1283777	48.26248	ppb	97
13) Benzyl alcohol	5.63	108	718943	47.15114	ppb	97
14) 1,2-DCB	5.66	146	1196773	48.56573	ppb	97
15) 2-Methylphenol	5.75	107	1000280	47.91957	ppb	99
16) Bis (2-chloroisopropyl) et	5.77	45	1127555	47.01882	ppb	100
17) Acetophenone	5.92	105	1477412	46.45588	ppb	99
18) 3&4-Methylphenol	5.92	107	2347562	95.21848	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	832033	46.46922	ppb	99
20) Hexachloroethane	6.03	117	468170	48.18007	ppb	95
23) Nitrobenzene	6.12	77	1337322	51.51079	ppb	100
24) Isophorone	6.39	82	2335484	51.57041	ppb	100
25) 2-Nitrophenol	6.47	139	655816	51.30629	ppb	99
26) 2,4-Dimethylphenol	6.52	122	1093253	51.69152	ppb	97
27) Benzoic acid	6.66	105	894833	54.07578	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1384922	49.31027	ppb	100
29) 2,4-Dichlorophenol	6.74	162	949905	52.19556	ppb	95
30) 1,2,4-Trichlorobenzene	6.83	180	1019586	50.39201	ppb	100
31) 3,4-Dimethylphenol	6.85	107	1456405	50.93263	ppb	100
32) Naphthalene	6.93	128	3388497	49.24639	ppb	100
33) 4-Chloroaniline	6.99	127	1259364	49.47066	ppb	99
34) 2,6-Dichlorophenol	7.00	162	915959	50.82211	ppb	99
35) Hexachloropropene	7.02	213	637825	51.69508	ppb	99
36) Hexachlorobutadiene	7.05	225	538197	51.06295	ppb	97
37) Caprolactum	7.42	55	462035	50.42547	ppb	98

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	Qion	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	1053821	51.38731	ppb	99
39) 2-Methylnaphthalene	7.72	142	2146475	48.37837	ppb	99
40) 1-Methylnaphthalene	7.83	142	2195869	49.51781	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	412511	56.53516	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	931572	54.64934	ppb	97
44) 2,4,6-Trichlorophenol	8.04	196	637106	57.25617	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	683790	54.41270	ppb	97
47) 1,1'-Biphenyl	8.25	154	2800863	55.61888	ppb	99
48) 2-Chloronaphthalene	8.28	162	2159211	56.12559	ppb	98
49) 2-Nitroaniline	8.40	65	689275	55.11518	ppb	97
50) Dimethyl phthalate	8.61	163	2465503	54.27961	ppb	100
51) 2,6-DNT	8.69	165	595747	58.49045	ppb	97
52) Acenaphthylene	8.77	152	3379049	55.37197	ppb	99
53) 3-Nitroaniline	8.89	138	624378	54.13436	ppb	95
54) Acenaphthene	8.96	154	2148281	54.35989	ppb	99
55) 2,4-Dinitrophenol	9.02	184	303263	55.09102	ppb	93
56) 4-Nitrophenol	9.09	65	360931	51.49458	ppb	96
57) Dibenzofuran	9.16	168	2924995	52.81029	ppb	100
58) 2,4-DNT	9.16	165	790761	58.86232	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	549310	59.39518	ppb	96
60) Diethyl phthalate	9.42	149	2353679	54.68973	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1174961	54.37478	ppb	96
62) Fluorene	9.56	166	2428778	54.70594	ppb	100
63) 4-Nitroaniline	9.61	138	658803	56.41060	ppb	93
66) 4,6-Dinitro-2-methylphenol	9.64	198	506716	59.32023	ppb	96
67) Diphenyl amine	9.70	169	3783179	112.13803	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3783179	112.13803	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2626496	55.23523	ppb	88
70) 4-Bromophenyl phenyl ether	10.13	248	638862	55.91557	ppb	97
71) Hexachlorobenzene	10.20	284	611901	56.65132	ppb	# 82
72) Atrazine	10.32	200	318295	27.49651	ppb	97
73) Pentachlorophenol	10.44	266	372770	55.14520	ppb	98
74) Phenanthrene	10.69	178	3621712	56.03684	ppb	99
75) Anthracene	10.75	178	3644386	55.05050	ppb	100
76) Carbazol	10.94	167	3465221	57.59909	ppb	97
77) Di-n-butylphthalate	11.33	149	4025120	56.70186	ppb	100
78) Fluoranthene	12.08	202	3892862	56.09809	ppb	100
80) Benzidine	12.24	184	1135359	53.74461	ppb	99
81) Pyrene	12.35	202	4018707	55.42232	ppb	100
83) Butyl benzylphthalate	13.08	149	1869616	57.51923	ppb	95
84) 3,3'-Dichlorobenzidine	13.71	252	1295998	58.28828	ppb	98
85) Benz (a) anthracene	13.74	228	3486147	55.12946	ppb	99
86) Bis (2-ethylhexyl) phthala	13.72	149	2508599	55.45746	ppb	# 94
87) Chrysene	13.79	228	3424994	55.38630	ppb	99
88) Di-n-octylphthalate	14.48	149	4408873	57.43934	ppb	# 94
90) Benzo (b) fluoranthene	15.08	252	3369057m	53.58981	ppb	99
91) Benzo (k) fluoranthene	15.12	252	3061298	50.66483	ppb	100
92) Benzo (a) pyrene	15.55	252	3279011	57.62317	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.58	276	3494580	59.61887	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	3040489	57.37576	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2787424	53.67772	ppb	99

(#) = qualifier out of range (m) = manual integration

0124Y034.D Y0125NC.M

Tue Jan 29 08:17:01 2019

Quantitation Report

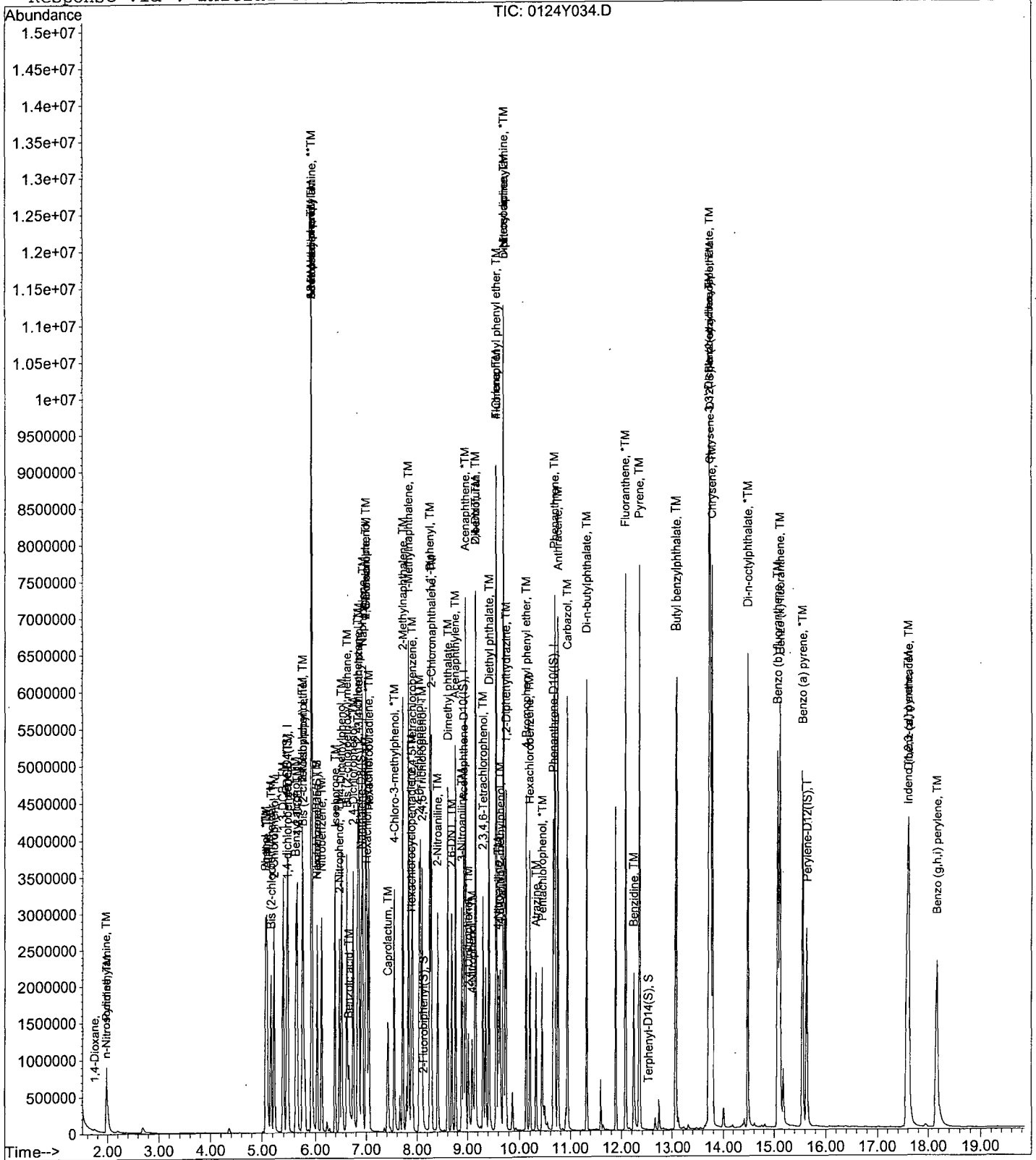
Data File : M:\YODA\DATA\Y190124\0124Y034.D  
Acq On : 28 Jan 19 14:11  
Sample : SS-8270 01/24/19  
Misc :

Vial: 34  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 28 15:00 2019

Quant Results File: Y0125NC.RES

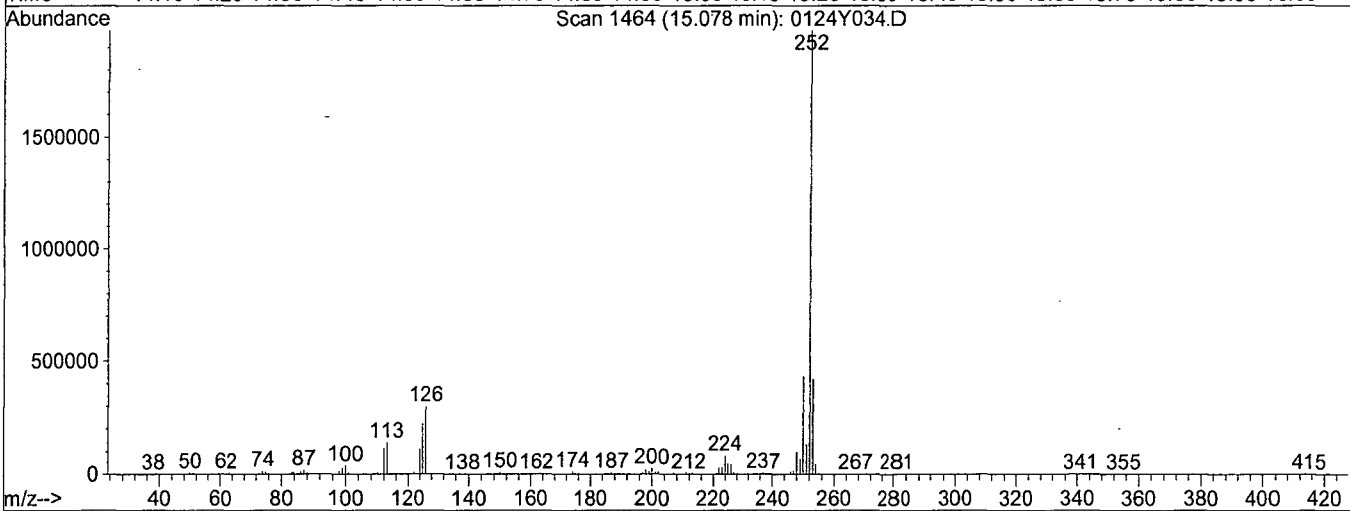
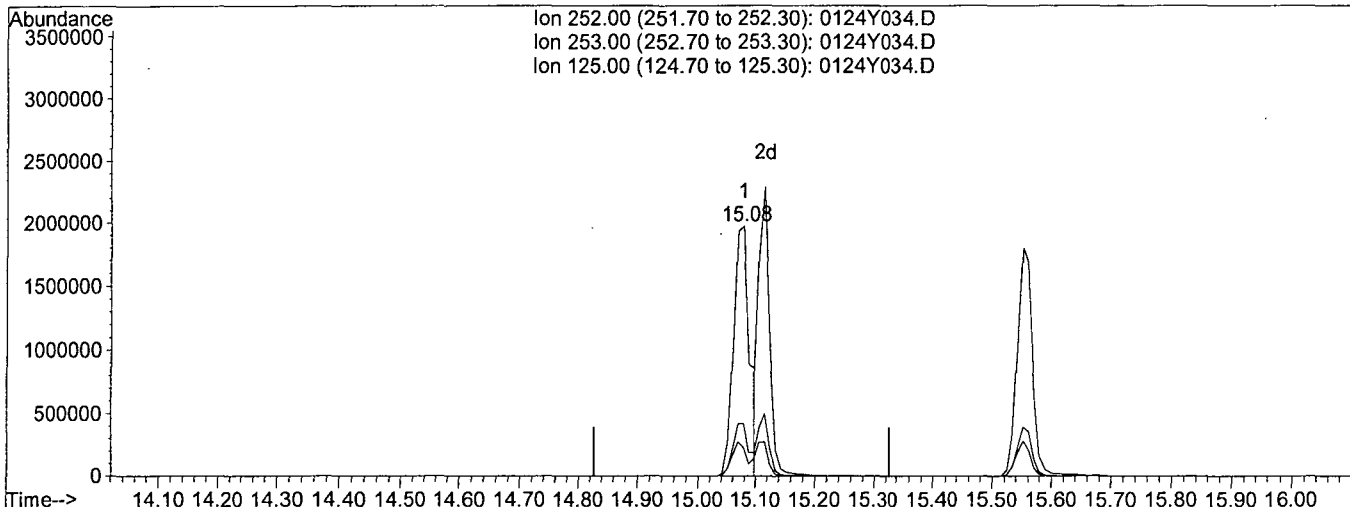
Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D Vial: 34  
 Acq On : 28 Jan 19 14:11 Operator: MA  
 Sample : SS-8270 01/24/19 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 28 15:00 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 61.5896ppb

response 3871985

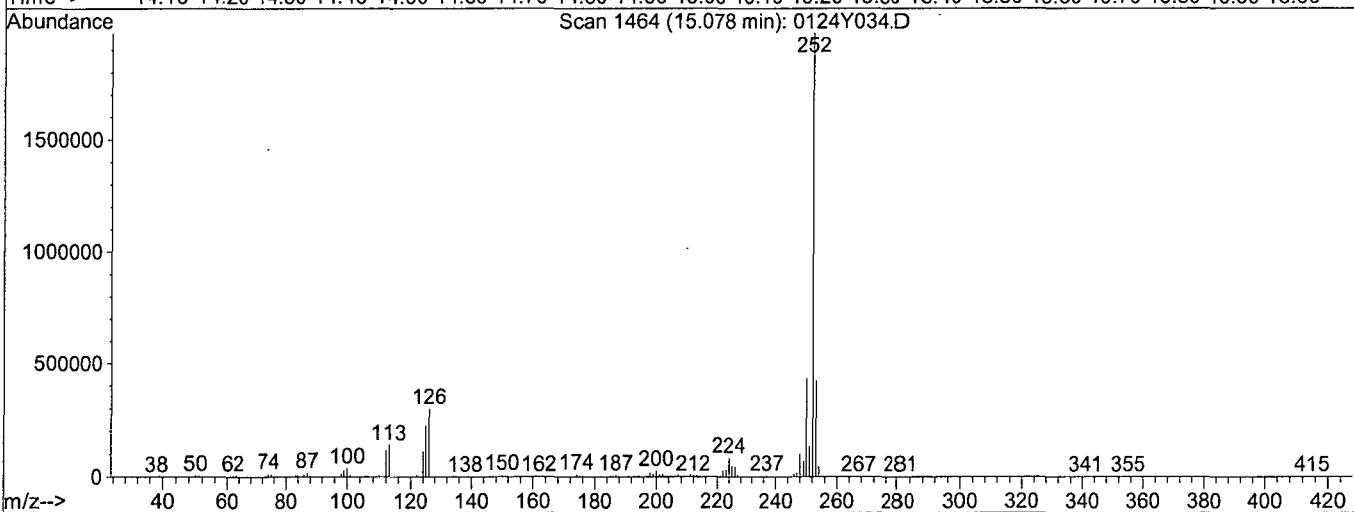
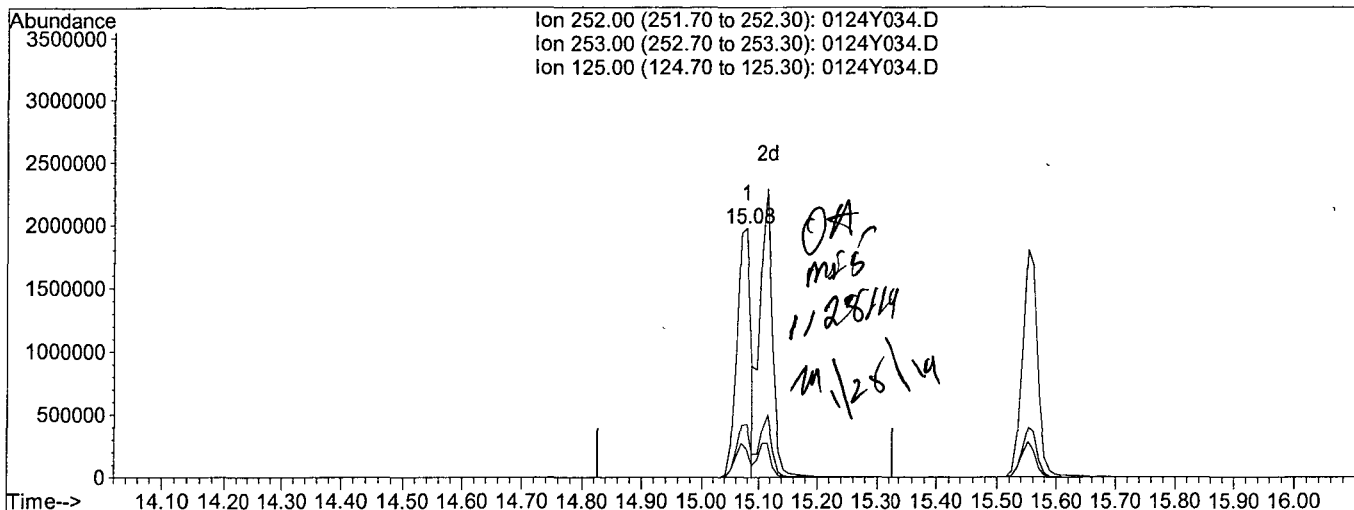
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y034.D  
 Acq On : 28 Jan 19 14:11  
 Sample : SS-8270 01/24/19  
 Misc :  
 Quant Time: Jan 28 15:00 2019

Vial: 34  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Multiple Level Calibration



TIC: 0124Y034.D

(90) Benzo (b) fluoranthene (TM)

15.08min 53.5898ppb m

response 3369057

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.35
125.00	12.10	11.35
0.00	0.00	0.00

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 13:38  
Instrument: Yoda  
Initial Cal. Date: 01/25/19  
Data File: 0124Y095.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2		1,4-Dioxane	0.2237	0.2209	1.2	
3	TM	n-Nitrosodimethylamine	0.3626	0.3720	2.6	TM
4	TM	Pyridine	0.8923	1.031	16	TM
5	S	2-Fluorophenol (S)	1.784	1.792	0.46	S
6	S	Phenol-D6 (S)	2.349	2.313	1.5	S
7	*TM	Phenol	3.026	2.780	8.1	*TM
8	TM	Aniline	3.167	2.699	15	TM
9	TM	Bis (2-chloroethyl) ether	1.394	1.293	7.2	TM
10	TM	2-Chlorophenol	2.135	1.963	8.1	TM
11	TM	1,3-DCB	2.272	2.084	8.3	TM
12	*TM	1,4-DCB	2.321	2.114	8.9	*TM
13	TM	Benzyl alcohol	1.331	1.178	11	TM
14	TM	1,2-DCB	2.150	1.980	7.9	TM
15	TM	2-Methylphenol	1.822	1.683	7.6	TM
16	TM	Bis (2-chloroisopropyl) ether	2.093	1.951	6.8	TM
17	TM	Acetophenone	2.775	2.567	7.5	TM
18	TM	3&4-Methylphenol	2.152	2.012	6.5	TM
19	**TM	n-Nitrosodi-n-propylamine	1.563	1.434	8.2	**TM
20	TM	Hexachloroethane	0.8480	0.7802	8.0	TM
21	I	Napthalene-D8(IS)	ISTD			I
22	S	Nitrobenzene-D5(S)	0.4763	0.4906	3.0	S
23	TM	Nitrobenzene	0.5356	0.5160	3.7	TM
24	TM	Isophorone	0.9343	0.9110	2.5	TM
25	*TM	2-Nitrophenol	0.2637	0.2601	1.4	*TM
26	TM	2,4-Dimethylphenol	0.4363	0.4057	7.0	TM
27	TM	Benzoic acid	0.3414	0.3049	11	TM
28	TM	Bis (2-chloroethoxy) methane	0.5794	0.5580	3.7	TM
29	*TM	2,4-Dichlorophenol	0.3755	0.3778	0.62	*TM
30	TM	1,2,4-Trichlorobenzene	0.4174	0.4026	3.5	TM
31	TM	3,4-Dimethylphenol	0.5899	0.5719	3.1	TM
32	TM	Napthalene	1.420	1.370	3.5	TM
33	TM	4-Chloroaniline	0.5252	0.4916	6.4	TM
34	TM	2,6-Dichlorophenol	0.3718	0.3683	0.94	TM
35	TM	Hexachloropropene	0.2546	0.2552	0.24	TM
36	*TM	Hexachlorobutadiene	0.2175	0.2086	4.1	*TM
37	TM	Caprolactum	0.1890	0.1847	2.3	TM
38	*TM	4-Chloro-3-methylphenol	0.4231	0.4128	2.4	*TM
39	TM	2-Methylnapthalene	0.9154	0.8858	3.2	TM
40	TM	1-Methylnapthalene	0.9149	0.8771	4.1	TM

Average

5.5

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 13:38  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y095.D

		Compound	MEAN	CCRF	%D		%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TML	Hexachlorocyclopentadiene	0.2131	0.2830	33	**TML	0.07
43	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6704	0.22	TM	
44	*TM	2,4,6-Trichlorophenol	0.4386	0.4570	4.2	*TM	
45	TM	2,4,5-Trichlorophenol	0.4953	0.4948	0.10	TM	
46	S	2-Fluorobiphenyl(S)	1.620	1.705	5.2	S	
47	TM	1,1'-Biphenyl	1.985	1.994	0.47	TM	
48	TM	2-Chloronaphthalene	1.516	1.509	0.49	TM	
49	TM	2-Nitroaniline	0.4929	0.5029	2.0	TM	
50	TM	Dimethyl phthalate	1.790	1.792	0.12	TM	
51	TM	2,6-DNT	0.4015	0.4109	2.3	TM	
52	TM	Acenaphthylene	2.405	2.407	0.07	TM	
53	TM	3-Nitroaniline	0.4546	0.4664	2.6	TM	
54	*TM	Acenaphthene	1.558	1.551	0.44	*TM	
55	**TML	2,4-Dinitrophenol	0.1911	0.2258	18	**TML	4.6
56	**TM	4-Nitrophenol	0.2763	0.1942	30	**TM	
57	TM	Dibenzofuran	2.183	2.158	1.1	TM	
58	TM	2,4-DNT	0.5295	0.5533	4.5	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3660	0.42	TM	
60	TM	Diethyl phthalate	1.696	1.695	0.06	TM	
61	TM	4-Chlorophenyl phenyl ether	0.8517	0.8508	0.11	TM	
62	TM	Fluorene	1.750	1.760	0.58	TM	
63	TM	4-Nitroaniline	0.4603	0.4705	2.2	TM	
64	S	2,4,6-Tribromophenol(S)	0.1657	0.1803	8.8	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1877	5.1	TM	
67	TM	Diphenyl amine	0.7057	0.7091	0.49	TM	
68	*TM	n-Nitrosodiphenylamine	0.7057	0.7091	0.49	*TM	
69	TM	1,2-Diphenylhydrazine	0.9947	0.9454	5.0	TM	
70	TM	4-Bromophenyl phenyl ether	0.2390	0.2425	1.5	TM	
71	TM	Hexachlorobenzene	0.2259	0.2297	1.7	TM	
72	TM	Atrazine	0.2421	0.2358	2.6	TM	
73	*TM	Pentachlorophenol	0.1414	0.1339	5.3	*TM	
74	TM	Phenanthrene	1.352	1.343	0.68	TM	
75	TM	Anthracene	1.385	1.390	0.38	TM	
76	TM	Carbazol	1.258	1.278	1.6	TM	
77	TM	Di-n-butylphthalate	1.485	1.515	2.0	TM	
78	*TM	Fluoranthene	1.452	1.454	0.19	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TM	Benzidine	0.4947	0.4849	2.0	TM	
Average					3.9		

\*NT

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 13:38  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y095.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	Pyrene	1.698	1.657	2.4	TM
82	S	Terphenyl-D14(S)	1.020	1.045	2.4	S
83	TM	Butyl benzylphthalate	0.7611	0.7725	1.5	TM
84	TM	3,3'-Dichlorobenzidine	0.5206	0.5306	1.9	TM
85	TM	Benz (a) anthracene	1.481	1.446	2.4	TM
86	TM	Bis (2-ethylhexyl) phthalate	1.059	1.066	0.67	TM
87	TM	Chrysene	1.448	1.435	0.88	TM
88	*TM	Di-n-octylphthalate	1.797	1.858	3.4	*TM
89	I	Perylene-D12(IS)	ISTD			I
90	TM	Benzo (b) fluoranthene	1.501	1.440	4.1	TM
91	TM	Benzo (k) fluoranthene	1.443	1.509	4.6	TM
92	*TM	Benzo (a) pyrene	1.359	1.392	2.5	*TM
93	TM	Indeno (1,2,3-cd) pyrene	1.400	1.430	2.2	TM
94	TM	Dibenz (a,h) anthracene	1.266	1.315	3.9	TM
95	TM	Benzo (g,h,i) perylene	1.240	1.257	1.4	TM
96						
97						
98						
99						
100						
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118						
119						
120						

Average

2.4



Data File : M:\YODA\DATA\Y190124\0124Y095.D Vial: 95  
 Acq On : 1 Feb 19 13:38 Operator: MA  
 Sample : 50ug/mL 8270 01/24/19 (2) Inst : Yoda  
 Misc : Multiplr: 1.00

Quant Time: Feb 1 15:05 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	416513	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1765187	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	989986	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1903135	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1732954	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1699588	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	1866351	100.46347	ppb	0.02
Spiked Amount				200.000		
			Recovery	=	50.232%	
6) Phenol-D6 (S)	5.06	99	2408819	98.48039	ppb	0.00
Spiked Amount				200.000		
			Recovery	=	49.240%	
22) Nitrobenzene-D5 (S)	6.09	82	1082507	51.49952	ppb	0.00
Spiked Amount				100.000		
			Recovery	=	51.500%	
46) 2-Fluorobiphenyl (S)	8.13	172	2109374	52.61833	ppb	0.00
Spiked Amount				100.000		
			Recovery	=	52.618%	
64) 2,4,6-Tribromophenol (S)	9.85	330	446193	108.80398	ppb	0.00
Spiked Amount				200.000		
			Recovery	=	54.402%	
82) Terphenyl-D14 (S)	12.51	244	2263200	51.19343	ppb	0.00
Spiked Amount				100.000		
			Recovery	=	51.193%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	11503	4.93865		60
3) n-Nitrosodimethylamine	1.96	42	193677	51.29411	ppb	99
4) Pyridine	1.98	79	536650	57.75708	ppb	96
7) Phenol	5.08	94	1447328	45.93657	ppb	99
8) Aniline	5.10	93	1405363	42.61363	ppb	97
9) Bis (2-chloroethyl) ether	5.17	63	673360	46.39238	ppb	93
10) 2-Chlorophenol	5.23	128	1022251	45.97294	ppb	100
11) 1,3-DCB	5.39	146	1085148	45.87300	ppb	99
12) 1,4-DCB	5.48	146	1100589	45.53349	ppb	99
13) Benzyl alcohol	5.63	108	613099	44.25008	ppb	99
14) 1,2-DCB	5.65	146	1030895	46.03819	ppb	97
15) 2-Methylphenol	5.76	107	876033	46.18463	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	1015766	46.61368	ppb	# 87
17) Acetophenone	5.92	105	1336572	46.25058	ppb	94
18) 3&4-Methylphenol	5.92	107	2095562	93.53850	ppb	97
19) n-Nitrosodi-n-propylamine	5.92	70	746500	45.88179	ppb	99
20) Hexachloroethane	6.02	117	406192	46.00245	ppb	97
23) Nitrobenzene	6.12	77	1138613	48.17066	ppb	99
24) Isophorone	6.39	82	2009997	48.74874	ppb	100
25) 2-Nitrophenol	6.47	139	573912	49.31491	ppb	100
26) 2,4-Dimethylphenol	6.52	122	895186	46.48964	ppb	100
27) Benzoic acid	6.67	105	672786	44.65623	ppb	99
28) Bis (2-chloroethoxy) metha	6.62	93	1231247	48.15059	ppb	100
29) 2,4-Dichlorophenol	6.75	162	833572	50.30843	ppb	97
30) 1,2,4-Trichlorobenzene	6.83	180	888396	48.22683	ppb	98
31) 3,4-Dimethylphenol	6.86	107	1261977	48.47409	ppb	96
32) Naphthalene	6.93	128	3021964	48.23928	ppb	100
33) 4-Chloroaniline	6.99	127	1084636	46.79772	ppb	100
34) 2,6-Dichlorophenol	7.00	162	812740	49.53049	ppb	100
35) Hexachloropropene	7.02	213	563006	50.11930	ppb	99
36) Hexachlorobutadiene	7.05	225	460313	47.96916	ppb	98
37) Caprolactum	7.42	55	407450	48.84203	ppb	96

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y190124\0124Y095.D  
 Acq On : 1 Feb 19 13:38  
 Sample : 50ug/mL 8270 01/24/19 (2)  
 Misc :

Vial: 95  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 1 15:05 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	910751	48.77901	ppb	92
39) 2-Methylnaphthalene	7.71	142	1954588	48.38658	ppb	100
40) 1-Methylnaphthalene	7.83	142	1935279	47.93391	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	350201	49.96612	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	829608	49.89003	ppb	98
44) 2,4,6-Trichlorophenol	8.04	196	565523	52.09946	ppb	99
45) 2,4,5-Trichlorophenol	8.10	196	612312	49.94852	ppb	92
47) 1,1'-Biphenyl	8.25	154	2467653	50.23274	ppb	99
48) 2-Chloronaphthalene	8.28	162	1867270	49.75599	ppb	98
49) 2-Nitroaniline	8.40	65	622307	51.01005	ppb	99
50) Dimethyl phthalate	8.61	163	2218072	50.05865	ppb	100
51) 2,6-DNT	8.69	165	508461	51.17445	ppb	96
52) Acenaphthylene	8.76	152	2978532	50.03457	ppb	100
53) 3-Nitroaniline	8.88	138	577157	51.29698	ppb	99
54) Acenaphthene	8.96	154	1919008	49.77791	ppb	99
55) 2,4-Dinitrophenol	9.01	184	279393	52.30683	ppb	96
56) 4-Nitrophenol	9.10	65	240322	35.14822	ppb	98
57) Dibenzofuran	9.16	168	2670488	49.42611	ppb	99
58) 2,4-DNT	9.15	165	684648	52.24345	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	452976	50.20896	ppb	98
60) Diethyl phthalate	9.42	149	2097804	49.96845	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	1052819	49.94593	ppb	96
62) Fluorene	9.56	166	2178111	50.29202	ppb	100
63) 4-Nitroaniline	9.61	138	582188	51.10234	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.64	198	446569	52.52977	ppb	94
67) Diphenyl amine	9.70	169	3373858	100.48507	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	3373858	100.48507	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2249004	47.52349	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	576912	50.73574	ppb	93
71) Hexachlorobenzene	10.19	284	546516	50.84058	ppb	# 84
72) Atrazine	10.32	200	280456	24.34396	ppb	98
73) Pentachlorophenol	10.43	266	318609	47.35911	ppb	98
74) Phenanthrene	10.69	178	3194281	49.66055	ppb	99
75) Anthracene	10.75	178	3306605	50.18777	ppb	100
76) Carbazol	10.94	167	3041157	50.79281	ppb	97
77) Di-n-butylphthalate	11.33	149	3604642	51.02222	ppb	99
78) Fluoranthene	12.08	202	3459621	50.09407	ppb	99
80) Benzidine	12.24	184	1050459	49.01617	ppb	99
81) Pyrene	12.35	202	3588704	48.78592	ppb	100
83) Butyl benzylphthalate	13.08	149	1673326	50.74576	ppb	92
84) 3,3'-Dichlorobenzidine	13.71	252	1149363	50.95569	ppb	99
85) Benz (a) anthracene	13.74	228	3131477	48.81416	ppb	100
86) Bis (2-ethylhexyl) phthala	13.72	149	2309791	50.33383	ppb	# 95
87) Chrysene	13.79	228	3109036	49.55949	ppb	99
88) Di-n-octylphthalate	14.49	149	4024370	51.68188	ppb	97
90) Benzo (b) fluoranthene	15.07	252	3058636	47.94348	ppb	98
91) Benzo (k) fluoranthene	15.11	252	3205338	52.27603	ppb	99
92) Benzo (a) pyrene	15.55	252	2958102	51.22657	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	3038490	51.08277	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2792680	51.93188	ppb	99
95) Benzo (g,h,i) perylene	18.17	276	2671288	50.69202	ppb	99

Quantitation Report

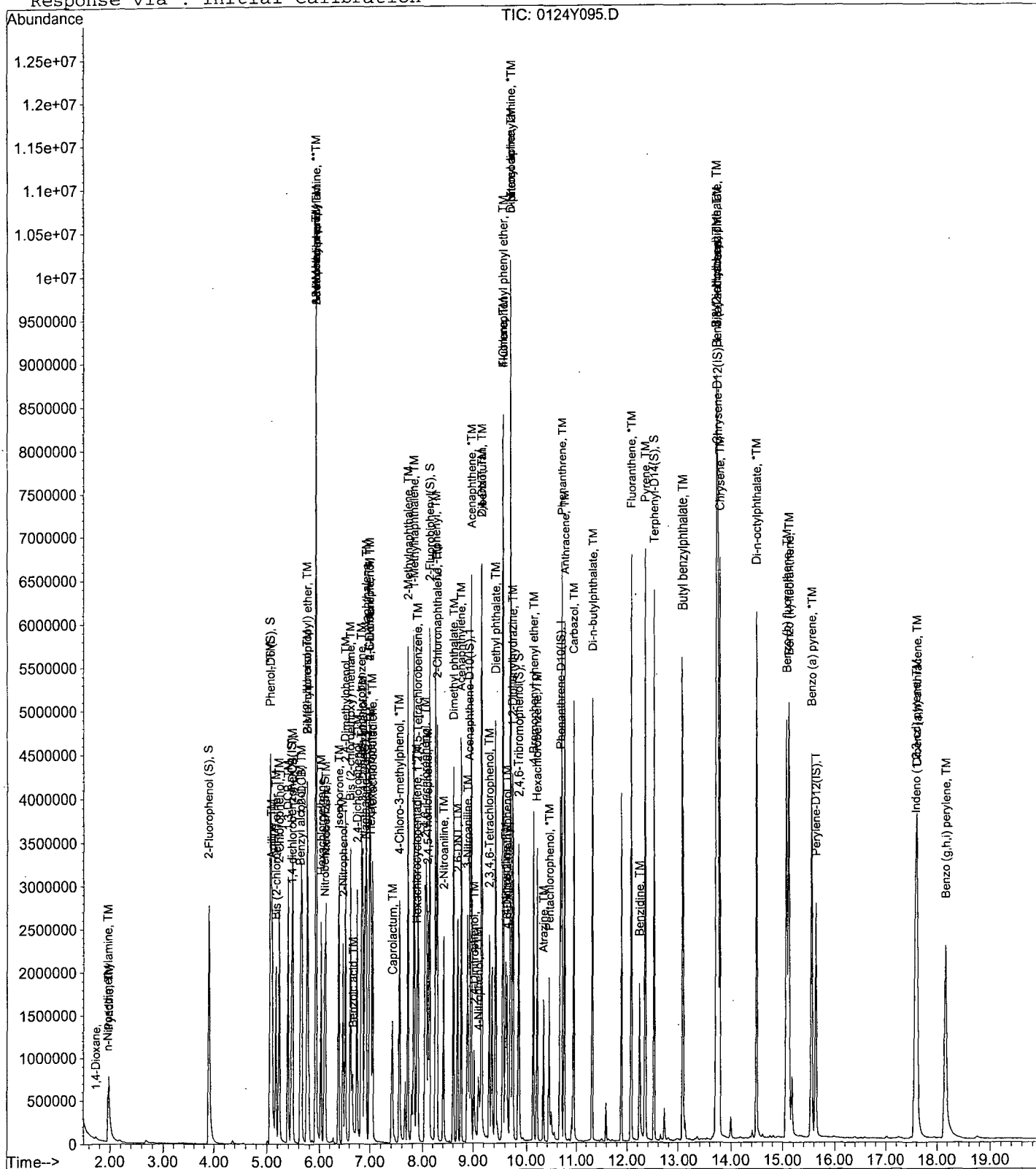
Data File : M:\YODA\DATA\Y190124\0124Y095.D  
Acq On : 1 Feb 19 13:38  
Sample : 50ug/mL 8270 01/24/19 (2)  
Misc :

Vial: 95  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 15:05 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 2 Feb 19 00:12

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 01/25/19

Data File: 0124Y115.D

	Compound	MEAN	CCRF	%D	%Drift
1	1,4-dichlorobenzene-D4(IS)	ISTD			
2	1,4-Dioxane	0.2237	0.2534	13	
3 TM	n-Nitrosodimethylamine	0.3626	0.4030	11	TM
4 S	2-Fluorophenol (S)	1.784	1.885	5.7	S
5 S	Phenol-D6 (S)	2.349	2.434	3.6	S
6 *TM	Phenol	3.026	2.790	7.8	*TM
7 TM	Aniline	3.167	2.084	34	TM
8 TM	Bis (2-chloroethyl) ether	1.394	1.343	3.6	TM
9 TM	2-Chlorophenol	2.135	2.048	4.1	TM
10 TM	1,3-DCB	2.272	2.135	6.0	TM
11 *TM	1,4-DCB	2.321	2.174	6.3	*TM
12 TM	Benzyl alcohol	1.331	0.2334	82	TM
13 TM	1,2-DCB	2.150	2.030	5.6	TM
14 TM	2-Methylphenol	1.822	1.733	4.8	TM
15 TM	Bis (2-chloroisopropyl) ether	2.093	1.958	6.4	TM
16 TM	Acetophenone	2.775	2.710	2.3	TM
17 TM	3&4-Methylphenol	2.152	2.040	5.2	TM
18 **TM	n-Nitrosodi-n-propylamine	1.563	1.502	3.9	**TM
19 TM	Hexachloroethane	0.8480	0.7996	5.7	TM
20	Napthalene-D8(IS)	ISTD			
21 S	Nitrobenzene-D5(S)	0.4763	0.5129	7.7	S
22 TM	Nitrobenzene	0.5356	0.5287	1.3	TM
23 TM	Isophorone	0.9343	0.9293	0.53	TM
24 *TM	2-Nitrophenol	0.2637	0.2659	0.82	*TM
25 TM	2,4-Dimethylphenol	0.4363	0.4136	5.2	TM
26 TM	Benzoic acid	0.3414	0.2348	31	TM
27 TM	Bis (2-chloroethoxy) methane	0.5794	0.5611	3.2	TM
28 *TM	2,4-Dichlorophenol	0.3755	0.3835	2.1	*TM
29 TM	1,2,4-Trichlorobenzene	0.4174	0.4092	2.0	TM
30 TM	3,4-Dimethylphenol	0.5899	0.5666	4.0	TM
31 TM	Napthalene	1.420	1.383	2.6	TM
32 TM	4-Chloroaniline	0.5252	0.4340	17	TM
33 TM	2,6-Dichlorophenol	0.3718	0.3762	1.2	TM
34 TM	Hexachloropropene	0.2546	0.2671	4.9	TM
35 *TM	Hexachlorobutadiene	0.2175	0.2152	1.0	*TM
36 TM	Caprolactum	0.1890	0.1858	1.7	TM
37 *TM	4-Chloro-3-methylphenol	0.4231	0.3917	7.4	*TM
38 TM	2-Methylnapthalene	0.9154	0.8970	2.0	TM
39 TM	1-Methylnapthalene	0.9149	0.8942	2.3	TM
40	Acenaphthene-D10(IS)	ISTD			

\*NT

Average

8.4

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 2 Feb 19 00:12

Matrix: 0

Instrument: Yoda

Cal. Date: 01/25/19

Data File: 0124Y115.D

		Compound	MEAN	CCRF	%D	%Drift	
41	**TML	Hexachlorocyclopentadiene	0.2131	0.3195	50	**TML	11
42	TM	1,2,4,5-Tetrachlorobenzene	0.6719	0.6625	1.4	TM	
43	*TM	2,4,6-Trichlorophenol	0.4386	0.4644	5.9	*TM	
44	TM	2,4,5-Trichlorophenol	0.4953	0.4680	5.5	TM	
45	S	2-Fluorobiphenyl(S)	1.620	1.697	4.8	S	
46	TM	1,1'-Biphenyl	1.985	1.984	0.03	TM	
47	TM	2-Chloronaphthalene	1.516	1.505	0.73	TM	
48	TM	2-Nitroaniline	0.4929	0.5002	1.5	TM	
49	TM	Dimethyl phthalate	1.790	1.789	0.05	TM	
50	TM	2,6-DNT	0.4015	0.4163	3.7	TM	
51	TM	Acenaphthylene	2.405	2.405	0.00	TM	
52	TM	3-Nitroaniline	0.4546	0.4516	0.66	TM	
53	*TM	Acenaphthene	1.558	1.531	1.7	*TM	
54	**TML	2,4-Dinitrophenol	0.1911	0.2189	15	**TML	1.7
55	**TM	4-Nitrophenol	0.2763	0.1051	62	**TM	*NT
56	TM	Dibenzofuran	2.183	2.150	1.5	TM	
57	TM	2,4-DNT	0.5295	0.5501	3.9	TM	
58	TM	2,3,4,6-Tetrachlorophenol	0.3645	0.3495	4.1	TM	
59	TM	Diethyl phthalate	1.696	1.716	1.1	TM	
60	TM	4-Chlorophenyl phenyl ether	0.8517	0.8507	0.11	TM	
61	TM	Fluorene	1.750	1.758	0.48	TM	
62	TM	4-Nitroaniline	0.4603	0.4473	2.8	TM	
63	S	2,4,6-Tribromophenol(S)	0.1657	0.1827	10	S	
64	I	Phenanthrene-D10(IS)	ISTD			I	
65	TM	4,6-Dinitro-2-methylphenol	0.1787	0.1870	4.7	TM	
66	TM	Diphenyl amine	0.7057	0.7079	0.32	TM	
67	*TM	n-Nitrosodiphenylamine	0.7057	0.7079	0.32	*TM	
68	TM	1,2-Diphenylhydrazine	0.9947	1.095	10	TM	
69	TM	4-Bromophenyl phenyl ether	0.2390	0.2472	3.4	TM	
70	TM	Hexachlorobenzene	0.2259	0.2289	1.3	TM	
71	TM	Atrazine	0.2421	0.1943	20	TM	
72	*TM	Pentachlorophenol	0.1414	0.1121	21	*TM	
73	TM	Phenanthrene	1.352	1.338	1.1	TM	
74	TM	Anthracene	1.385	1.386	0.11	TM	
75	TM	Carbazol	1.258	1.244	1.2	TM	
76	TM	Di-n-butylphthalate	1.485	1.504	1.3	TM	
77	*TM	Fluoranthene	1.452	1.443	0.61	*TM	
78	I	Chrysene-D12(IS)	ISTD			I	
79	TM	Benzidine	0.4947	0.1453	71	TM	*NT
80	TM	Pyrene	1.698	1.718	1.2	TM	

Average

8.3

Semi-Volatile Analysis by GC-MS  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 2 Feb 19 00:12  
Instrument: Yoda  
Cal. Date: 01/25/19  
Data File: 0124Y115.D

		Compound	MEAN	CCRF	%D	%Drift
81	S	Terphenyl-D14(S)	1.020	1.100	7.8	S
82	TM	Butyl benzylphthalate	0.7611	0.8046	5.7	TM
83	TM	3,3'-Dichlorobenzidine	0.5206	0.5087	2.3	TM
84	TM	Benz (a) anthracene	1.481	1.491	0.72	TM
85	TM	Bis (2-ethylhexyl) phthalate	1.059	1.092	3.1	TM
86	TM	Chrysene	1.448	1.447	0.05	TM
87	*TM	Di-n-octylphthalate	1.797	1.901	5.8	*TM
88	I	Perylene-D12(IS)	ISTD			I
89	TM	Benzo (b) fluoranthene	1.501	1.512	0.72	TM
90	TM	Benzo (k) fluoranthene	1.443	1.448	0.33	TM
91	*TM	Benzo (a) pyrene	1.359	1.397	2.8	*TM
92	TM	Indeno (1,2,3-cd) pyrene	1.400	1.404	0.27	TM
93	TM	Dibenz (a,h) anthracene	1.266	1.286	1.6	TM
94	TM	Benzo (g,h,i) perylene	1.240	1.217	1.8	TM
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120						

Average

2.5

Data File : M:\YODA\DATA\Y190124\0124Y115.D  
 Acq On : 2 Feb 19 00:12  
 Sample : 50ug/mL 8270 01/24/19 (1)  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 4 7:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	496552	40.00000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	2165400	40.00000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1244881	40.00000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2389876	40.00000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	2082073	40.00000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	2039768	40.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.92	112	2340360	105.67234	ppb	0.05
Spiked Amount 200.000			Recovery =	52.836%		
6) Phenol-D6 (S)	5.09	99	3020946	103.59824	ppb	0.03
Spiked Amount 200.000			Recovery =	51.799%		
22) Nitrobenzene-D5 (S)	6.10	82	1388367	53.84301	ppb	0.00
Spiked Amount 100.000			Recovery =	53.843%		
46) 2-Fluorobiphenyl (S)	8.14	172	2640473	52.38012	ppb	0.00
Spiked Amount 100.000			Recovery =	52.380%		
64) 2,4,6-Tribromophenol (S)	9.86	330	568606	110.26424	ppb	0.00
Spiked Amount 200.000			Recovery =	55.132%		
82) Terphenyl-D14 (S)	12.51	244	2863298	53.90746	ppb	0.00
Spiked Amount 100.000			Recovery =	53.907%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	15731	5.66523		91
3) n-Nitrosodimethylamine	1.97	42	250163	55.57460	ppb	98
7) Phenol	5.09	94	1731537	46.09854	ppb	100
8) Aniline	5.17	93	1293796	32.90710	ppb #	97
9) Bis (2-chloroethyl) ether	5.17	63	833755	48.18386	ppb	95
10) 2-Chlorophenol	5.24	128	1270872	47.94136	ppb	99
11) 1,3-DCB	5.40	146	1325432	46.99909	ppb	99
12) 1,4-DCB	5.48	146	1349672	46.83795	ppb	100
13) Benzyl alcohol	5.64	108	144860	8.76992	ppb	97
14) 1,2-DCB	5.65	146	1259804	47.19225	ppb	99
15) 2-Methylphenol	5.77	107	1075819	47.57514	ppb	94
16) Bis (2-chloroisopropyl) et	5.76	45	1215615	46.79286	ppb #	85
17) Acetophenone	5.93	105	1682335	48.83162	ppb	75
18) 3&4-Methylphenol	5.94	107	2531933	94.79948	ppb	98
19) n-Nitrosodi-n-propylamine	5.93	70	931988	48.04903	ppb	98
20) Hexachloroethane	6.03	117	496330	47.15025	ppb	89
23) Nitrobenzene	6.13	77	1431134	49.35594	ppb	99
24) Isophorone	6.39	82	2515476	49.73255	ppb	99
25) 2-Nitrophenol	6.48	139	719682	50.41109	ppb	96
26) 2,4-Dimethylphenol	6.52	122	1119550	47.39571	ppb	99
27) Benzoic acid	6.69	105	635436	34.38187	ppb	97
28) Bis (2-chloroethoxy) metha	6.63	93	1518874	48.42066	ppb	99
29) 2,4-Dichlorophenol	6.76	162	1038130	51.07425	ppb	94
30) 1,2,4-Trichlorobenzene	6.84	180	1107676	49.01708	ppb	99
31) 3,4-Dimethylphenol	6.87	107	1533738	48.02440	ppb	98
32) Napthalene	6.93	128	3743822	48.71687	ppb	99
33) 4-Chloroaniline	7.11	127	1174805	41.31988	ppb	99
34) 2,6-Dichlorophenol	7.00	162	1018309	50.58865	ppb	98
35) Hexachloropropene	7.02	213	722872	52.45731	ppb	99
36) Hexachlorobutadiene	7.05	225	582560	49.48826	ppb	99
37) Caprolactum	7.45	55	503008	49.15264	ppb	99
38) 4-Chloro-3-methylphenol	7.56	107	1060137	46.28582	ppb	96

Data File : M:\YODA\DATA\Y190124\0124Y115.D  
 Acq On : 2 Feb 19 00:12  
 Sample : 50ug/mL 8270 01/24/19 (1)  
 Misc :

