



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

March 24, 2022

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: Alethea Ramos

Title: Report of Data: Case 98556-rev

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:

Two aqueous water samples were received December 22, 2021. Revised written results for the requested analyses are being provided on this March 24, 2022.

Revision: The location ID was revised to reflect the location IDs in the revised COC.

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 98556
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CASE NARRATIVE

Case Narrative

ARF: 98556

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Sample Receipt Information:

Two aqueous water samples were received December 22, 2021, at 0.7°C. The sample group was assigned Analytical Request Form (ARF) number 98556.

Sample Preparation and Analysis Information:

For the APPL SOP ANA2MEE water analysis, the water phase of the sample was extracted according to 2MEE SPE Method.

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

Analytical Exceptions, Deviations and Abnormalities.

APPL SOP ANA2MEE: In the 211222A LCSD, 2MEE recovered above the upper control limit. 2MEE was not detected in the associated sample.

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description	Prep DateTime	Analysis DateTime
98556	12/22/2021	ERH2265	BA48142	12/21/2021 8:30:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER	12/22/2021 10:49:00 AM	12/22/2021 6:05:00 PM
98556	12/22/2021	ERH2267	BA48143	12/21/2021 9:30:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER	12/22/2021 10:49:00 AM	12/22/2021 6:28:00 PM

APPL Inc.
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 – (See case narrative)
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, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste 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
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

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

APPL - Analysis Request Form

98556



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 # 53428
 RAD Screen (Y/N): Y pH (Y/N): N
 Turn Around Type: 24 HOURS

Received by: MSA
 Date Received: 12/22/21 Time: 11:50
 Delivered by: FEDEX
 Shuttle Custody Seals (Y/N): Y Time Zone: -10
 Chest Temp(s): 0.7°C
 Color: A-Green
 Samples Chilled until Placed in Refrig/Freezer: Y
 Project Manager: Libby Cheesebor
 QC Report Type: DVP4DOD/EQUIS/HI
 Due Date: 12/23/21

Comments:

PM: login and F1s to Margie.Pascua@aecom.com & alethea.ramos@aecom.com

*AN: 1 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*

*FR: email ftp info to Margie, alethea.ramos@aecom.com, Stella, trommelfanger@lab-data.com
 EDD: AECOMEDD to alethea.ramos@, Margie.Pascua@aecom.com, jecklund@lab-data.com*

Sample Distribution:

GC: 2-\$87DMEEW5
Extractions: 2- MWE2MEE

Charges:

Invoice To:

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

Client ID	APPL ID	Sampled	Analyses Requested
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1. ERH2265	LCSD BA48142W 	12/21/21 08:30	\$87DMEEW5 -- See Comments
2. ERH2267	LCSD BA48143W 	12/21/21 09:30	\$87DMEEW5 -- See Comments

APPL Sample Receipt Form

ARF# 98556

Sample	Container Type	Count	p
BA48142	40 500mL Amber, unprsvd	2	NA
BA48143	40 500mL Amber, unprsvd	2	NA

Sample Container Type Count p



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

CHAIN OF CUSTODY RECORD

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

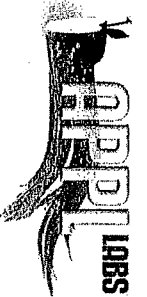
98554

C.O.C. 53428 NOT

Report to: PLEASE PRINT Company Name: _____ Phone: _____ Address: <u>AECOM</u> <u>1001 Bishop St., Suite 1600</u> <u>Honolulu, HI 96813</u> Attn: <u>Alethea Ramos (808)521-3051</u> <u>Alethea.Ramos@aecom.com</u> <u>CV_18F0126 / 60571032</u> Email: _____	Invoice to: PLEASE PRINT Company Name: <u>AECOM</u> Phone: <u>808-521-3051</u> Address: <u>1001 Bishop St., Ste 1600</u> <u>Honolulu, HI 96813</u> Attn: <u>Shereesmith@aecom.com</u> Email: <u>USAPImag.ny@aecom.com</u>
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Project Name/Number	Sampler (Print)	Analysis Requested/Method Number							Date Shipped: <u>12/21/21</u>
		Carrier: <u>FedEx</u>							
Purchase Order Number	Sampler (Signature)	Waybill No.:							Comments:
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed.	Soil	
<u>60571032.02.46.01</u>	<u>KL JW.NL MMC, MM</u>								
<u>102604</u>	<u>[Signature]</u>								
<u>ERH2265</u>	<u>RHST RHMW2254-01</u>	<u>12/21/21</u>	<u>0830</u>	<u>HST</u>	<u>2</u>	<u>X</u>			<u>X</u>
<u>ERH2267</u>	<u>RHST RHMW2254-01</u>	<u>↓</u>	<u>0930</u>	<u>↓</u>	<u>2</u>	<u>X</u>			<u>X</u>
<u>Jul 12/21/21</u>									

Shuttle Temperature: <u>IRB 4.4/0.7°C</u>	Turnaround Requested: Check one <input type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 3 days <input checked="" type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other: _____	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler:	Date: _____ Time: _____ Received by: _____	Relinquished by: _____ Date: _____ Time: _____ Received by: _____
Relinquished by: <u>Tianzhen Nie</u>	Date: <u>12/21/21</u> Time: <u>15:00</u> Received by: _____	Relinquished by: _____ Date: <u>12-22-21</u> Time: <u>1150</u> Received at lab by: <u>[Signature]</u>



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. 53428107

985526

Report to: PLEASE PRINT

Invoice to: PLEASE PRINT

Company Name: _____ Phone: _____

Company Name: AECOM Phone: 808-521-3051

Address: _____

Address: 1001 Bishop St, Ste 1600 Fax: _____

Att: _____

Att: Honolulu, HI 96813

Att: Alethea Ramos (808)521-3051

Att: Alethea.Ramos@aecom.com

Email: _____

Email: USAPImag.mg@aecom.com

Project Name/Number: _____

Analysis Requested/Method Number: _____

Purchase Order Number: 102604

Date Shipped: 12/21/21

Sampler (Print): KL, JW, NL, MMC, MM

Carrier: FedEx

Sampler (Signature): [Signature]

Waybill No.: _____

Sample Identification: KLST

Comments: _____

Location: PHSE

Matrix: Soil

Date Collected: 12/21/21

Time Collected: 0930

Time Zone: HST

No. of Containers: 2 X

Aq: X

Sed: X

Soil: X

Relinquished by: _____

Turnaround Requested: Standard 2-3 wk

Sample Disposal: Return to client

One week

3 days

24/48 Hrs.

Other: _____

Relinquished by: _____

Relinquished by: _____

Date: _____

Date: _____

Time: _____

Time: _____

Received by: _____

Received at lab by: _____

Shuttle Temperature: 18.4/0.7°C

Disposal by Lab (30-day retention): [Signature]

Relinquished by: TAMZLAM Nie

Date: 12/21/21 Time: 15:00

White: Return to client with report

Yellow: Laboratory Copy

See reverse side for Container Preservative and Sampling Information

COOLER RECEIPT FORM

ARF: 98556

- 1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 12/22/2021
- 2) Coolers: Number of Coolers: 1
- 3) YES Were custody seals present and intact?
How many? 2 Name/Date on seal? SEE BELOW
- 4) YES Was there a shipping slip? Carrier name: FEDEX
- 5) Type of packing in cooler: bubble wrap popcorn foam plastic bags other
 wet ice dry ice no ice gel ice
- 6) YES Were cooler temperatures acceptable?
- 7) Serial number of calibrated thermometer used: IRB CF:-3.7°C
- 8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp
1: 4.4/0.7 2: _____ 3: _____ 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) NA Were bubbles present in volatile samples?

If yes, the following were received with air bubbles:

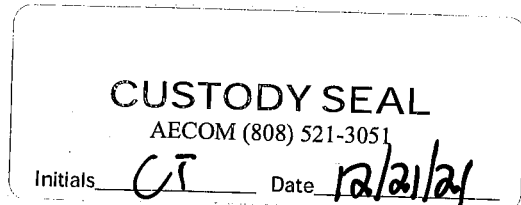
Larger than a pea: _____
Smaller than a pea: _____

Preservation Hold time:

- 18) Yes Was a sufficient amount of holding time remaining to analyze the samples?
- 19) NA Was the pH taken of all non-VOA preserved samples and written on the sample container?
- 20) NA 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: _____
Lab notified if pH was not adequate: _____

Notes/Deficiencies:



Personnel receiving samples: MS
 Personnel labeling samples: CH
 Project manager notified: MS
 Name of client notified: _____

Second reviewer: MS
 Date/Time of notification 12/22/2021
 Date/Time of notification _____

SAMPLE RESULTS

EPA 8270D MODIFIED WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Attn: Alethea Ramos
Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH2265

Sample Collection Date: 12/21/21

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 98556

APPL ID: BA48142

QCG: #87DME-211222A-271915

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	12/22/21	12/22/21

Quant Method: YMEE1110.M
Run #: 1110Y136
Instrument: Yoda
Sequence: Y211110M
Dilution Factor: 1
Initials: LPO

Printed: 12/23/2021 5:37:51 AM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D MODIFIED WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Attn: Alethea Ramos
Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH2267

Sample Collection Date: 12/21/21

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 98556

APPL ID: BA48143

QCG: #87DME-211222A-271915

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	12/22/21	12/22/21

Quant Method: YMEE1110.M
Run #: 1110Y137
Instrument: Yoda
Sequence: Y211110M
Dilution Factor: 1
Initials: LPO

Printed: 12/23/2021 5:37:51 AM
APPL-F1-SC-NoMC-REG MDLs-DOD

QC FORMS

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc.

SDG No: 98556

Case No: 98556

Date Analyzed: 12/22/2021

Matrix: WATER

Instrument: Yoda

Blank ID: 211222A-BLK

Time Analyzed: 1656

APPL ID.	Client Sample No.	File ID.	Date Analyzed
211222A-BLK	Blank	1110Y133	12/22/2021 1656
211222A-LCS	Lab Control Spike	1110Y134	12/22/2021 1719
BA48142	ERH2265	1110Y136	12/22/2021 1805
BA48143	ERH2267	1110Y137	12/22/2021 1828
211222A-LCSD	Lab Control Spiked	1110Y139	12/22/2021 1914

Comments: Batch: #87DME-211222A

Printed: 12/23/2021 5:39:18 AM
Form 4, Blank Summary

Method Blank
EPA 8270D MODIFIED WATER

Blank Name/QCG: **211222W-48142 - 271915**
Batch ID: #87DME-211222A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	12/22/2021	12/22/2021

Quant Method: YMEE1110.M
Run #: 1110Y133
Instrument: Yoda
Sequence: Y211110M
Initials: LPO

GC SC-Blank-REG MDLs-DOD
Printed: 12/23/2021 5:39:46 AM

EPA 8270D

Form 4

LCS Summary

Lab Name: APPL, Inc.

SDG No: 98556

Case No: 98556

Date Analyzed: 12/22/2021

Matrix: WATER

Instrument: Yoda

LCS ID: 211222A-LCS

Time Analyzed: 1719

APPL ID.	Client Sample No.	File ID.	Date Analyzed
211222A-BLK	Blank	1110Y133	12/22/2021 1656
211222A-LCS	Lab Control Spike	1110Y134	12/22/2021 1719
BA48142	ERH2265	1110Y136	12/22/2021 1805
BA48143	ERH2267	1110Y137	12/22/2021 1828
211222A-LCSD	Lab Control Spiked	1110Y139	12/22/2021 1914

Comments: Batch: #87DME-211222A

Printed: 12/23/2021 5:39:09 AM
Form 4, LCS Summary

Laboratory Control Spike Recoveries

EPA 8270D MODIFIED WATER

APPL ID: 211222W-48142 LCS - 271915

Batch ID: #87DME-211222A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	85.7	127	107	159 #	30-130	38.8 #	20

= Recovery is outside QC limits.

