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

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

Data Validatable Report

January 17, 2022

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: Alethea Ramos

Title: Report of Data: Case 97466 Addendum 1

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

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

Dear Ms. Ramos:

Nine water samples were received September 10, 2021 and August 9, 2021. Written results for the requested analyses are being provided on this January 17, 2022**.**

Addendum 1: Client requested two extracts be analyzed by GCMS. Results are in this addendum.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

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

Loren Portwood, Laboratory Director
APPL, Inc.

LP/lac
Enclosure
cc: File

Data Validation Package
for
60571032 CV18F0126 Red Hill Fuel Storage
APPL SDG 97466 Addendum 1
TABLE OF CONTENTS

LABORATORY NAME: *APPL, Inc.*

CASE NARRATIVE

Case Narrative

ARF: 97466

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Sample Receipt Information:

Nine water samples were received September 10, 2021 at 1.1°C, 1.1°C, and 2.1°C. The sample group was assigned Analytical Request Form (ARF) number 97466.

Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C.

EPA 8015B: The client requested the extracts for samples ERH 1657 and ERH 1659 be injected on a GCMS equipped with an DB-5 column. This column is very similar to the DB-1 used in the GC/FID. The run time for the second injection was extended to 45 minutes.

The extracts were spiked with the internal standard and surrogate mixture and injected used in the EPA 8270 method. The chromatograms were examined for tentatively identified compounds. The surrogates from the TPH extraction, the GC/MS IS and surrogates compounds, toluene used in the extraction process and column bleed were the only identified peaks.

Analytical Exceptions, Deviations and Abnormalities.

EPA 8015B: None

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
97466	9/10/2021	ERH1652	BA40208	9/8/2021 10:00:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1652	BA40208	9/8/2021 10:00:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1653	BA40209	9/8/2021 10:05:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1653	BA40209	9/8/2021 10:05:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
97466	9/10/2021	ERH1653	BA40209	9/8/2021 10:05:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1653	BA40209	9/8/2021 10:05:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1653	BA40209	9/8/2021 10:05:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
97466	9/10/2021	ERH1654	BA40210	9/8/2021 11:30:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1654	BA40210	9/8/2021 11:30:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1655	BA40211	9/8/2021 11:35:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1655	BA40211	9/8/2021 11:35:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
97466	9/10/2021	ERH1655	BA40211	9/8/2021 11:35:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1655	BA40211	9/8/2021 11:35:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1655	BA40211	9/8/2021 11:35:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
97466	9/10/2021	ERH1656	BA40212	9/8/2021 1:15:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1656	BA40212	9/8/2021 1:15:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1657	BA40213	9/8/2021 1:20:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1657	BA40213	9/8/2021 1:20:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
97466	9/10/2021	ERH1657	BA40213	9/8/2021 1:20:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1657	BA40213	9/8/2021 1:20:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1657	BA40213	9/8/2021 1:20:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
97466	9/10/2021	ERH1658	BA40214	9/8/2021 8:26:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1658	BA40214	9/8/2021 8:26:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1659	BA40215	9/8/2021 8:30:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1659	BA40215	9/8/2021 8:30:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
97466	9/10/2021	ERH1659	BA40215	9/8/2021 8:30:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1659	BA40215	9/8/2021 8:30:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1659	BA40215	9/8/2021 8:30:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
97466	9/10/2021	ERH1660	BA40216	9/8/2021 10:05:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
97466	9/10/2021	ERH1660	BA40216	9/8/2021 10:05:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
97466	9/10/2021	ERH1660	BA40216	9/8/2021 10:05:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1660	BA40216	9/8/2021 10:05:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
97466	9/10/2021	ERH1660	BA40216	9/8/2021 10:05:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
97466	9/10/2021	ERH1653 BLANK	BA40217	9/8/2021 10:05:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1655 BLANK	BA40218	9/8/2021 11:35:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ

97466	9/10/2021	ERH1657 BLANK	BA40219	9/8/2021 1:20:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1659 BLANK	BA40220	9/8/2021 8:30:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
97466	9/10/2021	ERH1660 BLANK	BA40221	9/8/2021 10:05:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ

Abbreviations and Flags

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

SAMPLE RECORDS MANAGEMENT

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form 97466

Client: **AECOM**
Address: **1001 Bishop Street, Suite 1600**
Honolulu, HI 96813
Attn: **Alethea Ramos**
Phone: **808-954-4536** Fax: **808-523-8950**
Job: **60571032 CV18F0126 Red Hill Fuel Storage**
PO #: **18S-22209-HI27 PO# 102604**
Chain of Custody (Y/N): **Y** # **53004**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **ONE WEEK**

Received by: **MSA**
Date Received: **09/10/21** Time: **10:40**
Delivered by: **FEDEX**
Shuttle Custody Seals (Y/N): **Y** Time Zone: **-10**
Chest Temp(s): **1.1,1.1,2.1°C**
Color: **VFRG/Receiving**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Libby Cheesebor**
QC Report Type: **DVP4DOD/EQUIS/HI**
Due Date: **09/17/21**

Comments:
PM: login and F1s to Margie.Pascua@aecom.com & alethea.ramos@aecom.com
AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms: LOD database
Report MS/MSD/DUPs when AECOM sample used
8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.
TPH-D/O both with and w/o SGC, reverse surrog for SGC; DO NOT Q-DELETE.
FR: email ftp info to Margie, alethea.ramos@aecom.com, Stella, trommelfanger@lab-data.com & jcanlas@la
EDD: AECOM EQuIS EDD 2.5.3 to alethea.ramos@, Margie.Pascua@aecom.com, jecklund@lab-data.com

Sample Distribution:
GC: 5-$DOC53SGCW5LIQ, 5-$DOC53W5LIQ, 5-$SIM53LIQ51, 5-$RHBLKETBLK
Extractions: 5-_LIQ003, 10-_LIQ005, 5-_LIQ005SGC
VOA: 9-$86BTOTXDOD5W, 9-$GASBL, 9-$GRO86BW

Charges:

Invoice To:
ACCOUNTS PAYABLE
1001 Bishop Street, Ste 1600
USAPImaging@aecom.com
mary.basano@aecom.com

	Client ID	APPL ID	Sampled	Analyses Requested
1.	ERH1652	LCSD BA40208W	09/08/21 10:00	$86BTOTXDOD5W, $GASBL, $GRO86BW -- See Comments
2.	ERH1653	LCSD BA40209W	09/08/21 10:05	$86BTOTXDOD5W, $DOC53SGCW5LIQ, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments
3.	ERH1654	LCSD BA40210W	09/08/21 11:30	$86BTOTXDOD5W, $GASBL, $GRO86BW -- See Comments
4.	ERH1655	LCSD BA40211W	09/08/21 11:35	$86BTOTXDOD5W, $DOC53SGCW5LIQ, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments

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

5.	ERH1656	LCSD	BA40212W	09/08/21 13:15	$86BTOTXDOD5W, $GASBL, $GRO86BW -- See Comments
6.	ERH1657	LCSD	BA40213W	09/08/21 13:20	$86BTOTXDOD5W, $DOC53SGCW5LIQ, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments
7.	ERH1658	LCSD	BA40214W	09/08/21 08:26	$86BTOTXDOD5W, $GASBL, $GRO86BW -- See Comments
8.	ERH1659	LCSD	BA40215W	09/08/21 08:30	$86BTOTXDOD5W, $DOC53SGCW5LIQ, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments
9.	ERH1660	LCSD	BA40216W	09/08/21 10:05	$86BTOTXDOD5W, $DOC53SGCW5LIQ, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments
10.	ERH1653 BLANK	LCSD	BA40217W	09/08/21 10:05	$RHBLKETBLK -- See Comments
11.	ERH1655 BLANK	LCSD	BA40218W	09/08/21 11:35	$RHBLKETBLK -- See Comments
12.	ERH1657 BLANK	LCSD	BA40219W	09/08/21 13:20	$RHBLKETBLK -- See Comments
13.	ERH1659 BLANK	LCSD	BA40220W	09/08/21 08:30	$RHBLKETBLK -- See Comments
14.	ERH1660 BLANK	LCSD	BA40221W	09/08/21 10:05	$RHBLKETBLK -- See Comments

APPL Sample Receipt Form

ARF# **97466**

Sample	Container Type	Count	p
BA40208	[13] VOAs - HCL	4	NA
BA40209	[13] VOAs - HCL	4	NA
	[17] Amber Liter	2	NA
	[39] Amber Liter, HCL prsvd	2	1.3
BA40210	[13] VOAs - HCL	4	NA
BA40211	[13] VOAs - HCL	4	NA
	[17] Amber Liter	2	NA
	[39] Amber Liter, HCL prsvd	2	1.3
BA40212	[13] VOAs - HCL	4	NA
BA40213	[13] VOAs - HCL	4	NA
	[17] Amber Liter	2	NA
	[39] Amber Liter, HCL prsvd	2	1.3
BA40214	[13] VOAs - HCL	4	NA
BA40215	[13] VOAs - HCL	4	NA
	[17] Amber Liter	2	NA
	[39] Amber Liter, HCL prsvd	2	1.3
BA40216	[13] VOAs - HCL	4	NA
	[17] Amber Liter	2	NA
	[39] Amber Liter, HCL prsvd	2	1.3
BA40217	[39] Amber Liter, HCL prsvd	1	NA
BA40218	[39] Amber Liter, HCL prsvd	1	NA
BA40219	[39] Amber Liter, HCL prsvd	1	NA
BA40220	[39] Amber Liter, HCL prsvd	1	NA
BA40221	[39] Amber Liter, HCL prsvd	1	NA

Sample	Container Type	Count	p

Summary

974060

APPL LABS

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 53004

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM 1001 Bishop St., Suite 1600 Honolulu, HI 96813 Attn: Alethea Ramos (808)521-3051 Alethea.Ramos@aecom.com CV_18F0126 / 60571032	Company Name: Address: **Accounts Payable** Email: *USAPImaging@aecom.com*
Attn:	Attn:
Email:	Email:

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
60571032.02.20.01	GM, MM, AR	102604	Weifeng for GM, MM, AR

Date Shipped: 9/9/2021
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	BTEX 8260	TPH-G 8260	TPH-D/O 8015	TPH-D/O SGC 8015	PAHs Short list 8270D SIM	
ERH1652	Trip Blank	9/8/21	10:00	HST	4	X			X	X				
ERH1653	RHMW-01R		10:05		8	X			X	X	X	X	X*	
ERH1654	Trip Blank		11:30		4	X			X	X				
ERH1655	RHMW-02		11:35		8	X			X	X	X	X	X*	
ERH1656	Trip Blank		13:15		4	X			X	X				
ERH1657	RHMW-03		13:20		8	X			X	X	X	X	X*	
ERH1658	Trip Blank		08:26		4	X			X	X				
ERH1659	RHSF		08:30		8	X			X	X	X	X	X*	
ERH1660	RHMW-01R		10:05		8	X			X	X	X	X	X*	

WZ 9/9/21

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TPH-D/O and PAHs need liquid-liquid extraction;
* Naphthalene
~~1-methylnaphthalene~~
2-methylnaphthalene

Shuttle Temperature: 4.0/2°C R3C 3.0/1.1, 3.0/1.1

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by: WEIFENG ZHENG	Date 9/9/21	Time 15:00	Received by:	Relinquished by:	Date 9/10/21	Time 1040	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy See reverse side for Container Preservative and Sampling Information

APPL LABS

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

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

CHAIN OF CUSTODY RECORD

C.O.C. 53005 1/3

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM	Company Name:
Address: 1001 Bishop St., Suite 1600, Honolulu, HI 96813	Address: **Accounts Payable** Email: *USAPImaging@aecom.com*
Attn: Alethea Ramos (808)521-3051, Alethea.Ramos@aecom.com, CV_18F0126 / 60571032	Attn:
Email:	Email:

Project Name/Number	Sampler (Print)	Date Shipped: 9/9/2021
60571032.02.20.01	GM, MM, AR	Carrier: FedEx
Purchase Order Number	Sampler (Signature)	Waybill No.:
102604	Weifeng for GM, MM, AR	Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	BTEX 8260	TPH-G 8260	TPH-D/O 8015	TPH-D/O SGC 8015	PAHs Short list 8270 MS									
ERH1652	Trip Blank	9/8/21	10:00	HST	4	X			X	X												
ERH1653	RHMW-01R		10:05		8	X			X	X	X	X	X*									
ERH1654	Trip Blank		11:30		0	X			X	X												
ERH1655	RHMW-02		11:35		0	X			X	X	X	X	X*									
ERH1656	Trip Blank		13:15		0	X			X	X												
ERH1657	RHMW-03		13:20		0	X			X	X	X	X	X*									
ERH1658	Trip Blank		08:26		0	X			X	X												
ERH1659	RHSF		08:30		0	X			X	X	X	X	X*									
ERH1660	RHMW-01R		10:05		8	X			X	X	X	X	X*									

WZ 9/9/21

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TPH-D/O and PAHs need liquid-liquid extraction;
* Naphthalene
1-methylnaphthalene
2-methylnaphthalene

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by: WEIFENG ZHENG	Date 9/9/21	Time 15:00	Received by:	Relinquished by:	Date 9-10-21	Time 1040	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy See reverse side for Container Preservative and Sampling Information

APPL LABS

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

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

CHAIN OF CUSTODY RECORD

C.O.C. 53006 2/3

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM	Company Name:
Address: 1001 Bishop St., Suite 1600, Honolulu, HI 96813	Address: Accounts Payable, Email: USAPImaging@aecom.com
Attn: Alethea Ramos (808)521-3051, Alethea.Ramos@aecom.com, CV_18F0126 / 60571032	Attn:
Email:	Email:

Project Name/Number	Sampler (Print)	Date Shipped: 9/9/2021
60571032.02.20.01	GM, MM, AR	Carrier: FedEx
Purchase Order Number	Sampler (Signature)	Waybill No.:
102604	Weifeng for GM, MM, AR	Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	BTEX 8260 SIM WZ	TPH-G 8260	TPH-D/O 8015 SGC	TPH-D/O 8015 SGC	PAHs Short list 8270D SIM											
ERH1652	Trip Blank	9/8/21	10:00	HST	0	X			X	X														
ERH1653	RHMW-01R		10:05		0	X			X	X	X	X	X*											
ERH1654	Trip Blank		11:30		4	X			X	X														
ERH1655	RHMW-02		11:35		8	X			X	X	X	X	X*											
ERH1656	Trip Blank		13:15		4	X			X	X														
ERH1657	RHMW-03		13:20		8	X			X	X	X	X	X*											
ERH1658	Trip Blank		08:26		0	X			X	X														
ERH1659	RHSF		08:30		0	X			X	X	X	X	X*											
ERH1660	RHMW-01R		10:05		0	X			X	X	X	X	X*											

WZ 9/9/2021

14 of 62

TPH-D/O and PAHs need liquid-liquid extraction;
* Naphthalene
1-methylnaphthalene
2-methylnaphthalene

Shuttle Temperature:	Turnaround Requested: Check one: ☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:	Sample Disposal: ☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by: WEIFENG ZHENG	9/9/21	15:00	Received by:	Relinquished by:	9-10-21	1040	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy See reverse side for Container Preservative and Sampling Information

APPL LABS

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

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

CHAIN OF CUSTODY RECORD

C.O.C. 53007 3/3

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM 1001 Bishop St., Suite 1600 Honolulu, HI 96813 Attn: Alethea Ramos (808)521-3051 Alethea.Ramos@aecom.com CV_18F0126 / 60571032	Company Name: _____ Address: _____ **Accounts Payable** Email: *USAPImaging@aecom.com* Attn: _____
Email: _____	Email: _____

Project Name/Number	Sampler (Print)	Date Shipped: 9/9/2021
60571032.02.20.01	GM, MM, AR	Carrier: FedEx
Purchase Order Number	Sampler (Signature)	Waybill No.:
102604	Weifeng for GM, MM, AR	Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	BTEX 8260	TPH-G 8260	TPH-D/O 8015	TPH-D/O SGC 8015	PAHs Short list 8270D SIM	
ERH1652	Trip Blank	9/8/21	10:00	HST	0	X			X	X				
ERH1653	RHMW-01R		10:05		0	X			X	X	X	X	X*	
ERH1654	Trip Blank		11:30		0	X			X	X				
ERH1655	RHMW-02		11:35		0	X			X	X	X	X	X*	
ERH1656	Trip Blank		13:15		0	X			X	X				
ERH1657	RHMW-03		13:20		0	X			X	X	X	X	X*	
ERH1658	Trip Blank		08:26		4	X			X	X				
ERH1659	RHSF		08:30		8	X			X	X	X	X	X*	
ERH1660	RHMW-01R		10:05		0	X			X	X	X	X	X*	

WZ 9/9/2021

15 of 62

TPH-D/O and PAHs need liquid-liquid Extractions;
* Naphthalene
1-methylnaphthalene
2-methylnaphthalene

Shuttle Temperature:	Turnaround Requested: Check one ☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____	Sample Disposal: ☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by: WEIFENG ZHENG	Date 9/9/21	Time 15:00	Received by:	Relinquished by:	Date 9-10-21	Time 1040	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy See reverse side for Container Preservative and Sampling Information

COOLER RECEIPT FORM **ARF: 97466**

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 9/10/2021

2) Coolers: Number of Coolers: 3

3) YES Were custody seals present and intact?
How many? 6 Name/Date on seal? SEE BELOW

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

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

6) YES Were cooler temperatures acceptable?

7) Serial number of calibrated thermometer used: R3 CF: -2.4°C

8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp
1: 3.0/1.1 2: 3.0/1.1 3: 4.0/2.1 4: _____ 5: _____ 6: _____
7: _____ 8: _____ 9: _____ 10: _____ 11: _____ 12: _____

Chain of custody:

9) YES Was a chain of custody received?

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

Sample Labels:

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

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

Sample Containers:

13) YES Were all containers sealed in separate bags?

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

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

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

17) Yes Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: BA40211W3-W4
Smaller than a pea: _____

Preservation Hold time:

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

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

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

21) NA Was the pH of the "basic" preserved samples for Cyanide > 12, Sulfide >9, Hexchrom >9?

22) NO Were unpreserved VOA Vials received for VOA Dept analysis?

23) NA If "yes", are the unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?
pH strip lot number: HC029115
Lab notified if pH was not adequate: _____

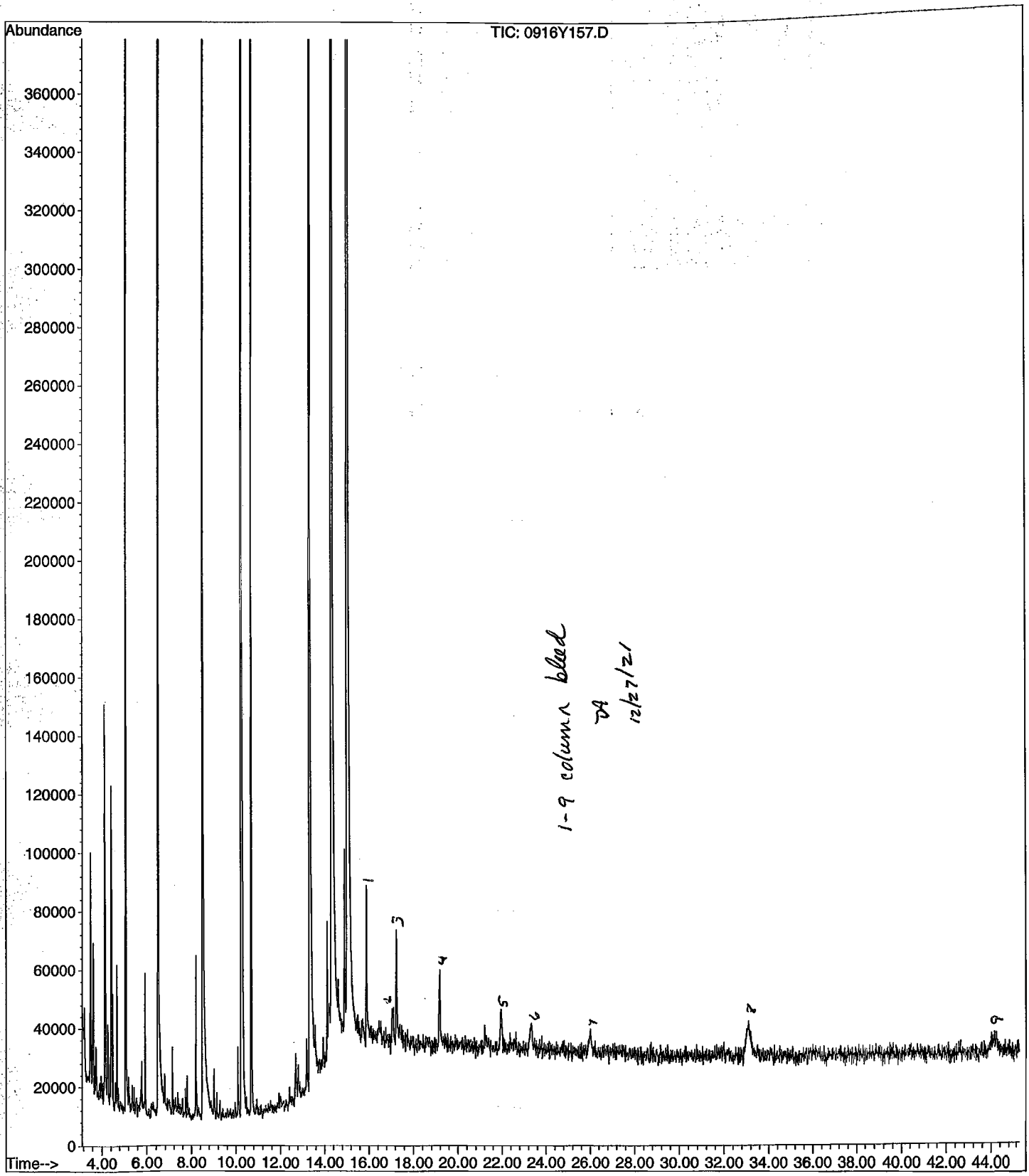
Notes/Deficiencies:

CUSTODY SEAL 313
APPL, Inc. (559) 275-2175
Initials TY Date 9/9/21

Personnel receiving samples: MS Second reviewer: SS
Personnel labeling samples: DR
Project manager notified: MS Date/Time of notification 9/10/2021
Name of client notified: _____ Date/Time of notification _____

SAMPLE RESULTS

File : M:\YODA\DATA\Y210916\0916Y157.D
Operator : LS
Acquired : 4 Oct 21 11:57 using AcqMethod SVOCEXT
Instrument : Yoda
Sample Name: BA40213W08 5/1020 TPH ERH 1657
Misc Info :
Vial Number: 57



LSC Area Percent Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D
Acq On : 4 Oct 21 11:57
Sample : BA40213W08 5/1020 TPH ERH1657
Misc :
MS Integration Params: LSCINT.P

Vial: 57
Operator: LS
Inst : Yoda
Multiplr: 1.00000

Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 1 % of largest Peak
Start Thrs: 0.4
Max Peaks: 100
Stop Thrs : 0.8
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