Vial: 15  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Feb 4 7:25 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) 2-Methylnaphthalene	7.71	142	2428021	48.99759	ppb	100
40) 1-Methylnaphthalene	7.83	142	2420244	48.86648	ppb	99
42) Hexachlorocyclopentadiene	7.89	237	497218	55.65502	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	1030920	49.30228	ppb	98
44) 2,4,6-Trichlorophenol	8.05	196	722719	52.94850	ppb	100
45) 2,4,5-Trichlorophenol	8.11	196	728244	47.24197	ppb	100
47) 1,1'-Biphenyl	8.25	154	3087683	49.98465	ppb	99
48) 2-Chloronaphthalene	8.28	162	2342284	49.63397	ppb	99
49) 2-Nitroaniline	8.42	65	778396	50.74028	ppb	82
50) Dimethyl phthalate	8.60	163	2784470	49.97436	ppb	99
51) 2,6-DNT	8.69	165	647823	51.85052	ppb	# 80
52) Acenaphthylene	8.76	152	3742987	50.00200	ppb	100
53) 3-Nitroaniline	8.90	138	702707	49.66761	ppb	87
54) Acenaphthene	8.97	154	2381834	49.13292	ppb	99
55) 2,4-Dinitrophenol	9.02	184	340648	50.86832	ppb	96
56) 4-Nitrophenol	9.13	65	163535	19.02049	ppb	95
57) Dibenzofuran	9.16	168	3346328	49.25332	ppb	95
58) 2,4-DNT	9.16	165	856085	51.94965	ppb	96
59) 2,3,4,6-Tetrachlorophenol	9.31	232	543842	47.93801	ppb	95
60) Diethyl phthalate	9.43	149	2669927	50.57450	ppb	98
61) 4-Chlorophenyl phenyl ethe	9.56	204	1323801	49.94251	ppb	90
62) Fluorene	9.56	166	2736135	50.24095	ppb	100
63) 4-Nitroaniline	9.62	138	696033	48.58571	ppb	97
66) 4,6-Dinitro-2-methylphenol	9.64	198	558646	52.32965	ppb	94
67) Diphenyl amine	9.71	169	4229730	100.31863	ppb	100
68) n-Nitrosodiphenylamine	9.71	169	4229730	100.31863	ppb	100
69) 1,2-Diphenylhydrazine	9.75	77	3271061	55.04286	ppb	96
70) 4-Bromophenyl phenyl ether	10.13	248	738392	51.71132	ppb	96
71) Hexachlorobenzene	10.20	284	683765	50.65341	ppb	96
72) Atrazine	10.33	200	290170	20.05733	ppb	99
73) Pentachlorophenol	10.44	266	334871	39.63850	ppb	98
74) Phenanthrene	10.69	178	3995650	49.46751	ppb	99
75) Anthracene	10.75	178	4141165	50.05326	ppb	99
76) Carbazol	10.94	167	3716019	49.42374	ppb	97
77) Di-n-butylphthalate	11.32	149	4492693	50.64052	ppb	99
78) Fluoranthene	12.08	202	4309982	49.69669	ppb	98
80) Benzidine	12.24	184	378134	14.68578	ppb	99
81) Pyrene	12.34	202	4471510	50.59437	ppb	99
83) Butyl benzylphthalate	13.08	149	2093953	52.85392	ppb	98
84) 3,3'-Dichlorobenzidine	13.71	252	1324044	48.85724	ppb	97
85) Benz (a) anthracene	13.74	228	3881347	50.35819	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2841101	51.53058	ppb	98
87) Chrysene	13.78	228	3766636	49.97419	ppb	100
88) Di-n-octylphthalate	14.49	149	4947258	52.88056	ppb	99
90) Benzo (b) fluoranthene	15.07	252	3855956	50.36127	ppb	99
91) Benzo (k) fluoranthene	15.11	252	3691472	50.16390	ppb	98
92) Benzo (a) pyrene	15.56	252	3561169	51.38515	ppb	97
93) Indeno (1,2,3-cd) pyrene	17.58	276	3578985	50.13481	ppb	97
94) Dibenz (a,h) anthracene	17.62	278	3277771	50.78721	ppb	97
95) Benzo (g,h,i) perylene	18.17	276	3104199	49.08303	ppb	98

(#) = qualifier out of range (m) = manual integration



Quantitation Report

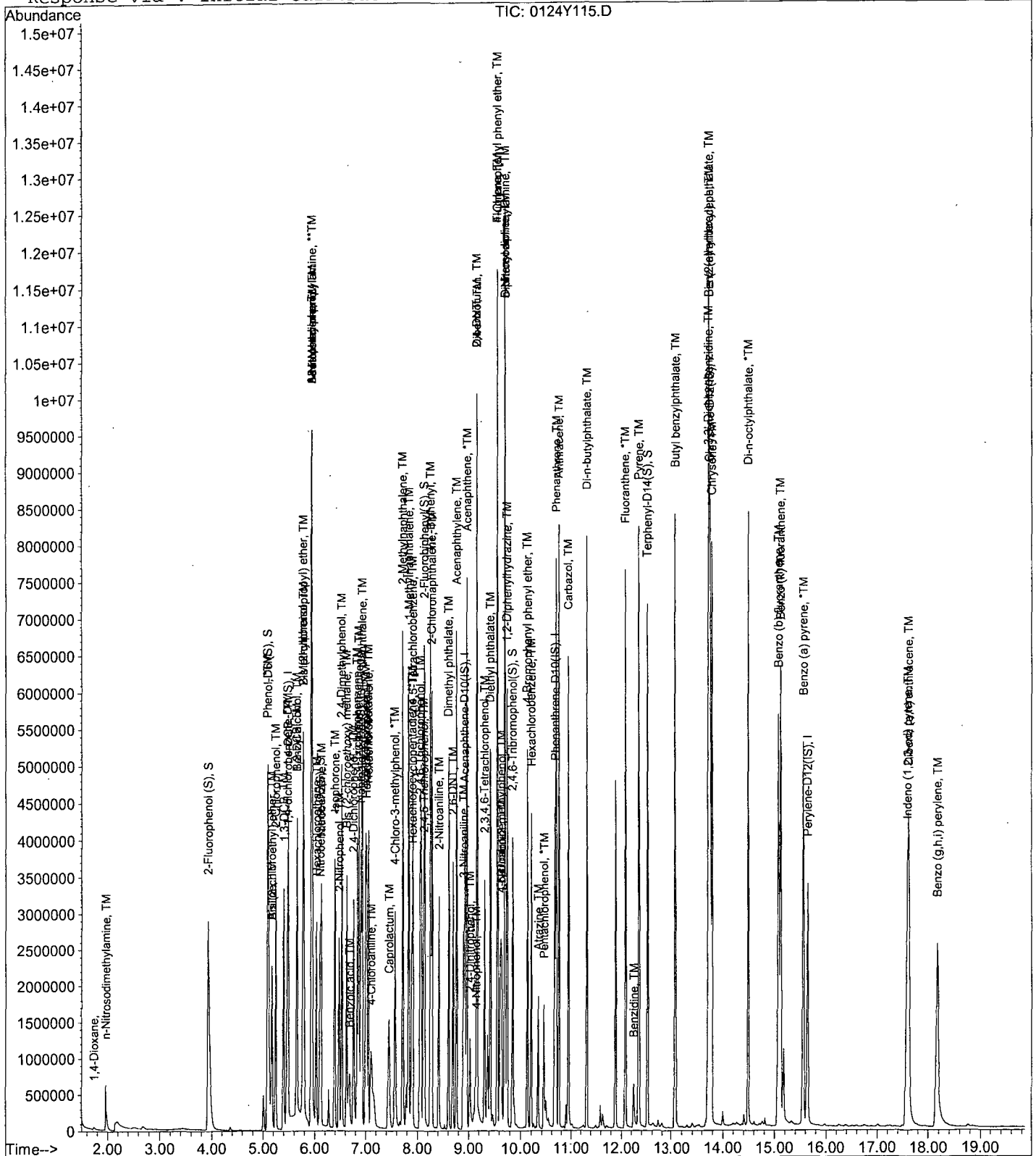
Data File : M:\YODA\DATA\Y190124\0124Y115.D  
Acq On : 2 Feb 19 00:12  
Sample : 50ug/mL 8270 01/24/19 (1)  
Misc :

Vial: 15  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 4 7:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Jan 28 14:58:58 2019  
Response via : Initial Calibration



**ORGANICS**  
**Raw Data**

Data File : M:\YODA\DATA\Y190124\0124Y108.D Vial: 8  
 Acq On : 1 Feb 19 20:57 Operator: MA  
 Sample : AZ85643W32 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 10:43 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	418016	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1757138	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	570404	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1717013	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1315978	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.65	264	32061	40.0000	ppb	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.91	112	3523515	236.2309	ppb	0.04
Spiked Amount 250.000			Recovery =	94.492%		
6) Phenol-D6 (S)	5.07	99	3458795	176.1230	ppb	0.02
Spiked Amount 250.000			Recovery =	70.449%		
22) Nitrobenzene-D5 (S)	6.10	82	2054166	122.7165	ppb	0.00
Spiked Amount 125.000			Recovery =	98.173%		
46) 2-Fluorobiphenyl (S)	8.13	172	3747834	202.8245	ppb	0.00
Spiked Amount 125.000			Recovery =	162.259%		
64) 2,4,6-Tribromophenol (S)	9.85	330	887705	469.6207	ppb	0.00
Spiked Amount 250.000			Recovery =	187.848%		
82) Terphenyl-D14 (S)	12.52	244	4216537	156.9985	ppb	0.00
Spiked Amount 125.000			Recovery =	125.599%		

Target Compounds Qvalue

Quantitation Report

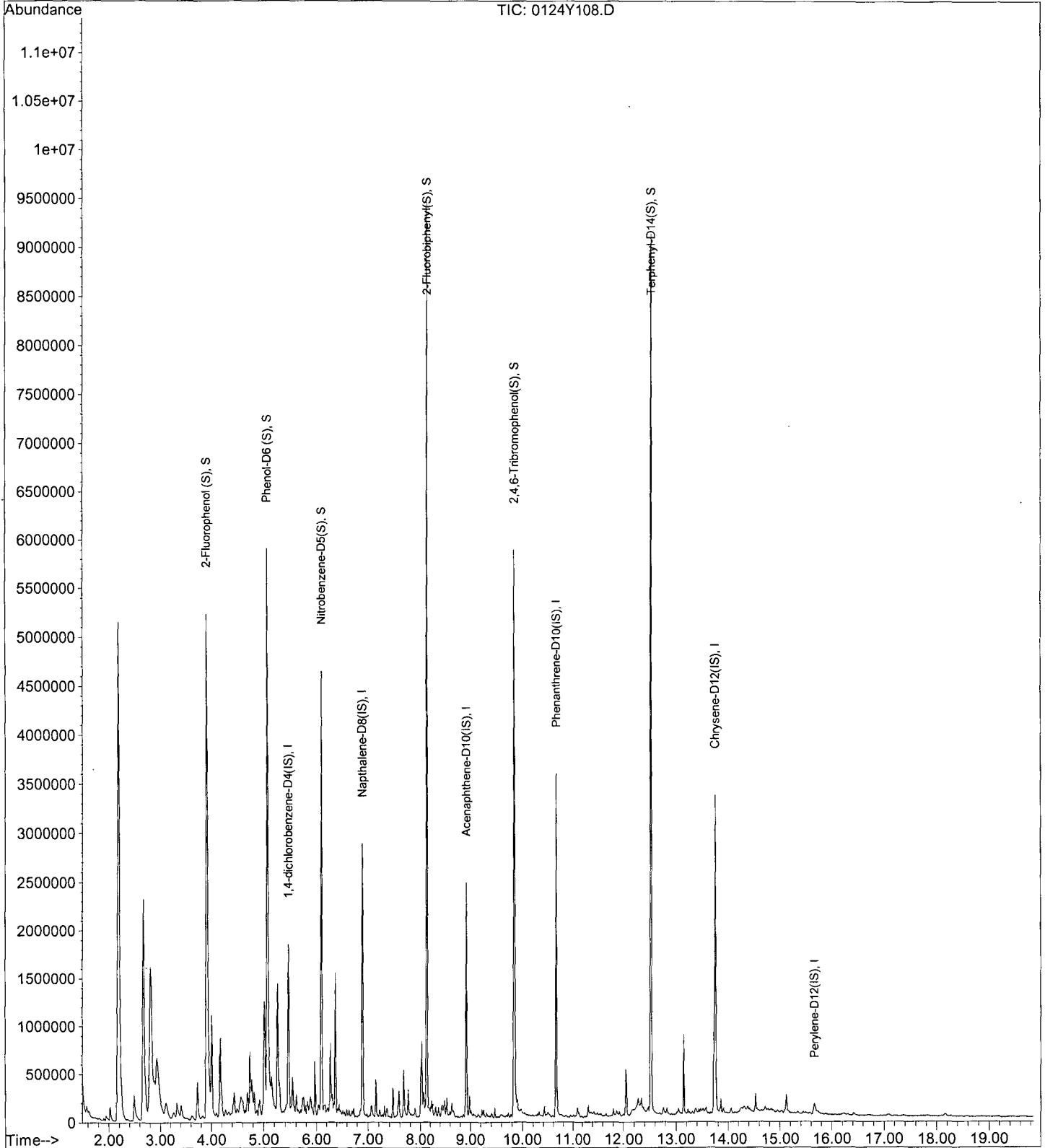
Data File : M:\YODA\DATA\Y190124\0124Y108.D  
Acq On : 1 Feb 19 20:57  
Sample : AZ85643W32 1/800  
Misc :

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:43 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 20:57  
Data File: M:\YODA\DATA\Y190124\0124Y108.D  
Name: AZ85643W32 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.67	113.0	ppb	5711630	ISTD01	5.47	2527910	40.0
Cyclotetrasiloxane,	5.01	43.1	ppb	2179460	ISTD01	5.47	2527910	40.0
Cyclopentasiloxane,	6.27	15.1	ppb	1026660	ISTD02	6.90	3399280	40.0

0124Y108.D Y0125NC.M Tue Mar 05 08:34:40 2019

**ADDED PAGE**

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y108.D  
 Acq On : 1 Feb 19 20:57  
 Sample : AZ85643W32 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs : 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

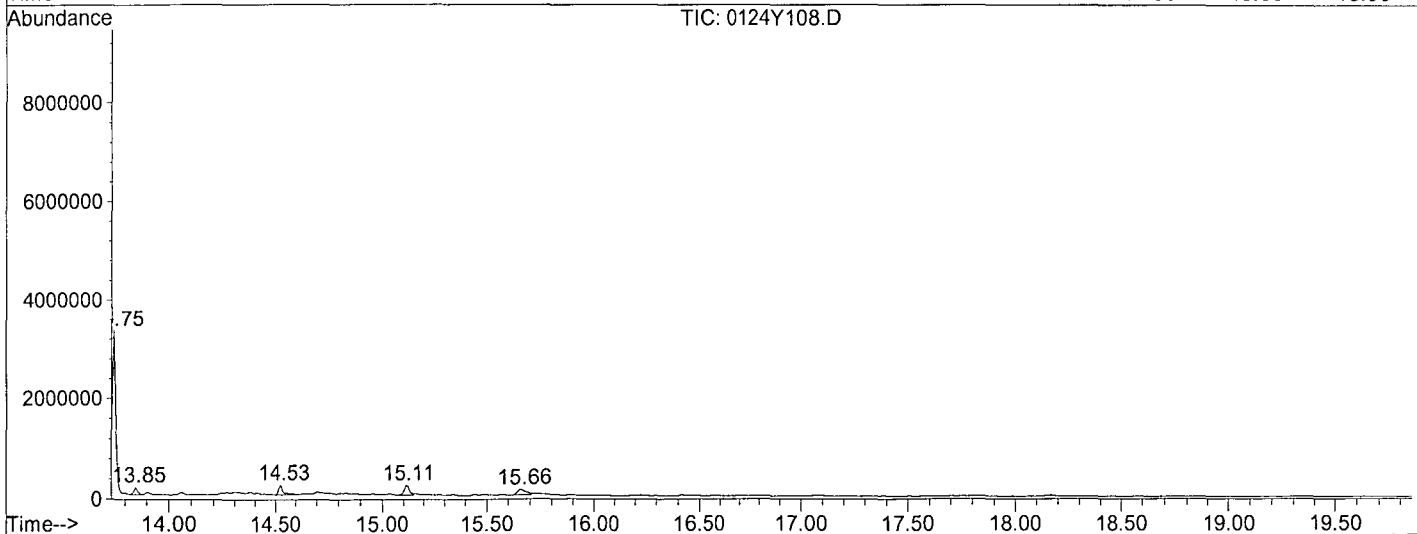
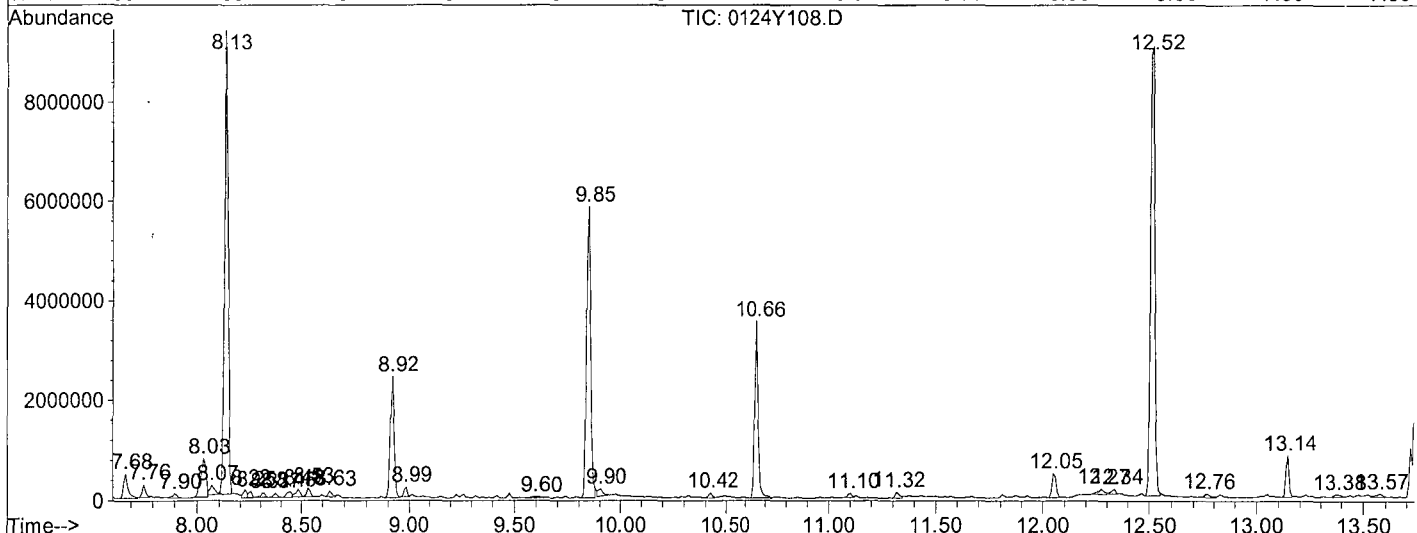
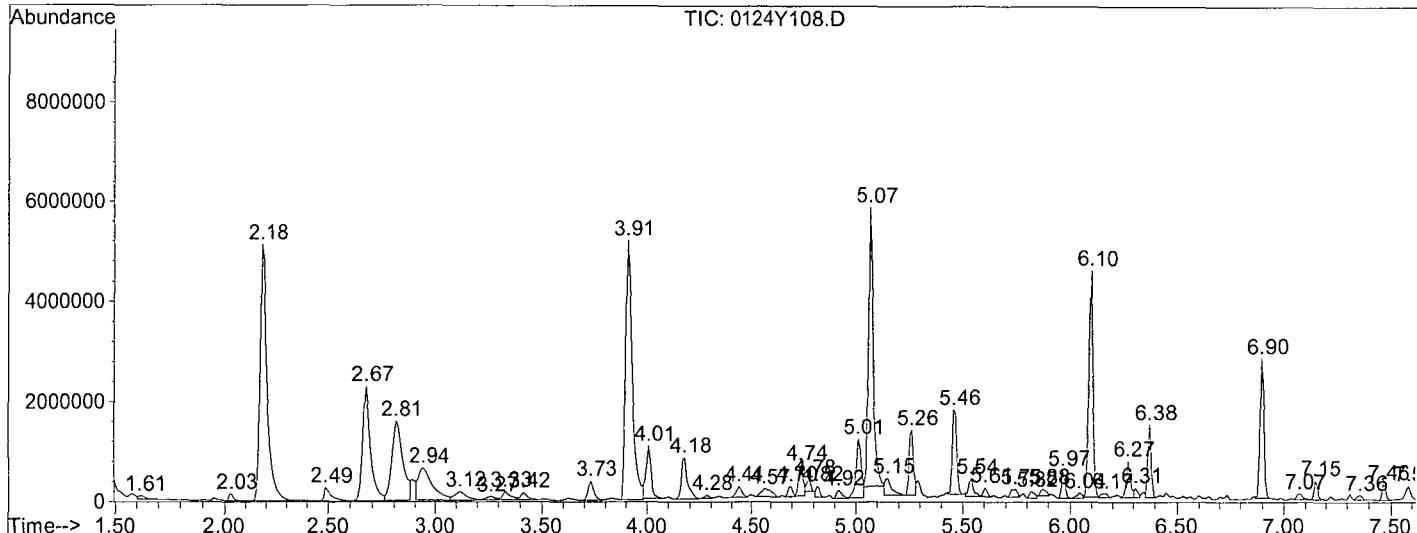
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.614	13	14	22	rVB2	66347	1586369	139965	1.12%	0.105%
2	2.032	56	59	70	rVB	140002	2158835	241669	1.93%	0.181%
3	2.181	70	75	92	rBV	5131305	15527888	12485165	99.89%	9.358%
4	2.487	105	108	121	rBV	264699	2769253	623898	4.99%	0.468%
5	2.673	122	128	137	rVV	2293558	7763286	5711632	45.70%	4.281%
6	2.812	137	143	150	rVV	1592857	7965386	5721637	45.78%	4.289%
7	2.942	153	157	171	rVV2	643824	7569860	3080792	24.65%	2.309%
8	3.118	171	176	186	rVV2	171661	3040690	696824	5.58%	0.522%
9	3.267	186	192	196	rVV3	69267	1635355	233055	1.86%	0.175%
10	3.332	196	199	205	rVV	165551	1735648	410369	3.28%	0.308%
11	3.415	205	208	217	rVB	139137	2082616	302162	2.42%	0.226%
12	3.731	237	242	248	rBV	387369	2254262	751922	6.02%	0.564%
13	3.907	257	261	269	rBV	5190520	13333748	11602655	92.83%	8.697%
14	4.009	269	272	279	rVB	1043912	4168952	1693046	13.55%	1.269%
15	4.177	285	290	297	rBV	821891	3396646	1618205	12.95%	1.213%
16	4.279	297	301	304	rBV	67590	1153158	126984	1.02%	0.095%
17	4.436	313	318	323	rBV4	218384	1981884	454132	3.63%	0.340%
18	4.566	328	332	340	rVB5	166824	2613771	600029	4.80%	0.450%
19	4.696	343	346	348	rBV	209224	1193631	323147	2.59%	0.242%
20	4.743	348	351	353	rBV	618240	1889305	951499	7.61%	0.713%
21	4.780	353	355	358	rVB2	239137	1485225	318031	2.54%	0.238%
22	4.817	358	359	362	rVB	221073	1118308	260078	2.08%	0.195%
23	4.919	367	370	375	rBV2	164905	1515804	303095	2.42%	0.227%
24	5.012	375	380	383	rBV	1177074	3488734	2179463	17.44%	1.634%
25	5.068	383	386	393	rVV	5587398	11895640	8810590	70.49%	6.604%
26	5.151	393	395	403	rVB	336018	3234172	685616	5.49%	0.514%
27	5.263	403	407	409	rBV	1302075	2979341	1984533	15.88%	1.488%
28	5.458	425	428	433	rVB	1700704	3973094	2527911	20.22%	1.895%
29	5.541	434	437	442	rVB	357004	1932628	538727	4.31%	0.404%
30	5.606	442	444	447	rBV	180344	1150364	222064	1.78%	0.166%
31	5.745	455	459	461	rBV2	165019	1355609	346617	2.77%	0.260%
32	5.820	465	467	470	rBV2	130016	1084462	235576	1.88%	0.177%
33	5.875	470	473	476	rBV3	138490	1233477	250244	2.00%	0.188%
34	5.968	481	483	487	rVB	556041	1764866	596677	4.77%	0.447%
35	6.042	487	491	493	rBV2	110652	1117270	211710	1.69%	0.159%
36	6.098	493	497	501	rVV	4548749	7467135	6141820	49.14%	4.604%
37	6.172	501	505	507	rVB2	79749	1202439	167537	1.34%	0.126%
38	6.275	512	516	519	rVV	722429	2132939	1026656	8.21%	0.770%
39	6.312	519	520	522	rVV	193823	813616	192753	1.54%	0.144%
40	6.377	525	527	530	rVB	1460423	3299003	1513913	12.11%	1.135%
41	6.897	580	583	587	rVB	2800204	4545572	3399278	27.20%	2.548%
42	7.073	599	602	608	rVB2	113309	1612277	234792	1.88%	0.176%
43	7.147	608	610	613	rBV	380018	1283908	462865	3.70%	0.347%
44	7.361	630	633	635	rBV	87084	8761254	161254	1.29%	0.121%
45	7.463	642	644	648	rBV2	310220	1332349	412906	3.30%	0.309%

ADDED PAGE

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y108.D  
Operator : MA  
Acquired : 1 Feb 19 20:57 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85643W32 1/800  
Misc Info :  
Vial Number: 8  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y108.D  
 Acq On : 1 Feb 19 20:57  
 Sample : AZ85643W32 1/800  
 Misc :

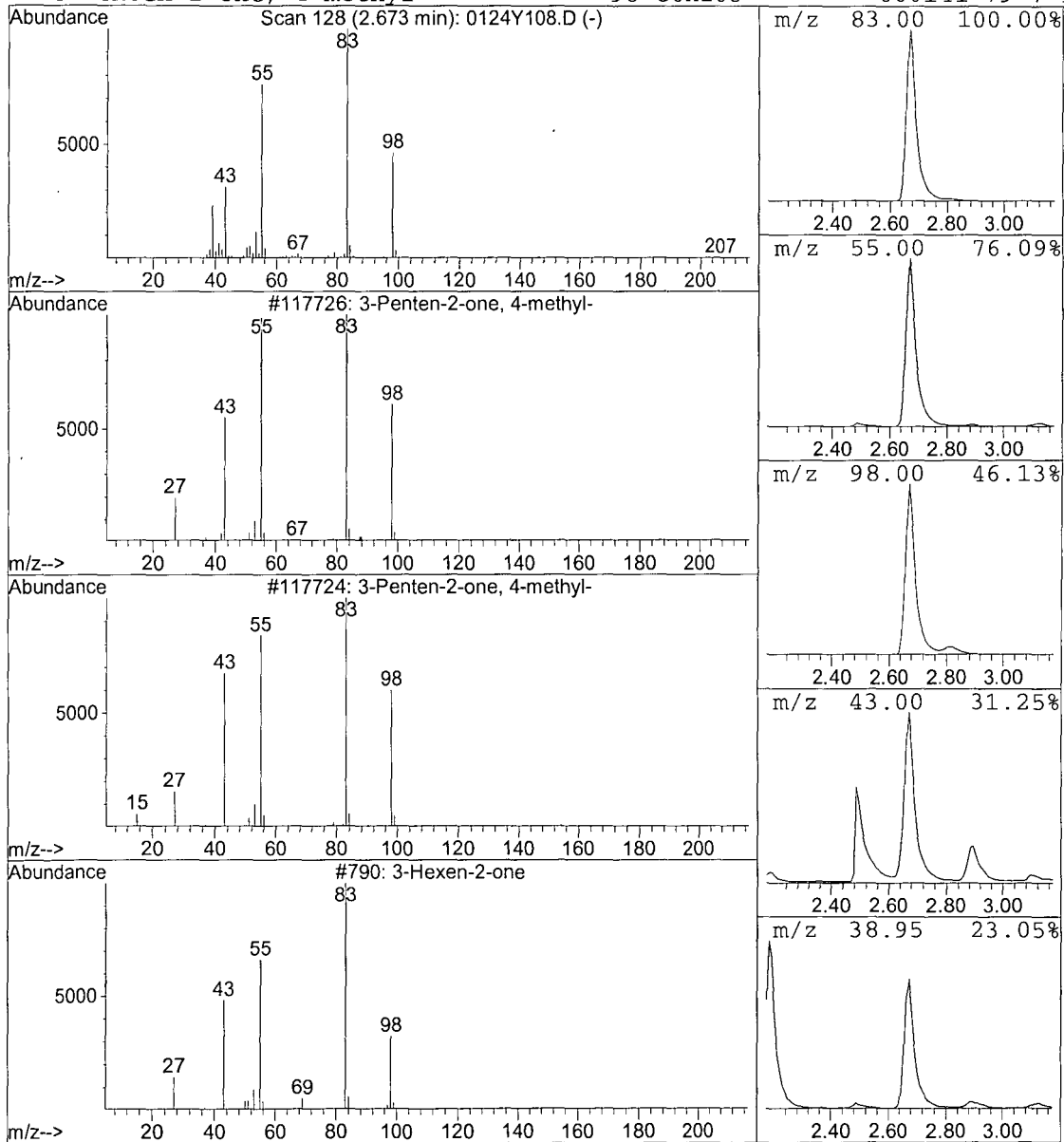
Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.67	112.97 ppb	5711630	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
3		3-Hexen-2-one	98	C6H10O	000763-93-9	91
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91



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Data File : M:\YODA\DATA\Y190124\0124Y108.D  
 Acq On : 1 Feb 19 20:57  
 Sample : AZ85643W32 1/800  
 Misc :

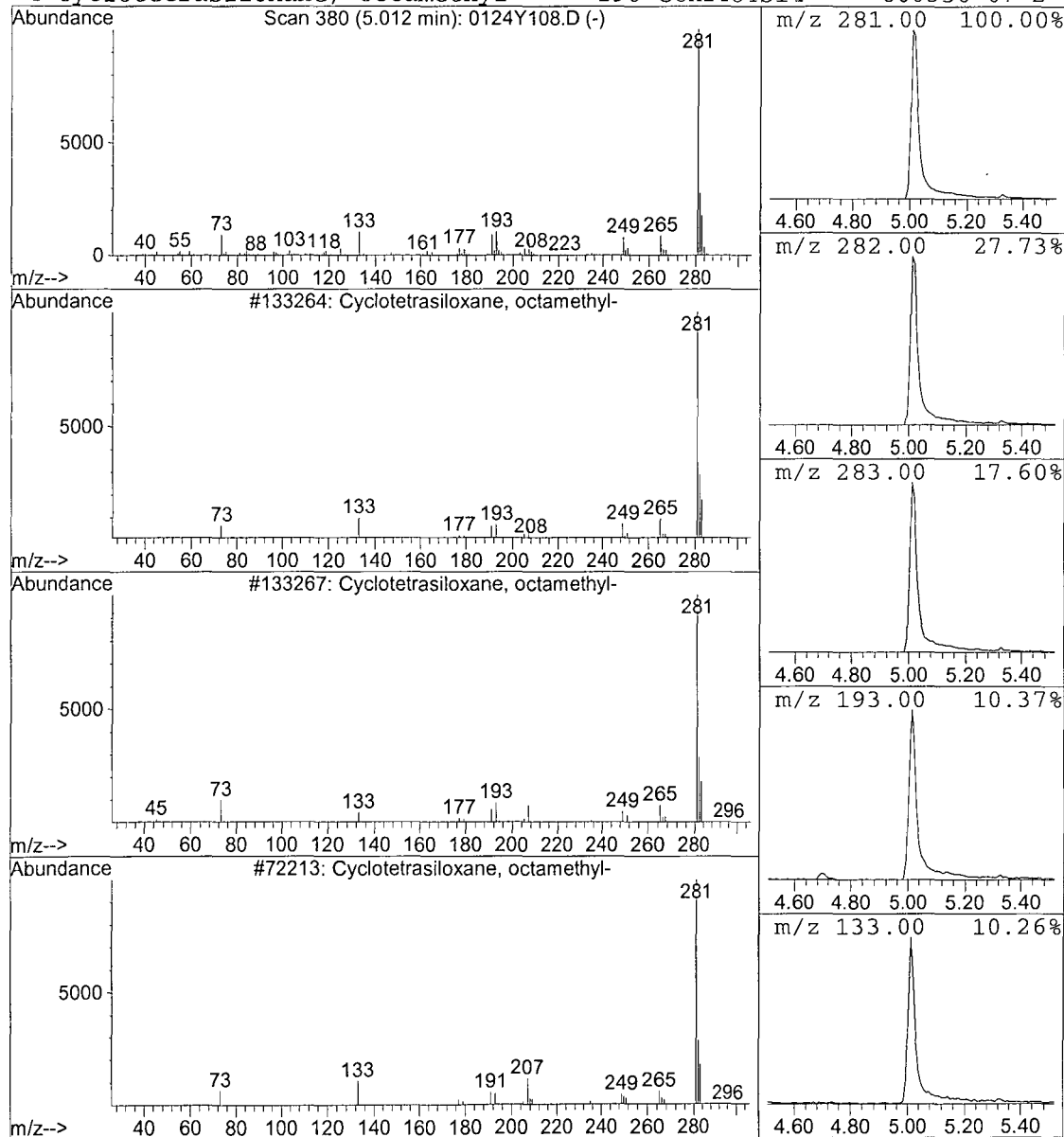
Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Cyclotetrasiloxane, octamethyl Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.01	43.11 ppb	2179460	1,4-dichlorobenzene-D4 (IS)	5.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
3		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	78
4		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	72



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Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y108.D  
 Acq On : 1 Feb 19 20:57  
 Sample : AZ85643W32 1/800  
 Misc :

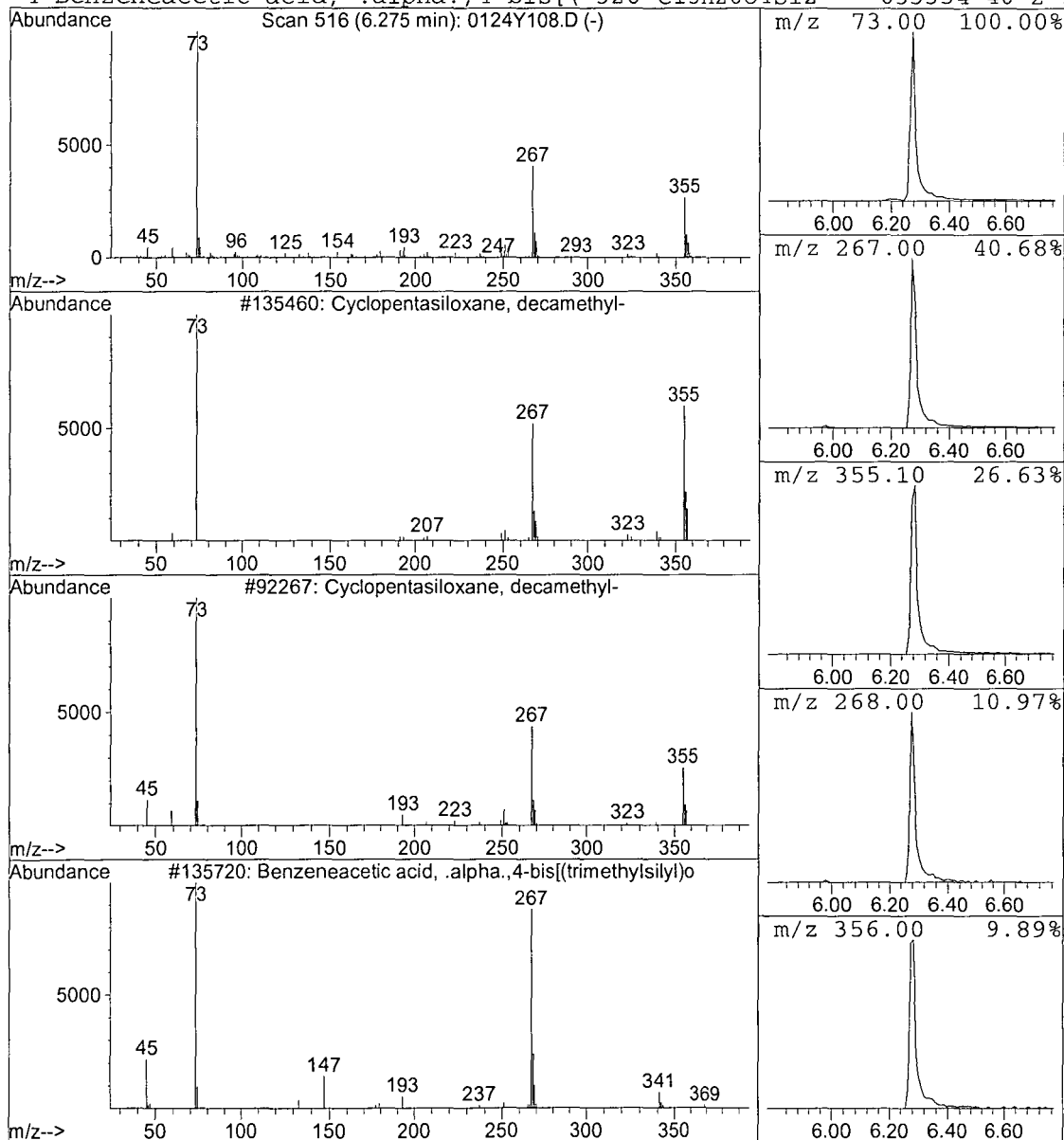
Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Cyclopentasiloxane, decamethyl Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.27	15.10 ppb	1026660	Napthalene-D8 (IS)	6.90

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopentasiloxane, decamethyl-	370	C10H30O5Si5	000541-02-6	91
2		Cyclopentasiloxane, decamethyl-	370	C10H30O5Si5	000541-02-6	53
3		Benzeneacetic acid, .alpha.,4-bis[(	384	C17H32O4Si3	037148-64-4	38
4		Benzeneacetic acid, .alpha.,4-bis[(	326	C15H26O4Si2	055334-40-2	38



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Data File : M:\YODA\DATA\Y190124\0124Y109.D Vial: 9  
 Acq On : 1 Feb 19 21:25 Operator: MA  
 Sample : AZ85644W07 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 10:25 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	409099	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1781367	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1089248	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2204887	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1984115	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.64	264	1768326	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.93	112	3404823	233.2489	ppb	0.06
Spiked Amount 250.000			Recovery =	93.300%		
6) Phenol-D6 (S)	5.08	99	4332695	225.4311	ppb	0.03
Spiked Amount 250.000			Recovery =	90.172%		
22) Nitrobenzene-D5 (S)	6.09	82	2019118	118.9821	ppb	0.00
Spiked Amount 125.000			Recovery =	95.186%		
46) 2-Fluorobiphenyl (S)	8.13	172	3828882	108.5095	ppb	0.00
Spiked Amount 125.000			Recovery =	86.808%		
64) 2,4,6-Tribromophenol (S)	9.85	330	874278	242.2054	ppb	0.00
Spiked Amount 250.000			Recovery =	96.882%		
82) Terphenyl-D14 (S)	12.52	244	4199734	103.7154	ppb	0.00
Spiked Amount 125.000			Recovery =	82.972%		

Target Compounds Qvalue

Quantitation Report

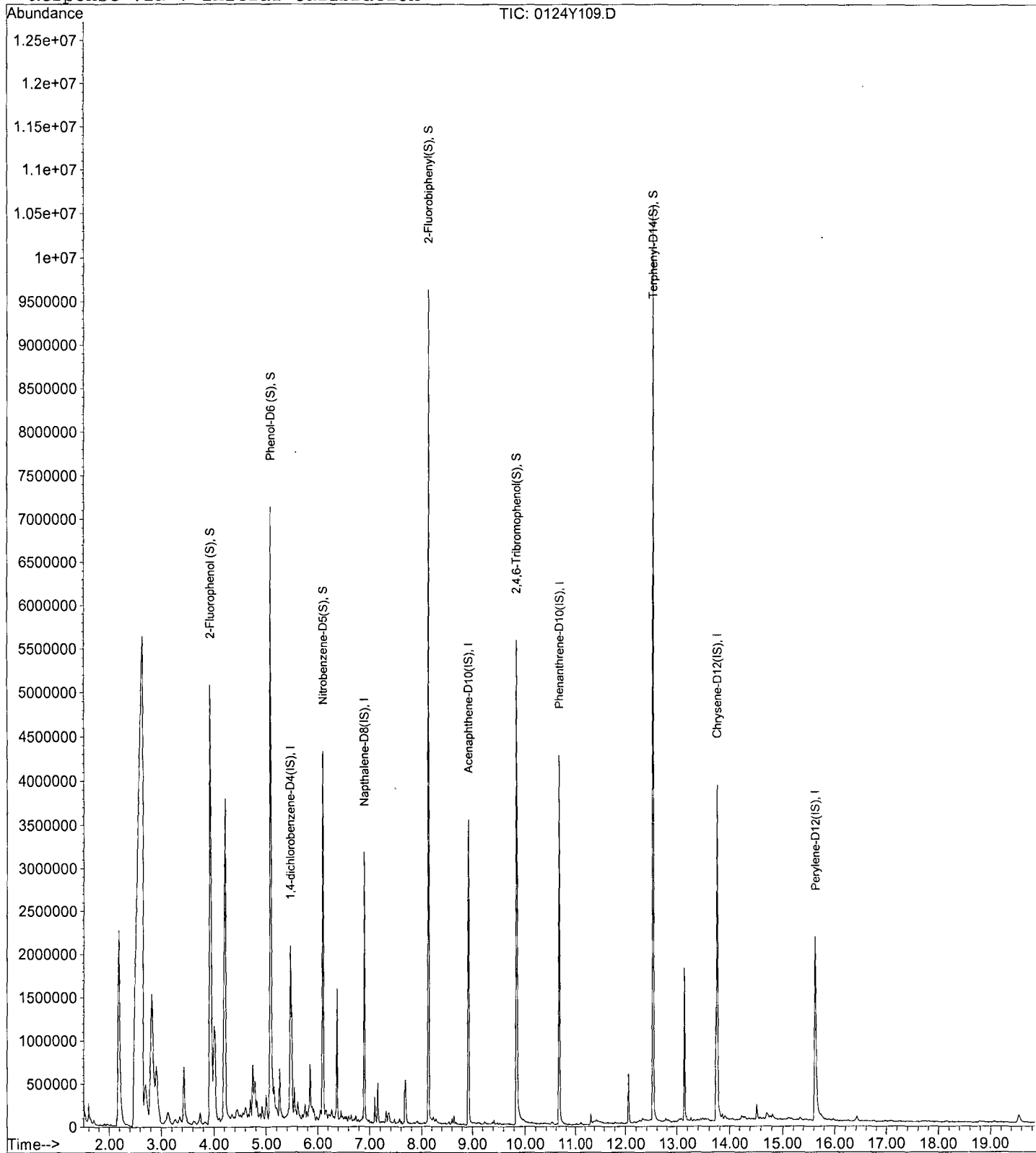
Data File : M:\YODA\DATA\Y190124\0124Y109.D  
Acq On : 1 Feb 19 21:25  
Sample : AZ85644W07 1/800  
Misc :

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:25 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 21:25  
Data File: M:\YODA\DATA\Y190124\0124Y109.D  
Name: AZ85644W07 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-one, 4-me	2.69	20.0	ppb	1697680	ISTD01	5.46	4242960	40.0
Hexanedioic acid, di	13.14	19.4	ppb	1997620	ISTD05	13.75	5139570	40.0

0124Y109.D Y0125NC.M Tue Mar 05 08:37:34 2019

**ADDED PAGE**

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y109.D  
 Acq On : 1 Feb 19 21:25  
 Sample : AZ85644W07 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.183	70	75	92	rBV	2258395	7456101	5366243	13.53%	3.207%
2	2.638	104	124	127	rBV	5634099	42461795	39661310	100.00%	23.704%
3	2.694	127	130	137	rVV	481697	3438518	1697679	4.28%	1.015%
4	2.815	137	143	149	rVV	1518488	7281879	5558352	14.01%	3.322%
5	2.908	149	153	168	rVV3	680507	6709450	2554469	6.44%	1.527%
6	3.121	172	176	185	rVV2	154071	2002413	552128	1.39%	0.330%
7	3.427	206	209	225	rVB	669722	3832800	1394609	3.52%	0.833%
8	3.929	259	263	268	rBV	5051856	12273045	11084646	27.95%	6.625%
9	4.003	268	271	279	rVB2	1095982	6027381	3106030	7.83%	1.856%
10	4.217	287	294	297	rBV	3680235	9470140	8256704	20.82%	4.935%
11	4.746	348	351	353	rVV	612467	1979225	1108131	2.79%	0.662%
12	4.774	353	354	357	rVV2	424050	1607362	667069	1.68%	0.399%
13	4.996	374	378	383	rBV3	279411	1581344	518154	1.31%	0.310%
14	5.080	383	387	393	rBV	7027436	12032132	10681861	26.93%	6.384%
15	5.256	403	406	411	rVB	563029	1772492	799045	2.01%	0.478%
16	5.460	425	428	434	rVV2	1962962	5742699	4242955	10.70%	2.536%
17	5.841	465	469	472	rBV	607406	2002971	993666	2.51%	0.594%
18	6.101	493	497	500	rVV	4240520	7278670	6296091	15.87%	3.763%
19	6.380	524	527	530	rVB	1515857	2686754	1774625	4.47%	1.061%
20	6.899	580	583	587	rVB	3089828	4500791	3484558	8.79%	2.083%
21	7.150	608	610	613	rVV	451248	1127291	450678	1.14%	0.269%
22	7.679	664	667	674	rBV2	508813	2136731	900169	2.27%	0.538%
23	8.134	712	716	719	rBV	9573830	11329796	10565048	26.64%	6.314%
24	8.923	797	801	804	rBV	3531207	5483272	4771706	12.03%	2.852%
25	9.842	897	900	912	rBV	5571192	10446605	8264743	20.84%	4.939%
26	10.659	984	988	991	rBV	4255126	6125108	5431761	13.70%	3.246%
27	12.052	1135	1138	1147	rBV	571374	1907025	696208	1.76%	0.416%
28	12.516	1184	1188	1191	rBV	10520466	13149864	12366532	31.18%	7.391%
29	13.138	1253	1255	1258	rBV	1769189	2835232	1997622	5.04%	1.194%
30	13.723	1315	1318	1319	rBV	1322095	2137458	1685074	4.25%	1.007%
31	13.751	1319	1321	1329	rVB	3853835	15084003	5139573	12.96%	3.072%
32	15.635	1519	1524	1543	rBV	2130526	8043352	5253168	13.25%	3.140%

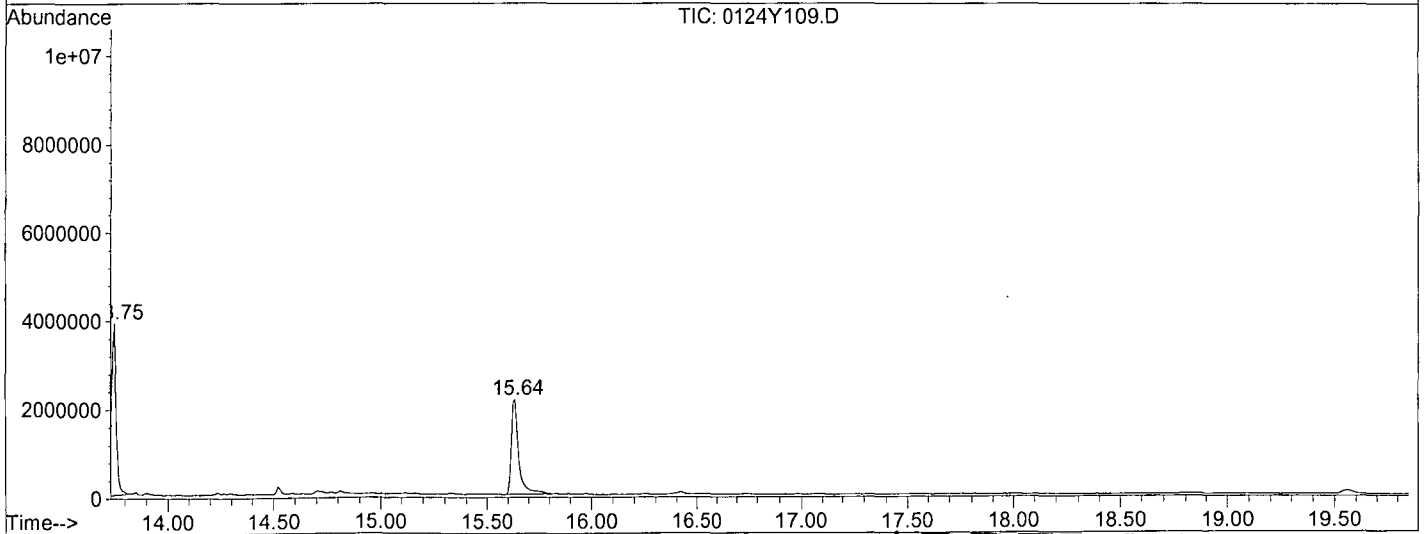
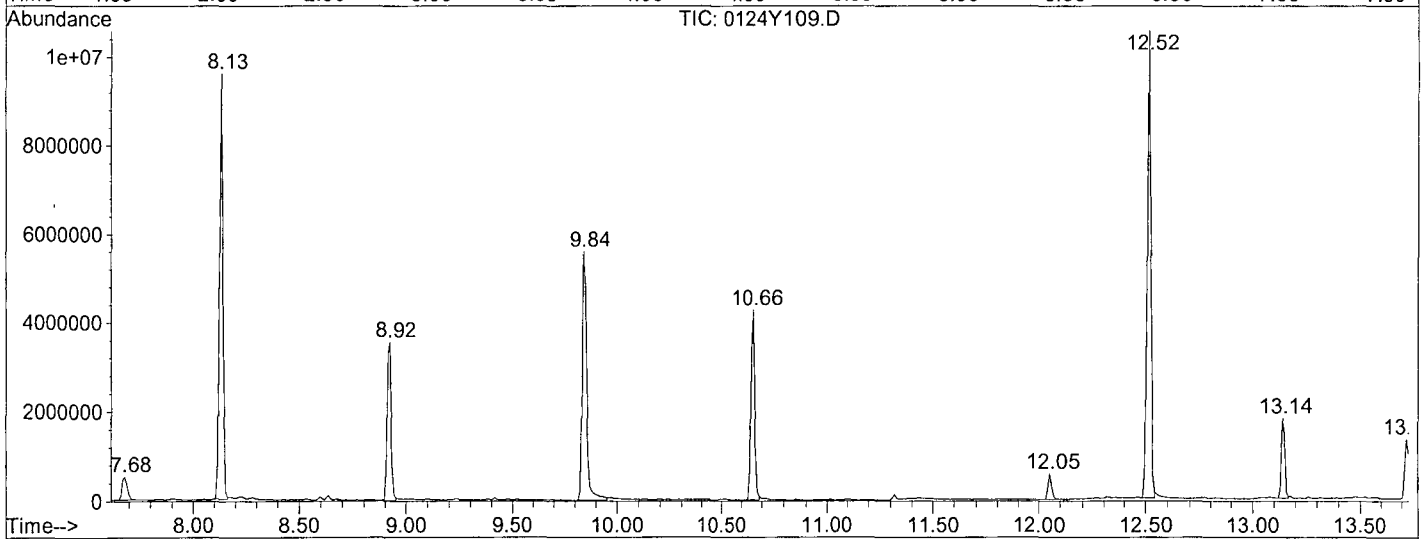
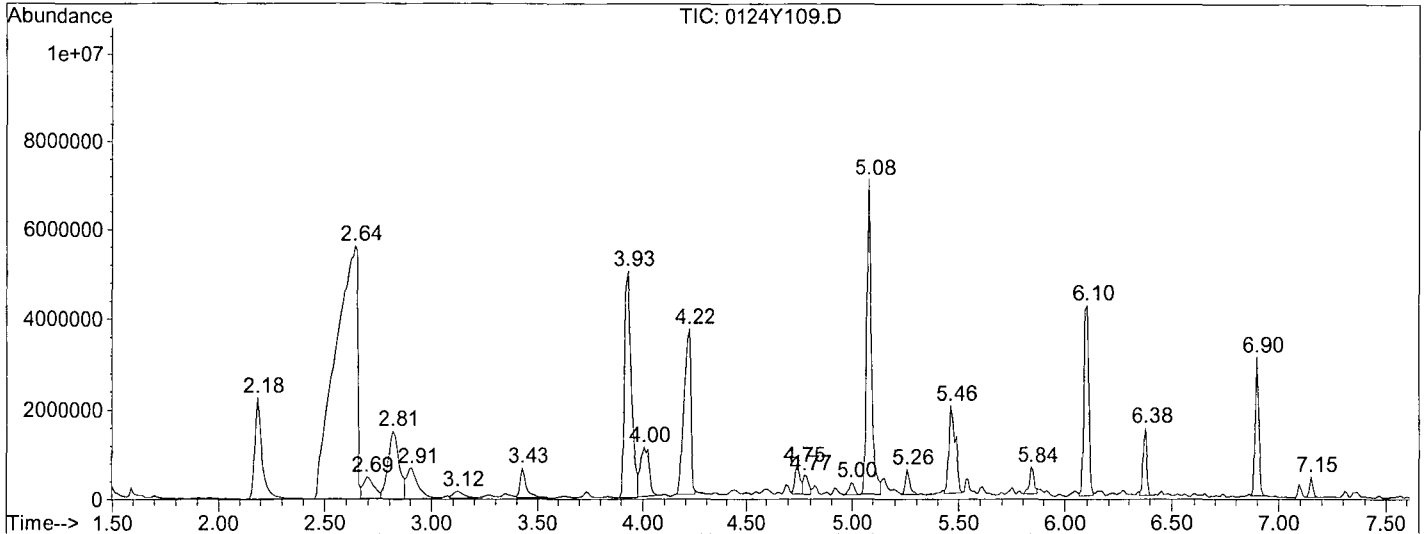
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0124Y109.D Y0125NC.M Tue Mar 05 08:37:31 2019