Comments: _____

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	YMEE1110.M	YMEE1110.M
Extraction Date :	12/22/2021	12/22/2021
Analysis Date :	12/22/2021	12/22/2021
Instrument :	Yoda	Yoda
Run :	1110Y134	1110Y139
Initials :	LPO	

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: _____
Matrix: Water
ID: 1110Y001.D

SDG No: _____
Date Analyzed: 11/10/2021
Instrument: Yoda
Time Analyzed: 10:19

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	50ug/ml MEE 11/08/21	1110Y002.D	11/10/2021 10:34
2	100ug/ml MEE 11/08/2	1110Y003.D	11/10/2021 10:57
3	200ug/ml MEE 11/08/2	1110Y004.D	11/10/2021 11:20
4	400ug/ml MEE 11/08/2	1110Y005.D	11/10/2021 11:43
5	500ug/ml MEE 11/08/2	1110Y006.D	11/10/2021 12:06
6	600ug/ml MEE 11/08/2	1110Y007.D	11/10/2021 12:29
7	800ug/ml MEE 11/08/2	1110Y008.D	11/10/2021 12:53
8	1000ug/ml MEE 11/08/	1110Y009.D	11/10/2021 13:16
9	SSug/ml MEE 11/08/21	1110Y010.D	11/10/2021 14:06
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>28.7</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.3</u>
127 10 - 80% of mass 198	<u>46.1</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.6</u>
275 10 - 60% of mass 198	<u>31.3</u>
365 1 - 100% of mass 198	<u>3.9</u>
441 0.01 - 24% of mass 442	<u>16.1</u>
442 50 - 500% of mass 198	<u>122.0</u>
443 15 - 24% of mass 442	<u>19.3</u>

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 98556
Matrix: Water
ID: 1110Y131.D

SDG No: 98556
Date Analyzed: 12/22/2021
Instrument: Yoda
Time Analyzed: 11:54

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	500ug/ml (1) MEE 11/	1110Y132.D	12/22/2021 12:09
2	Blank	211222A BLK 2/500	12/22/2021 16:56
3	Lab Control Spike	211222A LCS-1 2/500	12/22/2021 17:19
4	ERH2265	BA48142W01 2/450	12/22/2021 18:05
5	ERH2267	BA48143W01 2/450	12/22/2021 18:28
6	Lab Control Spiked	211222A LCSD-1 2/500	12/22/2021 19:14
7	500ug/ml (2) MEE 11/	1110Y140.D	12/22/2021 19:37
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 9.95 - 80.04% of mass 198	<u>31.3</u>
68 0 - 2.04% of mass 69	<u>0.0</u>
70 0 - 2.04% of mass 69	<u>0.0</u>
127 10 - 80% of mass 198	<u>47.8</u>
197 0 - 2% of mass 198	<u>0.0</u>
198 100 - 100% of mass 198.05	<u>100.0</u>
199 5 - 9% of mass 198	<u>6.8</u>
275 10 - 60% of mass 198	<u>29.1</u>
365 1 - 100% of mass 198	<u>3.4</u>
441 0.01 - 24% of mass 442	<u>16.3</u>
442 50 - 500% of mass 198.05	<u>96.1</u>
443 15 - 24% of mass 442	<u>19.7</u>

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: _____
 Lab Code: _____ SDG No.: _____
 Lab File ID (Standard): 1110Y132.D Date Analyzed: 12/22/21
 Instrument ID: Yoda Time Analyzed: 12:09
 GC Column: _____ ID: _____ Heated Purge: (Y/N) _____

1,4-dichlorobenzene-D4(IS)						
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	678653	4.94				
UPPER LIMIT	1357306	5.11				
LOWER LIMIT	339327	4.77				
SAMPLE NO.						
01 211222A BLK 2/500	835560	4.93				
02 211222A LCS-1 2/500	772987	4.93				
03 BA48142W01 2/450	552284	4.93				
04 BA48143W01 2/450	792565	4.94				
05 211222A LCSD-1 2/500	580356	4.93				
06 500ug/ml (2) MEE 11/08	714770	4.93				
07						
08						
09						
10						
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12						
13						
14						
15						
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18						
19						
20						
21						
22						

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

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

ORGANICS
Calibration Data

2MEE
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc.

SDG No: _____

Case No: _____

Initial Cal. Date: 11/10/2021

Matrix: _____

Instrument: Yoda

Initials: MA

1110Y002.D 1110Y003.D 1110Y004.D 1110Y005.D 1110Y006.D 1110Y007.D 1110Y008.D 1110Y009.D

	Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r ²	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)															
2	TM	2-(2-Methoxyethoxy)ethanol	0.1763	0.1798	0.1757	0.1868	0.1883	0.1859	0.1879	0.1911		0.18	3.2	TM			
3																	
4																	
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34																	
35																	

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y002.D
Acq On : 10 Nov 21 10:34
Sample : 50ug/ml MEE 11/08/21
Misc : Water

Vial: 2
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 9:33 2021

Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Nov 10 09:33:43 2021
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.28	152	1435410	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.45	45	316358	56.02385	ppb	95

Quantitation Report

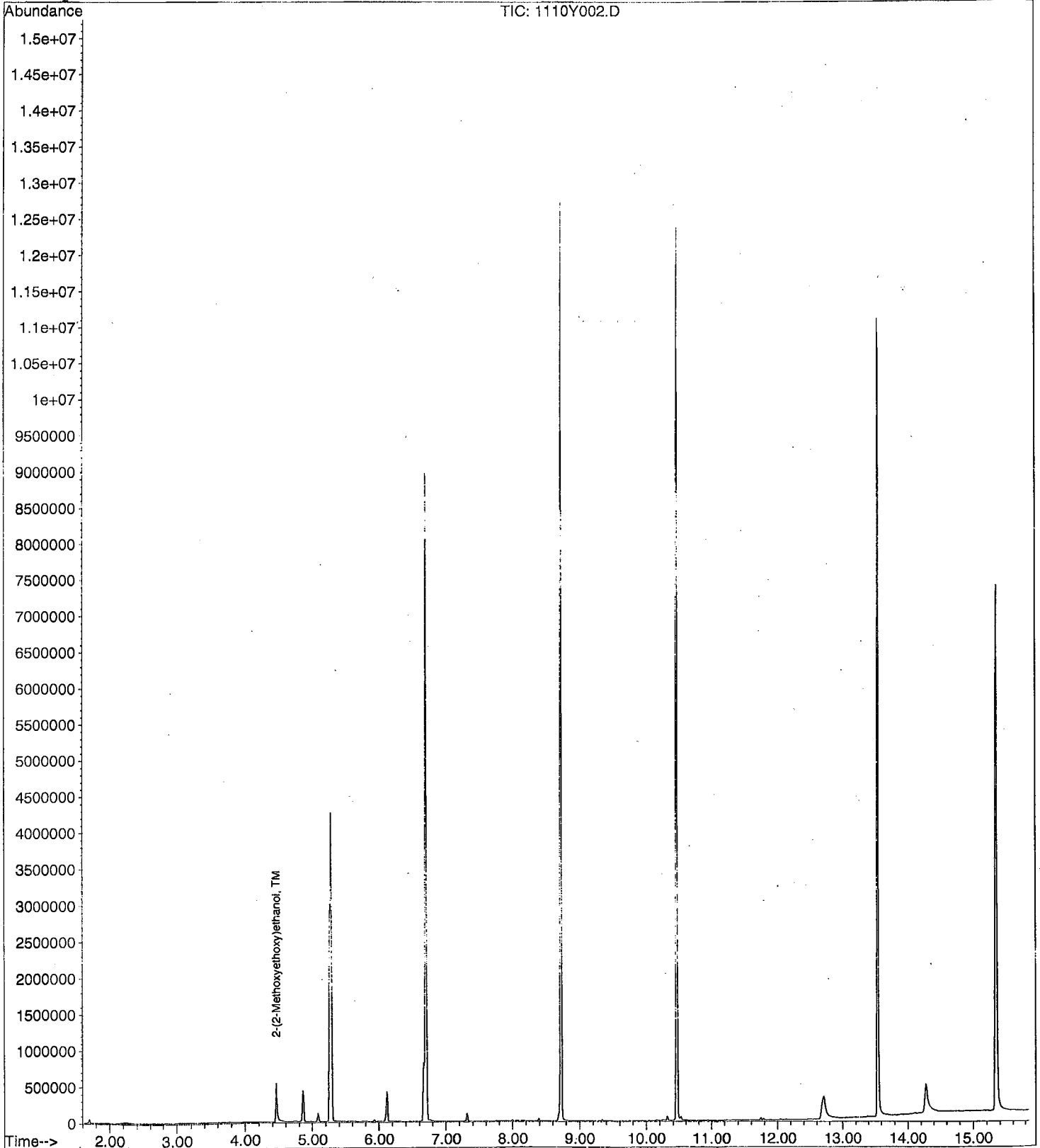
Data File : M:\YODA\DATA\Y211110M\1110Y002.D
Acq On : 10 Nov 21 10:34
Sample : 50ug/ml MEE 11/08/21
Misc : Water

Vial: 2
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 9:33 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y003.D Vial: 3
Acq On : 10 Nov 21 10:57 Operator: MA,SS
Sample : 100ug/ml MEE 11/08/21 Inst : Yoda
Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:11 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Nov 10 09:33:43 2021
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	1490416	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.46	45	669764	114.23111	ppb	95

Quantitation Report

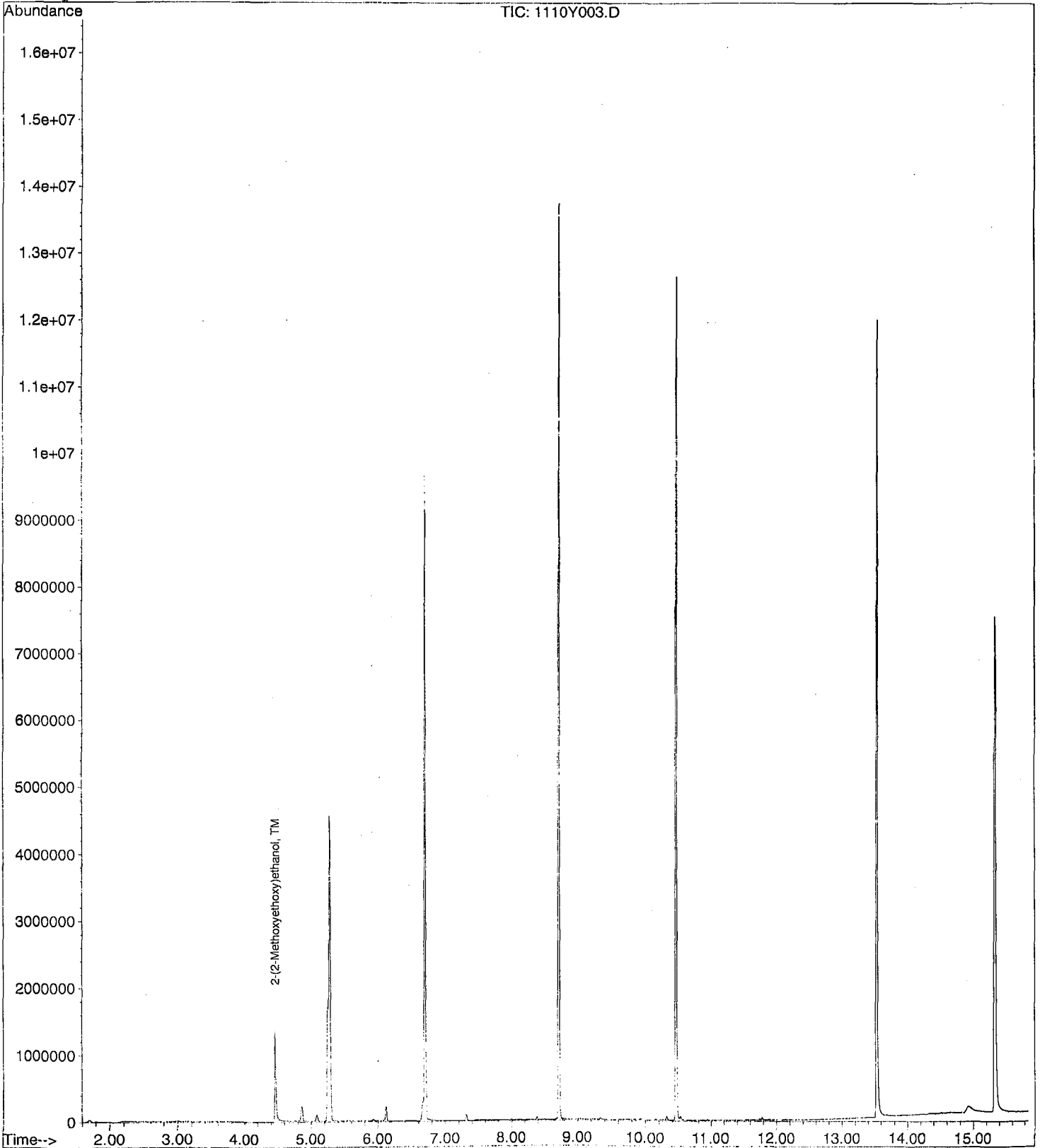
Data File : M:\YODA\DATA\Y211110M\1110Y003.D
Acq On : 10 Nov 21 10:57
Sample : 100ug/ml MEE 11/08/21
Misc : Water

Vial: 3
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:11 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y004.D Vial: 4
 Acq On : 10 Nov 21 11:20 Operator: MA,SS
 Sample : 200ug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:11 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 09:33:43 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.28	152	1500456	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.47	45	1318092	223.30197	ppb	97