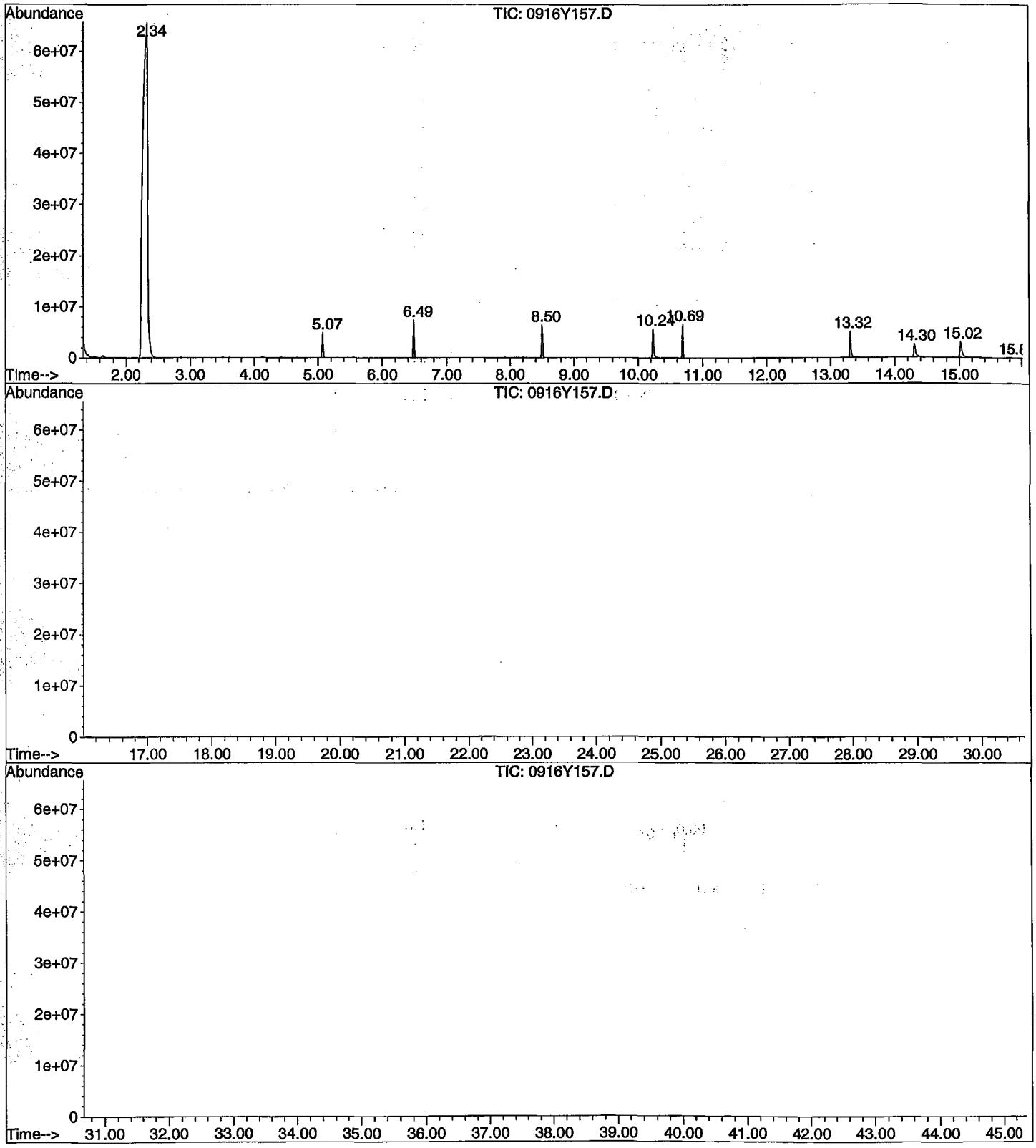
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.336	93	108	162	rBV2	65586368	421255522	353184603	100.00%	84.935%
2	5.074	399	403	416	rBV	4840770	21801321	5150637	1.46%	1.239%
3	6.485	549	555	584	rBV	7343194	41186811	6891646	1.95%	1.657%
4	8.500	765	772	825	rBV	6403136	66715205	8016902	2.27%	1.928%
5	10.236	954	959	1004	rBV	5647421	57178484	8236646	2.33%	1.981%
6	10.691	1004	1008	1042	rVB	6555591	44033398	6811325	1.93%	1.638%
7	13.318	1287	1291	1374	rBV	5105343	93897169	8228030	2.33%	1.979%
8	14.302	1393	1397	1458	rVB	2583345	69783242	5438032	1.54%	1.308%
9	15.017	1470	1474	1565	rVB	3053357	102488253	7534433	2.13%	1.812%
10	15.890	1565	1568	4738	rVB	61166	3141758741	6336438	1.79%	1.524%

Sum of corrected areas: 415828692

0916Y157.D M0716W.M Mon Dec 27 07:31:27 2021

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y210916\0916Y157.D
Operator : LS
Acquired : 4 Oct 21 11:57 using AcqMethod SVOCEXT
Instrument : Yoda
Sample Name: BA40213W08 5/1020 TPH
Misc Info :
Vial Number: 57
Quant File :M0716W.RES (RTE Integrator)



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

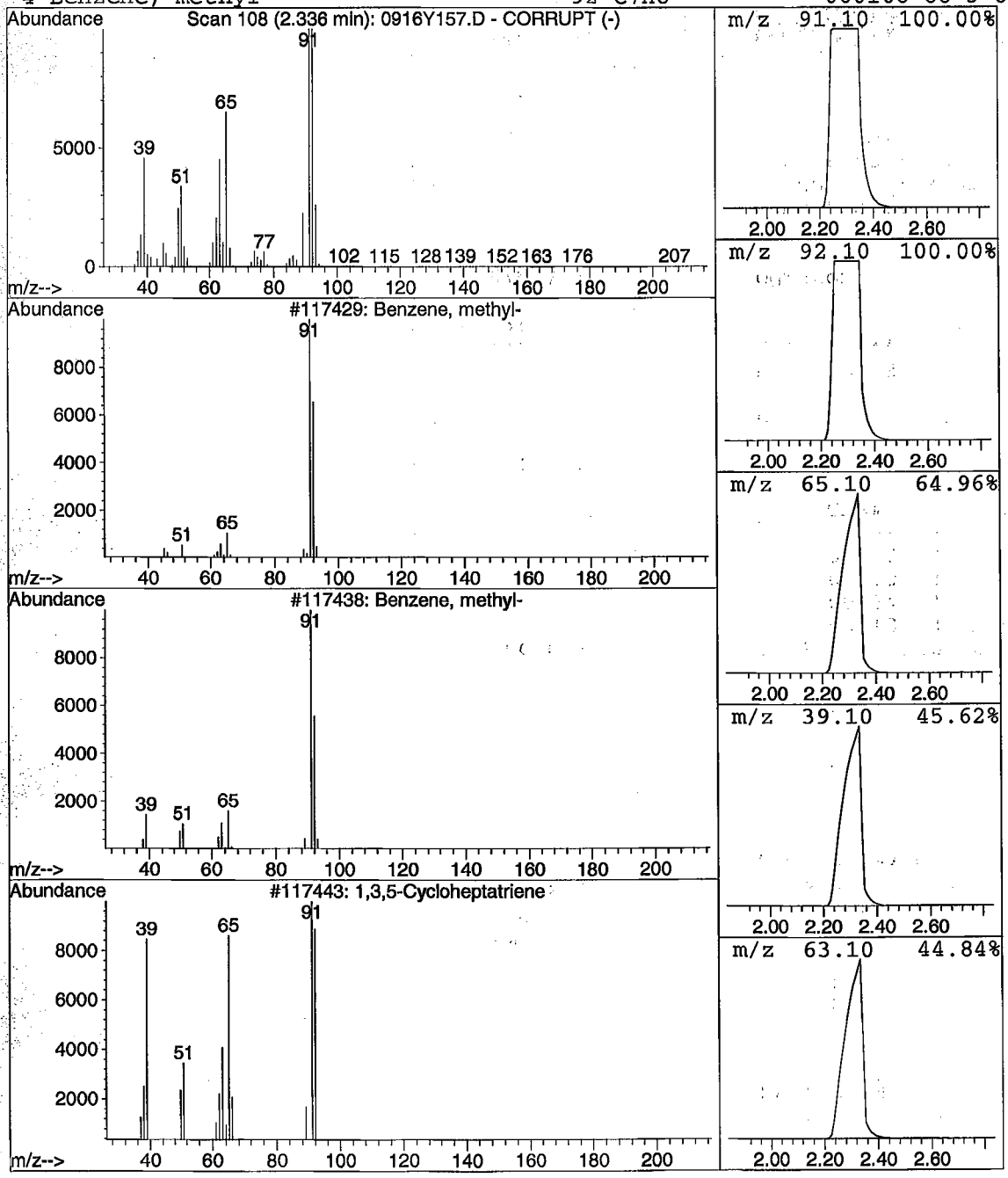
****

Peak Number 1 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.34	3531.85 ppb	353185000	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	90
2	Benzene, methyl-	92	C7H8	000108-88-3	89
3	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	83
4	Benzene, methyl-	92	C7H8	000108-88-3	80

Solvent Blank DA 12/27/21



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

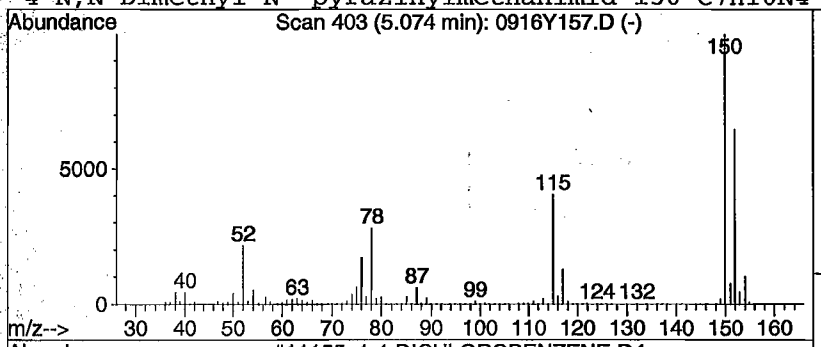
****

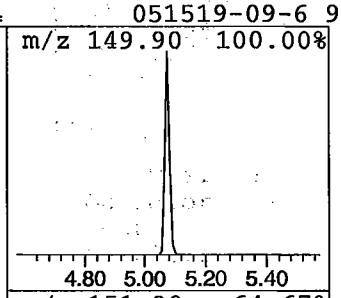
Peak Number 2 1,4-DICHLOROBENZENE-D4 Concentration Rank 10

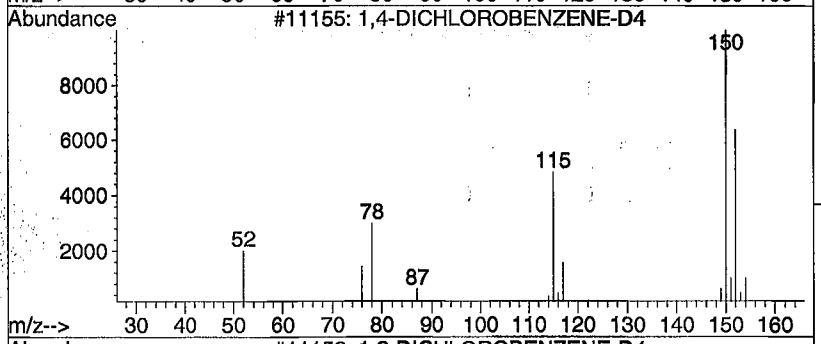
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.07	51.51 ppb	5150640	External Standard	0.00

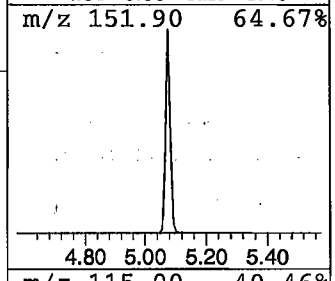
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-DICHLOROBENZENE-D4	146	C6D4Cl2	000000-00-0	91
2	1,2-DICHLOROBENZENE-D4	146	C6D4Cl2	000000-00-0	89
3	Benzonitrile, 2-amino-5-chloro-	152	C7H5ClN2	005922-60-1	9
4	N,N-Dimethyl-N'-pyrazinylmethanimid	150	C7H10N4	051519-09-6	9

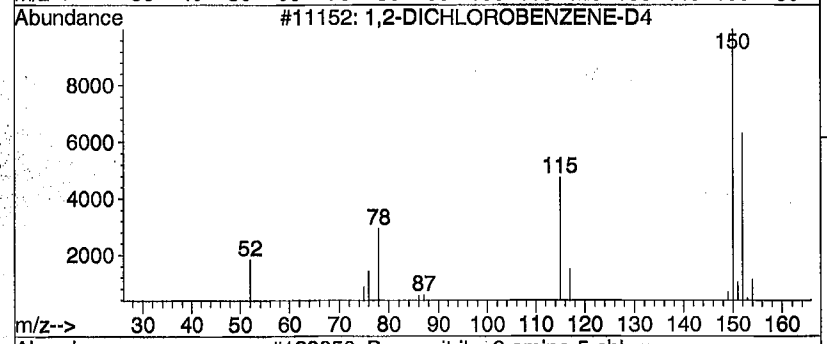
12/27/21 JA Sum

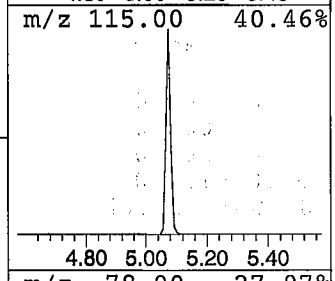


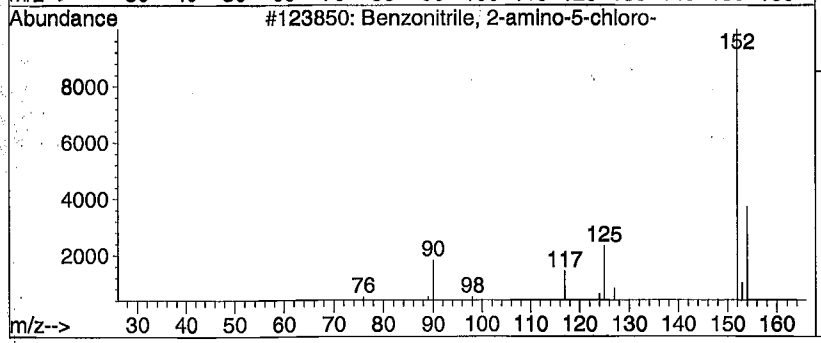


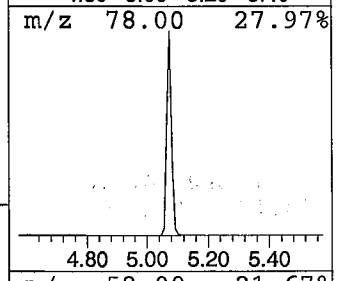


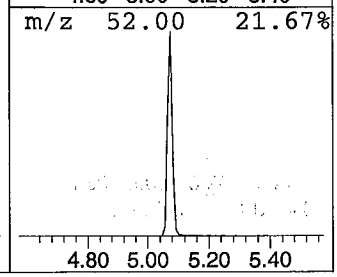












Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

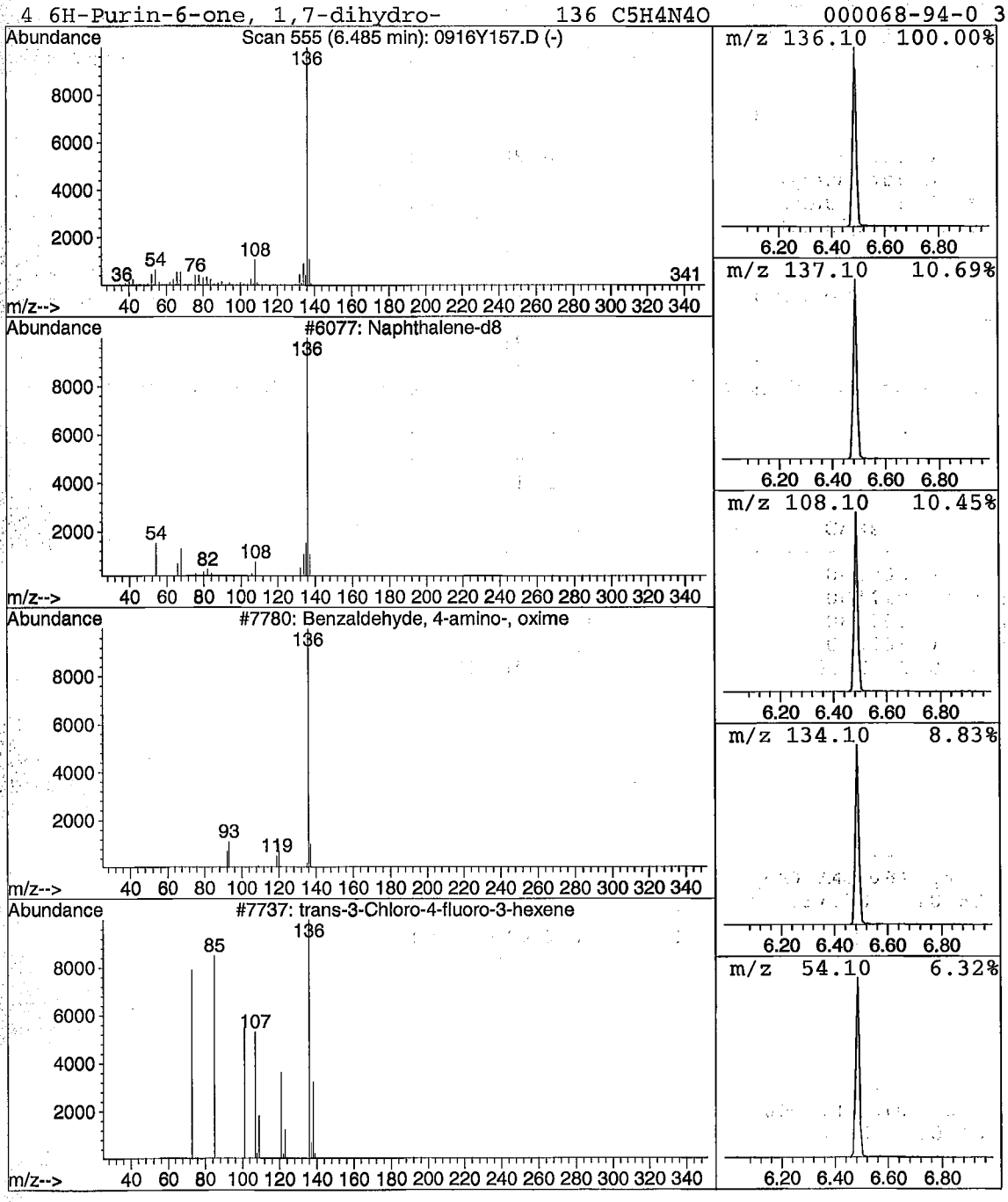
****

Peak Number 3 Naphthalene-d8 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.49	68.92 ppb	6891650	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene-d8	128	C10D8	000000-00-0	87
2	Benzaldehyde, 4-amino-, oxime	136	C7H8N2O	003419-18-9	50
3	trans-3-Chloro-4-fluoro-3-hexene	136	C6H10ClF	087161-02-2	42
4	6H-Purin-6-one, 1,7-dihydro-	136	C5H4N4O	000068-94-0	38

13 DA 12/27/21



Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

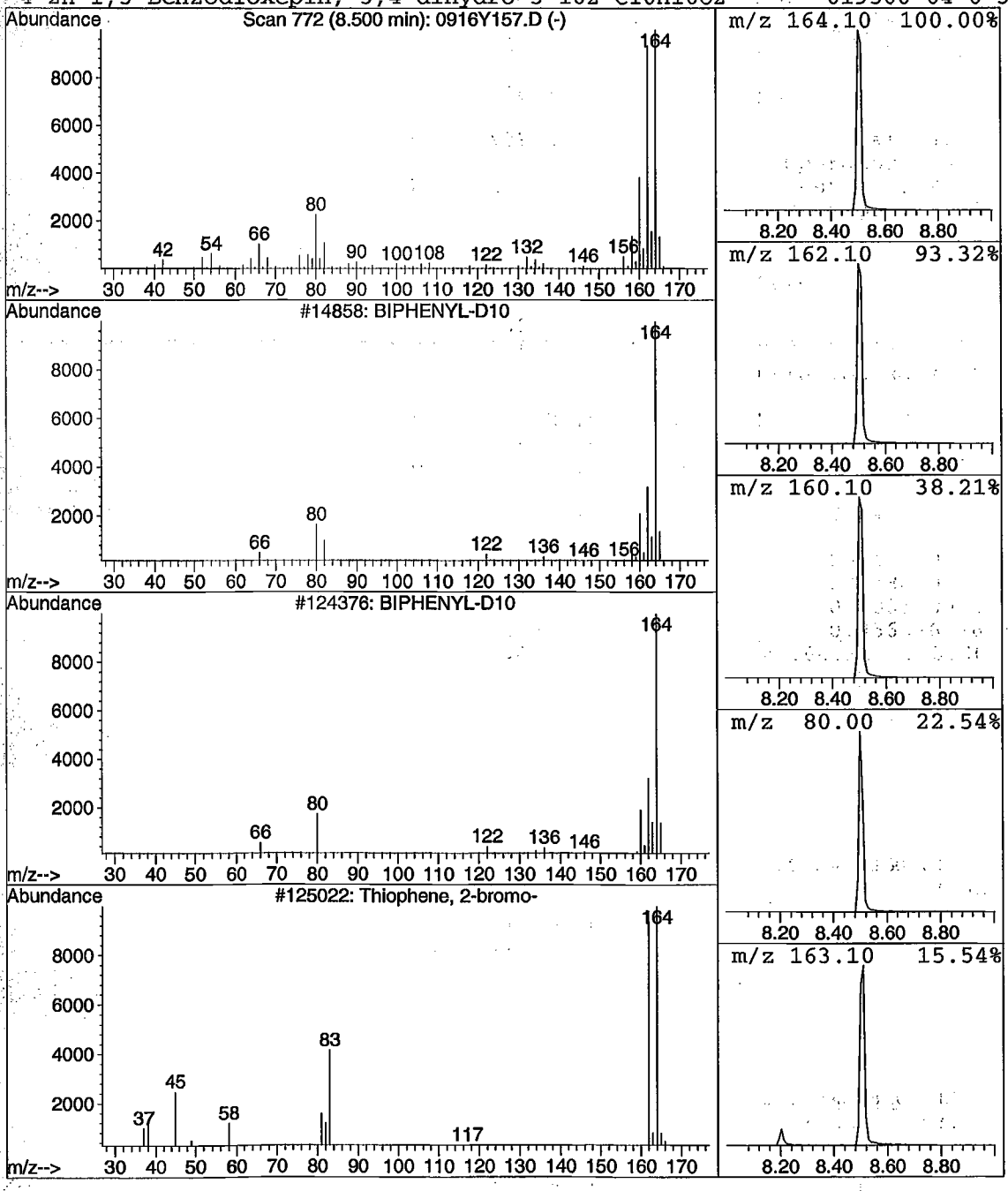
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 4 BIPHENYL-D10 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.50	80.17 ppb	8016900	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	BIPHENYL-D10	154	C12D10	001486-01-7	74
2	BIPHENYL-D10	154	C12D10	001486-01-7	62
3	Thiophene, 2-bromo-	162	C4H3BrS	001003-09-4	50
4	2H-1,5-Benzodioxepin, 3,4-dihydro-3	162	C10H10O2	019560-64-6	35