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LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y109.D  
 Operator : MA  
 Acquired : 1 Feb 19 21:25 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: AZ85644W07 1/800  
 Misc Info :  
 Vial Number: 9  
 Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y109.D  
 Acq On : 1 Feb 19 21:25  
 Sample : AZ85644W07 1/800  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

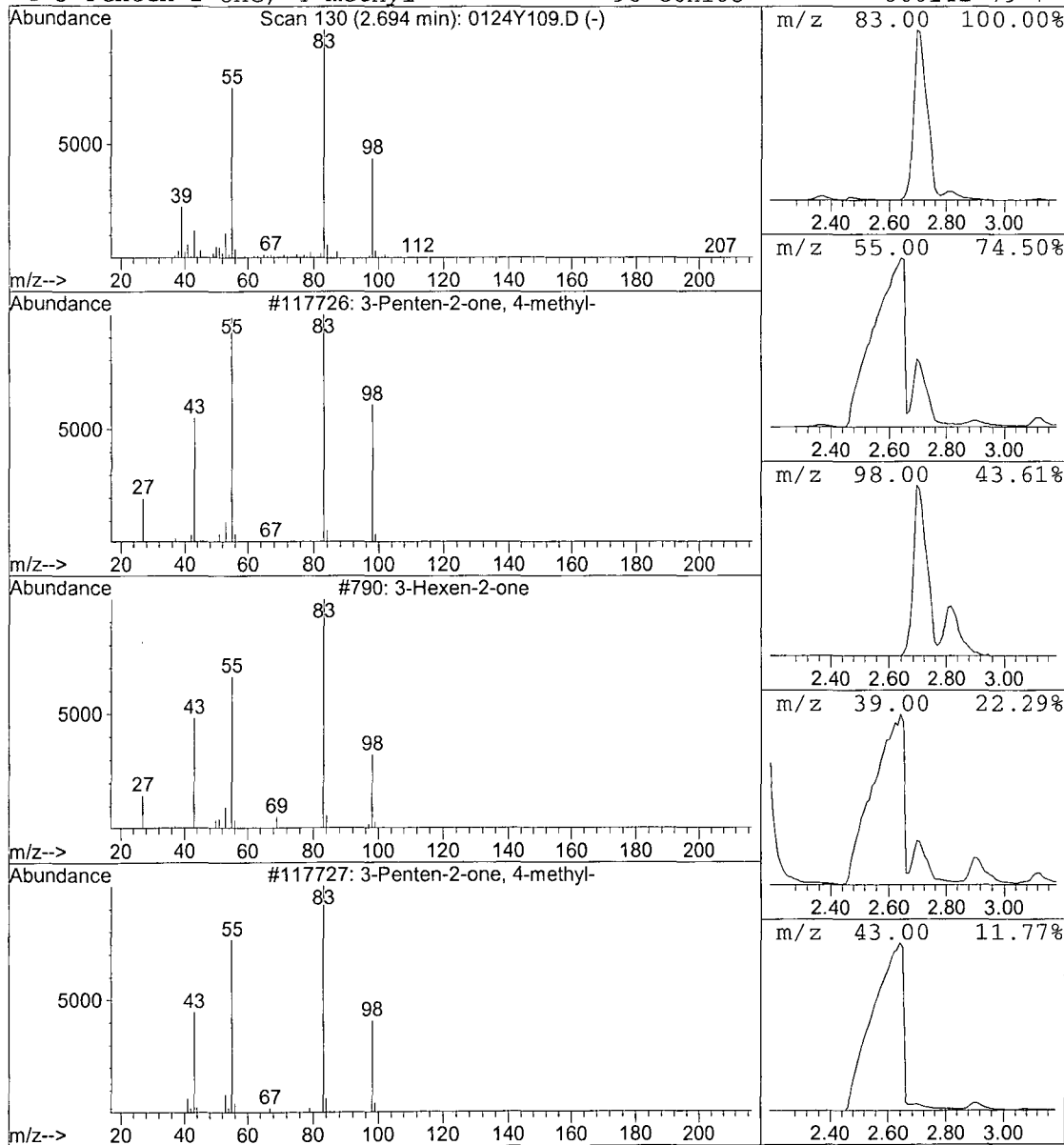
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.69	20.01 ppb	1697680	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	91
2		3-Hexen-2-one	98	C6H10O	000763-93-9	90
3		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	90
4		3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	83



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Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y109.D  
 Acq On : 1 Feb 19 21:25  
 Sample : AZ85644W07 1/800  
 Misc :

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

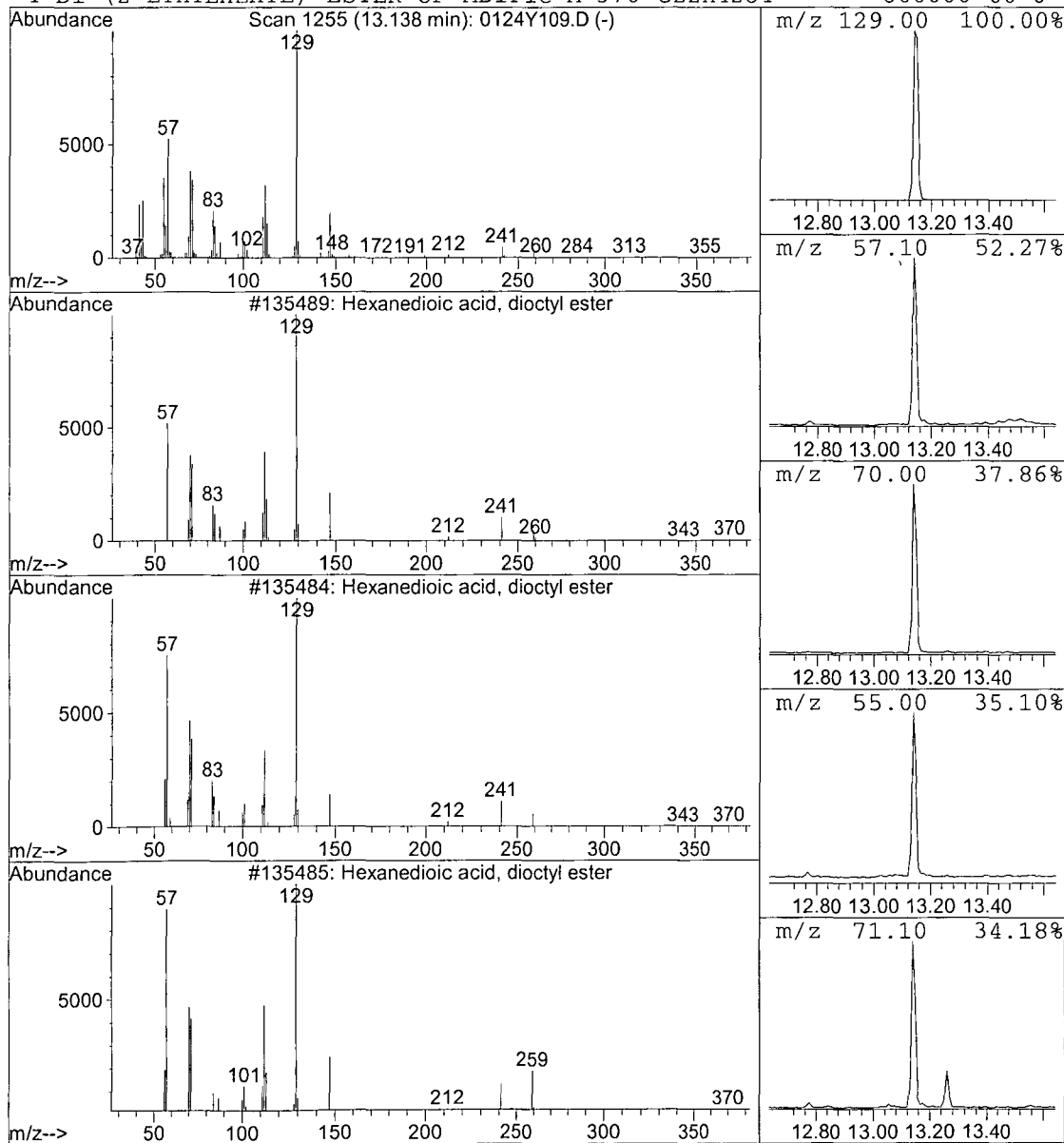
Title : EPA 8270C

Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Hexanedioic acid, dioctyl este Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.14	19.43 ppb	1997620	Chrysene-D12 (IS)	13.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	91
2			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	80
3			Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	58
4			DI-(2-ETHYLHEXYL) ESTER OF ADIPIIC A	370	C22H42O4	000000-00-0	56



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Data File : M:\YODA\DATA\Y190124\0124Y110.D Vial: 10  
 Acq On : 1 Feb 19 21:53 Operator: MA  
 Sample : AZ85646W21 1/800 Inst : Yoda  
 Misc : Multiplr: 1.25

Quant Time: Feb 4 10:24 2019 Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	434608	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1823765	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	957008	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1850035	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1628406	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1434618	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.92	112	3638537	234.6294	ppb	0.05
Spiked Amount 250.000			Recovery =	93.852%		
6) Phenol-D6 (S)	5.08	99	4642208	227.3584	ppb	0.03
Spiked Amount 250.000			Recovery =	90.943%		
22) Nitrobenzene-D5 (S)	6.10	82	2160683	124.3642	ppb	0.00
Spiked Amount 125.000			Recovery =	99.491%		
46) 2-Fluorobiphenyl (S)	8.13	172	4093475	132.0381	ppb	0.00
Spiked Amount 125.000			Recovery =	105.630%		
64) 2,4,6-Tribromophenol (S)	9.85	330	952146	300.2265	ppb	0.00
Spiked Amount 250.000			Recovery =	120.091%		
82) Terphenyl-D14 (S)	12.51	244	4435986	133.4799	ppb	0.00
Spiked Amount 125.000			Recovery =	106.784%		

Target Compounds Qvalue

Quantitation Report

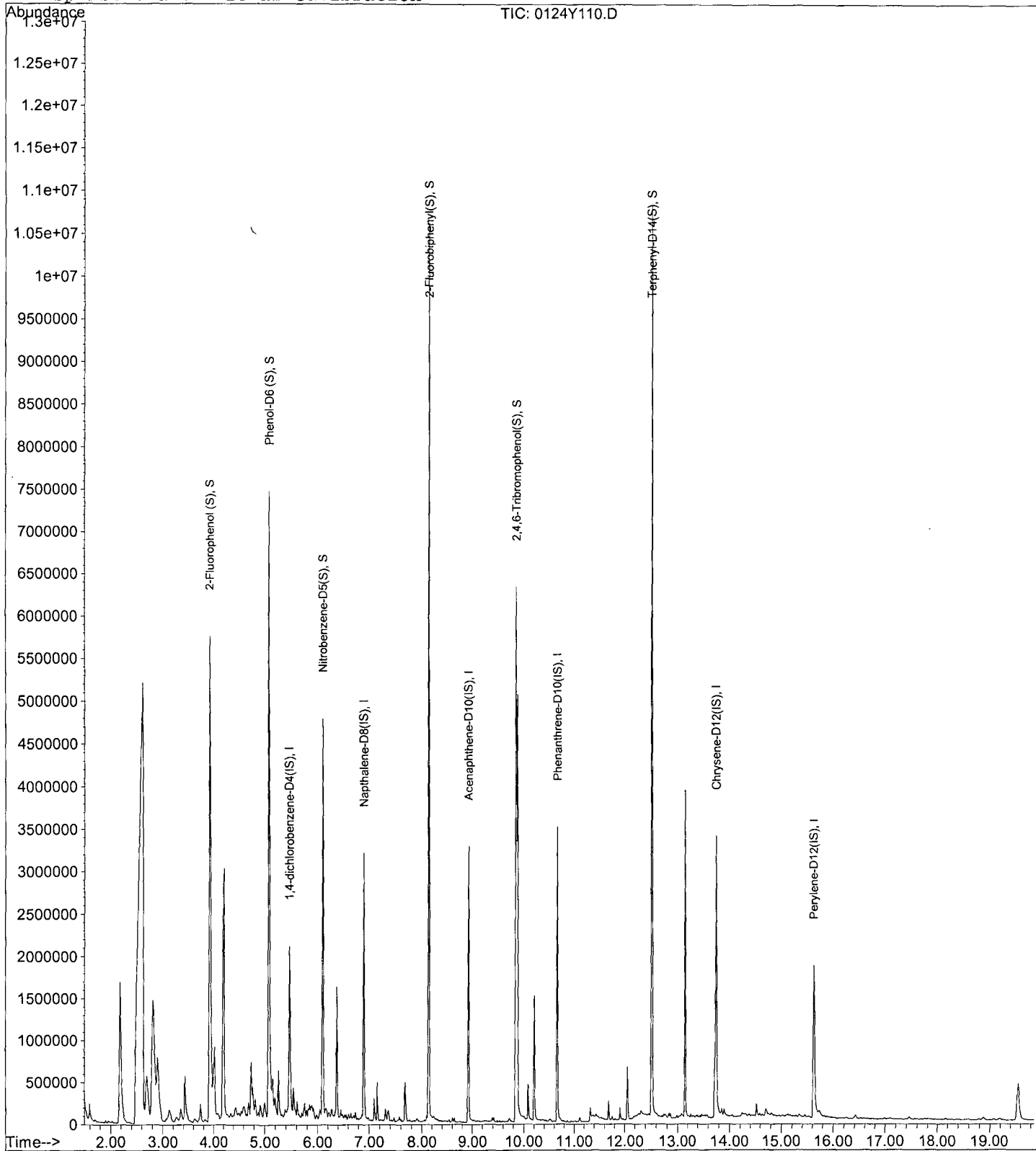
Data File : M:\YODA\DATA\Y190124\0124Y110.D  
Acq On : 1 Feb 19 21:53  
Sample : AZ85646W21 1/800  
Misc :

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:24 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 21:53  
Data File: M:\YODA\DATA\Y190124\0124Y110.D  
Name: AZ85646W21 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzenesulfonamide,	10.20	22.8	ppb	2070090	ISTD04	10.66	4543610	40.0
Hexanedioic acid, di	13.15	50.2	ppb	4305360	ISTD05	13.75	4284800	40.0

0124Y110.D Y0125NC.M Tue Mar 05 08:40:56 2019

**ADDED PAGE**

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y110.D  
 Acq On : 1 Feb 19 21:53  
 Sample : AZ85646W21 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

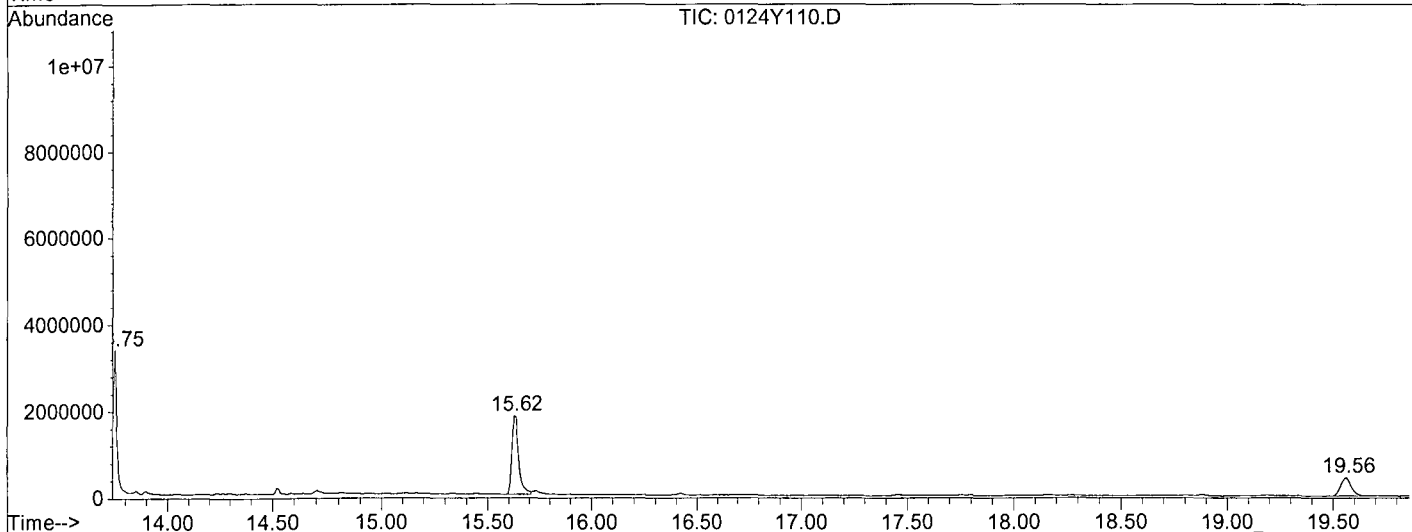
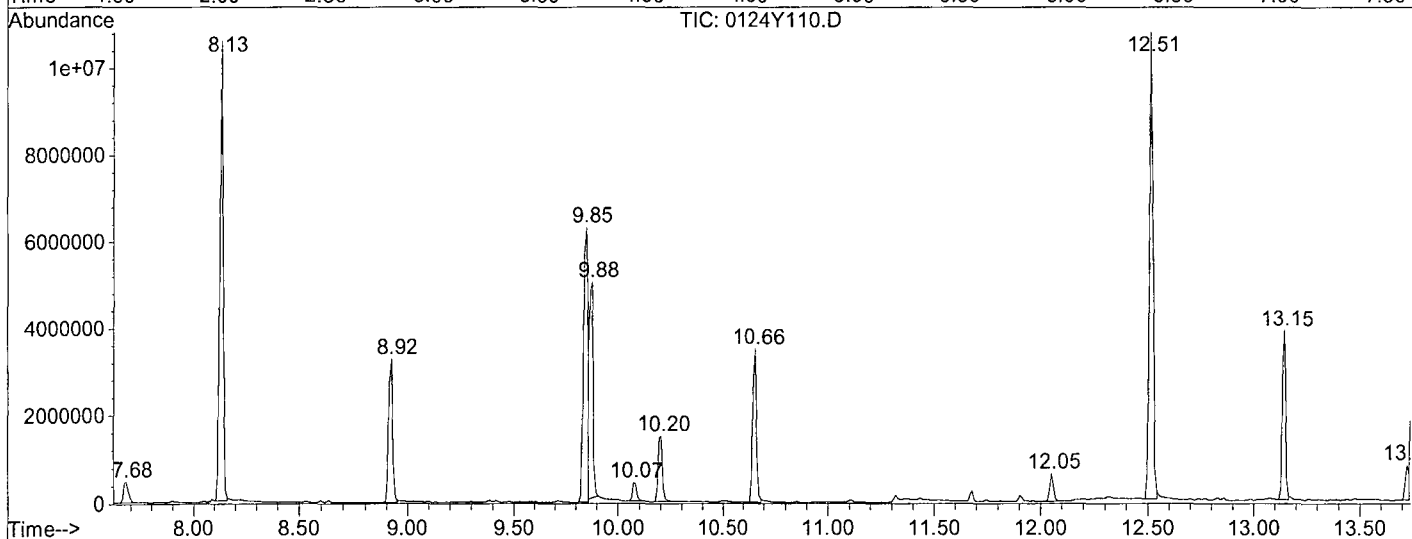
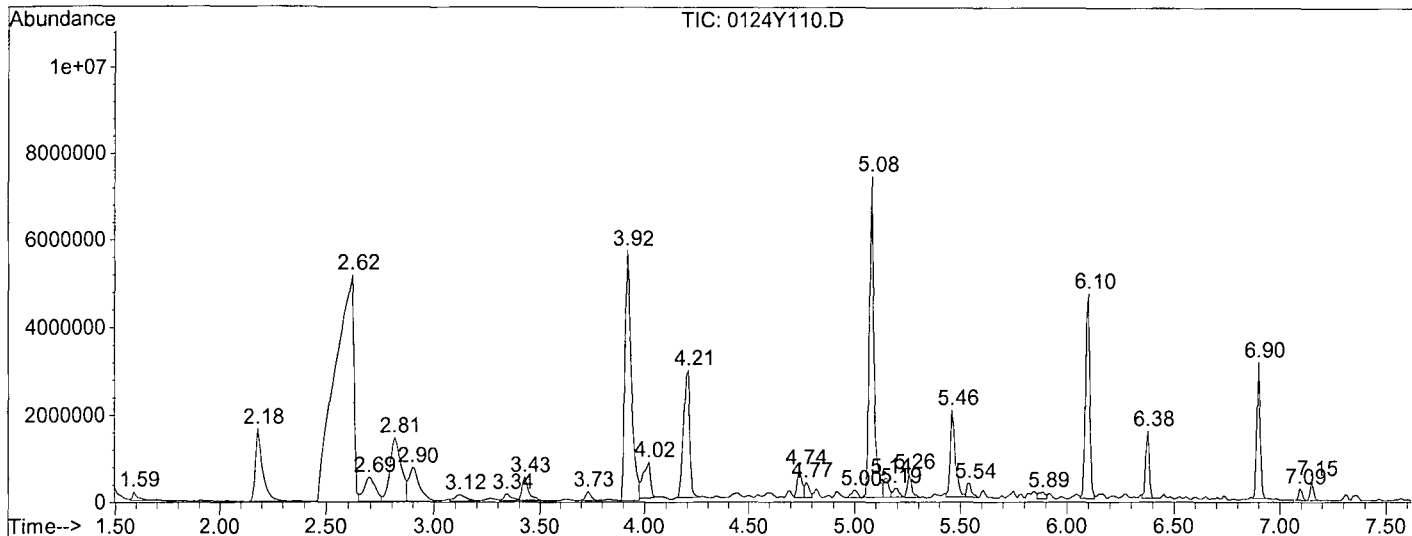
If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.588	9	11	21	rVB	198712	1802878	329577	1.07%	0.196%
2	2.182	70	75	91	rBV	1671631	6194051	3977820	12.91%	2.371%
3	2.619	104	122	125	rBV	5197502	33045189	30801166	100.00%	18.357%
4	2.693	125	130	136	rVV2	558840	3648032	1997899	6.49%	1.191%
5	2.814	136	143	149	rVV	1459075	7146033	5425821	17.62%	3.234%
6	2.897	149	152	167	rVV2	772441	7010302	2650366	8.60%	1.580%
7	3.120	171	176	186	rVV	149735	2313615	559721	1.82%	0.334%
8	3.343	196	200	206	rVV	158032	1536398	409175	1.33%	0.244%
9	3.426	206	209	225	rVB	545803	3979463	1203873	3.91%	0.717%
10	3.733	236	242	249	rVV	206935	1810665	392750	1.28%	0.234%
11	3.918	258	262	268	rBV	5724928	13080763	11974628	38.88%	7.137%
12	4.021	268	273	277	rVB	811023	3983637	1957182	6.35%	1.166%
13	4.206	287	293	299	rBV	2924311	7608873	5977078	19.41%	3.562%
14	4.745	348	351	353	rVV	638351	1953448	1084128	3.52%	0.646%
15	4.773	353	354	357	rVV2	349079	1372173	477131	1.55%	0.284%
16	5.005	374	379	383	rBV3	172307	1528290	384068	1.25%	0.229%
17	5.079	383	387	393	rBV	7363002	12926622	11446531	37.16%	6.822%
18	5.144	393	394	397	rVV	433574	1672708	672354	2.18%	0.401%
19	5.190	397	399	404	rVV	210978	1550286	400334	1.30%	0.239%
20	5.255	404	406	412	rVB2	536264	2250827	754654	2.45%	0.450%
21	5.459	425	428	435	rVV2	1998084	5061894	3380484	10.98%	2.015%
22	5.543	435	437	442	rVV	315936	1984652	475889	1.55%	0.284%
23	5.887	471	474	476	rVV2	155343	1140432	344695	1.12%	0.205%
24	6.100	493	497	500	rVV	4706743	7646670	6622861	21.50%	3.947%
25	6.379	524	527	530	rVB	1550771	2650542	1715059	5.57%	1.022%
26	6.898	580	583	587	rVB	3129325	4586913	3534806	11.48%	2.107%
27	7.093	602	604	608	rBV	262305	1065353	324026	1.05%	0.193%
28	7.149	608	610	615	rVB	452410	1490970	474604	1.54%	0.283%
29	7.678	664	667	674	rBV2	457224	2114228	780090	2.53%	0.465%
30	8.133	713	716	719	rVV	10552779	13207216	11431237	37.11%	6.813%
31	8.922	797	801	804	rBV	3267804	5007575	4221486	13.71%	2.516%
32	9.851	897	901	902	rBV	6310835	10376187	9626472	31.25%	5.737%
33	9.878	902	904	907	rVB	4922250	13176616	5879766	19.09%	3.504%
34	10.073	923	925	930	rVB	411958	1471679	548027	1.78%	0.327%
35	10.203	935	939	947	rBV	1484765	3447596	2070094	6.72%	1.234%
36	10.658	984	988	991	rBV	3492911	5310562	4543613	14.75%	2.708%
37	12.051	1135	1138	1143	rBV	626521	1669466	732717	2.38%	0.437%
38	12.515	1184	1188	1191	rBV	10732584	13952351	13039032	42.33%	7.771%
39	13.146	1253	1256	1258	rBV	3868485	5268864	4305363	13.98%	2.566%
40	13.722	1315	1318	1319	rBV	783968	1473804	967126	3.14%	0.576%
41	13.750	1319	1321	1329	rVB	3304332	12065915	4284795	13.91%	2.554%
42	15.625	1519	1523	1532	rBV	1821569	5753367	4103871	13.32%	2.446%
43	19.561	1939	1947	1962	rBV	432848	4082125	1509770	4.90%	0.909%

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y110.D  
Operator : MA  
Acquired : 1 Feb 19 21:53 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85646W21 1/800  
Misc Info :  
Vial Number: 10  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y110.D  
 Acq On : 1 Feb 19 21:53  
 Sample : AZ85646W21 1/800  
 Misc :

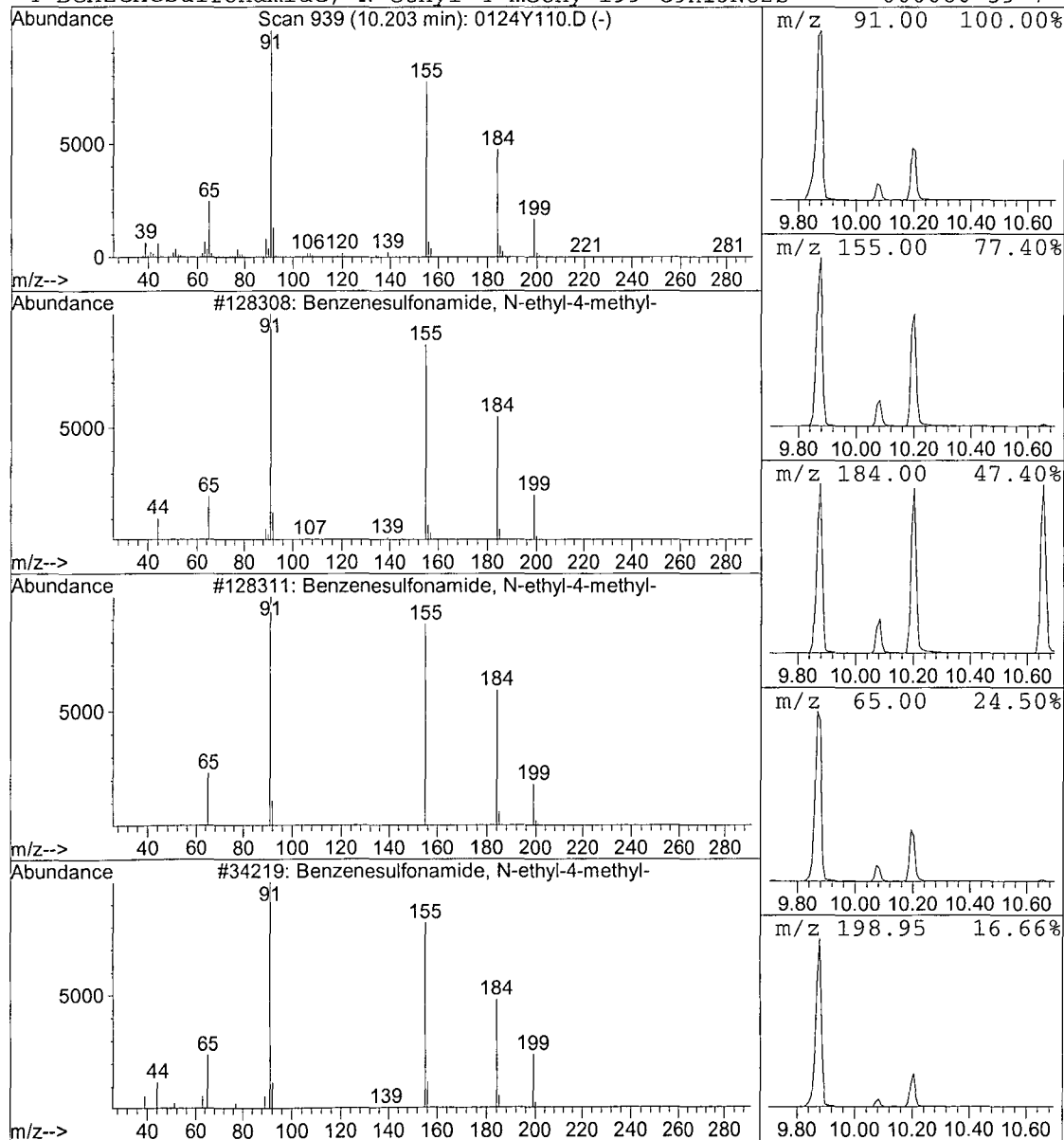
Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzenesulfonamide, N-ethyl-4- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.20	22.78 ppb	2070090	Phenanthrene-D10 (IS)	10.66

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzenesulfonamide, N-ethyl-4-methyl-	199	C9H13NO2S	000080-39-7	95
2			Benzenesulfonamide, N-ethyl-4-methyl-	199	C9H13NO2S	000080-39-7	90
3			Benzenesulfonamide, N-ethyl-4-methyl-	199	C9H13NO2S	000080-39-7	87
4			Benzenesulfonamide, N-ethyl-4-methyl-	199	C9H13NO2S	000080-39-7	78



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Data File : M:\YODA\DATA\Y190124\0124Y110.D  
 Acq On : 1 Feb 19 21:53  
 Sample : AZ85646W21 1/800  
 Misc :

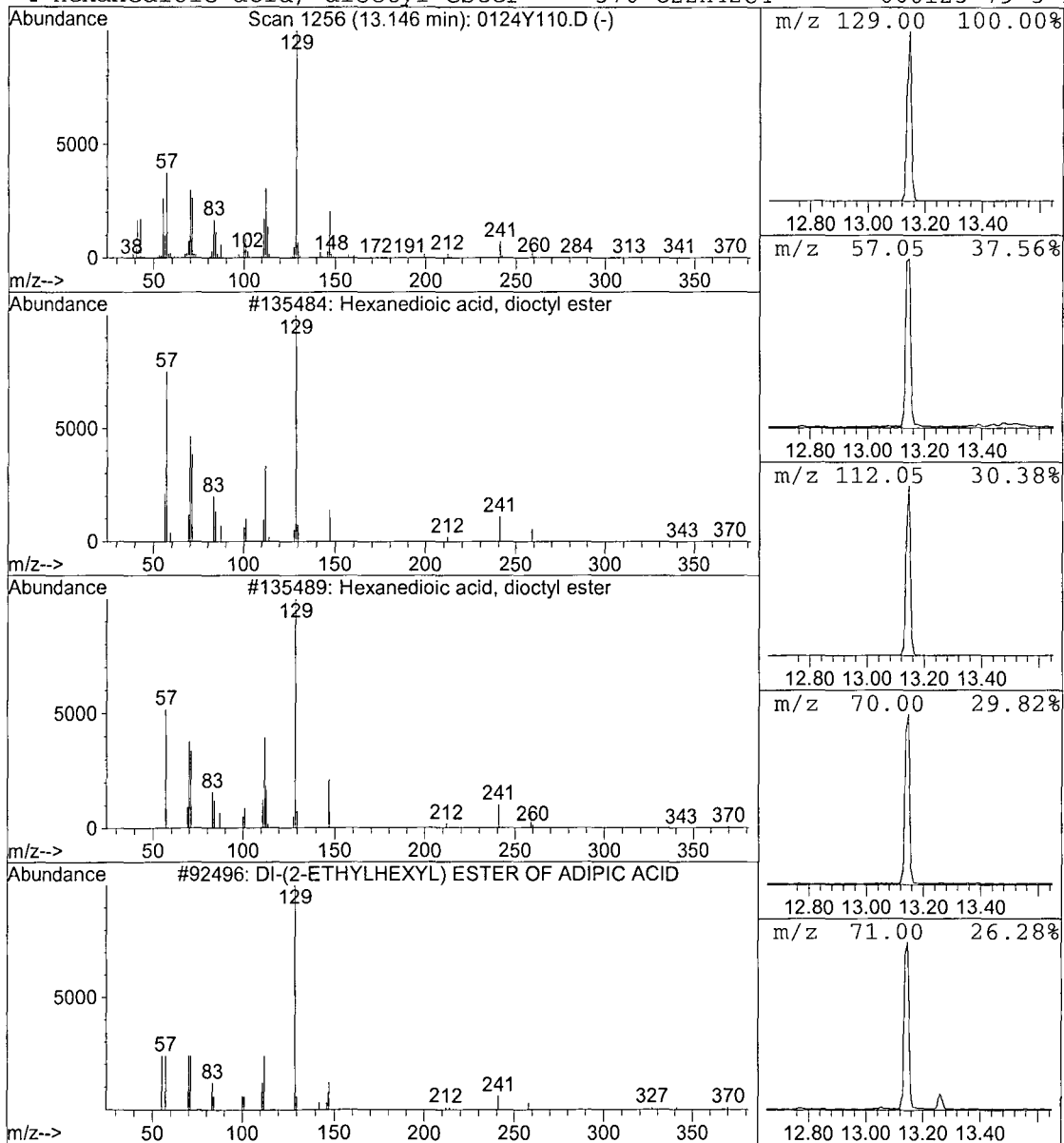
Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Hexanedioic acid, dioctyl este Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.15	50.24 ppb	4305360	Chrysene-D12 (IS)	13.75

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	92
2		Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	91
3		DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	80
4		Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	50



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Data File : M:\YODA\DATA\Y190124\0124Y111.D  
 Acq On : 1 Feb 19 22:21  
 Sample : AZ85653W20 1/800  
 Misc :

Vial: 11  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 10:23 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	405613	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1746486	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1093424	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2195027	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1964121	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1808191	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.93	112	3502408	241.9961	ppb	0.06
Spiked Amount 250.000			Recovery =	96.798%		
6) Phenol-D6 (S)	5.09	99	4502286	236.2683	ppb	0.04
Spiked Amount 250.000			Recovery =	94.507%		
22) Nitrobenzene-D5 (S)	6.10	82	2094134	125.8672	ppb	0.00
Spiked Amount 125.000			Recovery =	100.694%		
46) 2-Fluorobiphenyl (S)	8.13	172	4009319	113.1891	ppb	0.00
Spiked Amount 125.000			Recovery =	90.551%		
64) 2,4,6-Tribromophenol (S)	9.85	330	910181	251.1888	ppb	0.00
Spiked Amount 250.000			Recovery =	100.476%		
82) Terphenyl-D14 (S)	12.52	244	4402228	109.8228	ppb	0.00
Spiked Amount 125.000			Recovery =	87.858%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

0124Y111.D Y0125NC.M

Wed Feb 06 10:53:02 2019

Quantitation Report

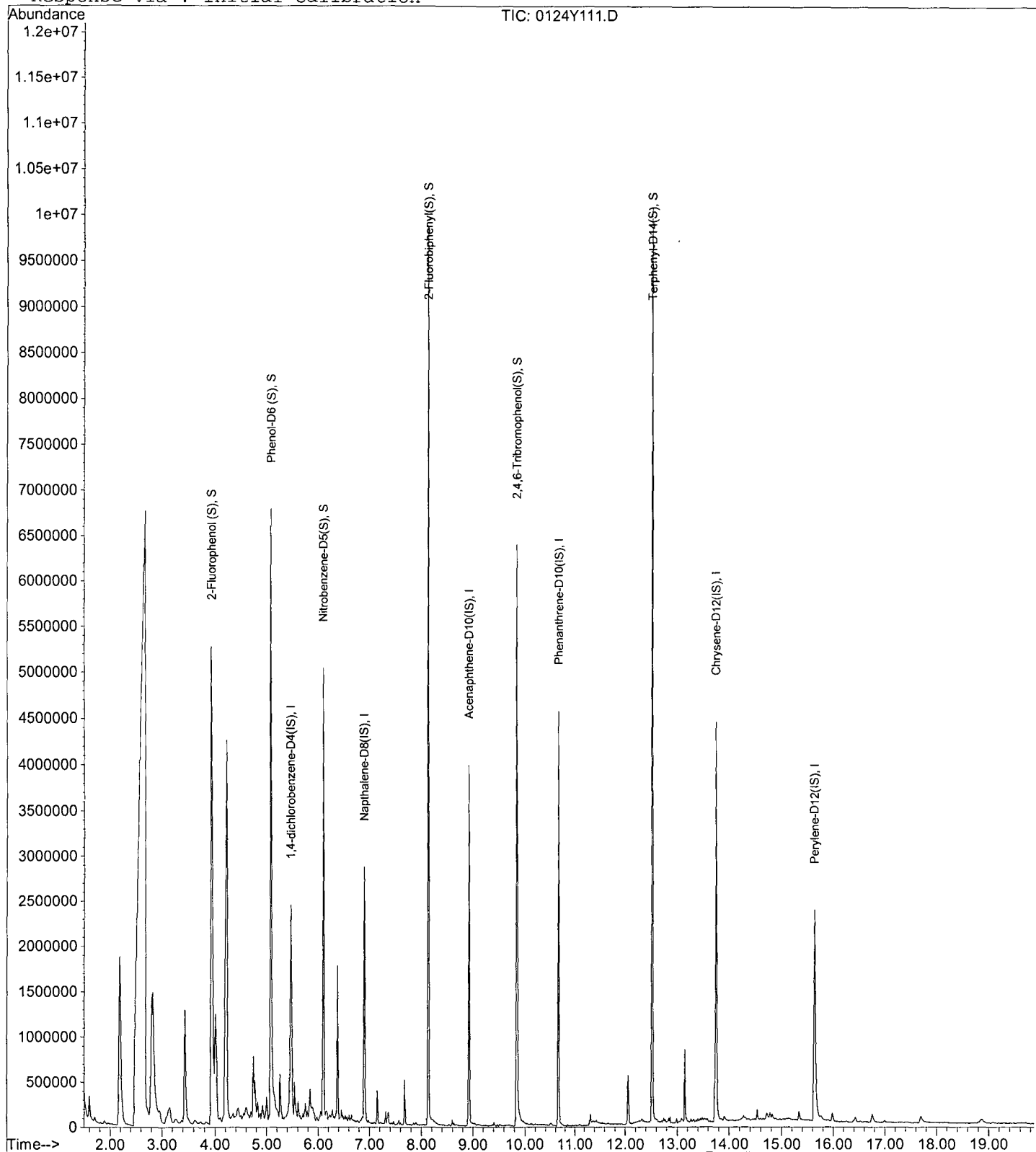
Data File : M:\YODA\DATA\Y190124\0124Y111.D  
Acq On : 1 Feb 19 22:21  
Sample : AZ85653W20 1/800  
Misc :

Vial: 11  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:23 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 22:21  
Data File: M:\YODA\DATA\Y190124\0124Y111.D  
Name: AZ85653W20 1/800  
Misc:  
Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title: EPA 8270C  
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Pentanedioic acid, d	6.38	23.8	ppb	1705290	ISTD02	6.90	3575440	40.0
0124Y111.D Y0125NC.M								

Tue Mar 05 08:59:59 2019

**ADDED PAGE**

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y111.D  
 Acq On : 1 Feb 19 22:21  
 Sample : AZ85653W20 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 11  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.190	70	76	104	rVB	1863807	9842873	5080548	9.59%	2.842%
2	2.682	104	129	131	rVB	6747776	56715690	52970776	100.00%	29.626%
3	2.821	136	144	156	rVV	1356470	8677661	5238843	9.89%	2.930%
4	3.146	169	179	187	rBV4	173242	3427570	792256	1.50%	0.443%
5	3.434	206	210	226	rVB	1264374	5559013	2519765	4.76%	1.409%
6	3.935	260	264	269	rBV	5246350	13075093	11450021	21.62%	6.404%
7	4.009	269	272	279	rVB	1176771	6592839	2991589	5.65%	1.673%
8	4.223	288	295	298	rBV	4152982	11476778	9701820	18.32%	5.426%
9	4.743	348	351	353	rBV	676729	1994687	1057107	2.00%	0.591%
10	4.770	353	354	357	rVV2	401723	1641703	535203	1.01%	0.299%
11	5.086	384	388	399	rBV	6678916	14282670	11482818	21.68%	6.422%
12	5.253	404	406	412	rVB	494236	2356627	798620	1.51%	0.447%
13	5.467	415	429	435	rBV2	2364189	8589558	5384073	10.16%	3.011%
14	5.847	465	470	472	rBV2	315601	1895240	651094	1.23%	0.364%
15	6.098	494	497	501	rVV	4968098	8490923	6371136	12.03%	3.563%
16	6.376	525	527	530	rVB	1690563	3330413	1705286	3.22%	0.954%
17	6.896	581	583	591	rVB	2819110	7220193	3575438	6.75%	2.000%
18	7.676	664	667	674	rBV	495823	2093694	622548	1.18%	0.348%
19	8.131	713	716	719	rBV	9835221	12276478	11016724	20.80%	6.162%
20	8.920	797	801	804	rBV	3964426	5727729	4755350	8.98%	2.660%
21	9.848	897	901	913	rBV	6382838	11122296	8697305	16.42%	4.864%
22	10.656	985	988	991	rBV	4552233	6688487	5396902	10.19%	3.018%
23	12.049	1135	1138	1145	rBV	535472	2143330	720518	1.36%	0.403%
24	12.522	1185	1189	1192	rBV	10015681	14488823	13011786	24.56%	7.277%
25	13.144	1253	1256	1258	rBV	799349	1680961	881077	1.66%	0.493%
26	13.748	1315	1321	1329	rBV	4400795	8330769	6240889	11.78%	3.490%
27	15.632	1519	1524	1534	rBV	2330676	7449906	5147372	9.72%	2.879%

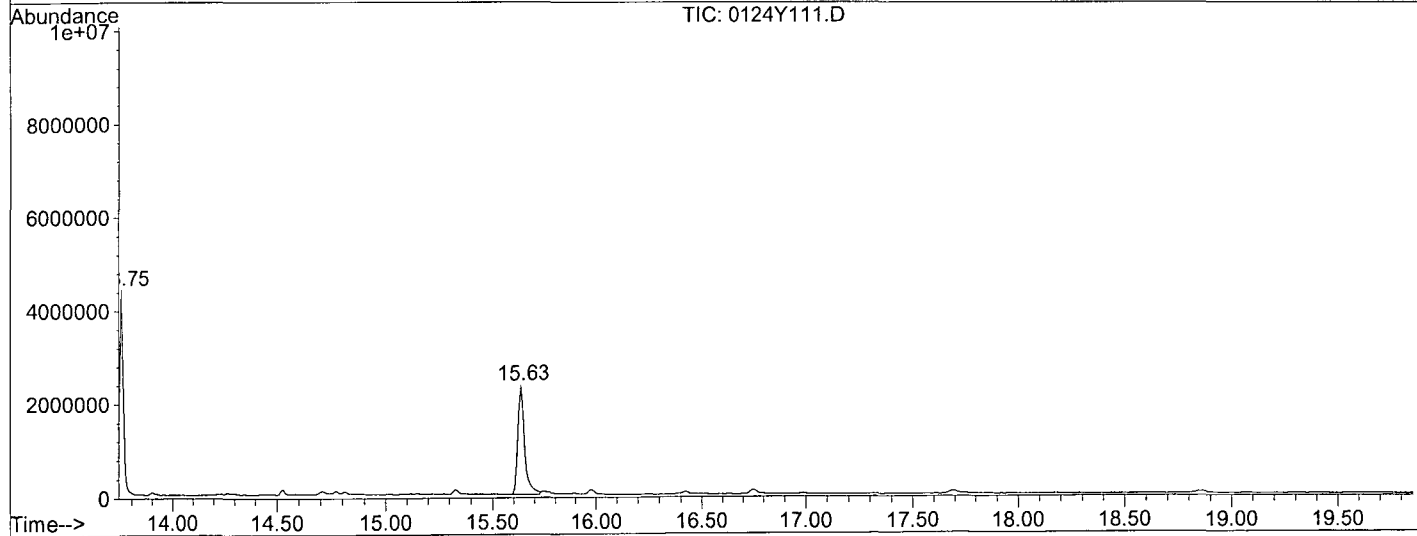
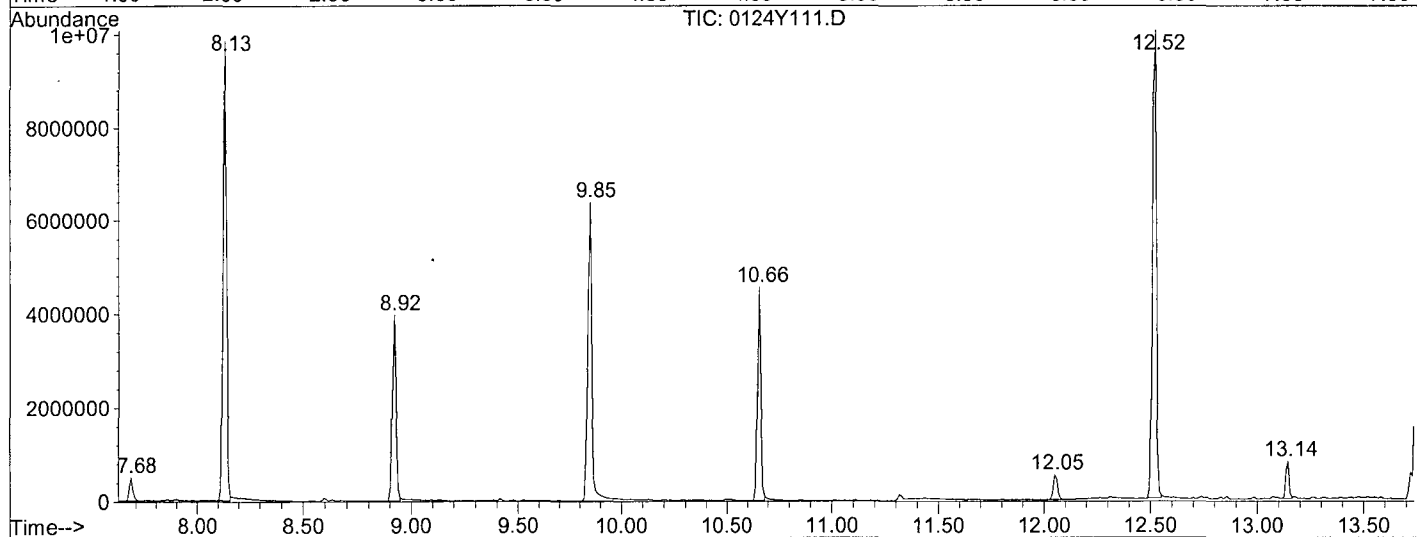
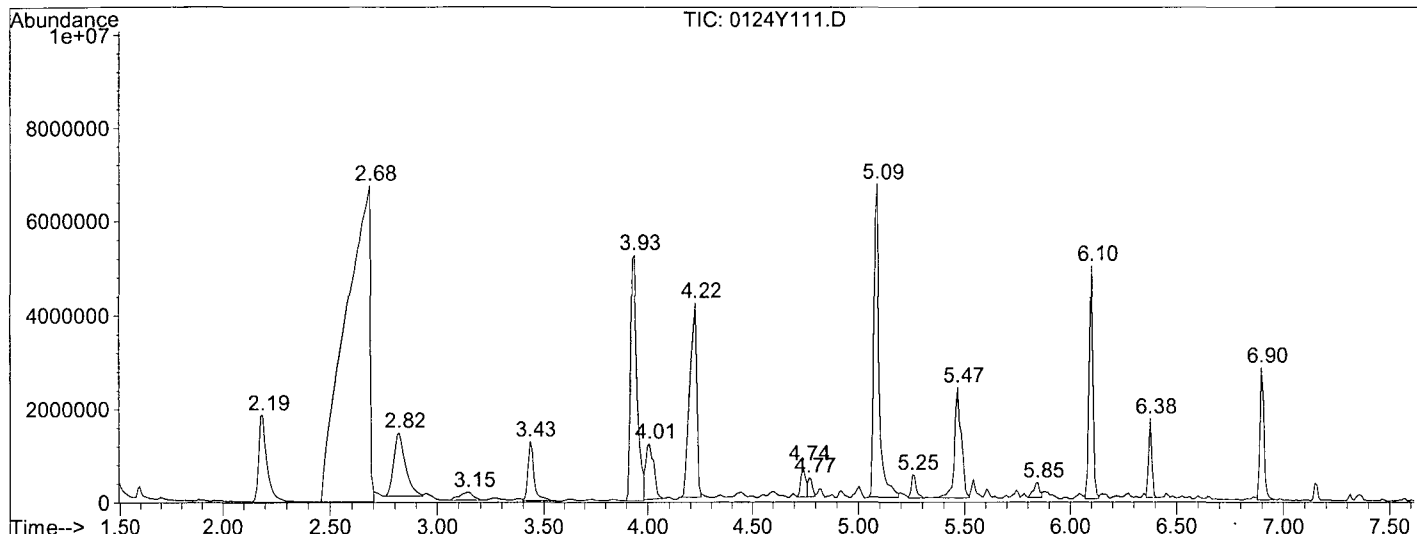
Sum of corrected areas: 178796864