Quantitation Report

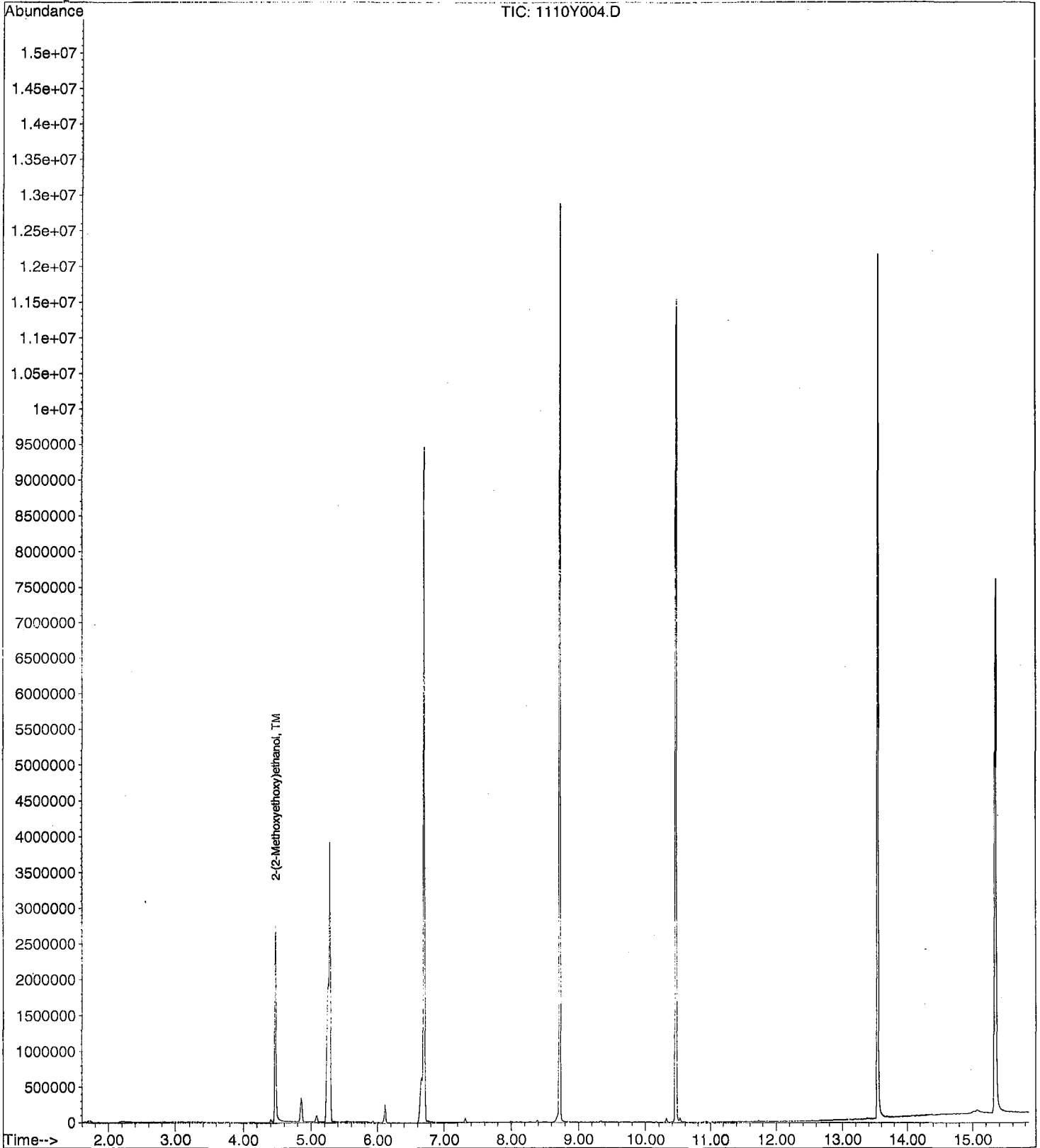
Data File : M:\YODA\DATA\Y211110M\1110Y004.D
Acq On : 10 Nov 21 11:20
Sample : 200ug/ml MEE 11/08/21
Misc : Water

Vial: 4
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:11 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y005.D Vial: 5
 Acq On : 10 Nov 21 11:43 Operator: MA,SS
 Sample : 400ug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:12 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 09:33:43 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	1527749	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.53	45	2854033	474.87257	ppb	94

Quantitation Report

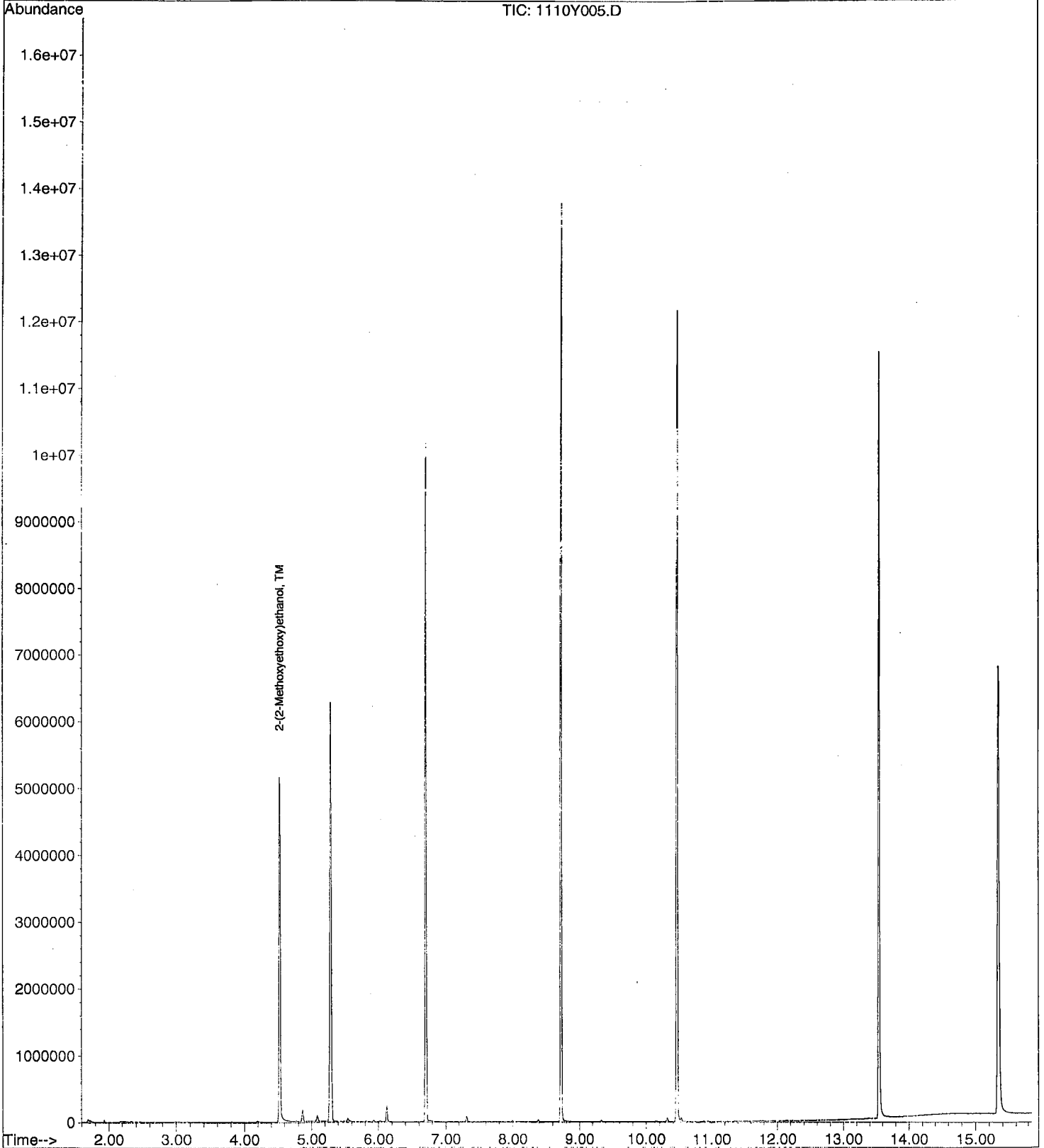
Data File : M:\YODA\DATA\Y211110M\1110Y005.D
Acq On : 10 Nov 21 11:43
Sample : 400ug/ml MEE 11/08/21
Misc : Water

Vial: 5
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:12 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y211110M\1110Y006.D Vial: 6
 Acq On : 10 Nov 21 12:06 Operator: MA,SS
 Sample : 500ug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:14 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 12:14:10 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.27	152	1533564	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.51	45	3610286	574.29423	ppb	100

Quantitation Report

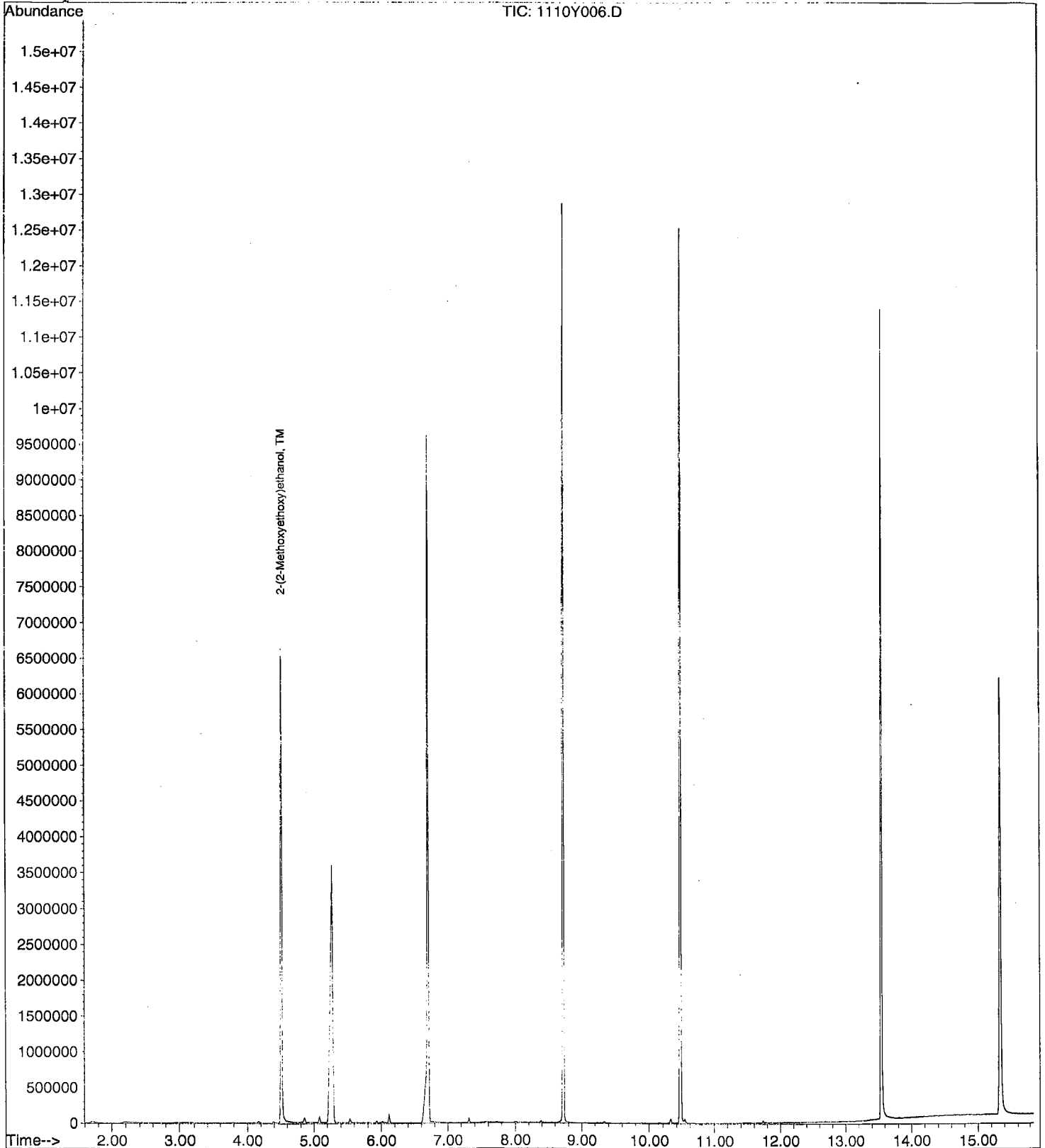
Data File : M:\YODA\DATA\Y211110M\1110Y006.D
Acq On : 10 Nov 21 12:06
Sample : 500ug/ml MEE 11/08/21
Misc : Water

Vial: 6
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:14 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y211110M\1110Y007.D Vial: 7
 Acq On : 10 Nov 21 12:29 Operator: MA,SS
 Sample : 600ug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:12 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 09:33:43 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.29	152	1531708	40.00000 ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.56	45	4270025	708.63816 ppb	95