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

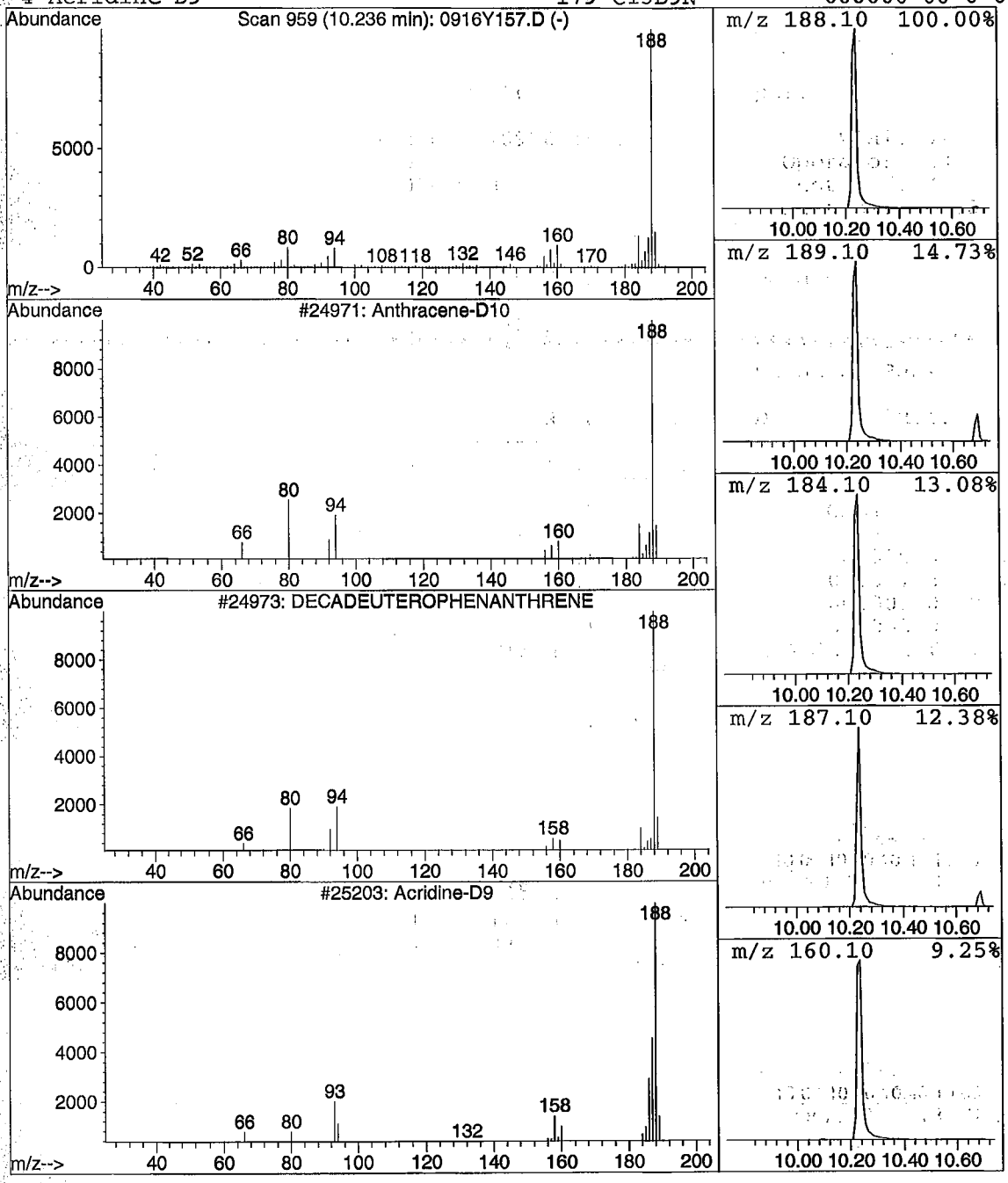
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 5 Anthracene-D10 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.24	82.37 ppb	8236650	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene-D10	178	C14D10	000000-00-0	95
2	DECADEUTEROPHENANTHRENE	178	C14D10	001517-22-2	90
3	Acridine-D9	179	C13D9N	000000-00-0	64
4	Acridine-D9	179	C13D9N	000000-00-0	64



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

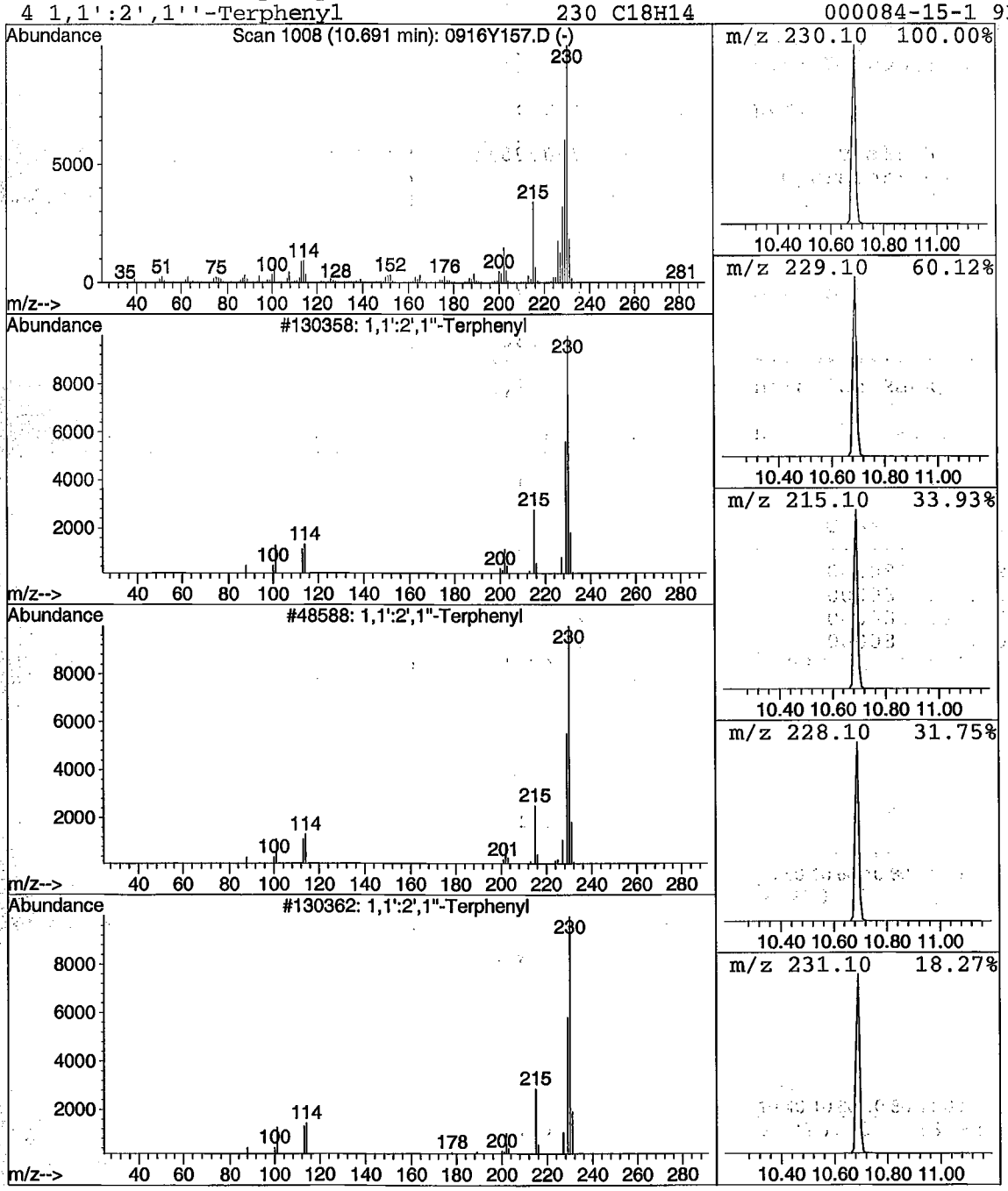
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 6 1,1':2',1''-Terphenyl Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.69	68.11 ppb	6811330	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	97
2	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	97
3	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	97
4	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	93



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

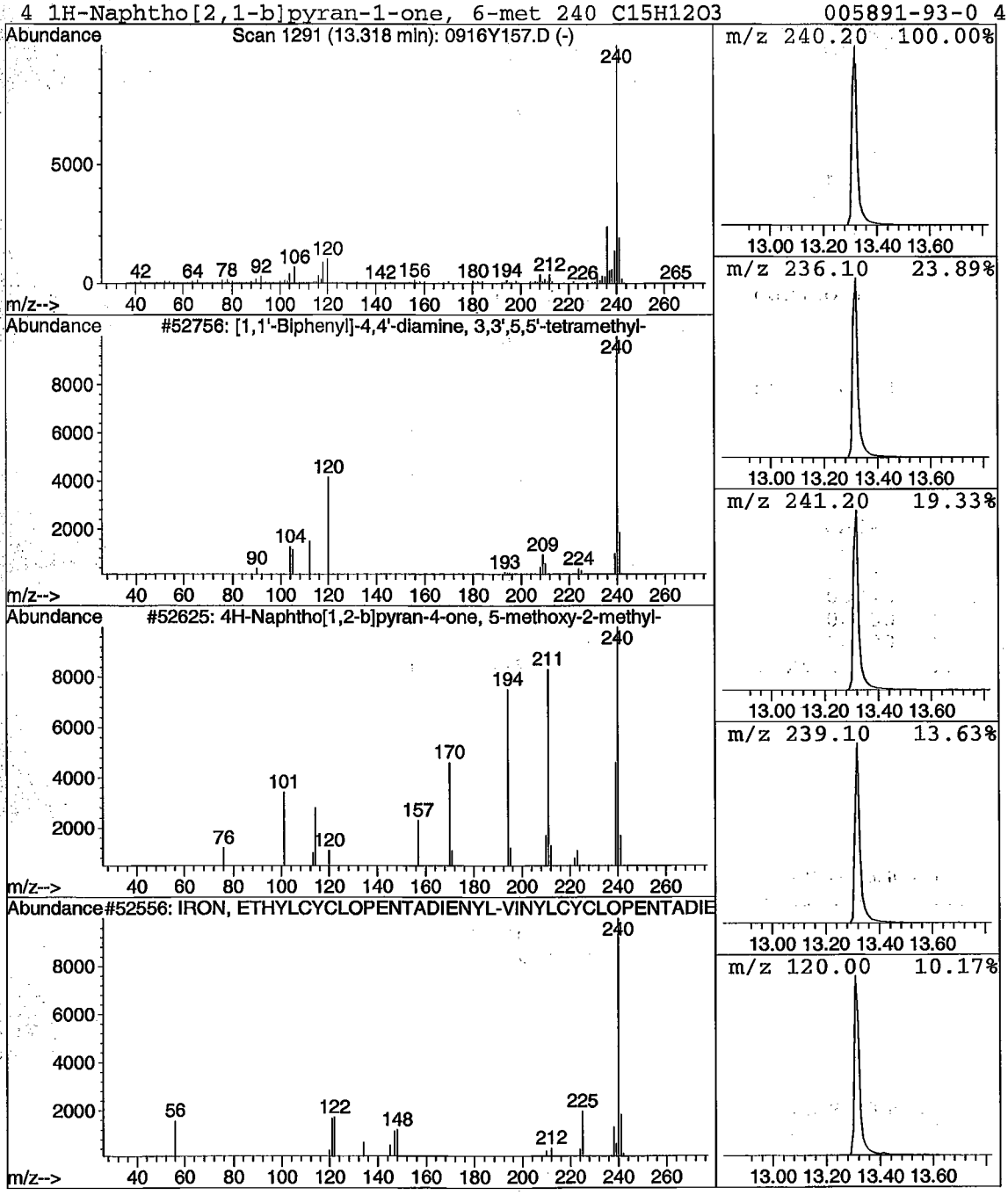
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 7 [1,1'-Biphenyl]-4,4'-diamine, Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.32	82.28 ppb	8228030	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,3',	240	C16H20N2	054827-17-7	59
2	4H-Naphtho[1,2-b]pyran-4-one, 5-met	240	C15H12O3	032454-43-6	50
3	IRON, ETHYLCYCLOPENTADIENYL-VINYLCY	240	C14H16Fe	000000-00-0	50
4	1H-Naphtho[2,1-b]pyran-1-one, 6-met	240	C15H12O3	005891-93-0	49



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

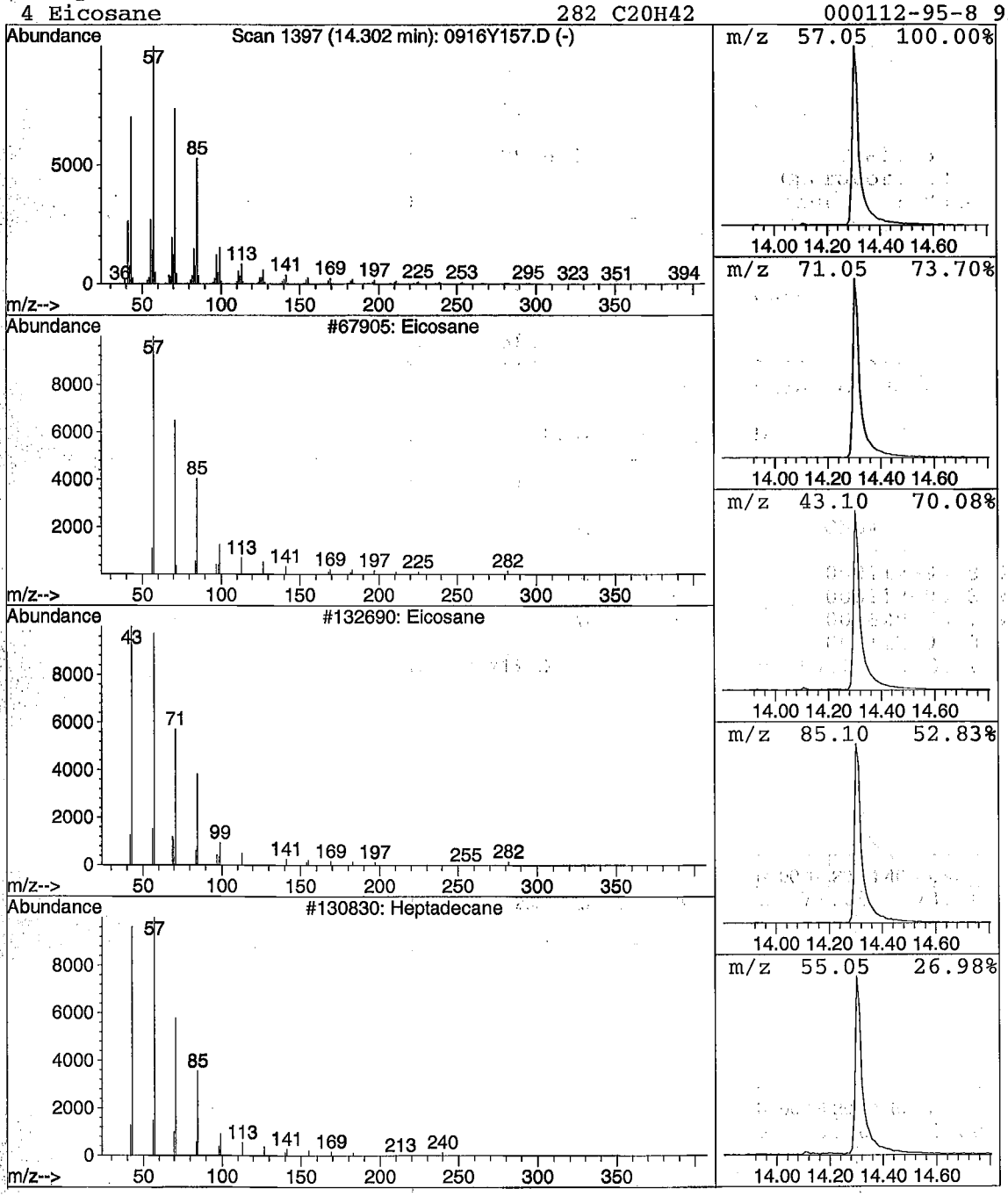
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 8 Eicosane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	54.38 ppb	5438030	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	96
2	Eicosane	282	C20H42	000112-95-8	95
3	Heptadecane	240	C17H36	000629-78-7	95
4	Eicosane	282	C20H42	000112-95-8	95



Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

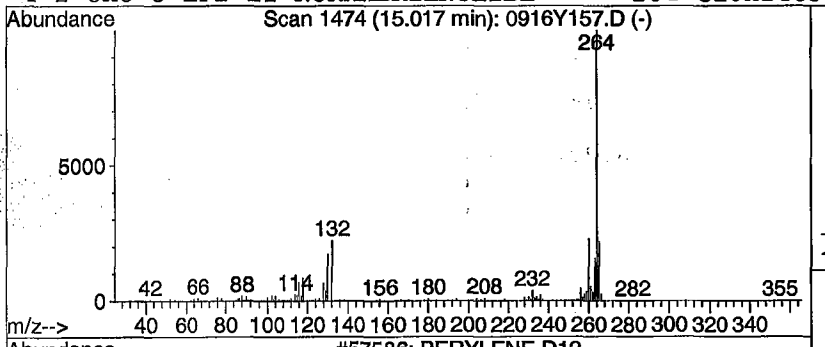
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

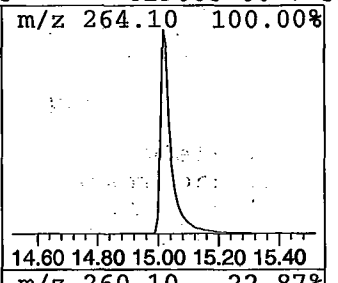
****

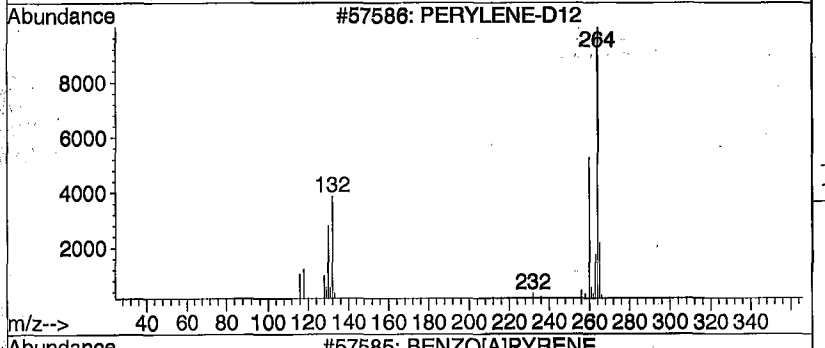
Peak Number 9 PERYLENE-D12 Concentration Rank 5

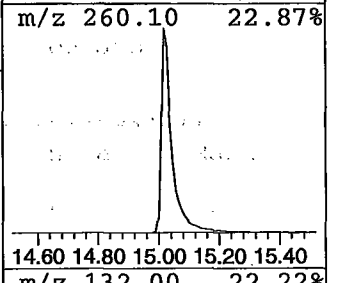
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.02	75.34 ppb	7534430	External Standard	0.00

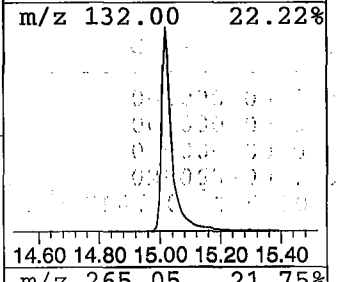
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	PERYLENE-D12	252	C20D12	000000-00-0	87
2	BENZO[A]PYRENE	252	C20D12	000000-00-0	64
3	5,6-Dimethylene-5,5a,6,11,11a,12-he	264	C16H16N4	000000-00-0	59
4	2-OXO-8-EPI-12-NORAMBRIENOLIDE	264	C16H24O3	029065-00-7	55

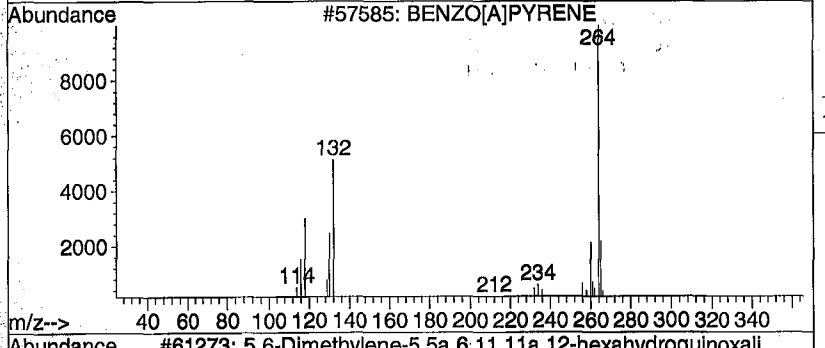


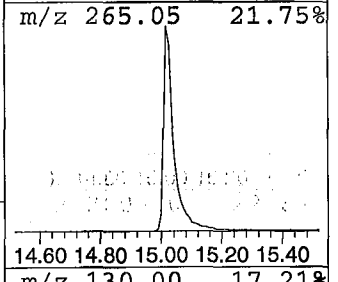


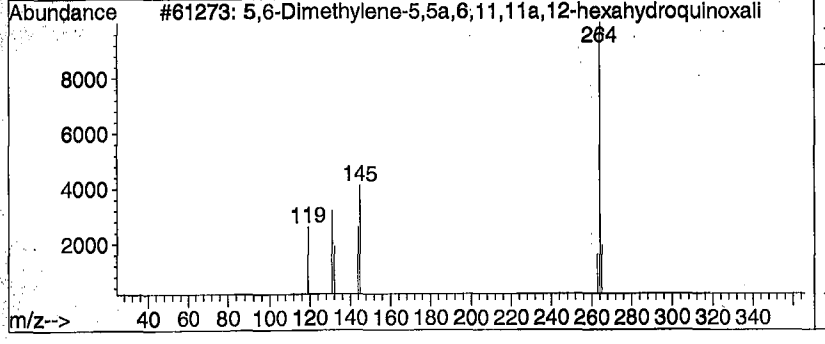


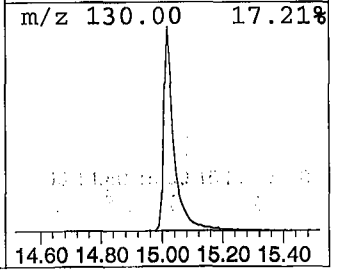












Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y157.D Vial: 57
Acq On : 4 Oct 21 11:57 Operator: LS
Sample : BA40213W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

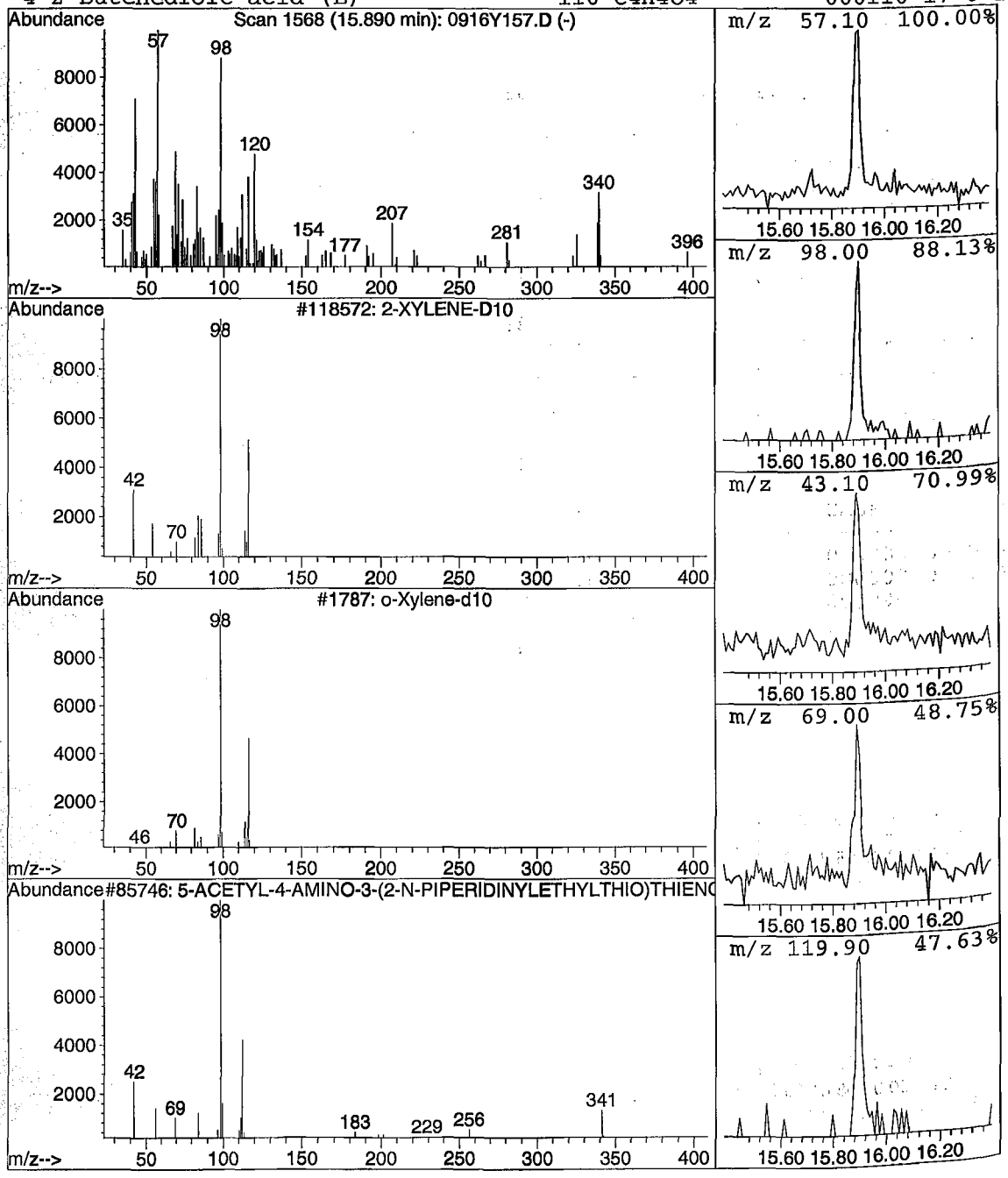
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 10 2-XYLENE-D10 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.89	63.36 ppb	6336440	External Standard	0.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-XYLENE-D10	106	C8D10	000000-00-0	43
2	o-Xylene-d10	106	C8D10	000000-00-0	35
3	5-ACETYL-4-AMINO-3-(2-N-PIPERIDINYL	341	C14H19N3OS3	097090-69-2	27
4	2-Butenedioic acid (E)-	116	C4H4O4	000110-17-8	25