0124Y111.D Y0125NC.M Tue Mar 05 08:59:57 2019

ADDED PAGE

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y111.D  
Operator : MA  
Acquired : 1 Feb 19 22:21 using AcqMethod SVOC416  
Instrument : Yoda  
Sample Name: AZ85653W20 1/800  
Misc Info :  
Vial Number: 11  
Quant File :Y0125NC.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y111.D  
 Acq On : 1 Feb 19 22:21  
 Sample : AZ85653W20 1/800  
 Misc :

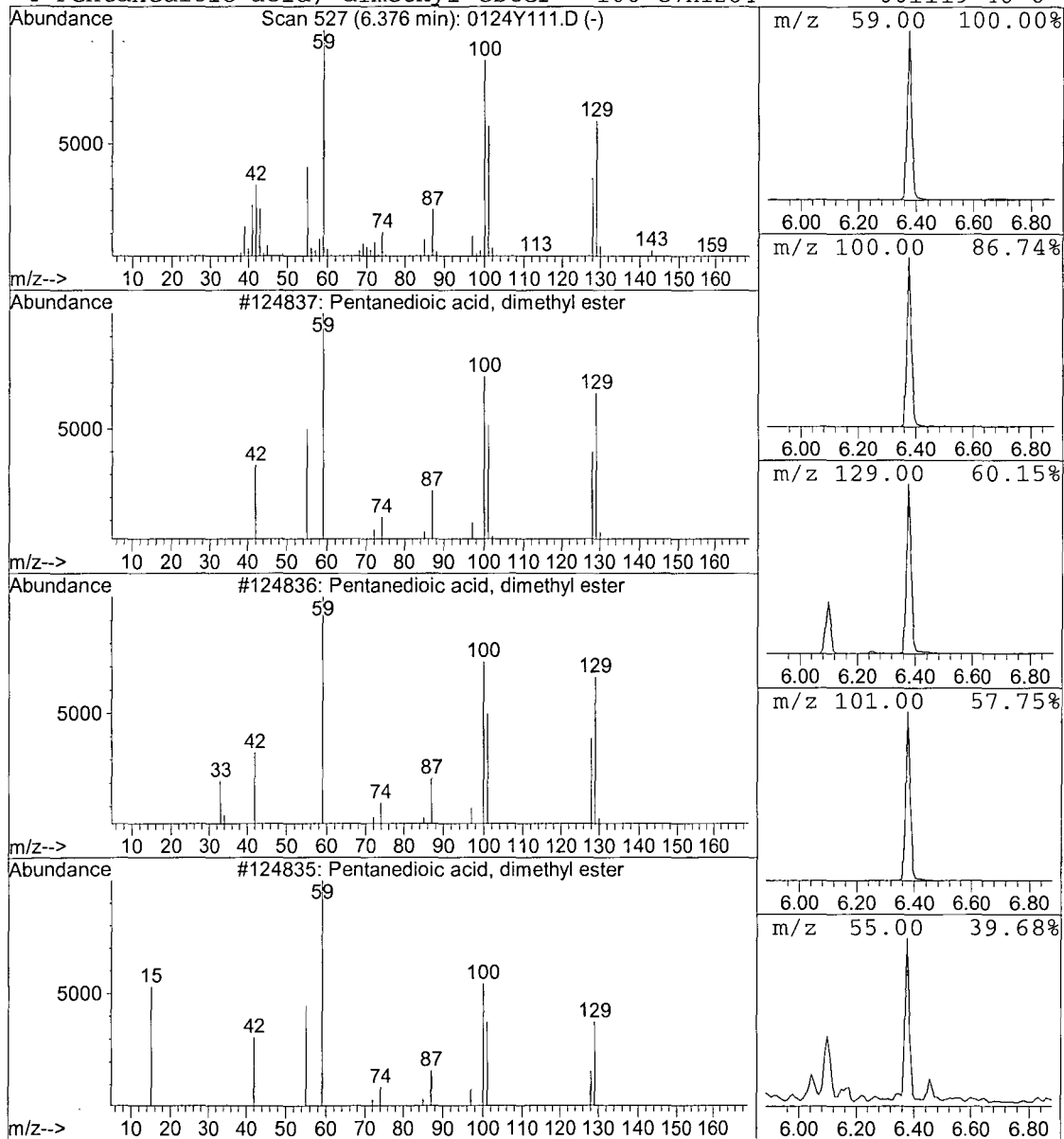
Vial: 11  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Pentanedioic acid, dimethyl es Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.38	23.85 ppb	1705290	Napthalene-D8 (IS)	6.90

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
3			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
4			Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78



ADDED PAGE

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 10:48 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.46	152	407906	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.90	136	1730017	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	912178	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	1761484	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.75	240	1559813	40.0000	ppb	-0.01
89) Perylene-D12 (IS)	15.63	264	1513972	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.89	112	3313768	227.6750	ppb	0.02
Spiked Amount 250.000			Recovery =	91.070%		
6) Phenol-D6 (S)	5.06	99	4218189	220.1152	ppb	0.00
Spiked Amount 250.000			Recovery =	88.046%		
22) Nitrobenzene-D5 (S)	6.09	82	2015717	122.3073	ppb	0.00
Spiked Amount 125.000			Recovery =	97.846%		
46) 2-Fluorobiphenyl (S)	8.13	172	3786452	128.1373	ppb	0.00
Spiked Amount 125.000			Recovery =	102.510%		
64) 2,4,6-Tribromophenol (S)	9.85	330	872148	288.5172	ppb	0.00
Spiked Amount 250.000			Recovery =	115.407%		
82) Terphenyl-D14 (S)	12.51	244	4243389	133.2995	ppb	0.00
Spiked Amount 125.000			Recovery =	106.640%		

Target Compounds Qvalue

Quantitation Report

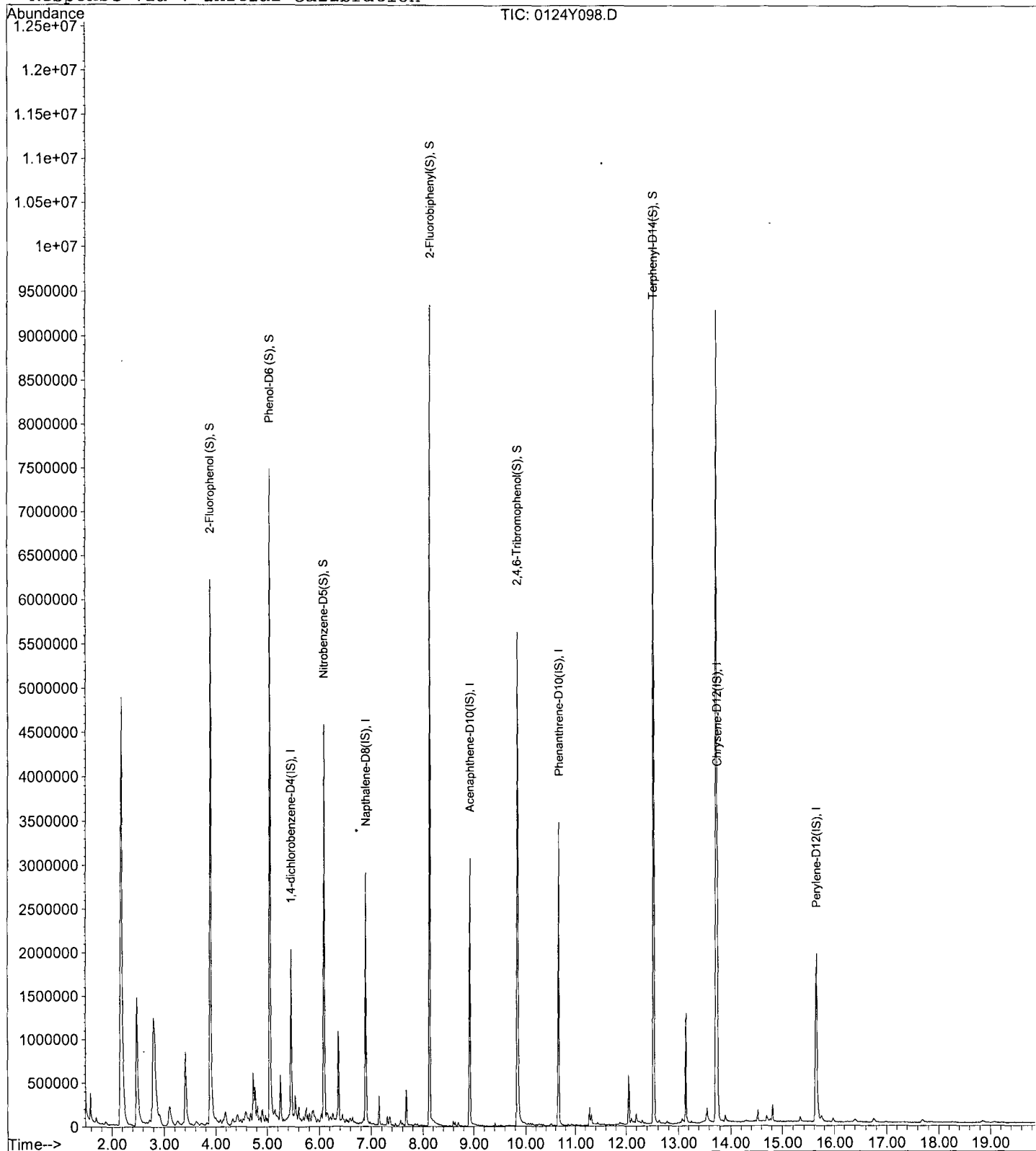
Data File : M:\YODA\DATA\Y190124\0124Y098.D  
Acq On : 1 Feb 19 16:19  
Sample : 190130A Blk 1/800  
Misc :

Vial: 98  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 10:48 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration





Tentatively Identified Compound (LSC) summary

Operator ID: MA Date Acquired: 1 Feb 19 16:19  
 Data File: M:\YODA\DATA\Y190124\0124Y098.D  
 Name: 190130A Blk 1/800  
 Misc:  
 Method: M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title: EPA 8270C  
 Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.18	218.0	ppb	11425600	ISTD01	5.46	2620080	40.0
Ethene, tetrachloro-	2.80	84.6	ppb	4431650	ISTD01	5.46	2620080	40.0
Nonane	4.20	8.0	ppb	420148	ISTD01	5.46	2620080	40.0
Decane	5.25	14.5	ppb	759179	ISTD01	5.46	2620080	40.0
Butanedioic acid, di	5.53	7.7	ppb	401962	ISTD01	5.46	2620080	40.0
Pentanedioic acid, d	6.37	18.4	ppb	1289090	ISTD02	6.90	3509310	40.0
Hexanedioic acid, di	7.15	5.3	ppb	369644	ISTD02	6.90	3509310	40.0

0124Y098.D Y0125NC.M Tue Mar 05 08:29:18 2019

LSC Area Percent Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :  
 MS Integration Params: LSCINT.P

Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25000

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.002  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

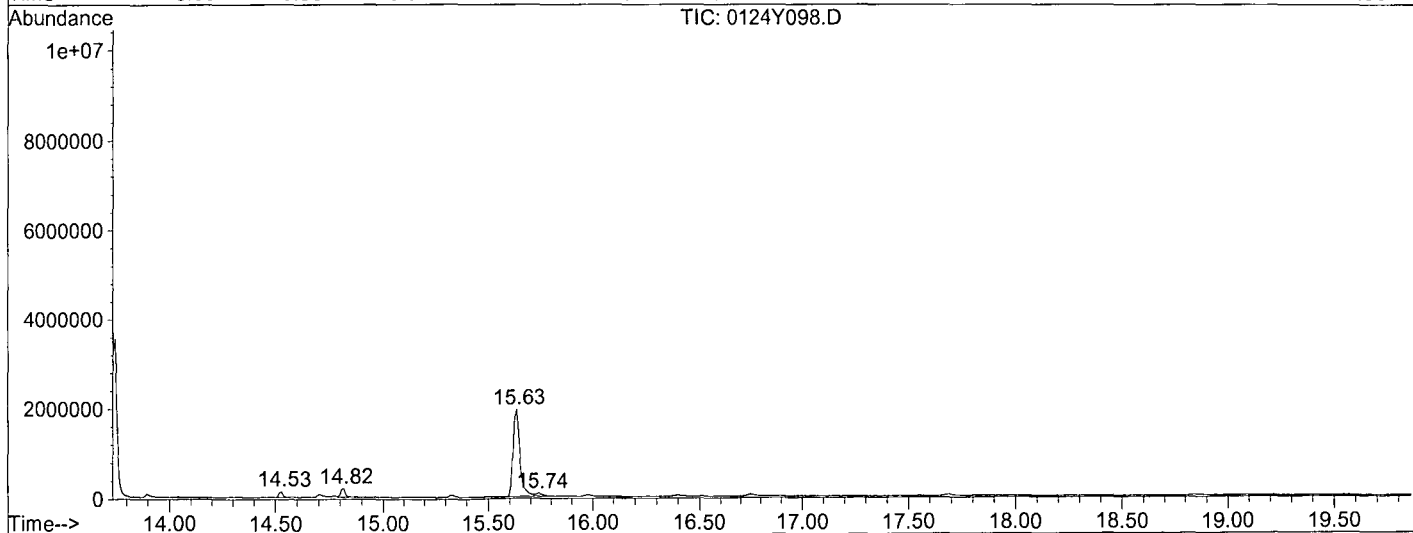
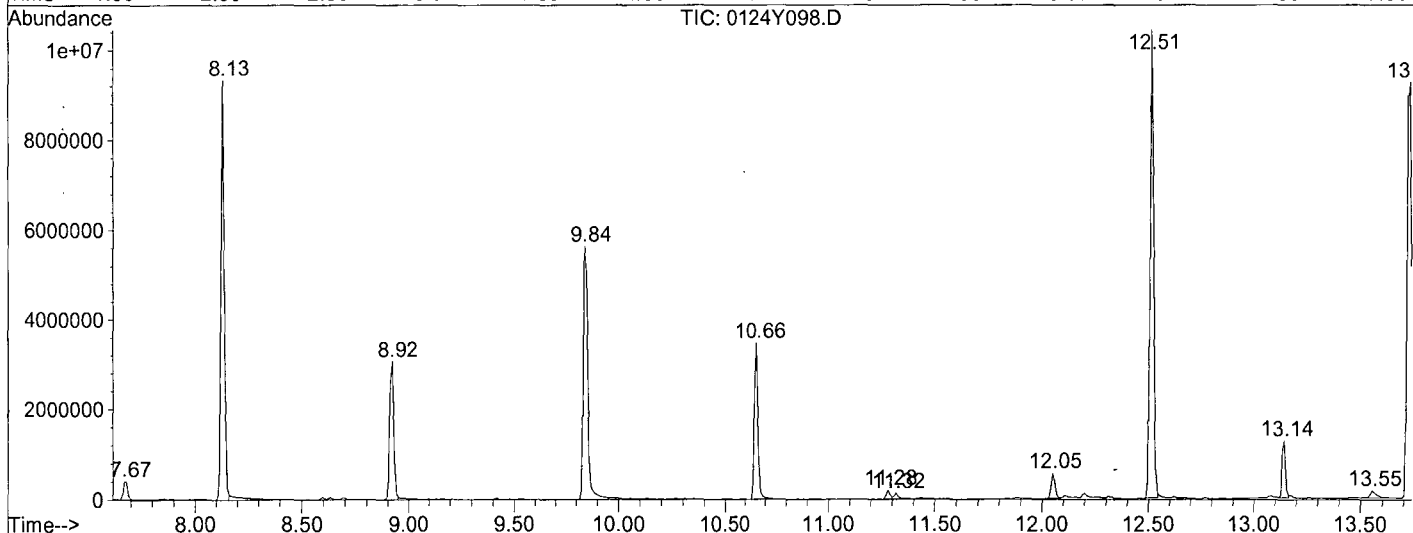
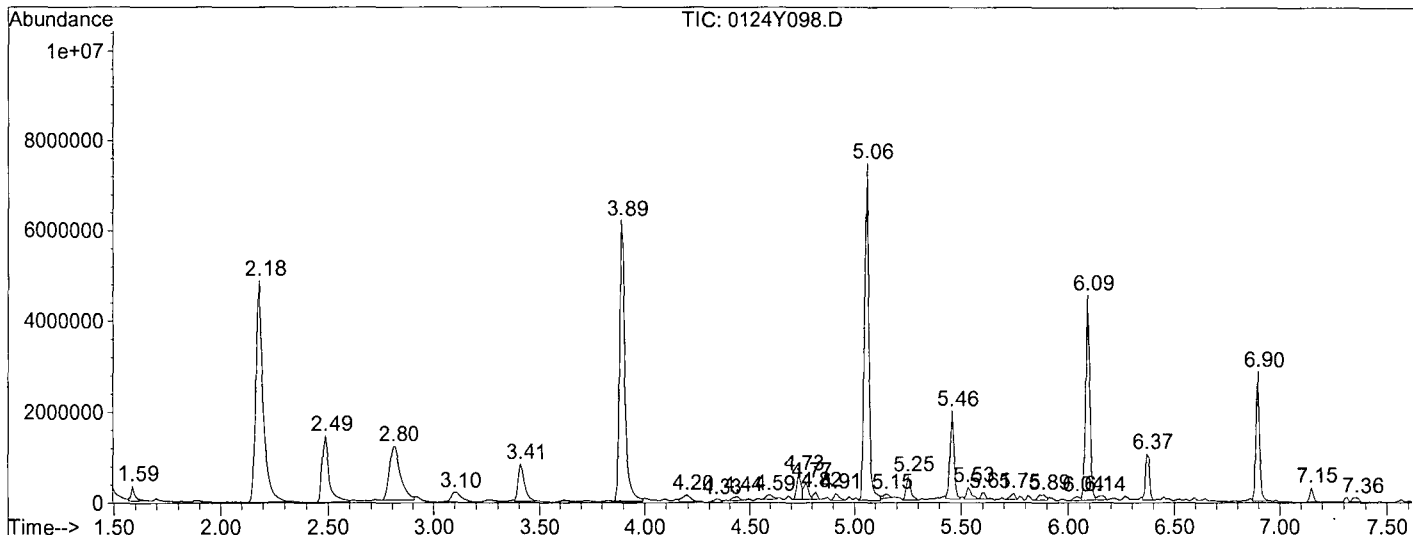
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.587	9	11	20	rVB	327810	1914866	424902	2.67%	0.335%
2	2.181	69	75	91	rBV	4869307	13705170	11425577	71.84%	8.997%
3	2.487	104	108	120	rBV	1464366	5364796	3347431	21.05%	2.636%
4	2.803	136	142	153	rBV	1192201	6493373	4431654	27.87%	3.490%
5	3.100	167	174	186	rBV3	213372	2718907	774626	4.87%	0.610%
6	3.406	204	207	217	rVB	822735	3626605	1759672	11.06%	1.386%
7	3.889	256	259	270	rBV	6192385	13820287	10930960	68.73%	8.607%
8	4.195	288	292	301	rVB2	153588	2029265	420148	2.64%	0.331%
9	4.335	301	307	310	rBV	69919	1102551	180838	1.14%	0.142%
10	4.437	313	318	321	rVV4	79010	1116371	203579	1.28%	0.160%
11	4.595	331	335	339	rBV2	95704	1197788	240463	1.51%	0.189%
12	4.734	347	350	352	rVV	539736	1426445	809329	5.09%	0.637%
13	4.771	352	354	357	rVV2	374096	1577308	579569	3.64%	0.456%
14	4.817	357	359	362	rVB2	156971	952629	194528	1.22%	0.153%
15	4.910	367	369	374	rBV2	146445	1163001	258751	1.63%	0.204%
16	5.059	381	385	392	rBV	7441081	12102047	10653140	66.99%	8.388%
17	5.152	392	395	398	rVB2	83225	993115	171167	1.08%	0.135%
18	5.254	403	406	411	rVB	525628	1748404	759179	4.77%	0.598%
19	5.458	425	428	432	rVV	1954165	3876593	2620081	16.48%	2.063%
20	5.532	434	436	441	rVV	264169	1397605	401962	2.53%	0.317%
21	5.607	441	444	446	rVV	137354	828702	189887	1.19%	0.150%
22	5.746	455	459	461	rBV3	146062	966410	223838	1.41%	0.176%
23	5.885	469	474	476	rBV3	123403	1142036	309024	1.94%	0.243%
24	6.043	486	491	493	rBV	93474	962968	184390	1.16%	0.145%
25	6.089	493	496	500	rVV	4521994	7406600	6077860	38.22%	4.786%
26	6.145	500	502	506	rVB4	90406	990829	209194	1.32%	0.165%
27	6.368	524	526	530	rVB	1021558	2259706	1289087	8.11%	1.015%
28	6.897	580	583	590	rVB	2872179	5264757	3509310	22.07%	2.763%
29	7.148	608	610	615	rBV	323835	1257448	369644	2.32%	0.291%
30	7.361	629	633	636	rVB2	94111	928606	187316	1.18%	0.147%
31	7.667	664	666	671	rBV	399097	1431262	571618	3.59%	0.450%
32	8.132	712	716	719	rBV	9334728	11185498	10438905	65.64%	8.220%
33	8.921	797	801	804	rBV	3054563	4724547	3995069	25.12%	3.146%
34	9.840	897	900	912	rBV2	5617378	10538591	8258336	51.93%	6.503%
35	10.657	984	988	1006	rBV	3462155	6685263	4451138	27.99%	3.505%
36	11.279	1052	1055	1057	rBV	198296	755203	247442	1.56%	0.195%
37	11.316	1057	1059	1069	rVB	121100	1583767	181280	1.14%	0.143%
38	12.049	1135	1138	1142	rBV	555150	1437005	687040	4.32%	0.541%
39	12.513	1185	1188	1191	rBV	10410879	13722632	12440161	78.22%	9.796%
40	13.145	1253	1256	1258	rBV	1244092	2071486	1430467	8.99%	1.126%
41	13.553	1297	1300	1315	rVB2	153646	2424654	326633	2.05%	0.257%
42	13.730	1315	1319	1329	rBV2	9237465	17617520	15903204	100.00%	12.522%
43	14.528	1402	1405	1408	rBV	129638	852679	164543	1.03%	0.130%
44	14.816	1433	1436	1446	rVB	192035	882366	700639	1.89%	0.237%
45	15.633	1519	1524	1533	rBV	1936832	5881367	4286473	26.95%	3.375%

ADDED PAGE

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y190124\0124Y098.D  
 Operator : MA  
 Acquired : 1 Feb 19 16:19 using AcqMethod SVOC416  
 Instrument : Yoda  
 Sample Name: 190130A Blk 1/800  
 Misc Info :  
 Vial Number: 98  
 Quant File : Y0125NC.RES (RTE Integrator)



Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

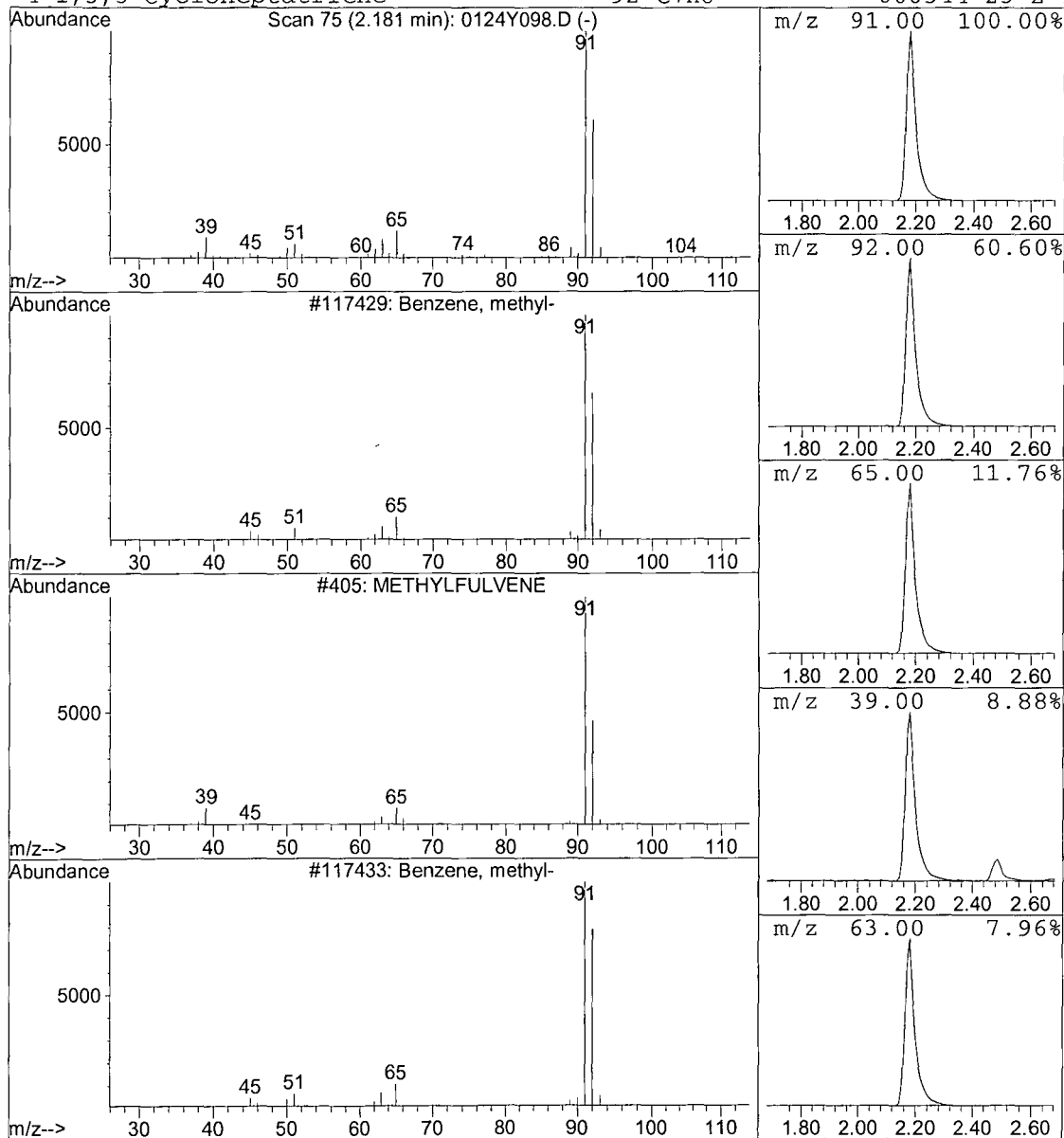
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 1 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.18	218.04 ppb	11425600	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzene, methyl-	92	C7H8	000108-88-3	94
2		METHYLFULVENE	92	C7H8	000000-00-0	91
3		Benzene, methyl-	92	C7H8	000108-88-3	91
4		1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91



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Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

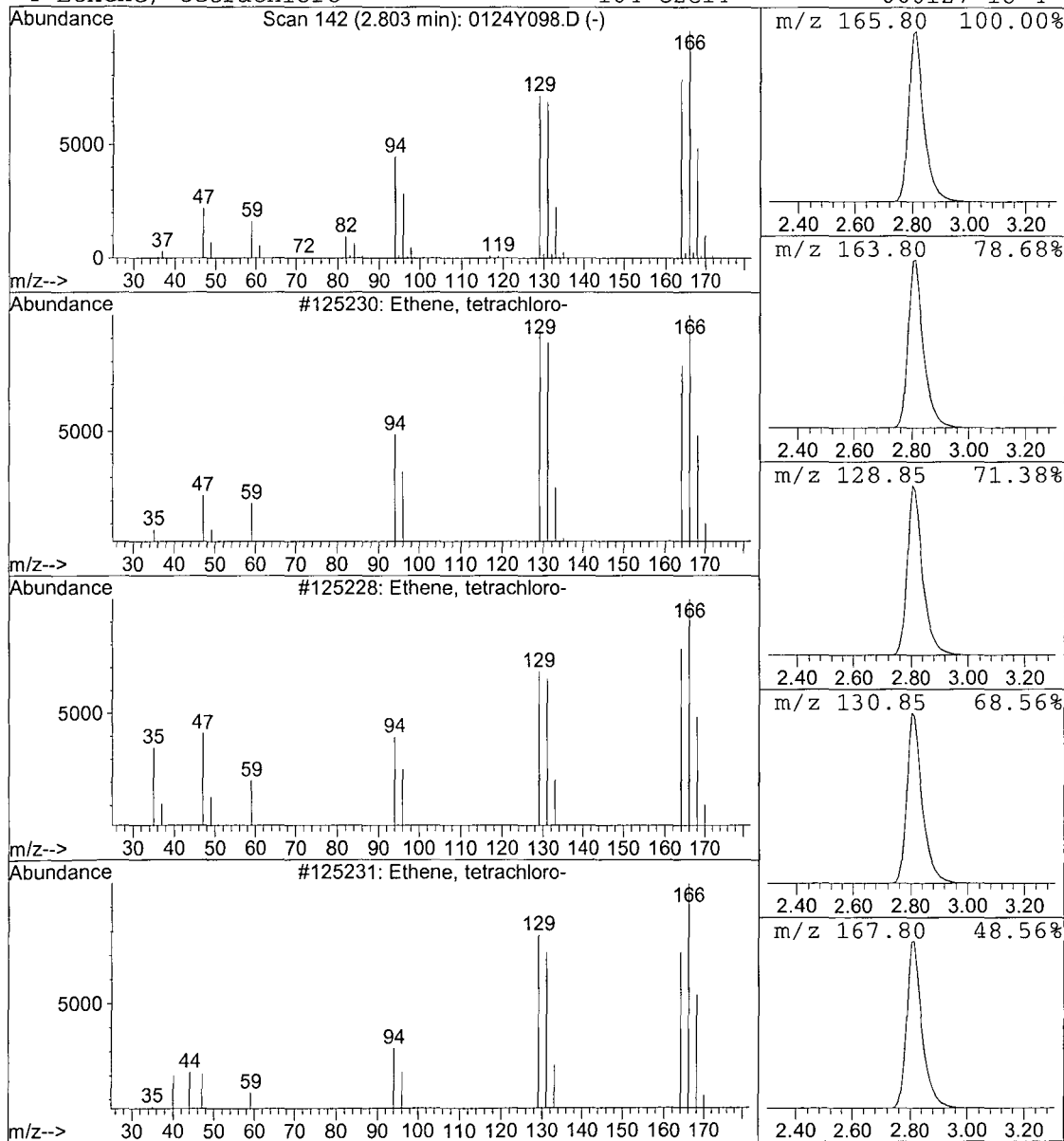
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 2 Ethene, tetrachloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.80	84.57 ppb	4431650	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
2			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	97
3			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	95
4			Ethene, tetrachloro-	164	C2Cl4	000127-18-4	94



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Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

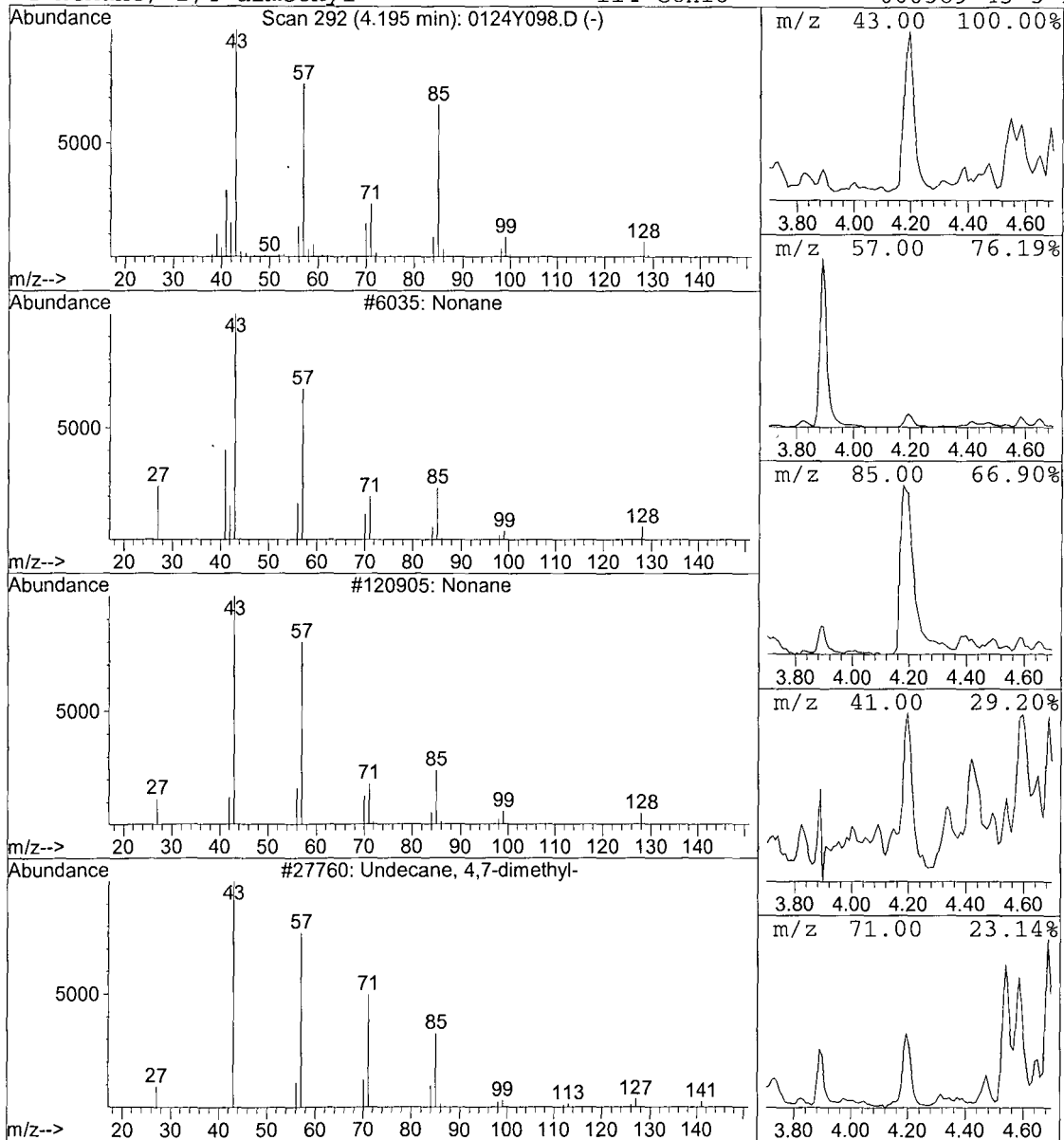
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 3 Nonane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.20	8.02 ppb	420148	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Nonane	128	C9H20	000111-84-2	70
2		Nonane	128	C9H20	000111-84-2	62
3		Undecane, 4,7-dimethyl-	184	C13H28	017301-32-5	53
4		Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	53



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Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

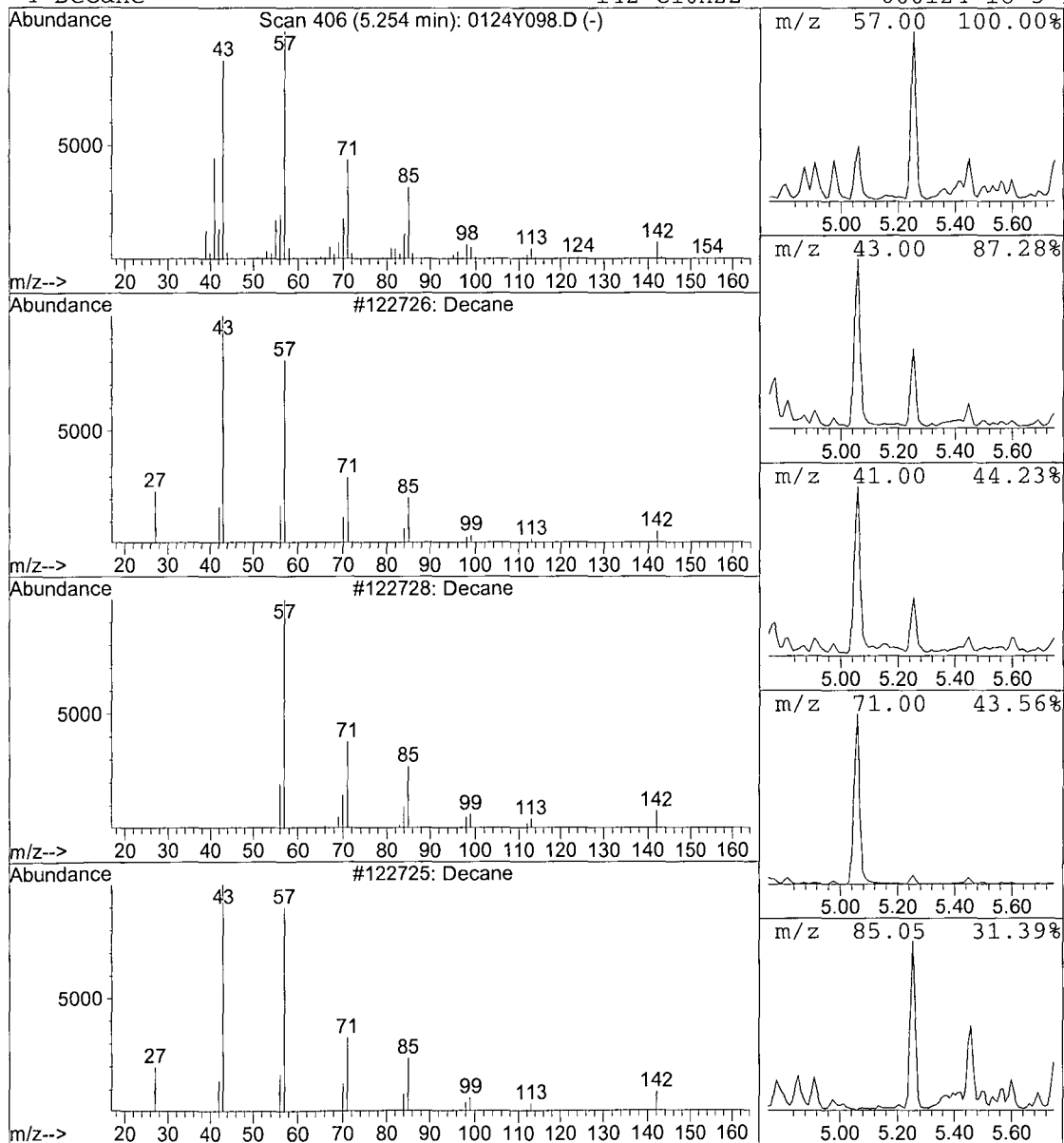
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 4 Decane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.25	14.49 ppb	759179	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Decane	142	C10H22	000124-18-5	91
2		Decane	142	C10H22	000124-18-5	91
3		Decane	142	C10H22	000124-18-5	91
4		Decane	142	C10H22	000124-18-5	91



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Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

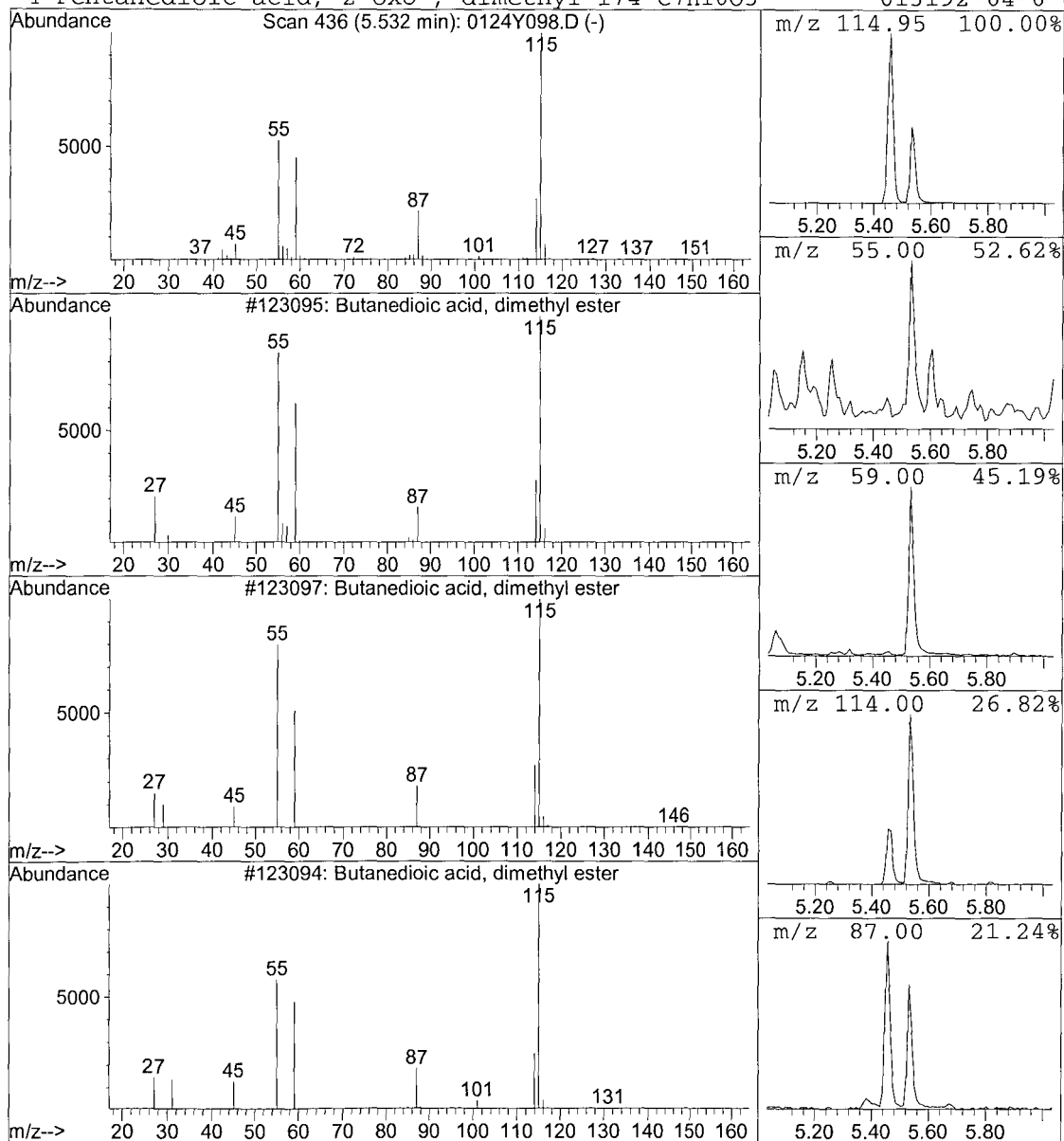
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 5 Butanedioic acid, dimethyl est Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.53	7.67 ppb	401962	1,4-dichlorobenzene-D4 (IS)	5.46

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
2			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	83
3			Butanedioic acid, dimethyl ester	146	C6H10O4	000106-65-0	74
4			Pentanedioic acid, 2-oxo-, dimethyl	174	C7H10O5	013192-04-6	64



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Library Search Compound Report

Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

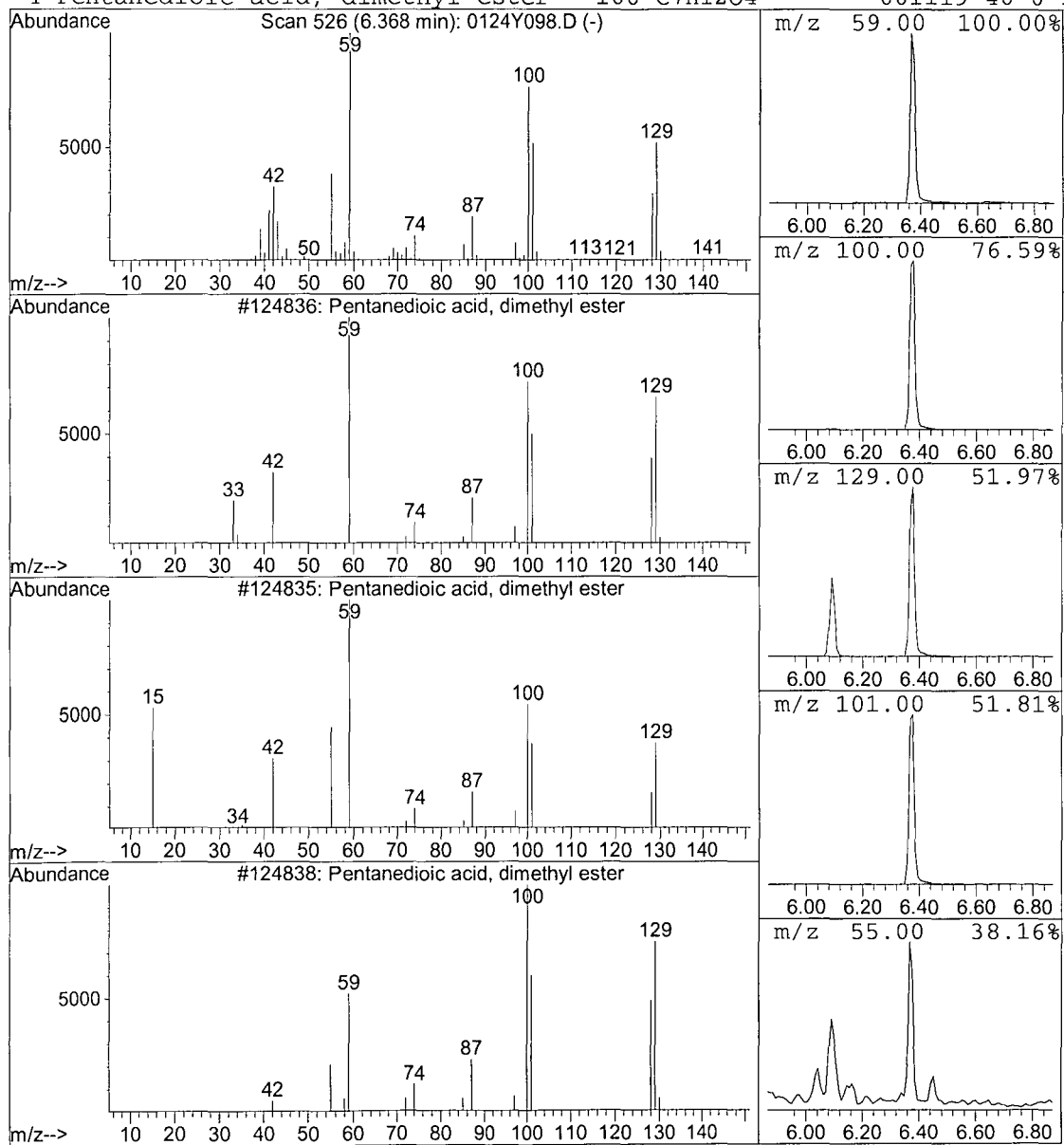
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 6 Pentanedioic acid, dimethyl es Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.37	18.37 ppb	1289090	Napthalene-D8 (IS)	6.90

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	91
2		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	78
3		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	58
4		Pentanedioic acid, dimethyl ester	160	C7H12O4	001119-40-0	50



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Data File : M:\YODA\DATA\Y190124\0124Y098.D  
 Acq On : 1 Feb 19 16:19  
 Sample : 190130A Blk 1/800  
 Misc :