Quantitation Report

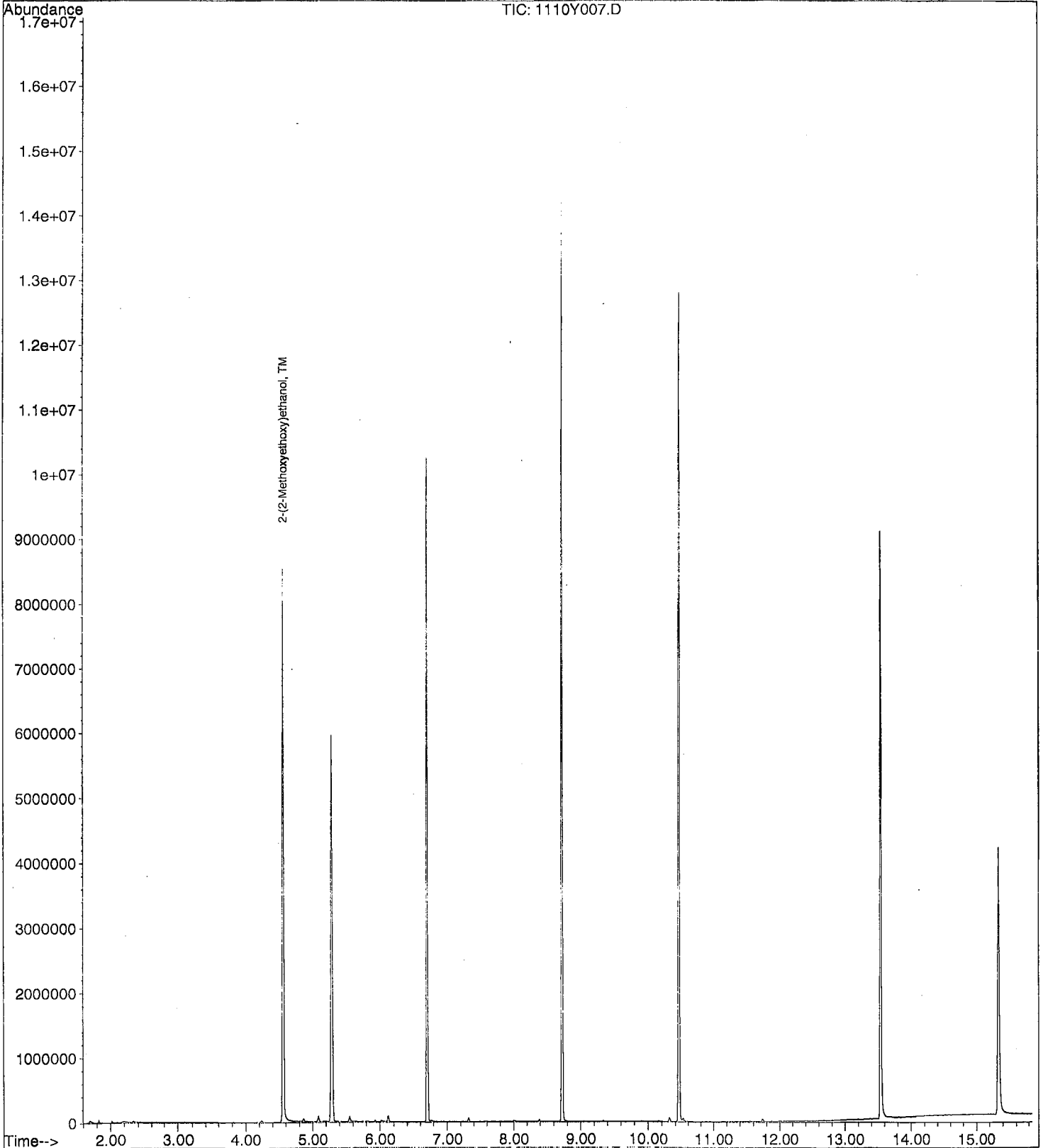
Data File : M:\YODA\DATA\Y211110M\1110Y007.D
Acq On : 10 Nov 21 12:29
Sample : 600ug/ml MEE 11/08/21
Misc : Water

Vial: 7
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:12 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y211110M\1110Y008.D Vial: 8
 Acq On : 10 Nov 21 12:53 Operator: MA,SS
 Sample : 800ug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:12 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 12:12:52 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.28	152	1458440	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.59	45	5481720	955.42892	ppb	100

Quantitation Report

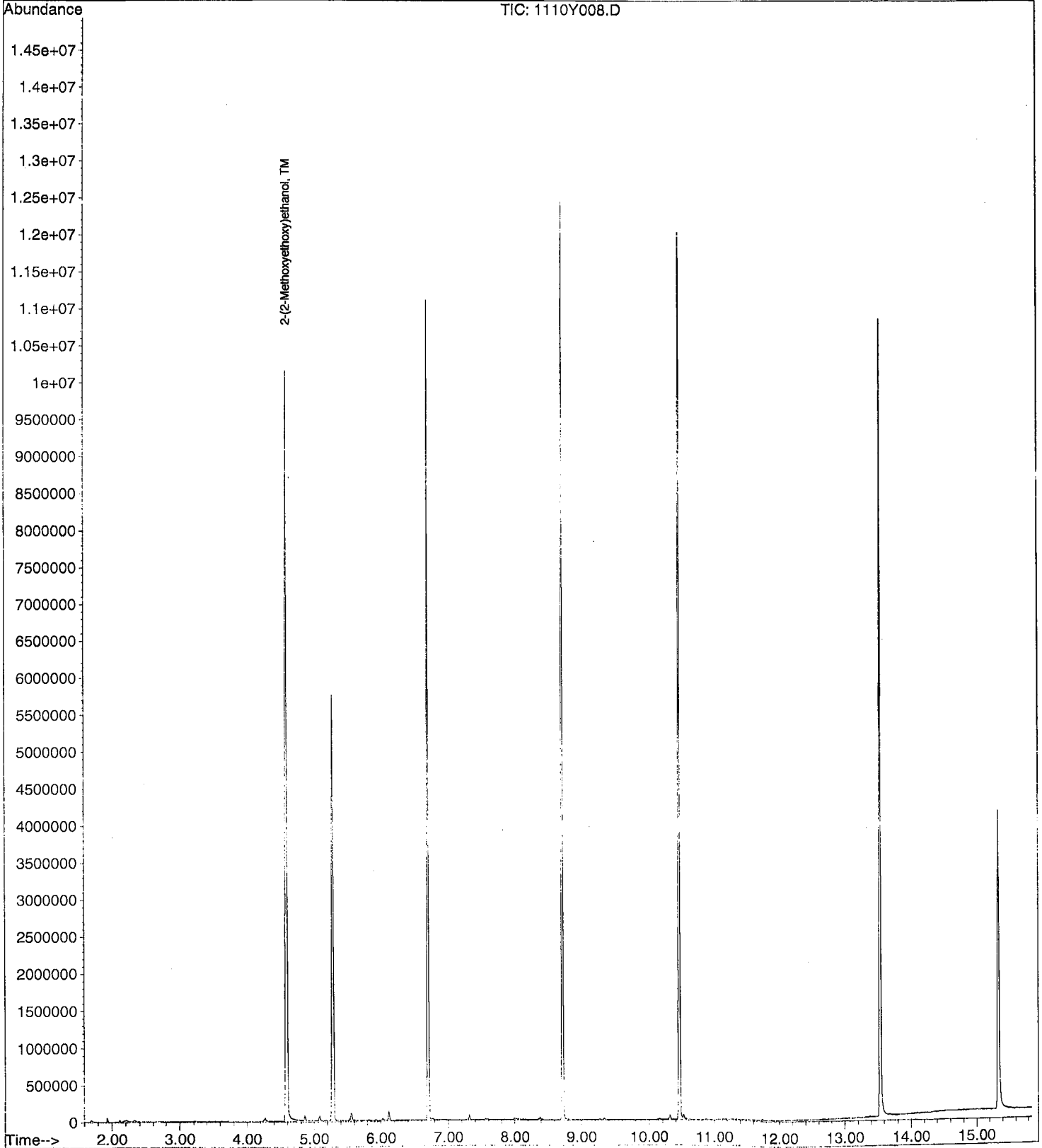
Data File : M:\YODA\DATA\Y211110M\1110Y008.D
Acq On : 10 Nov 21 12:53
Sample : 800ug/ml MEE 11/08/21
Misc : Water

Vial: 8
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:12 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y009.D Vial: 9
 Acq On : 10 Nov 21 13:16 Operator: MA,SS
 Sample : 1000ug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 12:13 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 12:12:52 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	5.28	152	1426294	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.62	45	6812900	1214.20792	ppb	100

Quantitation Report

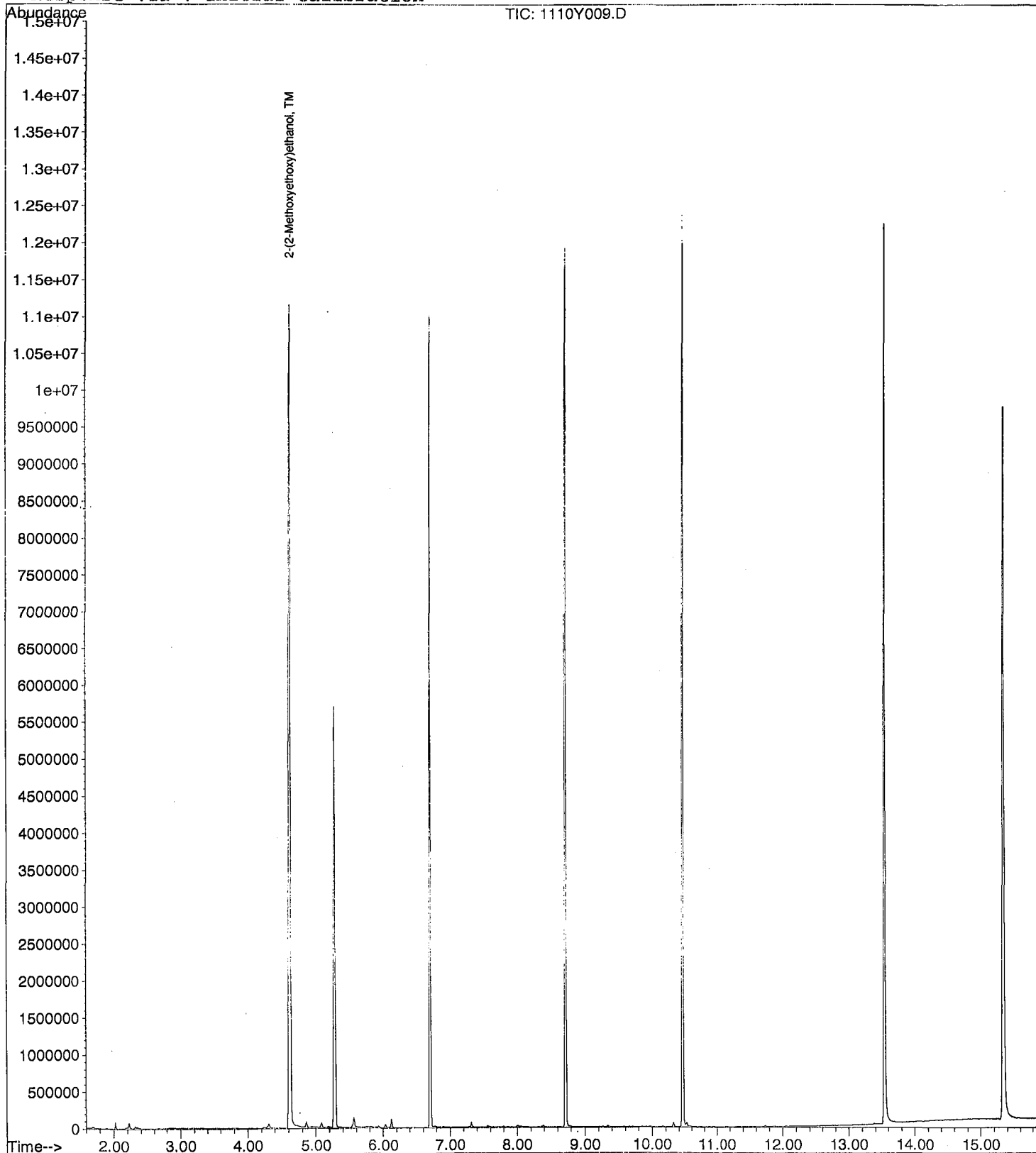
Data File : M:\YODA\DATA\Y211110M\1110Y009.D
Acq On : 10 Nov 21 13:16
Sample : 1000ug/ml MEE 11/08/21
Misc : Water

Vial: 9
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 12:13 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: _____

Case No: _____

Date Analyzed: 11/10/2021

Matrix: _____

Instrument: Yoda

Initial Cal. Date: 11/10/2021

Data File: 1110Y010.D

		Compound	MEAN	CCRF	%D	%Drift
1	TM	2-(2-Methoxyethoxy)ethanol	0.1840	0.1974	7.3	TM
2						
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39						
40						

Average

7.3

Data File : M:\YODA\DATA\Y211110M\1110Y010.D Vial: 10
 Acq On : 10 Nov 21 14:06 Operator: MA,SS
 Sample : SSug/ml MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Nov 10 13:01 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Nov 10 12:14:33 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.28	152	1575741	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.52	45	3888079	536.49371	ppb	98