Tentatively Identified Compound (LSC) summary

Operator ID: LS Date Acquired: 4 Oct 21 11:57
Data File: M:\YODA\DATA\Y210916\0916Y157.D
Name: BA40213W08 5/1020 TPH
Misc:
Method: M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title: METHOD 8260B
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.34	3531.9	ppb	353185000	ISTD00	0.00	100000	1.0
1,4-DICHLOROBENZENE-	5.07	51.5	ppb	5150640	ISTD00	0.00	100000	1.0
Naphthalene-d8	6.49	68.9	ppb	6891650	ISTD00	0.00	100000	1.0
BIPHENYL-D10	8.50	80.2	ppb	8016900	ISTD00	0.00	100000	1.0
Anthracene-D10	10.24	82.4	ppb	8236650	ISTD00	0.00	100000	1.0
1,1':2',1''-Terpheny	10.69	68.1	ppb	6811330	ISTD00	0.00	100000	1.0
[1,1'-Biphenyl]-4,4'	13.32	82.3	ppb	8228030	ISTD00	0.00	100000	1.0
Eicosane	14.30	54.4	ppb	5438030	ISTD00	0.00	100000	1.0
PERYLENE-D12	15.02	75.3	ppb	7534430	ISTD00	0.00	100000	1.0
2-XYLENE-D10	15.89	63.4	ppb	6336440	ISTD00	0.00	100000	1.0

0916Y157.D M0716W.M Mon Dec 27 07:31:31 2021

LSC Area Percent Report

Data File : M:\YODA\DATA\Y210916\0916Y155.D Vial: 55
Acq On : 4 Oct 21 10:02 Operator: LS
Sample : BA40213W08 5/1000 TPH ERH1657 Inst : Yoda
Misc : Multiplr: 5.00000
MS Integration Params: LSCINT.P

Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

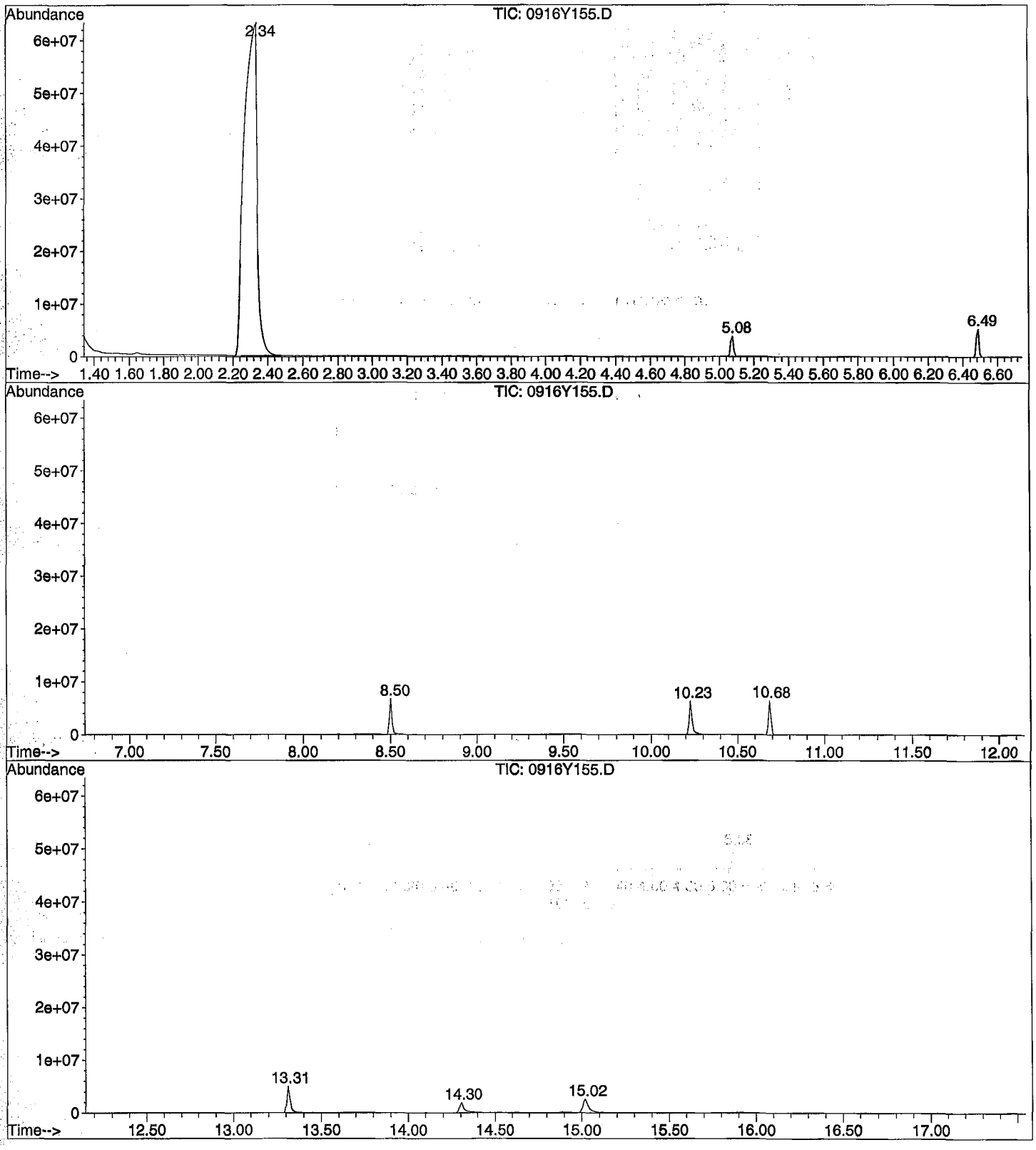
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	2.337	94	108	125	rVB3	63215168	363614269	327198069	100.00%	87.338%
2	5.076	400	403	406	rBV	3876535	11646250	4556531	1.39%	1.216%
3	6.487	552	555	557	rBV	5283016	11705812	5765670	1.76%	1.539%
4	8.501	769	772	775	rBV	6722565	13289815	6612255	2.02%	1.765%
5	10.228	955	958	981	rBV	6276184	36120962	7394843	2.26%	1.974%
6	10.683	1004	1007	1010	rBV	6392628	12603458	6064120	1.85%	1.619%
7	13.310	1287	1290	1299	rBV	5014337	19983049	6732189	2.06%	1.797%
8	14.304	1393	1397	1415	rBV	1874953	28036396	3955485	1.21%	1.056%
9	15.018	1469	1474	1499	rBV	2579216	39114632	6356159	1.94%	1.697%

Sum of corrected areas: 374635321

0916Y155.D Y0730.M Mon Dec 27 07:30:18 2021

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y210916\0916Y155.D
Operator : LS
Acquired : 4 Oct 21 10:02 using AcqMethod SVOC1011
Instrument : Yoda
Sample Name: BA40213W08 5/1000 TPH
Misc Info :
Vial Number: 55
Quant File :Y0730.RES (RTE Integrator)



0916Y155.D Y0730.M Mon Dec 27 07:30:18 2021

Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y155.D Vial: 55
Acq On : 4 Oct 21 10:02 Operator: LS
Sample : BA40213W08 5/1000 TPH Inst : Yoda
Misc : Multiplr: 5.00

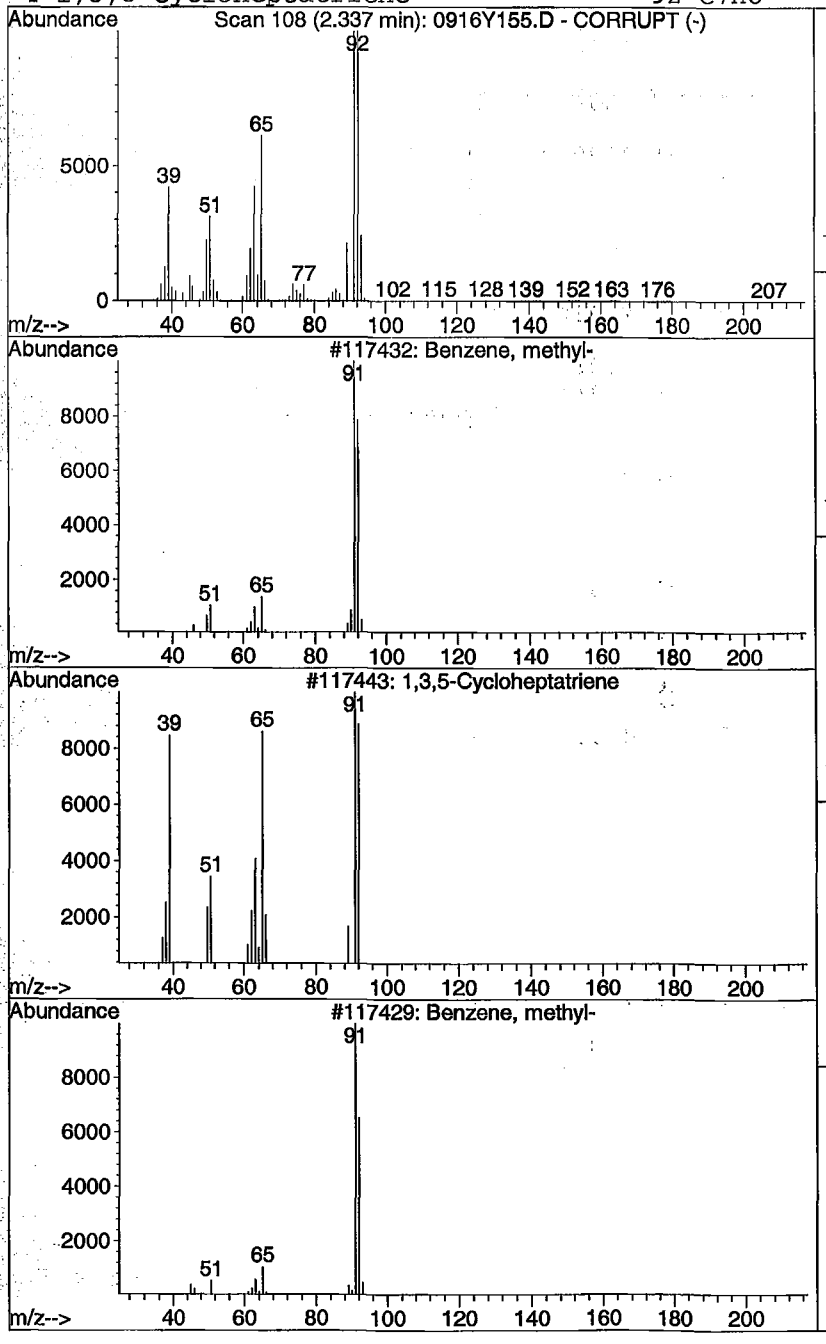
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

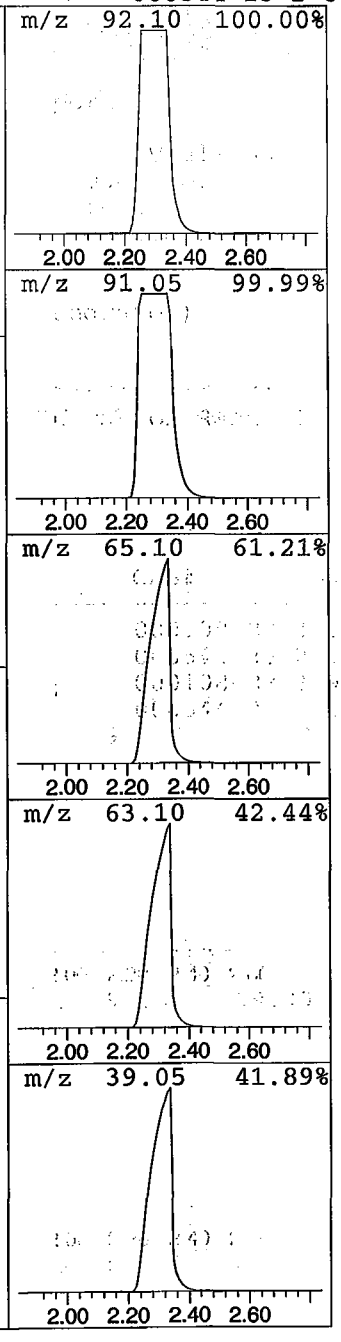
****

Peak Number 1 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.34	14361.70 ppb	327198000	1,4-dichlorobenzene-D4(IS)	5.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	94
2	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91
3	Benzene, methyl-	92	C7H8	000108-88-3	90
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	86





Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y155.D Vial: 55
Acq On : 4 Oct 21 10:02 Operator: LS
Sample : BA40213W08 5/1000 TPH Inst : Yoda
Misc : Multiplr: 5.00

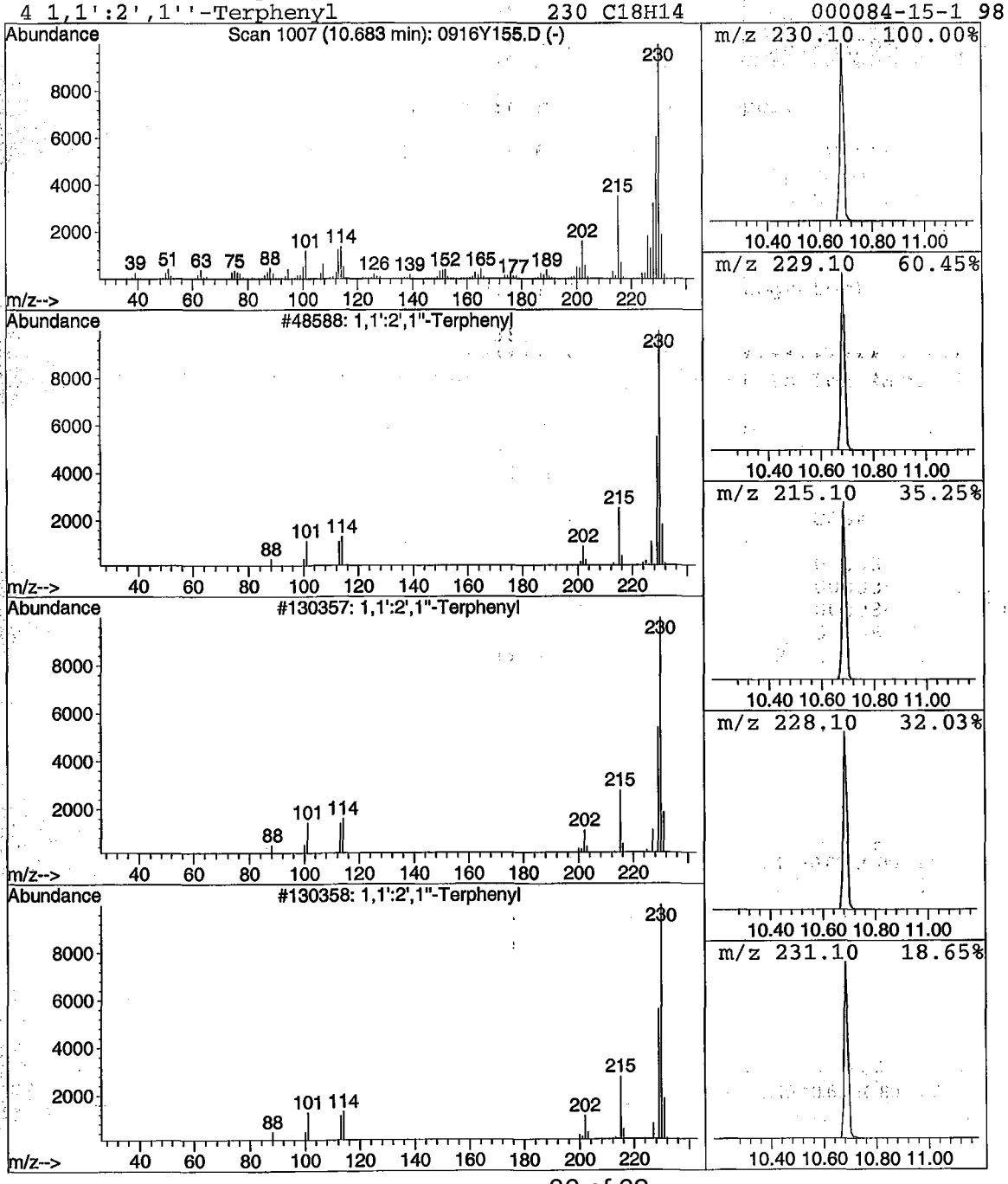
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

****

Peak Number 2 1,1':2',1''-Terphenyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.68	164.01 ppb	6064120	Phenanthrene-D10(IS)	10.23

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
2	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
3	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
4	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	98



Data File : M:\YODA\DATA\Y210916\0916Y155.D Vial: 55
Acq On : 4 Oct 21 10:02 Operator: LS
Sample : BA40213W08 5/1000 TPH Inst : Yoda
Misc : Multiplr: 5.00

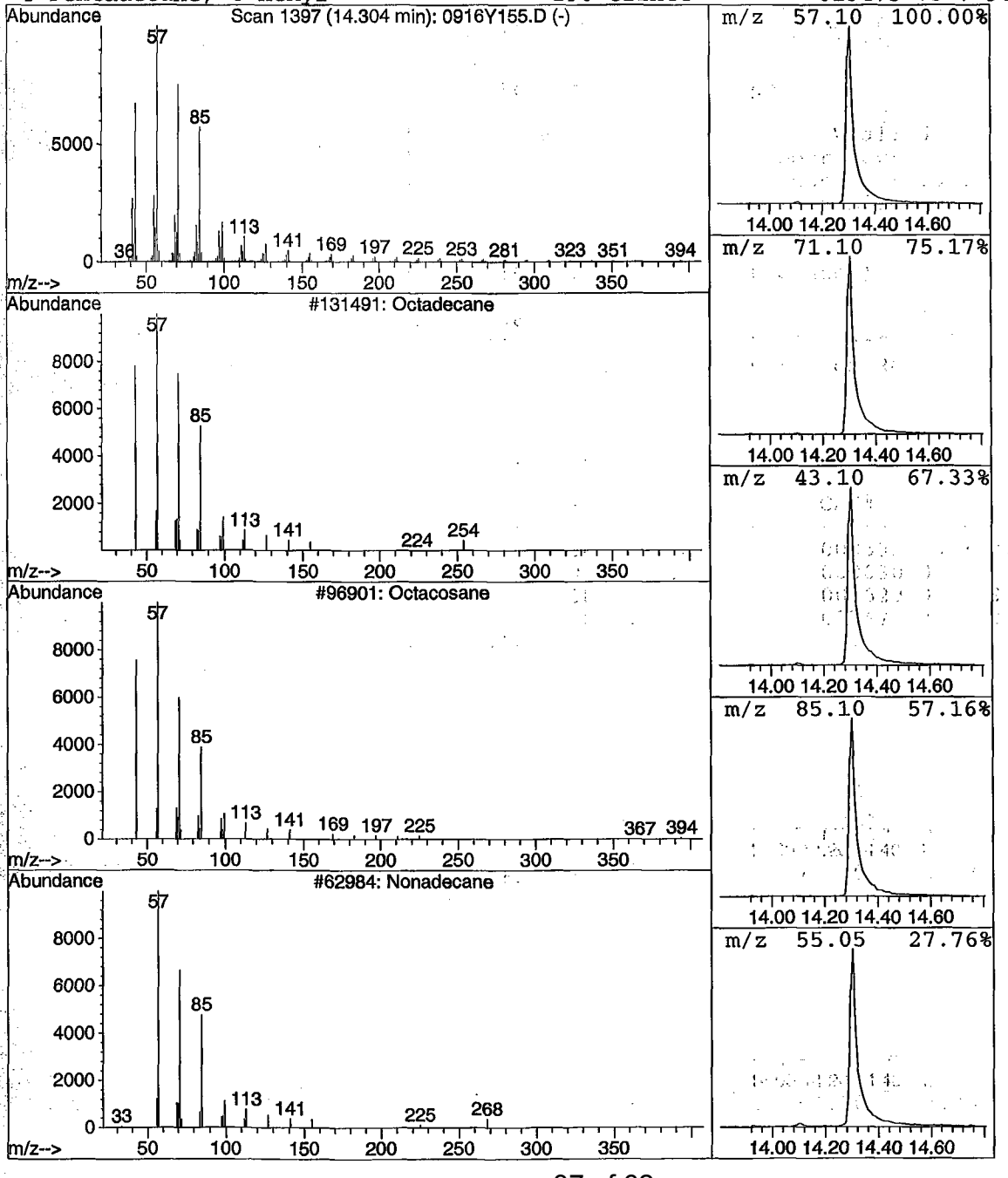
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

****

Peak Number 3 Octadecane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	124.46 ppb	3955490	Perylene-D12(IS)	15.02

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	97
2	Octacosane	394	C28H58	000630-02-4	97
3	Nonadecane	268	C19H40	000629-92-5	94
4	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	94



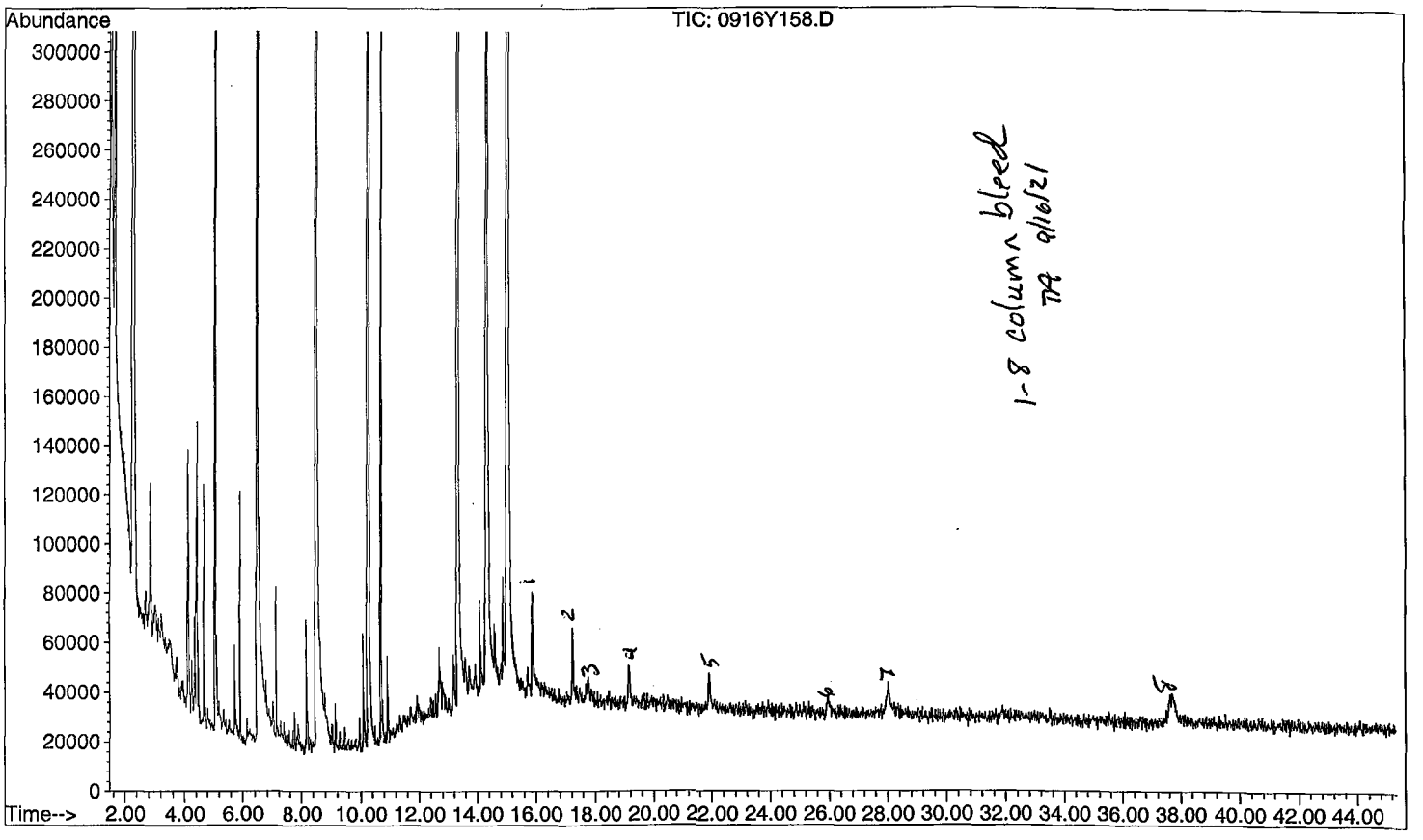
Tentatively Identified Compound (LSC) summary