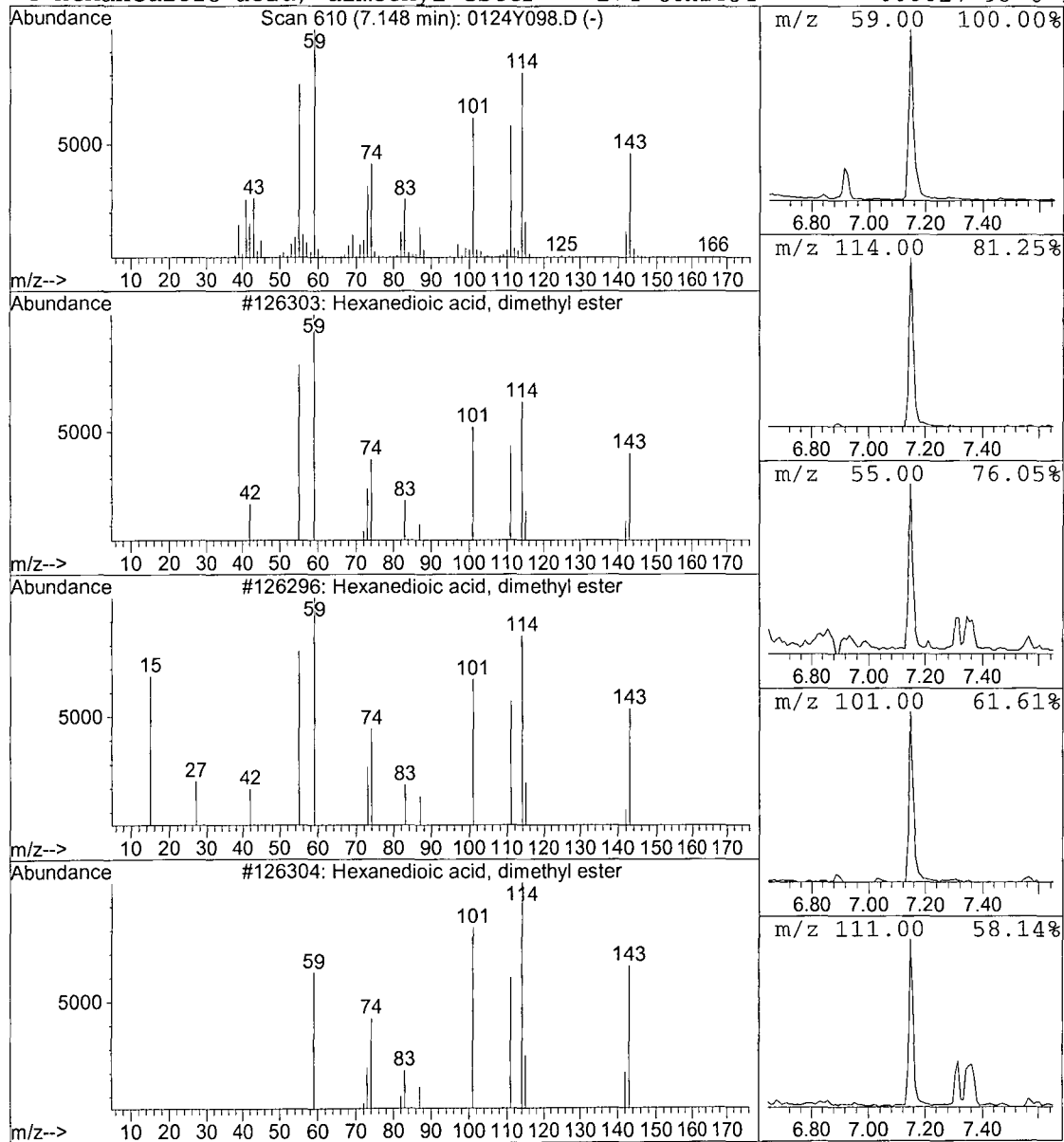
Vial: 98  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Library : M:\DATABASE\WILEY138.L

\*\*\*\*\*  
 Peak Number 7 Hexanedioic acid, dimethyl est Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.15	5.27 ppb	369644	Napthalene-D8 (IS)	6.90

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
2			Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	91
3			Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	90
4			Hexanedioic acid, dimethyl ester	174	C8H14O4	000627-93-0	90



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Data File : M:\YODA\DATA\Y190124\0124Y099.D  
 Acq On : 1 Feb 19 16:47  
 Sample : 190130A LCS-1 1/800  
 Misc :

Vial: 99  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	511564	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2139035	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1151768	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2179017	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1955925	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1751725	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3288190	180.1401	ppb	0.03
Spiked Amount	250.000		Recovery	= 72.056%		
6) Phenol-D6 (S)	5.07	99	4263766	177.4098	ppb	0.02
Spiked Amount	250.000		Recovery	= 70.964%		
22) Nitrobenzene-D5 (S)	6.10	82	1924266	94.4323	ppb	0.00
Spiked Amount	125.000		Recovery	= 75.546%		
46) 2-Fluorobiphenyl (S)	8.13	172	3628655	97.2531	ppb	0.00
Spiked Amount	125.000		Recovery	= 77.802%		
64) 2,4,6-Tribromophenol (S)	9.85	330	884858	231.8300	ppb	0.00
Spiked Amount	250.000		Recovery	= 92.732%		
82) Terphenyl-D14 (S)	12.51	244	4036942	101.1320	ppb	0.00
Spiked Amount	125.000		Recovery	= 80.906%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	8926	3.9003		86
3) n-Nitrosodimethylamine	1.97	42	166776	44.9533	ppb	92
4) Pyridine	1.98	79	244483	26.7794	ppb	94
7) Phenol	5.09	94	1156545	37.3588	ppb	95
8) Aniline	5.10	93	332915	10.2738	ppb	92
9) Bis (2-chloroethyl) ether	5.17	63	565317	39.6397	ppb	96
10) 2-Chlorophenol	5.23	128	865654	39.6212	ppb	93
11) 1,3-DCB	5.39	146	870665	37.4591	ppb	98
12) 1,4-DCB	5.48	146	895606	37.7104	ppb	99
13) Benzyl alcohol	5.63	108	517224	37.9928	ppb	95
14) 1,2-DCB	5.65	146	843354	38.3312	ppb	97
15) 2-Methylphenol	5.75	107	744554	39.9495	ppb	97
16) Bis (2-chloroisopropyl) et	5.76	45	850362	39.7157	ppb	# 82
17) Acetophenone	5.92	105	1151712	40.5609	ppb	91
18) 3&4-Methylphenol	5.93	107	1803081	81.9113	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	642726	40.2045	ppb	98
20) Hexachloroethane	6.02	117	313270	36.1083	ppb	91
23) Nitrobenzene	6.12	77	998050	43.5554	ppb	94
24) Isophorone	6.39	82	1743555	43.6201	ppb	100
25) 2-Nitrophenol	6.47	139	489802	43.4146	ppb	95
26) 2,4-Dimethylphenol	6.52	122	770183	41.2591	ppb	99
27) Benzoic acid	6.65	105	624376	42.7498	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	1023795	41.3002	ppb	99
29) 2,4-Dichlorophenol	6.75	162	715223	44.5269	ppb	97
30) 1,2,4-Trichlorobenzene	6.83	180	731427	40.9577	ppb	100
31) 3,4-Dimethylphenol	6.86	107	1123068	44.4987	ppb	96
32) Napthalene	6.92	128	2563041	42.2036	ppb	100
33) 4-Chloroaniline	7.00	127	54129	2.4091	ppb	# 79
34) 2,6-Dichlorophenol	7.00	162	707972	44.5061	ppb	99
35) Hexachloropropene	7.02	213	240044	22.0427	ppb	99
36) Hexachlorobutadiene	7.05	225	339042	36.4456	ppb	100
37) Caprolactum	7.42	55	351878	43.5105	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y099.D  
 Acq On : 1 Feb 19 16:47  
 Sample : 190130A LCS-1 1/800  
 Misc :

Vial: 99  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.55	107	796812	44.0222	ppb	100
39) 2-Methylnaphthalene	7.71	142	1632764	41.6942	ppb	100
40) 1-Methylnaphthalene	7.82	142	1700322	43.4424	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	44201	13.3494	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	705697	45.5967	ppb	100
44) 2,4,6-Trichlorophenol	8.05	196	503885	49.8756	ppb	97
45) 2,4,5-Trichlorophenol	8.09	196	540864	47.4037	ppb	98
47) 1,1'-Biphenyl	8.25	154	2156073	47.1564	ppb	99
48) 2-Chloronaphthalene	8.28	162	1622025	46.4376	ppb	98
49) 2-Nitroaniline	8.41	65	490469	43.1953	ppb	82
50) Dimethyl phthalate	8.60	163	1974674	47.8821	ppb	100
51) 2,6-DNT	8.69	165	457140	49.4332	ppb	98
52) Acenaphthylene	8.76	152	2514250	45.3785	ppb	100
53) 3-Nitroaniline	8.88	138	97549	9.3153	ppb	97
54) Acenaphthene	8.96	154	1659506	46.2501	ppb	100
55) 2,4-Dinitrophenol	9.01	184	252616	52.2036	ppb	96
56) 4-Nitrophenol	9.11	65	398193	62.5716	ppb	98
57) Dibenzofuran	9.16	168	2349848	46.7283	ppb	99
58) 2,4-DNT	9.15	165	602488	49.3955	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	415041	49.4278	ppb	97
60) Diethyl phthalate	9.42	149	1855924	47.4969	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	905193	46.1383	ppb	98
62) Fluorene	9.56	166	1922102	47.6837	ppb	99
63) 4-Nitroaniline	9.60	138	280770	26.4790	ppb	92
66) 4,6-Dinitro-2-methylphenol	9.63	198	392246	50.3726	ppb	91
67) Diphenyl amine	9.70	169	1829817	59.4979	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	1829817	59.4979	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	1724614	39.7859	ppb	90
70) 4-Bromophenyl phenyl ether	10.13	248	501482	48.1481	ppb	96
71) Hexachlorobenzene	10.20	284	480235	48.7731	ppb	96
72) Atrazine	10.32	200	59209	5.6109	ppb	98
73) Pentachlorophenol	10.43	266	303972	49.3285	ppb	99
74) Phenanthrene	10.68	178	2867863	48.6761	ppb	99
75) Anthracene	10.75	178	2829108	46.8796	ppb	100
76) Carbazol	10.93	167	2354197	42.9265	ppb	97
77) Di-n-butylphthalate	11.32	149	3286530	50.7871	ppb	99
78) Fluoranthene	12.08	202	3090833	48.8599	ppb	99
80) Benzidine	12.26	184	2978	0.1539	ppb	# 34
81) Pyrene	12.35	202	3162679	47.6164	ppb	99
83) Butyl benzylphthalate	13.08	149	1441016	48.3986	ppb	95
84) 3,3'-Dichlorobenzidine	13.71	252	20074	0.9856	ppb	# 97
85) Benz (a) anthracene	13.74	228	2732171	47.1682	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2363753	57.0472	ppb	99
87) Chrysene	13.78	228	2724979	48.1071	ppb	99
88) Di-n-octylphthalate	14.48	149	3559778	50.6300	ppb	95
90) Benzo (b) fluoranthene	15.07	252	2627365	49.9471	ppb	97
91) Benzo (k) fluoranthene	15.11	252	2762990	54.6507	ppb	98
92) Benzo (a) pyrene	15.55	252	2346180	49.2755	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2617585	53.3710	ppb	99
94) Dibenz (a,h) anthracene	17.61	278	2397031	54.0598	ppb	97
95) Benzo (g,h,i) perylene	18.17	276	2200071	50.6341	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

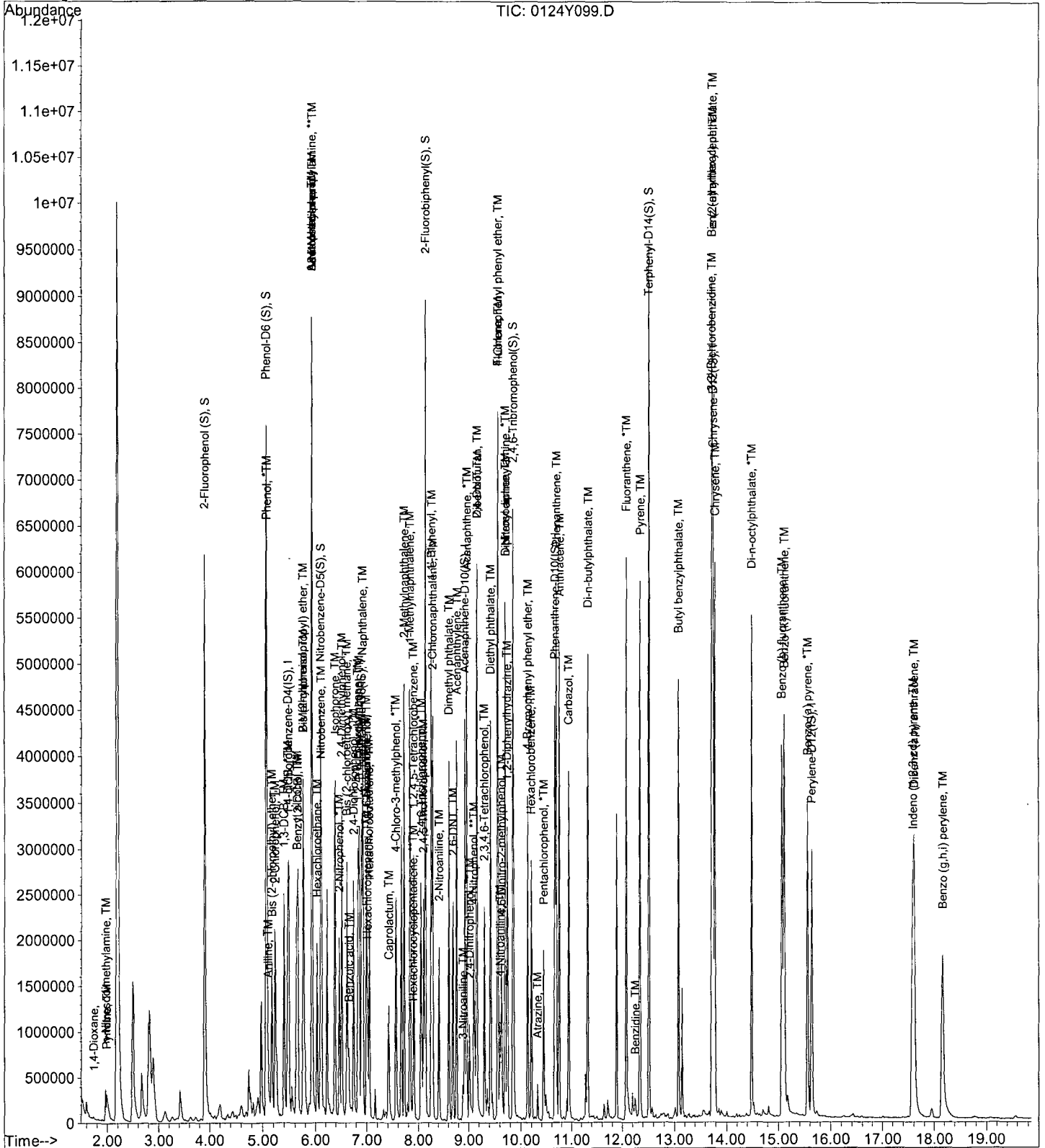
Data File : M:\YODA\DATA\Y190124\0124Y099.D  
Acq On : 1 Feb 19 16:47  
Sample : 190130A LCS-1 1/800  
Misc :

Vial: 99  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y100.D  
 Acq On : 1 Feb 19 17:14  
 Sample : 190130A LCSD-1 1/800  
 Misc :

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	493547	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2051252	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1092291	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2061300	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1805530	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1080606	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.90	112	3234387	183.6610	ppb	0.03
Spiked Amount	250.000		Recovery	= 73.464%		
6) Phenol-D6 (S)	5.07	99	4238109	182.7796	ppb	0.02
Spiked Amount	250.000		Recovery	= 73.112%		
22) Nitrobenzene-D5 (S)	6.10	82	1894411	96.9457	ppb	0.00
Spiked Amount	125.000		Recovery	= 77.557%		
46) 2-Fluorobiphenyl (S)	8.13	172	3591262	101.4919	ppb	0.00
Spiked Amount	125.000		Recovery	= 81.194%		
64) 2,4,6-Tribromophenol (S)	9.85	330	861720	238.0614	ppb	0.00
Spiked Amount	250.000		Recovery	= 95.224%		
82) Terphenyl-D14 (S)	12.51	244	3976305	107.9104	ppb	0.00
Spiked Amount	125.000		Recovery	= 86.328%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	8491	3.8456		83
3) n-Nitrosodimethylamine	1.96	42	170423	47.6132	ppb	82
4) Pyridine	1.99	79	207376	23.5441	ppb	99
7) Phenol	5.09	94	1155581	38.6903	ppb	93
8) Aniline	5.10	93	253738	8.1163	ppb	# 82
9) Bis (2-chloroethyl) ether	5.17	63	566223	41.1526	ppb	97
10) 2-Chlorophenol	5.23	128	870498	41.2974	ppb	94
11) 1,3-DCB	5.39	146	874621	39.0030	ppb	97
12) 1,4-DCB	5.49	146	899568	39.2600	ppb	98
13) Benzyl alcohol	5.62	108	434721	33.0982	ppb	96
14) 1,2-DCB	5.65	146	844111	39.7661	ppb	97
15) 2-Methylphenol	5.75	107	751838	41.8130	ppb	98
16) Bis (2-chloroisopropyl) et	5.76	45	844286	40.8714	ppb	# 80
17) Acetophenone	5.92	105	1146614	41.8555	ppb	92
18) 3&4-Methylphenol	5.93	107	1781751	83.8971	ppb	98
19) n-Nitrosodi-n-propylamine	5.92	70	642044	41.6280	ppb	100
20) Hexachloroethane	6.02	117	314071	37.5221	ppb	92
23) Nitrobenzene	6.12	77	1007080	45.8302	ppb	95
24) Isophorone	6.39	82	1730489	45.1459	ppb	99
25) 2-Nitrophenol	6.47	139	498337	46.0615	ppb	97
26) 2,4-Dimethylphenol	6.52	122	770161	43.0235	ppb	99
27) Benzoic acid	6.66	105	593253	42.3572	ppb	98
28) Bis (2-chloroethoxy) metha	6.62	93	891780	37.5142	ppb	99
29) 2,4-Dichlorophenol	6.75	162	709073	46.0331	ppb	96
30) 1,2,4-Trichlorobenzene	6.83	180	737765	43.0806	ppb	99
31) 3,4-Dimethylphenol	6.86	107	1096400	45.3011	ppb	97
32) Napthalene	6.92	128	2551166	43.8058	ppb	100
33) 4-Chloroaniline	7.00	127	61751	2.8659	ppb	# 80
34) 2,6-Dichlorophenol	7.00	162	700728	45.9359	ppb	99
35) Hexachloropropene	7.02	213	236859	22.6811	ppb	99
36) Hexachlorobutadiene	7.05	225	339719	38.0812	ppb	99
37) Caprolactum	7.42	55	357477	46.0945	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y100.D  
 Acq On : 1 Feb 19 17:14  
 Sample : 190130A LCSD-1 1/800  
 Misc :

Vial: 100  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.56	107	789729	45.4981	ppb	99
39) 2-Methylnaphthalene	7.71	142	1624576	43.2605	ppb	99
40) 1-Methylnaphthalene	7.82	142	1681039	44.7877	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	59047	15.7912	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	7.90	216	701750	47.8106	ppb	97
44) 2,4,6-Trichlorophenol	8.05	196	501960	52.3905	ppb	99
45) 2,4,5-Trichlorophenol	8.09	196	547158	50.5666	ppb	97
47) 1,1'-Biphenyl	8.25	154	2174397	50.1467	ppb	99
48) 2-Chloronaphthalene	8.28	162	1615091	48.7569	ppb	99
49) 2-Nitroaniline	8.41	65	431722	40.0918	ppb	80
50) Dimethyl phthalate	8.60	163	1985676	50.7706	ppb	100
51) 2,6-DNT	8.69	165	450958	51.4200	ppb	97
52) Acenaphthylene	8.76	152	2459051	46.7990	ppb	100
53) 3-Nitroaniline	8.88	138	101032	10.1732	ppb	97
54) Acenaphthene	8.96	154	1637282	48.1154	ppb	100
55) 2,4-Dinitrophenol	9.01	184	259574	56.0415	ppb	96
56) 4-Nitrophenol	9.11	65	384211	63.6620	ppb	99
57) Dibenzofuran	9.16	168	2312398	48.4874	ppb	100
58) 2,4-DNT	9.15	165	605503	52.3458	ppb	97
59) 2,3,4,6-Tetrachlorophenol	9.31	232	411218	51.6391	ppb	98
60) Diethyl phthalate	9.42	149	1846939	49.8407	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	899471	48.3431	ppb	97
62) Fluorene	9.56	166	1907513	49.8985	ppb	99
63) 4-Nitroaniline	9.60	138	195914	19.4825	ppb	98
66) 4,6-Dinitro-2-methylphenol	9.63	198	393009	53.3529	ppb	87
67) Diphenyl amine	9.70	169	860248	29.5690	ppb	99
68) n-Nitrosodiphenylamine	9.70	169	860248	29.5690	ppb	99
69) 1,2-Diphenylhydrazine	9.74	77	1390112	33.9005	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	498782	50.6237	ppb	96
71) Hexachlorobenzene	10.20	284	480506	51.5875	ppb	95
72) Atrazine	10.32	200	9109	0.9125	ppb	96
73) Pentachlorophenol	10.43	266	298630	51.2292	ppb	100
74) Phenanthrene	10.68	178	2783224	49.9373	ppb	100
75) Anthracene	10.75	178	2776667	48.6382	ppb	100
76) Carbazol	10.93	167	1052830	20.2936	ppb	98
77) Di-n-butylphthalate	11.32	149	3211726	52.4655	ppb	100
78) Fluoranthene	12.08	202	3038828	50.7811	ppb	99
80) Benzidine	12.22	184	146	0.0082	ppb	# 1
81) Pyrene	12.35	202	3073658	50.1308	ppb	100
83) Butyl benzylphthalate	13.08	149	1516885	55.1905	ppb	97
84) 3,3'-Dichlorobenzidine	13.71	252	1959	0.1042	ppb	# 62
85) Benz (a) anthracene	13.74	228	2627669	49.1428	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	2817272	73.6560	ppb	99
87) Chrysene	13.78	228	2688027	51.4076	ppb	99
88) Di-n-octylphthalate	14.48	149	3547271	54.6546	ppb	# 94
90) Benzo (b) fluoranthene	15.07	252	2576910	79.4122	ppb	98
91) Benzo (k) fluoranthene	15.11	252	2695133	86.4162	ppb	98
92) Benzo (a) pyrene	15.55	252	2160572	73.5592	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.57	276	2489216	82.2745	ppb	99
94) Dibenz (a,h) anthracene	17.60	278	2301117	84.1275	ppb	99
95) Benzo (g,h,i) perylene	18.16	276	2065261	77.0513	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0124Y100.D Y0125NC.M Wed Feb 06 10:53:33 2019

Quantitation Report

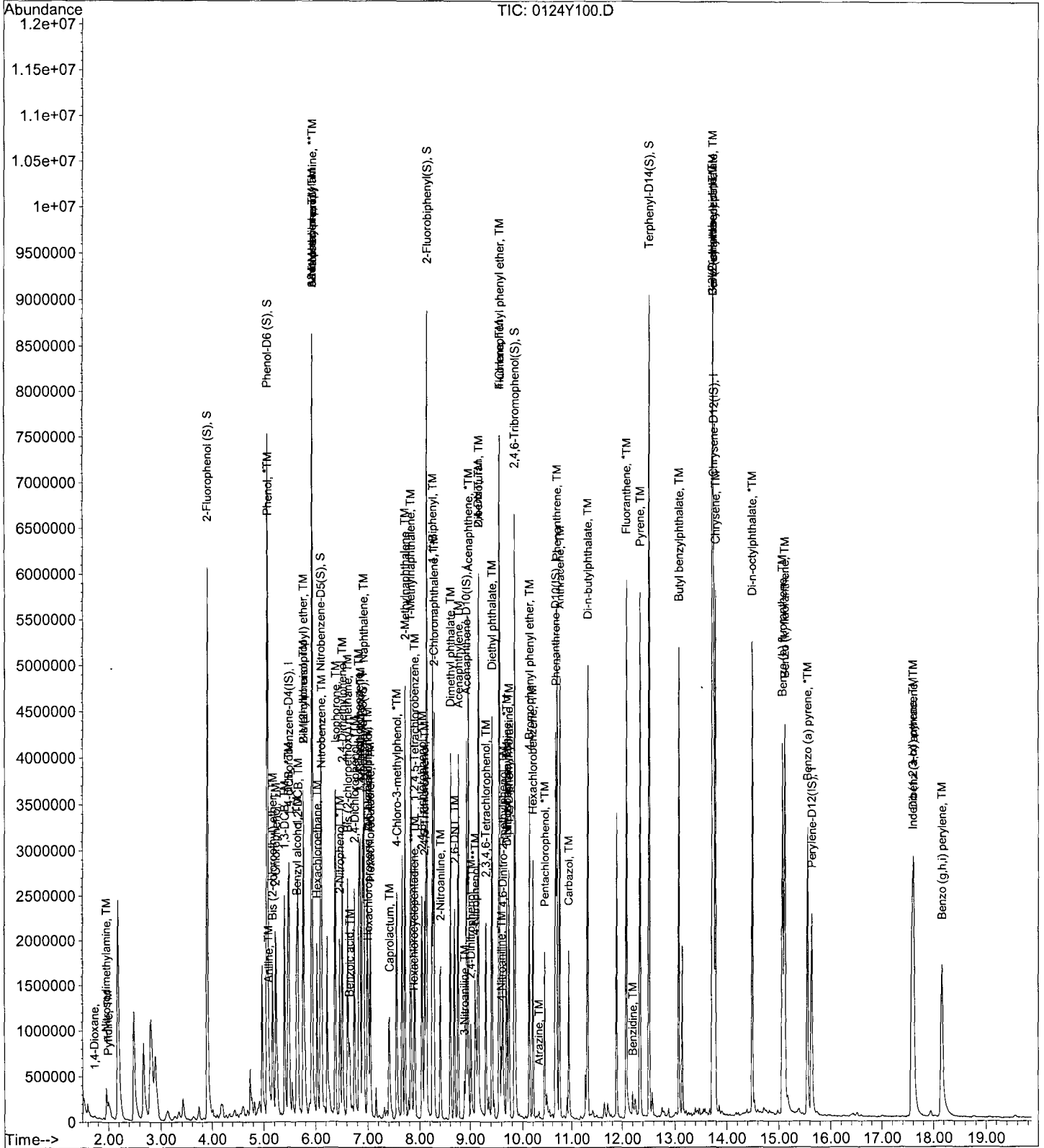
Data File : M:\YODA\DATA\Y190124\0124Y100.D  
Acq On : 1 Feb 19 17:14  
Sample : 190130A LCSD-1 1/800  
Misc :

Vial: 100  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y190124\0124Y106.D  
 Acq On : 1 Feb 19 20:01  
 Sample : AZ85643W33 MS-1 1/800  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	489488	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2058321	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1088257	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2115840	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1821680	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1247356	40.0000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol (S)	3.91	112	3454206	197.7696	ppb	0.03
Spiked Amount 250.000			Recovery =	79.108%		
6) Phenol-D6 (S)	5.08	99	4297560	186.8805	ppb	0.03
Spiked Amount 250.000			Recovery =	74.752%		
22) Nitrobenzene-D5 (S)	6.10	82	2006908	102.3499	ppb	0.00
Spiked Amount 125.000			Recovery =	81.880%		
46) 2-Fluorobiphenyl (S)	8.14	172	3839211	108.9013	ppb	0.00
Spiked Amount 125.000			Recovery =	87.121%		
64) 2,4,6-Tribromophenol (S)	9.85	330	918628	254.7237	ppb	0.00
Spiked Amount 250.000			Recovery =	101.890%		
82) Terphenyl-D14 (S)	12.52	244	4166193	112.0613	ppb	0.00
Spiked Amount 125.000			Recovery =	89.649%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	10021	4.5762		94
3) n-Nitrosodimethylamine	1.97	42	179202	50.4811	ppb	89
7) Phenol	5.09	94	1201163	40.5499	ppb	98
8) Aniline	5.17	93	925033	29.8342	ppb	# 98
9) Bis (2-chloroethyl) ether	5.17	63	597875	43.8133	ppb	98
10) 2-Chlorophenol	5.23	128	915323	43.7840	ppb	99
11) 1,3-DCB	5.40	146	938667	42.2062	ppb	100
12) 1,4-DCB	5.48	146	950870	41.8431	ppb	99
13) Benzyl alcohol	5.63	108	239357	18.3749	ppb	98
14) 1,2-DCB	5.65	146	901324	42.8136	ppb	98
15) 2-Methylphenol	5.76	107	792798	44.4566	ppb	95
16) Bis (2-chloroisopropyl) et	5.76	45	882490	43.0751	ppb	# 59
17) Acetophenone	5.92	105	1223925	45.0481	ppb	76
18) 3&4-Methylphenol	5.93	107	1914792	90.9092	ppb	98
19) n-Nitrosodi-n-propylamine	5.93	70	683089	44.6565	ppb	97
20) Hexachloroethane	6.02	117	322340	38.8294	ppb	89
23) Nitrobenzene	6.13	77	1065581	48.3260	ppb	99
24) Isophorone	6.39	82	1834270	47.6891	ppb	98
25) 2-Nitrophenol	6.48	139	523691	48.2387	ppb	93
26) 2,4-Dimethylphenol	6.52	122	804725	44.8000	ppb	100
27) Benzoic acid	6.65	105	436691	31.0718	ppb	96
28) Bis (2-chloroethoxy) metha	6.62	93	703482	29.4915	ppb	99
29) 2,4-Dichlorophenol	6.76	162	760355	49.1928	ppb	97
30) 1,2,4-Trichlorobenzene	6.83	180	792541	46.1202	ppb	98
31) 3,4-Dimethylphenol	6.86	107	1080684	44.4984	ppb	99
32) Napthalene	6.92	128	2738566	46.8622	ppb	100
33) 4-Chloroaniline	7.07	127	38434	1.7776	ppb	95
34) 2,6-Dichlorophenol	7.00	162	747886	48.8589	ppb	99
35) Hexachloropropene	7.02	213	180283	17.2042	ppb	99
36) Hexachlorobutadiene	7.05	225	319617	35.7048	ppb	99
37) Caprolactum	7.42	55	353881	45.4741	ppb	98
38) 4-Chloro-3-methylphenol	7.56	107	792779	45.5169	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y106.D  
 Acq On : 1 Feb 19 20:01  
 Sample : AZ85643W33 MS-1 1/800  
 Misc :

Vial: 6  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) 2-Methylnaphthalene	7.71	142	1736418	46.0799	ppb	100
40) 1-Methylnaphthalene	7.82	142	1790951	47.5522	ppb	99
42) Hexachlorocyclopentadiene	7.88	237	78181	18.5603	ppb	98
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	733340	50.1480	ppb	100
44) 2,4,6-Trichlorophenol	8.05	196	524301	54.9252	ppb	99
45) 2,4,5-Trichlorophenol	8.11	196	548895	50.9151	ppb	95
47) 1,1'-Biphenyl	8.25	154	2274139	52.6414	ppb	100
48) 2-Chloronaphthalene	8.28	162	1730800	52.4436	ppb	98
49) 2-Nitroaniline	8.41	65	361324	33.6787	ppb	87
50) Dimethyl phthalate	8.60	163	2066742	53.0393	ppb	100
51) 2,6-DNT	8.69	165	474279	54.2796	ppb	98
52) Acenaphthylene	8.76	152	2513054	48.0040	ppb	99
53) 3-Nitroaniline	8.90	138	99783	10.0847	ppb	91
54) Acenaphthene	8.96	154	1749830	51.6135	ppb	100
55) 2,4-Dinitrophenol	9.01	184	263453	56.9731	ppb	95
56) 4-Nitrophenol	9.15	65	324598	53.9838	ppb	80
57) Dibenzofuran	9.16	168	2439710	51.3466	ppb	97
58) 2,4-DNT	9.15	165	635823	55.1707	ppb	98
59) 2,3,4,6-Tetrachlorophenol	9.31	232	420358	52.9826	ppb	98
60) Diethyl phthalate	9.42	149	1972677	53.4312	ppb	99
61) 4-Chlorophenyl phenyl ethe	9.55	204	962171	51.9046	ppb	98
62) Fluorene	9.56	166	2023457	53.1277	ppb	99
63) 4-Nitroaniline	9.61	138	133440	13.3190	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.63	198	403034	53.3035	ppb	87
67) Diphenyl amine	9.70	169	735004	24.6128	ppb	98
68) n-Nitrosodiphenylamine	9.70	169	735004	24.6128	ppb	98
69) 1,2-Diphenylhydrazine	9.74	77	936279	22.2444	ppb	92
70) 4-Bromophenyl phenyl ether	10.13	248	524318	51.8437	ppb	97
71) Hexachlorobenzene	10.20	284	506450	52.9713	ppb	96
72) Atrazine	10.43	200	53412	5.2127	ppb	# 33
73) Pentachlorophenol	10.43	266	285978	47.7942	ppb	98
74) Phenanthrene	10.68	178	2936632	51.3316	ppb	99
75) Anthracene	10.75	178	2904294	49.5625	ppb	100
76) Carbazol	10.94	167	1053382	19.7809	ppb	99
77) Di-n-butylphthalate	11.32	149	3403208	54.1605	ppb	100
78) Fluoranthene	12.08	202	3194184	52.0013	ppb	99
80) Benzidine	12.23	184	164	0.0091	ppb	# 42
81) Pyrene	12.35	202	3210835	51.9039	ppb	100
83) Butyl benzylphthalate	13.08	149	1482252	53.4523	ppb	99
84) 3,3'-Dichlorobenzidine	13.68	252	2481	0.1308	ppb	# 89
85) Benz (a) anthracene	13.74	228	2849666	52.8221	ppb	100
86) Bis (2-ethylhexyl) phthala	13.73	149	2316950	60.0384	ppb	99
87) Chrysene	13.78	228	2733682	51.8172	ppb	99
88) Di-n-octylphthalate	14.49	149	3662907	55.9360	ppb	98
90) Benzo (b) fluoranthene	15.07	252	2953524	78.8507	ppb	99
91) Benzo (k) fluoranthene	15.11	252	2519112	69.9745	ppb	100
92) Benzo (a) pyrene	15.55	252	2243510	66.1719	ppb	99
93) Indeno (1,2,3-cd) pyrene	17.58	276	2581873	73.9290	ppb	100
94) Dibenz (a,h) anthracene	17.61	278	2414309	76.4661	ppb	98
95) Benzo (g,h,i) perylene	18.17	276	2117498	68.4392	ppb	98

(#) = qualifier out of range (m) = manual integration

0124Y106.D Y0125NC.M

Wed Feb 06 10:53:36 2019

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y106.D

Acq On : 1 Feb 19 20:01

Sample : AZ85643W33 MS-1 1/800

Misc :

Vial: 6

Operator: MA

Inst : Yoda

Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

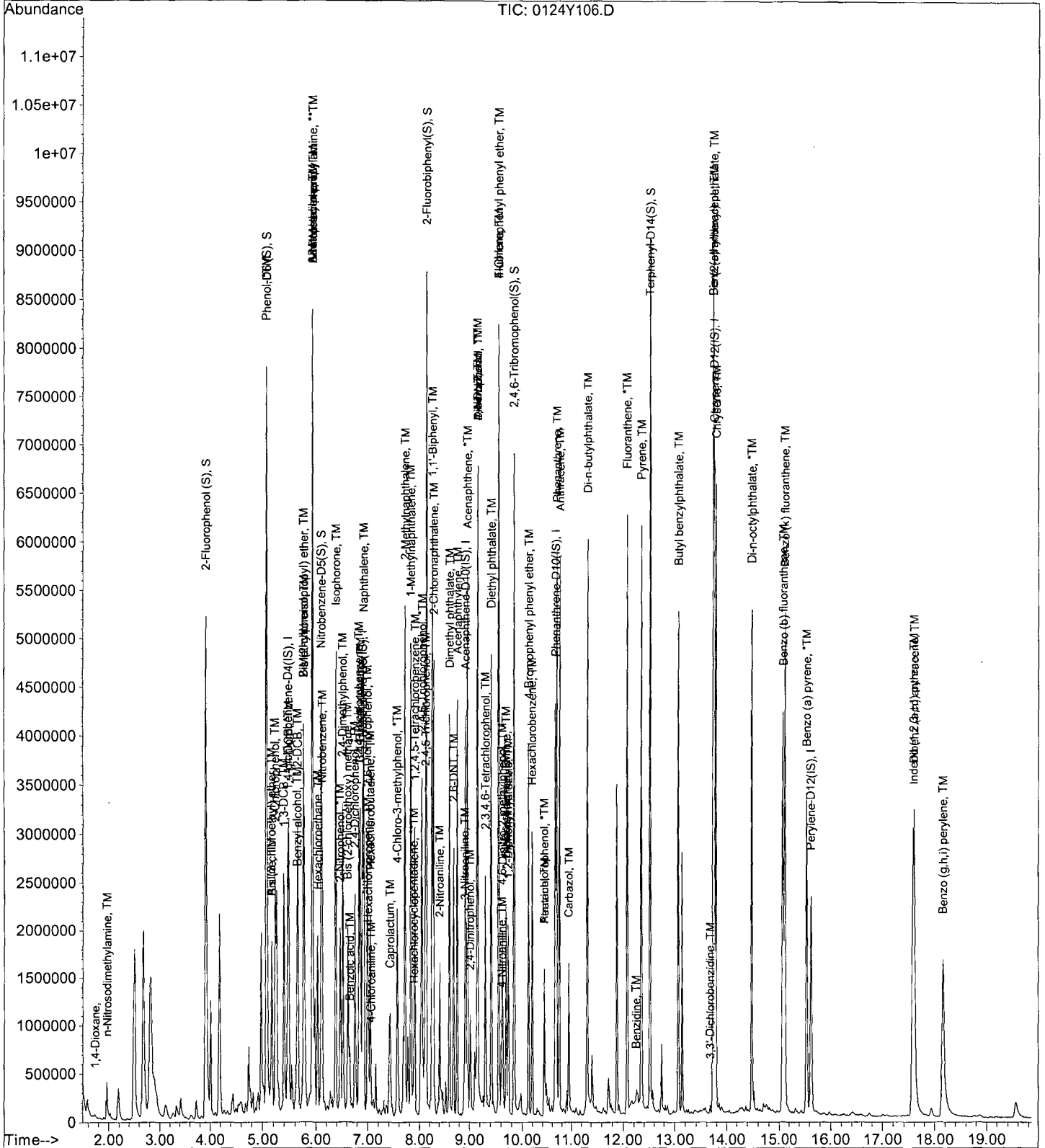
Quant Results File: Y0125NC.RES

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)

Title : EPA 8270C

Last Update : Mon Feb 04 19:46:10 2019

Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y107.D  
 Acq On : 1 Feb 19 20:29  
 Sample : AZ85643W34 MSD-1 1/800  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.47	152	484237	40.0000	ppb	0.00
21) Napthalene-D8 (IS)	6.91	136	2132838	40.0000	ppb	0.00
41) Acenaphthene-D10 (IS)	8.92	164	1152004	40.0000	ppb	0.00
65) Phenanthrene-D10 (IS)	10.66	188	2200967	40.0000	ppb	0.00
79) Chrysene-D12 (IS)	13.76	240	1941664	40.0000	ppb	0.00
89) Perylene-D12 (IS)	15.63	264	1920695	40.0000	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol (S)	3.93	112	3327432	192.5771	ppb	0.05
Spiked Amount	250.000		Recovery	= 77.031%		
6) Phenol-D6 (S)	5.09	99	4449544	195.5878	ppb	0.04
Spiked Amount	250.000		Recovery	= 78.235%		
22) Nitrobenzene-D5 (S)	6.10	82	1968836	96.9002	ppb	0.00
Spiked Amount	125.000		Recovery	= 77.520%		
46) 2-Fluorobiphenyl (S)	8.13	172	3774465	101.1402	ppb	0.00
Spiked Amount	125.000		Recovery	= 80.912%		
64) 2,4,6-Tribromophenol (S)	9.86	330	880709	230.6957	ppb	0.00
Spiked Amount	250.000		Recovery	= 92.278%		
82) Terphenyl-D14 (S)	12.52	244	4194106	105.8409	ppb	0.00
Spiked Amount	125.000		Recovery	= 84.673%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	1.73	58	9717	4.4855		88
3) n-Nitrosodimethylamine	1.97	42	178260	50.7603	ppb	93
7) Phenol	5.10	94	1232075	42.0445	ppb	96
8) Aniline	5.17	93	894937	29.1765	ppb	# 97
9) Bis (2-chloroethyl) ether	5.17	63	586293	43.4305	ppb	94
10) 2-Chlorophenol	5.24	128	895158	43.2838	ppb	99
11) 1,3-DCB	5.39	146	898754	40.8498	ppb	98
12) 1,4-DCB	5.49	146	918447	40.8546	ppb	98
13) Benzyl alcohol	5.64	108	203947	15.8264	ppb	95
14) 1,2-DCB	5.65	146	862833	41.4296	ppb	98
15) 2-Methylphenol	5.77	107	760336	43.0986	ppb	96
16) Bis (2-chloroisopropyl) et	5.76	45	874154	43.1309	ppb	# 80
17) Acetophenone	5.92	105	1217205	45.2865	ppb	# 65
18) 3&4-Methylphenol	5.95	107	1861793	89.3515	ppb	99
19) n-Nitrosodi-n-propylamine	5.92	70	685732	45.3154	ppb	98
20) Hexachloroethane	6.02	117	316513	38.5409	ppb	91
23) Nitrobenzene	6.13	77	1039174	45.4818	ppb	98
24) Isophorone	6.39	82	1835435	46.0521	ppb	96
25) 2-Nitrophenol	6.48	139	518043	46.0513	ppb	93
26) 2,4-Dimethylphenol	6.52	122	691268	37.1392	ppb	99
27) Benzoic acid	6.66	105	403985	27.7404	ppb	97
28) Bis (2-chloroethoxy) metha	6.62	93	1093185	44.2276	ppb	99
29) 2,4-Dichlorophenol	6.77	162	743336	46.4115	ppb	98
30) 1,2,4-Trichlorobenzene	6.83	180	769115	43.1933	ppb	99
31) 3,4-Dimethylphenol	6.87	107	1019276	40.5035	ppb	99
32) Napthalene	6.92	128	2663813	43.9904	ppb	100
33) 4-Chloroaniline	7.16	127	461420	20.5959	ppb	99
34) 2,6-Dichlorophenol	7.00	162	732800	46.2008	ppb	98
35) Hexachloropropene	7.02	213	187496	17.2674	ppb	99
36) Hexachlorobutadiene	7.05	225	318163	34.3006	ppb	99
37) Caprolactum	7.43	55	377680	46.8367	ppb	98
38) 4-Chloro-3-methylphenol	7.56	107	765228	42.4001	ppb	96

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y190124\0124Y107.D  
 Acq On : 1 Feb 19 20:29  
 Sample : AZ85643W34 MSD-1 1/800  
 Misc :

Vial: 7  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

Quant Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Jan 28 14:58:58 2019  
 Response via : Initial Calibration  
 DataAcq Meth : SVOC416

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) 2-Methylnaphthalene	7.71	142	1724848	44.1737	ppb	99
40) 1-Methylnaphthalene	7.82	142	1773697	45.4487	ppb	100
42) Hexachlorocyclopentadiene	7.88	237	98264	20.6559	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	7.91	216	730932	47.2175	ppb	99
44) 2,4,6-Trichlorophenol	8.05	196	520041	51.4642	ppb	99
45) 2,4,5-Trichlorophenol	8.11	196	530792	46.5114	ppb	98
47) 1,1'-Biphenyl	8.25	154	2265842	49.5470	ppb	100
48) 2-Chloronaphthalene	8.28	162	1711946	49.0019	ppb	99
49) 2-Nitroaniline	8.41	65	538787	47.4409	ppb	95
50) Dimethyl phthalate	8.60	163	2076021	50.3292	ppb	100
51) 2,6-DNT	8.69	165	478611	51.7444	ppb	95
52) Acenaphthylene	8.76	152	2678866	48.3397	ppb	100
53) 3-Nitroaniline	8.91	138	397348	37.9362	ppb	# 92
54) Acenaphthene	8.96	154	1747037	48.6796	ppb	100
55) 2,4-Dinitrophenol	9.02	184	239070	49.7300	ppb	91
56) 4-Nitrophenol	9.02	65	15717	2.4692	ppb	# 42
57) Dibenzofuran	9.16	168	2416176	48.0374	ppb	98
58) 2,4-DNT	9.16	165	640376	52.4910	ppb	90
59) 2,3,4,6-Tetrachlorophenol	9.31	232	395577	47.1001	ppb	97
60) Diethyl phthalate	9.42	149	1932219	49.4393	ppb	100
61) 4-Chlorophenyl phenyl ethe	9.55	204	958116	48.8258	ppb	100
62) Fluorene	9.56	166	1992811	49.4277	ppb	100
63) 4-Nitroaniline	9.62	138	441322	41.6120	ppb	99
66) 4,6-Dinitro-2-methylphenol	9.63	198	398342	50.6453	ppb	98
67) Diphenyl amine	9.70	169	2936883	94.5426	ppb	100
68) n-Nitrosodiphenylamine	9.70	169	2936883	94.5426	ppb	100
69) 1,2-Diphenylhydrazine	9.74	77	2083307	47.5814	ppb	88
70) 4-Bromophenyl phenyl ether	10.13	248	516152	49.0623	ppb	99
71) Hexachlorobenzene	10.20	284	499105	50.1840	ppb	97
72) Atrazine	10.33	200	174377	16.3599	ppb	97
73) Pentachlorophenol	10.44	266	241106	38.7364	ppb	97
74) Phenanthrene	10.68	178	2885513	48.4872	ppb	100
75) Anthracene	10.75	178	2946873	48.3441	ppb	99
76) Carbazol	10.94	167	2774961	50.0941	ppb	98
77) Di-n-butylphthalate	11.32	149	3363278	51.4548	ppb	99
78) Fluoranthene	12.08	202	3142528	49.1816	ppb	99
80) Benzidine	12.31	184	39756	2.0696	ppb	97
81) Pyrene	12.35	202	3277201	49.7030	ppb	100
83) Butyl benzylphthalate	13.08	149	1496457	50.6298	ppb	96
84) 3,3'-Dichlorobenzidine	13.71	252	384771	19.0310	ppb	96
85) Benz (a) anthracene	13.74	228	2856052	49.6690	ppb	99
86) Bis (2-ethylhexyl) phthala	13.73	149	4993225	121.3924	ppb	98
87) Chrysene	13.78	228	2691281	47.8611	ppb	99
88) Di-n-octylphthalate	14.49	149	3584923	51.3621	ppb	98
90) Benzo (b) fluoranthene	15.08	252	3002022	52.0488	ppb	99
91) Benzo (k) fluoranthene	15.11	252	2503257	45.1575	ppb	99
92) Benzo (a) pyrene	15.55	252	2495294	47.7968	ppb	100
93) Indeno (1,2,3-cd) pyrene	17.57	276	2666316	49.5819	ppb	98
94) Dibenz (a,h) anthracene	17.61	278	2432593	50.0354	ppb	98
95) Benzo (g,h,i) perylene	18.17	276	2221926	46.6384	ppb	96

(#) = qualifier out of range (m) = manual integration

0124Y107.D Y0125NC.M Wed Feb 06 10:53:40 2019

Quantitation Report

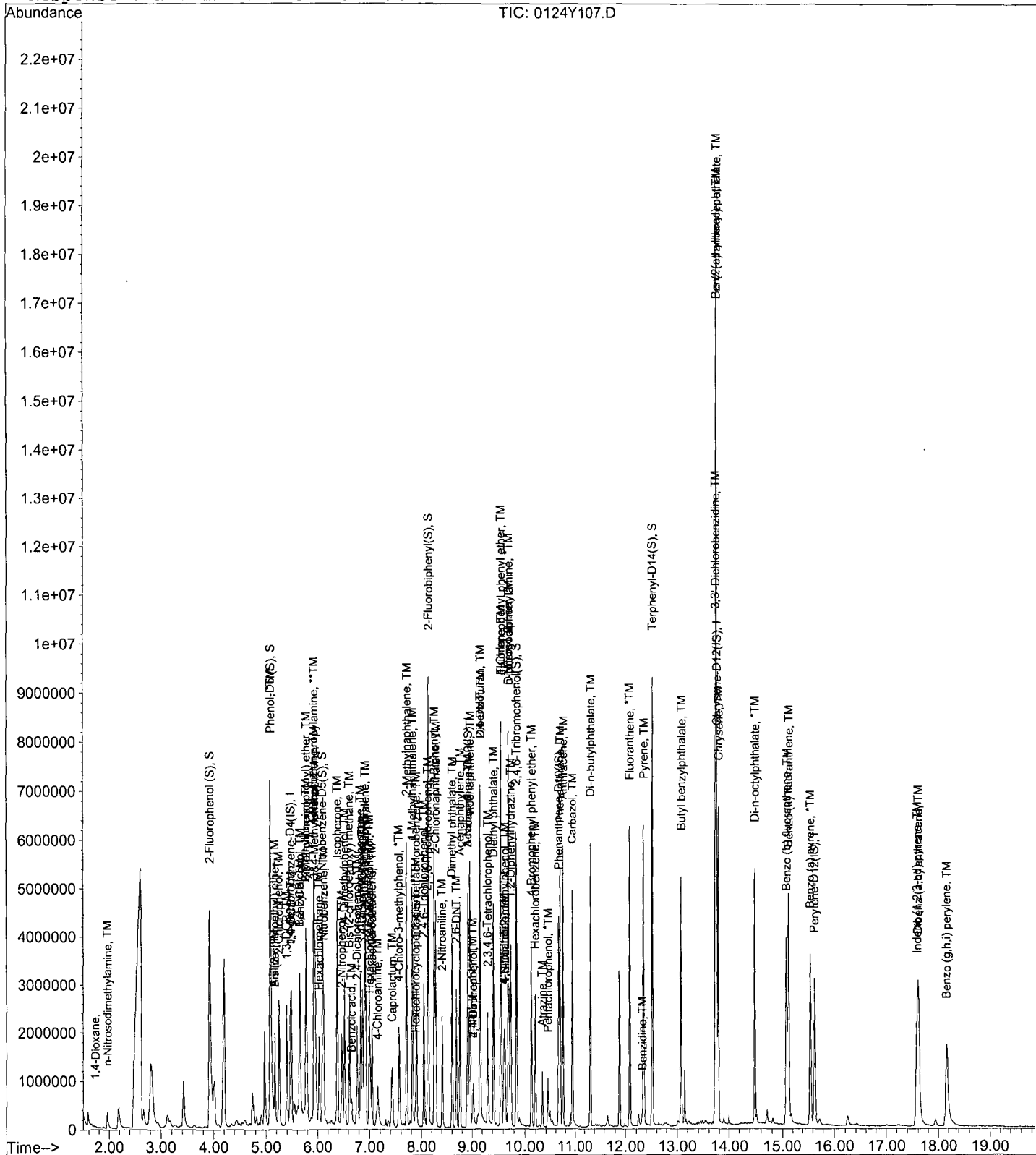
Data File : M:\YODA\DATA\Y190124\0124Y107.D  
Acq On : 1 Feb 19 20:29  
Sample : AZ85643W34 MSD-1 1/800  
Misc :