Quantitation Report

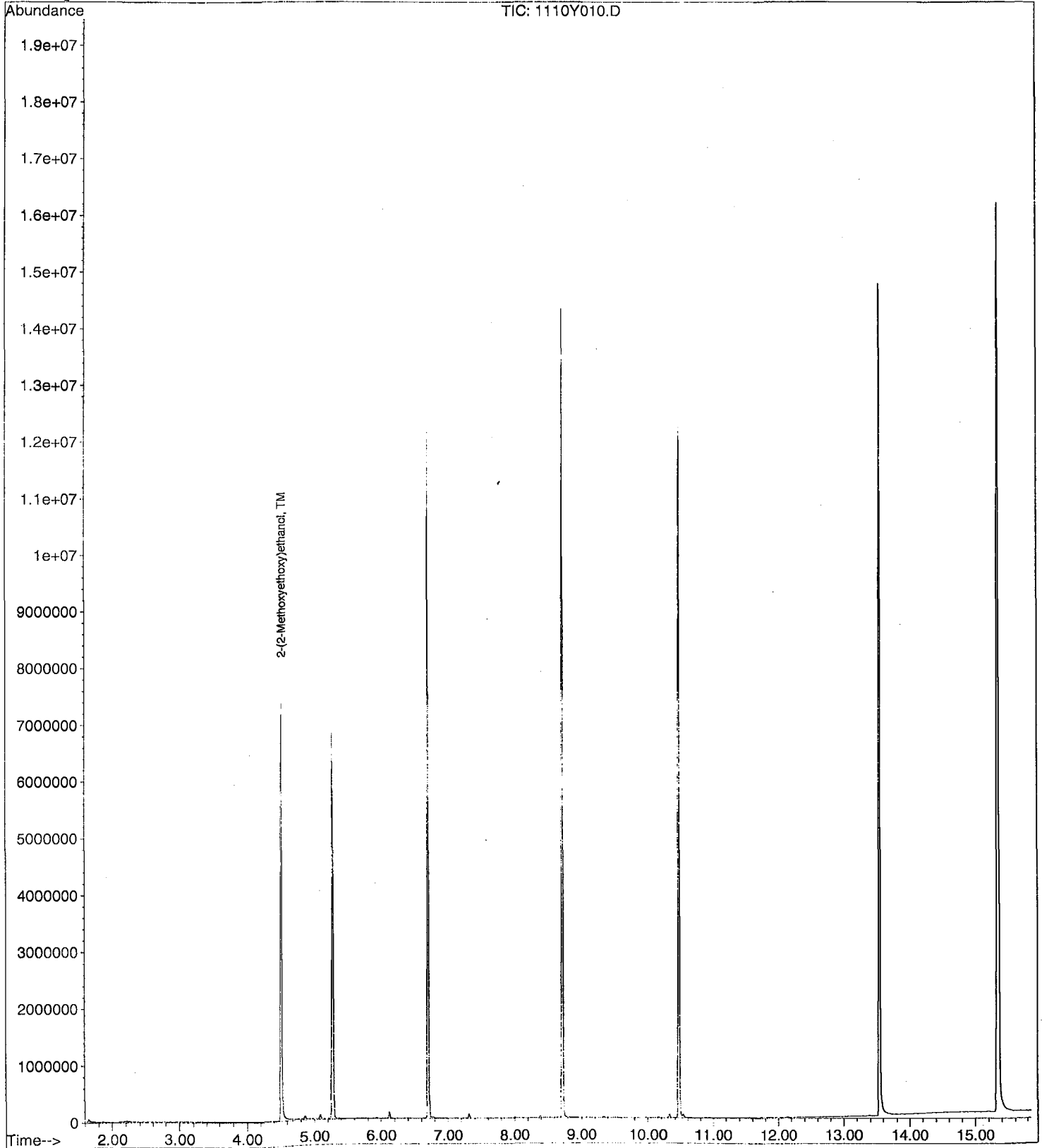
Data File : M:\YODA\DATA\Y211110M\1110Y010.D
Acq On : 10 Nov 21 14:06
Sample : SSug/ml MEE 11/08/21
Misc : Water

Vial: 10
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Nov 10 13:01 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Nov 15 18:27:06 2021
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: _____

SDG No: _____
Date Analyzed: 12/22/2021
Instrument: Yoda
Initial Cal. Date: 11/10/2021
Data File: 1110Y132.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.1840	0.2141	16	TM
3						
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40						

Average

16.0

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y132.D Vial: 32
 Acq On : 22 Dec 21 12:09 Operator: MA,SS
 Sample : 500ug/ml (1) MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Dec 22 11:14 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Dec 22 11:04:57 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.94	152	678653	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.17	45	1816136m	581.85528	ppb	100

Quantitation Report

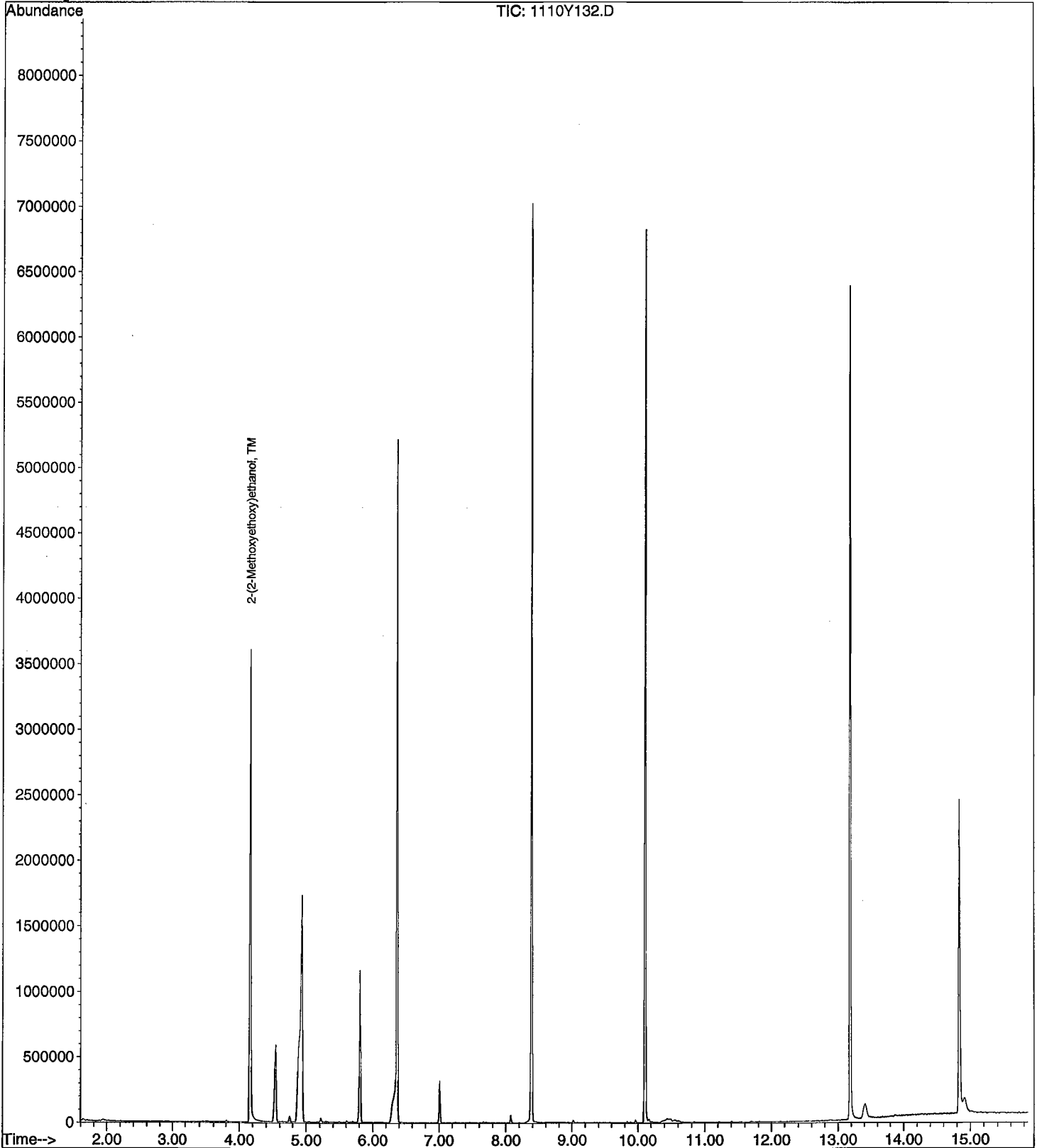
Data File : M:\YODA\DATA\Y211110M\1110Y132.D
Acq On : 22 Dec 21 12:09
Sample : 500ug/ml (1) MEE 11/08/21
Misc : Water

Vial: 32
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 22 11:14 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Dec 22 17:19:30 2021
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: _____

SDG No: _____
Date Analyzed: 12/22/2021
Instrument: Yoda
Initial Cal. Date: 11/10/2021
Data File: 1110Y140.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I
2	TM	2-(2-Methoxyethoxy)ethanol	0.1840	0.2267	23	TM
3						
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38						
39						
40		Average			23.0	

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y140.D Vial: 40
 Acq On : 22 Dec 21 19:37 Operator: MA,SS
 Sample : 500ug/ml (2) MEE 11/08/21 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Dec 23 5:29 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Thu Dec 23 05:28:45 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	4.93	152	714770	40.000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.17	45	2025417	616.116	ppb	100

Quantitation Report

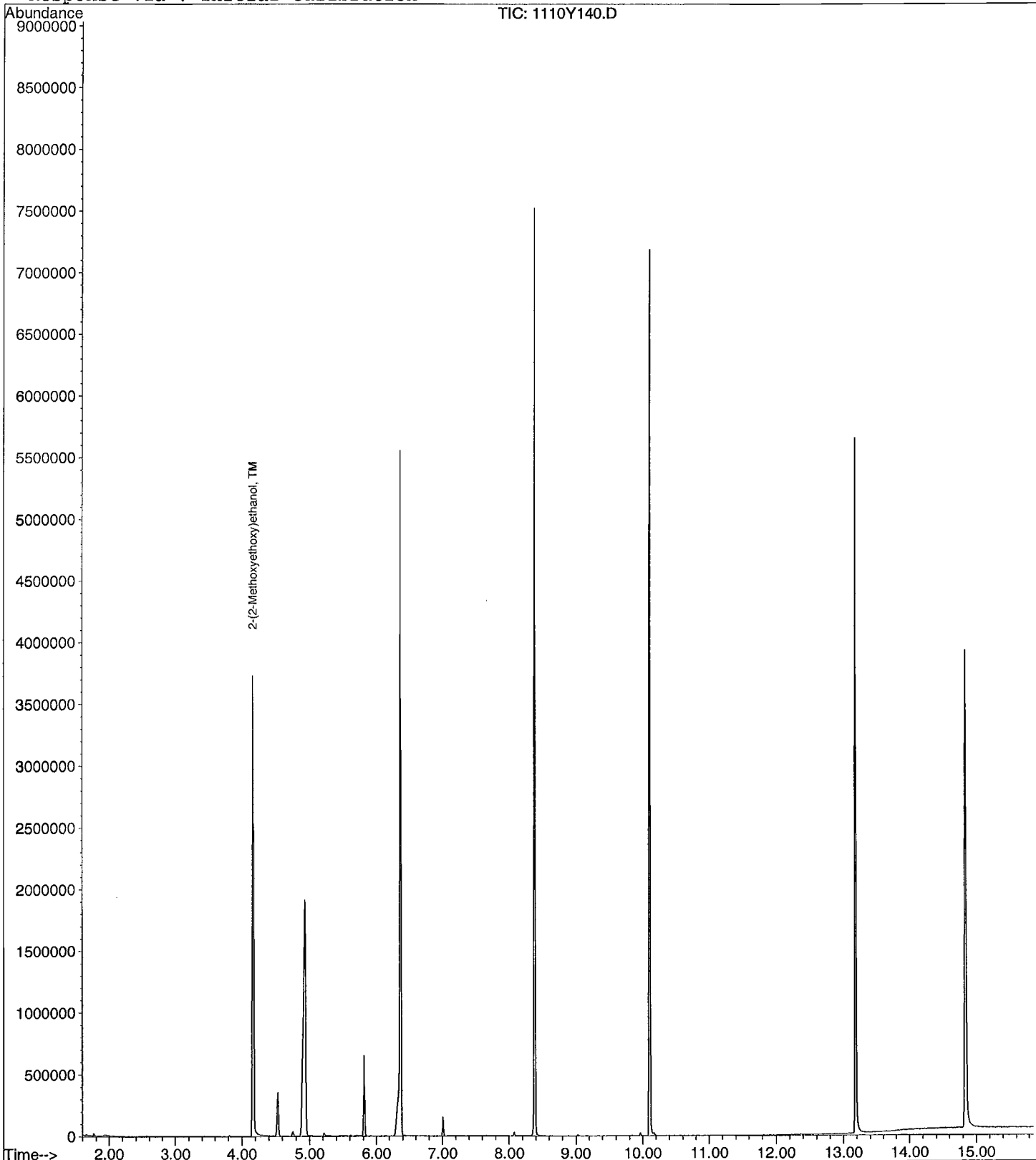
Data File : M:\YODA\DATA\Y211110M\1110Y140.D
Acq On : 22 Dec 21 19:37
Sample : 500ug/ml (2) MEE 11/08/21
Misc : Water

Vial: 40
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 23 5:29 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Dec 23 05:28:45 2021
Response via : Initial Calibration



ORGANICS
Raw Data

Data File : M:\YODA\DATA\Y211110M\1110Y136.D Vial: 36
 Acq On : 22 Dec 21 18:05 Operator: MA,SS
 Sample : BA48142W01 2/450 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Dec 22 17:25 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Dec 22 17:19:30 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	4.93	152	552284	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