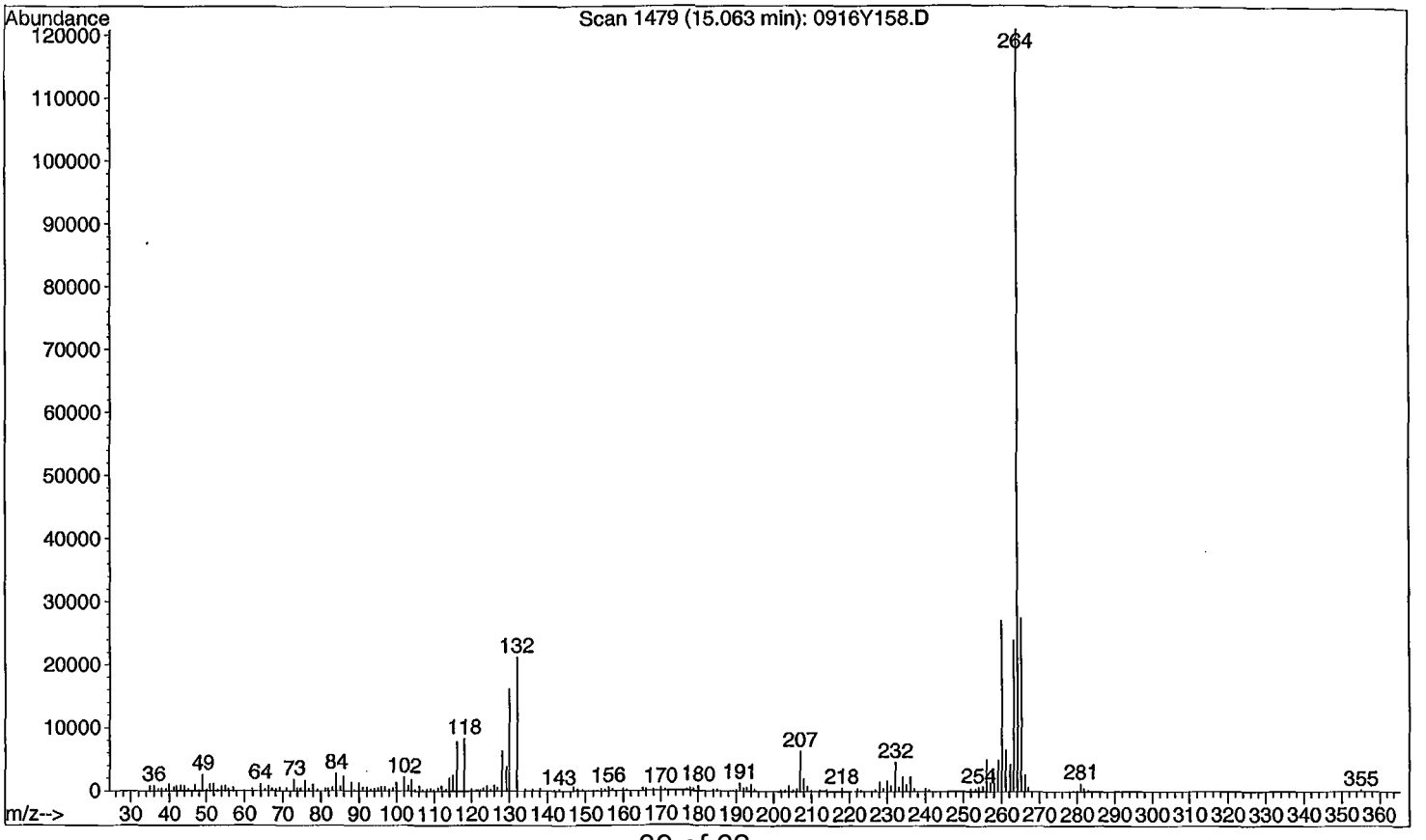
Operator ID: LS Date Acquired: 4 Oct 21 10:02
Data File: M:\YODA\DATA\Y210916\0916Y155.D
Name: BA40213W08 5/1000 TPH
Misc:
Method: M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title: EPA 8270C
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Benzene, methyl-	2.34	14361.7	ppb	327198000	ISTD01	5.08	4556530	40.0
1,1':2',1''-Terpheny	10.68	164.0	ppb	6064120	ISTD04	10.23	7394840	40.0
Octadecane	14.30	124.5	ppb	3955490	ISTD06	15.02	6356160	40.0

0916Y155.D Y0730.M Mon Dec 27 07:30:19 2021

File : M:\YODA\DATA\Y210916\0916Y158.D
Operator : LS
Acquired : 4 Oct 21 12:50 using AcqMethod SVOCEXT
Instrument : Yoda
Sample Name: BA40215W08 5/1020 TPH
Misc Info :
Vial Number: 58





LSC Area Percent Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D
Acq On : 4 Oct 21 12:50
Sample : BA40215W08 5/1020 TPH ERH1659
Misc :
MS Integration Params: LSCINT.P

Vial: 58
Operator: LS
Inst : Yoda
Multiplr: 1.00000

Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 1 % of largest Peak
Start Thrs: 0.4
Max Peaks: 100
Stop Thrs : 0.8
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

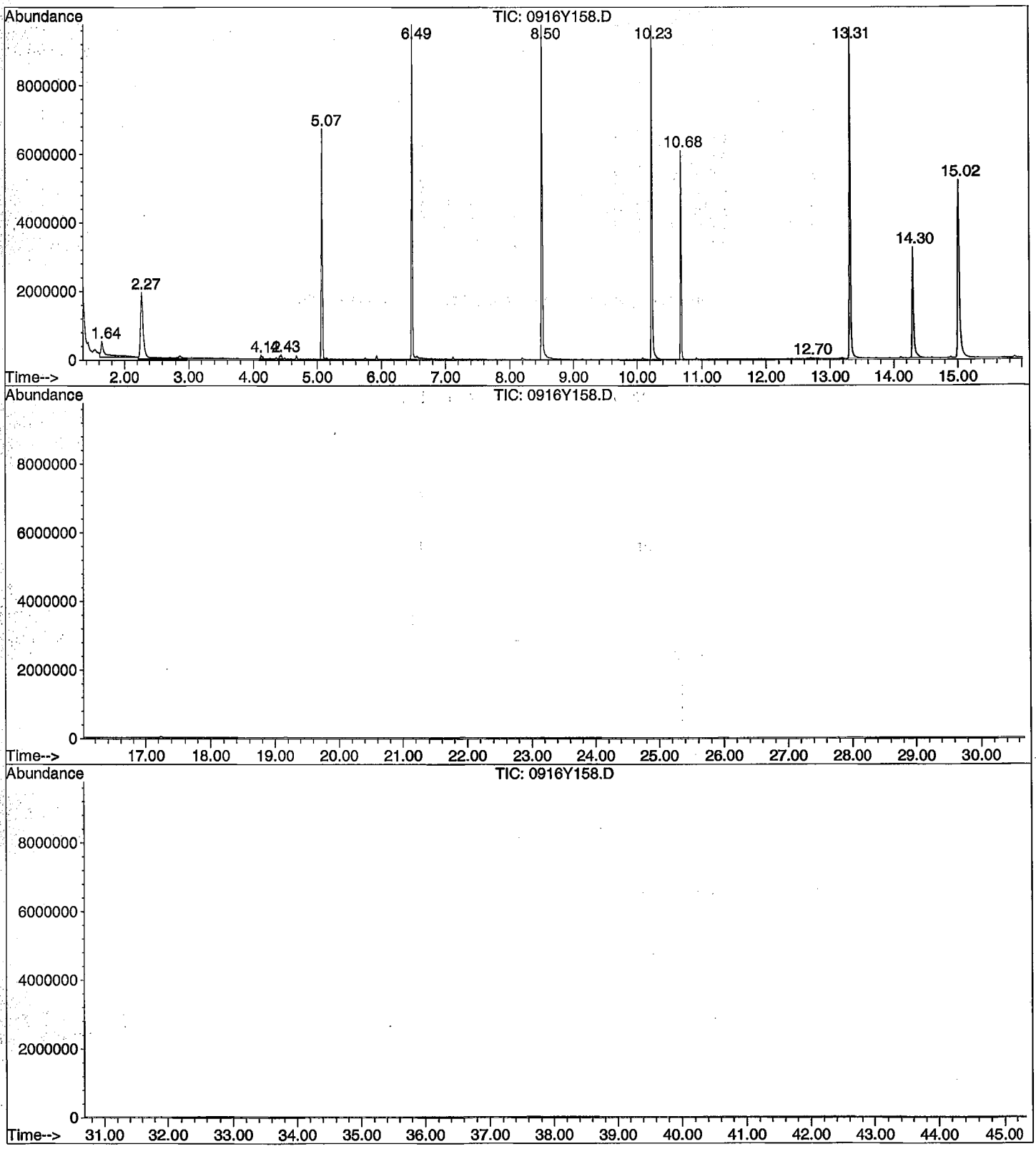
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.640	30	33	95	rVB2	456026	47507022	2527867	11.05%	2.524%
2	2.271	95	101	297	rVB	1934469	140851877	8368844	36.57%	8.356%
3	4.118	297	300	323	rVB3	102870	16909133	276237	1.21%	0.276%
4	4.434	329	334	338	rVB2	115128	6019223	251611	1.10%	0.251%
5	5.074	399	403	473	rVB	6715744	54398927	7369416	32.21%	7.358%
6	6.486	550	555	620	rBV	9751784	54373914	9902641	43.28%	9.887%
7	8.500	767	772	824	rBV	9755053	47569141	11444293	50.02%	11.426%
8	10.227	953	958	1002	rBV	9724412	42976043	11910741	52.05%	11.892%
9	10.682	1002	1007	1028	rBV	6085035	22802884	6292865	27.50%	6.283%
10	12.696	1028	1224	1286	rBV	37533	165368729	1644432	7.19%	1.642%
11	13.309	1286	1290	1374	rBV	9657937	68185985	11970049	52.31%	11.951%
12	14.302	1392	1397	1458	rVB	3230863	47831449	5317575	23.24%	5.309%
13	15.017	1469	1474	4737	rVB	5218042	2146178299	22881570	100.00%	22.845%

Sum of corrected areas: 100158141

0916Y158.D M0716W.M Mon Dec 27 07:31:55 2021

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y210916\0916Y158.D
Operator : LS
Acquired : 4 Oct 21 12:50 using AcqMethod SVOCEXT
Instrument : Yoda
Sample Name: BA40215W08 5/1020 TPH
Misc Info :
Vial Number: 58
Quant File :M0716W.RES (RTE Integrator)



0916Y158.D M0716W.M Mon Dec 27 07:31:55 2021

Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

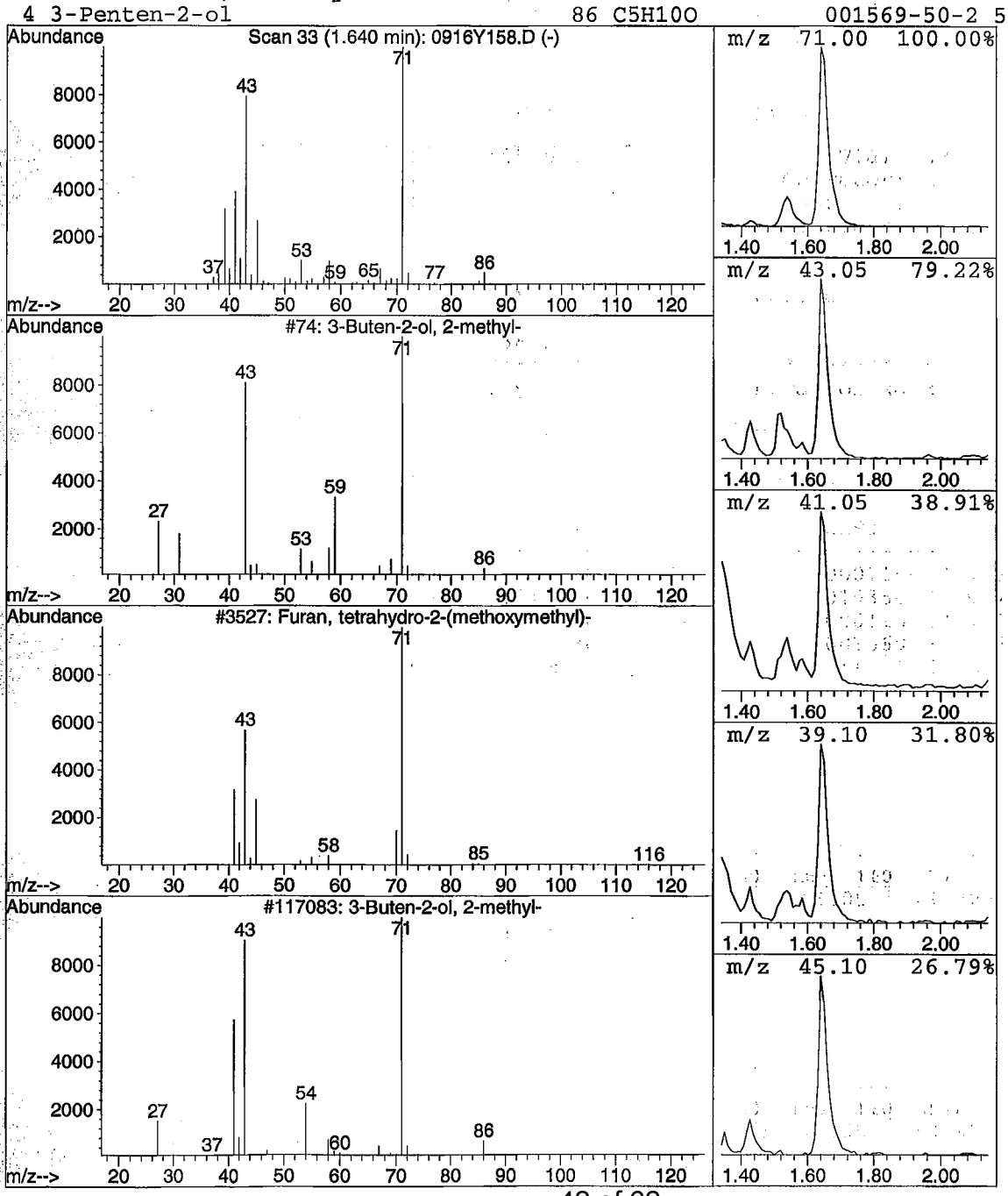
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 1 3-Buten-2-ol, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.64	38.43 ppb	2527870	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Buten-2-ol, 2-methyl-	86	C5H10O	000115-18-4	72
2	Furan, tetrahydro-2-(methoxymethyl)	116	C6H12O2	019354-27-9	72
3	3-Buten-2-ol, 2-methyl-	86	C5H10O	000115-18-4	64
4	3-Penten-2-ol	86	C5H10O	001569-50-2	56



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

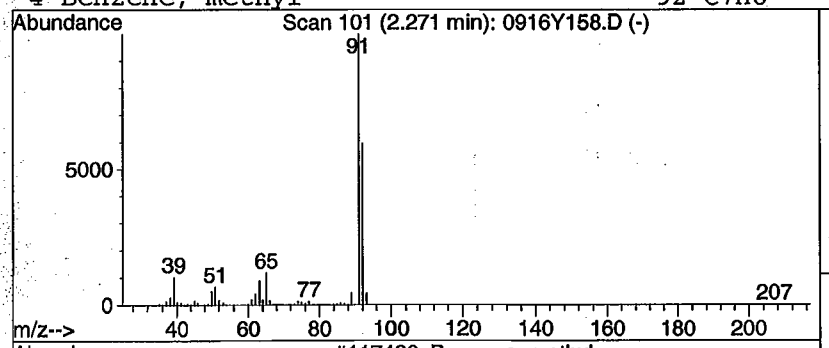
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

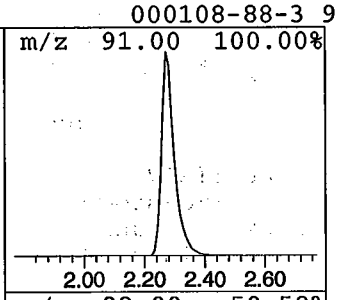
****

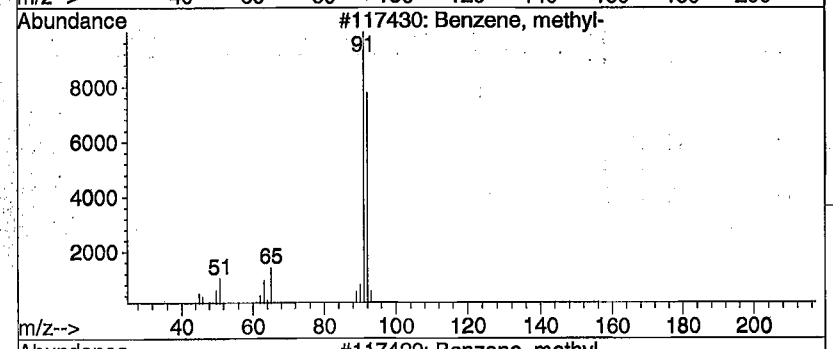
Peak Number 2 Benzene, methyl- Concentration Rank 6

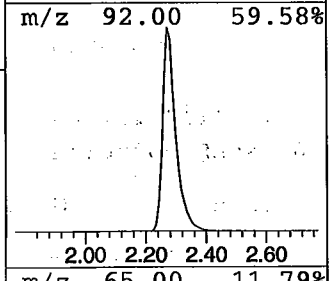
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.27	127.23 ppb	8368840	1,4-Dichlorobenzene-D (IS)	11.82

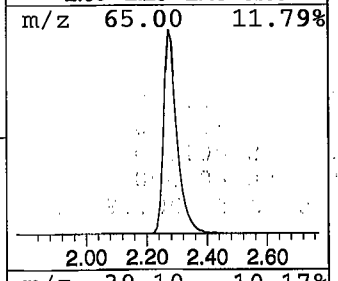
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	91
2	Benzene, methyl-	92	C7H8	000108-88-3	91
3	Benzene, methyl-	92	C7H8	000108-88-3	91
4	Benzene, methyl-	92	C7H8	000108-88-3	91

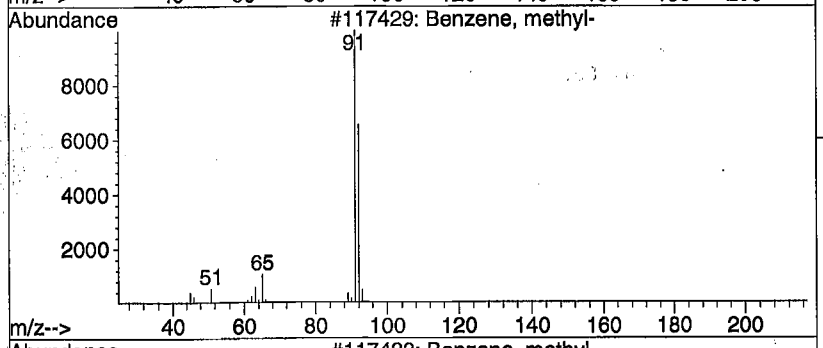


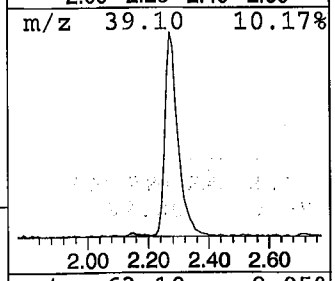


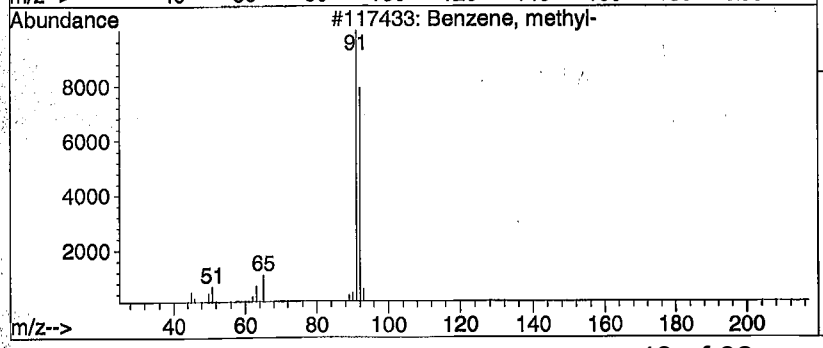


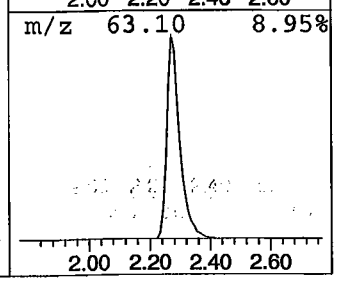












Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

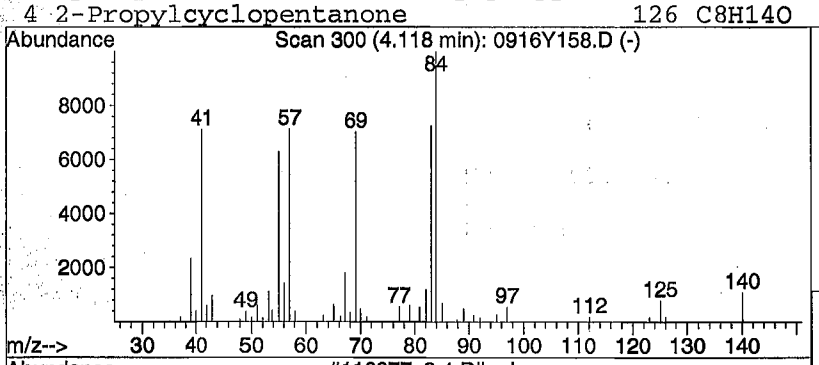
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

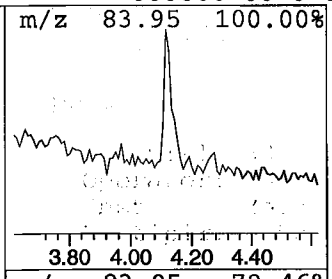
****

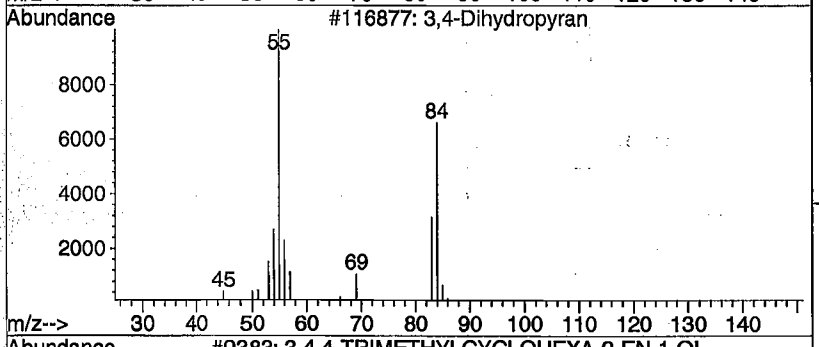
Peak Number 3 3,4-Dihydropyran Concentration Rank 11

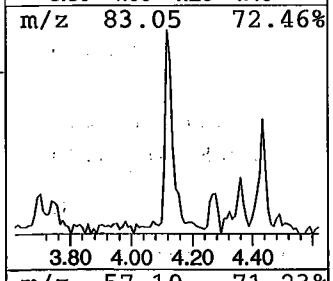
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.12	4.20 ppb	276237	1,4-Dichlorobenzene-D (IS)	11.82