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.25

Quant Time: Feb 4 7:36 2019

Quant Results File: Y0125NC.RES

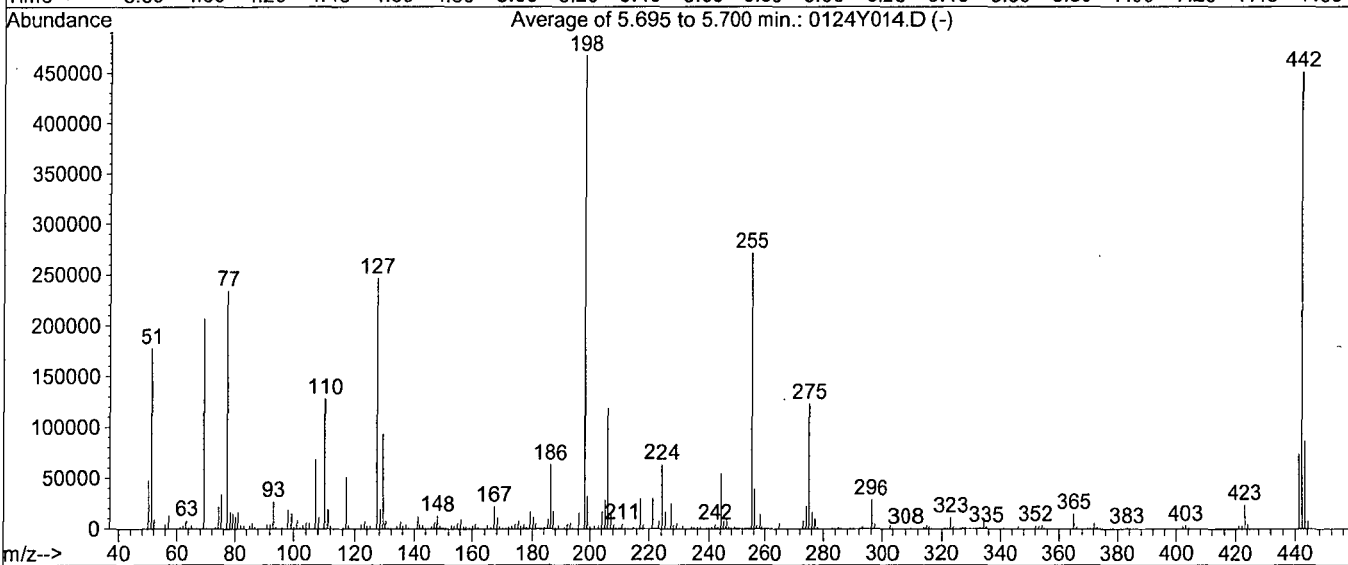
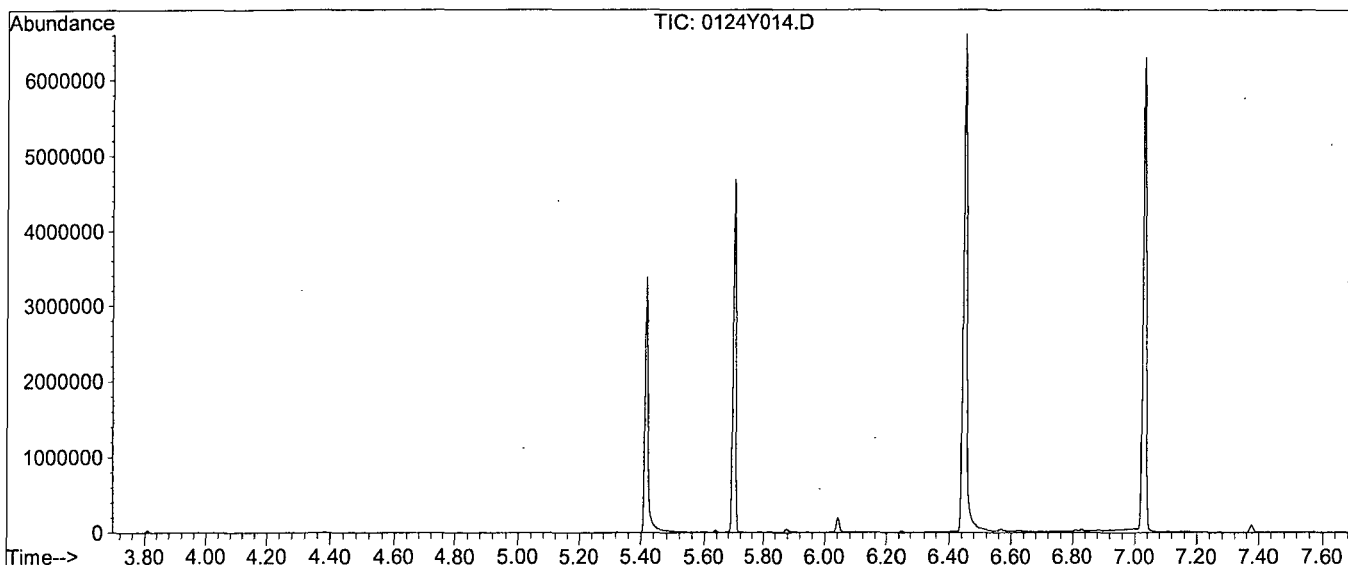
Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Feb 04 19:46:10 2019  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y181201\Y1201NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 844, 845, 846; Background Corrected with Scan 836

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.0	177707	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	324	PASS
127	198	10	80	52.7	246677	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	467755	PASS
199	198	5	9	6.9	32176	PASS
275	198	10	60	26.4	123307	PASS
365	198	1	100	3.2	14799	PASS
441	442	0.01	24	16.3	73683	PASS
442	198	50	150	96.4	451136	PASS
443	442	15	24	19.1	86139	PASS

Data File Name: 0124Y014.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 25 Jan 2019 07:05  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 14  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	45543100
2)	DDD	6.83	289306
3)	DDE	6.98	50792

Breakdown 0.74

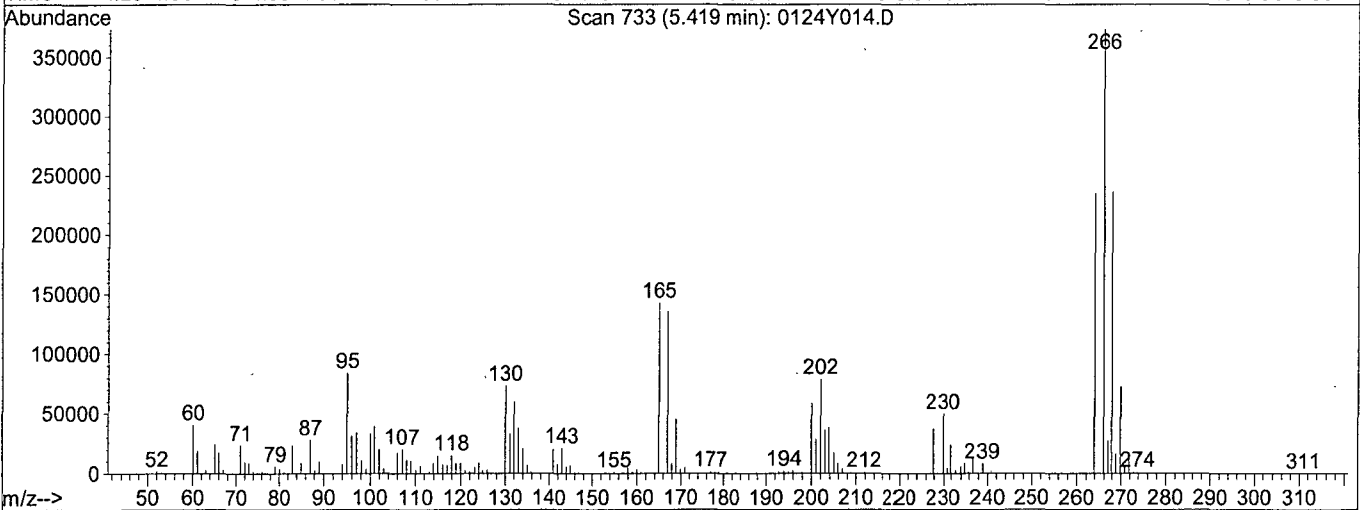
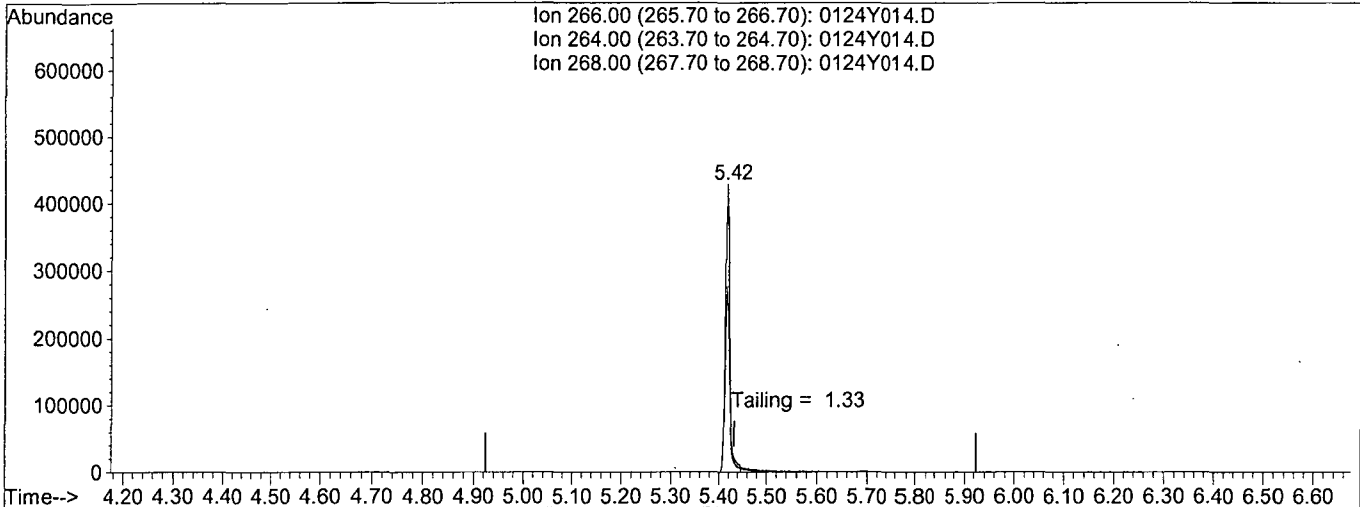


Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y014.D  
 Acq On : 25 Jan 19 7:05  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 25 7:20 2019

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y014.D

(5) Pentachlorophenol

5.42min 0.0000

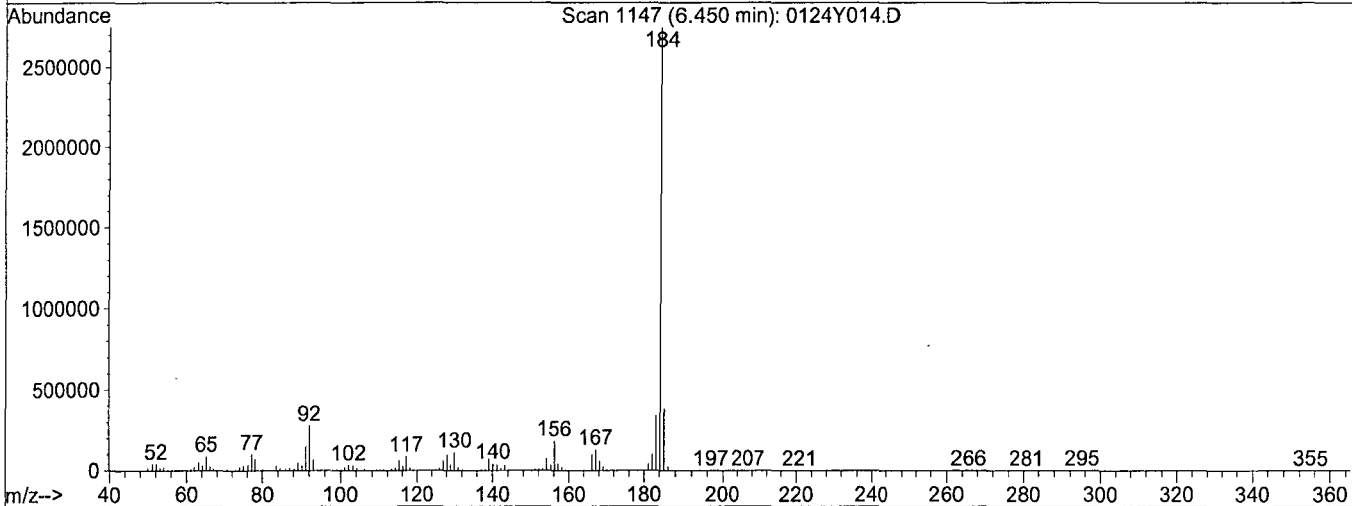
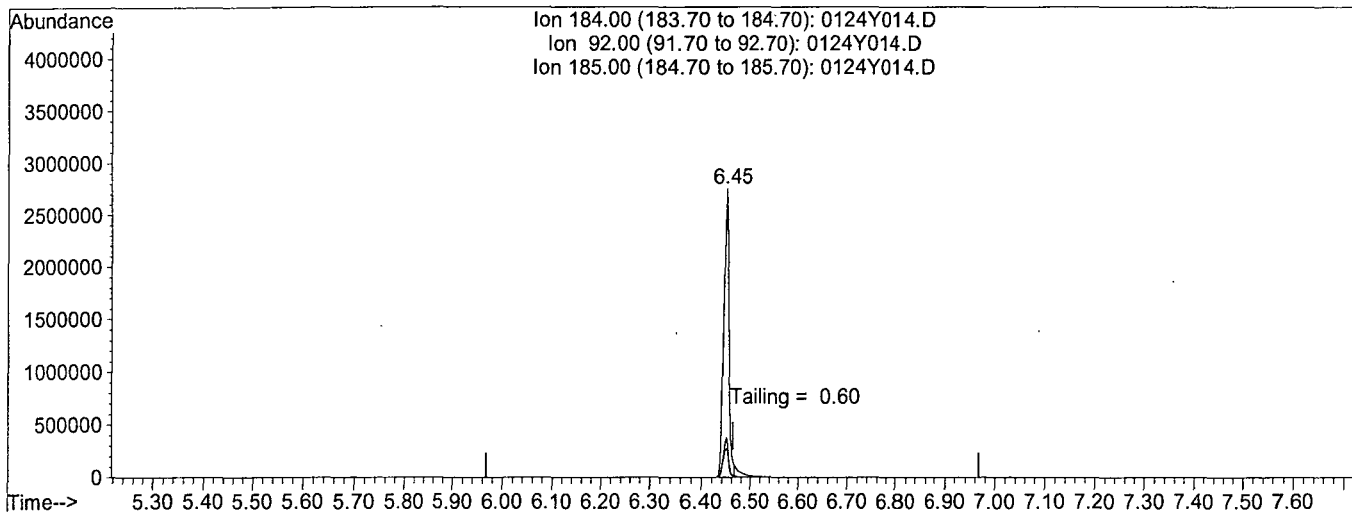
response 2758498

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	64.93
268.00	62.10	64.03
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y014.D Vial: 14  
 Acq On : 25 Jan 19 7:05 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Jan 25 7:20 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y014.D

(6) Benzidine

6.45min 0.0000

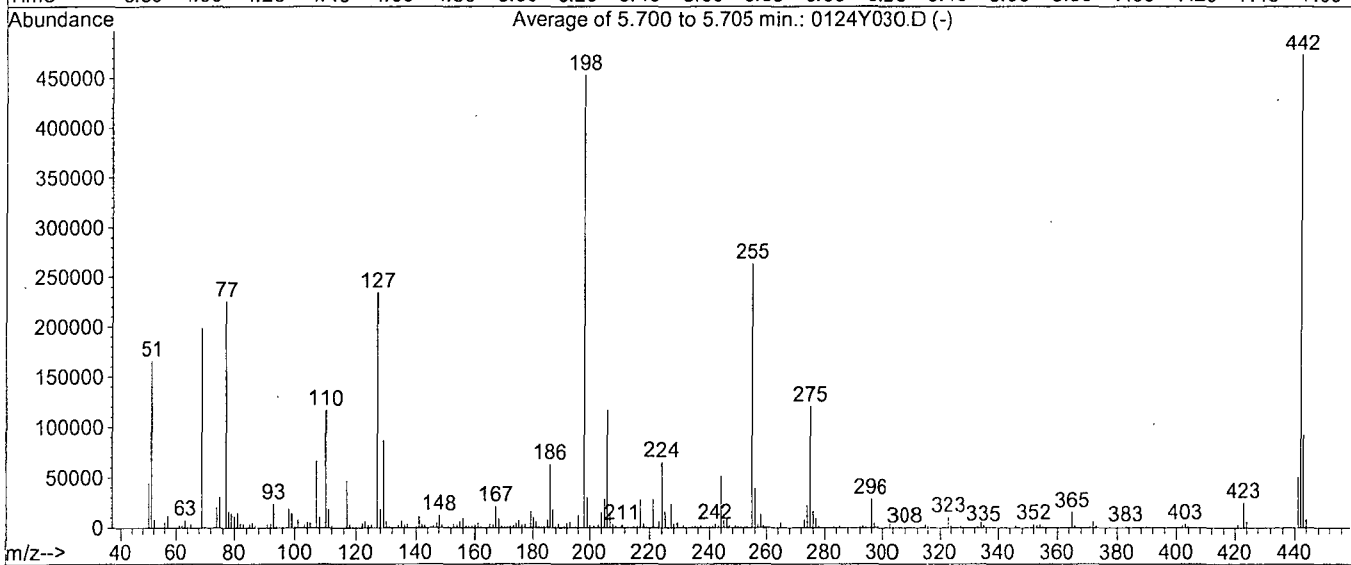
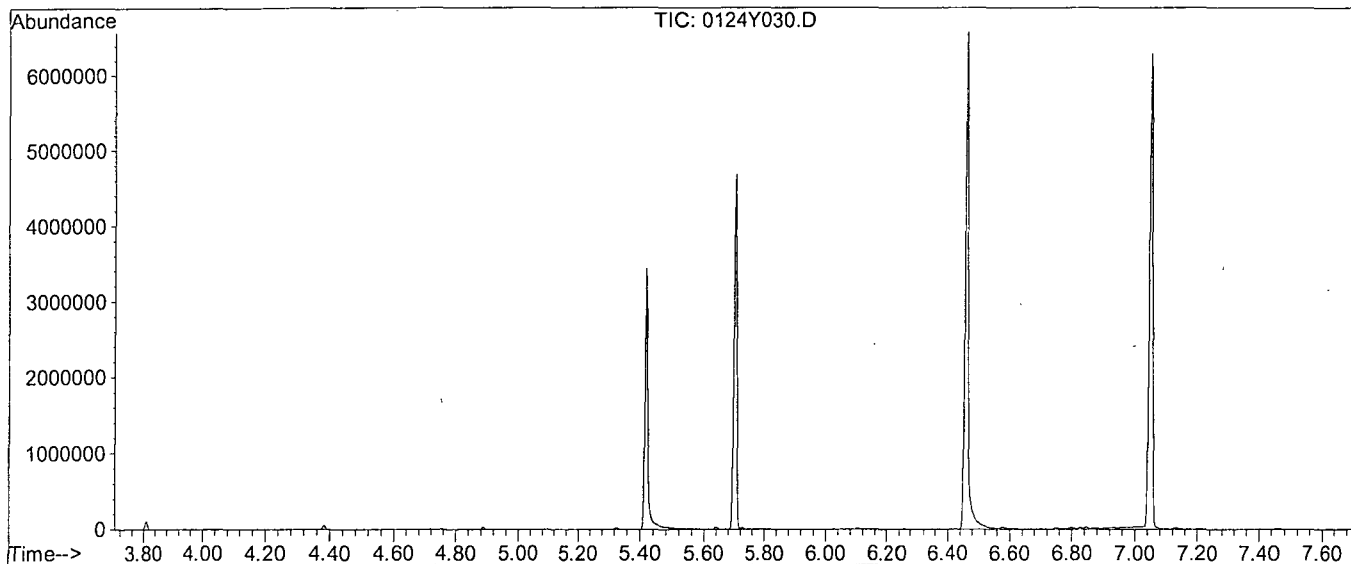
response 21096537

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.55
185.00	13.80	14.00
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 847, 848, 849; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.7	166219	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	962	PASS
127	198	10	80	51.8	234731	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	453312	PASS
199	198	5	9	6.7	30395	PASS
275	198	10	60	26.6	120363	PASS
365	198	1	100	3.4	15570	PASS
441	442	0.01	24	10.6	50421	PASS
442	198	50	150	104.5	473707	PASS
443	442	15	24	19.5	92189	PASS

Data File Name: 0124Y030.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 28 Jan 2019 11:49  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 30  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	45582200
2)	DDD	6.83	168406
3)	DDE	6.98	0

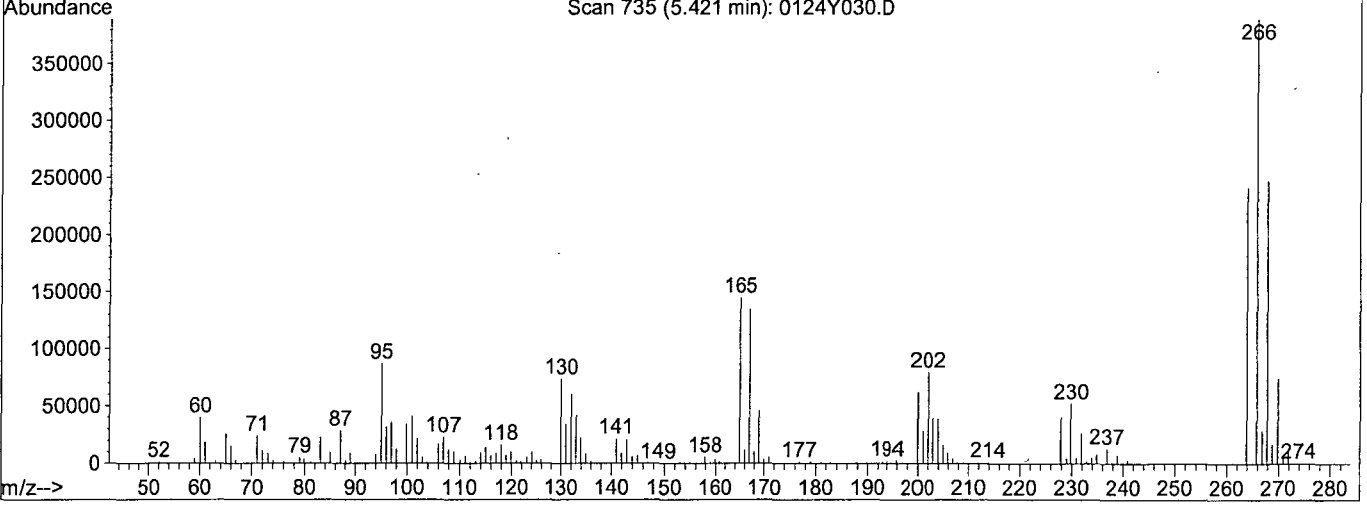
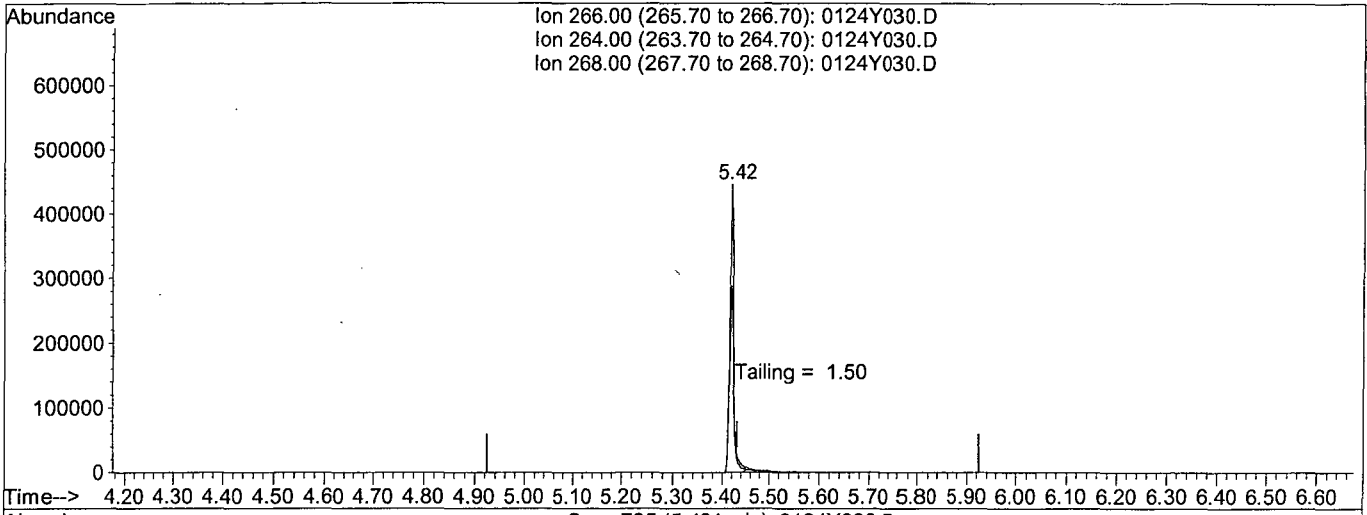
Breakdown 0.37

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 12:04 2019

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y030.D

(5) Pentachlorophenol

5.42min 0.0000

response 2670044

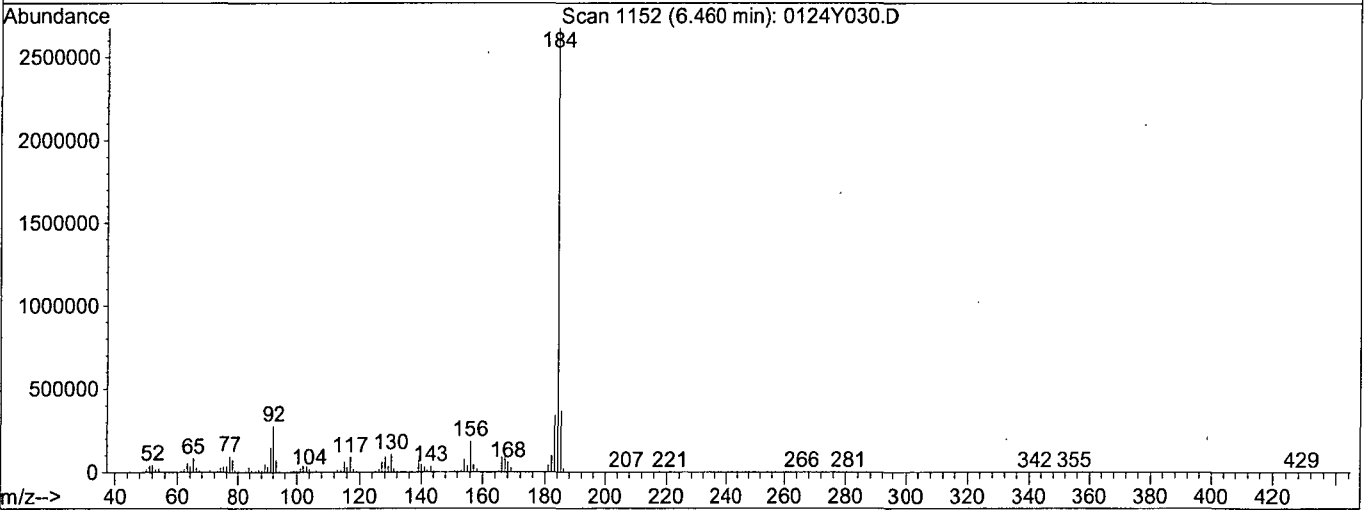
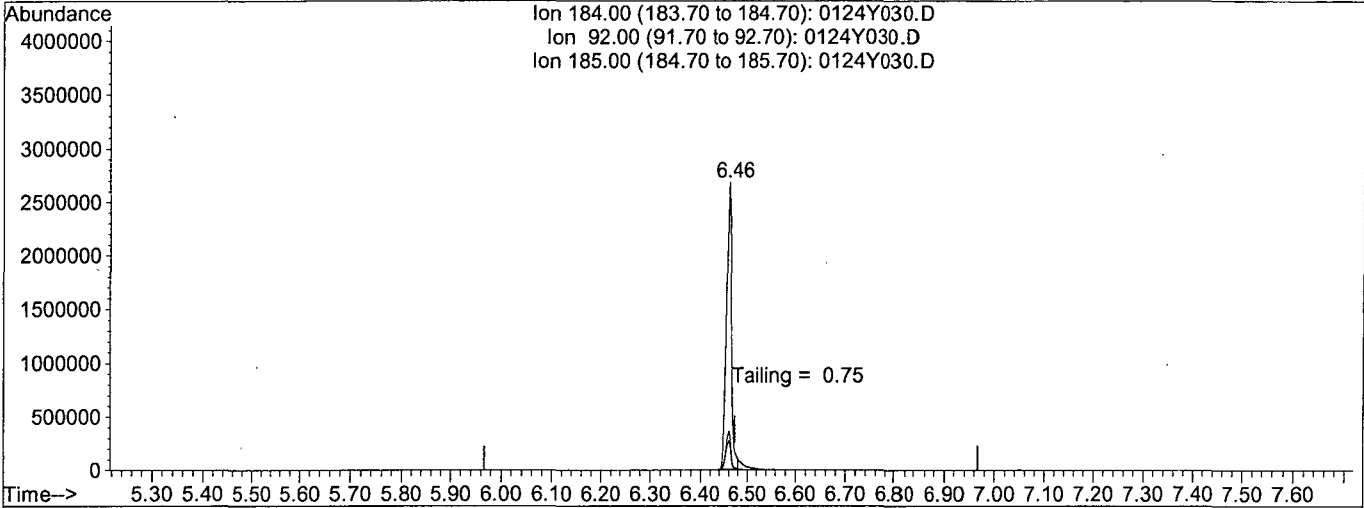
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	60.30
268.00	62.10	65.12
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y030.D  
 Acq On : 28 Jan 19 11:49  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Jan 28 12:04 2019

Vial: 30  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y030.D

(6) Benzidine

6.46min 0.0000

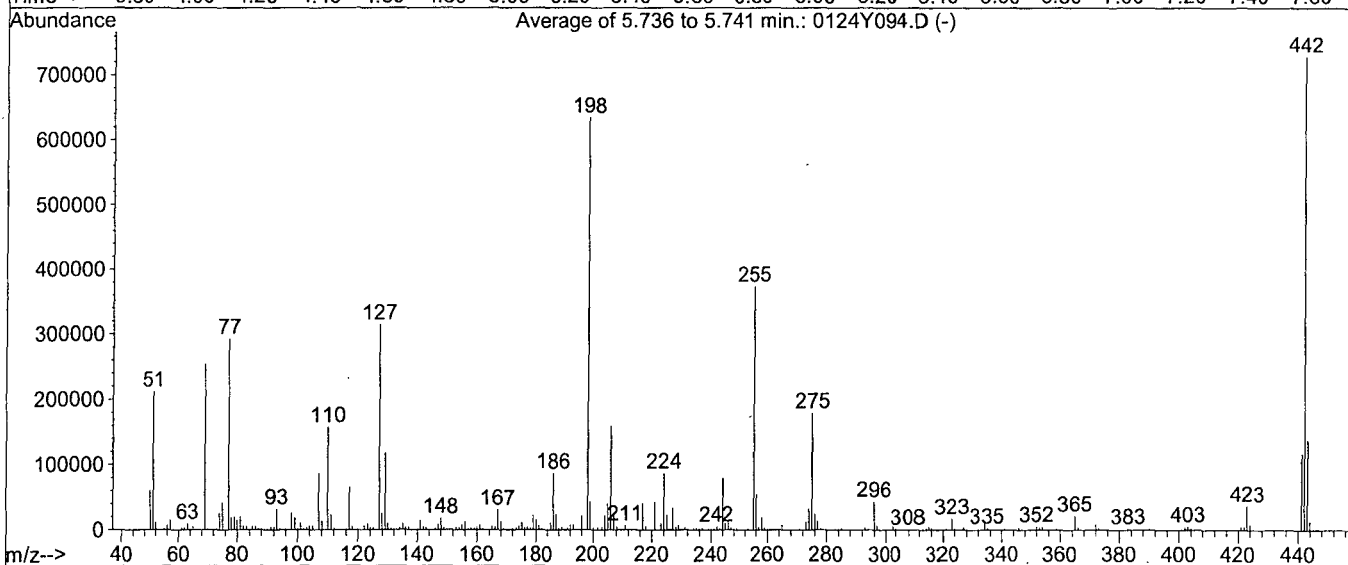
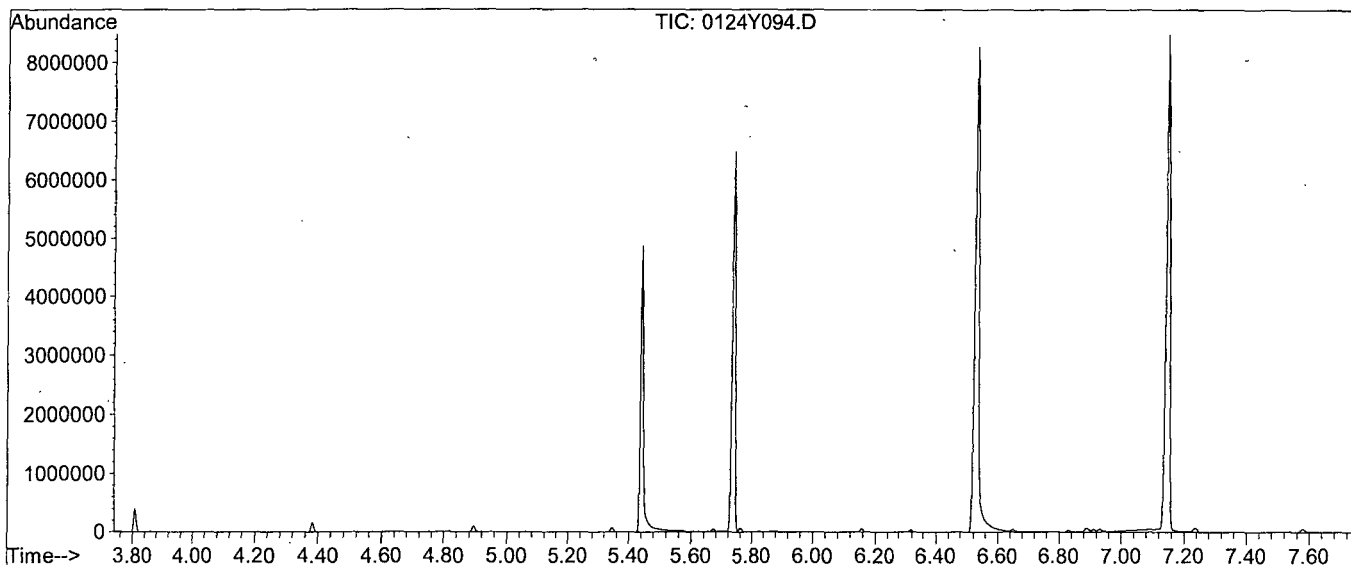
response 21118726

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.26
185.00	13.80	13.74
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y190124\0124Y094.D  
 Acq On : 1 Feb 19 13:23  
 Sample : SV TUNE 11/10/18  
 Misc :

Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Method : M:\YODA\DATA\Y190124\Y0125NC.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 861, 862, 863; Background Corrected with Scan 852

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.4	211611	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1438	PASS
127	198	10	80	49.6	314795	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	634197	PASS
199	198	5	9	6.7	42336	PASS
275	198	10	60	28.3	179563	PASS
365	198	1	100	3.4	21411	PASS
441	442	0.01	24	16.1	117525	PASS
442	198	50	150	115.1	729813	PASS
443	442	15	24	18.9	138091	PASS

M:\YODA\DATA\Y190124\0124Y094.D

Data File Name: 0124Y094.D  
Data File Path: M:\YODA\DATA\Y190124\  
Operator: MA  
Date Acquired: 1 Feb 19 13:23  
Method File: DFTPP2.M  
Sample Name: SV TUNE 11/10/18  
Vial Number: 94  
Instrument Name: Yoda

#	Name	Ret Time	Target Response
1)	DDT	7.05	69891300
2)	DDD	6.83	352986
3)	DDE	6.98	46709

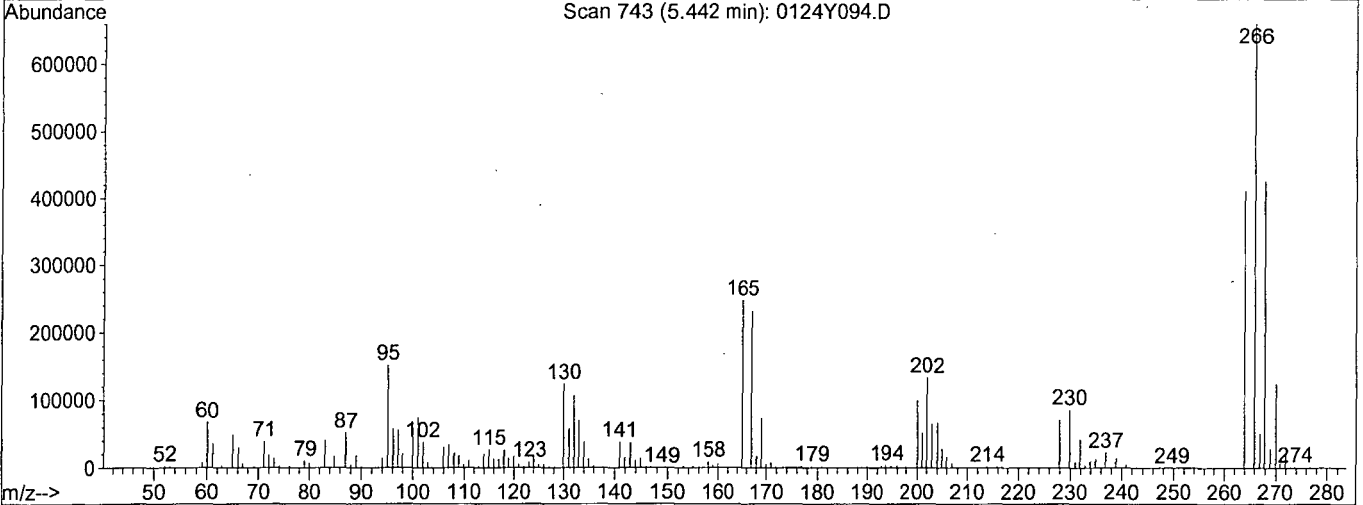
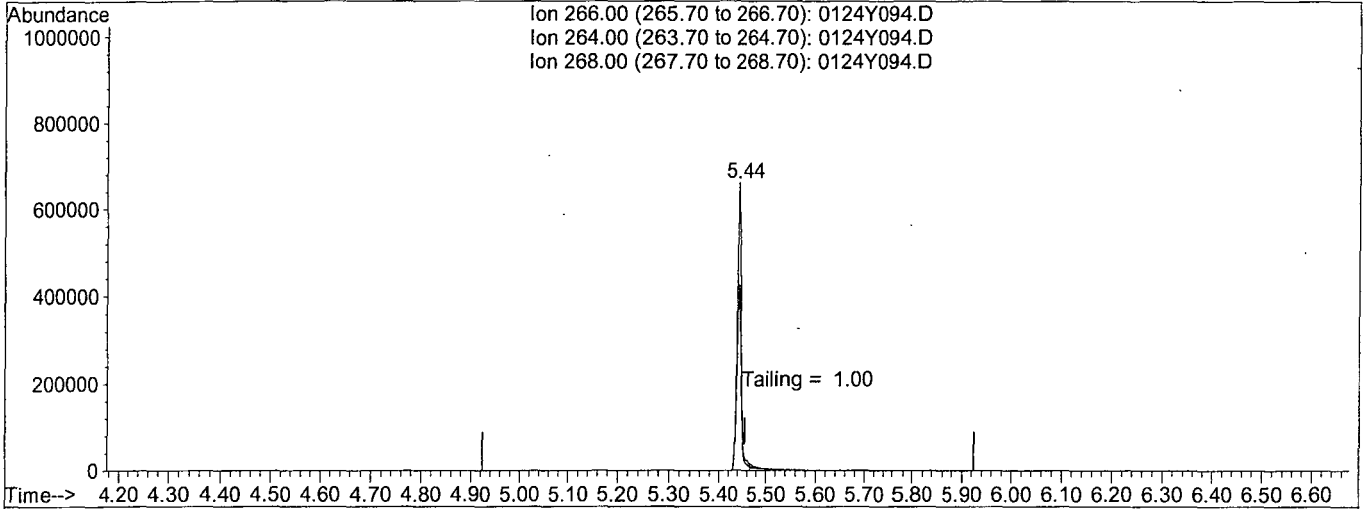
Breakdown 0.57



Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y094.D Vial: 94  
 Acq On : 1 Feb 19 13:23 Operator: MA  
 Sample : SV TUNE 11/10/18 Inst : Yoda  
 Misc : Multiplr: 1.00  
 Quant Time: Feb 4 7:31 2019 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y094.D

(5) Pentachlorophenol

5.44min 0.0000

response 4102610

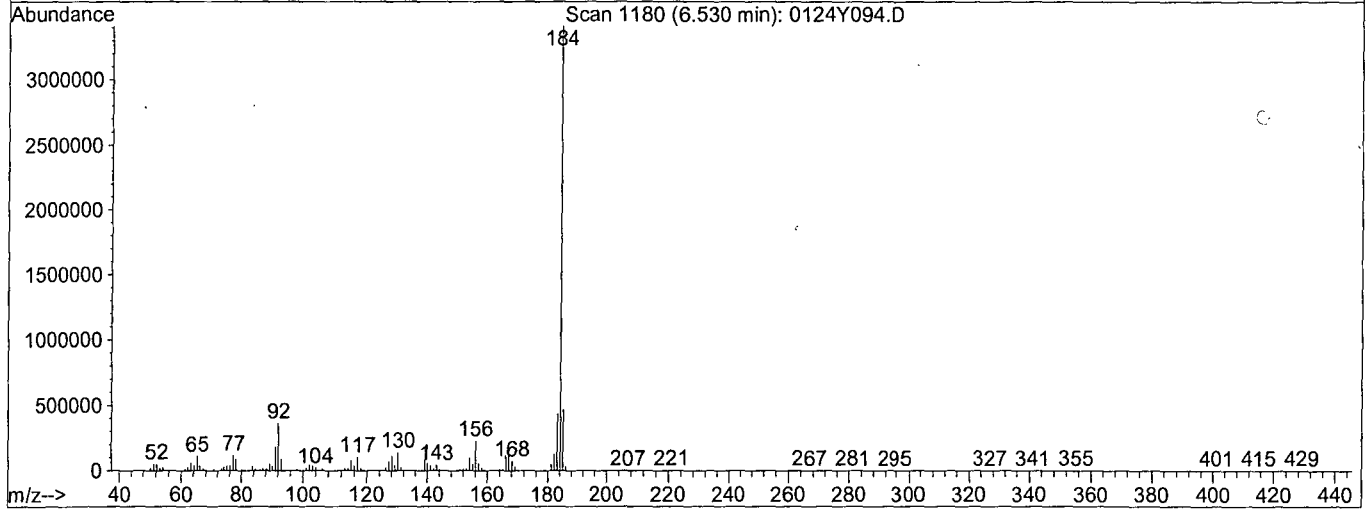
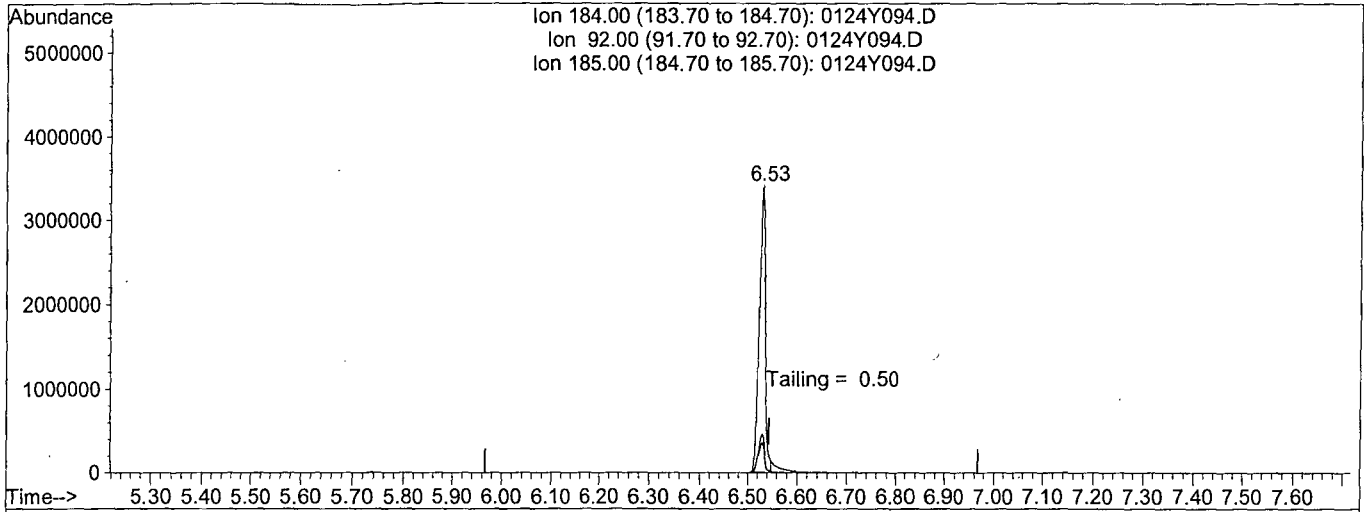
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	65.22
268.00	62.10	65.52
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y190124\0124Y094.D  
 Acq On : 1 Feb 19 13:23  
 Sample : SV TUNE 11/10/18  
 Misc :  
 Quant Time: Feb 4 7:31 2019

Vial: 94  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y190124\DFTPP2.M (Chemstation Integrator)  
 Title :  
 Last Update : Mon Jan 14 14:55:57 2019  
 Response via : Single Level Calibration



TIC: 0124Y094.D

(6) Benzidine

6.53min 0.0000

response 32338105

Ion	Exp%	Act%
184.00	100	100
92.00	10.50	10.42
185.00	13.80	13.69
0.00	0.00	0.00

Name of Final Standard 8270 Full Scan Spike      Prep'd By (Initials) GA  
 Prep Date 11/09/18  
 Exp Date 10/20/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	051018-39433	11/09/19	1.0 mL	20 mL	NA	2000 ug/mL
10002	Absolute	10002	2000	051018-39437	11/09/19	1.0 mL	*	*	2000 ug/mL
10004	Absolute	10004	2000	071618-39441	11/09/19	1.0 mL	*	*	2000 ug/mL
10005	Absolute	10005	2000	032018-39609	11/09/19	1.0 mL	*	*	2000 ug/mL
10006	Absolute	10006	2000	071318-39447	11/09/19	1.0 mL	*	*	2000 ug/mL
10007	Absolute	10007	2000	080116-39614	11/09/19	1.0 mL	*	*	2000 ug/mL
10018	Absolute	10018	2000	062718-39452	11/09/19	1.0 mL	*	*	2000 ug/mL
70023	Absolute	70023	1000	020818-39457	11/09/19	1.0 mL	*	*	1000 ug/mL
82705	Absolute	82705	2000	081418-39618	11/09/19	1.0 mL	*	*	2000 ug/mL
94552	Absolute	94552	various	102017-39621	10/20/19	1.0 mL	*	*	various

Name of  
Final

Standard 8270 Surrogate 200/400 ppm

Prep'd By (Initials)

GA

Prep Date 10/17/18

Exp Date 09/27/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352-39395	10/17/19	200 uL	5 mL	MC 56258	400 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243-39166	09/27/19	200 uL	*	*	200 ug/mL

Name of  
Final

Standard 8270 Internal Standard (Ampule)

Prep'd By (Initials)

OA

Prep Date 01/16/19

Exp Date 01/16/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent+ Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatil e Internal Standard	Restek	31206	2mg/mL	A0138585-39544	01/16/20	1 mL	1 mL	NA	2mg/mL

Name of  
Final

Standard **8270 SS STOCK**

Prep'd By (Initials)

OA

Prep Date 04/19/18

Exp Date 04/19/19

Initial Standard Information					Final Standard Information				
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
	Absolute	10001	2000	G34-081717-38180	04/19/19	1.0 mL	10 mL	NA	2000 ug/mL
	Absolute	10002	2000	G34-020217-38183	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10004	2000	010815-38624	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10005	2000	041317-37803	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10006	2000	011718-38826	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10007	2000	020515-38628	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	10018	2000	G34-030216-38198	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	70023	1000	013118-38829	04/19/19	1.0 mL	*	*	1000 ug/mL
	Absolute	82705	2000	090617-38831	04/19/19	1.0 mL	*	*	2000 ug/mL
	Absolute	94552	various	013118-38824	04/19/19	1.0 mL	*	*	various

Name of  
 Final **8270 Surrogate 100/200**  
 Standard **ppm**

Prep'd By (Initials) **GA**

Prep Date **11/06/18**  
 Exp Date **09/27/19**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Allquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0136352 - 39395	10/17/19	5.0 mL	250 mL	Acetone #030817A	200 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0135243 - 39166 & A0140132 - 39545	09/27/19 11/06/19	5.0 mL	250 mL	*	100 ug/mL

Name of Final Standard  
Prep Date  
Exp Date

8270 Full Scan Standard Curve  
01/23/19  
09/17/19

Prep'd By (Initials)

OA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	4 uL	200uL	MC 56258 192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	4 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	5 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	5 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	10 uL	100uL	MC 56258 80 uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	10 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	20 uL	100uL	MC 56258 60 uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	20 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	200 uL	MC 56258 100 uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	30 uL	100uL	MC 56258 40 uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	30 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	40 uL	100uL	MC 56258 20 uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	40 uL	*	*	*



SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL	*	*	*
8270 Stock	APPL	8270 Stock	200 ug/mL	11/09/18	10/20/19	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	10/17/18	09/17/19	50 uL	*	*	*
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	2 uL	*	*	*

**Name of Final Standard** 8270 Full Scan Second Source      **Prep'd By (Initials)** OA  
**Prep Date** 11/15/18  
**Exp Date** 04/19/19

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	04/19/18	04/19/19	50 uL	200uL	MC 56258 150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	01/16/19	01/16/20	4 uL	*	*	*

# Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	190130A	Extraction Method	LIQ003	Units	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19			Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19		
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20			Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19		
Spiked ID 3				Surrogate ID 3			
Spiked ID 4				Surrogate ID 4			
Spiked ID 5				Surrogate ID 5			
Spiked ID 6				Sufficient Vol for Matrix QC: yes			
Spiked ID 7				Ext. Start Time:	01/30/19 16:15	<i>01/31/19 13:00</i>	
Spiked ID 8				Ext. End Time:	01/31/19 10:30	<i>01/31/19 07:45, 02/01/19 11:20</i>	
				GC Requires Extract By:	01/31/19 0:00		
		pH1	2	01/30/19 1:40:00 PM	Water Bath Temp Criteria 73,75 °C		
		pH2	14	01/31/19 12:30:00 PM			
		pH3					

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	190130A Blk			1.0.050	1,2	800	1	2/1	01/30/19 13:30	
						equip		e-wb5 E-HP51		
2	190130A LCS-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30	
						equip		e-wb5 E-HP50		
3	190130A LCS-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	
						equip		e-wb5 E-HP49		
4	190130A LCSD-1	0.250	1	1	1	800	1	2/1	01/30/19 13:30	
						equip		e-wb5 E-HP48		
5	190130A LCSD-2	0.0250	2	0.050	2	800	1	2/1	01/30/19 13:30	
						equip		e-wb5 E-HP47		
6	AZ85562 MS-1	AZ85562W31	0.250	1	1	800	1	2/1	01/30/19 13:30	87940
						equip		e-wb5 E-HP25		
7	AZ85562 MSD-1	AZ85562W33	0.250	1	1	800	1	2/1	01/30/19 13:30	87940
						equip		e-wb5 E-HP26		
8	AZ85562 MS-2	AZ85562W37	0.0250	2	0.050	800	1	2/1	01/30/19 13:30	87940
						equip		e-wb5 E-HP27		
9	AZ85562 MSD-2	AZ85562W38	0.0250	2	0.050	800	1	2/1	01/30/19 13:30	87940
						equip		E-WB5 E-HP28		
10	AZ85562	AZ85562W36		1.0.050	1,2	800	1	2/1	01/30/19 13:30	87940
						equip		e-wb5 E-HP29		
11	AZ85563	AZ85563W10		1.0.050	1,2	800	1	2/1	01/30/19 13:30	87940
						equip		E-WB5 E-HP30		
12	AZ85569	AZ85569W22		1.0.050	1,2	800	1	2/1	01/30/19 13:30	87940
						equip		E-WB5 E-HP17		
13	AZ85643 MS-1	AZ85643W33	0.250	1	1	800	1	2/1	01/30/19 13:30	87956
						equip		E-WB6 E-HP16		
14	AZ85643 MSD-1	AZ85643W34	0.250	1	1	800	1	2/1	01/30/19 13:30	87956
						equip		E-WB6 E-HP15		
15	AZ85643 MS-2	AZ85643W35	0.0250	2	0.050	800	1	2/1	01/30/19 13:30	87956
						equip		E-WB6 E-HP14		
16	AZ85643 MSD-2	AZ85643W30	0.0250	2	0.050	800	1	2/1	01/30/19 13:30	87956
						equip		E-WB6 E-HP13		

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	OA
Date	02/01/19
Time	11:31
Refrigerator	GC-C

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *KY*

Date: *2/1/19*

# Organic Extraction Worksheet








<b>Method</b>	Continuous Liquid/Liquid SVOC 3520C	<b>Extraction Set</b>	190130A	<b>Extraction Method</b>	LIQ003	<b>Units</b>	mL
Spiked ID 1	8270T Spike 1-30-19 EXP 10-30-19	Surrogate ID 1	8270 Surrogate 12-6-18 EXP 10-17-19				
Spiked ID 2	Sim Spike 1-30-19 EXP 1-30-20	Surrogate ID 2	SIM Surrogate 1-24-19 EXP 6-7-19				
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		yes			
Spiked ID 7		Ext. Start Time:		01/30/19 16:15, 01/31/19 13:00			
Spiked ID 8		Ext. End Time:		01/31/19 10:30, 02/01/19 07:05, 02/01/19 11:20			
GC Requires Extract By:				01/31/19 0:00			
pH1	2	01/30/19 1:40:00 PM		Water Bath Temp Criteria		73,75 °C	
pH2	14	01/31/19 12:30:00 PM					
pH3							

Spiked By: DL

Date 01/30/19

Witnessed By: CFM

Date 01/30/19

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ85643 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP12				
18	AZ85644 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP11				
19	AZ85646 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP10				
20	AZ85653 			1,0.050	1,2	800	1	2/1	01/30/19 13:30	87956
					equip	E-WB6 E-HP9				
21	AZ85763 			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP7				
22	AZ85764 			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP6				
23	AZ85766 			1,0.050	1,2	800	1	2/1	01/30/19 15:55	87986
					equip	E-WB6 E-HP4				

Keg 2/4/19

Solvent and Lot#	
PH Strips	HC 849161
Dichloromethane (DCM)	18G194011
1+1 H2SO4	11-28-18
10N NaOH	1-8-19
Filter Paper	400148
Acidified Na2SO4	11-27-18
B. Na2SO4	2018110573

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	
Date	
Time	
Refrigerator	

Technician's Initials	
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL
Modified	02/01/19 4:47:57 PM

Reviewed By: *Keg* Page 406 of 911 Date 2/4/19

## Injection Log

Directory: M:\YODA\DATA\Y190124\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
14	0124Y014.D	1	SV TUNE 11/10/18		25 Jan 19 7:05
15	0124Y015.D	1	50ug/mL 8270 01/24/19		25 Jan 19 7:20
16	0124Y016.D	1	4ug/mL 8270 01/24/19		25 Jan 19 9:53
17	0124Y017.D	1	5ug/mL 8270 01/24/19		25 Jan 19 10:21
18	0124Y018.D	1	10ug/mL 8270 01/24/19		25 Jan 19 10:49
20	0124Y020.D	1	40ug/mL 8270 01/24/19		25 Jan 19 11:44
21	0124Y021.D	1	60ug/mL 8270 01/24/19		25 Jan 19 12:11
22	0124Y022.D	1	80ug/mL 8270 01/24/19		25 Jan 19 12:39
23	0124Y023.D	1	100ug/mL 8270 01/24/19		25 Jan 19 13:07
30	0124Y030.D	1	SV TUNE 11/10/18		28 Jan 19 11:49
33	0124Y033.D	1	20ug/mL 8270 01/24/19		28 Jan 19 13:36
34	0124Y034.D	1	SS-8270 01/24/19		28 Jan 19 14:11
94	0124Y094.D	1	SV TUNE 11/10/18		1 Feb 19 13:23
95	0124Y095.D	1	50ug/mL 8270 01/24/19 (2)		1 Feb 19 13:38
98	0124Y098.D	1.25	190130A Blk 1/800		1 Feb 19 16:19
99	0124Y099.D	1.25	190130A LCS-1 1/800		1 Feb 19 16:47
100	0124Y100.D	1.25	190130A LCSD-1 1/800		1 Feb 19 17:14
6	0124Y106.D	1.25	AZ85643W33 MS-1 1/800		1 Feb 19 20:01
7	0124Y107.D	1.25	AZ85643W34 MSD-1 1/800		1 Feb 19 20:29
8	0124Y108.D	1.25	AZ85643W32 1/800		1 Feb 19 20:57
9	0124Y109.D	1.25	AZ85644W07 1/800		1 Feb 19 21:25
10	0124Y110.D	1.25	AZ85646W21 1/800		1 Feb 19 21:53
11	0124Y111.D	1.25	AZ85653W20 1/800		1 Feb 19 22:21
15	0124Y115.D	1.25	50ug/mL 8270 01/24/19 (1)		2 Feb 19 00:12

**ORGANICS**  
**Calibration Data**

2MEE  
EPA 8270

Form 6  
Initial Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Initial Cal. Date: 11/28/18  
Instrument: Yoda

Initials: \_\_\_\_\_

1128Y004.D 1128Y005.D 1128Y006.D 1128Y007.D 1128Y012.D 1128Y008.D 1128Y009.D 1128Y010.D

		Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r^2	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)																
2	TM	2-(2-Methoxyethoxy)ethanol	0.2305	0.2453	0.2498	0.2070	0.2284	0.2415	0.2719	0.2475			0.24	7.9	TM			
3	I	Napthalene-D8(IS)																
4	I	Acenaphthene-D10(IS)																
5	I	Phenanthrene-D10(IS)																
6	I	Chrysene-D12(IS)																
7	I	Perylene-D12(IS)																
8																		
9																		
10																		
11																		
12																		
13																		
14																		
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33																		
34																		
35																		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y004.D  
 Acq On : 28 Nov 18 8:08  
 Sample : 50ug/ml MEE 08/01/18  
 Misc : soil

Vial: 4  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	846679	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3808187	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1917814	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3593004	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3055748	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3109829	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.46	45	243946	76.98478	ppb	99

Quantitation Report

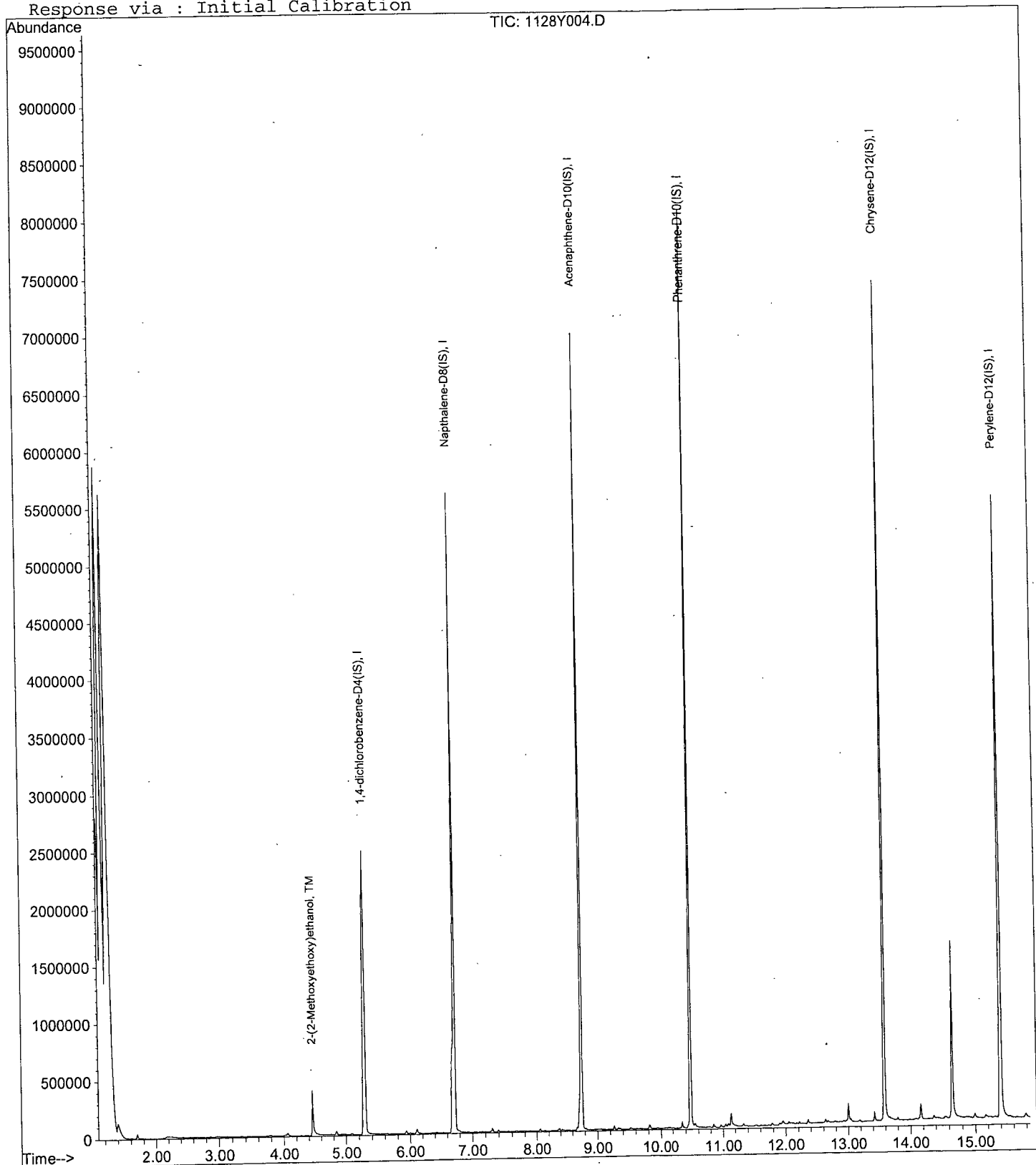
Data File : M:\YODA\DATA\Y181128M\1128Y004.D  
Acq On : 28 Nov 18 8:08  
Sample : 50ug/ml MEE 08/01/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y005.D Vial: 5  
 Acq On : 28 Nov 18 8:32 Operator: MA  
 Sample : 100ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	833525	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3655933	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1870603	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3472767	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	2784977	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2713194	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.47	45	511054	121.26713	ppb	99

Quantitation Report

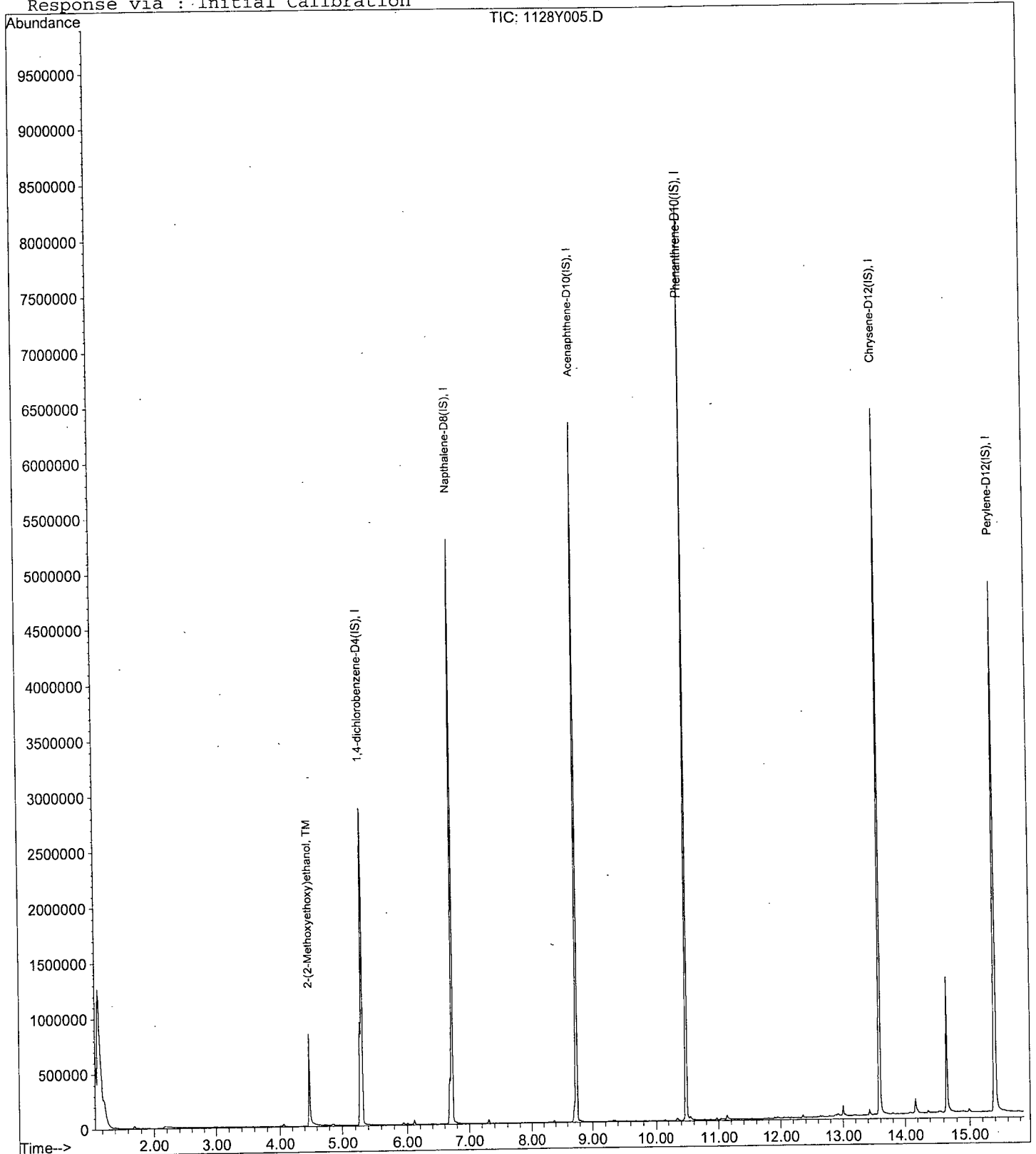
Data File : M:\YODA\DATA\Y181128M\1128Y005.D  
Acq On : 28 Nov 18 8:32  
Sample : 100ug/ml MEE 08/01/18  
Misc : soil

Vial: 5  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y006.D Vial: 6  
 Acq On : 28 Nov 18 8:55 Operator: MA  
 Sample : 200ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:30 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	906220	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4175598	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2128971	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3974569	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3488549	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3293123	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.48	45	1131710	207.88279	ppb	99

Quantitation Report

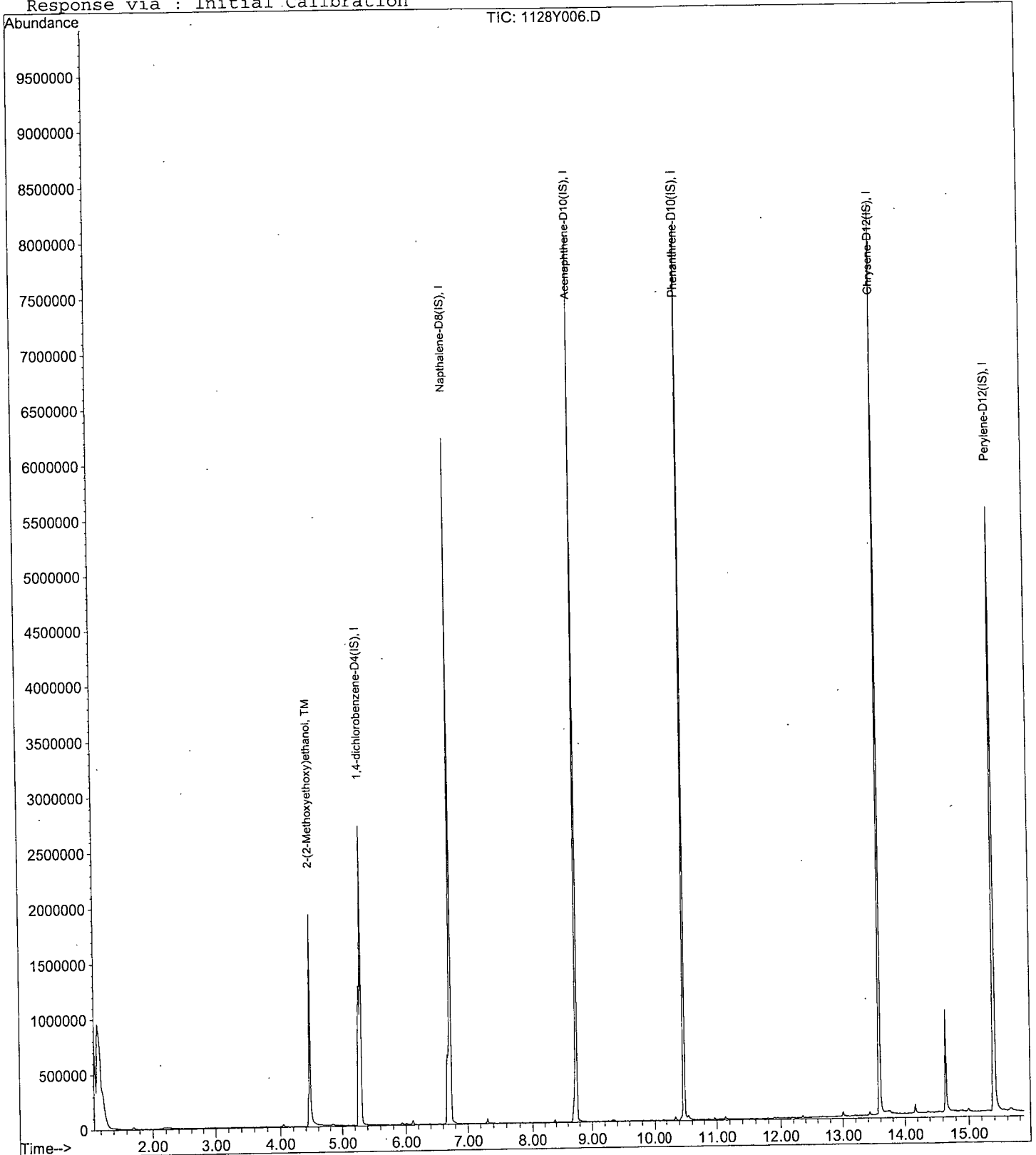
Data File : M:\YODA\DATA\Y181128M\1128Y006.D  
Acq On : 28 Nov 18 8:55  
Sample : 200ug/ml MEE 08/01/18  
Misc : soil

Vial: 6  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:30 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y007.D Vial: 7  
 Acq On : 28 Nov 18 9:19 Operator: MA  
 Sample : 400ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:31 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	948008	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	4475913	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2298421	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	4282330	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3776629	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3748965	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.48	45	1962520	319.79035	ppb	100

Quantitation Report

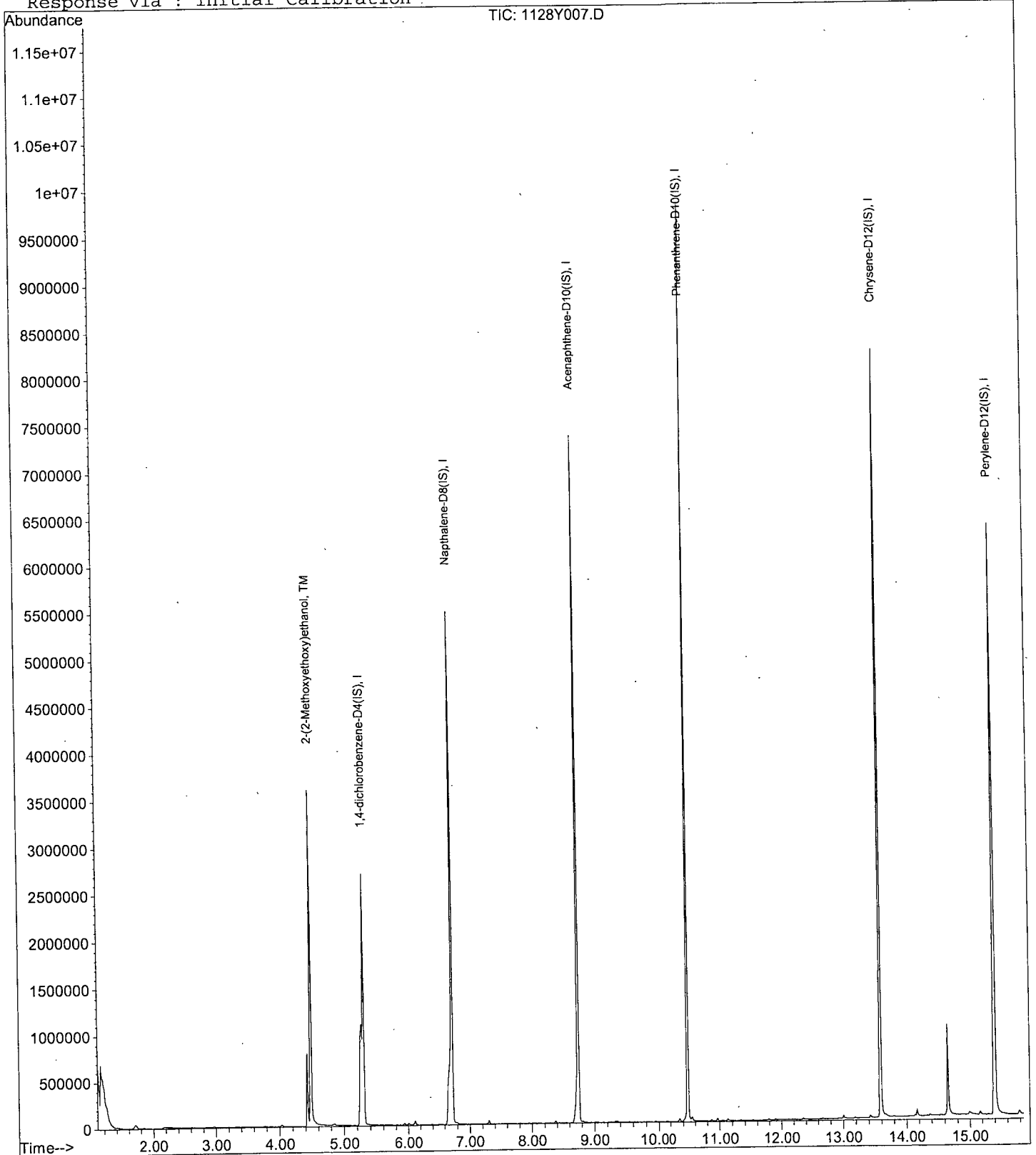
Data File : M:\YODA\DATA\Y181128M\1128Y007.D  
Acq On : 28 Nov 18 9:19  
Sample : 400ug/ml MEE 08/01/18  
Misc : soil

Vial: 7  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:31 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y181128M\1128Y012.D Vial: 12  
 Acq On : 28 Nov 18 11:17 Operator: MA  
 Sample : 500ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:25 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 09:56:17 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	830482	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3639618	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	1806558	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3340149	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	2995047	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2844171	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2370937	400.21340	ppb	100

Quantitation Report

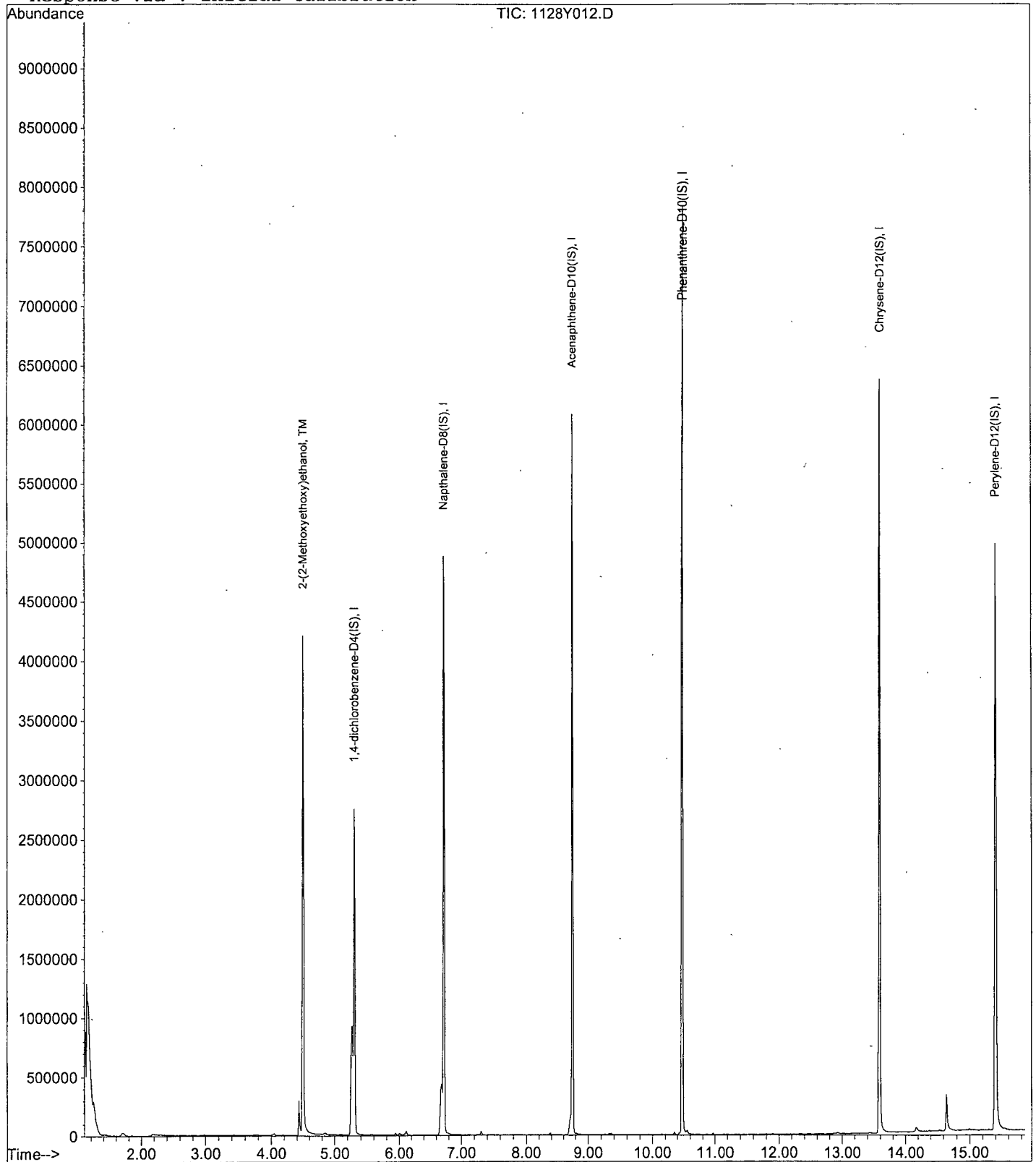
Data File : M:\YODA\DATA\Y181128M\1128Y012.D  
Acq On : 28 Nov 18 11:17  
Sample : 500ug/ml MEE 08/01/18  
Misc : soil

Vial: 12  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:25 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration





Data File : M:\YODA\DATA\Y181128M\1128Y008.D Vial: 8  
 Acq On : 28 Nov 18 9:43 Operator: MA  
 Sample : 600ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.31	152	856651m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.73	136	3531920	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	2073085	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3859845	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3489580	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3140389	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.50	45	3103564	483.70926	ppb	100

Quantitation Report

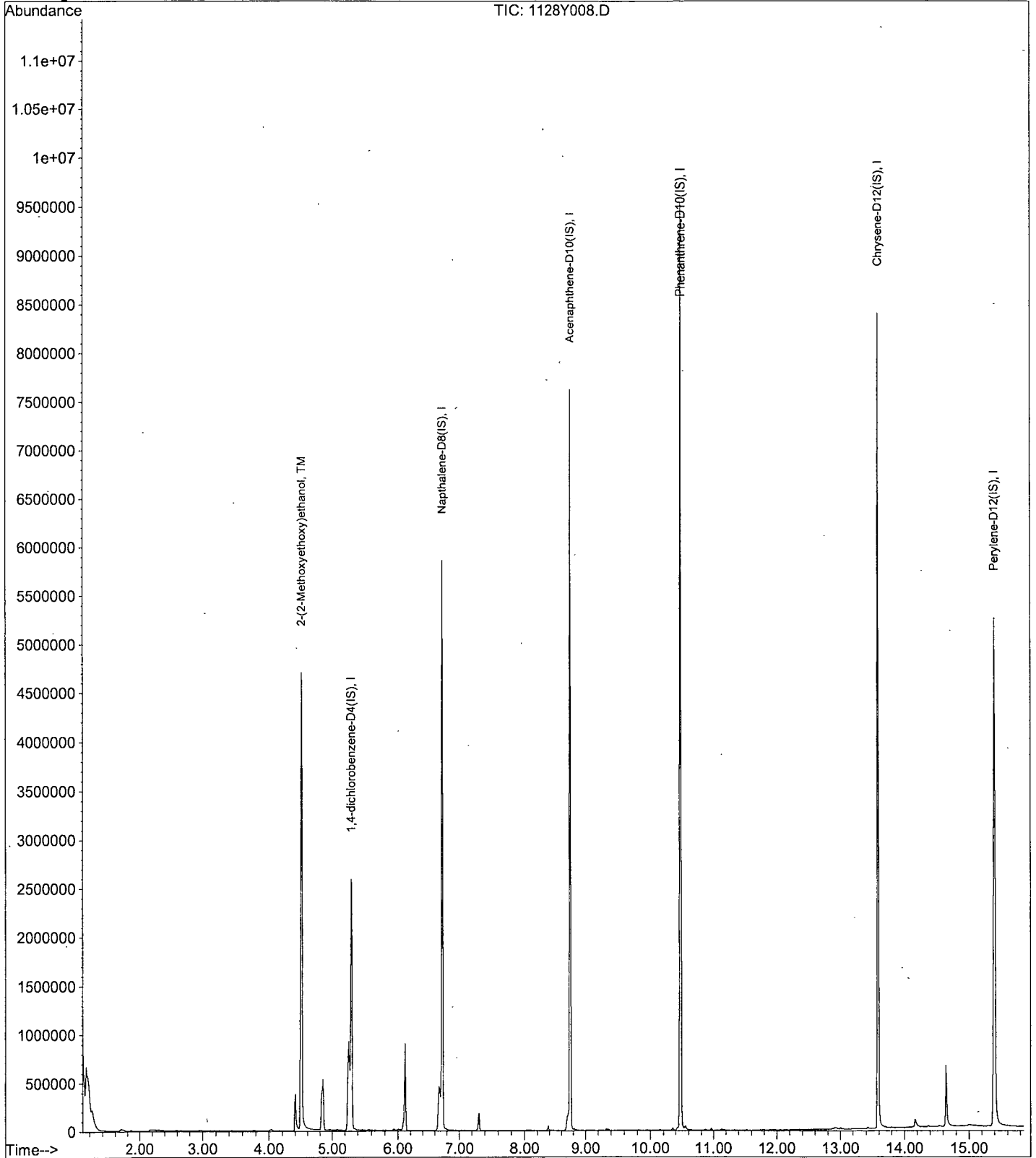
Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
Acq On : 28 Nov 18 9:43  
Sample : 600ug/ml MEE 08/01/18  
Misc : soil

Vial: 8  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

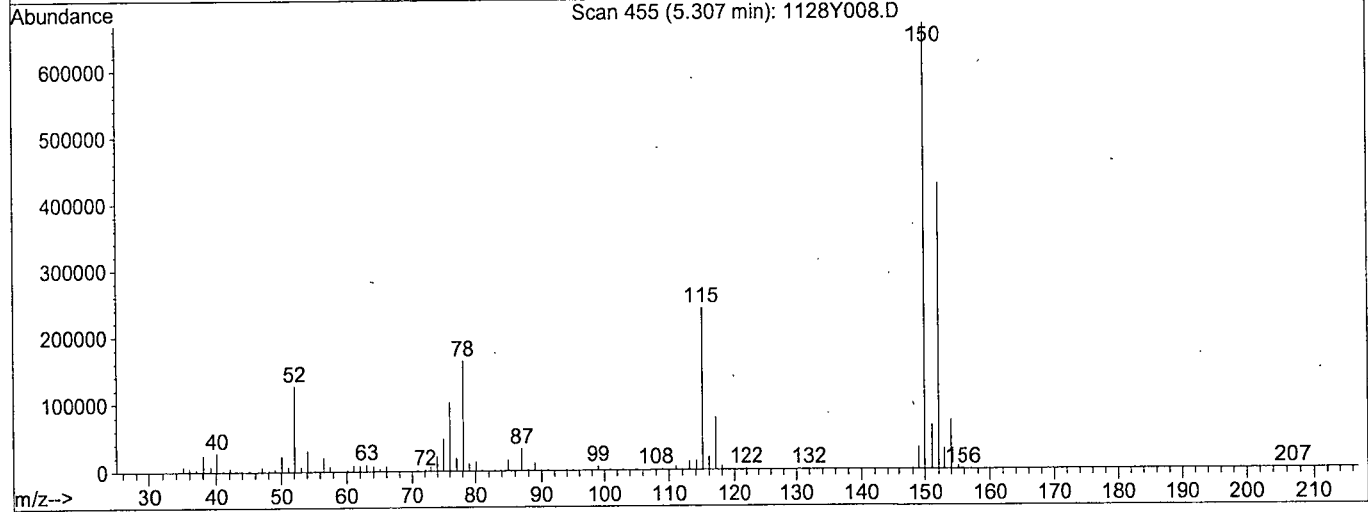
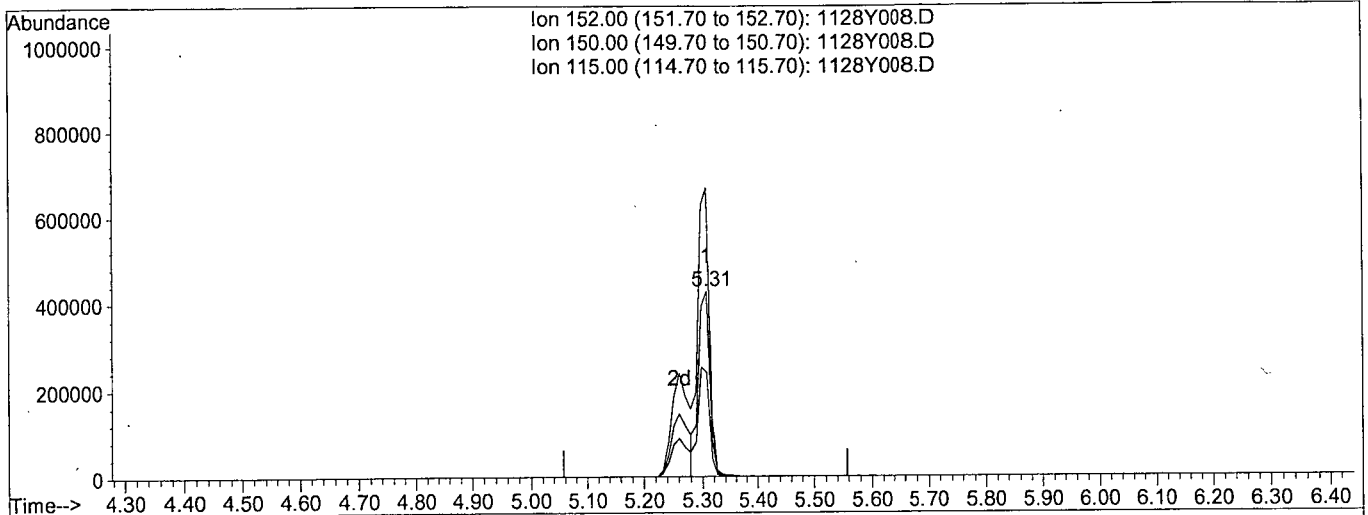


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.31min 40.0000ppb

response 580797

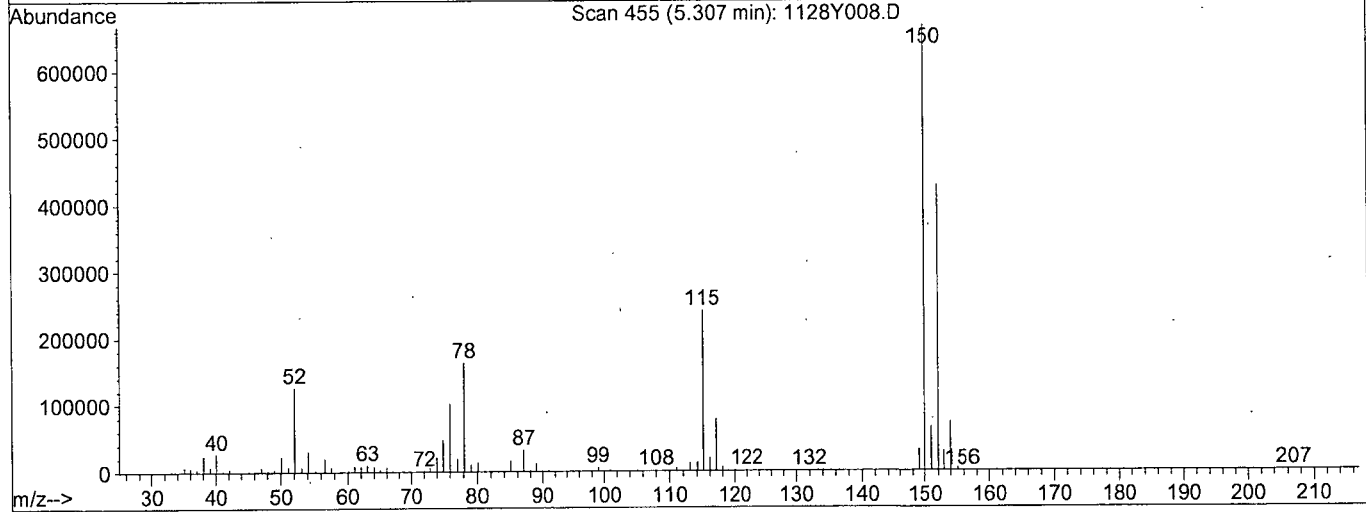
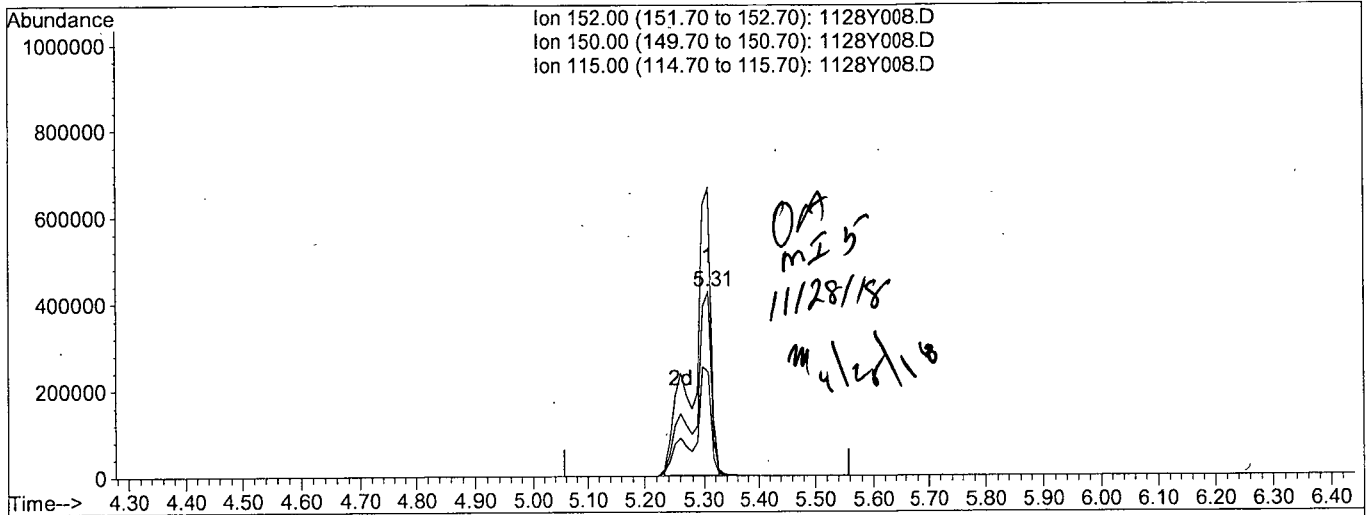
Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.26
115.00	56.30	56.24
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y008.D  
 Acq On : 28 Nov 18 9:43  
 Sample : 600ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 8  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y008.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.31min 40.0000ppb m

response 856651

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	156.25
115.00	56.30	56.26
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y181128M\1128Y009.D Vial: 9  
 Acq On : 28 Nov 18 10:06 Operator: MA  
 Sample : 800ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:40 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	785528m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3646286	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2099263	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3938984	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3411642	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	2743638	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.52	45	4272210	778.75542	ppb	98

Quantitation Report

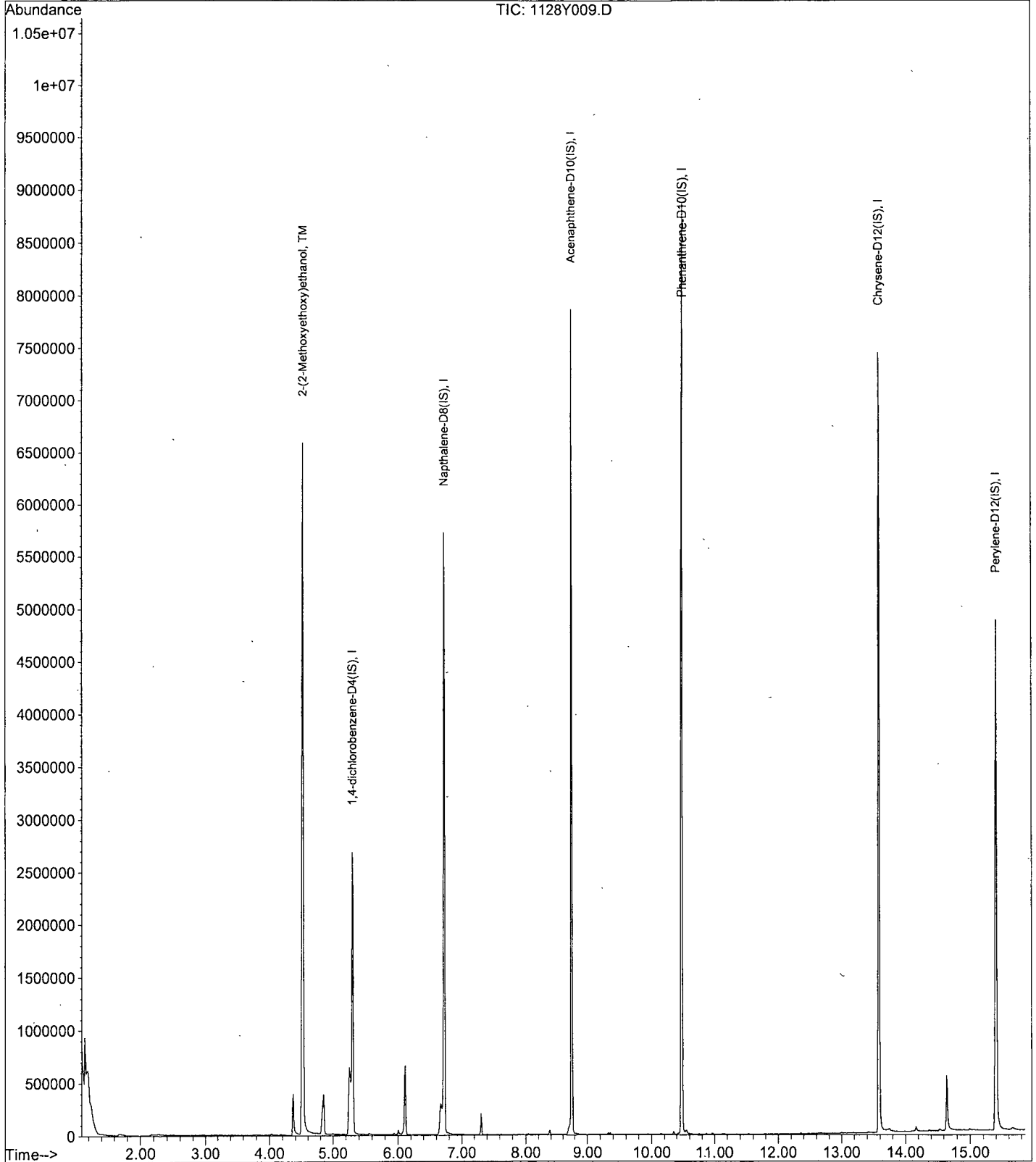
Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
Acq On : 28 Nov 18 10:06  
Sample : 800ug/ml MEE 08/01/18  
Misc : soil

Vial: 9  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:40 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

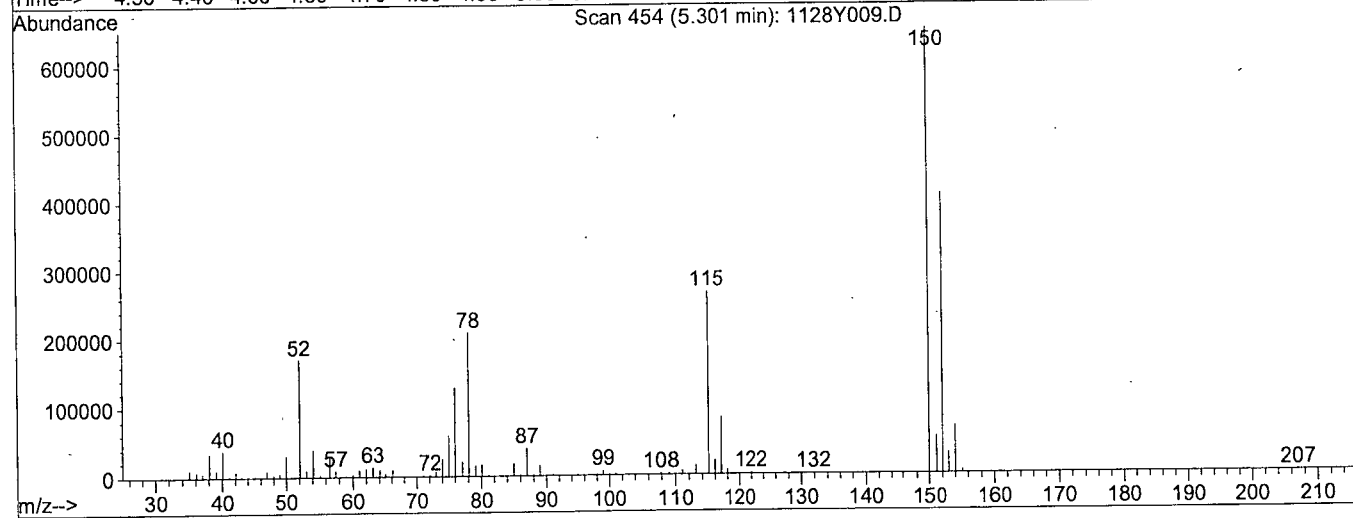
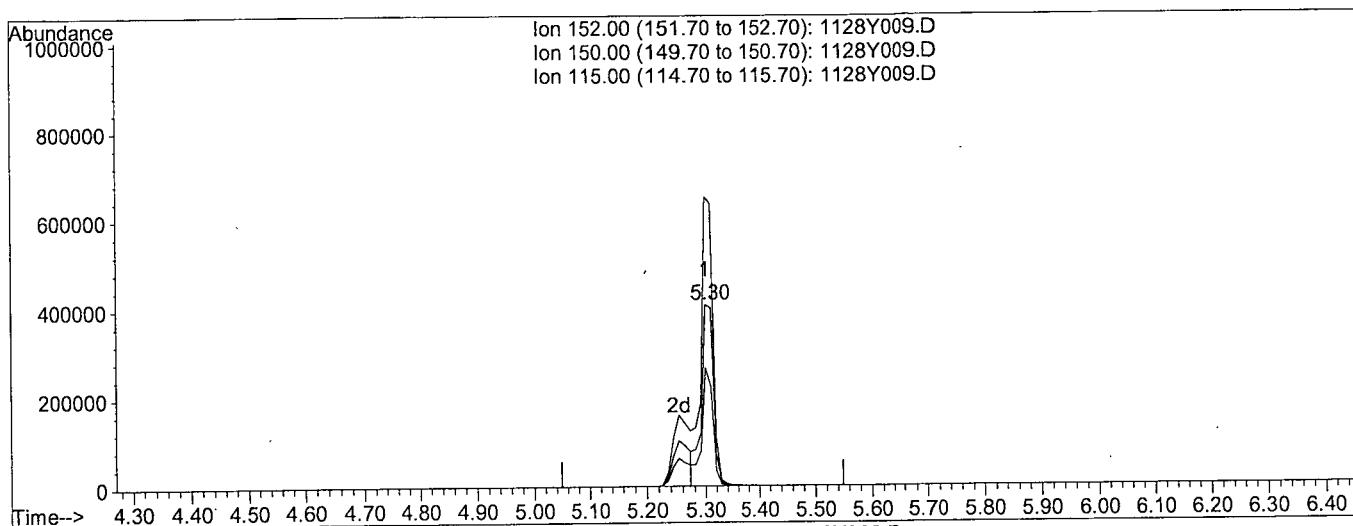