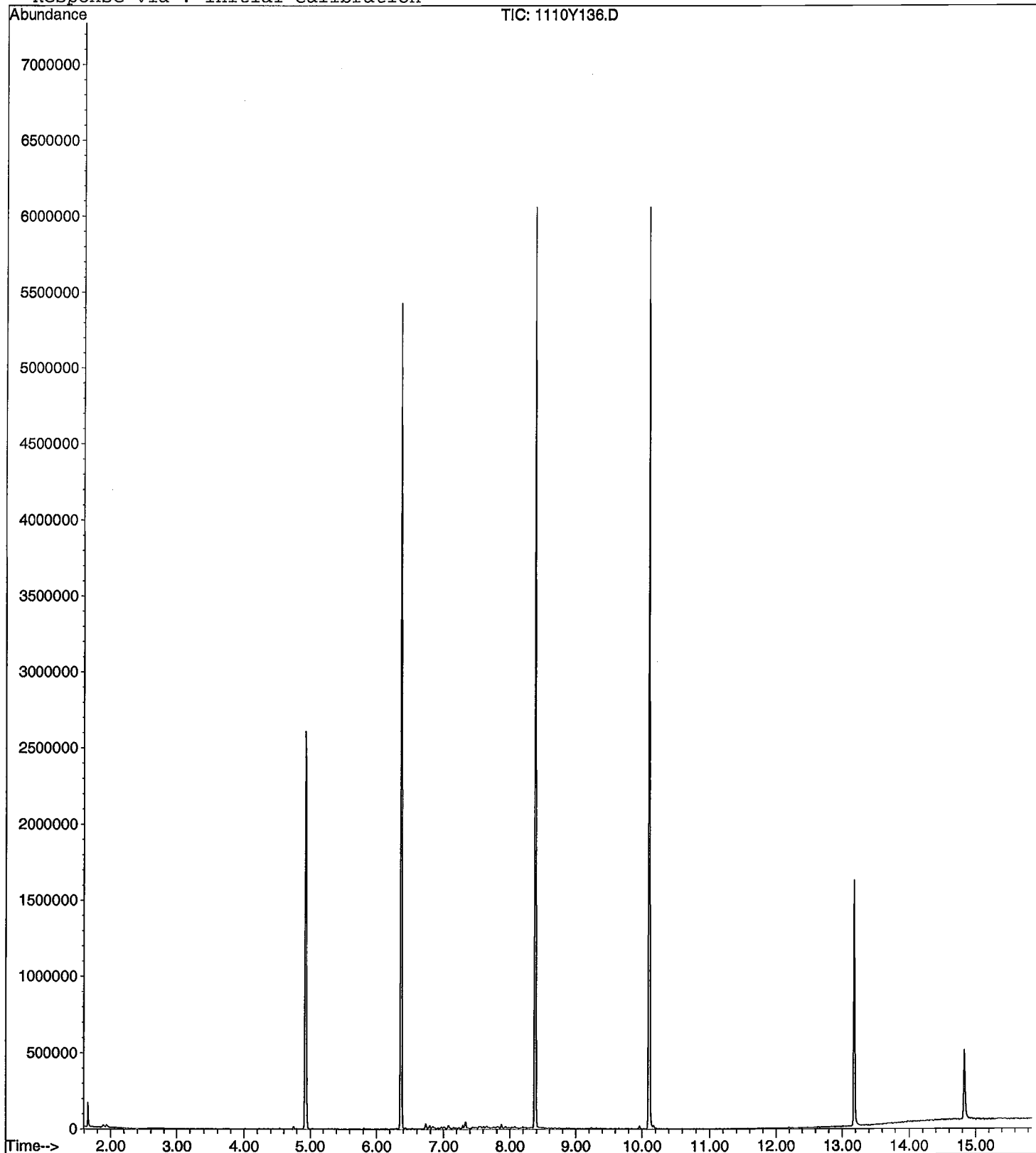
Data File : M:\YODA\DATA\Y211110M\1110Y136.D
Acq On : 22 Dec 21 18:05
Sample : BA48142W01 2/450
Misc : Water

Vial: 36
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 22 17:25 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Dec 22 17:19:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y137.D Vial: 37
Acq On : 22 Dec 21 18:28 Operator: MA,SS
Sample : BA48143W01 2/450 Inst : Yoda
Misc : Water Multiplr: 1.00

Quant Time: Dec 22 17:20 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Dec 22 17:19:30 2021
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	4.94	152	792565	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

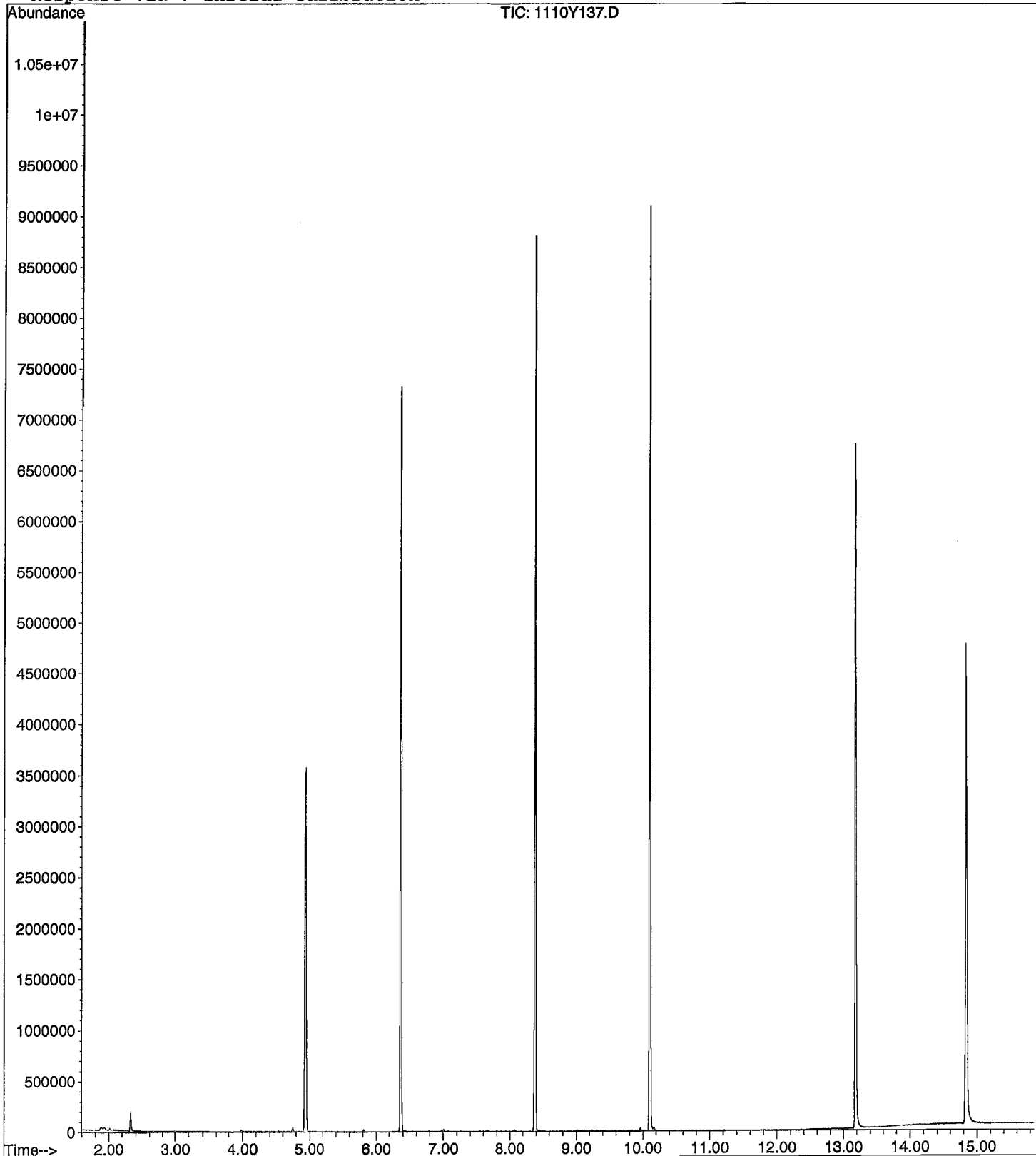
Data File : M:\YODA\DATA\Y211110M\1110Y137.D
Acq On : 22 Dec 21 18:28
Sample : BA48143W01 2/450
Misc : Water

Vial: 37
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 22 17:20 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Dec 22 17:19:30 2021
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y211110M\1110Y133.D Vial: 33
 Acq On : 22 Dec 21 16:56 Operator: MA,SS
 Sample : 211222A BLK 2/500 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Dec 22 17:24 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Dec 22 11:16:21 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	4.93	152	835560	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

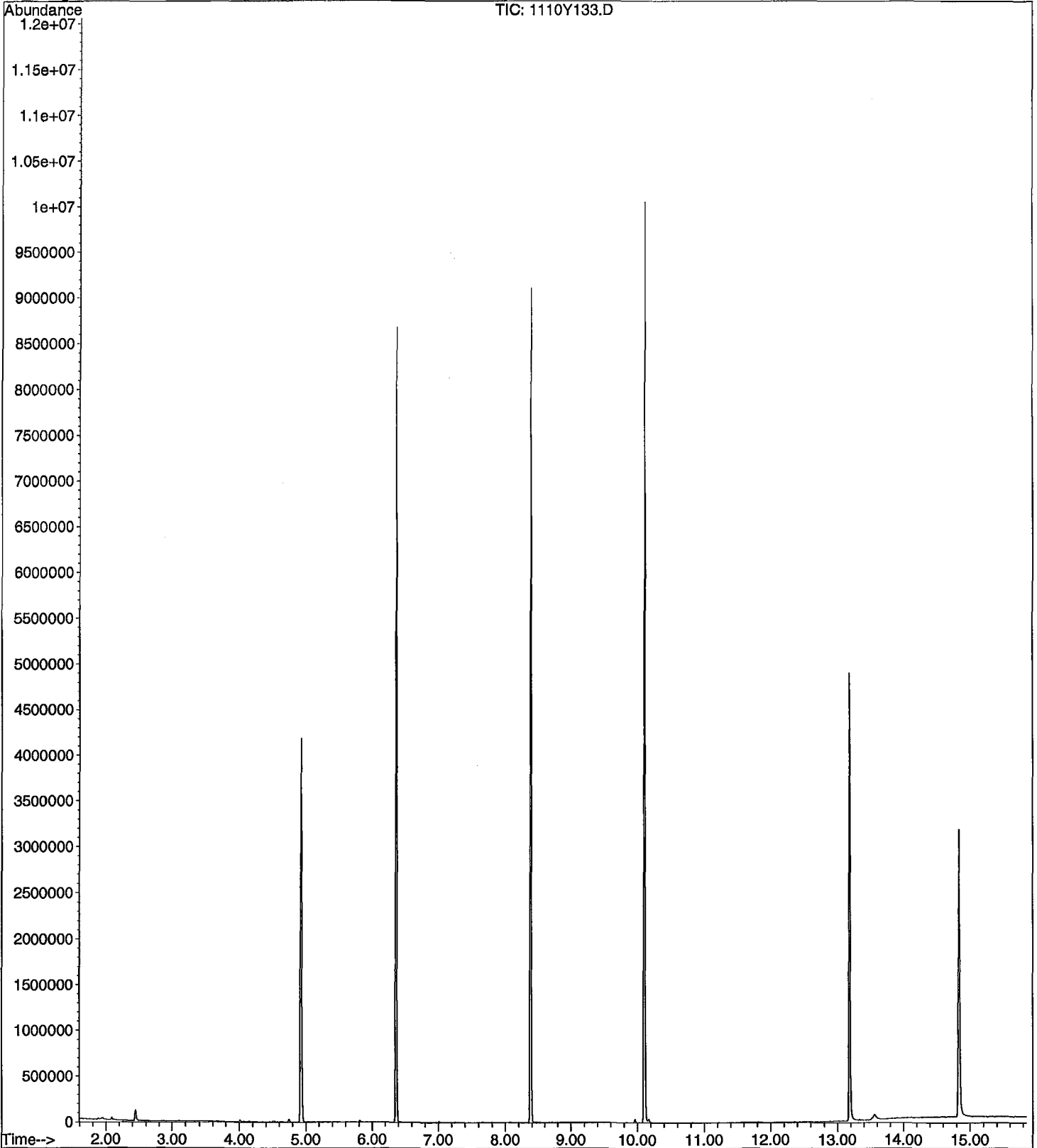
Data File : M:\YODA\DATA\Y211110M\1110Y133.D
Acq On : 22 Dec 21 16:56
Sample : 211222A BLK 2/500
Misc : Water

Vial: 33
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 22 17:24 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Dec 22 17:19:30 2021
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y134.D Vial: 34
 Acq On : 22 Dec 21 17:19 Operator: MA,SS
 Sample : 211222A LCS-1 2/500 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Dec 22 17:19 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Wed Dec 22 17:19:30 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	4.93	152	772987	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 2-(2-Methoxyethoxy) ethanol	4.38	45	304729	85.71483	ppb	100