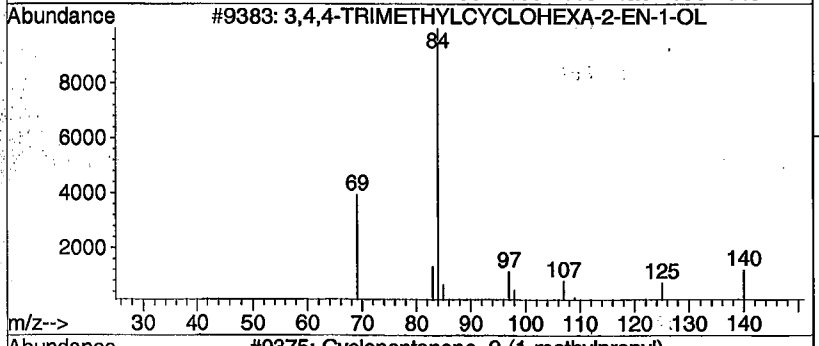
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3,4-Dihydropyran	84	C5H8O	000110-87-2	59
2	3,4,4-TRIMETHYLCYCLOHEXA-2-EN-1-OL	140	C9H16O	073741-63-6	58
3	Cyclopentanone, 2-(1-methylpropyl)-	140	C9H16O	006376-92-7	53
4	2-Propylcyclopentanone	126	C8H14O	000000-00-0	47

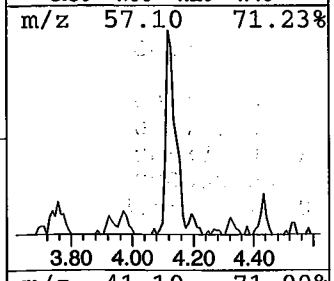


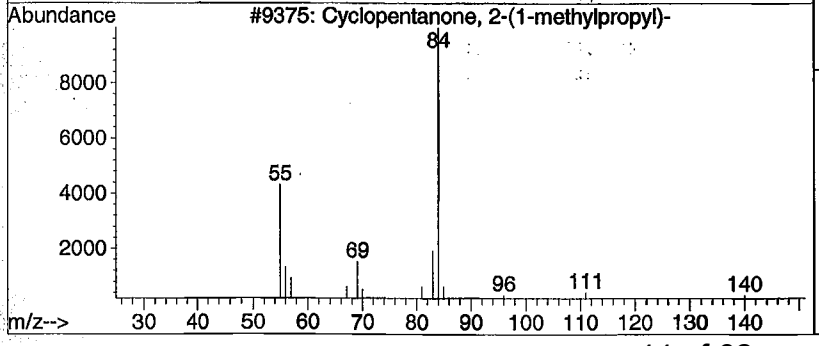


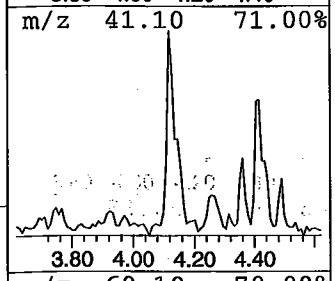


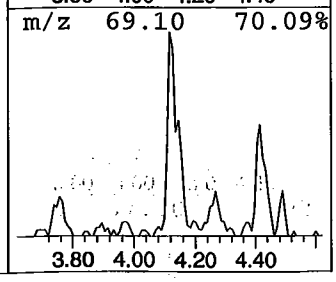












Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

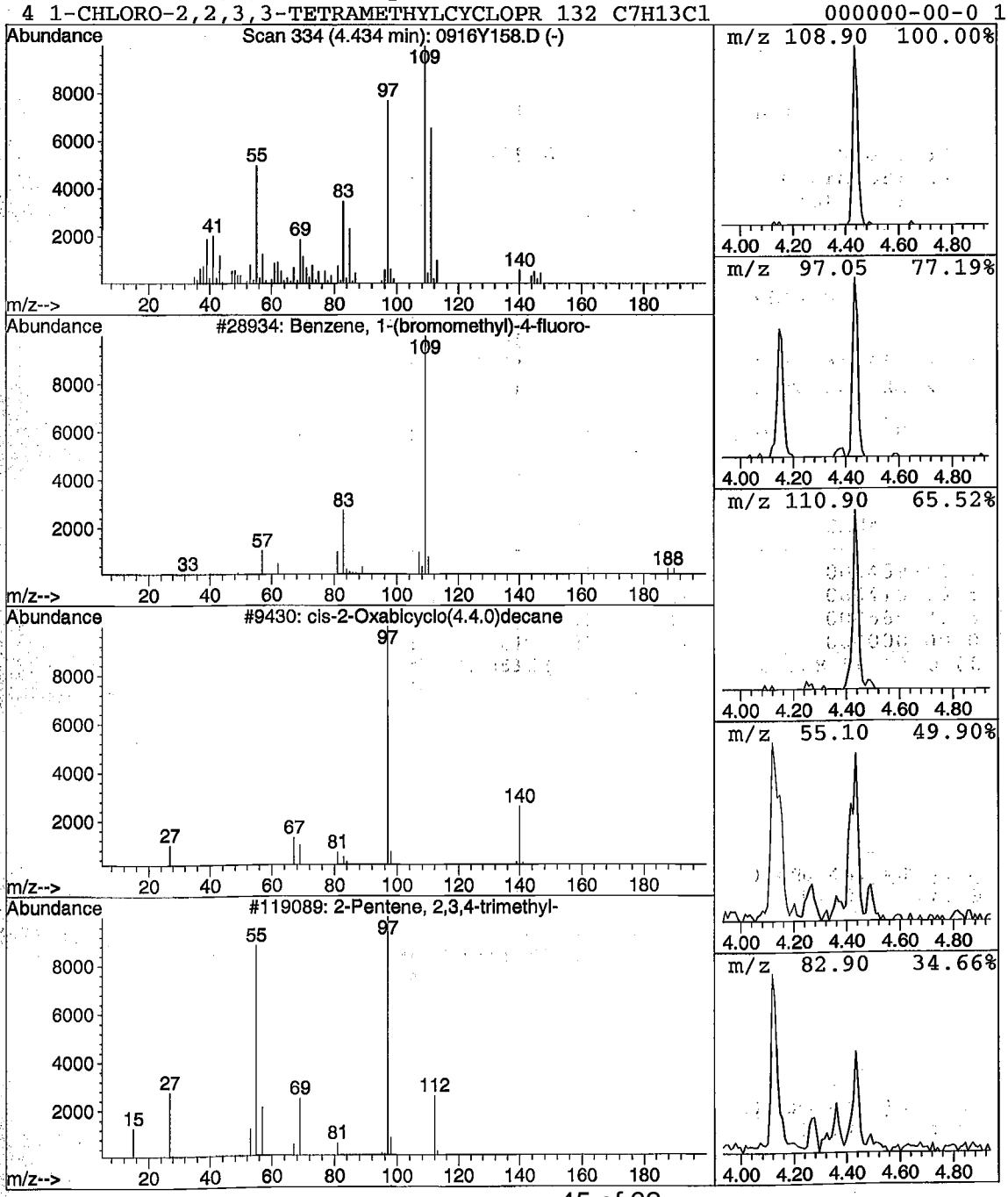
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 4 Benzene, 1-(bromomethyl)-4-flu Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.43	3.83 ppb	251611	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-(bromomethyl)-4-fluoro-	188	C7H6BrF	000459-46-1	17
2	cis-2-Oxabicyclo(4.4.0)decane	140	C9H16O	060416-19-5	10
3	2-Pentene, 2,3,4-trimethyl-	112	C8H16	000565-77-5	10
4	1-CHLORO-2,2,3,3-TETRAMETHYLCYCLOPR	132	C7H13Cl	000000-00-0	10



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

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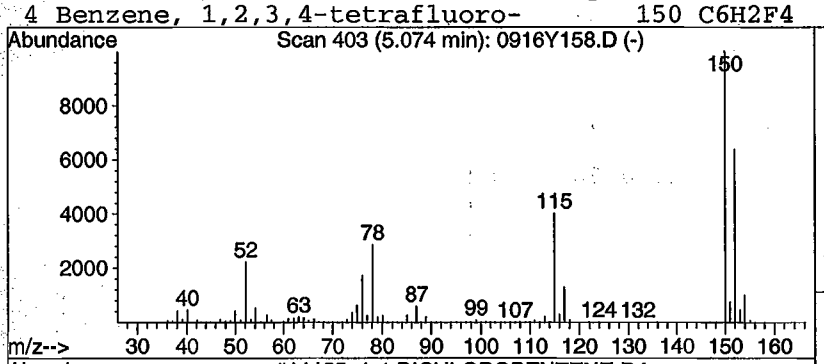
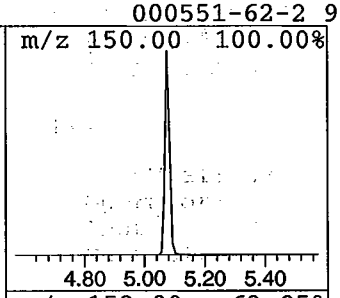
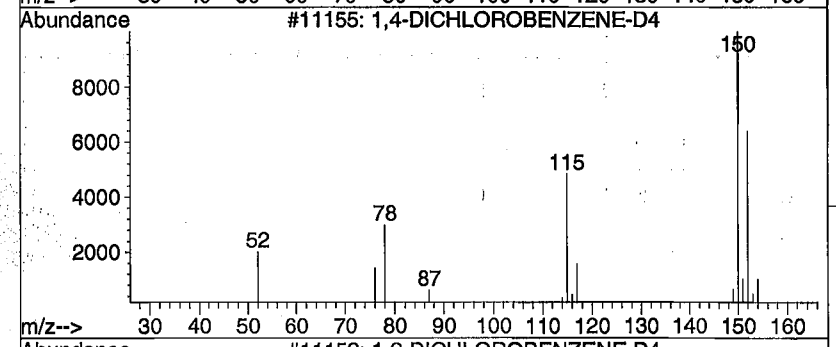
Peak Number 5 1,4-DICHLOROBENZENE-D4 Concentration Rank 7

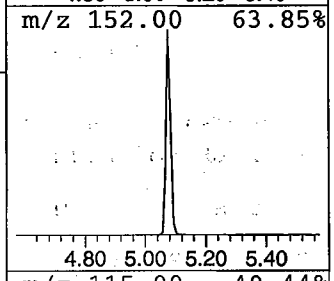
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.07	112.04 ppb	7369420	1,4-Dichlorobenzene-D (IS)	11.82

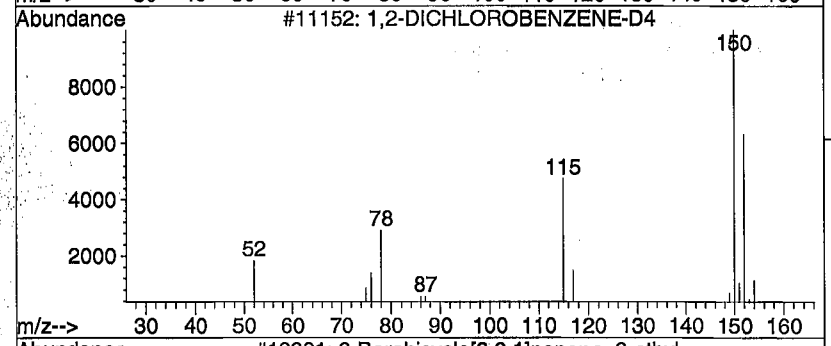
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-DICHLOROBENZENE-D4	146	C6D4Cl2	000000-00-0	94
2	1,2-DICHLOROBENZENE-D4	146	C6D4Cl2	000000-00-0	93
3	9-Borabicyclo[3.3.1]nonane, 9-ethyl	150	C10H19B	052102-17-7	9
4	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	9

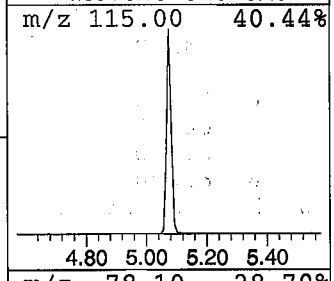


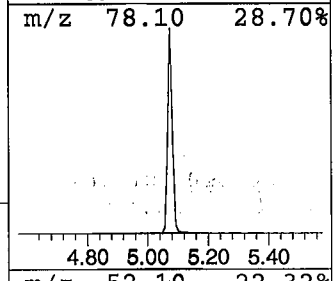


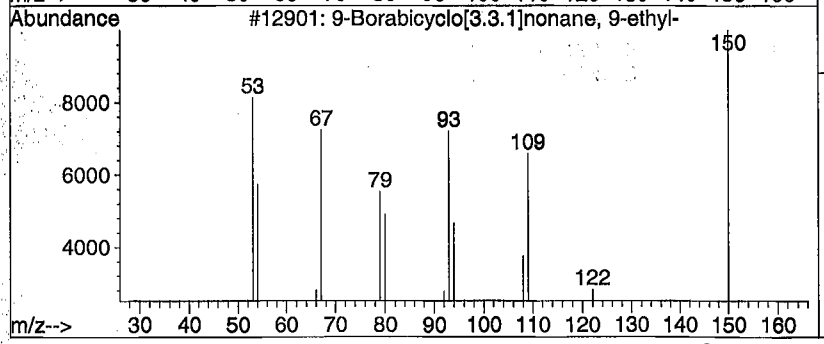


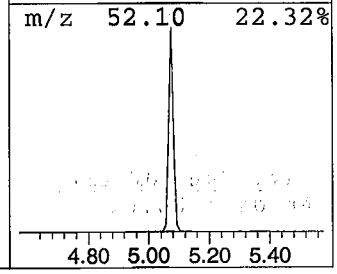












Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

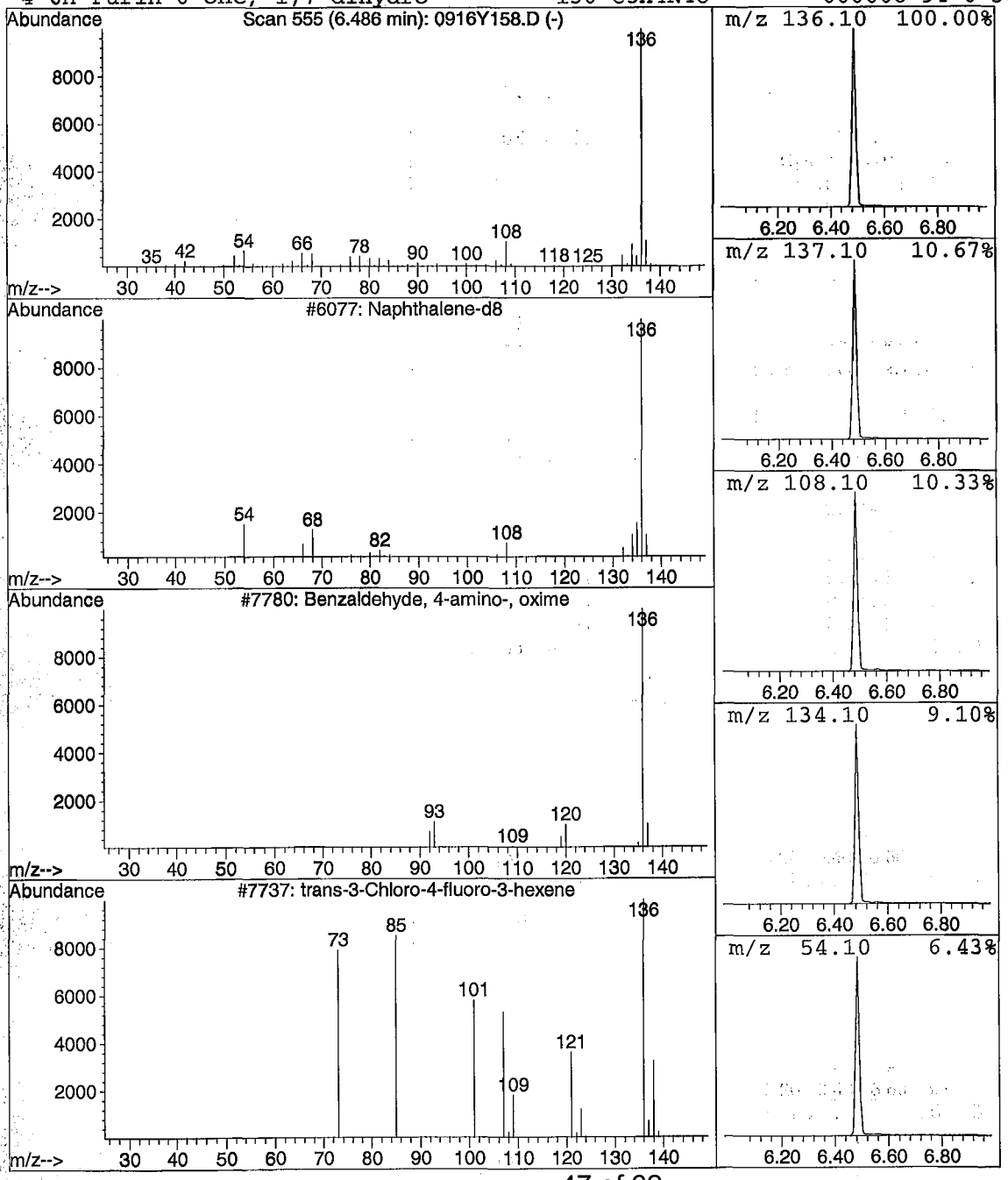
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 6 Naphthalene-d8 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.49	150.55 ppb	9902640	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene-d8	128	C10D8	000000-00-0	87
2	Benzaldehyde, 4-amino-, oxime	136	C7H8N2O	003419-18-9	45
3	trans-3-Chloro-4-fluoro-3-hexene	136	C6H10ClF	087161-02-2	42
4	6H-Purin-6-one, 1,7-dihydro-	136	C5H4N4O	000068-94-0	38



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

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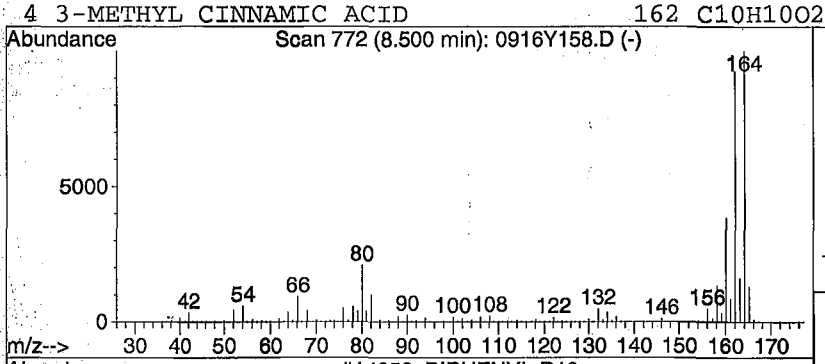
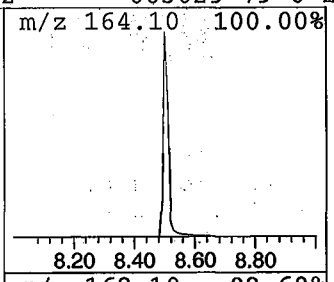
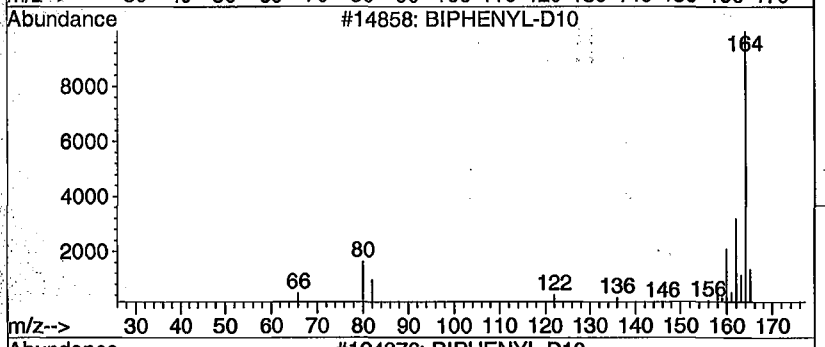
Peak Number 7 BIPHENYL-D10 Concentration Rank 4

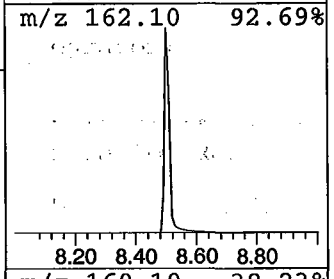
R.T.	EstConc	Area	Relative to ISTD	R.T.
8.50	173.99 ppb	11444300	1,4-Dichlorobenzene-D (IS)	11.82

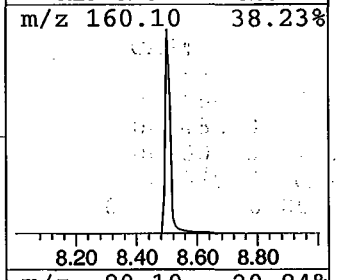
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	BIPHENYL-D10	154	C12D10	001486-01-7	74
2	BIPHENYL-D10	154	C12D10	001486-01-7	62
3	Thiophene, 2-bromo-	162	C4H3BrS	001003-09-4	40
4	3-METHYL CINNAMIC ACID	162	C10H10O2	003029-79-6	25