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:31 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 614492

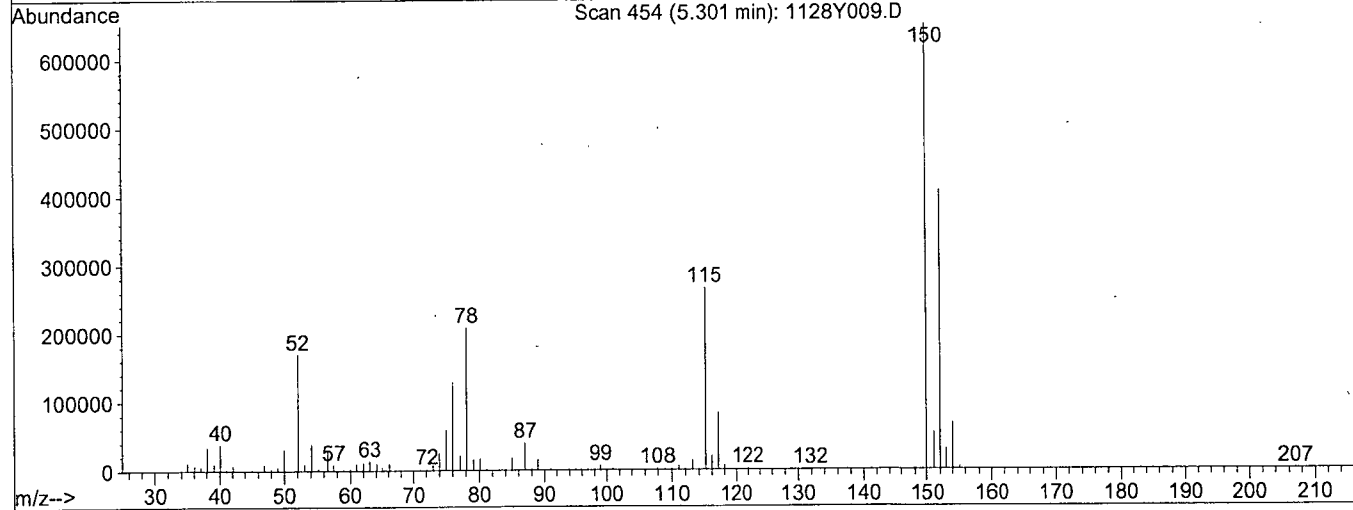
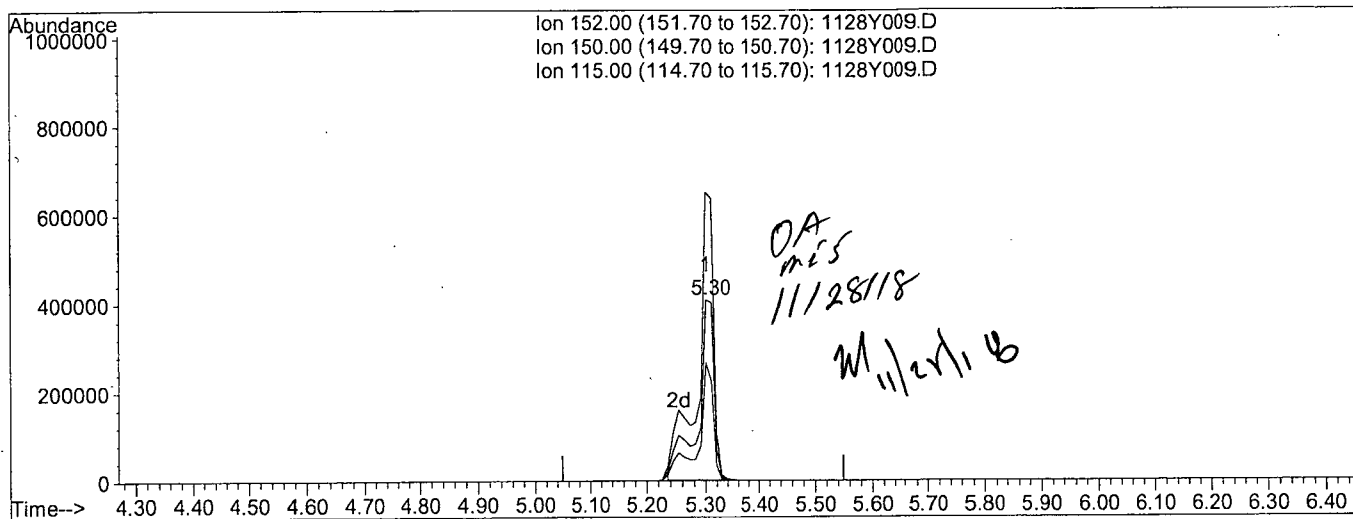
Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.30
115.00	63.20	65.14
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y009.D  
 Acq On : 28 Nov 18 10:06  
 Sample : 800ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:40 2018

Vial: 9  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y009.D

(1) 1,4-dichlorobenzene-D4(1S) (I)

5.30min 40.0000ppb m

response 785528

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	159.35
115.00	63.20	65.18
0.00	0.00	0.00



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y010.D Vial: 10  
 Acq On : 28 Nov 18 10:30 Operator: MA  
 Sample : 1000ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 11:41 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:29:49 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	817975m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3554268	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.74	164	2016499	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3774107	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.59	240	3353765	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3559145	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.53	45	5060771	787.46043	ppb	98

Quantitation Report

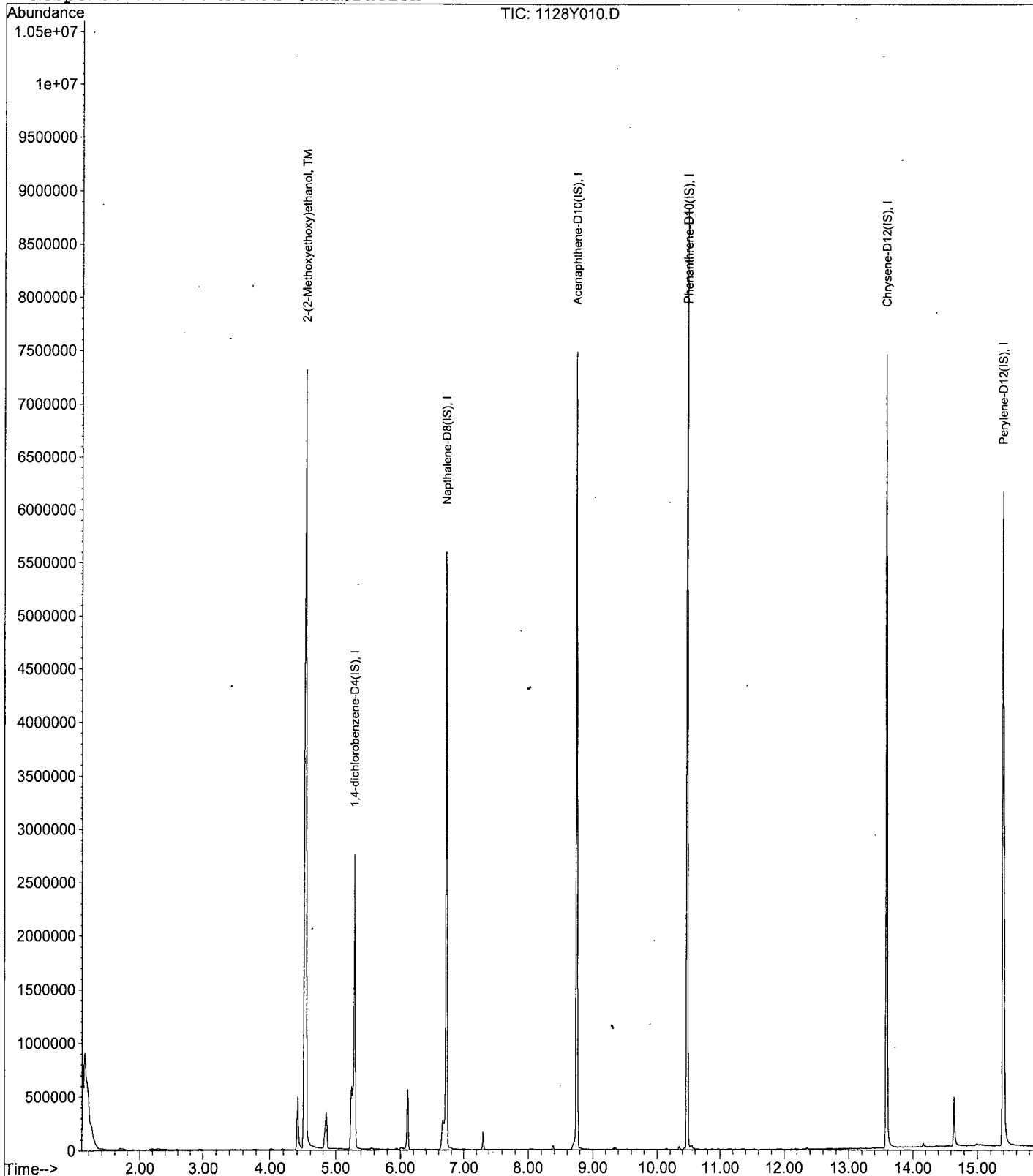
Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
Acq On : 28 Nov 18 10:30  
Sample : 1000ug/ml MEE 08/01/18  
Misc : soil

Vial: 10  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 11:41 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

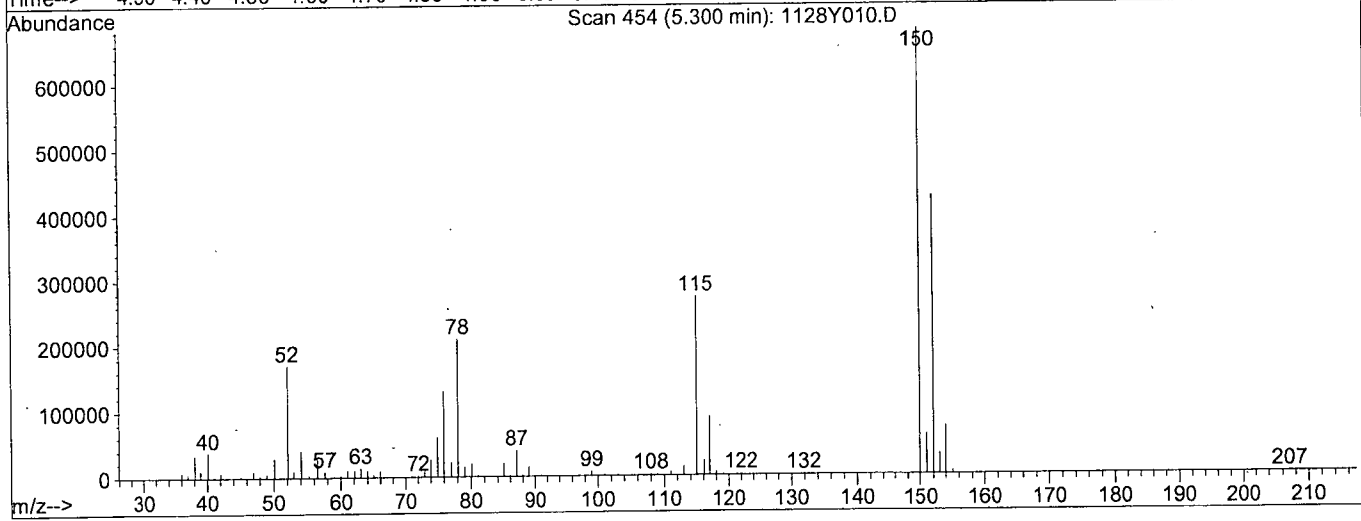
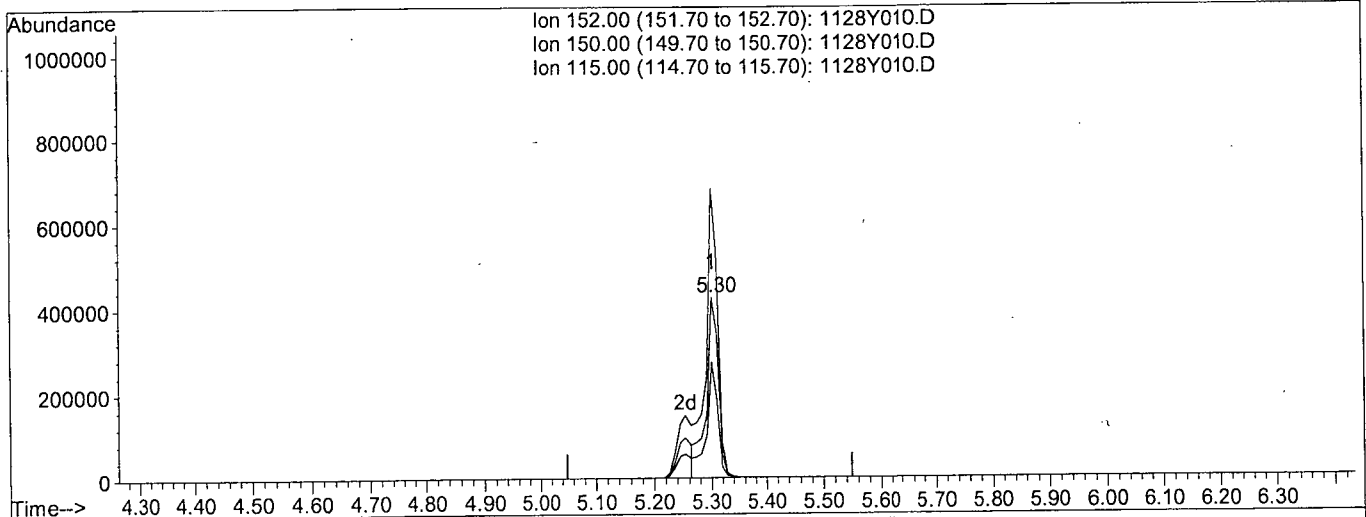


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D  
 Acq On : 28 Nov 18 10:30  
 Sample : 1000ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 11:32 2018

Vial: 10  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

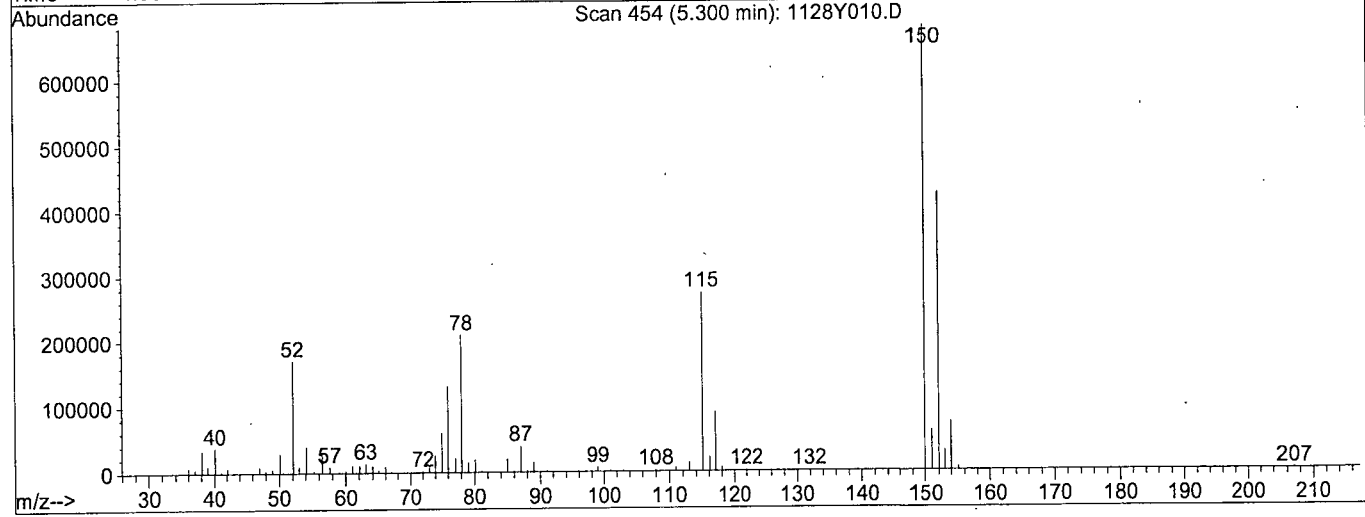
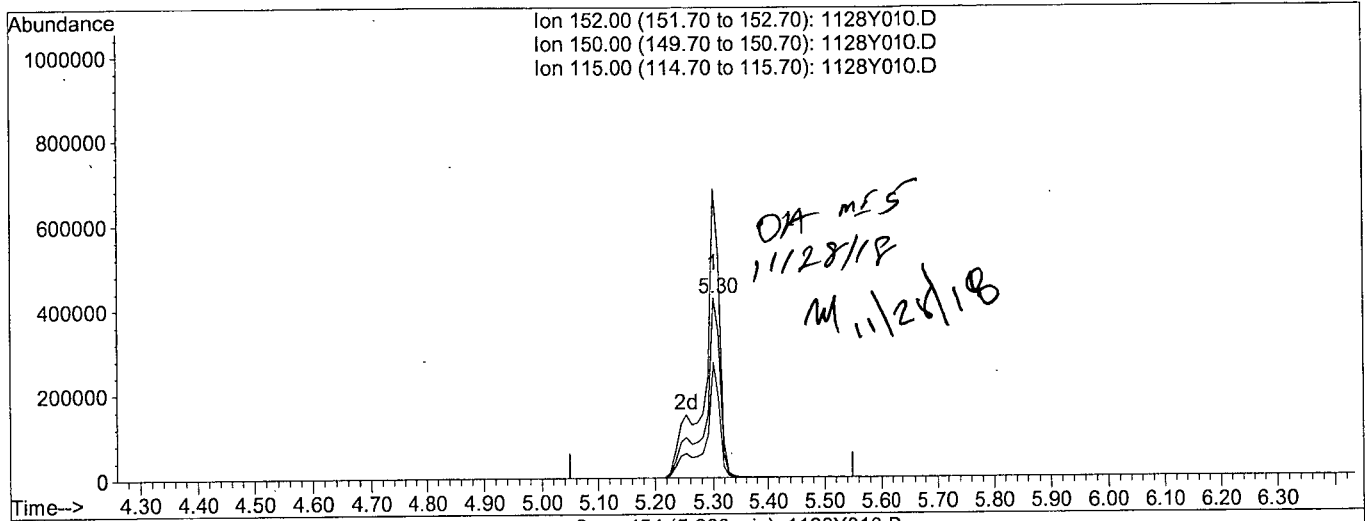
response 652352

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.08
115.00	63.20	64.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y010.D Vial: 10  
 Acq On : 28 Nov 18 10:30 Operator: MA  
 Sample : 1000ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00  
 Quant Time: Nov 28 11:41 2018 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:40:16 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y010.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 817975

Ion	Exp%	Act%
152.00	100	100
150.00	160.10	160.10
115.00	63.20	64.11
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 11/28/18

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y014.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2671	11	TM
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
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17						
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32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

11.0

Data File : M:\YODA\DATA\Y181128M\1128Y014.D Vial: 14  
 Acq On : 28 Nov 18 12:26 Operator: MA  
 Sample : SS ug/ml MEE 08/01/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Nov 28 12:58 2018 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.30	152	835108m	40.00000	ppb	0.00
3) Napthalene-D8 (IS)	6.72	136	3156594	40.00000	ppb	0.00
4) Acenaphthene-D10 (IS)	8.75	164	1957153	40.00000	ppb	0.00
5) Phenanthrene-D10 (IS)	10.49	188	3684850	40.00000	ppb	0.00
6) Chrysene-D12 (IS)	13.58	240	3336185	40.00000	ppb	0.00
7) Perylene-D12 (IS)	15.40	264	3221218	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.49	45	2787828	555.84367	ppb	100

Quantitation Report

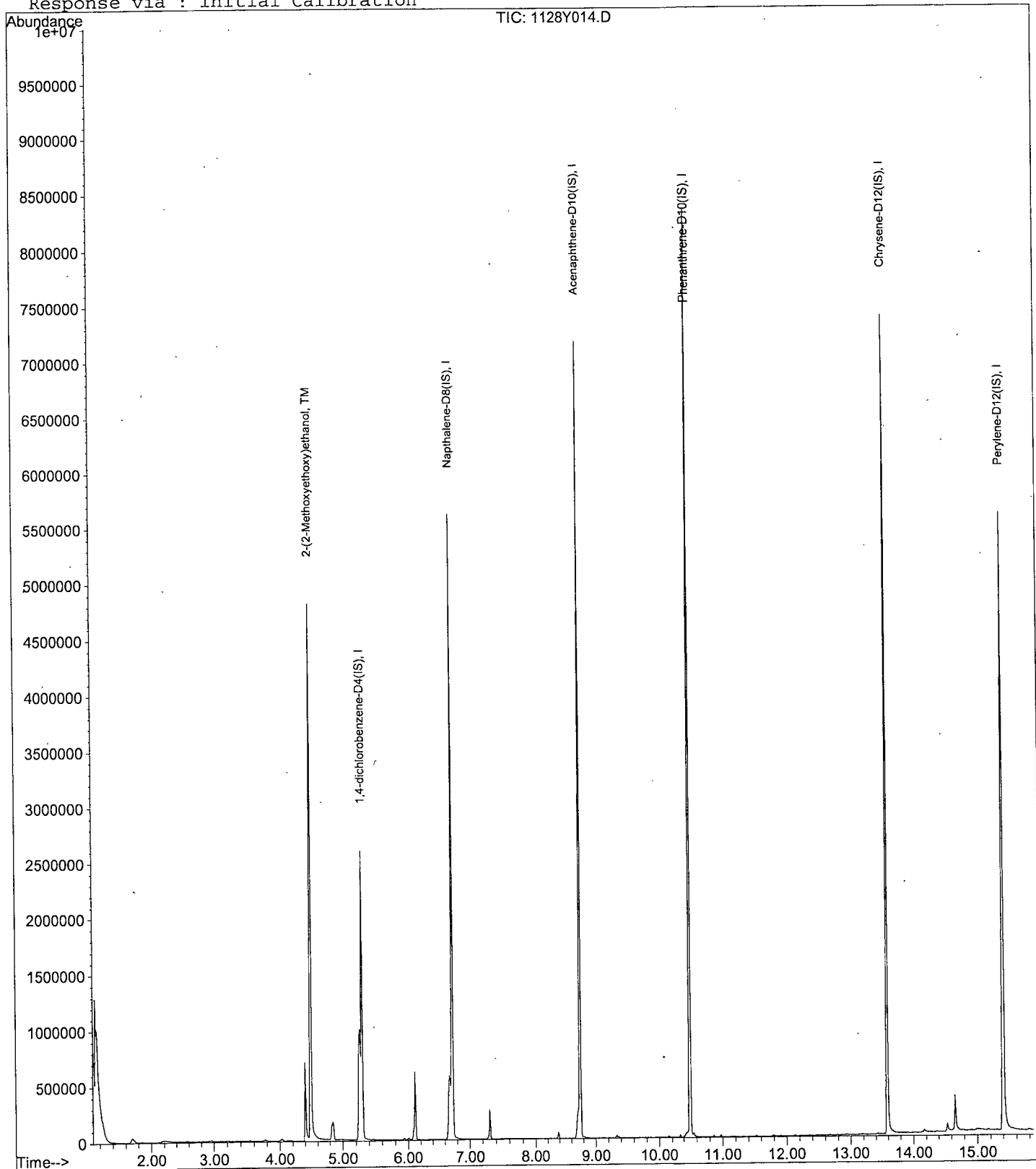
Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
Acq On : 28 Nov 18 12:26  
Sample : SS ug/ml MEE 08/01/18  
Misc : soil

Vial: 14  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Nov 28 12:58 2018

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

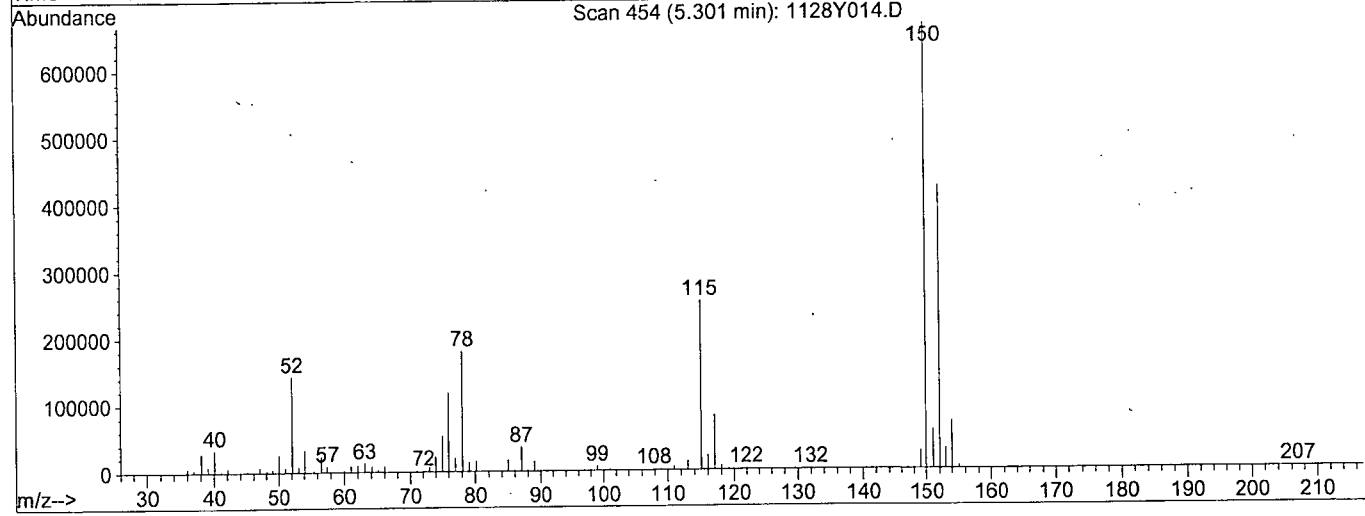
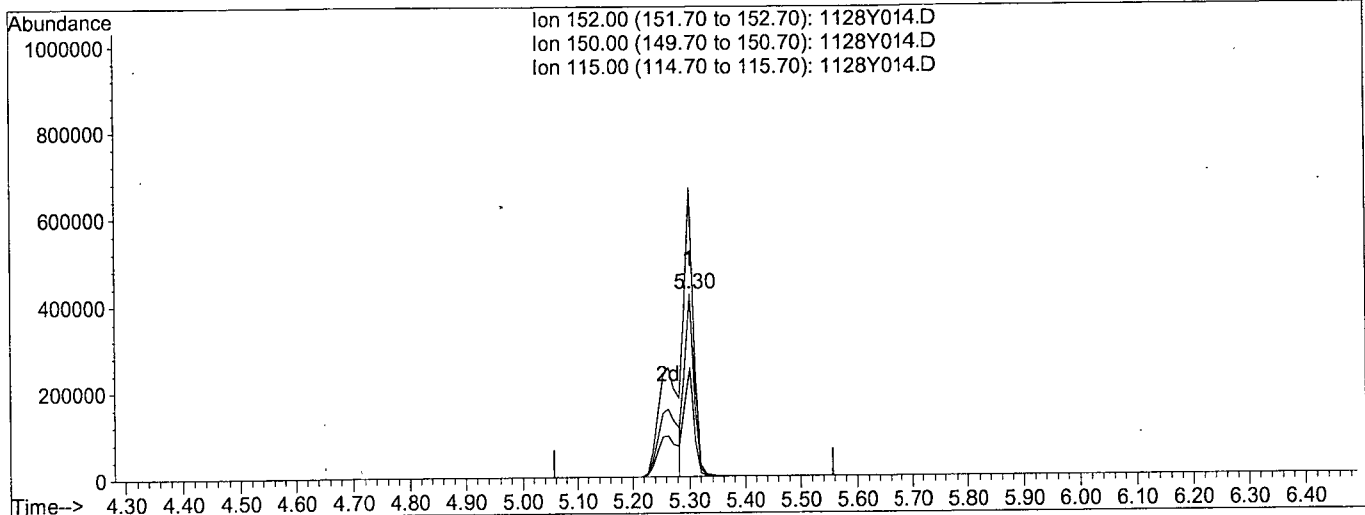


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb

response 473674

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.54
115.00	56.30	59.84
0.00	0.00	0.00

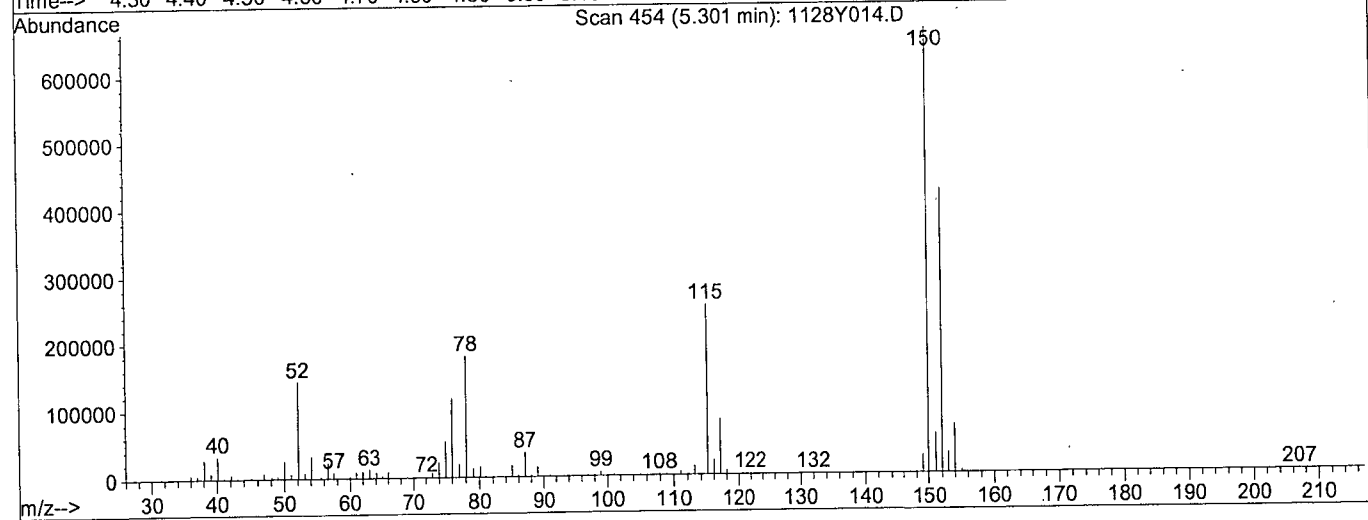
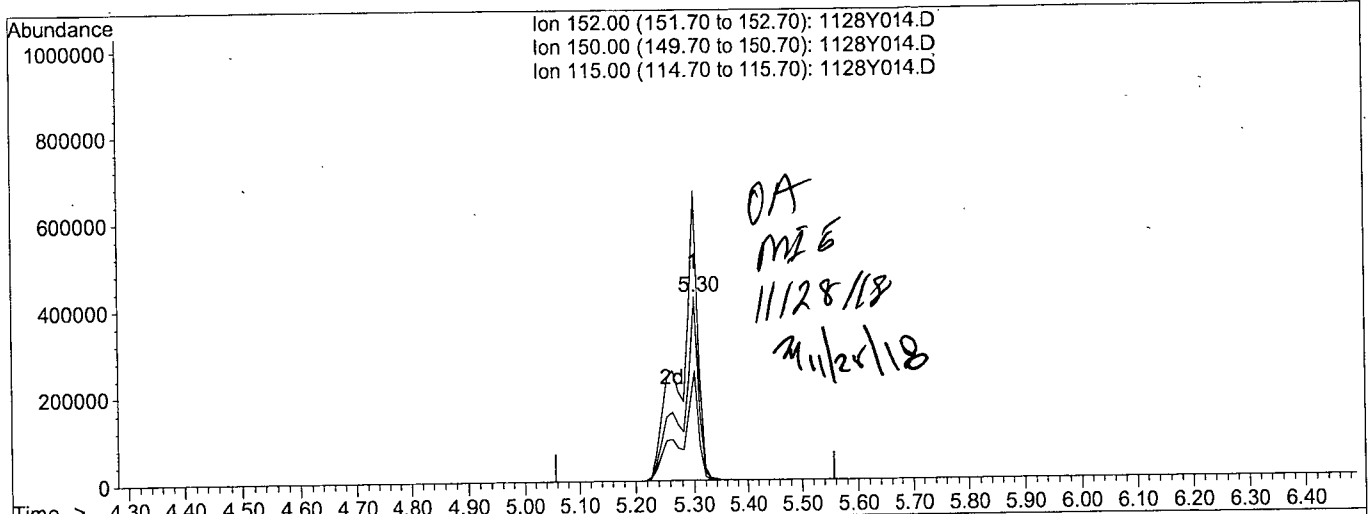


Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y014.D  
 Acq On : 28 Nov 18 12:26  
 Sample : SS ug/ml MEE 08/01/18  
 Misc : soil  
 Quant Time: Nov 28 12:58 2018

Vial: 14  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via.: Multiple Level Calibration



TIC: 1128Y014.D

(1) 1,4-dichlorobenzene-D4(IS) (I)

5.30min 40.0000ppb m

response 835108

Ion	Exp%	Act%
152.00	100	100
150.00	156.20	157.52
115.00	56.30	59.85
0.00	0.00	0.00

2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 01/29/19  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y057.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2337	2.7	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
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29						
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32						
33						
34						
35						
36						
37						
38						
39						
40		Average			2.7	

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y181128M\1128Y057.D Vial: 57  
 Acq On : 29 Jan 19 8:51 Operator: MA  
 Sample : 500ug/mL mee 12/12/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Jan 29 8:56 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.22	152	614573	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.65	136	2630250	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1440513	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2797253	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2568643	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2576041	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.41	45	1795438	486.43662	ppb	96

Quantitation Report

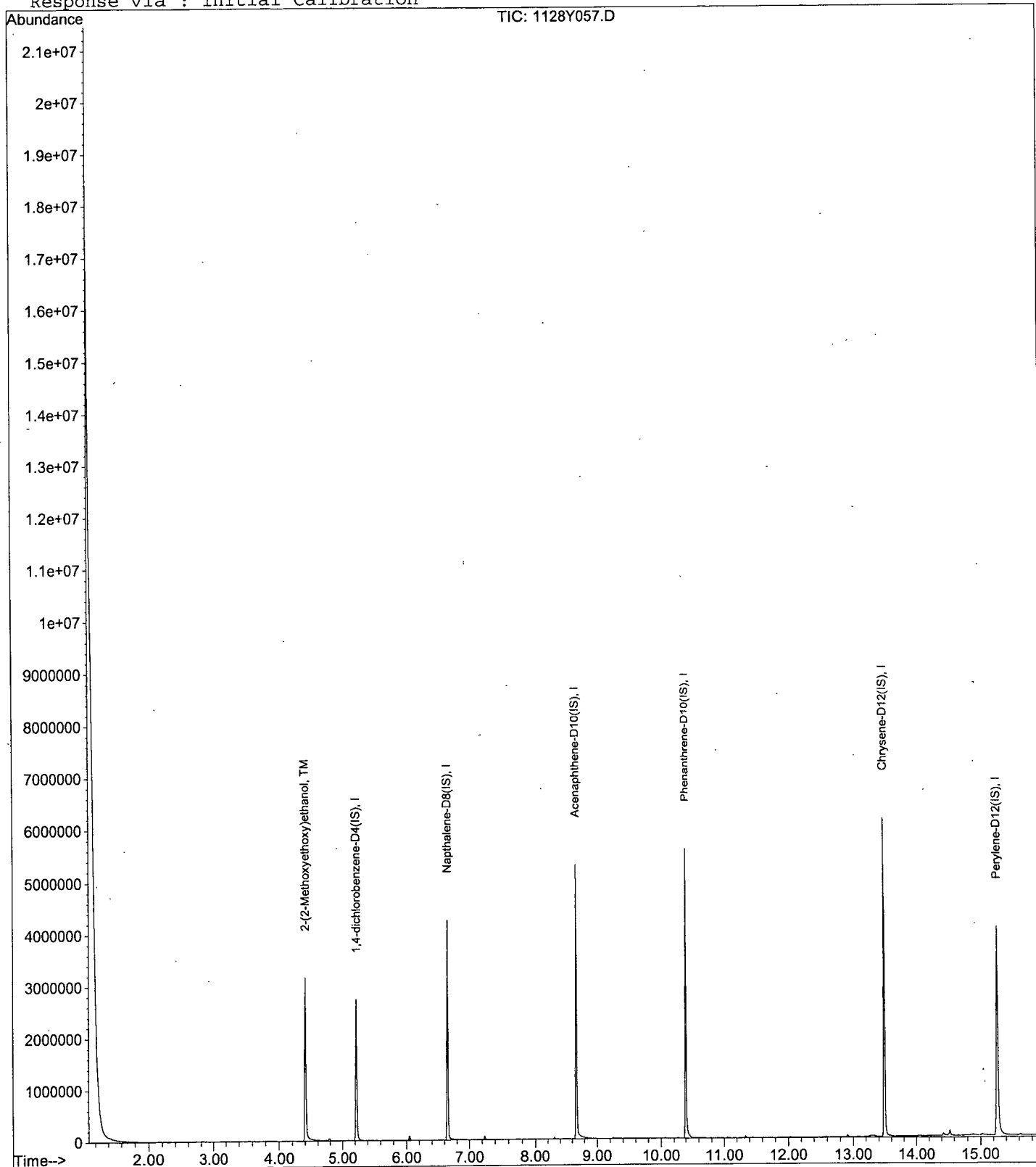
Data File : M:\YODA\DATA\Y181128M\1128Y057.D  
Acq On : 29 Jan 19 8:51  
Sample : 500ug/mL mee 12/12/18  
Misc : soil

Vial: 57  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 29 8:56 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 01/29/19

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y088.D

	Compound	MEAN	CCRF	%D	%Drift
1	I 1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2205	8.2	TM
3	I Napthalene-D8(IS)	ISTD			I
4	I Acenaphthene-D10(IS)	ISTD			I
5	I Phenanthrene-D10(IS)	ISTD			I
6	I Chrysene-D12(IS)	ISTD			I
7	I Perylene-D12(IS)	ISTD			I
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40					

Average

8.2

Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
 Acq On : 29 Jan 19 21:24  
 Sample : 500ug/ml MEE 12/19/18  
 Misc : soil

Vial: 88  
 Operator: MA  
 Inst : Yoda  
 Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.23	152	611145	40.00000	ppb	-0.08
3) Napthalene-D8 (IS)	6.66	136	2644721	40.00000	ppb	-0.06
4) Acenaphthene-D10 (IS)	8.67	164	1462932	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.41	188	2896073	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	2668383	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	2642413	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.41	45	1684434	458.92220	ppb	96

Quantitation Report

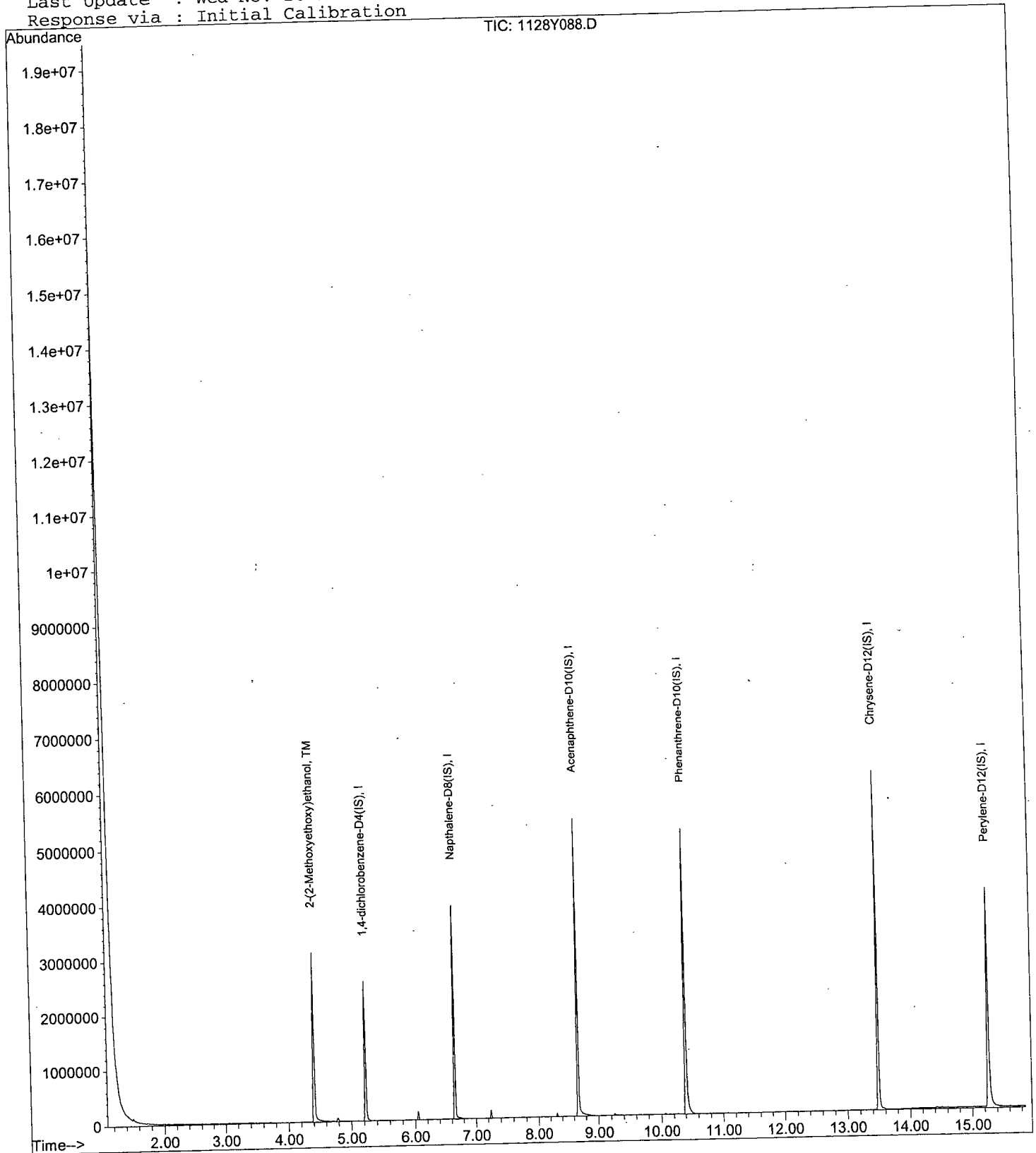
Data File : M:\YODA\DATA\Y181128M\1128Y088.D  
Acq On : 29 Jan 19 21:24  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 88  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Jan 30 5:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 1 Feb 19 9:32

Matrix: \_\_\_\_\_

Instrument: Yoda

Initial Cal. Date: 11/28/18

Data File: 1128Y101.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.2402	0.2443	1.7	TM
3	I	Napthalene-D8(IS)	ISTD			I
4	I	Acenaphthene-D10(IS)	ISTD			I
5	I	Phenanthrene-D10(IS)	ISTD			I
6	I	Chrysene-D12(IS)	ISTD			I
7	I	Perylene-D12(IS)	ISTD			I
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Average

1.7



Data File : M:\YODA\DATA\Y181128M\1128Y101.D Vial: 1  
 Acq On : 1 Feb 19 9:32 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 9:55 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.24	152	468889	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1873588	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	981470	40.00000	ppb	-0.07
5) Phenanthrene-D10 (IS)	10.40	188	1867635	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1576721	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1451631	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.46	45	1431881	508.47103	ppb	95

Quantitation Report

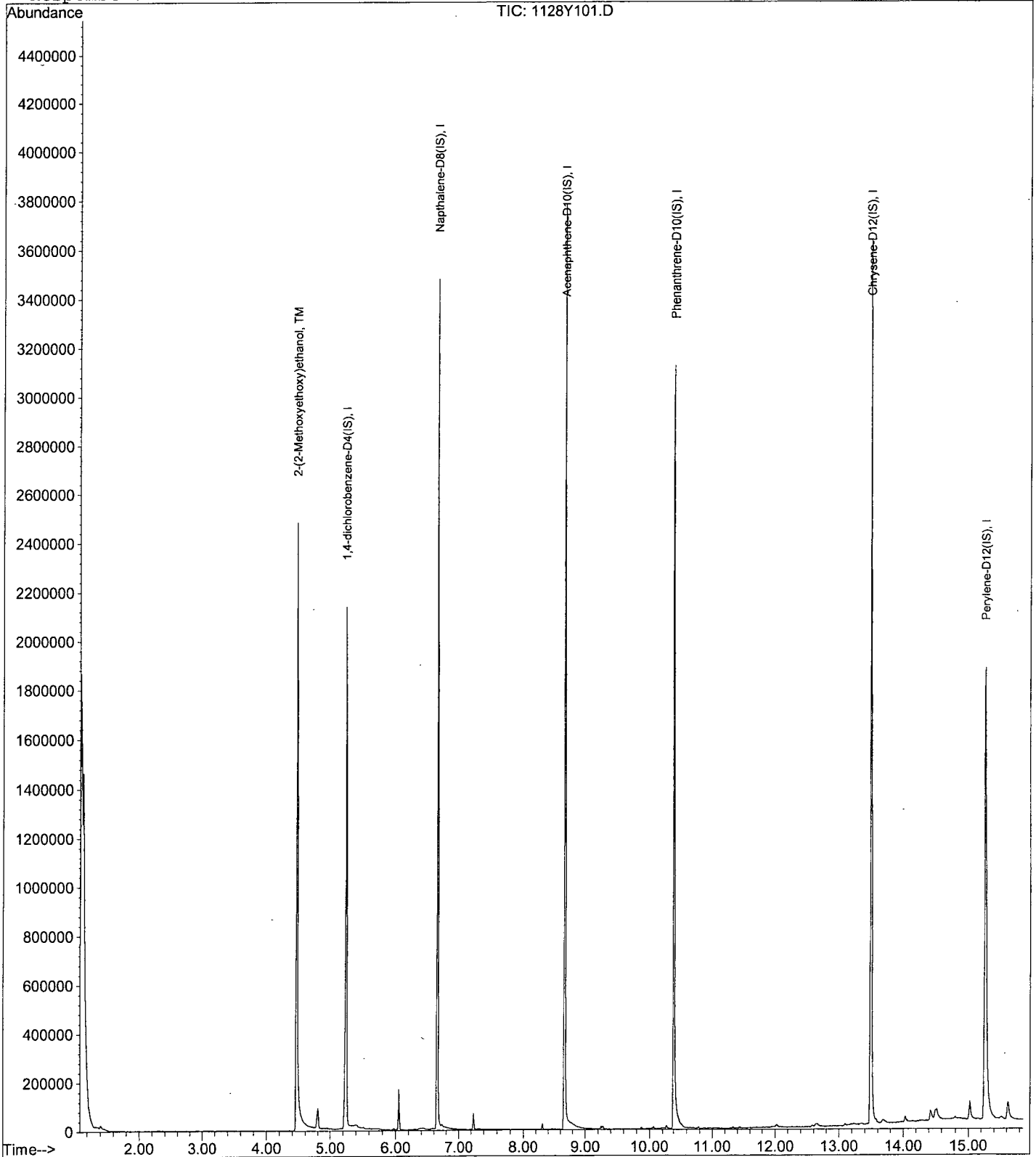
Data File : M:\YODA\DATA\Y181128M\1128Y101.D  
Acq On : 1 Feb 19 9:32  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 1  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 9:55 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration



2MEE  
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: \_\_\_\_\_

SDG No: \_\_\_\_\_  
Date Analyzed: 1 Feb 19 10:44  
Instrument: Yoda  
Initial Cal. Date: 11/28/18  
Data File: 1128Y104.D

	Compound	MEAN	CCRF	%D	%Drift
1	1,4-dichlorobenzene-D4(IS)	ISTD			
2	TM 2-(2-Methoxyethoxy)ethanol	0.2402	0.2321	3.4	TM
3	Napthalene-D8(IS)	ISTD			
4	Acenaphthene-D10(IS)	ISTD			
5	Phenanthrene-D10(IS)	ISTD			
6	Chrysene-D12(IS)	ISTD			
7	Perylene-D12(IS)	ISTD			
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40	Average			3.4	

Data File : M:\YODA\DATA\Y181128M\1128Y104.D Vial: 4  
 Acq On : 1 Feb 19 10:44 Operator: MA  
 Sample : 500ug/ml MEE 12/19/18 Inst : Yoda  
 Misc : soil Multiplr: 1.00

Quant Time: Feb 1 11:08 2019 Quant Results File: YMEE1128.RES

Quant Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 28 11:42:34 2018  
 Response via : Initial Calibration  
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.25	152	464116	40.00000	ppb	-0.06
3) Napthalene-D8 (IS)	6.65	136	1879796	40.00000	ppb	-0.07
4) Acenaphthene-D10 (IS)	8.67	164	985125	40.00000	ppb	-0.08
5) Phenanthrene-D10 (IS)	10.40	188	1843557	40.00000	ppb	-0.08
6) Chrysene-D12 (IS)	13.49	240	1605500	40.00000	ppb	-0.10
7) Perylene-D12 (IS)	15.26	264	1444131	40.00000	ppb	-0.14

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.47	45	1346483	483.06288	ppb	92

Quantitation Report

Data File : M:\YODA\DATA\Y181128M\1128Y104.D  
Acq On : 1 Feb 19 10:44  
Sample : 500ug/ml MEE 12/19/18  
Misc : soil

Vial: 4  
Operator: MA  
Inst : Yoda  
Multiplr: 1.00

Quant Time: Feb 1 11:08 2019

Quant Results File: YMEE1128.RES

Method : M:\YODA\DATA\Y181128M\YMEE1128.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Wed Nov 28 11:42:34 2018  
Response via : Initial Calibration