Quantitation Report

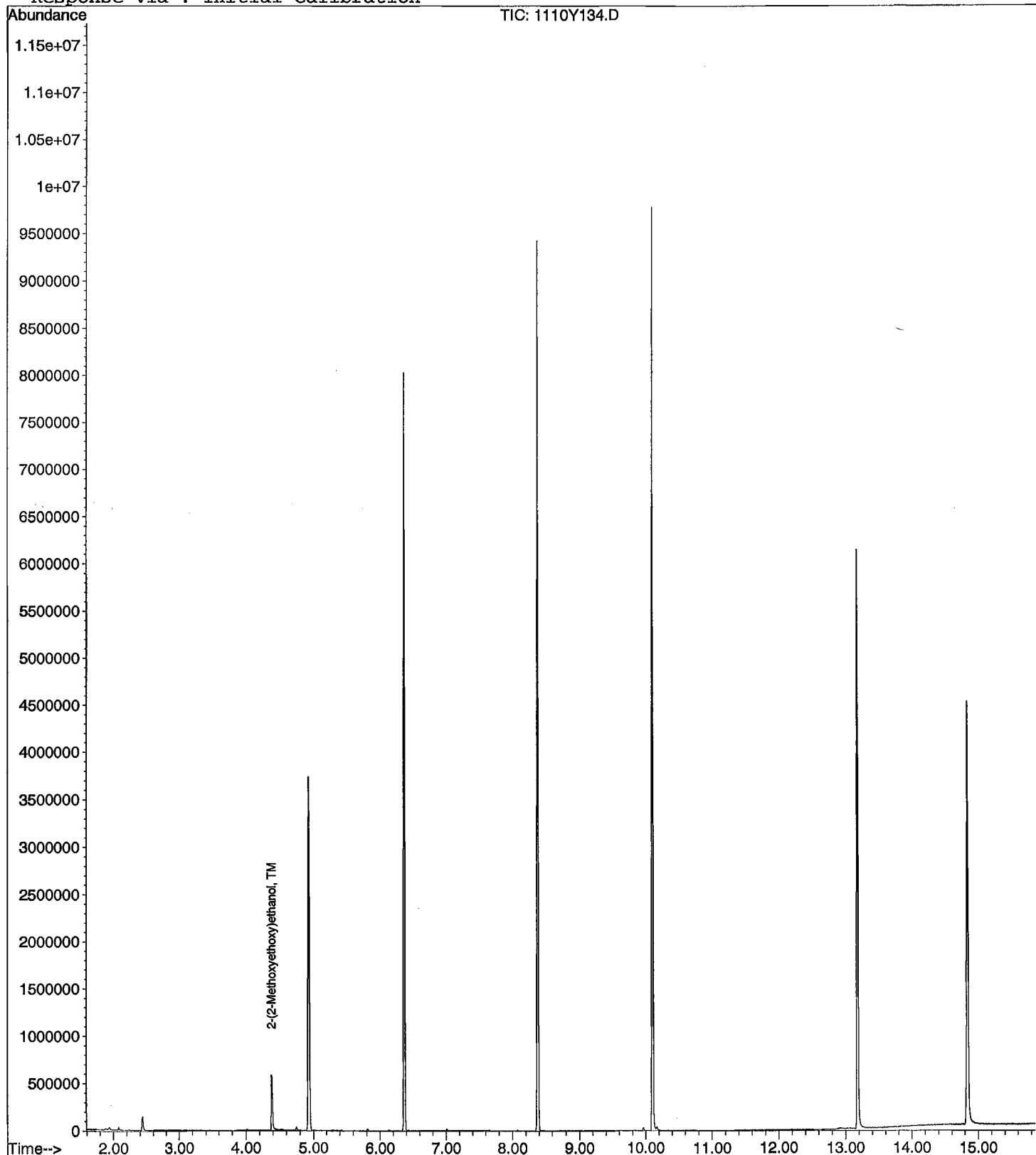
Data File : M:\YODA\DATA\Y211110M\1110Y134.D
Acq On : 22 Dec 21 17:19
Sample : 211222A LCS-1 2/500
Misc : Water

Vial: 34
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 22 17:19 2021

Quant Results File: YMEE1110.RES

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Dec 22 17:19:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y211110M\1110Y139.D Vial: 39
 Acq On : 22 Dec 21 19:14 Operator: MA,SS
 Sample : 211222A LCSD-1 2/500 Inst : Yoda
 Misc : Water Multiplr: 1.00

Quant Time: Dec 23 5:27 2021 Quant Results File: YMEE1110.RES

Quant Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Thu Dec 23 05:27:39 2021
 Response via : Initial Calibration
 DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4 (IS)	4.93	152	580356	40.000 ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.46	45	340270	127.480 ppb	100

Quantitation Report

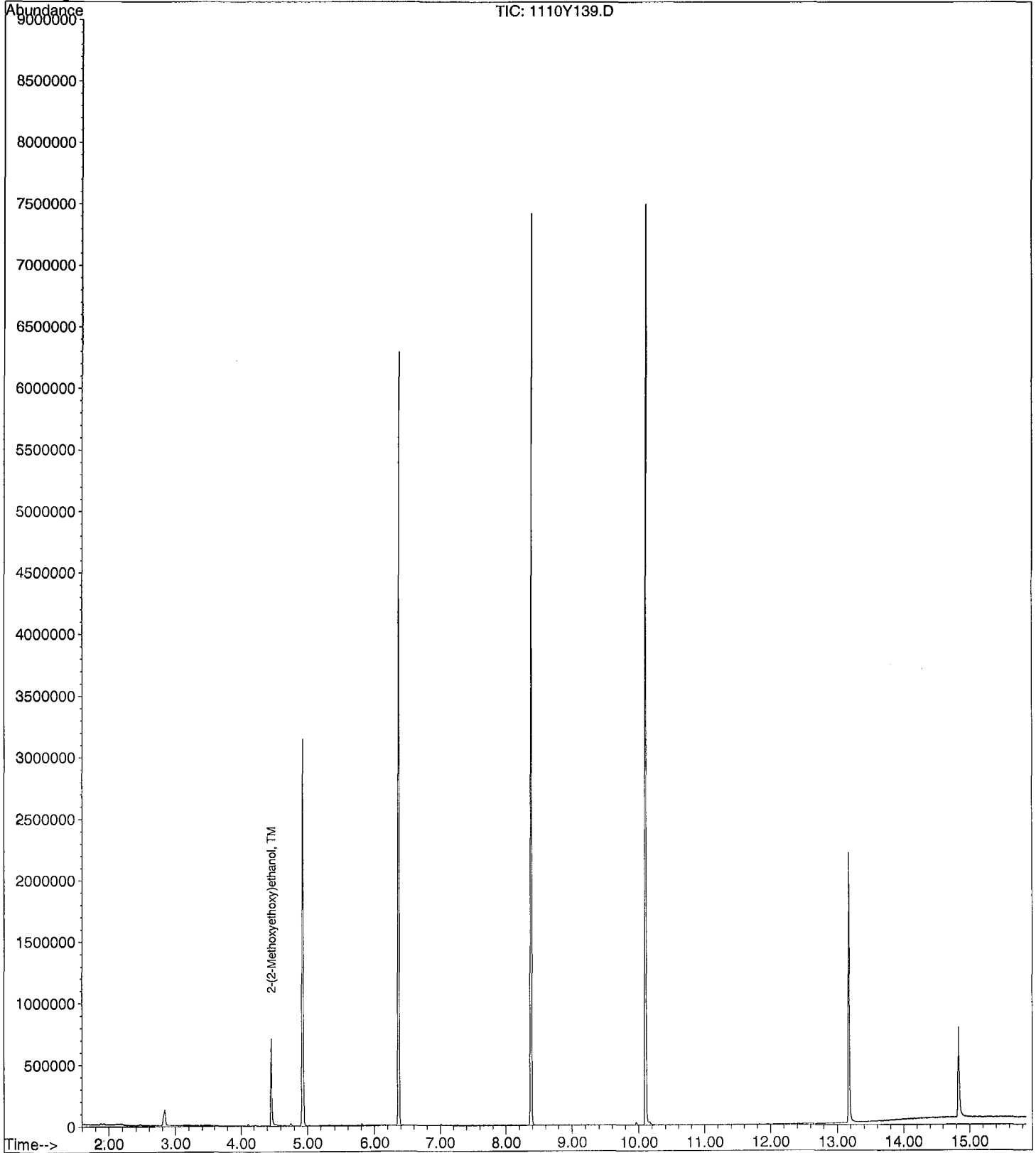
Data File : M:\YODA\DATA\Y211110M\1110Y139.D
Acq On : 22 Dec 21 19:14
Sample : 211222A LCSD-1 2/500
Misc : Water

Vial: 39
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Dec 23 5:27 2021

Quant Results File: YMEE1110.RES

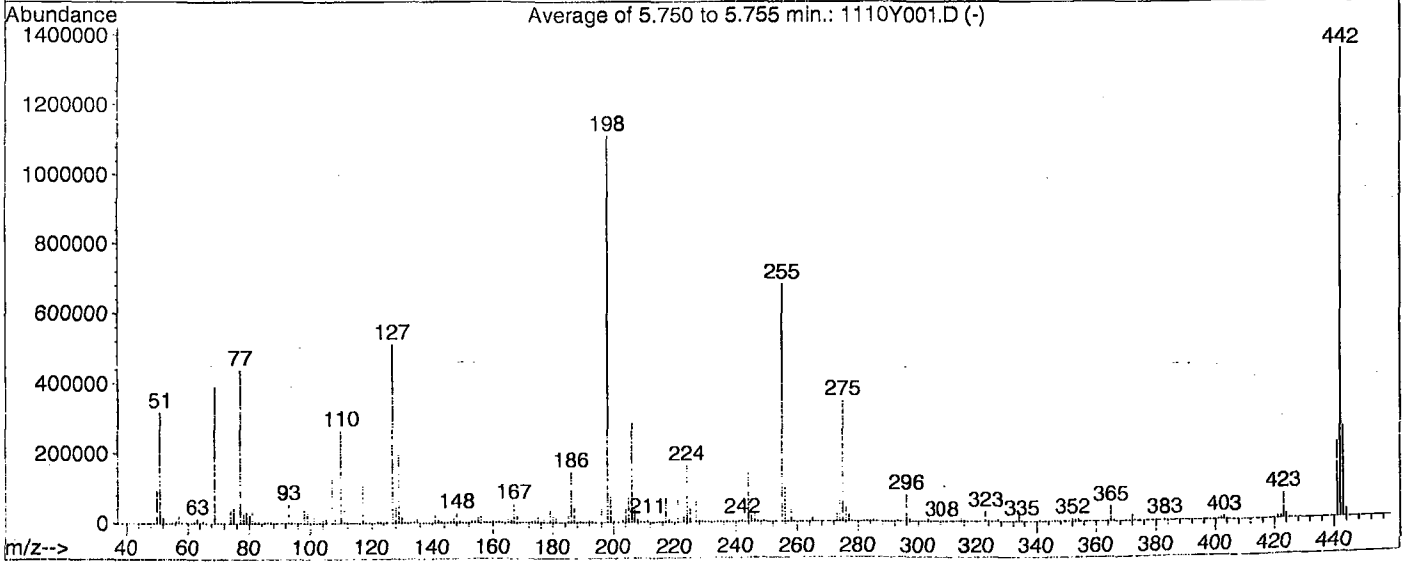
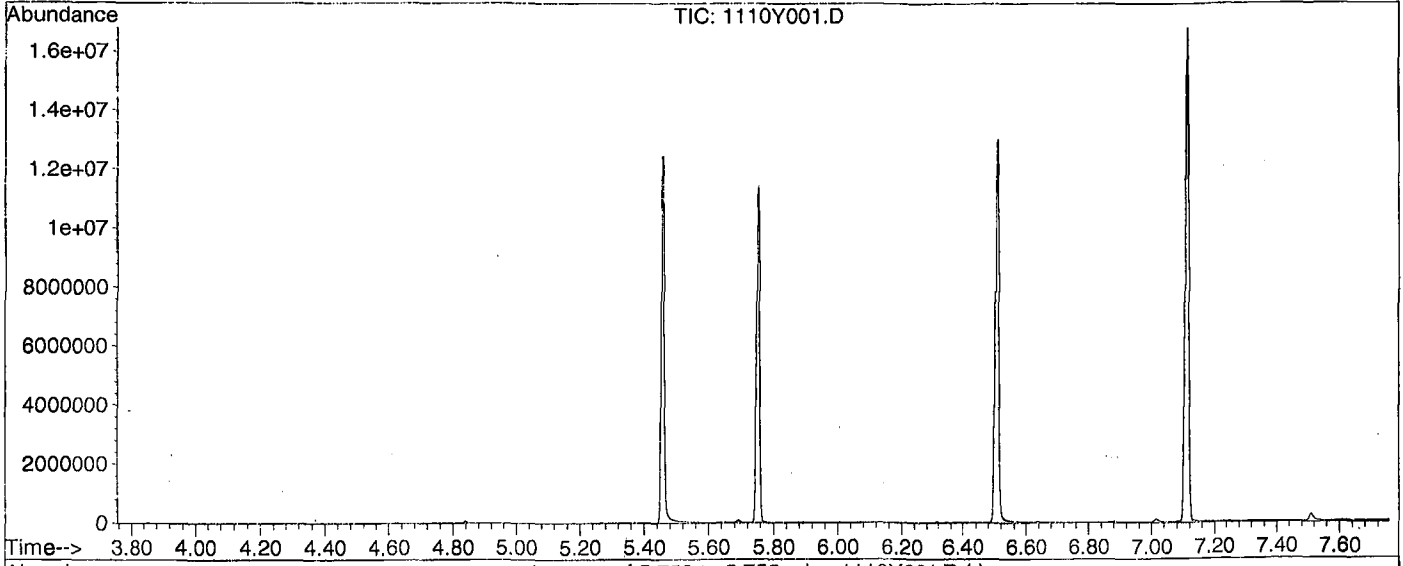
Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Dec 23 05:28:45 2021
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y211110M\1110Y001.D
 Acq On : 10 Nov 21 10:19
 Sample : SV TUNE 7/2/21
 Misc : Water