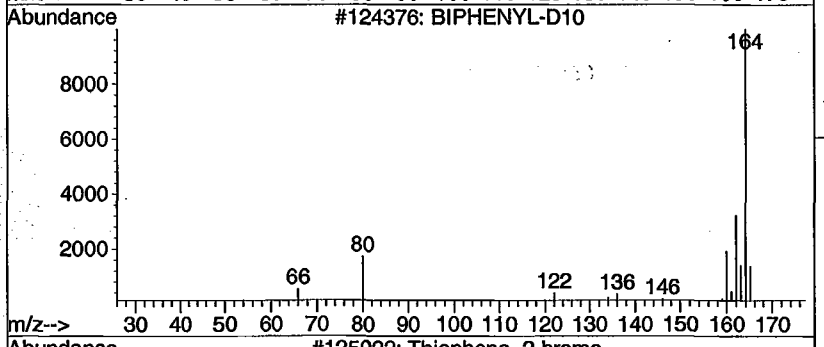


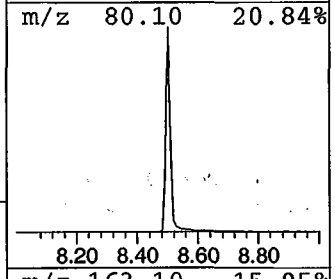


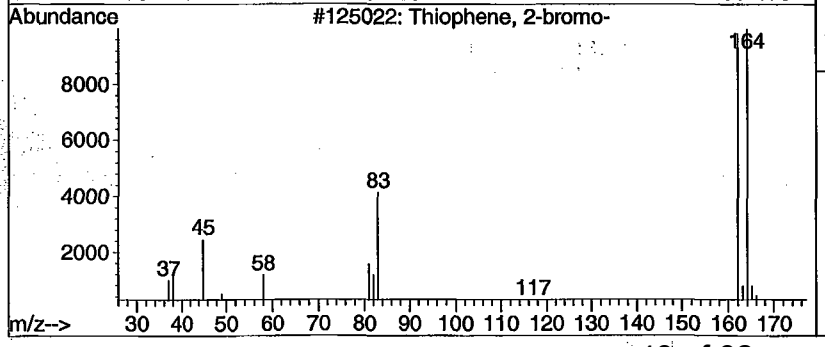


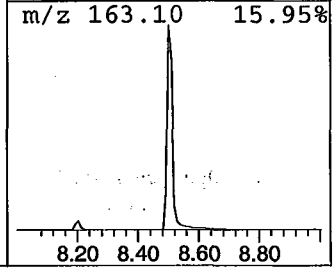












Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

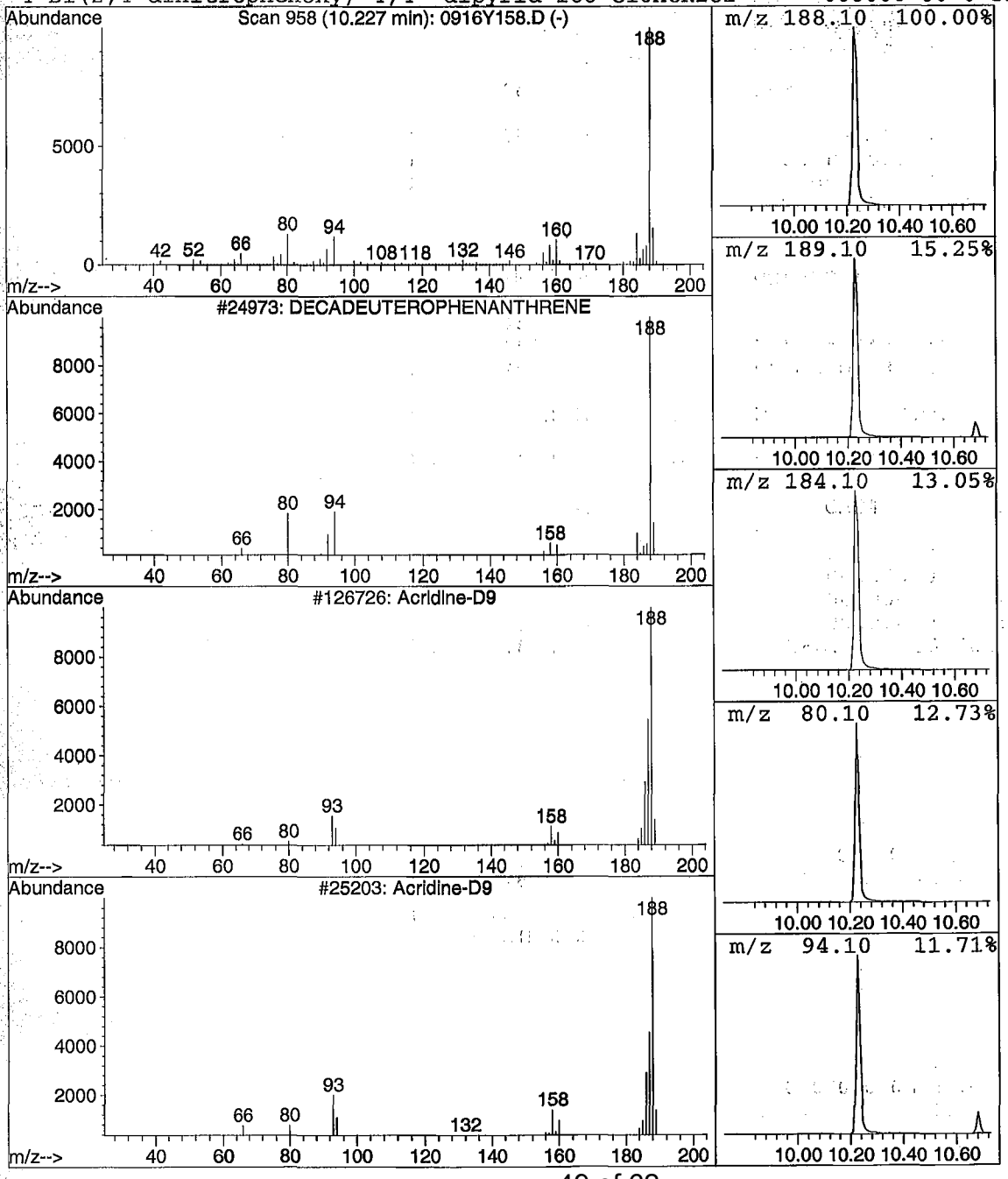
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 8 DECADEUTEROPHENANTHRENE Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.23	181.08 ppb	11910700	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	DECADEUTEROPHENANTHRENE	178	C14D10	001517-22-2	87
2	Acridine-D9	179	C13D9N	000000-00-0	80
3	Acridine-D9	179	C13D9N	000000-00-0	78
4	Di(2,4-dinitrophenoxy)-4,4'-dipyrid	188	C10H8N2O2	000000-00-0	59



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

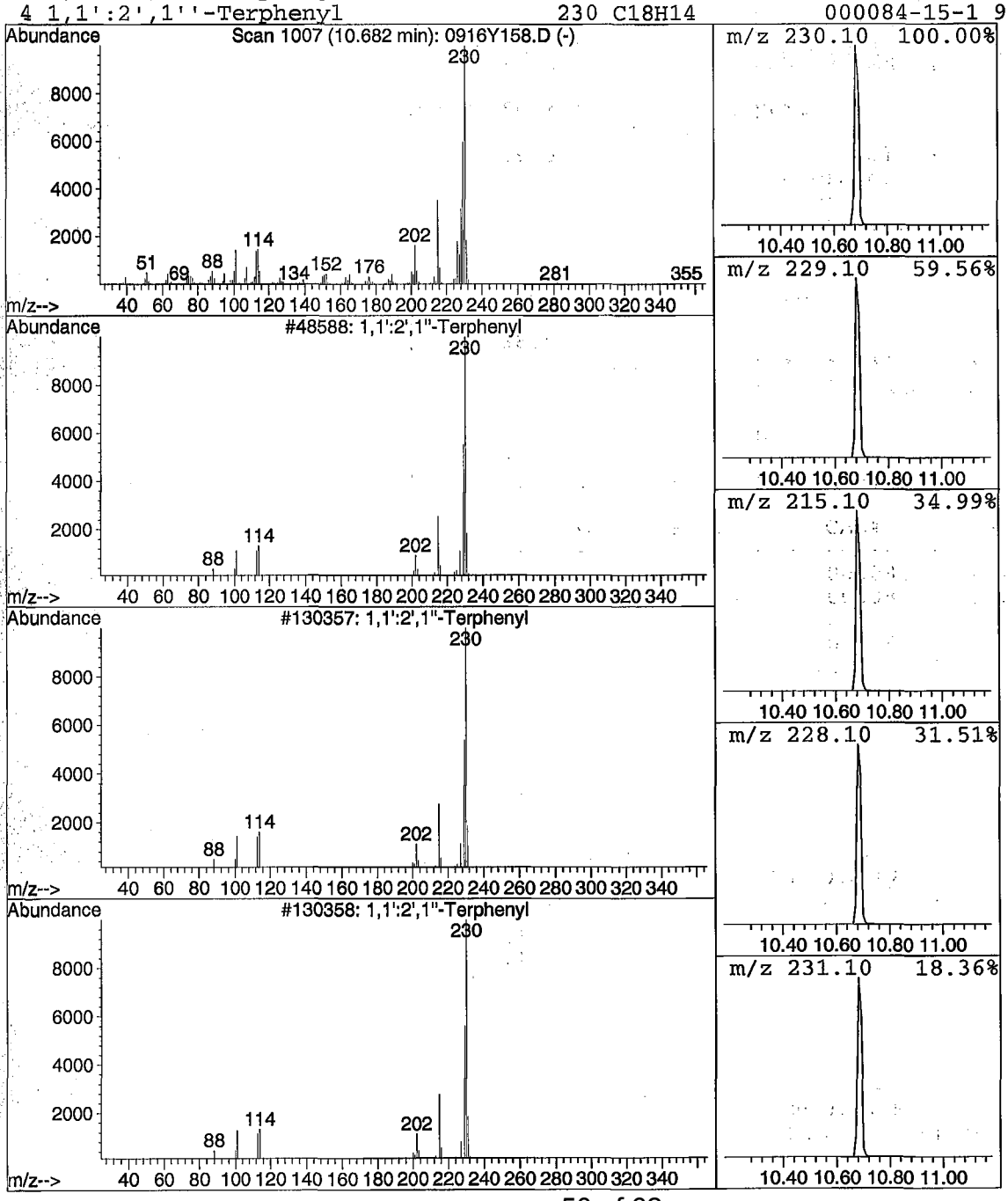
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 9 1,1':2',1''-Terphenyl Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.68	95.67 ppb	6292870	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
2	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
3	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
4	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	98



Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
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Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

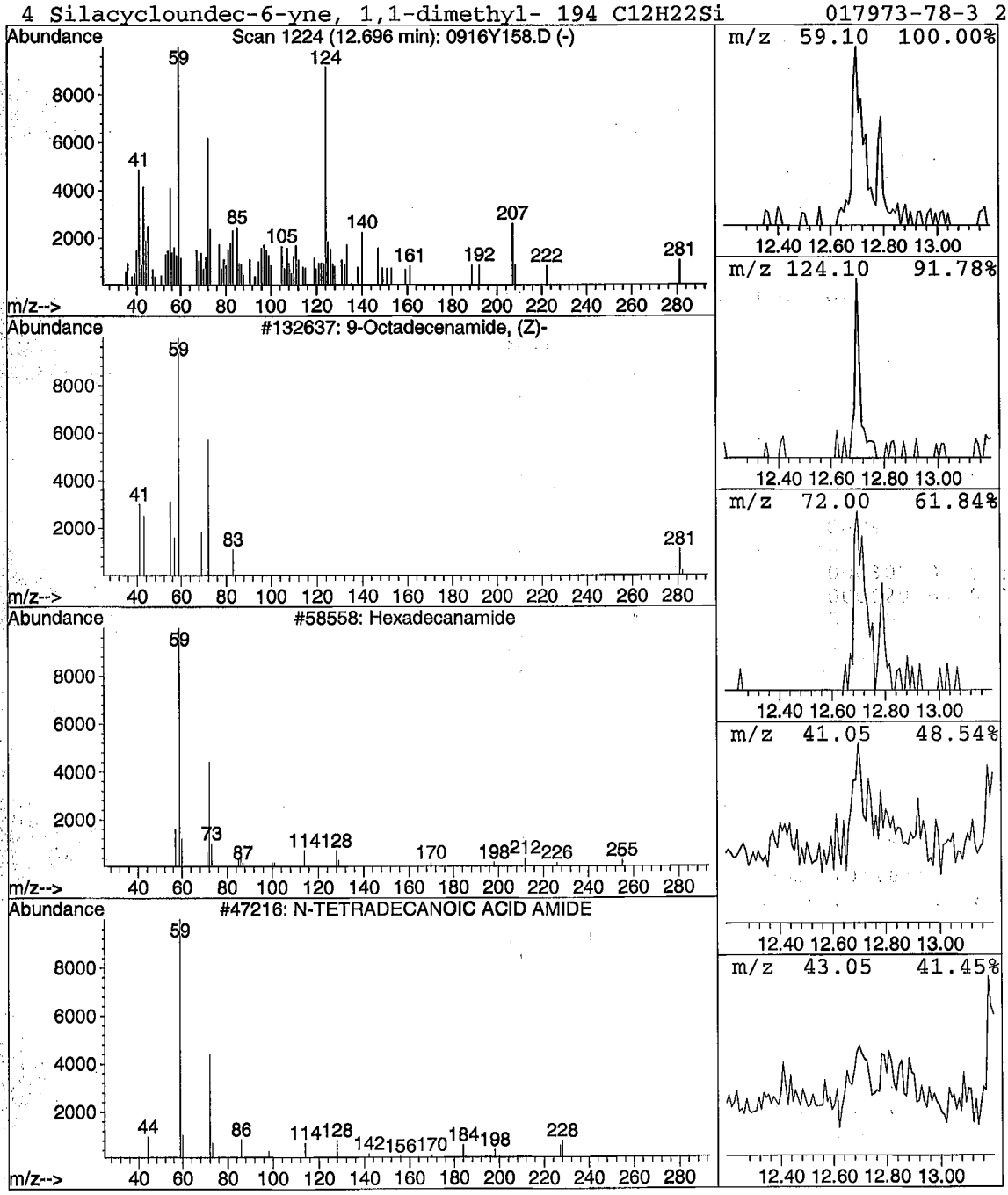
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

****

Peak Number 10 9-Octadecenamide, (Z)- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.70	25.00 ppb	1644430	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	35
2	Hexadecanamide	255	C16H33NO	000629-54-9	35
3	N-TETRADECANOIC ACID AMIDE	227	C14H29NO	000000-00-0	27
4	Silacycloundec-6-yne, 1,1-dimethyl-	194	C12H22Si	017973-78-3	22



Library Search Compound Report

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Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

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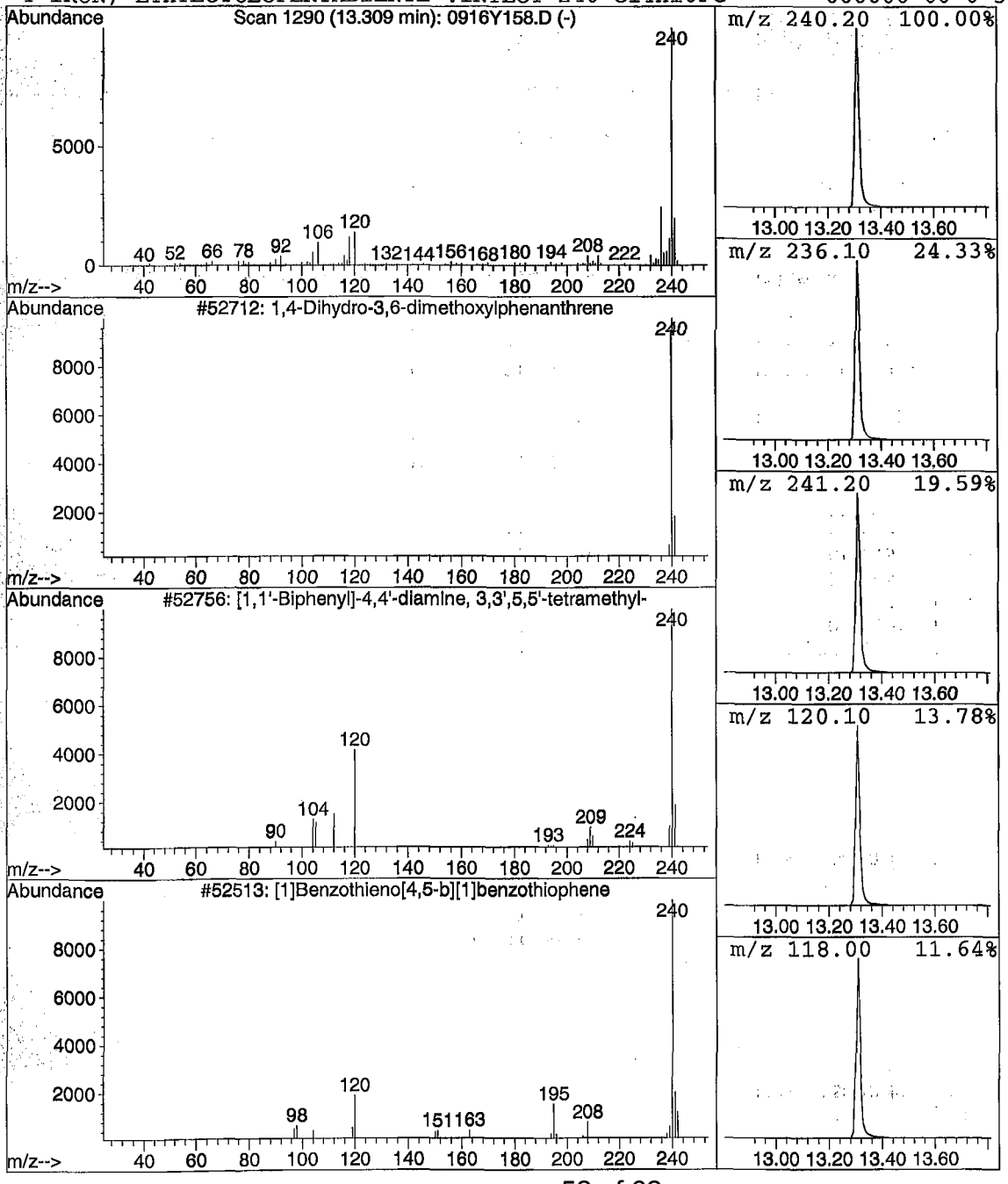
Peak Number 11 1,4-Dihydro-3,6-dimethoxylphen Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.31	181.98 ppb	11970000	1,4-Dichlorobenzene-D (IS)	11.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dihydro-3,6-dimethoxylphenanthr	240	C16H16O2	069795-79-5	74
2	[1,1'-Biphenyl]-4,4'-diamine, 3,3',	240	C16H20N2	054827-17-7	59
3	[1]Benzothieno[4,5-b][1]benzothioph	240	C14H8S2	055134-02-6	59
4	IRON, ETHYLCYCLOPENTADIENYL-VINYLCY	240	C14H16Fe	000000-00-0	50



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y158.D Vial: 58
Acq On : 4 Oct 21 12:50 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 1.00

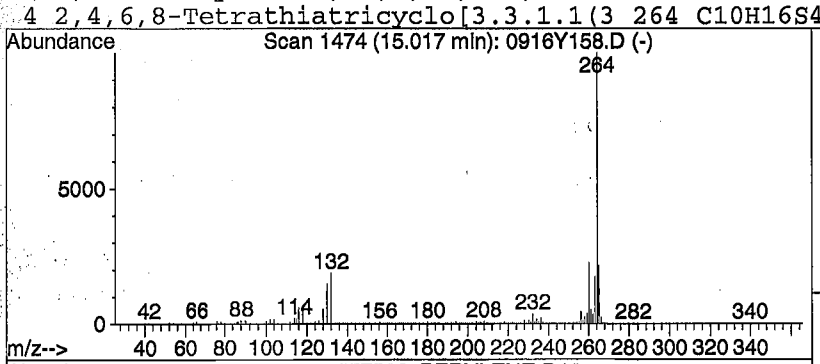
Quant Method : M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title : METHOD 8260B
Library : M:\DATABASE\WILEY138.L

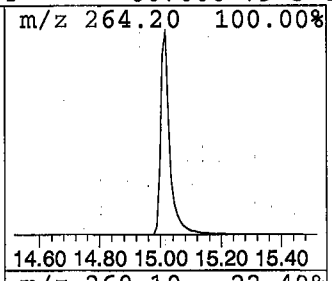
****

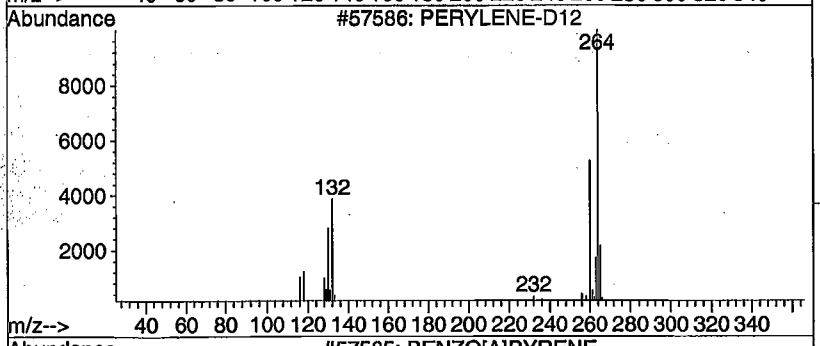
Peak Number 12 PERYLENE-D12 Concentration Rank 1

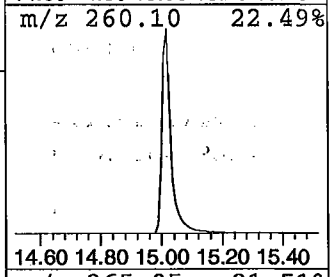
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.02	347.86 ppb	22881600	1,4-Dichlorobenzene-D (IS)	11.82

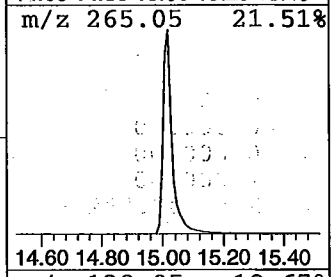
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	PERYLENE-D12	252	C20D12	000000-00-0	81
2	BENZO[A]PYRENE	252	C20D12	000000-00-0	78
3	5,6-Dimethylene-5,5a,6,11,11a,12-he	264	C16H16N4	000000-00-0	59
4	2,4,6,8-Tetrathiatricyclo[3.3.1.1(3	264	C10H16S4	007000-79-5	47

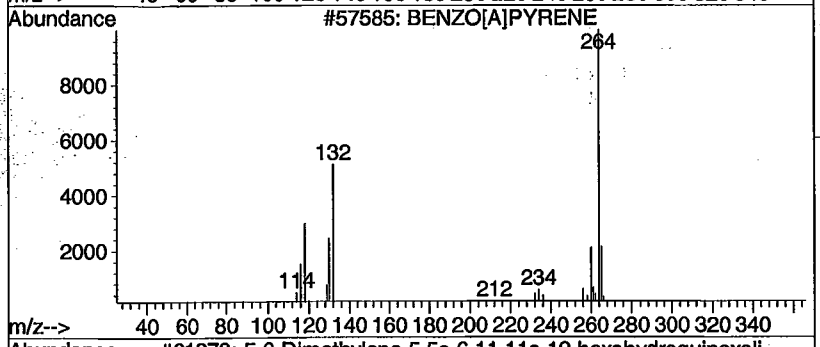


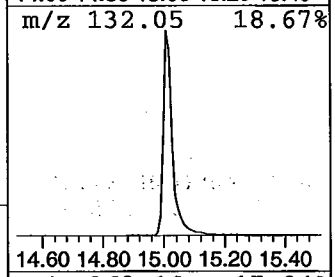


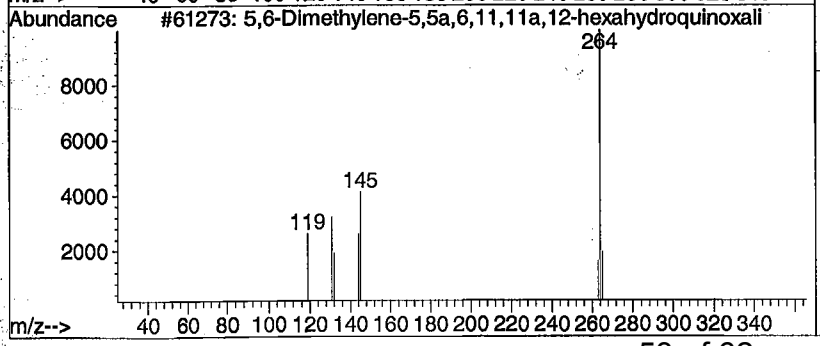


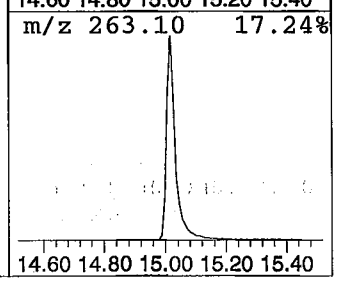












Tentatively Identified Compound (LSC) summary

Operator ID: LS Date Acquired: 4 Oct 21 12:50
Data File: M:\YODA\DATA\Y210916\0916Y158.D
Name: BA40215W08 5/1020 TPH
Misc:
Method: M:\MAX\DATA\210716\M0716W.M (RTE Integrator)
Title: METHOD 8260B
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Buten-2-ol, 2-meth	1.64	38.4	ppb	2527870	ISTD01	11.82	1644430	25.0
Benzene, methyl-	2.27	127.2	ppb	8368840	ISTD01	11.82	1644430	25.0
3,4-Dihydropyran	4.12	4.2	ppb	276237	ISTD01	11.82	1644430	25.0
Benzene, 1-(bromomet	4.43	3.8	ppb	251611	ISTD01	11.82	1644430	25.0
1,4-DICHLOROBENZENE-	5.07	112.0	ppb	7369420	ISTD01	11.82	1644430	25.0
Naphthalene-d8	6.49	150.5	ppb	9902640	ISTD01	11.82	1644430	25.0
BIPHENYL-D10	8.50	174.0	ppb	11444300	ISTD01	11.82	1644430	25.0
DECADEUTEROPHENANTHR	10.23	181.1	ppb	11910700	ISTD01	11.82	1644430	25.0
1,1':2',1''-Terpheny	10.68	95.7	ppb	6292870	ISTD01	11.82	1644430	25.0
9-Octadecenamide, (Z	12.70	25.0	ppb	1644430	ISTD01	11.82	1644430	25.0
1,4-Dihydro-3,6-dime	13.31	182.0	ppb	11970000	ISTD01	11.82	1644430	25.0
PERYLENE-D12	15.02	347.9	ppb	22881600	ISTD01	11.82	1644430	25.0

0916Y158.D M0716W.M Mon Dec 27 07:32:00 2021

LSC Area Percent Report

Data File : M:\YODA\DATA\Y210916\0916Y156.D Vial: 56
Acq On : 4 Oct 21 10:28 Operator: LS
Sample : BA40215W08 5/1020 TPH ERH1659 Inst : Yoda
Misc : Multiplr: 5.00000
MS Integration Params: LSCINT.P

Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

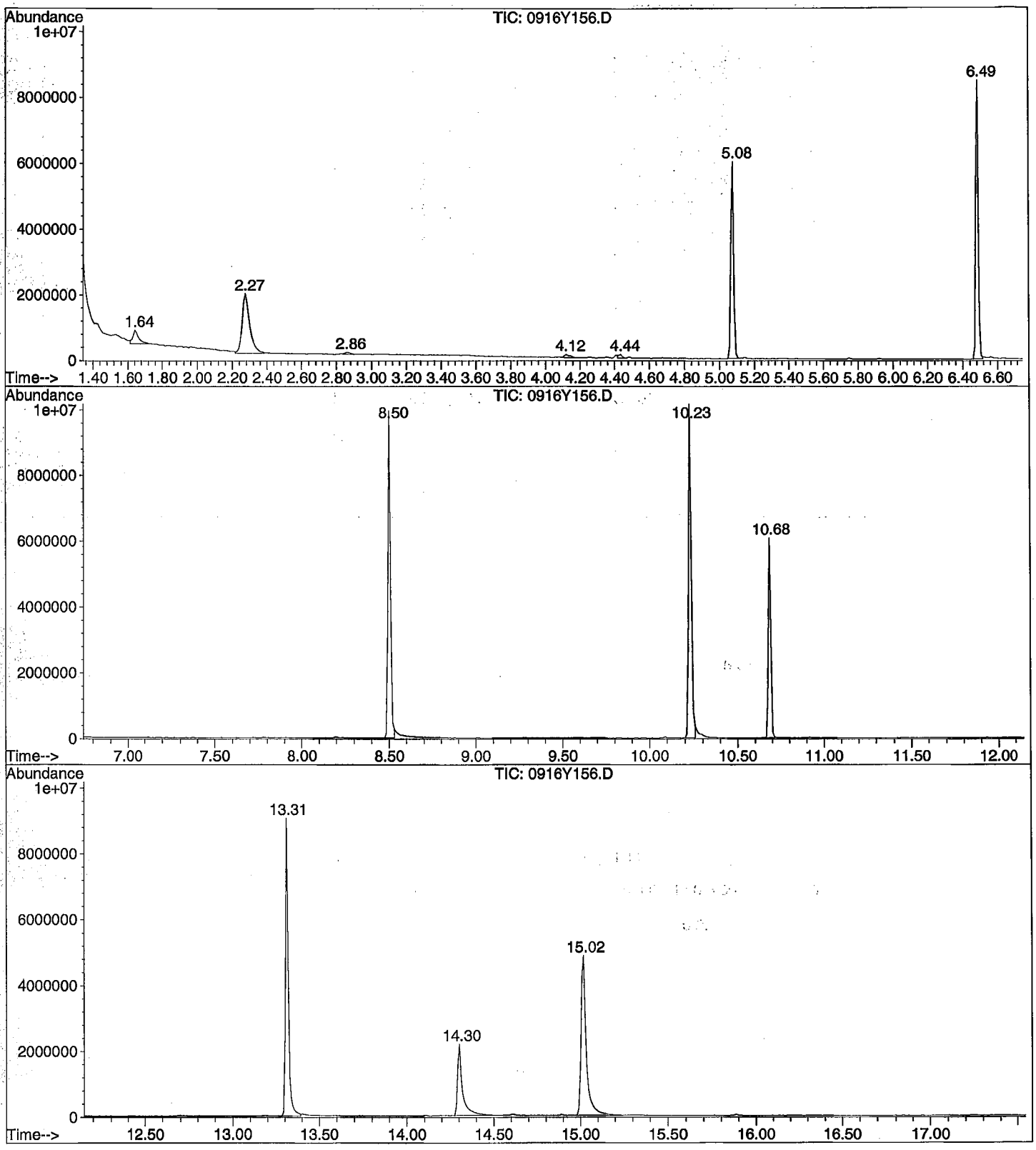
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	raw area	corr. area	corr. % max.	% of total
1	1.641	30	33	42	rVB2	419929	13145134	1011057	9.40%	1.373%
2	2.272	95	101	118	rVB	1814127	26427321	5482624	50.99%	7.444%
3	2.857	162	164	169	rVB2	61413	6399734	127532	1.19%	0.173%
4	4.120	297	300	306	rVB2	95354	7957538	213097	1.98%	0.289%
5	4.435	332	334	337	rVB2	115055	4547293	151758	1.41%	0.206%
6	5.076	400	403	406	rBV	5979130	12326110	6617354	61.54%	8.985%
7	6.487	552	555	558	rBV	8455320	14345869	8677146	80.70%	11.782%
8	8.501	769	772	775	rBV	9934168	15183551	9928420	92.33%	13.481%
9	10.228	955	958	961	rBV	10148100	15978584	10752622	100.00%	14.600%
10	10.683	1004	1007	1010	rBV	6074060	10895593	5817452	54.10%	7.899%
11	13.310	1287	1290	1299	rBV	9049263	20993534	10495537	97.61%	14.251%
12	14.304	1393	1397	1421	rBV	2167650	28075854	4297015	39.96%	5.834%
13	15.018	1469	1474	1498	rBV	4861005	34752560	10077197	93.72%	13.683%

Sum of corrected areas: 73648811

0916Y156.D Y0730.M Mon Dec 27 07:30:38 2021

LSC Report - Integrated Chromatogram

File : M:\YODA\DATA\Y210916\0916Y156.D
Operator : LS
Acquired : 4 Oct 21 10:28 using AcqMethod SVOC1011
Instrument : Yoda
Sample Name: BA40215W08 5/1020 TPH
Misc Info :
Vial Number: 56
Quant File :Y0730.RES (RTE Integrator)



0916Y156.D Y0730.M Mon Dec 27 07:30:38 2021

Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y156.D Vial: 56
Acq On : 4 Oct 21 10:28 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 5.00

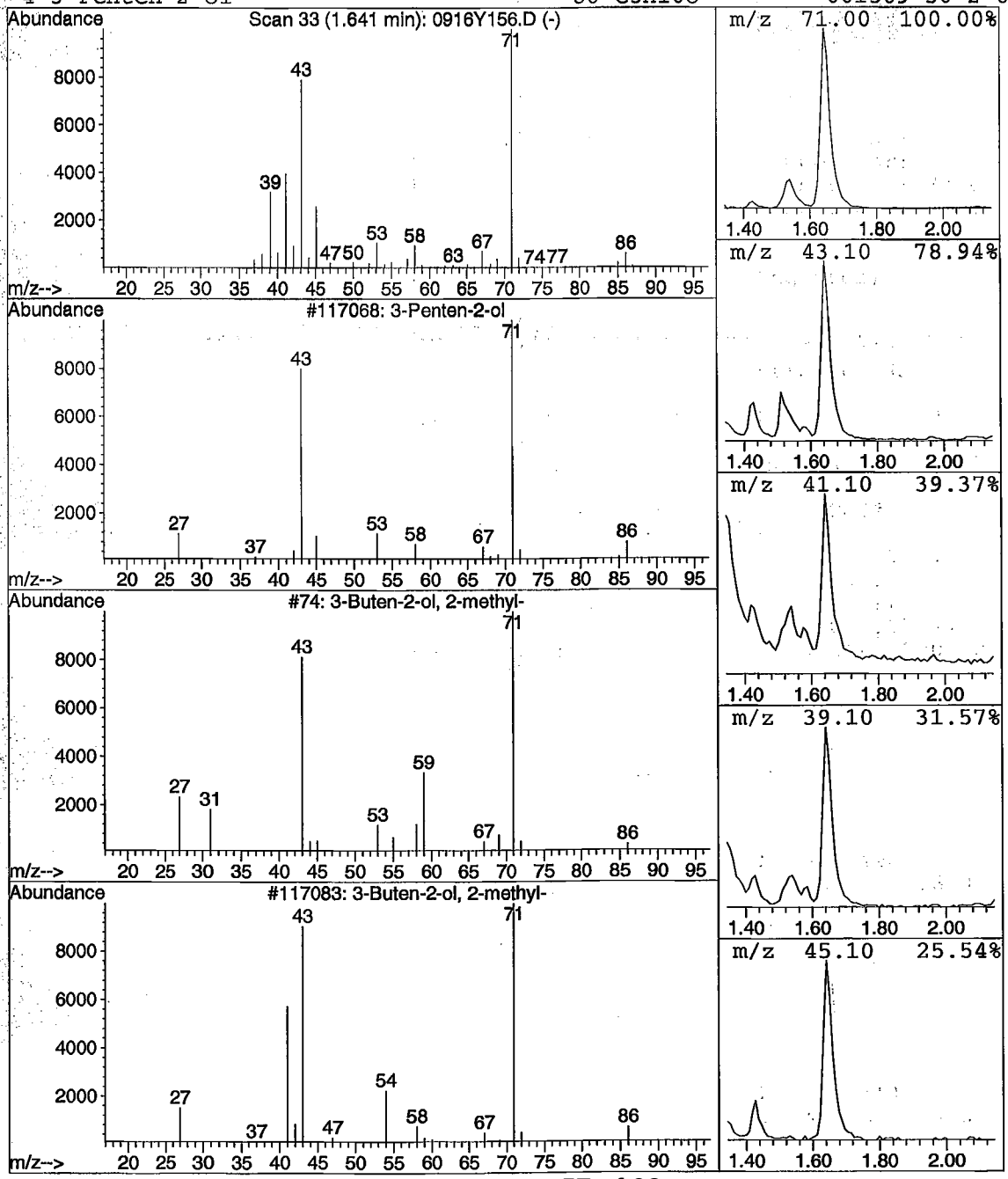
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

****

Peak Number 1 3-Penten-2-ol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.64	30.56 ppb	1011060	1,4-dichlorobenzene-D4(IS)	5.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Penten-2-ol	86	C5H10O	001569-50-2	86
2	3-Buten-2-ol, 2-methyl-	86	C5H10O	000115-18-4	80
3	3-Buten-2-ol, 2-methyl-	86	C5H10O	000115-18-4	64
4	3-Penten-2-ol	86	C5H10O	001569-50-2	64



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y156.D Vial: 56
Acq On : 4 Oct 21 10:28 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 5.00

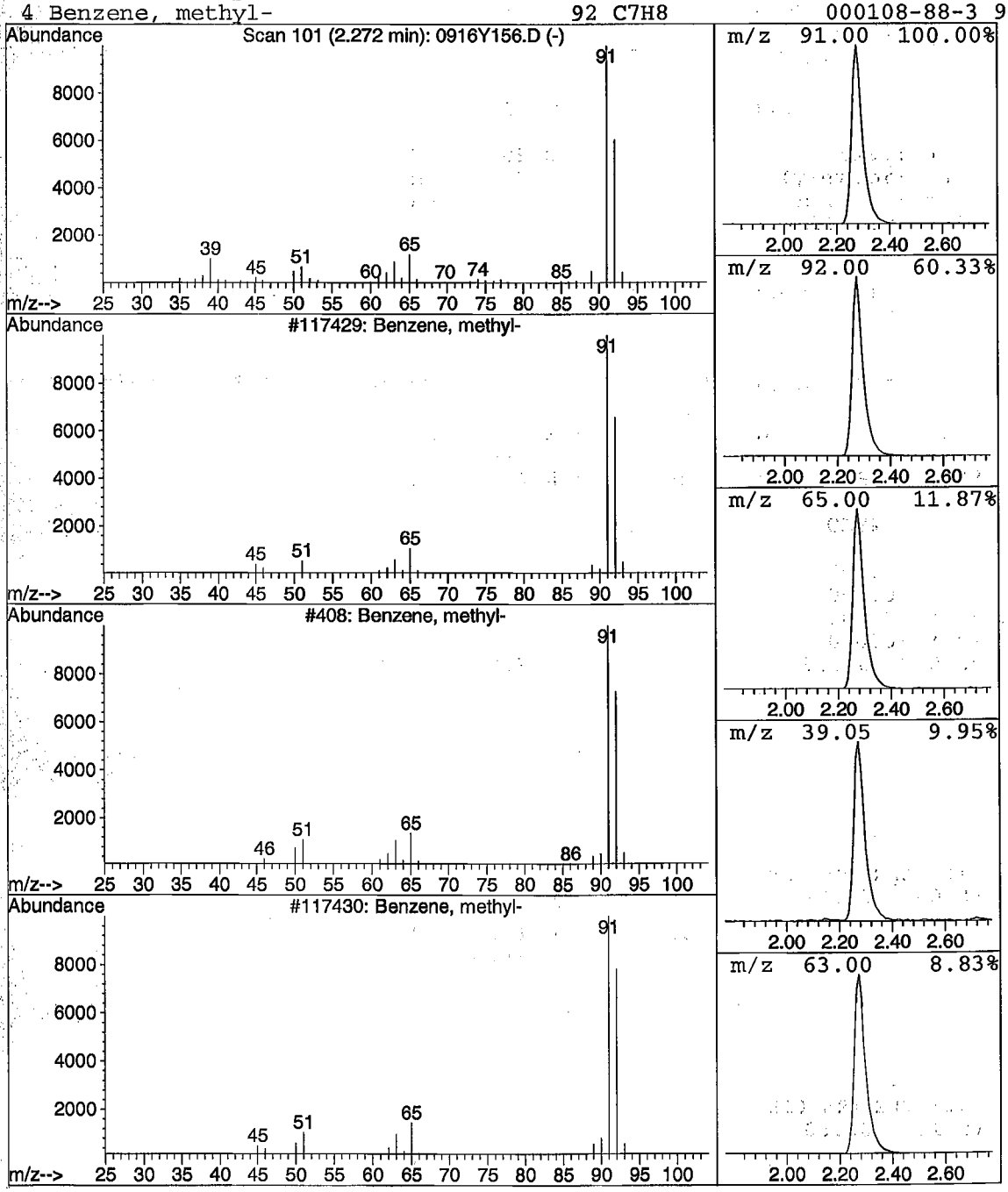
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

****

Peak Number 2 Benzene, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.27	165.70 ppb	5482620	1,4-dichlorobenzene-D4(IS)	5.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl-	92	C7H8	000108-88-3	91
2	Benzene, methyl-	92	C7H8	000108-88-3	91
3	Benzene, methyl-	92	C7H8	000108-88-3	91
4	Benzene, methyl-	92	C7H8	000108-88-3	91



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y156.D Vial: 56
Acq On : 4 Oct 21 10:28 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 5.00

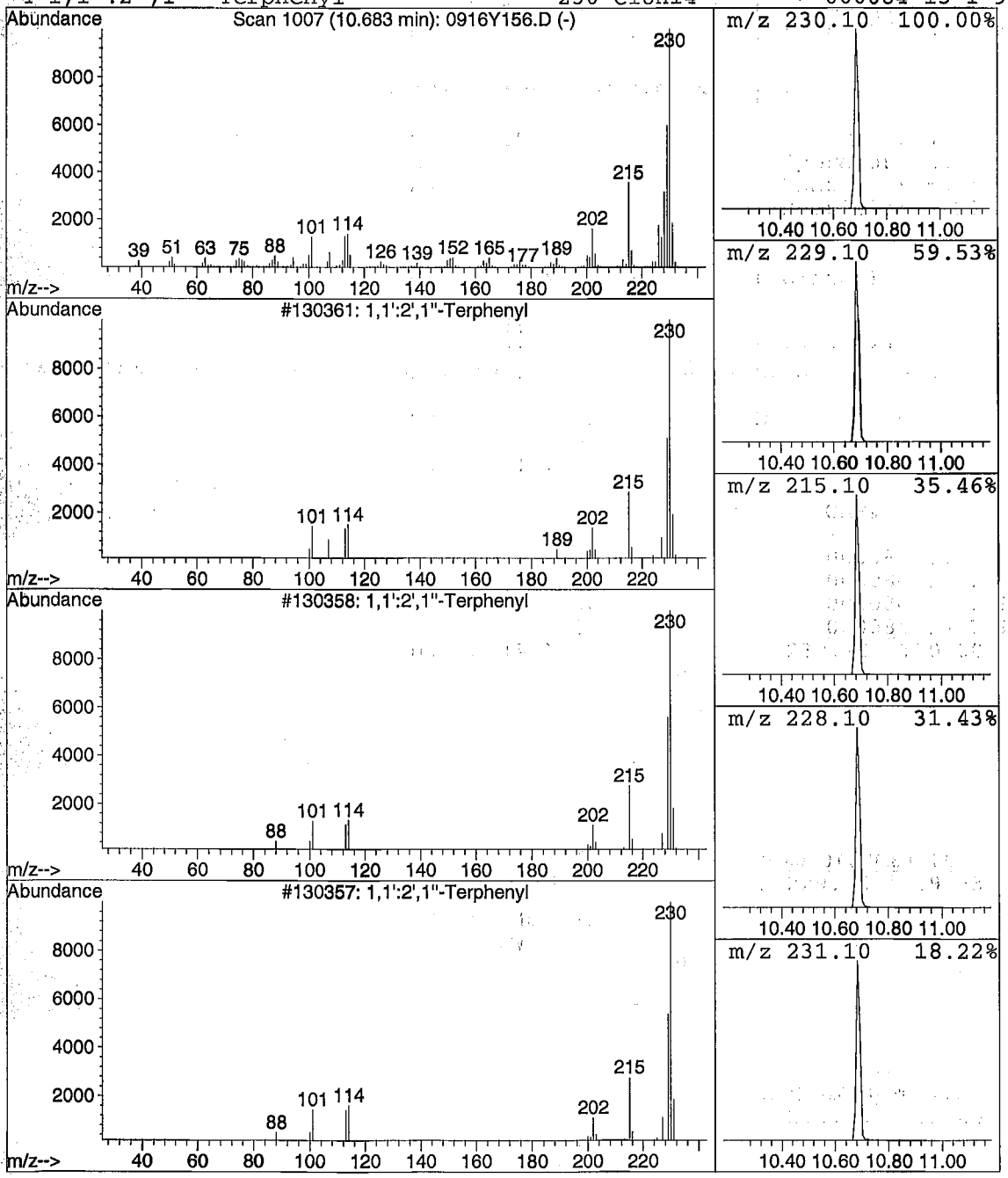
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

****

Peak Number 3 1,1':2',1''-Terphenyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.68	108.21 ppb	5817450	Phenanthrene-D10(IS)	10.23

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
2	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
3	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	99
4	1,1':2',1''-Terphenyl	230	C18H14	000084-15-1	98



Library Search Compound Report

Data File : M:\YODA\DATA\Y210916\0916Y156.D Vial: 56
Acq On : 4 Oct 21 10:28 Operator: LS
Sample : BA40215W08 5/1020 TPH Inst : Yoda
Misc : Multiplr: 5.00

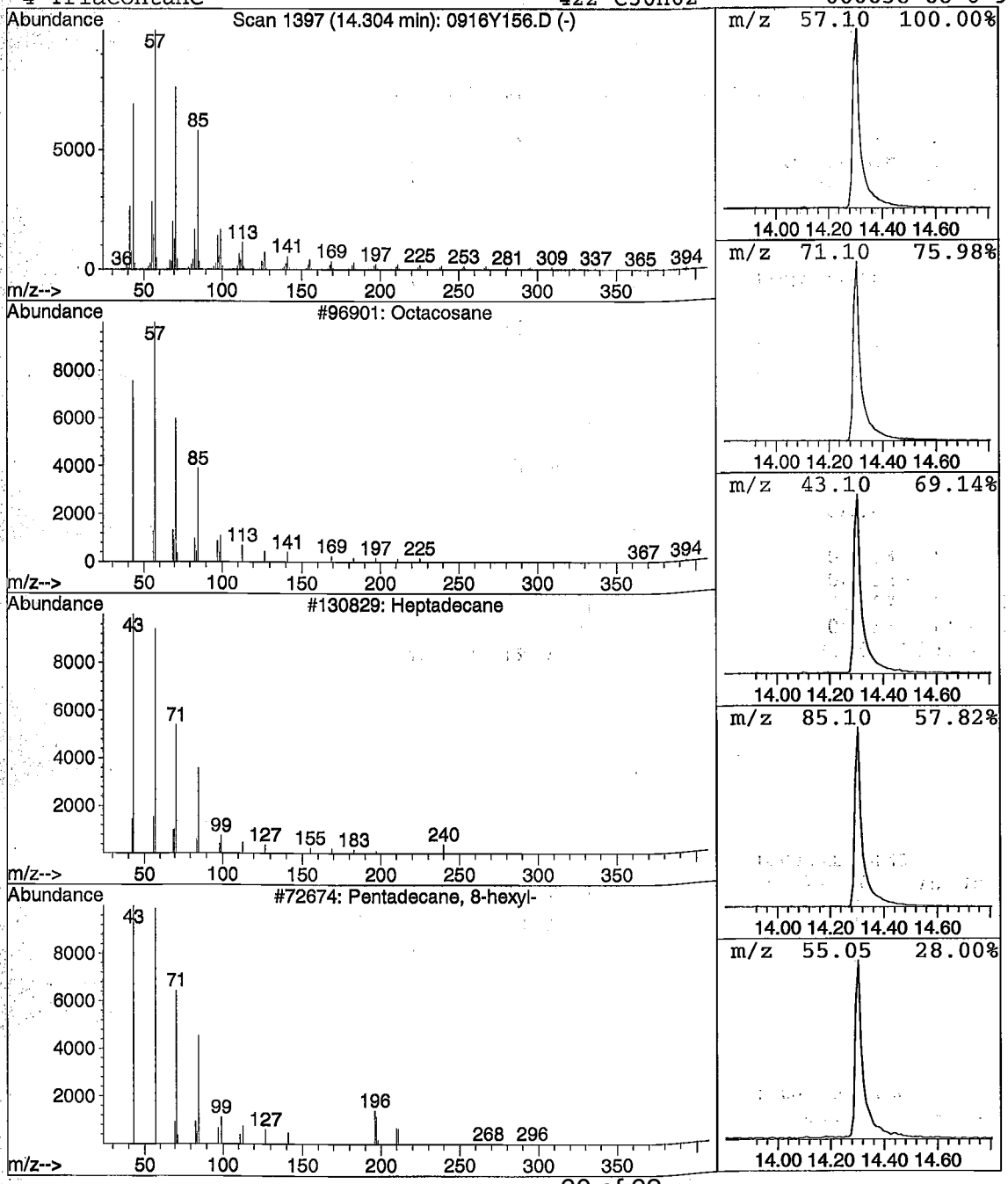
Quant Method : M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title : EPA 8270C
Library : M:\DATABASE\WILEY138.L

****

Peak Number 4 Octacosane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	85.28 ppb	4297020	Perylene-D12(IS)	15.02

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	98
2	Heptadecane	240	C17H36	000629-78-7	95
3	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	94
4	Triacontane	422	C30H62	000638-68-6	91



Tentatively Identified Compound (LSC) summary

Operator ID: LS Date Acquired: 4 Oct 21 10:28
Data File: M:\YODA\DATA\Y210916\0916Y156.D
Name: BA40215W08 5/1020 TPH
Misc:
Method: M:\YODA\DATA\Y210916\Y0730.M (RTE Integrator)
Title: EPA 8270C
Library Searched: M:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Penten-2-ol	1.64	30.6	ppb	1011060	ISTD01	5.08	6617350	40.0
Benzene, methyl-	2.27	165.7	ppb	5482620	ISTD01	5.08	6617350	40.0
1,1':2',1''-Terpheny	10.68	108.2	ppb	5817450	ISTD04	10.23	10752600	40.0
Octacosane	14.30	85.3	ppb	4297020	ISTD06	15.02	10077200	40.0

0916Y156.D Y0730.M Mon Dec 27 07:30:40 2021

Injection Log

Directory: M:\YODA\DATA\Y210916\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	52	0916Y152.D	1	MC		4 Oct 21 8:45
2	53	0916Y153.D	1	SV TUNE 7/2/21		4 Oct 21 9:22
3	54	0916Y154.D	1	50 ug/mL 08/16/21 (2)		4 Oct 21 9:37
4	55	0916Y155.D	5	BA40213W08 5/1000 TPH		4 Oct 21 10:02
5	56	0916Y156.D	5	BA40215W08 5/1020 TPH		4 Oct 21 10:28
6	57	0916Y157.D	1	BA40213W08 5/1020 TPH		4 Oct 21 11:57
7	58	0916Y158.D	1	BA40215W08 5/1020 TPH		4 Oct 21 12:50
8	59	0916Y159.D	1	SV TUNE 7/2/21		4 Oct 21 14:04
9	60	0916Y160.D	1	50 ug/mL 08/16/21 (2)		4 Oct 21 14:19