Vial: 1
 Operator: MA,SS
 Inst : Yoda
 Multiplr: 1.00

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C



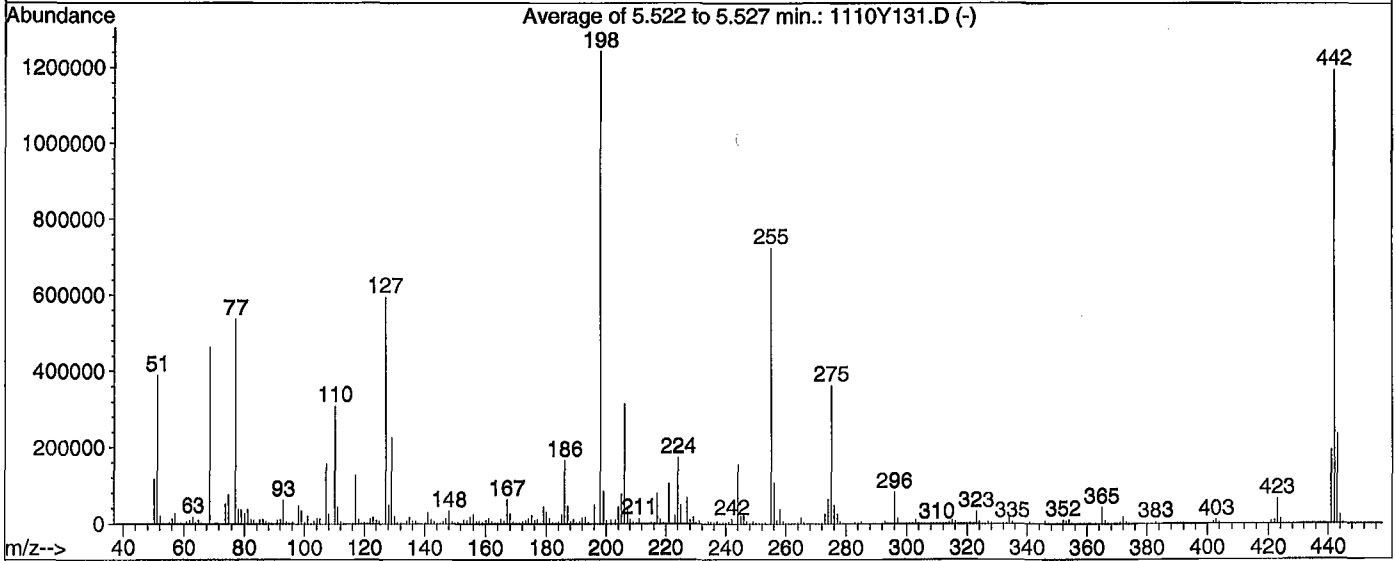
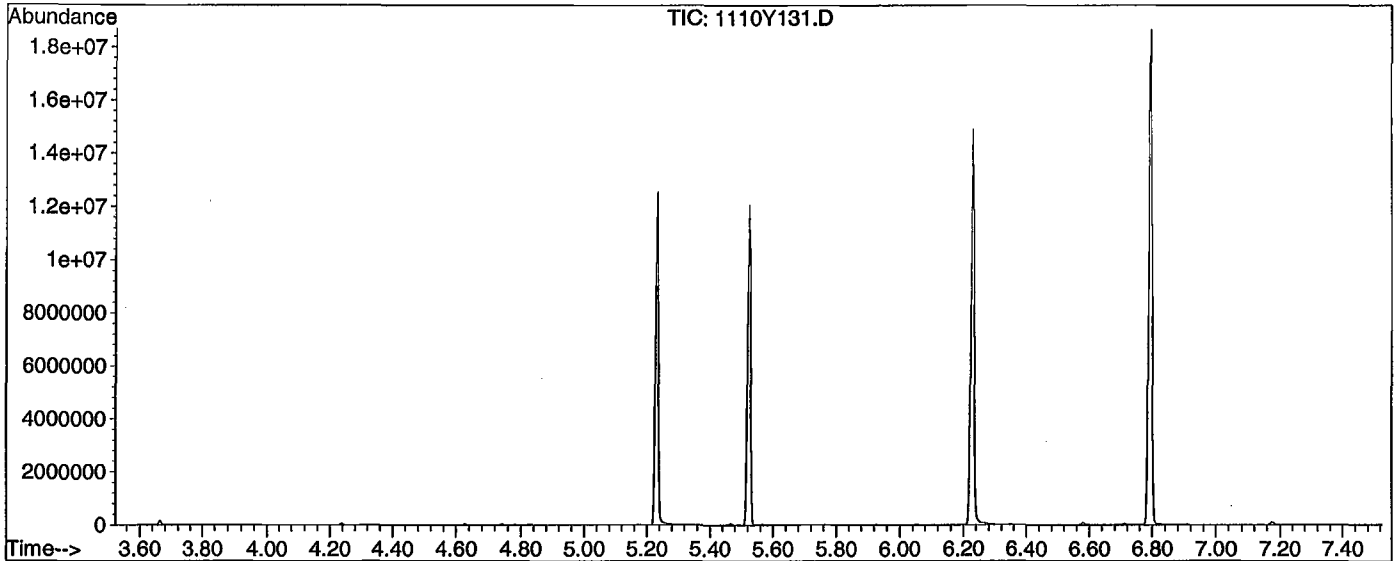
AutoFind: Scans 866, 867, 868; Background Corrected with Scan 857

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	28.7	318656	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	1234	PASS
127	198	10	80	46.1	511595	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	1110592	PASS
199	198	5	9	6.6	72832	PASS
275	198	10	60	31.3	348096	PASS
365	198	1	100	3.9	43349	PASS
441	442	0.01	24	16.1	217728	PASS
442	198	50	500	122.0	1355264	PASS
443	442	15	24	19.3	262208	PASS

Data File : M:\YODA\DATA\Y211110M\1110Y131.D
 Acq On : 22 Dec 21 11:54
 Sample : SV TUNE 7/2/21
 Misc : Water

Vial: 31
 Operator: MA,SS
 Inst : Yoda
 Multiplr: 1.00

Method : M:\YODA\DATA\Y211110M\YMEE1110.M (RTE Integrator)
 Title : EPA 8270C



AutoFind: Scans 775, 776, 777; Background Corrected with Scan 766

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	31.3	388676	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	47.8	594112	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	1242453	PASS
199	198	5	9	6.8	84880	PASS
275	198	10	60	29.1	362112	PASS
365	198	1	100	3.4	41949	PASS
441	442	0.01	24	16.3	194283	PASS
442	198	50	500	96.1	1194411	PASS
443	442	15	24	19.7	235499	PASS

Name of Final Standard 2MEE Curve
 Prep Date 11/8/2021
 Exp Date 9/23/2022

Prep'd By (Initials) LS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	5 uL	200uL	Methanol 195uL Lot# 60303	60 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	5 uL	100uL	Methanol 95uL Lot# 60303	100 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	10 uL	100uL	Methanol 90uL Lot# 60303	200 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	20 uL	100uL	Methanol 80 uL Lot# 60303	400 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	50 uL	200 uL	Methanol 150 uL Lot# 60303	500 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	30 uL	100uL	Methanol 70 uL Lot# 60303	600 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	40 uL	100uL	Methanol 60 uL Lot# 60303	800 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/2/2021	11/2/2022	50 uL	100uL	Methanol 50uL Lot# 60303	1000 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	2 uL	*	*	*

Name of Final Standard 2MEE Second Source
 Prep Date 11/8/2021
 Exp Date 7/31/2022

Prep'd By (Initials) LS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	11/3/2021	7/31/2022	50 uL	200uL	Methanol 150uL Lot# 60303	500 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	9/23/2021	9/23/2022	4 uL	*	*	*

Name of Final Standard 2MEE STOCK (Diethylene Glycol)
 Prep Date 11/2/2021
 Exp Date 11/2/2022

Prep'd By (Initials) IC

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol methyl ether	AccuStandard	S-72273	2000 ug/mL	218101558-01-51172,51173	12/23/2022	2.0 mL	4 mL	Methanol #60303	1000 ug/mL

Given to Extraction to be extracted to do MEE M STD Stock (used for ICAL) Final concentration 2000ug/L

Name of Final Standard 2MEE Second Source Stock
 Prep Date 11/3/2021
 Exp Date 7/31/2022

Prep'd By (Initials) LS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Methoxyethanol-Neat	Chem Service	N-12404-1G	Neat 99.5%	10417700-51771	7/31/2022	0.010 mL	10 mL	Methanol #60303	1000 ug/mL

Given to Extraction to be extracted for MEE SS (used for ICAL SS) Final concentration 2000ug/L

8270 Internal Standard Ampules

Name of Final Standard 8270 Internal Standard Ampules
 (1,2)

 Prep Date 9/23/2021
 Exp Date 9/23/2022

Prep'd By (Initials) LS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2000 ug/mL	A0162879-50583,50594 A0173418-52790,52791	6/30/2026	4 mL	4 mL	NA	2000ug/mL

Name of Final Standard Semivolatle (SV) Tuning Solution
 Prep Date 7/2/2021
 Exp Date 7/2/2022

Prep'd By (Initials) LS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatle GC/MS Tuning Standard	Agilent	GCM-150-1	1,000 ug/mL	6559405-51018	7/2/2022	1,000 uL	20 mL	MC #60338	50 ug/mL

Name of Final Standard 2MEE STOCK (Diethylene Glycol)
 Prep Date 1/20/2021
 Exp Date 1/20/2022

Prep'd By (Initials) MA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol methyl ether	AccuStandard	S-72273	2000 ug/mL	218101558-01-51164, 61165	12/23/2022	2.0 mL	4 mL	Methanol #235140	1000 ug/mL

Given to Extraction to do MEE M STD Stock (used for ICAL) Final concentration 2000ug/L

Organic Extraction Worksheet

Method	Solid Phase Extraction of 2MBE in Water	Extraction Set	211222A	Extraction Method	MWE2MBE	Units	mL
Spiked ID 1	2MBEE Stock 11/2/21 - 11/2/22	Surrogate ID 1					
Spiked ID 2		Surrogate ID 2					
Spiked ID 3		Surrogate ID 3					
Spiked ID 4		Surrogate ID 4					
Spiked ID 5		Surrogate ID 5					
Spiked ID 6		Sufficient Vol for Matrix QC:		NO			
Spiked ID 7		Ext. Start Time:		12/22/21 10:49			
Spiked ID 8		Ext. End Time:		12/22/21 15:45			
LS 12/22/21		GC Requires Extract By:					
		pH1		Water Bath Temp 1 °C			
		pH2		Water Bath Temp 2 °C			
		pH3		Water Bath Temp 3 °C			

Spiked By:

Date

Witnessed By:

Date

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 211222A Blk				NA	NA	500	2	7Y	12/22/21 10:49	
						equip				
2 211222A LCS-1		0.040	1	NA	NA	500	2	7Y	12/22/21 10:49	
						equip				
3 211222A LCSD-1		0.040	1	NA	NA	500	2	7Y	12/22/21 10:49	
						equip				
4 BA48142	BA48142W01			NA	NA	450	2	7Y	12/22/21 10:49	98556
						equip				
5 BA48143	BA48143W01			NA	NA	450	2	7Y	12/22/21 10:49	98556
						equip				

Solvent and Lot#	
pH Strip Lot	HC16
Carbon Cartridge 2000mg Lot#	061077-EX
Dichloromethane (DCM)	61117
Methanol (MeOH)	61231
Di Water	12/22/21
80% MeOH: 20% DCM	*

Extraction COC Transfer	
Extraction lab employee Initials	
GC analyst's initials	LS
Date	
Time	
Refrigerator	Hobart

Technician's Initials	
Scanned By	SR
Sample Preparation	SR
Extraction	SR
Concentration	SR
Modified	12/22/2021 3:49:31 PM

Reviewed By:

Date

Injection Log

Directory: M:\YODA\DATA\Y211110M\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1110Y001.D	1	SV TUNE 7/2/21	Water	10 Nov 21 10:19
2	2	1110Y002.D	1	50ug/ml MEE 11/08/21	Water	10 Nov 21 10:34
3	3	1110Y003.D	1	100ug/ml MEE 11/08/21	Water	10 Nov 21 10:57
4	4	1110Y004.D	1	200ug/ml MEE 11/08/21	Water	10 Nov 21 11:20
5	5	1110Y005.D	1	400ug/ml MEE 11/08/21	Water	10 Nov 21 11:43
6	6	1110Y006.D	1	500ug/ml MEE 11/08/21	Water	10 Nov 21 12:06
7	7	1110Y007.D	1	600ug/ml MEE 11/08/21	Water	10 Nov 21 12:29
8	8	1110Y008.D	1	800ug/ml MEE 11/08/21	Water	10 Nov 21 12:53
9	9	1110Y009.D	1	1000ug/ml MEE 11/08/21	Water	10 Nov 21 13:16
10	10	1110Y010.D	1	SSug/ml MEE 11/08/21	Water	10 Nov 21 14:06
11	31	1110Y131.D	1	SV TUNE 7/2/21	Water	22 Dec 21 11:54
12	32	1110Y132.D	1	500ug/ml (1) MEE 11/08/21	Water	22 Dec 21 12:09
13	33	1110Y133.D	1	211222A BLK 2/500	Water	22 Dec 21 16:56
14	34	1110Y134.D	1	211222A LCS-1 2/500	Water	22 Dec 21 17:19
15	36	1110Y136.D	1	BA48142W01 2/450	Water	22 Dec 21 18:05
16	37	1110Y137.D	1	BA48143W01 2/450	Water	22 Dec 21 18:28
17	39	1110Y139.D	1	211222A LCSD-1 2/500	Water	22 Dec 21 19:14
18	40	1110Y140.D	1	500ug/ml (2) MEE 11/08/21	Water	22 Dec 21 19:37